Invitation for Bids

Leahi Hospital Young Building Sub-Basement – Food Service Operations Phase 1
21L-0404

The Hawaii Health Systems Corporation (HHSC) Oahu Region is requesting bids from qualified companies for the first phase of the food service operations construction in the Young Building Sub-Basement at Leahi Hospital located at 3675 Kilauea Ave., Honolulu, HI 96816.

The IFB may be obtained electronically from the following website:
http://leahi.hhsc.org/procurement/notices/

Due to COVID-19, a pre-bid orientation will not be scheduled. The deadline for submission of written/emailed questions pertaining to the IFB is March 29, 2022.

All bids must be received by HHSC by April 12, 2022, 2:00 p.m. Hawaii Standard Time. Due to COVID-19, all bids shall be sent digitally to skawai@hhsc.org. E-mail bids not received by deadline will be disqualified for consideration. No exceptions will be made even if network provider or software (e.g. MS Outlook) delays delivery. Please note that large files (>10MB) may experience network delivery issues.

Addenda to the IFB will be posted on the website listed above.

For any inquiries, please contact Scott Kawai, Oahu Region Contracts Department, at (808) 832-3025 or by email at skawai@hhsc.org.

Leahi Hospital
3675 Kilauea Ave.
Honolulu, HI 96816

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SECTION 1
ADMINISTRATION

1.0 INTRODUCTION

This Invitation for Bid (hereinafter "IFB") is issued by the Hawaii Health Systems Corporation (hereinafter "HHSC"), a public body corporate and politic and an instrumentality and agency of the State of Hawaii. All procedures and processes will be in accordance with HHSC Oahu Region policy and procedures.

In order for HHSC to accept Bidder's response in a timely manner, please thoroughly read this IFB and follow instructions as presented.

1.1 IFB TIMETABLE AS FOLLOWS

The timetable as presented represents HHSC's best estimated schedule. If an activity of the timetable, such as "Closing Date for Receipt of Bids" is delayed, the rest of the timetable dates may be modified. BIDDER will be advised, by addendum to the IFB, of any such modifications to the timetable. Contract start date will be subject to the issuance of a Notice to Proceed.

ACTIVITY		SCHEDULED DATES
1.	IFB Public Announcement	March 15, 2022
2.	No Pre-Bid Orientation due to COVID-19	N/A
3.	Closing Date for Receipt of Questions	March 29, 2022
4.	**Closing Date for Receipt of Bids 2:00 p.m.**	**April 12, 2022**
5.	Contractor Selection/Award Notification (on/about)	April 13, 2022
6.	Contract Start Date (on/about)	May 4, 2022

1.2 AUTHORITY

This IFB is issued following the provisions of Chapter 323F, Hawaii Revised Statutes (HRS), and its administrative rules. All BIDDERS are charged with presumptive knowledge of all requirements of the cited authorities. Submission of a valid executed bid by any BIDDER shall constitute admission of such knowledge on the part of such BIDDER.

1.2.1 IFB ORGANIZATION

This IFB is organized into four sections:

SECTION 1: ADMINISTRATIVE
Provides information regarding administrative requirements.

SECTION 2: SCOPE OF SERVICES
Provides a detailed description of goods and/or services to be provided and delineates HHSC and CONTRACTOR responsibilities.

SECTION 3: BID FORMS AND GENERAL CONDITIONS
Describes the required format and content for submission of the bid.

SECTION 4: BID EVALUATION AND AWARD
Describes how bids will be evaluation and procedures for selection and award of contract.

1.3 HEAD OF PURCHASING AGENCY (HOPA)

The HOPA for HHSC, or designee, is authorized to execute any and all Agreements (Contracts), resulting from this IFB.

The HOPA for this IFB is:

Derek Akiyoshi
Regional Chief Executive Officer
Hawaii Health Systems Corporation

1.4 DESIGNATED OFFICIALS

The officials identified in the following paragraphs have been designated by the HOPA as HHSC's procurement officials responsible for execution of this IFB, award of Agreement and coordination of CONTRACTOR's satisfactory completion of contract requirements.

1.4.1 ISSUING OFFICER

The Issuing Officer is responsible for administrating/facilitating all requirements of the IFB solicitation process and is the **sole point of contact** for BIDDER from date of public announcement of the IFB until the selection of the successful BIDDER. The Issuing Officer will also be responsible for contractual actions throughout the term of the contract. For purposes of this IFB, the designated Issuing Officer is:

Scott Kawai
Director of Contracts and Project Management
e-mail: skawai@hhsc.org
phone: (808) 832-3025

1.5.1 CHARTER

HHSC is a public body corporate and politic and an instrumentality and agency of the State of Hawaii. HHSC is administratively attached to the Department of Health, State of Hawaii and was created by the legislature with passage of Act 262, Session Laws of the State of Hawaii 1996. Act 262 affirms the State's commitment to provide quality health care for the people in the State of Hawaii, including those served by small rural facilities.

1.5.2 STRUCTURE AND SERVICES

HHSC is organized into four operational regions and provides a broad range of healthcare services including acute, long term, rural and ambulatory health care services. As the fourth largest public health system in the country, HHSC is the largest provider of healthcare in the Islands, other than on Oahu. This solicitation is for the Oahu Region.

1.5.3 MISSION

The mission of HHSC is to provide and enhance accessible, comprehensive health care services that are quality-driven, customer-focused and cost-effective.

1.6 FACILITY INFORMATION

Detailed information pertaining to HHSC facilities is located at http://www.hhsc.org.

1.7 SUBMISSION OF QUESTIONS

Questions must be submitted in writing via electronic mail, facsimile or post mail to the Issuing Officer no later than the "Closing Date for Receipt of Questions", identified in paragraph 1.1 in order to generate an official answer. All written questions will receive an official written response from HHSC and become addenda to the IFB.

IMPORTANT

BIDDER may request changes and/or propose alternate language to the attached HHSC General and Special Terms and Conditions during this phase only. All requests will be presented to the HHSC Legal Department for review. No requests to change the HHSC General or Special Terms and Conditions will be entertained after the bids have been submitted or during the contracting process. All written questions and/or approved changes will receive an official written response from HHSC and shall be recorded as addenda to the IFB.

HHSC reserves the right to reject or deny any request(s) made by BIDDER.

Responses by HHSC shall be due to the BIDDER prior to notice of award.

Impromptu, un-written questions are permitted and verbal answers will be provided during pre-bid conferences and other occasions, but are only intended as general direction and will not represent the official HHSC position. The only official position of HHSC is that which is stated in writing and issued in the IFB as addenda thereto.

No other means of communication, whether oral or written, shall be construed as a formal or official response/statement and may not be relied upon.

SEND QUESTIONS TO:

Scott Kawai, Issuing Officer
e-mail: skawai@hhsc.org

1.8 SOLICITATION REVIEW

BIDDER should carefully review this solicitation for defects and questionable or objectionable matter. Comments concerning defects and questionable or objectionable matter, **excluding requests to revise the General or Special Conditions**, must be made in writing and should be received by the Issuing Officer, Scott Kawai, no later than the "Closing Date for Receipt of Bids" as identified in Section 1.1. This will allow issuance of any necessary amendments to the IFB. It will also assist in preventing the opening of bids upon which award may not be made due to a defective solicitation package.

1.9 IFB AMENDMENTS

HHSC reserves the right to amend the IFB any time prior to the deadline date of the IFB. IFB Amendments will be in the form of addenda.

1.10 CANCELLATION OF IFB

The IFB may be canceled when it is determined to be in the best interests of HHSC.

1.11 PROTESTS

Any protest shall be submitted in writing to the HOPA as noted below.

A protest based upon the content of the solicitation shall be submitted in writing within five (5) working days **after** the aggrieved individual/business knows or should have known of the facts giving rise thereto; provided further that the protest shall not be considered unless it is submitted in writing prior to and not later than the "Closing Date for Receipt of Bid" identified in section 1.1.

A protest of an award or proposed award shall be submitted within five (5) working days after the posting of award of the contract. The notice of award, if any, resulting from this solicitation shall be posted at the following website: http://leahi.hhsc.org/procurement/notices/

Any and all protests shall be submitted in writing to the HOPA, as follows:

Derek Akiyoshi
Hawaii Health Systems Corporation
Oahu Region
3675 Kilauea Avenue
Honolulu, Hawaii 96816

1.12 PERFORMANCE AND PAYMENT BOND

Performance and payment bonds shall be required for contracts $25,000 and higher. At the time of the execution of the contract, the successful Bidder shall file good and sufficient performance and payment bonds, each in an amount equal to one hundred percent (100%) of the amount of the contract price unless otherwise stated in the solicitation of bids.

1.13 SPECIALTY CONTRACTOR'S LICENSE

A. Contractor shall be solely responsible to ensure that all specialty licenses required to perform the Work are covered by the Contractor and/or its subcontractor(s).

1.14 WORKING HOURS

A. Regular working hours for this project shall take place between the hours of 8:00 AM to 4:30 PM Monday through Friday, excluding State Holidays, unless otherwise noted or restricted.

B. The Contractor may be given approval to work beyond the regular hours including Saturdays, Sundays, State Holidays, night work, or after hours under the provisions of the GENERAL CONDITIONS.

1.15 SPECIAL PROCEDURES DURING BIDDING

A. Bid documents will be available upon request from the office of the Chief Executive Officer, at Leahi Hospital, 3675 Kilauea Avenue, Honolulu, HI, 96816.

B. All bids shall be submitted to the Issuing Officer.

C. All questions regarding the IFB shall be submitted, in writing, to the Issuing Officer, who shall review the questions and issue any responses via Addendum. Only information received by Addendum shall be binding.

E. Any visitation to the site to examine the scope of work shall be requested through the HHSC Representative. Disruption of facility operations shall not be permitted.

SECTION 2
SCOPE OF SERVICES

2.0 INTRODUCTION

LEAHI HOSPITAL – YOUNG BUILDING SUB-BASEMENT FOOD SERVICE OPERATIONS – PHASE 1

Work for this project shall include, but is not limited to demolition of interior walls, doors, plumbing fixtures, lighting, floor slab, and miscellaneous work as indicated in the Plans.

2.1 CONTRACT PERIOD

The work shall be completed within 360 consecutive calendar days.

2.2 SCOPE OF SERVICES

A. The CONTRACTOR shall complete the work specified in the specifications and drawings in APPENDIX C.

B. Qualifications. The CONTRACTOR shall have:

1. A current and valid license to perform the scope of work.
2. Have been in business for the past three (3) consecutive years.
3. A permanent, on-island office location in conducting business which is accessible to telephone calls. An answering service is not acceptable.

C. HOSPITAL shall provide:

Technical Representatives who shall have the authority to oversee the successful completion of contract requirements, including monitoring, coordinating and assessing CONTRACTOR performance; placing requests for services; and, approving completed work/services with verification of same for CONTRACTOR's invoices. Technical Representatives will also serve as points of contact for "technical" matters throughout the term of the contract.

SECTION 3
BID FORMS AND GENERAL CONDITIONS

General Instructions for Completing Forms

- *Bids shall be submitted in the prescribed format outlined in this IFB*
- *No supplemental literature, brochures or other unsolicited information should be included in the bid packet.*
- *A written response is required for each item unless indicated otherwise.*

3.0 Bid Form

The bid form must be completed and submitted to HHSC by the required due date and time, and in the form prescribed by the HHSC. Facsimile transmissions shall not be accepted.

Interested bidders shall submit their bid under the interested bidder's exact legal name that is registered with the Department of Commerce and Consumer Affairs and shall indicate this exact legal name in the appropriate space on page 1 of the bid form. Failure to do so may delay proper execution of the Contract.

Interested bidders shall certify its ability to provide services on May 4, 2022 or upon execution of the Contract agreement by both parties. The Hospital reserves the right to apply liquidated damages for the delay in Contract execution on the part of the Contractor.

The interested bidder's authorized signature shall certify bid documents. If the Bid Form on Appendix A is unsigned the bid shall be automatically rejected.

The option to extend the Contract shall be at the sole discretion of the Hospital and determined to be in the best interests of the State.

3.1 Bid Security

All lump sum bids of $25,000 and higher, or lump sum base bids including alternates of $25,000 and higher, that are not accompanied by bid security are non –responsive.

a. The bid security shall be in an amount equal to at least five percent (5%) of the lump sum bid or lump sum base bid including alternates or in an amount required by the terms of the federal funding, where applicable.

3.2 General Conditions

The State of Hawaii INTERIM GENERAL CONDITIONS, dated August 1999, and AMENDMENTS shall be read by the Contractor as they form a part of the Agreement to be entered into between the Contractor and HHSC. The Interim General Conditions are not physically included in these specifications, but are included by reference. Copies of the INTERIM GENERAL CONDITIONS may be obtained from the Division of Public works, Department of Accounting and General Services, State of Hawaii at the following website: http://hawaii.gov/pwd/construction_bids/Members/qc/gen_cond_constr

The General Conditions are hereby amended as follows:

a. The following terms specified in Section 1 are hereby defined:

i) Bidder shall have the same definition as Contractor.

ii) Comptroller shall be the Chief Financial Officer at HHSC or his authorized representative.

iii) Department shall be HHSC or its designee.

iv) Engineer shall be the person so designated by HHSC.

v) State shall be HHSC or its designee.

b. Section 1.20 and 1.25 replace "State of Hawaii" with "State".

c. The last two sentences of the third paragraph of Section 2.1.1.2, in the Interim General Conditions is deleted and is replaced with the following:

" If the notice is faxed, the time of receipt by the CEO's fax machine shall be official. The submittal of intention to bid via fax is acceptable only to this office."

d. Section 2.1.2.1: second sentence is hereby deleted in its entirety.

e. Last sentence of paragraph 2.1.2.3 of the Interim General Conditions is amended to read as follows:

"Failure to submit either the required tax clearance certificate or Bid Form will be sufficient grounds for HHSC to refuse to receive or consider the prospective bidder's proposal."

f. The addresses specified in Section 2.6.1 of the Interim General Conditions shall be changed to Leahi Hospital 3675 Kilauea Avenue Honolulu Hawaii 96816.

g. Sections 2.10 through 2.11 are hereby deleted in their entirety.

h. Paragraph 3.8.1 of the Interim General Conditions is amended to read as follows:

“The contract shall be signed and forwarded to HHSC (Contracts Office), by the successful bidder all within three (3) days of receipt of the contract. The performance and payment bonds shall be received by HHSC (Contracts Office) within ten (10) calendar days after the bidders is awarded the contract. No proposal or contract shall be considered binding until the contract has been fully and properly executed by all parties thereto.”

i. In paragraph 3.9.2 of the Interim General Conditions, “ten (10) calendar days after such award or within such further time as the Comptroller may allow” shall be replaced with, “the time allowed in the previous section.”

j. Section 4.1: the words “accepted bid” is deleted from the first sentence.

k. Section 4.9.3: the words “submission of bids” is replaced with the words “execution of this contract”.

l. Section 5.5: the last sentence is hereby deleted in its entirety and replaced with the following:

"In the event of conflict among the Contract Documents, the order of precedence is listed in paragraph 5 of this contract and is further detailed in the following subparagraphs:"

m. Sections 5.5.1 and 5.5.2 are hereby deleted in their entirety.

n. Section 5.8.1: "twenty-four (24)" is hereby changed to "three (3)".

o. Section 5.11 is hereby deleted in its entirety.

p. Section 5.12.4 is hereby deleted in its entirety.

q. Section 7.3.7.4, subparagraphs a and b: Replace "If the project falls within the State University System, The University of Hawaii" with "HHSC."

r. Section 7.4.1 is hereby deleted in its entirety and replaced with the following:

> "The Contractor shall prepare, process, obtain, and pay for all permits necessary for the proper execution of the work."

s. Section 7.7.2 is amended to read as follows: "The wage rate schedule is attached to this contract."

t. Sections 7.14.2, 7.19.2, and 7.19.4: delete "Departments and Agencies and their" and insert "directors" between "officers" and "representatives".

u. Section 7.14.4 is hereby added and reads as follows:

> "Contractor warrants that it and none of its employees, agents or subcontractors performing services or providing goods pursuant to this Agreement are excluded from participation in federal health care programs, as defined in the Social Security Act (section 1128 and 1128A), and other federal laws and regulations relating to health care. HHSC reserves the right to verify that the above warranty is true and to immediately cancel this Agreement in the event it is violated."

v. Section 7.15 delete "and its Departments and Agencies".

w. Section 7.21.8.6 — Delete the word "bad" before the words "weather day conditions."

x. Section 7.35.1: the last word "earlier" is changed to "later".

3. CORPORATE COMPLIANCE PROGRAM. A description of the Corporate Compliance Program of HHSC is posted on the HHSC Internet (www.hhsc.org). The CONTRACTOR, by signing this contract, acknowledges that it has read said description, and that the CONTRACTOR knows of the fact and substance of the Corporate Compliance Program, which governs operations at all facilities of the HHSC. The CONTRACTOR understands and agrees that employees, agents, and contractors performing any services at any of the HHSC facilities shall be fully subject to such Corporate Compliance Program, as may be amended from time to time, as well as all federal program requirements and applicable policies and procedures of HHSC and its facilities. The Corporate Compliance Program requires periodic training, including an orientation program, of all people who provide financial, business office, personnel, coding, medical records information systems and clinical services in the facility. The CONTRACTOR agrees to cause its employees, agents, and contractors who provide any services at any financial, business office, personnel, coding, medical records information systems and clinical services at any of the HHSC facilities to participate in the orientation and training programs.

4. CONFIDENTIAL INFORMATION. It is acknowledged and agreed that all of the trade secrets, business plans, marketing plans, know how, data, contracts, documents, scientific and medical concepts, billing records, personnel records, medical records of any kind, and referral resources for existing or future services, products, operations, management, business, pricing, financial status, valuations, business plans, goals, strategies, objectives and agreements of HHSC and any of its facilities, affiliates or subsidiaries, and all patient information, in any form, whether written, verbal, or electronic, are confidential ("Confidential Information"); provided, however, that Confidential Information, with the exception of patient information, shall not include information that is in the public domain.

5. CONTRACTOR EXCLUSION FROM FEDERAL PROGRAMS. CONTRACTOR warrants that it and none of its employees, agents or subcontractors performing services or providing goods pursuant to this Agreement are excluded from participation in federal health care programs, as defined in the Social Security Act (section 1128 and 1128A), and other federal laws and regulations relating to health care. HHSC reserves the right to verify that the above warranty is true and to immediately cancel this Agreement in the event it is violated.

6. CAMPAIGN CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS.
CONTRACTORs are hereby notified of the applicability of Section 11-205.5, HRS, which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, please consult with the Campaign Spending Commission, or visit its website, www.hawaii.govicampaign.

(END OF SECTION)

SECTION 4
BID EVALUATION AND AWARD

4.0 Bid Evaluation

Each bid offer will be reviewed for exact conformity of the requirements in the IFB, known as a responsible bid. Information provided in/with the bid offer will be used to determine whether the interested bidder has the technical and financial capacity to deliver the goods or services, known as a responsive bid.

4.1 Method of Award

A. The contract will be awarded to the lowest responsive and responsible Bidder whose bid (including any alternates which may be selected) meets the requirements and criteria set forth in the solicitation documents.

B. In the event the total lump sum bid of all bidders exceeds the project control budget, HHSC reserves the right to make an award to the apparent Low Bidder if additional funds are available or by reducing the scope of work through negotiation.

4.2 Contract Execution

Upon receipt of the Contract document, the CONTRACTOR shall have ten (10) business days to execute and return the Contract to the Issuing Officer. Explicit execution instructions will accompany the Contract. A copy of the fully executed Contract will be provided the CONTRACTOR within seven (7) business days of Contract execution.

Award of Contract may be withdrawn if the CONTRACTOR is unable to meet Contract execution requirements.

(END OF SECTION)

APPENDIX A

SAMPLE
BID TRANSMITTAL COVER LETTER

Dear Mr. Kawai,

(Name of Business) proposes to provide any and all goods and services as set forth in the "Invitation for Bid" for Leahi Hospital – Young Building Sub-Basement Food Service Operations – Phase 1 IFB No. 21L-0404, for which fees/costs have been set. The fees/costs offered herein shall apply from XXX, 2022 to XXX, 2024.

It is understood and agreed that (Name of Business) have read HHSC's Scope of Services described in the IFB and that this bid is made in accordance with the provisions of such Scope of Services. By signing this bid, (Name of Business) guarantee and certify that all items included in this bid meet or exceed any and all such Scope of Services. (Name of Business) agree, if awarded the contract, to provide the goods and services set forth in the IFB; and comply with all terms and conditions indicated in the IFB; and at the fees/costs set forth in this bid. The following individual(s) may be contacted regarding this bid:_____

Other information:

Address:		Federal Tax ID #:	
Phone No.:		Hawaii GET ID #:	
E-mail address:			

(Name of Business) is a: ☐ Sole Proprietor ☐ Partnership ☐ Corporation ☐ Joint Venture Other (Specify)_____

State of Incorporation is: (Specify)_____

Year of Business started: _____

The exact legal name of the business under which the contract, if awarded, shall be executed is:_____

(Authorized Bidder's Signature, Printed Name/Title; Corporate Seal or Notarized)

P R O P O S A L

FOR

FURNISHING LABOR AND MATERIALS

REQUIRED FOR

LEAHI HOSPITAL
YOUNG BUILDING SUB-BASEMENT
FOOD SERVICE OPERATIONS – PHASE 1

TAX MAP KEY: 3-2-031: 001

HONOLULU, OAHU, HAWAII

FOR THE

HAWAII HEALTH SYSTEMS CORPORATION
STATE OF HAWAII

After carefully examining the bid documents, drawings and specifications identified above, the Bidder proposes to furnish at its own expense all necessary labor, materials, tools and equipment to complete the work according to the true intent and meaning of the drawings and specifications, all for the Lump Sum Base Bid of:

_____DOLLARS ($_____).

SCHEDULE AND COMPLETION OF WORK

The Bidder agrees to commence and complete all work under this contract as follows:

PART I

Upon receipt of the Letter of Award with written instructions from the HHSC Representative, proceed with preparatory work including processing submittals, obtaining approvals, and permits, or other work as approved by the HHSC Representative. No work will be allowed at the jobsite. No ordering of materials will be allowed until;

(a) the date stipulated in the Letter of Notice to Proceed, or
(b) upon earlier written notice from the HHSC Representative, or
(c) upon receipt of the executed contract for the project.

PART II

The Contractor shall fully complete all work under this contract within 360 consecutive calendar days from the date stipulated in the Letter of Notice to Proceed.

EVALUATION CRITERIA

Evaluating Bids: The lowest responsive, responsible bid is determined by the following procedures:

1) The total lump sum bid price.

2) Project control budget is established at $788,000.

Should the Lump Sum Base Bid of all bidders exceed the project control budget, the bidder with the lowest total lump sum base bid is designated the Low Bidder for the project.

METHOD OF AWARD

The contract will be awarded to the lowest responsive and responsible Bidder whose bid meet the requirements and criteria set forth in the solicitation documents and as determined by the HHSC.

In the event that the total lump sum base bid for of all bidders exceed the project control budget, the HHSC shall reserve the right to make an award to the apparent Low Bidder and seek additional funds and increase the project control budget or reduce the scope of work through negotiation to meet the project control budget.

OTHER CONDITIONS FOR AWARD

The HHSC reserves the right to reject any and/or all bids and waive any defects when, in its opinion, such rejection or waiver will be for the best interest of the HHSC;

The award of the contract shall be conditioned upon funds being made available for these projects and further upon the right of the HHSC to hold all bids received for a

period of sixty (60) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn;

Any agreement arising out of this offer is subject to approval of HHSC as to form, and to all further approvals, including the approval of the HHSC, required by statute, regulation, rule, order, or other directive.

OTHER CONDITIONS

1. Bidder agrees to pay liquidated damages to the HHSC to be specified.

2. By submitting this proposal, the Bidder is declaring that its firm has not been assisted or represented on this matter by an individual who has, in a HHSC capacity, been involved in the subject matter of this contract in the past two years;

3. Anti-collusion certification. In accordance with HAR 3-122-192, by submitting this proposal, the Bidder is declaring that the price submitted is independently arrived at without collusion.

4. Certification for Safety and Health Program for bids in excess of $100,000. In accordance with HRS 396-18, the Bidder certifies that its organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH); and

5. Upon the acceptance of the proposal by the HHSC, the Bidder must enter into and execute a contract for the same and furnish a Performance and Payment bond, as required by law. These bonds shall conform to the provisions of Sections 103D-324 and 325, Hawaii Revised Statutes and any law applicable thereto.

RECEIPT OF ADDENDA

Receipt of the following addenda issued by HHSC is acknowledged by the date (s) of receipt indicated below:

Addendum No. 1 _____ Date	Addendum No. 5
Addendum No. 2 _____	Addendum No. 6
Addendum No. 3 _____	Addendum No. 7
Addendum No. 4 _____	Addendum No. 8

It is understood that failure to receive any such addendum shall not relieve the Bidder from any obligation under this Proposal as submitted.

ALL JOINT CONTRACTORS OR SUBCONTRACTORS TO BE ENGAGED ON THIS PROJECT

The Bidder certifies that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes, who will be engaged by the Bidder on this project to perform the nature and scope of work indicated pursuant to Section 103D-302, Hawaii Revised Statutes and understands that failure to comply with this requirement may be just cause for rejection of the bid.

The Bidder further understands that only those joint contractors or subcontractors listed shall be allowed to perform work on this project and that all other work necessary shall be performed by the Bidder with his own employees. If no joint contractor or subcontractor is listed, it shall be construed that all of the work shall be performed by the Bidder with its own employees.

The Bidder must be sure that it has and that the subcontractor(s) listed in the proposal have all the necessary specialty licenses needed to perform the work for this project. The Bidder shall be solely responsible for assuring that all the specialty licenses required to perform the work are covered in its bid.

The Bidder shall include the license number of the joint contractors or subcontractors listed below. Failure to provide the correct names and license numbers as registered with the Contractor's Licensing Board may cause rejection of the bid submitted.

Complete Firm Name Joint Contractor or Subcontractor for Lump Sum Base Bid	License Number	Nature and Scope of Work to be Performed

Enclosed herewith:

1. Surety Bond (*1))
2. Legal Tender (*2))
3. Cashier's Check (*3))
4. Certified Check (*3))

(Cross Out Those Not Applicable)

in the amount of:

_____ DOLLARS ($_____).

as required by law.

Respectfully submitted,

_____
Name of Company, Joint Venture or Partnership

_____
License No.

By _____
Signature (*4)

Title _____

Date: _____

Address: _____

_____

Telephone No.: _____

(CORPORATE SEAL)

(*5)

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;

2. Legal tender; or

3. A cashier's or a certified check accepted by, and payable on demand to the HHSC by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation.

    a. These instruments may be utilized only to a maximum of $100,000.

    b. If the required security or bond amount totals over $100,000, more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be accepted.

4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company, and also the names and residence addresses of all officers of the Company.

5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT. MISSING PAGES MAY INVALIDATE YOUR BID.

END OF PROPOSAL

APPENDIX C

S P E C I F I C A T I O N S

FOR

FURNISHING LABOR AND MATERIALS

REQUIRED FOR

LEAHI HOSPITAL

YOUNG BUILDING
SUB-BASEMENT – FOOD SERVICE OPERATIONS
PHASE 1

3675 KILAUEA AVE.
HONOLULU, OAHU, HAWAII

TMK: 03-03-031:001

FOR THE

HAWAII HEALTH SYSTEMS CORPORATION (HHSC)

STATE OF HAWAII

ARCHITECT: PACIFIC ARCHITECTS, INC.
ENVIRONMENTAL: ENVIROQUEST, INC.

FEBRUARY 2022

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FOR

FURNISHING LABOR AND MATERIALS

REQUIRED FOR

LEAHI HOSPITAL
YOUNG BUILDING SUB-BASEMENT
FOOD SERVICE OPERATIONS – PHASE 1

TAX MAP KEY: 3-2-031: 001

HONOLULU, OAHU, HAWAII

FOR THE

HAWAII HEALTH SYSTEMS CORPORATION
STATE OF HAWAII

After carefully examining the bid documents, drawings and specifications identified above, the Bidder proposes to furnish at its own expense all necessary labor, materials, tools and equipment to complete the work according to the true intent and meaning of the drawings and specifications, all for the Lump Sum Base Bid of:

_____DOLLARS ($_____).

SCHEDULE AND COMPLETION OF WORK

The Bidder agrees to commence and complete all work under this contract as follows:

PART I

Upon receipt of the Letter of Award with written instructions from the HHSC Representative, proceed with preparatory work including processing submittals, obtaining approvals, and permits, or other work as approved by the HHSC Representative. No work will be allowed at the jobsite. No ordering of materials will be allowed until;

(a) the date stipulated in the Letter of Notice to Proceed, or
(b) upon earlier written notice from the HHSC Representative, or
(c) upon receipt of the executed contract for the project.

PART II

The Contractor shall fully complete all work under this contract within 360 consecutive calendar days from the date stipulated in the Letter of Notice to Proceed.

EVALUATION CRITERIA

Evaluating Bids: The lowest responsive, responsible bid is determined by the following procedures:

1) The total lump sum bid price.

2) Project control budget is established at $788,000.

Should the Lump Sum Base Bid of all bidders exceed the project control budget, the bidder with the lowest total lump sum base bid is designated the Low Bidder for the project.

METHOD OF AWARD

The contract will be awarded to the lowest responsive and responsible Bidder whose bid meet the requirements and criteria set forth in the solicitation documents and as determined by the HHSC.

In the event that the total lump sum base bid for of all bidders exceed the project control budget, the HHSC shall reserve the right to make an award to the apparent Low Bidder and seek additional funds and increase the project control budget or reduce the scope of work through negotiation to meet the project control budget.

OTHER CONDITIONS FOR AWARD

The HHSC reserves the right to reject any and/or all bids and waive any defects when, in its opinion, such rejection or waiver will be for the best interest of the HHSC;

The award of the contract shall be conditioned upon funds being made available for these projects and further upon the right of the HHSC to hold all bids received for a

period of sixty (60) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn;

Any agreement arising out of this offer is subject to approval of HHSC as to form, and to all further approvals, including the approval of the HHSC, required by statute, regulation, rule, order, or other directive.

OTHER CONDITIONS

1. Bidder agrees to pay liquidated damages to the HHSC to be specified.

2. By submitting this proposal, the Bidder is declaring that its firm has not been assisted or represented on this matter by an individual who has, in a HHSC capacity, been involved in the subject matter of this contract in the past two years;

3. Anti-collusion certification. In accordance with HAR 3-122-192, by submitting this proposal, the Bidder is declaring that the price submitted is independently arrived at without collusion.

4. Certification for Safety and Health Program for bids in excess of $100,000. In accordance with HRS 396-18, the Bidder certifies that its organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH); and

5. Upon the acceptance of the proposal by the HHSC, the Bidder must enter into and execute a contract for the same and furnish a Performance and Payment bond, as required by law. These bonds shall conform to the provisions of Sections 103D-324 and 325, Hawaii Revised Statutes and any law applicable thereto.

RECEIPT OF ADDENDA

Receipt of the following addenda issued by HHSC is acknowledged by the date (s) of receipt indicated below:

Addendum No. 1 _____ Date	Addendum No. 5
Addendum No. 2 _____	Addendum No. 6
Addendum No. 3 _____	Addendum No. 7
Addendum No. 4 _____	Addendum No. 8

It is understood that failure to receive any such addendum shall not relieve the Bidder from any obligation under this Proposal as submitted.

ALL JOINT CONTRACTORS OR SUBCONTRACTORS TO BE ENGAGED ON THIS PROJECT

The Bidder certifies that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes, who will be engaged by the Bidder on this project to perform the nature and scope of work indicated pursuant to Section 103D-302, Hawaii Revised Statutes and understands that failure to comply with this requirement may be just cause for rejection of the bid.

The Bidder further understands that only those joint contractors or subcontractors listed shall be allowed to perform work on this project and that all other work necessary shall be performed by the Bidder with his own employees. If no joint contractor or subcontractor is listed, it shall be construed that all of the work shall be performed by the Bidder with its own employees.

The Bidder must be sure that it has and that the subcontractor(s) listed in the proposal have all the necessary specialty licenses needed to perform the work for this project. The Bidder shall be solely responsible for assuring that all the specialty licenses required to perform the work are covered in its bid.

The Bidder shall include the license number of the joint contractors or subcontractors listed below. Failure to provide the correct names and license numbers as registered with the Contractor's Licensing Board may cause rejection of the bid submitted.

Complete Firm Name Joint Contractor or Subcontractor for Lump Sum Base Bid	License Number	Nature and Scope of Work to be Performed

Enclosed herewith:

1. Surety Bond (*1))
2. Legal Tender (*2))
3. Cashier's Check (*3))
4. Certified Check (*3))

(Cross Out Those Not Applicable)

in the amount of:

_____ DOLLARS ($_____).

as required by law.

Respectfully submitted,

_____
Name of Company, Joint Venture or Partnership

_____
License No.

By _____
Signature (*4)

Title _____

Date: _____

Address: _____

_____

Telephone No.: _____

(CORPORATE SEAL)

(*5)

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;

2. Legal tender; or

3. A cashier's or a certified check accepted by, and payable on demand to the HHSC by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation.

    a. These instruments may be utilized only to a maximum of $100,000.

    b. If the required security or bond amount totals over $100,000, more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be accepted.

4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company, and also the names and residence addresses of all officers of the Company.

5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT. MISSING PAGES MAY INVALIDATE YOUR BID.

END OF PROPOSAL

SECTION 00210 - INSTRUCTIONS TO BIDDERS

Part 1 - GENERAL

1.01 GENERAL

A. Only Bidders with the required contractor's license(s) are eligible to submit a Bid.

B. Bidders (Contractors) shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract. The following definitions are used in the solicitation documents.

1. Hawaii Business §3-1222-112 HAR: A bidder who is registered and incorporated or organized under the laws of the State is a "Hawaii Business" and eligible for an award.

2. Compliant non-Hawaii Business §3-122-112 HAR: A bidder not incorporated or organized under the laws of the State, but is registered to do business in the State and complies with or is exempt from the requirements of §3-122-112 HAR, is a "Compliant Non-Hawaii Business" and eligible for an award.

3. Non-compliant Bidder: If a bidder is a non-Hawaii business and is not registered with the DCCA Business Registration Division (BREG) or cannot comply with §3-122-112 HAR, then the bidder in non-compliant and is ineligible for an award.

C. Prospective Bidders shall submit their "Intention to Bid".

D. Bidders shall submit the "Sealed Bid Form", bid bond (if required), tax clearances, Hawaii business certificates, and any other documents required by the bidding documents.

E. The GENERAL CONDITIONS set forth additional terms and conditions for the bid and award process. The GENERAL CONDITIONS will be part of the contract documents by which HHSC and the bidder (prospective contractor) will be bound. Bidders are directed to the GENERAL CONDITIONS for contract and statutory requirements and for Bidding and Execution of the Contract Requirements. Bidders are also directed to "Section 00800 – Special Conditions" of these specifications for definitions and modifications to the GENERAL CONDITIONS.

1.02 OFFEROR(S) or BIDDER(S)

A. The terms "Offeror" and "Bidder" are synonymous when used in this Section 00210 and other solicitation documents.

1.03 ADDENDA, CLARIFICATIONS

A. Addenda: The HHSC may periodically issue an addendum that may increase or decrease the scope of work or contract time, provisions or conditions. The HHSC will make the addenda available online on the facility website. Bidders are responsible for the information contained in the addenda or bid clarification whether or not the Bidder receives the addenda or clarification.

B. Bidders discovering an ambiguity, inconsistency or error when examining the bidding documents or the site and local conditions or bidders with questions or clarification requests shall send their written requests (email or fax notification are acceptable) to the Contract Manager. Bidders shall comply with the following procedures:

1. Identify each request with the Project Name and HHSC Project Number.

2. Indicate the appropriate section number, paragraph, drawing and detail number, schedule or other identifier.

3. The request should be brief, concise, but complete enough to properly evaluate and determine the merits or non-merits of the question or request.

C. Bidders shall make any requests for clarifications no later than fourteen (14) calendar days prior to the submission date for sealed bids. Refer to the “Notice to Bidders” for submission date.

D. HHSC will respond to important requests or clarifications by way of addenda. HHSC may not address or respond to all bidders inquiries, if the HHSC determines the request is unimportant or not required to disseminate to all Bidders.

1.04 SEALED BID FORM (BID FORM)

A. Bidder shall fill out the “Sealed Bid Form” completely. Write in ink or type. Besides the following paragraphs with instructions, there are supplemental Bidder’s Instructions within the text of the “Sealed Bid Form” and bidders shall comply with the instructions. Do not alter the “Sealed Bid Form”, and maintain the form intact.

B. RECYCLED PRODUCT PREFERENCE is not applicable to this project.

C. OTHER CONDITIONS: Bidder acknowledges and agrees to the provisions and certifications stated in this article.

D. RECEIPT OF ADDENDA: Bidder shall fill in the appropriate dates any addenda were received.

E. LISTING JOINT CONTRACTORS OR SUBCONTRACTORS:

1. Bidder shall complete the "Joint Contractors or Subcontractors List." It is the sole responsibility of the bidder to review the requirements of this project and determine the appropriate specialty contractor's licenses that are required to complete the project. Failure of the bidder to provide the correct names, license numbers, specialty class number, classification description and to indicate that the specialty contractor is required for this project, may cause the bid to be rejected.

2. Bidder agrees the completed listing of joint contractors or subcontractors is required for the project and that the bidder, together with the listed joint contractors and subcontractors, have all the specialty contractor's licenses to complete the work.

3. Based on the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Hawaii 450 (2002), the bidder as a general contractor ('A' or 'B' license) is prohibited from undertaking any work solely or as part of a larger project, which would require the bidder ('A' or 'B' general contractor) to act as a specialty ('C' license) contractor in any area in which the bidder ('A' or 'B' general contractor) has no specialty contractor's license. Although the 'A' and 'B' contractor may still bid on and act as the "Prime Contractor" on an 'A' or 'B' project (*See, HRS §444-7 for the definitions of an "A" and "B" project*), respectively, the 'A' and 'B' contractor may only perform work in the areas in which they have the appropriate contractor's license. The bidder ('A' or 'B' general contractor) must have the appropriate 'C' specialty contractor's licenses either obtained on its own, or obtained automatically under HAR §16-77-32.

4. General Engineering 'A' Contractors automatically have these 'C' specialty contractor's licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-56, C-57a, C-57b, and C-61.

5. General Building 'B' Contractors automatically have these 'C' specialty contractor's licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-42a, and C-42b.

6. The table that lists the specialty contractor' classifications in the bid form is from the Department of Commerce and Consumer Affairs' (DCCA) website www.state.hi.us/dcca/har/index.html. Bidders shall provide the appropriate classifications numbers and descriptions for any specialty contractors that are not included in the bid form and bidders are directed to the DCCA web site for the latest updated list.

7. Instructions to complete the Joint Contractors or Subcontractors List:

a. Determine the specialty contractor classification(s) required for this project and provide the complete firm name and license number of the joint contractor or subcontractor in the respective columns. If the bidder is a general contractor and providing the work of the required specialty contractor classification, fill in the bidder's (general contractor's) license number and name.

b. List only one joint contractor or subcontractor per required specialty contractor's classification.

c. For projects with alternate(s), fill out the respective "Joint Contractors or Subcontractors List for the Alternate(s)." Bidder shall determine the specialty contractor's classification and description required for the respective alternate. Bidders shall fill in the complete class number, class description, firm name and license number of the respective joint contractor or subcontractor. The bidder shall not include any joint contractor or subcontractor previously listed for the base bid.

F. COST AND TIME: Bidder shall completely fill out the article and enter the cost for the Project Bid Price, and Alternates when provided. Bidder shall tabulate the Project Bid Price, and Alternates when provided, and the Bidders shall then enter the Total Lump Sum Bid Price. **BE SURE TO ENTER THE TOTAL LUMP SUM BID PRICE IN WORDS AND NUMERALS**. Refer to Bidder's Instructions located within the article.

1. If provided, bidder shall fill in total costs for each alternate.

2. The bidder is directed to the construction time information paragraph "B" for the list of contract times and dates which may include: contract duration, project start date, jobsite start date, jobsite completion, contract completion date and construction time for alternates. Bidder shall refer to "Section 01100" of these specifications for additional construction time information, as applicable.

G. SIGNATORY PAGE: Bidder shall completely fill out article (page). Bidder shall indicate if it is a "Hawaii Business" or a "Compliant Non-Hawaii Business." Also, bidder shall refer to Bidder's Instructions located within the article.

1.05 <u>EVALUATION CRITERIA</u>

A. <u>EVALUTATING BIDS</u>: The lowest responsive, responsible bid is determined by the following procedures:

1. The total lump sum bid price is adjusted to reflect the applicable preferences.

a. For projects with alternates, the total lump sum base bid price and alternates will be adjusted to reflect the applicable preferences.

2. Project control budget is established prior to the submission of bids.

1.06 METHOD OF AWARD

A. The contract will be awarded to the lowest responsive and responsible Bidder whose bid (including any alternates which may be selected) meets the requirements and criteria set forth in the solicitation documents.

B. In the event the total lump sum bid of all bidders exceeds the project control budget, HHSC reserves the right to make an award to the apparent Low Bidder if additional funds are available or by reducing the scope of work through negotiation.

1.07 OTHER CONDITIONS FOR AWARD

A. The Chief Procurement Officer may reject any or all bids and waive any defects if the Chief Procurement Officer believes the rejection or waiver is in the best interest of HHSC.

B. The Chief Procurement Officer may hold all bids up to 60 calendar days from the date bids were opened. Unless otherwise required by law, bids may not be withdrawn without penalty.

C. The award of the contract is conditioned upon funds made available for the project (or projects if applicable)

1.08 COMPLIANCE WITH §3-122-112 HAR:

A. As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the bidder shall meet the “Hawaii Business” or “Compliant non-Hawaii Business” requirements and shall provide the following documents:

1. Department of Taxation (DOTAX) and the IRS tax clearance certificates.

2. Department of Labor (DLIR) certificate of compliance.

3. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) certificate of good standing.

a. A Hawaii business that is a sole proprietorship is not required to register with the BREG and therefore not required to submit the DCCA, BREG “Certificate of Good

Standing."

B. The apparent three low bidders shall furnish the required documents to HHSC within seven calendar days from the bid opening date. If a valid certificate is not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the documents by the required deadlines.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 REQUIRED DOCUMENTATION FOR HAWAII BUSINESS OR COMPLIANT NON-HAWAII BUSINESS (§3-122-112 HAR)

A. TAX CLEARANCE REQUIREMENTS (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is ~~are~~ valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by HHSC.

1. DOTAX *TAX CLEARANCE APPLICATION* Form A-6 (Rev 2003) is available at DOTAX and IRS (State of Hawaii) offices or DOTAX website, and by mail or fax.

a. DOTAX website: http://www.state.hi.us/tax/alphalist.html#a

b. DOTAX forms by fax/mail: (808) 587-7572 or 1-800-222-7572

2. Mail, fax or submit in person completed tax clearance application forms to the Department of Taxation, Taxpayer Services Branch or to the address listed on the application. Facsimile numbers are:

a. DOTAX: (808) 587-1488

b. IRS: (808) 539-1573

3. DOTAX will return the form to the bidder. The bidder is reminded that it is responsible to submit the applications for the tax clearance directly to DOTAX or IRS and not to HHSC.

B. DLIR CERTIFICATE of COMPLIANCE (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial Relations (DLIR). The certificate is valid for six months from the date of issue; certificates must

be valid on the date received by HHSC.

1. DLIR *APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112 HAR*, Form LIR#27 is available at DLIR website or at the neighbor island DLIR District Office.

   a. DLIR website: http://www.dlir.state.hi.us/LIR#27

2. Mail, fax or submit in person completed application form to the Department of Labor and Industrial Relations, Administrative Services Office at the address listed on the application.

3. DLIR will return the form to the bidder. The bidder is reminded that it is responsible to submit the application for the certificate directly to DLIR and not to HHSC.

C. DCCA CERTIFICATE OF GOOD STANDING: Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by HHSC.

1. DCCA *CERTIFICATE OF GOOD STANDING* is available from the business registrations website or by telephone. Bidders are advised there are costs associated with registering and obtaining the certificate.

   a. DCCA form website: http//www.BusinessRegistrations.com

   b. DCCA telephone: (808) 586-2727, M - F 7:45 to 4:30 HST

2. Submit the application per DCCA's requirements.

3. DCCA will return the form to the bidder. The bidder is reminded that it is responsible to submit the application for the certificate directly to DCCA and not to HHSC.

END INSTRUCTION TO BIDDERS

SECTION 00800 - SPECIAL PROVISIONS

PART 1 - GENERAL

1.01 SUBSTITUTION REQUESTS

A. Written substitution requests must be submitted with your Invitation for Bid (IFB) in accordance with IFG Section 3. All substitutions will be reviewed and approved in accordance with the GTC.

B. Substitution requests by FAX are not acceptable.

1.02 PROJECT CONTACT PERSON

A. HHSC Representative – For access to the site.

NAME:	Mr. Ron Kurasaki
POSITION OR TITLE:	Project Manager
TELEPHONE NUMBER:	(808) 486-8048
Email:	rkuraski@hhsc.org

B. Project Coordinator - For questions and clarifications during bidding and Requests for Substitutions.

NAME:	Mr. Clifford Murakami
POSITION OR TITLE:	Project Architect
TELEPHONE NUMBER:	(808) 949-1601
Email:	cmurakami@pacarchitects.com

C. Procurement Agency – For questions regarding proposal and contract requirements.

NAME:	Mr. Scott Kawai
POSITION OR TITLE:	Contracts Manager
TELEPHONE NUMBER:	(808) 832-3025
Email:	SKawai@hhsc.org

1.03 OFFEROR'S RESPONSIBILITY FOR EXAMINING PLANS, SPECIFICATIONS AND SITE OF WORK

A. Offerors herewith refers to sub-contractors, suppliers, manufacturer's representatives as well as contractors.

1.04 LIQUIDATED DAMAGES

A. The time of completion for the Work shall be within 360 consecutive calendar days from the official commencement date of the Notice to Proceed (NTP).

B. In accordance with the General Conditions, upon failure to complete Work or any portion of the Work within the time or times fixed in the contract or extension thereof, the Contractor shall pay liquidated damages to the Department in the amount of $250.00 per calendar day of delay.

C. In accordance with the General Conditions, PROJECT ACCEPTANCE DATE, for failure to correct punch list deficiencies, within the time or times fixed in the contract or extension thereof, the Contractor shall pay liquidated damages to the HHSC, in the amount equal to ten percent (10%) of the liquidated damages per calendar day of delay.

D. In accordance with the General Conditions FINAL SETTLEMENT OF THE CONTRACT, for failure to submit closing documents within the time or times fixed in the contract or extension thereof, it is agreed that the Bidder shall pay liquidated damages to HHSC in the amount equal to five percent (5%) of the liquidated damages per calendar day of delay.

1.05 SPECIALTY CONTRACTOR'S LICENSE

A. Contractor shall be solely responsible to assure that all the specialty licenses required to perform the Work are covered by the Contractor or its subcontractor(s).

1.06 WORKING HOURS

A. The regular working hours for this project is from 8:00 AM to 4:30 PM Monday through Friday, excluding State Holidays, unless otherwise noted or restricted under "Section 01100". The Working Hours provisions of specification "Section 01100" shall govern over this article 1.06.

B. The Contractor may be given approval to work beyond the regular hours including Saturdays, Sundays, State Holidays, night work, or after hours under the provisions of the GENERAL CONDITIONS, "Overtime And Night Work Section" and under specification "Section 01100".

1.07 **COVID-19 REQUIREMENTS AND PROTOCOL**

A. ALL CONTRACTOR personnel entering the facilities shall be fully vaccinated. The CONTRACTOR shall comply with all Federal, State, County, HHSC, and facility COVID-19 rules, regulations, and requirements. All CONTRACTOR personnel entering the facility shall be vaccinated in accordance with CMS, CDC, and HHSC Oahu Region guidelines. Failure to do so may result if CONTRACTOR personnel being prohibited from entering facility. All cost incurred due to non-compliance shall be the responsibility of the CONTRACTOR.

1.08 SPECIAL PROCEDURES DURING BIDDING

A. Bid documents will be available online and from the Contracts Manager's office, at Maluhia, 1027 Hala Drive, Honolulu, HI, 96817.

B. All bids shall be submitted to the Contracts Manager.

C. All questions regarding the plans and specifications shall be submitted, in writing, to the Architect. The Architect will review the questions and issue any responses via Addendum. Only information received by Addendum shall be binding.

D. All questions regarding the proposal or contractual requirements shall be submitted, in writing to the Contracts Manager. The Contracts Manager will review the questions and issue any responses via Addendum. Only information received by Addendum shall be binding.

E. Any visitation to the site to examine the scope of work shall be requested through the HHSC Representative. Disruption of facility operations shall not be permitted.

1.09 PROCEDURES DURING CONSTRUCTION

A. Upon issuance of the Notice to Proceed, the Contractor shall submit a work schedule for review and discussion. The work schedule shall be up-dated on a weekly or bi-weekly basis as directed by the Architect.

B. On a weekly or bi-weekly basis, the Contractor shall conduct a progress meeting with the Hospital and Architect. The meeting will discuss the progress of the construction, discussion of problems, and review of outstanding issues. The Contractor shall conduct the meeting and prepare the meeting notes and minutes and distribute to all parties.

C. During the construction, submittals and RFIs shall be submitted to the Architect for review and action. To expedite the review, the Contractor may make submittals via email.

D. Periodic requests for payment shall be submitted to the Architect for review and confirmation. Approved requests for payment will be forwarded to the Contracts Officer for processing of payment.

E. Upon substantial completion of the project, the Contractor shall submit in writing to the Architect a request for a pre-final inspection. The Contractor shall have completed their own inspection and completed all noted discrepancies. Include with the request for the pre-final inspection a list of all outstanding work not completed or corrected.

F. Upon conducting a pre-final inspection, the Architect shall prepare a punchlist of noted discrepancies for the Contractor's remedial action. A final inspection will be performed upon completion of all punchlist items.

1.10 PROJECT RESTRICTIONS

A. The Contractor is informed that the facilities will be fully occupied and work shall be performed in close coordination with the HHSC representative. Work shall be phased and may be limited to one area at a time. If work will require the relocation of clients from the work area, time shall be allocated for the Hospital to conduct this relocation. Scheduling of the work shall be closely monitored and work performed to minimize the disruption to the remaining areas of the facility. All work schedules shall be approved by HHSC prior to starting.

B. Staging and storage of materials on-site is limited and shall not be allowed unless coordinated and approved with the HHSC representative.

Contractor may be required to store materials off-site at his own expense.

C. Parking on-site is limited and may be restricted to only active delivery of materials and equipment. Coordinate with the HHSC representative. If on-site parking will not be available, the Contractor shall park off-site.

D. The above restrictions shall be considered in the work of this project and shall be included in the Contractor's cost. No additional compensation shall be made for not considering these restrictions.

PART 2 - MATERIALS (Not Used)

PART 3 - EXECUTION

3.01 FINAL PAYMENT REQUIREMENTS

A. In addition to the requirements in the GENERAL CONDITIONS "Final Payment" section, the contractor shall submit"

1. Tax clearance certificate from DOTAX and IRS, current within two months of the issuance date; and

2. An originally signed Certificate of Compliance for Final Payment (SPO Form - 22, modified), affirming that the contractor remained in compliance with all laws as required by (§3-122-112 HAR). A contractor making a false affirmation shall be suspended and may be debarred pursuant to section 103D-702 HRS.

END OF SECTION

SECTION 01019 - GENERAL PROJECT REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY OF WORK

A. Perform operations and furnish equipment, tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.

1.02 DIVISION OF WORK

A. The Division and Sections into which these specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to work specified within each section

B. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.

C. Specifications and Drawings are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as “the Contractor shall”, “as shown on the drawings”, “a”, “an”, and “the” are intentional. Omitted words and phrases shall be provided by inference to form complete sentences

D. Specifying of interface and coordination in the various Specification Sections is provided for information and convenience only. Such requirements in the various Sections shall complement the requirements of this Section.

1.03 NOTIFICATION

A. Contact the Architect and HHSC Representative at least five (5) working days prior to starting any onsite work.

1.04 SAFETY REQUIREMENTS

A. The Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes, effective May 16, 1972, as amended, is applicable and made a part of the Contract. Carefully read and strictly comply with its requirements.

B. Protect the facility personnel, students, and the public whenever power driven equipment is used. Ensure adequate safety precautions are used when operating any power driven equipment.

1.05 PERFORMANCE AND COORDINATION

A. Contractor shall be in charge of the Work and the Project Contract Limits, as well as the directing and scheduling of all work. Contractor shall

include general supervision, management and control of the Work of this project, and in addition to other areas more specifically noted throughout the Specifications. Final responsibility for performance, interface, and completion of the Work and the Project shall be the Contractor's.

B. Jobsite Administration shall be the responsibility of the Contractor. Provide a competent superintendent on the job and provide an adequate staff to execute the Work. In addition, all workers shall dress neatly and conduct themselves properly at all times. Loud abusive behavior, sexual harassment and misconduct will not be tolerated. Workers found in violation of the above shall be removed from the job site as directed by the HHSC Technical Representative.

C. The HHSC and/or Hospital will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the Prime Contractor in matters pertaining to other trades employed on the job.

D. Coordination: Provide project interface and coordination to properly and accurately bring together the several parts, components, systems, and assemblies as required to complete the Work.

1. Provide interface and coordination of all trades, crafts and subcontracts. Ensure and make correct and accurate connections of abutting, adjoining, overlapping, and related work. Provide anchors, fasteners, accessories, appurtenances, and incidental items needed to complete the Work, fully, and correctly in accordance with the Contract Documents.

2. Provide additional structural components, bracing, blocking, miscellaneous metal, backing, anchors, fasteners, and installation accessories required to properly anchor, fasten, or attach material, equipment, hardware, systems and assemblies to the structure.

3. Provide caulking, sealing, and flashing as required to waterproof the building complete and as required to insulate the building thermally and acoustically. Include sealing, flashing, and related work as required to prevent moisture intrusion, air infiltration, and light leakage.

4. Materials, equipment, component parts, accessories, incidental items, connections, and services required to complete the Work which is not provided by subcontractors shall be provided by the Contractor.

1.06 COOPERATION WITH OTHER CONTRACTORS

A. The Hospital reserves the right at any time to contract for or otherwise perform other or additional work within the Project Contract Limits. The Contractor of this project shall to the extent ordered by the HHSC Representative, conduct its work so as not to interfere with or hinder the

progress or completion of the work performed by the Hospital or other contractors.

1.07 SUBMITTALS

A. Furnish required submittals specified in this Section and in the Technical Sections. Submittals include one or more of the following: shop drawings, color samples, material samples, technical data, material safety data information, schedules of materials, schedules of operations, guarantees, certifications, operating and maintenance manuals, and field posted as-built drawings.

B. Record Drawings: Field Posted As-Built Drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be prepared and submitted by the Contractor. To accomplish this, the following procedure shall be followed by the Contractor:

1. A full-size set of field posted as-built drawings shall be maintained at the job site. All deviations from alignments, elevations and dimensions which are stipulated on the drawings and authorizations given by the HHSC Technical Representative to deviate from the drawings shall be clearly and accurately recorded by the Contractor on this set of record drawings.

2. Changes shall be recorded immediately after they are constructed in place to assure they are not forgotten. Record the changes in red pencil and where applicable, refer to the authorizing document or Change Order. The field posted as-built drawings shall be made available to the Architect and HHSC Technical Representative at any time so that its clarity and accuracy can be monitored.

3. The words “FIELD POSTED AS-BUILT” shall be labeled on the title sheet and certified by the Contractor as to accuracy and completeness as shown below:

   FIELD POSTED AS-BUILT

   Certified By: _____Date:_____
   Contractor (Include name and company)

4. The words “FIELD POSTED AS-BUILT” shall be labeled on all sheets in the margin space to the right of the sheet number written from the bottom upward.

5. The Index to Drawings shall be revised with the label “FIELD POSTED AS-BUILT” for each sheet. The index shall conclude with the following note: “A COMPLETE SET CONTAINS ____ SHEETS” with the total number of sheets comprising the set to be placed in the blank.

6. Any “FIELD POSTED AS-BUILT” drawing which the Architect determines does not accurately record the deviation may be corrected by the Architect and the Contractor shall be charged for the services.

7. Submit the set of “FIELD POSTED AS-BUILT” drawings to the Architect and notify the HHSC Technical Representative no later than five (5) calendar days prior to the date of final inspection.

8. “AS-BUILT” drawings will be prepared by the design consultant using the “FIELD POSTED AS-BUILT”. Both sets of drawings will be sent to the Contractor for review and approval. The Contractor shall retain the “FIELD POSTED AS-BUILT” drawings for records, sign the “AS-BUILT” set of drawings, indicating approval, and return the drawings in a timely manner to the Architect and notify the HHSC Representative.

1.08 CONSTRUCTION SCHEDULE:

A. The Construction Schedule completion date will be approved prior to award. The daily activities of the Construction Schedule will be reviewed within fifteen (15) calendar days after the Notice to Proceed or upon earlier written instruction by HHSC.

B. The schedule shall be related to the entire project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the work. If requested by the Architect or HHSC Representative, the Contractor shall participate in a preliminary meeting to discuss the proposed schedule and requirements prior to submission of the schedule.

C. Contractor shall prosecute the work according to the Schedule. The Architect and HHSC Representative shall rely on the reviewed Contractor’s Schedule and regular updates for planning and coordination. The HHSC Representative’s review of the Contractor’s Construction Schedule does not relieve the Contractor of its obligation to complete the work within the allotted contract time. Nor does the review grant, reject or in any other way act on the Contractor’s request for adjustment(s)to complete remaining contract work, or for claims of additional compensation. Such requests shall be processed in accordance with other relevant provisions of the contract.

D. If the Architect issues a Field Order or Change Order or requires Force Account Work that affects the sequence or duration of work activities noted on the construction progress schedule, the Contractor shall promptly update the schedule. This shall be accomplished by adding, deleting or revising the work activities noted, or changing the logic in the schedule to show the Contractor’s plan for incorporating the change into the flow of work. All Change Orders and Time Extension requests that

affect the construction schedule shall be evaluated based on their impact on the approved Construction Schedule.

1.09 MEETINGS

A. Contractor shall meet with the hospital's representative, weekly or other interval as determined, to discuss the progress of the Work.

B. For each meeting, Contractor shall take meeting minutes and provide a list stating all items, work or material, which may cause a delay or have an impact on the project's contractual dates. The list shall be inclusive of items requiring action from all responsible parties such as outstanding submittal status, request for information (clarification), force account work, change order, and change proposals. The format of this list shall be at the Contractor's discretion, subject to the Architect's approval. Submit the list to all parties for discussions as a meeting agenda. Contractor shall provide a plan of corrective action for any item, which is delayed or expected to be delayed, where that item impacts the contractual dates.

1.10 PROJECT AND SITE CONDITIONS

A. Project Contract Limits (Contract Zone Limits) shown on the drawings indicate only in general the limits of the work involved. Perform necessary and incidental work, which may fall outside of these demarcation lines. Confine construction activities within the Project Contract Limits and do not spread equipment and materials indiscriminately about the area.

1.11 SANITARY FACILITIES

A. The Contractor shall be allowed to utilize on-site restrooms as directed by the Architect and/or HHSC Representative. The Contractor shall maintain the facility in clean and sanitary condition at all time. Failure to do so, may require the Contractor to provide portable temporary toilet facilities for the contractor's use.

1.12 CONSTRUCTION AIDS

A. Provide construction aids and equipment required by construction personnel and to facilitate execution of the Work including: scaffolds, ladders, ramps, platforms, railings, and other such facilities and equipment.

PART 2 - MATERIALS

2.01 QUALITY

A. Materials, items, equipment and fixtures specified in the various Divisions and Sections shall be new unless otherwise specified.

2.02 STORAGE AND HANDLING

A. Contractor shall supervise jobsite delivery and handling, and assign storage space for materials, items, equipment and fixtures of all trades. Contractor and installer are responsible for delivery, unloading, unpacking, handling, storage, distribution, installation and protection of its materials at the jobsite.

B. Except as otherwise required by these specifications or by the Hospital, determine and comply with manufacturer(s) recommendation(s) on product handling, storage and protection.

C. Deliver products to the jobsite in manufacturer's original containers, with labels intact and legible. Maintain packaged material with seals unbroken and labels intact until time of use. Promptly remove damaged materials and unusable items from the jobsite, and promptly replace with material meeting the specified requirements, at no additional cost to the Hospital.

D. The Architect may reject as non-complying such material and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality, and other pertinent information.

PART 3 - EXECUTION

3.01 EXAMINING THE SITE

A. Contractor and Subcontractors are expected to visit the site and make due allowances for difficulties and contingencies to be encountered. Compare contract documents with work in place. Become familiar, with existing conditions, the conditions to be encountered in performing the Work, and the requirements of the drawings and specifications.

B. Verify construction dimensions and elevations indicated on the drawings before any construction begins. Any discrepancy shall be immediately brought to the attention of the Architect, and any change shall be made in accordance with the Architect's instruction. Contractor shall not be entitled to extra payment if it fails to report the discrepancies before proceeding with any work whether within the area affected or not.

E. Obtain all field measurements required for the accurate fabrication and installation of the Work included in this Contract. Exact measurements are the Contractor's responsibility.

F. Furnish or obtain templates, patterns, and setting instructions as required for the installation of all Work. All dimensions shall be verified in the field.

G. The Contractor shall accept the site in the condition which exists at the time access is granted to begin the Work.

1. Verify existing conditions and dimensions shown and other dimensions not indicated but necessary to accomplish the Work.

2. Locate general reference points and take action to prevent their destruction. Lay out work and be responsible for lines, elevations and measurements and the work executed. Exercise precautions to verify figures and conditions shown on drawings before layout of work.

3. Before starting the Work, the Contractor and each Subcontractor, shall verify governing dimensions and shall examine adjoining work on which the Contractor's work is in any way dependent. No additional compensation will be allowed on account of differences between actual measurements and dimensions shown. Submit differences discovered during the verification work to the Architect for interpretations before proceeding with the associated work.

3.03 UTILITY SERVICE

A. Electricity - Make arrangements with the facilities for temporary use of electricity for construction use.

B. Telephone - Make arrangements with the utility companies for temporary telephone service for construction use or utilize cellular phone service.

C. Water - Make arrangements for temporary water use with the facilities.

3.04 ENVIRONMENTAL

A. General Contractor shall oversee that proper environmental conditions are met regarding temperature, humidity, lighting and ventilation.

3.05 PREPARATION AND PROTECTION

A. Protection of Property: Continually maintain adequate protection of the Work from damage and protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. Repair, replace or pay the expense to repair damages resulting from Contractor's fault or negligence.

B. Before starting work to be applied to previously erected constructions, make a thorough and complete investigation of such recipient surfaces and determine their suitability to receive required additional construction and finishes. Contractor, at its expense, shall make whatever repairs and conditioning required to properly prepare such surfaces. Contractor shall coordinate the work to provide a suitable surfaces to receive following work.

C. Commencement of work by any trade will be construed as acceptance of existing conditions and surfaces as being satisfactory for application of subsequent work, and full responsibility for finished results and assumption of warranty obligations under the Contract.

D. Protect existing work in a manner to prevent damage including interior work from damage by vandals or the elements. Provide temporary protection. Use curtains, barricades, or other appropriate methods. Take positive measures to prevent breakage of glass and damage to plastic, aluminum and other finishes.

E. Repairs and Replacements: In event of damage, promptly make replacements and repairs to the approval of the Architect and/or HHSC Representative and at no additional cost to the Hospital. Additional time required to secure replacements and to make repairs will not be considered to justify an extension in the Contract Time or completion.

3.06 BARRICADE

A. Erect temporary construction barricade(s) to prevent unauthorized persons from entering the project area and to the extent required by the Architect and/or HHSC Representative.

B. Maintain temporary construction barricade(s) throughout the duration of the Work. During the course of the project, the Architect and/or HHSC Representative may require additional barricades be provided for the safety of the public. Contractor shall erect the additional barricade(s) at its own expense.

3.07 INSTALLATION

A. Materials, items, fixtures required by the various Divisions and Sections of the Specifications shall be installed in accordance with Contract Documents, by workers specially trained and skilled in performance of the particular type of work, to meet guarantee and regulatory agency requirements. Should the drawings or specifications be void of installation requirements, install the materials, items, fixtures in accordance with the manufacturer's current specifications, recommendations, instructions and directions, and/or best construction industry standards.

3.08 CUTTING AND PATCHING

A. General Contractor shall oversee cutting and patching of concrete, masonry, structural members and other materials where indicated on drawings and as job conditions require. Unless noted elsewhere in the Drawings and Specifications, no cutting or patching of existing or new structural members will be permitted without previously notifying the HHSC Technical Representative.

B. Patching materials and workmanship shall be of equal quality to that indicated on the drawings, specified for new work, and/or to match the construction of item to be patched.

3.09 CLEAN-UP

A. Rubbish and debris resulting from work of the various Divisions and Sections of the specifications shall be collected and disposed of by the Contractor at legal disposal areas away from the project site. Clean up and remove from premises all debris accumulated from operations from time to time and as directed by the Architect and/or HHSC Representative. Permission to provide on-site trash containers shall be granted by the Hospital and shall be placed where directed by the Architect and/or HHSC Representative.

END OF SECTION

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: The work shall generally consist of demolition of interior walls, doors, plumbing fixtures, lighting, floor slab, and miscellaneous work as indicated on the drawings and specified herein.

1. Project Location: Leahi Hospital, 3675 Kilauea Ave., Honolulu, Hawaii.

B. Perform operations and furnish equipment, tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.

C. The Division and Sections into which these specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to work specified within each section

D. Contractor shall not alter the Drawings and Specification. If an error or discrepancy is found, notify the Architect.

E. Specifying of interface and coordination in the various specification sections is provided for information and convenience only. These requirements in the various sections shall complement the requirements of this Section.

1.02 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated and include incomplete sentences. Omission of words or phrases such as “the Contractor shall”, “as shown on the drawings”, “a”, “an”, and “the” are intentional. Omitted words and phrases shall be provided by inference to form complete sentences. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred, as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

   a. The words “shall,” “shall be,” or “shall comply with,” depending on the context, are implied where a colon (:) is used within a sentence or phrase.

3. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research’s “Encyclopedia of Associations” or in Columbia Books’ “National Trade & Professional Associations of the U.S.”

B. Definitions

1. Directed: Terms such as “directed,” “requested,” “authorized,” “selected,” “approved,” “required,” and “permitted” mean directed by Contracting Officer, requested by Contracting Officer, and similar phrases.

2. Indicated: The term “indicated” refers to graphic representations, notes, or schedules on drawings or to other paragraphs or schedules in specifications and similar requirements in the Contract Documents. Terms such as “shown,” “noted,” “scheduled,” and “specified” are used to help the user locate the reference.

3. Furnish: The term “furnish” means to supply and deliver to project site, ready for unloading, unpacking, assembly, installation, and similar operations.

4. Install: The term “install” describes operations at project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

5. Provide: The terms “provide” or “provides” means to furnish and install, complete and ready for the intended use.

6. Installer: An installer is the contractor or another entity engaged by contractor as an employee, subcontractor, or sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

7. Submit: Terms such as “submit,” “furnish,” “provide,” and “prepare” and similar phrases in the context of a submittal, means to submit to the Contracting Officer.

C. Industry Standards

1. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

2. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

3. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Contracting Officer for a decision before proceeding.

1.04 WORK SEQUENCE

A. The Work will be conducted in a single construction phase.

1.05 USE OF PREMISES AND WORK RESTRICTIONS

A. General: Contractor shall have full use of construction zone for construction operations, including restricted use of project site, during construction period. Contractor’s use of premises is limited only by State’s right to perform work or to retain other contractors on portions of the project site.

B. Contractor’s use of premises is restricted as follows:

1. Construction Times and Schedule:

a. The Contractor shall coordinate the work schedule with the Architect and/or HHSC Representative. An advanced notice of 15 calendar days shall be provided prior to the start of work. Work can be scheduled for weekdays (8:00 AM to 4:30 PM) with advanced notice by the Contractor.

b. The normal operational hours are 8:00 AM to 4:30 PM, Monday through Friday.

c. Unless restricted elsewhere in these specifications, the Contractor may not perform work outside of normal daily operation hours. Weekend or holiday work may be

permitted with the approval of the Architect and/or HHSC Representative. Any weekend or holiday work shall require a 15 calendar day advanced notice.

d. Work performed during normal operating hours shall not impede public traffic or office personnel. An alternate route around the work areas may be required.

2. Site Access and Parking:

a. Arrange all on-site parking and access with the Architect and/or HHSC Representative.

b. Permanent use of the loading area is prohibited.

c. Subject to availability, the Architect and/or HHSC Representative will designate other on-site areas that may be used by the Contractor other than assigned stalls. Restore any property damaged by construction activities at the completion of the project.

3. Sanitation and Utilities:

a. Contractor may use designated restrooms, however, shall maintain the facilities in clean condition at all times. Coordinate with the Architect and/or HHSC Representative.

b. Arrange all temporary electricity and water service with the Architect and/or HHSC Representative. There will be no charges for reasonable electricity and water service.

c. Should interruption of any utility services be required, outages shall be coordinated with the Architect and/or HHSC Representative. A minimum five (5) working days notice shall be provided. Contractor is forewarned that the Architect and/or HHSC Representative may require outages to be done at specific times to minimize disruptions to the facility operations.

4. Other Conditions:

a. Noise and other disrupting activities normally resulting from construction operations are detrimental to the conduct of normal activities in adjacent locations surrounding the project area. Accordingly, exercise every precaution to keep noise levels to a minimum. Internal combustion engines and compressors shall be equipped with mufflers to reduce noise to a minimum.

b. Use or application of materials with offensive odors should be avoided and may be restricted from use on this project.

1.06 WORK UNDER OTHER CONTRACTS

A. Separate Contract: The HHSC may execute a separate contract for certain construction at the facility that was not known at the time Offers were submitted.

B. Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END SECTION

SECTION 01140 – WORK RESTRICTIONS

PART 1 – GENERAL

1.01 SUMMARY

A. This section includes work restrictions on the Contractor's operations, and construction as required to maintain the facility's operation during the construction period.

B. CONSTRUCTION PROVISIONS

1. Rules and Regulations: Consult with the Architect and HHSC Representative at the pre-construction conference and become familiar with the rules and regulations of the facility.

2. Contractor's Operations: Confine all construction operations to the immediate vicinity of the construction activity. Store building materials, equipment, tools and incidentals in an enclosed area as directed by the Architect or HHSC Representative. Take precautions and prevent access to power equipment, tools, etc., by other than authorized construction personnel. Perform operations to insure the safety of the occupants of the buildings at all times.

3. Perform operations to minimize inconvenience or disturbance upon the personnel and residents.

4. Protection of occupants: Special consideration must be made by the Contractor at all times to safely protect the occupants and facility personnel from any and all injuries that may be caused as a result of the work performed under this contract.

5. Caution: The Contractor shall caution his personnel on the job that any association with the occupants be avoided as much as possible, that when spoken to by occupants, normal courtesy shall be maintained at all times.

7. None of the foregoing regulations shall be construed as a restriction on the legal prosecution of the work.

1.02 SEQUENCING OF WORK

A. The Contractor shall schedule his work in general consideration for the on-going operation of the hospital. All work shall be coordinated with the HHSC Representative and/or Architect.

B. Stoppage of work for the duration of CMS and State Survey audits shall not incur additional costs to the HHSC.

C. All work shall be coordinated and scheduled with the hospital and/or HHSC Representative. In general, the Contractor will be restricted to work areas as coordinated with the HHSC Representative.

END OF SECTION

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

Where indicated in these specifications, provide submittals to the Architect for review.

1.02 PROCEDURES

A. Unless otherwise specified, deliver submittals to the Architect with copy of transmittal to the Contracts Manager.

B. Transmit all items using form which identifies Project, Contractor, Subcontractor, and major supplier. Identify pertinent drawing sheet, detail number, and specification section number, as appropriate. Identify deviations from Contract Documents. Provide space for the Architect or his Consultant's review stamp.

C. Upon completion of review by the Architect, the Architect will return submittals to the Contractor with copy to the Contracts Manager and HHSC Representative.

1.03 SCHEDULE OF WORK

A. Coordinate Schedule with Work Sequence specified in Section 01014.

1.04 SHOP DRAWINGS AND SAMPLE SUBMITTALS

A. All submittals shall be made in accordance with the following unless otherwise specified. Minimum sheet size is 8-1/2" x 11". Maximum sheet size is same size as the Contract Drawings. Drawings shall be presented in a clear and thorough manner. Details shall be identified by reference to sheet, schedule, and detail shown on Contract Drawings.

B. Mark each copy to identify applicable products, and other data. Supplement manufacturer's standard data to provide information unique to the work. Include manufacturer's installation instructions when required by the specification.

1. The Contractor shall review, stamp with his approval and submit with reasonable promptness and in orderly sequence so as to cause no delay in work of any other Subcontractor, all shop drawings, and product data required by these specifications.

2. Properly identify shop drawings and samples as specified. At the time of submission, the Contractor shall inform the HHSC Technical Representative in writing of any deviation in the shop drawings or submittals from requirements of the Contract Documents.

3. By approving and submitting the shop drawings and submittals the Contractor thereby represents that he has determined and verified all field measurements, field criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated each shop drawing and sample with the requirements of these specifications.

4. Six (6) copies of the Shop Drawings and submittals shall be submitted for review. Upon review, the Architect will retain three (3) copies and return the balance to the Contractor.

5. The Architect will review the shop drawings and submittals with reasonable promptness so as to cause no delay but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Architect's review of a separate item shall not indicate approval of an assembly in which the item functions.

6. The Contractor shall make any corrections required by the Architect and shall resubmit the required number of corrected copies of shop drawings or submittals for review. The Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the Architect on previous submissions.

7. The Architect's review of shop drawings or submittals shall not relieve the Contractor of responsibilities for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Hospital in writing of such deviation, at time of submission, and the HHSC Representative has given written approval to the specific deviation; nor shall the Architect's review relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

8. No portion of the work requiring a shop drawing or sample submission shall be commenced until the submission has been reviewed by the Architect. All such portions of the work shall be in accordance with reviewed shop drawings and samples.

C. Samples: Submit full range of manufacturer's standard textures, colors, and patterns for the Hospital's selection. Submit samples as specified in the respective Specification sections and as noted above. Samples shall illustrate functional characteristics of the Product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work. Include identification on each sample, giving full information.

1.05 BIDDER'S SPECIAL RESPONSIBILITY FOR COORDINATING CONTRACTURAL WORK AND SUBMITTALS:

A. The General Contractor shall be responsible for the coordination of all contractual work and submittals.

B. The General Contractor shall have a rubber stamp made up in the following format:

Contractor's Name

PROJECT: _____
_____

PROJECT NO.: _____

THIS SUBMITTAL HAS BEEN CHECKED BY THIS GENERAL CONTRACTOR. IT IS CERTIFIED CORRECT, COMPLETE, AND IN COMPLIANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS. ALL AFFECTED CONTRACTORS AND SUPPLIERS ARE AWARE OF, AND WILL INTEGRATE THIS SUBMITTAL INTO THEIR OWN WORK.

DATE RECEIVED _____
SPECIFICATION SECTION # _____
SPECIFICATION PARAGRAPH # _____
DRAWING _____
SUBCONTRACTOR _____
SUPPLIER _____
MANUFACTURER _____

CERTIFIED BY: _____

C. This stamp, "filled-in", should appear on the title sheet of each shop drawing, on a cover sheet of submittals in an 8-1/2" x 11" format, or on one face of a cardstock tag (min. 3" x 6") tied to each sample. The tag on the samples should state what the sample is, so that if the tag is accidentally separated from the sample, they can be matched up again. The back of this tag will be used by the Architect for his receipt, review, and log stamp and for any comments that relate to the sample.

D. All submittals for material and shop drawings listed in the contract documents, shall be required and shall be first reviewed and certified by the General Contractor, then reviewed and approved by the Architect, prior to any ordering of materials and equipment. Submittals that have not been reviewed by the General Contractor shall be returned for review.

1.06 MANUFACTURER'S CERTIFICATES

Submit certificates, warranties, operating and maintenance instructions in accordance with requirements of each specification section. Submit in triplicate.

1.07 MSDS

MSDS shall be submitted prior to the pre-construction meeting. The Contractor shall submit MSDS log and reference each MSDS to its specification Section number and product system.

PART 2 – PRODUCTS

(Not used.)

PART 3 – EXECUTION

(Not used.)

END OF SECTION

SECTION 01577 - POLLUTION CONTROL

PART 1 - GENERAL

1.01 SUMMARY

A. Includes site and environmental control requirements.

1.02 TRASH, REFUSE DISPOSAL

A. Burning of debris and/or waste materials on the project site is prohibited.

B. Do not bury debris and/or waste material on the project site, unless specifically allowed elsewhere in these specifications as backfill material.

C. Haul unusable debris and waste material to an appropriate off-site dump area. During loading operations, water down or provide other measures to prevent dust or other airborne contaminants.

D. Vacuum, wet mop, or damp sweep when cleaning rubbish and fines which can become airborne from floors or other paved areas. Do not dry sweep.

E. Use enclosed chutes and/or containers to conveying debris from above the ground floor level.

F. Clean-up shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials and other objectionable materials, and removal as required. Frequency of clean-up shall coincide with rubbish producing events. The Contractor shall be responsible for all clean-up cost.

1.03 DUST

A. Prevent dust from becoming airborne at all times including non-working hours, weekends and holidays in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 60 - Air Pollution Control.

B. Contractor is responsible for and shall determine the method of dust control. Subject to the Contractor’s choice, the use of water or “environmentally friendly chemicals” may be used over surfaces which create airborne dust.

C. Construct or erect dust control barriers as required to retain dust within the project site area.

D. Contractor is responsible for all damage claims resulting from failure to control airborne dust during all times that the site is under the Contractor's control.

1.04 NOISE

A. Keep noise within acceptable levels at all times in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 46 - Community Noise Control. Contractor shall obtain and pay for the Community Noise Permit from the State Department of Health when the construction equipment or other devices emit noise at levels exceeding the allowable limits.

B. To reduce loud disruptive noise levels, ensure mufflers and other devises are provided on equipment, internal combustion engines and compressors. Maintain equipment to reduce noise to acceptable levels.

C. Starting-up of construction equipment meeting allowable noise limits shall not be done prior to 8:00 a.m. without prior approval of the HHSC Representative. Equipment exceeding allowable noise levels shall not be started-up prior to 8:00 a.m.

1.05 EROSION

A. During interim grading operations, the grade shall be maintained so as to preclude any damage to adjoining property from water and eroding soil.

B. Install temporary berms, cut-off ditches and other provisions as required construction methods and operations. Should there be a question if the temporary measures are insufficient to prevent erosion, the HHSC Representative shall make the final determination.

C. Construct and maintain drainage outlets and silting basins as required to minimize erosion and pollution of waterways during construction.

1.06 OTHERS

A. Wherever trucks and/or vehicles leave the site and enter surrounding paved streets, Contractor shall prevent any material from being carried onto the pavement. Waste water shall not be discharged into existing streams, waterways, or drainage systems such as gutters and catch basins unless treated to comply with the State Department of Health water pollution regulations. The Contractor shall construct a vehicle wash-down area, within the project site, to remove all mud, gravel, etc., before leaving the site.

B. Trucks hauling debris shall be covered as required by PUC Regulation. Trucks hauling fine materials shall be covered.

C. No dumping of waste concrete will be permitted at the job-site.

D. Except for rinsing of the hopper and delivery chute, and for wheel washing where required, concrete trucks shall not be cleaned on the job-site.

E. Except in an emergency, such as a mechanical breakdown, all vehicle

fueling and maintenance shall be done in a designated area. A temporary berm shall be constructed around the area when runoff can cause a problem.

F. If allowed in this Contract, spray painting shall be done by the “airless spray” process only. All other types of spray painting shall not be permitted.

1.07 SUSPENSION OF WORK

A. Violations of any of the above requirements or any other pollution control requirements which may be specified in the Specifications shall be cause for suspension of the work creating such violation.

B. Reference the General Conditions Construction, dated 3/17/06 for the suspension procedures.

C. The Architect and/or HHSC Representative may also suspend any operations which creates a pollution problems even if the problem does not violate the provisions of this Section. In this instance, the work is considered a Change and subject to the provisions of the contract.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION

DIVISION 2 - SITE WORK

SECTION 02055 - SELECTIVE DEMOLITION AND REMOVAL

PART I - GENERAL

1.01 GENERAL REQUIREMENTS: Furnish all labor, materials, tools and equipment necessary to complete all removal work and surface preparation work as specified herein.

1.02 SPECIAL REQUIREMENTS:

A. The Contractor shall visit the site, examine the areas and note all existing conditions and extent of work involved for the complete removal and surface preparation work required.

B. The Contractor shall comply with pollution control regulations and safety code. See POLLUTION CONTROL Section 01577 also.

C. The project has been tested for hazardous materials including asbestos containing materials and lead-based paints.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Damaged surfaces or items shall be patched by the Contractor with materials which are equal or better in quality.

PART 3 - EXECUTION

3.01 GENERAL

A. All work shall be executed in an orderly and careful manner with due consideration for the remaining parts of the building.

3.02 REMOVAL WORK

A. Remove interior walls, doors, plumbing fixtures, lighting, concrete floor slab, etc. as indicated on the drawings and/or specified herein.

B. All dismantled materials having no salvage value as determined by the Architect or HHSC Representative shall become the property of the Contractor and shall be completely removed and hauled away from the premises. Contractor shall recycle all materials to be disposed off to the greatest extent possible.

3.03 SURFACE PREPARATION WORK

A. All surfaces to receive manufactured finishes shall be inspected by the manufacturer's representative as approved for installation of new materials. Should the manufacturer's representative find discrepancies in

the preparation work, all such discrepancies shall be corrected at no additional cost to the project.

B. Contractor shall repair any damages occurring during the progress of the work.

3.04 PATCHWORK: All areas or surfaces damaged as a result of removal work shall be patched to match existing adjacent surfaces and/or areas to the satisfaction of the Architect.

3.05 TEMPORARY BARRICADES

A. The Contractor shall provide, erect and maintain safety barricades around the project areas during the execution of work under this contract including work done by other sections. At the discretion and approval of the Architect and/or HHSC Representative, alternative means to provide safety around the project area are acceptable.

B. Barricades shall be constructed from durable materials to provide necessary protection and security of the project area.

C. The barricades shall remain until final acceptance of the project or until the hazardous condition no longer remains and approval is given by the Architect and/or HHSC Representative for their removal.

3.06 CLEAN-UP

A. From time to time, as directed by the Architect and/or HHSC Representative, and at the completion of the removal work, remove from the site all rubbish, debris, fines, etc., accumulated from this work and leave the area neat and clean to the satisfaction of the Architect and/or HHSC Representative.

B. After the completion of the repair work and before the final acceptance of the project, the Contractor shall clean all areas of all rubbish, debris, fines, etc.

END OF SECTION

DIVISION 15 - MECHANICAL

SECTION 15000 - MECHANICAL GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. This Section shall apply to all phases of work indicated in contract drawings, or required to provide for a complete installation of mechanical systems included in this project.

1.02 GENERAL DESCRIPTION

A. This section applies to all Sections of DIVISION 15 - MECHANICAL, of this project specification, unless specified otherwise in the individual sections.

B. Electrical Requirements: Provide electrical components of mechanical equipment and systems such as motors, controllers, contactors, starters, and disconnects under DIVISION 15 - MECHANICAL, as specified herein, and as necessary for complete and operable systems. Provide interconnecting wiring for components of packaged equipment as an integral part of the equipment. Interconnecting power wiring and conduit for field erected equipment shall be as specified in DIVISION 16 - ELECTRICAL. Control wiring rated at 120 volts or less and conduit shall be as specified in DIVISION 15 - MECHANICAL. Extended voltage range motors will not be permitted. Motor control equipment forming part of motor control centers, assemblies, or other power sources to mechanical equipment shall conform to DIVISION 16 - ELECTRICAL.

1.03 GENERAL REQUIREMENTS

A. Provide all work described by the drawings and specifications, including work specified and not indicated, and work indicated and not specified.

B. Completely examine the drawings and specifications and report to the Contracting Officer any error, inconsistency, omission, or error in the work of others affecting the mechanical work. If the Contractor proceeds with the work affected without instructions from the Contracting Officer, he shall correct or pay for any resultant damage or defect.

C. Provide all supplementary or miscellaneous items, details, appurtenances and devices incidental to or necessary for a complete operating system where work required is not specifically indicated or specified.

D. Maintain at the job site one copy of all drawings, specifications, addenda, approved shop drawings, change orders, and other modification, in good order and marked to record all changes made during construction. These documents shall be made available to the Contracting Officer.

E. The Contractor shall schedule a date and time with the Contracting

Officer, a minimum of 7 days in advance, for all testing.

F. Reference to standards and publications are intended to be the latest revision of the standard or publication. In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, “shall” had been substituted for “should” wherever it appears. Interpret references in these publications to the “authority having jurisdiction” or words of similar meaning, to mean the Contracting Officer.

G. The words “or approved equal”, or other words of similar intent or meaning, means that the equipment or material to be substituted is subject to review by the Contracting Officer and must be acceptable to the Contracting Officer.

1.04 QUALITY ASSURANCE

A. County, City, State, Federal and Industry Regulations: Comply with the City & County of Honolulu building, fire and plumbing codes; State of Hawaii Department of Health and Department of Labor and Industrial Relations Regulations; U.S. Occupational Safety and Health Act; U.S. Environmental Protections Agency Regulations; National Fire Protection Association Codes; and other laws, codes and regulations, and ordinances and manufacturer’s recommendations and requirements, when applicable and as referenced in these specifications. The Contractor shall schedule and pay for all inspections required by any government agency.

B. Permits: Obtain all permits and pay all fees required by the applicable government agencies.

C. Warranty: Warrant all equipment and material furnished, and workmanship of the mechanical systems for a period of one year starting only after 30 consecutive days of trouble free operation after system acceptance. Submit the manufacturer’s warranty documents for all equipment furnished to the State. The warranty shall cover all labor and material required to correct, replace, or repair any defective item at no cost to the State.

D. Material and Equipment Qualifications: Provide materials and equipment that are standard products of manufacturers regularly engaged in the manufacture of such products, which are of a similar material, design and workmanship. Standard products shall have been in satisfactory commercial or industrial use for 2 years prior to award of this contract. The 2-year use shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been for sale on the commercial market through advertisements, manufacturer’s catalogs, or brochures during the 2-year period. Air conditioning equipment to be considered for bid purposes must be a manufacturer that has locally stocked spare parts, representative, and support of a service organization reasonably convenient to the site of installation which has serviced manufacturer’s unit of comparable type, size and capacity installed and operating satisfactorily in the State of

Hawaii for a minimum of two years prior to bid opening. The Contractor shall provide a list of locations in Hawaii with addresses and telephone number when requested by the Contracting Officer. All equipment with local manufacturer's representation shall be purchased thru the local factory authorized distributor. Preference should be given to products made or manufactured in the United States of America.

E. Alternative Qualifications: Products having less than a two-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturer's factory or laboratory tests, can be shown.

F. Service Support: The equipment items shall be supported by service organizations. Submit a certified list of qualified permanent service organizations for support of the equipment which includes their addresses and qualifications. These service organizations shall be reasonably convenient to the equipment installation and able to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

G. Manufacturer's Nameplate: Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of distributing agent will not be acceptable.

1.05 SUBMITTALS

A. Submit in accordance with Section 01330 – SUBMITTAL PROCEDURES.

1. Submit 6 copies of each required submittal to the Contracting Officer. Submittals shall include the manufacturer's name, trade name, place of manufacture, catalog model or number, nameplate data, size, layout dimensions, capacity, project specification and paragraph reference, applicable industry, and technical society reference standards, years of satisfactory service, and other information necessary to establish contract compliance of each item the Contractor proposes to be provided. Photographs of existing installations and date submitted in lieu of catalog data are not acceptable and will be returned without review. Partial submittals are not acceptable and will be returned without review.

2. At the time the submittals are submitted, the Contractor shall inform the Contracting Officer, in writing, of any deviation in the shop drawings and other submittals from the requirements of the contract documents.

3. Manufacturer's Catalog Data: Submittals for each manufactured item shall be current manufacturer's descriptive literature of cataloged products, equipment drawings, diagrams, performance and characteristic curves and catalog cuts.

4. Shop Drawings:

   a. Submit drawings a minimum 24 by 36 inches in size, using a minimum scale of 1/8 inch per foot. Include floor plans, section views, wiring diagrams, and installation details of equipment; and equipment spaces identifying and indicating proposed location, layout and arrangement of items of equipment, control panels, accessories, piping, ductwork, and other items that must be shown to ensure a coordinated installation. Indicate locations of items requiring maintenance or inspection. Wiring diagrams shall identify circuit terminals, and indicate the internal wiring for each item of equipment and the interconnection between each item of equipment. Drawings shall indicate adequate clearance for operation, maintenance, and replacement of equipment devices.

   b. Provide a written certification with the shop drawing submittal stating that the Contractor has determined and verified all field measurements, sizes and obstructions, and that he has coordinated the shop drawings with the field conditions and the work of other trades.

5. Manufacturer's Instructions: Where installation procedures or part of installation procedures are required to be in accordance with the manufacturer's instructions, submit printed copies of those instructions prior to installation. Installation of the item shall not proceed until the manufacturer's instructions are received. Failure to submit can be cause for rejection of the equipment or material.

6. Certificates of Compliance: Submit a certificate of compliance from the manufacturer for approval for products, finishes, and equipment as specified in the technical sections whose compliance with organizational standards or specifications is not regulated by an organization using its own listing or label as proof of compliance. The certificate shall identify the manufacturer, the products, equipment, or materials and the referenced standard and shall simply state that the manufacturer certifies that the product conforms to the requirements specified.

7. Reference Standards Compliance: Where equipment or materials are specified to conform to industry and technical society reference standards of organizations such as the American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), National Electrical Manufacturers Association (NEMA), American Society of Mechanical Engineers (ASME), American Gas Association (AGA), American Refrigeration Institute (ARI), and Underwriters Laboratories (UL), submit proof of such conformance. If an organization uses a label or listing to indicate compliance with a particular reference

standard, the label or listing will be acceptable evidence, unless otherwise specified in the individual sections.

8. Independent Testing Organization Certificate: In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing and approved by the Contracting Officer. The certificate shall state that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

9. Operation and Maintenance Manuals: Submit operation and maintenance manuals (5 sets) for each system and principal item of equipment.

10. Operating Instructions: Submit text of posted operating instructions for each system and principal item of equipment as specified in the technical sections.

11. Submit as-built drawings to the Contracting Officer prior to final inspection.

1.06 DELIVERY, STORAGE AND HANDLING

A. Handle, store, and protect equipment and materials to prevent damage before and during installation in accordance with the manufacturer's recommendations, and as approved by the Contracting Officer. Replace damaged or defective items.

1.07 POSTED OPERATING INSTRUCTIONS

A. Provide for each system and principal item of equipment as specified in the technical sections for the use of the operation and maintenance personnel. Include the following in the operating instructions.

B. System Descriptive Information: Wiring diagrams, control diagrams, piping diagrams, control sequence and operating points for each principal system and item of equipment. Post instructions where indicated.

C. Equipment Instructions: Attach to or post adjacent to each principal item of equipment and include directions under glass.

D. Start up, proper adjustment, operating, lubrication and shutdown procedures.

E. Safety precautions, procedure in the event of equipment failure.

F. Other areas as recommended by the manufacturer of each system of item of equipment.

G. Print or engrave, and frame under glass or in an approved laminated plastic. Operating instructions exposed to weather shall be made of

weatherproof materials or provided with a weatherproof enclosure. Operating instructions shall not fade when exposed to sunlight and shall be secured to prevent easy removal.

1.08 SAFETY REQUIREMENTS

A. Equipment Safety: Fully enclose or properly guard, in accordance with DOSH regulations, belts, pulleys, chains, gears, couplings, projecting setscrews, keys, rotating parts, and other power transmission apparatus, located where persons can come in close proximity thereto. Points of operation, in going nip points, and machinery producing flying chips and sparks shall be guarded in accordance with the applicable portions of DOSH regulations. Provide positive means of locking out equipment so that the equipment cannot be accidentally started during maintenance procedures. High-temperature equipment and piping so located as to endanger personnel or create a fire hazard shall be properly guarded or covered with insulation of the type specified. Ensure that access openings leading to equipment are large enough to carry through routine maintenance items such as filters and tools.

B. Warning Sign: Provide a permanent placard or sign at the entrance to confined spaces contained in the equipment. The sign shall warn personnel not to enter the space until the atmosphere inside has been tested and systems have been de-energized.

1.08 INSTRUCTIONS TO PERSONNEL

A. Furnish the services of competent instructors to give full instruction to the designated personnel in the adjustment, operation, and maintenance, including pertinent safety requirements, of each specified equipment or system. Instructors shall be thoroughly familiar with all parts of the installation and shall be trained in operating theory as well as practical operation and maintenance work. Instruction shall be given during the first regular work week after the equipment or system has been accepted and turned over to the State for regular operation. The number of man days (8 hours per day) of instruction furnished shall be as specified in the individual sections. When more than 4 man days of instruction are specified, use approximately half of the time for classroom instruction. Use other time for instruction with the equipment or system. When significant changes or modifications in the equipment or system are made under the terms of the contract, provide additional instruction to acquaint the operating personnel with the changes or modifications.

PART 2 – PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. All materials and equipment shall be new and free from defects. Unless otherwise specified, each equipment or material of its kind shall be the standard product of a single manufacturer. All mechanical equipment, fans, pumps and compressor motors shall be sized to not overload

anywhere on the operating curve. Safety factor shall be a minimum of 1.15.

B. All materials and equipment shall be selected and installed so that adequate clearance for maintenance and servicing is provided. Installation and clearance requirements shall meet manufacturer's recommendations.

PART 3 - EXECUTION

3.01 FACTORY PAINTING OF EQUIPMENT

A. Factory applied painting of equipment shall be as specified herein, and provided under each section. Manufacturer's standard factory painted systems may be provided subject to certification that the factory painting system applied will withstand 125 hours in a salt spray fog test, except that equipment located outdoors shall withstand 500 hours in a salt spray fog test. Salt spray fog test shall be in accordance with ASTM B117. Immediately after completion of the test, the paint shall show no signs of blistering, wrinkling or cracking; no loss of adhesion; and the specimen shall show no signs of rust creepage beyond 0.125 inch on either side of the scratch mark. The film thickness of the factory painted system applied to the equipment shall be not less than the film thickness used on the test specimen. If manufacturer's standard factory painting system is being proposed for use in lieu of the shop painting systems, submit certifications that the manufacturer's standard factory painting system conforms to the heat resistance requirement in addition to other certifications.

3.02 FIELD PAINTING

A. Conform to Section 09913 - EXTERIOR PAINTING and Section 09923 - INTERIOR PAINTING. Provide labels/signs for all piping including refrigerant piping, chilled water, condenser water, condensate drain lines.

B. The following items furnished under this section are to be painted and identified under Section 09913 - EXTERIOR PAINTING and Section 09923 - INTERIOR PAINTING. Do not paint over name plates or other identifying labels.

1. Paint exposed black iron work including pipe, fittings, iron body valves, pipe hangers, etc., with two coats of zinc rich paint.

2. Stencil all exposed piping with painted black letters indicating the service and with an arrow indicating the direction of flow. Stencil where pipes enter and leave each area and at not over 30 ft. intervals within an area. Paint color band at stencils; yellow for fuel and green for water systems. Width of color band, size of legend letters, and position of legend shall conform to the requirements of ANSI A13.1, Scheme for the Identification of Piping Systems.

3.03 MANUFACTURER'S RECOMMENDATIONS

A. Equipment installed under this Division of the Specifications shall be installed according to the manufacturer's recommendations, unless otherwise indicated or specified otherwise.

3.04 OPENINGS, CUTTING AND PATCHING

A. The Contractor shall be responsible for the cutting, drilling and patching of walls, partitions, floors, roofs, ceilings and other building structures, required for the installation of piping, ductwork, conduits and other material equipment. This work may be subcontracted to other Contractors, or arranged to be performed by the General Contractor.

B. Holes through existing concrete and existing masonry shall be sawcut or core drilled. Holes through new concrete and masonry shall be provided with sleeves. Holes through other building materials shall be sawcut or core drilled and provided with sleeves.

3.05 PIPING INSTALLATION

A. Conform to the requirements of the Uniform Plumbing Code and all manufacturer's recommendations. Inspect all pipes inside and outside. Remove interior obstructions and ream out pipe ends. Tool markings on polished fittings are not acceptable. Cut pipe accurately so that it can be worked into place without springing or forcing. Install pipes parallel to the wall of the structure and plumb. Make changes in direction with fittings. Bushings are not permitted. Pull-tees are not permitted. Install valves with stems above horizontal. Provide proper support and adequate provisions for expansion, contraction, slope and anchorage. Provide dielectric unions or separation at all dissimilar metals. Wrap pipe or tubing with 1/4-inch thick felt, secured with tape, where they contact other materials. Have piping treated, inspected and approved before it is furred in, buried or otherwise hidden. Provide standard weight galvanized steel pipe sleeves for all pipes passing through structure, sufficiently large to provide 1/4-inch clearance around pipe. Caulk watertight around pipes passing through sleeves. Wrap pipe with polyethylene tape where it passes through sleeve and when it contacts concrete or masonry. Grout with fire proof material around all pipe penetrations through slabs and walls full length of penetrations. Provide chrome plated brass escutcheons, set tight on the pipe and to the wall where pipes are exposed in finished areas. Provide clamping collar or membrane flange where pipe or drains penetrate waterproof membrane. Perform all welding using qualified welders in accordance with American National Standards Institutes Code B31.1 and American Welding Society Standard B3.0. Soil for bedding and backfill shall be tested for soil resistivity. If soil resistivity is less than 20,000 ohms-cm, provide cathodic protection of underground steel (including gas) and copper lines. Coordinate all pipe openings in prestressed tri-tee concrete flooring. Trenching/backfilling in accordance with the Plumbing Code. Support underground piping on firm soil along its entire length. Where rocks are encountered, have trench excavated to a minimum overdepth of four inches and backfilled with granular moist

earth, thoroughly tamped. Materials used for backfilling over piping shall be granular earth, free from debris and stones. The Contracting Officer may reject any materials which he considers unsuitable for fill. Clay and adobe type soil is not allowed. Provide a minimum of two feet of cover for all pipes. Where sewer and water lines are laid in the same trench, place water line on solid shelf with bottom of water line twelve inches above top of sewer. Where sewer and water lines cross, encase sewer in four inch thick concrete envelope.

3.06 FIELD TESTS

A. The Contractor shall provide all labor, material, equipment, and instruments needed for the tests. During pressure test, all items in the system to be tested, which are not designed for the test pressure shall be removed or isolated from the system, and shall be reconnected or unblocked after the tests are completed. If operating tests require the supervision of the manufacturer's representative, the Contractor shall assist the representative by providing any labor, material, or equipment needed by the representative.

3.07 CLEANUP AND CLEANING

A. The Contractor shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, he shall remove all his waste materials, and rubbish from the project site as well as his tools, construction equipment, and surplus materials. Clean all new equipment and materials prior to final inspection.

END OF SECTION

SECTION 15400 - PLUMBING

PART - GENERAL

1.01 SUMMARY

A. Plumbing work to include the removal/demolition of existing plumbing fixtures (including associated plumbing line, supports, accessories, etc.) as indicated in plans and specifications.

1.02 SUBMITTALS

A. Submit in accordance with Section 01330 - SUBMITTAL PROCEDURES.

B. Equipment Submittal: Before beginning work, submit for review certified literature showing dimensions of equipment, a list indicating manufacturer and model of fixtures and trim, and a list indicating all materials and items that are of a different manufacturer or model than those specified.

C. Shop Drawings: After review of equipment, submit for review dimensioned installation shop drawings to scale showing details where space requirements present problems, proposed departures from the Contract Documents due to field conditions, and requirements for the concrete work, access panels, inserts in slabs, and openings in structure.

D. As-Built Drawings: Record changes from the contract drawings of all concealed piping. Indicate location of isolating valves and items requiring maintenance or inspection. Dimension underground piping from a visible point on structure. Indicate invert and slope of drainage piping at sufficient location so that the invert can be calculated for any point in the system. Submit field posted as-built drawings for review as required by Section 01770 - CLOSEOUT PROCEDURES.

E. Certificates: The Contracting Officer shall have the right to require a written certificate, dated and signed by a responsible employee of this Contractor, evidencing the performance of any portion of the work, or any testing; as a condition precedent to the acceptance of any work or the result of any test. Whenever a regulatory agency performs inspections or tests of any portion of the work, a certificate shall be furnished by the Contractor that the inspection or test was satisfactorily passed.

F. Warranty: Submit warranty as noted under item entitled “WARRANTY” below.

1.03 QUALITY ASSURANCE

A. Comply with all the requirements of the City and County of Honolulu, State of Hawaii.

B. Obtain and pay for all fees, permits, licenses, assessments, connection charges and inspections required for this work.

C. Products of the following manufacturers are acceptable.

D. Comply with the recommendations and requirements of the Codes and Standards listed hereinafter in addition to detailed requirements of this specification. In the event of conflicting requirements, this specification shall prevail.

1. American Society for Testing and Materials (ASTM) Publications:

A74	Cast Iron Soil Pipe and Fittings
B53	Pipe, Steel, Black and Hot-Dipped Zinc Coated Welded and Seamless
B88	Seamless Copper Water Tube
B306	Copper Drainage Tube (DWV)
C564	Rubber Gaskets for Cast Iron Soil Pipe and Fittings

2. American National Standards Institute Publications (ANSI):

B16.18	Cast Copper Alloy Solder-Joint Pressure Fittings
B16.22	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
B16.23	Cast Copper Alloy Solder Joint Drainage Fittings-DWV
B16.26	Cast Copper Alloy Fittings for Flared Copper Tubes
C1	National Electrical Code
C2	National Electrical Safety Code

3. Cast-Iron Soil Pipe Institute Publication (CISPI):

Standard No. 301	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications
Standard No. 310	Couplings Joint for Use in Connection with Hubless Cast Iron Soil Pipe and Fitting

Pamphlet	Installation Suggestions for “No Hub” Pipe 100 Fittings

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Furnish new equipment, fixtures, materials and accessories bearing the manufacturer’s identification. Coordinate deliveries to avoid interference or construction delays. Protect products during delivery, storage, installation, and the remainder of the construction period after installation.

1.05 WARRANTY

A. All work in this Section shall be guaranteed by the Contractor for a period of one year from the date of project acceptance as a whole. Should any existing plumbing risers or materials from the upper floor fail within this period, this Contractor shall be responsible for all damage to any part of the premises caused by the failure and shall repair or replace the defects at no cost to the Hospital.

PART 2 - PRODUCTS

2.01 PIPE AND FITTINGS

A. Sanitary Waste and Vent Pipes, Below Grade: Service weight cast-iron soil pipe, ASTM A74, with dual tight gaskets, or no-hub cast-iron soil pipe conforming to CISPI 301 with MG couplings.

B. Below grade piping within building in sizes 6-inches and smaller may be hubless cast iron sanitary system with MG mechanical cast iron couplings or accepted equivalent, conforming to Cast Iron Soil Pipe Institute's Standard 301-72. Stainless steel couplings are unacceptable. Each assembled coupling shall bear the following clearly identifiable markings: the manufacturer, the size, and the letters UPC, indicating conformance with the Uniform Plumbing Code. Install couplings per manufacturer's written instructions and tighten nuts or bolts heads alternately and gradually to manufacturer's specifications using an accurate torque wrench.

C. Sanitary Waste and Vent Pipes, Above Grade: Above grade cast iron soil, waste and vent piping in enclosed pipe shafts, concealed ceiling spaces, or enclosed under floor spaces may be No-Hub systems, Tyler No-Hub pipe and fittings or equal, conform to Cast Iron Soil Pipe Institute Standard 301-82 with Cast Iron Soil Pipe Institute Standard 310 coupling joint.

D. Water Pipes, Below Grade: Type "K" seamless rigid copper tubing conforming to ASTM B88 with wrought copper solder type fittings conforming to ANSI B16.22 or ANSI B16.18. Joints shall be brazed with a

silver alloy filler metal. Submit 5 copies of certificates stating that solder and fluxes used are lead-free.

E. Water Pipes, Above Grade: Above ground piping shall be Type “L” seamless rigid copper tubing conforming to ASTM B88 with wrought copper or cast copper alloy solder type fittings conforming to ANSI B16.22 or ANSI B16.18. Solder shall be 95-5 tin-antimony. Submit 5 copies of certificates stating that solder and fluxes used are lead-free.

2.02 VALVES

A. Ball Valves, 1/2-inch to 2-inch: Bronze construction, 2-piece body, 600-psi WOG, full-port, insulated quarter-turn handle, double O-ring stem seals, blowout-proof stem, PTFE seats.

B. Check Valves: bronze body, swing type, renewable disc, screwed cap and ends, 125 psi SWP.

C. Strainer: Y-strainers for lines 2-inches and smaller, bronze body, 20 mesh stainless steel screen, screwed ends, hose end valve, 300 psi WOG.

D. Unions: Provide unions at all equipment and accessory locations and at screwed valves. Provide dielectric unions at lines of dissimilar metals. EPCO Model FX or accepted equivalent.

2.03 PLUMBING SYSTEM SPECIALTIES

A. All drains and floor cleanouts with flashing flange and strainers maximum 1/4" openings, tops shall be matching nickel/bronze cleanout covers.

B. Floor Cleanout: Smith 4048-U, Josam 56020-22-15, Zurn ZN-1400-T-IC, or approved equal. Provide clamp device when installed in floor with waterproofing membrane. Provide nickel bronze cleanout covers.

C. Cleanout: Josam 58480 series, coated cast iron, spigot connection, bronze threaded plug.

D. P-traps installed below floor: Deep-seal P-trap.

E. Floor Drains (FD): Zurn Z415 cast iron drain with flashing collar and 5” type B adjustable nickel bronze round strainer head with secured square hole heel proof grate maximum 1/4" grate openings, approved trap primer connection and no hub outlet.

F. Trap Primer (TP): Precision plumbing products model PFTPR500 “Prime-Rite” trap primer valve, 5PSI minimum pressure drop, removable operating parts, integral vacuum breaker and union connections. Smith 2699-2, Josam 88250-91, Wade W-2400-T, or Zurn Z-1022 all bronze primer valve

with removable operating parts, integral vacuum breaker and union connections.

G. Plumbing Vent Caps: J.R. Smith 1748 vandal proof cast iron with galvanized finish. Use on all vent thru roof pipe terminations.

H. Vent Flashing: Prefabricated roof cap/curbing (non-lead). J.R. Smith 1748 vandal proof cast iron with galvanized finish. Use on all vent thru roof pipe terminations.

2.04 PIPING INSULATION

A. All insulation material applied to the exterior surface of metal pipes shall have flame spread of not more than 25 and a smoke development rating of not more than 50 when tested as a composite installation, including insulation, facing material, tapes, and adhesives as normally applied.

B. Hot water pipe insulation shall AP Armaflex insulation, Armacell or substitute. Closed cell structure, built-in vapor retarder. Provide air drying contact adhesive for joining seams and butt joints of the Armaflex insulation. Insulation thickness: 1-inch minimum. Installation in accordance with manufacturer's latest recommendations. Seal all joints with insulation manufacturer's approved adhesive.

C. On pipe insulation exposed to weather or subject to damage, apply 1 mil embossed aluminum jacket with 2-inch overlap at longitudinal and circumferential joints, secured in place with 3/4 inch x 0.015 gauge aluminum on 18 inch centers. Apply humped aluminum ells or fabricated 16 mil aluminum to fittings and band in place.

PART 3 – EXECUTION

3.01 PREPARATION

A. Visit the worksite and become fully aware of all existing conditions. Investigate the Contract Documents and make proper provisions to avoid interference or construction delays. Determine the exact route of each pipe. Make offsets and changes in direction required to maintain proper head room and pitch or to accommodate the structure and the work of other trades. Furnish other trades with information to properly locate and size openings in the structure required for this work. Furnish anchor bolts, sleeves, inserts, and supports required for this work.

3.02 INSTALLATION AND REQUIREMENTS

A. Perform work using personnel skilled in the trade involved. Provide competent supervision. Furnish new equipment, fixtures, materials, and accessories bearing the manufacturer’s identification and conforming to recognized commercial standards. Provide all extra materials and labor for

a complete operable system at no extra cost to the School. Installation shall be in accordance with manufacturer's recommendations.

3.03 PIPING INSTALLATION

A. Conform to the requirements of the Uniform Plumbing code. Inspect all piping inside and outside. Remove interior obstructions and ream out pipe ends. Tool markings on polished fittings are not acceptable. Cut pipe accurately so that it can be worked into place without springing or forcing. Install pipes parallel to the wall of the structure and plumb. Make changes in direction with fittings. Bushings are not permitted. Install valves with stems above horizontal. Provide proper support and adequate provisions for expansion, contraction, slope, and anchorage. Provide dielectric unions where copper tubing connects to steel pipe. Wrap pipe or tubing with 1/4-inch thick felt and secure with tape where it contacts other materials. Have piping tested, inspected, and approved before it is furred in, buried, or otherwise hidden. Provide standard weight galvanized steel pipe sleeves where water pipes pass through structure, sufficiently large to provide 1/4-inch clearance around pipe. Caulk watertight around pipes passing through sleeves. Wrap pipe with polyethylene tape where it passes through sleeve and where it contacts concrete or masonry. Grout with fireproof material around all pipe penetrations through slabs and walls for full length of penetrations. Provide chrome-plate brass escutcheons, set tight on the pipe and to the wall where pipes are exposed in finished areas. Provide clamping collar to membrane flange where pipe or drains penetrate waterproof membrane. Perform all welding using qualified welders in accordance with American National Standards Institute's Code B31.1 and American Welding Society Standard B3.0.

3.04 PIPING SYSTEM SUPPORTS

A. Pipe Supports: Support underground piping on firm soil along its entire length. Where rocks are encountered, have trench excavated to minimum overdepth of 4-inches and backfilled with granular moist earth, thoroughly tamped. Materials used for backfilling over piping shall be granular earth, free from debris and stones. The Contracting Officer's representative may reject any materials which he considers unsuitable for fill. Provide a minimum of one foot of cover for all pipes. Support steel and copper pipe at maximum spacing of 6-feet for pipes 1-1/2-inches and smaller, 10-feet for pipes 2-inches through 4-inches.

3.05 DRAINAGE, WASTE AND PIPE SYSTEMS

A. Slope drain lines at 1/4-inches per foot unless otherwise indicated. On roof vents and where other drains occur above the ground floor, provide clamping device with drain. Provide a 4-pound lead flashing sheet extending 8-inches out around drain body and secure with clamp device. On vents through roof, extend vent flashing 8-inches out all around base of

vent, extend collar up vent and turn in at top. Install hubless cast-iron and neoprene gasketed no-hub coupling below grade. MG stainless steel clamps and cast-iron no-hub couplings shall be installed in accordance with manufacturer's written instructions. Cleanout to grade shall be encased in concrete, flush with finished grade.

3.06 WATER PIPING SYSTEM

A. Secure each water line where it penetrates partitions to serve fixtures, hose bibs, and similar items. Wrap all lines passing through concrete with polyethylene tape. Install unions or flanges at all valves, equipment, and system specialties. Set hose bibs 18-inches above finished grade unless otherwise indicated. Install dielectric unions at connections of copper and ferrous pipes.

B. Provide water hammer arrester on all cold water lines serving fixtures using flush valves sized in accordance with the PDI Standards WH201 for the total number of fixture units connected to the branch line. Install arrester between last 2 fixtures served or as shown. Provide access panel for concealed arresters.

C. Provide all hose bibbs with non-adjustable vacuum breakers and square head cock.

3.07 STANDARDIZED PIPE IDENTIFICATION SYSTEM

A. Use an arrow marker with each pipe content marker, the arrow shall always point away from the pipe marker and in the direction of the flow.

B. If flow can be in both directions, use a double headed arrow marker.

C. Apply pipe marker and arrow marker at every point of pipe entry or exit where line goes through wall.

D. Apply pipe marker and arrow marker on each riser and "T" joint.

E. Apply pipe marker and arrow marker every 20-feet on long continuous lines.

F. Apply markers on the 2 lower quarters of the pipe and where view is unobstructed.

G. Arrow markers shall be 4-inches long minimum, and pipe content marker lettering shall be block-style lettering, all caps, with size minimum 1-1/2-inches in height. All identifications shall be contrasting color against the background, i.e. black lettering against white pipe insulation.

3.08 TESTING AND ADJUSTING

A. All work shall be completely installed and tested as required by this Section and the applicable plumbing ordinances, and proven leak tight before inspection is required. Providing all required equipment and labor to make the test and repeating the tests to the satisfaction of those making the inspection is within the scope of this Section of the specifications. Any work concealed without the required test and approval shall be uncovered and tested at the Contractor's expense.

B. Procedure:

1. Soil, Waste and Vent Piping: Filled with water to the highest point in each system, and left filled for 8 hours with no noticeable change in water level; after approval, remove the test plugs and flush the line.

2. Water Piping: At 150 psi and left for an 8 hour period without loss of pressure; and left under line pressure for the balance of the construction period.

3. Plumbing Fixtures: Filled with water and checked for leaks and/or retarded flow.

4. All Valves: Adjusted and balanced to provide for the proper operation of the various systems. After disinfecting, strainer screens shall be removed, cleaned, and reinstalled.

3.09 DISINFECTING

A. All domestic cold and hot water lines shall be thoroughly flushed and drained after installation. Sterilization shall be accomplished by opening taps at the end of all branches and slowly filling the system adding liquid chlorine, or hypochlorite solution, to the water until water flowing from all branches indicates not less than 50 P.P.M. residual chlorine; the system shall be allowed to stand for not less than 8 hours, with all valves opened and closed several times during this period; then drained and thoroughly flushed until all traces of chlorine are eliminated (less than 0.2 P.P.M.). Certificate shall be submitted to the Contracting Officer. The Contractor shall be responsible for the proper disposal of chlorinated water to safeguard public health and environment in accordance with applicable Department of Health requirements.

3.10 FIELD QUALITY CONTROL

A. Test plumbing systems in accordance with the Uniform Plumbing Code. Perform tests in the presence of, and to the satisfaction of inspectors having jurisdiction over the work. Ask for final inspection by the Engineer after tests, adjustments and balancing has been performed.

1. Test drainage systems in accordance with Section 318 of the Plumbing Code.

2. Hydrostatically test the domestic water piping system at 100 psi for 2 hours. Inspect the entire system while under pressure and correct all deficiencies.

3. Test equipment to demonstrate its operation and compliance with the specification.

3.11 SPARE-PARTS

A. After approval of materials and equipment and 2 months prior to the project acceptance date, the Contractor shall furnish a complete list of parts and supplies with current source of supply.

3.12 TESTING AND INSPECTION

A. Contractor shall furnish all equipment for tests and any required retests and pay for all cost of repairing any damage resulting from such tests. Contractor shall adjust systems until they are approved. Tests shall be performed in the presence of, and to the satisfaction of, an inspector of the official agency involved.

B. Sanitary and water piping shall be tested in accordance with the Plumbing Code. Sanitary drains shall be tested with a minimum of 10 feet of water for 15 minutes. Water piping shall be tested. Valves shall be rated for at least 200 psi working pressure.

C. Defective Work: If inspection of tests show defects, such defective work or material shall be replaced and inspection and tests repeated. Repairs to piping shall be made with new material. No caulking of screwed joints or holes will be accepted. Installation shall be repaired by skilled mechanics of the trade involved at no extra expense to the State.

D. Protection to Fixtures, Materials and Equipment: Pipe openings shall be closed with caps or plugs during installation. Fixtures and equipment shall be tightly covered and protected against dirt, water and chemical or mechanical injury. Upon completion of all work, the fixtures, materials and equipment shall be thoroughly cleaned, repainted, adjusted and operated.

E. Chlorination: Domestic water lines shall be sterilized with chlorine before acceptance of work. Sterilize water system for 24 hours with 100 ppm chlorine introduced into the lines in an approved manner. Dosage of chlorine shall not be less than 50 ppm. After a contact period of not less than eight (8) hours, the system shall be flushed with clean water until the residual chlorine content is not greater than 0.2 ppm. All valves in the lines being sterilized shall be opened and closed several times during the contact period. A certificate shall be furnished to the Engineer evidencing proper performance of sterilizations.

3.13 PIPE PENETRATION

A. Where pipes penetrate fire rated walls and floors, the space between the pipe and pipe sleeve shall be sealed with fireproof sealant.

B. Installation shall be in accordance with manufacturers' instructions.

3.14 CLEANING AND ADJUSTING

A. At the completion of the work, all parts of the installation shall be thoroughly cleaned. Equipment, fixtures, pipe valves, and fittings shall be cleaned of grease and metal cuttings, and sludge that may have accumulated by operation of the system for testing. Any stoppage or discoloration or other damage to parts of the building, its finish, or furnishing, due to the Contractors failure to properly clean the piping system shall be repaired by the Contractor without cost to the State. Touch up with matching paint all damaged factory finishes.

END OF SECTION

DIVISION 16 - ELECTRICAL

SECTION 16010 - GENERAL ELECTRICAL PROVISIONS

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS: The General Instructions to Bidders, the General Conditions of Construction Contracts, and Special Provisions preceding these specifications shall govern this section of the work.

1.02 INTENT OF SPECIFICATIONS AND DRAWINGS:

A. Abbreviated Form: Specifications and Drawings are prepared in abbreviated form and includes incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a" and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.

B. Specifications and Drawings: Specifications and drawings complement each other and what is specified, scheduled or mentioned by one shall be binding as if called for by both.

1.03 DEFINITIONS:

A. Provide: "furnish and install, test and deliver to the Hospital in operating and ready to use condition".

B. Wiring: "Provide all raceways, junction boxes, conductors, devices, protection equipment, installation of motor controller furnished (by others) when required, etc., including testing for a complete, operative and ready to use electrical system".

C. Equal: "Material, equipment or system, including all necessary labor, modifications and accessories satisfying the requirements of the contract documents to provide features or have operating characteristics equal or better than that specified".

D. Complete: "Furnish installation that is operative, tested, ready to use and which satisfies the intent of the contract documents, including all necessary accessories and modifications".

E. Contractor: "General Contractor responsible for all work shall assign work to Subcontractors. Except where noted, work of this section shall be assigned to the Electrical Subcontractor".

1.04 SUMMARY:

A. Electrical Work: Provide all articles, materials and services specified herein or on the Drawings or as normally required by accepted industry standard practices, including all labor taxes, fees, insurance, warranties and incidentals required to complete all electrical work.

B. In general, the following work is included:

1. Complete disconnecting, removal, and disposal of existing, electrical equipment, devices, wiring in sub-basement area.

2. Complete disconnecting and removal of existing light fixtures in sub-basement area. Light fixtures shall be returned to the Hospital Facilities Office.

3. Complete relocating of existing electric panel and new wiring to maintain lighting and receptacles in adjacent non-construction areas as indicated.

4. Complete new wiring to maintain fire alarm system connection to fire sprinkler riser and devices in adjacent spaces as indicated.

5. Complete new 120V and low-voltage wiring to maintain cameras as indicated.

6. Testing.

7. As-built drawings.

C. Wiring and connecting of all electrical equipment supplied for installation and use in this contract and not specifically listed as work by others.

D. Furnishing of "Contractor Submittals" and "As Built" Drawings.

E. Coordinate electrical work with Hospital Facilities Management.

F. Coordinate work with other trades to avoid omissions and overlapping of responsibilities.

G. Obtain and pay for all fees, permits, licenses, assessments and inspections required for this work.

1.05 RELATED WORK SPECIFIED IN OTHER SECTIONS:

A. Materials and methods specified under SECTION 16400 - ELECTRICAL WORK.

1.06 QUALITY ASSURANCE:

A. Government and Utility Requirements: Comply with all requirements of the State of Hawaii and City & County of Honolulu.

B. Accompanying Plans: Specifications are accompanied by architectural plans of the building, site plans and diagrammatic electrical plans showing locations of outlets, feeder runs, devices and other electrical equipment. Locations are approximate and before installation, Contractor shall study adjacent construction details and make installation in the most

logical manner. Prior to installation and at the direction of the Architect and/or HHSC Representative, relocate any device within 10'-0 of the location presently shown without added cost to the Hospital.

C. Prior to the Start of Rough-in Work: Verify all dimensions and sizes of equipment at the job site. Circuits and raceway routes are diagrammatic and may be altered in any logical manner. However, all changes from the contract documents shall be subject to review and acceptance of the Architect and/or HHSC Representative and indicated on the "As Built" Drawings.

D. Materials and Equipment: Materials and equipment shall conform to requirements of applicable technical sections, publications specified therein and shall be as shown on the drawings. Materials and equipment shall be new and shall be the product of the manufacturers regularly engaged in the manufacturer of such products. All items shall essentially duplicate materials and equipment that have been in satisfactory use at least two years prior to bid opening and shall be supported by service organization that is reasonably convenient to the site of installation.

E. Asbestos Prohibition: No asbestos containing materials or equipment shall be used under this section. The contractor shall insure that all materials and equipment incorporated in the project are asbestos-free.

F. List of Materials and Equipment: Refer to "Submittals" paragraph for required documentation lists. These lists shall included manufacturer's names and material or equipment identification such as styles, types, or catalog numbers to permit ready and complete identification. Catalog cuts or brochures shall be included for electrical apparatus.

1. Where items are specified by manufacturer's name or catalog number, substitutions require written permission by the HHSC Representative prior to bidding. Brand names, manufacturer's names and catalog numbers indicate standard of design and quality required. List of substitute materials together with qualifying data shall be submitted for review per Submittal requirements of these specifications.

2. Items requiring shop drawings shall be included in the list of materials and equipment, identified by manufacturer's name and type, and accompanied by complete descriptive data, electrical and physical characteristics of the equipment and manufacturer's bulletins.

3. Burden of proof of equality of proposed substitutions will be the responsibility of the Contractor. Submittals shall be sufficiently detailed to permit evaluation of the proposed items. Inadequacy of submittal will be sufficient cause to reject a proposed substitution.

1.07 DEPARTURES:

A. Departures resulting from substitution of materials or system shall be accompanied by appropriate changes in all affected work of every trade. Such changes shall be at no increase in the contract amount and shall be the responsibility of the Subcontractor or supplier responsible for the departures. Changes proposed by the Contractor shall be based on a system approach and shall be allowed if implemented without decrease in quality in performance or operations, increase in utility costs, or adverse affect on the available physical space to install the equipment. Such departures shall be submitted and noted in shop drawings for review and acceptance by the Architect and/or HHSC Representative. Departures initiated by other trades, requiring changes in the electrical system as well as other systems, shall be accompanied by appropriate changes to all affected work of every trade, at no increase in contract amount, by the trade responsible for the departure.

B. Responsibilities: The General Contractor shall be responsible to coordinate, approve, and select systems that do not impose unaccounted for impact on the electrical work. It shall be understood that after the award of the contract, all departures having electrical impact, unless otherwise noted, have been reviewed and approved by the General Contractor. Therefore all appropriate changes to the electrical system required to accommodate the departures shall be at no additional cost to the Hospital.

1.08 SUBMITTALS:

A. Submit in accordance with SECTION 01330 - SUBMITTAL PROCEDURES.

B. Shop Drawings: Submit drawings for equipment not completely identifiable by information contained in the list of materials and equipment.

C. Certificate of Compliance: Where required by section specifying the equipment, the Contractor shall submit six copies of certificates of compliance in accordance with the requirements of the General Provisions. The certificates shall include but not be limited to factory test reports.

D. Acceptance Requirements: Acceptance for material and equipment will be based on manufacturer's published data. Where materials or equipment are specified to be constructed and tested, or both, in accordance with the standards of the National Electrical Manufacturers Association (NEMA) or the American National Standard Institute (ANSI) the Contractor shall submit proof that the items furnished under this section of the specifications conform to such requirements. A certification or published catalog specification data statement to the effect that the time is in accordance with the referenced NEMA standard by a company listed as a member company of NEMA for the section whose standards

cover the item under construction, will be acceptable as sufficient evidence that the item conforms to the requirements of the National Electrical Manufacturers Association. A manufacturer's statement indicating complete compliance of each item with the applicable NEMA, ANSI or other commercial standard specified shall be submitted and will be acceptable proof of compliance. Conformance with the agency requirements does not relieve the item from complying with any other requirements of the specifications.

E. Equipment Guarantees: Installation shall be complete in every detail and ready for use. Any item supplied by the Contractor developing defects within one (1) year after final acceptance by the Architect and/or HHSC Representative shall be replaced by materials, apparatus or parts including installation labor to make such defective portion of complete system conform to the true intent and meaning of the drawings and specifications, without additional cost to the Hospital. The Contractor shall guarantee all equipment specified from the date such equipment is accepted by the Architect and/or HHSC Representative, against defects in materials, design, performance and workmanship. Guarantees shall be supported by manufacturer's written warranties and shall be signed by an official of the manufacturer's organization. Replacement parts shall be delivered or repairs shall be made promptly upon receipt of notice of failure under normal and proper use and maintenance. All costs of replacement and repair shall be borne by the Contractor provided that a report substantiating such defect or failure to conform to specifications is promptly given to the Contractor.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. All materials shall be new, except as specifically noted, and shall bear the label of Underwriters' Laboratories, Inc., wherever standards have been established and label service is normally and regularly furnished by the agency.

PART 3 - EXECUTION

3.01 MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR:

A. The electrical installation shall be complete and operable and shall conform to the requirements of contract drawings. The Contractor shall provide all electrical equipment and materials, wiring, supports, and such additional parts as are necessary to make the installation complete. All Contractor furnished materials and equipment are subject to review and acceptance by the Architect and/or HHSC Representative.

3.02 PROTECTION DURING STORAGE:

A. All materials and equipment shall be stored in a safe manner; weather and fire protection shall be maintained and all materials shall be stored above the ground of floor level to avoid damage by moisture.

3.03 PROTECTION OF WORK IN PROGRESS:

A. All electrical materials and equipment shall be completely protected during installation. Equipment shall be securely protected against physical or chemical damage. In areas exposed to weather, materials unused at the end of each day's work shall be stored in weather-protected locations. Damage to materials or equipment due to Contractor's neglect shall be repaired or replaced by and at the expense of the Contractor.

3.04 PROGRESS OF WORK AND COORDINATION:

A. The Contractor shall prepare a schedule giving sequence of electrical work. The electrical work shall be coordinated with the work of other Contractors and other trades. The schedule shall be submitted prior to beginning installation and shall be subject to review and acceptance by the Architect and/or HHSC Representative.

3.05 RULES:

A. The entire electrical installation shall conform to the applicable rules and regulations and requirements of the National Electrical Code and other City and County standards and publications specified in the technical sections.

3.06 COORDINATION:

A. The contract drawings indicate the extent and general location and arrangement of equipment, conduit and wiring. Electrical equipment shall be located so as to avoid interference with architectural, mechanical or structural features. Any device or equipment may be relocated within 10'-0" of the location shown on the drawings before installation is initiated and without increase in contract amount.

3.07 WORKMANSHIP:

A. All materials and equipment shall be installed in accordance with printed recommendations of the manufacturer, and shall conform to the requirements of the contract drawings.

3.08 TESTS:

A. Field Tests: After the installation is completed, and at such time the Architect and/or HHSC Representative may direct, the Contractor shall conduct field tests for acceptance by the Architect and/or HHSC Representative. When the tests are specified to be performed under

supervision of the equipment manufacturer, the Contractor shall cooperate with the Architect and/or HHSC Representative during tests and shall place at his disposal all assistance, materials and services required to perform such tests. The tests shall be performed in the presence of the Architect and/or HHSC Representative. The Contractor shall furnish all necessary electric power instruments and personnel required for the tests.

END OF SECTION

SECTION 16400 - ELECTRICAL WORK

PART 1 - GENERAL

1.01 SUMMARY

A. Furnish all labor and materials required to complete all electrical work indicated on the drawings and/or as specified.

B. In general, the following work is included:

The work shall include complete temporary disconnecting, removal, and reconnection of existing equipment and wiring and installation of new equipment and wiring. At the completion of the work and making any minor connection changes or adjustments necessary for the proper functioning of the system and equipment. All systems shall be properly adjusted and in working order at the time of final acceptance.

C. The term "wiring" shall include raceway, conductors, equipment, and wiring.

D. The term “provide” shall mean “furnish and install”.

E. Test complete installation and correct all defects and malfunctions of material and workmanship at no additional charge to HHSC.

1.02 RULES AND PERMITS

A. The entire installation to be made in strict accordance with applicable provisions of 2017 edition of the National Electrical Code, Local Ordinances, and rules and regulations of the City and County of Honolulu and State of Hawaii.

B. Contractor shall obtain and pay for electrical permit as required by local rules and regulations. He shall arrange for periodic inspection by local authorities as work progresses so that certificates of completion and inspection may be turned over to the Architect or HHSC Representative as stipulated in GENERAL CONDITIONS.

1.03 GUARANTEE

A. All work and material executed under this Section shall be guaranteed to be free from defects of materials and workmanship for one (1) year from date of final acceptance of a project as a whole. All work of repair and replacement required, including other work damaged by this work's defects shall be performed without cost to HHSC.

1.04 DRAWINGS

A. Specifications are accompanied by drawings of facility and diagrammatic electrical plans showing locations of outlets, junction boxes, lighting

fixtures, wiring devices, raceways and other electrical equipment. Locations are approximate. Before installing, study adjacent construction details and make installation in most logical manner. Any device or equipment may be relocated within 10'-0" before installation at direction of the Architect or HHSC Representative without additional charge to HHSC.

B. Before installing, verify all dimensions and sizes of equipment at jobsite. Circuit and conduit routing is typical and may be altered in any logical manner; however, all changes shall be approved by the Architect or HHSC Representative and shown on "field posted as-built" drawings.

C. Submit for approval six (6) sets of catalog cuts of following equipment and resubmit until approval is received before placing order:

1. Circuit breakers.

2. Junction and outlet boxes.

3. Raceways.

4. Wires and cables.

5. Any built-to-order equipment.

D. Drawings and catalog cuts for substitute materials shall clearly specify compliance with and/or deviation from specified material. Approval of drawings and catalog cuts shall not release Contractor from complying with the intent of specifications and drawings. Any deviations from approved drawings shall have prior approval by the Architect and/or HHSC Representative.

PART 2 - PRODUCTS

2.01 MATERIALS

A. All materials shall be new and of the best quality available in their respective kinds, free from all defects and shall conform to standards of Underwriters' Laboratories, Inc., NEMA, ANSI, ASTM, IEEE and EEI. Materials and equipment listed by Underwriters' Laboratories shall bear "UL" label of approval. Brand names, manufacturer's names, and catalog numbers indicate standards of design and quality required. Substitute materials other than those listed in each paragraph will not be solicited unless indicated with "or approved equal".

Example:

Item	Manufacturer and Catalog No. Specified	Substitute Manufacturer and Catalog Number
Cable	Joe Doe - No. 3200	King - No. 2200

Qualifying data shall include cuts, drawings, and specifications to show equality with materials specified herein and in drawings.

B. Raceways:

1. EMT: Galvanized and zinc-coated, 3/4" minimum diameter, except as noted. (Interior use only)

2. Rigid Steel Conduit: Galvanized, 3/4” minimum diameter, except as noted. (Exterior use)

C. Watertight Flexible Conduit: 3/4” minimum, except as noted. (Interior and exterior)

D. Junction Boxes: Junction boxes, unless otherwise specified, shall be NEMA 1 and NEMA 3R. NEMA 1 junction boxes shall be fabricated from galvanized steel. Prime paint and enamel finish according to NEMA specifications. NEMA 3R junction boxes shall be stainless steel. Manufacture and install according to NEC Article 370.

E. Wires and Cables: Wires and cables shall meet the applicable requirements of ASTM and UL for the type of insulation, jacket, and conductor specified or indicated. Wires and cables manufactured more than 12 months prior to date of delivery to the site shall not be used.

1. Conductors: Conductors No. 10 AWG and smaller shall be solid or stranded, and those No. 8 AWG and larger shall be stranded. Unless indicated otherwise, conductor sizes shown are based on copper. All conductors shall be copper.

2. Minimum Conductor Size: Minimum size shall be No. 12 AWG.

3. Color Coding: All branch circuit conductors shall be color-coded. Color shall be green for grounding conductors, and white for neutrals, except where neutrals of more than one system are installed in same raceway or box, the other neutral shall be white with a colored (not green) stripe. The color of the ungrounded conductors in different voltage systems shall match existing color-coding. If not available, use the following:

120/208V, 3-phase:

Black	Phase A
Red	Phase B
Blue	Phase C
White	Neutral
Green	Ground

4. Insulation: Unless specified or indicated otherwise, or required to be otherwise by NFPA 70, all power and lighting wires shall be 600-volt, Type THWN or XHHW, except that grounding wire may be Type TW.

5. Equipment Grounding Conductors: ASTM B 1, solid bare copper wire for sizes No. 8 AWG and smaller; ASTM B 8, Class B, stranded bare copper wire for sizes No. 6 AWG and larger.

F. Splices and Termination Components:

1. UL 486A and UL 486B, as applicable for wire connectors, and UL 510 for insulating tapes. Connectors for wires No. 10 AWG and smaller shall be insulated pressure-type in accordance with UL 486A or UL 486C (twist-on splicing connector). Provide solderless terminal lugs on stranded conductors.

G. Circuit Breakers: Individual breakers shall be molded plastic case, with toggle operated mechanism thermal-magnetic overload trips. Interchangeable trip shall be provided when available. Toggle positions "ON", "TRIPPED", and "OFF", engraved on body or toggle. When specified for use in existing panelboard, circuit breaker shall be compatible with existing Manufacturer.

H. Hardware, Support, Backing, Etc.: Provide all hardware, supports, backing, and other accessories necessary to install electrical equipment. Wood materials shall be termite treated, iron or steel materials shall be galvanized for corrosion protection, and non-ferrous materials shall be brass or bronze. All wood screws shall be brass or galvanized steel.

PART 3 - EXECUTION

3.01 CONSTRUCTION METHODS

A. Comply with local ordinances and regulations of the City and County of Honolulu. Workmanship subject to approval of the Architect and/or HHSC Representative who shall be afforded every opportunity to determine skill and competency. Concealed work reopened at random during formal inspection by the Architect and/or HHSC Representative without additional charge to HHSC.

B. Construction shall conform to construction practices as recommended by American Electricians Handbook by Croft (latest edition), National Electrical Code, National Electrical Safety Code, and applicable instructions of manufactures of equipment and materials for this project.

3.02 JUNCTION BOXES

A. Provide outlet boxes where called for in drawings or required by Code.

3.03 RACEWAYS

A. All conduits shall be EMT and rigid steel raceway. Provide No. 14 galvanized steel pull wire or nylon cord in all empty conduits. EMT for interior and RSC for exterior.

B. Cut raceways square and ream inner edges. Butt together evenly in couplings.

C. Make bends and offsets with hickey or conduit bending machine; do not use vise or pipe tee. Make bends so that interior cross-sectional area will not be reduced. Radius of curve of inner edge of field bend not less than 10 times internal diameter of raceway. Use of running threads not permitted. Where raceways cannot be joined by standard threaded couplings, use approved watertight raceway unions.

D. Cap raceways during construction with plastic or metal-capped bushings to prevent entrance of dirt or moisture. Swab all raceways out and dry before wires or cables are pulled in.

E. Mount raceways free from other piping, valves or mechanical equipment.

F. Fish wires, cords, strings, chains, or the like shall not be placed or inserted in the conduit system during installation.

G. Install insulating bushings and two (2) locknuts on each end of every run of conduit at enclosures and boxes. Provide grounding bushings as required to grounding receptacles and connect conduits to service ground, per NEC Article 250.

H. Project adequate number of conduit threads through box for bushings.

I. Run exposed conduit or raceway parallel with, or at right angles to, structural or architectural elements.

3.04 Pull Boxes: Construct of not less than the minimum size required by NFPA 70 or code-gage aluminum or galvanized sheet steel, except where cast metal boxes are required in locations specified above. Furnish boxes with screw-fastened covers. Where several feeders pass through a common pull box, tag the feeders to indicate clearly the electrical characteristics, circuit number, and panel designation.

3.05 WIRING

A. Conductor Identification: Provide conductor identification within each enclosure where a tap, splice, or termination is made. For Conductors No. 6 and smaller, color-coding shall be by factory-applied color-impregnated insulation.

B. Splices: Make splices in accessible locations. Make splices in Conductors No. 10 AWG and smaller with an insulated pressure type connector.

3.06 GROUNDING

A. Grounding and Bonding: In accordance with NFPA 70. Ground all exposed non-current carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductor in nonmetallic raceways, and neutral conductor of wiring systems.

B. Grounding Conductor: Provide an insulated, green colored equipment-grounding conductor in all branch circuits. This conductor shall be separate from the electrical system neutral conductor.

3.07 CLEANING AND REPAIRING

A. During the process of work, all rubbish, waste lumber, displaced materials, etc. shall be removed as soon as possible and upon completion of work, Contractor shall remove from State's property and from all public and private property, at his own expense, all temporary structures, rubbish, and waste material resulting from his operations.

B. The Contractor shall restore all removed or damaged pavement, gutters, curbs, sidewalks, signposts, trees, and landscape damaged by his operations to their original condition or better.

3.08 FINISHING

A. Patch, repair, and restore all structural and architectural elements cut or drilled for installation of electrical system. Drilling, cutting, patching, repairing, and restoring shall be subject to approval of the Architect or HHSC Representative.

B. Attach electrical equipment to wood by wood screws, and attach to concrete by embedded or expansion inserts and bolts. Use powder-driven charge with approval only. Close unused knockouts on boxes or enclosures with metal cap.

C. Wipe clean all new exposed raceways and enclosures with rag and solvent. Prime paint and finish all new exposed raceways and enclosures to match adjoining wall finish. Factory finished enclosures shall not be painted unless called for in drawings.

D. Complete panel directories with typewriter.

END OF SECTION

LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASEMENT FOOD SERVICE OPERATIONS - PHASE I
PROJECT NO.: FY 21L-0404

3675 KILAUEA AVENUE HONOLULU, HAWAII 96816

T.M.K.: 03 - 02 - 031: 001

INDEX TO DRAWINGS

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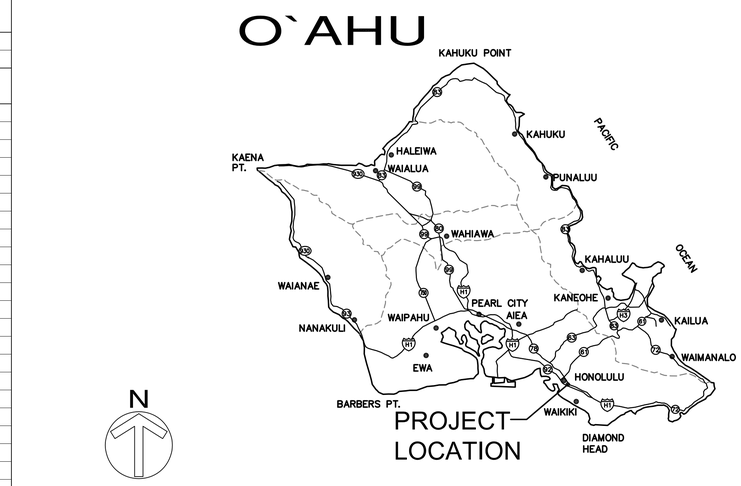
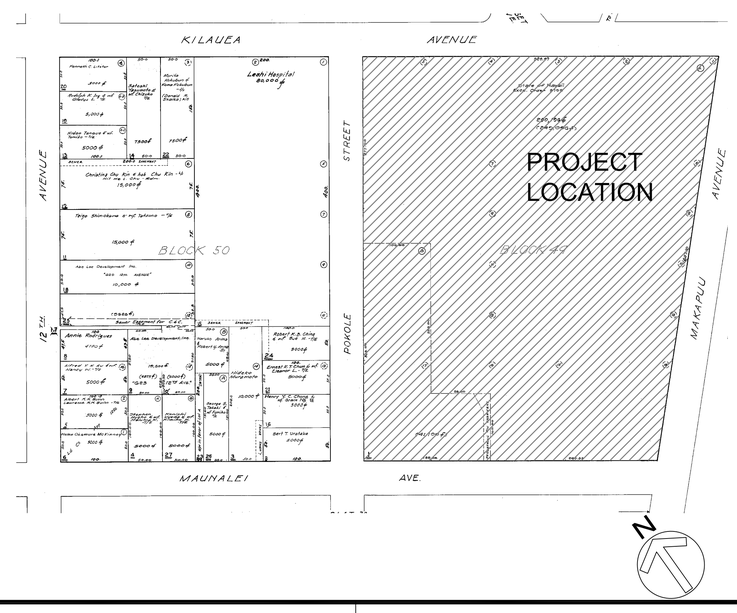
T-1.0	TITLE SHEET, INDEX TO DRAWINGS, LOCATION MAP, VICINITY MAP, CONSULTANTS & NOTES
	ARCHITECTURAL
A-1.0	SITE PLAN
A-2.0	SUB-BASEMENT PLAN – DEMO WORK & DEMO WORK LEGEND
	MECHANICAL
M-1.0	GENERAL NOTES AND MECHANICAL LEGEND
M-2.0	PLUMBING DEMOLITION PLAN – SUB-BASEMENT
M-2.1	DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT
M-2.2	DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT
	ELECTRICAL
E001	ELECTRICAL SITE PLAN, GENERAL ELECTRICAL NOTES, ELECTRICAL SYMBOL LIST
E002	FIRE ALARM SYSTEM NOTES
E101	SUB-BASEMENT – LIGHTING PLAN (EXISTING/REMOVAL WORK)
E102	SUB-BASEMENT – ELECTRICAL PLAN (EXISTING/REMOVAL WORK)
E103	SUB-BASEMENT – FIRE ALARM PLAN (EXISTING/REMOVAL WORK)
E104	SUB-BASEMENT – FIRE ALARM PLAN (EXISTING/REMOVAL WORK)
E105	BASEMENT – ELECTRICAL PLAN (EXISTING/REMOVAL WORK)
E201	SUB-BASEMENT – ELECTRICAL PLAN (EXISTING/NEW WORK)
E202	SUB-BASEMENT – FIRE ALARM PLAN (EXISTING/NEW WORK)
E301	ONE LINE & RISER DIAGRAMS

LOCATION MAP



VICINITY MAP



CONSULTANTS

ARCHITECTS:	PACIFIC ARCHITECTS, INC.
STRUCTURAL ENGINEER:	KAI HAWAII, INC.
MECHANICAL ENGINEER:	MECHANICAL ENTERPRISES, INC.
ELECTRICAL ENGINEER:	BOWERS & KUBOTA, INC.
ENVIRONMENTAL ENGINEER:	ENVIROQUEST, INC.

NOTES

GENERAL NOTES

1. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND READ THE SPECIFICATIONS AND ALL OTHER PROPOSED CONTRACT DOCUMENTS PRIOR TO SUBMITTAL OF HIS BID PROPOSAL. THE CONTRACTOR SHALL FULLY INFORM HIMSELF OF THE SCOPE OF THIS PROJECT PRIOR TO THE SUBMISSION OF HIS BID PROPOSAL AS TO ALL CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED. HE SHALL INCLUDE IN HIS PROPOSAL, A SUM TO COVER ALL COSTS OF ITEMS NECESSARY TO PERFORM THE WORK AS SET FORTH IN THE PROPOSED CONTRACT DOCUMENTS. NO ALLOWANCE SHALL BE MADE TO THE CONTRACTOR DUE TO LACK OF SUCH KNOWLEDGE.
2. IF THE CONTRACTOR IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE PROPOSED CONTRACT DOCUMENTS, OR FINDS DISCREPANCIES IN OR OMISSIONS FROM ANY PART OF THE PROPOSED CONTRACT DOCUMENTS, HE MAY SUBMIT TO THE ARCHITECT A REQUEST FOR INTERPRETATION THEREOF.
3. ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL LAWS, REGULATIONS AND STANDARDS HAVING JURISDICTION OVER THIS PROJECT.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO FABRICATING AND/OR ORDERING MATERIALS.
5. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW AND FREE FROM ANY AND ALL DEFECTS UNLESS SPECIFIED OTHERWISE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THAT THE INSTALLATION OF ALL WORK IS IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL BACKING, BLOCKING, BRACKETS, ETC. AS REQUIRED FOR THE PROPER AND SECURED INSTALLATION OF ALL MATERIALS AND PRODUCTS.
8. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF THEIR PRODUCTS.
9. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY UPON ENCOUNTERING OR SUSPECTING ANY ADDITIONAL HAZARDOUS MATERIALS, ETC. DURING THE COURSE OF THIS PROJECT. THE CONTRACTOR IS NOT AUTHORIZED TO HANDLE, TEST, OR REMOVE SUCH ADDITIONAL MATERIALS WITHOUT SPECIFIC AUTHORIZATION FROM THE OFFICER IN CHARGE.
10. THE CONTRACTOR WITH THE SUPERVISION OF THE ARCHITECT, SHALL INSPECT AND NOTE ALL EXISTING DAMAGES PRIOR TO THE START OF WORK. ANY NEW DAMAGES RESULTING FROM THE CONSTRUCTION SHALL BE CORRECTED AT THE CONTRACTOR'S COST.
11. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFETY BARRICADE, AS NECESSARY, OR REQUIRED BY THE OWNER AND SHALL ASSURE SAFETY FOR THE PATIENTS, STAFF AND THE PUBLIC AT ALL TIMES.
12. THE CONTRACTOR SHALL REPORT ANY UNSATISFACTORY CONDITIONS AND/OR DISCREPANCIES TO THE CONTRACTING OFFICER. FAILURE TO COMPLY WITH THIS CONDITION MAY RESULT IN PLACING ANY AND ALL RESPONSIBILITY, LIABILITY AND EXPENSE TO THE CONTRACTOR.
13. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL COMPLY WITH THE 2006 IBC.
14. TO THE BEST OF OUR KNOWLEDGE, THIS PROJECT CONFORMS TO ADA ACCESSIBILITY GUIDELINES.

COVID-19 REQUIREMENTS AND PROTOCOLS:
ALL CONTRACTOR PERSONNEL ENTERING THE FACILITIES SHALL BE FULLY VACCINATED. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, COUNTY, HHSC AND FACILITY COVID-19 RULES, REGULATIONS AND REQUIREMENTS. ALL CONTRACTOR PERSONNEL ENTERING THE FACILITY SHALL BE VACCINATED IN ACCORDANCE TO CMS, CDC AND HHSC OAHU REGION GUIDLINES. FAILURE TO DO SO MAY RESULT IN CONTRACTOR PERSONNEL BEING PROHIBITED FROM ENTERING FACILITY. ALL COST INCURRED DUE TO NON-COMPLIANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project will be under my observation.

Signature

LICENSE EXPIRES : APRIL 30, 2022

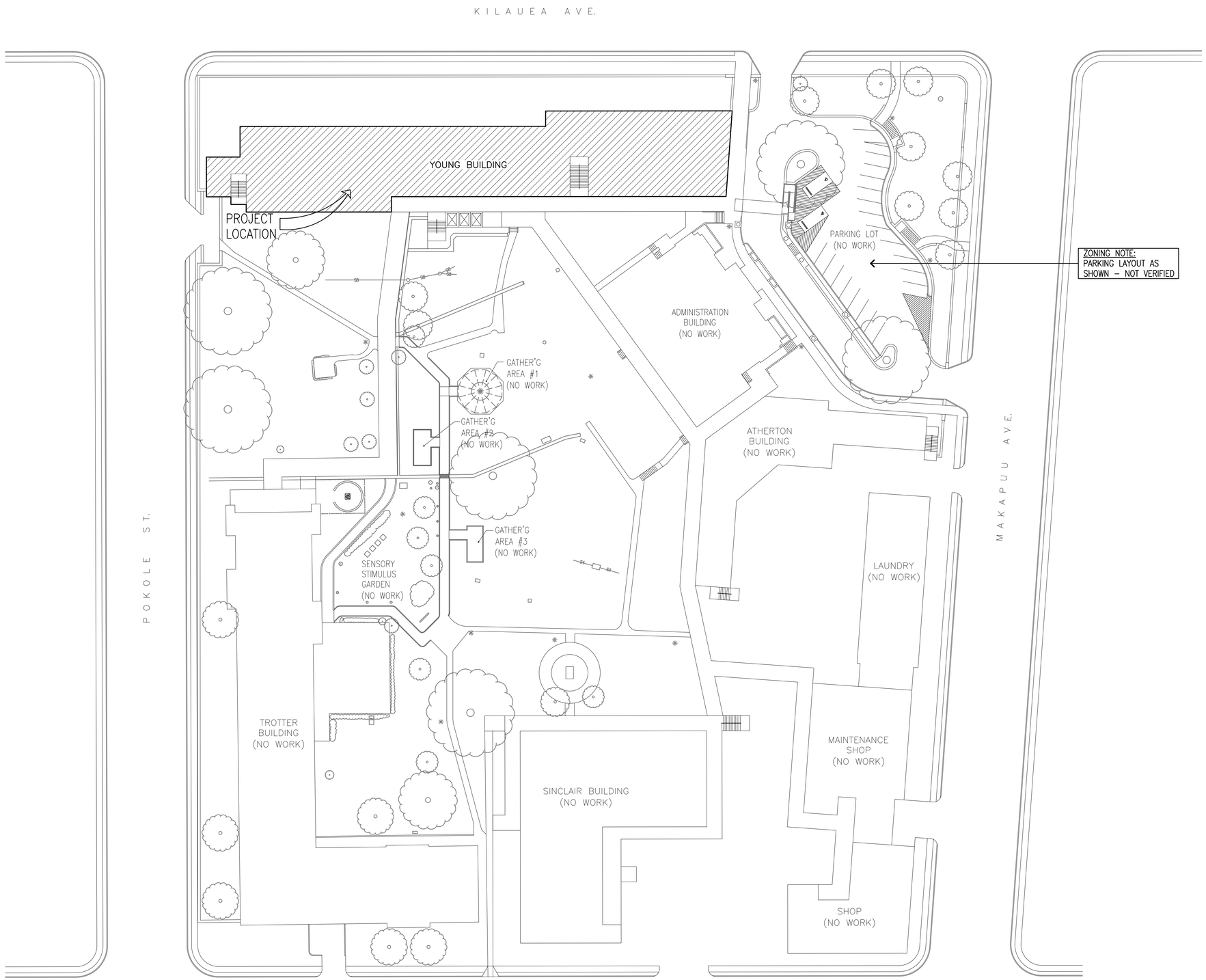
GLENN K. MURAKAMI LICENSED PROFESSIONAL ARCHITECT NO. 6065 HAWAII USA

Pacific Architects, Inc.
2020 South King Street
Honolulu, Hawaii 96826
808-949-1601
fax 808-942-0054

PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
TITLE SHEET, CONSULTANTS, LOCATION MAP, VICINITY MAP, NOTES & COVID-19 REQUIREMENTS AND PROTOCOLS NOTE

DATE FEBRUARY 2022
SCALE AS SHOWN
DRAWN MT CHECK CM
SHEET
T-1.0
____ OF ____ SHEETS



A
A–1.0
SITE PLAN
SCALE: 1/32" = 1'–0"

GRAPHIC SCALE:
0 8' 16' 32' 64' 96'
SCALE: 1/32" = 1'–0"

REV. NO.	DESCRIPTION	DATE

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Signature
LICENSE EXPIRES : APRIL 30, 2022

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HAWAII USA

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SUB-BASMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE SITE PLAN

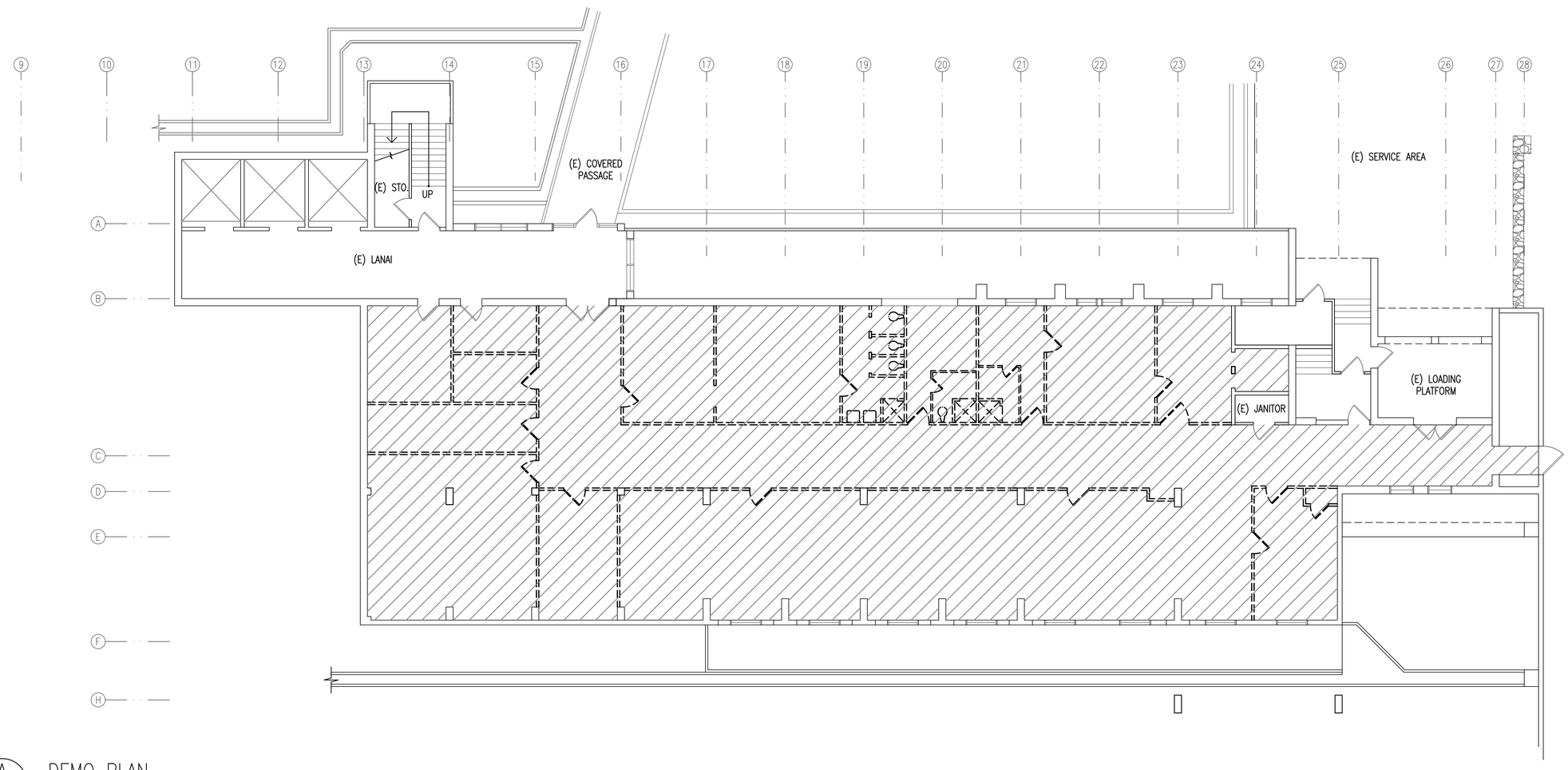
DATE FEBRUARY 2022
SCALE AS SHOWN
DRAWN MT CHECK CM
SHEET
A-1.0
____ OF ____ SHEETS

DEMO WORK LEGEND:

1. — — — — INDICATES EXISTING WALLS, DOORS & FRAME, FIXTURES, ETC. TO BE REMOVED & DISPOSED.

2. ▭ INDICATES EXTENT OF EXISTING CONCRETE FLOORING TO BE SAWCUT, CHIPPED OUT COMPLETELY & DISPOSED.

3. AFTER THE REMOVAL OF THE CONCRETE FLOORING THE SOIL/ SUB-BASE MATERIAL SHOULD BE KEPT AT IT'S CURRENT ELEVATION.



A
A-2.0

DEMO PLAN

SCALE: 1/8" = 1'-0"

GRAPHIC SCALE:

0 2' 4' 8' 16' 24'

SCALE: 1/8" = 1'-0"

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project does be solely my alteration.

Signature

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SUB-BASEMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE DEMO PLAN

DATE FEBRUARY 2022

SCALE AS SHOWN

DRAWN MT CHECK CM

SHEET

A-2.0

____ OF ____ SHEETS

GENERAL NOTES:

1. CONFORM TO ALL REQUIREMENTS OF THE 2012 IBC AND 2012 UPC CODES OF THE CITY AND COUNTY OF HONOLULU, STATE OF HAWAII HEALTH REGULATIONS, FIRE DEPARTMENT REGULATIONS, MANUFACTURER'S RECOMMENDATIONS AND OTHER APPLICABLE REGULATIONS.
2. EXAMINE ALL PROJECT PLANS AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL PRIOR TO BIDDING. NOTIFY AND COORDINATE WITH THE ENGINEER FOR ANY MAJOR DEVIATIONS OR DISCREPANCIES DISCOVERED IN THE PLANS AND SPECIFICATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS.
3. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND CONSTRUCTION
4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING LINE SIZES, CONDITIONS, AND INVERTS PRIOR TO BID AND CONSTRUCTION.
5. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL AT NO ADDITIONAL COST TO THE OWNER.
6. PAY FOR ALL PERMITS AND APPLICATIONS.
7. PREPARE SIX (6) SETS OF SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK. NO REPRODUCTIONS OF ANY KIND OF THE CONTRACT DOCUMENTS SHALL BE ACCEPTABLE AS SHOP DRAWINGS. PROVIDE ONE SET OF REPRODUCIBLE AS-BUILT DRAWINGS SHOWING THE ACTUAL INSTALLED CONDITIONS AND SUBMIT TO THE OWNERS UPON COMPLETION OF WORK.
8. CAULK ALL PENETRATIONS WATERTIGHT. PROVIDE ALL CUTTING, PATCHING, AND RESTORING OF EXISTING SURFACES TO MATCH ORIGINAL SURFACE FINISHES. SPOT PAINT TO MATCH EXISTING SURFACES/COLOR.
9. LOCATE ALL UTILITY LINES OR OTHER INTERFERENCES IN AREAS OF PROPOSED WORK PRIOR TO START OF WORK. REPAIR OR PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
10. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ARCHITECT/ENGINEER FOR REVIEW/APPROVAL PRIOR TO PROCEEDING WITH WORK.
11. COORDINATE ALL WORK WHICH WILL AFFECT AREAS WITH BUILDING SUPERVISOR. SCHEDULE OFF-HOUR WORK WHEN REQUIRED TO MINIMIZE DISRUPTIONS.
12. DRAWING FILES WILL NOT BE AVAILABLE TO CONTRACTORS FOR SHOP DRAWINGS OR ANY OTHER PURPOSE.
13. COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND DELAYS.

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCES OF HONOLULU 1990
CHAPTER 32

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE BUILDING ENERGY CONSERVATION CODE FOR:

_____ BUILDING COMPONENT SYSTEMS
_____ ELECTRICAL COMPONENT SYSTEMS
✓ MECHANICAL COMPONENT SYSTEMS

SIGNATURE:
NAME: ROSS R. TANAKA
TITLE: VICE PRESIDENT
PE #: 9301-M
DATE: 02/28/2022

ROSS R. TANAKA LICENSED PROFESSIONAL ENGINEER No. 9301-M HAWAII, U.S.A.
EXP. 4-30-2022

MECHANICAL LEGEND

SYMBOL	ABBREV.	DESCRIPTION
GENERAL		
	ABV	ABOVE
	DEMO	DEMOLITION
Ø	DIA	DIAMETER
	DN	DOWN
(E)	EXIST'G	EXISTING
(R)		REMOVE
	(TYP)	TYPICAL
	W/	WITH
PLUMBING		
	BFG	BELOW FLOOR GRADE
	CO	CLEAN OUT
	CW	COLD WATER
	DF	DRINKING FOUNTAIN
	EWH	ELECTRIC WATER HEATER
	FCO	FLOOR CLEAN OUT
	FD	FLOOR DRAIN
	HB	HOSE BIBB
	HW	HOT WATER
	LAV	LAVATORY
	S	SANITARY
	SS	SERVICE SINK
	SH	SHOWER
	SOV	SHUT OFF VALVE
	SK	SINK
	T&P	TEMPERATURE AND PRESSURE
	V	VENT
	WCO	WALL CLEAN OUT
	WM	WASHING MACHINE
	WC	WATER CLOSET
HVAC		
	DT	DUCT
	EF	EXHAUST FAN
	ER	EXHAUST REGISTER
	WAC	WINDOW AIR CONDITIONER
FIRE SPRINKLER		
	FDC	FIRE DEPARTMENT CONNECTION
	FS	FIRE SPRINKLER
		UPRIGHT PENDANT TYPE FIRE SPRINKLER HEAD
	OS&Y	OUTSIDE STEM AND YOKE

GENERAL SCOPE:

DEMO ALL MECHANICAL/PLUMBING WITHIN SUB-BASEMENT LEVEL AS INDICATED. ANY UTILITIES SERVING OTHER AREAS OF THE BUILDING (I.E. UPPER FLOORS ETC. TO REMAIN INTACT AND OPERATIONAL).

BWS FLOW REQUIREMENT

METER NUMBER (M/N): 2667015291
PREMISE ID #: 05154013

A. PROPOSED DOMESTIC:	0 F.U.	0 GPM	0 GPD
B. PROPOSED IRRIGATION:	0 F.U.	0 GPM	0 GPD
C. OTHER:	0 F.U.	0 GPM	0 GPD
D. TOTAL PROPOSED:	0 F.U.	0 GPM	0 GPD
E. DEMOLITION:	33.3 F.U.	43.0 GPM	1720 GPD
F. NET CHANGE:	−33.3 F.U.	−43.0 GPM	−1720 GPD
G. EXISTING TO REMAIN:	XXXX F.U.	XXXX GPM	XXXX GPD
H. GRAND TOTAL:	XXXX F.U.	XXXX GPM	XXXX GPD

NOTES:
1. IRRIGATION SHALL BE PERFORMED DURING NON-BUSINESS HOURS.
2. A/C WORK WILL NOT AFFECT WATER DEMAND.
3. NO FIRE SPRINKLER WORK IN THIS PROJECT SCOPE.

FIXTURE UNIT COUNT

DEMO

FIXTURE	QTY	F.U. EACH	SUBTOTAL F.U.
WATER CLOSET (VALVE)	4	3.4	13.6
LAVATORY	3	0.6	1.8
SINK	1	1.6	1.6
SERVICE SINK	1	2.0	2.0
HOSE BIBB (ADDITIONAL)	1	1.0	1.0
WASHING MACHINE	4	2.0	8.0
SHOWER	3	1.6	4.8
DRINKING FOUNTAIN	1	0.5	0.5
TOTAL			33.3 F.U. 43.0 GPM 1720 GPD

REV. NO.	DESCRIPTION	DATE

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Signature
LICENSE EXPIRES : APRIL 30, 2020

ROSS R. TANAKA LICENSED PROFESSIONAL ENGINEER No. 9301-M HAWAII, U.S.A.

Pacific Architects, Inc.
2020 South King Street
Honolulu, Hawaii 96826
808-949-1601
fax 808-942-0054

PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
NEW DIETARY KITCHEN
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE GENERAL NOTES AND MECHANICAL LEGEND

DATE OCTOBER 2014
SCALE AS SHOWN
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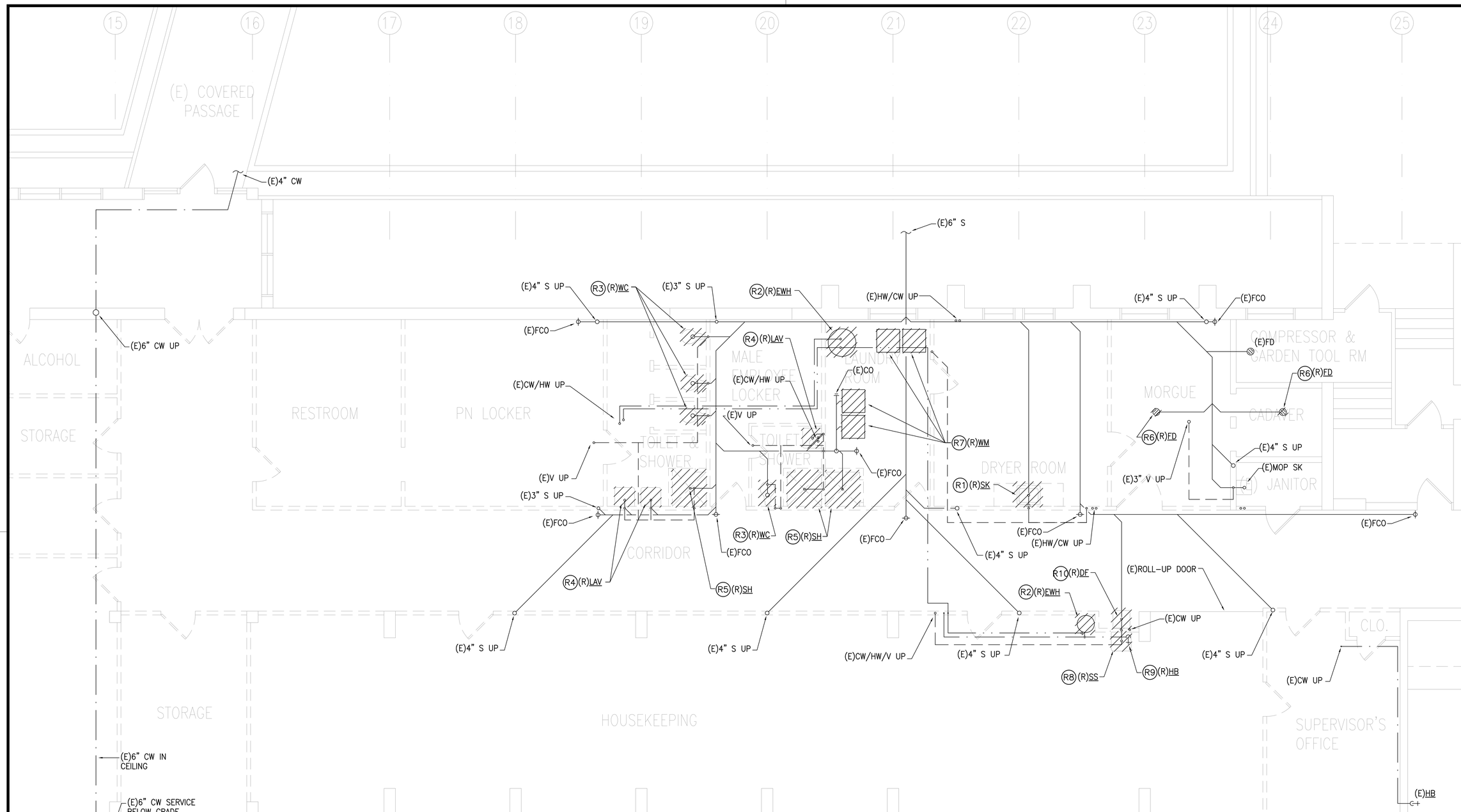
SHEET
M-1.0
___ OF 7 SHEETS



GENERAL NOTES:

1. ALL EXISTING CW/HW/S/V RISERS SERVING UPPER FLOOR SHALL BE REMAIN. CONTRACTOR TO FIELD VERIFY

2. ALL EXISTING CW/HW/S/V PIPING SERVING OTHER AREAS IN THE FACILITY SHOULD REMAIN. CONTRACTOR TO FIELD VERIFY.

3. EXISTING PLUMBING LINES (WASTE, COLD WATER, HOT WATER, VENT) WHICH ARE TO BE MODIFIED, DEMOLISHED AS PART OF THIS SCOPE OF WORK SHALL BE CUT/CAPPED BELOW FLOOR AND WITH WALL/CEILINGS AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING. CONTRACTOR TO FIELD VERIFY.

PLUMBING DEMOLITION WORK NOTES:

R1 EXISTING STAINLESS STEEL COUNTERTOP WITH INTEGRAL SINK TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/HW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R2 EXISTING EWH TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/HW PIPING AND VALVE AS REQUIRED. REMOVE EXISTING T&P RELIEF PIPING. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R3 EXISTING FLUSH VALVE WC TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R4 EXISTING LAV TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/HW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R5 EXISTING SH TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/HW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R6 EXISTING FD TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED S PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R7 EXISTING WASHING MACHINE TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/HW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R8 EXISTING SERVICE SINK TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/S/V PIPING. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R9 EXISTING HB TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW PIPING AND VALVE. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. CONTRACTOR TO FIELD VERIFY.

R10 EXISTING DRINKING FOUNTAIN TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED CW/S/V PIPING AND VALVE. CUT/CAP PIPING BELOW FLOOR/WITHIN WALL AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING/MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

1 / M-2.0 PLUMBING DEMOLITION PLAN – SUB-BASEMENT

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

0 1' 2' 4' 8' 12'

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

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project shall be verified by observation.

Signature

LICENSE EXPIRES : APRIL 30, 2020

ROSS R. TANAKA LICENSED PROFESSIONAL ENGINEER No. 9301-H HAWAII, U.S.A.

Pacific Architects, Inc.
2020 South King Street
Honolulu, Hawaii 96826
808-949-1601
fax 808-942-0054

PROJECT TITLE

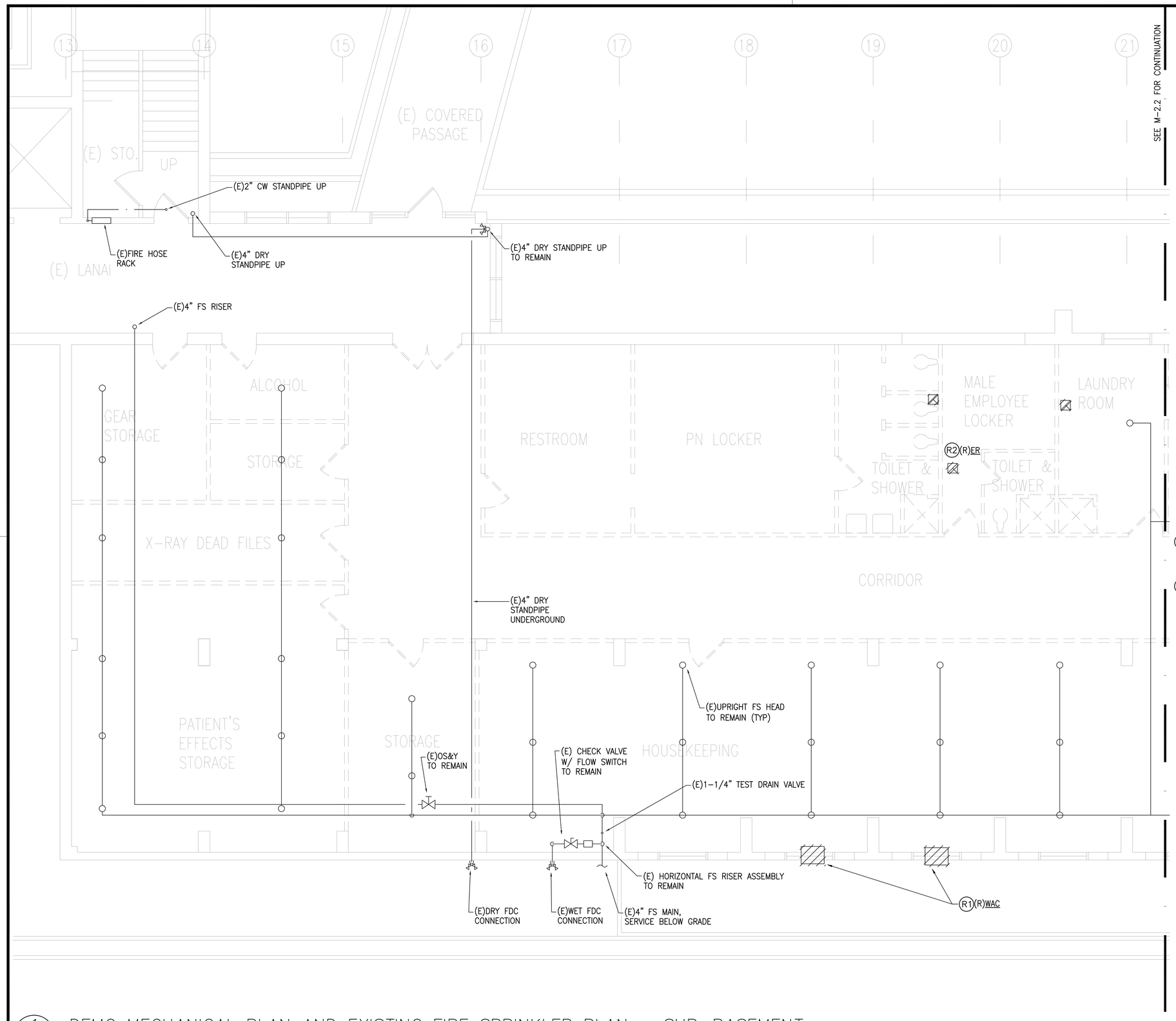
LEAHI HOSPITAL - YOUNG BUILDING
NEW DIETARY KITCHEN
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE PLUMBING DEMOLITION PLAN – SUB-BASEMENT

DATE OCTOBER 2014
SCALE AS SHOWN
DRAWN MEI CHECK RRT
SHEET

M-2.0

OF ? SHEETS



GENERAL NOTES:

1. ALL EXISTING UPRIGHT FS HEADS, OS&Y, CHECK VALVE, ETC SHALL REMAIN AS REQUIRED.

MECHANICAL DEMOLITION WORK NOTES:

R1 EXISTING WINDOW AIR CONDITIONER UNIT AND CONDENSATE DRAIN LINE TO BE REMOVED COMPLETELY. PATCH/REPAIR WALL TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R2 EXISTING ER TO BE REMOVED COMPLETELY. CUT/CAP DUCT TO THE NEAREST CEILING SURFACE. PATCH/REPAIR CEILING TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

1 / M-2.1 DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT

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

0 1' 2' 4' 8' 12'
SCALE: 1/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE

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Signature

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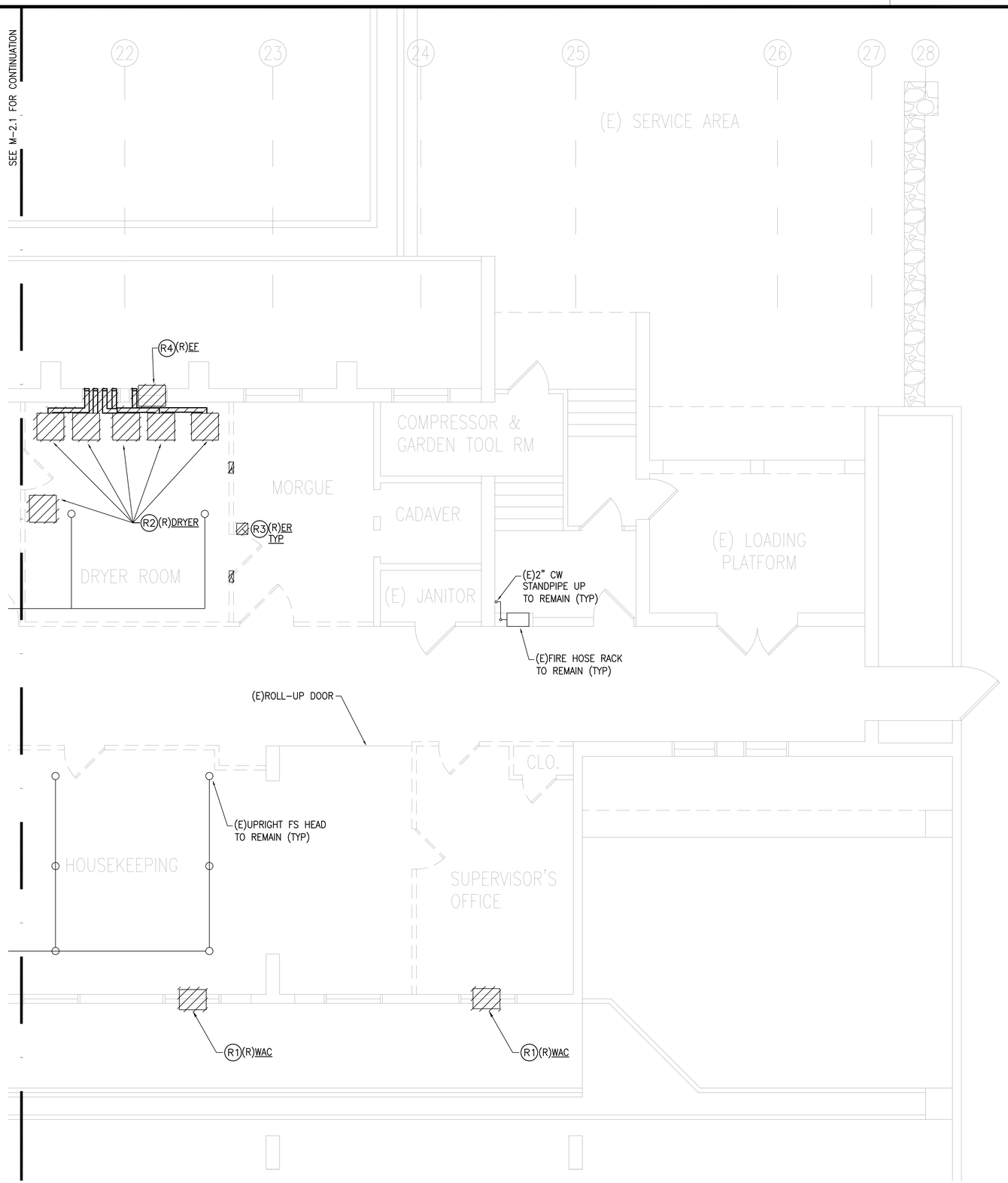
DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT

DATE OCTOBER 2014
SCALE AS SHOWN
DRAWN MEI CHECK RRT
SHEET
M-2.1
OF 2 SHEETS



1 M-2.2 DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT

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

GENERAL NOTES:

1. ALL EXISTING UPRIGHT FS HEADS, OS&Y, CHECK VALVE, ETC SHALL REMAIN AS REQUIRED.

MECHANICAL DEMOLITION WORK NOTES:

R1 EXISTING WINDOW AIR CONDITIONER UNIT AND CONDENSATE DRAIN LINE TO BE REMOVED COMPLETELY. PATCH/REPAIR WALL TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R2 EXISTING DRYER TO BE REMOVED COMPLETELY INCLUDING ASSOCIATED EXHAUST DUCT. PATCH/REPAIR WALL TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R3 EXISTING ER TO BE REMOVED COMPLETELY. CUT/CAP DUCT TO THE NEAREST CEILING/WALL SURFACE. PATCH/REPAIR CEILING TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

R4 EXISTING EF TO BE REMOVED COMPLETELY. PATCH/REPAIR WALL TO MATCH EXISTING ADJACENT SURFACE. CONTRACTOR TO FIELD VERIFY.

0 1' 2' 4' 8' 12'

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

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project was in accordance with my observation.

Signature

LICENSE EXPIRES : APRIL 30, 2020

ROSS R. TANAKA LICENSED PROFESSIONAL ENGINEER No. 9301-M HAWAII, U.S.A.

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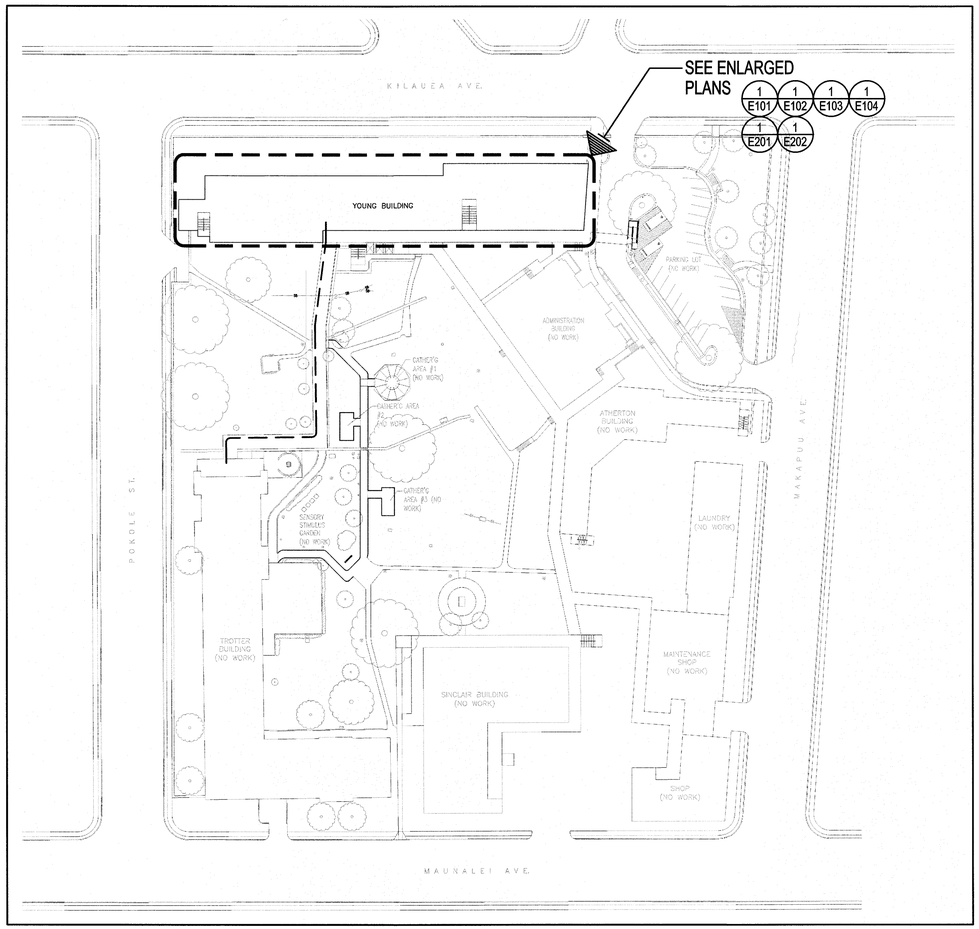
PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
NEW DIETARY KITCHEN
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
DEMO MECHANICAL PLAN AND EXISTING FIRE SPRINKLER PLAN – SUB-BASEMENT

DATE OCTOBER 2014
SCALE AS SHOWN
DRAWN MEI CHECK RRT
SHEET
M-2.2
OF ? SHEETS



1 E001 **SITE ELECTRICAL PLAN**
SCALE: 1" = 60'

GENERAL ELECTRICAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO BIDDING. BID SUBMISSION SHALL BE CONSIDERED AS CONFIRMATION THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS REGARDING THE WORK. NO EXTRA PAYMENT WILL BE GIVEN FOR WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO VISIT THE SITE.
2. CONDUIT SIZES INDICATED ON THE DRAWINGS ARE NOT NECESSARILY BASED ON THE MINIMUM SIZE ALLOWED BY THE NATIONAL ELECTRICAL CODE AND MAY BE PURPOSELY OVERSIZED FOR FUTURE CONDUCTORS OR TO AVOID CONDUIT HEATING. CONDUIT SIZES NOT CALLED OUT ON THE DRAWINGS SHALL BE SIZED BY THE CONTRACTOR, BASED ON THE ACTUAL NUMBER OF CONDUCTORS TO BE INSTALLED, USING THE NATIONAL ELECTRICAL CODE AS A GUIDE. IN NO CASE SHALL CONDUIT SIZES BE SMALLER THAN 3/4" DIAMETER.
3. ALL WIRING SHALL INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER TABLE 250.122 OF THE NATIONAL ELECTRICAL CODE. THIS CONDUCTOR SHALL BE CARRIED IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LEGS AND SHALL BE ATTACHED TO THE DEVICE, LIGHT FIXTURE, OR EQUIPMENT HOUSING USING A SUITABLE GROUNDING LUG.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZING OF THESE BOXES SHALL BE PER THE NATIONAL ELECTRICAL CODE.
5. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND SLABS SHALL BE SEALED TO MAINTAIN THE INTEGRITY OF THE FIRE RATING USING A U.L. LISTED FIRE STOPPING SYSTEM.
6. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CONTRACTING OFFICER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALLS AND SLABS.
7. PROJECT CONDITIONS MAY REQUIRE REARRANGEMENT OF ELECTRICAL WORK, THE CONTRACTOR SHALL MAKE CHANGES ON THE AS-BUILT DRAWINGS AND SUBMIT TO THE CONTRACTING OFFICER. WHERE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT DRAWINGS SHOWING THE PROPOSED METHOD FOR APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL APPROVAL IS OBTAINED FROM THE CONTRACTING OFFICER.
8. EXISTING CONDITION SHOWN ON DRAWINGS ARE TAKEN FROM PAST DESIGN DRAWINGS AND VISUAL FIELD INVESTIGATION. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS SHOWN. DEVIATIONS SHALL BE SHOWN ON AS-BUILT DRAWINGS.
9. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
10. ALL NEW WIRES SHALL BE # 12 AWG, UNLESS OTHERWISE NOTED.
11. AVOID CORING OR DRILLING THROUGH RE-BARS WHEN PENETRATING THROUGH EXISTING CONCRETE WALL, CEILING OR FLOOR. ALL EXTERIOR WALL PENETRATIONS SHALL BE WATERTIGHT.
12. THE CONTRACTOR SHALL LABEL EACH RECEPTACLE WITH PANEL NAME AND CIRCUIT NUMBER. USE ADHESIVE LABELS - BLACK LETTERING ON CLEAR BACKGROUND.
13. THE TERM "WIRING" SHALL INCLUDE RACEWAY, CONDUCTORS, EQUIPMENT, AND WIRING.
14. THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".

ELECTRICAL SYMBOL LIST

EXISTING	NEW	DESCRIPTION
		LIGHT, FLUORESCENT, CEILING SURFACE MOUNTED.
		LIGHT, FLUORESCENT, WALL SURFACE MOUNTED.
		LIGHT, CEILING SURFACE MOUNTED.
		LIGHT, WALL MOUNTED.
		EMERGENCY LIGHT, WALL MOUNTED.
		EXIT SIGN, SINGLE FACE, WALL SURFACE MOUNTED.
		EXIT SIGN, SINGLE FACE, CEILING SURFACE MOUNTED.
		EXIT SIGN, SINGLE FACE W/ARROW ON SIGN FACE, WALL SURFACE MOUNTED.
		EXIT SIGN, DOUBLE FACE W/ARROWS ON SIGN FACE, CEILING SURFACE MOUNTED.
		SWITCH, FLUSH TUMBLER, WALL MOUNTED.
		SWITCH, 3-WAY, WALL MOUNTED.
		SWITCH, FLUSH TUMBLER WITH PILOT LIGHT, WALL MOUNTED.
"a"		INDICATES FIXTURE OR DEVICE CONTROLLED BY SW. "a", OTHER LETTERS SIMILAR.
J	J	JUNCTION BOX, CEILING MOUNTED.
J	J	JUNCTION BOX, WALL MOUNTED.
		RECEPTACLE, DUPLEX, WALL MOUNTED, 20A, 125V, NEMA 5-20.
		RECEPTACLE, SINGLE, WALL MOUNTED, 20A, 125V, NEMA 5-20.
		RECEPTACLE, SINGLE, WALL MOUNTED, 30A, 125V, NEMA 5-30.
		RECEPTACLE, SINGLE, WALL MOUNTED, 30A, 125/250V, NEMA 14-30.
C		CAMERA, WALL MOUNTED.
S		SPEAKER, WALL MOUNTED.
E		EQUIPMENT CONNECTION.
		EQUIPMENT DISCONNECT SWITCH, HORSEPOWER RATED.
		ELECTRIC PANEL.
—e—		RACEWAY, CONCEALED ABOVE FINISH FLOOR.
—e—		RACEWAY, CONCEALED BELOW FINISH FLOOR.
--e--	----	EXPOSED RACEWAY.
--c--		CAMERA SYSTEM RACEWAY, EXPOSED.
--f--		FIRE ALARM SYSTEM RACEWAY, EXPOSED.
--pa--		PUBLIC ADDRESS SYSTEM RACEWAY, EXPOSED.
		FLEXIBLE RACEWAY.
—e→		ARROW, HOMERUN TO PANEL OR CABINET.
2	2	ELECTRICAL NOTE INDICATOR.
	1/E3	DETAIL INDICATOR UPPER HALF: DETAIL NUMBER. LOWER HALF: SHEET NUMBER, DETAIL LOCATION.

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCE CHAPTER 32,
HONOLULU COUNTY CODE 1990, AS AMENDED

To the best of my knowledge, this project's design substantially conforms to the Building Energy Conservation Code for:

____ Building Component Systems
X Electrical Component Systems
____ Mechanical Component Systems

Signature: [signature] Date: 2/28/22
Name: BRIAN I. OZAKI
Title: ELECTRICAL ENGINEER
License No.: 9058-E

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project shall be under my observation.

Signature
LICENSE EXPIRES : APRIL 30, 2022

BRIAN T. ITOZAKI LICENSED PROFESSIONAL ENGINEER No. 9058-E HAWAII, U.S.A.

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PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
ELECTRICAL SITE PLAN, GENERAL ELECTRICAL NOTES, ELECTRICAL SYMBOL LIST

DATE FEBRUARY 2022
SCALE AS SHOWN
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SHEET
E001
___ OF 15 SHEETS

380.134

FIRE ALARM SYSTEM NOTES:

1. DASHED LINES (— — —) INDICATE EXISTING RACEWAY/ENCLOSURE WITH EXISTING WIRES AND NEW CABLES AS INDICATED.
2. SOLID LINES (———) INDICATE NEW RACEWAY/ENCLOSURE WITH NEW WIRES/CABLES.
3. CONTRACTOR SHALL VERIFY NEW WIRING PROVIDED WITH FIRE ALARM SYSTEM EQUIPMENT SUPPLIER.
4. PROVIDE CONDUIT SIZED PER NATIONAL ELECTRICAL CODE (N.E.C.) MINIMUM SIZE SHALL BE 3/4" DIA. UNLESS NOTED OTHERWISE.
5. REFER TO N.E.C. ARTICLE 336 FOR REQUIREMENTS OF TYPE TC CABLE AND N.E.C. ARTICLE 760.179 FOR REQUIREMENTS OF TYPE FPL WIRES.
6. SOLID COPPER WIRES SHALL BE USED FOR BUILDING FIRE ALARM WIRING.
7. CABLES SHALL BE MANUFACTURED BY AMERICAN INSULATED WIRE CORP., WEST PENN WIRE, KENNER INC., OR APPROVED EQUAL.
8. CONTRACTOR SHALL PROVIDE SIZE IN OHMS & RATINGS IN WATTS FOR ALL "END-OF-LINE" RESISTORS ON FINAL "AS-BUILT" DRAWINGS.
9. PROVIDE WIRE NUT CONNECTIONS FOR ALL DEVICES WITH PIGTAILS. ALL OTHERS SHALL BE BY SCREW OR TERMINAL CONNECTIONS.
10. TC CABLES SHALL ONLY BE USED FOR BELOW GRADE WIRING. SOLID COPPER WIRES SHALL BE USED FOR BUILDING FIRE ALARM WIRING.
11. EXISTING FIRE ALARM SYSTEM IS HOCHIKI.

1.14 PLAN REVIEW

12. 1.14.4 REVIEW AND APPROVAL BY THE AHJ SHALL NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY OF COMPLIANCE WITH THIS CODE. NFPA 1 2018, AS AMENDED.
13. 1.3.6.3 REPAIRS, RENOVATIONS, ALTERATIONS, RECONSTRUCTION, CHANGE OF OCCUPANCY, AND ADDITIONS TO BUILDINGS SHALL CONFORM TO THIS CODE, NFPA 101, AND THE BUILDING CODE. NFPA 1 2018, AS AMENDED.
14. 10.7.1.1 AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING, ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM OR DEVICE SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE. NFPA 1 2018, AS AMENDED.
15. 13.1.1 THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT THE CONSTRUCTION DOCUMENTS FOR ALL FIRE PROTECTION SYSTEMS BE SUBMITTED FOR REVIEW AND APPROVAL AND A PERMIT BE ISSUED PRIOR TO THE INSTALLATION, REHABILITATION, OR MODIFICATION. FURTHER, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT FULL ACCEPTANCE TESTS OF THE SYSTEMS BE PERFORMED IN THE AHJ'S PRESENCE PRIOR TO FINAL SYSTEM CERTIFICATION. NFPA 1 2018, AS AMENDED.
16. 13.1.10 THE AHJ SHALL BE NOTIFIED WHEN ANY FIRE PROTECTION SYSTEM IS OUT OF SERVICE AND ON RESTORATION OF SERVICE.
17. 13.1.11 IN THE EVENT OF A FAILURE OF A FIRE PROTECTION SYSTEM OR AN EXCESSIVE NUMBER OF ACCIDENTAL ACTIVATIONS, THE AHJ SHALL BE PERMITTED TO REQUIRE AN APPROVED FIRE WATCH UNTIL THE SYSTEM IS REPAIRED.
18. 13.7.1.1 WHERE BUILDING FIRE ALARM SYSTEMS OR AUTOMATIC FIRE DETECTORS ARE REQUIRED BY OTHER SECTION OF THIS CODE, THEY SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 70, NFPA 72, NATIONAL FIRE ALARM CODE, AND SECTION 13.7. NFPA 1 2018, AS AMENDED.
    72: 10.15 PROTECTION OF FIRE ALARM SYSTEM
    IN AREAS THAT ARE NOT CONTINUOUSLY OCCUPIED, AUTOMATIC SMOKE DETECTION SHALL BE PROVIDED AT THE LOCATION OF EACH FIRE ALARM CONTROL UNIT(S), NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDERS, AND SUPERVISING STATION TRANSMITTING EQUIPMENT TO PROVIDE NOTIFICATION OF FIRE AT THAT LOCATION.
    EXCEPTION: WHERE AMBIENT CONDITIONS PROHIBIT INSTALLATION OF AUTOMATIC SMOKE DETECTION, AUTOMATIC HEAT DETECTION SHALL BE PERMITTED.
19. 13.7.1.2 BUILDING FIRE ALARM SYSTEMS. PROTECTED PREMISES FIRE ALARM SYSTEMS THAT SERVE THE GENERAL FIRE ALARM NEEDS OF A BUILDING OR BUILDINGS SHALL INCLUDE ONE OR MORE OF THE FOLLOWING SYSTEMS OR FUNCTIONS:
    (1) MANUAL FIRE ALARM SIGNAL INITIATION
    (2) AUTOMATIC FIRE ALARM AND SUPERVISORY SIGNAL INITIATION
    (3) MONITORING OF ABNORMAL CONDITIONS IN FIRE SUPPRESSION SYSTEMS
    (4) ACTIVATION OF FIRE SUPPRESSION SYSTEMS
    (5) ACTIVATION OF EMERGENCY CONTROL FUNCTIONS
    (6) ACTIVATION OF FIRE ALARM NOTIFICATION APPLIANCES
    (7) IN-BUILDING FIRE EMERGENCY VOICE/ALARM COMMUNICATIONS
    (8) GUARD'S TOUR SUPERVISORY SERVICE
    (9) PROCESS MONITORING SUPERVISORY SYSTEMS
    (10) ACTIVATION OF OFF-PREMISES SIGNALS
    (11) COMBINATION SYSTEMS (72:23.3.1.)
    NFPA 1 2018, AS AMENDED.
20. 13.7.1.3 ALL APPARATUS REQUIRING REWINDING OR RESETTING TO MAINTAIN NORMAL OPERATION SHALL BE REWOUND OR RESET AS PROMPTLY AS POSSIBLE AFTER EACH TEST AND ALARM. (72:14.5.4) NFPA 1 2018, AS AMENDED.
21. 13.7.1.4 THE PROVISIONS OF SECTION 13.7 SHALL APPLY ONLY WHERE SPECIFICALLY REQUIRED BY ANOTHER SECTION OF THIS CODE. (101:9.6.1.1). NFPA 1 2018, AS AMENDED.
22. 13.7.1.4.1 FIRE DETECTION, ALARM, AND COMMUNICATIONS SYSTEMS INSTALLED TO MAKE USE OF AN ALTERNATIVE PERMITTED BY THIS CODE SHALL BE CONSIDERED REQUIRED SYSTEMS AND SHALL MEET THE PROVISIONS OF THIS CODE APPLICABLE TO REQUIRED SYSTEMS. (101:9.6.1.2) NFPA 1 2018, AS AMENDED.
23. 13.7.1.4.2 TO ENSURE OPERATIONAL INTEGRITY, THE FIRE ALARM SYSTEM SHALL HAVE AN APPROVED MAINTENANCE AND TESTING PROGRAM COMPLYING WITH THE APPLICABLE REQUIREMENTS OF NFPA 70 AND NFPA 72 (101:9.6.1.4)
24. 13.7.1.4.3 FIRE ALARM SYSTEM IMPAIRMENT PROCEDURES SHALL COMPLY WITH NFPA 72 (101:9.6.1.5).
25. 13.7.1.5.1 IMPAIRED FIRE ALARM SYSTEMS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, REQUIRED SYSTEMS THAT ARE NOT FULLY OPERATIONAL, ARE NO LONGER MONITORED AS REQUIRED BY THE AJH, OR ARE UNDER RENOVATION OR REPAIR.
26. 13.7.1.5.2 THE OWNER OR DESIGNATED REPRESENTATIVE SHALL IMMEDIATELY NOTIFY THE AHJ IN A APPROVED MANNER WHEN A FIRE ALARM SYSTEM IS IMPAIRED.
27. 13.7.1.5.3 THE AHJ SHALL BE AUTHORIZED TO REQUIRE STANDBY FIRE PERSONNEL OR AN APPROVED FIRE WATCH IN ACCORDANCE WITH 1.7.16 AT PREMISES IN WHICH REQUIRED FIRE ALARM SYSTEMS ARE IMPAIRED OR CLASSIFIED AS CHRONIC NUISANCE ALARM PRONE SYSTEMS.
28. 13.7.1.7.1 WHERE REQUIRED BY OTHER SECTIONS OF THIS CODE, ACTUATION OF THE FIRE ALARM SYSTEM SHALL OCCURE BY ANY OR ALL OF THE FOLLOWING MEANS OF INITIATION, BUT SHALL NOT BE LIMITED TO SUCH MEANS:
    MANUAL FIRE ALARM INITIATION
    AUTOMATIC DETECTION
    EXTINGUISHING SYSTEM OPERATION
    (101.9.6.2.1) NFPA 1 2018, AS AMENDED.
29. 13.7.1.7.2 MANUAL FIRE ALARM BOXES SHALL BE USED ONLY FOR FIRE-PROTECTIVE SIGNALING PURPOSES. COMBINATION FIRE ALARM AND GUARD'S TOUR STATIONS SHALL BE PERMITTED. (101:9.6.2.2) NFPA 1 2018, AS AMENDED.
30. 13.7.1.7.3 A MANUAL FIRE ALARM BOX SHALL BE PROVIDED AS FOLLOWS, UNLESS MODIFIED BY ANOTHER SECTION OF THIS CODE:
    (1) FOR NEW ALARM SYSTEMS INSTALLATIONS, THE MANUAL FIRE ALARM BOX SHALL BE LOCATED WITHIN 60 IN. (1525 MM) OF EXIT DOORWAYS.
    (2) FOR EXISTING ALARM SYSTEM INSTALLATIONS, THE MANUAL FIRE BOX EITHER SHALL BE PROVIDED IN THE NATURAL EXIT ACCESS PATH NEAR EACH REQUIRED EXIT OR WITHIN 60 IN. (1525 MM) OF EXIT DOORWAYS. (101:9.6.2.3)
    NFPA 1 2018, AS AMENDED.
31. 13.7.1.7.4 MANUAL FIRE ALARM BOXES SHALL BE MOUNTED ON BOTH SIDES OF GROUPED OPENINGS OVER 40 FT. (12.2 M) IN WIDTH, AND WITHIN 60 IN. (1525 MM) OF EACH SIDE OF THE OPENING. (101:9.6.2.4) NFPA 1 2018, AS AMENDED.
32. 13.7.1.7.5 ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE LOCATED SO THAT, ON ANY GIVEN FLOOR IN ANY PART OF THE BUILDING, NO HORIZONTAL DISTANCE ON THAT FLOOR EXCEEDING 200 FT. (61 M) SHALL NEED TO BE TRAVERSED TO REACH A MANUAL FIRE ALARM BOX. (101:9.6.2.5) NFPA 1 2018, AS AMENDED.
33. 13.7.1.7.6 FOR FIRE ALARM SYSTEMS USING AUTOMATIC FIRE DETECTION OR WATER-FLOW DETECTION DEVICES TO INITIATE THE FIRE ALARM SYSTEM IN ACCORDANCE WITH CHAPTERS 11 THROUGH 43 OF NFPA 101, NOT LESS THAN ONE MANUAL FIRE ALARM BOX, LOCATED AS REQUIRED BY THE AHJ, SHALL BE PROVIDED TO INITIATE A FIRE ALARM SIGNAL. (101:9.6.2.6) NFPA 1 2018 AS AMENDED.
    A. 13.7.1.7.6 THE MANUAL FIRE ALARM BOX REQUIRED BY 13.7.1.7.6 IS INTENDED TO PROVIDE A MEANS TO MANUALLY ACTIVATE THE FIRE ALARM SYSTEM WHEN THE AUTOMATIC FIRE DETECTION SYSTEM OR WATER FLOW DEVICES ARE OUT OF SERVICE DUE TO MAINTENANCE OR TESTING, OR WHERE HUMAN DISCOVERY OF THE FIRE PRECEDES AUTOMATIC SPRINKLER SYSTEM OR AUTOMATIC DETECTION SYSTEM ACTIVATION. WHERE THE FIRE ALARM SYSTEM IS CONNECTED TO A MONITORING FACILITY, THE MANUAL FIRE ALARM BOX REQUIRED BY 13.7.1.7.6 SHOULD BE CONNECTED TO A SEPARATE CIRCUIT THAT IS NOT PLACED "ON TEST" WHEN THE DETECTION OR SPRINKLER SYSTEM IS PLACED "ON TEST". THE MANUAL FIRE ALARM BOX SHOULD BE LOCATED IN AN AREA THAT IS ACCESSIBLE TO OCCUPANTS OF THE BUILDING AND SHOULD NOT BE LOCKED. (101:9.6.2.6)
34. 13.7.1.7.7 MANUAL FIRE ALARM BOXES SHALL BE ACCESSIBLE, UNOBSTRUCTED, AND VISIBLE. (101:9.6.2.7) NFPA 1 2018, AS AMENDED.
35. 13.7.1.7.8 WHERE A SPRINKLER SYSTEM PROVIDES AUTOMATIC DETECTION AND ALARM SYSTEM INITIATION, IT SHALL BE PROVIDED WITH AN APPROVED ALARM INITIATION DEVICE THAT OPERATES WHEN THE FLOW OF WATER IS EQUAL TO OR GREATER THAN THAT FROM A SINGLE AUTOMATIC SPRINKLER. (101:9.6.2.8) NFPA 1 2018, AS AMENDED.
36. 13.7.1.7.9 WHERE A TOTAL (COMPLETE) COVERAGE SMOKE DETECTION SYSTEM IS REQUIRED BY ANOTHER SECTION OF THIS CODE, AUTOMATIC DETECTION OF SMOKE IN ACCORDANCE WITH NFPA 72 SHALL BE PROVIDED IN ALL OCCUPIABLE AREAS IN ENVIRONMENTS THAT ARE SUITABLE FOR PROPER SMOKE DETECTOR OPERATION. (101:9.6.2.9) NFPA 1 2018, AS AMENDED.
37. 13.7.1.9.5 UNLESS OTHERWISE PROVIDED IN 13.7.1.9.5.1 THROUGH 13.7.1.9.5.8, NOTIFICATION SIGNALS FOR OCCUPANTS TO EVACUATE SHALL BE BY AUDIBLE AND VISIBLE SIGNALS IN ACCORDANCE WITH NFPA 72 AND ICC/ANSI A117.1, AMERICAN NATIONAL STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, OR OTHER MEANS OF NOTIFICATION ACCEPTABLE TO THE AHJ. (101:9.6.3.5) NFPA 1 2018, AS AMENDED.
38. 13.7.1.4.10.5.1 AREAS NOT SUBJECT TO OCCUPANCY BY PERSONS WHO ARE HEARING IMPAIRED SHALL NOT BE REQUIRED TO COMPLY WITH THE PROVISIONS FOR VISIBLE SIGNALS. (10:9.6.3.5.1) NFPA 1 2018, AS AMENDED.
    72: 3.3.117 OCCUPIABLE AREA. THE SPACES OF A FACILITY THAT CAN BE OCCUPIED OR USED BY THE FACILITY OCCUPANTS AS PART OF THE BUILDING FUNCTION OR TO SUPPORT BUILDING OPERATIONS AND MAINTENANCE. THIS INCLUDES, BUT IS NOT LIMITED TO, STORAGE AREAS, MECHANICAL AND ELECTRICAL EQUIPMENT AREAS, WALK-IN CLOSETS OR JANITOR'S ROOMS, RESTROOMS, CONFERENCE ROOMS AND INDIVIDUAL OFFICES.
    72: 18.4.3.1 TO ENSURE THAT AUDIBLE PUBLIC MODE SIGNALS ARE CLEARLY HEARD, UNLESS OTHERWIRE PERMITTED BY 18.4.3.2 THROUGH 18.4.3.5, THEY SHALL HAVE A SOUND LEVEL AT LEAST 15dB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5dB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION AT LEAST 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5FT. ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM USING THE A-WEIGHTED SCALE.
    72: 18.4.8.1 IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY 18.4.8.2 THROUGH 18.4.8.5, WALL-MOUNTED APPLIANCES SHALL BE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90 IN. AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THA 6 IN.
39. 72: 18.5.4.3.2 VISIBLE NOTIFICATION APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH TABLE 18.5.4.3.1 (a), USING ONE OF THE FOLLOWING:
    (1) A SINGLE VISIBLE NOTIFICATION APPLIANCE.
    (2) TWO VISIBLE NOTIFICATION APPLIANCE.
    (3) TWO GROUPS OF VISIBLE NOTIFICATION APPLIANCES, WHERE VISUAL APPLIANCES OF EACH GROUP ARE SYNCHRONIZED, IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW.
    (4) MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW THAT FLASH IN SYNCHRONIZATION.
40. 13.7.1.9.7 AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL BE OF SUCH CHARACTER AND SO DISTRIBUTED AS TO BE EFFECTIVELY HEARD ABOVE THE AVERAGE AMBIENT SOUND LEVEL THAT EXISTS UNDER NORMAL CONDITIONS OF OCCUPANCY. (101:9.6.3.7) NFPA 1 2018, AS AMENDED.
41. 13.7.1.9.8 AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL PRODUCE SIGNALS THAT ARE DISTINCTIVE FROM AUDIBLE SIGNALS USED FOR OTHER PURPOSES IN A GIVEN BUILDING. (101:9.6.3.8) NFPA 1 2018, AS AMENDED.
42. 13.7.1.9.9 AUTOMATICALLY TRANSMITTED OR LIVE VOICE EVACUATION OR RELOCATION INSTRUCTIONS SHALL BE PERMITTED TO BE USED TO NOTIFY OCCUPANTS AND SHALL COMPLY WITH EITHER 13.7.1.9.9.1 OR 13.7.1.9.9.2. (101:9.6.3.9) NFPA 1 2018, AS AMENDED. NFPA 1 2018, AS AMENDED.
43. 13.7.1.9.9.1 AUTOMATICALLY TRANSMITTED OR LIVE VOICE EVACUATION OR RELOCATION INSTRUCTIONS SHALL BE IN ACCORDANCE WITH NFPA 72. (101:9.6.3.9.1) NFPA 1 2018, AS AMENDED.
44. 13.7.3.1.1.3 ALL DEVICES AND APPLIANCES THAT RECEIVE THEIR POWER FROM THE INITIATING DEVICE CIRCUIT OR SIGNALING LINE CIRCUIT OF A CONTROL UNIT SHALL BE LISTED FOR USE WITH THE CONTROL UNIT. (72:10.3.3) NFPA 1 2018, AS AMENDED.
45. 13.7.3.2.1 APPROVAL AND ACCEPTANCE. THE AHJ SHALL BE NOTIFIED PRIOR TO INSTALLATION OR ALTERATION OF EQUIPMENT OR WIRING. (72:10.19.2) NFPA 1 2018, AS AMENDED.
46. 13.7.3.2.3.2 BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, IF REQUIRED BY THE AHJ, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT STATING THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS AND THE APPROPRIATE NFPA REQUIREMENTS. (72:7.5.2) NFPA 1 2018, AS AMENDED.
47. 13.7.3.2.3.6.1 THE RECORD OF COMPLETIONS FORMS, FIGURE 13.7.3.2.5.2(a) THROUGH FIGURE 13.7.3.2.5.2(f), OR AN ALTERNATIVE DOCUMENT THAT CONTAINS ONLY THE ELEMENTS OF FIGURE 13.7.3.2.5.2(a) THROUGH FIGURE 13.7.3.2.3.5.2(f) APPLICABLE TO THE INSTALLED SYSTEM (72:7.5.6.1)
48. 13.7.3.2.3.6.2 THE RECORD OF COMPLETION DOCUMENTATION SHALL BE COMPLETED BY THE INSTALLING CONTRACTOR AND SUBMITTED TO THE ENFORCING AUTHORITY AND THE OWNER AT THE CONCLUSION OF THE JOB. THE RECORD OF COMPLETION DOCUMENTATION SHALL BE PERMITTED TO BE PART OF THE WRITTEN STATEMENT REQUIRED IN 13.7.3.2.3.2 AND PART OF THE DOCUMENTS THAT SUPPORT THE REQUIREMENTS OF 13.7.3.2.3.8. WHEN MORE THAN ON CONTRACTOR HAS BEEN RESPONSIBLE FOR THE INSTALLATION, EACH CONTRACTOR SHALL COMPLETE THE PORTIONS OF THE DOCUMENTATION FOR WHICH THAT CONTRACTOR HAS RESPONSIBILITY. (72:7.5.6.2)
49. 13.7.3.2.3.6.3 THE PREPARATION OF THE RECORD OF COMPLETION DOCUMENTATION SHALL BE THE RESPONSIBILITY OF THE QUALIFIED AND EXPERIENCED PERSON IN ACCORDANCE WITH 10.5.2 OF NFPA 72. (72:7.5.6.3)
50. 13.7.3.2.3.6.4 THE RECORD OF COMPLETION DOCUMENTATION SHALL BE UPDATED TO REFLECT ALL SYSTEM ADDITIONS OF MODIFICATIONS. (72:7.5.6.4)
51. 13.7.3.3.4 MANUALLY ACTUATED ALARM-INITIATING DEVICES SHALL BE MOUNTED ON A BACKGROUND OF CONTRASTING COLOR. (72:17.14.4)
52. 13.7.3.3.5 TYHE OPERABLE PART OF A MANUALLY ACTUATED ALARM-INITIATING DEVICE SHALL NOT BE LESS THAN 42 IN. (1.07 M) AND NOT MORE THAN 48 IN. (1.22 M). (72:17.14.5)
53. 13.7.3.3.8.4 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5 FT. (1.5 M) OF EACH EXIT DOORWAY ON EACH FLOOR. (72:17.14.8.4)
54. 13.7.3.3.8.5 ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE PROVIDED SO THAT THE TRAVEL DISTANCE TO THE NEAREST MANUAL FIRE ALARM BOX WILL NOT EXCEED 200 FT. (61 M), MEASURED HORIZONTALLY ON THE SAME FLOOR (72:17.14.8.5)
55. 13.7.3.3.8.6 MANUAL FIRE ALARM BOXES SHALL BE MOUNTED ON BOTH SIDES OF GROUPED OPENINGS OVER 40 FT. (12.2 M) IN WIDTH, AND WITHIN 5 FT. (1.5 M) OF EACH SIDE OF THE GROUPED OPENING. (72:17.14.8.6)
56. 16.1.1 STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, AND THIS CHAPTER. NFPA 1 2018, AS AMENDED.
57. 16.4.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.
58. 16.4.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED. NFPA 1 2018, AS AMENDED.
59. 16.4.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AUTHORITY HAVING JURISDICTION (AHJ) SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE. NFPA 1 2018, AS AMENDED.
60. 16.4.4.4 THE FIRE DEPARTMENT SHALL BE NOTIFIED WHEN THE SYSTEM IS SHUT DOWN AND WHEN THE SYSTEM IS RETURNED TO SERVICE. NFPA 1 2018, AS AMENDED.

42.2.2 GENERAL REQUIREMENTS

61. 42.2.2.1 PERMITS. PERMITS, WHERE REQUIRED, SHALL COMPLY WITH SECTION 1.12.
62. 42.2.2.2 PLANS AND SPECIFICATIONS. PLANS AND SPECIFICATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO THE INSTALLATION OR CONSTRUCTION OF A MOTOR VEHICLE FUEL DISPENSING STATION.
63. 42.2.2.2.1 A SITE PLAN SHALL BE SUBMITTED THAT ILLUSTRATES THE LOCATION OF FLAMMABLE AND COMBUSTIBLE LIQUIDS, LP-GAS OR CNG STORAGE VESSELS, AND THEIR SPATIAL RELATION TO EACH OTHER, PROPERTY LINES, AND BUILDING OPENINGS.
64. 42.2.2.2.2 ABOVE GROUND AND UNDERGROUND STORAGE VESSELS SHALL BE SHOWN ON PLANS.
65. 42.2.2.2.3 FOR EACH TYPE OF FUEL DISPENSING FACILITY, PLANS AND SPECIFICATIONS SHALL ALSO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
    (1) TYPE AND DESIGN OF UNDERGROUND AND ABOVEGROUND LIQUID STORAGE TANKS
    (2) QUANTITY AND TYPES OF LIQUIDS TO BE STORED
    (3) LOCATION AND DESIGN OF THE FUEL DISPENSERS AND DISPENSER NOZZLES
    (4) DISTANCES FROM DISPENSERS TO TANKS, PROPERTY LINES AND BUILDINGS
    (5) VEHICLE ACCESS
    (6) FIRE APPLIANCES
    (7) VEHICLE IMPACT PROTECTION
    (8) METHOD OF STORAGE AND DISPENSING
    (9) OVERFILL PREVENTION
    (10) SPILL CONTAINMENT
    (11) VENTS
    (12) VAPOR RECOVERY
    (13) OTHER EQUIPMENT AND ACCESSORIES
    (14) SEISMIC DESIGN IN ACCORDANCE WITH THE BUILDING CODE
    (15) SECONDARY CONTAINMENT
    (16) DESIGN AND SPECIFICATIONS FOR RELATED PIPIT, VALVES AND FITTINGS
    (17) LOCATION AND CLASSIFICATION OF ELECTRICAL EQUIPMENT INCLUDING EMERGENCY FUEL SHUTDOWN DEVICES.
    (18) SPECIFICATIONS FOR FUEL STORAGE AND VENTING COMPONENTS
    (19) OTHER INFORMATION AS REQUIRED BY THE AHJ.
66. FIRE ALARM SYSTEM DESIGN, INSTALLATION, TESTING AND MAINTENANCE SHALL BE IN ACCORDANCE WITH NFPA 72, NATIONAL FIRE ALARM CODE, NFPA 1, 9 AND NFPA 101.
67. SEC. 18-5.2 RETENTION OF PLANS. ONE SET OF APPROVED PLANS, SPECIFICATIONS AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT AND SAID SET SHALL BE KEPT ON THE SITE OF WORK AT ALL TIMES DURING THE WORK AUTHORIZED THEREBY IS IN PROGRESS. (SEC. 18-5.2 R.O. 1978 (1983 ED.), AM. ORD. 93-59)

    FAS INITIATION, NOTIFICATION AND PROTECTION SHALL BE PROVIDED PER 13.7.1.1. WHERE INSTALLATION DEVIATES FROM THE APPROVED PLANS, REVISED DRAWINGS ARE TO BE SUBMITTED FOR REVIEW AND APPROVAL.
68. A FIRE WATCH SHALL BE REQUIRED AS SPECIFIED IN SECTIONS 16.5.4, 34.6.3.3, 13.7.1.5.3, 41.2.2.6, 41.2.2.7, 41.2.4, 41.3.5, 41.4.1, 34.5.4.3 AND 25.1.8 AT NO COST TO THE AHJ. NFPA 1 2018, AS AMENDED.
69. FIRE ALARM SIGNALLING DEVICES SHALL COMPLY WITH ADAAG 215.1 AND 702.1
70. ALL REFERENCES TO NFPA 72 REFER TO 2010 EDITION.
71. WE FORMALLY STATE THAT THE FIRE ALARM DESIGN SHOWN ON THE SUBJECT DRAWINGS BASED ON NFPA 72, 2016 EDITION AND THAT IT DOES PROVIDE GREATER ACCESSIBILITY THAN THE 1999 OR 2002 EDITIONS. WE ALSO FORMALLY STATE THAT NFPA 72 PROVIDES GREATER ACCESSIBILITY THAN ADAAG 702.1.
72. 1.14 PLAN REVIEW
    1.14.4 REVIEW AND APPROVAL BY THE AHJ SHALL NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY OF COMPLIANCE WITH THIS CODE.
73. LIABILITY
    1.9.4 THIS CODE SHALL NOT BE CONSTRUED TO RELIEVE FROM OR LESSEN THE RESPONSIBILITY OF ANY PERSON OWNING, OPERATING, OR CONTROLLING ANY BUILDING OR STRUCTURE FOR ANY DAMAGES TO PERSONS OR PROPERTY CAUSED BY DEFECTS, NOR SHALL THE CODE ENFORCEMENT AGENCY OR ITS PARENT JURISDICTION BE HELD AS ASSUMING ANY SUCH LIABILITY BY REASON OF THE INSPECTIONS AUTHORIZED BY THIS CODE OR ANY PERMITS OR CERTIFICATES ISSUED UNDER THIS CODE.
74. ENSURE FIRE ALARM SYSTEM AUDIBILITY AND VISIBILITY IS ADEQUATE THROUGH ALL OCCUPIABLE AREAS AND SPACES. THIS WILL BE THOROUGHLY CHECKED AT TIME OF FIRE ALARM ACCEPTANCE TESTING.

INTERNATIONAL BUILDING CODE NOTES

1. 907.5.2.1.1 AVERAGE SOUND PRESSURE. THE AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL PROVIDE A SOUND LEVEL PRESSURE LEVEL OF 15 DECIBELS (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 dBA ABOVE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
2. 907.5.2.1.2 MAXIMUM SOUND PRESSURE. THE MAXIMUM SOUND PRESSURE LEVEL FOR AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL BE 110 dBA AT THE MINIMUM HEARING DISTANCE FROM THE AUDIBLE APPLIANCE. WHERE THE AVERAGE AMBIENT NOISE IS GREATER THAN 95 dBA, VISIBLE ALARM NOTIFICATION APPLIANCES SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 72 AND AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL NOT BE REQUIRED.
3. 907.5.2.2 EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS.
   EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS REQUIRED BY THIS CODE SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72. THE OPERATION OF ANY AUTOMATIC FIRE DETECTOR, SPRINKLER WATERFLOW DEVICE OR MANUAL FIRE ALARM BOX SHALL AUTOMATICALLY SOUND AN ALERT TONE FOLLOWED BY VOICE INSTRUCTIONS GIVING APPROVED INFORMATION AND DIRECTIONS FOR A GENERAL OR STAGED EVACUATION IN ACCORDANCE WITH THE BUILDING'S FIRE SAFETY AND EVACUATION IN ACCORDANCE WITH THE BUILDING'S FIRE SAFETY AND EVACUATION PLANS REQUIRED BY SECTION 404 OF THE INTERNATIONAL FIRE CODE. IN HIGH-RISE BUILDINGS, THE SYSTEM SHALL OPERATE ON THE MINIMUM OF THE ALARMING FLOOR, THE FLOOR ABOVE AND THE FLOOR BELOW. SPEAKERS SHALL BE PROVIDED THROUGHOUT THE BUILDING BY PAGING ZONES. AT A MINIMUM, PAGING ZONES SHALL BE PROVIDED AS FOLLOWS:
   (1) ELEVATOR GROUPS.
   (2) EXIT STAIRWAYS.
   (3) EACH FLOOR.
   (4) AREAS OF REFUGE AS DEFINED IN SECTION 1002.1.
   EXCEPTION: IN GROUP I-1 AND I-2 OCCUPANCIES, THE ALARM SHALL SOUND IN A CONSTANTLY ATTENDED AREA AND A GENERAL OCCUPANT NOTIFICATION SHALL BE BROADCAST OVER THE OVERHEAD PAGE.
4. 907.5.2.2.1 MANUAL OVERRIDE. A MANUAL OVERRIDE FOR EMERGENCY VOICE COMMUNICATION SHALL BE PROVIDED ON A SELECTIVE AND ALL-CALL BASIS FOR ALL PAGING ZONES.
5. 907.5.2.2.2 LIVE VOICE MESSAGES. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL ALSO HAVE THE CAPABILITY TO BROADCAST LIVE VOICE MESSSAGES BY PAGING ZONES ON A SELECTIVE AND ALL-CALL BASIS.
6. 907.5.2.2.3 ALTERNATE USES. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL BE ALLOWED TO BE USED FOR OTHER ANNOUNCEMENTS, PROVIDED THE MANUAL FIRE ALARM USE TAKES PRECEDENCE OVER ANY OTHER USE.
7. 907.5.2.2.4 EMERGENCY VOICE/ALARM COMMUNICATION CAPTIONS. WHERE STADIUMS, ARENAS AND GRANDSTANDS ARE REQUIRED TO CAPTION AUDIBLE PUBLIC ANNOUNCEMENTS IN ACCORDANCE WITH SECTION 1108.2.7.2, THE EMERGENCY/VOICE COMMUNICATION SYSTEM SHALL ALSO BE CAPTIONED. PRERECORDED OR LIVE EMERGENCY CAPTIONS SHALL BE FROM AN APPROVED LOCATION CONSTANTLY ATTENDED BY PERSONNEL TRAINED TO RESPOND TO AN EMERGENCY.
8. 907.5.2.2.5 EMERGENCY POWER. EMERGENCY VOICE/ALARM COMMUNICATIONS SYSTEMS SHALL BE PROVIDED WITH AN APPROVED EMERGENCY POWER SOURCE.

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project shall be under my observation.

Signature

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PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
FIRE ALARM SYSTEM NOTES

DATE FEBRUARY 2022
SCALE AS SHOWN
DRAWN KN | CHECK BI

SHEET
E002

____ OF 15 SHEETS

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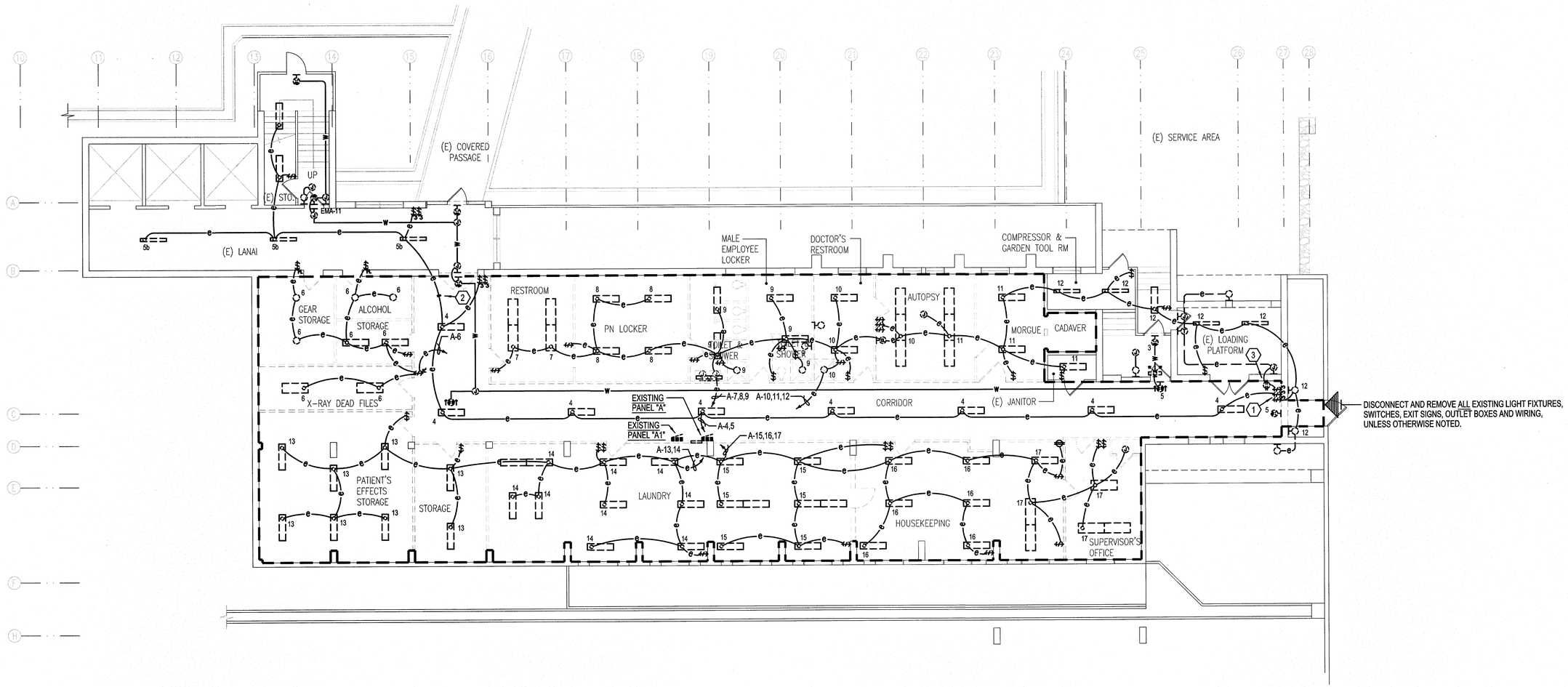

1 / E101 SUB-BASEMENT - LIGHTING PLAN (EXISTING/REMOVAL WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: EXISTING/REMOVAL WORK

1. DISCONNECT AND REMOVE EXISTING SWITCH AND WIRES. EXISTING SURFACE OUTLET BOX TO REMAIN. PROVIDE NEW BLANK DEVICE PLATE OVER EXISTING FLUSH OUTLET BOX.
2. INTERCEPT EXISTING RACEWAY. SEE NEW WORK PLAN FOR NEW WORK.
3. EXISTING RECEPTACLE TO REMAIN. SEE NEW WORK PLAN FOR NEW WORK.

REV. NO.	DESCRIPTION	DATE

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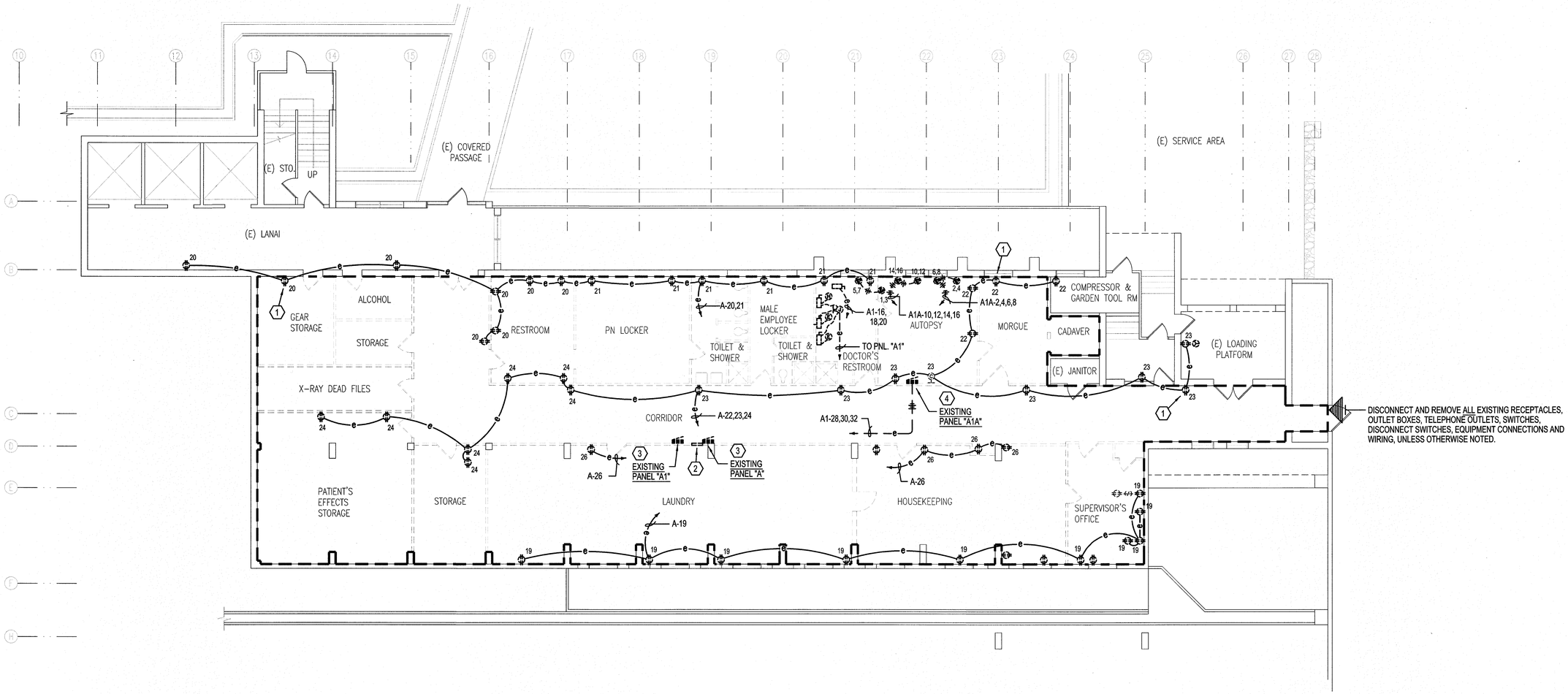

1 / E102 SUB-BASEMENT - ELECTRICAL PLAN (EXISTING/REMOVAL WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: EXISTING/REMOVAL WORK

1. DISCONNECT AND REMOVE EXISTING RECEPTACLE AND WIRES. EXISTING FLUSH OUTLET BOX TO REMAIN. SEE NEW WORK PLAN FOR NEW WIRING.
2. REMOVE EXISTING FLUSH JUNCTION BOX. INTERCEPT EXISTING FEEDER RACEWAY. SEE NEW WORK PLAN FOR NEW WORK.
3. DISCONNECT EXISTING ELECTRIC PANEL. TURN PANEL OVER TO FACILITIES OFFICE.
4. DISCONNECT AND REMOVE EXISTING ELECTRIC PANEL WITH NEW OUTLET BOX.

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T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
SUB-BASEMENT – ELECTRICAL PLAN (EXISTING/REMOVAL WORK)

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OF 15 SHEETS

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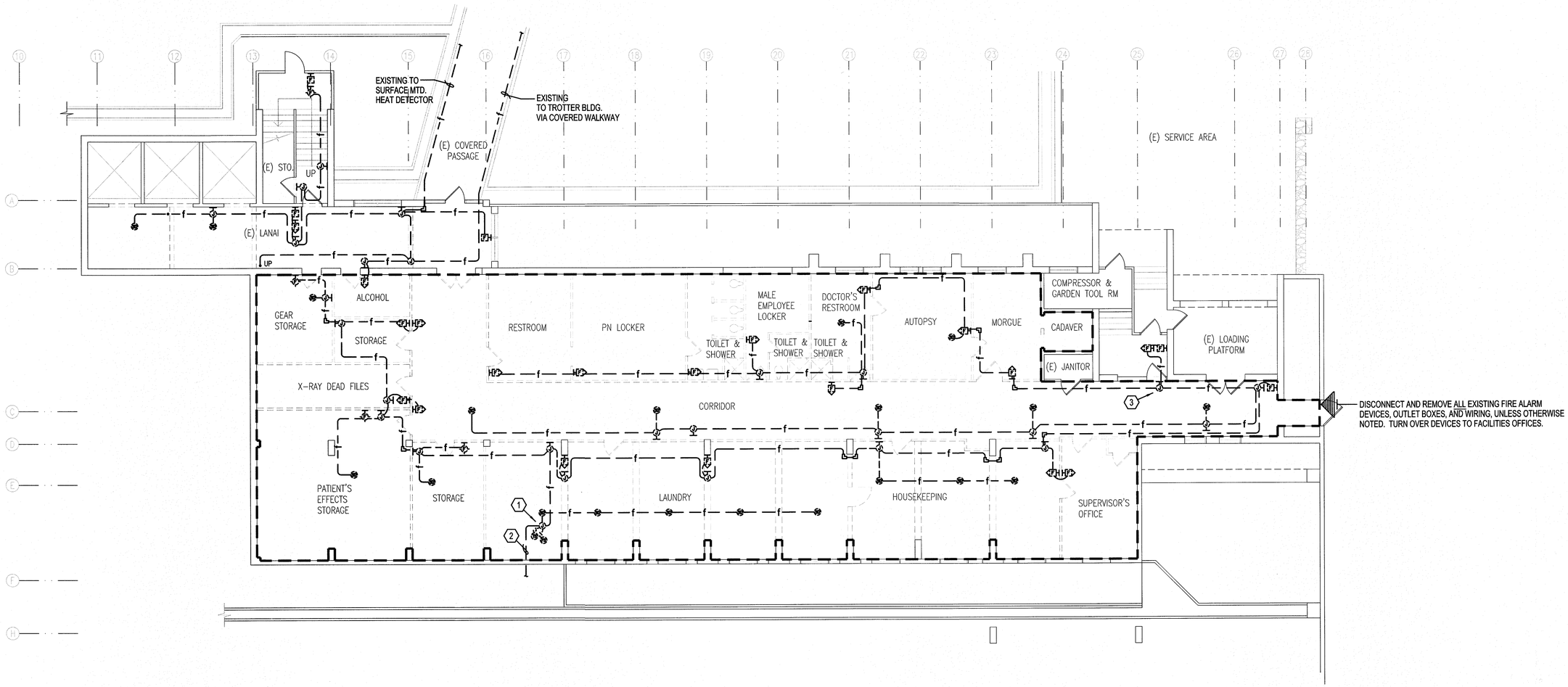

1 / E103 SUB-BASEMENT - FIRE ALARM PLAN (EXISTING/REMOVAL WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: EXISTING/REMOVAL WORK

1. EXISTING FIRE ALARM CONNECTION TO REMAIN. SEE NEW WORK PLAN FOR NEW WORK.
2. EXISTING EXPOSED WIRING TO REMAIN.
3. EXISTING SURFACE MOUNTED OUTLET BOX TO REMAIN. SEE NEW WORK PLAN FOR NEW WORK.

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T.M.K.: 3 – 2 – 031: 001

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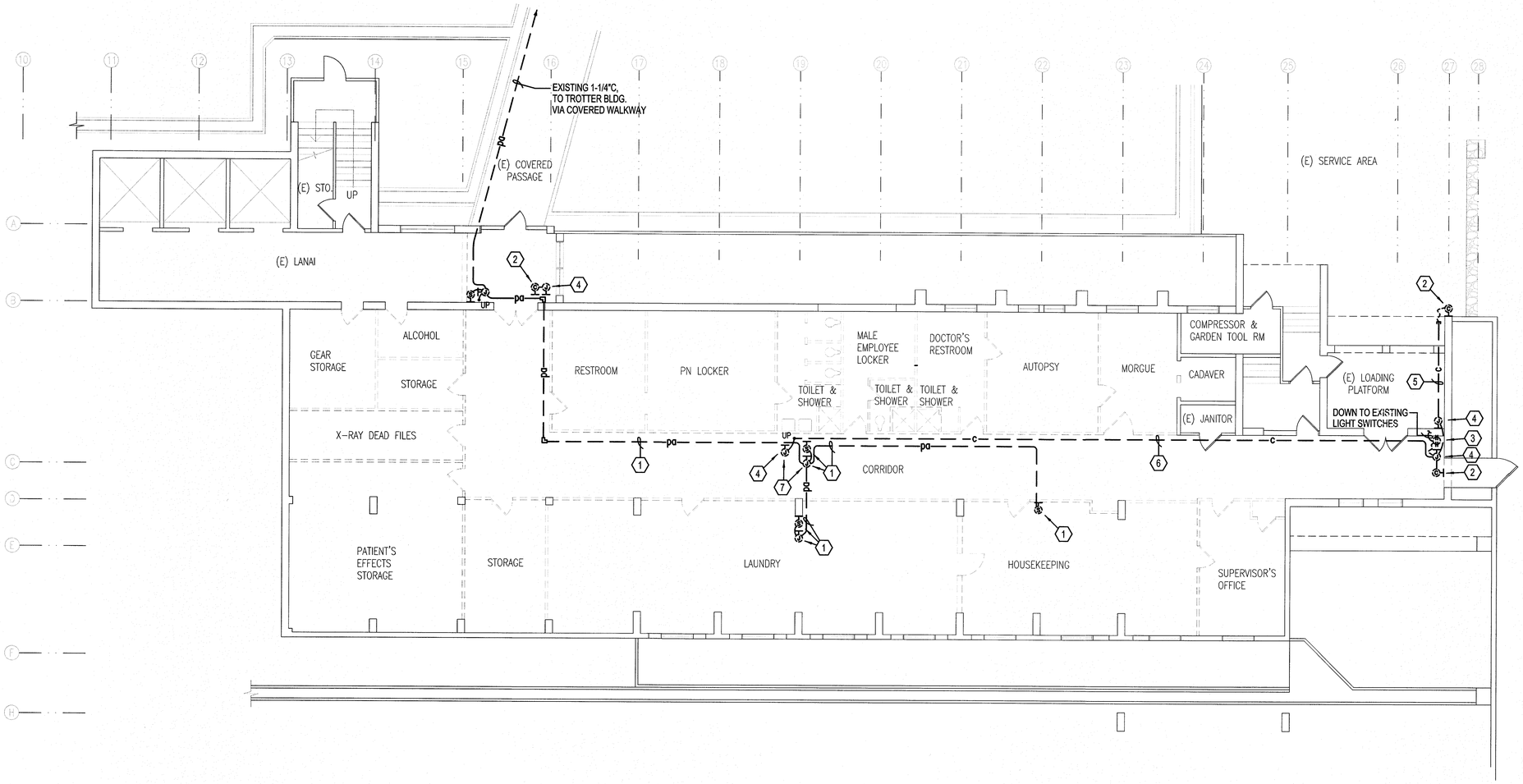

1 / E104 SUB-BASEMENT - SECURITY/PA SYSTEM PLAN (EXISTING/REMOVAL WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: EXISTING/REMOVAL WORK

1. DISCONNECT AND REMOVE EXISTING OUTLET, SPEAKER AND EXPOSED WIRING ON WALL TO BE DEMOLISHED.
2. EXISTING CAMERA TO REMAIN. PROVIDE WIRING AS REQUIRED TO MAINTAIN CAMERA OPERATION.
3. EXISTING RECEPTACLE TO REMAIN.
4. EXISTING OUTLET BOX TO REMAIN.
5. EXISTING WIRING TO REMAIN.
6. EXISTING WIRING TO REMAIN. PROVIDE HANGERS AND SUPPORTS AS REQUIRED TO SUPPORT RACEWAY.
7. PROVIDE HANGERS AND SUPPORTS AS REQUIRED TO SUPPORT OUTLET BOX.

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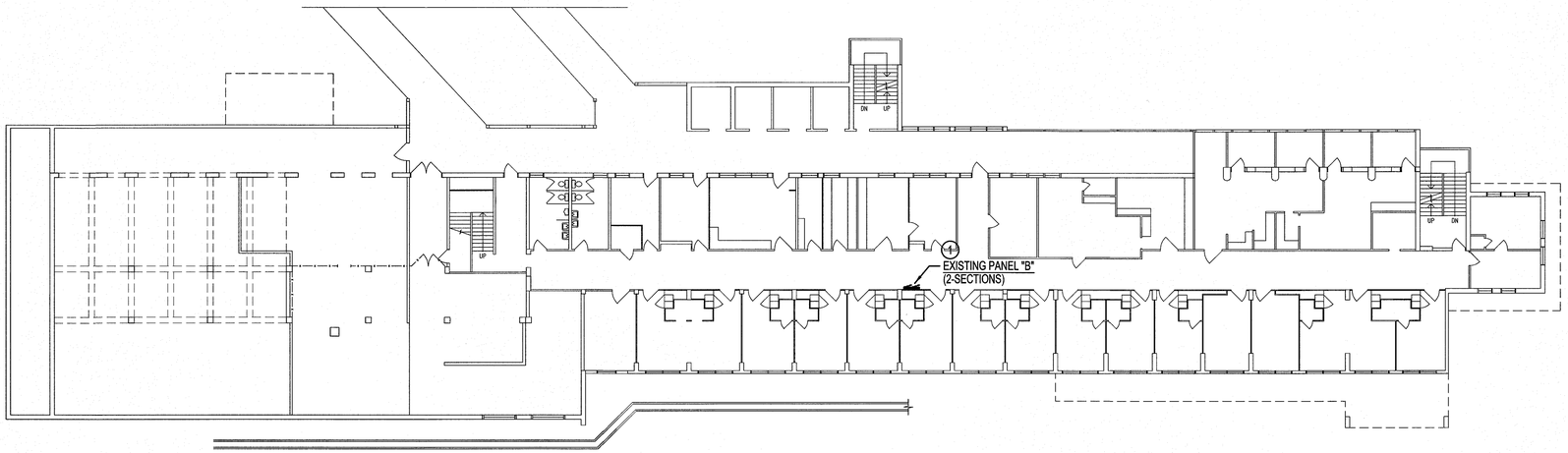

1 / E105 BASEMENT - ELECTRICAL PLAN (EXISTING/NEW WORK)

SCALE: 1/16" = 1' - 0"

ELECTRICAL NOTES: NEW WORK

1. CONNECT NEW FEEDER WIRES TO EXISTING SPARE 3P70A CIRCUIT BREAKER.

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LICENSE EXPIRES: APRIL 30, 2022

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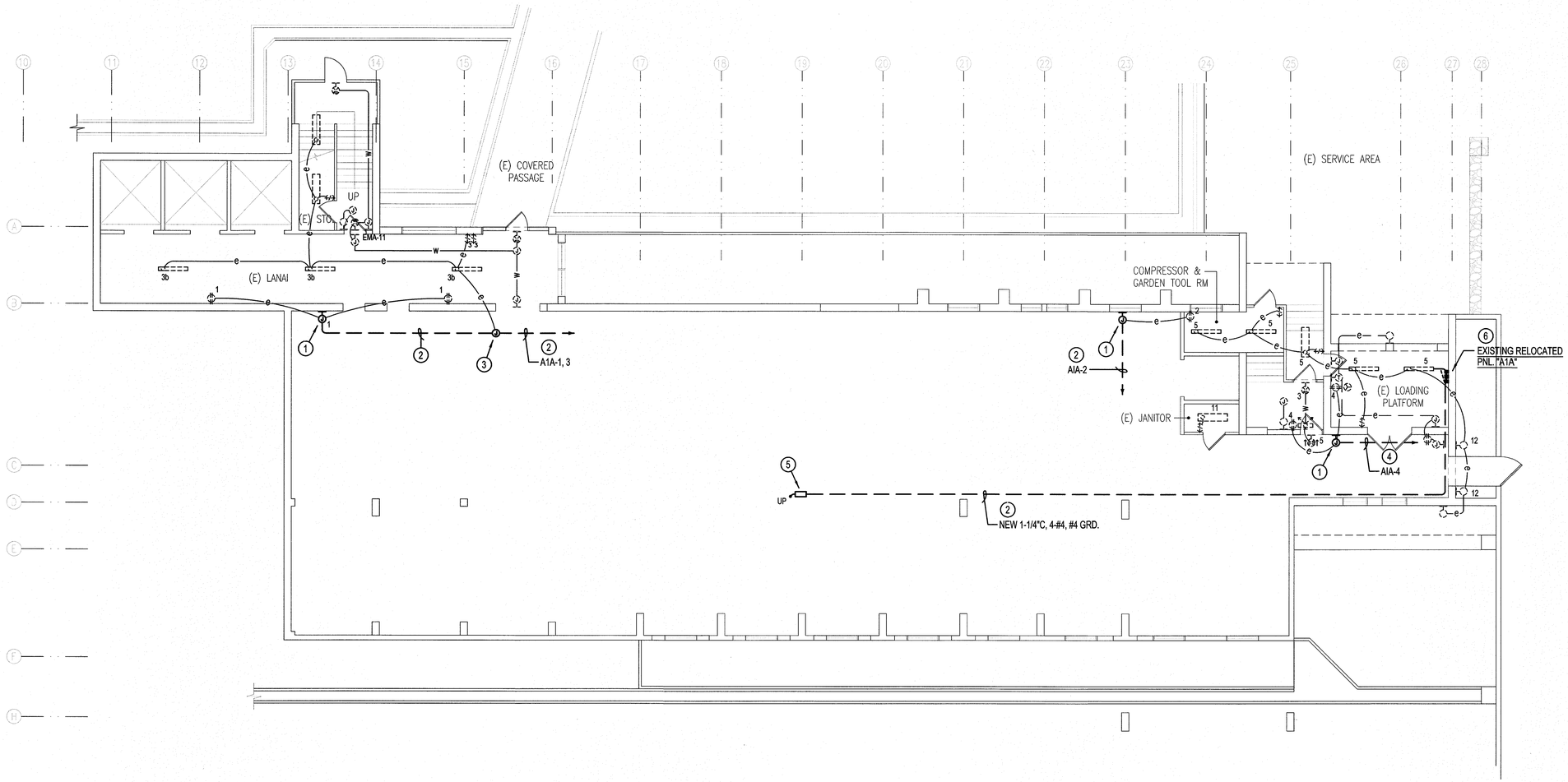

1 / E201 SUB-BASEMENT - ELECTRICAL PLAN (EXISTING/NEW WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: NEW WORK

1. PROVIDE NEW SURFACE METAL RACEWAY EXTENSION BOX OVER EXISTING FLUSH OUTLET TO ACCOMMODATE NEW SURFACE METAL RACEWAY. REINSTALL BLANK DEVICE PLATE IN NEW EXTENSION BOX.
2. SUSPEND NEW EXPOSED RACEWAY HIGH TO CEILING. PROVIDE HANGERS AND SUPPORTS PER N.E.C.
3. INTERCEPT EXISTING RACEWAY WITH NEW OUTLET BOX. SPLICE EXISTING WIRES TO NEW MAINTAIN CONTINUITY OF CIRCUITS.
4. MOUNT NEW EXPOSED RACEWAY ON WALL NEAR CEILING.
5. INTERCEPT EXISTING RACEWAY WITH NEW 8"SQ. x 18"L WIREWAY. MOUNT HIGH TO CEILING. PULL IN NEW WIRES FROM PANEL "B".
6. MOUNT RELOCATED PANEL ON WALL @ 5'-6" A.F.F. TO TOP.
7. CONNECT NEW RACEWAY TO EXISTING LIGHT FIXTURE. CONNECT TO NEW CIRCUIT.

REV. NO.	DESCRIPTION	DATE

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Signature

LICENSE EXPIRES: APRIL 30, 2022

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T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
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DATE FEBRUARY 2022
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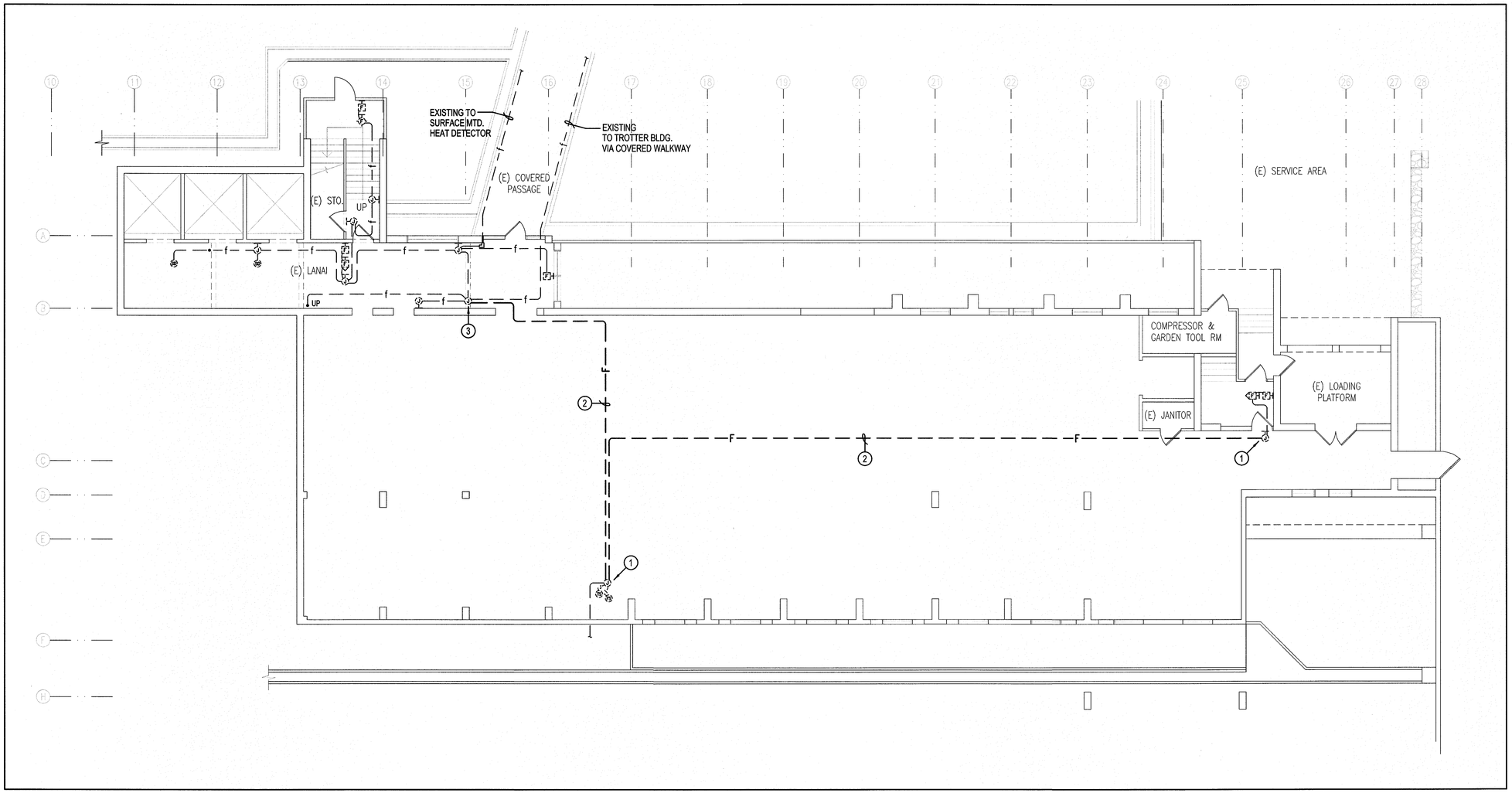

1 / E202 SUB-BASEMENT - FIRE ALARM PLAN (EXISTING/NEW WORK)

SCALE: 1/8" = 1' - 0"

ELECTRICAL NOTES: NEW WORK

1. CONNECT NEW EXPOSED RACEWAY TO EXISTING OUTLET BOX. PULL IN WIRES TO MAINTAIN DEVICES.
2. SUSPEND NEW EXPOSED RACEWAY HIGH TO CEILING. PROVIDE HANGERS AND SUPPORTS PER N.E.C.
3. CONNECT NEW EXPOSED RACEWAY TO EXISTING OUTLET BOX. EXTEND EXISTING INITIATING AND SIGNALLING CIRCUITS.

REV. NO.	DESCRIPTION	DATE

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Signature

LICENSE EXPIRES : APRIL 30, 2022

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PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
SUB-BASEMENT – FIRE ALARM PLAN (EXISTING/NEW WORK)

DATE FEBRUARY 2022
SCALE AS SHOWN
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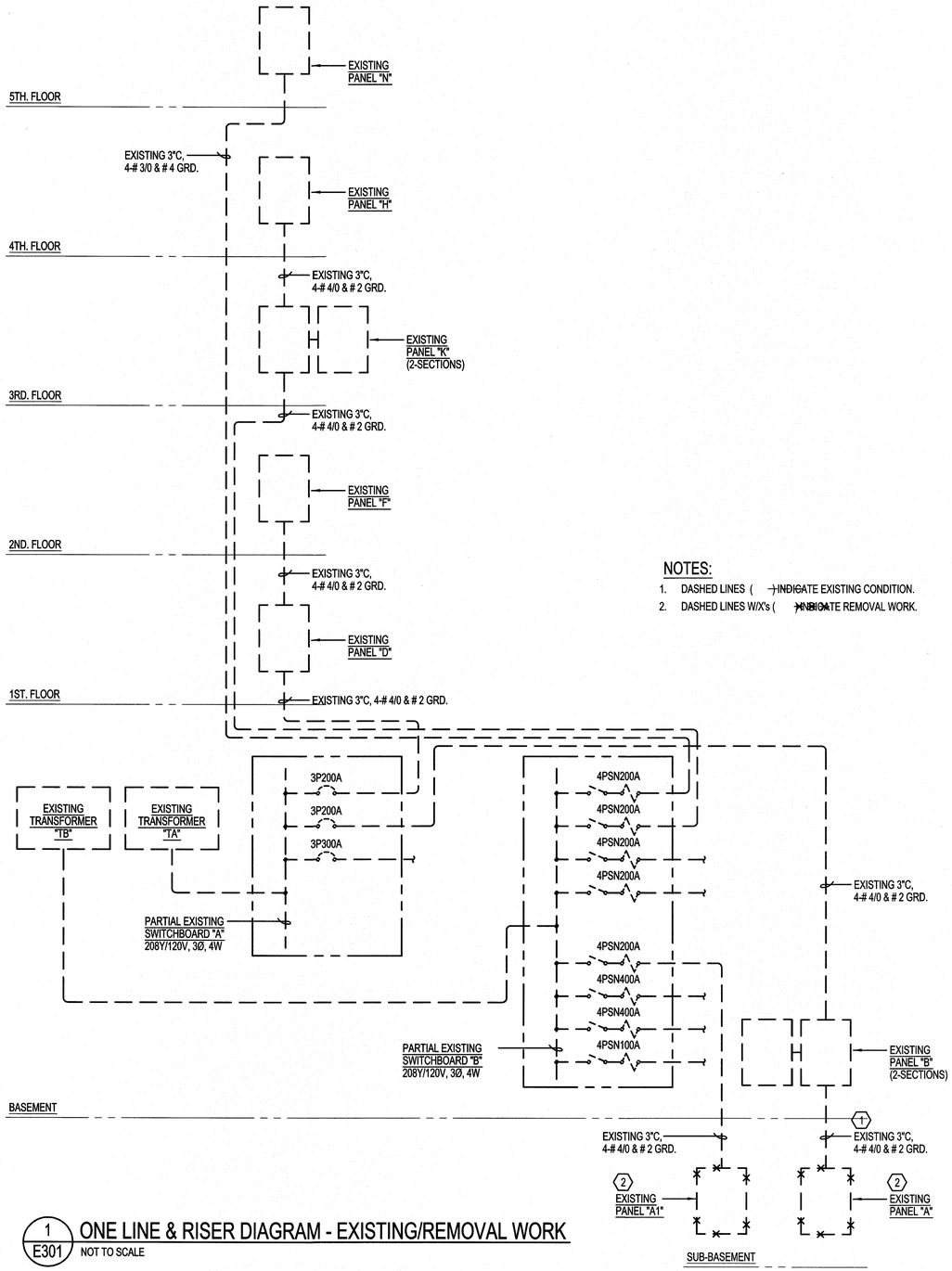
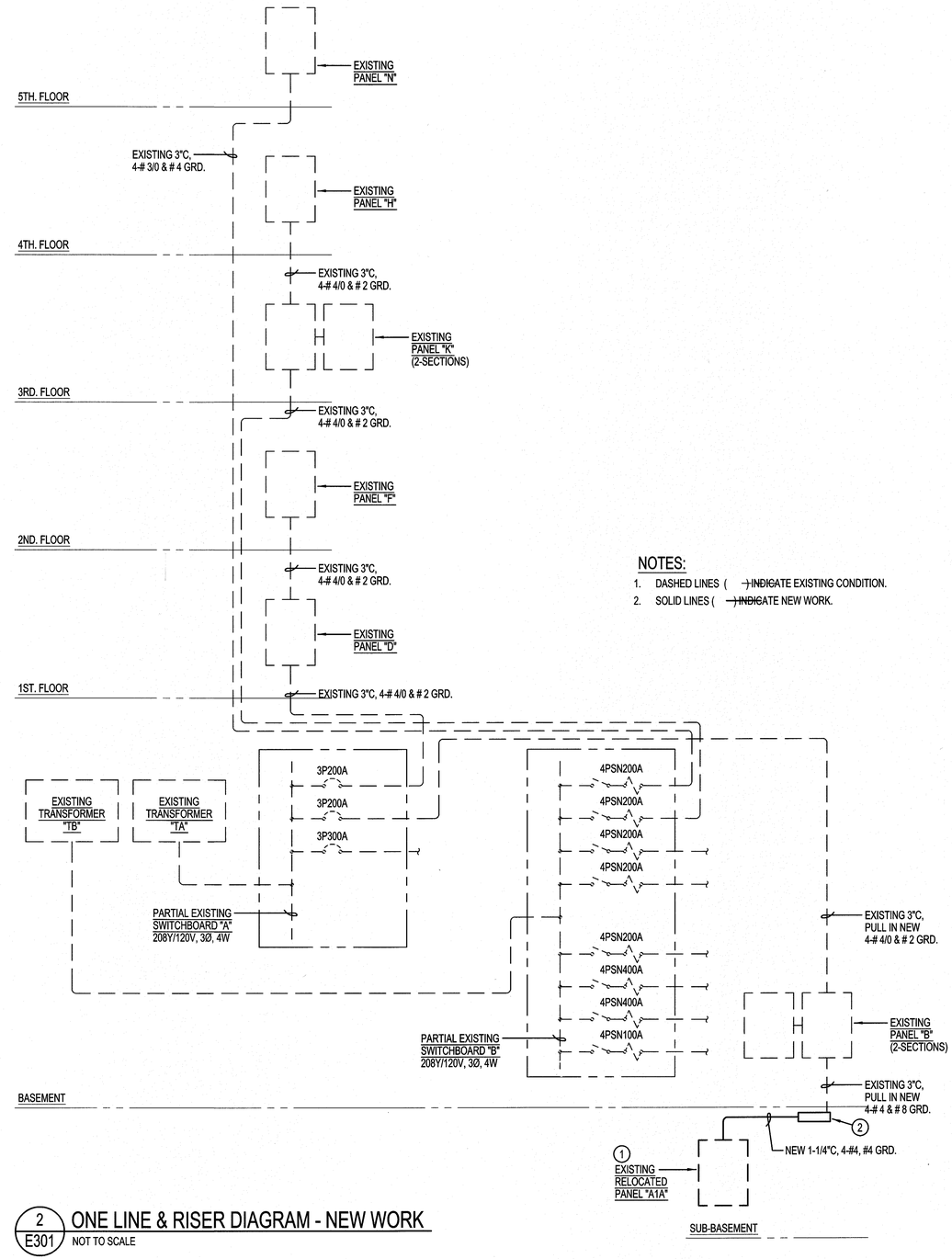


1 E301 ONE LINE & RISER DIAGRAM - EXISTING/REMOVAL WORK
NOT TO SCALE

NOTES:

1. DASHED LINES ( ) INDICATE EXISTING CONDITION.
2. DASHED LINES W/X's ( ) INDICATE REMOVAL WORK.



2 E301 ONE LINE & RISER DIAGRAM - NEW WORK
NOT TO SCALE

NOTES:

1. DASHED LINES ( ) INDICATE EXISTING CONDITION.
2. SOLID LINES ( ) INDICATE NEW WORK.

ELECTRICAL NOTES: EXISTING/REMOVAL WORK

1. REMOVE EXISTING WIRES. EXISTING RACEWAY TO REMAIN.
2. DISCONNECT AND REMOVE EXISTING ELECTRIC PANEL. EXISTING FEEDER AND BRANCH CIRCUIT RACEWAYS TO REMAIN

ELECTRICAL NOTES: NEW WORK

1. REINSTALL EXISTING RELOCATED PANEL IN NEW LOCATION. CONNECT TO NEW FEEDER WIRES.
2. INTERCEPT EXISTING RACEWAY WITH NEW 8"SQ. x 18"L WIREWAY. MOUNT HIGH TO CEILING. PULL IN NEW WIRES FROM PANEL "B".

REV. NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and was not prepared for this project shall be under my observation.

Signature

LICENSE EXPIRES : APRIL 30, 2022

BRIAN T. ITOZAKI LICENSED PROFESSIONAL ENGINEER No. 9058-E HAWAII, U.S.A.

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PROJECT TITLE
LEAHI HOSPITAL - YOUNG BUILDING
SUB-BASEMENT FOOD SERVICE OPERATIONS - PHASE I
3675 KILAUEA AV., HONOLULU, HAWAII 96816
T.M.K.: 3 – 2 – 031: 001

SHEET TITLE
ONE LINE & RISER DIAGRAMS

DATE FEBRUARY 2022
SCALE AS SHOWN
DRAWN KN
CHECK BI
SHEET
E301
15 OF SHEETS

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