

ADDENDUM NO. 2
MAY 18, 2023

TO

PLANS, BID FORM, SPECIFICATIONS, CONTRACT AND BOND

FOR

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS

PAUKUKALO, ISLAND OF MAUI, HAWAII

IFB NO.: IFB-23-HHL-011

ITEM NO. 1 REVISED BID SET DRAWINGS

A revised bid set drawings are uploaded and attached to **ADDENDUM NO 2 5-16-23**. The revisions are marked with Delta 1. The sheets that were updated with delta revision are Sheet A101, A102, A201, A301, A401, A501, A502, and E102

ITEM NO. 2 REVISED BID OFFER FORM

The Bid Offer Form has been revised to match the revisions done on the drawings. It also contains additional electrical repair work. All of the changes in the bid form are indicated in red.

2 GENERAL WORKS:

Revised items

Item 2.2 **Remove existing metal gable end louver and install CDX plywood cover.**

Item 2.5 Remove and replace **damaged portion of the** downspouts

Additional items

3.5 Provide conduit and wires for hand dryer

3.6 Provide conduit provision for restroom exhaust fan

3.7 Provide conduit and wires for new receptacles

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER RENOVATION
DEPARTMENT OF HAWAIIAN HOME LANDS

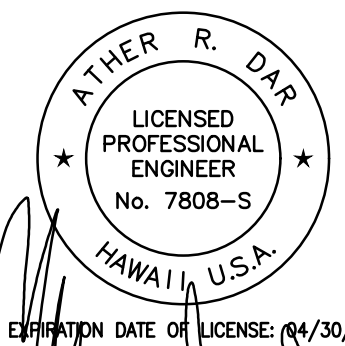
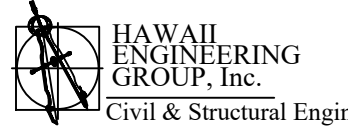
IFB-23-HHL-011

657 KAUMUALI'I STREET, WAILUKU MAUI HI 96793
T.M.K.: (2) 3-3-005:087

APPROVED:

DIRECTOR, DEPARTMENT OF PLANNING AND PERMITTING DATE
(FOR SITE GRADING ONLY)

REVISION NO.	DATE	REVISIONS	BY
-	-	-	-

	DEPARTMENT OF HAWAIIAN HOME LANDS	
	PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087	
COVER SHEET		
DESIGNED BY: AD	 HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002	JOB NO. 22-038
DRAWN BY: RSG		
CHECKED BY: -		
SUPV: -		
DATE: 04/18/2023	SHEET A000 1 OF 21 SHEETS	

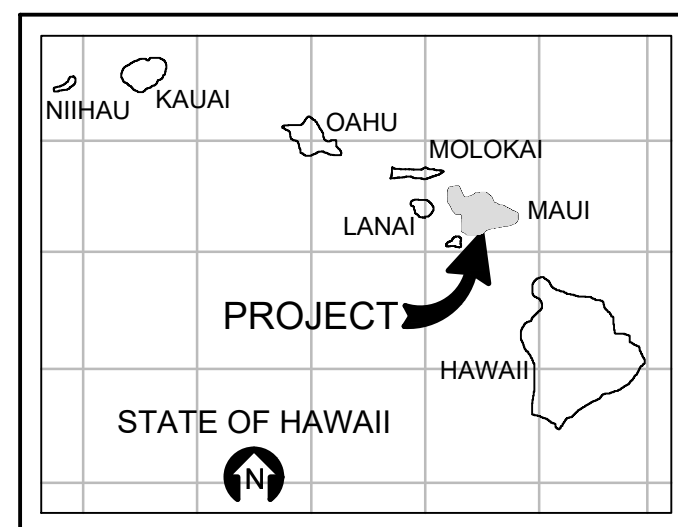
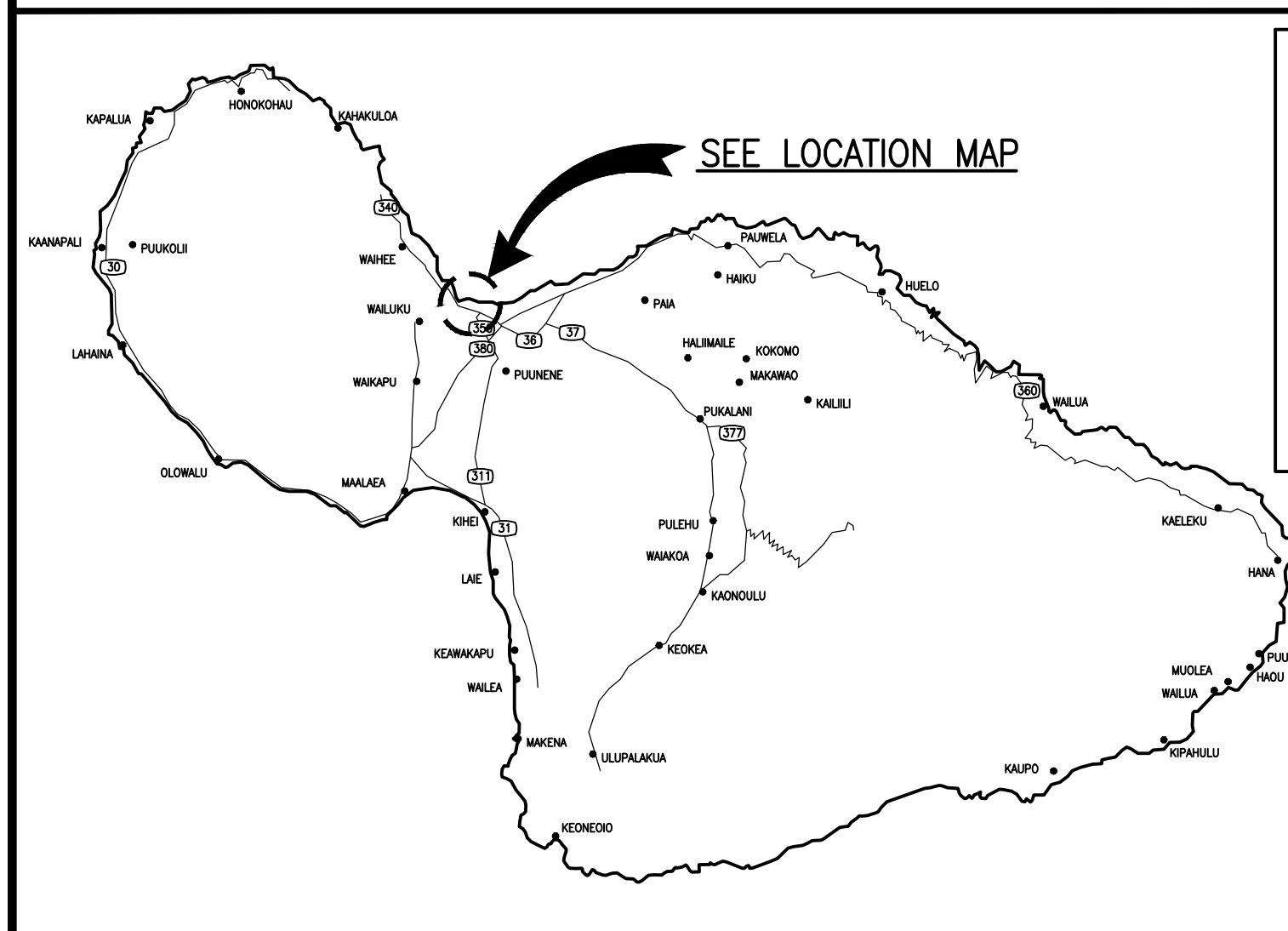
2020/CP-186

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER RENOVATION
DEPARTMENT OF HAWAIIAN HOME LANDS

IFB-23-HHL-011

657 KAUMUALI'I STREET, WAILUKU MAUI HI 96793
T.M.K.: (2) 3-3-005:087



GENERAL NOTES

1. THE INFORMATION CONTAINED HEREIN IS BASED UPON LIMITED FIELD INVESTIGATIONS AND AVAILABLE RECORD DRAWINGS.
2. DRAWINGS ARE INTENDED TO PROVIDE A GRAPHIC ILLUSTRATION OF DESIGN CONCEPT, ONLY, AND DEPICT THE GENERAL PLACEMENT OF CERTAIN COMPONENTS IN RELATION TO EACH OTHER.
3. FOR CLARITY, DETAIL DRAWINGS DO NOT SHOW ALL COMPONENTS OR ILLUSTRATE ALL FIELD CONDITIONS THAT MAY BE PRESENT.
4. CONTRACTOR SHALL TAKE MEASUREMENTS AND FIELD-VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
5. ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING BUILDING CODES:

2018 IBC
2018 NFPA 1, UFC
2018 UPC WITH STATE AMENDMENTS
2021 IECC
2020 NEC
TITLE 11 CHAPTER 39

INDEX TO DRAWINGS

COUNT	SHEET NO.	SHEET DESCRIPTION
1	A000	COVER SHEET
2	A001	TITLE SHEET
3	A002	GENERAL NOTES
4	C001	ENLARGED SITE PLAN AND OVERALL SITE PLAN
5	A101	PROPOSED FLOOR PLAN
6	A102	DEMOLITION FLOOR PLAN
7	A103	REFLECTED CEILING PLAN
8	A104	ROOF PLAN
9	A201	EXTERIOR ELEVATIONS
10	A301	BUILDING SECTIONS
11	A401	ENLARGED PLANS
12	A402	INTERIOR ELEVS
13	A501	ARCHITECTURAL SPECIFICATIONS
14	A502	ARCHITECTURAL SPECIFICATIONS
15	E001	ELECTRICAL GENERAL NOTES
16	E002	ELECTRICAL SCHEDULES
17	E101	ELECTRICAL DEMO PLAN
18	E102	ELECTRICAL PLAN NEW WORK
19	M100	MECHANICAL LEGEND NOTES AND SPECS
20	M101	PLUMBING PLANS AND DIAGRAMS
21	M102	MECHANICAL PLANS AND EQUIPMENT SCHEDULE

COUNTY OF MAUI
MAUI COUNTY CODE, CHAPTER 16.16B ENERGY CODE
COMMERCIAL PROVISIONS

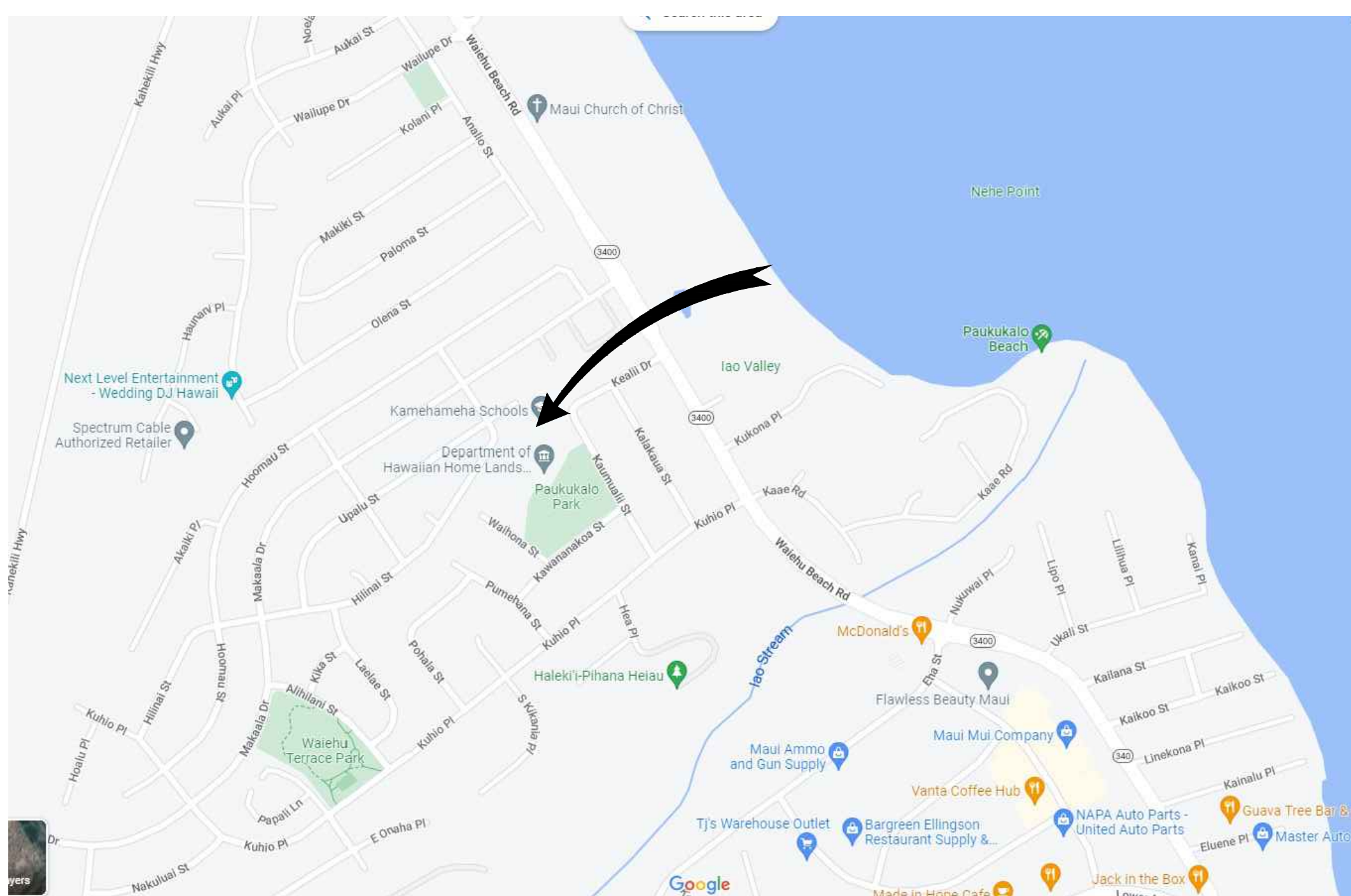
COMPLIANCE METHOD
Check applicable method

<input type="checkbox"/>	C401.2(1) ANSI/ASHRAE/IESNA 90.1
<input type="checkbox"/>	C401.2(2) Sections C402 through C406
<input checked="" type="checkbox"/>	C401.2(3) Sections C402.5, C403.2, C404, C405.2, C405.3, C405.4, C405.6 & C407
<input type="checkbox"/>	C102.1 Alternative

To the best of my knowledge, this project's design substantially conforms to the Energy Code.

Signature: Kenneth R. Welch Date: 4/8/2022
Name: KENNETH R WELCH
Title: LICENSED PROFESSIONAL ENGINEER
License No.: PE-14751-E

ISLAND MAP



PREPARED BY

CIVIL ENGINEER

HAWAII ENGINEERING GROUP, INC.
1088 BISHOP STREET, SUITE 2506
HONOLULU, HAWAII 96813

CONTACT:
GREGORY D. SANTORO, P.E.

PREPARED FOR

DEPARTMENT OF HAWAIIAN HOME LANDS, STATE OF HAWAII

LAND DEVELOPMENT DIVISION
91-5420 KAPOLEI PARKWAY
KAPOLEI, HAWAII 96707

CONTACT:
KALI WATSON
CHAIRMAN, HAWAIIAN HOMES COMMISSION

PROJECT DATA

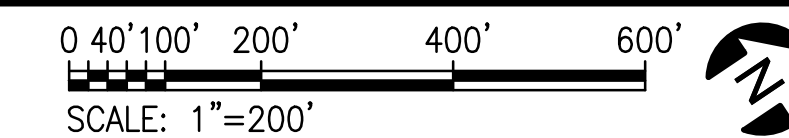
TAX MAP KEY: (2) 3-3-005:087
LOT SIZE: 70,942 S.F.
PLANNING ZONE: R-2
OCCUPANCY GROUP (LESS THAN 300) A-3
CONSTRUCTION TYPE: V-N

APPROVED:

DIRECTOR, DEPARTMENT OF PLANNING AND PERMITTING DATE
CITY AND COUNTY OF HONOLULU
(FOR SITE GRADING ONLY)

2020/CP-186

LOCATION MAP



REVISION NO.	DATE	REVISIONS	BY

EXPIRATION DATE OF LICENSE: 04/30/24

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

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
657 KAUMUALI'I WAILUKU, MAUI, HAWAII
T.M.K.: (2) 3-3-005:087

TITLE SHEET

JOB NO.
22-038

SHEET
A001

2 OF 21 SHEETS

DESIGNED BY: AD
DRAWN BY: RSG
CHECKED BY: -
DATE: 04/18/2023

HAWAII ENGINEERING GROUP, Inc.
Civil & Structural Engineers
1088 BISHOP STREET, SUITE 2506
HONOLULU, HI 96813
TEL: 808-533-2002

DATE: 04/18/2023

GENERAL NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, ETC. TO COMPLETE THE WORK INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.
- THE CONTRACTOR SHALL VERIFY NEW WORK REQUIREMENTS AT EXISTING CONDITION AND LOCATION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO SAFETY PRECAUTIONS. THE CONTRACTOR SHALL PROVIDE SAFE PASSAGEWAYS TO OCCUPIED SPACES AND ERECT SUCH BARRICADES AND COVERINGS FOR BUILDING OCCUPANTS, VISITORS AND WORK CREWS.
- THE CONTRACT WORK ZONE PLAN DEFINES THE AREAS ACCESSIBLE, SHARED, RESTRICTED TO THE CONTRACTOR, RESIDENTS, AND HPHA'S USE. THE CONTRACTOR IS STILL RESPONSIBLE FOR THE DEMOLITION, REPAIR AND REFINISH OF THOSE AREAS SHOWN AND SPECIFIED AS SUCH IN THESE SET OF DOCUMENTS.
- CONTRACTOR SHALL NOT SHUTDOWN ANY UTILITY SYSTEM OF THE BUILDING WITHOUT PRIOR WRITTEN APPROVAL FROM THE CONTRACTING OFFICER AND SHALL PROVIDE 72 HOURS ADVANCE NOTICE OF ANY SHUTDOWN. HOURS AND THE TIME OF THE DAY FOR ANY PROPOSED SHUTDOWN SHALL BE THE SOLE DISCRETION OF THE CONTRACTING OFFICER.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING CONDITIONS, LANDSCAPE, WALKWAY, SURFACES AND AREAS WHICH ABUT THE PROPOSED WORK. RESTORE DAMAGED AREAS, SURFACES OR CONDITIONS TO ORIGINAL OR BETTER CONDITION AT NO COST TO HPHA.
- BUILDING WILL BE IN USE THROUGHOUT THE DURATION OF THE CONTRACT. MAKE PROVISIONS TO KEEP PEOPLE OUT AND AWAY FROM THE EXCLUSIVE CONTRACT ZONE. THE UNITS, STAIRS, ELEVATORS, AND CORRIDORS MUST BE ACCESSIBLE TO THE RESIDENTS, VISITORS, AND HPHA STAFF 24 HOURS EVERYDAY. THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER SHOULD THE ACCESSIBLE ROUTE TO THE UNITS, STAIRS, ELEVATORS AND CORRIDORS HAVE TO BE REDIRECTED.
 - A) WORKING HOURS SHALL BE DETERMINED BY HPHA.
- COORDINATE WITH THE HPHA FOR SITE ACCESS, STAGING AND MATERIAL STORAGE ON SITE.
- ASBESTOS AND OTHER HAZARDOUS MATERIALS MAY BE PRESENT IN THE EXISTING STRUCTURE SUBJECT TO ALTERATION. OBSERVE THE APPLICABLE REQUIREMENTS OF HAWAII OCCUPATIONAL SAFETY AND HEALTH STANDARDS AND THE ENVIRONMENTAL PROTECTION AGENCY. NOTIFY OWNER IMMEDIATELY IF ANY HAZARDOUS MATERIALS ARE DISCOVERED.
- KEEP DUST WITHIN ACCEPTABLE LEVELS AT ALL TIMES, INCLUDING WEEKENDS AND HOLIDAYS, IN CONFORMANCE WITH CHAPTER 31 - AIR POLLUTION, OF THE STATE DEPARTMENT OF HEALTH PUBLIC HEALTH REGULATIONS, LATEST EDITION.
- PROVIDE SECURITY AND FACILITIES TO PROTECT WORK AND EXISTING FACILITIES FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT.
- PROTECT EXISTING FINISHED SURFACES FROM TRAFFIC, DIRT, WEAR, DAMAGE, OR MOVEMENT OF HEAVY OBJECTS, BY PROTECTING WITH DURABLE SHEET MATERIALS.
- COORDINATE ACTIVITIES OF HEAVY NOISE AND VIBRATION WITH THE CONTRACTING OFFICER REPRESENTATIVE.
- PATCH TO MATCH SURFACES AFFECTED BY DEMOLITION WORK, READY TO RECEIVE NEW FINISH.
- PERFORM CUTTING AND REMOVAL WORK TO REMOVE MINIMUM NECESSARY, AND IN A MANNER TO AVOID DAMAGE TO ADJACENT WORK AND PROVIDE PROPER SURFACES TO RECEIVE INSTALLATION OF REPAIR AND NEW WORK.
- REMOVE, CUT, AND PATCH WORK IN A MANNER TO MINIMIZE DAMAGE AND TO PROVIDE A MEANS OF RESTORING PRODUCTS AND FINISHES TO ORIGINAL SPECIFIED CONDITION AS APPROPRIATE.
- REFINISH VISIBLE EXISTING SURFACES TO REMAIN IN RENOVATED ROOMS AND SPACES TO SPECIFIED CONDITION FOR EACH MATERIAL, WITH A NEAT TRANSITION TO ADJACENT FINISHES.
- WHERE NEW WORK ABUTS OR ALIGNS WITH EXISTING, PERFORM A SMOOTH AND EVEN TRANSITION. PATCH WORK TO MATCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.
- (E) INDICATES EXISTING DIMENSION. CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS.
- TEMPORARY PASSAGEWAYS, IF REQUIRED, SHALL BE ACCESSIBLE AND COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

EROSION AND TEMPORARY DUST CONTROL

- FOR DRAIN INLETS OUTSIDE OF THE ROADWAY, USE FILTER SOCKS FOR SEDIMENT PROTECTION. FOR DRAIN INLETS WITHIN THE ROADWAY, USE ULTRA DRAIN GUARD WITH OVERFLOW BYPASS OR EQUIVALENT.
- DURING CONSTRUCTION, PREVENTATIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
- FUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRUBBING AND GRADING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE II, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 58, SOLID WASTE MANAGEMENT CONTROL.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.

BEST MANAGEMENT PRACTICES (BMP) NOTES

- EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO START OF PROJECT AND BE MAINTAINED UNTIL COMPLETION OF PROJECT.
- CONTRACTOR TO PERIODICALLY INSPECT SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, CATCH BASIN AND INLET FILTERS, ESPECIALLY DURING HEAVY RAINFALL. CONTRACTOR SHALL ALSO ENSURE DRAINAGE THROUGH FILTER MATERIAL IS MAINTAINED.
- THE FINAL LIFT OF EACH DAY'S WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIAL.
- GOOD HOUSEKEEPING SHALL BE UTILIZED TO ENSURE PROTECTION OF ROADWAYS FROM MUD, DIRT, AND DEBRIS.
- THE CONTRACTOR SHALL ENSURE THAT ALL TIRES OF CONSTRUCTION VEHICLES ARE SUFFICIENTLY CLEANED OFF SO THAT DIRT OR DEBRIS IS NOT TRACKED OFF THE CONSTRUCTION SITE. WASHING OFF TIRES WITH WATER WILL NOT BE ACCEPTABLE UNLESS THE RUNOFF IS CONTAINED AND DOES NOT ENTER THE STORM DRAIN SYSTEM OR ONTO THE STATE'S ROW.
- AT THE END OF GRADING OPERATIONS AND AT THE COMPLETION OF PROJECT, CONTRACTOR SHALL INSPECT ALL CATCH BASIN, DRAIN INLET AND DRAIN MANHOLES SURROUNDING THE PROJECT SITE. ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE STORM DRAIN STRUCTURES SHALL BE REMOVED. PLEASE NOTE THAT FLUSHING INTO THE DRAIN STRUCTURES IS PROHIBITED.
- ANY DIRT OR GRASSED AREA DISTURBED SHALL BE RESTORED BY RE-GRASSING THE AREA OR BY SEEDED HYDROMULCH. THE GRASS SHALL BE FULLY ESTABLISHED AT COMPLETION OF PROJECT.

ABBREVIATIONS

&	AND	N	NORTH
∠	ANGLE	NIC	NOT IN CONTRACT
@	AT	NO	NUMBER
⊕	CENTERLINE	NTS	NOT TO SCALE
∅	CHANNEL	NVR	NETWORK VIDEO RECORDER
∅	DIAMETER OR ROUND	OA	OVERALL
%	PERCENT	OC	ON CENTER
⊥	PERPENDICULAR	OD	OUTSIDE DIAMETER/DIMENSION
#	POUND OR NUMBER	OF/CI	OWNER FURNISHED- OWNER INSTALLED
ℙ	PROPERTY LINE	OFF	OFFICE
AB	ANCHOR BOLT	OPNG	OPENING
ABV	ABOVE	OPP	OPPOSITE
ACOUS	ACOUSTICAL		
ACS	ACCESS CONTROL SYSTEM	PL	PROPERTY LINE
ADA	AMERICANS WITH DISABILITIES ACT	PNL	PANEL
ADDM	ADDENDUM	PROP	PROPERTY
ADJ	ADJACENT, ADJUSTABLE	PT	POINT
AFF	ABOVE FINISH FLOOR	PTN	PARTITION
ALUM	ALUMINUM		
ALT	ALTERNATE	R	RISER, RADIUS
ANOD	ANODIZED	REF	REFERENCE
APPROX	APPROXIMATE	REINF	REINFORCES, REINFORCING
ARCH	ARCHITECT(URAL)	REQD	REQUIRED
		RM	ROOM
BD	BOARD	RO	ROUGH OPENING
BLDG	BUILDING		
BLKG	BLOCKING	SCHED	SCHEDULE
BOT	BOTTOM	SECT	SECTION
		SHT	SHEET
CLG	CEILING	SIM	SIMILAR
CLR	CLEAR(ANCE)	SLDG	SLIDING
CMU	CONCRETE MASONRY UNIT(S)	SPEC	SPECIFICATION
COLUMN	COLUMN	SQ	SQUARE
CONC	CONCRETE	SST	STAINLESS STEEL
COND	CONDITION	STC	SOUND TRANSMISSION CLASS
CONN	CONNECTION	STD	STANDARD
CONSTR	CONSTRUCTION	STL	STEEL
CONT	CONTINUOUS	STOR	STORAGE
CONTR	CONTRACTOR	STRUCT	STRUCTURAL
COORD	COORDINATE	SUSP	SUSPEND(ED)
		SYMM	SYMMETRICAL
D	DEEP, DEPTH	THK	THICK
DEMO	DEMOLISH	TYP	TYPICAL
DET	DETAIL		
DIA	DIAMETER	UL	UNDERWRITERS LABORATORIES
DIAG	DIAGONAL	UNO	UNLESS NOTED OTHERWISE
DIM	DIMENSION		
DN	DOWN	VERT	VERTICAL
DR	DOOR		
DWG	DRAWING	W	WEST, WIDE, WIDTH
DWR	DRAWER	W/	WITH
		WDW	WINDOW
		W/O	WITHOUT
EA	EACH		
EL	ELEVATION		
ELEC	ELECTRICAL		
ELEV	ELEVATOR		
EQ	EQUAL		
EQUIP	EQUIPMENT		
EXH	EXHAUST		
EXP	EXPANSION		
(E), EXIST	EXISTING		
EXT	EXTERIOR		
FD	FLOOR DRAIN		
FFEL	FINISHED FLOOR ELEVATION		
FIN	FINISH(ED)		
FL	FLOOR		
FOF	FACE OF FINISH		
FR	FRAME		
FT	FOOT, FEET		
GA	GAUGE		
GALV	GALVANIZED		
GB	RAB BAR		
GL	GLASS		
GND	GROUND		
HDW	HARDWARE		
HM	HOLLOW METAL		
HORIZ	HORIZONTAL		
HT	HEIGHT		
ID	INSIDE DIAMETER/ DIMENSION		
IDS	INTRUSION DETECTION SYSTEM		
INCL	INCLUD(ED), (ING), (SIVE)		
INT	INTERIOR		
KD	KNOCKED DOWN		
KO	KNOCK-OUT		
L	LENGTH, LONG		
LBP	LEAD BASED PAINT		
LT	LIGHT		
MAX	MAXIMUM		
MECH	MECHANICAL		
MFR	MANUFACTURER		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MOD	MODIFIED		
MTD	MOUNTED		
MTG	MOUNTING		
MTL	METAL		
MULL	MULLION		

DESIGN CRITERIA

ALL WORK SHALL CONFORM TO THE 2006 INTERNATIONAL BUILDING CODE (IBC) WITH THE CITY AND COUNTY OF HONOLULU AMENDMENTS.

BASIC WIND SPEED = 105 MPH
WIND EXPOSURE B
SEISMIC DESIGN CATEGORY C
SITE CLASS D
OCCUPANCY CATEGORY II

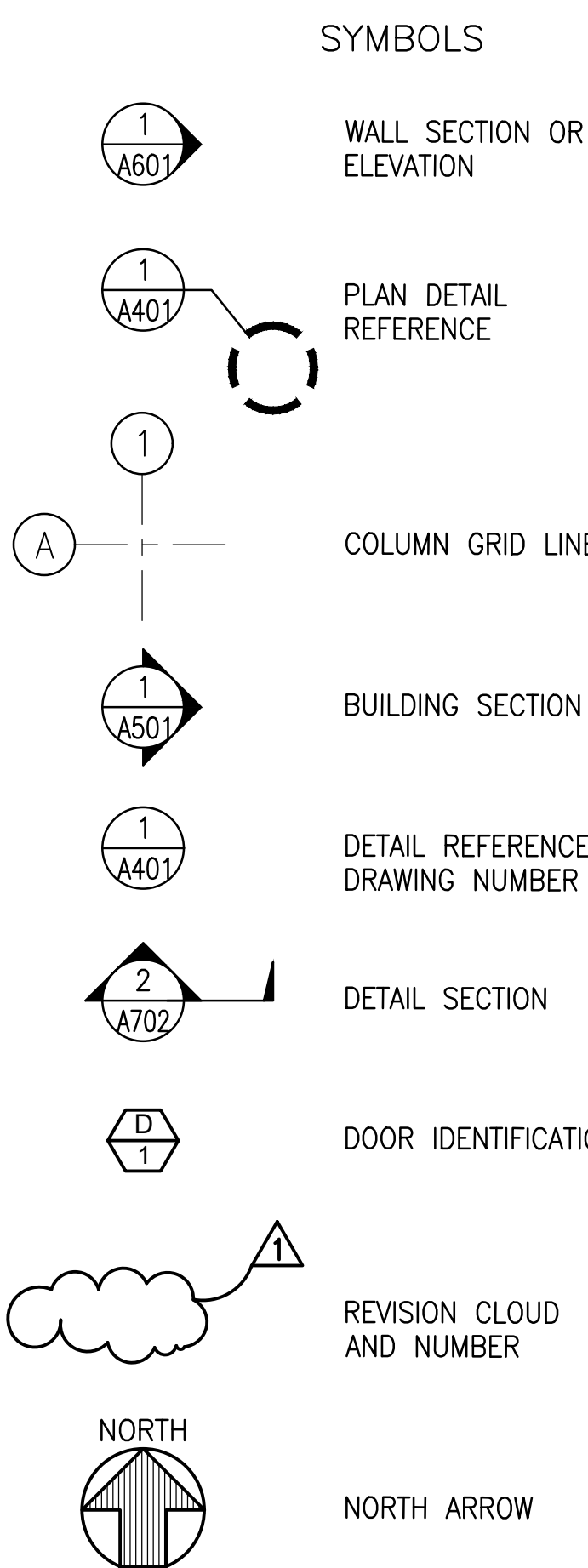
DOOR SCHEDULE							
DOOR NO	TYPE	SIZE (WxH)	ADA ACCESSIBLE HARDWARE	MATRL	FRAME	LOCK	DOOR NOTES
A	EXTERIOR	PAIR 3'-0"x6'-8"	YES	GLASS ALUM	ALUM	YES	NEW SWING GLASS DOORS, SIDELIGHTS AND FRAME. PROVIDE NEW HARDWARE, CLOSER AND EGRESS PUSHBAR
B	EXTERIOR	12'-0"x6'-8"	NO	GLASS ALUM	ALUM	YES	(E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
C	EXTERIOR	12'-0"x6'-8"	NO	GLASS ALUM	ALUM	YES	(E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
D	EXTERIOR	12'-0"x6'-8"	NO	GLASS ALUM	ALUM	YES	(E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
E	EXTERIOR	12'-0"x6'-8"	NO	GLASS ALUM	ALUM	YES	(E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
F	EXTERIOR	12'-0"x6'-8"	NO	GLASS ALUM	ALUM	YES	(E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
G	EXTERIOR	PAIR 3'-0"x6'-8"	YES	GLASS ALUM	ALUM	YES	NEW SWING GLASS DOORS, SIDELIGHTS AND FRAME. PROVIDE NEW HARDWARE, CLOSER AND EGRESS PUSHBAR
H	INTERIOR	3'-0"x7'-0"	YES	MTL	STEEL	YES	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
I	INTERIOR	PAIR 3'-0"x6'-8"	YES	MTL	STEEL	YES	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
J	INTERIOR	3'-0"x7'-0"	YES	MTL	STEEL	YES	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
K	INTERIOR	3'-0"x7'-0"	YES	MTL	STEEL	NO	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
L	INTERIOR	3'-0"x7'-0"	YES	MTL	STEEL	NO	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
M	EXTERIOR	3'-0"x6'-8"	YES	GLASS ALUM	ALUM	YES	REPLACE EXISTING ALUMINUM STOREFRONT SYSTEM WITH NEW STOREFRONT METAL DOOR AND HARDWARE. PROVIDE NEW SIDE LIGHTS WITH LOWER JALOUSIE WINDOWS AND METAL DOOR. FINISH TO MATCH EXISTING. INSTALL NEW CLOSER. PROVIDE INSECT SCREENS AND SECURITY SCREENS AT LOWER JALOUSIE WINDOWS
N	EXTERIOR	3'-0"x7'-0"	NO	MTL	STEEL	NO	EXISTING INTERIOR DOOR TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED

NOTES:

ALL EXISTING DOORS SHALL BE REFURBISHED. REFURBISHED MEANS REMOVAL OF DOORS FROM FRAME. PARCHING OF ALL HOLES AND DENTS AND OTHER DAMAGE W. EPOXY PATCHING COMPOUNDS, SANDING AND PAINTING OF ALL SURFACES

EXISTING LOCKSET TO REMAIN, REMOVE PAINT, DISASSEMBLE, CLEAN AND OIL. REINSTALL SALVAGED HARDWARE

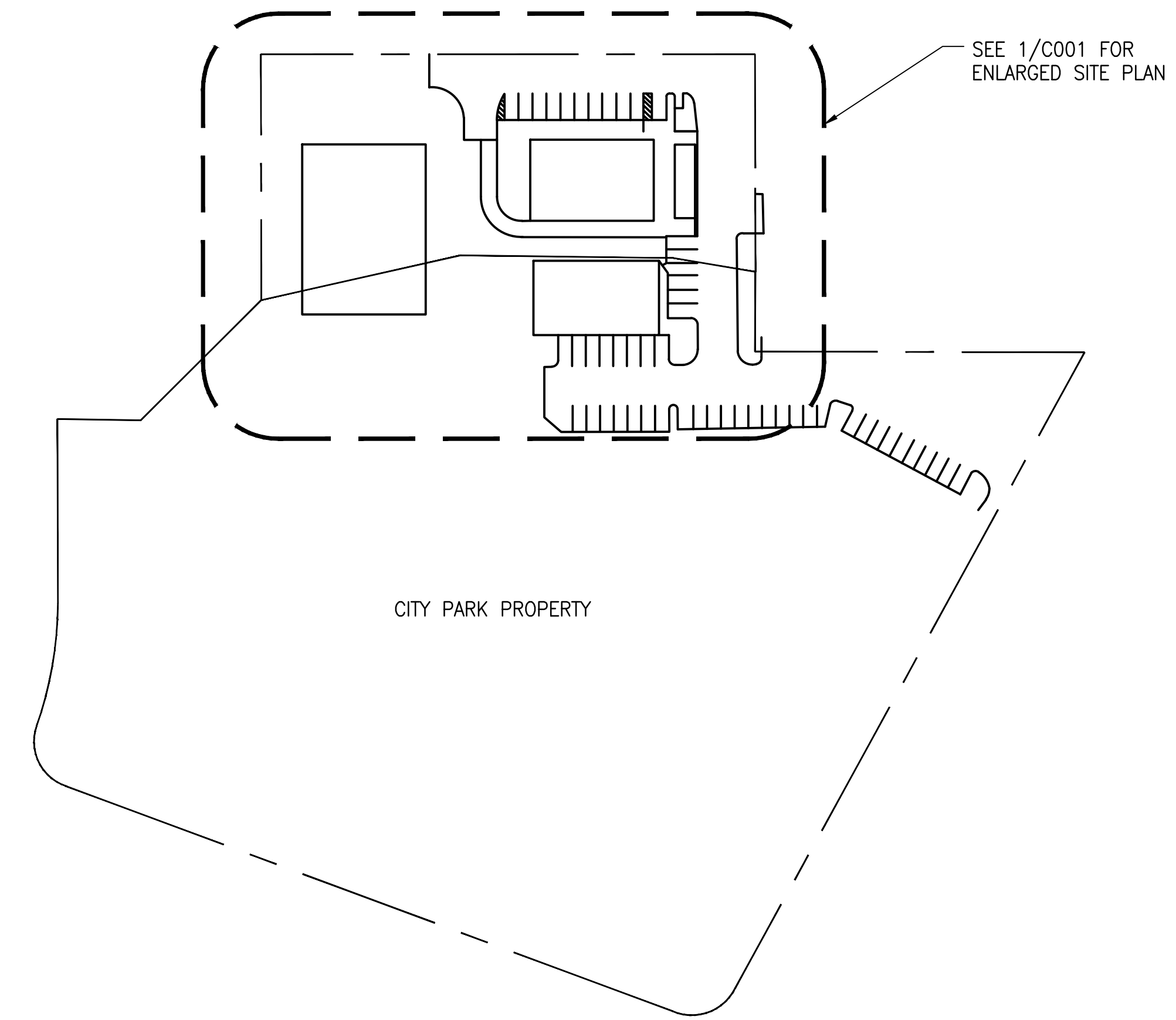
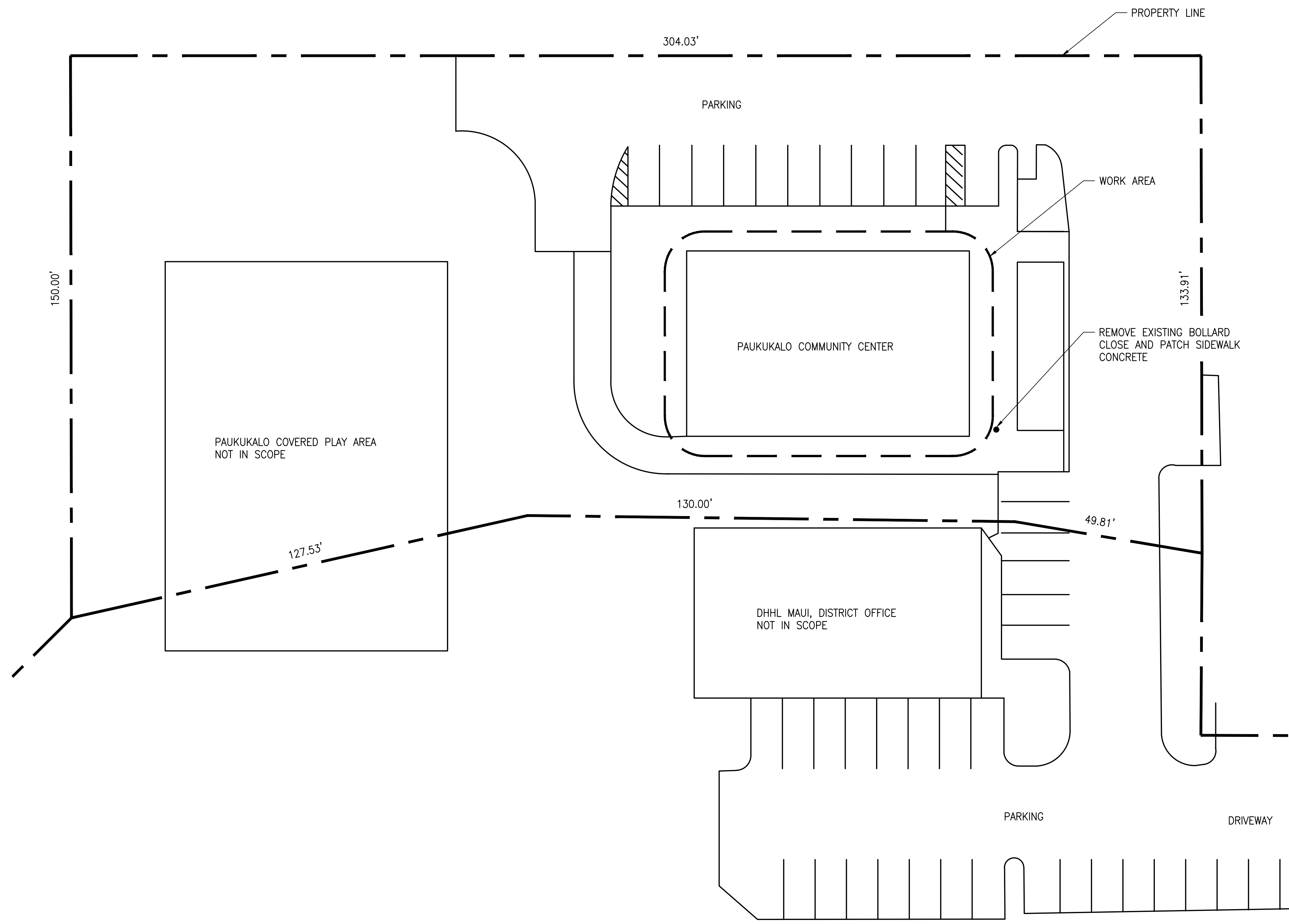
INSTALL NEW HARDWARE IN NEW DOORS SEE SCHEDULE FOR DOORS NEEDING ADA REQUIRED HARDWARE



APPROVED: _____ DATE _____

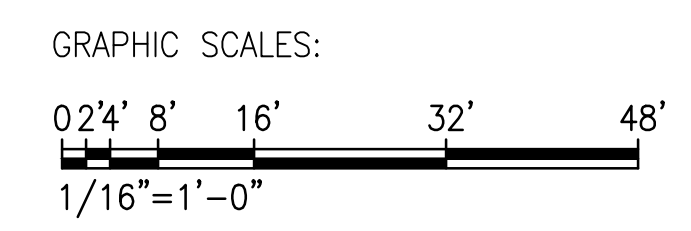
CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.		DATE	REVISIONS	BY
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087				
GENERAL NOTES				
DESIGNED BY: AD	DRAWN BY: RSG	CHECKED BY: -	SUPV: -	DATE: 04/18/2023
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION				JOB NO. 22-038 SHEET A002 3 OF 21 SHEETS



1 OVERALL SITE PLAN
A001 SCALE: NOT TO SCALE

1 ENLARGED SITE PLAN
A001 SCALE: 1/16" = 1'-0"

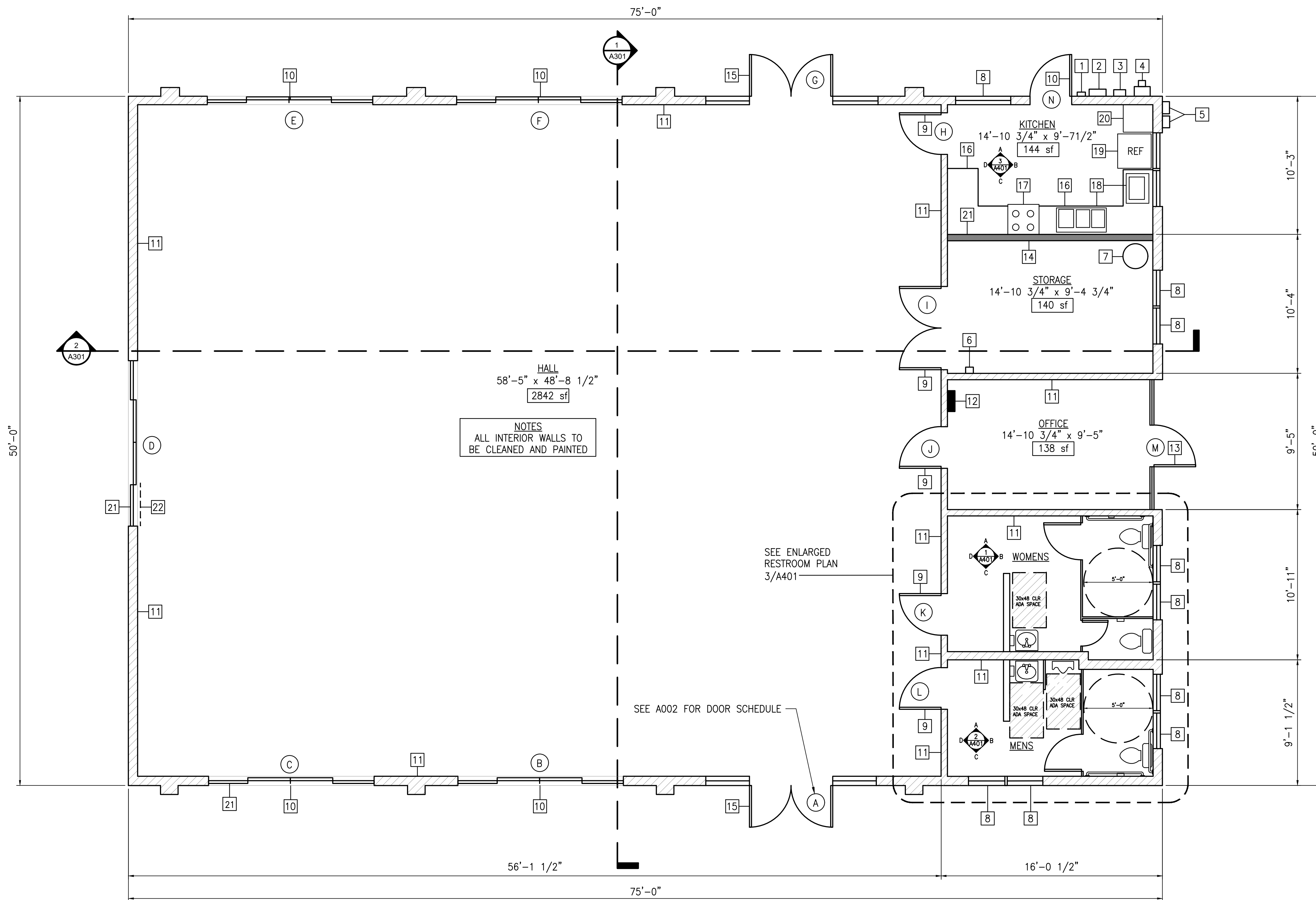


APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.	DATE	REVISIONS	BY

	DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087	
	ENLARGED SITE PLAN AND OVERALL SITE PLAN	
DESIGNED BY: AD DRAWN BY: RSG CHECKED BY: - SUPV: - DATE: 04/18/2023	 HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002	JOB NO.: 22-038 SHEET C001 4 OF 21 SHEETS



GENERAL NOTES

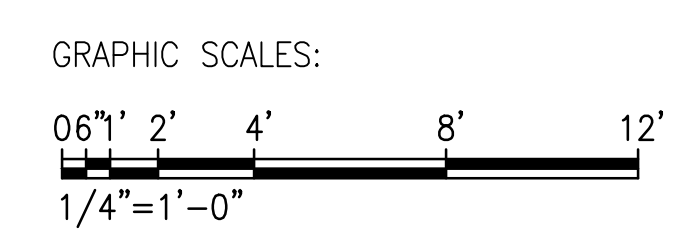
- 1- REPLACE CONDUIT STRAPS W/ SIMILAR OR EQUAL (2) PLACES
- 2- EXISTING MAIN DISCONNECT
- 3- REPLACE CONDUIT TO (E) PV SENSOR W/ SIMILAR OR EQUAL
- 4- (E) HECO METER #500012
- 5- REPLACE 2 METAL VENT HOODS IN WALL W/ SIMILAR OR EQUAL (2) PLACES FOR NEW VENT TO BATHROOMS
- 6- REPLACE FAN SWITCH W/ SIMILAR OR EQUAL (2) PLACES
- 7- REPLACE EXISTING WATER HEATER WITH SAME SIZE PROVIDE NEW WATER HEATER DRIP PAN WITH DRAIN TO OUTSIDE
- 8- (E) WINDOW TO REMAIN REPLACE ANY MISSING GLASS VANES IN EXISTING JALOUSIE WINDOW FRAME. CLEAN ALL OPERATING HINGES AND FRAMES. PROVIDE INSECT SCREEN. CLEAN ALL GLASS
- 9- EXISTING DOORS TO BE CLEANED. ALL CRACKS AND HOLES FILLED SANDED, PRIMED AND PAINTED. INSTALL NEW DOOR CLOSER AND HARDWARE. ALL DOOR FRAMES TO BE WIRE BRUSHED, CLEANED AND PAINTED
- 10- (E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
- 11- (E) CMU WALL
- 12- (E) MAIN ELECTRICAL PANEL TO REMAIN.
- 13- REPLACE EXISTING ALUMINUM STOREFRONT SYSTEM WITH NEW STOREFRONT AND HARDWARE. PROVIDE NEW SIDE LIGHTS WITH LOWER JALOUSIE WINDOWS AND METAL DOOR. FINISH TO MATCH EXISTING. INSTALL NEW CLOSER. PROVIDE INSECT SCREENS AND SECURITY SCREENS AT LOWER JALOUSIE WINDOWS
- 14- (E) WOOD FRAMED WALL
- 15- (E) SWING GLASS DOORS, SIDELIGHTS AND FRAME TO BE REPLACED. PROVIDE NEW HARDWARE, CLOSER AND EGRESS PUSHBAR
- 16- REPLACE EXISTING COUNTERTOP WITH NEW P-LAM COUNTERTOP
- 17- OPTION - REPLACE EXISTING RANGE W/ S.S. "LG" 6.3 CU FT SINGLE OVEN ELECTRIC RANGE MODEL# LREL6321S OR EQUAL
- 18- RE-USE EXISTING STAINLESS STEEL SINK IN NEW COUNTERTOP
- 19- OPTION - REPLACE EXISTING REFRIGERATOR W/ S.S. "LG" 30" 20 CU FT TOP FREEZER ENERGY STAR MODEL #LK65C OR EQUAL
- 20- REPLACE EXISTING FRP (FIBER REINFORCED PLASTIC) WALL WAINSCOT WITH NEW
- 21- REPLACE BROKEN GLASS WINDOW SIDELIGHT PANEL
- 22- REPLACE MISSING GLASS VANE IN EXISTING JALOUSIE WINDOW ABOVE
- 23- OPTION - REPLACE RANGE VENT HOOD W/ "BROAN-NUTONE" 30" CONVERTABLE S/S. MODEL #BCSQ130SS OR EQUAL

NOTES
ALL INTERIOR WALLS TO BE CLEANED AND PAINTED

SEE ENLARGED RESTROOM PLAN 3/A401

SEE A002 FOR DOOR SCHEDULE

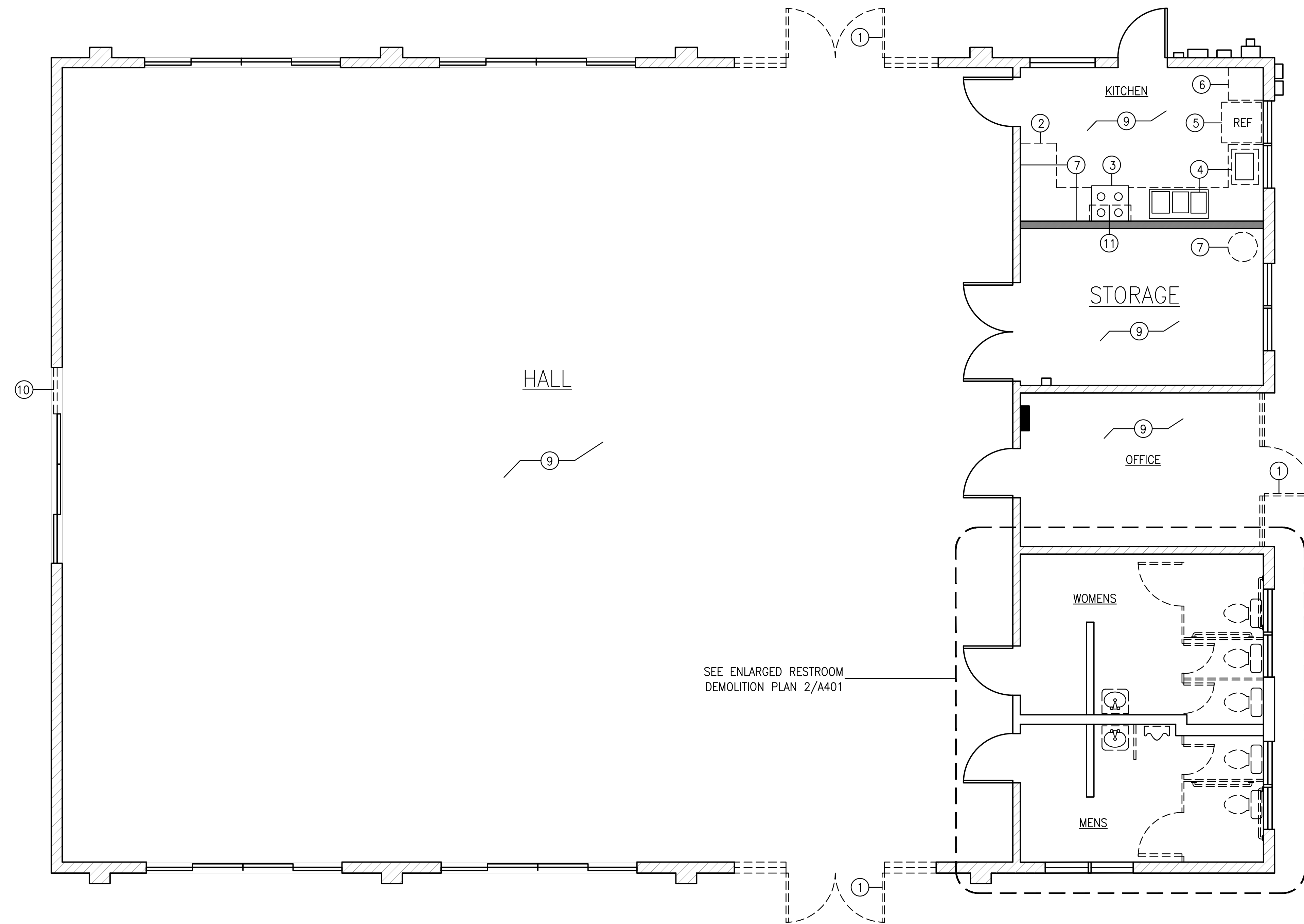
1 PROPOSED FLOOR PLAN
A001 SCALE: 1/4" = 1'-0"



APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.		DATE	REVISIONS	BY
5/10/23		BID REVISIONS		
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087 PROPOSED FLOOR PLAN				
		DESIGNED BY: AD DRAWN BY: RSG CHECKED BY: - DATE: 04/18/2023		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002		
JOB NO. 22-038		SHEET A101		
5 OF 21 SHEETS				

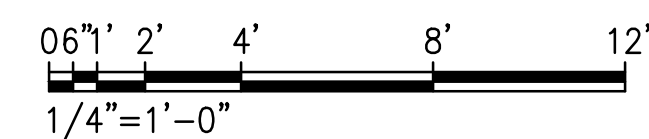


DEMOLITION PLAN NOTES:

- ① REMOVE (E) SWING GLASS DOORS, SIDELIGHTS AND FRAME
- ② REMOVE (E) PLAM COUNTER TOP
- ③ REMOVE (E) RANGE - OPTIONAL NOT IN CONTRACT
- ④ REMOVE (E) S.S. SINK AND RE-USE IN NEW S.S. COUNTERTOP
- ⑤ REMOVE (E) REFRIGERATOR - OPTIONAL NOT IN CONTRACT
- ⑥ REMOVE (E) CABINET
- ⑦ REMOVE (E) WATER HEATER
- ⑧ NOT USED ▲
- ⑨ REMOVE (E) T-BAR CEILING
- ⑩ REMOVE BROKEN GLASS AND FRAME
- ⑪ REMOVE EXISTING RANGE HOOD NOT IN CONTRACT

1 DEMOLITION FLOOR PLAN
A001 SCALE: 1/4" = 1'-0"

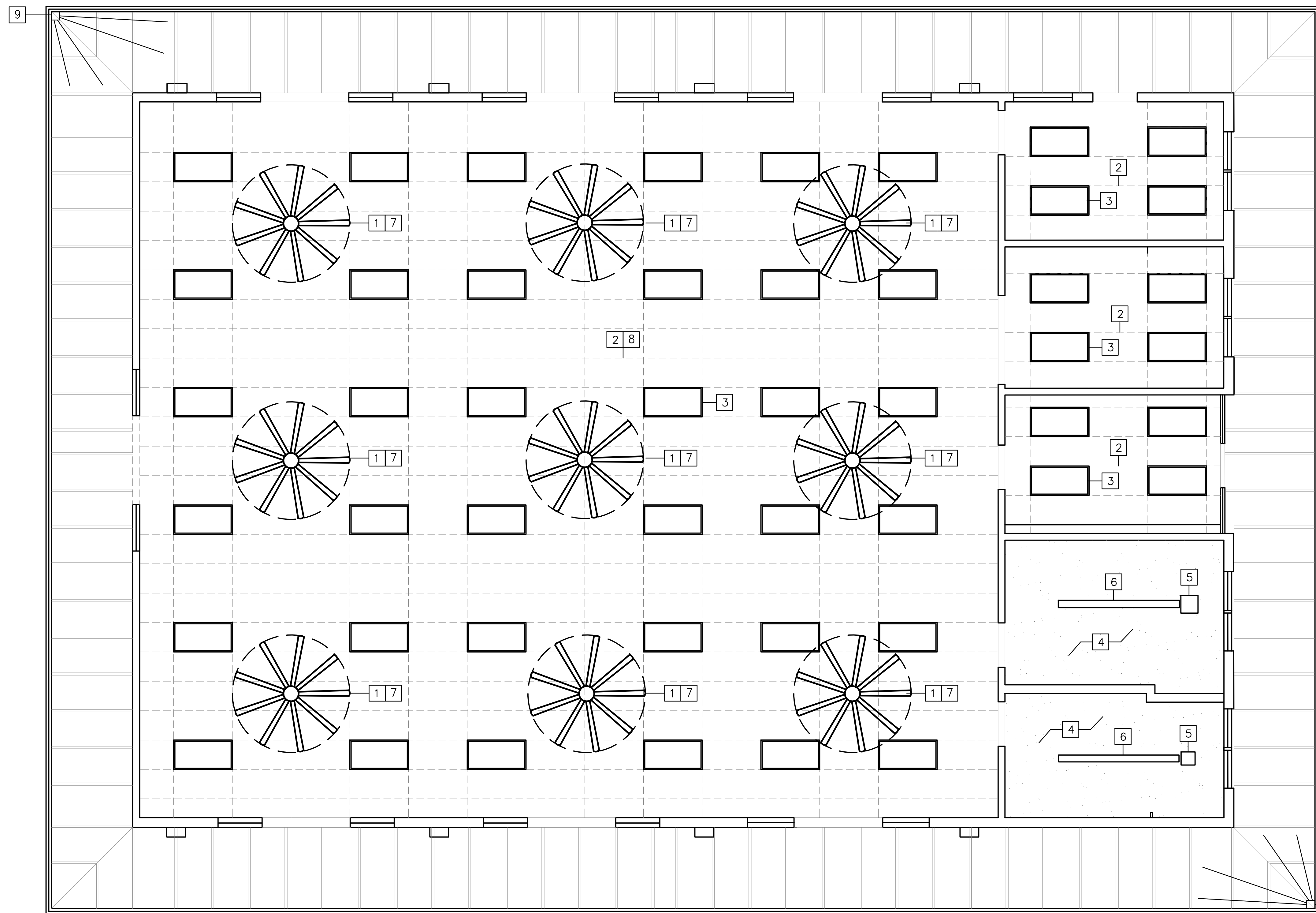
GRAPHIC SCALES:



APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.	DATE	REVISIONS	BY
▲	5/10/23	BID REVISIONS	
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087 DEMOLITION FLOOR PLAN			
DESIGNED BY:	AD	DRAWN BY:	RSG
CHECKED BY:	-	SUPV:	-
DATE:	04/18/2023	HAWAIIAN ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002	
LICENSED PROFESSIONAL ENGINEER No. 7808-S HAWAII, U.S.A. EXPIRATION DATE OF LICENSE: 04/30/24		JOB NO. 22-038 SHEET A102 6 OF 21 SHEETS	

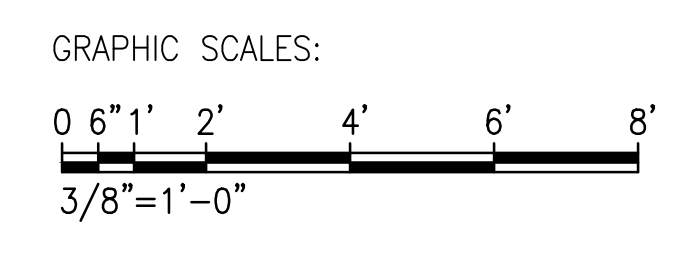


GENERAL NOTES:

- 1 REMOVE AND REPLACE (9) (E) CEILING FANS W/ NEW MINKA-AIR (F899L-DK) DISTRESSED KOA INTERIOR FANS. PROVIDE J-BOX FOR 50LB WEIGHT RATING
- 2 REMOVE AND REPLACE (E) 2X4 T-BAR GRID CEILING W/ NEW
- 3 REMOVE AND REPLACE (48) (E) 2X4 RECESSED FLUORESCENT FIXTURES IN ALL ROOMS W/ NEW 2X4 RECESSED LED FIXTURES EXCEPT BATH ROOMS
- 4 CLEAN AND PAINT EXISTING CEILING
- 5 ABANDONED EXHAUST FAN OPENING. SEE MECHANICAL DRAWINGS FOR NEW FAN. CONTRACTOR TO VERIFY CONDITION OF EXISTING DUCT WORK FOR CONTINUED USE
- 6 REMOVE AND REPLACE (E) 1X6 SURFACE MTD FLUORESCENT W/ NEW LED 1X6 FIXTURE
- 7 AS REQUIRED ADD FRAMING AT (E) BLOCKING TO ENSURE IT WILL SUPPORT WEIGHT OF NEW FAN
- 8 ADD R19 LAY IN INSULATION ABOVE NEW T-BAR CEILING AT ALL AREAS
- 9 PROVIDE (2) NEW WIRELESS EXTERIOR GRADE SECURITY CAMERAS AT EACH CORNER WITH 180° VIEW TO COVER (4) SIDES OF BUILDING W/ NIGHT VISION. (2) CAMERAS PER CORNER (4) TOTAL SWANN CORCAM BATTERY POWERED OUTDOOR SMART CAMERA WITH SOLAR PANEL AND MOUNTING STAND OR EQUIVALENT.

NOT IN CONTRACT

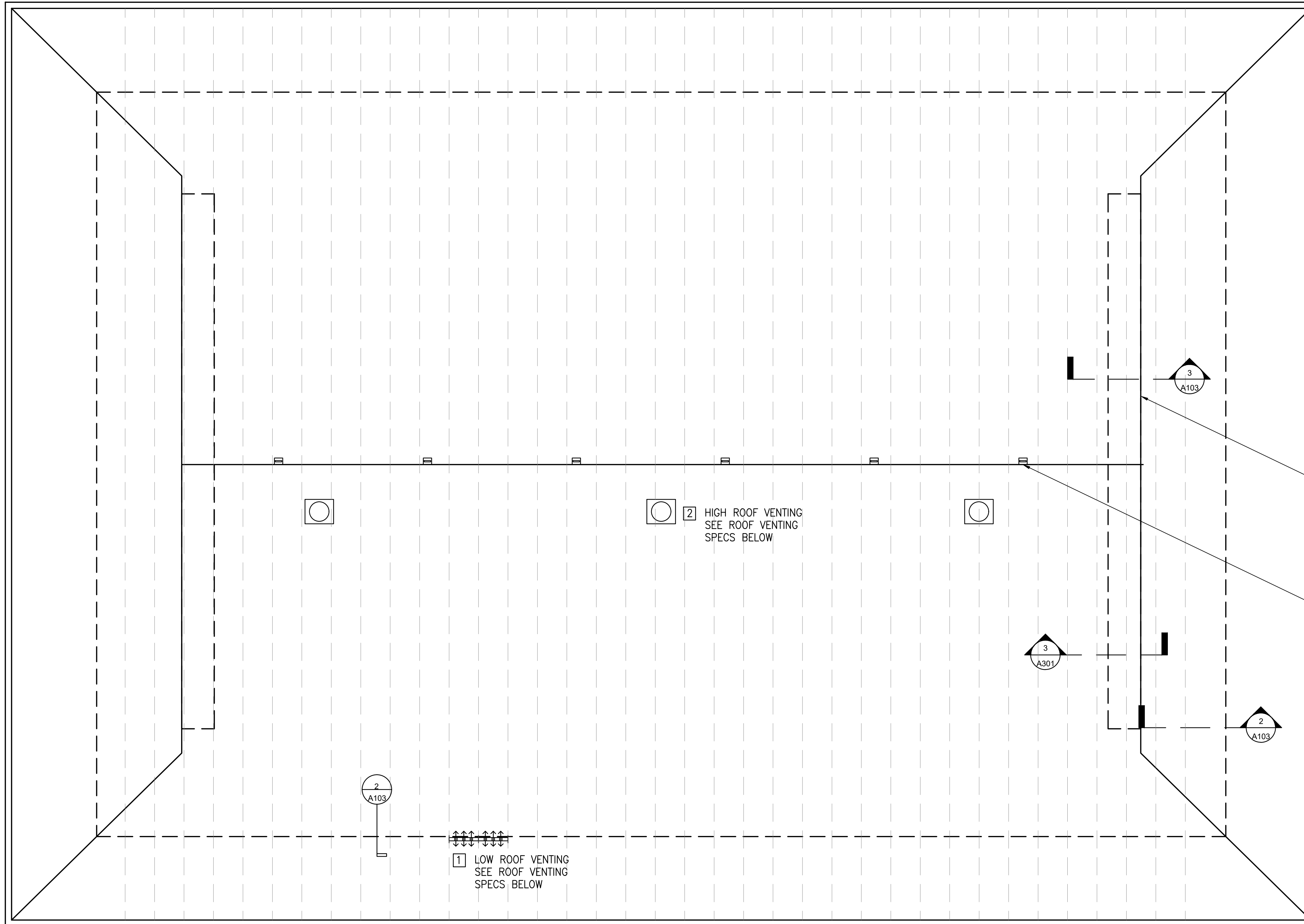
1 REFLECTED CEILING PLAN
A003 SCALE: 1/4" = 1'-0"



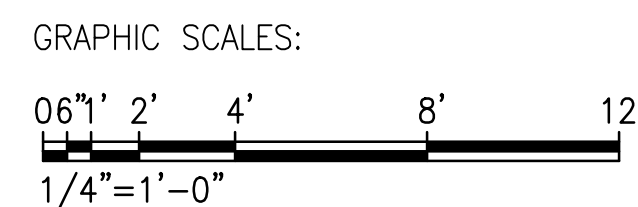
APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

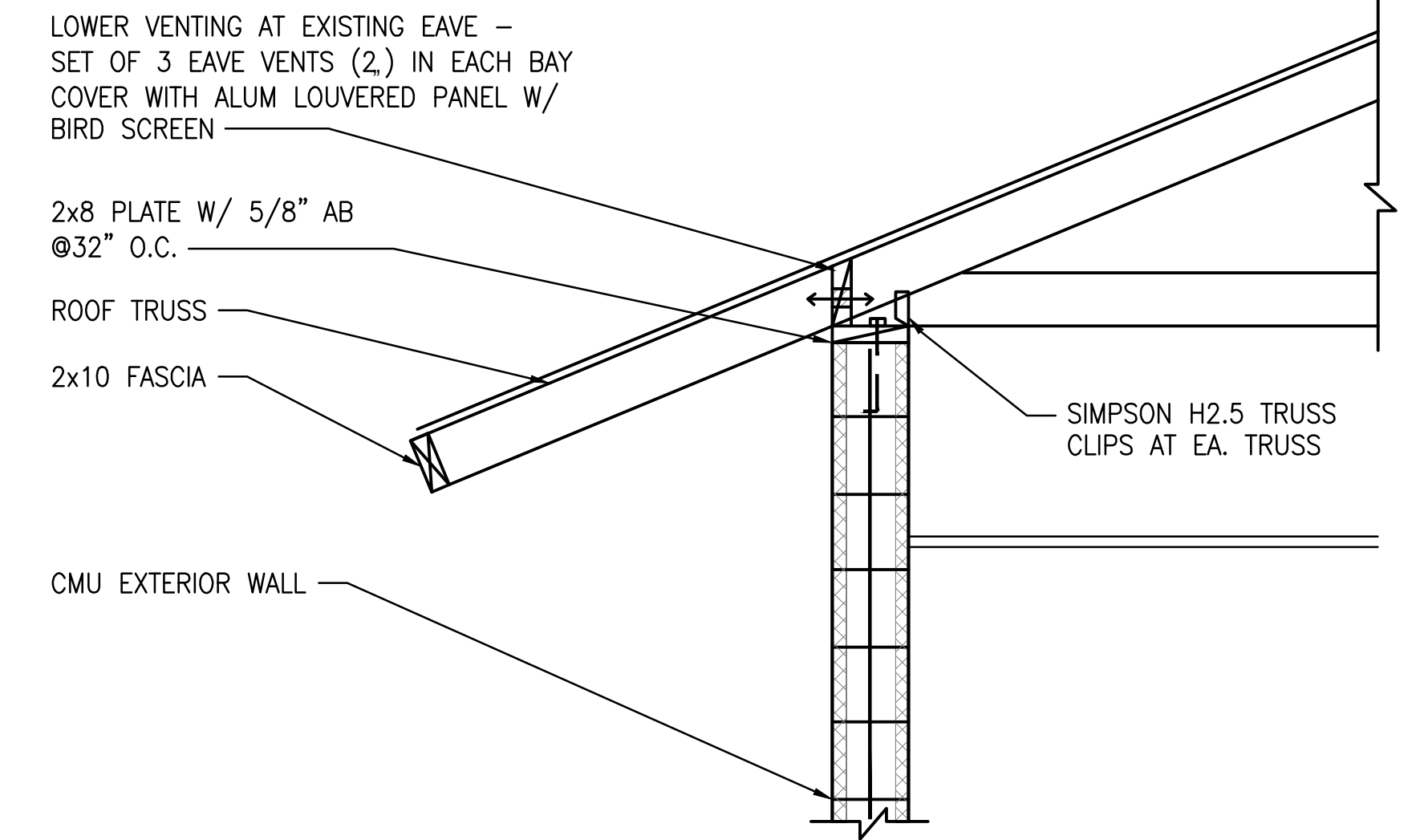
REVISION NO.	DATE	REVISIONS	BY
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087			
REFLECTED CEILING PLAN			
DESIGNED BY: AD	DRAWN BY: RSG		CHECKED BY: -
DATE: 04/18/2023	DATE: 04/18/2023		DATE: 04/18/2023
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION			HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002
JOB NO. 22-038			SHEET A103
7 OF 21 SHEETS			



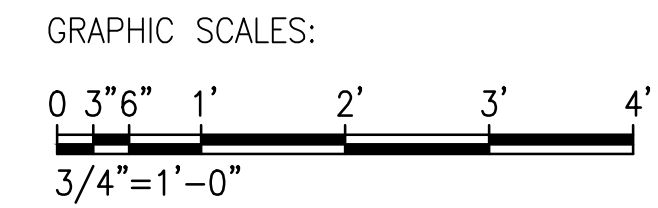
1 ROOF PLAN
 A003 SCALE: 1/4" = 1'-0"



ROOF VENTING CALCULATIONS	
ROOF SQUARE FOOTAGE -	3750
REQUIRED VENTING	1:300
REQUIRED VENTING HIGH	900 SQ INCHES
REQUIRED VENTING LOW	900 SQ INCHES
BUILDING IS 50'x75' AND A LITTLE MORE THAN 19,500 CU FT OF ATTIC SPACE	
1 LOWER VENTING	
SET OF (3) ROUND 2" VENT HOLES DRILLED INTO SOFFIT BLOCKING IN EACH BAY (94 BAYS) 855 SQ IN TOTAL. HOLES TO BE COVERED WITH APPROPRIATE BIRD/INSECT SCREEN	
2 UPPER VENTING	
(3) QUIET-COOL AFR SLR-40W SOLAR ATTIC VENT FANS (791 CFM EACH FAN) PROVIDING A TOTAL OF 2373 CFM	



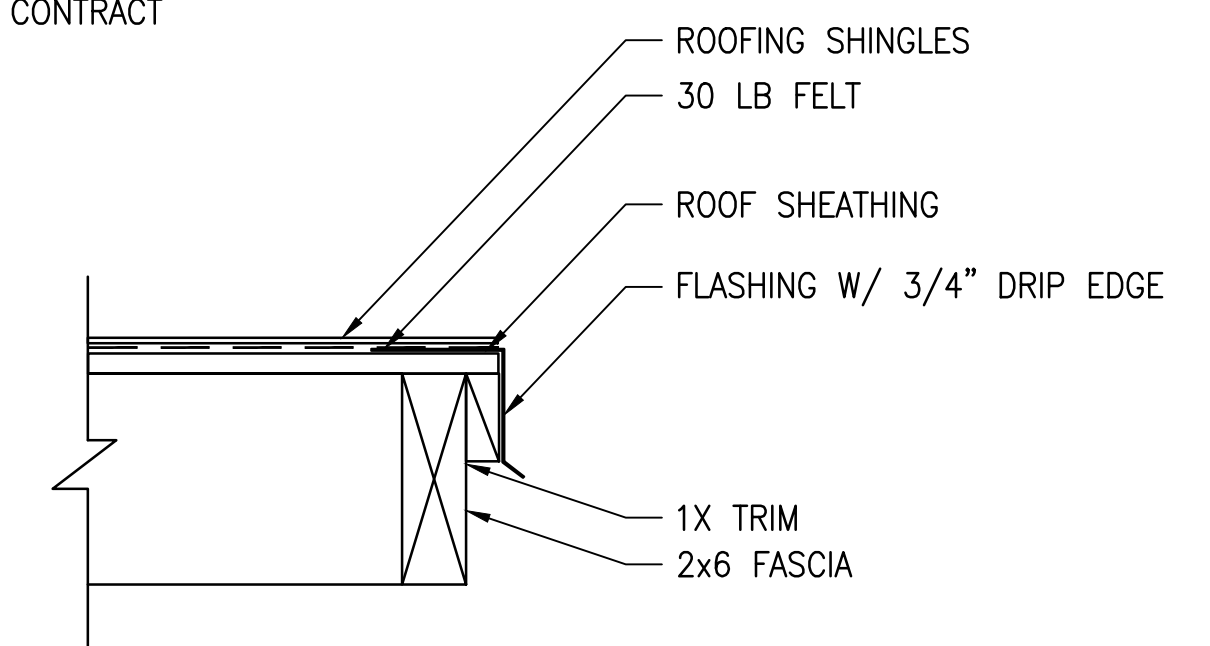
2 WALL / EVE SECTION
 A103 SCALE: 3/4" = 1'-0"



INSPECT FASCIA FOR DRY ROT AND REPAIR/REPLACE IF NECESSARY TYP. ALSO REPAIR ANY BROKEN/MISSING TRELLIS ON EXTERIOR OF LOUVERS

INSTALL RIDGE CLIP SAFETY FALL PROTECTION RINGS AT 10'-0" O.C. TYP (6) PLCS.

NOT IN CONTRACT



3 FLASHING AT EVE
 A103 SCALE: NONE

REPLACE EXISTING ASPHALT SHINGLES WITH NEW ARCH COMP SHINGLES - MATCH COLOR WITH EXISTING - PROVIDE NEW 30LB FELT UNDERLAYMENT. INSPECT (E) SHEATHING AND REPAIR OR REPLACE IF REQUIRED

NOT IN CONTRACT

REVISION NO.	DATE	REVISIONS	BY

APPROVED:

 CHIEF, CIVIL ENGINEERING BRANCH
 DEPARTMENT OF PLANNING AND PERMITTING

DATE _____

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS

657 KAUMUALI'I WAILUKU, MAUI, HAWAII

T.M.K.: (2) 3-3-005:087

ROOF PLAN

DESIGNED BY: AD

DRAWN BY: RSG

CHECKED BY: -

SUPV: -

DATE: 04/18/2023

EXPIRATION DATE OF LICENSE: 04/30/24

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

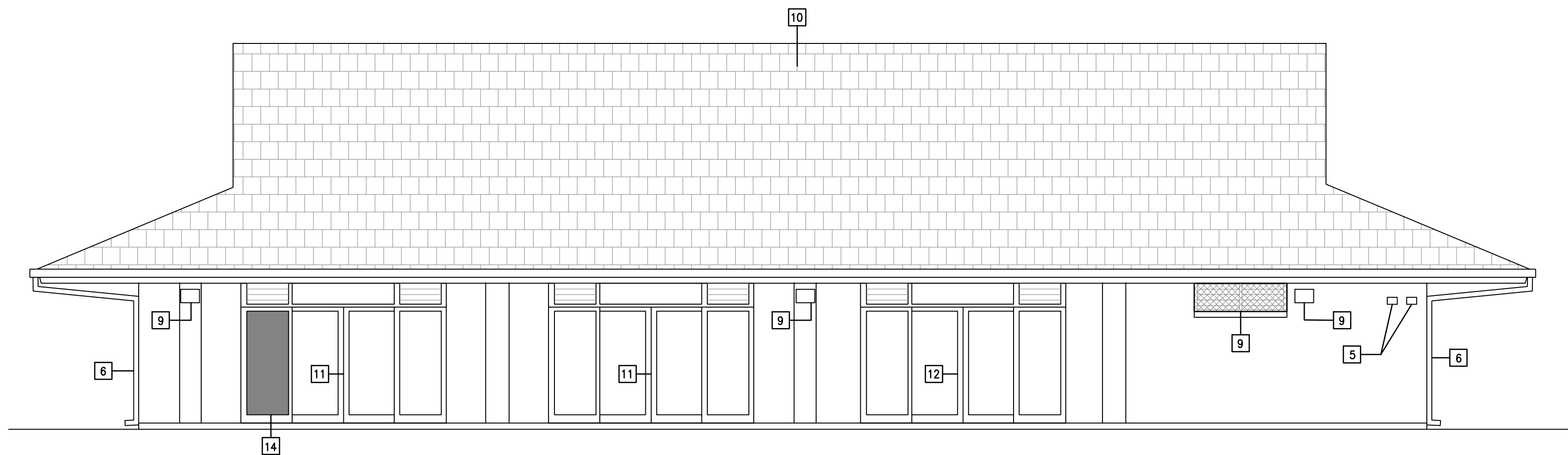
Ather R. D.P.
 LICENSED PROFESSIONAL ENGINEER
 No. 7808-S
 HAWAII, U.S.A.

HAWAII ENGINEERING GROUP, Inc.
 Civil & Structural Engineers
 1008 BISHOP STREET, 25TH FLOOR
 HONOLULU, HI 96813
 TEL: 808-533-2002

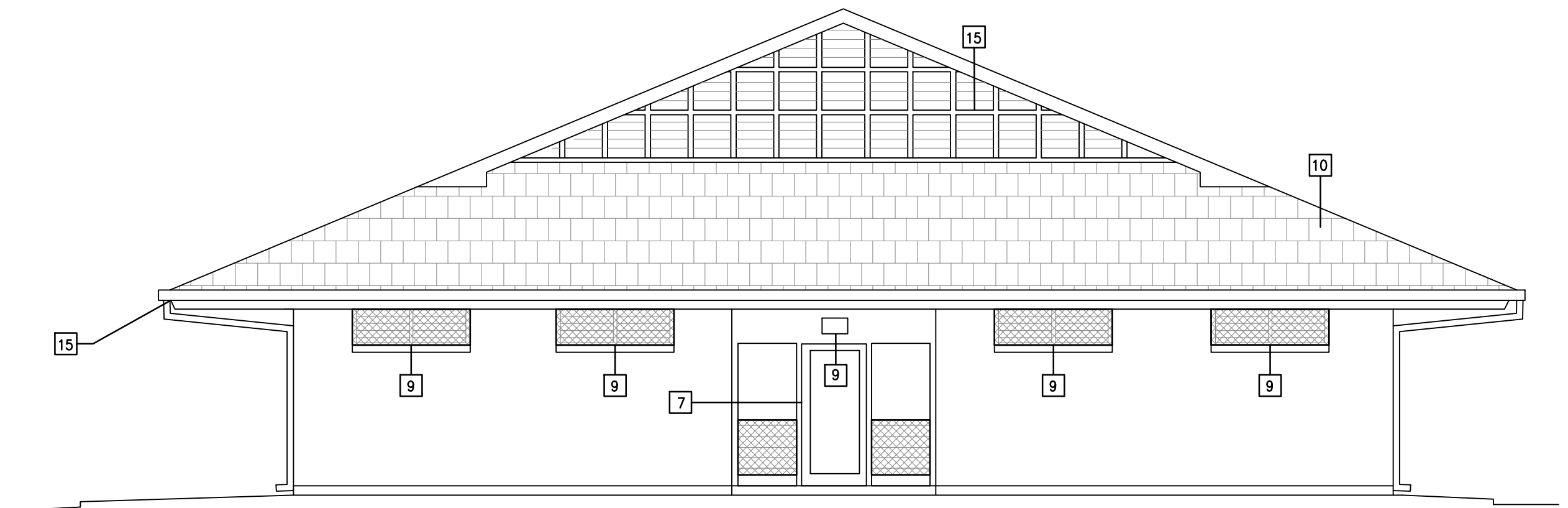
JOB NO. 22-038

A104

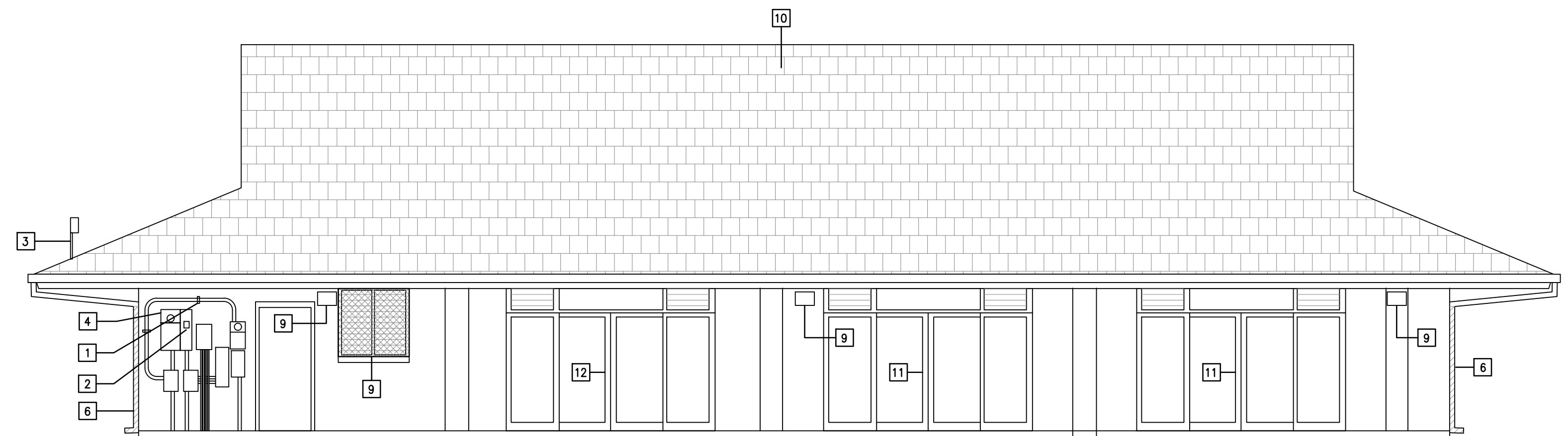
8 OF 21 SHEETS



1 SOUTH ELEVATIONS
A001 SCALE: 3/16" = 1'-0"



2 EAST ELEVATIONS
A001 SCALE: 3/16" = 1'-0"



3 NORTH ELEVATIONS
A001 SCALE: 3/16" = 1'-0"

EXTERIOR TO BE POWERWASHED AND CLEANED PRIOR TO PAINT NOT IN CONTRACT



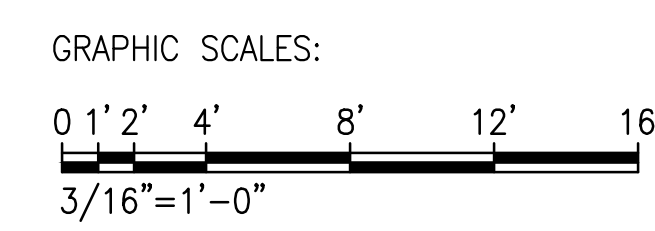
4 WEST ELEVATIONS
A001 SCALE: 3/16" = 1'-0"

GENERAL NOTES:

- 1 REPLACE CONDUIT STRAPS (2) PLACES
- 2 (E) MAIN DISCONNECT
- 3 REMOVE CONDUIT AND PV SENSOR
- 4 (E) HECO METER #500012
- 5 REPLACE 2 METAL VENT HOODS IN WALL W/ SIMILAR OR EQUAL (2) PLACES FOR NEW VENT TO BATHROOMS
- 6 REMOVE LOWER VERTICAL PORTION OF (E) METAL DOWNSPOUTS AT EACH CORNER AND REPLACE WITH (N) COPPER DOWNSPOUT. UPPER COPPER PIECES TO REMAIN
- 7 REPLACE EXISTING ALUMINUM STOREFRONT SYSTEM WITH NEW STOREFRONT AND HARDWARE. PROVIDE NEW SIDE LIGHTS WITH LOWER JALOUSIE WINDOWS AND METAL DOOR. FINISH TO MATCH EXISTING. INSTALL NEW CLOSER. PROVIDE INSECT SCREENS AND SECURITY SCREENS AT LOWER JALOUSIE WINDOWS
- 8 (E) WINDOW TO REMAIN REPLACE ANY MISSING GLASS VANES IN EXISTING JALOUSIE WINDOW FRAME. CLEAN ALL OPERATING HINGES AND FRAMES. PROVIDE INSECT SCREEN. CLEAN ALL GLASS
- 9 REPLACE EXTERIOR LIGHTS SEE ELECTRICAL DRAWINGS
- 10 REPLACE EXISTING ASPHALT SHINGLES WITH NEW ARCH COMP SHINGLES - MATCH COLOR WITH EXISTING - PROVIDE NEW SOLB FELT UNDERLAYMENT. INSPECT (E) SHEATHING AND REPAIR OR REPLACE IF REQUIRED
- 11 (E) SLIDING GLASS DOORS, FRAMES AND TRACKS TO BE CLEANED. REPLACE HARDWARE AND DOOR ROLLERS MAKE SURE SMOOTH OPERATION
- 12 (E) SWING GLASS DOORS, SIDELIGHTS AND FRAME TO BE REPLACED. PROVIDE NEW HARDWARE, CLOSER AND EGRESS PUSH BAR
- 13 REPLACE MISSING GLASS VANE IN EXISTING JALOUSIE WINDOW
- 14 REPLACE BROKEN GLASS WINDOW SIDELIGHT
- 15 INSPECT FASCIA FOR DRY ROT AND REPAIR/REPLACE IF NECESSARY TYP. ALSO REPAIR ANY BROKEN/MISSING TRELLIS ON EXTERIOR OF LOUVERS
- 16 PROVIDE (2) NEW WIRELESS EXTERIOR GRADE SECURITY CAMERAS AT EACH CORNER WITH 180° VIEW TO COVER (4) SIDES OF BUILDING W/ NIGHT VISION. (2) CAMERAS PER CORNER (4) TOTAL SWANN CORCAM BATTERY POWERED OUTDOOR SMART CAMERA WITH SOLAR PANEL AND MOUNTING STAND OR EQUIVILANT.

NOT IN CONTRACT

NOT IN CONTRACT



APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH DEPARTMENT OF PLANNING AND PERMITTING DATE

REVISION NO.	DATE	REVISIONS	BY
1	5/10/23	BID REVISIONS	

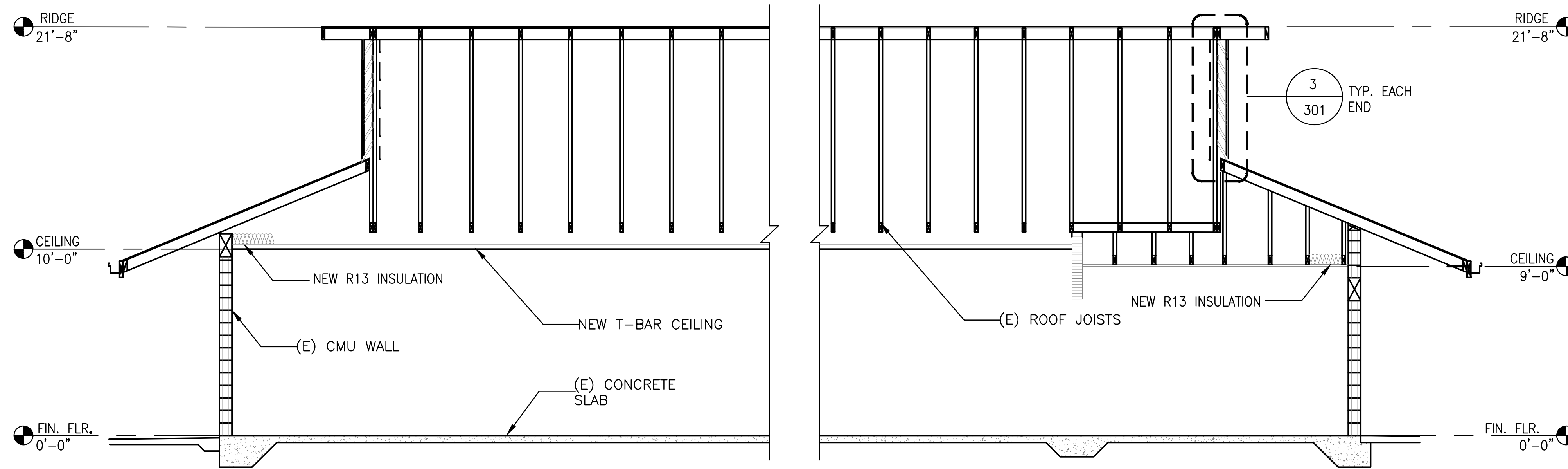
DEPARTMENT OF HAWAIIAN HOME LANDS
PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
657 KAUMUALI'I WAILUKU, MAUI, HAWAII
T.M.K.: (2) 3-3-005:087

EXTERIOR ELEVATIONS

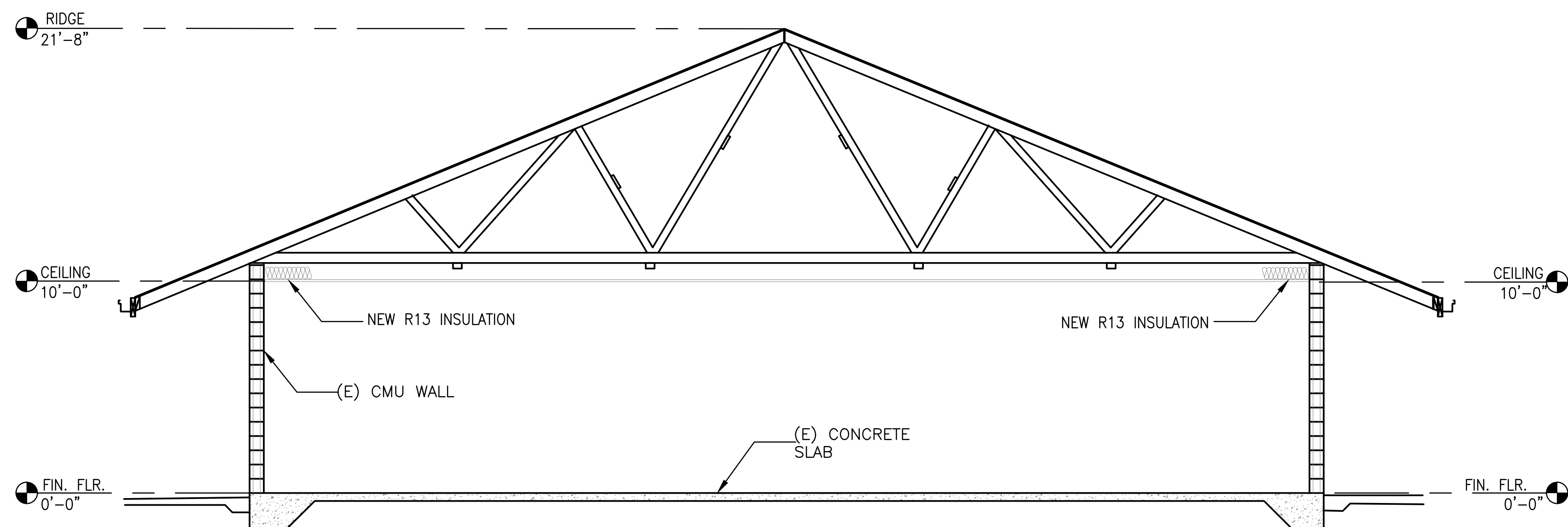
DESIGNED BY: AD
DRAWN BY: RSG
CHECKED BY: -
DATE: 04/18/2023

HAWAII ENGINEERING GROUP, Inc.
Civil & Structural Engineers
1008 BISHOP STREET, SUITE 2050
HONOLULU, HI 96813
TEL: 808-533-2002

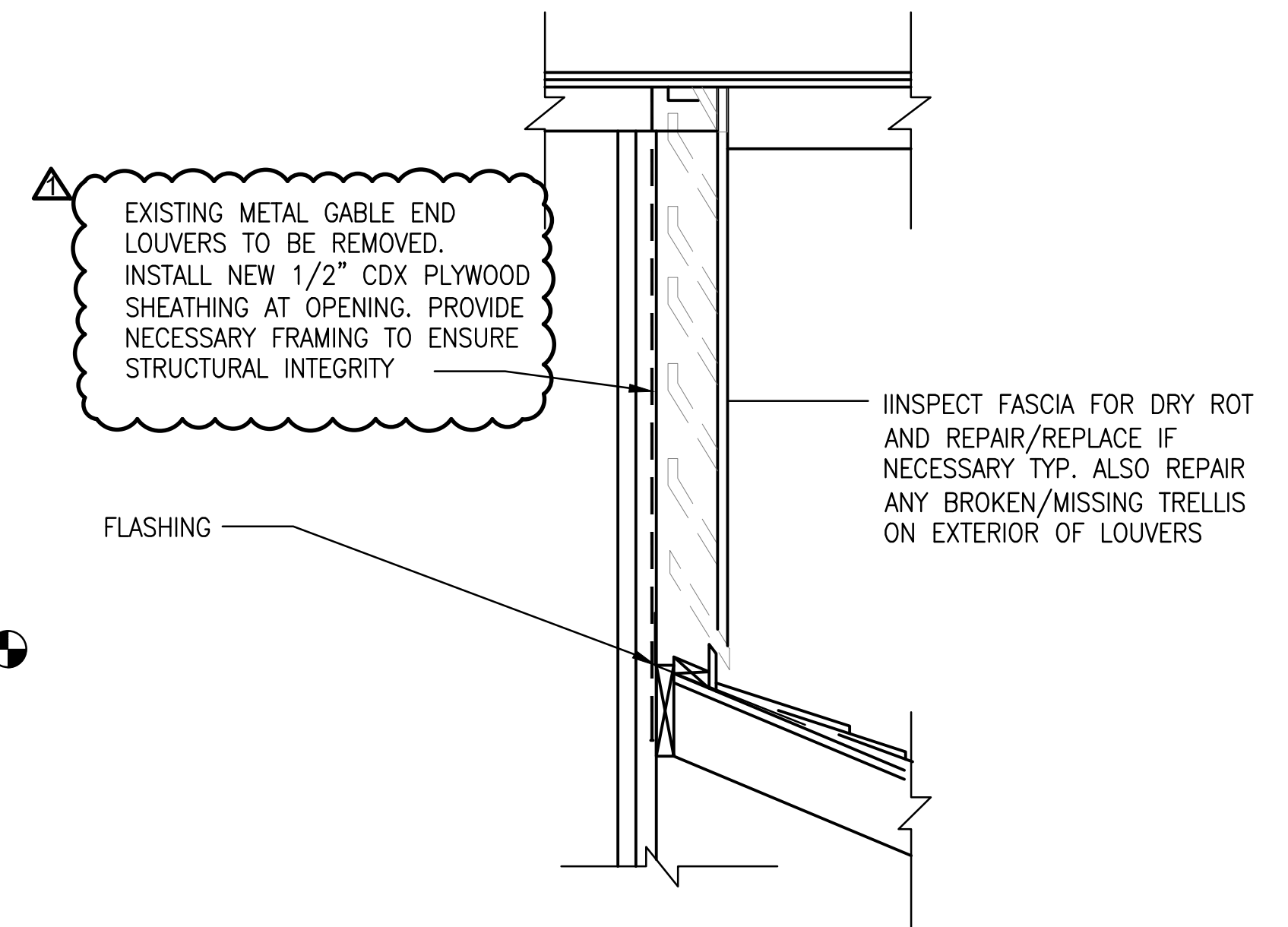
JOB NO. 22-038
SHEET A201
9 OF 21 SHEETS



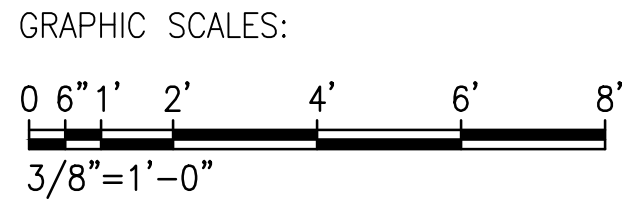
1 BUILDING SECTIONS
A301 SCALE: 1/4" = 1'-0"



1 BUILDING SECTIONS
A301 SCALE: 1/4" = 1'-0"

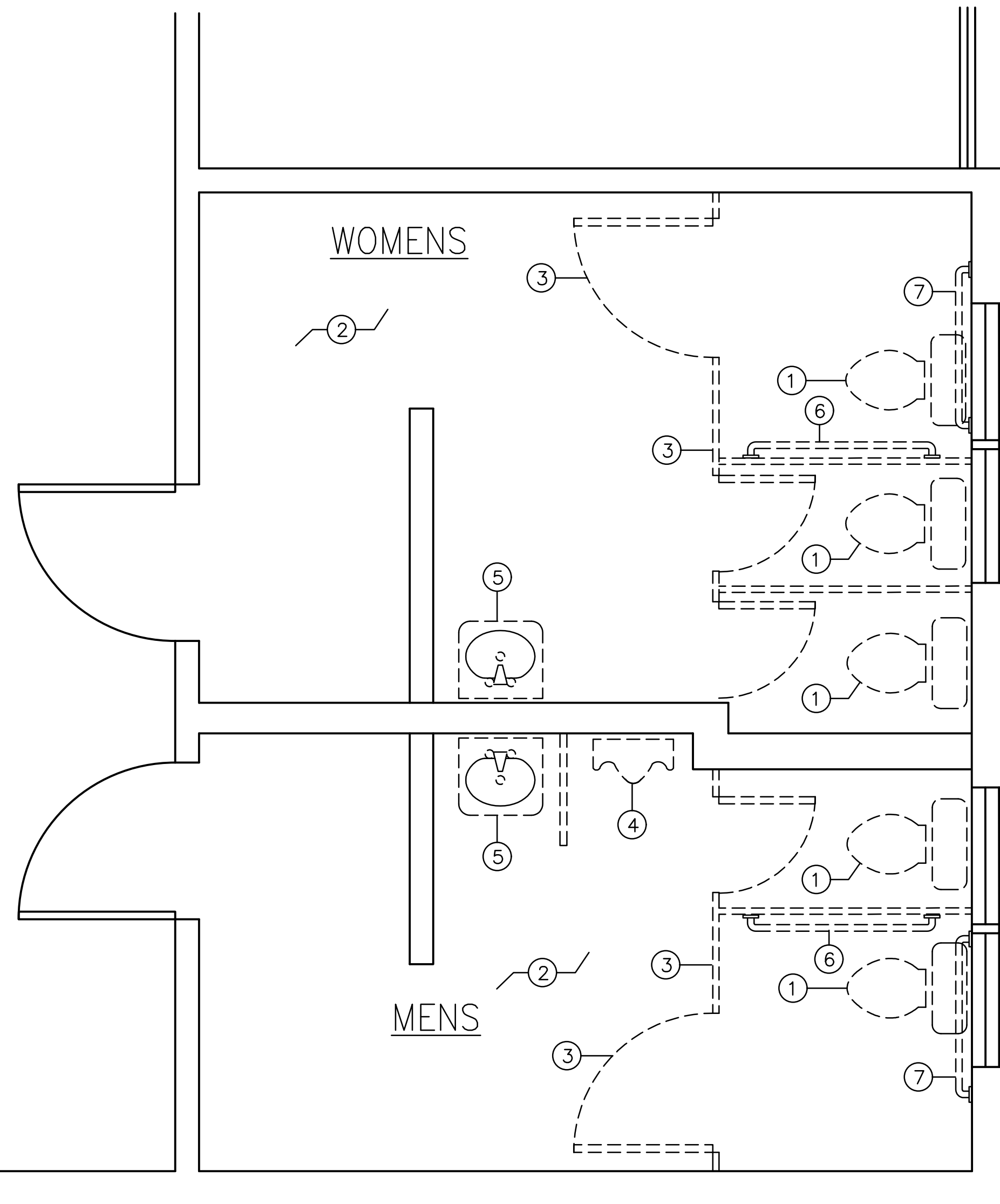


3 GABLE LOUVERED VENT
A301 SCALE: NO SCALE

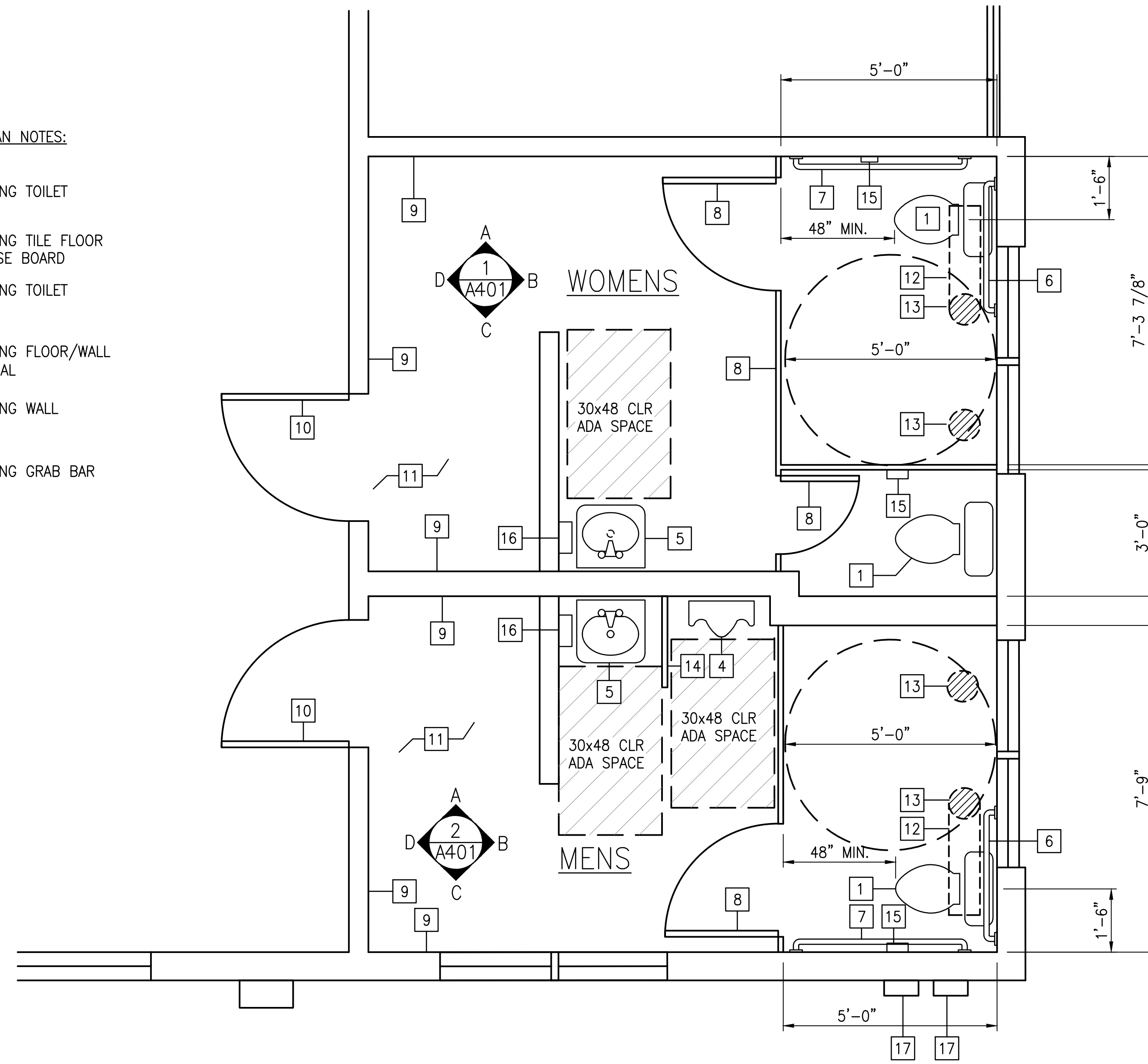


APPROVED: _____
CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.		DATE	REVISIONS	BY
5/10/23		BID REVISIONS		
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087				
BUILDING SECTIONS				
		DESIGNED BY: AD DRAWN BY: RSG CHECKED BY: - DATE: 04/18/2023		JOB NO.: 22-038 SHEET A301 10 OF 21 SHEETS
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION				
HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002				



- DEMOLITION PLAN NOTES:**
- ① REMOVE EXISTING TOILET
 - ② REMOVE EXISTING TILE FLOOR AND VINYL BASE BOARD
 - ③ REMOVE EXISTING TOILET PARTITIONS
 - ④ REMOVE EXISTING FLOOR/WALL MOUNTED URINAL
 - ⑤ REMOVE EXISTING WALL MOUNTED SINK
 - ⑥ REMOVE EXISTING GRAB BAR

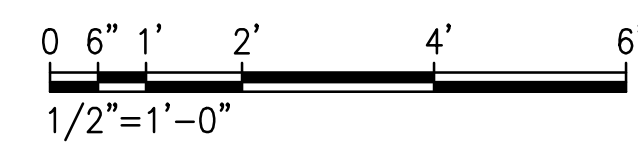


- FLOOR PLAN NOTES:**
- ① NEW TOILET
 - ② NEW VINYL BASE BOARD
 - ③ NEW TOILET PARTITIONS
 - ④ NEW WALL MOUNTED URINAL REPAIR WALL FROM DEMOLITION
 - ⑤ NEW WALL MOUNTED SINK
 - ⑥ NEW 36" GRAB BAR PROVIDE BLOCKING IF REQUIRED
 - ⑦ NEW 42" GRAB BAR PROVIDE BLOCKING IF REQUIRED
 - ⑧ NEW PARTITION DOOR
 - ⑨ PREP AND PAINT WALLS AND CEILINGS
 - ⑩ (E) DOOR AND FRAME TO BE CLEANED. HOLES AND CRACKS FILLED, SANDED PRIMED AND PAINTED
 - ⑪ NEW TILE FLOOR. MATCH EXISTING SIZE AND COLOR AS CLOSE AS POSSIBLE. TILES TO BE SLIP RESISTANT TO COMPLY WITH CURRENT BUILDING CODE
 - ⑫ SAW CUT CONCRETE FLOOR AND TIE INTO EXISTING TOILET DRAIN
 - ⑬ ABANDON CAP AND SEAL UP EXISTING TOILET DRAIN
 - ⑭ NEW URINAL PARTITION
 - ⑮ NEW TOILET PAPER DISPENSER
 - ⑯ HAND BLOW DRYER
 - ⑰ REPLACE VENT HOODS - VERIFY IF THESE ARE FOR BATHROOM VENTILATION

NOTE:
SEE MECHANICAL SHEETS FOR SPECIFICATIONS AND LAYOUT

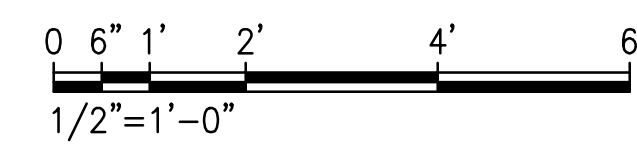
2 BATHROOM DEMOLITION PLAN
A401 SCALE: 1/2" = 1'-0"

GRAPHIC SCALES:



3 PROPOSED BATHROOM PLAN
A401 SCALE: 1/2" = 1'-0"

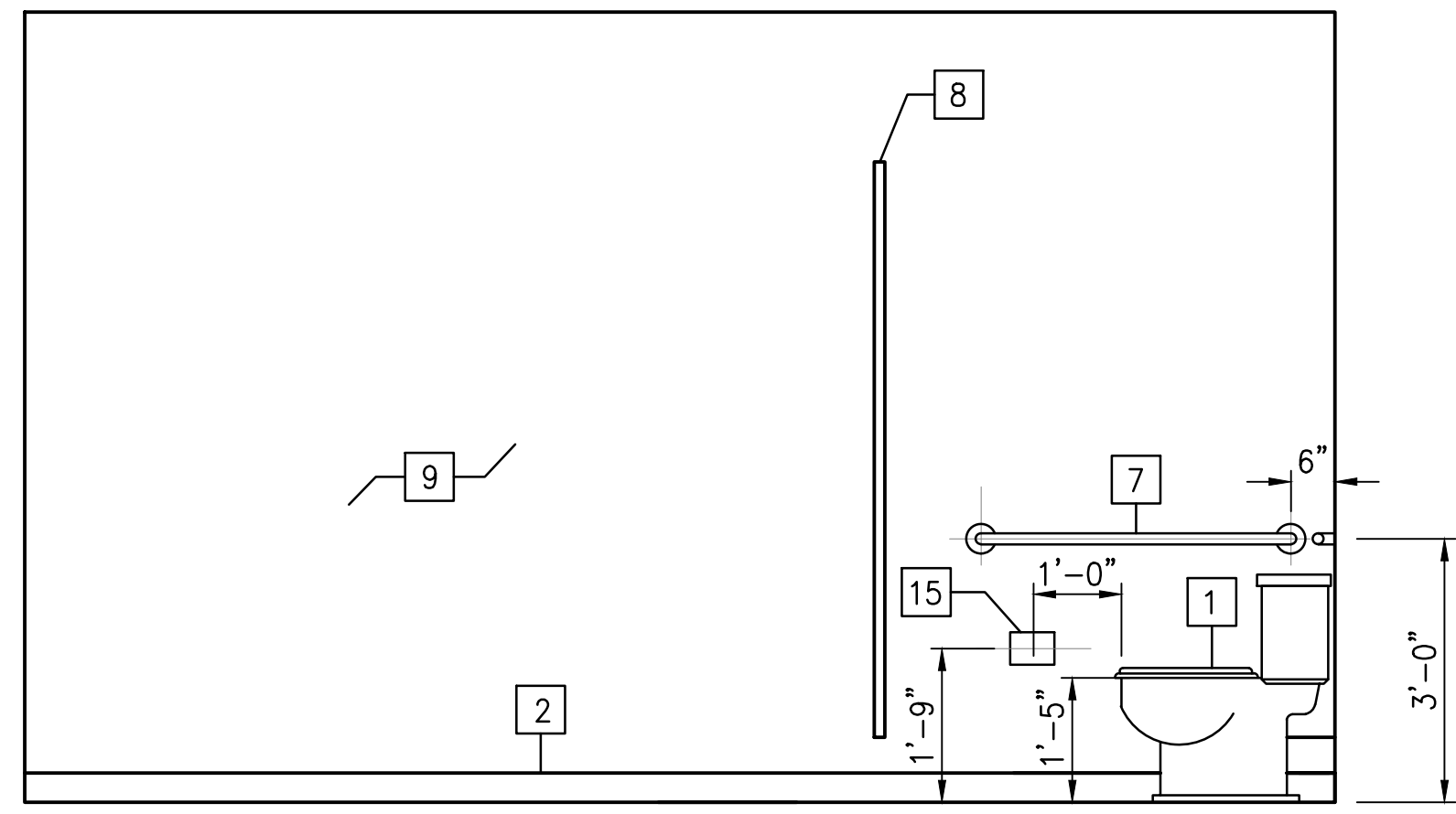
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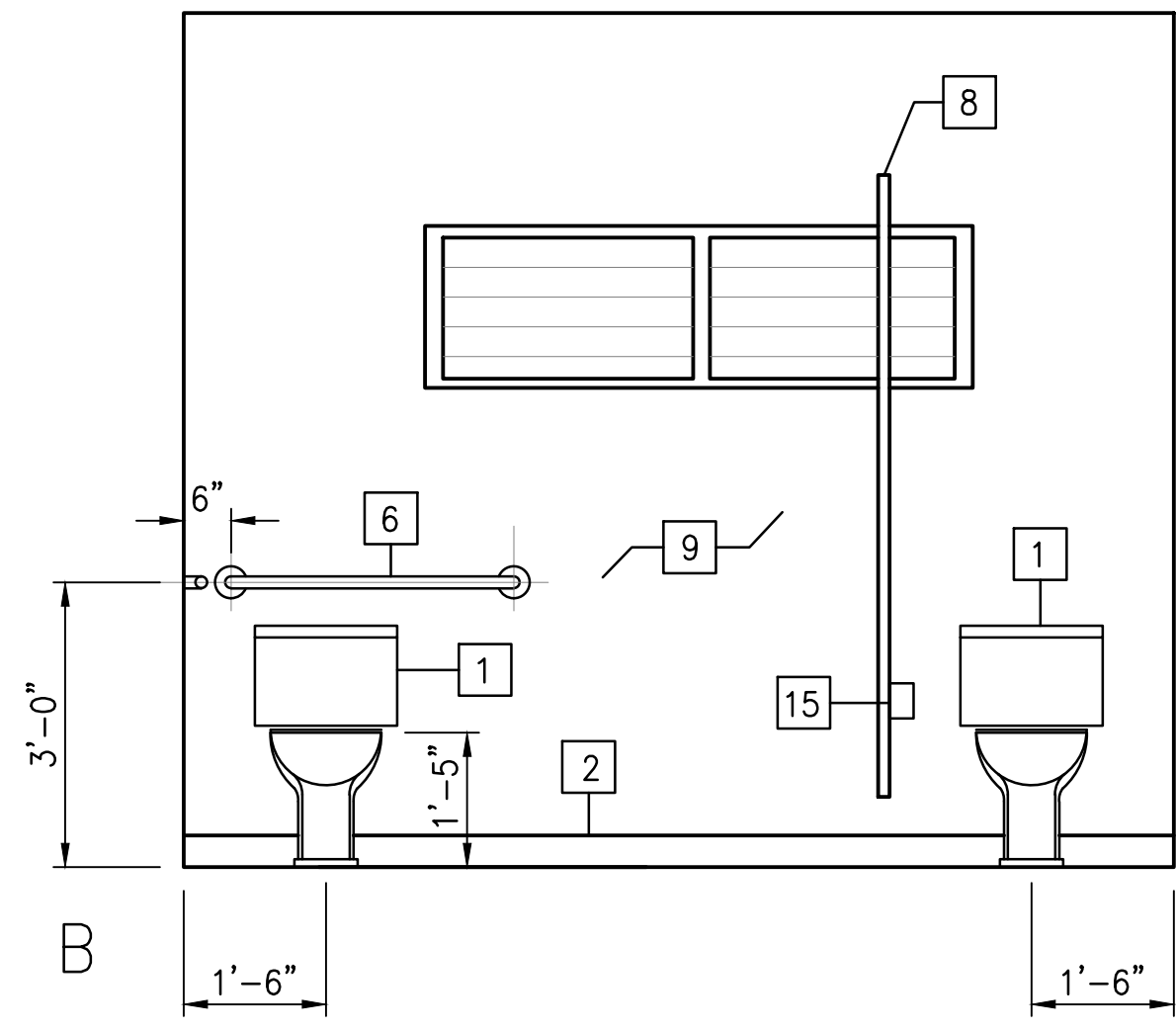
APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

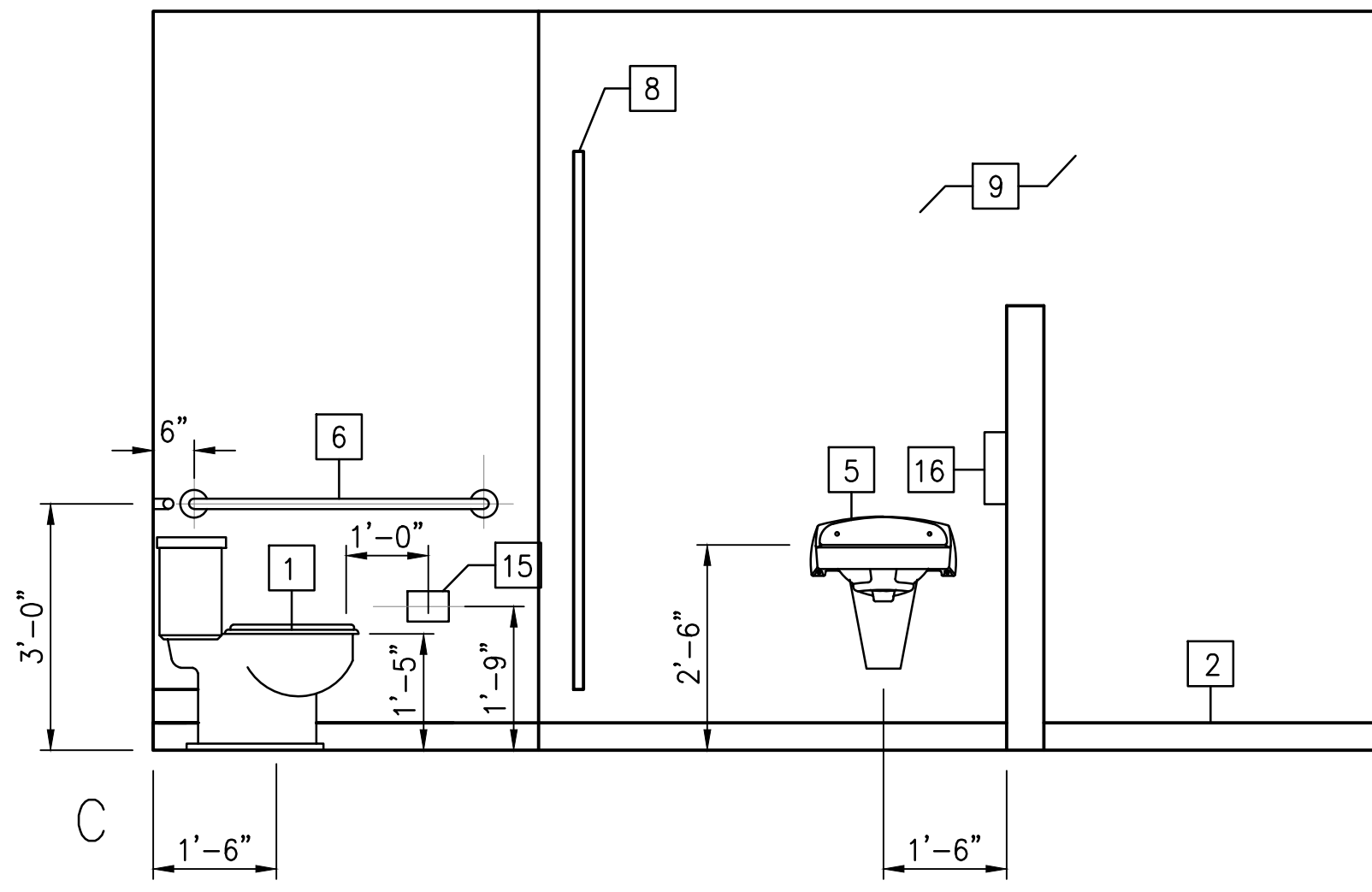
REVISION NO.		DATE	REVISIONS	BY
5/10/23		BID REVISIONS		
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087				
ENLARGED PLANS				
DESIGNED BY:	AD	JOB NO.		22-038
DRAWN BY:	RSG	HAWAII ENGINEERING GROUP, Inc.		
CHECKED BY:	-	Civil & Structural Engineers		
SUPV:	-	1008 BISHOP STREET, 2ND FLOOR HONOLULU, HI 96813 TEL: 808-533-2002		
DATE:	04/18/2023	SHEET		A401
		11 OF 21 SHEETS		



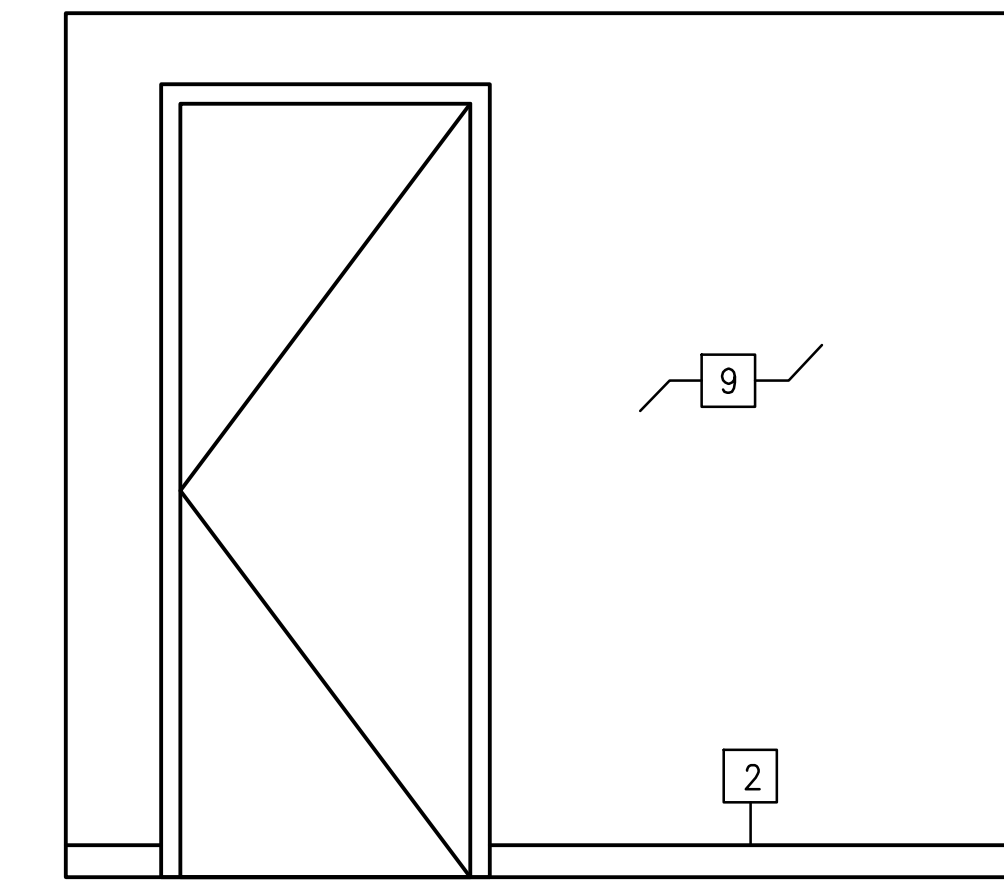
A
WOMENS RESTROOM



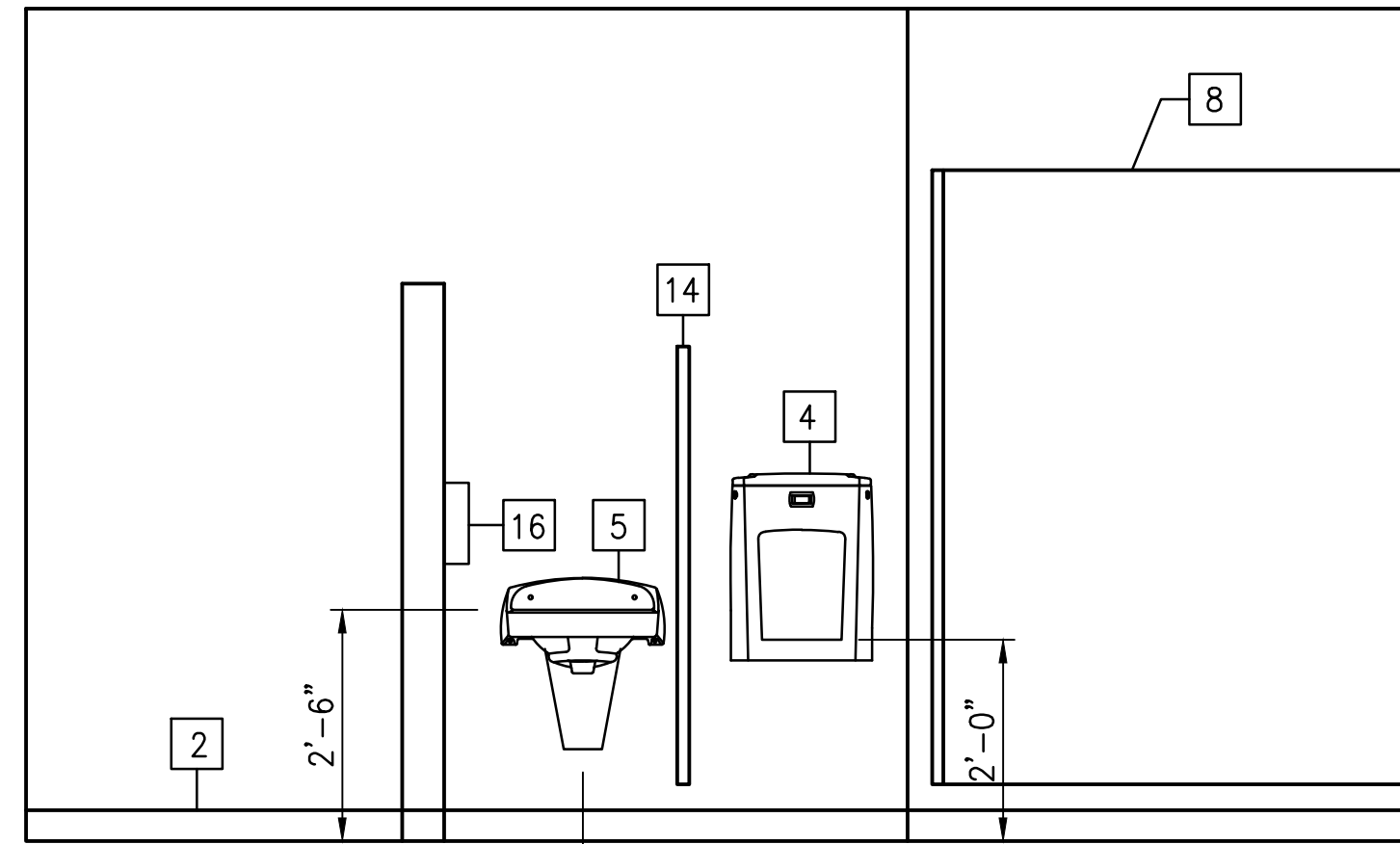
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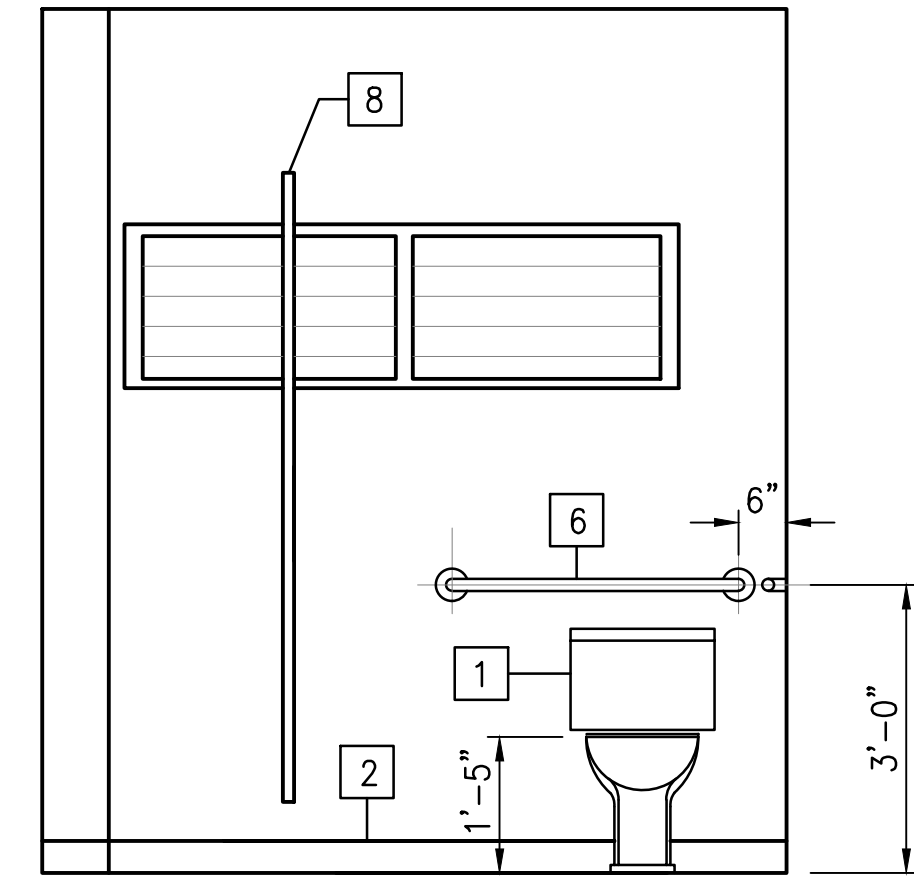
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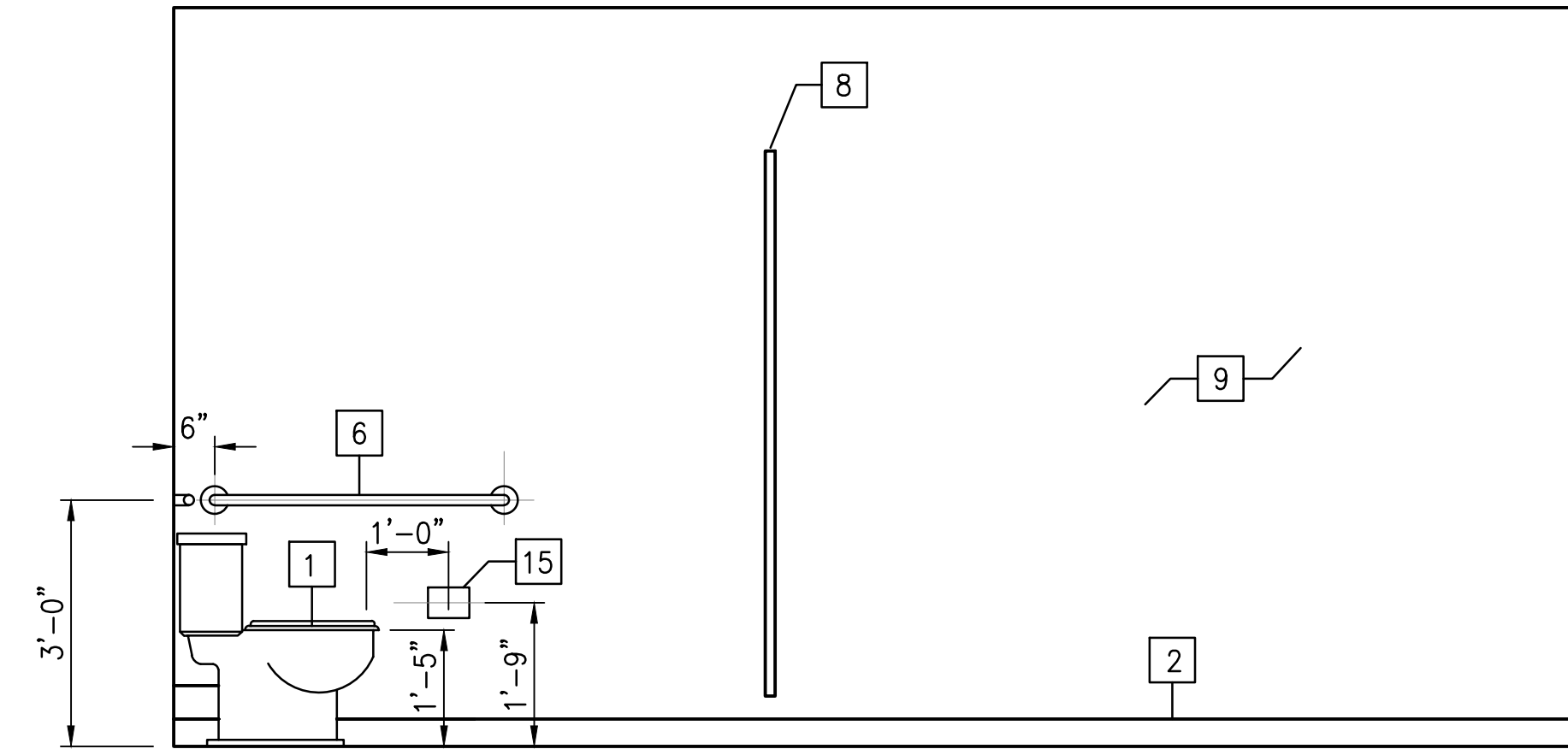
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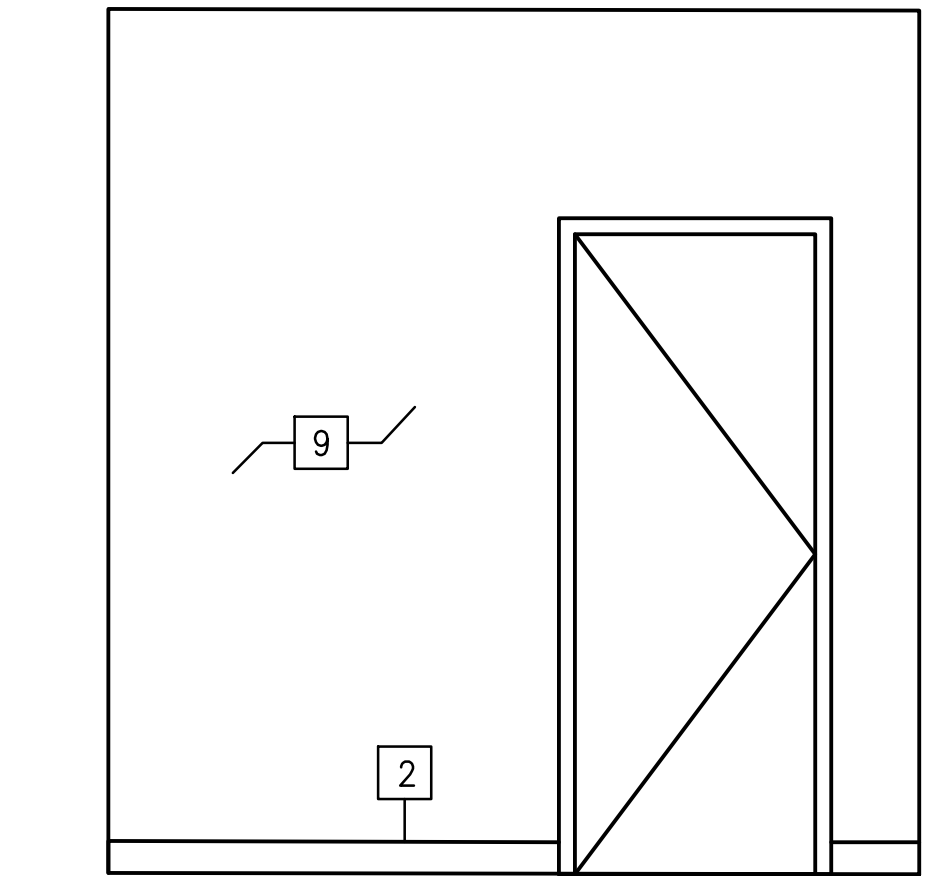
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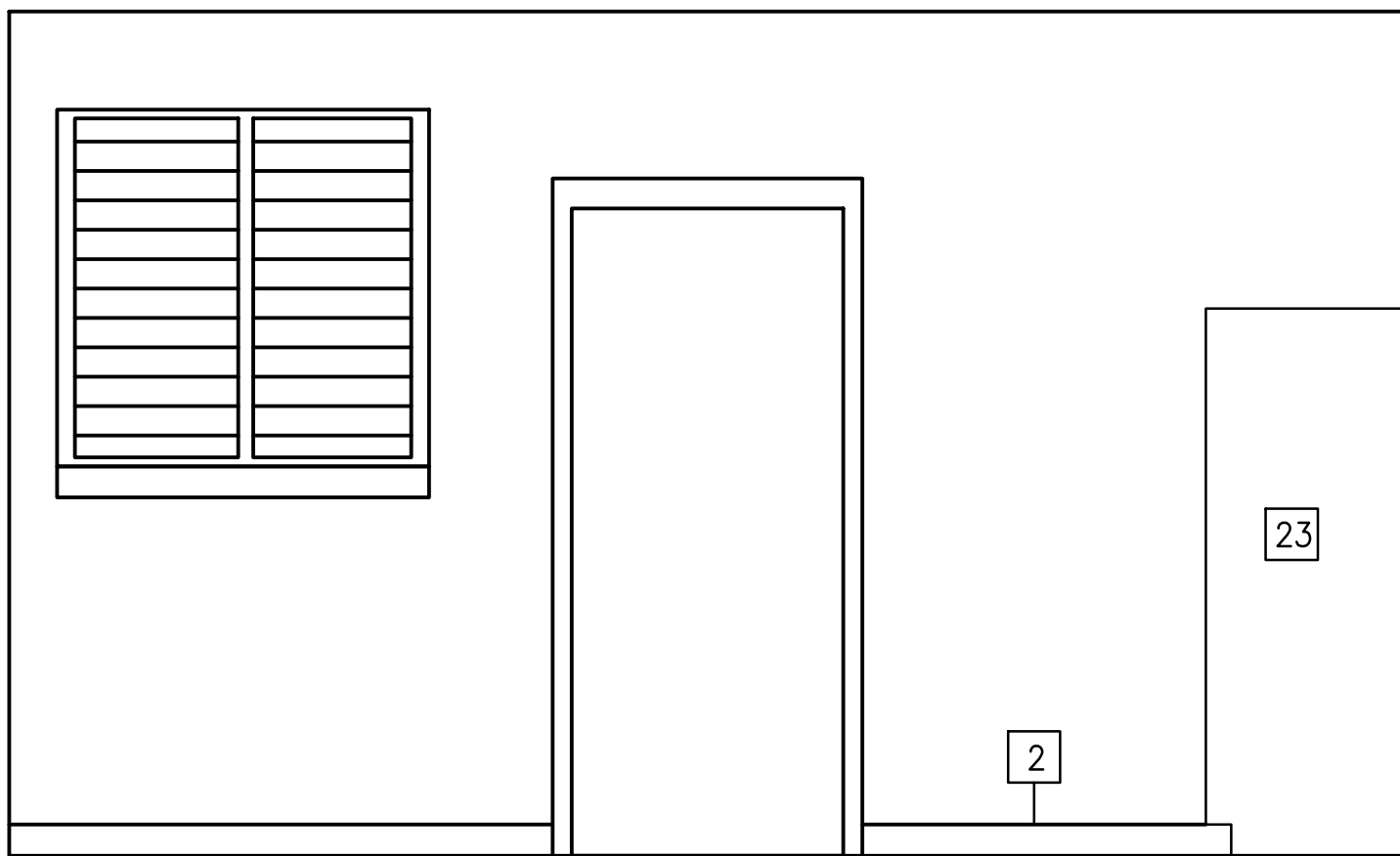
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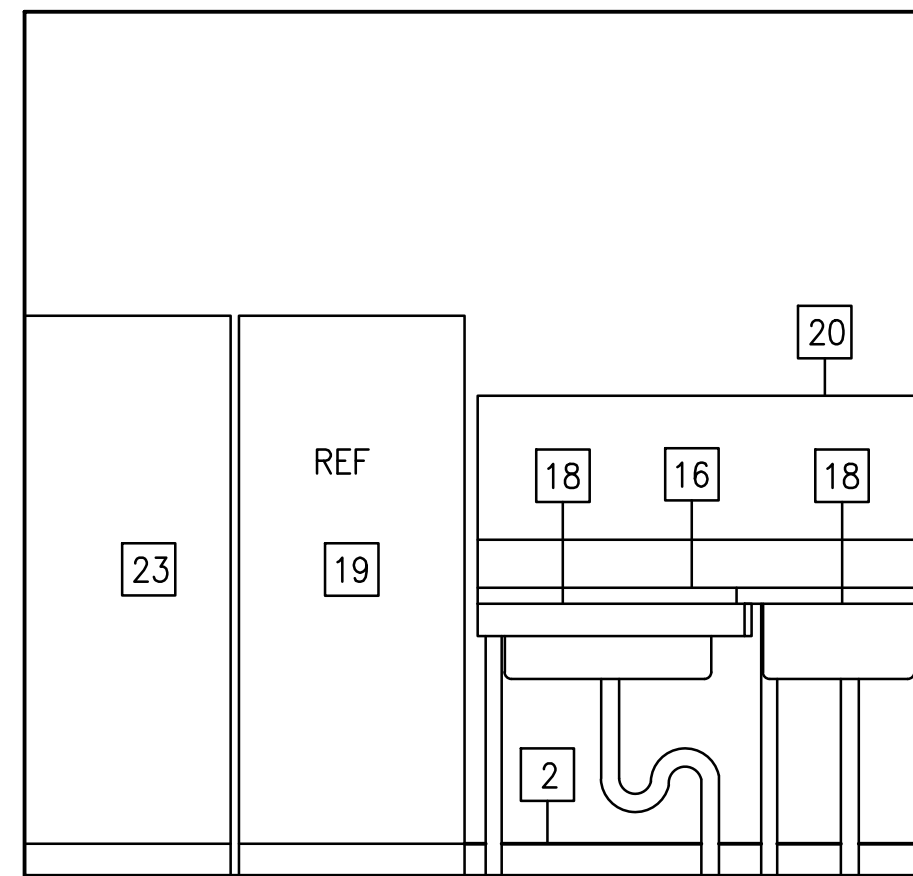
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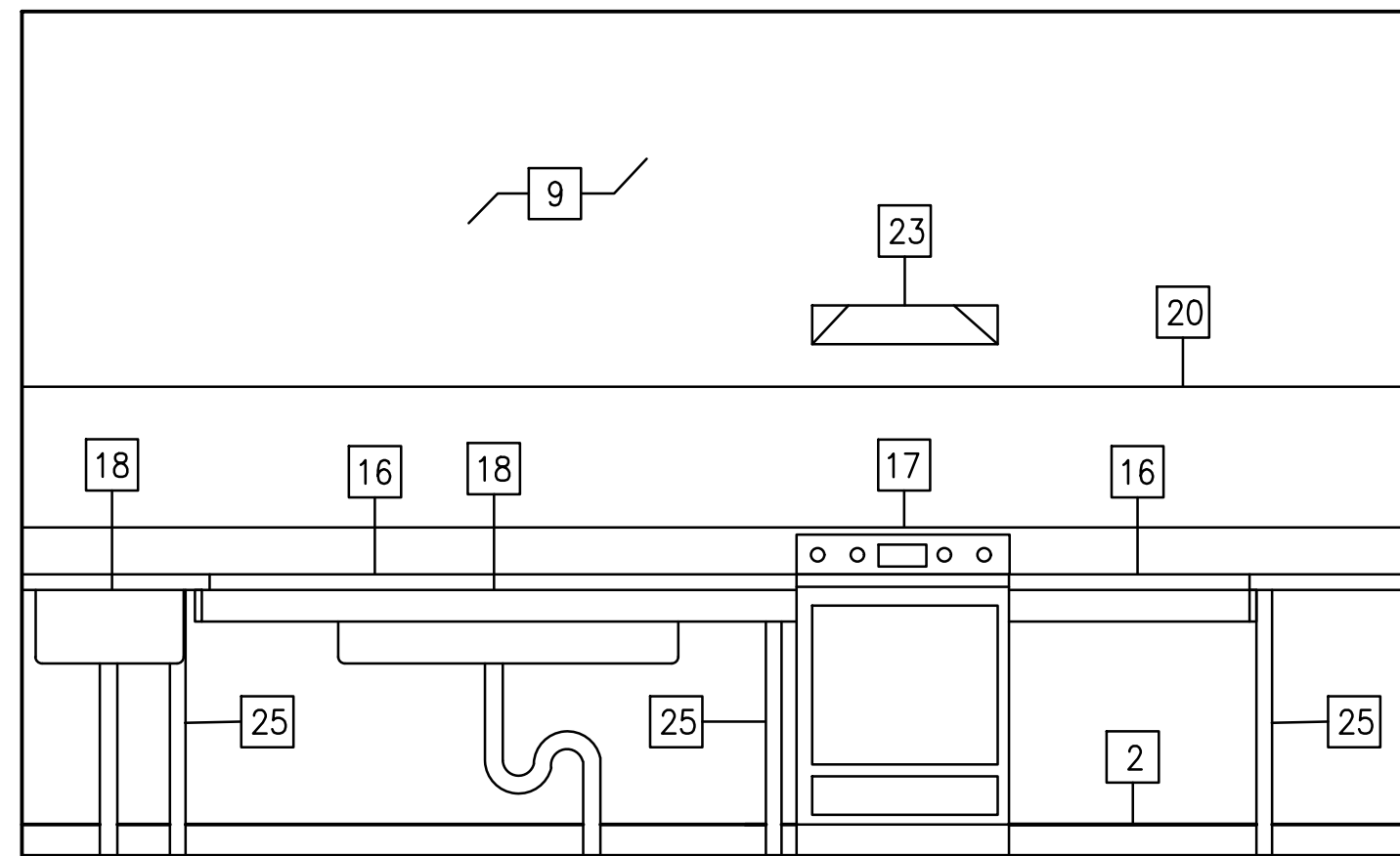
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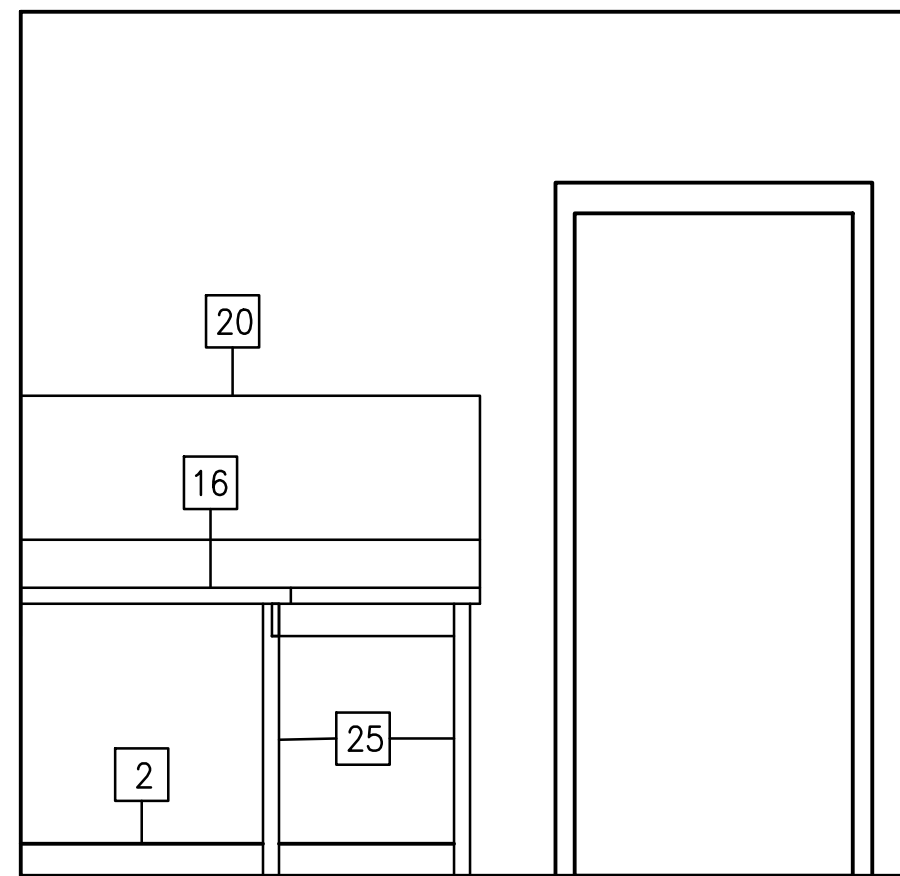
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KITCHEN



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C



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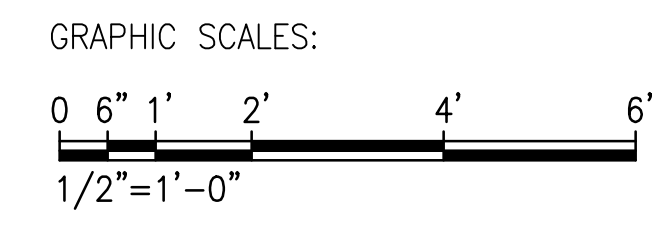
FLOOR PLAN NOTES:

- 1 NEW TOILET
- 2 NEW VINYL BASE BOARD
- 3 NEW TOILET PARTITIONS
- 4 NEW WALL MOUNTED URINAL
- 5 NEW WALL MOUNTED SINK
- 6 NEW 36" GRAB BAR
- 7 NEW 42" GRAB BAR
- 8 NEW PARTITION DOOR
- 9 PREP AND PAINT WALLS AND CEILINGS
- 10 (E) DOOR AND FRAME TO BE CLEANED. HOLES AND CRACKS FILLED, SANDED PRIMED AND PAINTED
- 11 NEW TILE FLOOR
- 12 SAW CUT CONCRETE FLOOR AND TIE INTO EXISTING TOILET DRAIN
- 13 ABANDON AND SEAL UP EXISTING TOILET DRAIN
- 14 NEW URINAL PARTITION
- 15 NEW TOILET PAPER DISPENSER
- 16 HAND BLOW DRYER
- 16 REPLACE EXISTING COUNTERTOP WITH NEW P-LAM COUNTERTOP
- 17 OPTION - REPLACE EXISTING RANGE W/ S.S. "LG" 6.3 CU FT SINGLE OVEN ELECTRIC RANGE MODEL# LREL6321S OR EQUAL
- 18 RE-USE EXISTING STAINLESS STEEL SINK IN NEW COUNTERTOP
- 19 OPTION - REPLACE EXISTING REFRIGERATOR W/ S.S. "LG" 30" 20 CU FT TOP FREEZER ENERGY STAR MODEL #LK65C OR EQUAL
- 20 REPLACE EXISTING FRP WALL WAINSCOT WITH NEW FRP WALL WAINSCOT
- 23 OPTION - REPLACE RANGE VENT HOOD W/ BROAN-NUTONE" 30" CONVERTABLE S/S. MODEL #BCSQ130SS OR EQUAL
- 24 REPLACE PANTRY CABINET
- 25 NEW SUPPORT LEG

NOT IN CONTRACT

NOT IN CONTRACT

NOT IN CONTRACT



1 INTERIOR ELEVATIONS
A401 SCALE: 1/2" = 1'-0"

APPROVED:
CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

REVISION NO.	DATE	REVISIONS	BY

ATHER R. D.P.
LICENSED PROFESSIONAL ENGINEER
No. 7808-S
HAWAII, U.S.A.

EXPIRATION DATE OF LICENSE: 04/30/24

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

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
657 KAUMUALI'I WAILUKU, MAUI, HAWAII
T.M.K.: (2) 3-3-005:087

INTERIOR ELEVATIONS

DESIGNED BY: AD
DRAWN BY: RSG
CHECKED BY: -
DATE: 04/18/2023

HAWAII ENGINEERING GROUP, Inc.
Civil & Structural Engineers
1008 BISHOP STREET, 25TH FLOOR
HONOLULU, HI 96813
TEL: 808-533-2002

JOB NO.: 22-038
SHEET: A402
12 OF 21 SHEETS

DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS

- 1.0 LIMITS OF PROJECT SCOPE OF WORK
- 1.0 THE CONTRACTOR SHALL INCLUDE IN THEIR CONTRACT PROPOSAL, ALL WORK UNDER THIS PROJECT, INCLUDING COSTS FOR COMPLETE INSTALLATION OF ALL ITEMS IDENTIFIED IN THE OVERALL CONTEXT OF THE CONTRACT DOCUMENTS.
- 2.0 COMPLETE INSTALLATION SHALL INCLUDE ALL NECESSARY LABOR, UTILITIES, AND RELATED MATERIALS AND ACCESSORIES THAT WILL PROVIDE COMPLETE AND USEABLE FACILITIES BUILDING PERMIT: ALL FEES REQUIRED FOR THE BUILDING PERMIT(S) SHALL BE PAID FOR BY THE CONTRACTOR.
- 3.0 GUARANTEE/WARRANTY: THE CONTRACTOR SHALL GUARANTEE THE MATERIAL AND WORKMANSHIP FOR A PERIOD OF TWO (2) YEARS. THE WARRANTY SHALL COMMENCE FROM THE PROJECT ACCEPTANCE DATE.

DIVISION 1 - GENERAL REQUIREMENTS

- NOT USED
- DIVISION 2 - SITE WORK
- NOT USED
- DIVISION 3 - CONCRETE
- NOT USED
- DIVISION 4 - MASONRY
- NOT USED
- DIVISION 5 - METALS
- NOT USED

DIVISION 6 - WOOD AND PLASTICS

- A. FINISH CARPENTRY
- 1.0 DESCRIPTION OF WORK
- A. PROVIDE ALL FINISH CARPENTRY WORK, COMPLETE, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING ITEMS:
 - 1) PANTRY CABINET/COUNTERTOP
 - 2) CEILING ACCESS PANELS
 - 3) SOFFIT VENTS (LOWER VENTING)
 - 4) FRP PANELS
 - 5) SAFETY FALL PROTECTION ANCHORS
- 2.0 MATERIALS
- A. PROVIDE SHOP FABRICATED CASEWORK FOR PLASTIC LAMINATE FINISH. PANTRY CABINET WORK AND SHELVINGS FOR KITCHEN, INCLUDING CABINET FINISH HARDWARE, SHALL BE PROVIDED.
 - 1) PANTRY CABINET CONSTRUCTION, INCLUDING COUNTERTOPS: 3/4-INCH PLYWOOD OR ENGINEERED PLYWOOD THROUGHOUT UNLESS NOTED OTHERWISE. FLUSH OVERLAY TYPE CASEWORK CONSTRUCTION, UNLESS DETAILED OTHERWISE.
 - 2) PANTRY CABINET DOORS AND EXPOSED CABINET SIDES: 3/4-INCH PLYWOOD OR ENGINEERED PLYWOOD WITH SOLID WOOD EDGING FOR PLASTIC LAMINATE FINISH.
 - 3) PANTRY CABINET TRIM SHALL BE SOLID WOOD FOR PLASTIC LAMINATE FINISH.
 - 4) SHELVES SHALL BE MINIMUM 3/4-INCH PLYWOOD OR ENGINEERED PLYWOOD WITH SOLID WOOD EDGING, UNLESS OTHERWISE NOTED FOR PLASTIC LAMINATE FINISH.
 - 5) COUNTERTOPS: COUNTERTOPS SHALL BE PLASTIC LAMINATE.
 - 6) COUNTERTOPS LEG SUPPORTS SHALL BE STAINLESS STEEL TO MATCH EXISTING.
 - 7) PRE-CUT OPENINGS: FABRICATE COUNTERTOP WITH PRE-CUT OPENINGS, WHERE POSSIBLE, TO RECEIVE EXISTING SINKS, PLUMBING FIXTURES, AND SIMILAR ITEMS. COORDINATE EXISTING SINK SIZES AND LOCATE OPENINGS ACCURATELY FOR PROPER SIZE AND SHAPE. SMOOTH EDGES OF CUTOUTS AND, WHERE LOCATED IN COUNTERTOPS AND SIMILAR EXPOSURES, SEAL EDGES OF CUTOUTS WITH A WATER-RESISTANT COATING.
- B. CEILING ACCESS PANELS - PROVIDE MILCOR OR ACCEPTED EQUIVALENT, 16-GAUGE ONE PIECE FRAME ACCESS DOORS WITH ALLEN WRENCH LOCK AND CONCEALED HINGES; STYLE M 12" X 12" OR 24" X 24" CEILING ACCESS AND AS INDICATED. UNLESS OTHERWISE NOTED, PROVIDE ACCESS PANELS WITH PRIMER PAINTED SURFACES AND FIELD PAINTED TO MATCH THE COLOR OF THE ADJACENT SURFACE.
- C. SOFFIT VENTS - PROVIDE 4-INCH X 16-INCH ALUMINUM SOFFIT LOUVER VENT WITH INSECT SCREEN.
- D. FRP PANELS - EQUIVALENT TO MARBLE PANELS AS MANUFACTURED BY MASONITE, GRABE REMULTE, OR ACCEPTED EQUIVALENT. PANELS SHALL BE 3/32-INCH THICK, 4-FEET WIDE BY HEIGHTS INDICATED. MOULDINGS SHALL BE MANUFACTURER'S STANDARD MATCHING COLORS FOR STARTING, SPLINING JOINTS, BASE, EDGES, AND CORNERS. ADHESIVE SHALL BE EQUIVALENT AS RECOMMENDED BY THE MANUFACTURER FOR THE SUBSTRATES INDICATED. SEALANT SHALL BE SILICONE SEALANT, COLOR MATCHED AS RECOMMENDED BY THE MANUFACTURER.

- INSTALL FRP PANELS ON WALLS, WHERE INDICATED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. ARRANGE PANELS FOR MINIMUM NUMBER OF JOINTS EXCEPT THE PANEL WIDTHS OF LESS THAN 6-INCHES SHALL BE MINIMIZED. INSTALL IN A FULL BED OF ADHESIVE WITH AL MOULDINGS SECURED IN PLACE. APPLY SEALANT AT ALL JOINTS AS RECOMMENDED BY THE MANUFACTURER FOR A WATERTIGHT SYSTEM.

- E. RIDGE CLIP SAFETY FALL PROTECTION RINGS: PROVIDE STAINLESS STEEL, ZINC PLATED STEEL RIDGE CLIP FALL PROTECTION ANCHOR SYSTEM EQUIVALENT TO "RIDGE-IT ANCHOR" BY GUARDIAN FALL PROTECTION OR ACCEPTED EQUIVALENT. PROVIDE FASTENERS AS RECOMMENDED BY MANUFACTURER.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

A. EXTERIOR SIDING

- 1.0 DESCRIPTION OF WORK
- A. FURNISH AND INSTALL EXTERIOR SIDING AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR A COMPLETE WEATHERTIGHT INSTALLATION. PROVIDE ALL FASTENERS, AND BUILDING FELTS AS REQUIRED.

2.0 MATERIALS

- A. EXTERIOR SIDING SHALL BE AB MARINE GRADE PLYWOOD, 3/4-INCH MINIMUM THICKNESS. INSTALL OVER 30# FELT OR TYVEK UNDERLAYMENT WITH SEALED BUTT JOINTS AND TRIMMED CORNERS.
- B. FIBERGLASS SHINGLE ROOFING
- 1.0 DESCRIPTION OF WORK
- A. FURNISH AND INSTALL ALL FIBERGLASS SHINGLE ROOFING AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR A COMPLETE WEATHERTIGHT INSTALLATION. PROVIDE ALL FASTENERS, AND BUILDING FELTS AS REQUIRED. FIBERGLASS SHINGLE ROOFING STYLE AND COLOR SHALL MATCH EXISTING.

2.0 MATERIALS

- A. FIBERGLASS ROOFING SHALL BE CLASS A ASPHALT SHINGLES SURFACED WITH MINERAL GRANULES, TYPE I, SELF-SEALING.
- B. SELF-ADHERING UNDERLAYMENT: POLYMER MODIFIED BITUMINOUS SHEET MATERIALS, MINIMUM 30# FELT AS RECOMMENDED BY THE ROOFING MANUFACTURER.
- C. HIP SHINGLES: PRE-CUT MANUFACTURER'S STANDARD OR JOB-CUT.
- D. NAILS: HOT-DIP GALVANIZED 10-1/2 GAUGE OR 12 GAUGE BARBED SHANK, 3/8-INCH, SHARP POINT SOLID DECKING AND 1/8-INCH THROUGH PLYWOOD SHEATHING EXCEPT WHERE UNDERSIDE IS EXPOSED.

B. THERMAL BATT INSULATION

1.0 DESCRIPTION OF WORK

- 1. FURNISH AND INSTALL ALL THERMAL BATT INSULATION AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE CORROSION RESISTANT FASTENERS AS RECOMMENDED BY THE INSULATION MANUFACTURER.

2.0 MATERIALS

- A. THERMAL BATT INSULATION FOR UNDERSIDE OF ROOFING SHALL BE MINERAL-FIBER BLANKET THERMAL INSULATION WITH FOIL SKIRM KRAFT (FSK), CLASS A FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS.
- B. R VALUE = 38.
- C. PROVIDE WIDTHS AS NECESSARY TO SNUGLY FIT FRAMING SPACING AND WITH TABS FOR ATTACHMENT TO FRAMING.
- D. FLASHING AND SHEE METAL
- 1.0 DESCRIPTION OF WORK
- A. FABRICATE AND INSTALL FLASHING, COUNTERFLASHING, DOWNSPOUTS, AND OTHER RELATED WORK AS SHOWN ON THE DRAWINGS.
- B. ROOF PENETRATIONS SHALL BE INSTALLED WEATHERTIGHT IN SUCH A MANNER TO MAINTAIN INTEGRITY OF THE ROOFING.

2.0 MATERIALS

- A. COPPER FLASHING: TEMPER H90 (COLD ROLLED) EXCEPT WHERE TEMPER 060 IS REQUIRED FOR FORMING, MINIMUM 16 OUNCE.
- B. COPPER DOWNSPOUT LEADER: PROVIDE CROSS SECTIONAL AREA NOT LESS THAN THE EXISTING DOWNSPOUT SIZE, INCLUDING ELBOW AND OFFSETS TO MATCH EXISTING. POSITION DOWNSPOUTS NOT LESS THAN 1/8-INCH AWAY FROM WALLS AND FASTEN TO THE WALLS AT TOP, BOTTOM, AND NOT TO EXCEED 5-FOOT CENTERS INTERMEDIATELY BETWEEN WITH MANUFACTURER'S STANDARD TYPE LEADER STRAPS, OR CONCEALED TYPE FASTENERS, FORM STRAPS AND FASTENERS FROM A METAL COMPATIBLE WITH THE DOWNSPOUTS.
- C. PREFABRICATED PIPE FLASHING SYSTEM: A PREMOLDED FLEXIBLE PIPE SLEEVE OF PIPE IN RELATED CONCENTRIC RINGS BONDED TO A SQUARE CORROSION-RESISTANT BASE OF SOFT ALUMINUM ALLOY ALLOWING FORMING OF BASE BY HAND PRESSURE TO ROOF PANEL PROFILE. PIPE FLASHING SYSTEM SHALL BE EQUIVALENT TO "MASTER FLASH" BY AZTEC WASHER.
- D. PROTECTION FROM CONTACT OF DISSIMILAR METALS: SURFACES IN CONTACT WITH DISSIMILAR METALS SHALL BE PAINTED WITH HEAVY-BODIED BITUMINOUS PAINT OR SHALL BE SEPARATED BY MEANS OF MOISTURE-PROOF BUILDING FELTS.
- E. SPLASH BLOCKS: SPLASH BLOCKS OF 12-INCH WIDE X 16-INCH LONG X 4-INCH DEEP SHALL BE FORMED WITH DEPRESSIONS IN TOP SURFACE TO DRAIN AWAY FROM BUILDING AND SHALL BE REINFORCED AS STANDARD WITH MANUFACTURER. BLOCK SHALL BE EQUIVALENT TO CONCRETE CREATIONS OF HAWAII - SPLASH BLOCK.

D. SEALANTS

1.0 DESCRIPTION OF WORK

- A. COMPLETE CLOSE WITH SEALANT ALL JOINTS INDICATED OR SPECIFIED TO BE SEALED TO A WATERTIGHT AND AIRTIGHT CONDITION WITHOUT STAINING SUBSTRATES.

2.0 MATERIALS

- A. INTERIOR SEALANTS: TYPE S OR M, GRADE NS, CLASS 12.5, USE NT. FOR USE TO SEAL GENERAL BUILDING CONSTRUCTION JOINTS, WINDOWS, DOORS, ETC.
- B. EXTERIOR SEALANTS: FOR JOINTS IN VERTICAL SURFACES, PROVIDE TYPE S OR M, GRADE NS, CLASS 25, USE NT. FOR JOINTS IN HORIZONTAL SURFACES, PROVIDE TYPE S OR M, GRADE P, CLASS 25, USE T FOR USE TO SEAL GENERAL BUILDING CONSTRUCTION JOINTS, WINDOWS, DOORS, ETC.

C. FLOOR JOINT SEALANT: TYPE S OR M, GRADE P, CLASS 25, USE T. COLOR OF SEALANT SHALL BE AS SELECTED.

D. ACOUSTICAL SEALANT: TYPE S OR M, GRADE NS, CLASS 12.5, USE NT FOR USE IN ACOUSTICAL CONDITIONS WHERE SOUND TRANSMISSION IS CRITICAL.

E. SANITARY SEALANT: TYPE S, GRADE NS, CLASS 25, USE NT, G AND A FOR USE AROUND PLUMBING FIXTURES AND AREAS OF HIGH MOISTURE. SINGLE COMPONENT ACRYLIC SILICONE SEALANT.

F. PRIMER FOR SEALANTS: PROVIDE NON-STAINING, QUICK-DRYING TYPE AND CONSISTENCY RECOMMENDED BY THE SEALANT MANUFACTURER FOR THE PARTICULAR APPLICATION.

DIVISION 8 - DOORS AND WINDOWS

A. STOREFRONT DOORS AND FRAMES

1.0 DESCRIPTION OF WORK

- A. WORK INCLUDED: FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT, AND PERFORM ALL OPERATIONS REQUIRED TO INSTALL COMPLETE THE STOREFRONT DOORS AND FRAMES, AND RELATED ITEMS INDICATED ON THE DRAWINGS, AND AS REQUIRED FOR A COMPLETE WEATHERTIGHT INSTALLATION.
- B. QUALIFICATIONS OF WORKERS AND INSTALLERS: USE ADEQUATE NUMBERS OF SKILLED PERSONNEL WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.

2.0 MATERIALS

- A. PROVIDE ALUMINUM STOREFRONT GLASS AND FRAMES OF SIZE, DESIGN, AND LOCATION INDICATED WITH DOORS COMPLETE WITH FRAMES, FRAMING MEMBERS, SIDELITE, TRANSOMS, TRIM, AND ACCESSORIES AS MANUFACTURED BY "KAWNEER" OR ACCEPTED EQUIVALENT.
- B. PROVIDE PAIR OF SINGLE ACTING-TYPE GLASS DOOR WITH MEDIUM STILE, 3-1/2-INCH VERTICAL STILE, 3-1/2-INCH TOP, AND 10-INCH BOTTOM RAIL. PROVIDE DOOR COMPLETE WITH TOP AND BOTTOM OFFSET PIVOTS, SURFACE MOUNTED CLOSERS, PANIC HARDWARE, ARCHITECTS CLASSIC PUSH/PULL AS MANUFACTURED BY "KAWNEER" OR ACCEPTED EQUIVALENT.
- C. PROVIDE SINGLE ACTING-TYPE FLUSH ENTRANCE DOOR WITH A FACE SHEET OF ALUMINUM. DOOR SHALL BE INSTALLED WITH STOREFRONT FRAMES OF SIZE, DESIGN, AND LOCATION INDICATED. PROVIDE DOOR COMPLETE WITH BUTT HINGES (4-1/2-INCH X 4-INCH NRP), SURFACE MOUNTED DOOR CLOSER (LCN 4040), CYLINDRICAL LOCKSET (YALE 5407), PULL (CO-9 PULL), FRAMES, FRAMING MEMBERS, SIDELITE, TRIM, AND ACCESSORIES MANUFACTURED BY "KAWNEER" OR ACCEPTED EQUIVALENT. PROVIDE JALOUSIE WINDOWS AT THE LOWER SECTION OF SIDELITES ON BOTH SIDES OF DOOR.
- D. ALUMINUM DOORS OF TYPE, SIZE, AND DESIGN INDICATED AND MINIMUM 1-3/4 INCH THICK. MINIMUM WALL THICKNESS, 0.125 INCH, EXCEPT BEADS AND TRIM, 0.050 INCH. DOOR SIZES SHOWN ARE NOMINAL; INCLUDE STANDARD CLEARANCES AS FOLLOWS: 0.093 INCH AT HINGE AND LOCK STILES, 0.125 INCH BETWEEN MEETING STILES, 0.125 INCH AT TOP RAILS, 0.187 INCH BETWEEN BOTTOM AND THRESHOLD, AND 0.687 INCH BETWEEN BOTTOM AND FLOOR. PROVIDE BEVEL SINGLE-ACTING DOORS 0.063 OR 0.125 INCH AT LOCK, HINGE, AND MEETING STILE EDGES.
- E. ALUMINUM FRAMES: EXTRUDED ALUMINUM ALLOY 6063-T5 SHAPES WITH CONTOURS APPROXIMATELY AS INDICATED. PROVIDE REMOVABLE GLASS STOPS AND GLAZING BEADS FOR FRAMES ACCOMMODATING FIXED GLASS. USE COUNTERSUNK STAINLESS STEEL PHILLIPS SCREWS FOR EXPOSED FASTENINGS, AND SPACE NOT MORE THAN 12 INCHES ON CENTER. MILL JOINTS IN FRAME MEMBERS TO A HAIRLINE FIT, REINFORCE, AND SECURE MECHANICALLY.

F. FULL GLAZED STILE AND RAIL DOORS: PROVIDE DOORS WITH MEDIUM STILES AND RAILS. FABRICATE FROM EXTRUDED ALUMINUM HOLLOW SEAMLESS TUBES OR FROM A COMBINATION OF OPEN-SHAPED MEMBERS INTERLOCKED OR WELDED TOGETHER. FASTEN TOP AND BOTTOM RAIL TOGETHER BY MEANS OF WELDING OR BY 3/8 OR 1/2 INCH DIAMETER CADMIUM-PLATED TENSIONING STEEL TIE RODS. PROVIDE AN ADJUSTABLE MECHANISM OF JACK SCREWS OR OTHER METHODS IN THE TOP RAIL TO ALLOW FOR MINOR CLEARANCE ADJUSTMENTS AFTER INSTALLATION.

G. WELDING AND FASTENINGS: WHERE POSSIBLE, LOCATE WELDS ON UNEXPOSED SURFACES. DRESS WELDS ON EXPOSED SURFACES SMOOTHLY. SELECT WELDING RODS, FILLER WIRE, AND FLUX TO PRODUCE A UNIFORM TEXTURE AND COLOR IN FINISHED WORK. REMOVE FLUX AND SPATTER FROM SURFACES IMMEDIATELY AFTER WELDING. EXPOSED SCREWS OR BOLTS WILL BE PERMITTED ONLY IN INCONSPICUOUS LOCATIONS, AND MUST HAVE COUNTERSUNK HEADS. WELD CONCEALED REINFORCEMENTS FOR HARDWARE IN PLACE.

H. WEATHERSTRIPPING: CONTINUOUS WOOL PILE, SILICONE TREATED, OR TYPE RECOMMENDED BY DOOR MANUFACTURER. PROVIDE ON STILES AND RAILS OF EXTERIOR DOORS. FIT INTO SLOTS WHICH ARE INTEGRAL WITH DOORS OR FRAMES. WEATHERSTRIPPING MUST BE REPLACEABLE WITHOUT SPECIAL TOOLS, AND ADJUSTABLE AT MEETING RAILS OF PAING INSTALLATION. VERIFY DOORS SWING FREELY AND CLOSE POSITIVELY.

I. ANCHORS: STAINLESS STEEL OR STEEL WITH HOT-DIPPED GALVANIZED FINISH. ON THE BACKS OF SUBFRAMES, PROVIDE ANCHORS OF THE SIZES AND SHAPES INDICATED FOR SECURING SUBFRAMES TO ADJACENT CONSTRUCTION. ANCHOR TRANSOM BARS AT HEAD AND MULLIONS AT HEAD AND SILL. REINFORCE AND ANCHOR FREESTANDING DOOR FRAMES TO FLOOR CONSTRUCTION AS INDICATED ON APPROVED SHOP DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. PLACE ANCHORS NEAR TOP AND BOTTOM OF EACH JAMB AND AT INTERMEDIATE POINTS NOT MORE THAN 25 INCH APART.

J. PROVISIONS FOR HARDWARE: COORDINATE AND DELIVER HARDWARE TEMPLATES AND HARDWARE (EXCEPT FIELD-APPLIED HARDWARE) TO THE DOOR MANUFACTURER FOR USE IN FABRICATION OF ALUMINUM DOORS AND FRAMES. CUT, REINFORCE, DRILL, AND TAP DOORS AND FRAMES AT THE FACTORY TO RECEIVE TEMPLATE HARDWARE. PROVIDE DOORS TO RECEIVE SURFACE-APPLIED HARDWARE, EXCEPT PUSH PLATES, WITH REINFORCING ONLY; DRILL AND TAP IN THE FIELD. PROVIDE HARDWARE REINFORCEMENTS OF STAINLESS STEEL OR STEEL WITH HOT-DIPPED GALVANIZED FINISH, AND SECURE WITH STAINLESS STEEL SCREWS.

K. PROVISIONS FOR GLAZING: PROVIDE EXTRUDED ALUMINUM, THEFT-PROOF, SNAP-IN GLAZING BEADS OR FIXED GLAZING BEADS ON EXTERIOR OR SECURITY DOORS. PROVIDE DOORS WITH GLAZING BEADS WITH VINYL INSERT GLAZING GASKETS. DESIGN GLAZING BEADS TO RECEIVE THICKNESS FOR EACH GLAZED ASSEMBLY.

- L. LAMINATED GLASS: FABRICATED FROM 2 NOMINAL 1/8-INCH PIECES OF TYPE I, CLASS 1, QUALITY Q3, FLAT ANNEALED TRANSPARENT GLASS. FLAT GLASS MUST BE LAMINATED TOGETHER WITH A MINIMUM OF 0.090-INCH THICK, CLEAR POLYVINYL BUTYRAL INTERLAYER WITH A TOTAL NOMINAL THICKNESS OF 5/16 INCH. MATCH EXISTING GLASS.
- M. FINISHES: PROVIDE EXPOSED ALUMINUM SURFACES WITH FACTORY FINISH OF ORGANIC COATING. CLEAN AND PRIME EXPOSED ALUMINUM SURFACES. PROVIDE A HIGH-PERFORMANCE FINISH IN ACCORDANCE WITH AAMA 2605 WITH TOTAL DRY FILM THICKNESS OF MINIMUM 1.2 MILS. FINISH COLOR SHALL BE CLEAR ANODIZED.

3.0 INSTALLATION

- A. COMPLY WITH MANUFACTURER SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF STOREFRONT DOOR UNITS, HARDWARE, OPERATORS, AND OTHER COMPONENTS OF WORK.
- B. SET UNITS PLUMB, LEVEL, AND TRUE TO LINE, WITHOUT WARP OR RACK OF FRAMES. ANCHOR SECURELY IN PLACE.
- C. ADJUST OPERATING HARDWARE TO PROVIDE TIGHT FIT AT CONTACT POINTS AND AT WEATHERSTRIPPING FOR SMOOTH OPERATIONS AND WEATHERTIGHT CLOSURE.
- B. EXISTING SLIDING GLASS DOORS
- 1.0 DESCRIPTION OF WORK
- A. WORK SHALL INCLUDE REPLACEMENT OF DOOR HARDWARE, INCLUDING LOCK SET/HANDLE, DOOR ROLLERS IN-KIND.
- C. JALOUSIE WINDOWS
- 1.0 DESCRIPTION OF WORK
- A. WORK INCLUDED: FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT, AND PERFORM ALL OPERATIONS REQUIRED TO INSTALL COMPLETE THE JALOUSIE WINDOW, AND RELATED ITEMS INDICATED ON THE DRAWINGS, AND AS REQUIRED FOR A COMPLETE WEATHERTIGHT INSTALLATION.

2.0 MATERIALS

- A. JALOUSIE WINDOWS SHALL BE FULL SURROUND FRAME TYPE.
- B. JALOUSIE WINDOW FRAMES: EXTRUDED ALUMINUM SECTIONS OF 6063-T5 ALLOY. FRAME MEMBERS SHALL BE NOT LESS THAN 2-1/2 INCHES DEEP AND SHALL BE 0.075 INCH THICK WITH AN EXTRUSION TOLERANCE ACCEPTABLE TO THE TRADE OF PLUS OR MINUS 0.006 INCH. MINIMUM JAMB THICKNESS AT THE CLIP ATTACHMENT SHALL BE 0.10 INCH, AND JAMB SHALL BE ONE CONTINUOUS VERTICAL PIECE.
- C. PIVOT CLIPS: ONE-PIECE 5052-H32 ALUMINUM ALLOY, MINIMUM 0.050 INCH THICK, CENTER BALANCED TYPE. DESIGN CLIPS FOR GLASS VANES TO PERMIT GLASS LOADING FROM THE INSIDE WITHOUT THE USE OF SPRING TENSION EXPANDERS OR ATTACHES. SIZE CLIPS FOR WOOD SLATS TO PERMIT THE INSERTION OF AN 11/16-INCH-THICK SLAT WITHOUT REBATING. SPACE CLIPS SO THAT VANES OR SLATS WILL OVERLAP 1/8 INCH.
- D. PUSH BAR: 6063-T5 ALUMINUM ALLOY, 5/8-INCH-WIDE X 3/32 INCH THICK OR 3/8 INCH WIDE X 1/8 INCH THICK.
- E. OPERATOR LEVER ARM AND CONNECTING BAR: HEAVY DUTY TYPE, 6061-T6 ALUMINUM ALLOY OTHER HARD TEMPERED ALUMINUM ALLOY WITH MINIMUM THICKNESS OF 1/8 INCH OR HAVING LATERAL BENDING RESISTANCE EQUAL OR GREATER THAN THAT FOR SPECIFIED UNITS. EITHER THE OPERATOR LEVER ARM OR THE OPERATOR LEVER ARM HOUSING/BRAKET SHALL BE DETACHABLE TO ALLOW REPAIR OR REPLACEMENT.

F. FINISH: ALL ALUMINUM PARTS, INCLUDING FRAME, CLIPS, RIVETS, LEVER, OPERATOR, PUSH BAR, AND SCREEN FRAMES ; "CLEAR" ANODIZED TO A MINIMUM THICKNESS OF .0004 INCH.

G. POLE EXTENSIONS: TUBULAR-SHAPED ANODIZED ALUMINUM; WITH RUBBER-CAPPED LOWER END AND STANDARD HOOK AT TOP TO MATCH HARDWARE DESIGN. OF SUFFICIENT LENGTH TO OPERATE WINDOW WITHOUT REACHING MORE THAN 60 INCHES ABOVE FLOOR; 1 POLE OPERATOR AND POLE HANGER PER ROOM THAT HAS OPERABLE WINDOWS MORE THAN 72 INCHES ABOVE FLOOR.

H. WEATHER STRIPPING: EXTRUDED PLASTIC VINYL OR MAXIMUM 7/16-INCH-WIDE STRIPS OF SHEET STAINLESS STEEL DESIGNED SO THAT A WEATHERPROOF CLOSURE IS ATTAINED ON THE SIDES OF THE WINDOW OPENING WHEN VANES OR SLATS ARE CLOSED.

I. GLASS VANES SHALL MATCH EXISTING (CLEAR OR OBUSCURE) INCHES WIDE X 7/32 INCH THICK, MAXIMUM 36 INCHES IN LENGTH; EXPOSED EDGES SHALL BE GROUND SMOOTH OR POLISHED EDGED.

J. WOOD SLATS: 4-INCH WIDE REDWOOD, CLEAR ALL HEART, KILN DRIED, AND GRABIN, WITH INTERLOCKING GROOVE. EACH END SHALL BE SCREWED TO THE PIVOT CLIP WITH TWO (2) ALUMINUM OR STAINLESS STEEL WOOD SCREWS.

D. SECURITY SCREEN

1.0 DESCRIPTION OF WORK

- A. FURNISH AND INSTALL SECURITY SCREENS COMPLETE WITH FRAMES AND ANGLE CLIPS, AND STAINLESS-STEEL ANCHORS, BOLTS, EXPANSION SHIELDS, AND OTHER FASTENERS AS REQUIRED FOR THE COMPLETE INSTALLATION OF WORK.
- 2.0 MATERIALS
- A. ALUMINUM SECURITY SCREEN MESH SHALL BE MANUFACTURED FROM 6063-T5 OR 6063-T4 ALUMINUM ALLOY AND TEMPER.
 - 1) MINIMUM EXTRUSION SECTION WIDTH: 0.228" (5.8 MM)
 - 2) MINIMUM EXTRUSION SECTION HEIGHT: 0.276" (7.0 MM)
 - 3) MAXIMUM OPENING DIMENSION: 2.875" (73.025 MM) PERPENDICULAR TO THE DIRECTION OF EXTRUSION.
- B. ALUMINUM EXTRUSION FRAMING: ALUMINUM FRAMING SHALL BE MANUFACTURED FROM 6063-T5 OR 6063-T4 ALUMINUM ALLOY AND TEMPER OF THE SIZES AND SHAPES AS DETAILED IN THE CONTRACT DRAWINGS OR AS RECOMMENDED BY THE ALUMINUM SECURITY SCREEN MANUFACTURER.
- C. SCREEN FRAME CORNER REQUIREMENT: ALUMINUM, OF THE TYPE AND SIZE RECOMMENDED BY THE ALUMINUM SECURITY SCREEN MANUFACTURER.
- D. ALUMINUM ANGLE CLIPS: 1-1/2-INCH-WIDE X 1/8 THICK. THE LENGTH OF THE ANGLE LEGS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- E. SPACERS: 5/8" DIAMETER ROUND ANODIZED ALUMINUM. PVC SPACERS SHALL NOT BE USED.

F. ANCHOR BOLTS, SCREWS, NUTS AND WASHERS: STAINLESS STEEL, TYPE 304 ALLOY OF THE SIZES AND TYPES RECOMMENDED BY THE ALUMINUM SECURITY SCREEN MANUFACTURER. FASTENERS SHALL BE TAMPER-RESISTANT TYPE WHERE SPECIFIED. USE OF PLASTIC OR LEAD SHIELDS WILL NOT BE PERMITTED.

G. POP-RIVETS: POP-RIVETS SHALL BE 1/8 INCH DIAMETER ANODIZED ALUMINUM AS RECOMMENDED BY THE ALUMINUM SECURITY SCREEN MANUFACTURER.

H. FINISH:

- 1) THE ALUMINUM SECURITY SCREEN SHALL BE FREE OF MAJOR SCRATCHES AND OTHER SURFACE BLEMISHES.
- 2) ALL EXPOSED SECURITY SCREEN MESH, FRAME AND CLIP ANGLE SURFACES SHALL BE PROVIDED WITH A CLEAR ANODIZED FINISH OF MINIMUM 0.0007 INCH (17.5 MICRONS) THICKNESS.
- 3) CUT ENDS, PUNCHED OR DRILLED HOLES, FASTENERS USED TO CONNECT CLEAR ANODIZED PARTS AND MINOR SCRATCHES SHALL BE TOUCH-UP PAINTED TO MATCH THE CLEAR ANODIZED FINISH.
- 4) ANCHOR BOLTS, SCREWS, NUTS, AND WASHERS EXPOSED SURFACES SHALL MATCH ALUMINUM SECURITY SCREEN ASSEMBLY FINISH AS RECOMMENDED BY THE ALUMINUM SECURITY SCREEN MANUFACTURER.

I. FINISH HARDWARE

1.0 DESCRIPTION OF WORK

- A. FURNISH AND INSTALL FINISHING HARDWARE REQUIRED FOR ALL IDENTIFIED DOORS, COMPLETE AS INDICATED ON DRAWINGS.
- B. COORDINATE THE WORK WITH OTHER DIRECTLY AFFECTED SECTIONS INVOLVING MANUFACTURE OR FABRICATION OF INTERNAL REINFORCEMENT FOR DOOR HARDWARE.
- 2.0 MATERIALS
- A. HAND OF DOOR: DRAWINGS SHOW DIRECTION OF SWING OR HAND OF EACH DOOR LEAF. FURNISH EACH ITEM OF HARDWARE FOR PROPER INSTALLATION AND OPERATION OF INDICATED DOOR.
- B. LOCK CYLINDERS AND KEYING: PROVIDE 4 KEYS PER LOCK WITH 2 KEYS STAMPED WITH BITTING NUMBER AND 2 WITHOUT BITTING STAMPING. ALL KEYS SHALL BE STAMPED "DO NOT DUPLICATE" AT THE POINT OF MANUFACTURE.
- C. ALL LOCK CYLINDERS SHALL BE MINIMUM 6 PIN HEAVY DUTY TYPE FURNISHED IN REMOVABLE CORE KEY SYSTEM AS AN EXTENSION OF THE EXISTING KEY SYSTEM.
- D. PANIC EXIT DEVICES SHALL TO ANS/BHMA A156.3 AND THE REQUIREMENTS OF THIS SECTION. EXIT DEVICE VERTICAL RODS SHALL BE ONE-PIECE CONSTRUCTION. NO SPULGING WILL BE ALLOWED. PROVIDE RECESSED FLOOR STRIKES.
- E. ALL EXIT DEVICES SHALL BE HEAVY DUTY PUSH RAIL AND CAST CHASSIS CONSTRUCTION. MOUNTING RAILS SHALL BE FORMED FROM A SOLID SINGLE PIECE OF STAINLESS STEEL. PUSH RAILS SHALL BE CONSTRUCTED OF STAINLESS STEEL. EXIT DEVICES SHALL HAVE FREEWHEELING OUTSIDE LEVERS ON ALL EXTERIOR DOORS. THE FREEWHEELING LEVER DESIGN SHALL ALLOW THE LEVER TO SWING FREELY UP TO 70 DEGREES, WHEN THE DOOR IS LOCKED.
- F. DOOR CLOSERS SHALL CONFORM TO ANS/BHMA A156.4, ADAAG SECTION 404.2.8 AND SECTION 404.2.9 AND THE REQUIREMENTS OF THIS SPECIFICATION.
- G. SIZE OF UNITS: COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR SIZE OF DOOR CONTROL UNIT, DEPENDING UPON SIZE OF DOOR, EXPOSURE TO WEATHER, AND ANTICIPATED FREQUENCY OF USE, WHERE PARALLEL ARM CLOSERS ARE INSTALLED, PROVIDE CLOSER UNIT ONE SIZE LARGER THAN RECOMMENDED FOR USE WITH STANDARD ARMS.
- H. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS.
- I. WEATHERSTRIP: PROVIDE CONTINUOUS WEATHERSTRIPPING AT EACH EDGE OF EVERY EXTERIOR DOOR LEAF.
- J. PROVIDE MATCHING FINISHES FOR HARDWARE UNITS AT EACH DOOR OR OPENING TO GREATEST EXTENT POSSIBLE. REDUCE DIFFERENCES IN COLOR AND TEXTURES AS MUCH AS COMMERCIALY FEASIBLE WHERE BASE METAL OR METAL FORMING PROCESS IS DIFFERENT FOR INDIVIDUAL UNITS OF HARDWARE EXPOSED AT SAME DOOR OR OPENING.

DIVISION 9 - FINISHES

A. CERAMIC TILE

1.0 DESCRIPTION OF WORK

- A. WORK INCLUDED: INCLUDE COMPLETE INSTALLATION FOR ALL HARD TILE FLOORING, HARD TILE WALL BASE, TILE GROUT, RESILIENT WALL BASE, AND RELATED WORK AT ALL LOCATIONS INDICATED ON THE DRAWINGS.
- 2.0 MATERIALS
- A. PORCELAIN TILE: PORCELAIN TILE AND TRIM SHALL BE UNGLAZED WITH BOTH TEXTURED SURFACED TILES AND POLISHED SURFACE TILES IN SIZE AND FINISH AS SCHEDULED.
- B. TRIM UNITS: PROVIDE ALL TRIM SHAPES AS DETAILED AND/OR AS REQUIRED. EXTERNAL CORNERS SHALL BE ROUNDED CONVEX. INTERNAL VERTICAL CORNERS SHALL BE ROUNDED. BOTTOM OF WALL SHALL BE CONCAVE WITH COVE BASE. BASE TILE SHALL BE 4-INCH HIGH, SANITARY COVED BASE UNLESS INDICATED OTHERWISE. PROVIDE OTHER SHAPES SUCH AS CURBS, BEADS, SHOES, ROUND CUT CORNERS AND SQUARE IN CORNERS, ETC. TO ACHIEVE A NEAT COMPLETE INSTALLATION.
- C. SETTING MATERIALS:
 - 1) CEMENT: PORTLAND CEMENT, ASTM C150/C150M, TYPE I.
 - 2) SAND: ASTM C144.
 - 3) HYDRATED LIME: ASTM C206, TYPE SOR ASTM C207, TYPE S.
 - 4) REINFORCING WIRE MESH: ASTM A1064/A1064M, 2 X 2 - 16/16, GALVANIZED WELDED WIRE FABRIC.
 - 5) LATEX-PORTLAND CEMENT MORTAR: ANSI A118.4, WITH MANUFACTURER'S STANDARD DRY POLYMER ADDITIVE. FOR LARGE FORMAT TILE, PROVIDE MEDIUM BED TYPE AS RECOMMENDED BY THE TILE MANUFACTURER.
 - 6) WATER: FRESH, CLEAN, AND POTABLE.
- D. GROUTING MATERIALS: COLORS AS INDICATED OR SELECTED BY THE USING AGENCY.
 - 1) EPOXY GROUT: ANSI A118.3.

- E. MARBLE THRESHOLD SHALL BE HONED FINISH. SIZE AS INDICATED OR REQUIRED TO CONFORM WITH AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) SECTION 303 AND SECTION 404.2.5. BEVEL EDGES AT 1:2 SLOPE, ALIGNING LOWER EDGE OF BEVEL WITH ADJACENT FLOOR FINISH. LIMIT HEIGHT OF BEVEL TO 1/2-INCH OR LESS, AND FINISH BEVEL TO MATCH FACE OF THRESHOLD.
- F. RESILIENT WALL BASE SHALL MATCH EXISTING COVE TYPE, 4-INCH HIGH, TOPSET TYPE, 1/8-INCH THICK WITH A SMOOTH EXPOSED SURFACE AND A TEXTURED BUILDING SURFACE ON THE UNEXPOSED FACE. BASE SHALL BE EQUIVALENT TO ARMSTRONG OR ACCEPTED EQUIVALENT.
- B. ACOUSTICAL CEILING
- 1.0 DESCRIPTION OF WORK
- A. WORK INCLUDED: INCLUDE COMPLETE INSTALLATION OF SUSPENDED ACOUSTICAL CEILING SYSTEMS, AND RELATED WORK AT ALL LOCATIONS INDICATED ON THE DRAWINGS.
- B. COORDINATE LOCATION OF ALL MECHANICAL & ELECTRICAL DEVICES.
- 2.0 MATERIALS
- A. COMPOSITION LAY-IN PANELS:
 - 1) TYPE: TYPE III (NON-ASBESTOS MINERAL COMPOSITION) WITH FACTORY-APPLIED STANDARD WHITE WASHABLE PAINTED FINISH.
 - 2) FORM: 1.
 - 3) CLASS: A, FLAME SPREAD 25 OR LESS.
 - 4) PATTERN: CD.
 - 5) NOISE REDUCTION COEFFICIENT (NRC) GRADE: MINIMUM 0.65.
 - 6) CEILING ATTENUATION CLASS (CAC): MINIMUM 35.
 - 7) LIGHT REFLECTANCE (LR) COEFFICIENT: LR-0.83 OR GREATER.
 - 8) NOMINAL SIZE: 24-INCHES X 48-INCHES.
 - 9) EDGE DETAIL: SQUARE LAY-IN.
 - 10) DESIGN: ARMSTRONG NATURAL FISURED, NO. 755 OR ACCEPTED EQUIVALENT.
- B. SUSPENSION SYSTEM: ASTM C 635/C 635M, "MANUFACTURE, PERFORMANCE, AND TESTING OF METAL SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS", AND THE FOLLOWING REQUIREMENTS:
 - 1) TYPE: EXPOSED GRID, 15/16-INCH STANDARD WIDTH. PROVIDE GRID FOR HIGH HUMIDITY EXPOSURE.
 - 2) STRUCTURAL CLASSIFICATION: INTERMEDIATE DUTY FOR MAIN RUNNERS.
 - 3) FINISH: SURFACES EXPOSED TO VIEW SHALL BE OF UNIFORM WIDTH AND SHALL BE ALUMINUM OR GALVANIZED STEEL WITH FACTORY APPLIED WHITE BAKED ENAMEL FINISH IN COLORS TO MATCH CEILING TILE. ZINC COATED STEEL SHALL RECEIVE A PHOSPHATE TREATMENT PRIOR TO PAINTING.
 - 4) ACCESSORIES: PROVIDE MANUFACTURER'S STANDARD WALL OR EDGE MOLDINGS.
- C. HANGER WIRES: ASTM A 641/A 641M, "ZINC-COATED (GALVANIZED) CARBON STEEL WIRE", CLASS 1, 12 GAUGE, GALVANIZED STEEL.
- D. FASTENERS: RUST-RESISTANT OF THE TYPE RECOMMENDED BY THE MANUFACTURER. USE FASTENERS FOR 5 TIMES DESIGN LOAD INDICATED IN ASTM C 635/C 635M, TABLE 1, DIRECT HUNG, UNLESS INDICATED OTHERWISE.

C. PAINTING

1.0 DESCRIPTION OF WORK

- A. WORK INCLUDES PAINTING AND FINISHING OF EXTERIOR AND INTERIOR ITEMS AND SURFACES THROUGHOUT THE PROJECT, WHETHER SCHEDULED OR NOT, EXCEPT AS OTHERWISE INDICATED. PAINTING SHALL INCLUDE NEW WORK AND EXISTING NEW SURFACES MADE BARE OR DAMAGED DURING CONSTRUCTION AND EXISTING SURFACES AS SCHEDULED.
- B. PAINTING SHALL BE PERFORMED BY SKILLED AND TRAINED PERSONNEL IN THE APPLICATION OF PAINT MATERIALS BEING USED FOR THIS STRUCTURE. ALL PAINTS SHALL BE OF A SINGLE MANUFACTURER, APPROVED AND COMPLYING WITH THE STANDARDS AND QUALITY ASSURANCES OF THE MASTER PAINTERS INSTITUTE (MPI). ALL PAINTS SHALL BE OF COMMERCIAL OR INSTITUTIONAL QUALITY AND SELECTED FOR THE APPROPRIATE USE AND CONTAIN NO OR LOW VOCs. ALL EXTERIOR FINISH MATERIALS SHALL CONTAIN MILDEWICIDE FOR MILDEW RESISTANCE.
- C. COLOR AND SAMPLES
 - 1) EXTERIOR AND INTERIOR COLORS, WHICH SHALL APPROXIMATELY MATCH ADJACENT EXISTING CONDITIONS, SHALL BE PROVIDED AS SELECTED BY OWNER.
 - 2) CONTRACTOR SHALL SUBMIT ONE (1) SET OF COLOR FINISH SAMPLE TO THE OWNER FOR APPROVAL.

- D. MINIMUM APPLICATION SHALL BE PRIME AND TWO FINISH COATS UNLESS MANUFACTURER'S WRITTEN INSTRUCTIONS REQUIRE ADDITIONAL COATS. MINIMUM COVERAGE APPLICATION SHALL BE AS SPECIFIED BY THE MANUFACTURER. ALL PAINTS SHALL HAVE A SEMI-GLOSS FINISH.
- 2.0 MATERIALS
- A. THE TYPES AND BRANDS OF PAINT AND ENAMEL ARE INTENDED AS A GUIDE TO DESIGNATE ONLY THE QUALITY AND STARDARD OF MATERIALS TO BE USED. THE MATERIALS SHALL BE THE FIRST QUALITY OF ANY OF THE PRODUCTS AS MANUFACTURED BY DEVOE, SHERWIN-WILLIAMS, PITTSBURGH, GUILDEN, SINCLAIR, BENJAMIN MOORE, OR APPROVED EQUAL. ALL PAINT MATERIALS SHALL CONTAIN MILDEWICIDE OF TYPE AND QUANTITY AS RECOMMENDED BY THE MANUFACTURER.
- 3.0 WORKMANSHIP
- A. APPLY ALL MATERIALS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS USING SKILLED MECHANICS WITH PAINT EVENLY SPREAD AND WILL BRUSHED WITH NO DROPS, RUNS, OR SAGS.
- B. APPLY PAINT IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS. USE APPLICATORS AND TECHNIQUES BEST SUITED FOR THE SUBSTRATE AND TYPE OF MATERIAL BEING APPLIED.
- C. SPRAY PAINTING BY "AIRLESS SPRAY" METHOD WILL BE PERMITTED EXCEPT FOR LAST FINISH COAT WHICH SHALL BE BY ROLLER AND BRUSH.
- D. FINISHED WORK SHALL BE UNIFORM AND OF THE APPROVED COLOR. MAKE EDGES OF PAINT ADJOINING OTHER MATERIALS OR COLORS SHARP AND CLEAN WITHOUT OVERLAPPING.

DIVISION 10 - SPECIALTIES

A. TOILET PARTITIONS AND URINAL SCREENS

1.0 DESCRIPTION OF WORK

- A. WORK UNDER THIS SECTION SHALL INCLUDE, BUT NOT LIMITED TO, SIGHTPROOF FLOOR AND WALL ANCHORED SOLID PHENOLIC TOILET COMPARTMENT DOORS AND PARTITIONS AND URINAL SCREENS.
- 2.0 MATERIALS
- A. TOILET COMPARTMENTS SHALL BE OF THE TYPE AND SIZE SPECIFIED AND AS SH

- B. DOORS:
- DOORS SHALL BE OF SOLID PHENOLIC A MINIMUM OF 3/4-INCH THICK.
 - UNLESS OTHERWISE NOTED ON THE DRAWINGS, A MINIMUM CLEAR DOOR OPENING WIDTH OF 32-INCHES SHALL BE PROVIDED AT THE DOOR LEADING TO AN ACCESSIBLE TOILET STALL. THIS CLEAR WIDTH SHALL BE MEASURED BETWEEN THE EDGE OF THE DOOR BUMPER/KEEPER AND THE FACE OF THE DOOR WHEN OPENED 90 DEGREES.
- C. PARTITIONS, STILES, AND PILASTERS:
- PILASTERS AND STILES FOR COMPARTMENTS SHALL HAVE ADJUSTABLE FLOOR ANCHORS WITH LEVELING DEVICES, STUDS, AND LOCKING NUTS TO FIRMLY SECURE PILASTERS AND STILES TO THE FLOOR.
 - PARTITIONS, STILES, AND PILASTERS SHALL BE OF SOLID PHENOLIC HAVING PARTITIONS A MINIMUM OF 1/2-INCH THICK AND STILES AND PILASTERS A MINIMUM OF 3/4-INCH THICK.
 - PARTITIONS TO WHICH GRAB BARS ARE FASTENED, ALONG WITH THEIR RESPECTIVE BRACKETS AND CONNECTORS, SHALL BE CAPABLE OF SUPPORTING THE IMPOSED LOADS NOTED IN THE ADAAG SECTION 609.8.

- D. HEADRAILS: HEADRAILS FOR OVERHEAD-BRACED COMPARTMENTS SHALL BE OF ANODIZED, EXTRUDED ALUMINUM ALLOY WITH END-CAPS, OF ANTI-GRIP DESIGN OR AS STANDARD WITH THE MANUFACTURER, OR SOLID WOOD CORE SURFACED WITH PLASTIC LAMINATE AND HAVING MINIMUM CROSS-SECTIONAL DIMENSIONS OF 1-1/4 INCH X 2-INCH.
- E. HARDWARE AND FITTINGS:
- DOORS, PARTITIONS, AND PILASTERS SHALL BE FURNISHED WITH THE NECESSARY HARDWARE AND FITTINGS TO PROVIDE A COMPLETE INSTALLATION. THEY SHALL BE PRE-CUT TO FACILITATE ERECTION AND MINIMIZE FIELD ERRORS.
 - MATERIALS: HARDWARE AND FITTINGS SHALL BE EITHER SATIN-FINISH TYPE 304 OR TYPE 316 STAINLESS STEEL OR ANODIZED EXTRUDED ALUMINUM. CHROME PLATED BRASS IS NOT DESIRED. NON-FERROUS ALLOYS SUCH AS ZAMAC CASTINGS SHALL NOT BE USED.
 - DOOR HINGES: STAINLESS STEEL, MINIMUM 16 GAUGE, CONTINUOUS THE FULL HEIGHT OF THE DOOR, THROUGH-BOLTED TO THE DOOR AND STILE WITH 6 THEFT-RESISTANT ONE-WAY STAINLESS-STEEL SCREWS AT APPROXIMATELY 12-INCHES ON CENTER.
 - LATCHES: THE LATCH SHALL BE OF A SHAPE WHICH IS EASY TO GRASP WITH ONE HAND AND WHICH DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE AND SHALL BE OPERABLE BY A PERSON ON THE OUTSIDE IN THE EVENT OF AN EMERGENCY. MECHANISMS SUCH AS SLIDE BOLTS WITH A PROJECTING HANDLE ON THE INSIDE OF THE STALL WHICH CAN BE OPENED BY A PERSON ON THE OUTSIDE REACHING OVER THE DOOR WITH A STICK ARE ACCEPTABLE. CONFORM WITH ADAAG SECTION 309.4.
 - DOOR PULLS: HANDICAP ACCESSIBLE TOILET STALL DOORS SHALL BE FURNISHED WITH A GRAB BAR/DOOR PULL CONFORMING WITH ADAAG SECTION 404.2.7.
 - COAT HOOK/DOOR BUMPER: FURNISH ONE EACH PER DOOR, MOUNT AT MIDDLE OF DOOR. AT ACCESSIBLE STALLS, COAT HOOK SHALL BE MOUNTED IN MIDDLE OF DOOR AT MAXIMUM 48-INCHES ABOVE THE FINISH FLOOR AND NO LOWER THAN 15-INCHES ABOVE THE FINISH FLOOR CONFORMING WITH ADAAG SECTION 308.2.1.
 - SHOE: ALL PILASTERS AND STILES SHALL HAVE A 3-INCH-HIGH MINIMUM TRIM COVER OR SHOE AT THE FLOOR.
 - HARDWARE MOUNTING HEIGHTS: THE HIGHEST PART OF ANY HANDLE, PULL, GRAB BAR, LATCH, OR OPERATING MECHANISM SHALL BE AT MINIMUM 34-INCHES AND 36-INCHES MAXIMUM ABOVE THE FINISHED FLOOR.
 - FASTENERS: HARDWARE AND FITTINGS SHALL BE FASTENED WITH THEFT-RESISTANT ONE-WAY STAINLESS STEEL OR CHROME PLATED BRASS THROUGH-BOLTS OR MACHINE SCREWS IN FACTORY INSTALLED STEEL INSERTS. DO NOT USE "ONE-WAY" SCREWS.

- B. SIGNAGE
- DESCRIPTION OF WORK
 - WORK UNDER THIS SECTION SHALL INCLUDE, BUT NOT LIMITED TO SIGNAGE, AND RELATED WORK AT ALL LOCATIONS INDICATED ON THE DRAWINGS.
- B. GENERAL REQUIREMENTS: CHARACTER PROPORTION, COLOR CONTRAST, DIMENSION, DEPTH, AND HEIGHTS OF SYMBOLS, GRADE II BRAILLE, AND LETTERS, LOCATION, AND MOUNTING HEIGHTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS NOTED IN THE ADAAG SECTION 216 AND SECTION 703 AND HRS 103-50.
- C. ANCHORS AND INSERTS: USE NONFERROUS METAL OR HOT-DIPPED GALVANIZED ANCHORS AND INSERTS FOR INSTALLATIONS AS REQUIRED FOR CORROSION RESISTANCE. USE TOOTHED STEEL OR LEAD EXPANSION BOLT DEVICES FOR DRILLED-IN-PLACE ANCHORS. FURNISH INSERTS, AS REQUIRED, TO BE SET INTO CONCRETE OR MASONRY WORK.

- 2.0 MATERIALS
- A. INTERIOR PLASTIC SIGNS: MELAMINE PLASTIC LAMINATE, APPROXIMATELY 1/8-INCH THICK, WITH CONTRASTING CORE COLOR, NON-STATIC, FIRE-RETARDANT, AND SELF-EXTINGUISHING. PLASTIC LAMINATE SHALL HAVE A CONTRASTING CORE COLOR AND SHALL BE IMPERVIOUS TO MOST ACIDS, ALKALIES, ALCOHOL, SOLVENTS, ABRASIVES, AND BOILING WATER.
- B. EXTERIOR FIBERGLASS SIGNS: FIBERGLASS, NON-CORROSIVE, 3 PLY LAMINATE, APPROXIMATELY 3/16-INCH TO 1/4-INCH THICK WITH CONTRASTING CORE COLOR.
- C. TOILET / BATHROOM / KITCHEN ACCESSORIES
- DESCRIPTION OF WORK
 - WORK INCLUDED: INCLUDE COMPLETE INSTALLATION IN THIS CONTRACT FOR ALL TOILET / BATHROOM / KITCHEN ACCESSORIES AND RELATED WORK AT LOCATIONS INDICATED ON THE DRAWINGS.

- A.0 MATERIALS
- A. TOILET ACCESSORIES: THE FOLLOWING ACCESSORIES ARE SPECIFIED AROUND BOBRICK WASHROOM EQUIPMENT AND ARE LISTED AS A GUIDE ONLY. OTHER PRE-APPROVED MANUFACTURER'S PRODUCTS MAY BE UTILIZED.
- B. GRAB BARS: CONCEALED MOUNTED, BOBRICK MODEL B-5806 SERIES.
- C. MIRROR WITH STAINLESS STEEL FRAME AND SHELF: BOBRICK MODEL B-292 SERIES, 18" WIDE X 36" HIGH, AS INDICATED ON THE DRAWINGS.
- D. TOILET PAPER DISPENSER: BOBRICK MODEL B-2888.
- E. SANITARY NAPKIN DISPOSAL: BOBRICK MODEL B-354 / B-353.
- F. PAPER TOWEL DISPENSER: BOBRICK MODEL B-262, SATIN STAINLESS STEEL.
- G. TOILET SEAT COVER DISPENSER: BOBRICK MODEL B-4221, SATIN STAINLESS STEEL.
- H. SOAP DISPENSER: BOBRICK MODEL B-822.
- I. PAPER TOWEL DISPENSER AT KITCHEN: GEORGIA PACIFIC #59498A, SURFACE MOUNTED, FOR ROLL PAPER TOWELS, BLACK PLASTIC COVER, HARDWOUND.

- DIVISION 11 - EQUIPMENT
NOT USED
- DIVISION 12 - FURNISHING
NOT USED.
- DIVISION 13 - SPECIAL CONSTRUCTION
NOT USED.
- DIVISION 14 - CONVEYING SYSTEMS
NOT USED.
- DIVISION 15 - MECHANICAL
NOT USED
- DIVISION 16 - ELECTRICAL
NOT USED

APPROVED: _____
 CHIEF, CIVIL ENGINEERING BRANCH
 DEPARTMENT OF PLANNING AND PERMITTING

DATE _____

REVISION NO.	DATE	REVISIONS	BY
5/10/23		BID REVISIONS	

EXPIRATION DATE OF LICENSE: 04/30/24

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

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
 657 KAUMUALI'I WAILUKU, MAUI, HAWAII
 T.M.K.: (2) 3-3-005:087

ARCHITECTURAL SPECIFICATIONS

JOB NO.
22-038

SHEET
A502

14 OF 21 SHEETS

DESIGNED BY: AD	 HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 100 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2000	DATE: 04/18/2023
DRAWN BY: RSG		
CHECKED BY: -		
SUPV: -		

ELECTRICAL NOTES

SUMMARY

SECTION INCLUDES: ELECTRICAL REQUIREMENTS FOR CONDUIT, BOXES, WIRING, LUMINAIRES, GROUNDING AND BONDING.

REFERENCES

- ANSI C80.1 – RIGID STEEL CONDUIT, ZINC COATED.
- ANSI C80.3 – ELECTRICAL METALLIC TUBING, ZINC COATED.
- ANSI/NEMA FB 1 – FITTINGS, CAST METAL BOXES, AND CONDUIT BODIES FOR CONDUIT AND CABLE ASSEMBLIES
- ANSI/NFPA 70 – NATIONAL ELECTRICAL CODE (2017 EDITION)
- NECA "STANDARD OF INSTALLATION"
- NEMA TC 2 – ELECTRICAL PLASTIC TUBING (EPT) AND CONDUIT (EPC-40 AND EPC-80)
- NEMA TC 3 – PVC FITTINGS FOR USE WITH RIGID PVC CONDUIT AND TUBING

DESIGN REQUIREMENTS

- WIRING AND CONDUIT SIZE: ANSI/NFPA 70.

REGULATORY REQUIREMENTS

- CONFORM TO CURRENT INTERNATIONAL BUILDING CODE, NFPA 1 UNIFORM FIRE CODE, AND NFPA 101 LIFE SAFETY CODE.
- CONFORM TO REQUIREMENTS OF ANSI/NFPA 70 (NEC 2017 EDITION IN ACCORDANCE WITH THE REVISED ORDINANCES OF COUNTY OF MAUI, CHAPTER 16, SECTION 16.18B).
- FURNISH PRODUCTS LISTED AND CLASSIFIED BY A RECOGNIZED TEST LABORATORY (SUCH AS UNDERWRITERS LABORATORIES, INC.) AS SUITABLE FOR PURPOSE SPECIFIED AND SHOWN.
- CONFORM TO HAWAII REVISED STATUTE § 201-8.5 (2018) NIGHT SKY PROTECTION STRATEGY.
- COUNTY OF MAUI, MAUI COUNTY ENERGY CODE, CHAPTER 16.16 ENERGY CODE, COMMERCIAL PROVISIONS.

SCOPE OF WORK

- THE SPECIFICATIONS DESCRIBE THE QUALITY AND CHARACTER OF THE MATERIALS AND METHODS OF INSTALLATION.
- THE DRAWINGS INCLUDE PLANS OF THE BUILDING, WITH DIAGRAMMATIC LAYOUTS SHOWING APPROXIMATE LOCATIONS OF EQUIPMENT AND DEVICES. BEFORE INSTALLING, STUDY ADJACENT ARCHITECTURAL FEATURES, AND MAKE INSTALLATION IN THE MOST LOGICAL MANNER IN ACCORDANCE WITH CODE AND REGULATORY REQUIREMENTS.
- THE ELECTRICAL SYMBOLS, NOTES, INSTRUCTIONS AND SCHEDULES ON THE DRAWINGS ARE INCLUDED AS PART OF THESE SPECIFICATIONS.
- SHOULD THERE BE OMISSIONS OR DISCREPANCIES IN THE PLANS AND SPECIFICATIONS, OR DISCREPANCIES FROM ACTUAL SITE CONDITIONS, BRING THEM TO THE ATTENTION OF THE CONTRACTING OFFICER. IF PROJECT CONDITIONS, INCLUDING CHANGES INITIATED BY OTHER TRADES OR DISCOVERY OF CONDITIONS UNKNOWN AT TIME OF DESIGN WHICH REQUIRE UNSPECIFIED MATERIALS AND METHODS OR REARRANGEMENT OF WORK, PREPARE DRAWINGS SHOWING PROPOSED CHANGES TO MEET PROJECT CONDITIONS. OBTAIN PERMISSION OF THE CONTRACTING OFFICER BEFORE PROCEEDING.

PRODUCTS – CONDUIT REQUIREMENTS

- PAINT CONDUITS TO MATCH BUILDING COLOR.
- MINIMUM SIZE: 3/4 INCH UNLESS OTHERWISE SPECIFIED.
- EXTERIOR LOCATIONS: USE PVC SCHEDULE 80 WITH EXPANSION JOINTS
- CONCEALED: USE ELECTRICAL METALLIC TUBING.
- EXPOSED: USE RIGID STEEL CONDUIT AND ELECTRICAL METALLIC TUBING. USE RIGID STEEL CONDUIT WHERE SUBJECT TO PHYSICAL DAMAGE.
- METAL CONDUIT NEC TYPE RMC OR IMC
- RIGID STEEL CONDUIT: ANSI C80.1.
- FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; ALL STEEL FITTINGS.
- FLEXIBLE METAL CONDUIT (NEC TYPE FMC)
- DESCRIPTION: INTERLOCKED STEEL OR ALUMINUM CONSTRUCTION.
- FITTINGS: ANSI/NEMA FB 1.
- LIQUIDTIGHT FLEXIBLE METAL CONDUIT (NEC TYPE LFMC): USE LIQUID TIGHT FLEXIBLE CONDUIT WITH WATERTIGHT CONNECTORS IN DAMP OR WET LOCATIONS.
- DESCRIPTION: INTERLOCKED STEEL OR ALUMINUM CONSTRUCTION WITH NEOPRENE OR PVC JACKET.
- FITTINGS: ANSI/NEMA FB 1.
- ELECTRICAL METALLIC TUBING (EMT)
- DESCRIPTION: ANSI C80.3; GALVANIZED TUBING.
- FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1, STEEL COMPRESSION OR SET SCREW TYPE.
- NONMETALLIC CONDUIT: NEC TYPE RNC
- DESCRIPTION: NEMA TC 2, SCHEDULE 40 OR SCHEDULE 80 PVC.
- FITTINGS AND CONDUIT BODIES: NEMA TC 3.

PRODUCT – PULL AND JUNCTION BOXES

- SHEET METAL BOXES: NEMA OS 1, GALVANIZED STEEL.
- SURFACE MOUNTED CAST METAL BOX: NEMA 250, TYPE 4 OR 6, FLAT-FLANGED, SURFACE MOUNTED JUNCTION BOX.
- MATERIAL: GALVANIZED CAST IRON OR CAST ALUMINUM.
- COVER: FURNISH WITH GROUND FLANGE, NEOPRENE GASKET, AND STAINLESS STEEL COVER SCREWS.

PRODUCT LUMINAIRES

- FURNISH PRODUCTS AS SCHEDULED ON DRAWINGS. APPROVED EQUIVALENT MAY BE SUBSTITUTED.
- ACCESSORIES & COVER SYSTEMS: A FIXTURE SERIES IS SPECIFIED IN THE LUMINAIRE SCHEDULE. PROVIDE ALL ACCESSORY COMPONENTS INCLUDING POWER FEEDS, END PIECES, CORNER PIECES AND INTERSECTION PIECES FOR A COMPLETE INSTALLATION TO MATCH CONFIGURATION SHOWN ON DRAWINGS.
- INSTALL SURFACE MOUNTED LUMINAIRES PLUMB AND ADJUST TO ALIGN WITH BUILDING LINES AND WITH EACH OTHER. SECURE TO PREVENT MOVEMENT.
- INSTALL WALL MOUNTED LUMINAIRES AT HEIGHT AS INDICATED ON DRAWINGS.
- INSTALL ACCESSORIES FURNISHED WITH EACH LUMINAIRE. USE SEALANT WHERE SURFACE FINISH PREVENTS GASKET SEALS.
- MAKE WIRING CONNECTIONS TO BRANCH CIRCUIT USING BUILDING WIRE WITH INSULATION SUITABLE FOR TEMPERATURE CONDITIONS WITHIN LUMINAIRE.

INSTALLATION

- INSTALL CONDUIT IN ACCORDANCE WITH NECA "STANDARD OF INSTALLATION."
- INSTALL NONMETALLIC CONDUIT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- ARRANGE SUPPORTS TO PREVENT MISALIGNMENT DURING WIRING INSTALLATION.
- SUPPORT CONDUIT USING COATED STEEL OR MALLEABLE IRON STRAPS, LAY-IN ADJUSTABLE HANGERS, CLEVIS HANGERS, AND SPLIT HANGERS.
- GROUP RELATED CONDUITS. SUPPORT USING CONDUIT RACK. CONSTRUCT RACK USING STEEL CHANNEL. PROVIDE SPACE ON EACH FOR 25 PERCENT ADDITIONAL CONDUITS.
- FASTEN CONDUIT SUPPORTS TO BUILDING STRUCTURE AND SURFACES UNDER PROVISIONS OF SECTION 16 19 00.
- DO NOT SUPPORT CONDUIT WITH WIRE OR PERFORATED PIPE STRAPS. REMOVE WIRE USED FOR TEMPORARY SUPPORTS.
- DO NOT ATTACH CONDUIT TO CEILING SUPPORT WIRES.
- ARRANGE CONDUIT TO MAINTAIN HEADROOM AND PRESENT NEAT APPEARANCE.
- ROUTE CONDUIT PARALLEL AND PERPENDICULAR TO WALLS.
- MAINTAIN ADEQUATE CLEARANCE BETWEEN CONDUIT AND PIPING.
- MAINTAIN 12 INCH CLEARANCE BETWEEN CONDUIT AND SURFACES WITH TEMPERATURES EXCEEDING 104 DEGREES F.
- CUT CONDUIT SQUARE USING SAW OR PIPE CUTTER; DE-BURR CUT ENDS.
- BRING CONDUIT TO SHOULDER OF FITTINGS. FASTEN SECURELY.
- JOIN NONMETALLIC CONDUIT USING CEMENT AS RECOMMENDED BY MANUFACTURER. WIPE NONMETALLIC CONDUIT DRY AND CLEAN BEFORE JOINING. APPLY FULL EVEN COAT OF CEMENT TO ENTIRE AREA INSERTED IN FITTING. ALLOW JOINT TO CURE FOR 20 MINUTES MINIMUM.
- USE CONDUIT HUBS OR SEALING LOCKNUTS TO FASTEN CONDUIT TO SHEET METAL BOXES IN DAMP AND WET LOCATIONS, AND TO CAST BOXES.
- INSTALL NO MORE THAN EQUIVALENT OF THREE 90-DEGREE BENDS BETWEEN BOXES. USE CONDUIT BODIES TO MAKE SHARP CHANGES IN DIRECTION AS AROUND BEAMS. USE FACTORY ELBOWS OR USE HYDRAULIC ONE-SHOT BENDER TO FABRICATE BENDS IN METAL CONDUIT LARGER THAN 2 INCH TRADE SIZE.
- AVOID MOISTURE TRAPS. PROVIDE JUNCTION BOX WITH DRAIN FITTING AT LOW POINTS IN CONDUIT SYSTEM.
- PROVIDE SUITABLE FITTINGS TO ACCOMMODATE EXPANSION AND DEFLECTION WHERE CONDUIT CROSSES SEISMIC CONTROL AND EXPANSION JOINTS.
- PROVIDE SUITABLE PULL STRING IN EACH EMPTY CONDUIT EXCEPT SLEEVES AND NIPPLES.
- USE SUITABLE CAPS TO PROTECT INSTALLED CONDUIT AGAINST ENTRANCE OF DIRT AND MOISTURE.
- GROUND AND BOND CONDUIT UNDER PROVISIONS
- MATERIALS AND FINISHES: PROVIDE ADEQUATE CORROSION RESISTANCE.
- PROVIDE MATERIALS, SIZES, AND TYPES OF ANCHORS, FASTENERS AND SUPPORTS TO CARRY THE LOADS OF EQUIPMENT AND CONDUIT. CONSIDER WEIGHT OF WIRE IN CONDUIT WHEN SELECTING PRODUCTS.
- ANCHORS AND FASTENERS:
- CONCRETE STRUCTURAL ELEMENTS: USE PRECAST INSERT SYSTEM, EXPANSION ANCHORS, AND PRESET INSERTS.
- STEEL STRUCTURAL ELEMENTS: USE BEAM CLAMPS, SPRING STEEL CLIPS, STEEL RAMSET FASTENERS, AND WELDED FASTENERS.
- CONCRETE SURFACES: USE SELF-DRILLING ANCHORS AND EXPANSION ANCHORS.
- HOLLOW MASONRY, PLASTER, AND GYPSUM BOARD PARTITIONS: USE TOGGLE BOLTS AND HOLLOW WALL FASTENERS.
- SOLID MASONRY WALLS: USE EXPANSION ANCHORS AND PRESET INSERTS.
- SHEET METAL: USE SHEET METAL SCREWS.
- WOOD ELEMENTS: USE WOOD SCREWS.
- EXTERIOR STEEL WALL; USE STAINLESS STEEL.
- APPLY FIRE STOPPING TO CABLE AND RACEWAY PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO ACHIEVE FIRE RESISTANCE OF THE ASSEMBLY.

BUILDING WIRE AND CABLE

- DESCRIPTION: SINGLE CONDUCTOR INSULATED WIRE.
- CONDUCTOR: COPPER.
- INSULATION VOLTAGE RATING: 600 VOLTS.
- INSULATION TYPE: ANSI/NFPA 70; TYPE XHHW INSULATION FOR FEEDERS AND BRANCH CIRCUITS LARGER THAN #8 AWG; TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS #8 AWG AND SMALLER.
- COMPLETELY AND THOROUGHLY SWAB RACEWAY BEFORE INSTALLING WIRE.
- USE ONLY BUILDING WIRE IN RACEWAY FOR PANEL AND EQUIPMENT FEEDERS, AND EXPOSED BRANCH CIRCUIT WIRING. USE WIRING METHODS INDICATED ON DRAWINGS.
- IDENTIFY WIRE AND CABLE AND CONDUCTOR WITH CIRCUIT NUMBER OR OTHER DESIGNATION INDICATED ON DRAWINGS. BOND PRODUCTS AND METAL ACCESSORIES TO BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR.

WIRING CONNECTORS

- USE SPLIT BOLT CONNECTORS, SOLDERLESS PRESSURE CONNECTORS, OR COMPRESSION CONNECTORS.
- IDENTIFY CONDUIT WITH BREAKER CIRCUIT OR SUBPANEL NAME.
- MAKE ELECTRICAL CONNECTIONS IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
- MAKE CONDUIT CONNECTIONS TO EQUIPMENT USING FLEXIBLE CONDUIT. USE LIQUID TIGHT FLEXIBLE CONDUIT WITH WATERTIGHT CONNECTORS IN DAMP OR WET LOCATIONS.
- MAKE WIRING CONNECTIONS USING WIRE AND CABLE WITH INSULATION SUITABLE FOR TEMPERATURES ENCOUNTERED IN HEAT PRODUCING EQUIPMENT.
- PROVIDE RECEPTACLE OUTLET WHERE CONNECTION WITH ATTACHMENT PLUG IS INDICATED. PROVIDE CORD AND CAP WHERE FIELD-SUPPLIED ATTACHMENT PLUG IS INDICATED.
- PROVIDE SUITABLE STRAIN-RELIEF CLAMPS AND FITTINGS FOR CORD CONNECTIONS AT OUTLET BOXES AND EQUIPMENT CONNECTION BOXES.
- PROVIDE INTERCONNECTING CONDUIT AND WIRING BETWEEN DEVICES AND EQUIPMENT WHERE INDICATED OR REQUIRED.
- USE SOLID CONDUCTOR FOR FEEDERS AND BRANCH CIRCUITS 10 AWG AND SMALLER. PROVIDE A SEPARATE, INSULATED CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY, INCLUDING SWITCH LEGS. TERMINATE EACH END ON SUITABLE LUG, BUS, OR BUSHING
- USE CONDUCTOR NOT SMALLER THAN 12 AWG FOR POWER AND LIGHTING CIRCUITS.
- USE 10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET.
- PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
- USE SUITABLE WIRE PULLING LUBRICANT FOR BUILDING WIRE 4 AWG AND LARGER.
- PROTECT EXPOSED CABLE FROM DAMAGE.
- SUPPORT CABLES ABOVE ACCESSIBLE CEILING USING SPRING METAL CLIPS OR PLASTIC CABLE TIES TO SUPPORT CABLES FROM STRUCTURE. DO NOT REST CABLE ON CEILING PANELS.
- USE SUITABLE CABLE FITTINGS AND CONNECTORS.
- NEATLY TRAIN WIRING INSIDE BOXES, EQUIPMENT, AND PANEL BOARDS.
- CLEAN CONDUCTOR SURFACES BEFORE INSTALLING LUGS AND CONNECTORS.
- MAKE SPLICES, TAPS, AND TERMINATIONS TO CARRY FULL AMPACITY OF CONDUCTORS WITH NO PERCEPTIBLE TEMPERATURE RISE.
- USE COMPRESSION CONNECTORS FOR COPPER CONDUCTOR SPLICES AND TAPS, 6 AWG AND LARGER. TAPE UNINSULATED CONDUCTORS AND CONNECTOR WITH ELECTRICAL TAPE TO 150 PERCENT OF INSULATION RATING OF CONDUCTOR.
- USE SOLDERLESS PRESSURE CONNECTORS WITH INSULATING COVERS FOR COPPER CONDUCTOR SPLICES AND TAPS, 8 AWG AND SMALLER.
- INSTALL DISCONNECT SWITCHES, CONTROLLERS, CONTROL STATIONS, AND CONTROL DEVICES AS INDICATED FOLLOWING MANUFACTURER'S INSTRUCTIONS.

ELECTRICAL CONNECTIONS

- PROVIDE RECEPTACLE OUTLET WHERE CONNECTION WITH ATTACHMENT PLUG IS INDICATED. PROVIDE CORD AND CAP WHERE FIELD-SUPPLIED ATTACHMENT PLUG IS INDICATED.
- PROVIDE SUITABLE STRAIN-RELIEF CLAMPS AND FITTINGS FOR CORD CONNECTIONS AT OUTLET BOXES AND EQUIPMENT CONNECTION BOXES.
- INSTALL DISCONNECT SWITCHES, CONTROLLERS, CONTROL STATIONS, AND CONTROL DEVICES AS INDICATED.
- PROVIDE INTERCONNECTING CONDUIT AND WIRING BETWEEN DEVICES AND EQUIPMENT WHERE INDICATED OR REQUIRED.
- MEASURE TIGHTNESS OF BOLTED CONNECTIONS AND COMPARE TORQUE MEASUREMENTS WITH MANUFACTURER'S RECOMMENDED VALUES.
- VERIFY CONTINUITY OF EACH BRANCH CIRCUIT CONDUCTOR.

INTERFACE WITH OTHER PRODUCTS

- INSTALL CABLE, ELECTRICAL BOXES, LUMINAIRES, AND CONDUIT TO PRESERVE FIRE RESISTANCE RATING OF PARTITIONS AND OTHER ELEMENT.
- COORDINATE CONDUIT PENETRATIONS THROUGH ROOF WITH PIPING AND DUCTWORK. USE PREFABRICATED ROOF PENETRATION ACCESSORIES. COORDINATE WITH ROOFING INSTALLER. COORDINATE CONDUIT PENETRATIONS, BOX AND LUMINAIRE, INSTALLATION THROUGH ARCHITECTURAL ELEMENTS WITH TERMITE CONTROL BARRIER SYSTEM.
- FIELD QUALITY CONTROL
- PERFORM FIELD INSPECTION AND TESTING TO VERIFY INSTALLATION.
- VERIFY THAT INTERIOR OF BUILDING HAS BEEN PROTECTED FROM WEATHER

GENERAL NOTES

SITE CONDITIONS AND EXISTING UTILITIES

- THE EXISTING SITE CONDITIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND DIAGRAMMATIC. EXISTING UTILITIES IDENTIFIED ON THE PLANS ARE SHOWN AS A MATTER OF INFORMATION AND NOT AS A MATTER OF FACT. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO ANY INSTALLATION.
- THE CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITIES THAT ARE IN SERVICE EXCEPT WHEN PRIOR PERMISSION IS OBTAINED IN WRITING FROM HPHA.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGE TO ANY AREAS AS SHOWN ON THE PLANS AS A RESULT OF THE CONSTRUCTION WORK. THE CONTRACTOR SHALL MAKE ALL REPAIRS AS DIRECTED BY THE INSPECTOR OF RECORD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE FOLLOWING TASKS PRIOR TO COMMENCING ANY OF THE CONSTRUCTION WORK:
 - PROPOSED CONDUIT ROUTING IS APPROXIMATE, AND MAY BE MODIFIED IN THE FIELD TO ALLOW FOR EXISTING CONDITIONS WITH PRIOR WRITTEN APPROVAL OF THE OWNERS REPRESENTATIVE. STRAIGHT CONDUIT RUNS SHALL BE MAINTAINED WHERE POSSIBLE. THE OWNERS REPRESENTATIVE RESERVES THE RIGHT TO FIELD-ADJUST THE PROPOSED CONDUIT ROUTE PLUS OR MINUS 30 FEET IN TOTAL LENGTH WITHOUT ADDITIONAL COST.
 - CORING NEEDED BY CONTRACTOR. CONTRACTOR TO X-RAY CONCRETE FLOORS/WALLS PRIOR TO CORING.
 - TOUCH UP PAINT WHEN NECESSARY.
 - CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL ASPECTS OF THE SEWER PUMP SYSTEM.
 - CONTRACTOR SHALL TONE GROUND FOR EXISTING UTILITIES PRIOR TO ANY TRENCHING.

ELECTRICAL SYMBOL LIST		
NEW	EXISTING	
		2 X 4 RECESSED TROFFER LED LIGHT FIXTURE
		MOTOR RATED FAN CONTROLLER
		20A DIMMER SWITCH. "o" INDICATES SWITCH LEG
		JUNCTION BOX
		HOMERUN RACEWAY & WIRING, 3/4" EMT CONDUIT MINIMUM 1#12 HOT, 1#12 NEUTRAL AND 1#12 GROUND. TYPICAL UNLESS NOTED OTHERWISE.
		CONCEALED RACEWAY & WIRING
		EXISTING CONCEALED RACEWAY & WIRING
		EXISTING ELECTRICAL PANELBOARD
		HATCHING INDICATES DEMOLITION WORK
		RECEIPT, DUPLEX, NEMA 5-20R, 125V, 20A, +18" FLR-CL, TR

ABBREVIATIONS

CKT NO	CIRCUIT NUMBER	J-BOX	JUNCTION BOX	FLR	FLOOR
COND.	CONDUCTOR	GFCI	GROUND-FAULT CIRCUIT INTERRUPTER	RECEPT	RECEPTACLE
CL	CENTERLINE	MIN	MINIMUM	TR	TAMPER RESISTANT
EOT.	EQUIPMENT	WP	WEATHERPROOF		

COUNTY OF MAUI MAUI COUNTY CODE, CHAPTER 16.16B ENERGY CODE COMMERCIAL PROVISIONS	
COMPLIANCE METHOD Check applicable method	
<input type="checkbox"/>	C401.2(1) ANSI/ASHRAE/IESNA 90.1
<input type="checkbox"/>	C401.2(2) Sections C402 through C406
<input type="checkbox"/>	C401.2(3) Sections C402.5, C403.2, C404, C405.2, C405.3, C405.4, C405.6 & C407
<input checked="" type="checkbox"/>	C102.1 Alternative
To the best of my knowledge, this project's design substantially conforms to the Energy Code.	
Signature:	Date: 4-8-2022
Name: Kenneth R. Welch	
Title: Electrical Engineer	
License No.: PE-14751-E	

REVISION NO.	DATE	REVISIONS	BY

DEPARTMENT OF HAWAIIAN HOME LANDS		JOB NO.
PAUKUKALO COMMUNITY CENTER IMPROVEMENTS		22-038
657 KAUMUALI'I WAILUKU, MAUI, HAWAII		
T.M.K.: 3-3-05:87		
ELECTRICAL GENERAL NOTES		
DESIGNED BY: AD	 HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002	SHEET 001 11 of 14 SHEETS
DRAWN BY: RSG		
CHECKED BY: -		
SUPV: -		
DATE: 12/19/2022		

APPROVED: _____ DATE _____

CHIEF, CIVIL ENGINEERING BRANCH
DEPARTMENT OF PLANNING AND PERMITTING

TYPE: W LAMP: INTEGRAL LED 24 WATT 2900 LM 70 CRI 3000K MOUNTING: WALL MOUNTED DESCRIPTION: LED FULL CUT-OFF WALLPACK WITH INTEGRAL PHOTOCELL, 120-277V, UL LISTED FOR WET LOCATIONS, DARK SKY COMPLIANT LITHONIA LIGHTING #WPX1 LED P2 30K MVOLT PE DDBXD OR EQUAL	TYPE: A LAMP: INTEGRAL LED 38.4 WATT 4800 LM 80 CRI 4000K MOUNTING: RECESSED DESCRIPTION: 2'x4' RECESSED LED TROFFER WITH 0-10V DIMMING, 120-277V LITHONIA LIGHTING #2VTL4 48L ADPT EZ1 LP840 OR EQUAL	TYPE: AE LAMP: INTEGRAL LED 38.4 WATT 4800 LM 80 CRI 4000K MOUNTING: RECESSED DESCRIPTION: SIMILAR TO LUMINAIRE TYPE 'A' EXCEPT EQUIPPED WITH MINIMUM 90 MINUTE, 10 WATT EMERGENCY BATTERY PACK LITHONIA LIGHTING #2VTL4 48L ADPT EZ1 LP840 E10WLCP OR EQUAL	TYPE: B LAMP: INTEGRAL LED 31.4 WATT 4000 LM 80 CRI 4000K MOUNTING: RECESSED DESCRIPTION: 2'x4' RECESSED LED TROFFER WITH 0-10V DIMMING, 120-277V LITHONIA LIGHTING #2VTL4 40L ADPT EZ1 LP840 OR EQUAL	TYPE: BE LAMP: INTEGRAL LED 31.4 WATT 4000 LM 80 CRI 4000K MOUNTING: RECESSED DESCRIPTION: SIMILAR TO LUMINAIRE TYPE 'B' EXCEPT EQUIPPED WITH MINIMUM 90 MINUTE, 10 WATT EMERGENCY BATTERY PACK LITHONIA LIGHTING #2VTL4 40L ADPT EZ1 LP840 E10WLCP OR EQUAL

TYPE: C LAMP: INTEGRAL LED 26.7 WATT 3195 LM 85 CRI 4000K MOUNTING: SURFACE MOUNTED DESCRIPTION: 4' SURFACE MOUNTED LED VOLUMETRIC WITH 0-10V DIMMING, 120-277V LITHONIA LIGHTING #STL4 30L EZ1 LP840 SC1 OR EQUAL	TYPE: CE LAMP: INTEGRAL LED 26.7 WATT 3195 LM 85 CRI 4000K MOUNTING: SURFACE MOUNTED DESCRIPTION: SIMILAR TO LUMINAIRE TYPE 'C' EXCEPT EQUIPPED WITH MINIMUM 90 MINUTE, 10 WATT EMERGENCY BATTERY PACK LITHONIA LIGHTING #STL4 30L EZ1 LP840 E10WLCP SC1 OR EQUAL

SINGLE PHASE PANELBOARD SCHEDULE

POLE NO.	C.B. AMP/P	LOAD DESCRIPTION	WATTS	LOAD TYPE	C.B. OPT.	LOAD IN WATTS		C.B. OPT.	LOAD TYPE	WATTS	LOAD DESCRIPTION	C.B. AMP/P	POLE NO.
						ΦA	ΦB						
1	20/1	NEW LIGHTS - HALL	307	L		1,207			R	900	EXISTING RECEPTACLES - HALL	20/1	2
3	20/1	NEW LIGHTS - HALL	307	L			1,207		R	900	EXISTING RECEPTACLES - HALL	20/1	4
5	20/1	NEW LIGHTS - HALL	384	L		744			R	360	EXISTING RECEPTACLES - HALL	20/1	6
7	20/1	NEW LIGHTS - HALL	307	L			1,407		R	1,100	EXISTING RECEPT - SERVING/HOOD	20/1	8
9	20/1	NEW LIGHTS - SER/ST/OFFICE	377	L		1,277			R	900	EXISTING RECEPTACLES - STORAGE	20/1	10
11	20/1	NEW LIGHTS - RESTROOM	107	L			827		R	720	EXISTING RECEPTACLES - OFFICE	20/1	12
13	20/2	HAND DRYERS/MEN	1,200	M		1,560			R	360	EXISTING RECEPTACLES - RESTROOM	20/1	14
15			1,200	M			2,200		M	1,000	EXISTING REFRIGERATOR	20/1	16
17	20/2	HAND DRYERS/WOMEN	1,200	M		5,200			M	4,000	EXISTING RANGE	50/2	18
19			1,200	M			5,200		M	4,000		20	
21	20/1	NEW CEILING FANS	250	M		2,550			M	2,300	EXISTING WATER HEATER	30/2	22
23	20/1	NEW CEILING FANS	100	M			2,400		M	2,300		24	
25	20/1	NEW CEILING FANS	100	M		1,300			R	1,200	NEW COMMUNITY HALL RECEPTACLE	20/1	26
27	20/1	NEW CEILING FANS	100	M			1,300		R	1,200	NEW COMMUNITY HALL RECEPTACLE	20/1	28
29		SPACE				1,200			R	1,200	NEW COMMUNITY HALL RECEPTACLE	20/1	30
31		SPACE									SPACE		32
33		SPACE									SPACE		34
35		SPACE									SPACE		36
37		SPACE									SPACE		38
39	20/1	EXISTING PARKING LOT LIGHTS	600	L			600				SPACE		40
41	20/1	NEW EXTERIOR NIGHT LIGHTS	192	L		292			L	100	EXISTING TIMECLOCK	15/1	42
ABBREVIATIONS			CONN. LOAD PER Φ IN KW:		15.33	15.14	PANELBOARD RATINGS			PANEL TAG			
Φ	PHASE	LOAD SUMMARY		CONN.	DEMAND	DEMAND	VOLTS:		120-240	A EXISTING			
A.I.C.	AMPERE INTERRUPTING CURRENT(KAIC=1000 AIC)	LTG. & CONTIN. LOADS [L]	2.68	125%	3.35	Φ/WIRES:		1PH/3W					
C.B.	CIRCUIT BREAKER	RECEPT.S ≤ 10KVA [R]	8.84	100%	8.84	MAIN C.B.:		MLO					
OPT.	CIRCUIT BREAKER OPTIONS OR SPECIAL FEATURES (WHERE NONE SHOWN PROVIDE THERMAL/MAG. C.B.)	RECEPT.S > 10KVA [R]		50%		BUS AMPS:		200A					
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MISC. LOADS [M]	18.95	100%	18.95	TVSS REQ'D:		NO					
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	AIR COND/HTG LOADS [A]		100%		ENCLOSURE:		NEMA 3R					
P	NUMBER OF POLES	COMM. KITCHEN LOADS [K]		65%		AIC RATING:		10KAIC					
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION	TOTALS:	30.5		31.1	DEMAND AMPS		129.8					
		DEMAND KW PER Φ:	15.7		15.5								

1 LUMINAIRE SCHEDULE

E002 NOT TO SCALE

PROVIDE NEW 1P20A CIRCUIT BREAKER IN EXISTING SPACE. AIC RATING TO MATCH EXISTING. CONTRACTOR TO FIELD VERIFY.

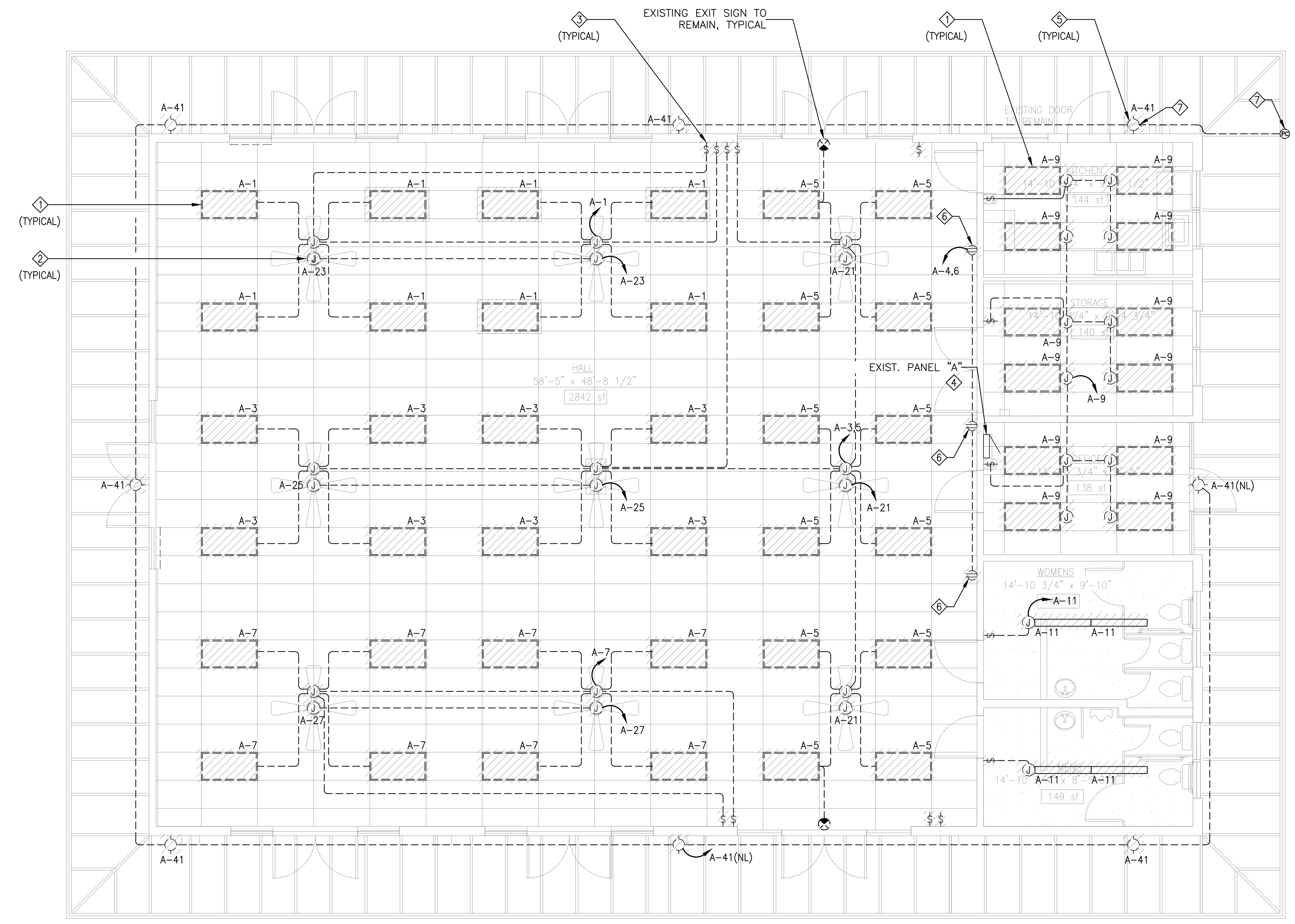
2 PANEL SCHEDULE

E002 NOT TO SCALE

APPROVED: _____
 CHIEF, CIVIL ENGINEERING BRANCH
 DEPARTMENT OF PLANNING AND PERMITTING

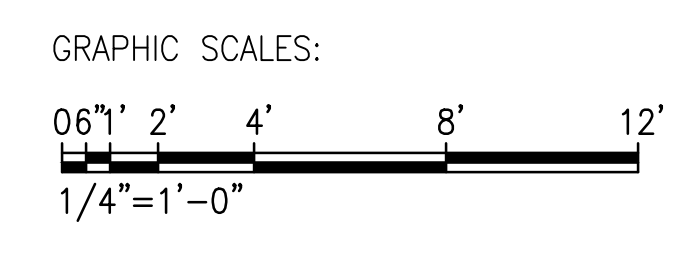
REVISION NO.		DATE	REVISIONS	BY
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: 3-3-05:87 ELECTRICAL SCHEDULES				
DESIGNED BY:	AD	DRAWN BY:	RSG	CHECKED BY:
SUPV:		DATE:	12/19/2022	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION				JOB NO. 22-038 SHEET E002 12 OF 14 SHEETS

NOTE:
 THE USE OF ROMEX IS STRICTLY PROHIBITED. CONTRACTOR SHALL FIELD VERIFY AND INSPECT ALL EXISTING WIRING ABOVE SUSPENDED CEILING. REPLACE ALL ROMEX CABLES WITH NEW EMT CONDUIT AND WIRING.



- PLAN NOTES:**
- ① DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE AND JUNCTION BOX. EXISTING BRANCH CIRCUIT SHALL REMAIN FOR RE-USE. RECONNECT TO NEW FIXTURE. SEE SHEET E102 FOR NEW WORK.
 - ② DISCONNECT AND REMOVE EXISTING CEILING FAN AND JUNCTION BOX. EXISTING BRANCH CIRCUIT SHALL REMAIN FOR RE-USE. RECONNECT TO NEW CEILING FAN. SEE SHEET E102 FOR NEW WORK.
 - ③ DISCONNECT AND REMOVE EXISTING SWITCH.
 - ④ EXISTING PANELBOARD "A" TO REMAIN FOR RE-USE. PROTECT IN PLACE DURING DEMOLITION WORK.
 - ⑤ DISCONNECT AND REMOVE EXISTING WALL MOUNTED DOWNLIGHT. EXISTING BRANCH CIRCUIT SHALL REMAIN FOR RE-USE. EXTEND EXISTING LIGHTING CIRCUIT AS REQUIRED AND RECONNECT TO NEW EXTERIOR LED WALL PACK. SEE SHEET E102 FOR NEW WORK.
 - ⑥ EXISTING RECEPTACLE TO BE REPLACED WITH NEW. NEW RECEPTACLE SHALL BE PROVIDED WITH NEW DEDICATED 20A BRANCH CIRCUIT FOR EACH RECEPTACLE. CONTRACTOR TO TRACE AND VERIFY EXISTING CIRCUITING AS SHOWN AND UPDATE THE PANEL SCHEDULE CIRCUIT DIRECTORY. MAINTAIN EXISTING CIRCUITS TO EXISTING HALL RECEPTACLES AS REQUIRED.
 - ⑦ DISCONNECT AND REMOVE EXISTING LIGHT SENSOR MOUNTED ABOVE GUTTER FOR EXTERIOR LIGHTING CONTROLS INCLUDING EXISTING EMT CONDUIT AND WIRING. NEW EXTERIOR NIGHT LIGHTS TO BE CIRCUITED VIA NEW NIGHT LIGHT TIME SWITCH.

1 ELECTRICAL DEMO PLAN
 E101 SCALE: 1/4" = 1'-0"



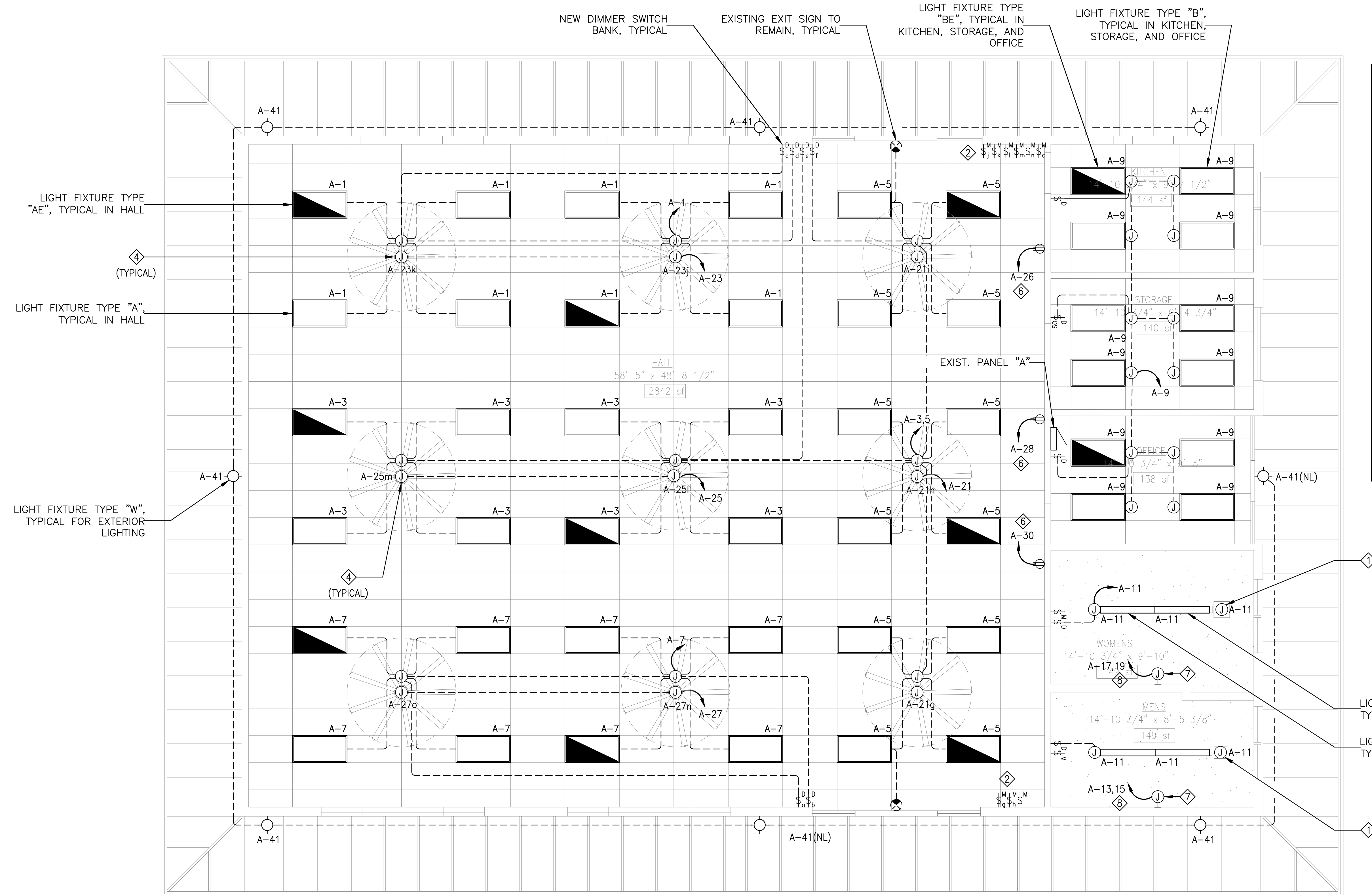
APPROVED:

 CHIEF, CIVIL ENGINEERING BRANCH
 DEPARTMENT OF PLANNING AND PERMITTING

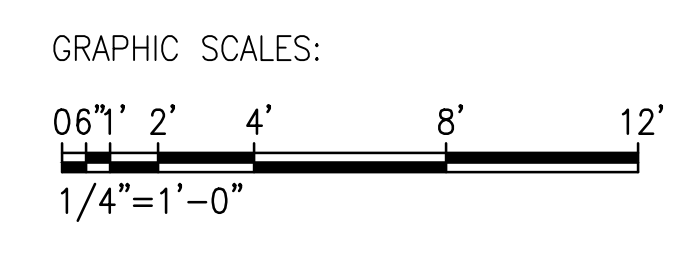
REVISION NO.	DATE	REVISIONS	BY
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: 3-3-05:87 ELECTRICAL DEMO PLAN			
		DESIGNED BY: AD DRAWN BY: RSG CHECKED BY: - DATE: 12/19/2022	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers 1008 BISHOP STREET, 25TH FLOOR HONOLULU, HI 96813 TEL: 808-533-2002	
JOB NO. 22-038 SHEET E101 13 OF 14 SHEETS		DATE: 12/19/2022	

NOTE:
 THE USE OF ROMEX IS STRICTLY PROHIBITED. CONTRACTOR SHALL FIELD VERIFY AND INSPECT ALL EXISTING WIRING ABOVE SUSPENDED CEILING. REPLACE ALL ROMEX CABLES WITH NEW EMT CONDUIT AND WIRING.

- PLAN NOTES:**
- 1 CONTRACTOR SHALL PROVIDE PROVISIONS FOR RESTROOM EXHAUST FANS. PROVIDE 3/4" EMT CONDUIT FROM EXHAUST FAN TO WALL MOUNTED FAN CONTROLS AS INDICATED. EXHAUST FAN SHALL BE INTERLOCKED WITH RESTROOM LIGHTING CIRCUIT.
 - 2 PROVIDE NEW CEILING FAN WALL CONTROLLER FOR EACH FAN. CONTROLLER SHALL BE COMPATIBLE WITH NEW CEILING FAN. PROVIDE MINKAIRE WALL CONTROL #WC600 OR EQUAL.
 - 3 PROVIDE NEW CEILING FAN MINKAIRE #F899L-DK OR EQUAL. PROVIDE 3/4" C - 2#12, 1#12GND AND RECONNECT TO EXISTING CEILING FAN CIRCUIT. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. CONTRACTOR TO FIELD VERIFY EXISTING CIRCUITING.
 - 4 PROVIDE NEW CEILING FAN JUNCTION BOX. JUNCTION BOX FOR CEILING FAN MOUNTING SHALL BE RATED FOR 50 LBS.
 - 5 NOT USED
 - 6 PROVIDE 3/4" C - 2#12, 1#12GND DEDICATED BRANCH CIRCUIT FROM NEW RECEPTACLE TO EXISTING PANEL "A". PROVIDE DEDICATED NEUTRAL. DO NOT SHARE NEUTRAL.
 - 7 PROVIDE NEW HAND DRYER WITH DEDICATED CIRCUIT AND INSTALL PER ADA GUIDELINES. COORDINATE HAND DRYER LOCATION WITH END USER PRIOR TO START OF WORK AND VERIFY HAND DRYER VOLTAGE AND CIRCUIT SIZE PRIOR TO ROUGH-IN.
 - 8 PROVIDE 3/4" C - 2#12, 1#12GND DEDICATED BRANCH CIRCUIT FROM NEW HAND DRYER TO EXISTING PANEL "A".



1 ELECTRICAL PLAN - NEW WORK
 E102 SCALE: 1/4" = 1'-0"



APPROVED:

 CHIEF, CIVIL ENGINEERING BRANCH
 DEPARTMENT OF PLANNING AND PERMITTING
 DATE _____

REVISION NO.	DATE	REVISIONS	BY
5/10/23		BID REVISIONS	

Exp. Date: 4-30-24

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

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
 657 KAUMUALI'I WAILUKU, MAUI, HAWAII
 T.M.K.: 3-3-05:87

ELECTRICAL PLAN - NEW WORK

DESIGNED BY: AD
 DRAWN BY: RSG
 CHECKED BY: -
 DATE: 12/19/2022

HAWAIIAN ENGINEERING GROUP, Inc.
 Civil & Structural Engineers
 1008 BISHOP STREET, SUITE 2050
 HONOLULU, HI 96813
 TEL: 808-533-2002

JOB NO.
22-038

SHEET
E102

14 OF 14 SHEETS

MECHANICAL LEGEND

----- COLD WATER LINE
 ----- VENT LINE
 ----- WASTE LINE

AWC ACCESSIBLE WATER CLOSET
 ALAV ACCESSIBLE LAVATORY
 FD FLOOR DRAIN
 WC WATER CLOSET
 AUR ACCESSIBLE URINAL
 W WASTE
 V VENT
 VTR VENT THRU ROOF
 CW COLD WATER
 WHA WATER HAMMER ARRESTER
 HB HOSE BIBB

GENERAL MECHANICAL NOTES

- CONFORM TO ALL REQUIREMENTS OF THE BUILDING, PLUMBING AND ELECTRICAL CODES, STATE OF HAWAII HEALTH REGULATIONS, FIRE MARSHAL'S REGULATIONS AND OTHER APPLICABLE REGULATIONS.
- INSTALLATION SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE PROJECT AS A WHOLE.
- DUCT SIZES NOTED ARE NET INSIDE DIMENSIONS.
- CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND CONSTRUCTION.
- COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND DELAYS.
- PAY FOR ALL PERMIT FEES AND APPLICATIONS.
- PROVIDE ADDITIONAL MATERIALS AND LABOR FOR A COMPLETE OPERABLE SYSTEM AT NO EXTRA COST TO THE OWNER.
- COORDINATE ALL REQUIRED SYSTEM DOWN-TIMES WITH THE OCCUPYING TENANTS AND THE BUILDING MANAGEMENT. SCHEDULE DOWN-TIMES FOR OFF-HOURS WHEN REQUIRED.
- PROVIDE ACCESS PANELS FOR ALL ITEMS UNDER THIS SECTION REQUIRING SERVICING, INSPECTION, MAINTENANCE AND ADJUSTMENT.
- PREPARE SIX (6) SETS OF SHOP DRAWINGS, SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO START OF WORK. PREPARE ONE SET OF REPRODUCIBLE AS-BUILT DRAWINGS SHOWING THE ACTUAL INSTALLED CONDITIONS AND SUBMIT TO THE OWNERS UPON COMPLETION OF WORK.
- PROVIDE ONE YEAR FREE MAINTENANCE CONTRACT FOR ALL SYSTEMS AND EQUIPMENT PROVIDED UNDER THIS SECTION.
- PROVIDE FINAL CONNECTIONS TO ALL OFCI EQUIPMENT. PROVIDE ALL VALVES, UNIONS, STRAINERS, PRESSURE REGULATORS, INDIRECT WASTE PIPING, ETC. REQUIRED FOR A COMPLETE INSTALLATION. VERIFY ALL REQUIREMENTS WITH THE OWNER AND EQUIPMENT SUPPLIER.
- ALL EXISTING PIPING SHOWN IS BASED ON INFORMATION MADE AVAILABLE AT THE TIME OF DESIGN, ALL LINE SIZES AND LOCATIONS MUST BE VERIFIED ON THE FIELD.
- SUBMIT AS-BUILT MECHANICAL DRAWINGS IN BOTH PRINTED FORMAT AND IN AUTOCAD DWG FORMAT BURNED ONTO A CD TO THE LANDLORD UPON COMPLETION OF THE PROJECT.
- ALL CONSTRUCTION SHALL CONFORM TO THE IBC AND THE LATEST COUNTY OF MAUI/ STATE OF HAWAII AMENDMENTS AND ORDINANCES.

GENERAL MECHANICAL SPECIFICATIONS

- WORK:
 - SCOPE: THE EXTENT OF THE WORK IS AS INDICATED ON THE DRAWINGS.
 - SUBMITTALS:
 - EQUIPMENT AND MATERIAL SUBMITTAL: SUBMIT FOR APPROVAL SIX (6) SETS OF SUBMITTAL DATA SHOWING DIMENSIONS, CAPACITIES, AND CONSTRUCTION.
 - SHOP DRAWINGS: SUBMIT FOR APPROVAL SIX (6) SETS OF SHOP DRAWINGS INDICATING PROPOSED LAYOUT INCLUDING PROPOSED DEVIATIONS FROM THE CONTRACT DRAWINGS DUE TO OBSERVED FIELD CONDITIONS. SHOP DRAWINGS SHALL INCORPORATE APPROVED EQUIPMENT.
 - AS-BUILT DRAWINGS: SUBMIT UPON COMPLETION OF THE PROJECT ONE SET OF REPRODUCIBLE DRAWINGS AND THREE SETS OF PRINTS SHOWING AS-BUILT CONDITIONS.
 - CODES, REGULATIONS AND STANDARDS
 - THE INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES AND REGULATIONS, INCLUDING THE LOCAL BUILDING CODES, PLUMBING CODE, ELECTRICAL CODE, AND PUBLIC HEALTH REGULATIONS OF THE STATE OF HAWAII.
 - THE INSTALLATION SHALL CONFORM TO THE LATEST APPLICABLE INDUSTRY STANDARDS UNLESS SPECIFICALLY NOTED OTHERWISE.
 - OBTAIN AND PAY FOR ALL COSTS OF PERMITS, FEE LICENSES, TESTS AND INSPECTION REQUIRED IN CONNECTION WITH THE WORK.
 - ADDITIONAL WORK: THE DESIGN IS BASED ON EQUIPMENT AS DESCRIBED IN THE DRAWINGS. ANY CHANGE IN ELECTRICAL, WIRING, CONDUIT, CONNECTIONS, PIPING, CONTROLS, AND OPENINGS REQUIRED BY ALTERNATE EQUIPMENT SPECIFIED AND SUBMITTED AND APPROVED SHALL BE PAID FOR BY THIS CONTRACTOR.
 - GUARANTEE AND CERTIFICATE: GUARANTEE AND CERTIFY IN WRITING ALL NEW WORK IN THIS SECTION FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF THE WORK AS A WHOLE BY THE ENGINEER. SHOULD ANY EQUIPMENT OR MATERIAL FAIL WITHIN THIS PERIOD, REPLACE OR REPAIR THAT ITEM AT NO COST TO THE OWNER IF SUCH IS DUE TO FAULTY WORKMANSHIP OR MATERIALS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO ANY PART OF PREMISES CAUSED BY EQUIPMENT FURNISHED UNDER THIS SECTION DURING THE GUARANTEE PERIOD.
 - PRODUCT DELIVERY, STORAGE AND HANDLING: FURNISH NEW FIXTURES, MATERIALS AND ACCESSORIES BEARING THE MANUFACTURER IDENTIFICATION. COORDINATE DELIVERIES TO AVOID INTERFERENCES OR CONSTRUCTION DELAYS. PROTECT PRODUCTS DURING DELIVERY, STORAGE, INSTALLATION, AND THE REMAINDER OF THE CONSTRUCTION PERIOD AFTER INSTALLATION.
 - INSPECTION OF SITE: THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE CONDITIONS AFFECTING HIS WORK BY SUBMITTING HIS PROPOSAL. THE SUBMISSION OF THE PROPOSAL SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND NO EXTRA WORK MADE NECESSARY BY HIS FAILURE TO VISIT THE SITE.
 - MAINTENANCE CONTRACT: PROVIDE ONE YEAR FREE MAINTENANCE FOR ALL EQUIPMENT AND SYSTEMS PROVIDED UNDER THESE SECTIONS, AS RECOMMENDED BY THE EQUIPMENT MANUFACTURERS, INDUSTRY STANDARDS AND AS OTHERWISE NOTED OR DIRECTED.

- MATERIALS:
 - AS SPECIFIED HEREIN AFTER.
- INSTALLATION:
 - PREPARATION: VISIT THE WORKSITE AND BECOME FULLY AWARE OF ALL EXISTING CONDITIONS. INVESTIGATE THE CONTRACT DOCUMENTS AND MAKE PROPER PROVISIONS TO AVOID INTERFERENCES OR CONSTRUCTION DELAYS. FURNISH OTHER TRADES WITH INFORMATION TO PROPERLY LOCATE AND SIZE OPENINGS IN THE STRUCTURE REQUIRED FOR THIS WORK. FURNISH ANCHOR BOLTS, SLEEVES, INSERTS AND SUPPORT REQUIRED FOR THIS WORK.
 - INSTALLATION: PERFORM WORK USING PERSONNEL SKILLED IN THE TRADE INVOLVED. PROVIDE COMPETENT SUPERVISION. FURNISH NEW EQUIPMENT, MATERIALS, AND ACCESSORIES BEARING THE MANUFACTURER'S IDENTIFICATION, AND CONFORMING TO THE RECOGNIZED COMMERCIAL STANDARDS. PROVIDE EXTRA MATERIALS AND LABOR FOR A COMPLETE OPERABLE SYSTEM AT NO EXTRA COST TO THE OWNER.
 - FIELD QUALITY CONTROL: TEST SYSTEMS IN ACCORDANCE WITH APPLICABLE STANDARDS, CODES AND MANUFACTURER'S RECOMMENDATIONS. 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 ALL TESTS, ADJUSTMENTS AND BALANCING HAS BEEN PERFORMED.
 - BALANCING, ADJUSTMENT AND CLEANING: CLEAN UP WORK AREAS AND FIXTURES. ADJUST SYSTEM FOR PROPER OPERATION, READY FOR USE. TOUCH UP WITH MATCHING PAINT ALL DAMAGED FACTORY FINISHES.
 - CLEANING AND ADJUSTING: AT THE COMPLETION OF THE WORK, ALL PARTS OF THE INSTALLATION SHALL BE THOROUGHLY CLEANED. PIPE, VALVES, AND FITTINGS SHALL BE CLEANSSED 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 CONTRACTOR FAILURE TO PROPERLY CLEAN THE PIPING SYSTEM SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT COST TO THE OWNER.

PLUMBING


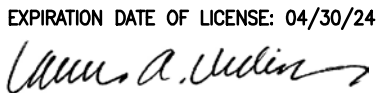
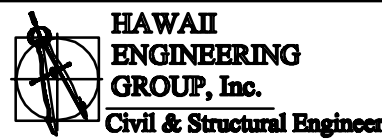
- WORK: FURNISH AND INSTALL ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE PLUMBING SYSTEM AS INDICATED ON THE PLANS AND AS SPECIFIED HEREIN.
- MATERIALS:
 - PIPING MATERIALS: NO FOREIGN PIPE ALLOWED.
 - WASTE AND VENT PIPING BELOW GRADE: PVC DWV PIPING WITH SOLVENT CEMENTED JOINTS.
 - WASTE AND VENT PIPING ABOVE GRADE: NO-HUB CAST IRON WITH STAINLESS STEEL BANDS, OR SCHEDULE 40 GALVANIZED STEEL WITH CAST DWV FITTINGS.
 - WATER PIPING ABOVE GRADE: TYPE L COPPER, HARD-DRAWN, WITH 95/5 TIN/ANTIMONY SOLDERED JOINTS, LEAD-FREE FLUX.
 - FIXTURES: ALL FIXTURES AND SUPPLY FAUCETS SHALL CONFORM TO THE LATEST CODES, ORDINANCES, AND REGULATIONS REGARDING WATER CONSERVATION.

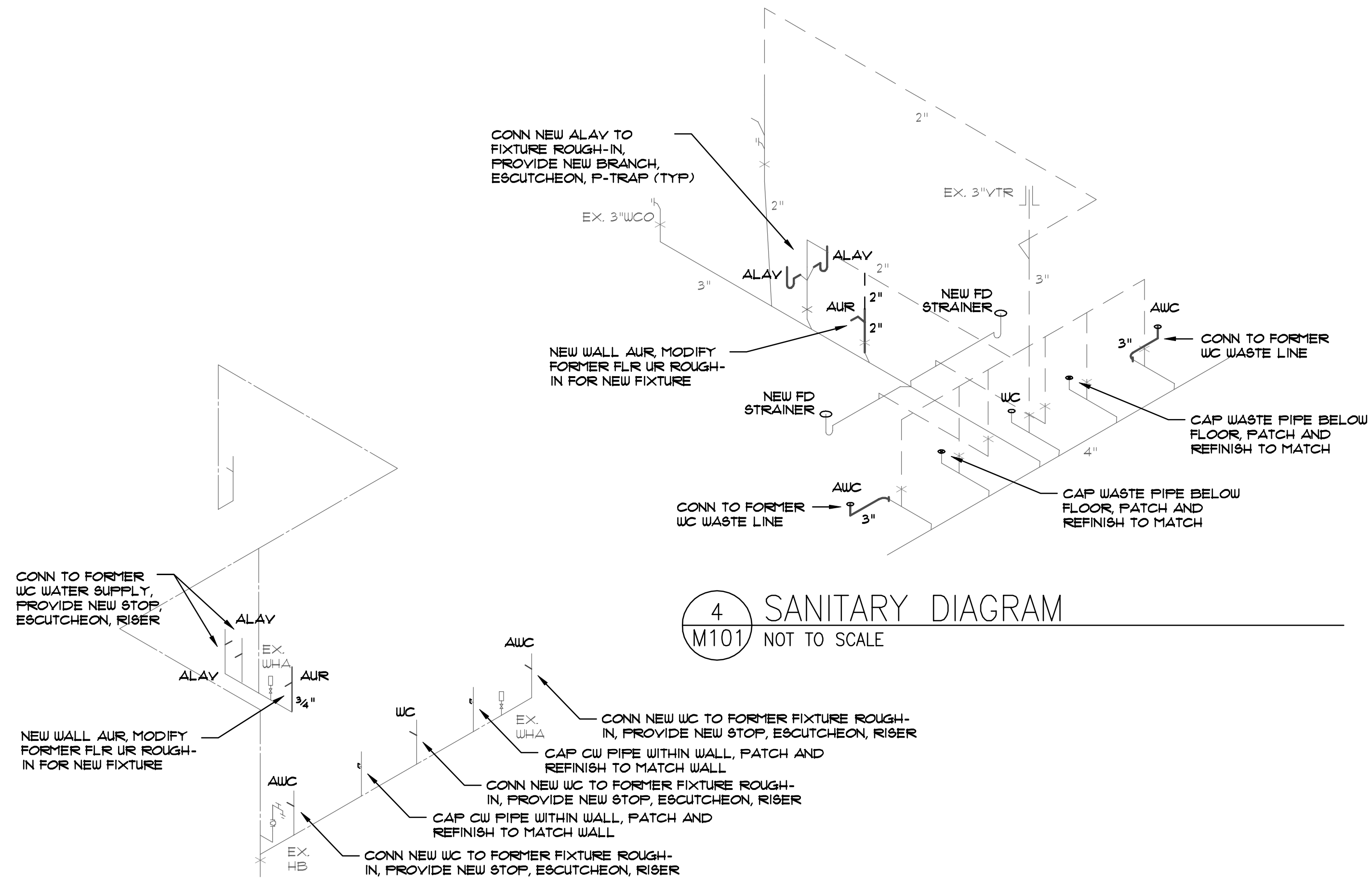
PLUMBING FIXTURES TO BE AS APPROVED BY OWNER, CONTRACTOR TO PROVIDE FIXTURE AND TRIM SUBMITTAL FOR APPROVAL. INSTALLATION BY PLUMBER. REFER TO ARCH SHEETS FOR DETAILS. PLUMBER TO PROVIDE NECESSARY CONNECTIONS AND FITTINGS, INCLUDING SUPPLY STOPS, SUPPLY RISERS, DRAIN LINES, P-TRAPS, FIXTURE CARRIERS, ETC., REQUIRED FOR COMPLETE INSTALLATION, VERIFY WITH FIXTURE SUPPLIER FOR REQUIREMENTS.
 - INSULATION:
 - HOT WATER PIPING: INSULATE HOT WATER PIPING WITH 1-INCH THICK FIBERGLASS WITH ALL-SERVICE JACKET, k=.22-.26.
- INSTALLATION:
 - PROVIDE STOPS OR VALVES FOR ALL FIXTURES.
 - STERILIZE AND TEST ALL WASTE AND WATER LINES IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PLUMBING CODE.
 - PROVIDE P-TRAPS FOR ALL FIXTURES.
 - INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE IAPMO PLUMBING CODE AS AMENDED BY THE BUILDING DEPARTMENT.
 - COORDINATE ALL REQUIRED SYSTEM DOWN-TIMES FOR TIE-IN TO EXISTING SYSTEMS WITH THE OWNER. SCHEDULE WORK FOR OFF-HOURS AS REQUIRED.

VENTILATION

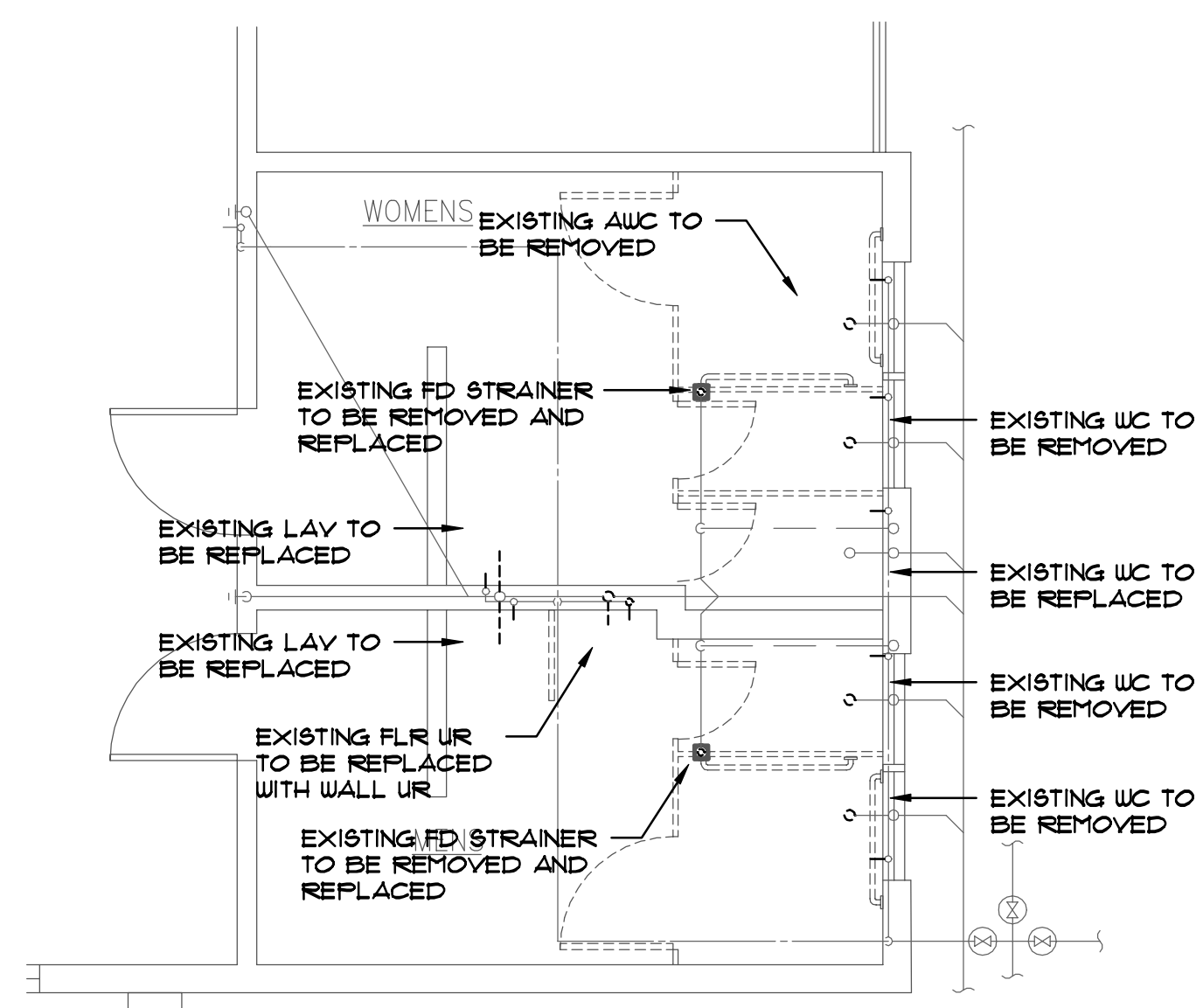
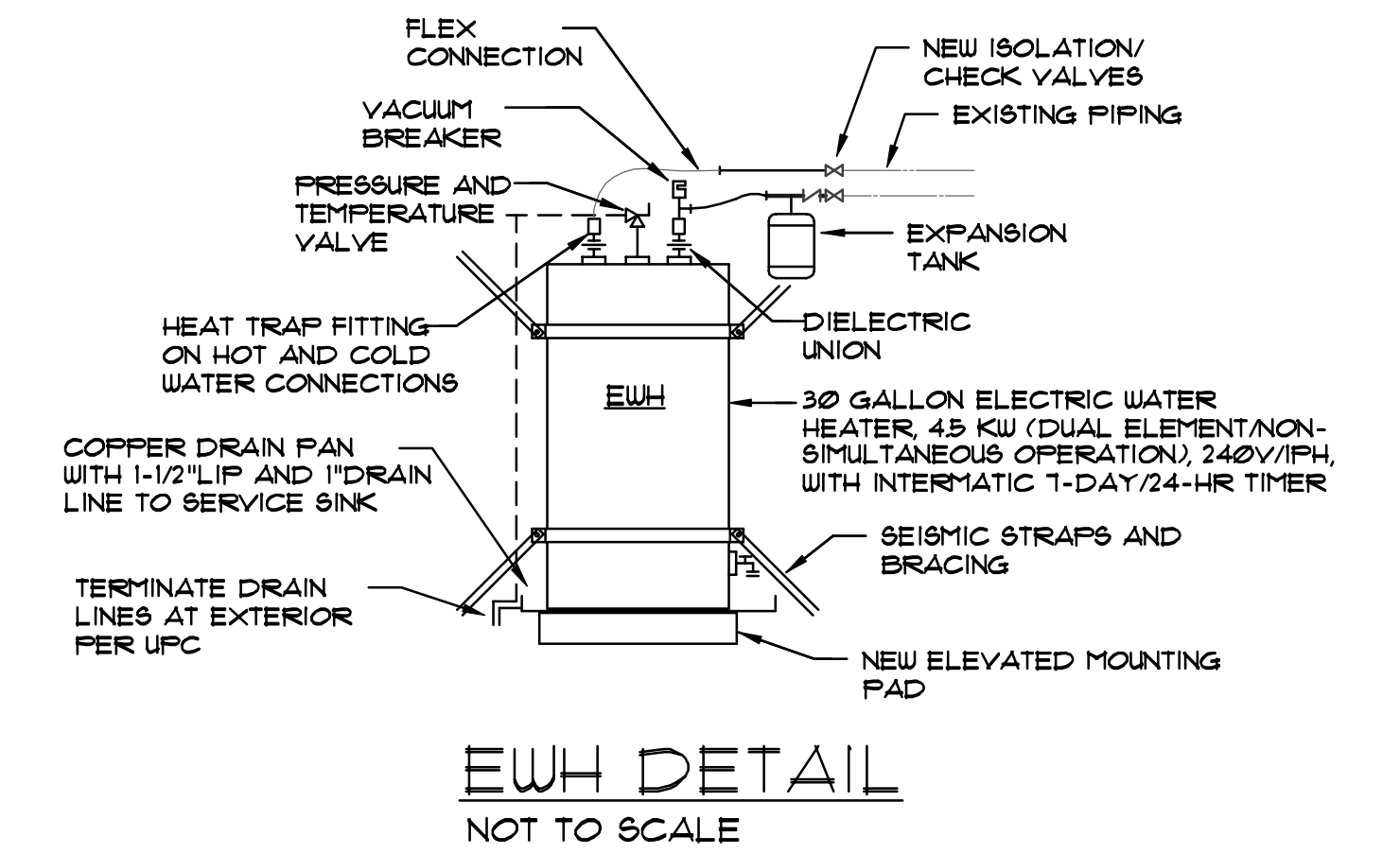
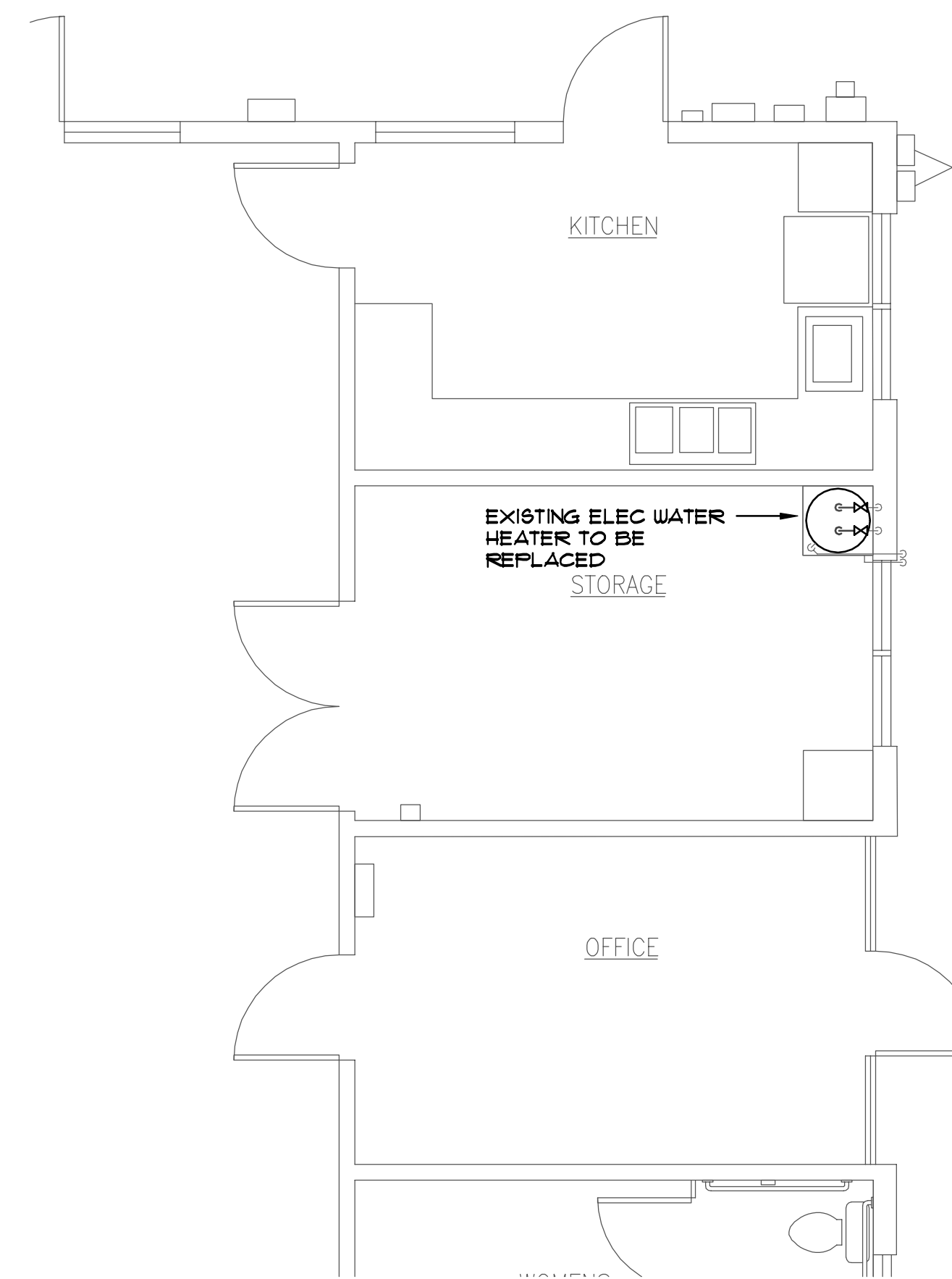
- WORK: FURNISH AND INSTALL ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE VENTILATION SYSTEM AS INDICATED ON THE PLANS AND AS SPECIFIED HEREIN.
- MATERIALS:
 - DUCTWORK:
 - INTERIOR AND EXTERIOR AIR CONDITIONING AND OUTSIDE AIR/EXHAUST DUCTWORK SHALL BE GALVANIZED SHEETMETAL, GAGES AND CONSTRUCTION IN ACCORDANCE WITH SMACNA STANDARDS FOR LOW PRESSURE DUCT.
 - EQUIPMENT: AS INDICATED ON EQUIPMENT SCHEDULE.
- INSTALLATION:
 - DUCTWORK INSTALLATION SHALL BE IN ACCORDANCE WITH SMACNA STANDARDS.
 - PROVIDE ALL CONTROLS, CONTROL WIRING AND CONDUIT UNDER THIS SECTION.
 - PROVIDE ONE YEAR FREE MAINTENANCE INCLUDING MONTHLY FILTER REPLACEMENT AND ALL EQUIPMENT MANUFACTURERS' RECOMMENDED SERVICE/SCHEDULE.

PLUMBING FIXTURE SCHEDULE					
SYM	FIXTURE	DESCRIPTION	MAKE/MODEL	FITTINGS	ACCESSORIES
AWC	ACCESSIBLE WATER CLOSET	Two piece tank type, 1.6 GPF, elongated bowl, pressure assist, ADA compliant, lever wide side of fixture.	Kohler K-3493		Solid, open front seat less cover.
WC	WATER CLOSET	Two piece tank type, 1.6 GPF, elongated bowl, 14.5" rim height.	Kohler K-3978		Solid, open front seat less cover.
ALAV (WALL HUNG)	ACCESSIBLE LAVATORY	Wall hung vitreous china, single hole, concealed arm carrier.	Kohler K-2007	K-45344-BA-CP single hole sensor activated faucet, vandal resistant aerator, battery operated.	Floor supported wall carrier, perforated grid drain, offset tailpiece and ADA tailpiece/trap and supply covers. Refer to architectural drawings for mounting heights.
AUR	ACCESSIBLE URINAL	Vitreous china, wall mount, 3/4-inch top spud, 0.125 gpf.	Kohler K-5452-ET-0	Kohler K-10949-SV touchless flush valve with manual override, battery operated.	Floor mounted wall carrier. Verify fixture mounting height with Architect and on site.

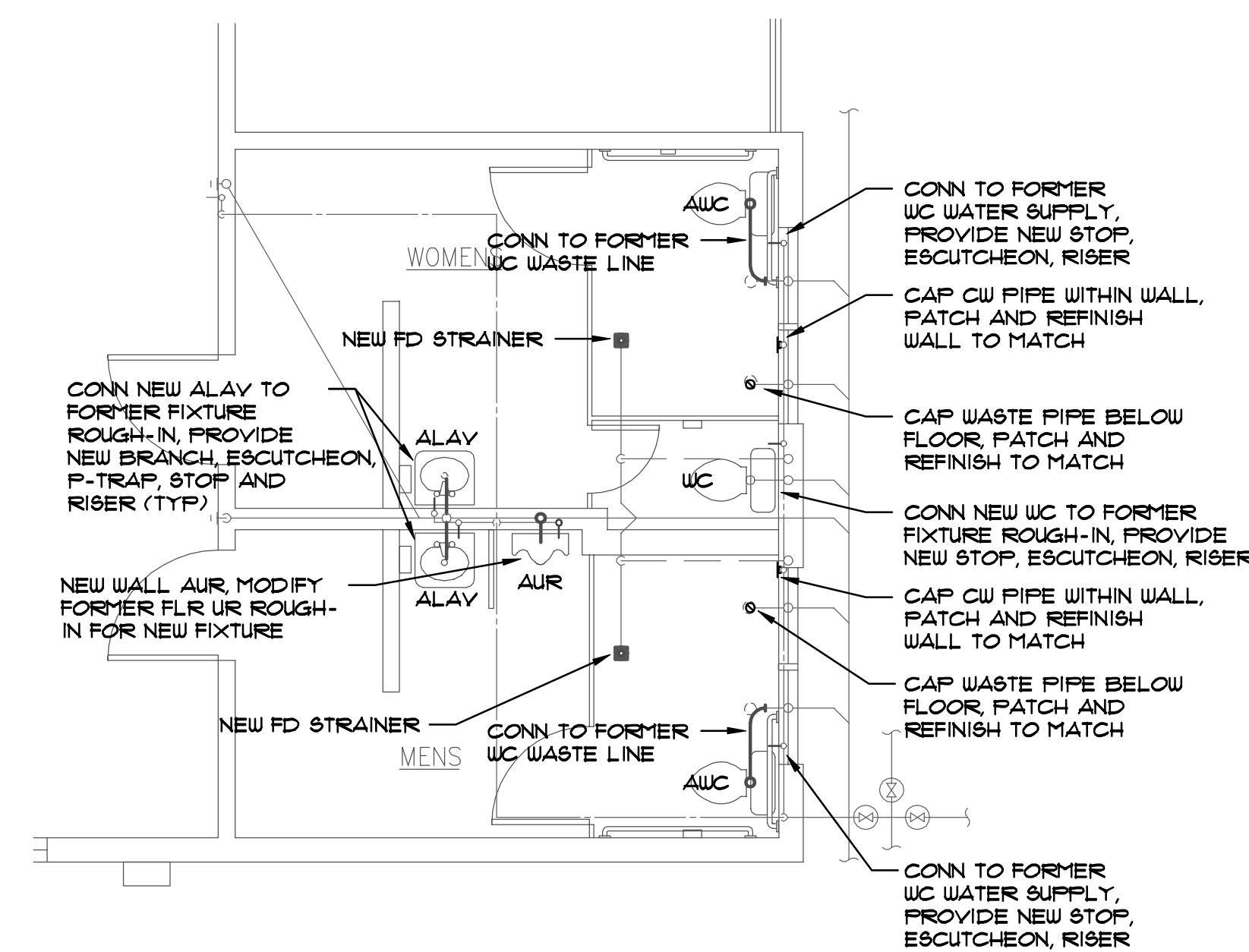
REVISION NO.	DATE	REVISIONS					BY			
										
DEPARTMENT OF HAWAIIAN HOME LANDS PAUKUKALO COMMUNITY CENTER IMPROVEMENTS 657 KAUMUALI'I WAILUKU, MAUI, HAWAII T.M.K.: (2) 3-3-005:087										
MECHANICAL LEGEND, NOTES, SPECS										
DESIGNED BY:	LU								JOB NO.	
DRAWN BY:	LU								SHEET	
CHECKED BY:	-								M100	
SUPV:									19 OF 35 SHEETS	
DATE:	04/18/2023									
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION 										
										
HAWAII ENGINEERING GROUP, Inc. Civil & Structural Engineers <small>1000 KAHULUOUE AVENUE SUITE 200 HAWAII, HI 96706</small>										



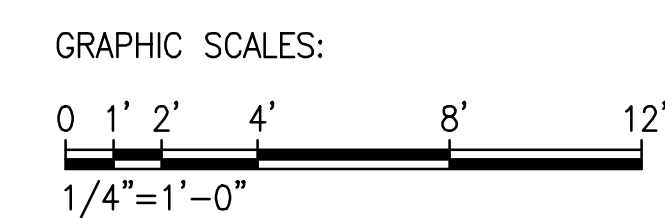
3 WATER DIAGRAM
M101 NOT TO SCALE



1 PLUMBING DEMOLITION PLAN
M101 1/4" = 1'-0"



2 PLUMBING PLAN
M101 1/4" = 1'-0"



REVISION NO.	DATE	REVISIONS	BY

DEPARTMENT OF HAWAIIAN HOME LANDS
 PAUKUKALO COMMUNITY CENTER IMPROVEMENTS
 657 KAUMUALI'I WAILUKU, MAUI, HAWAII
 T.M.K.: (2) 3-3-005:087

PLUMBING PLANS, DIAGRAMS

DESIGNED BY: LU
 DRAWN BY: LU
 CHECKED BY: -
 SUP: -
 DATE: 04/18/2023

LICENSED PROFESSIONAL ENGINEER
 No. 5804-M
 HAWAII, U.S.A.

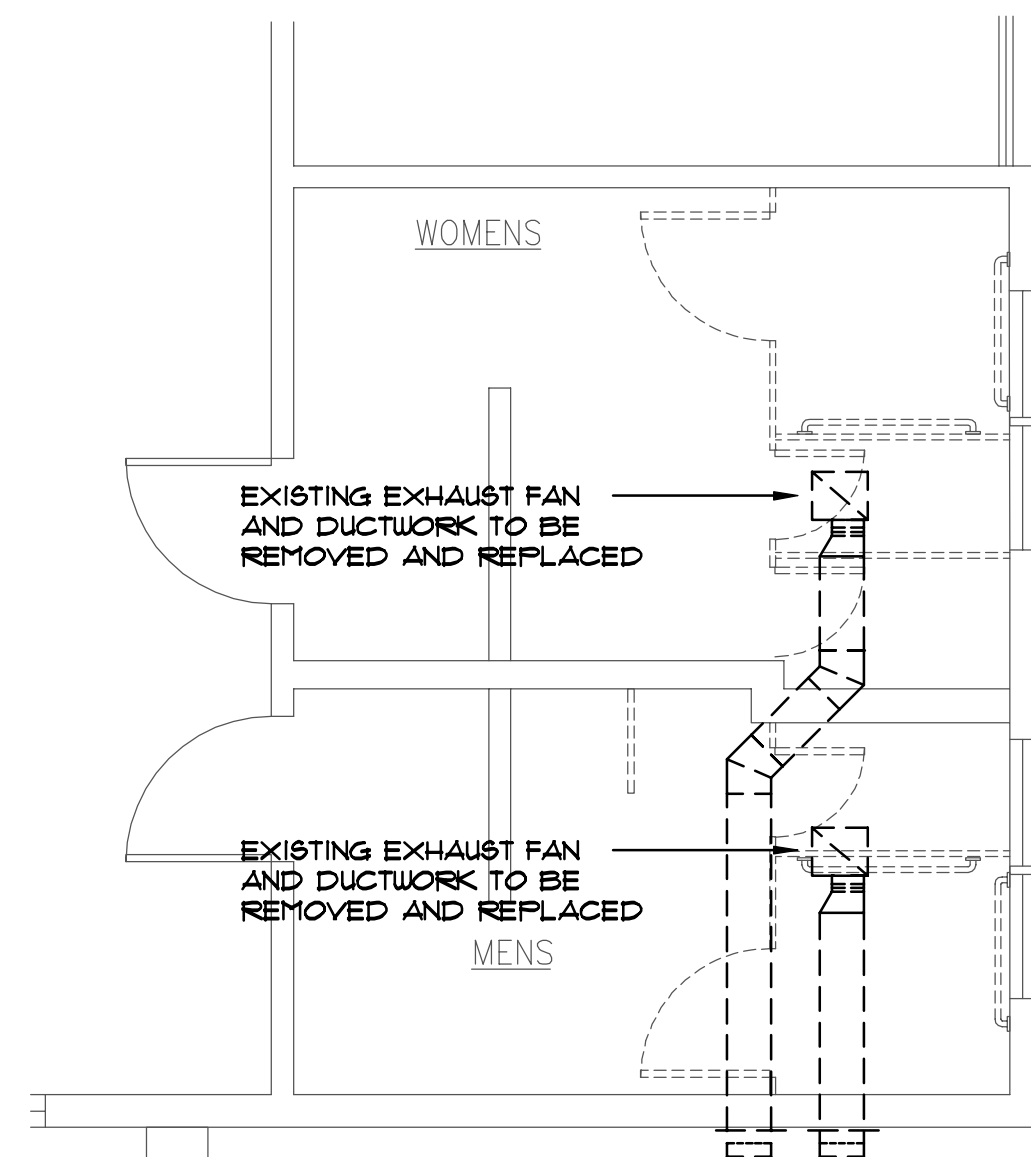
EXPIRATION DATE OF LICENSE: 04/30/24
 LANCE AKITO UCHIDA
 HAWAII ENGINEERING GROUP, Inc.
 Civil & Structural Engineers

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

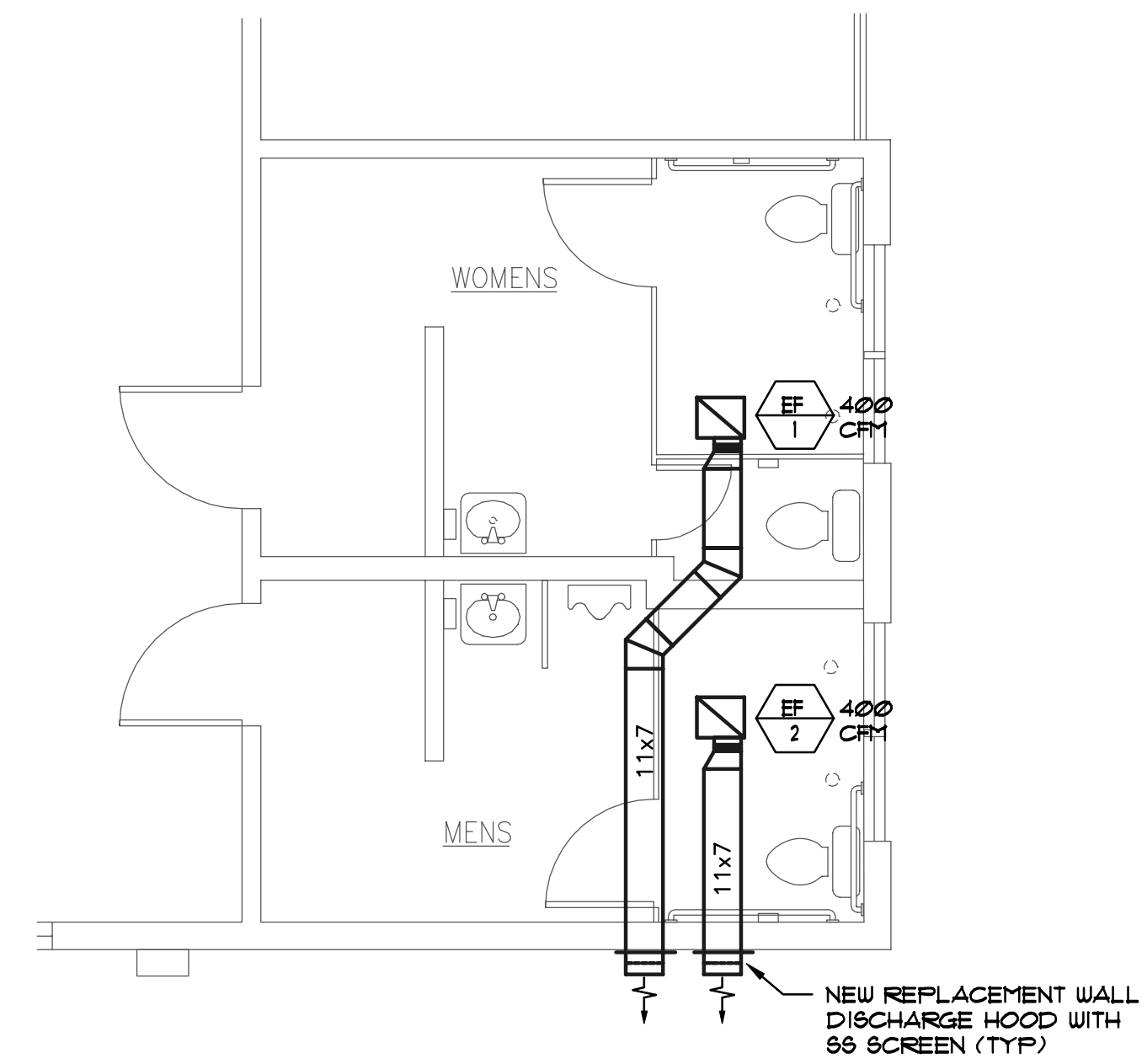
JOB NO.
 SHEET
 M101
 20 OF 35 SHEETS

FAN SCHEDULE

UNIT TAG	TYPE OF SERVICE	CFM	TSP	RPM	SONES	ELEC.	V/PH/Hz	NOTES
EF-1	TOILET EXH	400	0.125	1550	4.7	130 W	115/1/60	CENTRIFUGAL CABINET FAN WITH GRILLE AND INSULATED HOUSING, INTERLOCK W/ LIGHT, PENN Z8H
EF-2	TOILET EXH	400	0.125	1550	4.7	130 W	115/1/60	CENTRIFUGAL CABINET FAN WITH GRILLE AND INSULATED HOUSING, INTERLOCK W/ LIGHT, PENN Z8H

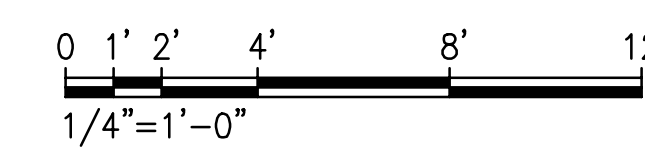


1 MECHANICAL DEMOLITION PLAN
M102 1/4" = 1'-0"



2 MECHANICAL PLAN
M102 1/4" = 1'-0"

GRAPHIC SCALES:



REVISION NO.	DATE	REVISIONS	BY

LANCE AKITO UCHIDA
 LICENSED PROFESSIONAL ENGINEER
 No. 5804-M
 HAWAII, U.S.A.
 EXPIRATION DATE OF LICENSE: 04/30/24
Lance A. Uchida
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

DEPARTMENT OF HAWAIIAN HOME LANDS

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS

657 KAUMUALI'I WAILUKU, MAUI, HAWAII

T.M.K.: (2) 3-3-005:087

MECHANICAL PLANS, EQUIPMENT SCHEDULE

DESIGNED BY: LU

DRAWN BY: LU

CHECKED BY: -

SUPV: -

DATE: 04/18/2023

HAWAII ENGINEERING GROUP, Inc.
 Civil & Structural Engineers
1000 KAHALUNA AVENUE SUITE 200 WAILUKU, HI 96793

JOB NO.
 SHEET
M102
 21 OF 35 SHEETS

**STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS**

BID OFFER FORM FOR

PAUKUKALO COMMUNITY CENTER IMPROVEMENTS

**WAILUKU, MAUI, HAWAII
Tax Map Key: (3) 3-003:087**

IFB No.: IFB-23-HHL-011

Chairman
Hawaiian Homes Commission
Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, Hawaii 96707

The undersigned has carefully examined, read, and understands the terms and conditions in the Plans and Specifications, Special Conditions attached hereto, DHHL Construction General Conditions, and General Conditions specified in the Invitation for Bids (IFB) No. IFB-23-HHL-011. The State of Hawaii's (State) Contract for Goods and Services Based on Competitive Sealed Bids AG-003 Rev. 6/22/2009, AG-008 103D General Conditions, are included by reference and made part hereof and available upon written request to the Procurement Officer. The undersigned hereby submits the following offer to perform the work for IFB No. IFB-23-HHL-011 as specified herein, all in accordance with the true intent and meaning thereof.

The undersigned understands and agrees that:

1. The State reserves the right to reject any and all offers, synonymous with bids to waive any items that are defective when, in the State's opinion, such rejection or waiver will be in the best interest of the State. A solicitation may be rejected in whole or part when in the best interest of the State.
2. If awarded the contract, all services will be in accordance with Hawaii Revised Statutes (HRS) § 103-55.5.
3. In submitting this offer, the Offeror, synonymous with Bidder is not in violation of HRS Chapter 84, Standards of Conduct.
4. By submitting this offer, the Offeror certifies that the offer was independently arrived at without collusion and the Offeror did not participate in any practices to restrict competition.
5. It is understood that the failure to receive any addendum shall not relieve the Offeror from any obligation under this IFB.

Date: _____

The undersigned represents that it is: **(Check ✓ one only)**

- A **Hawaii business** incorporated or organized under the laws of the State of Hawaii; **OR**

Paukukalo Community Center Improvements
IFB-23-HHL-011

Bid Offer Form
May 2023

- A **Compliant Non-Hawaii business** not incorporated or organized under the laws of the State of Hawaii, is or shall be registered at the State of Hawaii Department of Commerce and Consumer Affairs Business Registration Division (DCCA-BREG) to do business in the State of Hawaii.

State of incorporation: _____

Offeror is:

- Sole Proprietor Partnership Corporation Joint Venture Other: _____

Federal ID No.: _____

Hawaii General Excise Tax ID No.: _____

Telephone No.: _____

Fax No.: _____

E-Mail Address.: _____

Payment address (other than street address below)

(Street Address, City, State, Zip Code)

Business address

(Street Address, City, State, Zip Code)

Respectfully submitted:

Authorized (Original) Signature

Name and Title (Please Type or Print)

* _____
Exact Legal Name of Company (Offeror)

*If Offeror shown above is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the awarded contract will be executed:

The following bid is hereby submitted for, IFB-23-HHL-011, Paukukalo Community Center Improvements on Maui, to the Department of Hawaiian Home Lands.

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
	Base Bid				
1	GENERAL CONDITIONS – not to exceed 3% of total bid sum less allowances and force account. All work defined in the contract documents not included in the items below. This shall include, but not limited to supervision; mobilization; demobilization; dust protection; water control; designing and constructing work enclosures for interior and exterior work; coordination with other trades for electrical and plumbing repairs if necessary; dumpsters; project signage; and job site cleaning to include pressure washing all surfaces of the parking structure ^{areas} after all work is completed.	LS	LS		\$
2	GENERAL WORKS (to include but not limited to: 2.1 Replacing conduit straps, conduit and wire for PV sensor, metal vent hoods, hinges, missing jalousie glass. Install door closers. 2.2 Cover existing Gable Louver vents ^{Remove existing metal gable end louver and install CDX plywood cover} 2.3 Higher venting, provide Quitecool AFR SLR-40w solar attic fan 2.4 Lower venting, provide holes with a louvered panel with bird screen 2.5 Remove and replace ^{damaged portion of the} downspouts			Lump Sum	\$

	2.6 Remove existing bollard 2.7 Install security grill on office windows 2.8 Clean all aluminum door jambs 2.9 Install window screens 3.0 Replace existing water heater 3.1 Repair fascia if necessary and any broken/missing trellis on exterior of louvers 3.2 Replace pantry cabinet 3.3. Replace existing Fiber Reinforced Plastic wall 3.4 Replace existing countertop 3.4 Replace existing countertop on stainless steel sink 3.5 Provide conduit and wires for hand dryer 3.6 Provide conduit provision for restroom exhaust fan 3.7 Provide conduit and wires for new receptacles				
3	DOORS (to include but not limited to: 3.1 Replacing existing storefront system with new storefront and hardware 3.2 Replace existing swing doors and repair frames 3.3 Overhaul and change existing sliding door hardware and door rollers 3.4 Replace broken glass window sidelight	EA	1	\$ _____	
		EA	2	\$ _____	
		EA	5	\$ _____	
		PCS	2	\$ _____	
				Total Item 3	\$
4	CEILING (to include but not limited to: 4.1 Change T bars and ceiling tiles.	SF	3,580		
				Lump Sum	\$
5	ROOF INSULATION (to include but not limited to: 5.1 Installation of new insulation	SF	3,580		
				Lump Sum	

6	LIGHTS (to include but not limited to: 6.1 Remove and replace existing 2 x 4 light fixtures 6.2 Remove and replace the existing 1 x 6 light fixtures 6.3 Remove and replace exterior lights 6.4 Remove existing switches and provide Dimmer switch banks	EA EA EA EA	48 4 8 2	\$ _____ \$ _____ \$ _____ \$ _____	Total Item 6 \$
7	FANS (to include but not limited to: 7.1 Remove and replace existing ceiling fans and wall controller for each fan	EA	9	\$ _____	Total Item 7 \$
8	BATHROOM & FIXTURES (to include but not limited to: 8.1 Remove and install new toilets 8.2 Remove and install new tile floor and baseboards 8.3 Remove and install new toilet partitions 8.4 Remove and install new urinal 8.5 Remove and install new wall-mounted sinks 8.6 Remove and install new grab bars 8.7 Install new urinal partition 8.8 Provide toilet paper and paper towel dispenses 8.9 Remove and replace existing exhaust fan and ductwork)	EA LS LS EA EA EA LS LS LS	3 LS LS 1 2 4 LS LS LS	\$ _____ \$ _____ \$ _____ \$ _____ \$ _____ \$ _____ \$ _____ \$ _____ \$ _____	Total Item 8 \$

9	INTERIOR PAINTING (to include but not limited to: 6.1 Power washing, patching, and filling of holes, cracks, sanding, painting of walls and ceiling, doors, and framings)			Lump Sum	\$
10	ALLOWANCES (For associated work related to the repair of the community center. Funds listed in allowance item are to be spent at the direction of DHHL. Any unspent allowance will be deducted from the contract by change order prior to final payment.)			Allowance	\$ 75,000
11	TOTAL SUM BID (ITEMS 1-10)				\$

TOTAL SUM BID _____

Dollars (\$ _____).

The prices herein for the above items shall include all materials, labor, tools, equipment, machinery and all incidentals necessary, inclusive of general excise tax to install or to construct these items in place complete and in accordance with the plans and specifications contained in this IFB.

APPRENTICESHIP AGREEMENT PREFERENCE

Section §103-55.6 HRS, (ACT 17, SLH 2009) provides for a Hawai'i Apprenticeship Preference for public works contracts having an estimated value of \$250,000.00 or more. The preference shall be in the form of a 5% bid adjustment applied to the bidder's amount for bidders that are parties to apprenticeship agreements. The estimated value of this public works contract is \$250,000.00 or more and the apprenticeship agreement preference **shall** apply.

To be eligible for the preference, the bidder shall:

1. Be a party to an apprenticeship agreement registered with the DLIR at the time the bid is made for each apprenticeable trade the bidder will employ to construct the public works project for which the bid is being made.
 - a. The apprenticeship agreement shall be registered and conform to the requirements of HRS Chapter 372.
 - b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain the preference.
 - c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.
 - d. If a bidder's employee is multi-skilled and able to perform work in more than one trade (for example, a project requires a carpenter and a laborer, and the employee is a carpenter, but is also able to perform the work of a laborer), the bidder need only be a party to the carpenter's apprenticeship agreement and does not need to be a party to the laborer's apprenticeship agreement in order to qualify for the preference. The bidder is not "employing" a laborer, only a carpenter, and so only needs to be a party to the carpenter's apprenticeship agreement.
 - e. Qualification for the preference is given on a project-by-project basis and depends upon the specific offer for a specific project. A bidder's employees may vary from project to project and may qualify for the preference on one project but may not qualify on another project. For example, on one project, if the bidder only employs carpenters to perform work in the carpentry and labor trades, then the bidder only needs to be a party to the carpenter's apprenticeship agreement in order to qualify for the preference. However, on another project if the same bidder employs both carpenters and laborers, then the bidder will not qualify for the preference if the bidder is only a party to the carpenter's apprenticeship agreement and not the laborer's apprenticeship agreement.
2. State the trades the bidder will employ to perform the work;

3. For each trade to be employed to perform the work, the bidder shall submit a completed signed original *CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1)* verifying the participation in an apprenticeship program registered with the State Department of Labor and Industrial Relations (DLIR);
4. The *Certification Form 1* shall be authorized by an apprenticeship sponsor of the DLIR list of registered apprenticeship programs. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor; and
5. The completed *Certification Form 1* for each trade must be submitted by the bidder with the offer. A facsimile or copy is acceptable to be submitted with the offer; however, the completed signed original must be submitted within five (5) working days of the due date of the offer. If the signed original is not received within this timeframe, the preference may be denied. Previous certifications shall not apply.

Failure to comply with ALL of the conditions noted above, without exception, shall disqualify the Bidder from qualifying for, and thus receiving, benefit of the Hawai'i Apprenticeship Preference.

The *Certification Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: <http://labor.hawaii.gov/wdd/>.

Upon receiving *Certification Form 1*, the DHHL will verify with DLIR that the apprenticeship program is on the list of apprenticeship programs registered with the DLIR. If the program(s) are not confirmed by the DLIR, the bidder will not qualify for the preference.

If the bidder is certified to participate in an apprenticeship program for each trade which will be employed by the bidder for the project, a preference will be applied to decrease the bidder's total bid amount by five per cent (5%) for evaluation purposes.

Should the bidder qualify for other preferences (for example, Hawaii Products Preference), all applicable preferences shall be applied to the bid amount.

While Hawai'i Apprenticeship Agreement Preference will be taken into consideration to determine the low bidder, the contract awarded shall be the original bid amount, exclusive of any preferences. The preference is only for evaluation purposes.

The bidder hereby certifies that it will employ the following apprenticeable trades to perform the work for this project:

METHOD OF AWARD

Bidder is required to bid on the entire project. The low bidder shall be determined by the procedures outlined in items 1) through 5) below:

- 1) Prior to opening of bids, the State will determine the amount of funds available for the project. This amount will be designated the "Control Amount". **The control amount shall be announced at, and prior to the opening of bids.**
- 2) The Base Bid and Alternate Additive or Deductive, if any, of each Bidder will be adjusted to reflect the applicable preferences in accordance with Chapter 103D, HRS. Bidders shall provide an amount for the Alternate Additive(s) or Deductive (s), or it will not be considered in the evaluation of the Base bid. The Alternate Additive or Deductive, if any, will then be added or subtracted, respectively to the Base Bid and compared with the Control Amount.
- 3) The low bidder shall be the Bidder having the lowest aggregate amount, within the control amount (after application of the various preferences), for the Base Bid plus or minus the Alternate Additive or Deductive, respectively, if any.
- 4) If adding the Alternate Additive, if any, would make the aggregate amount exceed the Control Amount for all Bidders, the low bidder shall be the Bidder having the lowest Base Bid after application of the various preferences.
- 5) If subtracting the Alternate Deductive, if any would make the aggregate amount come within the Control Amount for all Bidders, the low bidder shall be the bidder having the lowest Base bid after application of the various preferences.

It is further understood and agreed that:

- 1) The Chairman reserves the right to reject any and/or all bids and waive any defects when, in his opinion, such rejection or waiver will be in the best interest of the State.
- 2) After determining the low bidder, an award may be made either on the amount of the Base Bid alone, or including the Alternate (exclusive of preferences), if:
 - a. It is in the best interest of the State;
 - b. Funds are available at time of the award; and
 - c. The combination of the Base Bid plus Alternate does not change the apparent low bidder.
- 3) In the event the Base Bid for all Bidders exceed the control amount, the Chairman reserves the right to negotiate with the lowest responsible and responsive bidder to award a contract within available funds.

- 4) In the event the award is made for the Base Bid alone, the Chairman reserves the right to amend the contract at a later date to include the Alternate should funds subsequently become available.

OTHER CONDITIONS

- 1) The liquidated damages per working day for failure to complete the work on time have been determined and are noted in the Special Conditions of the sample contract.
- 2) By submitting this bid, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past one (1) year.
- 3) By submitting this bid, the undersigned is declaring that Bidder's own organization will perform at least 20% of the contractor's work. For the purposes of this section, the Contractor's work is defined as: direct cost labor for contractor's forces; direct cost materials installed by the contractor's direct cost labor force; direct cost equipment, either owned or leased, used by the contractor's direct cost labor force; and field overhead cost to include: field supervision, field office trailer (if any), field office equipment and supplies, etc.
- 4) Upon the acceptance of the bid by the Chairman, the undersigned 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.
- 5) The quantities given herewith are approximate only and are subject to increase or decrease.
- 6) The estimated quantities shown for items for which a UNIT PRICE is asked in this bid are only for the purpose of comparing on a uniform basis bids offered for the work under this contract. No claim shall be filed for anticipated profit or loss because of any difference between the quantities of the various classes of work done or the materials and equipment actually installed and the said estimated quantities. Payment on UNIT PRICE items will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.
- 7) If the product of the UNIT PRICE BID and the number of units does not equal the total amount stated by the undersigned in the Bid for any item, it will be assumed that the error was made in computing the total amount. For the purpose of determining the lowest Bidder, the stated UNIT PRICE alone will be considered as representing the Bidder's intention and the total amount bid on such items shall be considered to be the amount arrived at by multiplying the UNIT PRICE by the number of units.
- 8) Certification for Safety and Health Programs for Bids in Excess of \$100,000. In accordance with Sections 103D-327 and 396-18, Hawaii Revised Statutes, by submitting this bid, the undersigned certifies that his firm 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.

- 9) Any contract arising out of this offer is subject to the approval of the Department of the Attorney General as to form, and to all further approvals, including the approval of the Governor, required by statute, regulation, rule, order, or other directive.

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

	Date		Date
Addendum No. 1	_____	Addendum No. 3	_____
Addendum No. 2	_____	Addendum No. 4	_____

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

Bid Security in the amount of _____
_____ DOLLARS (\$ _____)

as required by law, is enclosed herewith in the form of

- | | |
|--|---|
| <input type="checkbox"/> Surety Bond (*1) | <input type="checkbox"/> Official Check (*3) |
| <input type="checkbox"/> Legal Tender (*2) | <input type="checkbox"/> Share Certificate (*3) |
| <input type="checkbox"/> Cashier's Check (*3) | <input type="checkbox"/> Teller's Check (*3) |
| <input type="checkbox"/> Certificate of Deposit (*3) | <input type="checkbox"/> Treasurer's Check (*3) |
| <input type="checkbox"/> Certified Check (*3) | |

Respectfully submitted,

Name of Company, Joint Venture or Partnership

License No.

By _____
Signature (*4)

Title: _____

Date: _____

Address: _____

Telephone No.: _____

IF A CORPORATION, AFFIX CORPORATE SEAL TO SIGNATURE.

THIS BID FORM MAY NOT BE ALTERED AND BIDDERS MAY NOT QUALIFY OR CONDITION THEIR BIDS IN ANY WAY.

PLEASE FILL OUT THE ATTACHED CERTIFICATE OF RESOLUTION GIVING EVIDENCE OF THE AUTHORITY OF THIS OFFICER TO SUBMIT BIDS ON BEHALF OF THE COMPANY.

- *1. Surety bond underwritten by a company licensed to issue bonds in this State;
- *2. Legal tender, or
- *3. A certificate of deposit, share certificate; or cashier's, treasurer's, teller's, or official check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation of the National Credit Union Administration.
 - 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. BID MUST BE INTACT; MISSING PAGES MAY INVALIDATE YOUR BID.

CERTIFICATE OF RESOLUTION

I, _____, Secretary of _____, a Hawaii Corporation, do hereby certify that the following is a full, true and correct copy of a resolution duly adopted by the Board of Directors of said Corporation, at its meeting duly called and held at the office of the Corporation _____, Hawaii, on _____ day of _____, 2023, at which a quorum was present and acting throughout; and that said resolution has not been modified, amended or rescinded and continues in full force and effect.

“RESOLVED that any individual at the time holding the position(s) of _____, be, and each of them hereby is, authorized to execute on behalf of the Corporation any bid, proposal or contract for the sale or rental of the products of the Corporation or for the services to be performed by the Corporation and to execute any bond required by any such bid, proposal or contract with the United States Government or the State of Hawaii or the City and County of Honolulu, or any County of Municipal Government of said State, or any department or subdivision of any of them.”

IN WITNESS THEREOF, I have hereunto set my hand and affixed the corporate seal of said

_____ this _____ day of _____, 2023.

Secretary

END OF BID