NA LAMA KUKUI - GREASE INTERCEPTOR

GENERAL NOTES:

1. This specification is condensed due to the size of the project. All work performed under this contract shall be performed in accordance with manufacturers' recommendations and quality of workmanship acceptable in the state of Hawaii and comply with any owner's requirements for construction.

2. The contractor shall notify the architect of any discrepancies between the specification and drawings or within the drawings, prior to proceeding with the work.

3. Contractor shall visit the job site and examine the existing conditions. Verify the locations of drains and all utilities. The architect shall be notified of any discrepancies in the drawings prior to commencing construction.

4. Fire safety during construction, alteration or demolition shall be conformed in accordance with the latest adopted Uniform Fire Code, Article 87.

5. All plumbing and electrical work shall conform to their respective Codes of the City and County of Honolulu.

6. **APPLICABLE CODES:**
International Building Code (IBC), 2006 Edition with local amendments
International Existing Building Code (IEBC), 2006 Edition with local amendments
International Energy Conservation Code (IECC), 2006 Edition with local amendments
Uniform Plumbing Code (UPC), 2006 Edition with local amendments
Uniform Fire Code (UFC), NFPA 1 2012 Edition with local amendments
National Electrical Code, 2008 Edition
Department of Health (DOH), Hawaii Administrative Rules, Title 11, Ch 39 - Air Conditioning & Ventilating
Housing Code of the City and County of Honolulu, 1994 Edition

NFPA 1, 2012 edition, is the currently adopted Fire Code.

6.1 Plan Review
6.1.1 Review and approval by the AHJ shall not relieve the applicant of the responsibility of compliance with this Code.
6.1.2 Repairs, renovations, alterations, reconstruction, change of occupancy, and additions to buildings shall conform to this code, NFPA 101, and the building code.

6.2 FIRE SAFETY NOTE: COMMERCIAL COOKING EQUIPMENT: The design, installation, operation, inspection, and maintenance of all public and private commercial cooking equipment shall comply with this chapter and NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.

7. Contractor shall be responsible for verifying all required special inspections by the building department, scheduling inspections during construction, notifying special inspectors when construction is ready for inspection, and securing inspectors' signatures on inspection forms to close out the project.

8. Dimensions
a. Dimensions are shown to face of finish for existing conditions, and to face of stud for new partitions, unless otherwise noted.
b. Written dimensions shall have preference over scaled dimensions.
c. Dimensions shall be verified in field before proceeding with work.
d. All windows & doors are measured to center of unit.

9. Verify partition layout and exact location of all electrical devices with architect & owner prior to construction.

10. Provide termite ground treatment prior to slab work or repairs of penetrations or trenching. BTB barrier and a layer of termimesh shall be used at all openings before patching with non-shrink grout.

11. Separate lumber & plywood in contact with masonry and concrete with min. 30# building felt.

12. Separate dissimilar metals in contact with each other with bitumastic paint, neoprene tape or high impact plastic shims.

13. Contractor shall arrange for all permits, fees, and required inspections by authorities and shall be reimbursed by the owner if agreed upon in writing beforehand.

14. Contractor shall plan in the schedule and allow a min. of 5 working days for review of shop drawings and all other submittals by the architect, engineers, and consultants.

15. Requests for clarification shall be issued in writing, logged and numbered as an RFI (request for information). Contractor shall notify the architect in writing of any conflicts in the plans and/or specifications prior to construction, installation, or application the Work.

16. Requests for changes in price or time shall be issued in writing, logged and numbered as a RFP (request for proposal).

17. All changes shall be documented including a description of the scope of the work. The change in the agreed upon price and schedule, signature of contractor and owner, and date. Undocumented increases in plan and scope of work will be part of the original agreed upon price at no cost to the owner.

18. Keep premise free from accumulation of trash and debris. Upon completion of the work leave the project ready for occupancy by removing all rubbish, cleaning windows, floors, fixtures, cabinets, etc.

19. All trades shall install materials and assembles as per accepted trade industry standards & in accordance w/ manufacturer's recommendations. Architect's drawing is to provide information for sizes & design intent only.

20. Penetrations shall be firestopped and openings shall be protected through fire-rated walls, floor, roof and ceiling assemblies as required by the 2006 IBC Chapter 7.

21. Notify Architect of discrepancies or conflicts prior to ordering of labor or materials.

TECHNICAL NOTES:

DEMOLTION NOTES:
1. REMOVE ALL STRUCTURES, PIPING, UTILITY CHASES, ELECTRICAL WIRING, CONDUITS, LIGHTS, ETC. THAT ARE NOT IN USE OR ABANDONED.
2. REMOVE AREAS IN A CLEAN, AND WORKMAN-LIKE MANNER TO SUPPORT AND AID PATCHING WORK.
3. AT TRENCHED AREAS, TONE PRIOR TO ALL TRENCHING IN ACCORDANCE WITH ALL APPLICABLE CODES AND LAWS.
4. PROVIDE SHORING AS REQUIRED WHEN TRENCHING BENEATH OR ADJACENT TO EXISTING CONSTRUCTION.

CONCRETE
1. PROVIDE CONCRETE PATCHING AND TOPPING IN ACCORDANCE WITH MANUFACTURER'S RECC. SEE CUT SHEETS - MAPCEM102 - FINISH TO MATCH EXISTING. KEEP COEFF. OF FRICTION EQUAL TO OR BETTER THAN EXISTING FOR ADA AND SLIP PREVENTION. SUMBIT MATERIAL DATA SHEETS PRIOR TO INSTALLATION FOR PRODUCT VERIFICATION.

CARPENTRY
1. PROVIDE BLOCKING FOR DOORS AND CABINETS. LUMBER SHALL BE TREATED DOUGLAS FIR, CONSTRUCTION GRADE, S4S WITH COUNTY APPROVED PRESERVATIVE TREATMENT. WOOD BLOCKING SHALL BE FIRE RETARDANT TREATED TO MEET WALL'S FIRE STANDARDS.

FLOORING:
1. REFER TO NOTES ON PLAN.

PAINT:
1. REFER TO FINISH PLAN NOTES
2. PAINT PRODUCTS SHALL BE SHERWIN WILLIAMS OR APPROVED EQUAL. APPLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION WITH NO "HOLIDAY, SKIPS" AND SAND BETWEEN COATS..
3. WALLS - ONE COAT UNDILUTED FLAT VINYL ACRYLIC LATEX INTERIOR WALL PAINT AND TWO COAT VINYL ACRYLIC LATEX PAINT.
4. PAINT ALL AREAS AFFECTED BY DEMOLITION TO MATCH EXISTING.

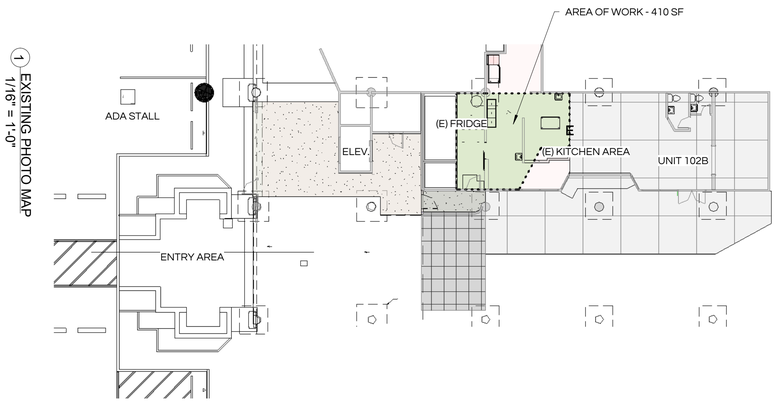
HOOD FIRE SUPPRESSION SYSTEM:
1. PROVIDE FIRE SUPPRESSION SYSTEM - VERIFY EXISTING SYSTEM IS TIED TO FIRE ALARM - SEE ELECTRICAL DRAWING AND PROVIDE IF NEEDED.

MECHANICAL / PLUMBING: REFER TO M DRAWINGS.

ELECTRICAL: REFER TO ELECTRICAL DRAWINGS.

Sheet List		
PAGE	Sheet Name	Sheet Number
1	TITLE SHEET	T001
2	FLOOR PLAN	A001
3	MECHANICAL NOTES	M100
4	MECHANICAL NOTES 2	M101
5	DEMO PLUMBING PLAN	M200
6	PLUMBING PLAN	M201
7	GAS PLUMBING PLAN	M202
8	PIPING DIAGRAMS	M300
9	MECHANICAL DETAILS	M400
10	NOTES AND LEGEND	E001
11	ELECTRICAL PLAN	E002

Grand total: 11



1 EXISTING PHOTO MAP
1/16" = 1'-0"

PROJECT TEAM

AR: Hale Takazawa, Architect PH: 808.392.0398
ME: ENGINEERING DYNAMICS PH: 808.523.6930
EE: DOUGLAS ENGINEERING PH: 808.524.2434

PROJECT INFO

Owner: NA LAMA KUKUI

Project location: 560 N. NIMITZ HIGHWAY
HONOLULU, OAHU, HAWAII 96817

TMK: 15010:015

SCOPE: TRENCHING, PLUMBING, PROVIDE NEW GREASE INTERCEPTOR AND PUMP. FLOOR PATCHING.

2024 Mauna Place
Honolulu, Hawaii 96822
Tel.808.392.0398
www.haleTakazawa.com
HALE I. TAKAZAWA architect

HALE I. TAKAZAWA
LICENSED PROFESSIONAL ARCHITECT
No. 9396
HAWAII, U.S.A.

EXPIRES 4.30.20

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

NA LAMA KUKUI - GREASE INTERCEPTOR
560 N. NIMITZ HWY, STE 102B
HONOLULU, HI 96817
commissioned by:
OFFICE OF HAWAIIAN AFFAIRS

REVISION
ISSUE: DATE:

SHEET TITLE:
TITLE SHEET

T001

DATE:
17OCT2018 BID SET

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

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

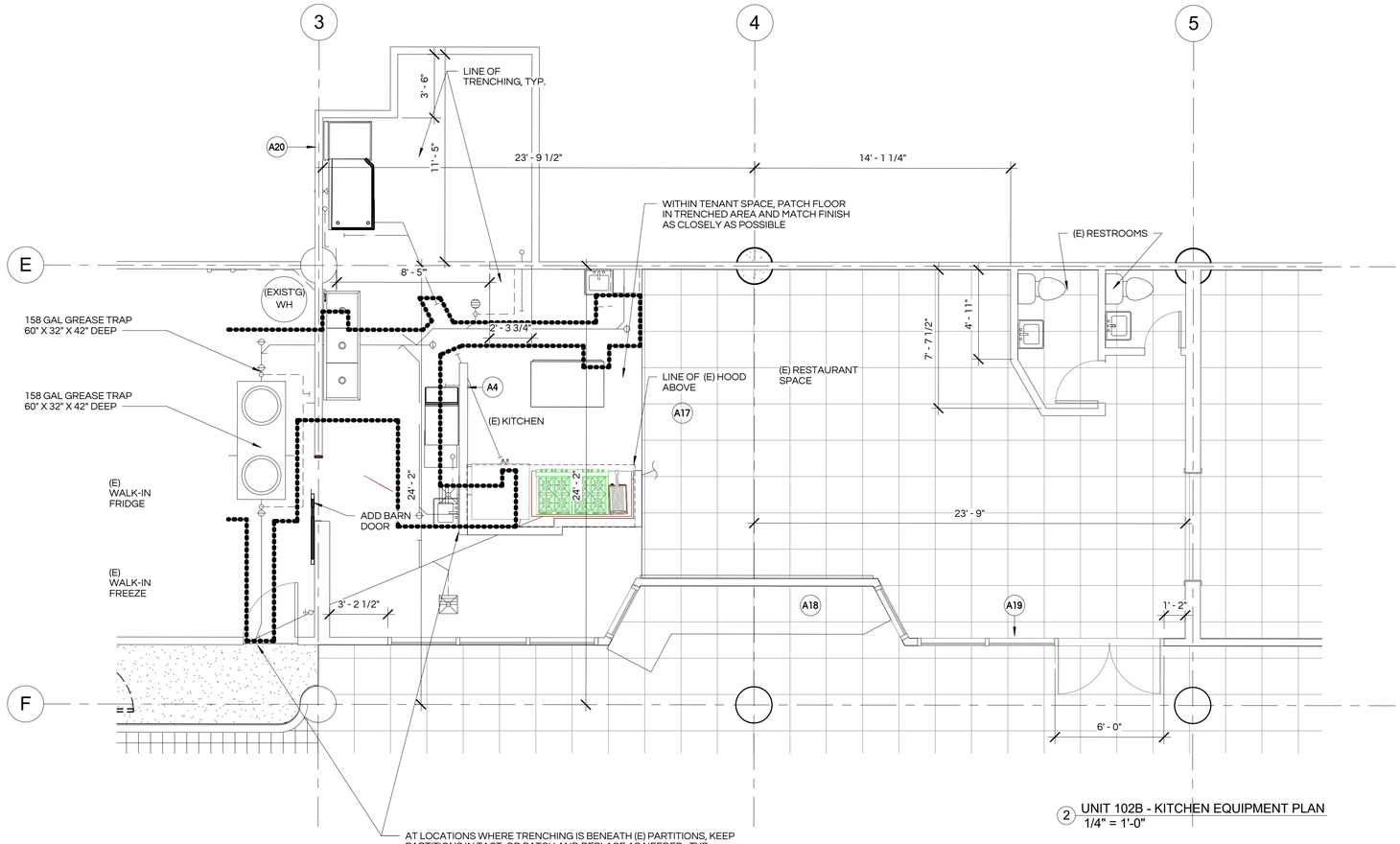
____X____ Building Component Systems
_____ Electrical Component Systems
_____ Mechanical Component Systems

Signature: _____ Date: Oct. 02, 2018

Name: Hale Takazawa

Title: ARCHITECT

License No.: AR-9396



2 UNIT 102B - KITCHEN EQUIPMENT PLAN
1/4" = 1'-0"

FLOOR PLAN KEY NOTES	
Key Value	Keynote Text
A4	(E) LOW WALL WITH STAINLESS STEEL SURROUND FOR KITCHEN COOKING AREA, TYP.
A5	SCOUR EXISTING EXPOSED CONCRETE, CLEAN AND TOP WITH SPECIFIED SEALER FOR COMMERCIAL KITCHENS AS RECC. BY BONDED MATERIALS. REMOVE EXIST'G. AS NEEDED IN SHADED AREAS, SCOUR, AND REFINISH WITH MAPECEM 102 DISTRIBUTED BY BONDED MATERIALS. FOLLOW MANUFACTURER RECCOMENDATIONS. MATCH FINISH TEXTURE OF EXISTING AND ADJACENT SALT FINISH. KEEP COEFF. OF FRICTION EQUAL TO OR BETTER THAN EXISTING FOR ADA AND SLIP PREVENTION. SUMBIT MATERIAL DATA SHEETS PRIOR TO INSTALLATION FOR PRODUCT VERIFICATION.
A6	TRENCHED AREA - CUT SLAB, REMOVE MATERIAL, AND FILL WITH ENGINEERED FILL IN ACCORDANCE WITH PLUMBING STANDARDS OF PRACTICE. TOP WITH MATERIAL DESCRIBED IN KEYNOTE A5.
A17	STEAM CLEAN EXISTING TILE FLOOR (BY TENANT)
A18	(E) COUNTER TOP
A19	(E) STOREFRONT
A20	(E) TENANT WALLS - PAINT/FINISH, TYP. (BY TENANT)

2024 Mauna Place
Honolulu, Hawaii 96822
Tel.808.392.0398
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HALE I. TAKAZAWA architect

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LICENSED PROFESSIONAL ARCHITECT
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HAWAII, U.S.A.

EXPIRES 4.30.20

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

NA LAMA KUKUI - GREASE INTERCEPTOR
560 N. NIMITZ HWY, STE 102B
HONOLULU, HI 96817
commissioned by:
OFFICE OF HAWAIIAN AFFAIRS

REVISION
ISSUE: DATE:

Written dimensions on these drawings shall have precedence over scaled dimensions-Contractor shall verify and be responsible for all dimensions and conditions on the job-Ommissions or errors on the drawings shall be immediately reported in writing to the Architect and affected work shall not proceed until certified by the Architect-Shop details must be submitted to this office for approval before proceeding with fabrication.

SHEET TITLE:
FLOOR PLAN

A001

28FEB2019 BID SET

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL VISIT THE SITE AND BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS AND THE AMOUNT AND KIND OF WORK TO BE PERFORMED. EXISTING CONDITIONS ARE BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE LOCATION, INVERT, SIZE AND CONDITION OF EXISTING UTILITIES AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.
2. FOR THE ACTUAL FABRICATION, INSTALLATION, AND TESTING OF WORK UNDER THIS SECTION, THE CONTRACTOR SHALL USE ONLY THOROUGHLY TRAINED AND EXPERIENCED WORKMEN, COMPLETELY FAMILIAR WITH THE ITEMS REQUIRED AND WITH THE MANUFACTURERS' RECOMMENDATIONS AS TO THEIR USE.
3. ALL WORK SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE AND ASCE 7 AND STATE AND COUNTY AMENDMENTS, INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2006 AND AMENDMENTS, UNIFORM PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, UNIFORM FIRE CODE, NATIONAL FIRE CODE, NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS, NATIONAL ELECTRIC CODE, TITLE 11 ADMINISTRATIVE RULES, DOH, CHAPTER 39-AIR CONDITIONING AND VENTILATION, AND ALL OTHER APPLICABLE CODES AND STANDARDS.
4. ALL WORK SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE WIND LOAD AND SEISMIC DESIGN REQUIREMENTS OF THE 2006 IBC AND ASCE 7. SEISMIC RESTRAINT PRODUCTS SHALL BE PROVIDED AND CERTIFIED BY MASON INDUSTRIES.
5. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC.
6. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ALL APPLICABLE FEES PRIOR TO COMMENCING ANY WORK.
7. CONTRACTOR SHALL PROVIDE (6) SETS OF SUBMITTALS AND SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR APPROVAL BY THE ENGINEER PRIOR TO COMMENCING ANY WORK. ALL WORK DONE WITHOUT PRIOR APPROVAL SHALL BE SUBJECT TO REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
8. MATERIALS: MANUFACTURERS SHOWN ON THE CONSTRUCTION DOCUMENTS OR IN THE PROJECT SPECIFICATIONS INDICATE STYLE AND QUALITY. EQUIVALENT FIXTURES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER.
9. OMISSION: SHOULD IT APPEAR THAT ANY PORTION OF THE SYSTEM HAS BEEN OMITTED FROM THE PLANS, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE ENGINEER TO SUCH APPARENT OMISSION ONE WEEK BEFORE THE DATE OF BID OPENING SO THAT CORRECTION MAY BE MADE. OTHERWISE, THE CONTRACTOR SHALL FURNISH AND INSTALL, IN A MANNER CORRESPONDING WITH THE REST OF THE WORK, AS IF THE SAME WERE SPECIFIED AND SPECIFICALLY PROVIDED FOR.
10. PLUMBING:
    PRODUCTS:
    A. WATER PIPING BELOW AND ABOVE GRADE SHALL BE TYPE "K" COPPER. FITTING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT UPC AND AMENDMENTS. "PLASTI-SLEEVE" OR ACCEPTABLE EQUAL, 10 MIL IN THICKNESS, SHALL BE INSTALLED ON ALL UNDERGROUND PIPING AND PIPING EMBEDDED IN CONCRETE. SOLDER FOR ALL DOMESTIC WATER PIPES SHALL BE "LEAD-FREE" SILVER SOLDER. FLUX SHALL BE NON-CORROSIVE COMPLYING WITH COPPER DEVELOPMENT ASSOCIATION STANDARD 1.0. SOLDER FOR ALL DOMESTIC WATER PIPES SHALL BE "LEAD-FREE" 95-5 OR SILVER SOLDER. CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AND COUPLINGS FOR CONNECTIONS OF PIPES AND FITTINGS OF DISSIMILAR METALS. ALL HOT WATER LINES SHALL BE INSULATED WITH MIN. 1.5" THICK INSULATION IN ACCORDANCE WITH THE IECC 2006.
    B. SOIL, WASTE, VENT, AND INTERIOR ROOF DRAIN PIPING AND FITTINGS SHALL BE NO-HUB CAST IRON PIPE AND FITTINGS IN ACCORDANCE WITH THE CURRENT UPC AND AMENDMENTS. CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AND COUPLINGS FOR CONNECTIONS OF PIPES AND FITTINGS OF DISSIMILAR METALS.
    C. SEWER FORCE MAIN PIPING AND FITTINGS SHALL BE PVC SCHED 80 PRESSURE PIPE AND FITTINGS IN ACCORDANCE WITH THE CURRENT UPC AND AMENDMENTS. CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AND COUPLINGS FOR CONNECTIONS OF PIPES AND FITTINGS OF DISSIMILAR METALS.

EXECUTION
EXCAVATION AND BACKFILL

A. TRENCHES FOR ALL UNDERGROUND PIPE LINES SHALL BE EXCAVATED TO THE REQUIRED DEPTHS. THE BOTTOMS OF THE TRENCHES SHALL BE TAMPED HARD AND GRADED TO SECURE THE REQUIRED FALL. BELL HOLES SHALL BE EXCAVATED SO THAT PIPE WILL REST ON SOLID GROUND FOR ITS ENTIRE LENGTH. ROCK, WHERE ENCOUNTERED, SHALL BE EXCAVATED TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE PIPE AND ROCK SURFACE SHALL BE FILLED WITH SAND.

B. AFTER PIPE LINES HAVE BEEN TESTED, INSPECTED, AND APPROVED, PRIOR TO BACKFILLING, FORMS SHALL BE REMOVED AND THE EXCAVATION SHALL BE CLEANED OF TRASH AND DEBRIS. MATERIALS FOR BACKFILLING SHALL CONSIST OF THE EXCAVATION EXCEPT ADOBE, OR BORROW OF SAND, GRAVEL AND OTHER MATERIALS APPROVED BY THE ENGINEER, AND SHALL BE FREE OF TRASH, LUMBER OR OTHER DEBRIS. BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN THICKNESS, AND PROPERLY MOISTENED TO APPROXIMATE OPTIMUM CONDITIONS. EACH LAYER SHALL BE COMPACTED BY HAND OR MACHINE TAMPERS OR BY OTHER SUITABLE EQUIPMENT TO A DENSITY THAT WILL PREVENT EXCESSIVE SETTLEMENT OR SHRINKAGE. BACKFILL SHALL BE BROUGHT TO SUITABLE ELEVATION ABOVE GRADE TO PROVIDE ANTICIPATED SETTLEMENT AND SHRINKAGE THEREOF. THE BACKFILL SHALL BE TAMPED TO DENSITY EQUAL TO THE SURROUNDING EARTH UNDER CONCRETE FLOOR AND PAVING.

PREPARATION

A. INVESTIGATE THE CONTRACT DOCUMENTS AND MAKE PROPER PROVISIONS TO AVOID INTERFERENCES OR CONSTRUCTION DELAYS. DETERMINE THE EXACT ROUTE OF EACH PIPE. MAKE OFF-SETS AND CHANGES IN DIRECTION REQUIRED TO MAINTAIN PROPER HEAD ROOM AND PITCH OR TO ACCOMMODATE THE STRUCTURE AND THE WORK OF OTHER TRADES. FURNISH OTHER TRADES WITH INFORMATION TO PROPERLY LOCATE AND SIZE OPENINGS IN THE STRUCTURE REQUIRED FOR THIS WORK. FURNISH ANCHOR BOLTS, SLEEVES, INSERTS, AND SUPPORTS REQUIRED FOR THIS WORK.

PIPING INSTALLATION AND PIPE SYSTEM SUPPORTS

ALL PIPING INSTALLATION SHALL CONFORM TO THE CURRENT UNIFORM PLUMBING CODE, IBC 2006 (SEISMIC RESTRAINTS), AND ASCE 7 (SEISMIC RESTRAINTS) AS APPLICABLE. ALL PIPING SHALL BE LABELED.

A. NO PIPE SHALL BE CLOSED UP, FURRED IN, BUTTED, OR OTHERWISE HIDDEN UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED BY THE PROPER AUTHORITIES.
B. UNLESS SPECIFICALLY NOTED OTHERWISE, GRAVITY SANITARY AND DRAINAGE PIPING SHALL SLOPE NOT LESS THAN 1/4 INCH PER FOOT OR HORIZONTAL RUN.
C. ALL PIPING SHALL BE INSPECTED INSIDE AND OUT BEFORE INSTALLATION AND NO OBSTRUCTIONS SHALL BE ALLOWED. PIPE ENDS SHALL BE TAPER REAMED TO FULL I.D. AND ALL BURRS REMOVED.
D. UNDERGROUND PIPES PASSING THROUGH WALLS OR AREAS BELOW WALLS OR FOOTINGS SHALL BE PROVIDED WITH PIPE SLEEVES ONE SIZE LARGER AND MADE WATER-TIGHT AT THE SLEEVES. PROVIDE SHEET METAL THIMBLES WHERE PIPES PASS THROUGH FLOORS OR NONSTRUCTURAL MEMBERS, STEEL PIPE SLEEVES WHERE PIPES PASS THROUGH STRUCTURAL MEMBERS AND CONCRETE WALLS.
E. ANCHOR PIPING IN BUILDING WITH APPROVED CLAMPS OR ADJUSTABLE HANGERS SPACED IN ACCORDANCE WITH UNIFORM PLUMBING CODE. SEISMIC RESTRAINTS SHALL BE IN ACCORDANCE WITH IBC 2006 AND ASCE 7 AS APPLICABLE.
F. ON ROOF DRAINS AND WHERE OTHER DRAINS OCCUR ABOVE THE GROUND FLOOR, PROVIDE CLAMPING DEVICE WITH DRAIN. PROVIDE A FOUR-POUND LEAD FLASHING SHEET EXTENDING EIGHT INCHES OUT AROUND DRAIN BODY AND SECURE WITH CLAMPING DEVICE. ON VENTS THROUGH ROOF, EXTEND VENT FLASHING EIGHT INCHES OUT ALL AROUND BASE OF ROOF, EXTEND COLLAR UP VENT AND TURN IN AT TOP.

G. SECURE EACH WATER LINE WHERE IT PENETRATES PARTITIONS TO SERVE FIXTURES, SHOWER ARMS, HOSE BIBS, AND SIMILAR ITEMS. WRAP ALL LINES PASSING THROUGH CONCRETE WITH POLYETHYLENE TAPE. INSTALL UNIONS OR FLANGES AT ALL VALVES, EQUIPMENT AND SYSTEM SPECIALTIES. SET HOSE BIBS 18-INCHES ABOVE FINISH GRADE, UNLESS OTHERWISE INDICATED.
H. PROVIDE CONCRETE THRUST BLOCKS AT EACH CHANGE IN DIRECTION IN UNDERGROUND WATER-PIPING, DRAINAGE AND SEWAGE FORCE MAIN SYSTEMS.

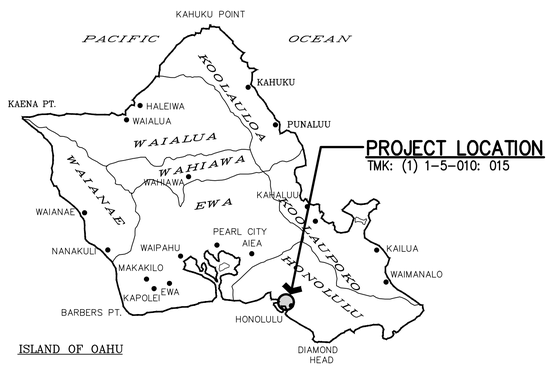
TESTING AND CLEANUP

A. DRAINAGE AND SANITARY PIPING SHALL BE TESTED IN ACCORDANCE WITH CURRENT UNIFORM PLUMBING CODE AND ALL OTHER APPLICABLE CODES. WATER PIPING SHALL BE TESTED AT 150 PSI FOR 15-MINUTES WITHOUT LEAKING. CONTRACTOR SHALL FURNISH ALL EQUIPMENT FOR THE TESTS AND PAY FOR ALL COSTS OF REPAIRING ANY DAMAGE RESULTING FROM SUCH TESTS. CONTRACTOR SHALL ADJUST SYSTEMS UNTIL THEY ARE APPROVED. TESTS SHALL BE PERFORMED IN THE PRESENCE OF, AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND INSPECTOR OF THE OFFICIAL AGENCY INVOLVED.
B. UPON COMPLETION OF WORK ALL STAINS AND DEFECTS MARRING OR DEFACING WALLS, CEILINGS, FIXTURES, OR FLOORS CAUSED BY THE CONTRACTOR'S WORK SHALL BE CLEANED OR REPLACED WITH NEW MATERIAL. ALL FIXTURES SHALL BE WASHED AND POLISHED EVERYTHING LEFT IN 'BROOM CLEAN' CONDITION READY FOR USE.

11. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON COMPLETION AND ACCEPTANCE OF THE WORK.
12. CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE TO REPAIR OR REPLACE AT HIS OWN EXPENSE ANY PARTS THAT MAY DEVELOP ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT.
13. THE CONTRACTOR SHALL PROVIDE A ONE-YEAR MAINTENANCE CONTRACT BASED ON THE REQUIREMENTS INDICATED IN THE MECHANICAL SPECIFICATIONS. THE COST OF THE ONE-YEAR MAINTENANCE CONTRACT SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.
14. ALL CONSTRUCTION SHALL CONFORM TO THE 2006 IBC AND THE LATEST CITY AND COUNTY OF HONOLULU / STATE OF HAWAII AMENDMENTS AND ORDINANCES.
15. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON COMPLETION AND ACCEPTANCE OF THE WORK.
16. CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE TO REPAIR OR REPLACE AT HIS OWN EXPENSE ANY PARTS THAT MAY DEVELOP ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT.

MECHANICAL LEGEND

CW	COLD WATER	———	LAV	LAVATORY
HW	HOT WATER	— — —	MAX	MAXIMUM
S	SEWER	———	MIN	MINIMUM
V	VENT	———	(N)	NEW
AC	AIR CONDITIONING		OA	OUTSIDE AIR
CD	CEILING DIFFUSER		OAR	OUTSIDE AIR REGISTER
CFM	CUBIC FEET PER MINUTE		RA	RETURN AIR
EA	EXHAUST AIR		RAR	RETURN AIR REGISTER
EAR	EXHAUST AIR REGISTER		SA	SUPPLY AIR
EF	EXHAUST FAN		SAR	SUPPLY AIR REGISTER
EXH	EXHAUST		VTR	VENT THROUGH ROOF
EXIST	EXISTING		WC	WATER CLOSET
(E)	EXISTING		WH	WATER HEATER
FCO	FLOOR CLEANOUT		WHA	WATER HAMMER ARRESTER
FD	FLOOR DRAIN			
FS	FLOOR SINK			
GV	GATE VALVE			



1 M100 VICINITY MAP
SCALE: NONE

North

AS-BUILT NOTES:

1) A TOPOGRAPHIC SURVEY WAS NOT PERFORMED FOR THIS PROJECT. INFORMATION SHOWN WAS COMPILED FROM CONSTRUCTION DOCUMENTS FOR "GENTRY – AMERICAN CAN WAREHOUSE / OFFICE BUILDING PARKING AREA" DATED NOVEMBER 27, 1985, "AMERICAN CAN HONOLULU FACTORY" DATED 1930, "AMERICAN CAN BUILDING PHASE 1" DATED JUNE 16, 1986, "MATTERS OF TASTE" DATED APRIL 28, 1998 AND A CONTRACTOR TONING DOCUMENT DATED SEPTEMBER 19, 2007.
2) EXISTING GRADE ELEVATIONS INDICATED ARE BASED ON CONSTRUCTION DOCUMENTS FOR "GENTRY – AMERICAN CAN WAREHOUSE / OFFICE BUILDING PARKING AREA" DATED NOVEMBER 27, 1985.
3) FOUNDATION AND FOOTING ELEVATIONS INDICATED ARE BASED ON CONSTRUCTION "AS-BUILT" DOCUMENTS FOR "AMERICAN CAN HONOLULU FACTORY" DATED 1930 AND "AMERICAN CAN BUILDING PHASE 1" DATED JUNE 16, 1986.
4) THE EXISTING SEWER LINES INDICATED ON PLAN ARE APPROXIMATE ONLY AND WERE OBTAINED FROM "AS-BUILT" DOCUMENTS FOR "MATTERS OF TASTE" DATED APRIL 28, 1998 AND CONTRACTOR TONING DOCUMENT DATED SEPTEMBER 19, 2007.

DEWATERING NOTE:

CONTRACTOR SHALL APPLY FOR, PAY FOR, & OBTAIN ALL REQUIRED CITY, STATE, AND FEDERAL PERMITS REQUIRED FOR DEWATERING.

HAZARDOUS MATERIALS NOTE:

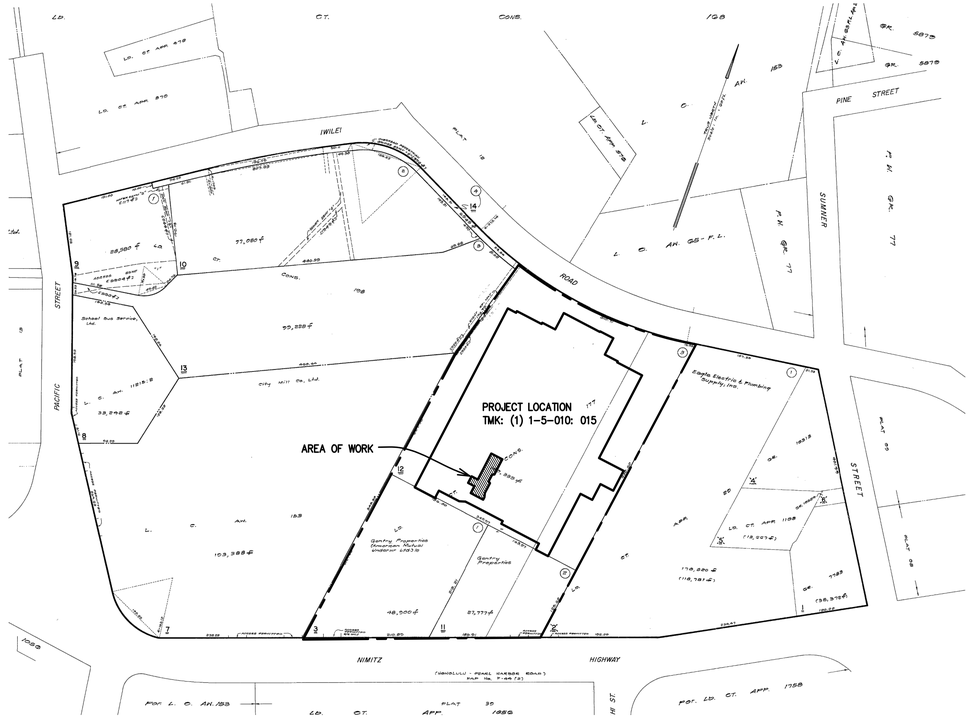
CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL HAZARDOUS MATERIALS AND WASTE FROM THE PROJECT SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND CITY AND COUNTY OF HONOLULU CODES, POLICIES, AND PERMIT REQUIREMENTS. THE CONTRACTOR, AT HIS EXPENSE, SHALL SUBMIT AND OBTAIN ALL FEDERAL, STATE, AND CITY AND COUNTY OF HONOLULU REQUIRED PERMITS AND APPROVALS FOR THE DISPOSAL OF HAZARDOUS MATERIALS.

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

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

_____ BUILDING COMPONENT SYSTEMS
_____ ELECTRICAL COMPONENT SYSTEMS
_X_ MECHANICAL COMPONENT SYSTEMS

SIGNATURE: _____ DATE: 02-08-19
NAME: DOUGLAS L. GOMES
TITLE: MECHANICAL ENGINEER
LICENSE NO: 3646-M



2 M100 LOCATION MAP
SCALE: NONE

North

DOUGLAS L. GOMES
LICENSED PROFESSIONAL ENGINEER
No. 3646-M
HAWAII, U.S.A.

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

Exp. 4/30/20

Observation as defined in the Hawaii Administrative Rules 16-115-2 for Professional Engineers, Architects, Surveyors and Landscape Architects

ENGINEERING DYNAMICS CORP.
CIVIL AND MECHANICAL ENGINEERING
MAUI: 900 Fort Street, Suite 201, Wailuku, HI 96793
OAHU: 126 Queen Street Suite 307A, Honolulu, HI 96813

MARK	DATE	REVISION

SMALL PYRAMID GRD PLUMBING
NA LAMA KUKUI
560 N NIMITZ HWY, HONOLULU, HAWAII
TMK: (1) 1-5-010:015

Project Number:
Date: 02-04-2019
Plans Drawn By: MKES/JL
Plans Checked By: TTM/DLG

Sheet Title:
MECHANICAL NOTES

Sheet:
M100
PAGE 1 OF 7

GREASE INTERCEPTOR SIZING CRITERIA

$V_{min} = F \times R \times S$

WHERE
Vmin = MINIMUM GREASE OPERATING VOLUME, GALLONS
F = FLOWRATE, GPM
R = RETENTION TIME = 30 MIN.
S = STORAGE FACTOR = 25 PERCENT

THUS,

$V_{min} = F \times 30 \times 1.25$

DRAINAGE FIXTURE UNITS (DFU) LESS THAN OR EQUAL TO 40:

F = (0.7 x DFU)

DFU CALCULATION:

FIXTURE	TRAP SIZE	AMOUNT	DFU	TOTAL
FLOOR SINK (3") [3-COMP. SINK / WALK-IN FREEZER CD / WH T&P / DISHWASHER]	3"	1	6.0	6.0
HAND SINK (1-1/4")	1-1/4"	2	1.0	2.0
			DFU TOTAL	8.0

THEREFORE,

F_{min} = (0.7 x 8.0) = 5.6

V = 5.6 x 30 x 1.25 = 210-GALLONS REQUIRED.

PROPOSED GREASE INTERCEPTOR CAPACITY = 257-GAL. CAPACITY.
(ENDURA XL 100 40100A04)

DOMESTIC FLOW COMPUTATION

EXISTING FIXTURES TO BE REMOVED

FIXTURE TYPE	QTY.	F.U.	TOTAL
DISHWASHER	1	2.0	2.0
COFFEE	1	2.0	2.0
ICE MAKER	1	2.0	2.0
3-COMP. SINK	1	1.6	1.6
PREP SINK	2	1.6	3.2
HAND SINK	1	1.6	1.6
FOUNTAIN STATION	1	1.6	1.6
MOP SINK	1	1.6	1.6
		TOTAL F.U.	15.6
		TOTAL GPM	12.3

DOMESTIC FLOW COMPUTATION

NEW FIXTURES TO BE ADDED

FIXTURE TYPE	QTY.	F.U.	TOTAL
DISHWASHER	1	1.5	1.5
3-COMP. SINK	1	1.6	1.6
HAND SINK	2	0.6	1.2
ICE MACHINE	1	1.0	1.0
		TOTAL F.U.	5.3
		TOTAL GPM	5.0

BWS FLOW REQUIREMENTS

SERVICE NO./PREMISE ID: 1052706
METER NO.: 93099401

	F.U.	GPM	GPD
A. PROPOSED DOMESTIC	5.3	5.0	500
B. PROPOSED AFS	N/A	N/A	N/A
C. PROPOSED OTHER	N/A	N/A	N/A
D. TOTAL PROPOSED (A+B+C)	5.3	5.0	500
E. DEMOLITION: DOMESTIC	15.6	12.3	250
DEMO PERMIT #_____ DATE: _____			
F. DEMOLITION: AFS	N/A	N/A	N/A
DEMO PERMIT #_____ DATE: _____			
G. DEMOLITION: OTHER	N/A	N/A	N/A
DEMO PERMIT #_____ DATE: _____			
H. TOTAL DEMOLITION (E+F+G)	15.6	12.3	250
I. NET CHANGE (D-H)	-10.3	-8.3	250
J. EXIST. DOMESTIC RESIDENTIAL TO REMAIN	N/A	N/A	N/A
K. EXIST. DOMESTIC COMMERCIAL TO REMAIN	243.4	72.9	950
L. TOTAL EXISTING TO REMAIN (J+K)	243.4	72.9	950
M. GRAND TOTAL (D+L)	248.7	73.8	1,200

*THIS METER DOES NOT SERVE ANY IRRIGATION SYSTEM.

DOUGLAS L. GOMES
LICENSED PROFESSIONAL ENGINEER
No. 3646-M
HAWAII, U.S.A.

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

Exp. 4/30/20

Observation as defined in the Hawaii Administrative Rules 516-115-2 for Professional Engineers, Architects, Surveyors and Landscape Architects

ENGINEERING DYNAMICS CORP.
CIVIL AND MECHANICAL ENGINEERING
MAUI: 900 Fort Street, Suite 201, Wailuku, HI 96793
OAHU: 126 Queen Street, Suite 307A, Honolulu, HI 96813

MARK	DATE	REVISION
1	9/28/18	DPP MECH. COMMENTS

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Sheet Title: MECHANICAL NOTES 2

Sheet: M101

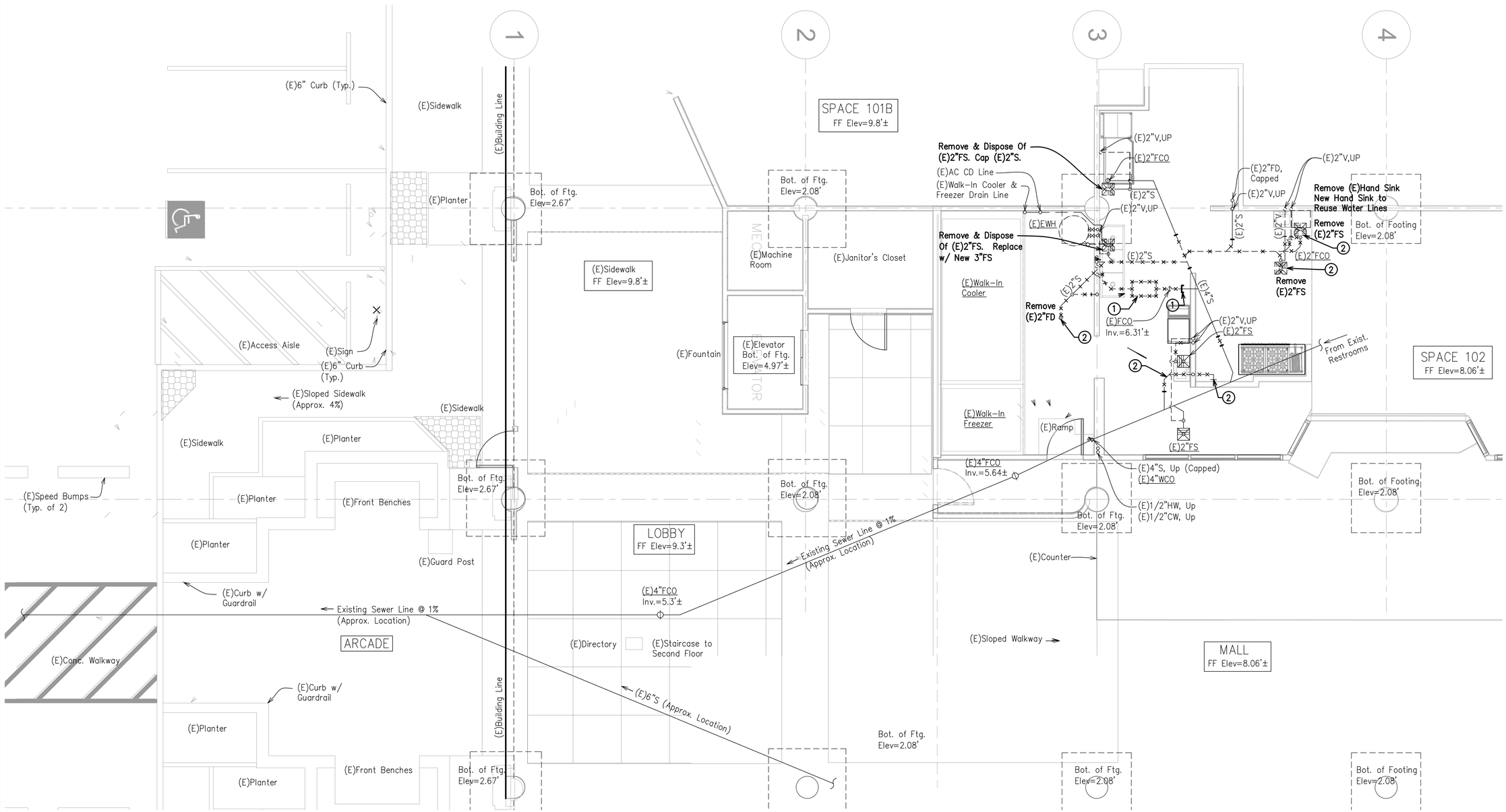
LEGEND

(1) Remove & Dispose Of Existing Grease Interceptor. Cut & Cap Existing Sewer Pipe As Necessary.

(2) Cut & Cap Existing Sewer And Vent Pipe. Remove & Dispose Of Existing Sewer And Vent Pipe As Necessary.

CONTRACTOR NOTES:

1. Prior To Construction And Prior To Ordering Of Piping And Fittings, The Contractor, At Their Expense, Shall Obtain The Services Of A Toning And Camera Company To Verify The Existing Sewer Line Size, Location, And Condition. The Contractor Shall Notify The Architect And Engineer Immediately Of Any Discrepancies.
2. Prior To Construction And Prior To Ordering Of Piping And Fittings, The Contractor, At Their Expense, Shall Verify The Existing Water Line Size, Location, And Condition. The Contractor Shall Notify The Architect And Engineer Immediately Of Any Discrepancies.



1 M200 DEMO PLUMBING PLAN
SCALE: SEE GRAPHIC SCALE

NORTH

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

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Sheet Title: DEMO PLUMBING PLAN

Sheet: M200

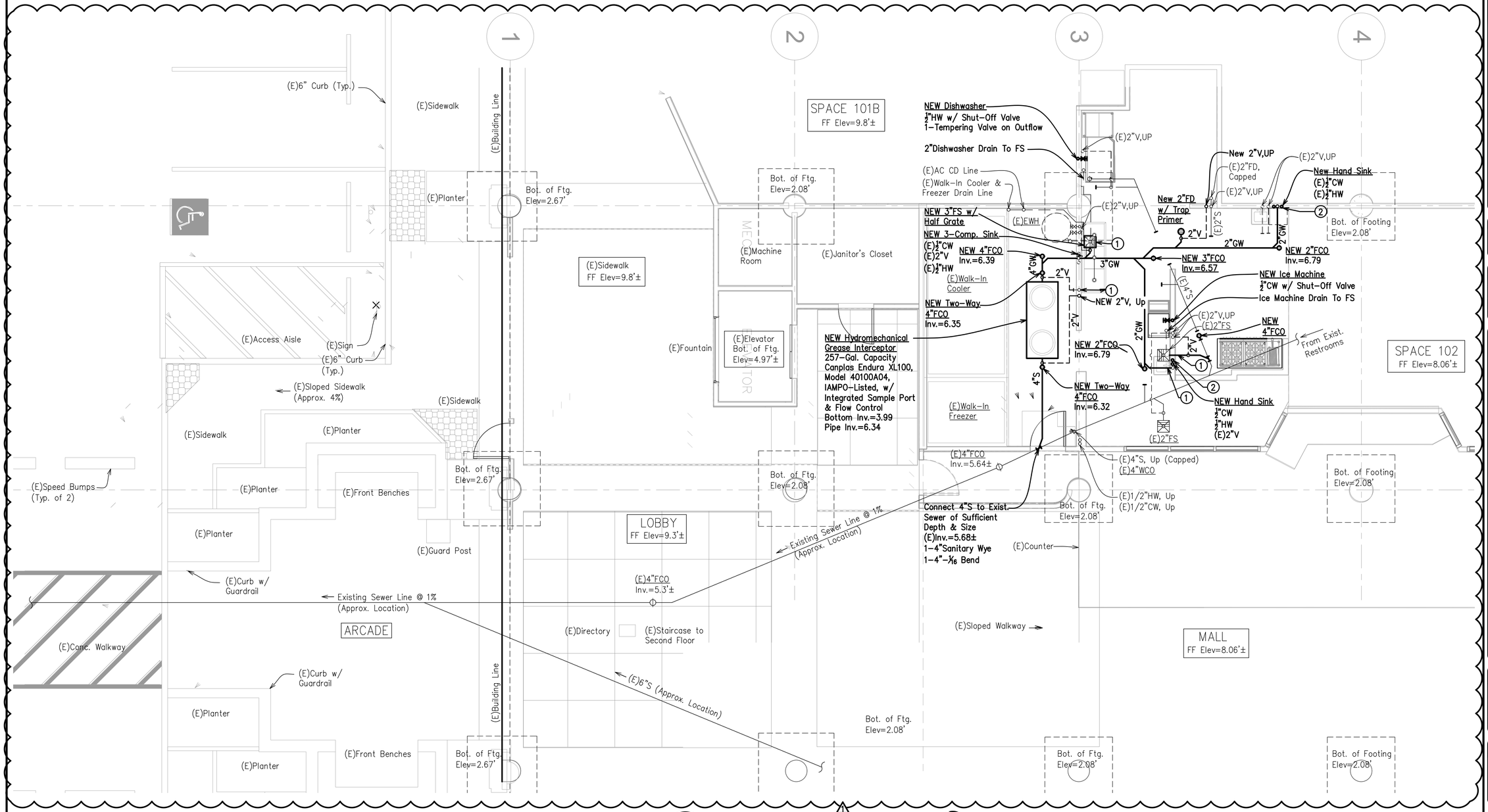
LEGEND

(1) Connect New Sewer Or Vent Line To Existing Sewer Or Vent Line Of Adequate Size. Contractor To Verify Location & Size.

(2) Connect New CW & HW lines To Existing CW & HW Lines Of Adequate Size. Contractor To Verify Location & Size.

CONTRACTOR NOTES:

The Contractor Shall Provide Insulation For All Hot Water Lines, in Accordance With IECC 2009.



1 / M201 DWV & CW/HW PLUMBING PLAN — NORTH

SCALE: SEE GRAPHIC SCALE

SCALE: 1/4"=1'

0' 2' 4' 8' 12'

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Plans Drawn By: MKES/JL

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Sheet Title: PLUMBING PLAN

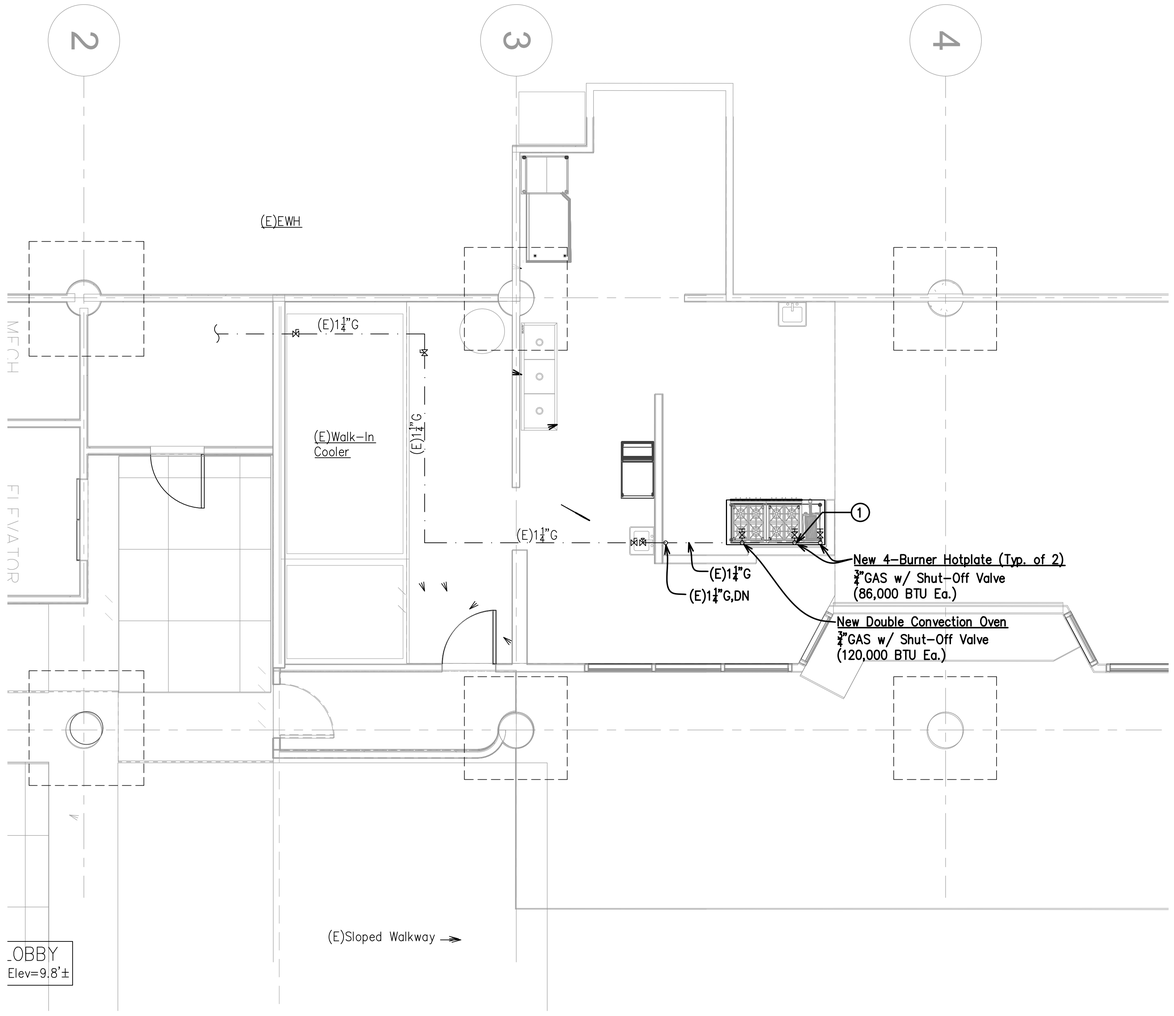
Sheet: M201

LEGEND

(1) Connect New Gas Line To Existing Gas Line Of Adequate Size. Contractor To Verify Location & Size.

CONTRACTOR NOTES:

Prior To Construction And Prior To Ordering Of Piping And Fittings, The Contractor, At Their Expense, Shall Verify The Existing Gas Line Size, Location, And Condition. The Contractor Shall Notify The Architect And Engineer Immediately Of Any Discrepancies.



1 / M202 GAS PLUMBING PLAN — SCALE: SEE GRAPHIC SCALE

NORTH

SCALE: 1/4"=1'

0' 2' 4' 8' 12'

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Plans Drawn By: MKES/JL

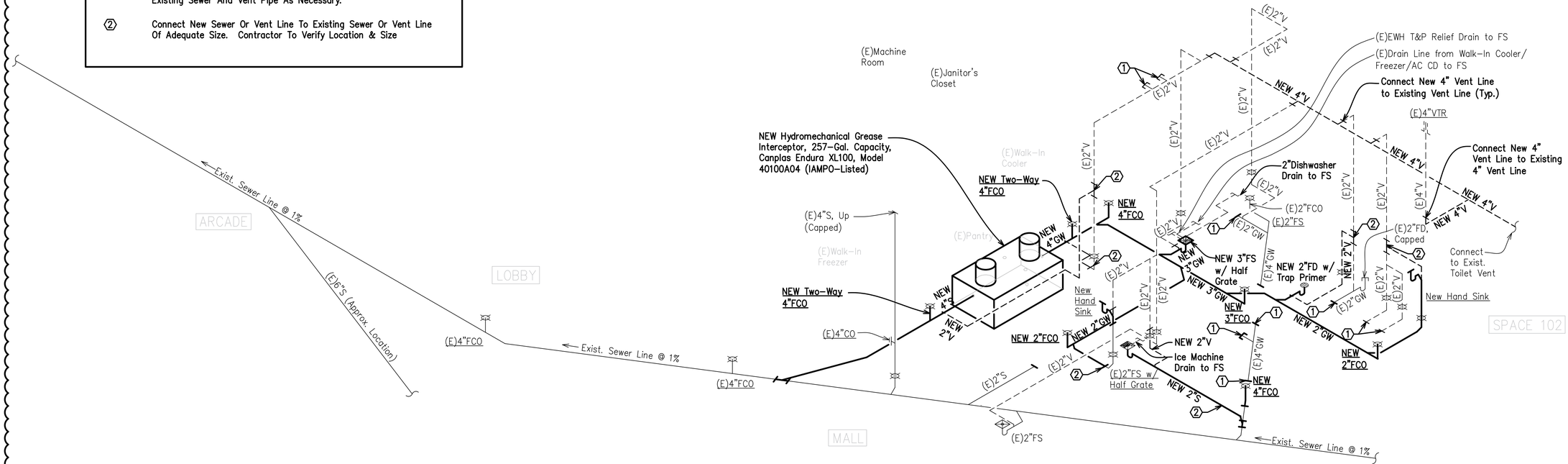
Plans Checked By: TTM/DLG

Sheet Title: GAS PLUMBING PLAN

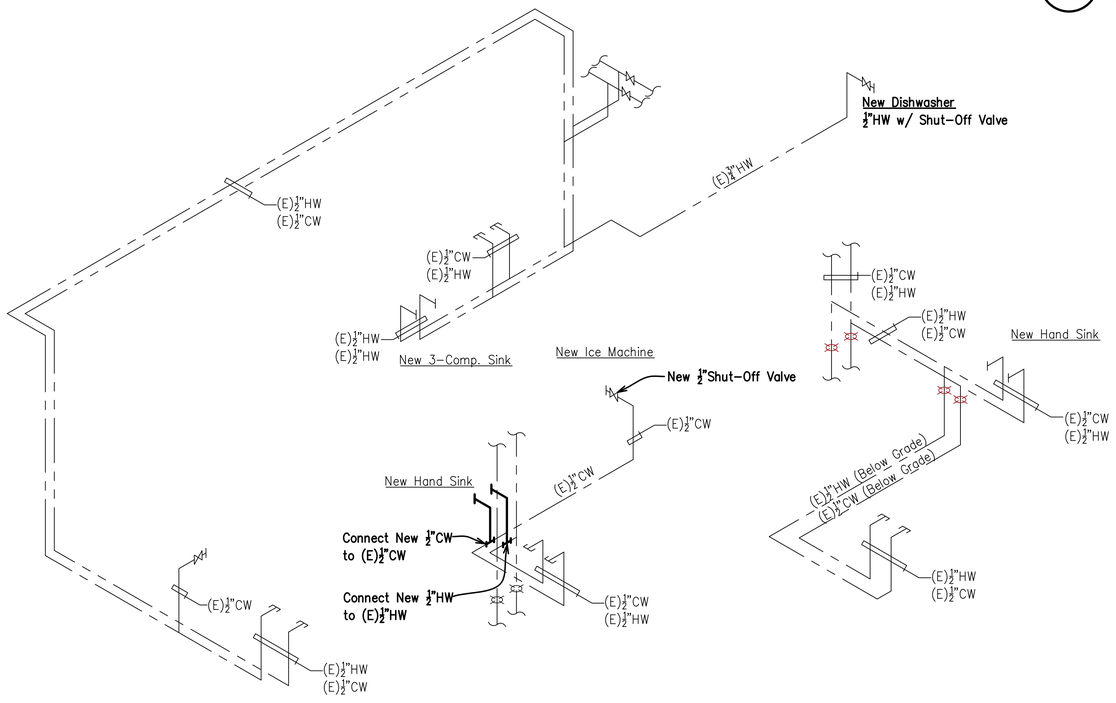
Sheet: M202

LEGEND

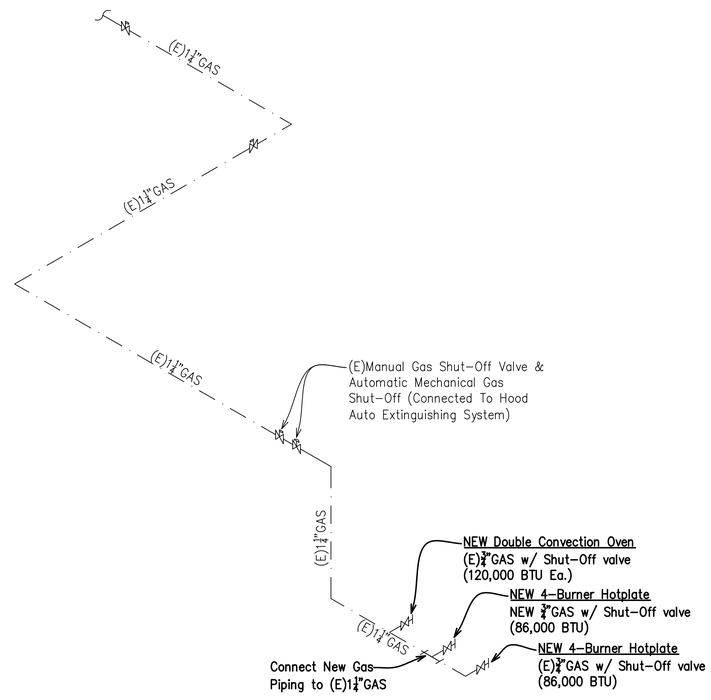
Symbol	Description
①	Cut & Cap Existing Sewer And Vent Pipe. Remove & Dispose Of Existing Sewer And Vent Pipe As Necessary.
②	Connect New Sewer Or Vent Line To Existing Sewer Or Vent Line Of Adequate Size. Contractor To Verify Location & Size



1 M300 DWV PIPING DIAGRAM
SCALE: NONE



2 M300 COLD & HOT WATER PIPING DIAGRAM
SCALE: NONE



3 M300 GAS PIPING DIAGRAM
SCALE: NONE

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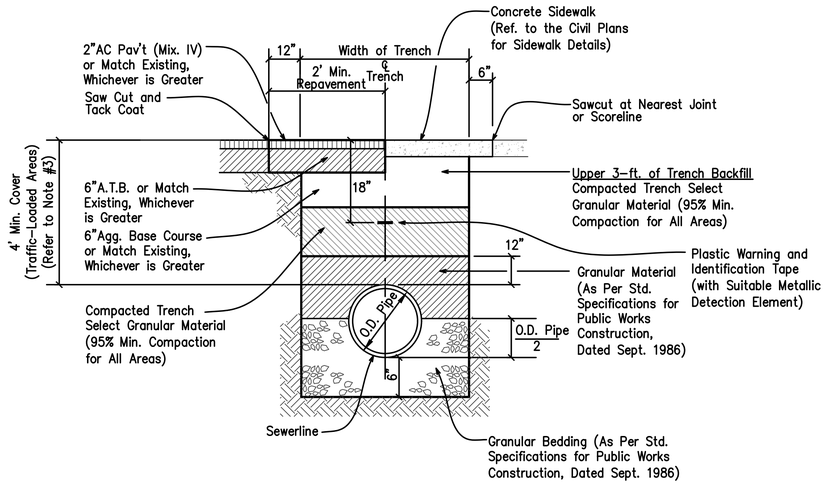
Sheet Title: PIPING DIAGRAMS

Sheet: M300

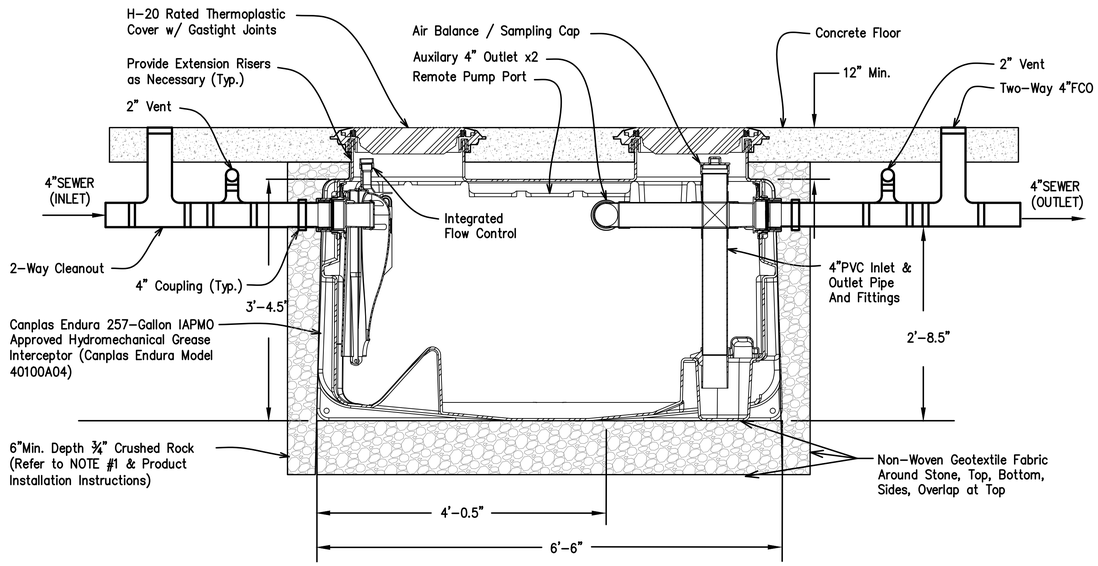


Notes

1. Utility Trench Backfill and Subgrade Shall be Per the Soils Rpt. Recommendations.
2. Where Unstable Soil Conditions Exist, the Underlying Unstable Soil Shall be Removed and Replaced with Crushed Rock (Min. 24" in Depth) Enclosed in Geotextile Fabric with the Width and Depth Determined by a Licensed Soils Engineer.
3. Sewer and Vent Lines Located in Traffic-Loaded Areas Shall be Provided with a Minimum of 4' Cover from the Bottom of the AC Pavement Layer to the Top of the Sewer/Vent Lines. If Cover is Less than 4', the Contractor Shall Install a 6" Reinforced Concrete Jacket on the Sewer/Vent Line (Refer to DPW Standard Detail S-5).

1 / M400 SEWER/VENT LINE TRENCH SECTION

SCALE: NOT TO SCALE



*NOTE #1
Where Unstable Soil Conditions Exist, the Underlaying Unstable Soils Shall Be Removed, Replaced, and Stabilized w/ 24"Min. Depth Crushed Rock (3b Fine) Enveloped in Geotextile Fabric. The Contractor, at His Expense, Shall Obtain the Services of a Licensed Soils Engineer to Test, Analyze, and Provide Recommendations for the Crushed Rock Depth.

2 / M400 SEWER/VENT LINE TRENCH SECTION

SCALE: NOT TO SCALE

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Sheet Title: MECHANICAL DETAILS

Sheet: M400

ELECTRICAL GENERAL NOTES

1. WORK INCLUDES INSTALLATION OF ALL ELECTRICAL SYSTEMS COMPLETE AND OPERATIONAL TO THE SATISFACTION OF THE OWNER AS LIMITED BY THE CONTRACT DOCUMENTS.
2. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2008 EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) WITH HAWAII AMENDMENTS, NATIONAL ELECTRICAL SAFETY CODE AND ALL LOCAL RULES AND REGULATIONS.
3. SUBMIT DRAWINGS FOR, AND OBTAIN AND PAY FOR, ALL NECESSARY PERMITS.
4. VISIT THE JOB SITE AND VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION, RECONNECTION AND/OR NEW WORK PRIOR TO BIDDING. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE OF SITE INSPECTION AND RESOLUTION OF ALL DISCREPANCIES AND QUESTIONS. NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK MADE NECESSARY BY FAILURE TO VISIT THE SITE.
5. SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR ALL EQUIPMENT AND DEVICES COVERED BY THIS CONTRACT FOR APPROVAL PRIOR TO ORDERING. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP AND SIGNATURE INDICATING THEY HAVE BEEN CHECKED AND ARE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS NOT BEARING CONTRACTOR APPROVAL WILL BE RETURNED WITHOUT REVIEW.
6. SHOP DRAWINGS ARE INTENDED TO SHOW UNDERSTANDING OF, AND COMPLIANCE WITH, THE CONTRACT DOCUMENTS. CAD FILES OF THE PROJECT DOCUMENTS WILL NOT BE AVAILABLE FOR USE AS SHOP DRAWINGS.
7. SHOULD PROJECT CONDITIONS, INCLUDING CONDITIONS DISCOVERED THROUGH DEMOLITION OR CHANGES IN OTHER TRADES, REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON AS-BUILT DRAWINGS. IF PROJECT CONDITIONS REQUIRE UNSPECIFIED MATERIALS OR METHODS, SUBMIT REQUEST FOR INFORMATION (RFI) TO THE ARCHITECT WITH DRAWINGS SHOWING THE PROPOSED ALTERNATIVE MATERIALS OR METHODS. DO NOT PROCEED WITH THE WORK UNTIL APPROVAL IS OBTAINED. RFIs SUBMITTED WITHOUT PROPOSED SOLUTIONS WILL BE RETURNED WITHOUT REVIEW. REARRANGEMENT OF WORK FOR THE PURPOSE OF COORDINATION BETWEEN TRADES SHALL NOT BE CONSIDERED REASON FOR EXTRA COST.
8. PROVIDE RECORD DOCUMENTS AT THE CLOSE OF CONSTRUCTION. INCLUDE OPERATIONS AND MAINTENANCE MANUALS FOR ALL EQUIPMENT, AND COPIES OF WARRANTIES, TEST RECORDS AND CERTIFICATIONS. INCLUDE AS-BUILT DRAWINGS: SHOW ALL CHANGES MADE PER PROJECT CONDITIONS, LOCATIONS OF ALL DISTRIBUTION APPARATUS, PULL AND JUNCTION BOXES, AND ROUTING OF CONDUITS 2" AND LARGER
9. ALL WIRING SHALL BE IN CONDUIT. ALL CONDUIT IN FINISHED AREAS SHALL BE CONCEALED; USE SURFACE METAL RACEWAY IN EXISTING FINISHED AREAS WHERE CONDUIT CANNOT BE CONCEALED. ALL CONDUIT IN UNFINISHED AREAS MAY BE EXPOSED. MINIMUM CONDUIT SIZE IS 0.5 INCH. EMT AND FLEXIBLE METAL CONDUIT SHALL BE USED FOR ALL INTERIOR APPLICATIONS. EMT AND RIGID GALVANIZED STEEL CONDUIT SHALL BE USED FOR ALL EXPOSED EXTERIOR LOCATIONS. CONDUIT IN OR UNDER THE SLAB SHALL BE SCHEDULE 40 PVC. ALL BURIED CONDUIT NOT UNDER A SLAB SHALL BE SCHEDULE 40 PVC, CONCRETE ENCASED WHERE INDICATED.
10. FITTINGS FOR EMT CONDUIT SHALL BE STEEL SET SCREW OR COMPRESSION TYPE. DIE-CAST FITTINGS ARE PROHIBITED. FITTINGS FOR RGS CONDUIT SHALL BE GALVANIZED MALLEABLE IRON. FITTINGS FOR PVC CONDUIT SHALL BE SCHEDULE 40 PVC.
11. CONDUIT SIZES INDICATED ON THE DRAWINGS MAY BE PURPOSELY OVERSIZED FOR FUTURE CONDUCTORS OR TO AVOID EXCESS CONDUIT HEATING. CONDUIT SIZES NOT SHOWN ON THE DRAWINGS SHALL BE SIZED BY THE CONTRACTOR BASED ON THE NUMBER OF CONDUCTORS TO BE INSTALLED, IN ACCORDANCE WITH NFPA 70.
12. PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT INDICATED ON PLANS. SIZING OF BOXES SHALL BE PER NFPA 70.
13. ALL PENETRATIONS THROUGH WALLS AND SLABS SHALL BE SEALED USING A U.L. LISTED FIRE RATED SEALANT. INSTALLATION MUST COMPLY WITH REQUIREMENTS FROM 2006 IBC SEC. 712 AND 2012 NFPA 1-12.7.5.
14. OBTAIN APPROVAL FROM THE ARCHITECT BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALLS OR CEILINGS.
15. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER, 600 VOLT INSULATION TYPE XHHW. ALL CONDUCTORS SMALLER THAN #8 SHALL BE SOLID COPPER, 600 VOLT INSULATION TYPE THHN/THWN.
16. METAL-CLAD ARMORED (TYPE AC OR MC) AND NONMETALLIC-SHEATHED (TYPE NM OR NMS) CABLE IS PROHIBITED.
17. PROVIDE A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUITS, INCLUDING SWITCH LEGS. SIZE GROUNDING CONDUCTOR PER NFPA 70, TABLE 250-122.
18. WIRING DEVICES IN NON-RESIDENTIAL OCCUPANCIES SHALL BE 20A 125V U.N.O.
19. BRANCH CIRCUIT ARRANGEMENTS ON PLANS ARE DIAGRAMMATIC AND DO NOT INDICATE ACTUAL ROUTING. USE #10 AWG CONDUCTORS FOR 20A 120V BRANCH CIRCUIT CONDUCTORS LONGER THAN 75 FEET, AND FOR 20A 277V BRANCH CIRCUITS LONGER THAN 200 FEET.
20. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES IN PANELBOARDS TO ACCURATELY REFLECT THE CIRCUITING AS ACTUALLY INSTALLED. UPDATE THE CIRCUIT DIRECTORIES IN EXISTING PANELBOARDS TO ACCURATELY REFLECT THE NEW CIRCUITING.
21. ALL DISCONNECT SWITCHES AND ENCLOSED CIRCUIT BREAKERS SHALL BE NEMA 1 INDOORS AND NEMA 3R OUTDOORS UNLESS NOTED OTHERWISE. PROVIDE FUSED SWITCHES FOR HERMETICALLY-SEALED EQUIPMENT. VOLTAGE, AMPERE AND MINIMUM A.I.C. RATINGS ARE SHOWN ON DIAGRAMS AND PLANS. MANUFACTURERS: SIEMENS-ITE, GENERAL ELECTRIC, CUTLER-HAMMER, SQUARE D.
22. CONFIRM EXACT COUNTER HEIGHTS, CABINET LOCATIONS AND EQUIPMENT LOCATIONS PRIOR TO ROUGH-IN FOR POWER, DATA AND COMMUNICATION BACKBOXES AND DEVICES.

FIRE ALARM SYSTEM NOTES

1. STANDARDS: FIRE ALARM SYSTEMS, AUTOMATIC FIRE DETECTORS, AND NOTIFICATION DEVICES SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH 2008 NFPA 70 NATIONAL ELECTRICAL CODE, 2010 NFPA 72 NATIONAL FIRE ALARM CODE, 2012 NFPA 1 UNIFORM FIRE CODE, SECTION 13.7 AS AMENDED, AND OTHER NATIONALLY RECOGNIZED STANDARDS.
2. SYSTEM SUPPLIER AND INSTALLER: AUTHORIZED ENGINEERED SYSTEMS DISTRIBUTOR FOR SPECIFIED SYSTEM, WITH 15 YEARS DOCUMENTED EXPERIENCE AND SERVICE TO FACILITIES WITHIN THE STATE OF HAWAII.
3. SUBMITTALS: PROVIDE PRODUCT DATA, COMPLETE RISER DIAGRAM, AND LAYOUT DRAWINGS, SHOWING ALL INTERCONNECTING WIRING AND EQUIPMENT.
4. PROVIDE SUFFICIENT BATTERY CAPACITY TO OPERATE SYSTEM IN SUPERVISORY MODE FOR 24 HRS, FOLLOWED BY ALARM MODE FOR 5 MINUTES.
5. FIRE ALARM DEVICES & CABLE SHALL BE UL LISTED FOR USE WITH THE SYSTEM INSTALLED. INSTALL CONDUIT AND CABLE PER APPROVED MANUFACTURER'S SHOP DRAWINGS.
   SIGNALING LINE CIRCUITS (SLC): POWER-LIMITED FIRE PROTECTIVE SIGNALING CABLE, MINIMUM 18/2 COPPER TWISTED SHIELDED PAIR, TYPE FPL/FPLP
   NOTIFICATION APPLIANCE CIRCUITS (NAC): POWER-LIMITED FIRE PROTECTIVE SIGNALING CABLE, MINIMUM 14/2 COPPER TWISTED SHIELD PAIR, TYPE FPL/FPLP
6. BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, IF REQUIRED BY THE AHJ, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THE APPROPRIATE NFPA REQUIREMENTS.
   (2012 NFPA 1 – 13.7.3.2.1.3; 2010 NFPA 72 – 10.18.1.3)
7. THE RECORD OF COMPLETION FORM, FIGURE 10.18.2.1.1 OF 2010 NFPA 72, SHALL BE PERMITTED TO BE PART OF THE WRITTEN STATEMENT REQUIRED IN 13.7.3.2.1.3. WHEN MORE THAN ONE CONTRACTOR HAS BEEN RESPONSIBLE FOR THE INSTALLATION, EACH CONTRACTOR SHALL COMPLETE THE PORTIONS OF THE FORM FOR WHICH THAT CONTRACTOR HAD RESPONSIBILITY.
   (2012 NFPA 1 – 13.7.3.2.1.4; 2010 NFPA 72 – 10.18.1.4)
8. THE RECORD OF COMPLETION FORM, FIGURE 10.18.2.1.1 OF 2010 NFPA 72, SHALL BE PERMITTED TO BE A PART OF THE DOCUMENTS THAT SUPPORT THE REQUIREMENTS OF 13.7.3.2.2.4.
   (2012 NFPA 1 – 13.7.3.2.1.5; 2010 NFPA 72 – 10.18.1.5)
9. ONE SET OF APPROVED PLANS, SPECIFICATIONS, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT AND SAID SET SHALL BE KEPT ON THE SITE OF WORK AT ALL TIMES DURING THE WORK AUTHORIZED THEREBY IS IN PROGRESS.
   (SEC. 18-5, R.O. 1978 (1983 ED.); AM ORD 93-59)

ELECTRICAL LEGEND

———	NEW WORK
———	EXISTING OR BY OTHERS
	PANELBOARD, 120/208V 3ø 4 WIRE
Ⓔ	CONNECTION TO EQUIPMENT FURNISHED BY OTHERS
	CONDUIT AND WIRE, SAME WIRE AS INDICATED ON HOME RUN, CONDUIT SIZE DETERMINED BY CONTRACTOR
	HOME RUN TO PANEL, CIRCUIT NO. INDICATED, MIN. 0.75"-2#12,#12GND. U.N.O. COMBINE UP TO THREE 1P15A OR 1P20A CIRCUITS IN ONE HOME RUN USING OPPOSITE PHASE LEGS ONLY; PROVIDE SEPARATE NEUTRAL CONDUCTORS FOR EACH CIRCUIT.
C.O.	CONDUIT ONLY, WITH PULL WIRE
U.N.O.	UNLESS NOTED OTHERWISE

FIRE SAFETY DURING ALTERATION

1. WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING THE ALTERATION.
   (2012 NFPA 1 – 16.4.4.1)
2. WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.
   (2012 NFPA 1 – 16.4.4.2)
3. WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.
   (2012 NFPA 1 – 16.4.4.3)
4. AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING, ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE. A FIRE WATCH SHALL BE REQUIRED AS SPECIFIED IN SECTIONS 13.3.3.6.5.2(4), 13.7.1.4.4, 16.5.4, 20.2.4.6, 25.1.8, 34.5.4.3, 34.6.3.3, 41.2.2.6, 41.2.2.7, 41.2.4, 41.3.5, AND 41.4.1 AND AT NO COST TO THE AHJ.
   (2012 NFPA 1 – 10.8.1.1, AS AMENDED)
5. THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT CONSTRUCTION DOCUMENTS FOR ALL FIRE PROTECTION SYSTEMS BE SUBMITTED FOR REVIEW AND APPROVED AND A PERMIT BE ISSUED PRIOR TO THE INSTALLATION, REHABILITATION, OR MODIFICATION. FURTHER, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT FULL ACCEPTANCE TEST OF THE SYSTEMS BE PERFORMED IN THE AHJ'S PRESENCE PRIOR TO FINAL SYSTEM CERTIFICATION.

   FIRE ALARM SYSTEM; FIRE HYDRANT SYSTEMS; FIRE-EXTINGUISHING SYSTEMS; STANDPIPES; AND OTHER FIRE-PROTECTION SYSTEMS AND APPURTENANCES REQUIRED BY THIS CODE SHALL BE APPROVED BY THE AHJ AS TO INSTALLATION AND LOCATION AND SHALL BE SUBJECT TO ACCEPTANCE TESTS REQUIRED BY THE APPROPRIATE COUNTRY AGENCY.
   (2012 NFPA 1 – 13.1.1, AS AMENDED)
6. WHERE BUILDING FIRE ALARM SYSTEMS OR AUTOMATIC FIRE DETECTORS ARE REQUIRED BY OTHER SECTIONS OF THIS CODE, THEY SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 70, NFPA 72, NATIONAL FIRE ALARM CODE, AND SECTION 13.7.
   (2012 NFPA 1 – 13.7.1.1)
7. TO ENSURE OPERATIONAL INTEGRITY, THE FIRE ALARM SYSTEM SHALL HAVE AN APPROVED MAINTENANCE AND TESTING PROGRAM COMPLYING WITH THE APPLICABLE REQUIREMENTS OF SECTIONS 13.4 AND 13.7.
   (2012 NFPA 1 – 13.7.1.4.3; 2012 NFPA 101 – 9.6.1.5)
8. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND THIS CHAPTER.
   (2012 NFPA 1 – 16.1.1)

EXST PANEL: A

VOLTAGE: 208/120V 3PH 4W +GND — MAIN BUS TYPE AND SIZE: 225A CU
TYPE: BOLT-ON — MAIN BREAKER: MLO
MOUNTING: SURFACE — MINIMUM A.I.C.: MATCH EXISTING

CKT. No.	CIRCUIT USE OR DESCRIPTION	WIRE SIZE	CKT. BRKR.	KVA	PHASE	KVA	CKT. BRKR.	WIRE SIZE	CIRCUIT USE OR DESCRIPTION	CKT. No.
1	SPARE	--	3P50	0.0	A	0.0	3P60	--	SPARE	2
3	--	--	--	0.0	B	0.0	--	--	--	4
5	--	--	--	0.0	C	0.0	--	--	--	6
7	SPARE	--	3P30	0.0	A	0.0	3P30	--	SPARE	8
9	--	--	--	0.0	B	0.0	--	--	--	10
11	--	--	--	0.0	C	0.0	--	--	--	12
13	R,L - CONFERENCE	EXST	1P20	0.3	A	0.0	3P50	--	SPARE	14
15	R - CONFERENCE	EXST	1P20	0.2	B	0.0	--	--	--	16
17	SPARE	--	1P20	0.0	C	0.0	--	--	--	18
19	SPARE	--	1P20	0.0	A	0.0	1P20	--	SPARE	20
21	SPARE	--	1P20	0.0	B	0.0	2P20	--	SPARE	22
23	SPARE	--	1P20	0.0	C	0.0	--	--	--	24
25	SPARE	--	1P20	0.0	A	1.6	2P20	EXST	WALK IN COOLER	26
27	R - KITCHEN FL.	EXST	1P20	0.2	B	1.6	--	EXST	--	28
29	R - KITCHEN	EXST	1P20	0.2	C	1.6	2P20	EXST	WALK IN FREEZER	30
31	SPARE	--	1P20	0.5	A	1.6	--	EXST	--	32
33	SPARE	--	1P20	0.5	B	1.6	2P20	EXST	WATER HEATER	34
35	SPARE	--	1P20	0.5	C	1.6	--	EXST	--	36
37	SPARE	--	1P20	1.1	A	0.1	1P20	EXST	L - STORAGE	38
39	SPARE	--	2P30	1.1	B	0.0	1P20	--	SPARE	40
41	--	--	--	1.1	C	1.0	1P20	12	FIRE SUPPRESSION SYSTEM	42
DEMAND FACTOR: 0.8				5.1		5.1	5.9			
TOTAL KVA: 16.1		TOTAL AMPS:				44.7				
DEMAND KVA: 12.9		DEMAND AMPS:				35.8				

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architect

KELLEY M. LEONG
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No. 11110-E
Expires 4/30/20

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

NA LAMA KUKUI - GREASE INTERCEPTOR

REVISION

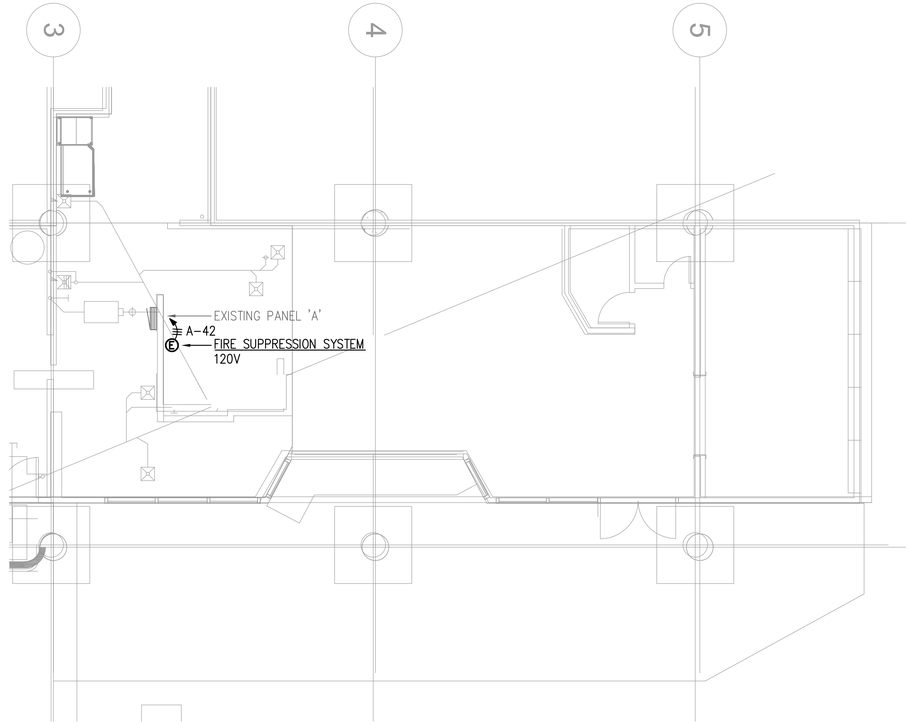
ISSUE:
DATE:

commissioned by:
OFFICE OF HAWAIIAN AFAIRS (OHA)

SHEET TITLE:
NOTES AND LEGEND

E1

DATE:
20 AUGUST 2018 DRAFT



PLAN NOTES

1. PROVIDE INTERCONNECTING WIRING BETWEEN EXHAUST HOOD FIRE SUPPRESSION CONTROL PANEL, VENTILATING UNITS, SOLENOID VALVES, AND FIRE ALARM SYSTEM.

1/E2 **ELECTRICAL PLAN**
SCALE: 3/16"=1'-0"

GRAPHIC SCALE
3/16"=1'-0"
2' 0 2' 4' 6' 8' 10'
scale feet

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Expires 4/30/20

This work was prepared by me or under mysupervision.
Construction of this project will be under my observation.

PUNA LAMA KUKUI - GREASE INTERCEPTOR

REVISION
ISSUE:
DATE:

commissioned by:
OFFICE OF HAWAIIAN AFAIRS (OHA)

SHEET TITLE:
ELECTRICAL PLAN

E2

DATE:
20 AUGUST 2018 DRAFT