

MEDICAL LAKE CITY HALL BUILDING COMMERCIAL KITCHEN UPGRADE

OWNER

MEDICAL LAKE CITY HALL
SECOND FLOOR COMMERCIAL KITCHEN
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MEDICAL LAKE, WA 99022
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MECHANICAL

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ELECTRICAL

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GENERAL CONDITIONS:

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO MAKE THEMSELVES FAMILIAR WITH THE GENERAL CONDITIONS, PLANS, AND SPECIFICATIONS AND OTHER NOTES OR REFERENCES RELATED TO THIS PROJECT SO AS TO POSSESS FULL COMPREHENSION OF THE WORK THEY ARE TO PERFORM. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- NOTHING IN THE PLANS, SPECIFICATIONS, NOTES OR REFERENCES SHALL BE INTERPRETED SO AS TO ELIMINATE ANY REQUIREMENTS OR PROVISIONS OF NATIONAL, STATE, COUNTY, OR LOCAL BUILDING CODES, ZONING/ZONE DEVELOPMENT AND ORDINANCES. ALL CONTRACTORS ARE RESPONSIBLE FOR FULL KNOWLEDGE OF, AND COMPLIANCE WITH THE AFOREMENTIONED REGULATIONS AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS BEFORE BEGINNING THEIR WORK.
- THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VISIT THE SITE TO VERIFY ALL FIELD CONDITIONS AND DIMENSIONS RELATED TO THEIR WORK. ANY DISCREPANCIES OR CONFLICTS SHALL BE REPORTED TO THE ARCHITECT BEFORE BEGINNING CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL CONSULT WITH THE SUBCONTRACTORS AND COORDINATE THE WORK IN ORDER TO ADHERE TO THE SCHEDULE AGREED UPON BY THE OWNER.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING:
 - PROVIDE SCHEDULE OF WORK TO OWNER PRIOR TO COMMENCING CONSTRUCTION.
 - OBTAINING ANY AND ALL PERMITS.
 - SCHEDULING ALL INSPECTIONS.
 - PROVIDING CERTIFICATE OF OCCUPANCY (C OF O) AND FINAL HEALTH INSPECTION REPORT (IF HEALTH INSPECTION IS REQUIRED FOR THE PROJECT).
 - THE CONTRACTOR SHALL PROVIDE THE FOLLOWING FINAL INVOICE:
 - ORIGINAL OR CLEAR PHOTO COPIES OF C OF O PERMIT AND HEALTH INSPECTION REPORT (IF HEALTH INSPECTION IS REQUIRED FOR THE PROJECT).
 - LISTING OF SUBCONTRACTORS AND AREA OF RESPONSIBILITY, COMPLETE WITH TRADE NAME, COMPANY OWNER'S NAME, ADDRESS, TELEPHONE NUMBER AND FEDERAL ID NUMBER.
 - PROPERLY EXECUTED LIEN WAIVER.
 - SERIAL NUMBERS, DATE OF MANUFACTURE OF ALL INSTALLED HVAC EQUIPMENT.
- UNLESS INDICATED "BY OTHERS" ON THE PLANS OR IN THE SPECIFICATIONS OR OTHERWISE DIRECTED BY OWNER THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL SUPPLY ALL LABOR AND MATERIALS AND MISCELLANEOUS ITEMS, NOT SPECIFICALLY SHOWN ON THE PLANS OR IN THE SPECIFICATIONS BUT OBVIOUSLY NECESSARY FOR THE COMPLETE AND PROPER INSTALLATION OF THEIR ELEMENTS OF WORK.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL TURN OVER ALL WRITTEN OPERATING INSTRUCTIONS AND WARRANTIES FOR EQUIPMENT TO THE OWNER AT THE COMPLETION OF WORK.
- ALL WORK PERFORMED BY THE CONTRACTOR AND SUBCONTRACTORS, INCLUDING MATERIALS AND LABOR SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS, AT THE COMPLETION OF THEIR WORK, SHALL LEAVE THE SITE CLEAN AND FREE OF DEBRIS RELATED TO THEIR WORK.
- THE USE OF BRAND NAMES, CATALOGUE NUMBERS OR NAMES OF MANUFACTURERS IS SOLELY FOR THE PURPOSE OF ESTABLISHING THE TYPE AND QUALITY THAT WILL BE ACCEPTABLE, UNLESS SPECIFICALLY PROHIBITED IN THE SPECIFICATIONS. SUBSTITUTION WILL BE PERMITTED AFTER SUBMITTAL TO AND WRITTEN APPROVAL BY OWNER.
- IT IS RECOMMENDED THAT THE CONTRACTOR ACQUIRE THE DESIGN AND EQUIPMENT BROCHURES FROM FROM THE OWNER FOR ANY OWNER FURNISHED, CONTRACTOR INSTALLED (OFCI) ITEMS.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS FOR INSTALLATION OF WORK INDICATED ON THESE DRAWINGS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADDITIONAL DESIGN / BUILD INFORMATION, WHICH MAY BE REQUIRED BY LOCAL CODE AUTHORITIES, WHICH MEETS THE DESIGN CRITERIA IN THESE DOCUMENTS.

GENERAL NOTES:

- THE OWNER HAS REQUESTED THAT THE ARCHITECT PREPARE THESE DRAWINGS, WHICH ARE LIMITED IN SCOPE, TO ESTABLISH MINIMUM GUIDELINES FOR DESIGN OF THE PROJECT.
- WHERE MATERIALS, ASSEMBLIES, EQUIPMENT, FIXTURES AND SYSTEMS ARE NOT SHOWN, OR ARE SHOWN DIAGRAMMATICALLY, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO DETERMINE SPECIFIC LOCATIONS, PROVIDE SPECIFIC MATERIALS AND DETERMINE CONSTRUCTION DETAILING, ALL IN COMPLIANCE WITH APPLICABLE BUILDING CODES, REGULATIONS, AND INDUSTRY STANDARDS FOR MATERIALS AND METHODS OF INSTALLATION.
- ALL DRAWINGS HAVE BEEN PREPARED WITH THE INTENT OF CURRENT CODE COMPLIANCE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE FULL COMPLIANCE WITH PREVAILING STATE OR LOCAL CODE REQUIREMENTS.
- DO NOT SCALE THE DRAWINGS. IF DIMENSIONAL DISCREPANCIES ARISE, CONTACT THE ARCHITECT.
- ANY DISCREPANCIES BETWEEN PORTIONS OF THE DOCUMENTS ARE NOT INTENDED. THE GENERAL CONTRACTOR IS TO CLARIFY WITH THE ARCHITECT ANY SUCH DISCREPANCIES PRIOR TO COMMENCING WORK.
- ALL DIMENSIONS ARE TO FACE OF STUD AT EXTERIOR AND CENTER OF STUD AT INTERIOR PARTITIONS, UNLESS OTHERWISE NOTED OR LABELED FINISHED OPENING (F.O.).
- ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE BUILDING CODES AND LOCAL DESCRIPTIONS.
- ALL ELECTRICAL, MECHANICAL AND PLUMBING WORK SHALL CONFORM TO STATE AND LOCAL REQUIREMENTS.
- CONSTRUCTION MAY NOT BEGIN UNTIL APPROVAL HAS BEEN GRANTED BY THE OWNER. THESE DRAWINGS ARE SUBJECT TO OWNER'S APPROVAL.
- ALL CONSTRUCTION TO COMPLY WITH THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE AND ALL AMENDMENTS TO SAID CODE CURRENTLY USED BY THE JURISDICTION HAVING AUTHORITY, AND ALL OTHER APPLICABLE CODES, REGULATIONS, AND AMENDMENTS.
- SCHEDULES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE FROM THE PLANS, SECTIONS, ELEVATIONS, DETAILS AND SPECIFICATIONS, THE REQUIRED QUANTITY AND QUALITY OF EQUIPMENT AND MATERIALS TO COMPLETE THE PROJECT.

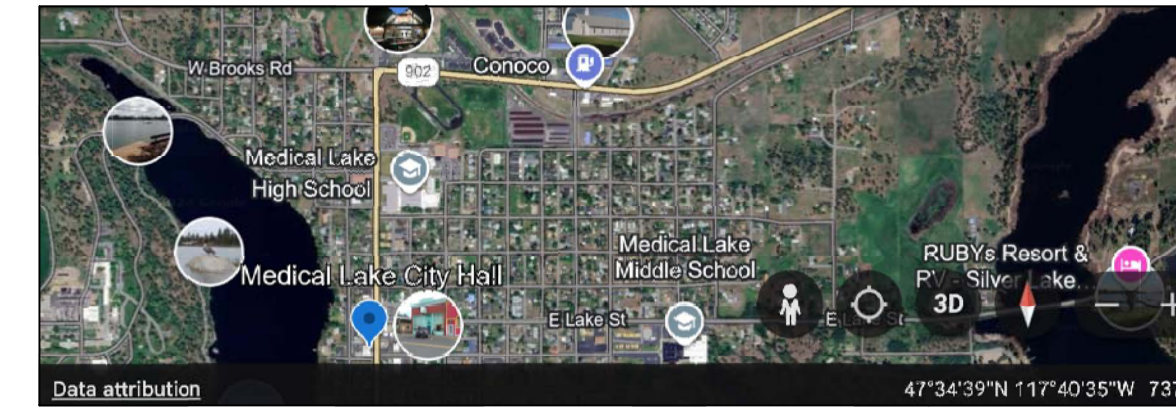
GENERAL NOTES (CONTINUED)

- DO NOT SCALE THE DRAWINGS - CONSULT ARCHITECT FOR ANY REQUIRED DIMENSIONAL CLARIFICATION. CONTRACTOR SHALL CAREFULLY REVIEW THE DIMENSIONS INDICATED ON THE DRAWINGS AS WELL AS FIELD CONDITIONS AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CONFLICTS OR PROBLEMS, PRIOR TO CONSTRUCTING THE WORK.
- FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT AND PRIOR TO ORDERING MATERIALS FOR OF EACH PORTION OF THE WORK.
- GENERAL CONTRACTOR TO COORDINATE SIZES AND LOCATIONS OF FLOOR AND WALL OPENINGS, PENETRATIONS AND SLEEVE LOCATIONS FOR ALL WORK PRIOR TO CONSTRUCTION, INCLUDING BUT NOT LIMITED TO MECHANICAL AND ELECTRICAL WORK.
- EXCEPT WHERE OTHERWISE SPECIFIED THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER TO MAINTAIN ALL WORK, MATERIALS, APPARATUS, AND FIXTURES FROM INJURY OR DAMAGES. AT THE END OF DAYS WORK ALL NEW WORK LIKELY TO BE DAMAGED SHALL BE COVERED OR OTHERWISE PROTECTED AS REQUIRED.
- THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ADEQUATE SAFETY BARRICADES AND CLEAR ACCESS IN AND OUT OF THE WORK SITE SO AS TO FACILITATE DAILY TRAFFIC, MOVEMENT, DELIVERIES, AND SAFETY.
- CITY/COUNTY APPROVED PLANS SHALL BE KEPT IN A SECURE PLACE AND SHALL NOT BE USED BY WORKERS. THE CONTRACTOR SHALL BE RESPONSIBLE THAT ALL SUBCONTRACTORS CONSTRUCTION SETS REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN, IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDUMS, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT AND ARE TO BE GIVEN TO THE OWNER UPON COMPLETION OF THE JOB.
- DOORS AND CASED OPENINGS INDICATED ADJACENT TO WALL INTERSECTIONS SHALL BE LOCATED WITH THE EDGE OF FINISHED OPENINGS A MINIMUM OF 3 INCHES FROM ADJACENT WALL UNLESS OTHERWISE NOTED.
- ANY CONTRACTOR WHOSE WORK REQUIRES OF THE ROOFING SYSTEM WILL CONTRACT WITH THE ROOFING CONTRACTOR TO FLASH AND SEAL SUCH WORK TO MAINTAIN ROOF WARRANTY.
- THE ARCHITECT WILL NOT HAVE CONTROL OVER OR CHARGE OF, AND WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THESE DUTIES BELONG EXCLUSIVELY TO THE CONTRACTOR.
- ANY ALTERNATE, MODIFICATIONS AND/OR SUBSTITUTION DEEMED ACCEPTABLE BY THE CITY/COUNTY PROJECT INSPECTOR MAY BE IMPLEMENTED AFTER REVIEW AND APPROVAL BY THE ARCHITECT AND CONSULTANTS (IF APPLICABLE). CONTRACTOR TO SUBMIT WRITTEN DESCRIPTION AND SKETCH TO ARCHITECT IN A TIMELY MANNER FOR REVIEW PRIOR TO ALTERNATE, MODIFICATION AND/OR SUBSTITUTION WORK IS INITIATED. WRITTEN DESCRIPTIONS AND SKETCHES SUBMITTED BY CONTRACTOR AND APPROVED FOR CONSTRUCTION WILL BE FILED WITH THE ORIGINAL JOB DOCUMENTS AS FINAL AS-BUILTS

ABBREVIATIONS:

SEE ALSO INDIVIDUAL SHEETS FOR ADDITIONAL ABBREVIATIONS NOT LISTED HERE

&	AND	J.H.A.	JURISDICTION HAVING AUTHORITY
∠	ANGLE	JAN	JANITOR
@	AT	JT	JOINT
⊕	CENTER LINE		
∅	DIAMETER	K.D.C.	KITCHEN DESIGN CONSULTANT
±	PLUS OR MINUS	KIT	KITCHEN
#	POUND OR NUMBER	KW	KILOWATTS
A/C	AIR CONDITIONING	LAM	LAMINATE
A.C.T.	ACOUSTICAL CEILING TILE	LAV	LAVATORY
A.F.F.	ABOVE FINISH FLOOR		
ACOUST	ACOUSTIC (AL)	M.U.A.	MAKE UP AIR
ADJ	ADJUSTABLE	MAX	MAXIMUM
APX	APPROXIMATE	MECH	MECHANICAL
ARCH	ARCHITECT (URAL)	MFRG	MANUFACTURE (R)
AUTO	AUTOMATIC	MIN	MINIMUM
		MIR	MIRROR
B.O.	BY OTHERS	MISC	MISCELLANEOUS
BLDG	BUILDING	MTD	MOUNTED
BLK(G)	BLOCK (ING)	MUL	MULLION
BM	BEAM		
BTWN	BETWEEN	N.I.C.	NOT IN CONTRACT
BOT	BOTTOM	N.T.S.	NOT TO SCALE
		NO	NUMBER
C.F.C.I.	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	NOM	NOMINAL
C.F.O.I.	CONTRACTOR FURNISHED OWNER INSTALLED	O.C.	ON CENTER
C.G.	CORNER GUARD	O.D.	OUTSIDE DIAMETER
C.J.	CONTROL JOINT	O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
C.L.	CENTER LINE	O.F.O.I.	OWNER FURNISHED OWNER INSTALLED
C.P.	CORNER AND PLUG		
C.T.	CERAMIC TILE	OA	OVERALL
C.W.	COLD WATER	OH	OVERHEAD
CAB	CABINET	OPNG	OPENING
CEM	CEMENT		
CER	CERAMIC	P.B.	PARTICLE BOARD
CLG	CEILING	P.L.	PROPERTY LINE
CLR	CLEAR	P.LAM.	PLASTIC LAMINATE
CNTR	COUNTER	P	PAINT
COL	COLUMN	PH	PHASE
CONC	CONCRETE	PLWD	PLYWOOD
CONN	CONNECTION	PR	PAIR
CONST	CONSTRUCTION	PRESERV	PRESERVATIVE
CONT	CONTINUOUS	PT	POINT
CONTR	CONTRACT (OR)	PTN	PARTITION
CPT	CARPET		
CTR	CENTER	Q.T.	QUARRY TILE
CTSK	COUNTERSINK (SUNK)	QTY	QUANTITY
		R	RISER
DBL	DOUBLE	R.B.	RUBBER BASE
DEPT	DEPARTMENT	R.O.	ROUGH OPENING
DET	DETAIL	R.T.	RUBBER TILE
DIA	DIAMETER	RAD	RADIUS
DIM	DIMENSION	RECEPT	RECEPTACLE
DN	DOWN	REF	REFRIGERATOR
DR	DOOR	REINF	REINFORCE (D)
DWR	DRAWER	RECD	REQUIRED
		RESIL	RESILIENT
E.J.	EXPANSION JOINT	RM	ROOM
E.W.	EACH WAY		
EA	EACH		
ELEC	ELECTRICAL	S.C.	SOLID CORE
ELEV	ELEVATION	S.S.	STAINLESS STEEL
ELEVR	ELEVATOR	S.V.	SHEET VINYL
EQ	EQUAL	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SECT	SECTION
EXH	EXHAUST	SHT	SHEET
EXIST	EXISTING	SIM	SIMILAR
EXT	EXTERIOR	SPEC	SPECIFICATION
		SQ	SQUARE
F.D.	FLOOR DRAIN	STD	STANDARD
F.E. (C.)	FIRE EXTINGUISHER (CABINET)	STL	STEEL
F.F.	FACTORY FINISH	STOR	STORAGE
F.O.C.	FACE OF CONCRETE	STRUCT	STRUCTURAL
F.O.F.	FACE OF FINISH	SUSP	SUSPENDED
F.O. FR.	FACE OF FRAMING	SYM	SYMMETRICAL
F.O.FND.	FACE OF FOUNDATION		
F.O.M.	FACE OF MASONRY	T	TREAD
F.O.S.	FACE OF SHEATHING	T.&G.	TONGUE AND GROOVE
F.O.W.	FACE OF WALL	T.B.D.	TO BE DETERMINED
F.S.	FLOOR SINK	T.I.	TENANT IMPROVEMENT
FIN	FINISH	T.L.	TRUE LENGTH
FLR	FLOOR	T.O.	TOP OF
FLOUR	FLOURESCENT	T.O.C.	TOP OF CONCRETE
FT	FOOT/FEET	T.O.CB.	TOP OF CURB
F.R.P.	FIBERGLASS REINFORCED PANEL	T.O.F.	TOP OF FOUNDATION
FURR	FURRING	T.O.P.	TOP OF PARAPET
		T.O.S.	TOP OF SLAB
G.R.	GUARD RAIL	T.O.W.	TOP OF WALL
G.W.B.	GYPNUM WALL BOARD	TEL	TELEPHONE
GA	GAUGE	THK	THICK
GALV	GALVANIZED	TV	TELEVISION
		TYP	TYPICAL
H.B.	HOSE BIB		
H.C.	HOLLOW CORE	U.N.O.	UNLESS NOTED OTHERWISE
H.M.	HOLLOW METAL		
H.P.	HORSE POWER	V.C.T.	VINYL COMPOSITION TILE
H.R.	HAND RAIL	V.T.	VINYL TILE
H.W.	HOT WATER	VEN	VENEER
H.V.A.C.	HEATING/VENTILATION/ AIR CONDITIONING	VERT	VERTICAL
		VEST	VESTIBULE
HDR	HEADER		
HDWD	HARDWOOD	W (O)	WITH (OUT)
HORIZD	HORIZONTAL	W.C.	WATER CLOSET
HR	HOUR	W.COV.	WALL COVERING
HT	HEIGHT	W.H.	WATER HEATER
		W.R.	WATER RESISTANT WOOD
I.D.	INSIDE DIAMETER	WD	WOOD
INCL	INCLUDE (ING/ED) INCLUSIVE	WP	WATERPROOF
INSUL	INSULATION	WSCT	WAINSCOT
INT	INTERIOR	W.W.F.	WELDED WIRE FABRIC
		WT	WEIGHT



ADDRESS
MEDICAL LAKE CITY HALL
124 S LEFEVRE STREET
MEDICAL LAKE, WA 99022

PARCEL INFO:
PARCEL NUMBER: UNKNOWN
NEIGHBORHOOD: UNKNOWN
LOT NUMBER: UNKNOWN

1 | VICINITY MAP
NOT TO SCALE

PROJECT NORTH

PROJECT DATA

1. APPLICABLE CODES	2021 IBC
2. PROJECT TYPE	TENANT IMPROVEMENT
3. PAST USE	BUSINESS, B-1 (RESIDENTIAL KITCHEN)
4. PROPOSED USE	BUSINESS, B-1 (COMMERCIAL KITCHEN - SMALL)
5. CONSTRUCTION TYPE	VB
6. AUTO FIRE EXTINGUISHING SYSTEM	NOT REQUIRED (TYPE 2 HOOD ONLY - PROVIDED)
7. MAXIMUM DISTANCE TO EXIT	70 FT. MAX.
8. MAXIMUM COMMON PATH OF TRAVEL	75 FT. - PER 1006.3.2(2)
9. NUMBER OF EXITS REQUIRED	1 (PER OCCUPANCY GROUP, 1 EXIT PROVIDED)
10. SEPA REQUIRED	NA
11. STORIES ABOVE GRADE/HEIGHT	NA - INTERIOR SPACE
12. SIDE YARD /REAR SETBACKS	NA - INTERIOR SPACE
13. EXISTING SF	210 SF
14. NEW SF	273 SF

DRAWING INDEX

- GENERAL INFORMATION**
G0.1 COVER SHEET/ VICINITY MAP/ CODE INFO/ PROJECT DATA/ ABBREVIATIONS/ SYMBOLS/SITE PLAN
- ARCHITECTURAL**
A2.0 EXISTING FLOOR PLAN/ DIMENSION PLAN - SECOND FLOOR AND KITCHEN
A2.1 NEW FLOOR PLAN/ DIMENSION PLAN - SECOND FLOOR AND KITCHEN
A2.2 ROOF PLAN
A3.1 INTERIOR ELEVATIONS
- MECHANICAL**
M1.1 DEMOLITION
M1.2 PLUMBING PLAN
M2.1 HVAC PLAN
M2.2 ROOF PLAN
M3.1 SCHEDULES
M4.1 SPECIFICATIONS
M5.1 DETAILS
- ELECTRICAL**
E1.1 SHEETS TO BE DETERMINED (COMING BY EOR)
KITCHEN INCLUDED IN ARCHITECTURAL DRAWINGS
8X11 EQUIPMENT SPECS AND CUT SHEETS

SYMBOLS:

SEE ALSO INDIVIDUAL SHEETS FOR ADDITIONAL SYMBOLS NOT LISTED HERE

	BUILDING SECTION CUT
	WALL SECTION CUT
	DETAIL FLAG
	INTERIOR ELEV TAG
	ROOM NAME AND NUMBER
	DOOR NUMBER

	WINDOW NUMBER
	KEY NOTE TAG
	FINISH FLOOR FLAG
	ELEVATION TAG
	ASSEMBLY TYPE TAG
	FINISH TAG
	REVISION TAG AND CLOUD

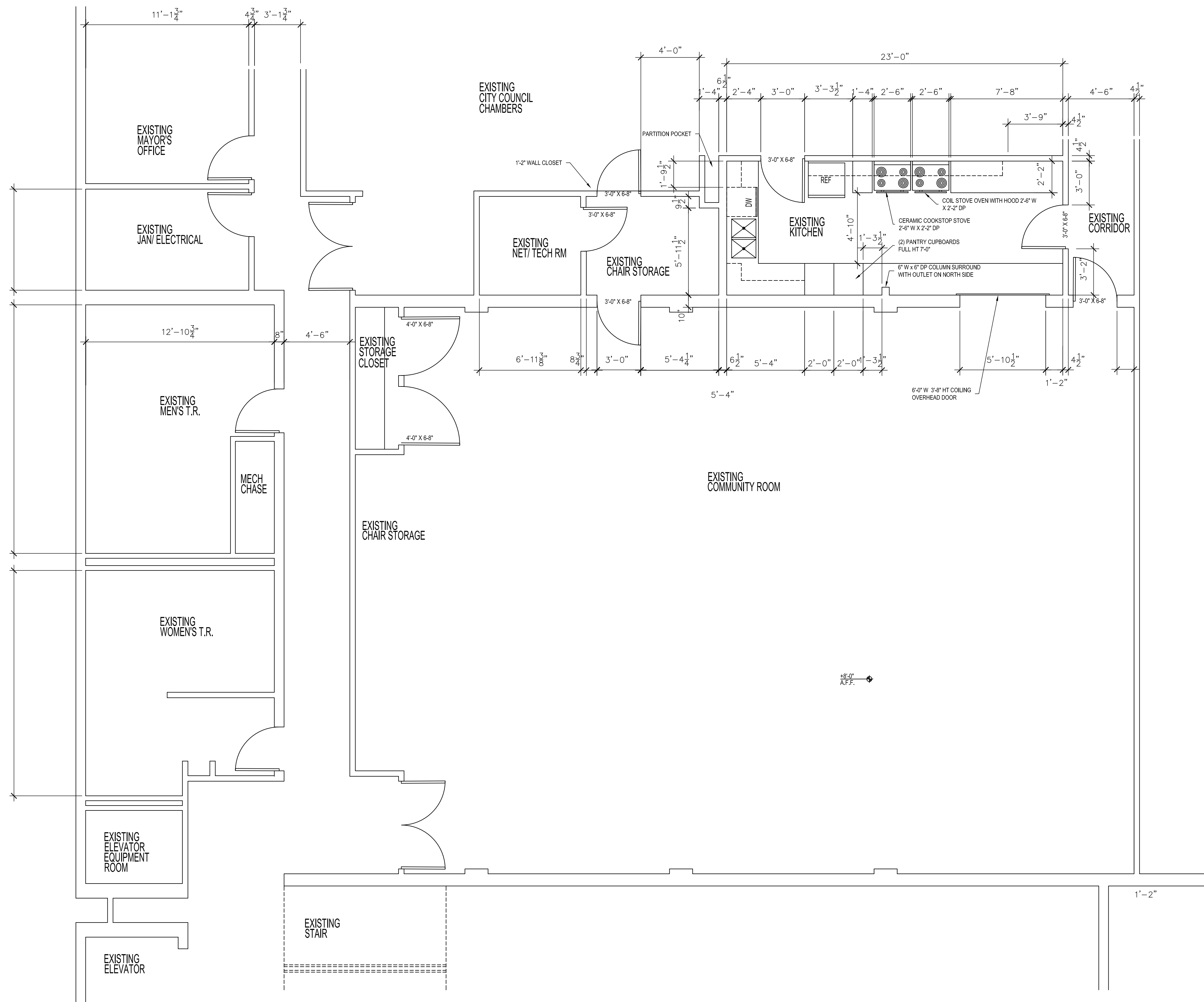
PROJECT NO: 2358C MEDICAL LAKE CITY HALL
COMMERCIAL KITCHEN UPGRADE
MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
124 S LEFEVRE ST
MEDICAL LAKE, WA 99022

CONSTRUCTION DOCUMENTS
PROJECT NO. 2358C
DRAWN BY: CWC
DATE: 10.15.2024
CHECKED BY: CWC

COVER SHEET
GO.1

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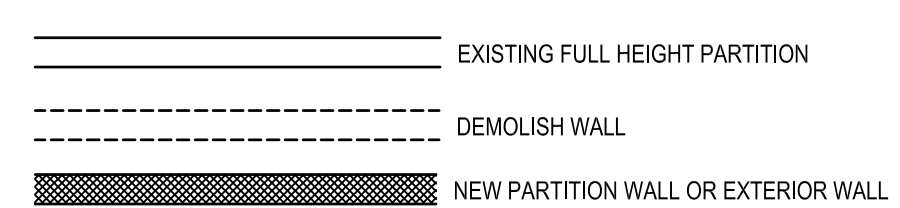
C:\Users\Chuck Crane\Dropbox\My PC (LAPTOP-09R05311)\Documents\Back to Terra\2358c Medical Lake City Hall Kitchen Medical Lake WA Dec135 Plot Annotation Drawings-05-3-03 MAIN PARTITION PLAN A2.1_10/16/2024 12:06:49 PM, CHUCK CRANE



1 | KITCHEN FLOOR PLAN - EXISTING
1/4" = 1'-0" N

- GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION.
- ALL EXTERIOR DIMENSIONS AND GRIDS ARE F.O.C. / FACE OF STUD U.N.O.
- ALL INTERIOR DIMENSIONS AND GRIDS ARE CENTER OF STUD OR STRUCTURAL COMPONENT U.N.O.
- "CLEAR" DIMENSIONS ARE FACE OF FINISH OR WALL.
- "F.O.S." DIMENSIONS ARE FACE OF STUD OR STRUCTURAL COMPONENT.
- WALLS EXTENDING TO STRUCTURE ABOVE REQUIRE DEFLECTION PROVISIONS.
- WALL TYPES CONTINUE FULL LENGTH OF ROOM, INCLUDING JOGS, ANGLES, RECESSES OR STUBS, U.N.O.
- WHERE DIFFERENT WALL TYPES OCCUR ALONG A CORRIDOR, ALIGN FINISHES CORRIDOR SIDE U.N.O.
- WALL TYPES ARE 2X6 FOR ALL INTERIOR WALLS AND 2X6 FOR ALL EXTERIOR UNLESS OTHERWISE NOTED.
- ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- DOORS AND CASED OPENINGS INDICATED ADJACENT TO WALL INTERSECTIONS SHALL BE LOCATED WITH THE EDGE OF FINISHED OPENINGS A MINIMUM OF 3 INCHES FROM ADJACENT WALL UNLESS OTHERWISE NOTED.
- RESTROOM (BATH/BATHROOM); WET SIDE OF WALL IN LIEU OF 5/8" GYPSUM BOARD, INSTALL 5/8" DENS-SHIELD ON WALLS FROM FINISH FLOOR TO 48" ABOVE AND INSTALL GYPSUM BOARD FROM 48" ABOVE FINISH FLOOR TO ABOVE CEILING-WALLS TO HAVE FULL BATT INSULATION FOR SOUND.
- SEE SITE PLAN FOR EXTERIOR WALLS, PATIOS AND PADS.
- SEE FLOOR PLAN NOTES/ WALL TYPES FOR INTERIOR AND EXTERIOR FINISHES AND THEIR LOCATIONS.
- SEE STRUCTURAL FOR LOCATION OF POSTS, COLUMNS, HEADERS, BEAMS, ETC.
- WINDOW TREATMENTS (BLINDS, SUNSCREENS, ETC.) ARE PROVIDED AND INSTALLED BY OWNER CONTRACTOR TO COORDINATE W/ OWNER FOR LOCATION OF IN-WALL BLOCKING (WHERE APPLICABLE).
- ALL FINISH FLOOR TRANSITION STRIPS TO OCCUR UNDER CENTER OF CLOSED DOORS OR AT EDGE CLOSEST TO BARN DOORS, WHERE OCCURS. SEE PLAN.

4 | FLOOR PLAN GENERAL NOTES



5 | PARTITION KEY
NTS

1. A.F.F. = ABOVE FINISH FLOOR. EXAMPLE → 8'-0" A.F.F. ↕

6 | FLOOR ELEVATION NOTES

Back to Terra
 Sustainable Architecture
 Chuck Crane, Architect NCARB, LEED AP, CSRA
 347 Homestead Loop
 Sandpoint, ID 83864
 208.255.2560

PROFESSIONAL SEAL
 729 REGISTERED ARCHITECT

 CHARLES W. CRANE
 STATE OF WASHINGTON
 1.23.25

PROJECT
PROJECT NO: 2358C MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

REVISIONS

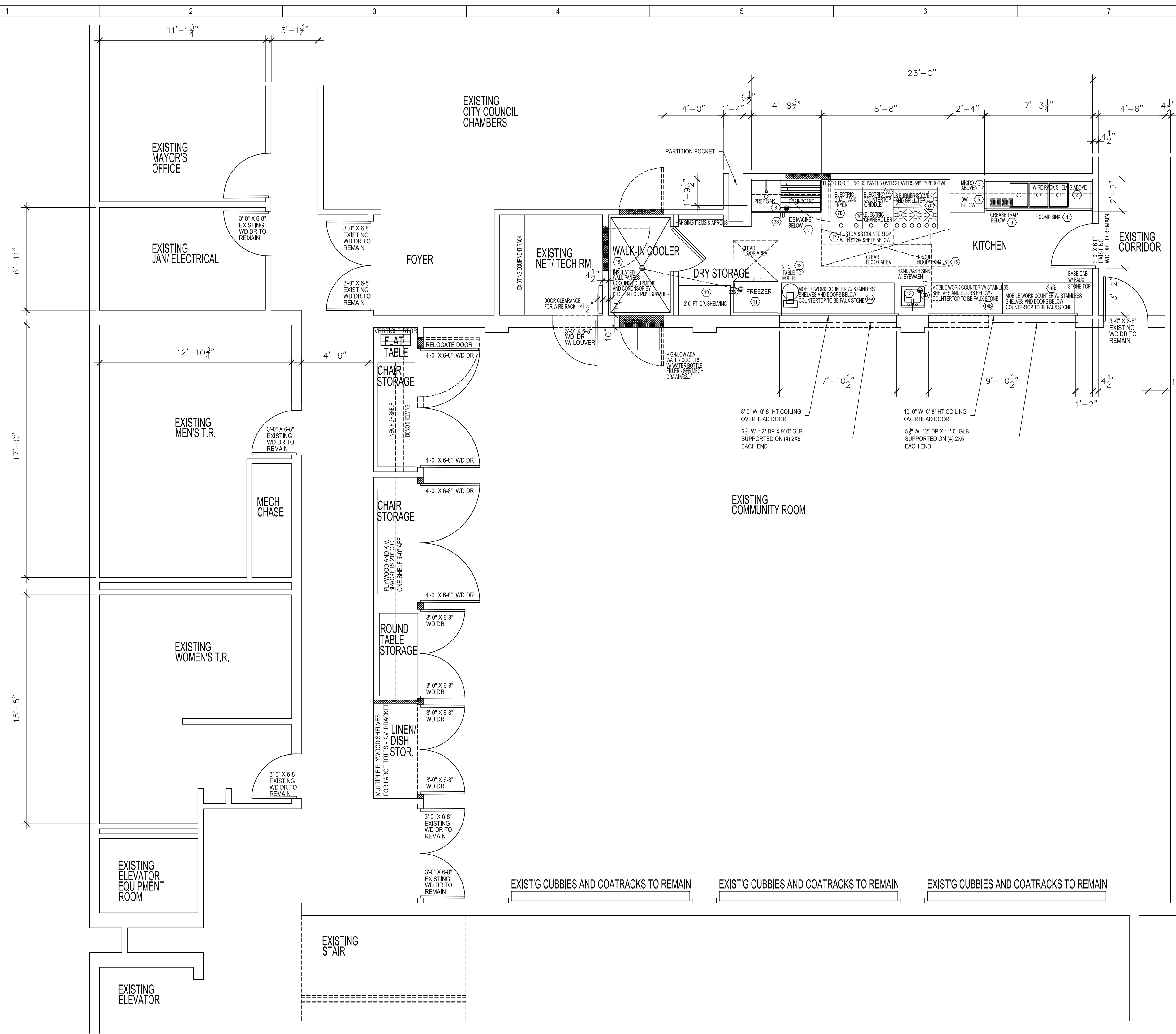
NO.	DESCRIPTION

CONSTRUCTION DOCUMENTS
 PROJECT NO. 2358C
 DRAWN BY: CWC
 DATE: 10.15.2024
 CHECKED BY: CWC

KITCHEN FLOOR PLAN EXISTING
A2.0

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2 | KITCHEN FLOOR PLAN - NEW
1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE			
MARK	SIZE	DESCRIPTION	QTY.
1	SEE CUT SHEET	3 COMPARTMENT SINK - COORDINATE PLUMBING WITH MECHANICAL	1
2	SEE CUT SHEET	WIRE RACK SHELVING	1
3	BY MECH.	GREASE TRAP - BY MECHANICAL	1
3B	BY MECH.	FLOOR DRAIN - BY MECHANICAL	3
4	SEE CUT SHEET	MICROWAVE - WALL HUNG (PROVIDE MOUNTING HARDWARE)	1
5	SEE CUT SHEET	DISHWASHER - BELOW COUNTER (PROVIDE STAINLESS STEEL COUNTER)	1
6	SEE CUT SHEET	6 BURNER STOVE AND GRILL TOP - NATURAL GAS	1
7A	SEE CUT SHEET	COUNTERTOP GRIDDLE - ELECTRIC (STORED BELOW COUNTERTOP WHEN ELEC. CHARBROIL IN USE)	1
7B	SEE CUT SHEET	COUNTERTOP DUAL TANK FRYER - ELECTRIC	1
7C	SEE CUT SHEET	COUNTERTOP CHARBROILER - ELECTRIC (STORED BELOW COUNTERTOP WHEN ELEC. GRIDDLE IN USE)	1
8	SEE CUT SHEET	PREP SINK WITH RIGHT SIDE DRAINBOARD - COORDINATE PLUMBING WITH MECHANICAL	1
9	SEE CUT SHEET	ICE MACHINE - BELOW COUNTER	1
10	BY SUPPLIER	2'-0" DP X 3'-6" WD X 8'-0" HT WIRE SHELVING RACK (4 ADJUSTABLE SHELVES)	1
11	SEE CUT SHEET	FREEZER	1
12	SEE CUT SHEET	20 QT COUNTERTOP MIXER	1
13	SEE CUT SHEET	WALL HUNG HANDWASH SINK AND EYEWASH - COORDINATE PLUMBING WITH MECHANICAL	1
14A*	CUSTOM	MOBILE WORKCOUNTER WITH STAINLESS SHELVES AND DOOR BELOW AND FAUX STONE TOP	1
14B**	CUSTOM	MOBILE WORKCOUNTER WITH STAINLESS SHELVES AND DOOR BELOW AND FAUX STONE TOP	2
15	SEE CUT SHEET	FLOOR DRAIN - BY MECHANICAL	1
16	SEE CUT SHEET	FLOOR DRAIN - BY MECHANICAL	1
17	CUSTOM	CUSTOM STAINLESS STEEL COUNTERTOP WITH STAINLESS SHELF BELOW FOR ELEC. COOKING EQUIP.	1

NOTE: SEE 8X11 PDF SET FOR ALL EQUIPMENT SPECS AND CUT SHEETS FOR KITCHEN EQUIPMENT LISTED ABOVE
 * 14A DIMENSIONS (2'-0" DP X 7'-8" WD X 3'-0" TALL ON ROLLING CASTERS)
 ** 14B DIMENSIONS (2'-0" DP X 4'-10" WD X 3'-0" TALL ON ROLLING CASTERS)

- GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION.
- ALL EXTERIOR DIMENSIONS AND GRIDS ARE F.O.C. / FACE OF STUD U.N.O.
- ALL INTERIOR DIMENSIONS AND GRIDS ARE CENTER OF STUD OR STRUCTURAL COMPONENT U.N.O.
- "CLEAR" DIMENSIONS ARE FACE OF FINISH OR WALL.
- "F.O.S." DIMENSIONS ARE FACE OF STUD OR STRUCTURAL COMPONENT.
- WALLS EXTENDING TO STRUCTURE ABOVE REQUIRE DEFLECTION PROVISIONS.
- WALL TYPES CONTINUE FULL LENGTH OF ROOM, INCLUDING JOGS, ANGLES, RECESSES OR STUBS, U.N.O.
- WHERE DIFFERENT WALL TYPES OCCUR ALONG A CORRIDOR, ALIGN FINISHES CORRIDOR SIDE U.N.O.
- WALL TYPES ARE 2X6 FOR ALL INTERIOR WALLS AND 2X8 FOR ALL EXTERIOR UNLESS OTHERWISE NOTED.
- ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- DOORS AND CASING OPENINGS INDICATED ADJACENT TO WALL INTERSECTIONS SHALL BE LOCATED WITH THE EDGE OF FINISHED OPENINGS A MINIMUM OF 3 INCHES FROM ADJACENT WALL UNLESS OTHERWISE NOTED.
- RESTROOM (BATH/BATHROOM): WET SIDE OF WALL IN LIEU OF 5/8" GYPSUM BOARD, INSTALL 5/8" DENS-SHIELD ON WALLS FROM FINISH FLOOR TO 48" ABOVE AND INSTALL GYPSUM BOARD FROM 48" ABOVE FINISH FLOOR TO ABOVE CEILING-WALLS TO HAVE FULL BATT INSULATION FOR SOUND.
- SEE SITE PLAN FOR EXTERIOR WALLS, PATIOS AND PADS.
- SEE FLOOR PLAN NOTES/ WALL TYPES FOR INTERIOR AND EXTERIOR FINISHES AND THEIR LOCATIONS.
- SEE STRUCTURAL FOR LOCATION OF POSTS, COLUMNS, HEADERS, BEAMS, ETC.
- WINDOW TREATMENTS (BLINDS, SUNSCREENS, ETC.) ARE PROVIDED AND INSTALLED BY OWNER CONTRACTOR TO COORDINATE W/ OWNER FOR LOCATION OF IN-WALL BLOCKING (WHERE APPLICABLE).
- ALL FINISH FLOOR TRANSITION STRIPS TO OCCUR UNDER CENTER OF CLOSED DOORS OR AT EDGE CLOSEST TO BARN DOORS, WHERE OCCURS. SEE PLAN.

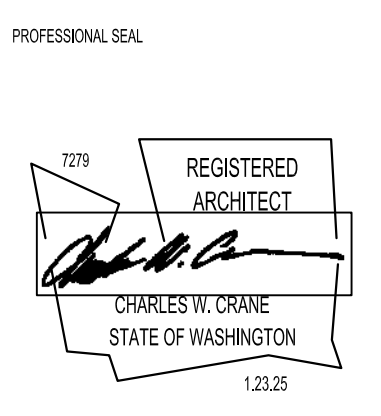
4 | FLOOR PLAN GENERAL NOTES

	EXISTING FULL HEIGHT PARTITION (WOOD FRAMED)
	DEMOLISH WALL
	NEW PARTITION WALL, INFILL WALL, OR EXTERIOR WALL

5 | PARTITION KEY

- A.F.F. = ABOVE FINISH FLOOR. EXAMPLE

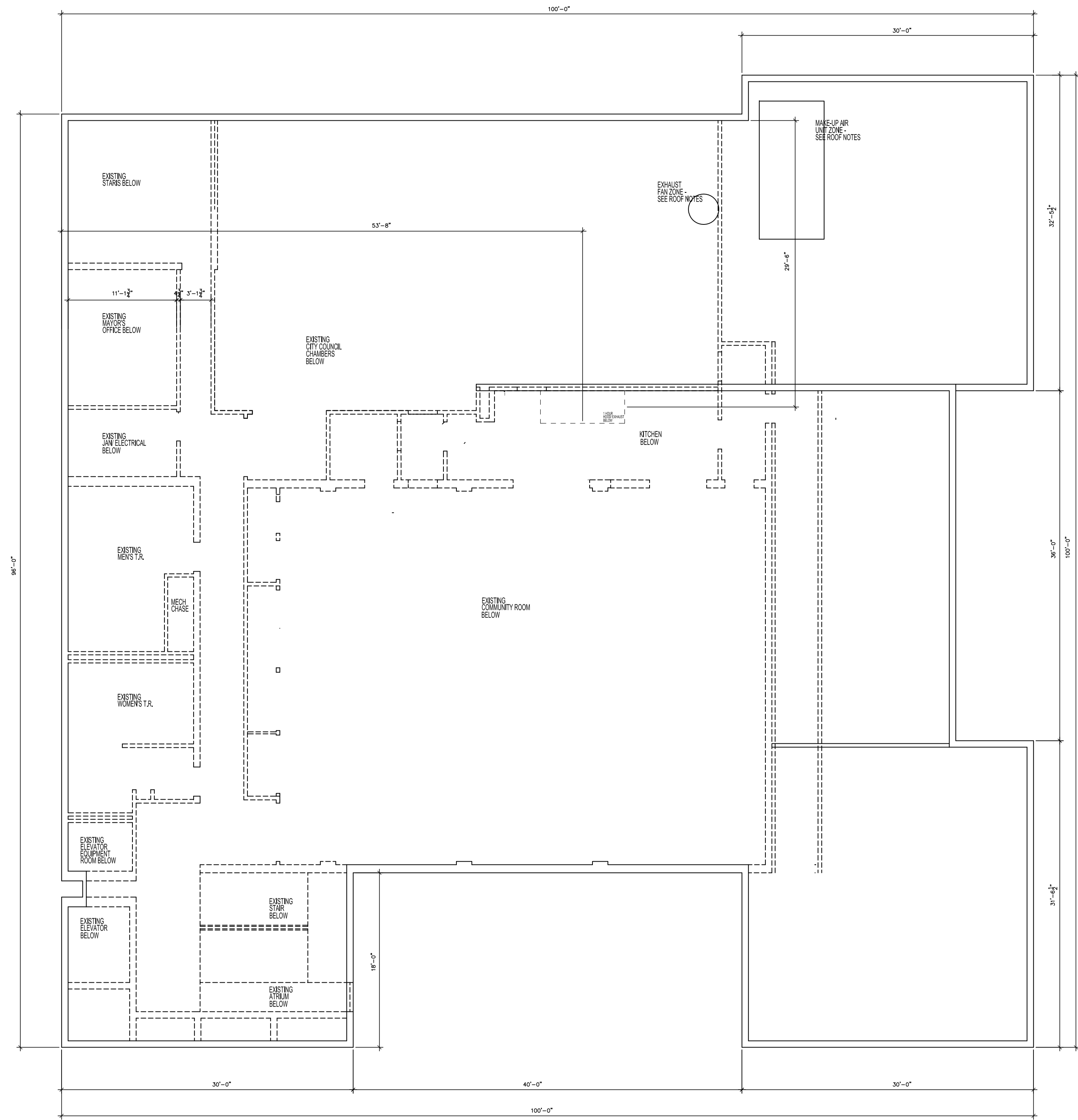
6 | FLOOR ELEVATION NOTES



PROJECT NO: 2358C MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

CONSTRUCTION DOCUMENTS
 PROJECT NO. 2358C
 DRAWN BY: CWC
 DATE: 10.15.2024
 CHECKED BY: CWC
 NEW AND EXISTING FLOOR PLAN
 A2.1

C:\Users\Chuck Crane\Dropbox\My PC (LAPTOP-09R05311)\Documents\Back to Terra\2358c Medical Lake City Hall Kitchen Medical Lake_VA Dec135 Plot Annotation Drawings\05-3-03 MAIN PARTITION PLAN A2_1_10/16/2024 12:10:08 PM, CHUCK CRANE

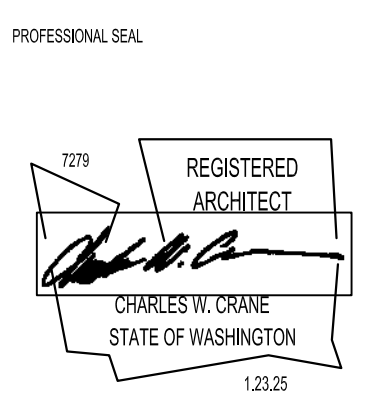


1 | ROOF PLAN - NEW
1/8" = 1'-0" N

ROOF NOTES
SEE MECHANICAL PLAN FOR HOOD EXHAUST AND MAKE UP AIR UNIT LOCATIONS. ALL ROOF PENETRATIONS/REPAIRS REQUIRED TO FOLLOW ROOF MANUFACTURER REQUIREMENTS AND SMACNA SHEET METAL GUIDELINES. ROOF LOAD STRUCTURAL MODIFICATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR FOR EQUIPMENT WEIGHT.

--- EXISTING EXTERIOR PARAPET WALL
- - - EXISTING WALL BELOW

2 | PARTITION KEY
NTS



PROJECT

PROJECT NO: 2358C MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
124 S LEFEVRE ST
MEDICAL LAKE, WA 99022

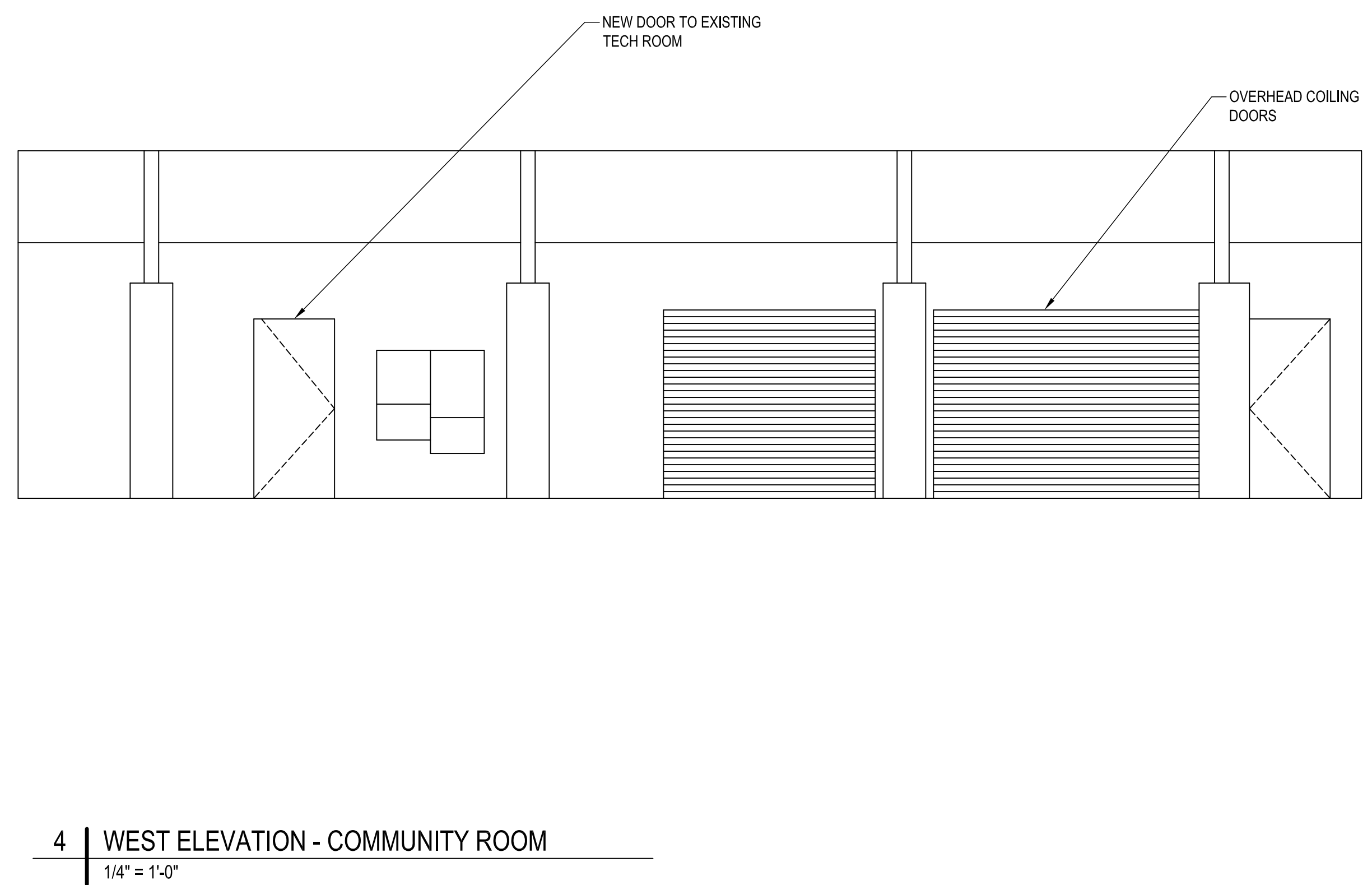
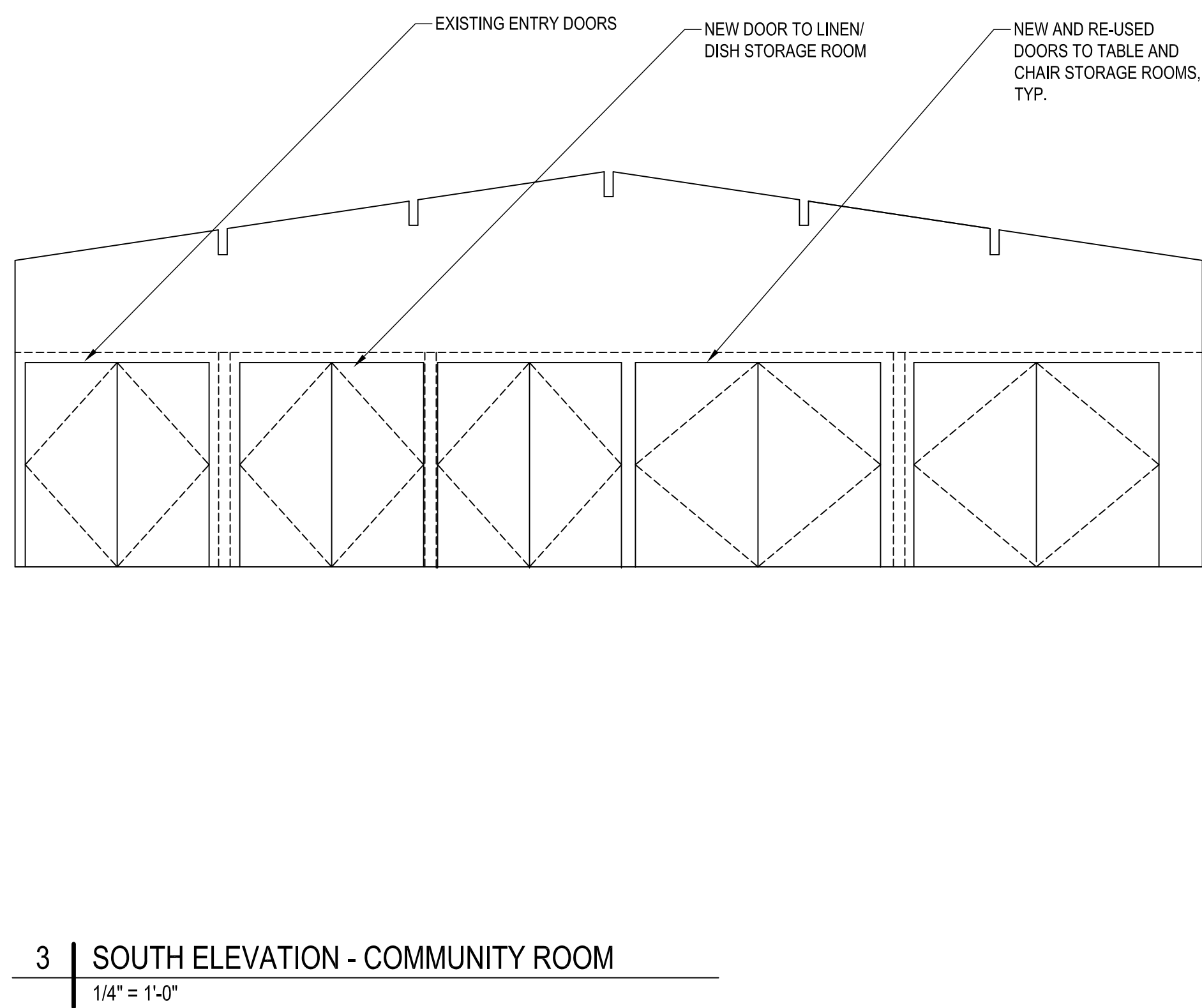
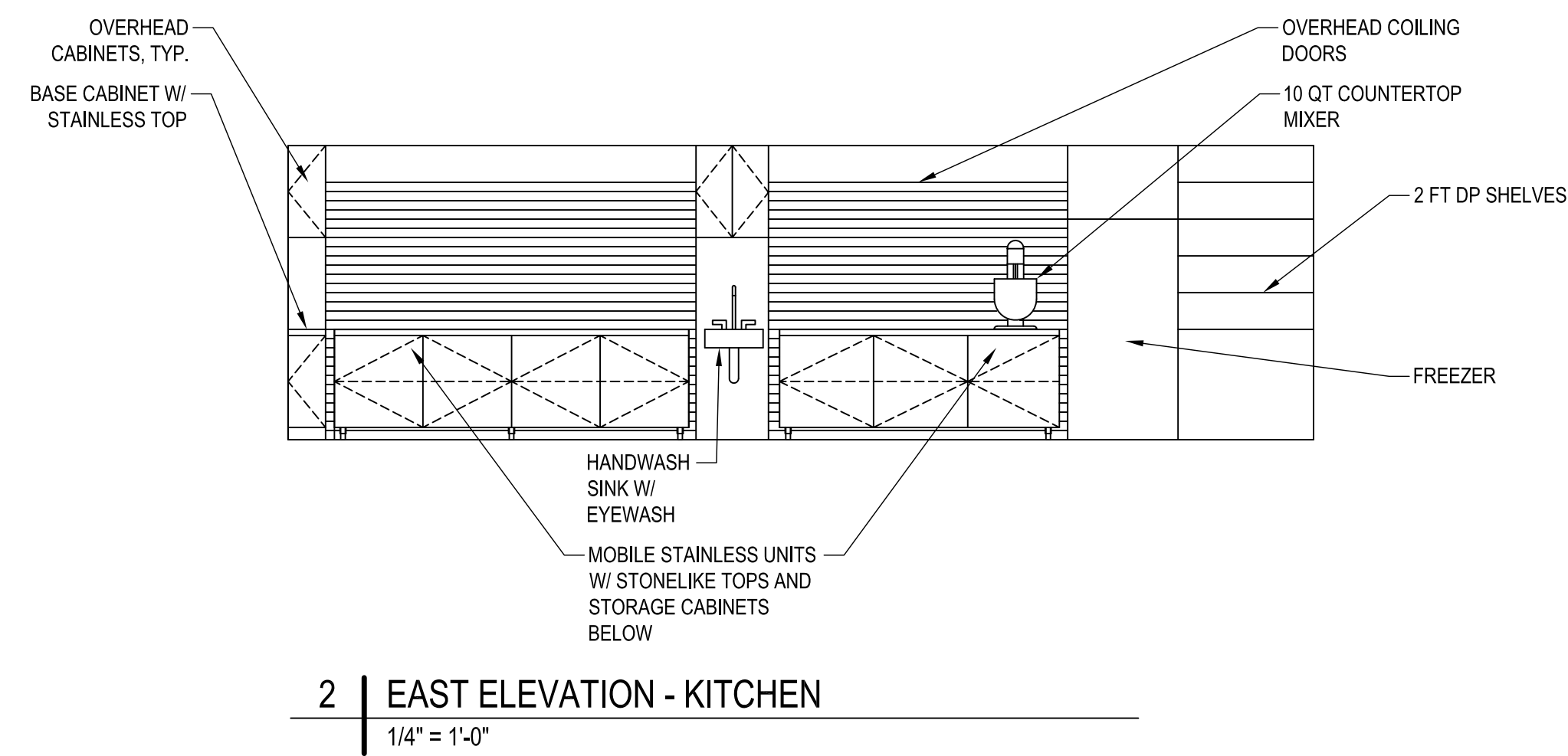
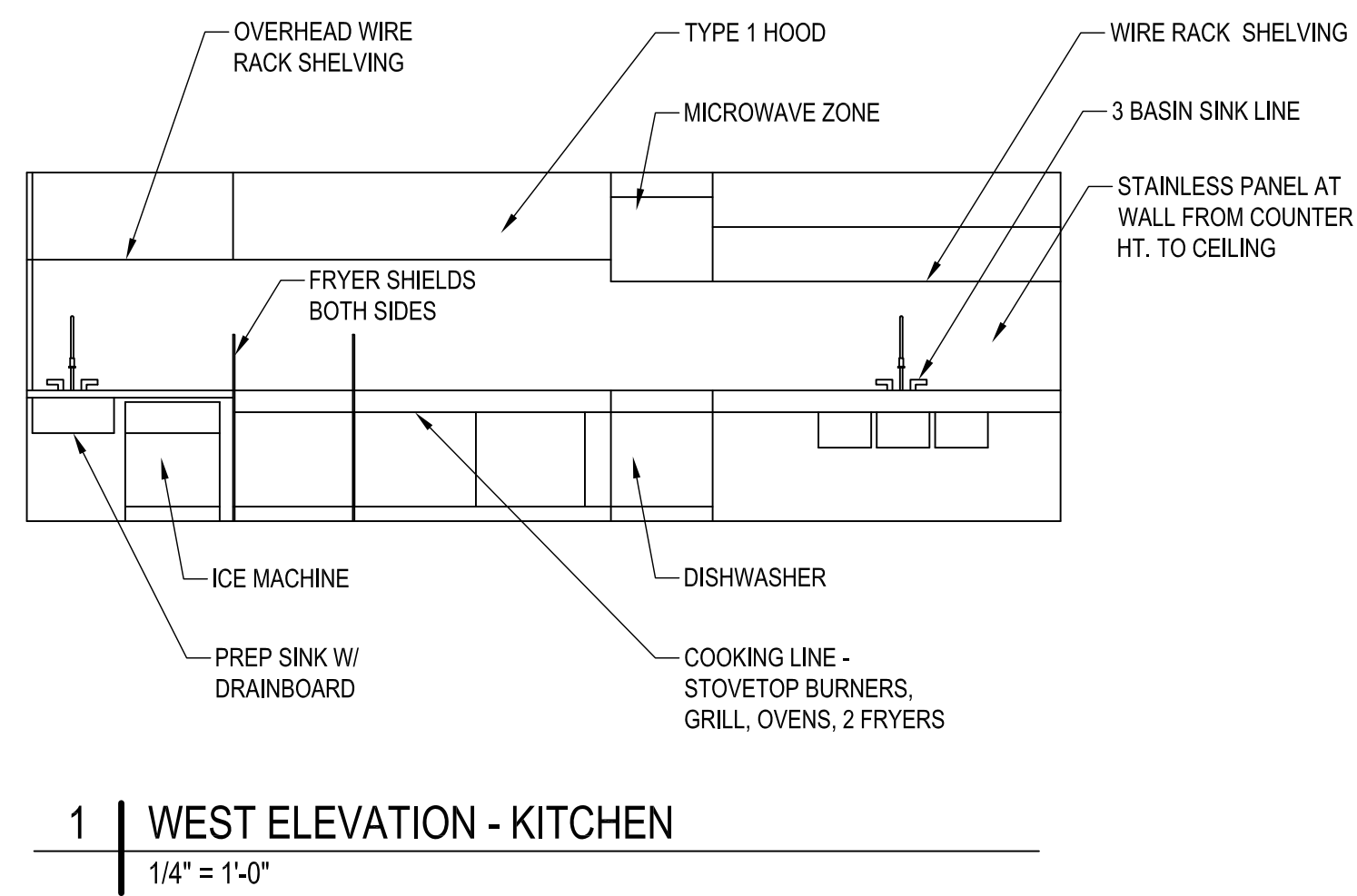
REVISIONS

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ROOF PLAN - NEW
A2.2

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Back to Terra
Sustainable Architecture
Chuck Crane, Architect N.CARB, LEED AP, CSRA
347 Homestead Loop
Sandpoint, ID 83864
208.255.2560

PROFESSIONAL SEAL

729 REGISTERED ARCHITECT
Chuck Crane
CHARLES W. CRANE
STATE OF WASHINGTON
1.23.25

PROJECT

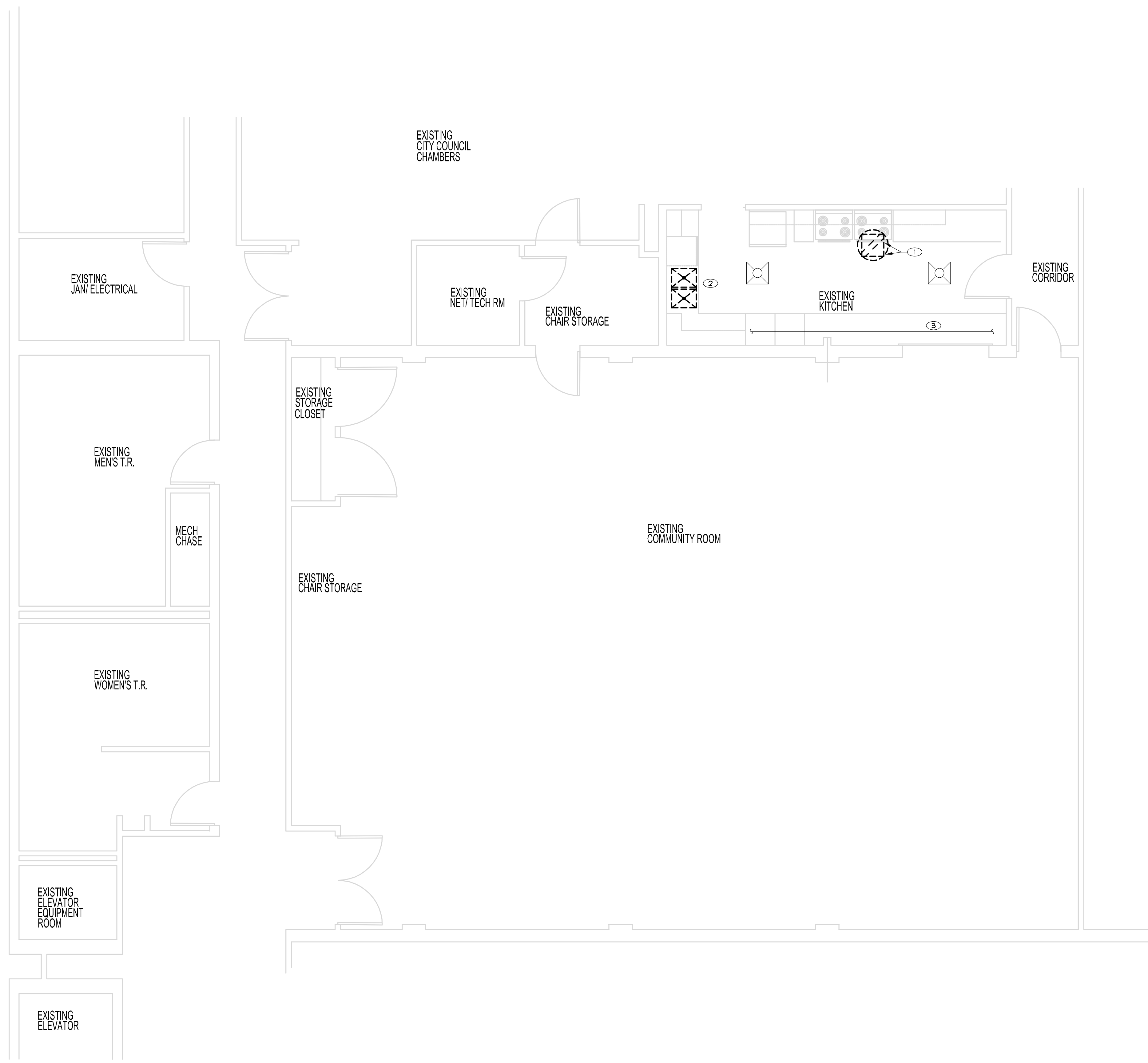
PROJECT NO: 2358C MEDICAL LAKE CITY HALL
COMMERCIAL KITCHEN UPGRADE
MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
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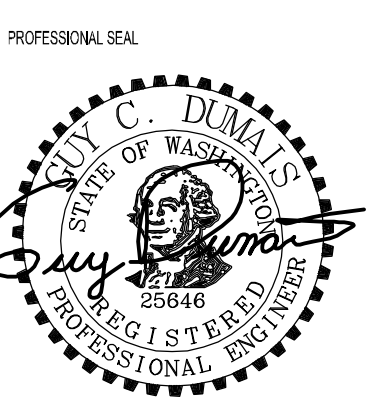
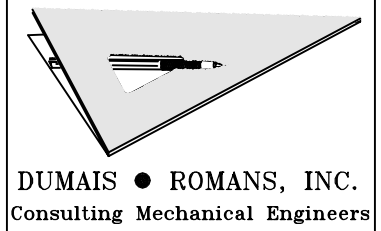
INTERIOR ELEVATIONS - NEW
A3.1

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PLAN NOTES:

- ① REMOVE THE CEILING GRILLE AND DUCTWORK UP TO THE ROOFTOP FAN. REMOVE THE ROOFTOP FAN.
- ② REMOVE THE EXISTING TWO COMPARTMENT SINK, CAP THE WATER, WASTE, AND VENT PIPING IN A CONCEALED LOCATION.
- ③ EXISTING NATURAL GAS LINE ON THE ROOF.



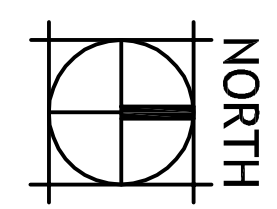
PROJECT

**PROJECT NO: 2358C MEDICAL LAKE CITY HALL
 COMMERCIAL KITCHEN UPGRADE**
 MEDICAL LAKE CITY HALL, COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

REVISIONS

1 | Demolition Plan

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



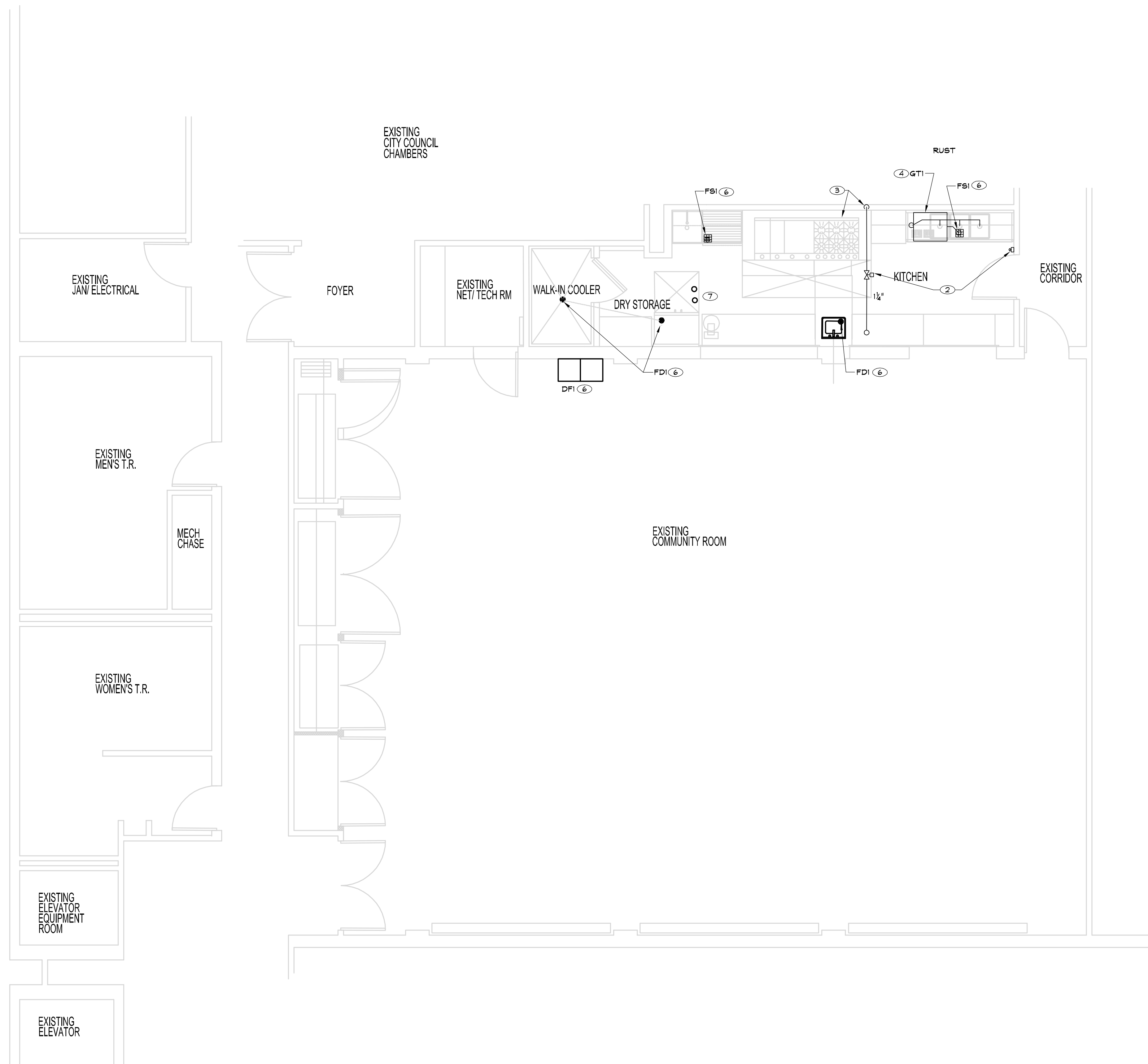
CONSTRUCTION DOCUMENTS

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DEMOLITION

M1.1

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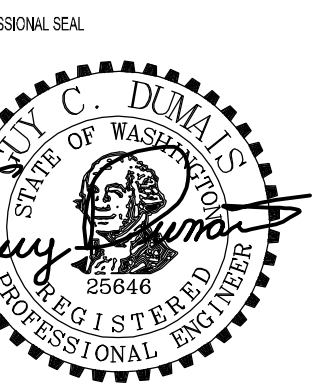
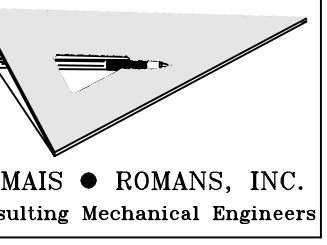


GENERAL NOTES:

1. ALL OF THE WASTE PIPING SERVING THE NEW FIXTURES IN THE KITCHEN WILL NEED TO TROUTE WEST IN THE CEILING OF THE MAIN FLOOR, AND DOWN IN A WALL TO CONNECT TO THE WASTE PIPING SERVING THE TWO TOILETROOMS AND THE JANITOR CLOSET JUST WEST OF THE KITCHEN ON THE MAIN FLOOR.

PLAN NOTES:

1. CONNECT TO THE EXISTING NATURAL GAS LINE ON THE ROOF. PENETRATE THE ROOF AND SEAL WATER TIGHT PER THE ROOFING MANUFACTURERS RECOMMENDATIONS. ROUTE THE GAS LINE IN THE CEILING SPACE TO THE WALL, AND DOWN INSIDE THE WALL TO THE APPLIANCES.
2. INSTALL A GAS SOLENOID SHUTOFF VALVE ABOVE THE CEILING. INSTALL THE VALVE CLOSING BUTTON ON THE WALL EXITING THE KITCHEN.
3. PROVIDE A GAS VALVE WHERE THE GAS LINE EXITS THE WALL TO CONNECT TO THE APPLIANCE. PROVIDE AN APPLIANCE RESTRAINT TO PREVENT STRESSING THE GAS LINE.
4. ROUTE THE WASTE FROM THE THREE COMPARTMENTS OVER THE TOP OF THE GREASE TRAP AND DROP INTO THE SOUTH END. PIPE THE GREASE TRAP DISCHARGE TO THE FLOOR SINK.
5. INDIRECT ROUTE DRAINS FOR ICE MAKER AND SINK TO FLOOR SINK.
6. PIPE WASTE PIPING FROM FLOOR DRAIN, FLOOR SINK, OR FIXTURE TO THE WEST IN THE FIRST FLOOR CEILING. DROP IN THE WALL, AND CONNECT TO THE NEAREST WASTE LINE SERVING THE TOILETROOMS OR JANITOR CLOSET JUST WEST OF THE KITCHEN ON THE FIRST FLOOR.
7. EXTEND THE PIPING PREVIOUSLY SERVING THE KITCHEN SINK TO THE NEW KITCHEN FIXTURES. SEE THE FIXTURE SCHEDULE IN THESE DRAWINGS, AND THE KITCHEN CONSULTANT DRAWINGS FOR FIXTURE DETAILS.

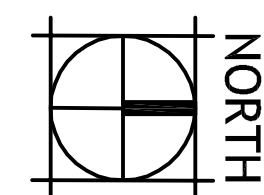


PROJECT

PROJECT NO: 2358C MEDICAL LAKE CITY HALL
COMMERICAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

REVISIONS

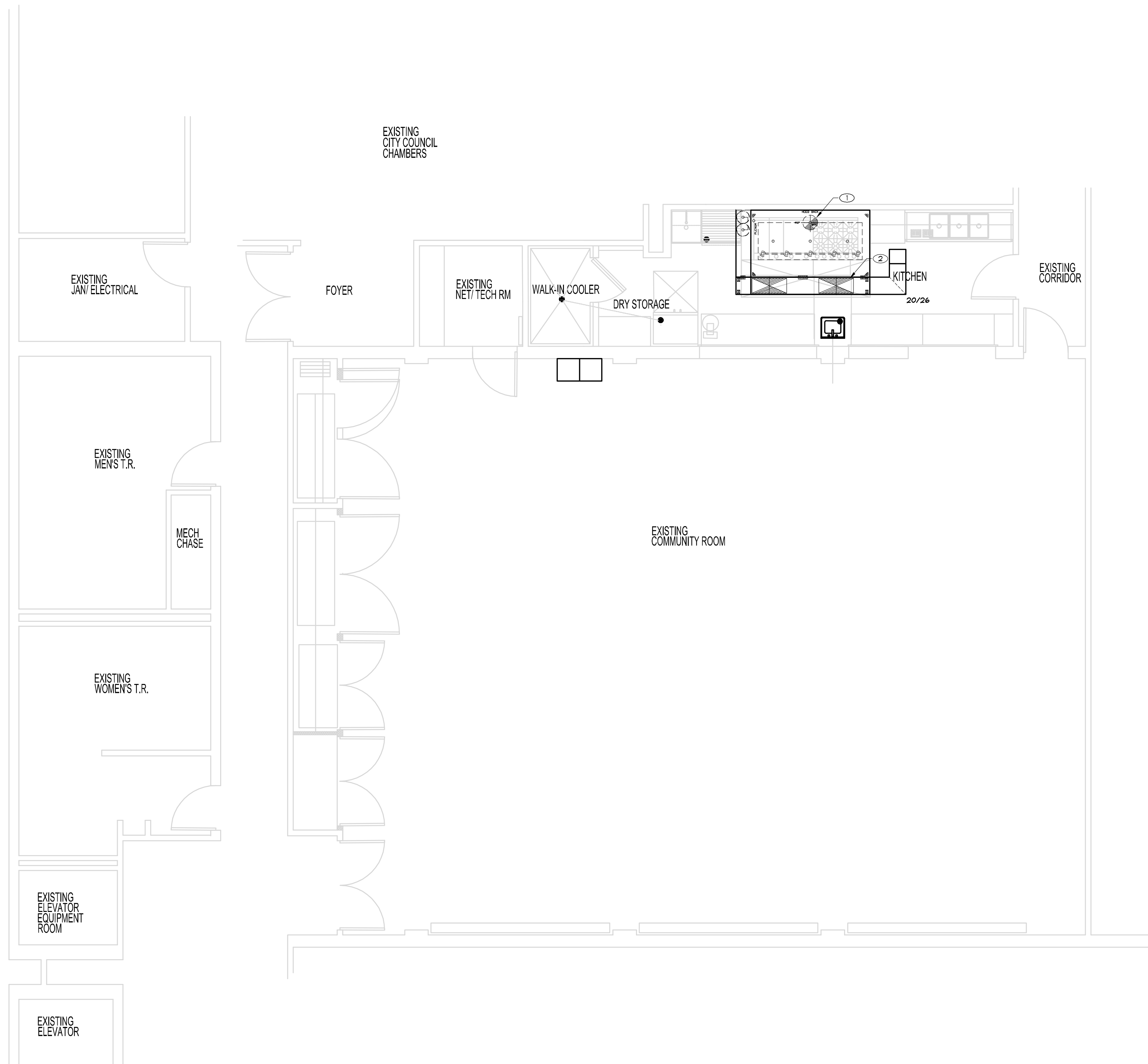
1 New Work Plan
 SCALE: 1/4" = 1'-0"



CONSTRUCTION DOCUMENTS
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 DATE: 10.15.2024
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PLUMBING PLAN
M1.2

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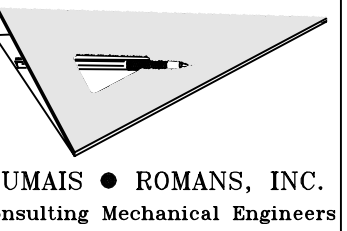


GENERAL NOTES:

1. DOCUMENTATION PROVIDED WITH THE HOOD, FAN, MAKEUP AIR UNIT DESIGN PACKAGE TO SUPERCEDE DETAILS ON THIS DRAWING.

PLAN NOTES:

1. VERIFY THE BACK WALL IS COMPLIANT WITH A TYPE I HOOD. MOUNT THE HOOD PER THE MANUFACTURERS RECOMMENDATIONS. PROVIDE A WATER TIGHT TRANSITION FROM THE HOOD COLLAR TO THE EXHAUST FAN LOCATED ABOVE IT ON THE ROOF.
2. CONNECT THE MAKEUP AIR SUPPLY DUCT TO THE TWO HOOD SUPPLY PLENUMS.

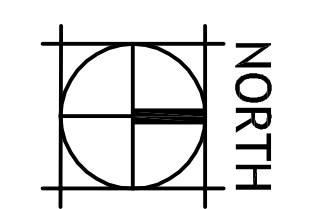


PROJECT

PROJECT NO: 2358C MEDICAL LAKE CITY HALL
COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

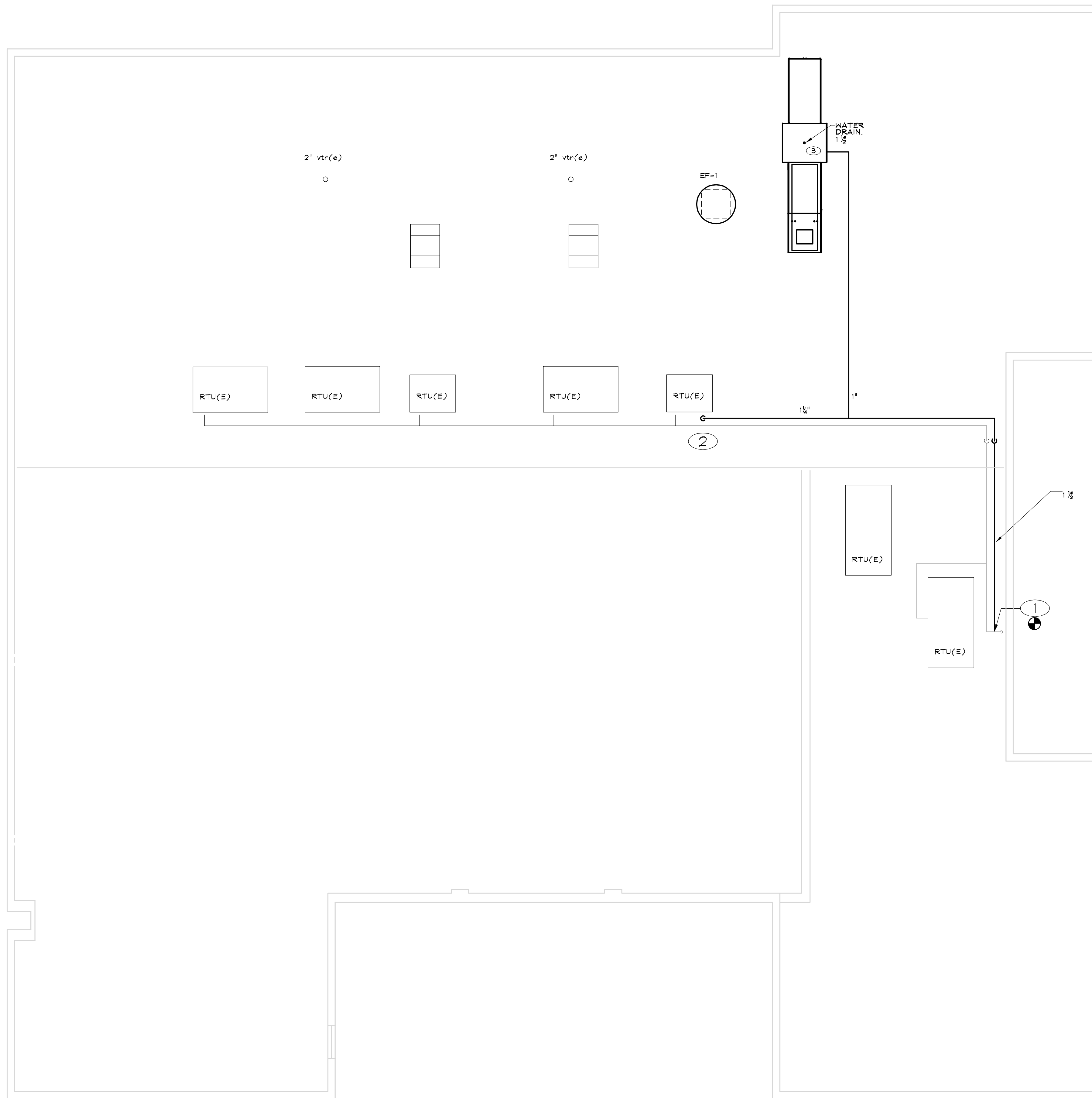
REVISIONS

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



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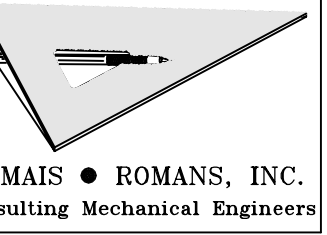


GENERAL NOTES:

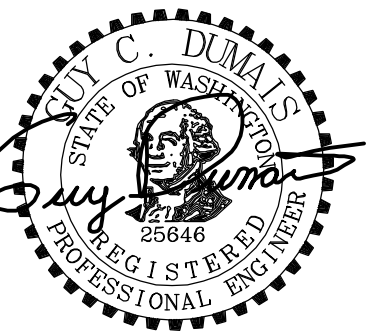
- EQUIPMENT LOCATIONS SHOWN ARE APPROXIMATE. COORDINATE EXACT NEW EQUIPMENT PLACEMENT WITH THE ROOF STRUCTURE, AND HOOD CONNECTIONS BELOW.

PLAN NOTES:

- CONNECT A NEW GAS LINE TO THE NEAREST 2' OR LARGER SECTION OF THE EXISTING GAS LINE.
- PIPE DOWN THROUGH THE ROOF TO THE KITCHEN CEILING SPACE, SEE SHEET M1.2 FOR CONTINUATION.
- ROUTE A 3/4" DOMESTIC COLD WATER FROM THE SECOND FLOOR THROUGH A REDUCED PRESSURE BACKFLOW DEVICE, AND TO THE WATER CONNECTION ON THE MAKEUP AIR UNIT. ROUTE THE MAKEUP AIR UNIT DRAIN TO THE FLOOR SINK UNDER THE THREE COMPARTMENT SINK.



PROFESSIONAL SEAL

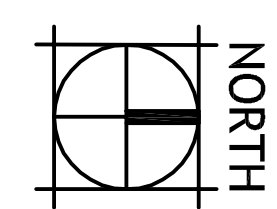


PROJECT

PROJECT NO: 2358C MEDICAL LAKE CITY HALL
 COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL, COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

REVISIONS

1 | Roof Plan
 SCALE: 3/16 = 1'-0"



CONSTRUCTION DOCUMENTS
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ROOF PLAN
M2.2

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NOTES:

- THE HOOD, FIRE SUPPRESSION, EXHAUST FAN, MAKEUP AIR UNIT, AND ALL CONTROLS AND INTERLOCKS REQUIRED TO BE COMPLIANT IN WASHINGTON SHALL BE SELECTED BY ONE MANUFACTURER AS A "SYSTEM", AND REPRESENTED IN THE SUBMITTALS. THIS SELECTION, AND THE SCHEDULES PROVIDED HAVE BEEN MADE THROUGH CAPTIVEAIRE. THEY PROVIDE A SIGNIFICANT AMOUNT OF INFORMATION WITH THEIR SELECTIONS FOR THE CONTRACTOR TO FOLLOW DURING INSTALLATION, ALL OF WHICH WILL BE REQUIRED IN THE CAPTIVEAIRE OR ALTERNATE MANUFACTURER SUBMITTAL. THE COMPLETE SELECTION PACKAGE WILL BE MADE AVAILABLE TO BIDDERS UPON REQUEST.

PLUMBING FIXTURE SCHEDULE									
ITEM	FIXTURE	TYPE	SIZE	MANUFACTURER AND MODEL NO.	COLOR OR FINISH	ROUGH-IN CONNECTION (IN.)			REMARKS
						W	V	H	
GT1	GREASE TRAP	INSTALLED ABOVE FLOOR	25 GPM, 64 GAL.	SCHIER GB1	--	3	2	--	PROVIDE STEEL TRAP W/ CORROSION RESISTANT COATING INSIDE AND OUTSIDE, VENTED INLET FLOW CONTROL DEVICE.
FD1	FLOOR DRAIN	ROUND	--	JR SMITH FIG. 2005	CAST IRON	--	--	--	SIZE AS INDICATED ON DRAWINGS. PROVIDE W/ NICKEL BRONZE STRAINER HEAD, AND TRAP PRIMER CONNECTION.
FS1	SANITARY FLR. SINK	SQUARE W/ SEDIMENT BUCKET	--	JR SMITH FIG. 3101	CAST IRON	--	--	--	SIZE AS INDICATED ON DRAWINGS. PROVIDE W/ ALL CAST IRON BODY, ACID RESISTANT COATING, AND TRAP PRIMER CONNECTION.
DF1	DRINKING FOUNTAIN	REFRIGERATED - ADA TWO LEVEL W/ BOTTLE FILLER	SURFACE MOUNTED	ELKAY LZSTLWLSL	POWDER COATED	2	1 1/2	1/2	BUBBLER SHALL HAVE A FLEXIBLE GUARD. COLOR BY ARCHITECT.

NOTES:

- PLUMBING CONTRACTOR TO PROVIDE AND INSTALL ALL COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL INSTALLATION PER STATE AND LOCAL PLUMBING CODES AND REQUIREMENTS.

EXHAUST FAN INFORMATION - JOB#7102052

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	KEF-1	1	DUBSHFA	CAPTIVEAIRE	1800	0.930	1367	TEAD-ECM	0.750	0.4300	1	115	8.9	570 FPM	90	12.5

MUA FAN INFORMATION - JOB#7102052

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	MCA	MDCP	EVAP FLOW RATE (GAL/Hr)	EVAP COOLER ENTERING DB TEMP	EVAP COOLER ENTERING WB TEMP	EVAP COOLER LEAVING DB TEMP	EVAP COOLER LEAVING WB TEMP	WEIGHT (LBS)	SONES
2	MAU-1	1	A1-D500-15D	15MF-1-MDD	A1-D500	1000	1440	0.500	1729	TEAD-ECM	1.000	0.7380	1	115	11.6	16.6A	25A	2.68	91.0°F	64.0°F	71.0°F	64.0°F	702	15

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
2	MAU-1	96357	88648	62°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF-1	1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - DU/DR8SHFA - SHIP LOOSE - FOR GREASE DUCTS
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCD MOTOR), CCW ROTATION
		1	2-YEAR PARTS WARRANTY
2	MAU-1	1	SIZE 1 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	SHIP LOOSE GAS STRAINER 3/4"
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	1BT/MUA EVAP INTERLOCK
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	FREEZE PROTECTION DRAIN KIT FOR 1BT/MUA WITH EVAPORATIVE COOLERS
		1	OCCUPIED SCHEDULING
		1	FREEZESTAT
		1	DISCHARGE FIRESTAT SET TO 240°F
		1	ECM WIRING PACKAGE - DD SUPPLY - PWM SIGNAL FROM ECPM03 PREWIRE (TELCD MOTOR)
		1	2-YEAR PARTS WARRANTY
1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET		

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST				SUPPLY				
		GREASE CURB	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT		
1	KEF-1	YES							YES	
2	MAU-1									

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	36 LBS	CURB	23.000"W X 23.000"L X 20.000"H VENTED HINGED.
2	# 2	MAU-1	75 LBS	CURB	21.000"W X 71.000"L X 20.000"H INSULATED.
	# 2			RAIL	4.000"W X 4.000"L X 36.000"H

HMI SCHEDULE				
UNIT NUMBER	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #2	HMI #1 - UNIT	IN UNIT	NOT AVERAGED	55

HOOD INFORMATION - JOB#7102052

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG					
										WIDTH	LENG	HEIGHT	DIA			CFM	VEL	SP	END TO END	ROW	
1	H-1	S424 ND-2-PSP-F	CAPTIVEAIRE	8' 0"	600 DEG	I	HEAVY	225	1800				4'	14'	1800	1684	-0.930"	1440	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT			
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	AVERAGE FOOT CANDLES @ 36" AFF	LOCATION	SIZE	TYPE	SIZE			ELECTRICAL MODEL #	SWITCHES QUANTITY	
1	H-1	CAPTRATE SOLD FILTER	5	16"	16"	85% SEE FILTER SPEC	5	RECESSED ROUND	NO	55	LEFT	12"x54"x24"	TANK FS		4.0/4.0	DCV-1111	1 LIGHT 1 FAN	YES	1047 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	H-1	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.
		BACKSPLASH 122.00" HIGH X 144.00" LONG 430 SS VERTICAL.
		WRAPPER CHANNEL - FRONT, LEFT, RIGHT.
		INSULATION FOR TOP OF HOOD.
		INSULATION FOR BACK OF HOOD.
		RISER SENSOR INSTALL 6IN PLEN.
		RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.		

PERFORATED SUPPLY PLENUM(S)

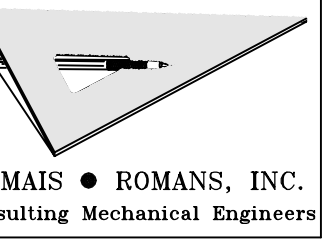
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	H-1	Front	108"	14"	6"	MUA	12"	28"		720	0.168"
						MUA	12"	28"		720	0.168"

FIRE SYSTEM INFORMATION - JOB#7102052

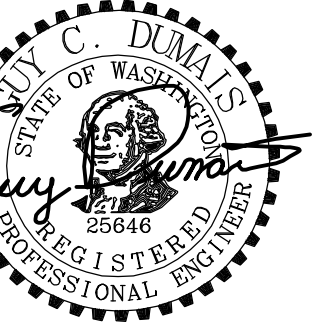
FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1	FS-1	TANK FS	4.0/4.0	40	23	FIRE CABINET LEFT	LEFT, HOOD 1

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1	FS-1	SC ELECTRICAL	2.000	CAPTIVEAIRE SYSTEMS



PROFESSIONAL SEAL



PROJECT

PROJECT NO: 2358C MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 124 S LEFAYRE ST
 MEDICAL LAKE, WA 99022

REV:016

CONSTRUCTION DOCUMENTS

PROJECT NO: 2358C
 DRAWN BY:
 DATE: 10.15.2024
 CHECKED BY: GCD

SCHEDULES

M3.1

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SECTION 220200 - MECHANICAL GENERAL PROVISIONS

1.1 PART 1 - GENERAL

A. THE SCOPE OF WORK IN THIS SECTION IS TO INCLUDE ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THE ENTIRE MECHANICAL WORK AS HEREIN SPECIFIED, AND/OR INDICATED ON RELATED DRAWINGS. EACH MECHANICAL SECTION OF THESE SPECIFICATIONS SHALL BE SUBJECT TO ALL PROVISIONS OF THE COMPLETE CONTRACT SET OF DOCUMENTS.

B. THE CONTRACTOR SHALL VERIFY THE INSTALLATION REQUIREMENTS OF ALL MECHANICAL EQUIPMENT FROM THE SUBMITTALS AND INSTALLATION INSTRUCTIONS PROVIDED WITH THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THESE REQUIREMENTS WITH THE ELECTRICAL, PLUMBING, HVAC, AND OTHER RELATED CONTRACTORS PRIOR TO MECHANICAL, CONTROL, PLUMBING, OR ELECTRICAL ROUGH-IN. IF THERE IS A DISCREPANCY BETWEEN THE DRAWINGS, AND INSTALLATION MATERIALS OR METHODS IN THE INSTALLATION INSTRUCTIONS, THE MORE STRINGENT SHALL APPLY. THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR ADDITIONAL CLARIFICATION IF NECESSARY.

C. DRAWINGS ARE PARTLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW THE EXACT LOCATION OF ALL NEW PIPING AND EXISTING UTILITIES, UNLESS SPECIFICALLY DIMENSIONED.

D. THE CONTRACTOR IS CHECKED TO DETERMINE THAT IT CLEARS ALL OPENINGS AND STRUCTURAL MEMBERS, THAT IT MAY BE PROPERLY CONCEALED AND THAT IT CLEARS CABINETS, LIGHTS AND ALL EQUIPMENT HAVING FIXED LOCATIONS. NO EXTRA PAYMENTS WILL BE ALLOWED WHERE PIPING AND/OR DUCTWORK MUST BE OFFSET TO AVOID OTHER WORK, OR WHERE MINOR CHANGES ARE NECESSARY TO FACILITATE INSTALLATION. THE DRAWINGS SHOW THE VARIOUS PIPING AND DUCT SYSTEMS SCHEMATICALLY, AND DO NOT ATTEMPT TO SHOW DETAILS OF ALL PIPING AND DUCTWORK, OR TO SHOW ALL OFFSETS THAT MAY BE REQUIRED. NO ADDED COMPENSATION WILL BE PERMITTED FOR VARIATIONS DUE TO FIELD CONDITIONS. THE CONTRACTOR SHALL CAREFULLY CHECK SPACE AND LOCATION OF ALL PIPING, DUCTS, PIPES, ETC. CAN BE INSTALLED IN THE SPACE ALLOTTED PRIOR TO FABRICATION OR ORDERING. LINES THAT MUST MATCH, OR THAT MUST HAVE A CONSTANT ELEVATION, SHALL HAVE THE RIGHT-OF-WAY OR LINES NOT SO RESTRICTED. THE CONTRACTOR SHALL INSTALL PIPING AND DUCTS IN SUCH A MANNER AS TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGeways CLEAR, WITHOUT FURTHER INSTRUCTIONS OR COST TO THE OWNER.

E. DRAWINGS DO NOT ATTEMPT TO SHOW COMPLETE DETAILS OF BUILDING CONSTRUCTION WHICH AFFECT THE MECHANICAL INSTALLATION. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND BUILDING DETAILS WHICH AFFECT INSTALLATION OF HIS WORK.

F. THE SPECIFICATIONS AND PLANS ARE COMPLEMENTARY, AND ANYTHING CALLED FOR IN EITHER IS AS BEING AS IF CALLED FOR IN BOTH. ITEMS NOT SPECIFICALLY MENTIONED IN THE SPECIFICATION OR NOTED ON THE DRAWINGS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE WORKING SYSTEM SHALL BE INCLUDED. CONTRACTOR CLAIMS FOR ADDITIONAL PAYMENT FOR SUCH ITEMS WILL NOT BE ALLOWED.

G. THE LOCATIONS OF EXISTING CONNECTION POINTS HAVE BEEN INDICATED AS CLOSELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE CONTRACTOR SHALL ASSUME THAT SUCH CONNECTION POINTS ARE WITHIN A 10-FOOT RADIUS OF THE INDICATED LOCATION UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY CONNECTION POINTS TO EXISTING CONCEALED PIPING AS SOON AS POSSIBLE. CONTRACTOR SHALL NOTIFY ENGINEER OF INVERT CONFLICTS BEFORE PROCEEDING WITH AFFECTED PIPING.

H. THE CONTRACTOR SHALL NOT USE PERMANENT HEATING/VENTILATING UNITS FOR TEMPORARY HEAT/VENTILATION UNLESS APPROVED BY THE OWNER. AND PROVISIONS ARE MADE TO PROTECT EQUIPMENT.

I. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS AND UTILITY COMPANY REGULATIONS.

J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYMENT FOR ALL PERMITS, LICENSES, AND INSPECTION CERTIFICATES REQUIRED BY THE CONTRACT DOCUMENTS, AND SHALL PAY ALL FEES FOR THE UTILITY CONNECTIONS AS REQUIRED FOR THIS PART OF THE WORK.

K. ELECTRICALLY DRIVEN OR ELECTRICALLY CONNECTED EQUIPMENT SHALL BEAR THE UL LABEL OR EQUIVALENT. ALL GAS-FIRED EQUIPMENT SHALL BE AGA APPROVED.

L. THE CONTRACTOR MUST PROVIDE PASSING TEST REPORTS FOR ALL BACKFLOW ASSEMBLIES, FIRE, DOMESTIC, AND IRRIGATION. TO THE AUTHORITY HAVING JURISDICTION.

1.2 PRODUCT OPTIONS AND SUBSTITUTIONS

A. SUBSTITUTIONS OF EQUIPMENT OR MATERIALS SHALL BE MADE ONLY WITH THE WRITTEN PRIOR APPROVAL OF THE ENGINEER. THE ENGINEER MUST RECEIVE PRIOR APPROVAL REQUESTS AT LEAST SEVEN (7) DAYS PRIOR TO BID DATE UNLESS OTHERWISE INSTRUCTED IN THE ARCHITECTURAL SPECIFICATIONS. ITEMS APPROVED FOR BIDDING WILL BE LISTED IN THE ADDENDUM. ITEMS NOT APPROVED WILL NOT BE LISTED.

B. SUBMITAL REVIEW BY THE ENGINEER IS TO ASSIST THE CONTRACTOR IN PROVIDING AN EQUAL PRODUCT. SUBMITAL ACCEPTANCE AND DOES NOT RELIEVE THE CONTRACTOR FROM ALL SUBMITTAL REQUIREMENTS IF THE PRODUCT IS UNDESIRABLE. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR SUBSTITUTED EQUIPMENT AND MATERIALS, AND HOW THEY RELATE TO THE ENGINEERS DESIGN. THE CONTRACTOR SHALL ALSO ASSUME THE COST OF ANY REDESIGN, IN THE FORM OF CHANGES TO THE DRAWINGS, AND THICKNESS AND STRENGTH OF MATERIALS AND ALLOY TYPES, AND ANY ADDITIONAL MATERIALS AS REQUIRED TO CORRECT ANY INSTALLED EQUIPMENT SUBSTITUTIONS. IF ADDITIONAL DESIGN IS REQUIRED BY THE ENGINEER TO ACCOMMODATE SUBSTITUTED EQUIPMENT, THE ENGINEER SHALL BE COMPENSATED BY THE CONTRACTOR AT THEIR STANDARD HOURLY RATE.

1.3 AS-BUILT DRAWINGS:

A. THE CONTRACTOR SHALL LOG THE DEPTH OF BURY OF ALL OUTSIDE UTILITY LINES. THIS SHALL INCLUDE BOTH NEW AND EXISTING LINES AND ALL CONSTRUCTION. BURIED LINES SHALL BE DIMENSIONED FROM EXTERIOR BUILDING WALLS.

B. AS-BUILT DRAWINGS SHALL BE BROUGHT UP-TO-DATE AT THE END OF EACH WORKING DAY.

C. ALL CHANGE ORDERS AND VARIATIONS TO THE CONTRACT SHALL BE NOTED ON THE AS-BUILT DRAWINGS AND SHALL INCLUDE ALL REVISIONS ACCOMPLISHED BY THESE ITEMS.

1.4 PRESSURE TESTING OF SYSTEMS:

A. PIPING SYSTEMS SHALL BE SUBJECT TO TESTS AS SPECIFIED BELOW. TESTS SHALL BE MADE IN PRESENCE OF OWNERS REPRESENTATIVES AND ANY LOCAL INSPECTOR HAVING JURISDICTION.

1. SANITARY WATER AND VENT PIPING AND RAINWATER PIPING: MINIMUM 10 FEET HEAD OF WATER OR 5 PSI AIR PRESSURE FOR AT LEAST 30 MINUTES.

2. DOMESTIC HOT AND COLD WATER PIPING: HYDROSTATIC TEST EQUAL TO SYSTEM WORKING PRESSURE OR AIR TEST AT MINIMUM 30 PSI FOR AT LEAST 30 MINUTES.

3. NATURAL GAS PIPING: GAS PIPING SHALL BE TESTED AND MADE TIGHT IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, INTERNATIONAL FUEL GAS CODE, NFPA 58 AND ANY OTHER LOCAL OR APPLICABLE GAS CODES.

4. LIQUID AND GAS PROPANE PIPING: PROPANE PIPING SHALL BE TESTED AND MADE TIGHT UNDER A TEST PRESSURE OF 150 PSI NITROGEN GAS, WITH METHODS IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, INTERNATIONAL FUEL GAS CODE, NFPA 58, AND ANY OTHER LOCAL OR APPLICABLE GAS CODES.

B. FURNISH ALL TOOLS, MATERIALS, FLUMES, GAUGES, BLOWERS, INSTRUMENTS, TEST EQUIPMENT AND PERSONNEL REQUIRED FOR TESTS. MAKE ALL PROVISIONS FOR REMOVAL OF TEST EQUIPMENT AND DRAINING OF PIPES AFTER TESTS.

C. ALL TESTS SHALL BE ENTERED INTO A TEST LOG, WHICH SHALL BE MAINTAINED ON SITE.

D. SUBMIT CERTIFICATES OF APPROVAL FROM AGENCIES HAVING JURISDICTION, AND INCLUDE A COPY IN THE TEST LOG. WORK IS NOT CONSIDERED COMPLETE UNTIL ALL CERTIFICATES HAVE BEEN SUBMITTED. PROVIDE LOG INDICATING TESTS PERFORMED, TESTED BY, OWNERS REPRESENTATIVE OR LOCAL INSPECTORS SIGNATURE AND DATE OF TEST.

1.5 INSTALLATION:

A. TEMPORARY OPENINGS IN PIPES AND DUCTS SHALL BE CAPPED OR SEALED DURING CONSTRUCTION. CAPS SHALL BE REMOVED FOR FINAL CONNECTIONS.

B. VALVES, DAMPER OPERATORS, THERMOMETERS, PRESSURE GAUGES, CLEANOUT FITTINGS, AND INDICATING EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS. REMOVAL, OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO FINISHED BUILDING.

C. NO PIPING OR DUCTWORK SHALL BE RUN OVER ANY ELECTRICAL PANEL. CONTRACTOR SHALL BE REQUIRED TO MOVE AT HIS EXPENSE ANY PIPE OR DUCT RUN OVER AN ELECTRICAL PANEL, REGARDLESS OF WHERE DIAGRAMMATICALLY INDICATED ON THE DRAWINGS.

D. PROVIDE SUPPLEMENTAL SUPPORT STEEL TO SPAN BUILDING STRUCTURAL ELEMENTS AS NECESSARY FOR EQUIPMENT FOUNDATIONS, SUPPORTS, HANGERS, ETC.

1.6 DOMESTIC WATER CHLORINATION:

A. ALL DOMESTIC WATER LINES SHALL BE DISINFECTED IN CONFORMANCE WITH THE MOST CURRENT AMERICAN WATER WORKS ASSOCIATION STANDARD C651. AFTER DISINFECTING, ALL DOMESTIC WATER LINES SHALL BE FLUSHED AND RETURNED TO NORMAL LEVELS OF RESIDUAL CHLORINE.

B. AFTER FLUSHING, THE WATER SHALL BE SAMPLED AND SHOWN TO BE SAFE BEFORE BEING USED FOR DRINKING. A LABORATORY CERTIFIED BY THE STATE DEPARTMENT OF HEALTH SHALL ANALYZE THE WATER SAMPLE. A COPY OF THE LABORATORY RESULT SHALL BE INCLUDED IN THE TEST LOG, AND WITH THE O&M MANUAL.

1.7 TEST LOG DATA:

A. THE TEST DATA SHALL INCLUDE THE TESTING AND FLUSHING OF ALL PIPING ON THE PROJECT AS WELL AS THE RESULTS OF ANY OTHER TESTING REQUIRED BY THIS SPECIFICATION.

B. THE CONTRACTOR AND THE ARCHITECT SHALL EACH HAVE A REPRESENTATIVE OR THE CODE AUTHORITY HAVING JURISDICTION SHALL SIGN ALL LOG DATA TEST ENTRIES.

C. TEST LOG SHALL BE INCLUDED IN THE O&M MANUAL AT PROJECT CLOSEOUT.

1.8 CUTTING AND PATCHING:

A. CUTTING AND PATCHING OF EXISTING OR NEW BUILDING WALLS, FLOORS AND ROOF REQUIRED TO INSTALL THE MECHANICAL SYSTEMS SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. THIS WORK INCLUDES BUT IS NOT LIMITED TO PATCHING OF HOLES LEFT BY THE REMOVAL OF MECHANICAL UTILITIES, EQUIPMENT, AND FIXTURES. ALL PATCHING SHALL MATCH THE EXISTING CONSTRUCTION, AND SHALL BE MADE IN ACCORDANCE WITH THE EXISTING MANUFACTURERS REQUIREMENTS AS REQUIRED TO MAINTAIN ANY EXISTING WARRANTY. ONE EXISTS.

B. NEGLIGENT DAMAGE TO EXISTING OR NEW STRUCTURES BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

C. PRECAUTIONS SHALL BE TAKEN TO PROTECT ADJACENT AREAS FROM DUST AND DIRT.

1.9 FIRE STOPPING

A. THE CONTRACTOR IS RESPONSIBLE FOR FIRE STOPPING ASSOCIATED WITH THE MECHANICAL WORK. FIRE STOPPING SHALL BE INSTALLED PER THIS SECTION, OR PER FIRE STOPPING REQUIREMENTS IN THE ARCHITECTURAL SPECIFICATION, WHICHEVER IS MORE STRINGENT.

B. ALL PENETRATIONS THROUGH FIRE-RATED WALL AND CEILING ASSEMBLIES, BOTH EMPTY HOLES AND HOLES ACCOMMODATING AIR, WATER, GAS, DUCTS, SPIRES AND CONDUIT SHALL BE SEALED TO RETAIN THE INTEGRITY OF TIME-RATED CONSTRUCTION BY MAINTAINING AN EFFECTIVE BARRIER AGAINST THE SPREAD OF FLAME, SMOKE AND GASES.

C. PROVIDE ASBESTOS-FREE FIRE STOPPING MATERIALS THAT HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E814 AND UL 1479 TO PROVIDE FIRE RATING EQUAL TO THAT OF THE CONSTRUCTION.

D. PROVIDE MANUFACTURERS PRODUCT DATA DESCRIBING PRODUCT CHARACTERISTICS, PERFORMANCE CRITERIA, TESTING CERTIFICATION AND INSTALLATION INSTRUCTIONS FOR EACH PROPOSED SYSTEM.

E. ACCEPTABLE MANUFACTURERS: 3M CONTRACTOR PRODUCTS, BIO FRESHIELD, PROSEI.

1.10 CLEANUP:

A. THE CONTRACTOR SHALL BE EXPECTED TO POLICE HIS DAY-TO-DAY OPERATION AND MAINTAIN A CLEAN AND SAFE WORKING AREA.

1.11 ACCESS DOORS AND PANELS:

A. THE CONTRACTOR SHALL PROVIDE WALL, FLOOR AND CEILING ACCESS DOORS AS REQUIRED TO MAINTAIN AND REPAIR ALL EQUIPMENT.

1. ACCEPTABLE MANUFACTURERS: MIFAB

1.12 GUARANTEE

A. THE CONTRACTOR SHALL GUARANTEE ALL WORK INCLUDED IN THIS SECTION FOR A PERIOD OF ONE YEAR AFTER DATE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. DURING THAT PERIOD, ALL DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND DAMAGE TO OTHER WORK, RESULTING FROM THE DEFECTS, OR THE CORRECTION OF IT, SHALL BE REMEDIATED AT THE CONTRACTORS EXPENSE.

1.13 ELECTRICAL WORK AND COORDINATION

A. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL MOTOR STARTERS AND DISCONNECTS REQUIRED FOR MECHANICAL EQUIPMENT, EXCEPT WHERE THEY ARE IDENTIFIED TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR IN THE ELECTRICAL CONTRACT DOCUMENTS. ALL STARTERS AND DISCONNECTS SHALL BE SIZED PER NEMA STANDARDS.

END OF SECTION

SECTION 220300 - MECHANICAL DEMOLITION

1.1 PART 1 - GENERAL

A. THE WORK UNDER THIS SECTION SHALL INCLUDE PROVIDING ALL LABOR, EQUIPMENT, AND MATERIALS OF EVERY KIND NECESSARY TO COMPLETE THE DEMOLITION OF EXISTING MECHANICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.

2.1 PART 2 - PRODUCTS

A. THE OWNER SHALL HAVE FINAL SALVAGE RIGHTS TO ALL REMOVED FIXTURES AND EQUIPMENT. CONTRACTOR SHALL COORDINATE SELECTION WITH THE OWNERS REPRESENTATIVE.

3.1 PART 3 - EXECUTION

A. REMOVAL PIPING, DUCTWORK, EQUIPMENT AND CONTROLS AS INDICATED OR REFERENCED IN THE SPECIFICATIONS AND DRAWINGS, INCLUDING ASSOCIATED COMPONENTS OF THE SYSTEM WHICH WILL NOT BE NECESSARY FOR FUTURE OPERATION. CAP OR OTHERWISE PROTECT ALL OPEN PIPING AND DUCTWORK WHICH IS TO REMAIN. NOT ALL ITEMS REQUIRING DEMOLITION ARE SPECIFICALLY IDENTIFIED ON THE DRAWINGS.

B. EXISTING UTILITY SERVICES, MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS.

END OF SECTION

SECTION 220400 - MECHANICAL SHOP DRAWINGS AND PRODUCT DATA

1.1 PART 1 - GENERAL

A. SUBMIT SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES REQUIRED BY CONTRACT DOCUMENTS PROMPTLY TO AVOID DELAYS. ALL MATERIALS AND EQUIPMENT MUST BE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE DESIGN ENGINEER AND ARCHITECT BEFORE BEING USED.

B. PROVIDE MECHANICAL SUBMITTALS IN AN ELECTRONIC PDF FILE, WITH INDEX TABS CORRESPONDING TO THE SPECIFICATION OR DRAWINGS.

1. PIPING: INCLUDING ALL MATERIAL, FIXTURES, TRIM, AND EQUIPMENT.

2. VENTILATION: INCLUDING ALL MATERIALS, EQUIPMENT, TEMPERATURE CONTROLS, AND BALANCING FIRM.

2.1 PART 2 - PRODUCTS

A. CLEARLY MARK EACH COPY TO IDENTIFY PERTINENT PRODUCTS OR MODELS, PERFORMANCE CHARACTERISTICS, DIMENSIONS, AND CLEARANCES. MODIFY DRAWINGS AND DIAGRAMS TO DELETE INFORMATION WHICH IS NOT APPLICABLE TO THE WORK.

B. EACH COPY OF THE ELECTRONIC SUBMITTAL TO THE ENGINEER FOR REVIEW. THE ENGINEER WILL REVIEW THE SUBMITTAL PACKAGE, AND RETURN A REVIEWED COPY OUTLINING APPROVAL AND RESUBMITTAL REQUIREMENTS. RESUBMIT ON ITEMS AS REQUIRED UNTIL THE SUBMITTAL IS ACCEPTED.

3.1 PART 3 - EXECUTION

A. REVIEW SHOP DRAWINGS, PRODUCT DATA AND SAMPLES PRIOR TO SUBMISSION.

B. DETERMINE AND VERIFY FIELD MEASUREMENTS, FIELD CONSTRUCTION CRITERIA, CATALOG NUMBERS AND SIMILAR DATA, AND CONFORMANCE WITH SPECIFICATIONS.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

END OF SECTION

SECTION 220529 - SUPPORTS AND ANCHORS

1.1 PART 1 - GENERAL

A. PIPE AND EQUIPMENT HANGERS AND SUPPORTS, EQUIPMENT BASES AND SUPPORTS, SLEEVES AND SEALS, FLASHING AND SEALING EQUIPMENT AND PIPE STACKS.

2.1 PART 2 - PRODUCTS

A. PIPE HANGER AND SUPPORTS TO BE ERICO/CHIMNEY HANGER MIRO, OR PIPE PIER.

B. THE CONTRACTOR SHALL SELECT ATTACHMENT DEVICES IN COMPLIANCE WITH THE SEISMIC ZONE REQUIREMENTS FOR THIS PROJECT. ATTACHMENT DEVICES NOT IN COMPLIANCE WITH THE SEISMIC REQUIREMENTS FOR THIS ZONE SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

C. HORIZONTAL SUPPORTS SHALL CONSIST OF UPPER ATTACHMENT, THREADED HANGER ROD(S) WITH TURNBUCKLES AND LOWER ATTACHMENT.

D. LOWER ATTACHMENTS SHALL BE AS RECOMMENDED BY THE HANGER MANUFACTURER FOR SERVICE.

E. HANGERS SHALL BE SIZED FOR INSULATION, AND ALL REFRIGERANT PIPING SHALL HAVE WITH VIBRATION ISOLATION BUSHING DESIGNED FOR THIS PURPOSE BETWEEN PIPING AND CLAMP.

F. HORIZONTAL SUPPORTS FOR ROOFTOP OR ON-GRADE PIPING SHALL BE PIPE PIER BY ERICO OR APPROVED ALTERNATIVE DESIGNED TO SUPPORT PIPING 6" MINIMUM ABOVE THE GRADE OR ROOF SURFACE.

G. POWER ACTUATED ANCHORS CAN ONLY BE USED WHEN ALLOWED UNDER ARCHITECTURAL SPECIFICATION SECTIONS. COORDINATE ALL POWDER ACTUATED ANCHORS WITH STRUCTURAL SYSTEM, PARTICULARLY IN PORTI-TENSIONED SLAB APPLICATIONS.

H. PLACE HANGERS WITHIN 12" OF EACH HORIZONTAL ELBOW.

I. WHERE SEVERAL PIPES CAN BE INSTALLED IN PARALLEL, AND AT SAME ELEVATION, PROVIDE MULTIPLE OR TRAPEZE HANGERS. TRAPEZE HANGERS SHALL BE UNISTRUT (OR APPROVED EQUAL) WITH ELECTRO-CHROMATE FINISH.

J. PROVIDE STRUCTURAL MEMBER HANGER WITH A WALL MOUNTED IRON CASE OF STEEL SHELL AND EXPANDER PLUG FOR THREADED ISOLATION BUSHING DESIGNED FOR THIS PURPOSE, BETWEEN PIPING AND CLAMP.

K. PROVIDE ALL NECESSARY SUPPLEMENTAL STEEL FOR SUPPORT OR ATTACHMENT OF HANGERS AND PIPE IN WEIGHTS AND BETWEEN STRUCTURAL MEMBERS.

L. SUPPORT AT EQUIPMENT: PIPING AT PUMPS, TANKS AND EQUIPMENT SHALL BE SUPPORTED SO THAT PIPE SHAFTS IS NOT EXERTED UPON THE EQUIPMENT.

M. SUSPENDED EQUIPMENT SHALL BE BRACED AGAINST LATERAL MOVEMENT DUE TO ITS OPERATION.

N. THE MECHANICAL CONTRACTOR SHALL PROVIDE HOUSEKEEPING PADS OF CONCRETE, MINIMUM 4" THICK AND EXTENDING 6" BEYOND SUPPORTED EQUIPMENT. THE MECHANICAL CONTRACTOR SHALL COORDINATE SITE AND LOCATION OF PADS. PROVIDE HOUSEKEEPING PADS FOR ALL EQUIPMENT LOCATED OUTSIDE THE BUILDING ON GRADE WHERE A CONCRETE PAD DOES NOT EXIST AND IS NOT PROVIDED IN THE ARCHITECTURAL OR STRUCTURAL DOCUMENTS.

O. PROVIDE FLEXIBLE FLASHING AND METAL CONTROLFLASHING WHERE PIPING AND DUCTWORK PENETRATE WEATHER OR WATERPROOFED WALLS, FLOORS, AND ROOFS.

P. SUPPLY OR RETURN DUCTWORK, INSTALLED IN PART OF THE INSULATION ENVELOPE, RETURN OR EXHAUST, CONDITIONED SPACE, BETWEEN ERY AND DAMPER: ZONE 4C

R-12 RELIEF OR EXHAUST, CONDITIONED SPACE DOWNSTREAM OF DAMPER, ZONES 5B

R-16 OA DUCT BETWEEN DAMPER & EXTERIOR, GREATER THAN 2,800 CFM, ZONES 4C & 5B

R-8 OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 4C

R-12 OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 5B

R-7 OA DUCTWORK, CONDITIONED SPACE, AIRFLOW < 2,800 CFM

NONE SUPPLY OR RETURN EXPOSED TO VIEW IN THE SITE IT ITEMS

*AUTOMATIC SHUT-OFF DAMPER.

NOTES:

1. DUCTWORK EXPOSED TO VIEW WITHIN THE AREA IT SERVES IS NOT REQUIRED TO BE INSULATED.

2. DUCTWORK IS NOT REQUIRED TO BE INSULATED WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT IS NOT GREATER THAN 15 F.

3. SEE RELEVANT ENERGY CODE FOR ADDITIONAL INFORMATION.

3.3 STATE OF IDAHO:

A. ALL DUCTWORK TO BE INSULATED PER THE INTERNATIONAL ENERGY EFFICIENCY CODE (IEEC) OR PER BELOW, WHICHEVER IS MORE STRINGENT.

DUCT SERVICE	R-VALUE
SUPPLY OR RETURN DUCTWORK, UNCONDITIONED SPACE IN BUILDING, ZONES 4C & 5B	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 4C	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 5B	R-12
SUPPLY DUCTWORK, CONDITIONED SPACE, WITH SUPPLY AIR < 55 F OR > 105 F	R-3.3
SUPPLY OR RETURN DUCTWORK, UNDERGROUND	R-5.3
SUPPLY OR RETURN DUCTWORK, INSTALLED IN PART OF THE INSULATION ENVELOPE, RETURN OR EXHAUST, UNCONDITIONED SPACE, BETWEEN ERY AND DAMPER: ZONE 4C	R-8
RELIEF OR EXHAUST, CONDITIONED SPACE, BETWEEN ERY AND DAMPER: ZONE 5B	R-12
RELIEF OR EXHAUST, CONDITIONED SPACE DOWNSTREAM OF DAMPER, ZONES 5B & 5B	R-16
OA DUCT BETWEEN DAMPER & EXTERIOR, GREATER THAN 2,800 CFM, ZONES 4C & 5B	R-16
OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 4C	R-8
OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 5B	R-12
OA DUCTWORK, CONDITIONED SPACE, AIRFLOW < 2,800 CFM	R-7
SUPPLY OR RETURN EXPOSED TO VIEW IN THE SITE IT ITEMS	NONE

END OF SECTION

SECTION 220535 - MECHANICAL IDENTIFICATION

1.1 PART 1 - GENERAL

A. THIS SECTION INCLUDES NAMEPLATES, TAGS, AND PIPE MARKERS.

2.1 PART 2 - PRODUCTS

A. ACCEPTABLE NAMEPLATE MANUFACTURERS ARE SETON NAMEPLATE CORP., AND BRIMAR.

B. NAME PLATES TO BE LAMINATED PLASTIC WITH ENGRAVED WHITE LETTERS MINIMUM 1/2" HIGH ON BLACK BACKGROUND.

C. ACCEPTABLE TAG MANUFACTURERS ARE SETON NAMEPLATE CORP. AND BRIMAR.

D. METAL TAGS TO BE BRASS WITH STAMPED LETTERS, TAG SIZE MINIMUM 1/4" DIAMETER WITH SMOOTH EDGES, LETTERS AND NUMBERS SHALL BE MINIMUM 1/2" HIGH.

E. ACCEPTABLE PIPE MARKERS ARE SETON NAMEPLATE CORP., BRIMAR, AND TABMESTLINE.

F. PIPE MARKER COLOR TO CONFORM TO ASME A13.1 OR OWNER PROVIDED COLOR SCHEME, AND SHALL BE FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PREFORMED TO FIT AROUND PIPE OR PIPE COVERING, INDICATING FLOW DIRECTION.

G. FOR DIRECT BURIAL APPLICATIONS, INSTALL WARNING TAPE. TAPE TO BE BRIGHT COLORED CONTINUOUSLY PRINTED METAL DETECTABLE PLASTIC RIBBON TAPE, MINIMUM 6" WIDE BY 1/8" MIL THICK, MANUFACTURED FOR DIRECT BURIAL SERVICE. PROVIDE FOR ALL SERVICES BURIED EXTERIOR OF THE BUILDING BY THE MECHANICAL CONTRACTOR.

3.1 PART 3 - EXECUTION

A. DEGREASE AND CLEAN SURFACES TO RECEIVE ADHESIVE FOR IDENTIFICATION MATERIALS, AND INSTALL IDENTIFICATION PER MANUFACTURERS RECOMMENDATIONS.

B. INSTALL UNDERGROUND PIPE WARNING TAPE 6" TO 8" BELOW FINISHED GRADE, DIRECTLY ABOVE BURIED PIPE.

C. IDENTIFY ALL MAJOR MECHANICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, AIR HANDLING UNITS, PUMPS, HEAT EXCHANGERS, EQUIPMENT, TANKS, WATER TREATMENT DEVICES, CONTROL PANELS, ETC., WITH PLASTIC NAMEPLATES SMALL DEVICES, SUCH AS IN-LINE PUMPS, AND MAIN SERVICE VALVES MAY BE IDENTIFIED WITH TAGS. IDENTIFY PIPING, CONCEALED OR EXPOSED, WITH PLASTIC PIPE MARKERS. IDENTIFY SERVICE AND FLOW DIRECTION. LOCATE IDENTIFICATION NOT TO EXCEED 20 FEET ON STRAIGHT RUNS INCLUDING RISERS AND DROPS, AND AT EACH SIDE OF PENETRATION OF STRUCTURE OR ENCLOSURE. THE INTENT OF THIS SPECIFICATION IS TO IDENTIFY ALL EQUIPMENT EXACTLY AS IT WAS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.

END OF SECTION

END OF SECTION

SECTION 220719 - PIPING INSULATION

1.1 PART 1 - GENERAL

A. THIS SECTION INCLUDES PIPING INSULATION, JACKETS, AND ACCESSORIES.

B. ALL COMPONENTS OF INSULATION FOR PIPING OR LESS IN COVERINGS, MASTICS AND ADHESIVES SHALL HAVE A FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 OR INCLUDING IN ACCORDANCE WITH ASTM E84. NO COMPONENT OF INSULATION SHALL CONTAIN ASBESTOS.

C. DELIVER MATERIALS TO SITE IN ORIGINAL FACTORY PACKAGING, LABELED WITH MANUFACTURERS IDENTIFICATION, INCLUDING PRODUCT DENSITY AND THICKNESS, AND STORE INSULATION IN ORIGINAL WRAPPING AND PROTECT FROM WEATHER, DIRT, AND CONSTRUCTION TRAFFIC.

2.1 PART 2 - PRODUCTS

A. FIBERGLASS INSULATION ACCEPTABLE MANUFACTURERS ARE SCHULLER CORP., OWENS-CORNING, AND KNAUF.

1. INSULATION TO BE ASTM C547; RIGID MOLDED, NONCOMBUSTIBLE, WITH A K' (KSI) VALUE ASTM C335, 0.23 AT 79° F, WITH A MAXIMUM SERVICE TEMPERATURE OF 850° F, AND MAXIMUM MOISTURE ABSORPTION 0.2 % BY VOLUME, IN A PREMOLDED PIPE INSULATION, WITH 41/2 MINIMUM ELBOWS TO HAVE MANUKLE 2535TON PVC JACKET.

2. THE VAPOR BARRIER JACKET SHALL BE ASTM C921, WHITE KRAFT PAPER REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM, WITH A MOISTURE VAPOR TRANSMISSION ASTM E96, 0.02 PER INCHES. SECURE WITH SELF SEALING LONGITUDINAL TAPS AND BUILT STRIPS, OUTWARD CLINCH EXPANDING STAPLES AND VAPOR BARRIER MASTIC.

B. FLEXIBLE UNICELLULAR ACQUACELL MANUFACTURERS ARE RUBATEX, AND IMCOA.

1. INSULATION TO MEET ASTM C534 FOR FLEXIBLE, ELASTOMERIC, MOLDED INSULATION WITH K' (KSI) VALUE 0.24 AT 79° F, AND MAXIMUM SERVICE TEMPERATURE OF 210° F.

2. CONNECTION SHALL BE FUSE-SALE HOT MELT METHOD OR APPROVED EQUAL. PROVIDE WITH UV-PROTECTION OUTDOOR PROTECTIVE COATING ON OUTDOOR INSTALLATIONS.

3.1 PART 3 - EXECUTION

A. INSULATE DOMESTIC COLD WATER, DOMESTIC HOT WATER, AND OTHER HOT OR COLD FLUID CONVEYING PIPING AS REQUIRED BY APPLICABLE CODES.

B. VERIFY THAT PIPING HAS BEEN TESTED AND IS CLEAN AND DRY BEFORE APPLYING INSULATION MATERIALS, AND INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

C. ALL PLUMBING PIPING Routed IN WALLS, SHALL BE IN INTERIOR WALLS EXCEPT WHERE NO INTERIOR WALLS IS AVAILABLE. PER UPC 313.3, "NO WATER, SOIL, OR WASTE PIPING SHALL BE INSTALLED OR PERMITTED UNDER A BUILDING OR IN AN EXTERIOR WALL UNLESS, WHERE NECESSARY, ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPING FROM FREEZING."

1. FOR INSULATED PIPES CONVEYING FLUIDS BELOW AMBIENT TEMPERATURE, PROVIDE VAPOR BARRIER JACKETS, FACTORY APPLIED.

2. INSULATE FITTINGS, JOINTS, AND VALVES WITH MOLDED INSULATION OF LIKE MATERIAL AND THICKNESS AS ADJACENT PIPE. CONTINUE INSULATION THROUGH WALLS, SLEEVES, PIPE HANGERS, AND OTHER PIPE PENETRATIONS. INSULATE ENTIRE SYSTEM INCLUDING FITTINGS, VALVES, UNIONS, FLANGES, AND STRAINERS. UTILIZE REINFORCED FIBERGLASS INSULATION PADS EXTENDING 6" BEYOND FLANGE OR UNION FOR WATER PUMP BODIES, EXPANSION TANKS, AND VALVE BODIES.

3. INSERTS AND SHIELDS SHALL BE INSTALLED ON PIPING 1-1/2" DIAMETER AND LARGER. SHIELDS TO BE 16 GAUGE GALVANIZED STEEL BETWEEN INSULATION LAYERS. INSULATION SHALL BE AT LEAST 1/2" THICK. INSULATION SHALL BE AT LEAST 1/2" THICK. INSULATION SHALL BE HYDROCALCIUM SILICATE INSULATION, WHERE VAPOR BARRIER IS REQUIRED, THE INSERT SHALL BE COATED WITH LAGGING ADHESIVE TO PROVIDE AN EFFECTIVE VAPOR SEAL.

D. FOR PIPE EXPOSED ABOVE FINISHED FLOOR ABOVE FINISHED FLOOR, FINISH WITH PVC JACKET.

E. ADA FIXTURE EXPOSED COLD WATER, HOT WATER, AND WASTE PIPING TO BE PROTECTED WITH CLEANABLE PVC COVER, TRUBRO OR EQUAL.

END OF SECTION

SECTION 233353 - DUCTWORK INSULATION

1.1 PART 1 - GENERAL

A. THIS SECTION INCLUDES DUCTWORK INSULATION, DUCT LINER, AND INSULATION JACKETS.

B. MATERIALS: ALL COMPONENTS OF INSULATION FOR DUCTWORK SHALL HAVE A FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 IN ACCORDANCE WITH ASTM E84.

C. DELIVER MATERIALS TO SITE IN ORIGINAL FACTORY PACKAGING, LABELED WITH MANUFACTURERS DENSITY AND THICKNESS, AND STORAGE AND INSTALLATION INSTRUCTIONS.

D. MAINTAIN AMBIENT TEMPERATURES AND CONDITIONS REQUIRED BY MANUFACTURERS OF ADHESIVES, MASTICS, AND INSULATION CEMENTS.

2.1 PART 2 - PRODUCTS

A. FIBERGLASS INSULATION ACCEPTABLE MANUFACTURERS ARE SCHULLER CORP., OWENS-CORNING, KNAUF, AND JOHNS MANVILLE.

1. INSULATION TO BE ASTM C553, FLEXIBLE, NONCOMBUSTIBLE BLANKET WITH A K' (KSI) VALUE ASTM C518, 0.29 AT 79° F, MAXIMUM SERVICE TEMPERATURE OF 250° F, MAXIMUM MOISTURE ABSORPTION OF 0.20 % BY VOLUME, AND DENSITY OF 0.75 #/FT3

2. THE VAPOR BARRIER JACKET SHALL BE KRAFT PAPER REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM, WITH A MOISTURE VAPOR TRANSMISSION OF ASTM E96 0.04 PER INCH, SECURED WITH UL LISTED PRESSURE SENSITIVE TAPE.

B. RIGID FIBERGLASS INSULATION ACCEPTABLE MANUFACTURERS ARE SCHULLER CORP., OWENS-CORNING, AND KNAUF.

1. INSULATION TO BE ASTM C912, RIGID, NONCOMBUSTIBLE BLANKET, WITH A K' (KSI) VALUE ASTM C918, 0.23 AT 79° F, MAXIMUM SERVICE TEMPERATURE OF 450° F, MAXIMUM MOISTURE ABSORPTION OF 1 % BY VOLUME, AND A DENSITY OF #3/FT3

2. THE VAPOR BARRIER JACKET SHALL BE KRAFT PAPER REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM, WITH A MOISTURE VAPOR TRANSMISSION OF ASTM E96 0.02 PER INCH, SECURE WITH UL LISTED PRESSURE SENSITIVE TAPE.

C. FIBERGLASS ACOUSTICAL DUCT LINER, ACCEPTABLE MANUFACTURERS ARE SCHULLER CORP., OWENS-CORNING, AND KNAUF.

1. LINER TO BE ASTM C1071 FLEXIBLE, NONCOMBUSTIBLE BLANKET WITH AIR SURFACE FACED WITH A NONABRASIVE BLACK COATED MAT WITH POLYVINYL ACETATE POLYMER (PVA) SPECIALLY FORMULATED SO AS NOT TO SUPPORT THE GROWTH OF FUNGUS AND BACTERIA AS DETERMINED BY ASTM G21 AND G22, WITH A K' (KSI) VALUE OF ASTM C518, 0.29 AT 79° F, MAXIMUM SERVICE TEMPERATURE OF 250° F, AND MAXIMUM VELOCITY ON COATED AIR SIDE OF 5000 FPM. ADHESIVE TO MEET ASTM C916 AND TO BE ALSO SECURED WITH GALVANIZED STEEL PINS, WELDED OR MECHANICALLY FASTENED.

2. THE NOISE REDUCTION COEFFICIENT TO BE TO AS BASED ON "TYPE A MOUNTING" AND TESTED IN ACCORDANCE WITH ASTM C423.

3.1 PART 3 - EXECUTION

A. VERIFY THAT DUCTWORK HAS BEEN TESTED BEFORE APPLYING EXTERIOR INSULATION MATERIALS.

B. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

C. FOR EXTERNALLY INSULATED DUCTWORK, PROVIDE INSULATION WITH VAPOR BARRIER JACKETS (WHERE REQUIRED).

D. CONTINUE INSULATION THROUGH WALLS, SLEEVES, HANGERS, AND OTHER DUCT PENETRATIONS, AND INSULATE ENTIRE SYSTEM INCLUDING FITTINGS, JOINTS, FLANGES, FLEXIBLE CONNECTIONS, AND EXPANSION JOINTS, WHERE SERVICE ACCESS IS REQUIRED, BEVEL AND SEAL ENDS OF INSULATION.

E. FOR DUCTWORK EXPOSED IN FINISHED SPACES BELOW 10 FEET ABOVE FINISHED FLOOR, FINISH WITH PVC JACKET.

F. FOR EXTERIOR APPLICATION TO HAVE VAPOR BARRIER JACKET OR COATING, COVER WITH CALKED ALUMINUM JACKET WITH SEAMS LOCATED ON BOTTOM SIDE OF HORIZONTAL DUCT SECTION. SEAL WATER TIGHT PER THE MANUFACTURERS RECOMMENDATIONS.

G. PROVIDE RIGID FIBERGLASS DUCT WRAP WITH R-VALUE AS INDICATED IN TABLE 1 ON ALL EXPOSED SUPPLY AND OUTSIDE AIR DUCTS AND ALL SUPPLY AND OUTSIDE AIR DUCTWORK LOCATED WITHIN A MECHANICAL ROOM. INSULATION CAN BE OMITTED WHERE INTERIOR LINING IS PROVIDED OR A SOUND ATTENUATORS, REHEAT BOXES AND FAN CASINGS.

H. PROVIDE FLEXIBLE DUCT WRAP WITH R-VALUE AS INDICATED IN TABLE 1 ON ALL CONCEALED SUPPLY AND OUTSIDE AIR DUCTS. INSULATION CAN BE OMITTED WHERE COMPARABLE INTERIOR LINING IS PROVIDED OR AT SOUND ATTENUATORS, REHEAT BOXES AND FAN CASINGS.

I. "CONCEALED" MEANS LOCATED ABOVE CEILING OR BEHIND WALLS OR CHASES OR IN ATTICS, ANY DUCTWORK LOCATED IN A VENTILATED ATTIC SHALL BE CONSIDERED IN AN "UNCONDITIONED SPACE"

J. PROVIDE ACUSTICAL LINING WITH R-VALUE AS INDICATED IN TABLE 1 IN DUCTWORK AS SHOWN OR NOTED ON THE DRAWINGS.

3.2 STATE OF WASHINGTON:

A. ALL DUCTWORK TO BE INSULATED PER THE WASHINGTON STATE ENERGY CODE (WSEC) OR PER BELOW, WHICHEVER IS MORE STRINGENT.

DUCT SERVICE	R-VALUE
SUPPLY OR RETURN DUCTWORK, UNCONDITIONED SPACE IN BUILDING, ZONES 4C & 5B	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 4C	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 5B	R-12
SUPPLY DUCTWORK, CONDITIONED SPACE, WITH SUPPLY AIR < 55 F OR > 105 F	R-3.3
SUPPLY OR RETURN DUCTWORK, UNDERGROUND	R-5.3
SUPPLY OR RETURN DUCTWORK, INSTALLED IN PART OF THE INSULATION ENVELOPE, RETURN OR EXHAUST, UNCONDITIONED SPACE, BETWEEN ERY AND DAMPER: ZONE 4C	R-8
RELIEF OR EXHAUST, CONDITIONED SPACE, BETWEEN ERY AND DAMPER: ZONE 5B	R-12
RELIEF OR EXHAUST, CONDITIONED SPACE DOWNSTREAM OF DAMPER, ZONES 5B & 5B	R-16
OA DUCT BETWEEN DAMPER & EXTERIOR, GREATER THAN 2,800 CFM, ZONES 4C & 5B	R-16
OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 4C	R-8
OA DUCTWORK BETWEEN DAMPER & HVAC UNIT, GREATER THAN 2,800 CFM, ZONE 5B	R-12
OA DUCTWORK, CONDITIONED SPACE, AIRFLOW < 2,800 CFM	R-7
SUPPLY OR RETURN EXPOSED TO VIEW IN THE SITE IT ITEMS	NONE

*AUTOMATIC SHUT-OFF DAMPER.

NOTES:

1. DUCTWORK EXPOSED TO VIEW WITHIN THE AREA IT SERVES IS NOT REQUIRED TO BE INSULATED.

2. DUCTWORK IS NOT REQUIRED TO BE INSULATED WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT IS NOT GREATER THAN 15 F.

3. SEE RELEVANT ENERGY CODE FOR ADDITIONAL INFORMATION.

3.3 STATE OF IDAHO:

A. ALL DUCTWORK TO BE INSULATED PER THE INTERNATIONAL ENERGY EFFICIENCY CODE (IEEC) OR PER BELOW, WHICHEVER IS MORE STRINGENT.

DUCT SERVICE	R-VALUE
SUPPLY OR RETURN DUCTWORK, UNCONDITIONED SPACE IN BUILDING	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 1 THROUGH 4	R-6
SUPPLY OR RETURN DUCTWORK, OUTSIDE OF THE BUILDING, ZONE 5 THROUGH 8	R-12
SUPPLY OR RETURN DUCTWORK, INSTALLED AS PART OF INSULATION ENVELOPE, ZONE 1 THROUGH 4	R-8
SUPPLY OR RETURN DUCTWORK, INSTALLED AS PART OF INSULATION ENVELOPE, ZONE 5 THROUGH 8	R-12

NOTES:

1. DUCTWORK EXPOSED TO VIEW WITHIN THE AREA IT SERVES IS NOT REQUIRED TO BE INSULATED.

2. DUCTWORK IS NOT REQUIRED TO BE INSULATED WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT IS NOT GREATER THAN 15 F.

3. SEE RELEVANT ENERGY CODE FOR ADDITIONAL INFORMATION.

END OF SECTION

END OF SECTION

SECTION 221116 - PLUMBING PIPING

1.1 PART 1 - GENERAL

A. THIS SECTION INCLUDES PIPE, PIPE FITTINGS, AND VALVES.

B. PERFORM WORK IN ACCORDANCE WITH UNIFORM PLUMBING CODE, THE WATER PURVEYOR, AND OTHER JURISDICTIONAL CODES AND WATER PURVEYOR REQUIREMENTS. PROVIDE CERTIFICATE OF COMPLIANCE FROM AUTHORITY HAVING JURISDICTION INDICATING APPROVAL OF THE WATER PURVEYOR.

C. PROVIDE TEMPORARY END CAPS AND CLOSURES ON PIPING AND FITTINGS. MAINTAIN IN PLACE UNTIL INSTALLATION. PIPING SYSTEMS TO INCLUDE PIPE, FITTINGS, JOINTS, AND INSTALLATION PER ASTM REQUIREMENTS AND THE MANUFACTURERS RECOMMENDATIONS FOR THE APPLICATION.

2.1 PART 2 - PRODUCTS

A. SANITARY SEWER AND VENT PIPING ABOVE GRADE:

1. CAST IRON PIPE, ASTM A888, HUBLESS, EXTRA HEAVY WEIGHT, WITH CAST IRON FITTINGS, JOINTS TO BE HEAVYWEIGHT, 4" AND 6" 4800 STAINLESS STEEL SLEEVE AND CLAMP, MADE BY MISSION RUBBER COMPANY, OR HUSKEY.

2. SANITARY VENT PIPING ABOVE GRADE (NON PLENUM RETURN)

1. ABS PIPE, ASTM F428 OR D2751, WITH SOLVENT WELD ASTM D2225 ABS FITTINGS AND JOINTS.

E. CONDENSATE, RELIEF, AND INDIRECT WASTE PIPING

1. COPPER TUBING, ASTM B88, TYPE L, HARD DRAWN WITH ASME B16.22 WROUGHT COPPER FITTINGS AND ASME B32 JOINTS, SOLDERED WITH GRADE 50B.

2. PVC PIPE, SCHEDULE 40 PVC (NON PLENUM RETURN) WITH SOLVENT WELD PVC FITTINGS AND JOINTS.

F. COPPER TUBING, ASTM B88, TYPE L, HARD DRAWN WITH ASME B16.22 WROUGHT COPPER AND BRONZE FITTINGS, AND ASME B32 JOINTS, SOLDERED WITH GRADE 95TA.

1. COPPER TUBING, ASTM B88, TYPE L, HARD DRAWN WITH ASME B16.22 WROUGHT COPPER AND BRONZE FITTINGS, AND ASME B32 JOINTS, SOLDERED WITH GRADE 95TA.

G. NATURAL GAS PIPING ABOVE GRADE

1. STEEL PIPE, SCHEDULE 40 BLACK.

1. FITTINGS: ASME B16.3, MALLEABLE IRON, OR ASTM A234, FORGED STEEL WELDING TYPE, WITH NFFA 54, 3/4" AND SMALLER) OR WELDED (2 1/2" AND LARGER) JOINTS.

3.1 PART 3 - EXECUTION

A. INSTALL ALL PIPING PER THE MANUFACTURERS RECOMMENDATIONS.

B. PROVIDE SYSTEM APPROPRIATE LINE SIZED VALVES AND UNIONS AT EACH PIECE OF EQUIPMENT TO ALLOW REMOVAL OR SERVICE OF EQUIPMENT WITHOUT THE NEED TO SHUT DOWN THE ENTIRE SYSTEM OR EXCEED CITY COMPANY REQUIREMENTS.

D. PROVIDE BALL VALVES AT BRANCH PIPING SERVING MORE THAN A SINGLE FIXTURE.

E. ESTABLISH INVERT ELEVATIONS, SLOPES FOR DRAINAGE TO 1/4" MINIMUM UNLESS NOTED OTHERWISE OR INVERT ELEVATIONS DICTATED.

END OF SECTION

SECTION 221119 - PLUMBING SPECIALTIES

1.1 PART 1 - GENERAL

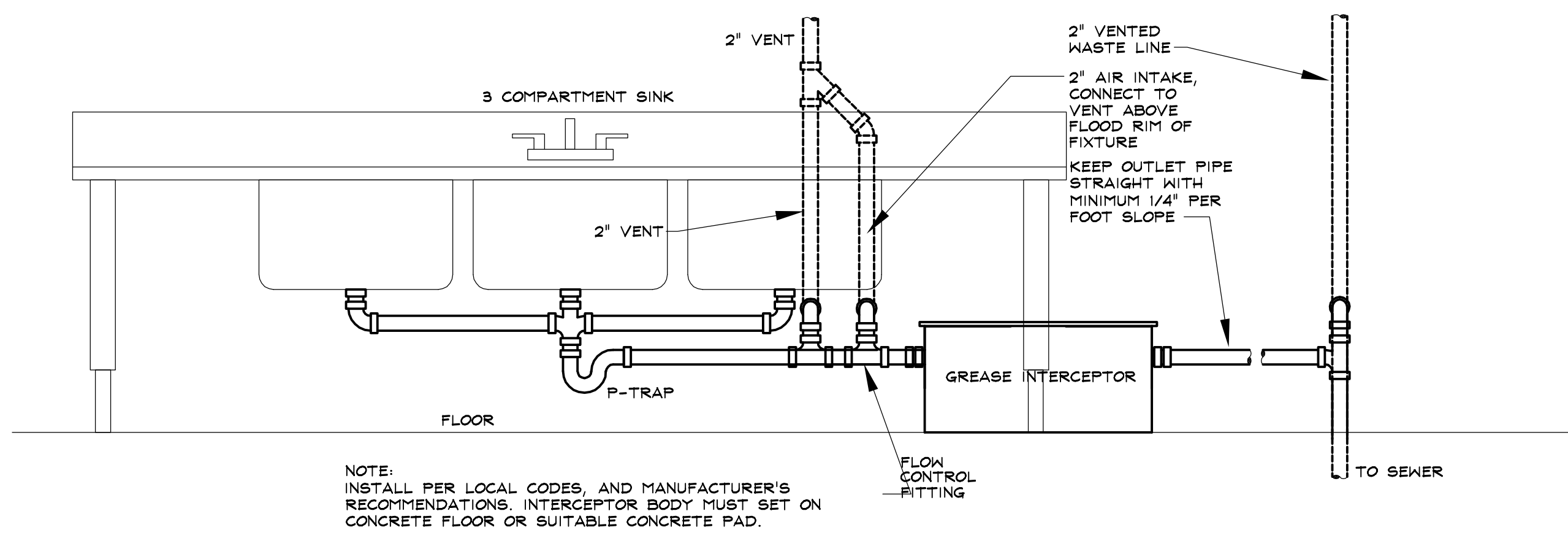
A. THIS SECTION INCLUDES TRAP PRIMERS, CLEANOUTS, BACKFLOW PREVENTERS, AND WATER HAMMER ARRESTORS.

2.1 PART 2 - PRODUCTS

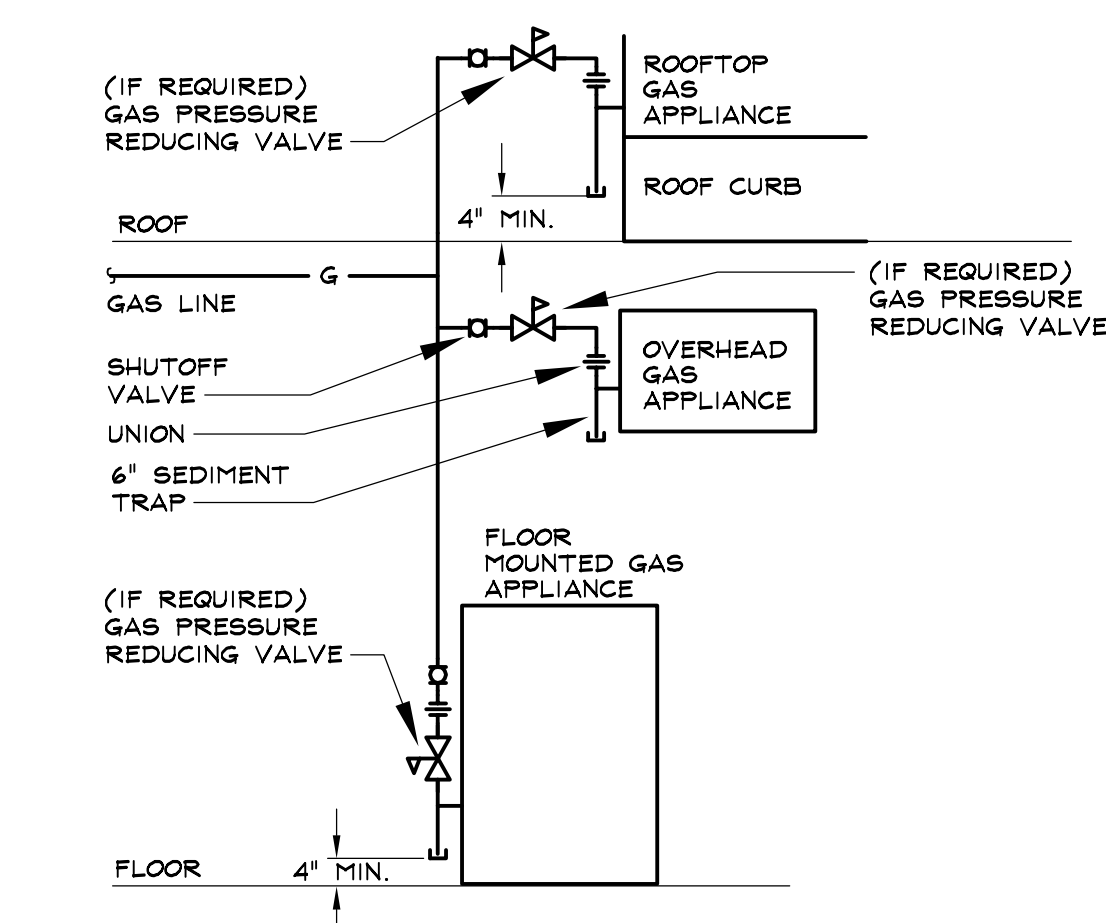
A. TRAP PRIMERS TO BE MIFAB, JAY R. SMITH, OR ZURN.

1. PROVIDE TRAP PRIMERS COMPLETE WITH PIPING, VALVES, SHUT-OFF VALVE, AND OTHER COMPONENTS TO ALL FLOOR DRAIN TRAPS. PRIMERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.

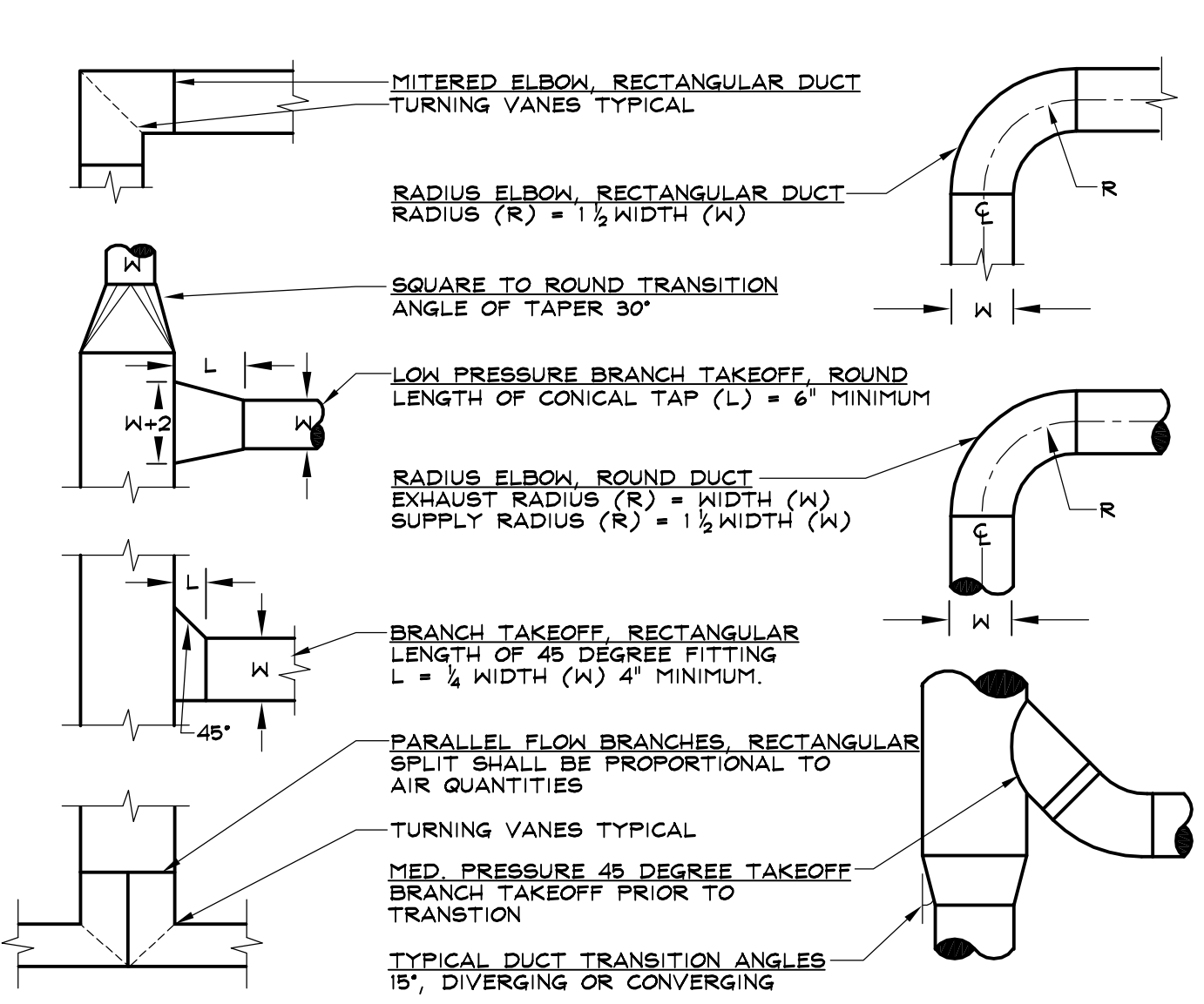
2. TRAP PRIMERS TO BE INSTALLED AS NOTED ON



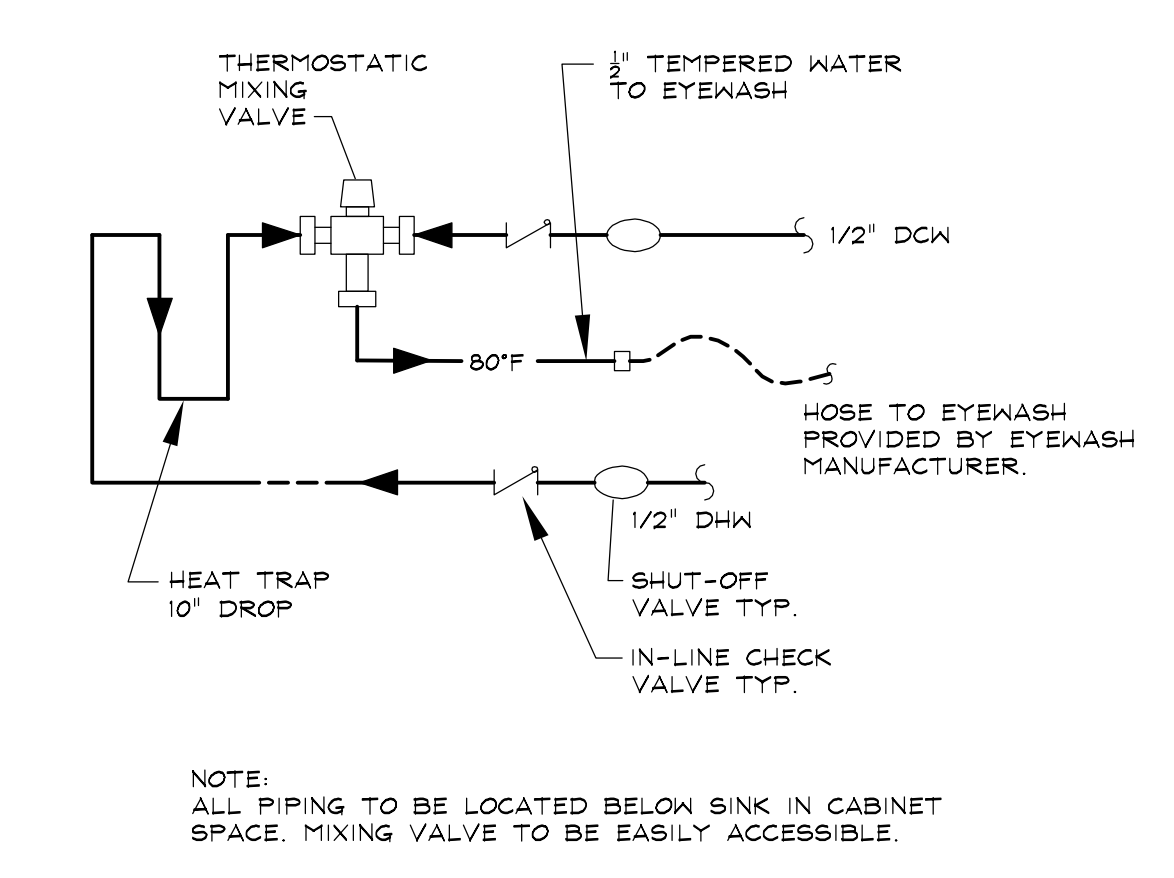
GREASE INTERCEPTOR
1 ABOVE GRADE INSTALLATION
 NOT TO SCALE



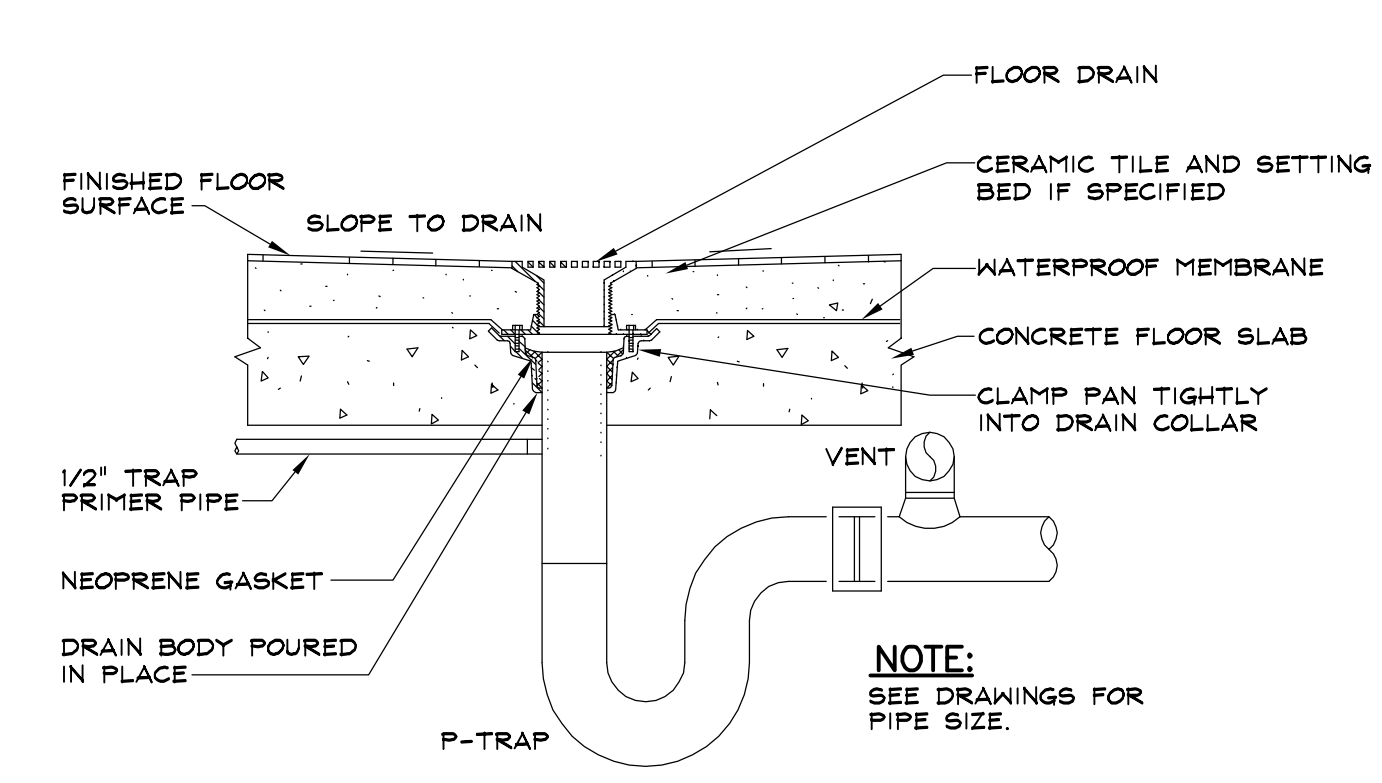
2 GAS APPLIANCE CONNECTION
 NOT TO SCALE



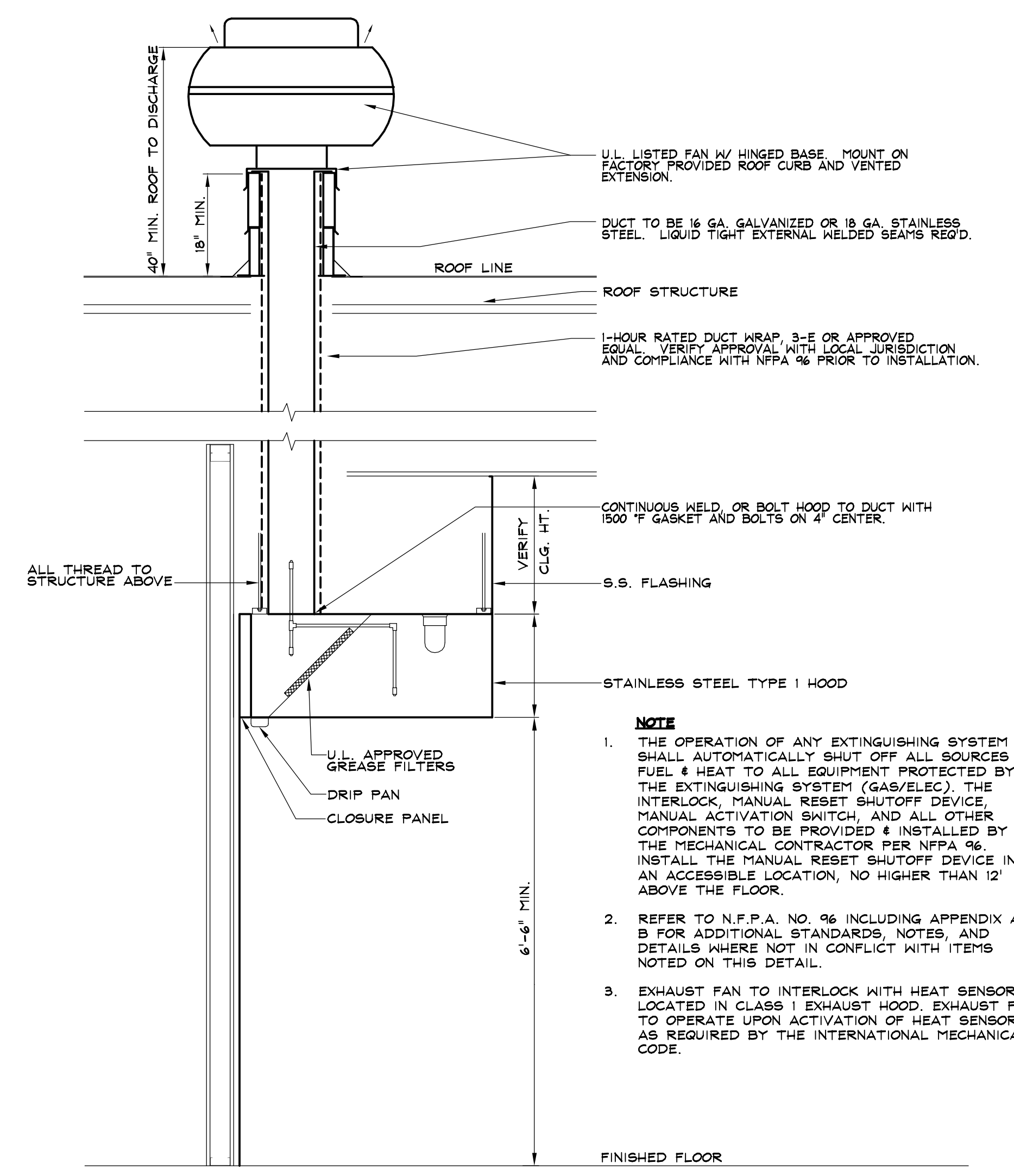
3 TYPICAL DUCT FITTINGS
 NOT TO SCALE



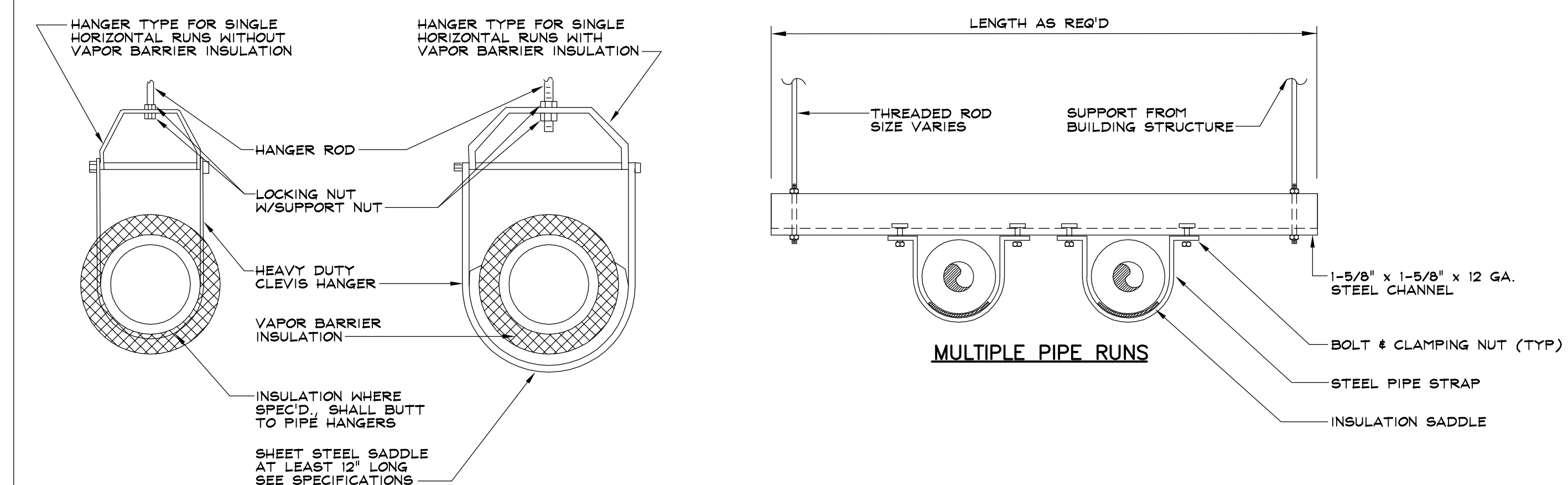
4 BELOW COUNTER EYEWASH MIXING VALVE PIPING
 DIAGRAMMATIC



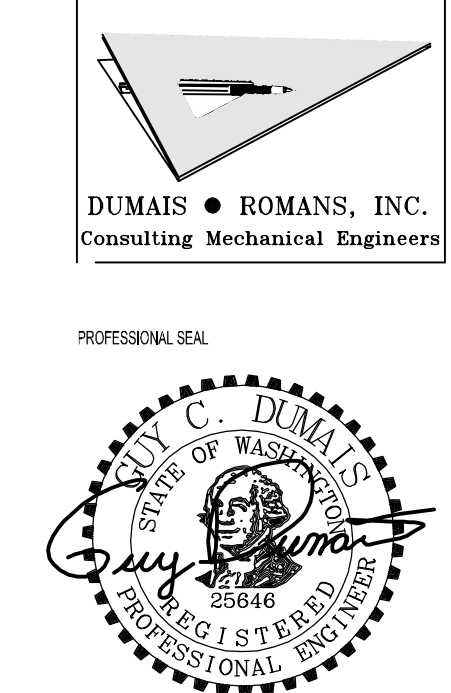
5 FLOOR DRAIN
 NOT TO SCALE



7 TYPE 1 HOOD DETAIL
 NOT TO SCALE



6 PIPE HANGERS
 NOT TO SCALE



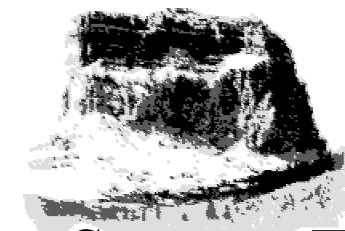
PROJECT NO: 2358C MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 COMMERCIAL KITCHEN UPGRADE
 MEDICAL LAKE CITY HALL COMMERCIAL KITCHEN UPGRADE
 124 S LEFEVRE ST
 MEDICAL LAKE, WA 99022

CONSTRUCTION DOCUMENTS
 PROJECT NO: 2358C
 DRAWN BY: GCD
 DATE: 10.15.2024
 CHECKED BY: GCD

DETAILS
M5.1
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SYMBOL LEGEND

ELECTRICAL						CONDUIT/CIRCUIT	
⊗	FIXTURE SYMBOLS & CALLOUTS, REFER TO LIGHTING FIXTURE SCHEDULE	⊕ ^{HC/G}	RECEPTACLE, HOSPITAL GRADE, WITH GFCI PROTECTION	⊕ ^L	SWITCH, LOW VOLTAGE. SUBSCRIPT REFERS TO LIGHTING GROUP	Ⓜ	CIRCUIT HOMERUN
↔	EXIT LIGHT, ARROW OR CHEVRON DENOTES DIRECTIONAL ARROW	⊕ ^C	RECEPTACLE, CEILING MOUNTED	⊕ ^P	SWITCH WITH PILOT LIGHT P0: LIGHTED IN OFF POSITION P1: LIGHTED IN ON POSITION	Ⓜ	CIRCUIT CONTINUATION, MAY INDICATE ONE OF MULTIPLE HOMERUNS ON A SPECIFIC CIRCUIT
└─	BRANCH CIRCUIT PANEL	⊕ ^{USB}	RECEPTACLE, DUPLEX WITH (2) INTEGRAL USB CHARGING PORTS WITH AN AVAILABLE 1.5A CURRENT FOR EACH PORT.	⊕ ^T	SWITCH, TIME 0-15 MINUTE	▽	CONDUIT CONCEALED IN THE FLOOR OR GROUND
I	CONTROL SWITCH	⊕ ^{MP/G}	RECEPTACLE, DUPLEX WITH WEATHERPROOF WHILE IN SERVICE COVER AND GROUND FAULT, LISTED WEATHER RESISTANT RECEPTACLE	⊕ ^{MP}	SWITCH, WITH WEATHERPROOF PLATE	---	LOW VOLTAGE WIRING FOR LIGHTING CONTROL. REFER TO LIGHTING CONTROL DETAILS FOR ADDITIONAL INFORMATION
⊙	[CORD REEL] OR [DROP CORD]	⊕ ^{MP/G/L}	RECEPTACLE, DUPLEX WITH LOCKING WEATHERPROOF COVER AND GROUND FAULT, LISTED WEATHER RESISTANT RECEPTACLE	Ⓜ	LIGHTING CONTROL PANEL RELAY	---	CONDUIT RUN. ALL CIRCUITS ARE TO INCLUDE A GREEN INSULATED #12 GROUND WIRE. MINIMUM WIRE SIZE TO BE #12 AWG UNLESS OTHERWISE NOTED. PROVIDE A DEDICATED NEUTRAL FOR EVERY SINGLE PHASE CONDUCTOR
⊠	DISTRIBUTION EQUIPMENT	⊕	RECEPTACLE, DUPLEX - FLOOR MOUNTED	Ⓜ	PHOTOCELL	---	TYPICAL CIRCUIT HOMERUN IDENTIFIER. LETTERS BEFORE HYPHEN DENOTE BRANCH PANEL OR DISTRIBUTION PANEL SUPPLYING CIRCUIT. NUMBERS AFTER HYPHEN INDICATE POSITION OR BREAKER CONNECTION POINTS IN SERVING PANEL. AN * IN THE IDENTIFIER INDICATES THAT THIS CIRCUIT IS SHOWN IN MULTIPLE LOCATIONS ON THE DRAWING.
⊠	DRY TYPE TRANSFORMER	⊕	RECEPTACLE, DUPLEX WITH 1/2 SWITCHED	Ⓜ	OCCUPANCY SENSOR	Ⓜ	CONDUIT STUBOUT OR STUBUP (CAP EXTERIOR)
⊠	DRY TYPE TRANSFORMER	⊕	RECEPTACLE, DUPLEX, FULLY SWITCHED	Ⓜ	VACANCY SENSOR	Ⓜ	UNDERGROUND ELECTRICAL PRIMARY
	GROUND BUS, COPPER	⊕	RECEPTACLE, DUPLEX WITH 1/2 SWITCHED	Ⓜ	DAYLIGHT SENSOR	Ⓜ	UNDERGROUND ELECTRICAL SECONDARY
	GROUND ROD	⊕	RECEPTACLE, SIMPLEX	Ⓜ	POWER PACK	Ⓜ	UNDERGROUND TELECOM (TELEPHONE, TV, FIBER, ETC.) SERVICE
⊕	JUNCTION BOX, WITH CONNECTION TO ADJACENT EQUIPMENT	⊕	FACELESS GFI RECEPTACLE	Ⓜ	POWER PACK, I/O INTERFACE	Ⓜ	
⊕	USB CHARGING DEVICE, # INDICATES NUMBER OF USB PORTS.	⊕	RECEPTACLE, 4-PLEX, SAME INSTRUCTIONS & VARIATIONS AS DUPLEX RECEPTACLES ABOVE	Ⓜ	POWER SUPPLY	Ⓜ	
⊕	EXHAUST FAN	⊕	RECEPTACLE, 4-PLEX - FLOOR MOUNTED	Ⓜ	COMMUNICATIONS	Ⓜ	
⊕	THERMOSTAT	⊕	RECEPTACLE, 4-PLEX WITH 1/2 SWITCHED	Ⓜ	BELL	Ⓜ	
⊕	MOTOR CONNECTION, WIRING AND CONNECTIONS BY ELECTRICAL CONTRACTOR	⊕	RECEPTACLE, 4-PLEX, FULLY SWITCHED	Ⓜ	CLOCK OUTLET	Ⓜ	
⊕	FUSED MOTOR DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR	⊕	RECEPTACLE, 4-PLEX ON EMERGENCY CIRCUIT	Ⓜ	CLOCK OUTLET AND SPEAKER COMBINATION	Ⓜ	
⊕	MOTOR STARTER BY ELECTRICAL CONTRACTOR	⊕	RECEPTACLE, 4-PLEX ON EMERGENCY CIRCUIT	Ⓜ	COMMUNICATIONS BACKBOARD	Ⓜ	
⊕	MUSHROOM HEAD PUSHBUTTON	⊕	RECEPTACLE, DUPLEX 20A - FLOOR MOUNTED	Ⓜ	DATA/TELEPHONE OUTLET	Ⓜ	
⊕	PLUGSTRIP WITH OUTLETS 18" O.C.	⊕	RECEPTACLE, DUPLEX 20A ON EMERGENCY CIRCUIT	Ⓜ	DATA OUTLET	Ⓜ	
⊕	PUSHBUTTON	⊕	RECEPTACLE, 240V, NUMERAL DENOTES AMPACITY	Ⓜ	TELEPHONE OUTLET	Ⓜ	
⊕	RECEPTACLE, DUPLEX - THE NUMERALS ADJACENT TO RECEPTACLE DENOTE CIRCUIT NUMBER	⊕	RECEPTACLE, 1 PHASE SPECIAL, NUMERAL DENOTES AMPACITY	Ⓜ	DATA/TELEPHONE OUTLET, NUMERAL DENOTES TYPE. REFERENCE COMMUNICATION OUTLET SCHEDULE	Ⓜ	
⊕	RECEPTACLE, DUPLEX ON EMERGENCY CIRCUIT	⊕	RECEPTACLE, 3 PHASE SPECIAL, NUMERAL DENOTES AMPACITY	Ⓜ	TELEPHONE OUTLET, WALL MOUNTED	Ⓜ	
⊕ ^A	RECEPTACLE, DUPLEX AT COUNTER LOCATION. MOUNT ABOVE COUNTER, COORDINATE WITH GENERAL CONTRACTOR & ARCHITECTURAL ELEVATIONS	⊕	CORD DROP	Ⓜ	TELEPHONE OUTLET, WALL MOUNTED (USE IF TELE IS SOLID)	Ⓜ	
⊕ ^C	RECEPTACLE, DUPLEX GROUND FAULT CIRCUIT INTERRUPTER (G.F.C.I.)	---	SURFACE MOUNTED RACEWAY	Ⓜ	DATA/TELEPHONE OUTLET, FLOOR MOUNTED	Ⓜ	
⊕ ^I	RECEPTACLE, DUPLEX ISOLATED GROUND	⊕	SWITCH, SINGLE POLE	Ⓜ	DATA OUTLET, FLOOR MOUNTED	Ⓜ	
⊕ ^P	RECEPTACLE, DUPLEX IN PATIENT CARE AREA. PROVIDE GROUNDING PER NEC ARTICLE 517.13	⊕	SWITCH, DOUBLE POLE	Ⓜ	TELEPHONE OUTLET, FLOOR MOUNTED	Ⓜ	
⊕ ^S	RECEPTACLE, DUPLEX W/SURGE SUPPRESSION	⊕	SWITCH, THREE WAY. PROVIDE FOUR WAY WHERE REQUIRED	Ⓜ	T.V. OUTLET	Ⓜ	
⊕ ^T	RECEPTACLE, DUPLEX, TAMPER RESISTANT	⊕	SWITCH AT COUNTER LOCATION. MOUNT ABOVE COUNTER, COORDINATE WITH GENERAL CONTRACTOR & ARCHITECTURAL ELEVATIONS	Ⓜ	T.V. OUTLET, FLOOR MOUNTED	Ⓜ	
⊕ ^{HC}	RECEPTACLE, HOSPITAL GRADE	⊕	SWITCH, DIMMER	Ⓜ	DATA/T.V. PORT	Ⓜ	
		⊕	SWITCH, KEYED	Ⓜ	T.V./HDMI PORT	Ⓜ	
		⊕	SWITCH, OCCUPANCY SENSING	Ⓜ	INTERCOM	Ⓜ	
		⊕	SWITCH, VACANCY SENSING	Ⓜ	TELEPHONE	Ⓜ	
				Ⓜ	DOOR BELL CHIME	Ⓜ	
				Ⓜ	MICROPHONE OUTLET	Ⓜ	
				Ⓜ	MICROPHONE OUTLET FLOOR MOUNTED	Ⓜ	
				Ⓜ	SPEAKER	Ⓜ	
				Ⓜ	SPEAKER, SUBSCRIPT INDICATES ZONE	Ⓜ	
				Ⓜ	[SPEAKER HORN] OR [SOUND SYSTEM]	Ⓜ	
				Ⓜ	REMOTE VOLUME CONTROL	Ⓜ	
				Ⓜ	HEAD PHONE JACK	Ⓜ	
				Ⓜ	FIRE PROTECTION	Ⓜ	
				Ⓜ	CARBON MONOXIDE DETECTOR	Ⓜ	
				Ⓜ	DUCT SMOKE DETECTOR	Ⓜ	
				Ⓜ	FIRE ALARM ANNUNCIATOR	Ⓜ	
				Ⓜ	FIRE ALARM CONTROL PANEL	Ⓜ	
				Ⓜ	FIRE/SMOKE DAMPER CONNECTION	Ⓜ	
				Ⓜ	POST INDICATOR VALVE	Ⓜ	
				Ⓜ	SMOKE DETECTOR	Ⓜ	
				Ⓜ	MISCELLANEOUS	Ⓜ	
				Ⓜ	BUCK AND BOOST TRANSFORMER, 208-240V, SINGLE PHASE	Ⓜ	
				Ⓜ	EXHAUST FAN SAIL SWITCH BY DIVISION 15	Ⓜ	
				Ⓜ	HEATER, BASEBOARD	Ⓜ	
				Ⓜ	HEATER, WALL	Ⓜ	
				Ⓜ	HYDROGEN DETECTOR BY DIVISION 16	Ⓜ	
				Ⓜ	120 VAC/24 VDC TRANSFORMER IN NEMA 1 ENCLOSURE	Ⓜ	
				Ⓜ	TRANSIENT VOLTAGE SURGE SUPPRESSOR	Ⓜ	
				Ⓜ	REFERENCE SYMBOLS	Ⓜ	
				Ⓜ	DETAIL REFERENCE	Ⓜ	
				Ⓜ	KEYED NOTE IDENTIFIER, SEE KEYED NOTES	Ⓜ	
				Ⓜ	CODE KEYED NOTE IDENTIFIER, SEE KEYED NOTES	Ⓜ	
				Ⓜ	KITCHEN EQUIPMENT IDENTIFIER, SEE KITCHEN EQUIPMENT SCHEDULE	Ⓜ	
				Ⓜ	MECHANICAL EQUIPMENT IDENTIFIER, SEE MECHANICAL EQUIPMENT SCHEDULE	Ⓜ	



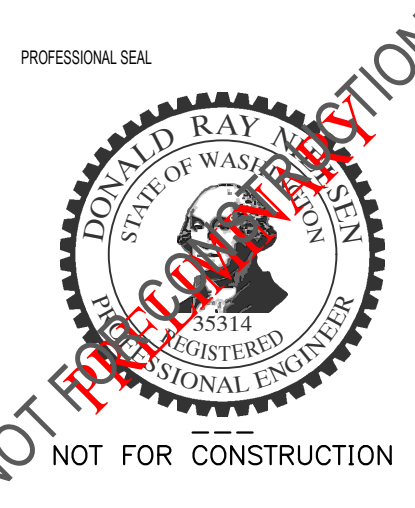
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DRAWING INDEX

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E0.1	PANEL SCHEDULES EQUIPMENT SCHEDULES DIAGRAMS
E3.0	FLOOR PLAN - POWER/SYSTEMS
E3.1	FLOOR PLAN - POWER/SYSTEMS DEMO
E3.2	ROOF PLAN - POWER/SYSTEMS

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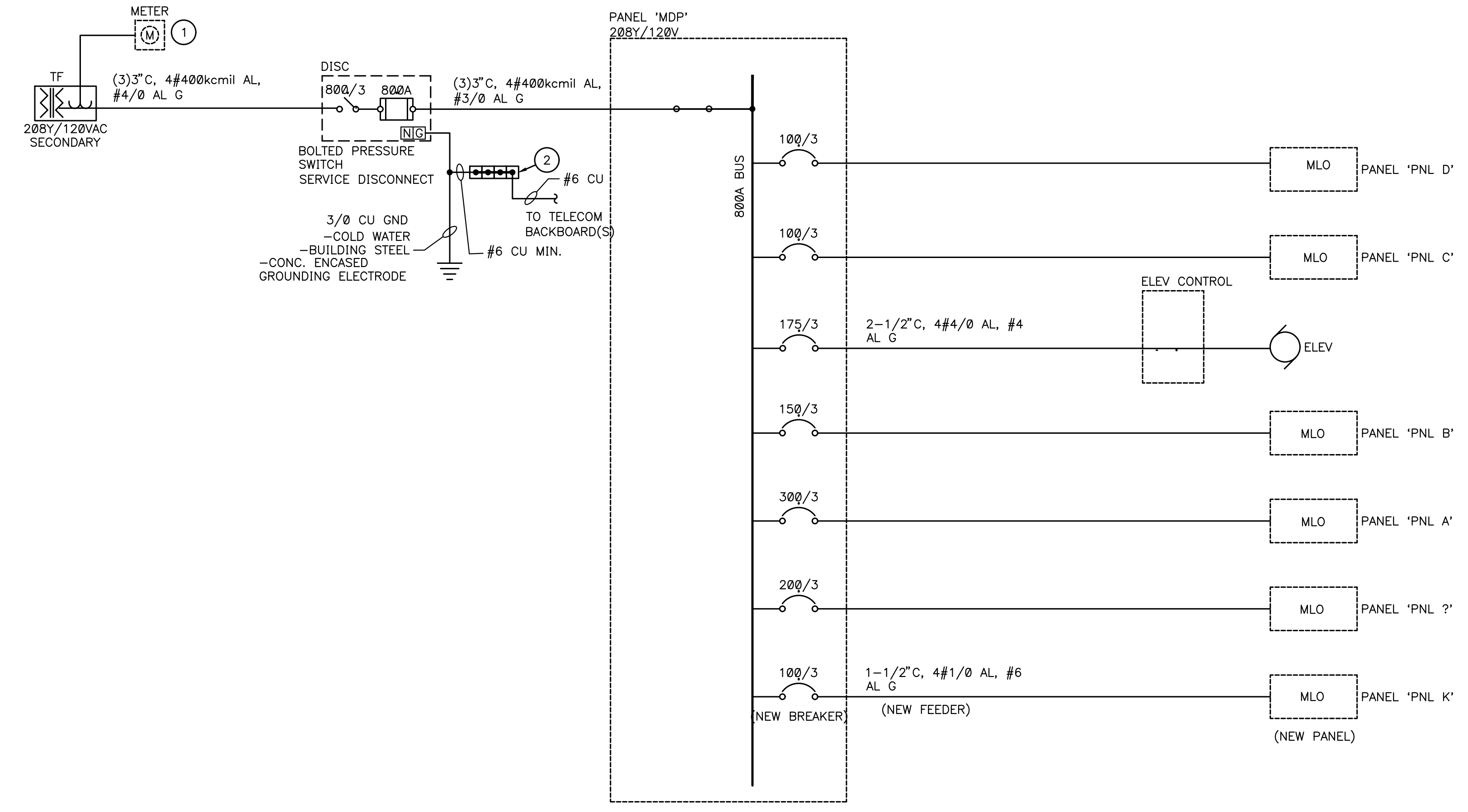
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GENERAL NOTES

- ALL DEVICES, FEEDERS AND PANELS ARE EXISTING UNLESS SPECIFIED AS NEW.

KEYED NOTES

- METER CTS AT WEATHER-HEAD RACK.



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ONE-LINE DIAGRAM
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SCHEDULES & DIAGRAMS

E0.1

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KITCHEN EQUIPMENT SCHEDULE

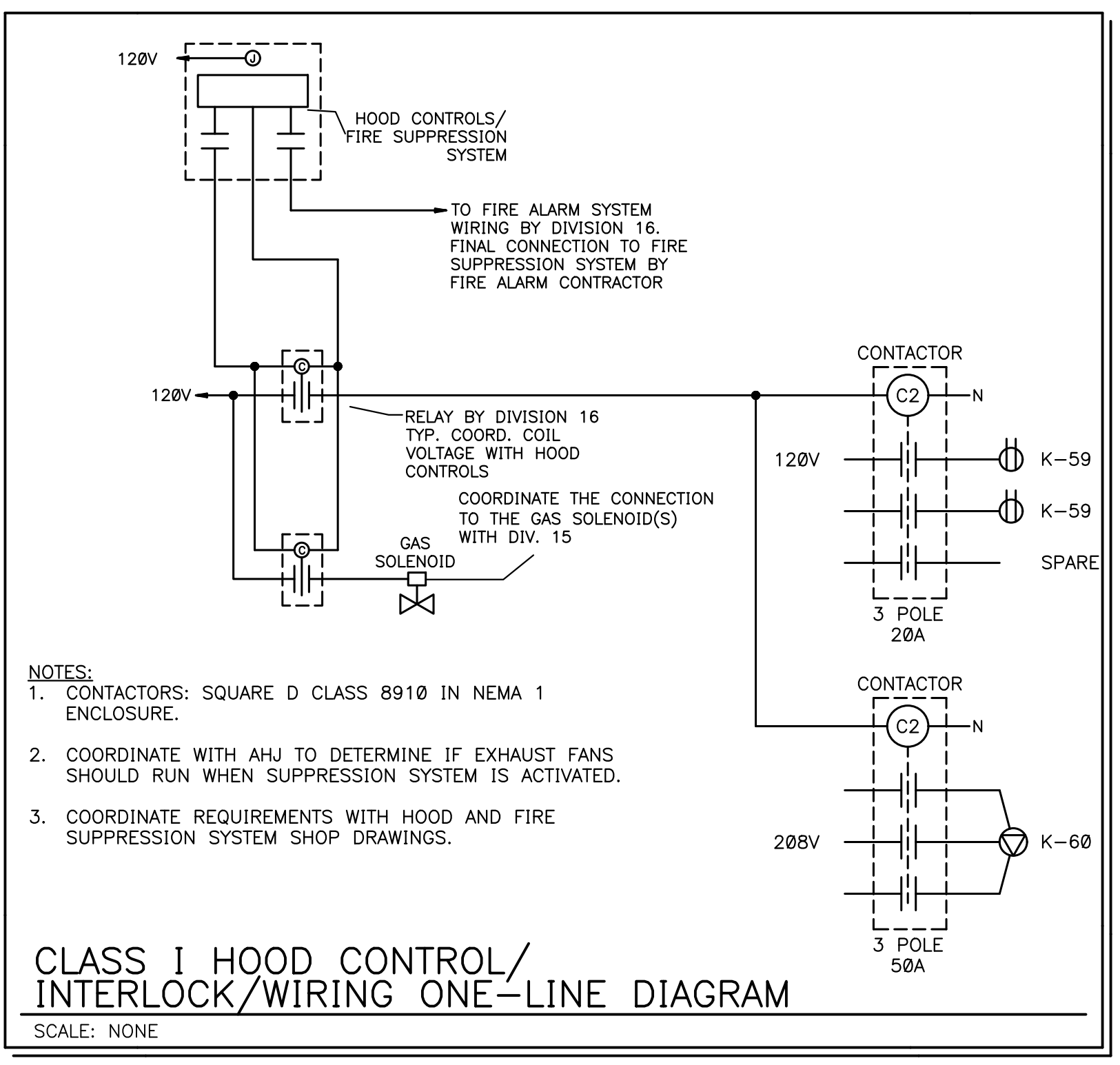
ITEM	DESCRIPTION	VOLTS/POLES	KVA	CONNECT	FEEDER	KEYED NOTES
CF-1	COUNTERTOP FRYER	208V 2P 2W	5.4	6-20P	3/4" C, 2#8, #10G	
CT-1	COUNTER TOP GRIDDLE	208V 3P 3W	10	NA	3/4" C, 3#8, #10G	
EB-1	ELECTRIC BROILER	208V 2P 2W	5.41	NA	3/4" C, 2#8, #10G	
FR-1	CONVERTIBLE UPRIGHT FREEZER	120V 1P 2W	0.9	NA	3/4" C, 2#12, #12G	
GW-1	UNDERBAR GLASS WASHER	208V 2P 2W	2.77	6-20P	3/4" C, 2#12, #12G	
IM-1	UNDERCOUNTER ICE MACHINE	120V 1P 2W	0.61	NA	3/4" C, 2#12, #12G	
MW-1	COMMERCIAL MICROWAVE	120V 1P 2W	1.2	NA	3/4" C, 2#12, #12G	
SM-1	PLANETARY STAND MIXER	120V 1P 2W	1.1	NA	3/4" C, 2#12, #12G	
WK-1	WALK-IN COOLER	208V 2P 2W	2.37	NA	3/4" C, 2#12, #12G	

KITCHEN EQUIPMENT GENERAL NOTES:
A. COORDINATE REQUIREMENTS WITH FINAL KITCHEN EQUIPMENT PLANS AND/OR ARCHITECTURALS.
KITCHEN EQUIPMENT KEYED NOTES:
1. NOT USED.

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	LOCATION	VOLTS/POLES	KVA	MCA	STARTER SIZE	DISC. SW.	FUSE SIZE	FEEDER	KEYED NOTES
EF-1	EXHAUST FAN		120V 1P 2W	1.07		NA	NA	INT	3/4" C, 2#10, #10G	
ELEV			208V 3P 4W	72.75					2-1/2" C, 4#4/0 AL, #4 AL G	

GENERAL NOTES:
A. PROVIDE DISCONNECT AND/OR STARTER WHERE SCHEDULED. COMBINATION UNITS ARE ALLOWED WHERE BOTH A STARTER AND DISCONNECT ARE SCHEDULED. COORDINATE STARTER COIL VOLTAGES WITH DIV. 15 WHERE REQ'D.
B. MRS = PROVIDE MOTOR RATED SWITCH FOR DISCONNECT.
C. LB = PROVIDE LOCKING PROVISIONS ON BREAKER FOR DISCONNECT.
D. INT = DEVICE HAS INTEGRAL DISCONNECTING MEANS.
E. COORDINATE REQUIREMENTS WITH MECHANICAL EQUIPMENT SUBMITTALS PRIOR TO GEAR ORDER. NOTIFY ENGINEER OF ANY DISCREPANCIES.
F. HW RECIRC PUMP(S): PROVIDE POWER TO PUMP(S) THROUGH CONTROL DEVICE(S) (TIMER, AQUASTAT, THERMOSTAT, ETC.) PRESENT. CONTROL DEVICE PROVIDED BY DIV. 15 UNLESS NOTED OTHERWISE.
G. EXHAUST FAN(S): PROVIDE POWER TO DAMPER OR DAMPER POWER SUPPLY AS REQ'D. DAMPER POWER SUPPLY(S) FURNISHED BY DIV. 15 UNLESS NOTED OTHERWISE.
KEYED NOTES:
1. NOT USED.



- NOTES:
1. CONTACTORS: SQUARE D CLASS 8910 IN NEMA 1 ENCLOSURE.
2. COORDINATE WITH AHJ TO DETERMINE IF EXHAUST FANS SHOULD RUN WHEN SUPPRESSION SYSTEM IS ACTIVATED.
3. COORDINATE REQUIREMENTS WITH HOOD AND FIRE SUPPRESSION SYSTEM SHOP DRAWINGS.

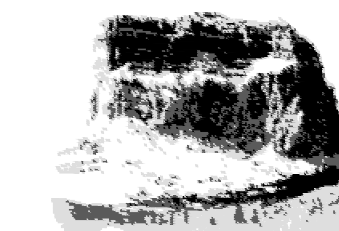
PANEL: PNL K

LOCATION:	VOLTS: 208Y/120V 3-PH 4W	AIC: 42,000
MOUNTING: FLUSH	BUS AMPS: 100	MAIN BKR: MLO
FED FROM: MDP	NEUTRAL: 100%	LUGS: STANDARD

CKT #	CIRCUIT DESCRIPTION	CKT BKR	KVA LOAD	PH	KVA LOAD	CKT BKR	CIRCUIT DESCRIPTION	CKT #
1	EF-1	20/1	1.07	A	0.9	20/1	FR-1	2
3	SPARE	20/1	0	B	1.1	20/1	SM-1	4
5	SPARE	20/1	0	C	1.38	20/2	GW-1	6
7	SPARE	20/1	0	A	1.38			8
9	SPARE	20/1	0	B	1.2	20/1	MW-1	10
11	SPARE	20/1	0	C	2.7	40/2	EB-1	12
13	SPARE	20/1	0	A	2.7			14
15	SPARE	20/1	0	B	3.33	40/3	CT-1	16
17	SPARE	20/1	0	C	3.33			18
19	SPARE	20/1	0	A	3.33			20
21	SPARE	20/1	0	B	2.7	40/2	CF-1	22
23	SPARE	20/1	0	C	2.7			24
25	SPARE	20/1	0	A	0.612	20/1	IM-1	26
27	SPARE	20/1	0	B	1.19	15/2	WK-1	28
29	SPARE	20/1	0	C	1.19			30
31	SPARE	20/1	0	A	0	20/1	SPARE	32
33	SPARE	20/1	0	B	0	20/1	SPARE	34
35	SPARE	20/1	0	C	0	20/1	SPARE	36
37	SPARE	20/1	0	A	0	20/1	SPARE	38
39	SPARE	20/1	0	B	0	20/1	SPARE	40
41	SPARE	20/1	0	C	0	20/1	SPARE	42

TOTAL CONNECTED KVA BY PHASE	10	9.52	11.3
TOTAL CONNECTED AMPS BY PHASE	85.6	81.5	94.2

	CONN KVA	CALC KVA		CONN KVA	CALC KVA	
LARGEST MOTOR	2.37	0.593	(25%)	KITCHEN EQUIPMENT	0.612	(100%)
MOTORS	3.44	3.44	(100%)	NONCONTINUOUS	5.97	(100%)
				HEATING	20.8	(100%)
				TOTAL LOAD	31.4	
				BALANCED 3-PHASE LOAD	87.2 A	



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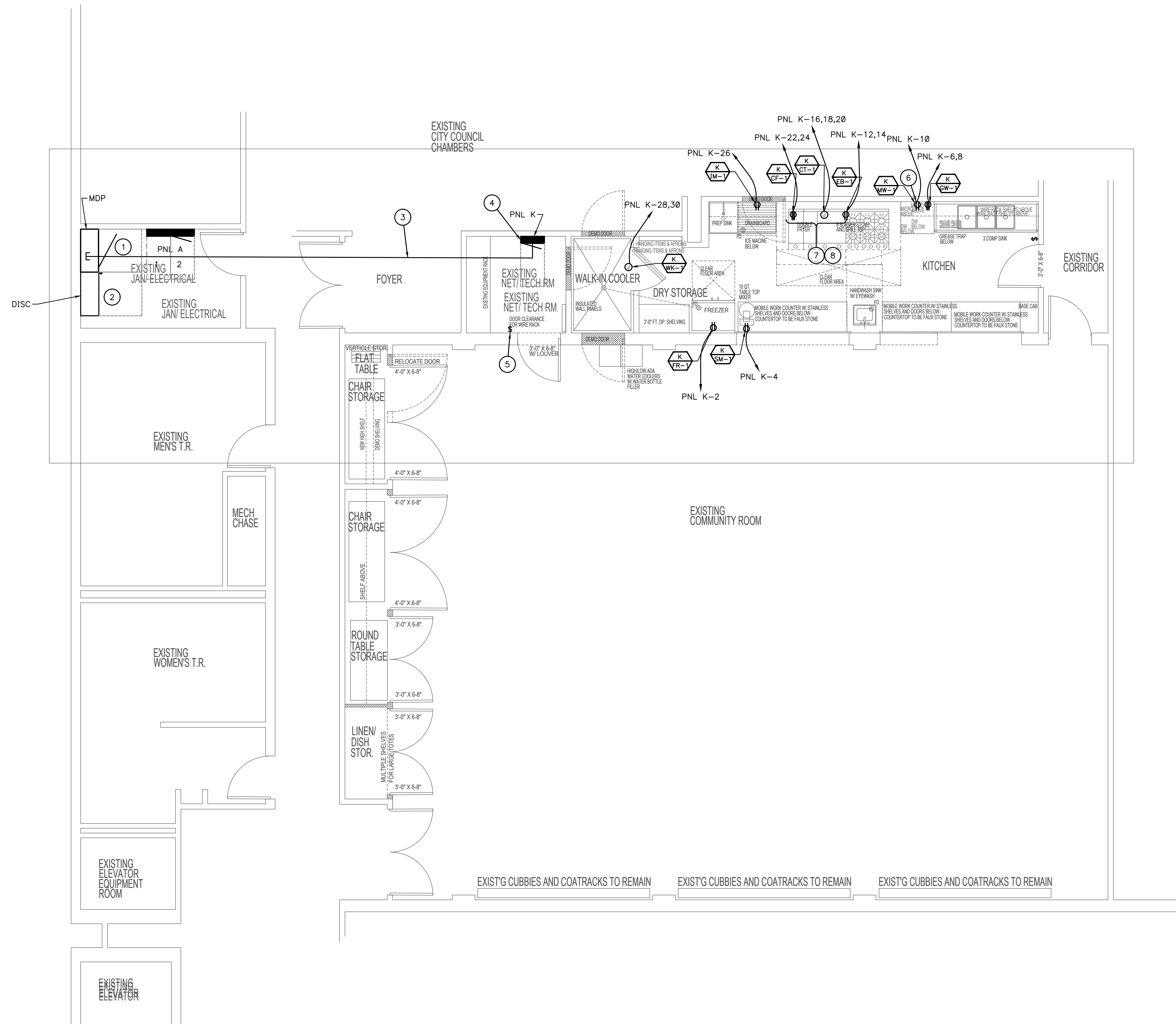
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GENERAL NOTES

1. ALL RECEPTACLES CONTROLLED BY AN AUTOMATIC DEVICE SHALL BE IDENTIFIED IN ACCORDANCE WITH NEC 406.3(E).
2. ALL WORK SHOWN ON THIS SHEET TO BE DONE BY REFRIGERATION ELECTRICAL CONTRACTOR.
3. REFER TO ALL REFRIGERATION SHEETS FOR ADDITIONAL ELECTRICAL REQUIREMENTS.
4. UPDATE ALL PANEL SCHEDULES TO REFLECT NEW CIRCUITS.

KEYED NOTES

- 1 MAIN DISTRIBUTION PANEL.
- 2 SERVICE DISCONNECT.
- 3 NEW PANEL FEEDER RUN THROUGH CEILING SPACE.
- 4 NEW PANEL K.
- 5 PROVIDE NEW SWITCH FOR IT ROOM, CONNECT TO EXISTING LIGHT FIXTURE.
- 6 MICROWAVE REC. MOUNTED ABOVE DISHWASHER.
- 7 PROVIDE POWER TO DEVICES UNDER HOOD THROUGH HOOD EQUIPMENT CONTACTOR(S). LOCATE ABOVE PANEL. SEE CLASS I HOOD CONTROL/INTERLOCKING DIAGRAM, SHEET E0.1.
- 8 PROVIDE POWER TO GAS SOLENOID(S) THROUGH HOOD CONTROLS/FIRE SUPPRESSION CONTROLS. SEE CLASS I HOOD CONTROL/INTERLOCKING DIAGRAM, SHEET E0.1. COORD. LOCATION WITH DIV. 15.
- 9
- 10



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MAIN LEVEL
POWER/SYSTEMS PLAN

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

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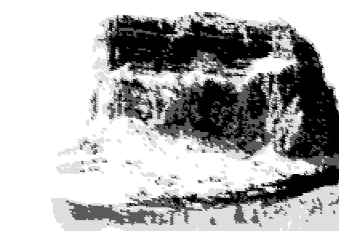
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MAIN LEVEL POWER/SYSTEMS PLAN
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GENERAL NOTES

1. DEVICES/FIXTURES IN DARK LINETYPE TO BE DEMOLISHED, UNLESS OTHERWISE NOTED. DEMOLISH THE DEVICE/FIXTURE, BOX, AND CONDUIT/CONDUCTORS BACK TO NEXT UPSTREAM DEVICE OR BREAKER. PROVIDE PLUG(S) IN ANY BOX WHERE CONDUIT WAS REMOVED. UPDATE PANEL SCHEDULES TO REFLECT DEMOLITION.
2. DEMO PLAN IS REPRESENTATIVE OF EXISTING CONDITIONS BUT DOES NOT NECESSARILY SHOW ALL DEVICES TO BE DEMOLISHED. REMOVE ALL CONDUIT, BOXES AND SURFACE RACEWAY IN/ON WALLS IDENTIFIED FOR DEMOLITION IN THE CONTRACT DOCUMENTS.
3. REMOVE CONDUIT AND BOXES FOR DEMOLISHED CIRCUITS BACK TO REMAINING LIVE DEVICES OR TO BRANCH/DISTRIBUTION PANELS. PROVIDE PLUGS FOR ALL OPENINGS OR HOLES IN ENCLOSURES, GUTTERS OR BOXES LEFT BY THE REMOVAL OF CONDUITS OR NIPPLES.
4. REMOVE CONDUCTORS FOR RECEPTACLE CIRCUITS BACK TO THE FIRST UPSTREAM CIRCUIT DEVICE THAT IS TO REMAIN IN SERVICE. ENSURE THAT ALL REMAINING RECEPTACLES ARE FULLY FUNCTIONAL. PROVIDE JUMPER CIRCUITS AROUND DEMOLISHED TO MAINTAIN FUNCTION OF REMAINING RECEPTACLE DEVICES ON MULTI-RECEPTACLE CIRCUITS.
5. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ANY DEMOLISHED DEVICES/FIXTURES.
6. PROVIDE COVER PLATES FOR ANY BOXES LEFT IN WALLS.

KEYED NOTES

- 1 HOOD DEMO.
- 2 EXHAUST FAN DEMO.
- 3 DISPOSAL SWITCH.
- 4 KEEP IF POSSIBLE PROVIDE GFI DEVICE.
- 5 PROVIDE POWER TO DEVICES UNDER HOOD THROUGH HOOD EQUIPMENT CONTACTOR(S). LOCATE ABOVE PANEL. SEE CLASS 1 HOOD CONTROL/INTERLOCKING DIAGRAM, SHEET E002.
- 6 PROVIDE POWER TO GAS SOLENOID(S) THROUGH HOOD CONTROLS/FIRE SUPPRESSION CONTROLS. SEE CLASS 1 HOOD CONTROL/INTERLOCKING DIAGRAM, SHEET E002. COORD. LOCATION WITH DIV. 15.
- 7
- 8



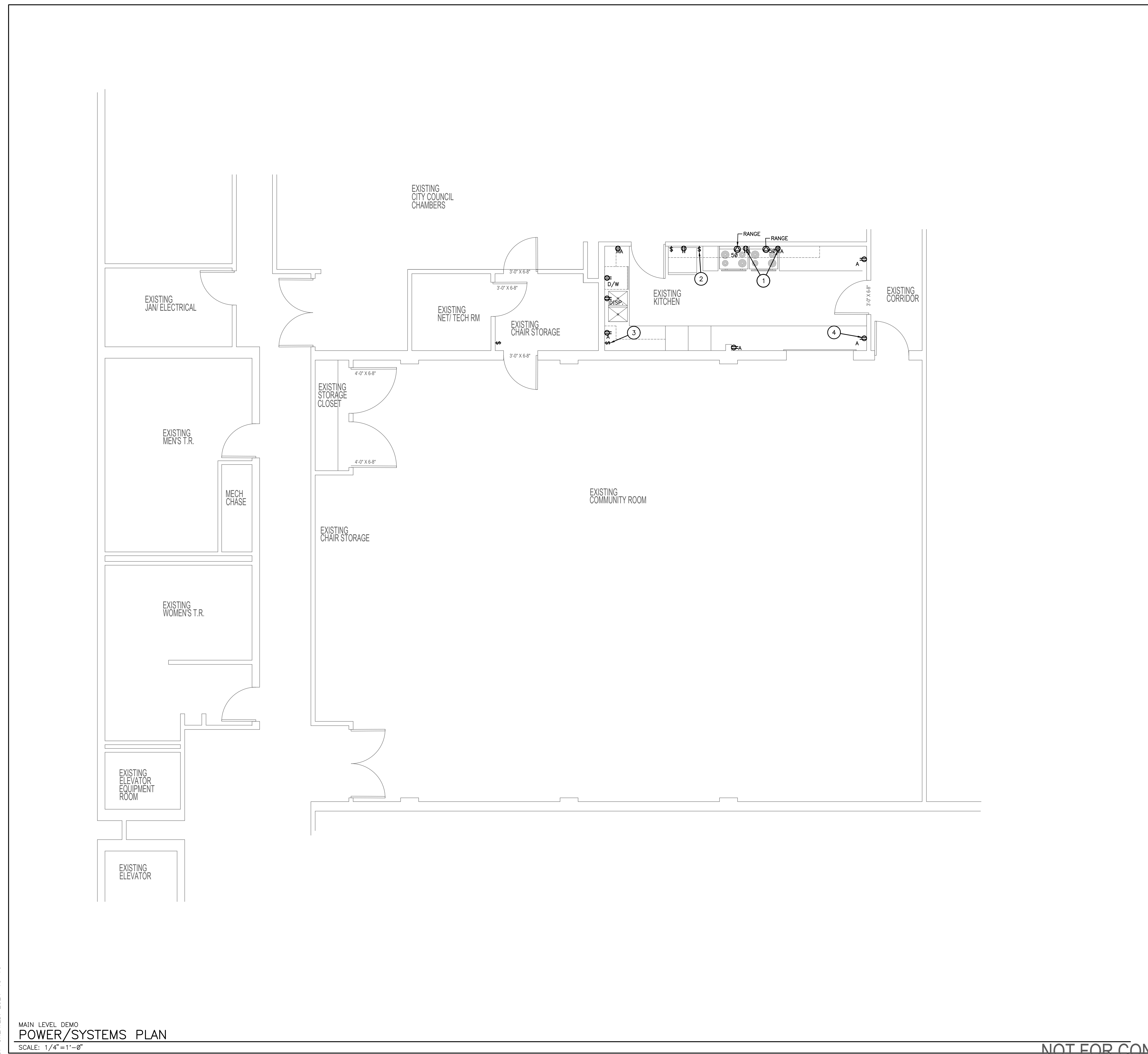
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MAIN LEVEL DEMO POWER/SYSTEMS PLAN
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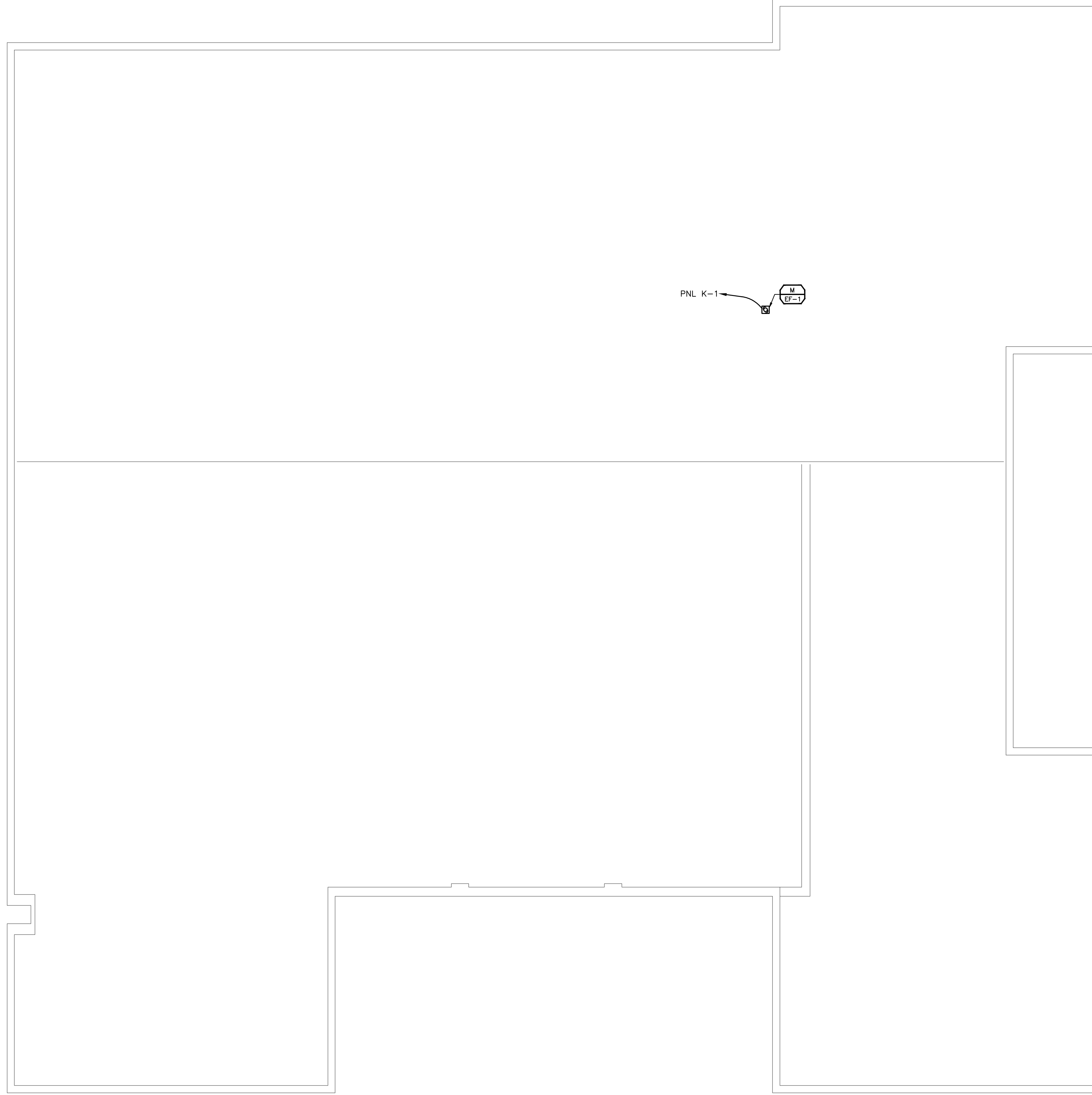


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MAIN LEVEL DEMO
POWER/SYSTEMS PLAN
 SCALE: 1/4" = 1'-0"

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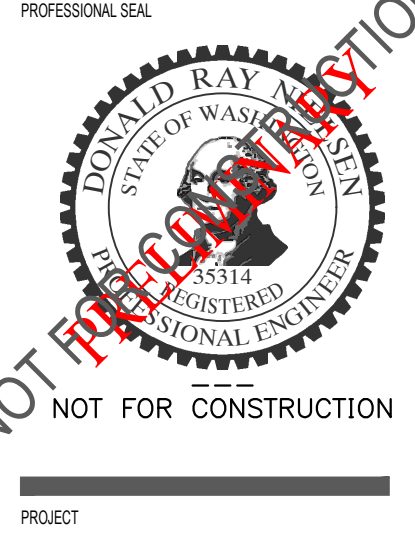


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ROOF PLAN POWER/SYSTEMS PLAN

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