

CHAPTER 10: MEANS OF EGRESS CONTINUED

OCCUPANT LOAD	LOCATION	USE	AREA	FACTOR: SF/PERSON	SUB TOTAL	TOTAL	REMARKS
FIRST FLOOR	F-1 KITCHEN	F-1	2,356 SF	1/100 GROSS	23.56	24	-
	B-1 BUSINESS	B-1	576 SF	1/100 GROSS	5.76	6	-
	S-2 STORAGE	S-2	283 SF	1/100 GROSS	2.83	3	-
BASEMENT	S-2 STORAGE	S-2	1,428 SF	1/100 GROSS	14.28	15	-
	S-2 MECHANICAL	S-2	31 SF	1/100 GROSS	.31	1	-
TOTAL OCCUPANT LOAD						49	

PLUMBING FIXTURES COUNT

REQUIRE	W.C.	LAV	DRINKING FOUNTAIN	SERVICE SINK	OTHERS	REMARKS
MEN	1	1		1		43 TOTAL OCCUPANTS
WOMEN	1	1				24.5 WOMAN
PROVIDED						WATER CLOSET - 1/100 OCCUPANTS
MEN						LAVATORY - 1/100 OCCUPANTS
WOMEN						SERVICE SINK - 1
UNSEX	2	2				

PROJECT ENERGY DATA

CLIMATE ZONE: ZONE 1 ZONE 2 ZONE 3 ZONE 4 ZONE 5 ZONE 6

CONSTRUCTION: NEW CONSTRUCTION EXISTING / REMODEL CONSTRUCTION

NEW COMPONENTS: NEW COMPONENTS MUST COMPLY WITH THE VALUES DESIGNATED IN THE TABLE BELOW UNLESS NOTED OTHERWISE IN THE DRAWINGS. STRICTER VALUES MUST BE USED.

COMPONENT VALUES

ASSEMBLY	DESCRIPTION	CAVITY R-VALUE	CONT. R-VALUE	U FACTOR	REMARKS
FLOOR	SLAB ON GRADE		10	1.26	
FLOOR	FLOOR CANTILEVER		38		
WALLS	EXTERIOR CAVITY WALLS	21		0.62	2" RIGID INSULATION
FLAT ROOF	INSULATION ABOVE DECK	28	0.39		POLY ISO - 5.5 PER INCH
SLOPED ROOF	BATT / ATTIC INSUL		38		
WINDOW	ALUMINUM WINDOWS		.31		SHGC = .26; VT = .54
WINDOW	VINYL WINDOWS		.27		SHGC = .40; VT = .54
WINDOW	WOOD VINYL CLAD		.34		SHGC = .30; VT = .55
DOORS	PATIO DOOR		.41		SHGC = .32; VT = .54
DOORS	INSULATED HOLLOW METAL		.16		R = 6.4
DOORS	INSULATED FIBERGLASS		.16		R = 6.4
DOORS	INSULATED OVERHEAD				R = 6.4
MASONRY	CMU PORTABLE LIQUID		8		
GLAZING	CURTAIN WALL / STOREFRONT		.29		SHGC = .26; VT = .70
METAL	INSULATED PANEL		15		R=5 PER INCH

LIFE SAFETY DIAGRAM LEGEND

COMPONENT	SYMBOL	DESCRIPTION
FIRE DEPARTMENT	FDC	FIRE DEPARTMENT
FIRE DEPARTMENT	LB	LOCK BOX - COORD. LOCATION WITH FIRE DEPARTMENT
FIRE DEPARTMENT	⊕	FIRE STROBE
FIRE DEPARTMENT	⊕	FIRE STROBE @ HDN
FIRE EXTINGUISHER	FE-WM	FIRE EXTINGUISHER - WALL MOUNTED
FIRE EXTINGUISHER	FE-SR	FIRE EXTINGUISHER - SEMI RECESSED
FIRE EXTINGUISHER	FE-R	FIRE EXTINGUISHER - RECESSED
EXIT DOORS	ED	EXIT DOOR
EXIT DOORS	ED-AC	EXIT DOOR - AUTO CLOSER WHEN SPRINKLERS ACTIVATED
EXIT DOORS	ED	EXIT GATE AT STAIR - SELF CLOSING DOWN - ALLOW GATE TO SWING IN DIRECTION OF EGRESS FROM LOWER LEVEL
EXIT LIGHTING	⦿	EXIT LIGHTING
CONVEYANCE	ELEV	ELEVATOR
CONVEYANCE	ES	EXIT STAIR
CONVEYANCE	VRR	VERTICAL REDUCTION RAIL
UTILITY	FIRE ELECT	FIRE EQUIPMENT ROOM OR SPRINKLER LOCATION
UTILITY	MEDH	MEDICAL ROOM
UTILITY	HMSR	HAZARDOUS MATERIAL STORAGE ROOM
BARRIER FREE	♿	BARRIER FREE COMPONENT
EGRESS TRAVEL	TO	TRAVEL DISTANCE INDICATOR - SEE ASSOCIATED TABLE
EGRESS TRAVEL	→	DIRECTIONAL ARROW
EGRESS TRAVEL	→	PATH OF TRAVEL WITH DIRECTION INDICATOR
AREA / FACTOR / LOAD	100	SQR FOOTAGE NET OR GROSS AREA OF SPACE RELATIVE TO OCCUPANT LOAD
AREA / FACTOR / LOAD	G1	OCCUPANCY CALCULATED OCCUPANT LOAD FOR SPACE
AREA / FACTOR / LOAD	100	OCCUPANCY FACTOR
AREA / FACTOR / LOAD	100	OCCUPANT LOAD FACTOR
RATED ASSEMBLY	RA	RATED ASSEMBLY - SEE FLOOR PLAN FOR ASSEMBLY TYPE
ACCESSORY USE		THE FOLLOWING SPACES ARE ACCESSORY TO THE MAIN OCCUPANCY AND ARE NOT REQUIRED TO HAVE A RATED SEPARATION
ACCESSORY USE		UTILITY ROOMS
ACCESSORY USE		TELECOM ROOM
ACCESSORY USE		ELECTRICAL ROOM
ACCESSORY USE		RESTROOMS
ACCESSORY USE		STORAGE CLOSETS
ACCESSORY USE		TRASH CLOSETS
ACCESSORY USE		MAIL ROOMS
ACCESSORY USE		JANITOR CLOSETS
ACCESSORY USE		MEDIA ROOMS
ACCESSORY USE		STORAGE CLOSETS
ACCESSORY USE		SIMILAR SPACES

GENERAL DATA

PROJECT IDENTIFICATION: ADDRESS: 3081 3RD AVE. DETROIT, MI 48201

PROJECT TYPE: NEW CONSTRUCTION TENANT IMPROVEMENT FACADE RENOVATION

PROJECT DESCRIPTION: ALTERATIONS TO AN EXISTING RETAIL/MERCANTILE TENANT SPACE AS PER PLANS FOR A NEW RETAIL FOOD ESTABLISHMENT.

APPLICABLE CODES: BUILDING: 2015 MICHIGAN BUILDING CODE; MECHANICAL: 2015 MICHIGAN MECHANICAL CODE; PLUMBING: 2015 MICHIGAN PLUMBING CODE; ELECTRICAL: 2017 NATIONAL ELECTRIC CODE; ACCESSIBILITY: 2009 ICC ANS A117.1; ENERGY: 2015 MICHIGAN ENERGY CODE; ENERGY: 2013 ASHRAE STANDARD 90.1

CHAPTER 3: USE & OCCUPANCY

BUILDING USE: SINGLE USE MIXED USE

OCCUPANCY CLASSIFICATION: A1 A2 A3 A4 A5 B E F1 F2 H1 H2 H3 H4 H5 I2 I3 I4 M R1 R2 R3 R4 S1 S2 U

CHAPTER 4: DETAILED REQUIREMENTS PER OCCUPANCY

DETAILED REQUIREMENTS: THIS CHAPTER IS NOT APPLICABLE

CHAPTER 5: GENERAL BUILDING AREA & HEIGHTS

BUILDING HEIGHT: HEIGHT EXCEPTIONS NOT APPLIED MOST RESTRICTIVE USE FOR STORY F1 NO PROPOSED CHANGES TO BUILDING HEIGHT

FRONTAGE INCREASE: FRONTAGE INCREASE NOT APPLIED FRONTAGE INCREASE APPLIED PER CALCULATION

CHAPTER 6: TYPES OF CONSTRUCTION

CONSTRUCTION TYPE: IA IB IIA IIB IIIA IIIB IVA VBA VBB

FIRE RATING OF BEARING WALLS - EXTERIOR: 0 HR 1 HR 1.5 HR 2 HR 3 HR

CHAPTER 7: FIRE & SMOKE PROTECTION

SHAFT ENCLOSURES: NOT REQUIRED LESS THAN 4 STORIES + 1 HR 4 STORIES OR ABOVE + 2 HRS

FIRE RATED ASSEMBLIES: FIRE WALL (FW) ELEVATOR SHAFT (ES) STAIRWAY ENCLOSURE (SE)

CHAPTER 8: INTERIOR FINISHES

INTERIOR FINISH MATERIALS: CLASS A FS-0-25 SD-0-450 CLASS B FS-26-75 SD-0-450 CLASS C FS-76-200 SD-0-450

CHAPTER 9: FIRE PROTECTION SYSTEMS

FIRE PROTECTION SYSTEM: NOT REQUIRED DEFERRED SUBMITTAL PROVIDED

CHAPTER 10: MEANS OF EGRESS

MINIMUM NUMBER OF EXITS REQUIRED: 1 EXIT - OCC. LOAD PER STORY LIMITED TO 500 2 EXITS - OCC. LOAD PER STORY LIMITED TO 1,000

CHAPTER 10: MEANS OF EGRESS (CONTINUED)

EXITS PROVIDED: FLOOR 1 = 2 - - -

TRAVEL DISTANCE: 75 FT 100 FT 150 FT 200 FT 250 FT 300 FT 400 FT

DESIGNHAUS ARCHITECTURE

EST 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

Code Data & Life Safety Plan

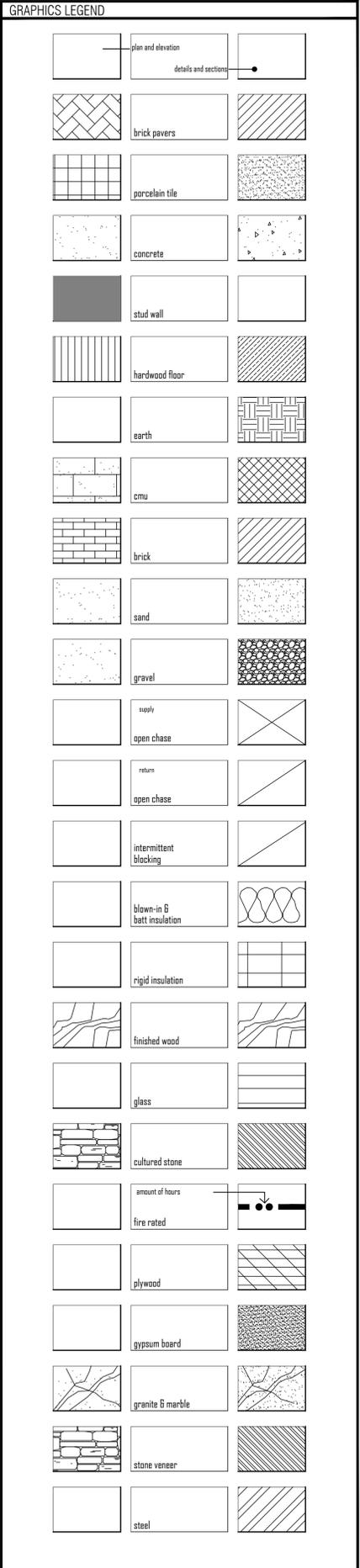
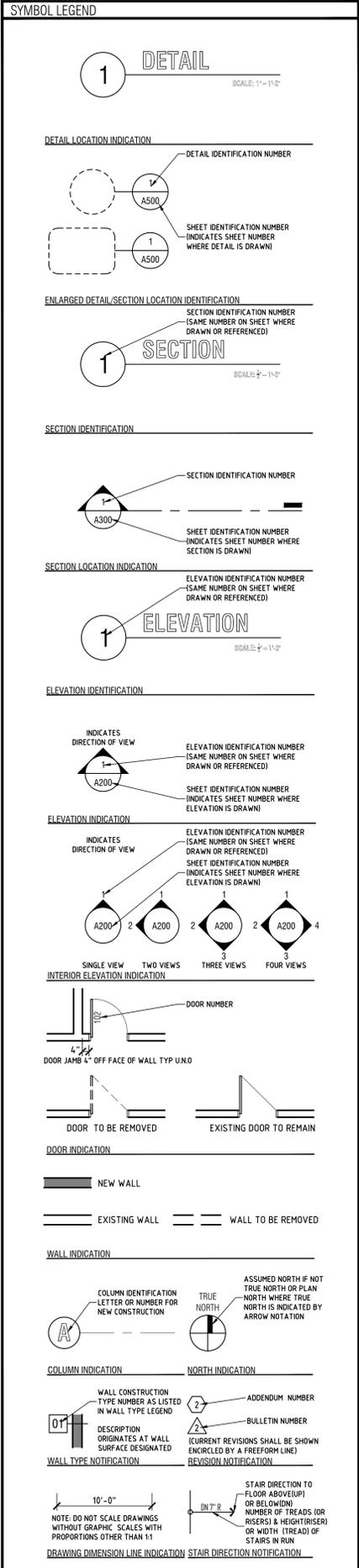
3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

021293

G2.1

G2.1 Code Data & Life Safety Plan.dwg 3/7/2022 DH Intern 02

ABBREVIATIONS		
A	AC	ACOUSTICAL
	ADD	ADDENDUM OR ADDITIONAL
	ADJ	ADJACENT
	AGG	AGGREGATE
	A/C	AIR CONDITIONING
	ALT	ALTERNATE OR ALTERNATIVE
	AL, ALUM	ALUMINUM
	ANCH	ANCHOR, ANCHORAGE
	AS	ANCHOR BOLT
	ANOD	ANODIZED
	ARCH	ARCHITECT (URAL)
	ASPH	ASPHALT
	AUTO	AUTOMATIC
B	B.F.	BARRIER FREE
	BP	BASE OR BERING PLATE OR BEARING
	BRG	BENCH MARK OR BEAM
	BETW	BETWEEN
	BLKG	BLOCKING
	BD	BOARD
	BS	BOTH SIDES
	B/O	BOTTOM OF
	BLDG	BUILDING
	BL	BUILDING LINE
C	CAB	CABINET
	CPT	CARPET (ED)
	CI	CAST IRON
	CIP	CAST-IN-PLACE
	CB	CATCH BASIN
	CLG	CEILING
	CEM	CEMENT
	C TO C	CENTER TO CENTER
	CM	CENTIMETER(S)
	CER	CERAMIC
	CT	CERAMIC TILE
	CHDK PL	CHECKERED PLATE
	CLR	CLEAR(ANCE)
	CLOS	CLOSET
	CO	CLEAN OUT
	CHK	COAT HOOK
	CW	COLD WATER
	COL	COLUMN
	COMB	COMBINATION
	COMP	COMPRESS(ED), (ION), (IBLE)
	CNCLD	CONCEALED
	CONC	CONCRETE
	CMU	CONCRETE MASONRY UNIT
	CONN	CONNECTION
	CONST	CONSTRUCTION
	CONST JT	CONSTRUCTION JOINT
	CONT	CONTINUOUS OR CONTINUE
	CONTR	CONTRACTOR
	CJ	CONTROL JOINT
	CORR	CORRUGATED OR CORRIDOR
	CTR	CENTER
	CTSK	COUNTERSUNK
	CF	CUBIC FOOT
	Y	CUBIC YARD
	CYL	CYLINDER
D	DPR	DAMPER
	DP	DAMPPOOFING
	DL	DEAD LOAD
	DET	DETAIL
	DIAG	DIAGONAL
	Ø	DIAMETER
	DIFF	DIFFUSER
	DIM	DIMENSION
	D/W	DISHWASHER
	DO	DOOR OPENING
	DN	DOWN
	DT	DRAIN TILE
	DWG	DRAWING
	DF	DRINKING FOUNTAIN
E	ELEC	ELECTRIC(AL)
	EL	ELEVATION
	EMER	EMERGENCY
	ENC	ENCLOSURE, (URE)
	EQ	EQUAL
	EQUIP	EQUIPMENT
	ESC	ESCALATOR
	EXH	EXHAUST
	EB	EXPANSION BOLT
	EJ	EXPANSION JOINT
	EXPCONST	EXPOSED CONSTRUCTION
	EXT	EXTERIOR
F	FOC	FACE OF CONCRETE
	FACT	FACTORY FINISH
	FT	FEET/FOOT
	FIN	FINISHED
	FE	FIRE EXTINGUISHER
	FEC	FIRE EXTINGUISHER CABINET
	FLD	FIELD
	FHS	FIRE HOSE STATION
	FPR	FIRE PROOFING
	FL	FLOORING
	FD	FLOOR DRAIN
	FLUOR	FLUORESCENT
	FTG	FOOTING
	FDN	FOUNDATION
	FA	FRESH AIR
	F/S	FAR SIDE
	FURR	FURRED, (ING)
	FVC	FIRE VALVE CABINET
G	G	GAGE, GAUGE
	GAL	GALLON
	GALV	GALVANIZED
	GL	GLASS, GLAZING
	GR	GRADE, GRADING
	GRD	GROUND
	GYP	GYP(S)UM
	GYP L	GYP(S)UM LATH
	GP	GYP(S)UM PLASTER
H	HDCP	HANDICAP (PED)
	HDBD	HARDBOARD
	HDWE	HARDWARE
	HDW	HARDWOOD
	HTG	HEATING
	H&V	HEATING & VENTILATING
	HVAC	HEATING/VENTILATION/AIR CONDITIONING
	HT	HEIGHT
	HP	HIGH POINT
	HS	HIGH STRENGTH
	HC	HOLLOW CORE
	HM	HOLLOW METAL
	HORIZ	HORIZONTAL
	HB	HOSE BIBB
	HW	HOT WATER
	HW/H	HOT WATER HEATER
	HR	HOUR
I	IN(")	INCH(ES)
	INCL	INCLUDE(D), (ING)
	INFO	INFORMATION
	ID	INSIDE DIMENSION
	INSL	INSULATE(D), (ION)
	ICA	INTEGRAL COLOR ANODIZED
	INT	INTERIOR/INTERNAL
	INTERM	INTERMEDIATE
	INV	INVERT
	IRR	IRRIGATION
K	kg	KILOGRAMS
	KV	KILOVOLT
	KVA	KILOVOLT/AMPERE
	kw	KILOWATT(S)
	kwh	KILOWATT-HOUR
	kg/m	KILOGRAM PER METER
	kg/cm ²	KILOGRAM PER SQUARE CENTIMETER
	K	KIPS
	KSI	KIPS PER SQUARE INCH
	KIT	KITCHEN
	KO	KNOCKOUT
L	LAB	LABORATORY
	LAM	LAMINATE(D)
	LAV	LAVATORY
	LCC	LEAD COATED COPPER
	LH	LEFT HAND
	LHR	LEFT HAND REVERSE
	L	LIGHT
	LTG	LIGHTING
	LP	LIGHTING PANEL
	LIN	LINEAR, LINEAL
	LL	LONG
	LLBB	LONG LEGS BACK TO BACK
	LLH	LONG LEG HORIZONTAL
	LLV	LONG LEG VERTICAL
	LOC	LOCATE/LOCATION
	L.P.	LOW POINT
	LV	LOW VOLTAGE
M	MAG	MAGNETIC
	MH	MANHOLE
	MFR	MANUFACTURE(R)
	MAR	MARBLE
	MAR THR	MARBLE THRESHOLD
	MB	MARKER BOARD
	MAS	MASONRY
	MO	MASONRY OPENING
	MAT	MATERIAL(S)
	MAX	MAXIMUM
	MECH	MECHANICAL
	ME	MEDICINE CABINET
	MED	MEDIUM
	MBR	MEMBER
	MET	METAL
	MDS	METAL DIVIDER STRIP
	ML	METAL LATH
	MEZZ	MEZZANINE
	mm	MILLIMETER(S)
	MIN	MINIMUM
	MIR	MIRROR
	MISC	MISCELLANEOUS
	MTD	MOUNT(ED), (ING)
	MULL	MULLION
N	NAT	NATURAL
	NCA	NATURAL COLOR ANODIZED
	NCA	NATURAL COLOR ANODIZED
	NEG	NOISE REDUCTION COEFFICIENT
	NRC	NOMINAL
	NOM	NOMINAL
	NA	NOT APPLICABLE
	NIC	NOT IN CONTRACT
	NO (#)	NUMBER
O	OFF	OFFICE
	OC	ON CENTER(S)
	OPG	OPENING
	OPP	OPPOSITE
	OPP HD	OPPOSITE HAND
	ORIG	ORIGINAL
	Oz	OUNCE
	OS	OUTSIDE
	OA	OUTSIDE AIR
	OD	OUTSIDE DIAMETER
	OH	OVERHEAD
P	PTD	PAPER TOWEL DISPENSER
	PTD/R	PAPER TOWEL DISPENSER & RECEPTACLE COMBINATION
	PKG	PARKING
	PBD	PARTICLE BOARD
	PERM	PERMANENT
	PLAS	PLASTER
	PLAM	PLASTIC LAMINATE
	P	PLATE
	PLBG	PLUMBING
	PT	POINT
	POL	POLISHED
	PVC	POLYVINYL CHLORIDE
	lb/#	POUNDS
	PCF	POUNDS PER CUBIC FOOT
	PPF	POUNDS PER FOOT
	PL	POUNDS PER LINEAL FOOT
	PSF	POUNDS PER SQUARE FOOT
	PC	PRECAST CONCRETE
	PRE-FAB	PREFABRICATE(D)
	PL	PROPERTY LINE
Q	QT	QUARRY TILE
	QTR	QUARTER
R	RAD	RADIUS, RADIATOR, RADIATION
	RECVG	RECEIVING
	REC	RECESS(ED)
	REF	REFERENCE
	REFL	REFLECT(ED), (IVE), (OR)
	REFR	REFRIGERATOR
	REG	REGISTER
	REINF	REINFORCE(D), (ING)
	REQD	REQUIRED
	RESIL	RESILIENT
	RT	RESILIENT TILE
	RTA	RETURN AIR
	REV	REVISION(S), REVISED
	RH	RIGHT HAND
	RHR	RIGHT HAND REVERSE
	ROW	RIGHT OF WAY
	R	RISER
	Rd	ROAD
	RD	ROOF DRAIN
	RS	ROOF SUMP
	RFG	ROOFING
	RM	ROOM
	RO	ROUGH OPENING
	RUB	RUBBER
S	SAN	SANITARY
	SND	SANITARY NAPKIN DISPENSER
	SNWR	SANITARY NAPKIN WASTE RECEPTACLE
	SCH	SCHEDULE
	SL	SEALER
	SECT	SECTION
	SHT	SHEET
	SIM	SIMILAR
	SK	SINK
	SB	SOIL BORING
	STC	SOUND TRANSMISSION CLASS
	SPC	SPACER, SPACING
	SPK	SPEAKER
	SPC(S)	SPECIFICATION(S)
	SQ	SQUARE
	cm ²	SQUARE CENTIMETER
	SF	SQUARE FOOT
	STAG	STAGGERED
	STD	STAINLESS STEEL
	STD	STANDARD
	STA	STATION
	STL	STEEL
	STN	STONE
	STOR	STORAGE
	STDR	STORM DRAIN
	ST	STREET
	STRUCT	STRUCTURAL
	SA	SUPPLY AIR
	SUPP	SUPPORTS
	SUSP	SUSPENDED
	SW	SWITCH
	SWBD	SWITCHBOARD
	SWGR	SWITCHGEAR
	SYN	SYMMETRICAL
T	TEMP	TEMPERATURE, TEMPERED
	TERR	TERRAZZO
	THERM	THERMOSTAT
	THR	THICKNESS
	THR	THRESHOLD
	THRU	THROUGH/THROUGHOUT
	TLET	TOILET
	TPH	TOILET PAPER HOLDER
	TOL	TOLERANCE
	T&G	TONGUE AND GROOVE
	T&B	TOP & BOTTOM
	TE	TOP ELEVATION
	TOC	TOP OF CONCRETE
	TO	TOP OF CURB
	TOS	TOP OF STEEL
	TWC	TOWEL & WASTE CABINET
	TRAN	TRANSFORMER
	T	TREAD
	TYP	TYPICAL
U	UH	UNIT HEATER
	UNO	UNLESS NOTED OTHERWISE
	UR	URINAL
V	VA	VALVE
	VB	VAPOR BARRIER
	VAR	VARNISH
	VERT	VERTICAL
	VEST	VESTIBULE
	VIN	VINYL
	VCT	VINYL COMPOSITION TILE
	VWC	VINYL WALL COVERING
	VRS	VINYL RESILIENT STRIP
W	WHYD	WALL HYDRANT
	WH	WATER HEATER
	WC	WATER CLOSET
	WM	WATER MAIN
	WP	WATERPROOFING
	WR	WATER RESISTANT
	WS	WATERSTOP
	WT	WEIGHT
	WWF	WELDED WIRE FABRIC
	WWM	WELDED WIRE MESH
	W	WIDTH, WIDE, WEST
	W/	WITH
	W/O	WITHOUT
	WD	WOOD
Y	Y	YARD
	YD	YARD



GENERAL NOTES

APPLICABLE CODES: ALL WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS AND LANDLORDS REQUIREMENTS

SCALED DRAWINGS: DO NOT SCALE DRAWINGS. FIELD VERIFY ALL DIMENSIONS AND JOB CONDITIONS

DISCREPANCIES: SHOULD ANY CONDITION ARISE WHERE THE INTENT OF THE DRAWINGS IS IN DOUBT, OR WHERE THERE APPEARS TO BE AN ERROR ON THE DRAWINGS OR A DISCREPANCY BETWEEN THE DRAWINGS AND THE FIELD CONDITIONS, THE ARCHITECT SHALL BE NOTIFIED AS SOON AS POSSIBLE. IF THE CONTRACTOR PROCEEDS WITH THE WORK SO AFFECTED WITHOUT INSTRUCTION FROM THE ARCHITECT, THE CONTRACTOR SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECTS. THIS INCLUDES ERRORS IN THE SPECIFICATIONS AND NOTATIONAL ERRORS ON THE DRAWINGS WHERE DOUBTFUL OF INTERPRETATION.

DETAILS: IN THE CASE WHERE TWO OR MORE DETAILS APPLYING TO THE SAME PART OF THE WORK ARE IN CONFLICT, THE MOST RESTRICTIVE SHALL GOVERN UNLESS CLARIFIED OR OTHERWISE APPROVED BY THE ARCHITECT.

EXISTING CONDITIONS: THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL CAREFULLY EXAMINE THE CONDITIONS AFFECTING HIS WORK BEFORE PROCEEDING, AND SHALL REPORT TO THE ARCHITECT ANY CONDITION WHICH WOULD PREVENT THE PROPER AND LEGAL COMPLETION OF HIS WORK. NOT REPORTING ANY SUCH UNSUITABLE CONDITION WILL CONSTITUTE ACCEPTANCE OF ALL CONDITIONS BY THE CONTRACTOR AND/OR SUBCONTRACTOR.

SHOP DRAWINGS: APPROVAL OF SHOP DRAWINGS MEANS APPROVAL OF THE GENERAL METHOD OF FABRICATION ONLY. DIMENSIONS AND QUANTITIES MAY NOT BE CHECKED, AND APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS UNLESS SPECIFICALLY INDICATED IN THE APPROVAL.

SPECIFICATIONS: IF SPECIFICATIONS ARE PROVIDED, SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. WHERE DRAWINGS AND SPECIFICATIONS CONFLICT, THE MOST RESTRICTIVE SHALL APPLY.

FIRE EXTINGUISHERS: PROVIDE 2A, 10BC MINIMUM RATED FIRE EXTINGUISHER TO BE LOCATED WITHIN 75 FEET OF TRAVEL DISTANCE FROM ALL AREAS. PROVIDE ONE EXTINGUISHER FOR EACH 75 FEET OF TRAVEL.

FIRE SPRINKLERS: PLANS OF SPRINKLER SYSTEM SHALL BE APPROVED BY THE FIRE DEPARTMENT PRIOR TO INSTALLATION OF SYSTEM.

FIRE PROTECTION EQUIPMENT: PLANS FOR ALL FIXED FIRE PROTECTION EQUIPMENT SUCH AS STANDPIPES, SPRINKLER SYSTEMS AND FIRE ALARM SYSTEMS, ETC. MUST BE SUBMITTED TO, AND APPROVED BY, THE FIRE PREVENTION BUREAU BEFORE THE EQUIPMENT IS INSTALLED.

DOOR SIGN: *THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS* SIGN, WITH MINIMUM ONE (1) INCH HIGH LETTERS SHALL BE PROVIDED ADJACENT TO FRONT EXIT DOOR. PROVIDE INDICATING TYPE LOCKS ON DOORS.

HAZARDOUS MATERIALS: NO HAZARDOUS MATERIALS, LIQUIDS OR CHEMICALS SHALL BE STORED OR USED WITHIN THE SUBJECT BUILDING AS TO REQUIRE A HAZARDOUS CLASSIFICATION PER APPLICABLE UNIFORM BUILDING CODE.

PARTITIONS: ALL INTERIOR WALLS AND PARTITIONS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST ALL LOADS TO WHICH THEY ARE SUBJECTED BUT NOT LESS THAN A FORCE OF 5 POUNDS PER SQUARE FOOT APPLIED PERPENDICULAR TO WALLS.

EXIT DOORS: ALL EXITS SHALL BE OPENED FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

MEP DOCUMENTS: LIGHT, VENTILATION AND SANITATION SHALL COMPLY WITH SECTIONS OF APPLICABLE BUILDING CODES.

DOORS: DOORS SHALL HAVE A CLEAR OPENING OF NO LESS THAN 32" WHEN OPEN AND BE OPERABLE BY A SINGLE EFFORT.

FLOOR LEVEL: THE FLOOR INSIDE OR OUTSIDE OF A DOORWAY SHALL BE LEVEL FOR A DISTANCE OF 5'-0" FROM THE DOOR IN THE DIRECTION OF THE DOOR SWING, AND SHALL EXTEND 18" BEYOND THE LATCH SIDE FOR THE INTERIOR DOORS AND 24" BEYOND THE LATCH SIDE FOR EXTERIOR DOORS.

SWITCHES & CONTROLS: SWITCHES AND CONTROLS FOR LIGHTS, VENTILATION, FIRE ALARMS, ETC. MUST BE PLACED NO MORE THAN 48" FROM THE FLOOR.

CLEARANCE: A 7'-0" MINIMUM VERTICAL CLEARANCE IS REQUIRED FROM THE FLOOR TO CEILINGS OR PROTRUDING WALL FIXTURES.

FIRE STOPPING: PROVIDE FIRE STOPPING AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES.

DRAFT STOPS: DRAFT STOPS MUST BE INSTALLED SO THAT THE LONGEST HORIZONTAL DIMENSION DOES NOT EXCEED 100 FEET.

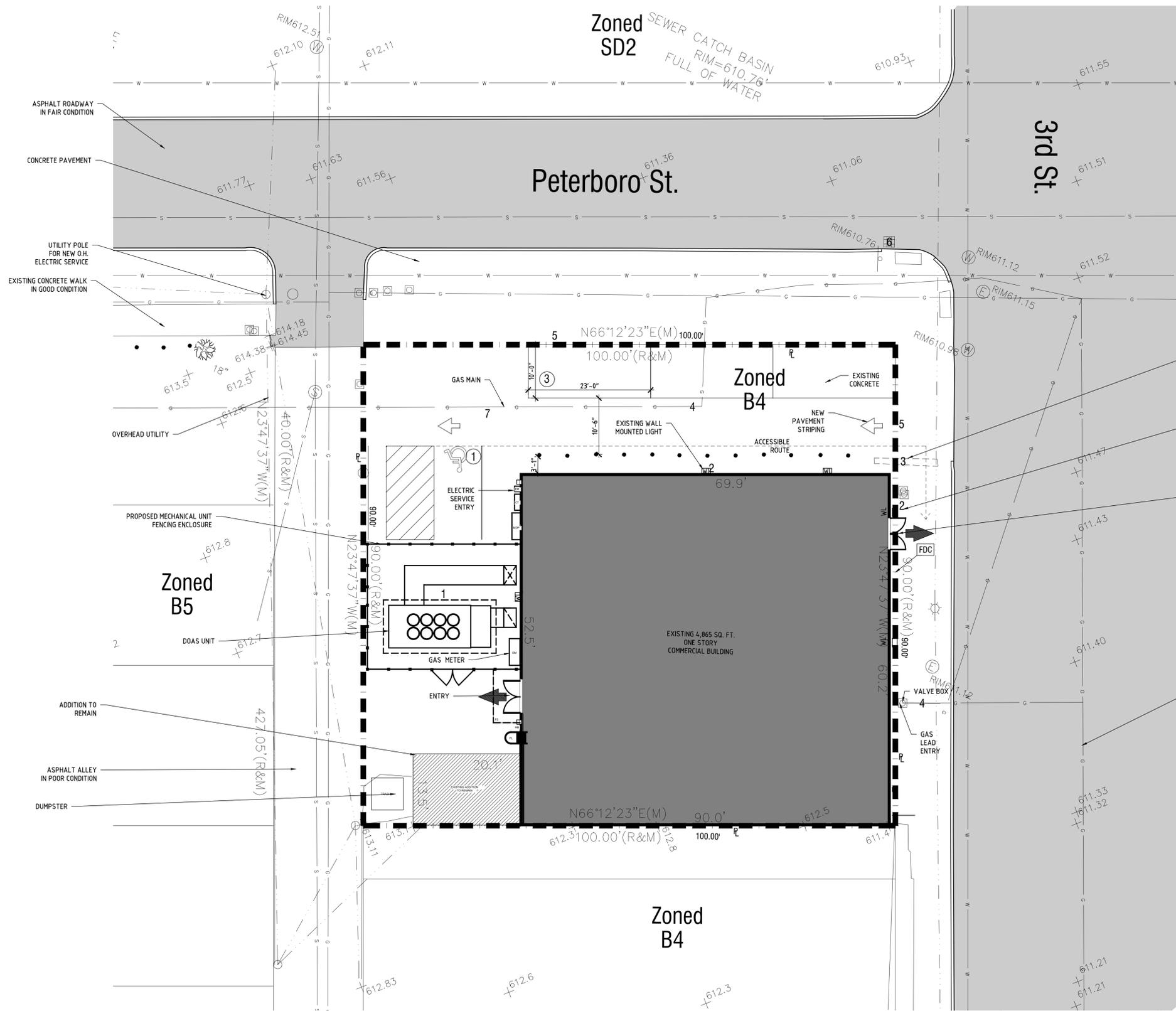
DESIGNHAUS ARCHITECTURE

EST 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

PETER M. STUHLEWEYER
REGISTERED PROFESSION



ASPHALT ROADWAY IN FAIR CONDITION

CONCRETE PAVEMENT

UTILITY POLE FOR NEW O.H. ELECTRIC SERVICE

EXISTING CONCRETE WALK IN GOOD CONDITION

OVERHEAD UTILITY

PROPOSED MECHANICAL UNIT FENCING ENCLOSURE

Zoned B5

DOAS UNIT

ADDITION TO REMAIN

ASPHALT ALLEY IN POOR CONDITION

DUMPSTER

Zoned SD2 SEWER CATCH BASIN FULL OF WATER RIM=610.76'

Peterboro St.

3rd St.

Zoned B4

Zoned B4

Zoned B4

EXISTING 4,865 SQ. FT. ONE STORY COMMERCIAL BUILDING

1 Site Plan SCALE: 1" = 10'



SITE DATA

Regulation	Information
Parcel I.D.	040003578-80 / 04003579-80
Address	1381 3rd Ave. Detroit, MI
Zoning	B 4
Parcel Area	100' x 90' / 9,000 SF / 0.207 Acres

ZONING SCHEDULE OF REGULATIONS

Regulation	Provided per B 4
Min Lot Width	n/a
Setbacks	see site notes
Maximum Building Height	n/a
Maximum Coverage	n/a
Minimum Openspace	n/a

PARKING SUMMARY

Regulation	Required	Provided
Commissary	1 / 3 Employees	4 Spaces Provided Including 1 Van Accessible

NOTES

- G.C. shall include a full site review of the entire property and provide a report for possible repairs to be done on the following but not limited to: trimming landscape, brick repairs, canopies and gutters, sidewalks and paving, roof. G.C. shall review and repair all site light fixtures including, but not limited to light poles, exterior building wall mounted lights around the perimeter and over entry soffit areas around the perimeter of the site.
- Development and use of this site will conform with all applicable codes and ordinances.
- All signage requires separate approvals and permits.
- Existing roof drainage to be maintained.
- Provided Setbacks:
Front (3rd St) 0.6'
Side (Peterboro St) 24.1'
Side (South) 0.0'
Rear (West) 9.3'
- Mechanical units to be ground mounted, fenced and secured
- All signs to meet City Code of Ordinances and be approved by Building Department.
- No Proposed ROW work.
- No exterior drainage modifications proposed
- No exterior grading changes proposed.

SITE SYMBOLS

	TRAFFIC FLOW		ACCESSIBLE TRAVEL PATH
	BUILDING EXIT		
WL	WALL LIGHT		
P	PROPERTY LINE		
	ACCESSIBLE PARKING SPACE		
FDC	FIRE DEPARTMENT CONNECTION		

DESIGNHAUS EST 1998
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Regulation	Required	Provided
Commissary	1 / 3 Employees	4 Spaces Provided Including 1 Van Accessible

3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Site Plan

021293

S100

3RD AVE DETROIT CONSTRUCTION PLANS

3181 THIRD AVENUE, DETROIT, MI, 48201

APPLICANT
3181 3RD STREET DET LLC
3181 3RD AVE.
DETROIT, MI 48201
NAME: TREVOR SHAFFER

ARCHITECT
PETER STUHLREYER
DESIGNHAUS ARCHITECTURE
3300 AUBURN ROAD,
AUBURN HILLS, MI 48326
T: 248.601.4422

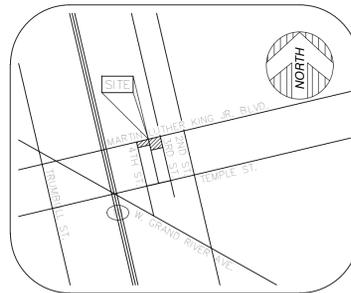
CIVIL ENGINEER
GREG EZZO
SM ENGINEERING
1939 LINCOLNSHIRE DRIVE
ROCHESTER HILLS, MI 48309
T: 810.712.8849

**S.M.
ENGINEERS**

CIVIL ENGINEER / SURVEY /
LAND PLANNER /
LANDSCAPE ARCHITECT

1939 LINCOLNSHIRE DRIVE,
ROCHESTER HILLS, MI 48309
T: 248.835.3553

LEGEND	
●	FOUND CORNER EVIDENCE AS NOTED
⊕	SET $\frac{1}{4}$ " BAR AND CAP
△	CONTROL POINT
⊙	EXISTING ELECTRIC MANHOLE
■	EXISTING ELECTRIC METER
⌚	LIGHT POLE
⌚	EXISTING UTILITY POLE
⊙	EXISTING TELEPHONE MANHOLE
□	EXISTING AIR CONDITIONER
⌚	EXISTING SINGLE POST SIGN
⊙	EXISTING WATER VALVE
⊙	EXISTING WATER MANHOLE
⊙	EXISTING WATER WELL
⊙	EXISTING SANITARY MANHOLE
●	EXISTING CLEAN OUT
⊙	EXISTING STORM MANHOLE
■	EXISTING CATCH BASIN
⌚	EXISTING CULVERT
⊙	EXISTING MANHOLE
⊙	EXISTING GAS METER
⌚	EXISTING GAS VALVE
✱	EXISTING CONIFEROUS TREE
●	EXISTING POST
■	EXISTING MAIL BOX
⌚	EXISTING FLAG POLE
⌚	EXISTING FIRE HYDRANT
⊙	PROPOSED SANITARY MANHOLE
□	PROPOSED WATER METER
---	PROPOSED RIDGE LINE
⊙	PROPOSED CATCH BASIN
⊙	PROPOSED MANHOLE
⊙	PROPOSED HYDRANT
100.00	PROPOSED GRADES
900.00	EXISTING GRADES
⊙	PROPOSED WATER VALVE
⊙	PROPOSED SANITARY CLEAN OUT



LOCATION MAP
NOT TO SCALE

DRAWING INDEX

- C1.0 COVER SHEET
- 1 TOPOGRAPHIC SURVEY
- C2.0 GRADING AND SOIL EROSION PLAN
- C3.0 DETAIL SHEET

PARCEL AREA

PARCEL 1:
2,400± SQUARE FEET = 0.055± ACRES
PARCEL 2:
10,400± SQUARE FEET = 0.239± ACRES
TOTAL:
12,800± SQUARE FEET = 0.294± ACRES

BENCHMARK

SITE BENCHMARK #1
NAIL IN EAST FACE OF UTILITY POLE AT SOUTHEAST CORNER OF 4TH AND PETERBORO ST.
ELEVATION = 612.76' (NAVD 88)

SITE BENCHMARK #2
NAIL IN NORTH FACE OF UTILITY POLE ON WEST SIDE OF ALLEY.
ELEVATION = 614.33' (NAVD 88)

SITE BENCHMARK #3
ARROW ON HYDRANT AT NORTHWEST CORNER OF 3RD ST. AND PETERBORO ST.
ELEVATION = 613.62' (NAVD 88)

PROPERTY DESCRIPTION

LAND IN THE CITY OF DETROIT, WAYNE COUNTY, MI, DESCRIBED AS FOLLOWS:

PARCEL 1
THE NORTH 24 FEET OF LOT 1, BLOCK 78, PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.

PARCEL 2
THE SOUTH 25 FEET (ASSESSED AS 26 FEET) OF LOT 1; THE NORTH 40 FEET OF LOT 2; THE NORTH 10 FEET OF LOT 23 AND ALL OF LOT 24, BLOCK 78, PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.

3	PERMITS	03.07.2022
2	100% CD SET	02.07.2022
NO.	ISSUE	01.01.2020

**3RD AVE. DETROIT
COMMISSARY**

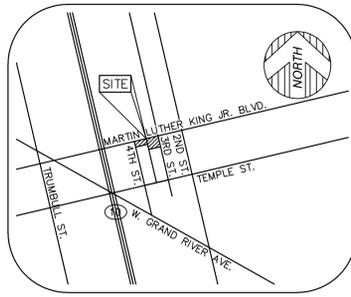
3181 3RD AVENUE
DETROIT, MI 48226
WAYNE COUNTY

COVER SHEET



C1.0

20001



VICINITY MAP
(NOT TO SCALE)

PARKING

NO MARKED PARKING ON SITE.

PARCEL AREA

PARCEL 1:
2,400± SQUARE FEET = 0.055± ACRES
PARCEL 2:
10,400± SQUARE FEET = 0.239± ACRES
TOTAL:
12,800± SQUARE FEET = 0.294± ACRES

BASIS OF BEARING

NORTH 66°12'23" EAST, BEING THE NORTH LINE OF PARCEL 1 OF THE SUBJECT PROPERTY, BASED ON GPS OBSERVATION, MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83.

BENCHMARK

SITE BENCHMARK #1
NAIL IN EAST FACE OF UTILITY POLE AT SOUTHEAST CORNER OF 4TH AND PETERBORO ST.
ELEVATION = 612.76' (NAVD 88)

SITE BENCHMARK #2
NAIL IN NORTH FACE OF UTILITY POLE ON WEST SIDE OF ALLEY.
ELEVATION = 614.33' (NAVD 88)

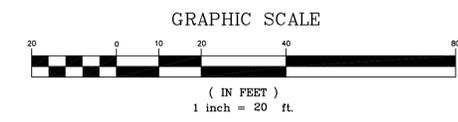
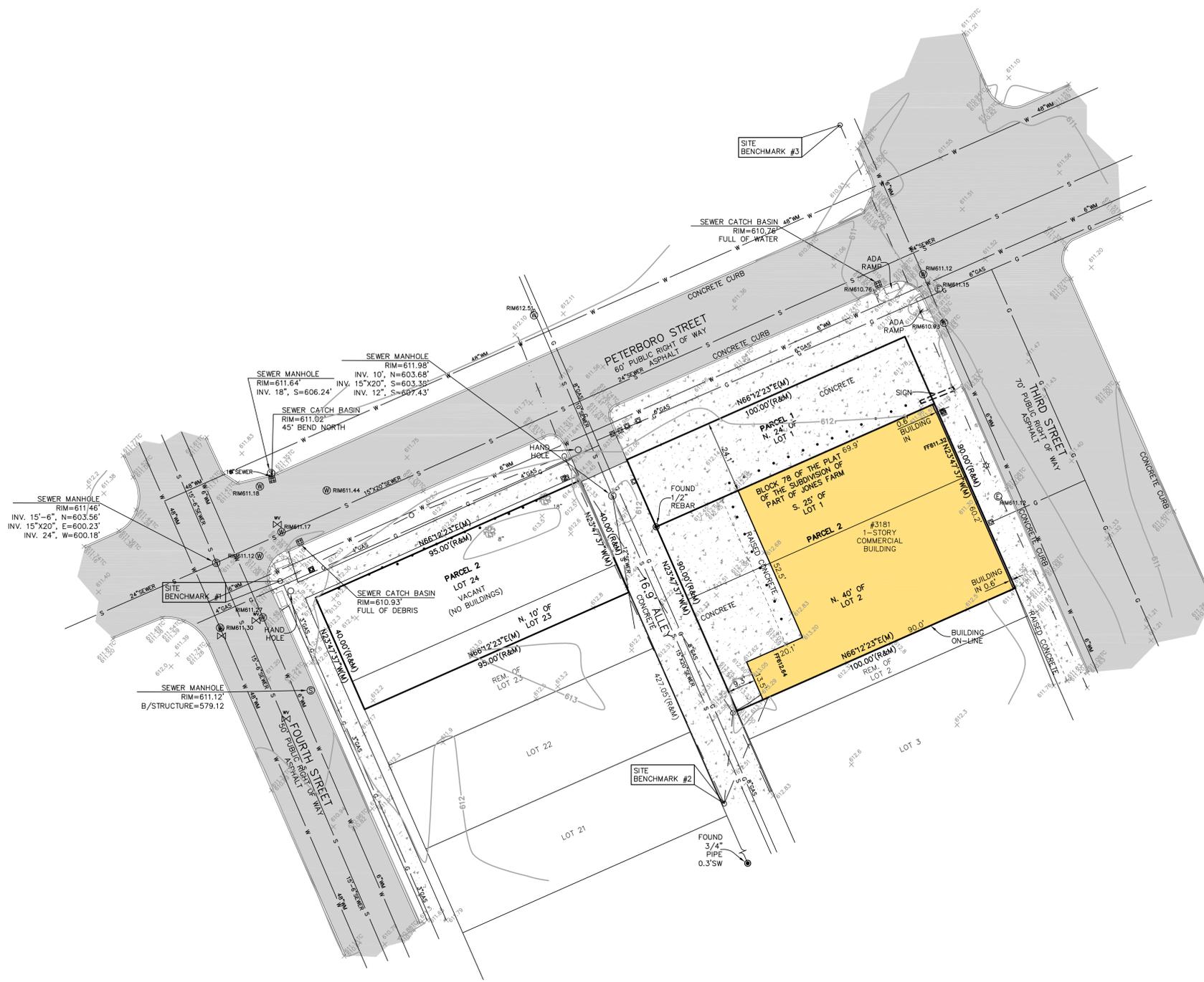
SITE BENCHMARK #3
ARROW ON HYDRANT AT NORTHWEST CORNER OF 3RD ST. AND PETERBORO ST.
ELEVATION = 613.62' (NAVD 88)

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

LEGEND

●	FOUND MONUMENT (AS NOTED)
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
X-0.00	GROUND ELEVATION
⊕	ELECTRIC MANHOLE
○	UTILITY POLE
⊗	GAS METER
⊙	SEWER MANHOLE
⊚	SQUARE CATCH BASIN
⊛	WATER GATE MANHOLE
⊜	WATER VALVE
•	BOLLARD
⊥	SINGLE POST SIGN
⊕	TREE (AS NOTED)
—	PARCEL BOUNDARY LINE
—	FLATTED LOT LINE
—	BUILDING
—	CENTERLINE DITCH
—	CENTERLINE ROAD
—	CONCRETE CURB
—	RAISED CONCRETE
—	EDGE OF CONCRETE (CONC.)
—	EDGE OF ASPHALT (ASPH.)
—	OVERHEAD UTILITY LINE
G	GAS LINE
S	SEWER LINE
W	WATER LINE
—	MINOR CONTOUR LINE
—	MAJOR CONTOUR LINE
■	BUILDING AREA
■	ASPHALT
■	CONCRETE



PROPERTY DESCRIPTION

LAND IN THE CITY OF DETROIT, WAYNE COUNTY, MI, DESCRIBED AS FOLLOWS:

PARCEL 1
THE NORTH 24 FEET OF LOT 1, BLOCK 78; PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.

PARCEL 2
THE SOUTH 25 FEET (ASSESSED AS 26 FEET) OF LOT 1; THE NORTH 40 FEET OF LOT 2; THE NORTH 10 FEET OF LOT 23 AND ALL OF LOT 24, BLOCK 78, PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT No. NCS-1088765-MICH, DATED SEPTEMBER 03, 2021, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

7. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "RESOLUTION" RECORDED JANUARY 29, 1969 AS LIBER 16915, PAGE 305 OF OFFICIAL RECORDS. (AFFECTS BOTH PARCELS) (SEE DOCUMENT FOR TERMS AND CONDITIONS)

8. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "ENVIRONMENTAL INDEMNITY AGREEMENT" RECORDED MAY 26, 2006 AS LIBER 44779, PAGE 101 OF OFFICIAL RECORDS. (AFFECTS BOTH PARCELS) (SEE DOCUMENT FOR TERMS AND CONDITIONS)

9. THE FACT, AS DISCLOSED BY THAT CERTAIN DOCUMENT OR DOCUMENTS RECORDED MAY 26, 2006 AS LIBER 44779, PAGE 101 OF OFFICIAL RECORDS, THAT SOME VIOLATION OF ENVIRONMENTAL PROTECTION LAWS MAY HAVE OCCURRED WHICH MAY AFFECT THE LAND. (AFFECTS BOTH PARCELS) (SEE DOCUMENT FOR TERMS AND CONDITIONS)

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT I HAVE SURVEYED THE PROPERTY HEREIN DESCRIBED. THE ELEVATIONS SHOWN HEREON ARE BASED ON A FIELD SURVEY AND THE DRAWING HEREON DELINEATED IS A CORRECT REPRESENTATION OF THE SAME.

ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemtec-survey.com

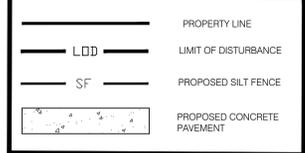


PROFESSIONAL ENGINEERING, SURVEYING & ENVIRONMENTAL SERVICES
KEM-TEC
A GROUP OF COMPANIES
Eastpointe, MI (800) 255-7222
Detroit, MI (313) 758-0877
Ann Arbor, MI (734) 994-0888
Grand Blanc, MI (800) 694-0001
www.kemteccorp.com

TOPOGRAPHIC SURVEY
PREPARED FOR: SME ENGINEERING
3248 4TH STREET, 3189-3181 3RD STREET, DETROIT, MICHIGAN,
PART OF BLOCK 78,
PLAT OF THE SUBDIVISION OF PART OF THE JONES FARM

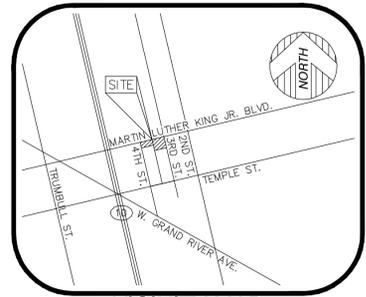
NO.	DATE	REVISION	BY
1	12/23/21		JDM
2	12/23/21		ATS
3	DECEMBER 23, 2021		DATE
4	21-03911		PROJECT NO.
5	1" = 20'		SCALE

SITE LEGEND



SITE NOTES

- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY KEM-TEC AND ASSOCIATES, PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
- ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS KEM-TEC AND ASSOCIATES, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
- THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY KEM-TEC AND ASSOCIATES.
- THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. KEM-TEC AND ASSOCIATES WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
- THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
- THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
- SHOULD AN EMPLOYEE OF KEM-TEC AND ASSOCIATES BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.
- IN NO WAY SHALL SURFACE RUNOFF BE DIRECTED SO AS TO ADVERSELY IMPACT ADJACENT PROPERTIES WITH A FLOODING CONDITION. THE GRADING PLAN SHOULD CONTINUE AS FAR AS STORM SEWER OUTLET OR OTHER NATURAL POINT OF DISCHARGE TO ASSURE PROPER CONTROL OF SURFACE RUNOFF. SURFACE RUNOFF SHALL BE DIVERTED TO A STORM SEWER OR OTHER APPROVED POINT OF COLLECTION SO AS NOT TO CREATE A FLOODING CONDITION.



VICINITY MAP
(NOT TO SCALE)

BENCHMARK

- SITE BENCHMARK #1**
NAIL IN EAST FACE OF UTILITY POLE AT SOUTHEAST CORNER OF 4TH AND PETERBORO ST.
ELEVATION = 612.76' (NAVD 88)
- SITE BENCHMARK #2**
NAIL IN NORTH FACE OF UTILITY POLE ON WEST SIDE OF ALLEY.
ELEVATION = 614.33' (NAVD 88)
- SITE BENCHMARK #3**
ARROW ON HYDRANT AT NORTHWEST CORNER OF 3RD ST. AND PETERBORO ST.
ELEVATION = 613.62' (NAVD 88)

PROPERTY DESCRIPTION

LAND IN THE CITY OF DETROIT, WAYNE COUNTY, MI, DESCRIBED AS FOLLOWS:

PARCEL 1
THE NORTH 24 FEET OF LOT 1, BLOCK 78, PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.

PARCEL 2
THE SOUTH 25 FEET (ASSESSED AS 26 FEET) OF LOT 1; THE NORTH 40 FEET OF LOT 2; THE NORTH 10 FEET OF LOT 23 AND ALL OF LOT 24, BLOCK 78, PLAT OF THE SUBDIVISION OF PART OF THE JONES FARMS, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 6 OF PLATS, PAGE 7, WAYNE COUNTY RECORDS.



GRADING, UTILITY & SOIL EROSION PLAN

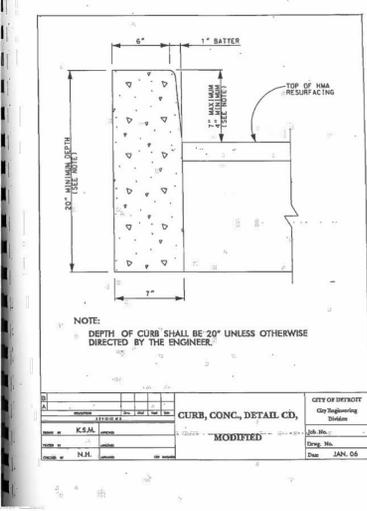
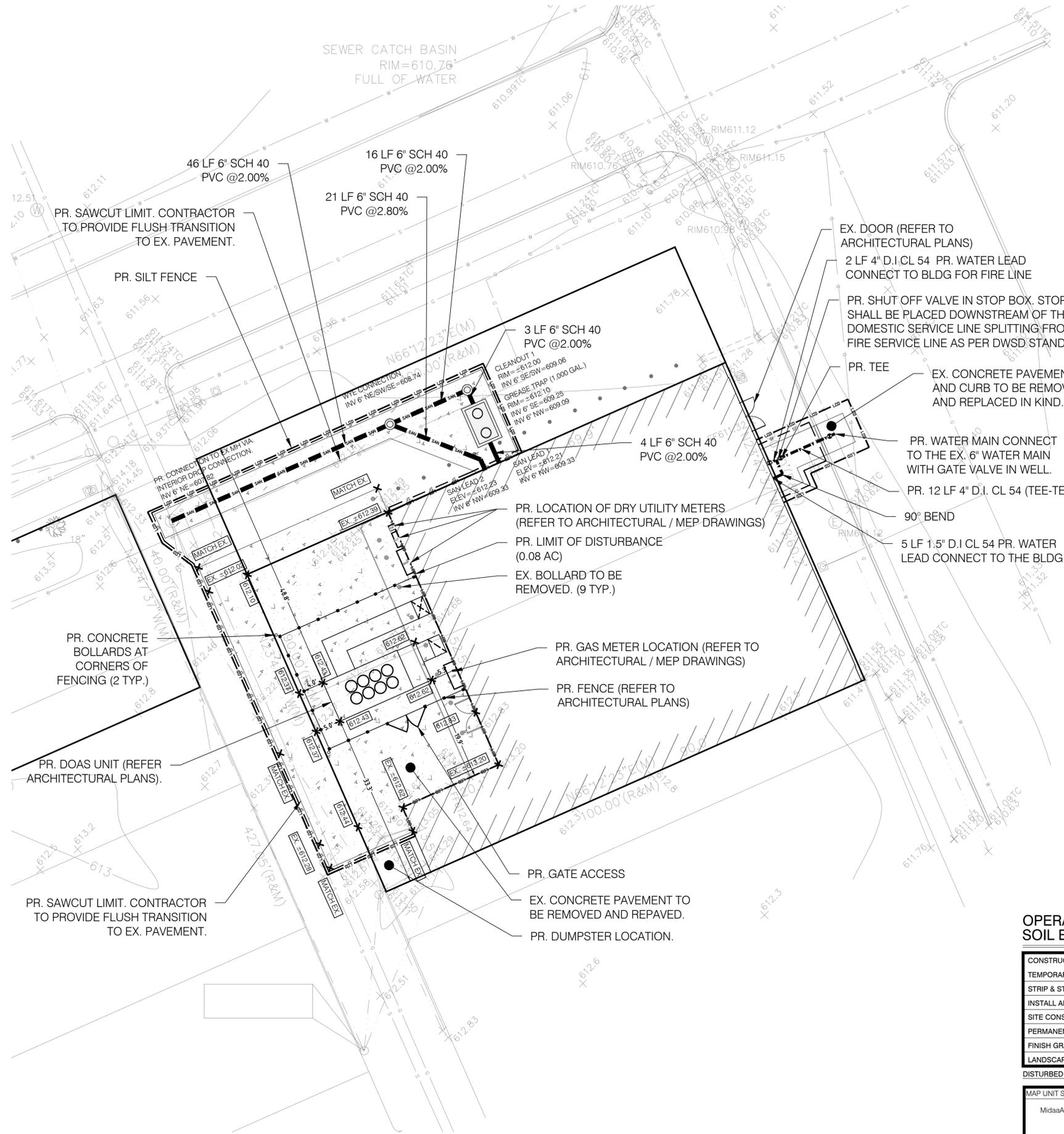
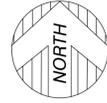
SCALE: 1"= 10'

OPERATION TIME AND SCHEDULE SOIL EROSION AND SEDIMENTATION CONTROL

CONSTRUCTION SEQUENCE	MAR 2022	APR
TEMPORARY EROSION CONTROL MEASURES	██████████	██████████
STRIP & STOCKPILE TOPSOIL / ROUGH GRADE	██████████	██████████
INSTALL ALL OTHER UTILITIES	██████████	██████████
SITE CONSTRUCTION & PAVEMENT	██████████	██████████
PERMANENT EROSION CONTROL MEASURES	██████████	██████████
FINISH GRADING	██████████	██████████
LANDSCAPING	██████████	██████████

DISTURBED AREA = ±0.05 ACRES

MAP UNIT SYMBOL	MAP UNIT NAME
MtdaaA	MIDTOWN GRAVELLY-ARTIFACTUAL SANDY LOAM, 0 TO 2 PERCENT SLOPES



C2.0 Grading Utility and Soil Erosion Plan.dwg

3/7/2022
Greg Ezzo

3RD AVE. DETROIT COMMISSARY

3181 3RD AVENUE
DETROIT, MI 48226
WAYNE COUNTY

GRADING, UTILITY & SOIL EROSION PLAN

C2.0 **20001**

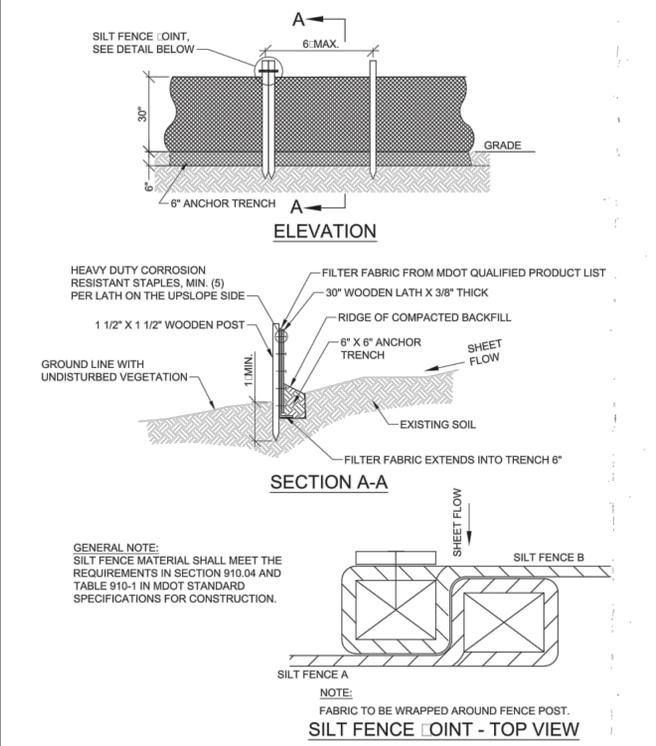


NO.	ISSUE	DATE
3	PERMITS	03.07.2022
2	100% CD SET	02.07.2022
1	50% CD SET	02.04.2022

3RD AVE. DETROIT COMMISSARY

3181 3RD AVENUE
DETROIT, MI 48226
WAYNE COUNTY

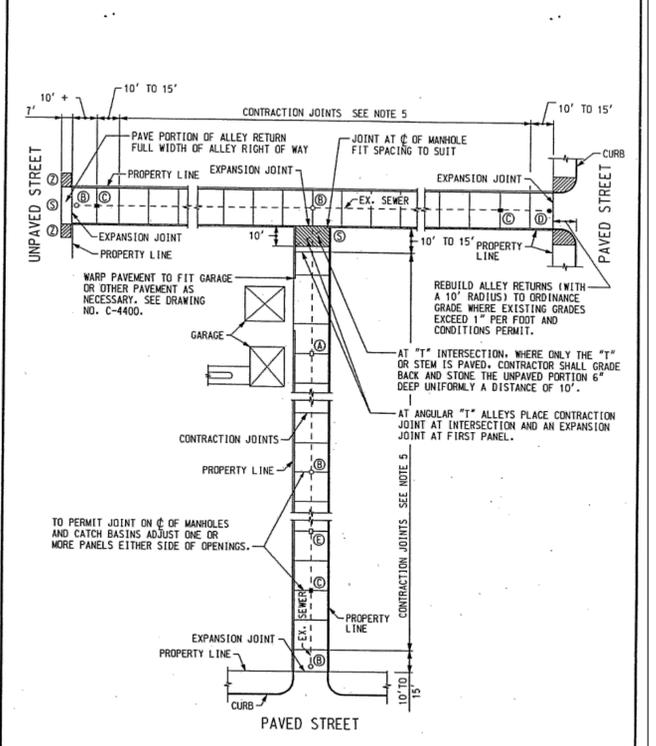
DETAIL SHEET



REV	DESCRIPTION	DATE
1	UPDATED	09/2020

EROSION CONTROL, SILT FENCE

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	015-13-02

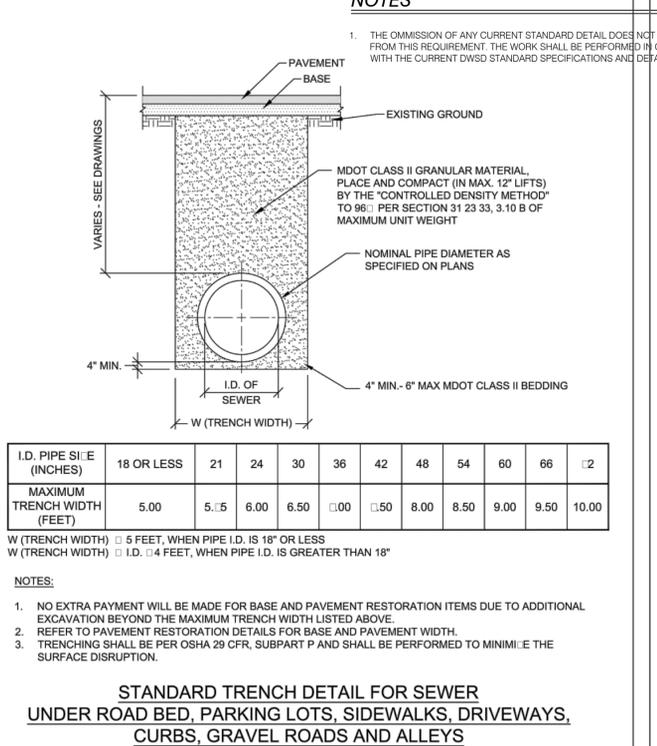


REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

TYPICAL PLAN AND SECTION FOR CONCRETE ALLEY PAVEMENT

SCALE	NONE	SHEET	1 OF 2
DATE	09/2018	DWG. No.	015-13-02



I.D. PIPE SIZE (INCHES)	18 OR LESS	21	24	30	36	42	48	54	60	66	72
MAXIMUM TRENCH WIDTH (FEET)	5.00	5.15	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

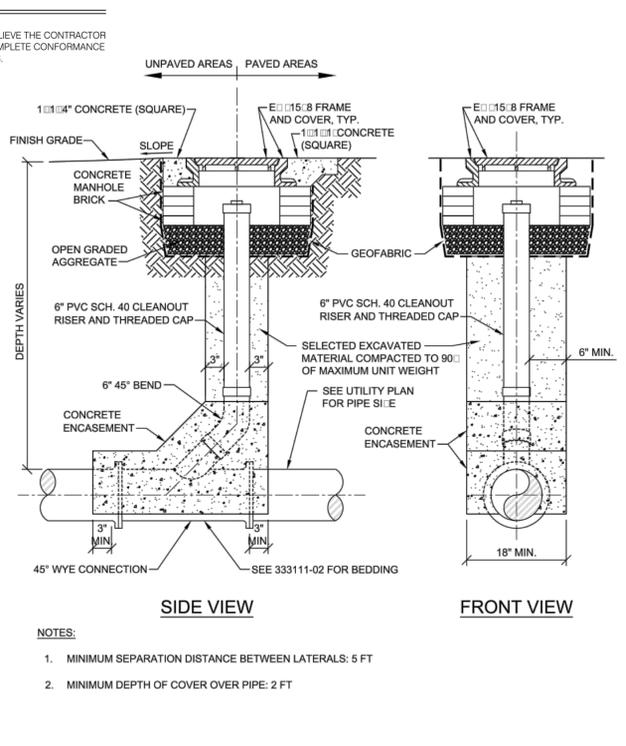
W (TRENCH WIDTH) □ 5 FEET, WHEN PIPE I.D. IS 18" OR LESS
W (TRENCH WIDTH) □ I.D. □ 4 FEET, WHEN PIPE I.D. IS GREATER THAN 18"

NOTES:

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- REFER TO PAVEMENT RESTORATION DETAILS FOR BASE AND PAVEMENT WIDTH.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

SANITARY SEWER TRENCH DETAIL

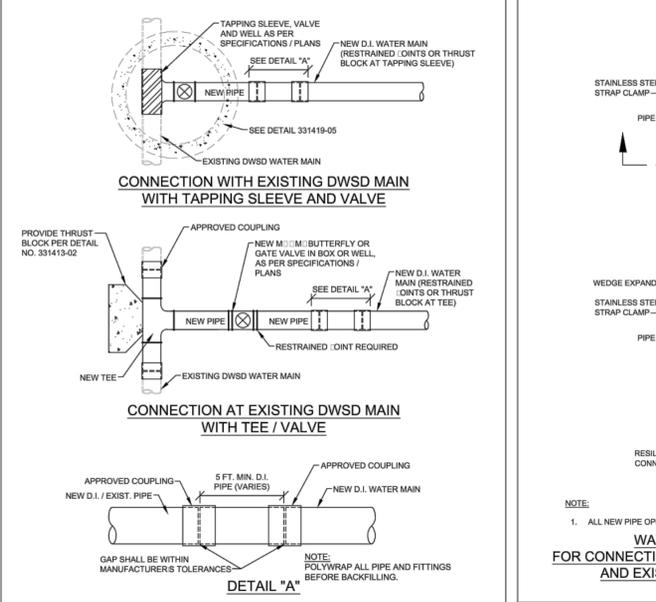
SCALE	NONE	SHEET	1 OF 3
DATE	09/2018	DWG. No.	312333-01



REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	333111-03

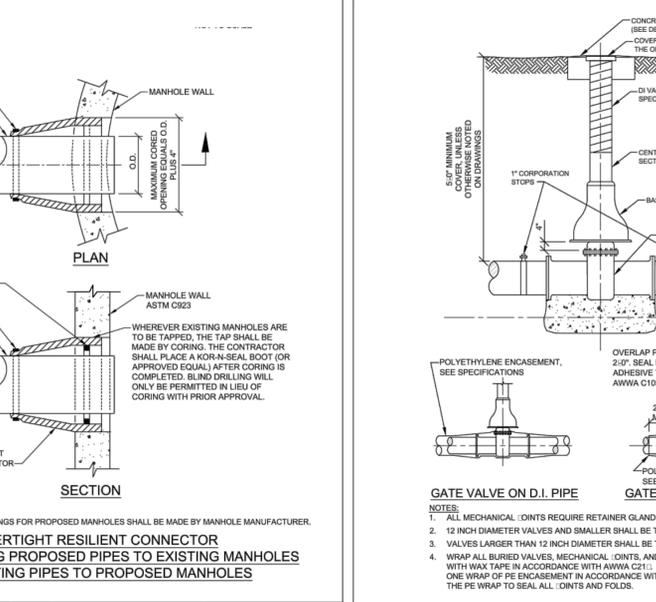


REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

CONNECTION WITH EXISTING WATER MAIN

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	331419-06

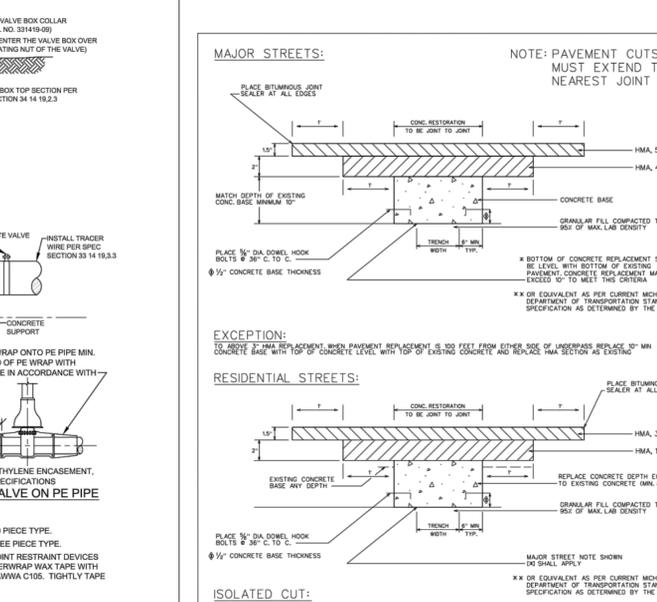


REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SEWER PIPE CONNECTION WITH MANHOLE

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	333111-05

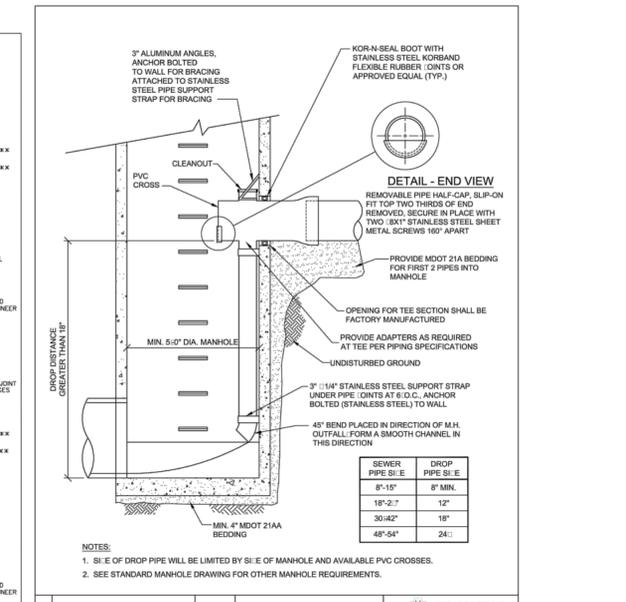


REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

VALVE BOX CONNECTION WITH MANHOLE

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	331419-04

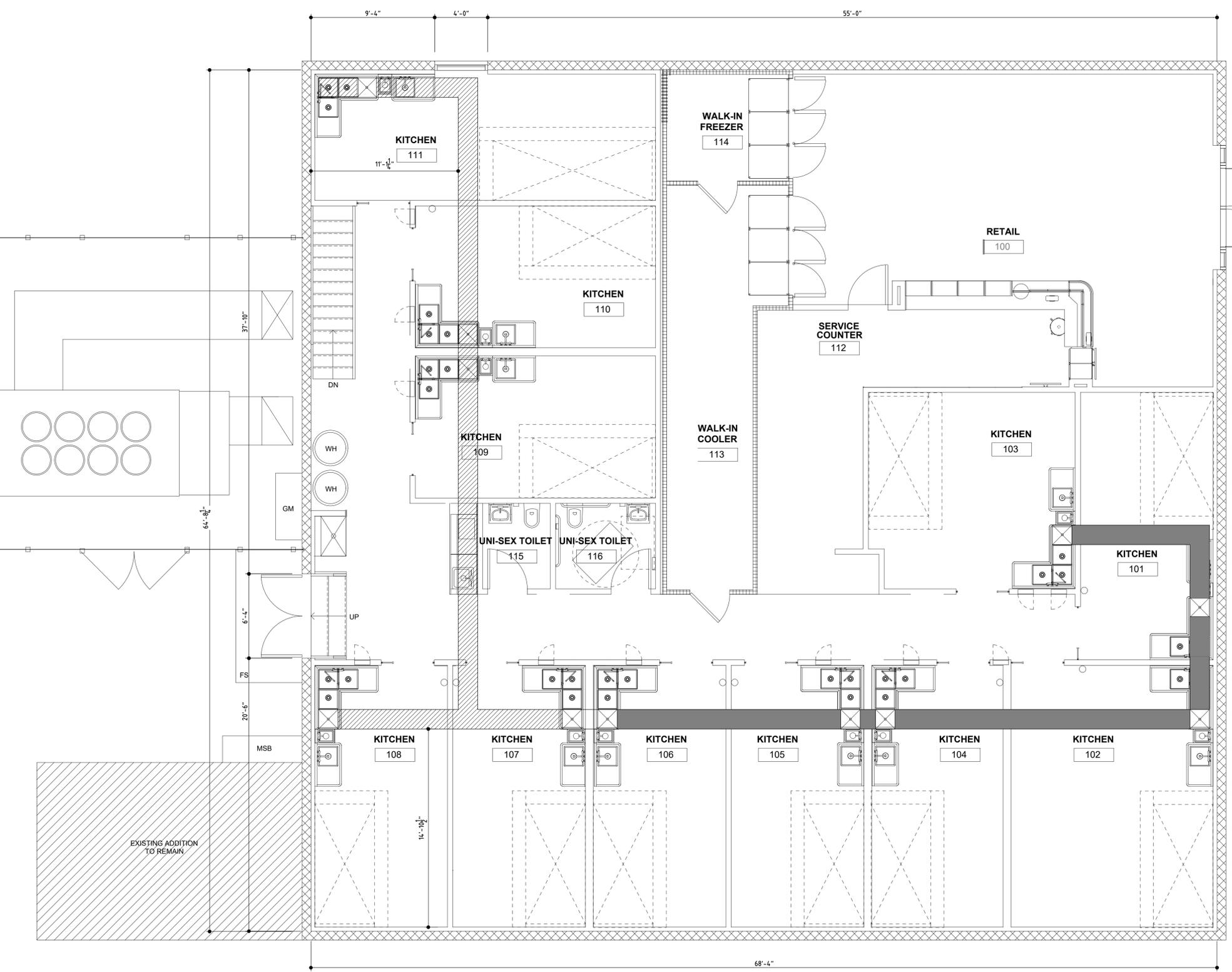


REV	DESCRIPTION	DATE
1	UPDATED	09/2020

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

MANHOLE, INTERIOR DROP

SCALE	NONE	SHEET	1 OF 1
DATE	09/2018	DWG. No.	333661-01



1 DEMO- SLAB PLAN - FIRST FLOOR

SLAB PLAN NOTES

1. ALL TRENCHES NEXT TO BEARING FOOTINGS SHALL BE A MINIMUM OF THE DEPTH OF THE TRENCH AWAY FROM THE FOOTING. ALL TRENCHES RUNNING PARALLEL TO THE STRUCTURAL WALL SHALL BE A MINIMUM OF THE DEPTH OF THE TRENCH AWAY FROM THE STRUCTURAL WALL.
2. PREPARE EXISTING SLAB TO RECEIVE NEW FINISH PATCH AND REPAIR EXISTING SLAB AS REQUIRED TO MEET FLOORING INSTALLATION TOLERANCES AS SPECIFIED.
3. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION.
4. CONCRETE POUR BACK TO MATCH COLOR AND FINISH OF EXISTING SLAB, UNLESS OTHERWISE NOTED. GC TO SUBMIT 3 MIX SAMPLES FOR COMPARISONS TO ARCHITECT AND OWNER FOR APPROVAL.

PLAN LEGEND

- AREA OF SLAB SAWCUT
- PLUMBING THROUGH JOIST
- 3' SQUARE AROUND FLOOR SINK ± 1'-0" SLOPE TO DRAIN

GENERAL NOTE:

OPTIMIZED TRENCHING LAYOUT
 -ROUTE SANITARY AND GREASE WASTE PIPING THROUGH KITCHENS AS SHOWN RATHER THAN DOWN THE MIDDLE OF CORRIDORS. THIS ALLOWS FOR THE MOST COST EFFICIENT LAYOUT OF SAWCUTTING, EXCAVATION, CONCRETE, AND PIPING. THIS LAYOUT ALSO ALLOWS FOR CONCURRENT FRAMING AND ASSOCIATED PLUMBING AND ELECTRICAL ROUGH INS, AND KEEPS CORRIDORS CLEAR FOR OVERHEAD WORK.

-AT DOUBLE LOADED CORRIDORS, AT LEAST ONE SIDE OF THE CORRIDOR SHALL HAVE TRENCHING THROUGH KITCHENS ON THE OPPOSITE SIDE OF CORRIDOR, EXCEPT WHEN THE TRENCH DISTANCE TO CROSS THE CORRIDOR IS SUBSTANTIALLY LESS THAN CONTINUING TO THE NEXT KITCHEN SINK. IN THIS CASE THE TRENCH SHALL CROSS OVER AND JOIN THE TRENCH ON THE OPPOSITE SIDE OF THE CORRIDOR.

CONCRETE POUR BACK
 ARCHITECT TO VERIFY AND APPROVE CONCRETE MIX DESIGN TO MATCH EXISTING SLAB

SLAB PLAN NOTES

1. ALL TRENCHES NEXT TO BEARING FOOTINGS SHALL BE A MINIMUM OF THE DEPTH OF THE TRENCH AWAY FROM THE FOOTING. ALL TRENCHES RUNNING PARALLEL TO THE STRUCTURAL WALL SHALL BE A MINIMUM OF THE DEPTH OF THE TRENCH AWAY FROM THE STRUCTURAL WALL.
2. PREPARE EXISTING SLAB TO RECEIVE NEW FINISH PATCH AND REPAIR EXISTING SLAB AS REQUIRED TO MEET FLOORING INSTALLATION TOLERANCES AS SPECIFIED.
3. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION.
4. CONCRETE POUR BACK TO MATCH COLOR AND FINISH OF EXISTING SLAB, UNLESS OTHERWISE NOTED. GC TO SUBMIT 3 MIX SAMPLES FOR COMPARISONS TO ARCHITECT AND OWNER FOR APPROVAL.

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES, AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE DEMOLITION PLAN NOTES). THE REMAINING SPACE SHOULD CONSIST OF EXISTING DEMISING WALLS, STRIPPED COLUMNS, EXISTING CONCRETE FLOOR, EXISTING LANDLORD BULKHEAD AT STOREFRONT AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS OTHERWISE NOTED). COORDINATE WITH ENGINEERS DRAWINGS FOR EXISTING EQUIPMENT AND FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF PUBLIC AUTHORITIES AS REQUIRED TO ENSURE SAFETY OF PERSONS & TO PREVENT DAMAGE TO EXISTING STRUCTURE & UTILITIES; CONSTRUCTION IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS NOTED OTHERWISE.

PREVENT MOVEMENT OR SETTLEMENT OF STRUCTURE(S). PROVIDE AND PLACE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY.

CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO PROPERLY SUPPORT STRUCTURE. DO NOT RESUME OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND CAPPING UTILITY SERVICES WITHIN AREAS OF DEMOLITION. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMOLITION WORK. NOTIFY THE AFFECTED UTILITY COMPANY AND BUILDING MANAGER IN ADVANCE PRIOR TO THIS WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED WITH OWNERS.

PROVIDE & MAINTAIN TEMPORARY LIGHTING & POWER AS REQUIRED FOR THE DEMOLITION & CONSTRUCTION PHASES AS INDICATED ON ENGINEERING PLAN.

PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST SETTING, TROWELLABLE, UNDERLAYMENT "ARDEX K-55" OR FLOORSTONE BY TAMUS INDUSTRIES" OR "RESURFACE BY DAYTON SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING LEVEL BY DAYTON SUPERIOR OR ARDEX 15 BY ARDEX PRODUCTS. CEMENT BINDER TO MEET ASTM C150 COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER ALTERATION WORK PERFORMED TO RESTORE SURFACES COMPLY WITH GENERAL CONDITIONS & REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN FINISH, COLOR, TEXTURE WHERE REQUIRED TO PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER AS REQUIRED TO ACCOMMODATE NEW WORK, INCLUDING THAT REQUIRED FOR PROTECTION OF EXISTING STRUCTURAL MEMBERS, PHASE DEMO IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IF ACCORDANCE WITH APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES, SO AS NOT TO DISRUPT BUSINESS OF ADJACENT TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES WITHIN AND ADJACENT TO THESE AREAS FROM DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT ARE NOT INDICATED ON DRAWING ADVISE ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND MECHANICAL EQUIPMENT U.N.O. COORDINATE WITH ELECTRICAL, MECHANICAL AND GENERAL CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED OTHERWISE.

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

EST 1998

DESIGNHAUS

ARCHITECTURE

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.459.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

3rd Ave. Detroit

3181 3rd Ave.
 Detroit, MI 48201

Slab Demolition Plan

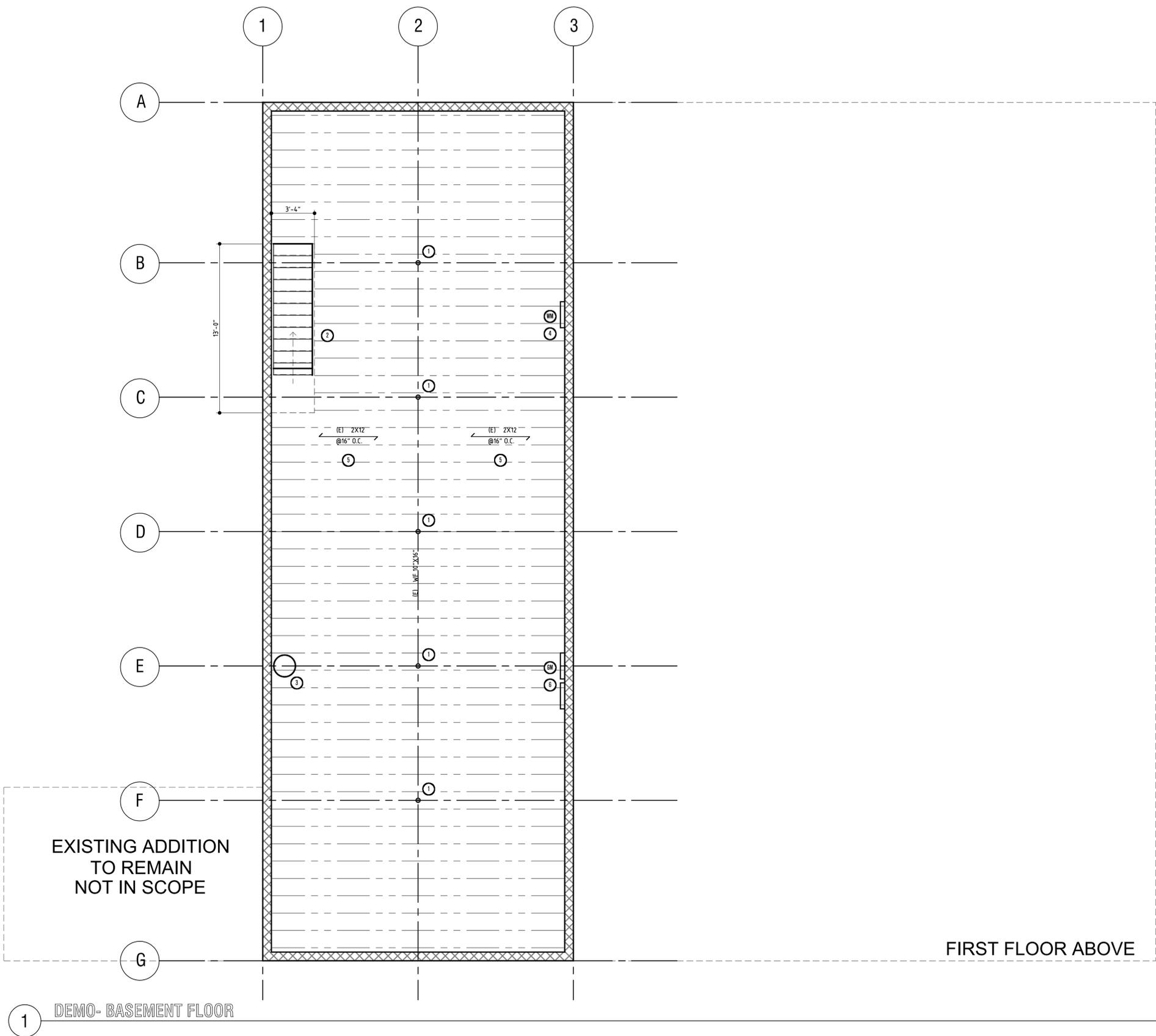
021293

AD1.0

AD1.1 Demolition Basement Plan.dwg

3/7/2022

D:\ARCCOM-004



PLAN LEGEND

	EXISTING WALL - TO REMAIN SEE ASSEMBLY TYPES
	EXISTING WALL TO BE REMOVED. SEE ASSEMBLY TYPES
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR AND FRAME TO BE REMOVED
EP	ELECTRICAL PANEL
SS	SERVICE SINK
WH	WATER HEATER

DEMOLITION TAGS

SYMBOL	DESCRIPTION
1	EXISTING STOREFRONT DOOR TO BE REMOVED
2	EXISTING INTERIOR PARTITION TO BE REMOVED
3	EXISTING SERVICE COUNTER TO BE REMOVED
4	EXISTING WALK-IN COOLER TO BE REMOVED PRIOR TO DEMO, NOT IN DEMO SCOPE
5	EXISTING DISPLAY CABINETS TO BE REMOVED
6	EXISTING CMU TO BE REMOVED FOR NEW WINDOW
7	EXISTING ELECTRICAL PANEL TO BE REMOVED + REPLACED
8	EXISTING SERVICE SINK TO BE REMOVED
9	EXISTING WATER HEATER TO BE REMOVED
10	EXISTING DOOR TO BE REMOVED
11	EXISTING FLOORING TO BE REMOVED
12	EXISTING ADDITION TO REMAIN
13	EXISTING SECURITY GATE TO REMAIN
14	EXISTING STAIRS TO BE REMOVED
15	EXISTING TOILET ROOM & PLUMBING FIXTURES TO BE REMOVED
16	EXISTING GRAB BARS TO BE REMOVED
17	NEW CMU OPENING SEE FLOOR PLANS
18	EXISTING DOOR TO BE REMOVED
19	EXISTING BUILT UP FLOOR & STEP TO BE REMOVED
20	

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES, AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE DEMOLITION PLAN NOTES). THE REMAINING SPACE SHOULD CONSIST OF EXISTING DIMMING WALLS, STRIPPED COLUMNS, EXISTING CONCRETE FLOOR, EXISTING LANDLORD BULKHEAD AT STOREFRONT AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS OTHERWISE NOTED). COORDINATE WITH ENGINEERS DRAWINGS FOR EXISTING EQUIPMENT AND FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF PUBLIC AUTHORITIES AS REQUIRED TO ENSURE SAFETY OF PERSONS & TO PREVENT DAMAGE TO EXISTING STRUCTURE & UTILITIES; CONSTRUCTION IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS NOTED OTHERWISE

PREVENT MOVEMENT OR SETTLEMENT OF STRUCTURE(S). PROVIDE AND PLACE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY.

CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO PROPERLY SUPPORT STRUCTURE. DO NOT RESUME OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND CAPPING UTILITY SERVICES WITHIN AREAS OF DEMOLITION. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMOLITION WORK. NOTIFY THE AFFECTED UTILITY COMPANY AND BUILDING MANAGER IN ADVANCE PRIOR TO THIS WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED WITH OWNERS

PROVIDE & MAINTAIN TEMPORARY LIGHTING & POWER AS REQUIRED FOR THE DEMOLITION & CONSTRUCTION PHASES AS INDICATED ON ENGINEERING PLAN

PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST SETTING, TROWELLABLE, UNDERLAYMENT, "ARDEX K-55" OR FLOORSTONE BY TAMUS INDUSTRIES" OR "RESURFACE BY DAYTON SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING LEVEL 1 BY DAYTON SUPERIOR OR ARDEX 15 BY ARDEX PRODUCTS
CEMENT BINDER TO MEET ASTM C150 COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER ALTERATION WORK PERFORMED TO RESTORE SURFACES COMPLY WITH GENERAL CONDITIONS & REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN FINISH, COLOR, TEXTURE WHERE REQUIRED TO PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER AS REQUIRED TO ACCOMMODATE NEW WORK, INCLUDING THAT REQUIRED FOR PROTECTION OF EXISTING STRUCTURAL MEMBERS, PHASE DEMO IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IF ACCORDANCE WITH APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES, SO AS NOT TO DISRUPT BUSINESS OF ADJACENT TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES WITHIN AND ADJACENT TO THESE AREAS FROM DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT ARE NOT INDICATED ON DRAWING ADVISE ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND MECHANICAL EQUIPMENT U.N.O. COORDINATE WITH ELECTRICAL, MECHANICAL AND GENERAL CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED OTHERWISE.

DESIGNHAUS EST 1998
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

**Demolition
Basement Plan**

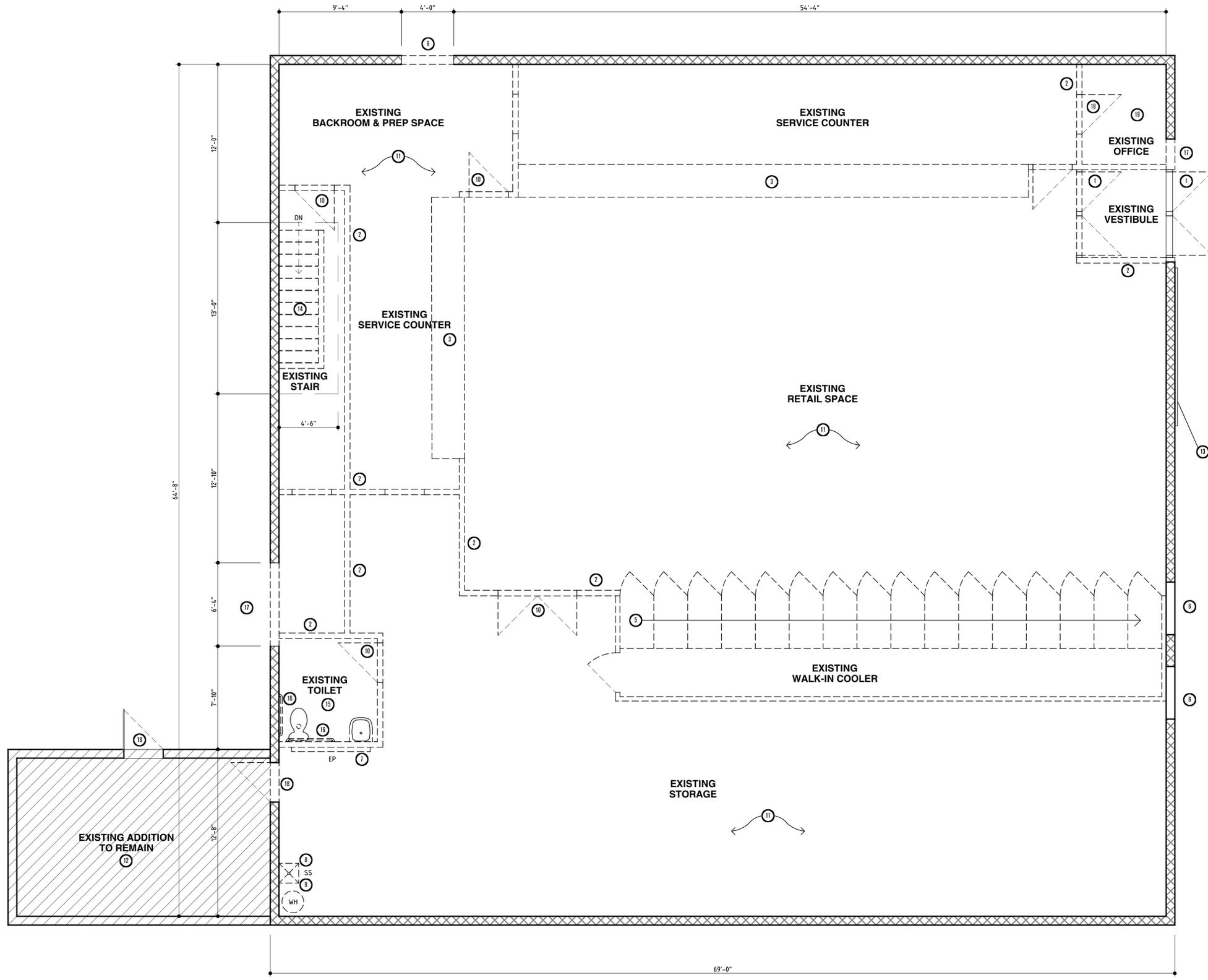
021293

AD1.1

FIRST FLOOR ABOVE



SCALE: 1/4" = 1'



PLAN LEGEND

	EXISTING WALL - TO REMAIN SEE ASSEMBLY TYPES
	EXISTING WALL TO BE REMOVED. SEE ASSEMBLY TYPES
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR AND FRAME TO BE REMOVED
EP	ELECTRICAL PANEL
SS	SERVICE SINK
WH	WATER HEATER

DEMOLITION TAGS

SYMBOL	DESCRIPTION
1	EXISTING STOREFRONT DOOR TO BE REMOVED
2	EXISTING INTERIOR PARTITION TO BE REMOVED
3	EXISTING SERVICE COUNTER TO BE REMOVED
4	EXISTING WALK-IN COOLER TO BE REMOVED PRIOR TO DEMO, NOT IN DEMO SCOPE
5	EXISTING DISPLAY CABINETS TO BE REMOVED
6	EXISTING CMU TO BE REMOVED FOR NEW WINDOW
7	EXISTING ELECTRICAL PANEL TO BE REMOVED + REPLACED
8	EXISTING SERVICE SINK TO BE REMOVED
9	EXISTING WATER HEATER TO BE REMOVED
10	EXISTING DOOR TO BE REMOVED
11	EXISTING FLOORING TO BE REMOVED
12	EXISTING ADDITION TO REMAIN
13	EXISTING SECURITY GATE TO REMAIN
14	EXISTING STAIRS TO BE REMOVED
15	EXISTING TOILET ROOM & PLUMBING FIXTURES TO BE REMOVED
16	EXISTING GRAB BARS TO BE REMOVED
17	NEW CMU OPENING SEE FLOOR PLANS
18	EXISTING DOOR TO BE REMOVED
19	EXISTING BUILT UP FLOOR & STEP TO BE REMOVED
20	

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE
CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES,
AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE
DEMOLITION PLAN NOTES). THE REMAINING SPACE
SHOULD CONSIST OF EXISTING DIMENSION WALLS,
STRIPPED COLUMNS, EXISTING CONCRETE FLOOR,
EXISTING LANDLORD BULKHEAD AT STOREFRONT
AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS
OTHERWISE NOTED). COORDINATE WITH ENGINEERS
DRAWINGS FOR EXISTING EQUIPMENT AND
FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH
LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF
PUBLIC AUTHORITIES AS REQUIRED TO ENSURE
SAFETY OF PERSONS & TO PREVENT DAMAGE TO
EXISTING STRUCTURE & UTILITIES; CONSTRUCTION
IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS
AND NOTIFY ARCHITECT OF ALL DISCREPANCIES
PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS
NOTED OTHERWISE

PREVENT MOVEMENT OR SETTLEMENT OF
STRUCTURE(S). PROVIDE AND PLACE BRACING OR
SHORING AND BE RESPONSIBLE FOR SAFETY AND
SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR
SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY

CEASE OPERATIONS AND NOTIFY THE ARCHITECT
IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS
TO BE ENDANGERED. TAKE PRECAUTIONS TO
PROPERLY SUPPORT STRUCTURE. DO NOT RESUME
OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND
CAPPING UTILITY SERVICES WITHIN AREAS OF
DEMOLITION. DISCONNECT AND STUB OFF ALL
UTILITIES AFFECTED BY THE DEMOLITION WORK
NOTIFY THE AFFECTED UTILITY COMPANY AND
BUILDING MANAGER IN ADVANCE PRIOR TO THIS
WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED
WITH OWNERS

PROVIDE & MAINTAIN TEMPORARY LIGHTING &
POWER AS REQUIRED FOR THE DEMOLITION &
CONSTRUCTION PHASES AS INDICATED ON
ENGINEERING PLAN

PLACE MARKERS TO INDICATE LOCATION OF
DISCONNECTED SERVICES. IDENTIFY SERVICE LINES
AND CAPPING LOCATIONS ON PROJECT RECORD
DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST
SETTING, TROWELLABLE, UNDERLAYMENT,
"ARDEX K-55" OR FLOORSTONE BY TAMUS
INDUSTRIES" OR "RESURFACE BY DAYTON
SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING
LEVEL 1 BY DAYTON SUPERIOR OR ARDEX 15 BY
ARDEX PRODUCTS
CEMENT BINDER TO MEET ASTM C150
COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS
SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL
MEANS OF EGRESS AND ALL FIRE PROTECTION
FEATURES FOR PORTIONS OF THE BUILDING THAT
REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION
WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS
FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS
PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER
ALTERATION WORK PERFORMED TO RESTORE
SURFACES COMPLY WITH GENERAL CONDITIONS &
REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN
FINISH, COLOR, TEXTURE WHERE REQUIRED TO
PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE
SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER
AS REQUIRED TO ACCOMMODATE NEW WORK,
INCLUDING THAT REQUIRED FOR PROTECTION OF
EXISTING STRUCTURAL MEMBERS, PHASE DEMO IN
ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IF ACCORDANCE WITH
APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF
THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES,
SO AS NOT TO DISRUPT BUSINESS OF ADJACENT
TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES
WITHIN AND ADJACENT TO THESE AREAS FROM
DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT
ARE NOT INDICATED ON DRAWING ADVISE
ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA
UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND
MECHANICAL EQUIPMENT U.N.O. COORDINATE WITH
ELECTRICAL, MECHANICAL AND GENERAL
CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED
OTHERWISE.

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

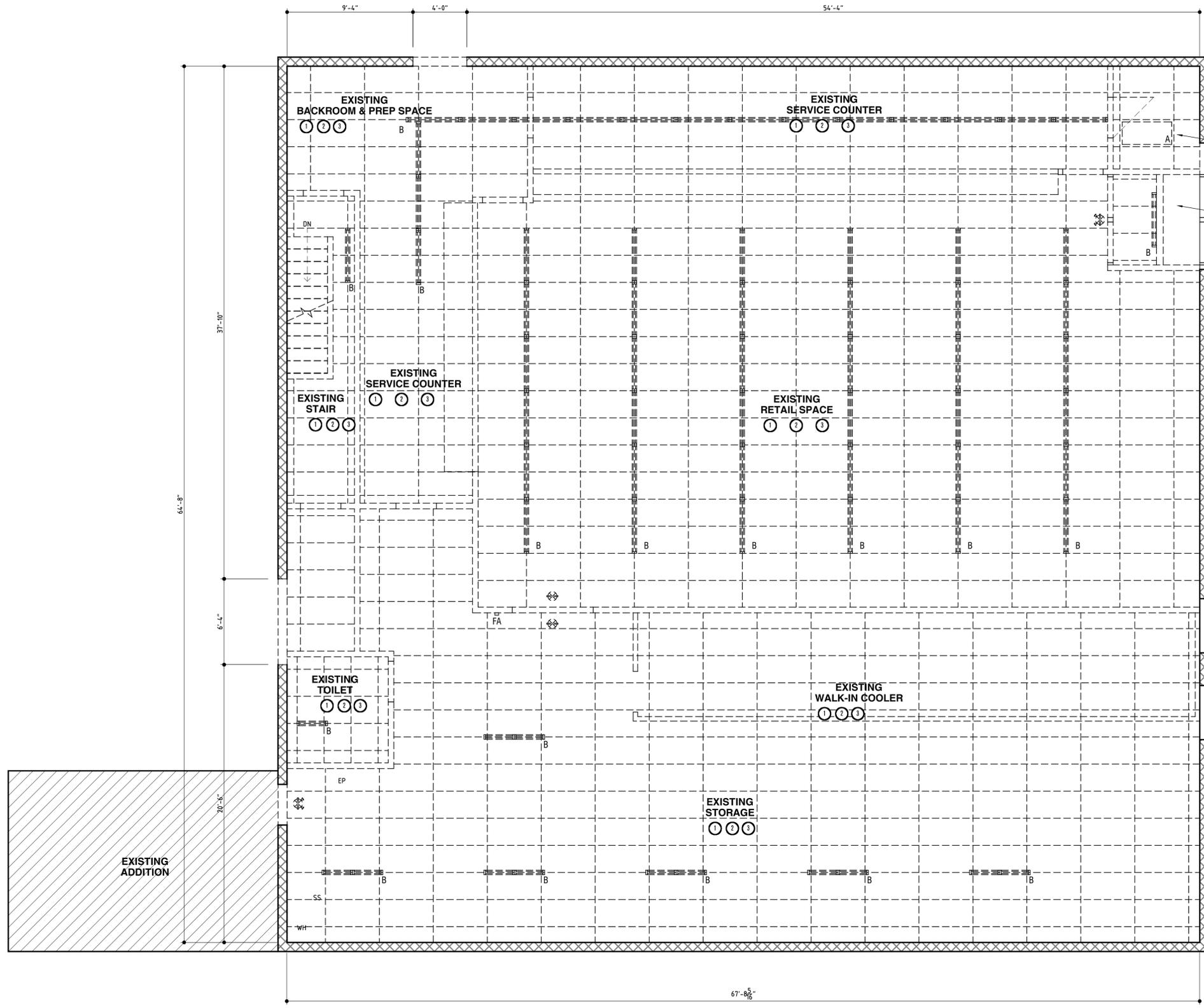
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Demolition First Floor

021293

AD1.2



PLAN LEGEND	
	EXISTING WALL - TO REMAIN SEE ASSEMBLY TYPES
	EXISTING WALL TO BE REMOVED. SEE ASSEMBLY TYPES
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR FRAME TO BE REMOVED
	EXISTING 2x4 SUSPENDED CEILING GRID LAY-IN LIGHT FIXTURE
	LAY-IN CEILING TILE TO BE REMOVED
	EXIT SIGN WITH EMERGENCY LIGHT TO BE REMOVED
	EXIT LIGHT TO BE REMOVED
	LED TRACK LIGHTS TO BE REMOVED
	FIRE ALARM

REFLECTING CEILING PLAN	
SYMBOL	DESCRIPTION
	EXISTING LIGHT FIXTURE TO BE REMOVED
	EXISTING SUSPENDED CEILING TO BE REMOVED
	EXISTING EXIT SIGNS TO BE REMOVED

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES, AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE DEMOLITION PLAN NOTES). THE REMAINING SPACE SHOULD CONSIST OF EXISTING DIMENSION WALLS, STRIPPED COLUMNS, EXISTING CONCRETE FLOOR, EXISTING LANDLORD BULKHEAD AT STOREFRONT AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS OTHERWISE NOTED). COORDINATE WITH ENGINEERS DRAWINGS FOR EXISTING EQUIPMENT AND FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF PUBLIC AUTHORITIES AS REQUIRED TO ENSURE SAFETY OF PERSONS & TO PREVENT DAMAGE TO EXISTING STRUCTURE & UTILITIES. CONSTRUCTION IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS NOTED OTHERWISE.

PREVENT MOVEMENT OR SETTLEMENT OF STRUCTURE(S). PROVIDE AND PLACE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY.

CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO PROPERLY SUPPORT STRUCTURE. DO NOT RESUME OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND CAPPING UTILITY SERVICES WITHIN AREAS OF DEMOLITION. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMOLITION WORK. NOTIFY THE AFFECTED UTILITY COMPANY AND BUILDING MANAGER IN ADVANCE PRIOR TO THIS WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED WITH OWNERS.

PROVIDE & MAINTAIN TEMPORARY LIGHTING & POWER AS REQUIRED FOR THE DEMOLITION & CONSTRUCTION PHASES AS INDICATED ON ENGINEERING PLAN.

PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST SETTING, TROWELABLE, UNDERLAYMENT, "ARDEX K-55" OR FLOORSTONE BY TAMUS INDUSTRIES" OR "RESURFACE BY DAYTON SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING LEVEL 1 BY DAYTON SUPERIOR OR ARDEX 15 BY ARDEX PRODUCTS
CEMENT BINDER TO MEET ASTM C150
COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS
SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER ALTERATION WORK PERFORMED TO RESTORE SURFACES COMPLY WITH GENERAL CONDITIONS & REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN FINISH, COLOR, TEXTURE WHERE REQUIRED TO PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER AS REQUIRED TO ACCOMMODATE NEW WORK, INCLUDING THAT REQUIRED FOR PROTECTION OF EXISTING STRUCTURAL MEMBERS, PHASE DEMO IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IN ACCORDANCE WITH APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES, SO AS NOT TO DISRUPT BUSINESS OF ADJACENT TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES WITHIN AND ADJACENT TO THESE AREAS FROM DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT ARE NOT INDICATED ON DRAWING ADVISE ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND MECHANICAL EQUIPMENT U.N.O. COORDINATE WITH ELECTRICAL, MECHANICAL AND GENERAL CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED OTHERWISE.

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

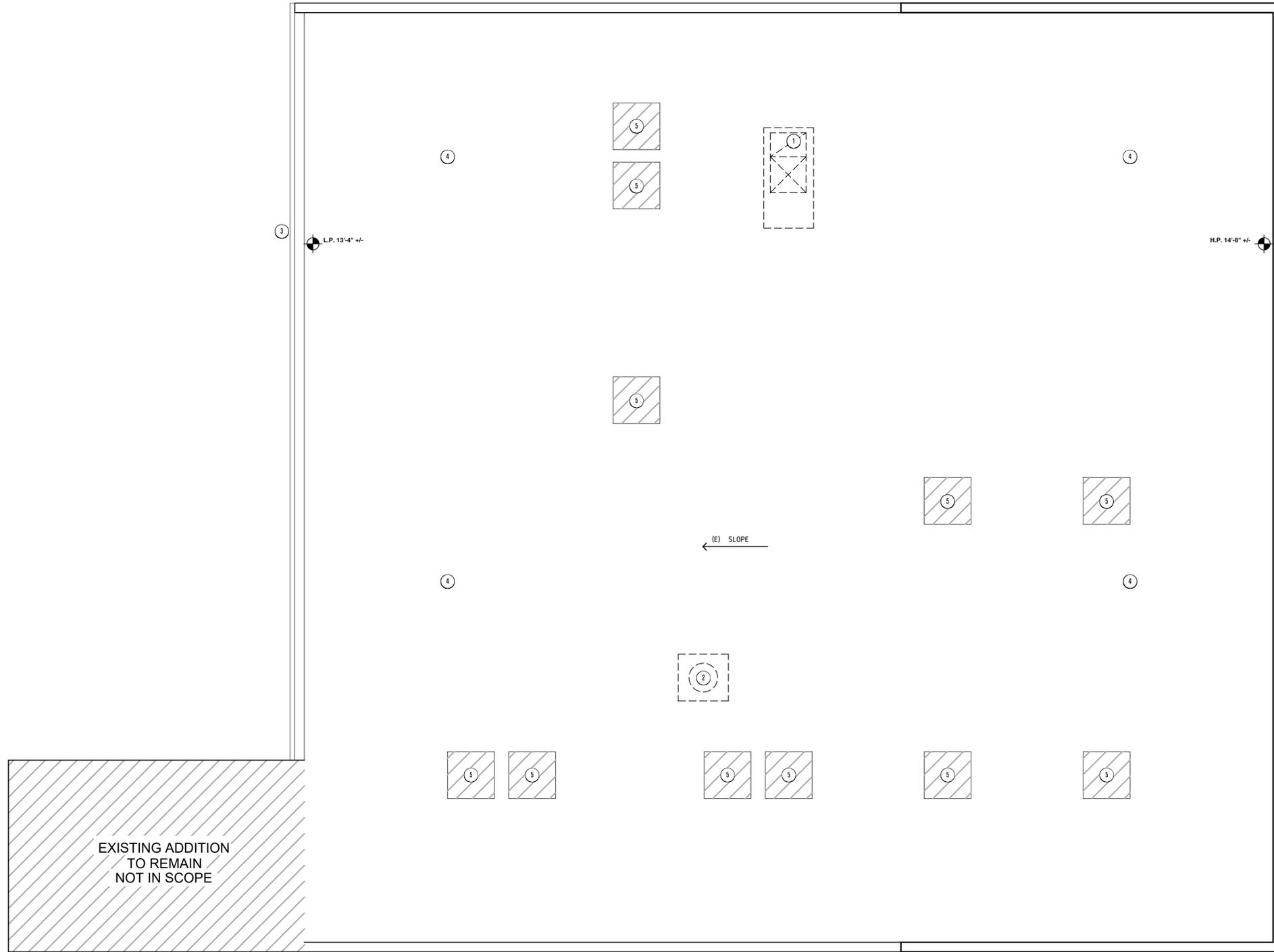
3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Demolition First Floor Reflected Ceiling

021293

AD1.3

1 DEMO- REFLECTED CEILING PLAN - FIRST FLOOR



PLAN LEGEND	
	EXHAUST FAN. SEE MECHANICAL DRAWINGS (TYP.)
(E)	EXISTING
	EXISTING WALL - TO REMAIN SEE ASSEMBLY TYPES
	EXISTING WALL TO BE REMOVED. SEE ASSEMBLY TYPES

KEY TAGS	
SYMBOL	DESCRIPTION
①	EXISTING RTU TO BE REMOVED
②	EXISTING MUA TO BE REMOVED
③	EXISTING GUTTER TO REMAIN FIELD VERIFY REPAIR AS REQUIRED
④	EXISTING ROOF TO REMAIN FIELD VERIFY REPAIR AS REQUIRED
⑤	LOCATION OF NEW EXHAUST FAN UNITS. COORDINATE WITH MECHANICAL DRAWINGS (TYP.)

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES, AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE DEMOLITION PLAN NOTES). THE REMAINING SPACE SHOULD CONSIST OF EXISTING DIMENSION WALLS, STRIPPED COLUMNS, EXISTING CONCRETE FLOOR, EXISTING LANDLORD BULKHEAD AT STOREFRONT AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS OTHERWISE NOTED). COORDINATE WITH ENGINEERS DRAWINGS FOR EXISTING EQUIPMENT AND FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF PUBLIC AUTHORITIES AS REQUIRED TO ENSURE SAFETY OF PERSONS & TO PREVENT DAMAGE TO EXISTING STRUCTURE & UTILITIES; CONSTRUCTION IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS NOTED OTHERWISE.

PREVENT MOVEMENT OR SETTLEMENT OF STRUCTURE(S). PROVIDE AND PLACE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY.

CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO PROPERLY SUPPORT STRUCTURE. DO NOT RESUME OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND CAPPING UTILITY SERVICES WITHIN AREAS OF DEMOLITION. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMOLITION WORK NOTIFY THE AFFECTED UTILITY COMPANY AND BUILDING MANAGER IN ADVANCE PRIOR TO THIS WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED WITH OWNERS

PROVIDE & MAINTAIN TEMPORARY LIGHTING & POWER AS REQUIRED FOR THE DEMOLITION & CONSTRUCTION PHASES AS INDICATED ON ENGINEERING PLAN

PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST SETTING, TROWELABLE, UNDERLAYMENT, "ARDEX K-55" OR FLOORSTONE BY TAMUS INDUSTRIES" OR "RESURFACE BY DAYTON SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING LEVEL 1 BY DAYTON SUPERIOR OR ARDEX 15 BY ARDEX PRODUCTS
CEMENT BINDER TO MEET ASTM C150
COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS
SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER ALTERATION WORK PERFORMED TO RESTORE SURFACES COMPLY WITH GENERAL CONDITIONS & REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN FINISH, COLOR, TEXTURE WHERE REQUIRED TO PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER AS REQUIRED TO ACCOMMODATE NEW WORK, INCLUDING THAT REQUIRED FOR PROTECTION OF EXISTING STRUCTURAL MEMBERS, PHASE DEMO IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IF ACCORDANCE WITH APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES, SO AS NOT TO DISRUPT BUSINESS OF ADJACENT TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES WITHIN AND ADJACENT TO THESE AREAS FROM DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT ARE NOT INDICATED ON DRAWING ADVISE ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND MECHANICAL EQUIPMENT U.N.O. COORDINATE WITH ELECTRICAL, MECHANICAL AND GENERAL CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED OTHERWISE.

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.459.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

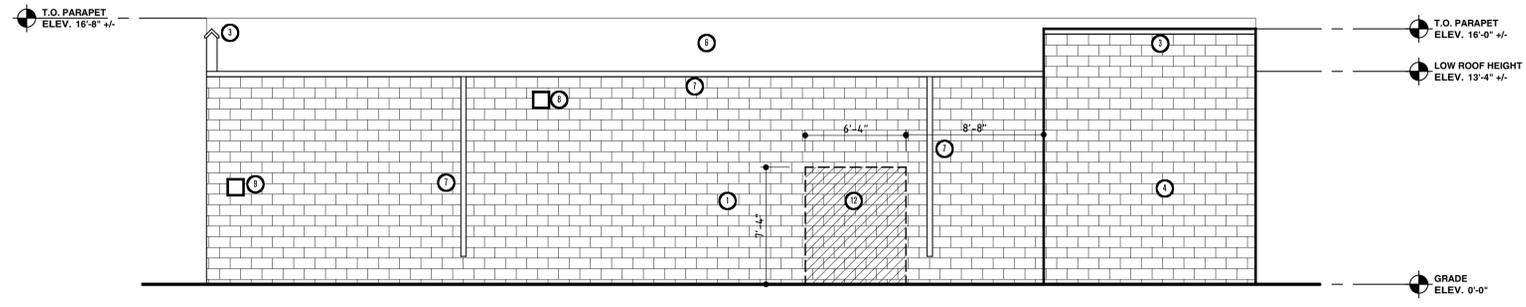
Demolition Roof
 Plan

021293

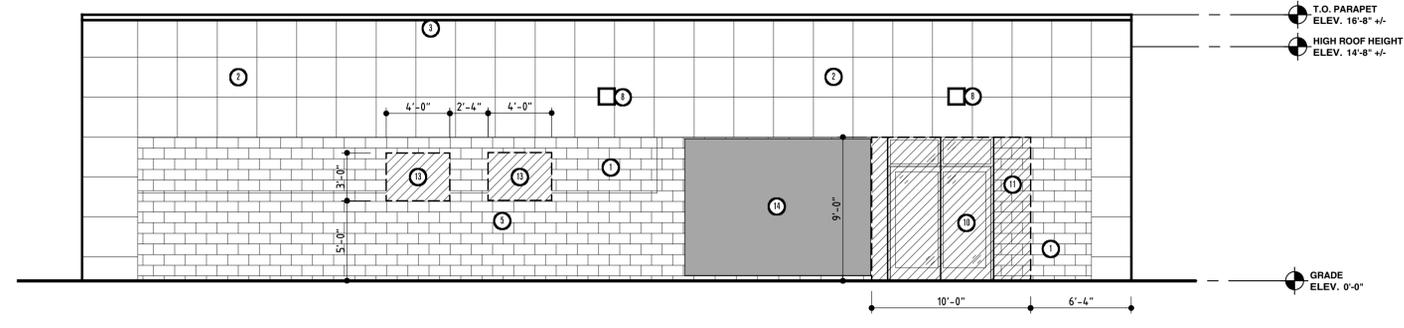
AD1.4

1 DEMO- ROOF PLAN

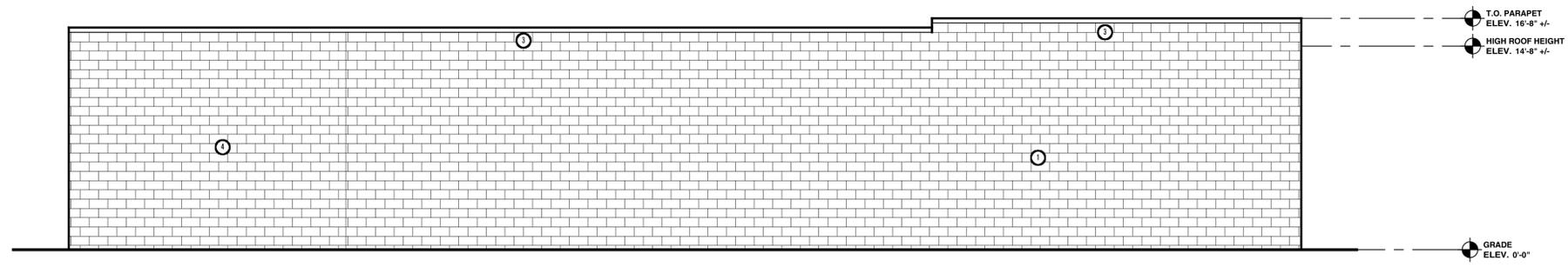
SCALE: 1/4" = 1'



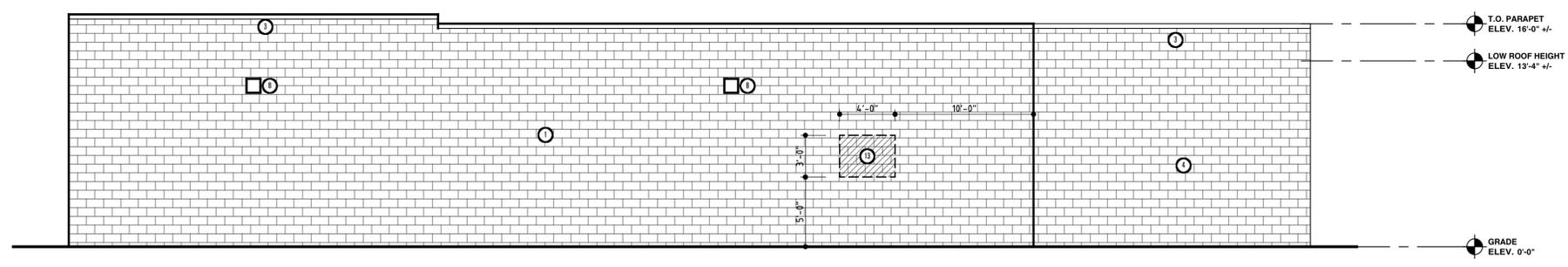
4 WEST - EXTERIOR ELEVATION - DEMO
SCALE: 1/4" = 1'



3 EAST - EXTERIOR ELEVATION - DEMO
SCALE: 1/4" = 1'



2 SOUTH - EXTERIOR ELEVATION - DEMO
SCALE: 1/4" = 1'



1 NORTH - EXTERIOR ELEVATION - DEMO
SCALE: 1/4" = 1'

ELEVATION LEGEND

[Hatched Box]	EXISTING SECTION TO BE REMOVED
---------------	--------------------------------

PLAN LEGEND

SYMBOL	DESCRIPTION
1	EXISTING MASONRY WALL TO REMAIN FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED
2	EXISTING CEMENT BOARD SIDING TO REMAIN FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED
3	EXISTING CAP FLASHING TO REMAIN FIELD VERIFY, REPAIR & REPLACE AS REQUIRED
4	MASONRY BUILDING ADDITION TO REMAIN UN-ALTERED NOT IN SCOPE
5	EXISTING MASONRY SILL TO REMAIN FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED
6	MASONRY WALL BEYOND
7	EXISTING MASONRY TO REMAIN FIELD VERIFY, REPLACE AS REQUIRED
8	EXISTING SURFACE MOUNTED LIGHT FIXTURE TO BE REPLACED. SEE ELEVATIONS
9	EXISTING ELECTRICAL BOX TO BE REMOVED AND REPLACED. SEE ELECTRICAL ELEVATIONS
10	EXISTING STOREFRONT GLAZING SYSTEM TO BE REMOVED.
11	EXISTING CMU TO BE REMOVED FOR NEW STOREFRONT GLAZING SYSTEM SEE FLOOR PLANS & ELEVATIONS
12	EXISTING CMU TO BE REMOVED FOR NEW DOUBLE HOLLOW METAL DOOR SEE FLOOR PLAN & ELEVATIONS
13	EXISTING CMU TO BE REMOVED FOR NEW PUNCH IN WINDOWS SEE FLOOR PLANS & ELEVATIONS
14	EXISTING SECURITY GATE TO REMAIN FIELD VERIFY & REPAIR AS REQUIRED
15	-

GENERAL NOTE:
 DEMO ONLY THE FOLLOWING:
 1. NON-LOAD BEARING INTERIOR PARTITIONS
 2. REMOVE ALL INTERIOR FINISHES AS REQUIRED.
 3. REPAIR & TUCK POINT AS REQUIRED.
 4. NO STRUCTURAL DEMOLITION WILL BE REQUIRED
 5. DISCONNECT AND/OR CAP ALL PLUMBING AS REQUIRED.
 7. ALL ELECTRICAL OUTLETS, SWITCHES & CONDUIT TO BE REMOVED AS REQUIRED.
 8. EXISTING STOREFRONT DOORS IN MAIN STORE TO BE REMOVED
 9. -
 10. -
 11. -

DEMOLITION NOTES

IT IS THE INTENT THAT THE ENTIRE SPACE IS TO BE CLEARED OF ALL PARTITIONS, FIXTURES, FINISHES, AND SIGNAGE (UNLESS OTHERWISE NOTED IN THE DEMOLITION PLAN NOTES). THE REMAINING SPACE SHOULD CONSIST OF EXISTING DEMISING WALLS, STRIPPED COLUMNS, EXISTING CONCRETE FLOOR EXISTING LANDLORD BULKHEAD AT STOREFRONT AND EXPOSED UNDERSIDE OF STRUCTURE (UNLESS OTHERWISE NOTED). COORDINATE WITH ENGINEERS DRAWINGS FOR EXISTING EQUIPMENT AND FIXTURES TO REMAIN.

CONDUCT WORK, OPERATION IN COMPLIANCE WITH LAWS, CODE, ORDINANCES, AND RESTRICTIONS OF PUBLIC AUTHORITIES AS REQUIRED TO ENSURE SAFETY OF PERSONS & TO PREVENT DAMAGE TO EXISTING STRUCTURE & UTILITIES. CONSTRUCTION IN PROGRESS & OTHER PROPERTIES.

CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO START OF DEMOLITION.

EXISTING SPRINKLER LINES TO REMAIN UNLESS NOTED OTHERWISE

PREVENT MOVEMENT OR SETTLEMENT OF STRUCTURE(S). PROVIDE AND PLACE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY

CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF SAFETY OR STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO PROPERLY SUPPORT STRUCTURE. DO NOT RESUME OPERATIONS UNTIL SAFETY IS RESTORED.

ARRANGE FOR DISCONNECTING, REMOVING AND CAPPING UTILITY SERVICES WITHIN AREAS OF DEMOLITION. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMOLITION WORK NOTIFY THE AFFECTED UTILITY COMPANY AND BUILDING MANAGER IN ADVANCE PRIOR TO THIS WORK.

ALL SERVICES DISCONNECTED TO BE COORDINATED WITH OWNERS

PROVIDE & MAINTAIN TEMPORARY LIGHTING & POWER AS REQUIRED FOR THE DEMOLITION & CONSTRUCTION PHASES AS INDICATED ON ENGINEERING PLAN

PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.

CONCRETE: PATCH & REPAIR: NON-SHRINK, FAST SETTING, TROWELLABLE, UNDERLAYMENT, ARDEX K-55" OR FLOORSTONE BY TAPUS INDUSTRIES" OR "RESURFACE BY DAYTON SUPERIOR."

CONCRETE FILL TO BE SELF-LEVELING LEVEL 1 BY DAYTON SUPERIOR OR ARDEX 15 BY ARDEX PRODUCTS
 CEMENT BINDER TO MEET ASTM C150
 COMPRESSIVE STRENGTH OF 4100 PSI @ 28 DAYS
 SEE SPECIFICATIONS FOR FURTHER INFORMATION.

CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.

REFER TO MECHANICAL ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.

ALL HAZARDOUS WASTE MUST BE HANDLED AS PER FEDERAL, STATE AND LOCAL REGULATIONS.

CUTTING, PATCHING, REPAIRING & OTHER ALTERATION WORK PERFORMED TO RESTORE SURFACES COMPLY WITH GENERAL CONDITIONS & REQUIREMENTS.

MATCH EXISTING EXPOSED SURFACE MATERIALS IN FINISH, COLOR, TEXTURE WHERE REQUIRED TO PATCH OR EXTEND EXISTING CONSTRUCTION.

ALL DEMOLITION TO FOLLOW ANSI A10.6 - SEE SPECIFICATIONS FOR FURTHER INFORMATION.

DEMOLISH IN AN ORDERLY AND CAREFUL MANNER AS REQUIRED TO ACCOMMODATE NEW WORK, INCLUDING THAT REQUIRED FOR PROTECTION OF EXISTING STRUCTURAL MEMBERS. PHASE DEMO IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

PERFORM DEMOLITION IN ACCORDANCE WITH APPLICABLE AUTHORITIES HAVING JURISDICTION.

REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, AT NO COST TO THE OWNER.

DEMOLISH WITHOUT EXCESSIVE NOISE OR FUMES, SO AS NOT TO DISRUPT BUSINESS OF ADJACENT TENANTS.

PROTECT EXISTING UTILITIES AND SERVICES WITHIN AND ADJACENT TO THESE AREAS FROM DEMOLITION.

IF UTILITIES OR SERVICES ARE UNCOVERED THAT ARE NOT INDICATED ON DRAWING ADVISE ARCHITECT, AND DO NOT WORK IN IMMEDIATE AREA UNTIL INDICATED BY ARCHITECT.

REMOVE ALL UNUSED ELECTRICAL AND MECHANICAL EQUIPMENT UNO. COORDINATE WITH ELECTRICAL, MECHANICAL AND GENERAL CONTRACTOR.

ALL FINISHES TO BE REMOVED UNLESS NOTED OTHERWISE.

DESIGNHAUS ARCHITECTURE
 EST 1998

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

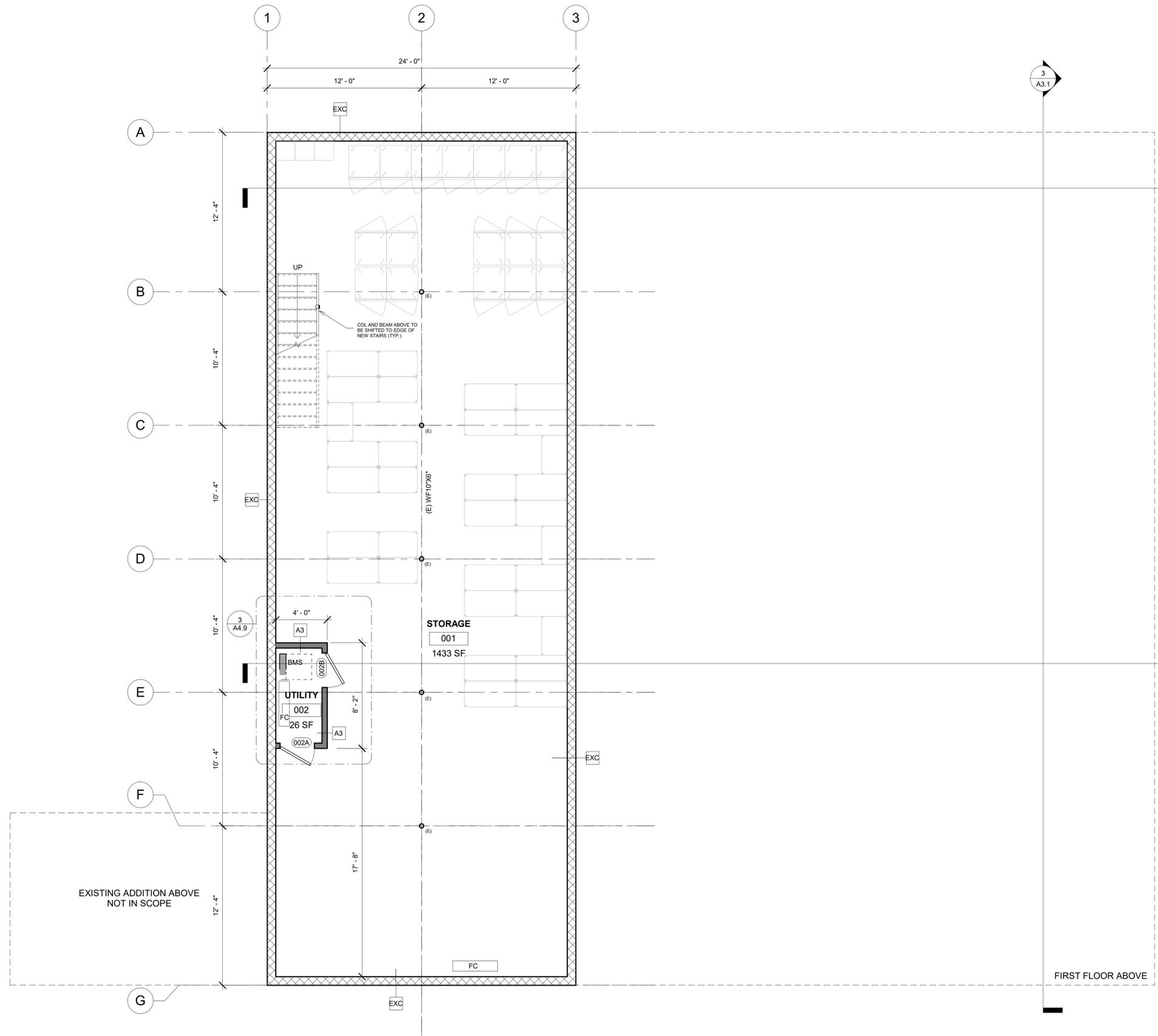
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

PETER M. STUHLREYER
 ARCHITECT
 No. 44608
 LICENSED ARCHITECT

3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

Demolition Exterior Elevations

021293
AD2.1



1 BASEMENT PLAN

- ### GENERAL NOTES
1. NOTIFY ARCHITECT IN WRITING OF CONFLICTS OR OTHER DISCREPANCIES PRIOR TO PROCEEDING WITH WORK OR AREAS AFFECTED.
 2. DOOR LAMB LOCATION SHALL BE # TYP. FROM ADJACENT WALL UNLESS NOTED OTHERWISE. MAINTAIN DOOR CLEARANCES AS REQUIRED.
 3. UNDERCUT OF DOORS TO CLEAR TOP OF FLOOR FINISHES BY 3/4" UNLESS OTHERWISE NOTED.
 4. PATCH AND REPAIR ALL SURFACES DAMAGED AS A RESULT OF WORK PERFORMED ON THIS PROJECT. PATCH & REPAIR EXISTING SURFACES AS REQUIRED TO RECEIVE NEW FINISHES.
 5. PATCH AND REPAIR ALL EXISTING WALLS, COLLARS, FLOORS AND SURFACES SCHEDULED TO REMAIN AS REQUIRED TO LEAVE THEM SMOOTH AND EVEN TO RECEIVE NEW SCHEDULED FINISHES.
 6. NEW GWB CONSTRUCTION ADJOINING EXISTING CONSTRUCTION IN PLANE SHALL BE FLUSH WITH NO VISIBLE JOINTS, UNLESS NOTED OTHERWISE.
 7. GC TO COORDINATE INSTALLATION OF ALL CABINETS AND DEVICES AS INDICATED ON DRAWINGS TO ENSURE PROPER WALL RECESS PROVIDED. ALL DEVICES INSTALLED IN EXISTING FIRE RATED PARTITIONS SHALL RECEIVE FIRE RATED J-RIB, GC TO MAINTAIN INTEGRITY OF EXISTING FIRE RATINGS WHERE OCCURS.
 8. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN ALL PARTITION LOCATIONS, DIMENSIONS AND TYPES. ALL DOOR AND WINDOW LOCATIONS SHALL BE AS SHOWN ON CONSTRUCTION PLAN. IN CASE OF CONFLICT NOTIFY ARCHITECT.
 9. CONTRACTOR TO PROVIDE ALL REQUIRED IN WALL WALL BLOCKING FOR BOTH CONTRACT AND OWNER FURNISHED ITEMS, INCLUDING LOCKERS, TV, CASEWORK DISPLAYS AND TOILET ACCESSORIES WHETHER THOSE ITEMS ARE INSTALLED BY THE CONTRACTOR OR BY OWNER AND VENDORS PRIOR TO CLOSING IN WALLS.
 10. SEE REFLECTED CEILING PLAN FOR SIKHED / SOFFIT HEIGHTS AND LOCATIONS. WALL TYPES SHOWN CONTINUE IF ABOVE FINISHED CEILING UNLESS NOTED OTHERWISE.
 11. F.V. EXISTING ROOF CONDITION. REPAIR & REPLACE AS REQUIRED.
 - 12.
 - 13.
 - 14.
 - 15.

DIMENSION

INTERIOR PARTITIONS	FACE OF STUD TO FACE OF STUD
MASONRY	FACE OF MASONRY

PLAN LEGEND

MARK	DESCRIPTION
	NEW GYP PARTITION AT EXISTING CMU SEE ASSEMBLY TYPES
	WALK-IN COOLER PARTITION SEE ASSEMBLY TYPES
	INTERIOR PARTITION SEE ASSEMBLY TYPES
	NEW DOOR SEE DOOR SCHEDULE
	DOOR TAG
	SECURITY FENCE
	WALL ASSEMBLY TAG
	CONSTRUCTION ABOVE
	CONSTRUCTION BELOW
	BACKFLOW PROTECTOR
	EXISTING TO REMAIN - REPAIR AS REQ'D
	ELECTRICAL METER
	ELECTRICAL PANEL
	FIRE SUPPRESSION EQUIPMENT
	FIRE METER
	FROST SLAB - SEE DETAIL
	GAS METER
	MAIN DISTRIBUTION PANEL
	WATER METER
	CL OF COLUMN
	4" PIPE COLUMN
	EXISTING SECURITY GATE
	EXISTING BOLLARDS
	CIRCUIT CABINET
	FAN COIL UNIT

ASSEMBLY TYPES

MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3' 3 5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	PARTITION TYPE 'A6' 6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3' 3 5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	PARTITION TYPE 'B6' 6" MTL STUD & GYP BD. WALL HEIGHT = B.O. OF ROOF DECK	B6/A6.1
C3	PARTITION TYPE 'C3' 3 5/8" MTL STUD & GYP. BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	PARTITION TYPE 'E3' 3 5/8" MTL STUD & GYP. BD. AT WALK-IN COOLER	E3/A6.1
F3	-	-
W4	PARTITION TYPE W4 WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 6" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL



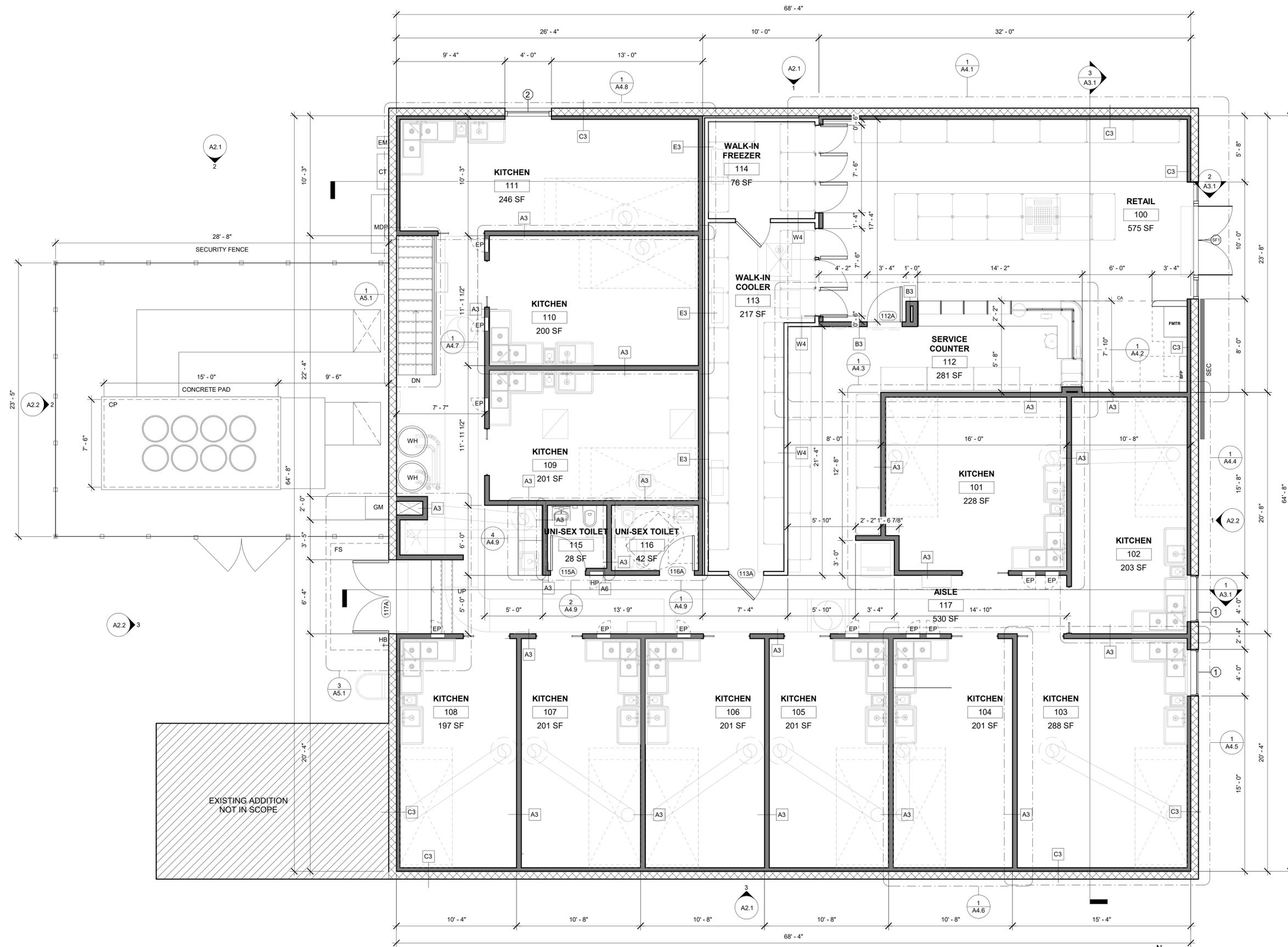
3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5554
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

Basement Floor
Plan
021293
A1.1



1 FIRST FLOOR

- GENERAL NOTES**
- NOTIFY ARCHITECT IN WRITING OF CONFLICTS OR OTHER DISCREPANCIES PRIOR TO PROCEEDING WITH WORK OR AREAS AFFECTED.
 - DOOR JAMB LOCATION SHALL BE 4" TYP. FROM ADJACENT WALL UNLESS NOTED OTHERWISE. MAINTAIN DOOR CLEARANCES AS REQUIRED.
 - UNDERCUT OF DOORS TO CLEAR TOP OF FLOOR FINISHES BY 3/4" UNLESS OTHERWISE NOTED.
 - PATCH AND REPAIR ALL SURFACES DAMAGED AS A RESULT OF WORK PERFORMED ON THIS PROJECT. PATCH & REPAIR EXISTING SURFACES AS REQUIRED TO RECEIVE NEW FINISHES.
 - PATCH AND REPAIR ALL EXISTING WALLS, COLUMNS, FLOORS AND SURFACES SCHEDULED TO REMAIN AS REQUIRED TO LEAVE THEM SMOOTH AND EVEN TO RECEIVE NEW SCHEDULED FINISHES.
 - NEW GWB CONSTRUCTION ADJOINING EXISTING CONSTRUCTION IN PLANE SHALL BE FLUSH WITH NO VISIBLE JOINTS, UNLESS NOTED OTHERWISE.
 - GC TO COORDINATE INSTALLATION OF ALL CABINETS AND DEVICES AS INDICATED ON DRAWINGS TO ENSURE PROPER WALL RECESS PROVIDED. ALL DEVICES INSTALLED IN EXISTING FIRE RATED PARTITIONS SHALL RECEIVE FIRE RATED JABS. GC TO MAINTAIN INTEGRITY OF EXISTING FIRE RATINGS WHERE OCCURS.
 - DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN ALL PARTITION LOCATIONS, DIMENSIONS AND TYPES. ALL DOOR AND WINDOW LOCATIONS SHALL BE AS SHOWN ON CONSTRUCTION PLAN IN CASE OF CONFLICT NOTIFY ARCHITECT.
 - CONTRACTOR TO PROVIDE ALL REQUIRED IN WALL WALL BLOCKING FOR BOTH CONTRACT AND OWNER FURNISHED ITEMS, INCLUDING LOCKERS, TV, CASEWORK DISPLAYS AND TOILET ACCESSORIES WHETHER THOSE ITEMS ARE INSTALLED BY THE CONTRACTOR OR BY OWNER AND VENDORS PRIOR TO CLOSING IN WALLS.
 - SEE REFLECTED CEILING PLAN FOR SCHEDULED SCOFFIT HEIGHTS AND LOCATIONS. WALL TYPES SHOWN CONTINUE AS ABOVE FINISHED CEILING, UNLESS NOTED OTHERWISE.
 - F.V. EXISTING ROOF CONDITION. REPAIR & REPLACE AS REQUIRED.
 -
 -
 -
 -

DIMENSION

INTERIOR PARTITIONS	FACE OF STUD TO FACE OF STUD
MASONRY	FACE OF MASONRY

PLAN LEGEND

MARK	DESCRIPTION
--- (dashed line)	NEW GYP. PARTITION AT EXISTING CMU SEE ASSEMBLY TYPES
--- (dotted line)	WALK IN COOLER PARTITION SEE ASSEMBLY TYPES
--- (solid line)	INTERIOR PARTITION SEE ASSEMBLY TYPES
○ (circle)	NEW DOOR SEE DOOR SCHEDULE
○ (circle)	DOOR TAG
□ (square)	SECURITY FENCE
○ (circle)	WALL ASSEMBLY TAG
--- (dashed line)	CONSTRUCTION ABOVE
--- (dotted line)	CONSTRUCTION BELOW
BP	BACKFLOW PROTECTOR
(E)	EXISTING TO REMAIN - REPAIR AS REQ'D
EM	ELECTRICAL METER
EP	ELECTRICAL PANEL
FE	FIRE SUPPRESSION EQUIPMENT
FMTR	FIRE METER
FS	FROST SLAB - SEE DETAIL
GM	GAS METER
MDP	MAIN DISTRIBUTION PANEL
WM	WATER METER
CL	CL OF COLUMN
○ (circle)	4" PIPE COLUMN
SEC	EXISTING SECURITY GATE
○ (circle)	EXISTING BOLLARDS
CT	CIRCUIT CABINET
FC	FAN COIL UNIT

ASSEMBLY TYPES

MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3' 3 5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	PARTITION TYPE 'A6' 6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3' 3 5/8" MTL STUD & GYP BD. WALL HEIGHT = 8.0' OF ROOF DECK	B3/A6.1
B6	PARTITION TYPE 'B6' 6" MTL STUD & GYP BD. WALL HEIGHT = 8.0' OF ROOF DECK	B6/A6.1
C3	PARTITION TYPE 'C3' 3 5/8" MTL STUD & GYP. BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	PARTITION TYPE 'E3' 3 5/8" MTL STUD & GYP. BD. AT WALK-IN COOLER	E3/A6.1
F3	-	-
W4	PARTITION TYPE 'W4' WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 6" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5554
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.04.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

First Floor Plan

021293

A1.2

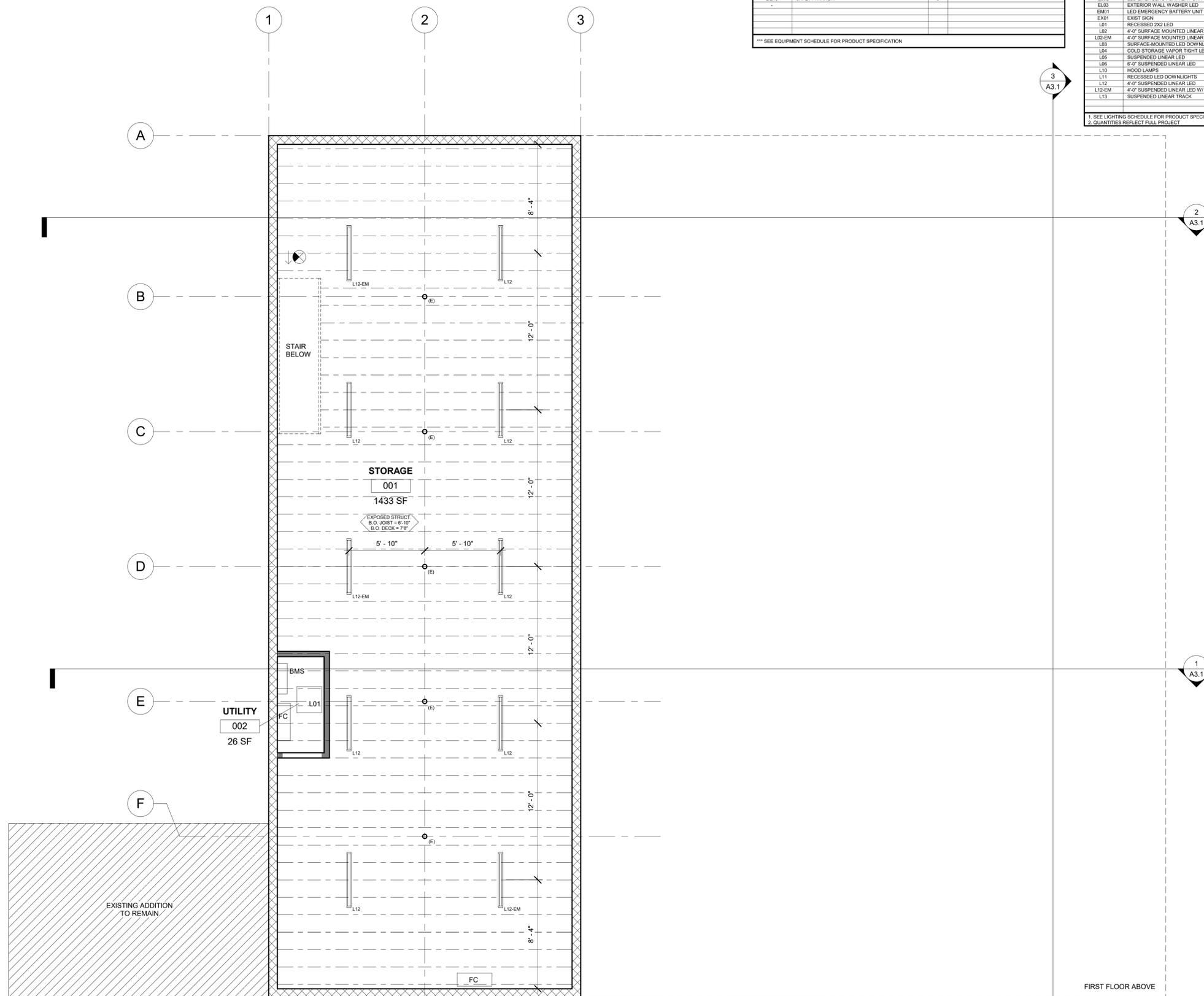
EQUIPMENT			
CODE	DESCRIPTION	QTY.	NOTES
EQ13	SAFETY MIRROR	3	
*** SEE EQUIPMENT SCHEDULE FOR PRODUCT SPECIFICATION			

LIGHTING			
CODE	DESCRIPTION	QTY.	NOTES
EL02	LED EMERGENCY BATTERY UNIT - SELF-DIAGNOSTICS	-	
EL03	EXTERIOR WALL WASHER LED	16	
EM01	LED EMERGENCY BATTERY UNIT - SELF-DIAGNOSTICS	1	QUANTITY TO BE DETERMINED BY CONTRACTOR
EX01	EXIT SIGN	5	
L01	RECESSED 2X2 LED	37	
L02	4'-0" SURFACE MOUNTED LINEAR LED	5	
L02-EM	4'-0" SURFACE MOUNTED LINEAR LED W/ EMERGENCY LIGHT	4	
L03	SURFACE MOUNTED LED DOWNLIGHTS	8	
L04	COLD STORAGE VAPOR TIGHT LED	4	
L05	SUSPENDED LINEAR LED	-	
L06	6'-0" SUSPENDED LINEAR LED	5	
L10	HOOD LAMPS	33	
L11	RECESSED LED DOWNLIGHTS	4	LOCATIONS TO BE DETERMINED BY CONTRACTOR
L12	4'-0" SUSPENDED LINEAR LED	10	LOCATIONS TO BE DETERMINED BY CONTRACTOR
L12-EM	4'-0" SUSPENDED LINEAR LED W/ EMERGENCY LIGHT	5	
L13	SUSPENDED LINEAR TRACK	2	SEE TRACKS IN R.F.P.
1. SEE LIGHTING SCHEDULE FOR PRODUCT SPECIFICATION 2. QUANTITIES REFLECT FULL PROJECT			

PLAN LEGEND	
MARK	DESCRIPTION
	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
	RECESSED 2X2 LED LIGHT FIXTURE
	SUSPENDED LINEAR LED
	SURFACE MOUNTED LED DOWNLIGHT
	COLD STORAGE VAPOR TIGHT LED
	LED EMERGENCY BATTERY UNIT
	HVAC SUPPLY DIFFUSER
	HVAC EXHAUST DUCT
	SUSPENDED GYP. BOARD
	EXIT SIGN
	TRACK LIGHTING
	SPRINKLERHEAD (PROPOSED)
	SAFETY MIRROR
	ACCESS POINT
	CEILING OUTLET

- GENERAL NOTES**
- GO TO SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AND VERIFY LOCATIONS OF MECHANICAL, ELECTRICAL AND PLUMBING IN RELATION TO STRUCTURAL AND OTHER ELEMENTS
 - IN GENERAL, ALL HORIZONTAL DIMENSIONS ARE PROVIDED ON PLANS, AND ALL VERTICAL DIMENSIONS ARE PROVIDED ON ELEVATIONS AND/OR SECTIONS UNLESS OTHERWISE NOTED.
 - SPRINKLER HEAD LOCATIONS ON ARCHITECTURAL DRAWINGS ARE FOR DESIGN INTENT AND LOCATION ONLY. COORDINATE WITH FIRE PROTECTION TO CONFIRM ALL CODE REQUIREMENTS ARE MET. IDENTIFY ANY CONFLICTS PRIOR TO INSTALLATION. CONTRACTOR TO SUBMIT SPRINKLER SYSTEM INSTALLERS SPRINKLER HEAD PLANS TO ARCHITECT FOR COMMENT AND APPROVAL EXEMPTION.
 - TYPICALLY, CONTRACT TO RUN ALL CONDUIT, WIRING, RACEWAYS, ETC. PERPENDICULAR OR PARALLEL TO ALL BEAMS AND JOISTS IN ALL OPEN TO STRUCTURE CEILINGS VERIFY WITH ARCHITECT.
 - CONTRACTOR TO GROUP ALL CONDUIT, WIRING, RACEWAYS, ETC. NEAR TP EACH OTHER AS MUCH AS PRACTICAL TO PROVIDE A CLEAN, NEAT, CLUTTER FREE AND ORDERLY APPEARANCE IN ALL OPEN TO STRUCTURE CEILINGS.
 - FINISHED CEILING HEIGHT IS 8'-0" UNLESS OTHERWISE NOTED.
 - CEILING IN CORRIDORS, TRASH DELIVERY, MECHANICAL ROOMS, DRY STORAGE & OTHER SIMILAR SPACES ARE EXPOSED TO STRUCTURE ABOVE UNLESS NOTED OR SCHEDULE OTHERWISE.
 - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL LIGHT FIXTURE SPECIFIC INFORMATION.
 - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL DIFFUSER SPECIFIC INFORMATION.
 - SUSPENDED CEILING GRIDS ARE LAID OUT WITH EITHER A TILE OR A GRID AT THE CORNER OF THE ROOMS UNLESS NOTED OR DIMENSIONS OTHERWISE.
 - DEVICES TO BE LOCATED AT THE CENTER OF THE CEILING TILE UNLESS OTHERWISE NOTED.
 - ARCHITECTURAL DRAWINGS SHALL GOVERN REGARDING CEILING MOUNTED DEVICE LOCATIONS, SHOWN FOR PLACEMENT ONLY. COORDINATE WITH MEP OR PERFORMANCE REQUIREMENTS. IDENTIFY ANY CONFLICT PRIOR TO INSTALLATION.

FINISH LEGEND	
SEE FINISH PLANS & FINISH SCHEDULE FOR ALL CEILING FINISHES	



1 BASEMENT PLAN

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



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

Basement
Reflected Ceiling
Plan

021293

A1.3

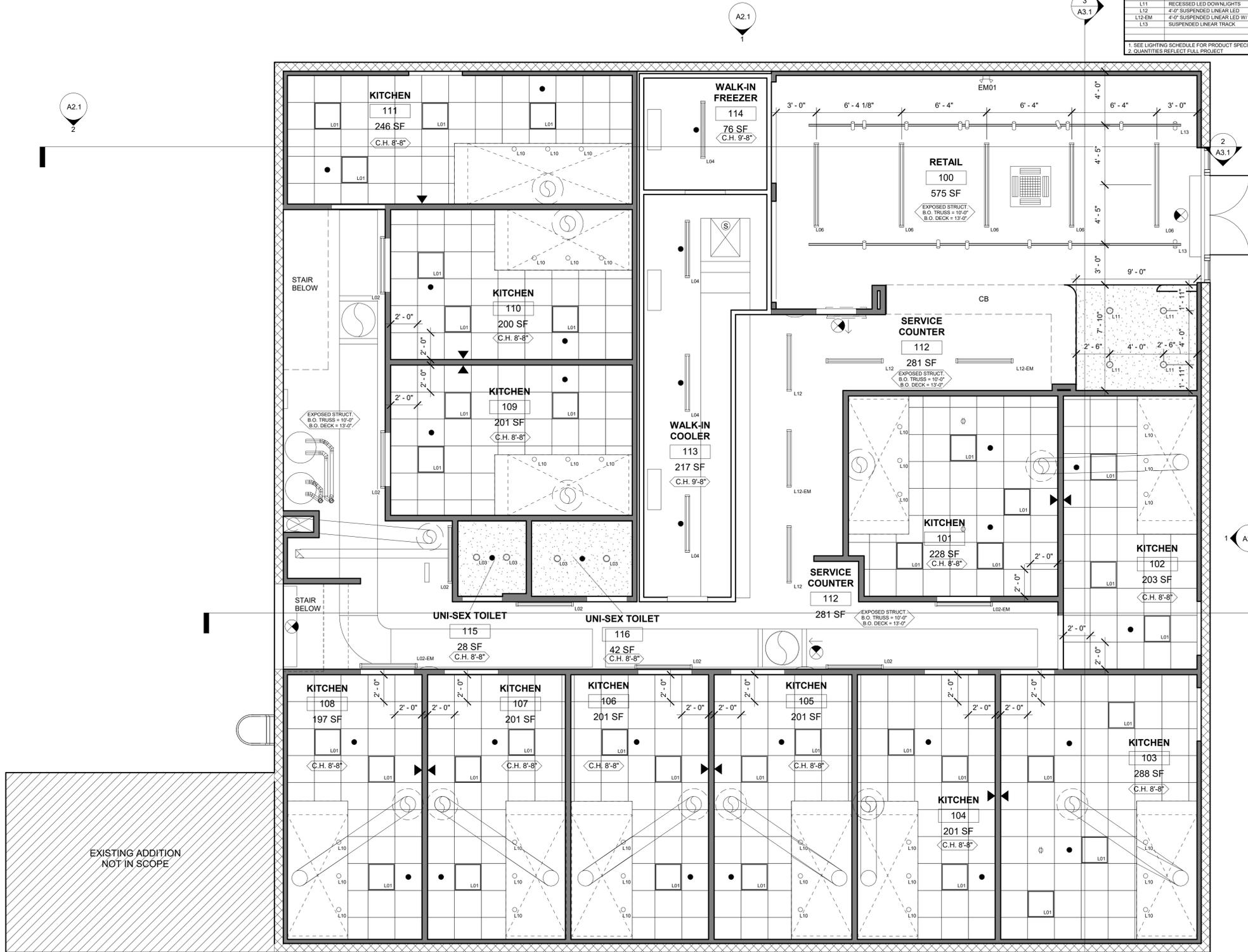
EQUIPMENT			
CODE	DESCRIPTION	QTY.	NOTES
EQ13	SAFETY MIRROR	3	
*** SEE EQUIPMENT SCHEDULE FOR PRODUCT SPECIFICATION			

LIGHTING			
CODE	DESCRIPTION	QTY.	NOTES
EL02	LED EMERGENCY BATTERY UNIT - SELF-DIAGNOSTICS	-	
EL03	EXTERIOR WALL WASHER LED	16	
EM01	LED EMERGENCY BATTERY UNIT - SELF-DIAGNOSTICS	1	
EX01	EXIT SIGN	5	
L01	RECESSED 2X2 LED	37	
L02	4'-0" SURFACE MOUNTED LINEAR LED	5	
L02-EM	4'-0" SURFACE MOUNTED LINEAR LED W/ EMERGENCY LIGHT	4	
L03	SURFACE MOUNTED LED DOWNLIGHTS	8	
L04	COLD STORAGE VAPOR TIGHT LED	4	
L05	SUSPENDED LINEAR LED	5	
L06	6'-0" SUSPENDED LINEAR LED	33	
L10	HOOD LAMPS	4	
L11	RECESSED LED DOWNLIGHTS	4	
L12	4'-0" SUSPENDED LINEAR LED	10	
L12-EM	4'-0" SUSPENDED LINEAR LED W/ EMERGENCY LIGHT	5	
L13	SUSPENDED LINEAR TRACK	2	
1. SEE LIGHTING SCHEDULE FOR PRODUCT SPECIFICATION 2. QUANTITIES REFLECT FULL PROJECT			

PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
[Symbol]	RECESSED 2X2 LED LIGHT FIXTURE
[Symbol]	SUSPENDED LINEAR LED
[Symbol]	SURFACE MOUNTED LED DOWNLIGHT
[Symbol]	COLD STORAGE VAPOR TIGHT LED
[Symbol]	LED EMERGENCY BATTERY UNIT
[Symbol]	HVAC SUPPLY DIFFUSER
[Symbol]	HVAC EXHAUST DUCT
[Symbol]	SUSPENDED GYP. BOARD
[Symbol]	EXIT SIGN
[Symbol]	TRACK LIGHTING (PROPOSED)
[Symbol]	SPRINKLERHEAD (PROPOSED)
[Symbol]	SAFETY MIRROR
[Symbol]	ACCESS POINT
[Symbol]	CEILING OUTLET

- GENERAL NOTES**
- GO TO SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AND VERIFY LOCATIONS OF MECHANICAL, ELECTRICAL AND PLUMBING IN RELATION TO STRUCTURAL AND OTHER ELEMENTS
 - IN GENERAL, ALL HORIZONTAL DIMENSIONS ARE PROVIDED ON PLANS, AND ALL VERTICAL DIMENSIONS ARE PROVIDED ON ELEVATIONS AND/OR SECTIONS UNLESS OTHERWISE NOTED.
 - SPRINKLER HEAD LOCATIONS ON ARCHITECTURAL DRAWINGS ARE FOR DESIGN INTENT AND LOCATION ONLY. COORDINATE WITH FIRE PROTECTION TO CONFIRM ALL CODE REQUIREMENTS ARE MET. IDENTIFY ANY CONFLICTS PRIOR TO INSTALLATION. CONTRACTOR TO SUBMIT SPRINKLER SYSTEM INSTALLERS SPRINKLER HEAD PLANS TO ARCHITECT FOR COMMENT AND APPROVAL EXEMPTION.
 - TYPICALLY, CONTRACTOR TO RUN ALL CONDUIT, WIRING, RACEWAYS, ETC. PERPENDICULAR OR PARALLEL TO ALL BEAMS AND JOISTS IN ALL OPEN TO STRUCTURE CEILINGS. VERIFY WITH ARCHITECT.
 - CONTRACTOR TO GROUP ALL CONDUIT, WIRING, RACEWAYS, ETC. NEAR TP EACH OTHER AS MUCH AS PRACTICAL TO PROVIDE A CLEAN, NEAT CLUTTER FREE AND ORDERLY APPEARANCE IN ALL OPEN TO STRUCTURE CEILINGS.
 - FINISHED CEILING HEIGHT IS 8'-0" UNLESS OTHERWISE NOTED.
 - CEILING IN CORRIDORS, TRASH DELIVERY, MECHANICAL ROOMS, DRY STORAGE & OTHER SIMILAR SPACES ARE EXPOSED TO STRUCTURE ABOVE UNLESS NOTED OR SCHEDULE OTHERWISE.
 - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL LIGHT FIXTURE SPECIFIC INFORMATION.
 - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL DIFFUSER SPECIFIC INFORMATION.
 - SUSPENDED CEILING GRIDS ARE LAID OUT WITH EITHER A TILE OR A GRID AT THE CORNER OF THE ROOMS UNLESS NOTED OR DIMENSIONS OTHERWISE.
 - DEVICES TO BE LOCATED AT THE CENTER OF THE CEILING TILE UNLESS OTHERWISE NOTED.
 - ARCHITECTURAL DRAWINGS SHALL GOVERN REGARDING CEILING MOUNTED DEVICE LOCATIONS, SHOWN FOR PLACEMENT ONLY. COORDINATE WITH MEP OR PERFORMANCE REQUIREMENTS. IDENTIFY ANY CONFLICT PRIOR TO INSTALLATION.

FINISH LEGEND	
SEE FINISH PLANS & FINISH SCHEDULE FOR ALL CEILING FINISHES	



1 FIRST FLOOR

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



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE

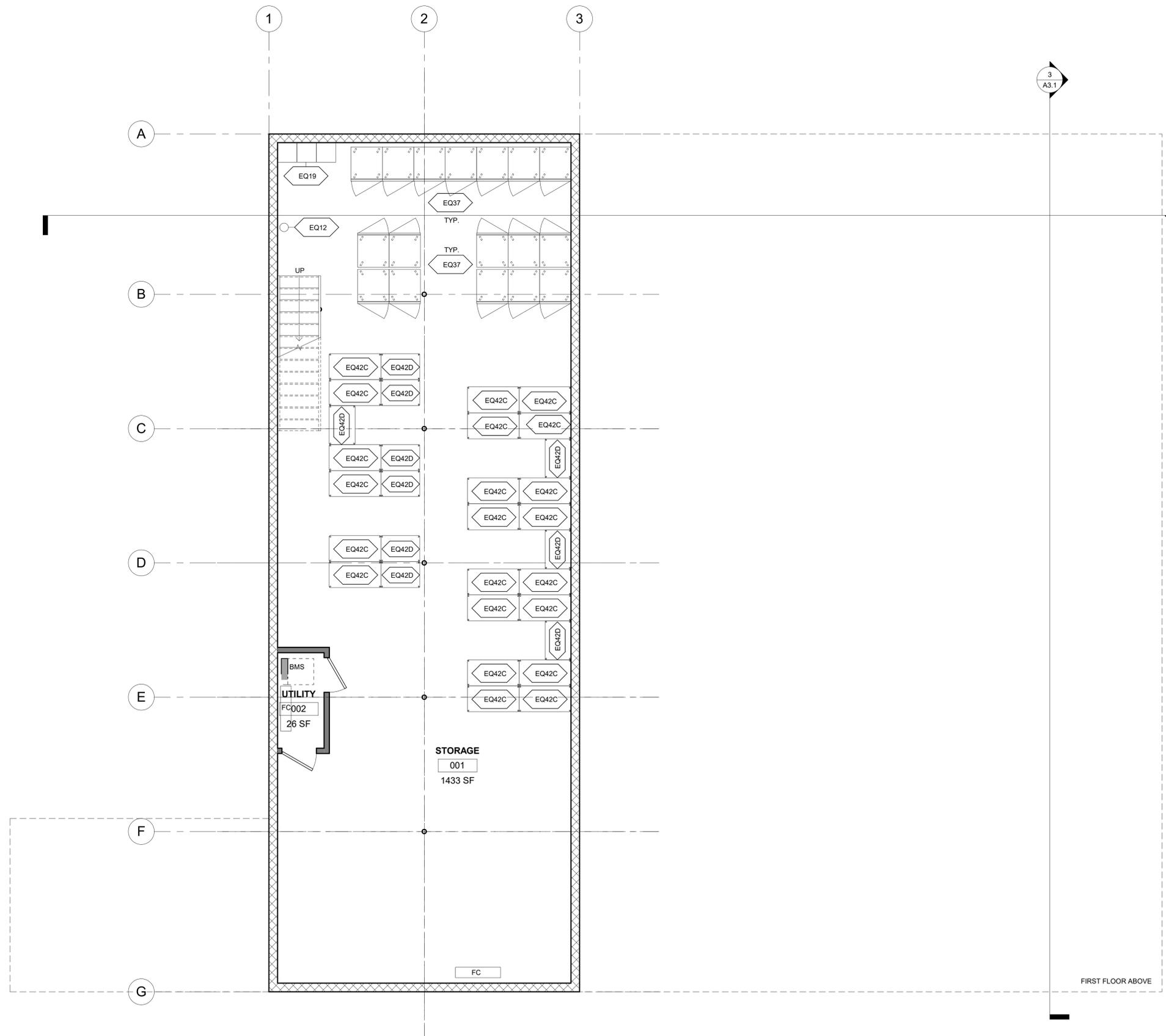


3rd Ave. Detroit
181 3rd Ave. Detroit, MI 48201

First Floor
Reflected Ceiling
Plan

021293

A1.4



EQUIPMENT				
CODE	DESCRIPTION	LOCATION	QTY	NOTES
EQ09	PICK-UP COUNTER	SERVICE COUNTER	1	SEE ENLARGED PLAN A4.2 & SECTIONS ON A7.1
EQ11	STOOL	SERVICE COUNTER	1	
EQ12	FIRE EXTINGUISHER BRACKET		14	INSTALLED THROUGHOUT FACILITY
EQ13	SAFETY MIRROR	AISLE	3	
EQ14	ICE MACHINE	AISLE	1	
EQ16	ICE MACHINE DISPENSER	AISLE	1	
EQ17	ICE MACHINE FILTER	AISLE	1	
EQ18	ARI CURTAIN	AISLE	1	
EQ19	LOCKERS	BASEMENT	3	
EQ20	RUNNER SHELF	FIRST FLOOR	3	
EQ29	CABINET (SINK)	KITCHENETTE	3	
EQ30	CABINET	KITCHENETTE	3	
EQ33	WALL MOUNTED SOAP DISPENSER		17	SEE SHEET A8.3 FOR LOCATIONS & SPEC.
EQ34	FIRE STROBE	KITCHENS	11	
EQ37	1-DOOR REACH IN REFRIGERATOR	BASEMENT	17	
EQ41	3008 DRY RACK	WALK-IN FREEZER	6	
EQ42C	2448 DRY RACK	F.F. / BASEMENT	42	
EQ43D	2638 DRY RACK	F.F. / BASEMENT	21	
EQ45A	2148 COLD RACK	WALKS-INS	3	
EQ45B	2136 COLD RACK	WALKS-INS	16	
EQ60	MOP/BROOM HOLDERS	BACKROOM	1	
EQ61A	WALL MOUNTED UTILITY CABINET	BACKROOM	1	
EQ60	FOLDING SECURITY GATE	KITCHENS	11	

1. SEE EQUIPMENT SCHEDULES FOR MFG / SPECIFICATIONS
2. QUANTITIES REFLECT FULL PROJECT

PLUMBING				
CODE	DESCRIPTION	LOCATION	QTY	NOTES
P-FSS-2-L	1-COMP. PREP SINK (L)	KITCHENS	5	
P-FSS-2-R	1-COMP. PREP SINK (R)	KITCHENS	6	
P-FSS-3	HAND SINK	KITCHENS	11	
P-FSS-4	3-COMPARTMENT SINK (CORNER)	KITCHENS	11	
P-MW-1	UTILITY / MOP SINK	BACKROOM	1	
P-FL-1	WALL HUNG LAVATORY	TOILET ROOMS	2	
P-WC-1	WATER CLOSET	TOILET ROOM 115	1	
P-WC-2	(ADA) WATER CLOSET	TOILET ROOM 116	1	
P-SWH-1	GAS WATER HEATER 1 - 150-300 MBH	BACKROOM	1	
P-SWH-2	GAS WATER HEATER 2 - 400-500 MBH	BACKROOM	1	
P-FS-1	FLOOR SINK	KITCHENS	11	
P-FS-2	FLOOR SINK	ICE MAKER	1	
P-FS-3	FLOOR SINK	UTILITY	1	

1. SEE EQUIPMENT SCHEDULES FOR MFG / SPECIFICATIONS
2. QUANTITIES REFLECT FULL PROJECT



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



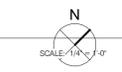
3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

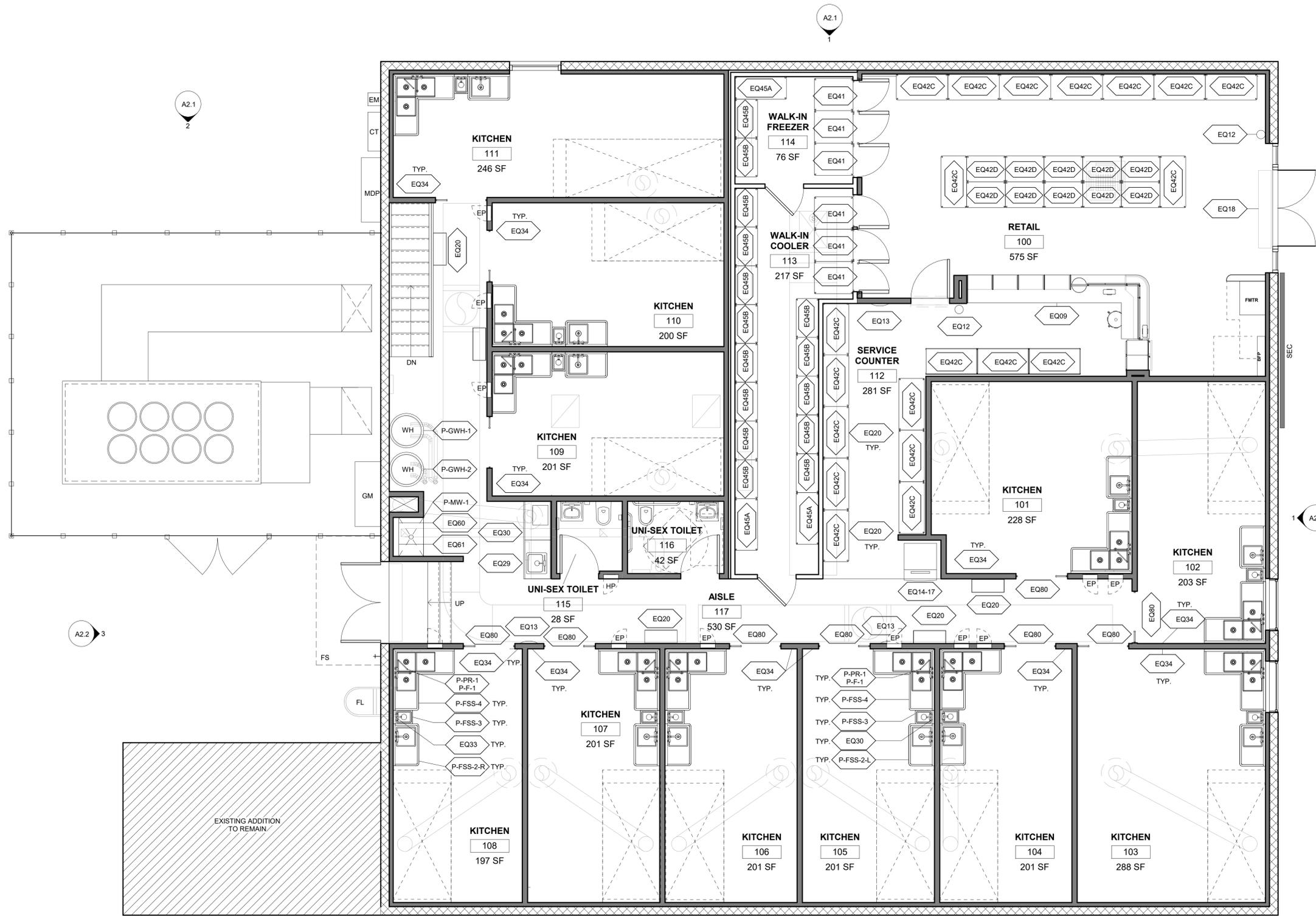
Basement
Equipment Plan

021293

A1.5

1 BASEMENT EQUIPMENT PLAN





CODE	DESCRIPTION	LOCATION	QTY	NOTES
EQ09	PICK-UP COUNTER	SERVICE COUNTER	1	SEE ENLARGED PLAN A2.2 & SECTIONS ON A7.1
EQ11	STOOL	SERVICE COUNTER	1	
EQ12	FIRE EXTINGUISHER BRACKET	SERVICE COUNTER	14	INSTALLED THROUGHOUT FACILITY
EQ13	SAFETY MIRROR	aisle	3	
EQ14	ICE MACHINE	aisle	1	
EQ16	ICE MACHINE DISPENSER	aisle	1	
EQ17	ICE MACHINE FILTER	aisle	1	
EQ18	AIR CURTAIN	aisle	1	
EQ19	LOCKERS	BASEMENT	3	
EQ20	RUNNER SHELF	FIRST FLOOR	3	
EQ29	CABINET (SINK)	KITCHENETTE	3	
EQ30	CABINET	KITCHENETTE	3	
EQ33	WALL MOUNTED SOAP DISPENSER	-	17	SEE SHEET A8.3 FOR LOCATIONS & SPEC.
EQ34	FIRE STROBE	KITCHENS	11	
EQ37	1-DOOR REACH IN REFRIGERATOR	BASEMENT	17	
EQ41	3038 DRY RACK	WALK-IN FREEZER	6	
EQ42C	2448 DRY RACK	F.F. / BASEMENT	42	
EQ43D	2438 DRY RACK	F.F. / BASEMENT	21	
EQ45A	2148 COLD RACK	WALKS-INS	3	
EQ45B	2138 COLD RACK	WALKS-INS	16	
EQ48	MOP/BROOM HOLDERS	BACKROOM	1	
EQ61A	WALL MOUNTED UTILITY CABINET	BACKROOM	1	
EQ61B	FOLDING SECURITY GATE	KITCHENS	11	

1. SEE EQUIPMENT SCHEDULES FOR MFG / SPECIFICATIONS
2. QUANTITIES REFLECT FULL PROJECT

CODE	DESCRIPTION	LOCATION	QTY	NOTES
P-FSS-2-L	1-COMP. PREP SINK (L)	KITCHENS	5	
P-FSS-2-R	1-COMP. PREP SINK (R)	KITCHENS	6	
P-FSS-3	HAND SINK	KITCHENS	11	
P-FSS-4	3-COMPARTMENT SINK (CORNER)	KITCHENS	11	
P-MW-1	UTILITY / MOP SINK	BACKROOM	1	
P-FL-1	WALL HUNG LAVATORY	TOILET ROOMS	2	
P-WC-1	WATER CLOSET	TOILET ROOM 115	1	
P-WC-2	(ADA) WATER CLOSET	TOILET ROOM 116	1	
P-GWH-1	GAS WATER HEATER 1 - 150-300 MBH	BACKROOM	1	
P-GWH-2	GAS WATER HEATER 2 - 400-500 MBH	BACKROOM	1	
P-FS-1	FLOOR SINK	KITCHENS	11	
P-FS-2	FLOOR SINK	ICE MAKER	1	
P-FS-3	FLOOR SINK	UTILITY	1	

1. SEE EQUIPMENT SCHEDULES FOR MFG / SPECIFICATIONS
2. QUANTITIES REFLECT FULL PROJECT



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

First Floor
Equipment Plan

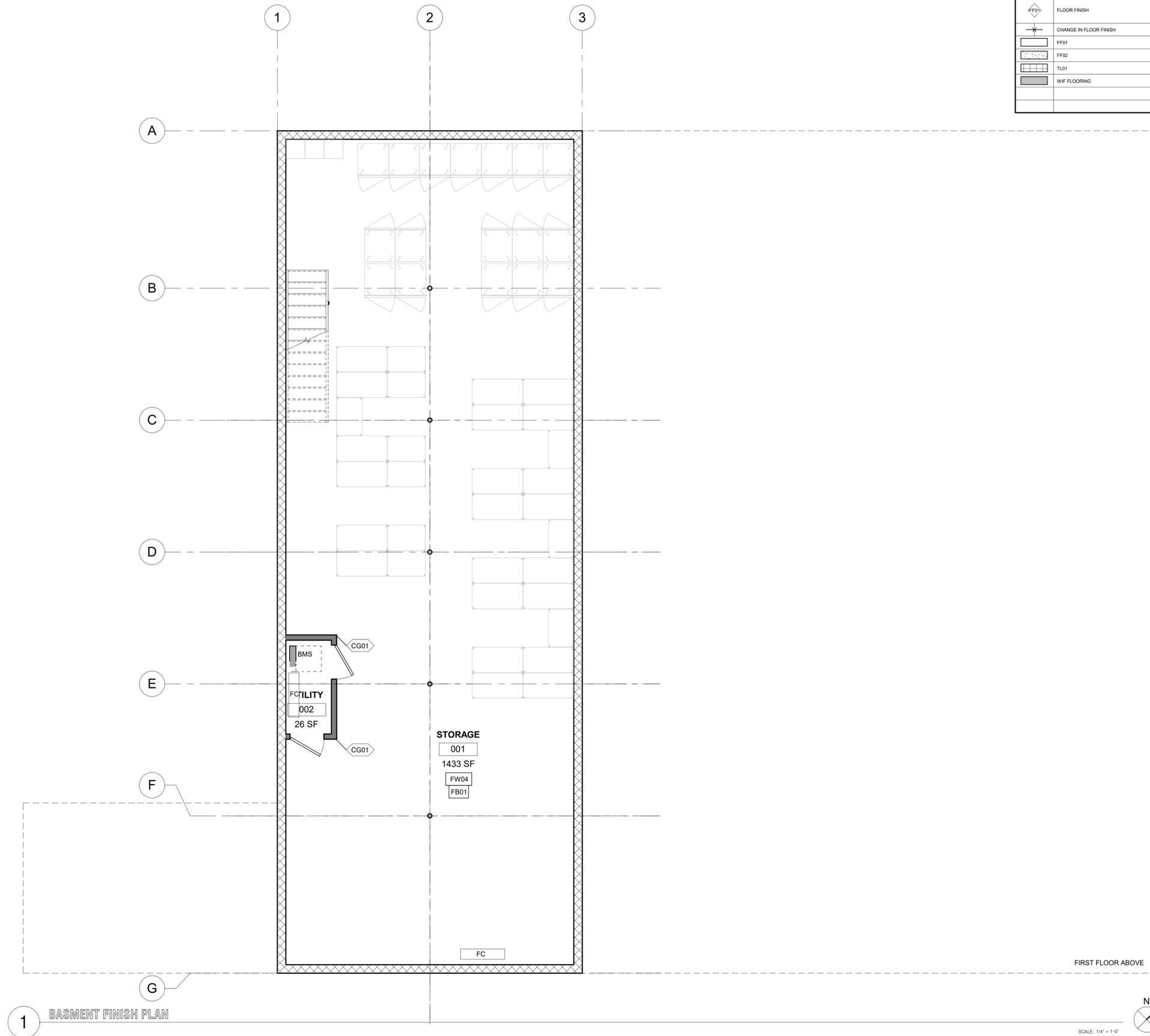
021293

A1.6

1 FIRST FLOOR - EQUIPMENT PLAN

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





MARK	DESCRIPTION
[FB01] [FB01]	FINISH TAG
[CG01]	EXTENT OF WALL / WANSOT / BASE FINISH
[CG01]	SPECIALTY FINISH
[FF01]	FLOOR FINISH
[FF01]	CHANGE IN FLOOR FINISH
[FF01]	FF01
[FF02]	FF02
[TL01]	TL01
[WIF]	WIF FLOORING

LOCATION	CODE	DESCRIPTION	NOTES
BASE	FB01	RUBBER BASE	
	FB02	COVE BASE TILE	
	FB03	COVE GALVANIZED ALUMINUM	LOCATED IN WALK-INS
CEILING	TL01A	TILE BULL NOSE BASE	TO MATCH TL01
	FC01	CEILING TILE (2X2 KITCHEN)	
	FC02	EXPOSED PAINTED STRUCTURE	
	FC03	GALVANIZED ALUMINUM	LOCATED IN WALK-INS
FLOORING	FF03	BENJAMIN MOORE CEILING PAINT	
	FF01	SEALED CONCRETE FLOOR	FINISH IN SERVICE COUNTER
	FF02	VCT COMPOSITE TILE	IN CORRIDOR & KITCHEN ABOVE BASEMENT
	FF03	QUARRY TILE	
	WIF	WALK-IN COOLER / FREEZER FLOORING	
	TL01	12"x12" FLOOR TILE	
	FF01	WALL TILE	
WALL	FW02	WALL GROUT	
	FW03	EPOXY PAINT	LOCATED IN KITCHENS
	FW04	PAINT	WHITE, NON-EPOXY
	FW05	ACCENT PAINT	WALL PAINT
	FW05A	ACCENT PAINT (EPOXY COATED)	ACCENT WALL PAINT (IN TOILETROOMS)
	FW06	PAINT	INTERIOR DOOR PAINT
	FW07	STAINLESS STEEL FINISH	INTERIOR DOOR PAINT
	FW08	FRP (WET AREA)	
	FE	EXTERIOR PAINT	
	FF01	STUCCO EMBOSSED COATED STEEL	FINISH FOR WALK-INS
	CG01	CORNER GUARD	
	PT01	BENJAMIN MOORE SCUFF X-PAINT	
	PT02	BENJAMIN MOORE SCUFF X-PAINT	
	PT04	BENJAMIN MOORE SCUFF X-PAINT	

1. SEE A8.1 FINISH SCHEDULE FOR PRODUCT SPECIFICATION
2. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH DETAILS



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

Basement Finish
Plan

021293

A1.7



MARK	DESCRIPTION
[FW01 / FB01]	FINISH TAG
[---]	EXTENT OF WALL / WAINSCOT / BASE FINISH
[CG01]	SPECIALTY FINISH
[FF01]	FLOOR FINISH
[*]	CHANGE IN FLOOR FINISH
[---]	FF01
[---]	FF02
[TL01]	TL01
[---]	W/F FLOORING

LOCATION	CODE	DESCRIPTION	NOTES
BASE	FB01	RUBBER BASE	
	FB02	COVE BASE TILE	
	FB03	COVE GALVANIZED ALUMINUM	LOCATED IN WALK-INS
CEILING	TL01A	TILE BULL NOSE BASE	TO MATCH TL01
	CG01	CEILING TILE (2X2 KITCHEN)	
	FC02	EXPOSED PAINTED STRUCTURE	
	FC03	GALVANIZED ALUMINUM	LOCATED IN WALK-INS
FLOORING	FF03	BENJAMIN MOORE CEILING PAINT	FINISH IN SERVICE COUNTER
	FF01	SEALED CONCRETE FLOOR	IN CORRIDOR & KITCHEN ABOVE BASEMENT
	FF02	VCT COMPOSITE TILE	
	FF03	QUARRY TILE	
	W/F	WALK-IN COOLER / FREEZER FLOORING	
WALL	TL01	12"x12" FLOOR TILE	
	FW01	WALL TILE	
	FW02	WALL GROUT	
	FW03	EPOXY PAINT	LOCATED IN KITCHENS
	FW04	PAINT	WHITE, NON-EPOXY
	FW05	ACCENT PAINT	WALL PAINT
	FW05A	ACCENT PAINT (EPOXY COATED)	ACCENT WALL PAINT (IN TOILETROOMS)
	FW06	PAINT	INTERIOR DOOR PAINT
	FW07	STAINLESS STEEL FINISH	INTERIOR DOOR PAINT
	FE	EXTERIOR PAINT	
	FF01	STUCCO EMBOSSED COATED STEEL	FINISH FOR WALK-INS
	CG01	CORNER GUARD	
	PT01	BENJAMIN MOORE SCUFF X-PAINT	
	PT02	BENJAMIN MOORE SCUFF X-PAINT	
PT04	BENJAMIN MOORE SCUFF X-PAINT		

1. SEE A8.1 FINISH SCHEDULE FOR PRODUCT SPECIFICATION
2. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH DETAILS



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
3181 3rd Ave. Detroit, MI 48201

First Floor Finish
Plan

021293
A1.8

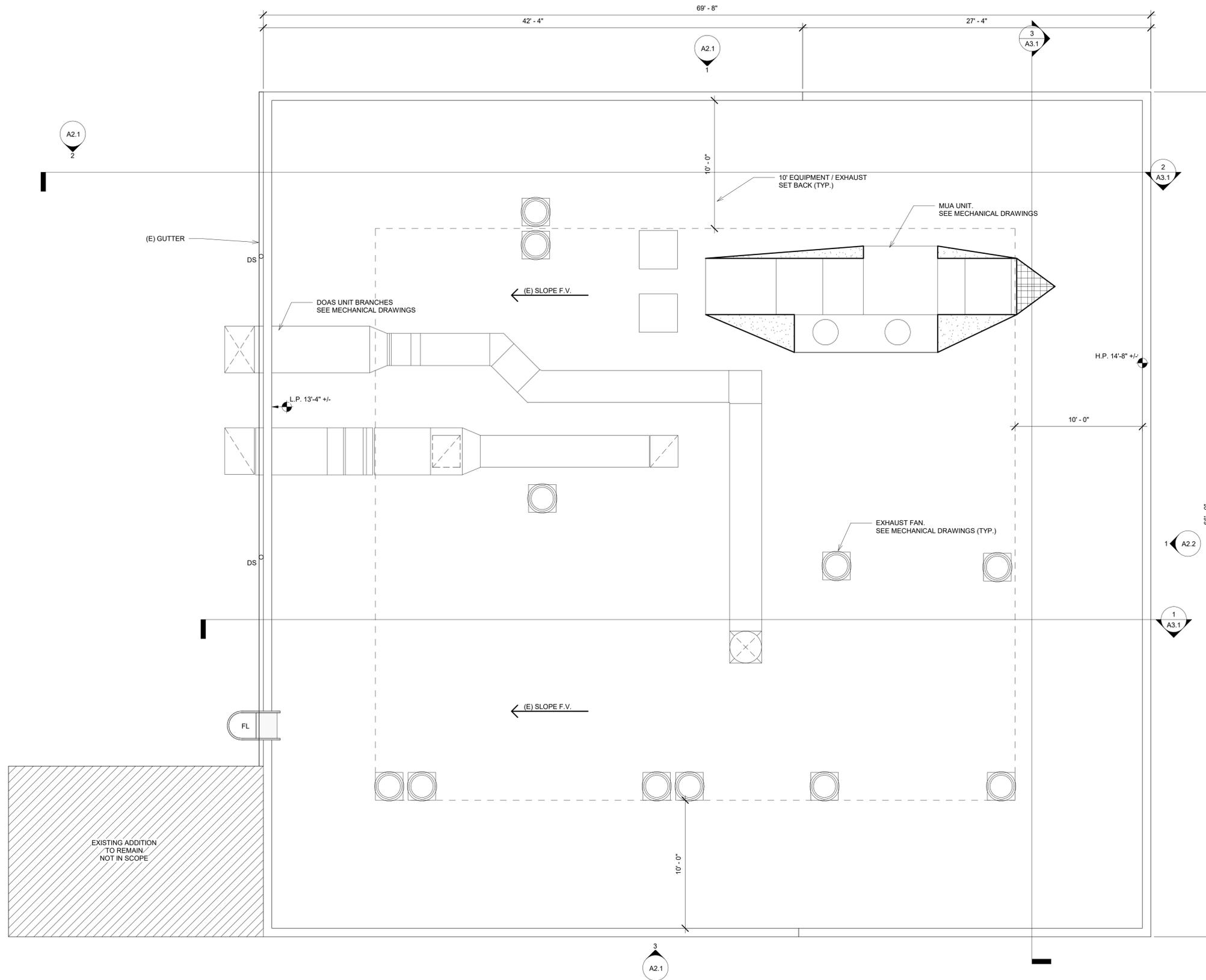
1 FIRST FLOOR FINISH PLAN

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

PLAN LEGEND	
MARK	DESCRIPTION
→	(E) ROOF SLOPE, FIELD VERIFY
▬	TAPERED CRICKET AT MECHANICAL EQUIPMENT
H.P.	ROOF HIGH POINT
L.P.	ROOF LOW POINT
GU	(E) GUTTER
DS	(E) DOWNSPOUT
FL	FIXED LADDER
F.V.	FIELD VERIFY

GENERAL NOTES	
1.	NOTIFY ARCHITECT IN WRITING OF CONFLICTS OR OTHER DISCREPANCIES PRIOR TO PROCEEDING WITH WORK OR AREAS AFFECTED
2.	PATCH AND REPAIR ALL SURFACES DAMAGED AS A RESULT OF WORK PERFORMED ON THIS PROJECT. PATCH & REPAIR EXISTING SURFACES AS REQUIRED TO RECEIVE NEW FINISHES.
3.	DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN ALL PARTITION LOCATIONS, DIMENSIONS AND TYPES. ALL DOOR AND WINDOW LOCATIONS SHALL BE AS SHOWN ON CONSTRUCTION PLAN. IN CASE OF CONFLICT NOTIFY ARCHITECT.
4.	F.V. EXISTING ROOF CONDITION. REPAIR & REPLACE AS REQUIRED.
5.	COORDINATE ALL NEW MECHANICAL UNITS WITH MECHANICAL DRAWINGS.

DIMENSION	
INTERIOR PARTITIONS	FACE OF STUD TO FACE OF STUD
MASONRY	FACE OF MASONRY



3300 AUBURN RD - SUITE - 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5654
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Description	Date
PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
SECOND INVESTIGATION	10.08.21
SITE INVESTIGATION	09.30.21
REVISION DATE	DATE



3rd Ave. Detroit
 3181 3rd Ave. Detroit, MI 48201

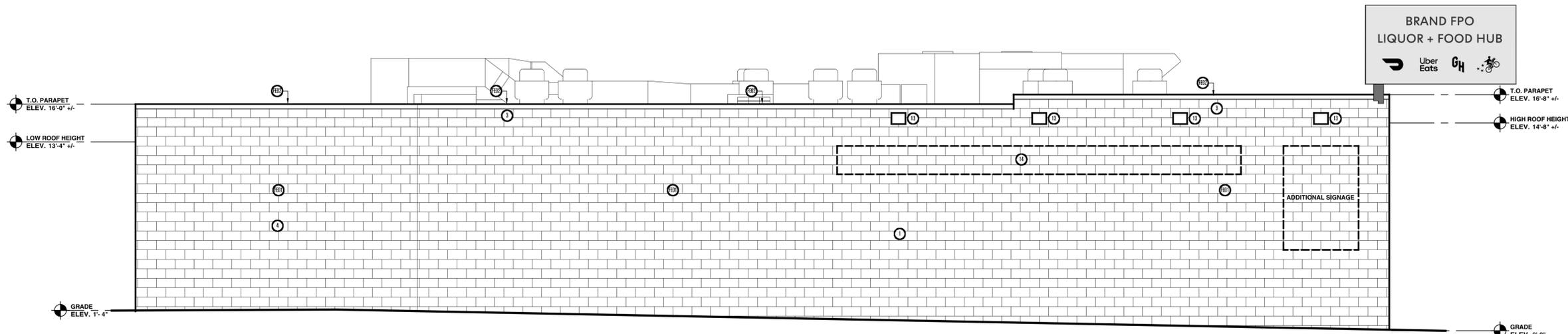
Roof Plan

021293

A1.9

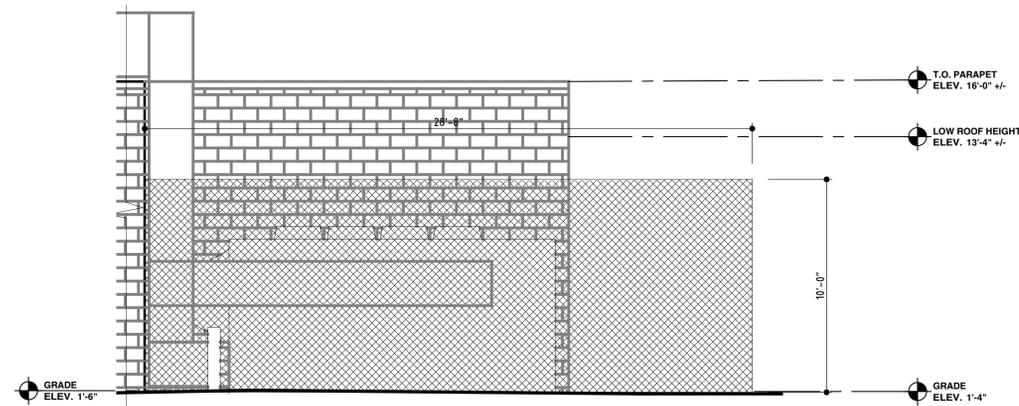
1 ROOF PLAN





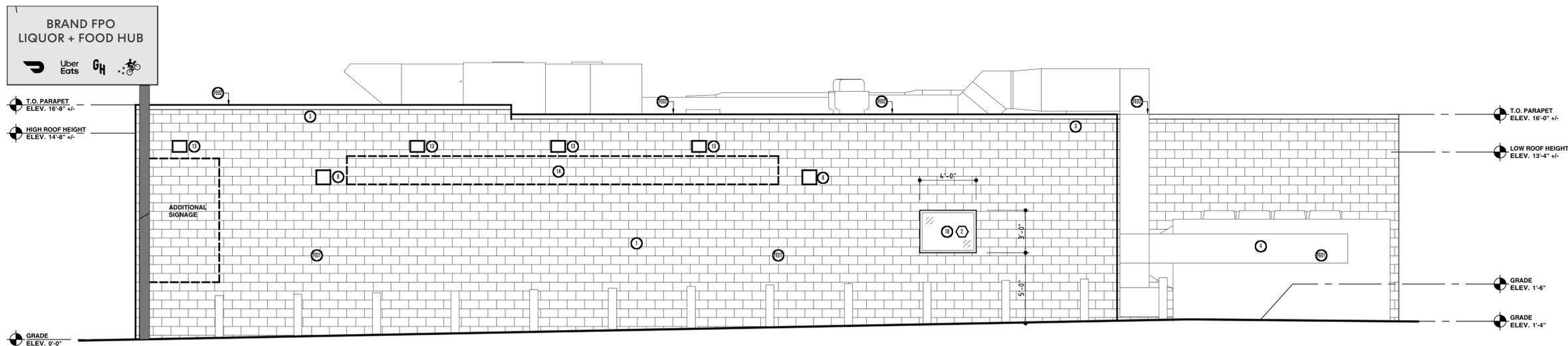
3 SOUTH - EXTERIOR ELEVATION

SCALE: 1/4" = 1'



2 NORTH - EXTERIOR ELEVATION WITH FENCE

SCALE: 1/4" = 1'



1 NORTH - EXTERIOR ELEVATION

SCALE: 1/4" = 1'

PLAN LEGEND	
SYMBOL	DESCRIPTION
1	MASONRY WALL
2	CEMENT BOARD SIDING
3	PARAPET CAP FLASHING
4	MASONRY BUILDING ADDITION IN POOR CONDITION - TO BE REMOVED
5	MASONRY SILL
6	MASONRY WALL BEYOND
7	GUTTERS
8	SURFACE MOUNTED LIGHT FIXTURE
9	ELECTRICAL BOX
10	NEW STOREFRONT GLAZING SYSTEM
11	NEW DOUBLE HOLLOW METAL DOOR
12	NEW PUNCH IN GLAZING
13	LIGHT FIXTURE
14	ACM PANELS
15	EXISTING SECURITY GATE
16	EXISTING BOLLARD
17	SECURITY FENCE PER OWNERS SPECS
18	WINDOWS
19	STOREFRONT

FINISH SCHEDULE		
MARK	MFG	COLOR
100	PPG	VICTORY BLUE 1165-7
101	PPG	BURNT RED 1188-7
102	PPG	SOLSTICE 1010-3

BOLLARDS	
ALL BOLLARDS TO BE PAINTED WITH SOLSTICE 1010-3 SEE FINISH SCHEDULE	

PPG CONTACT INFO	
PPG PAINTS PH: 800.441.9695 E: techservicerequests@ppg.com	

LIGHTING LEGENDS			
CODE	DESCRIPTION	NOTES	QTY
EL01	POLE MOUNT TYPE IV DISTRIBUTION	EXTERIOR	-
EL02	LED EMERGENCY BATTERY UNIT, SELF-DIAGNOSTICS	EXTERIOR	-
EL03	EXTERIOR WALL WASHER LED	EXTERIOR	-
L	INSTALL BLACK LIGHTING FIXTURE	EXTERIOR	PULL POWER

*** SEE ADDENDUM SCHEDULES FOR PRODUCT SPECIFICATION

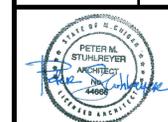
ELEVATION NOTES	
1.	G.C. TO POWER-WASH ALL EXTERIOR ELEVATIONS PRIOR TO PAINTING. PATCH & REPAIR CMU TO PAINTABLE CONDITIONS AS NEEDED
2.	G.C. TO ENSURE THAT ALL PENETRATIONS IN THE BUILDING ENVELOPE ARE THOROUGHLY SEALED AND THAT THE EXTERIOR PRIMER AND PAINT APPLIED OVER THE EXTERIOR CMU WALL CONSTITUTES A CONTINUOUS AIR BARRIER.

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

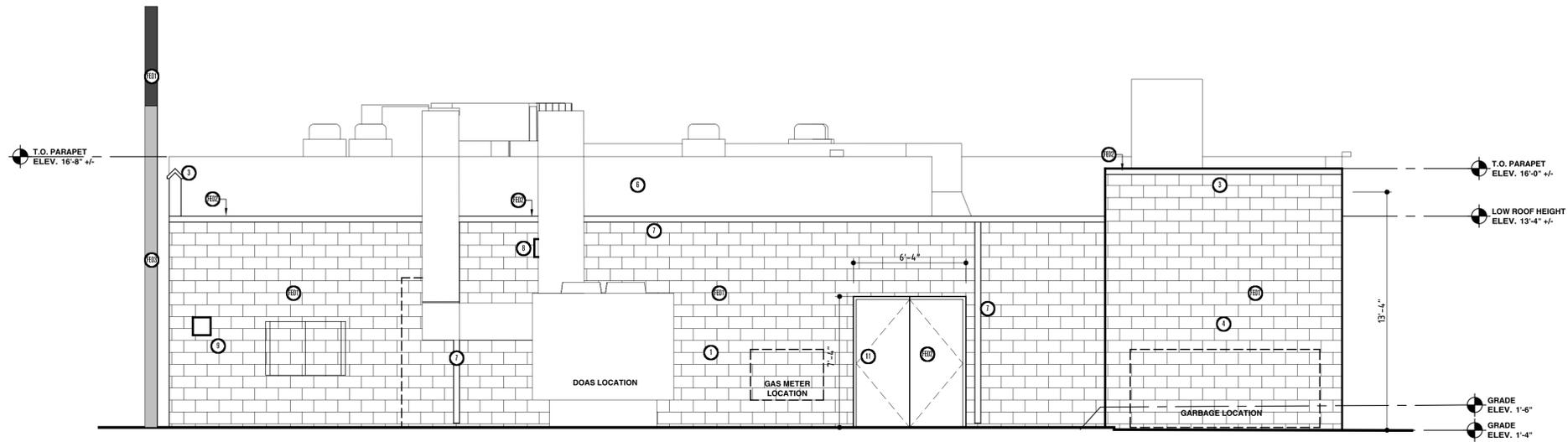
Exterior Elevations

021293
A2.1

A3.1 EXTERIOR ELEVATIONS.dwg

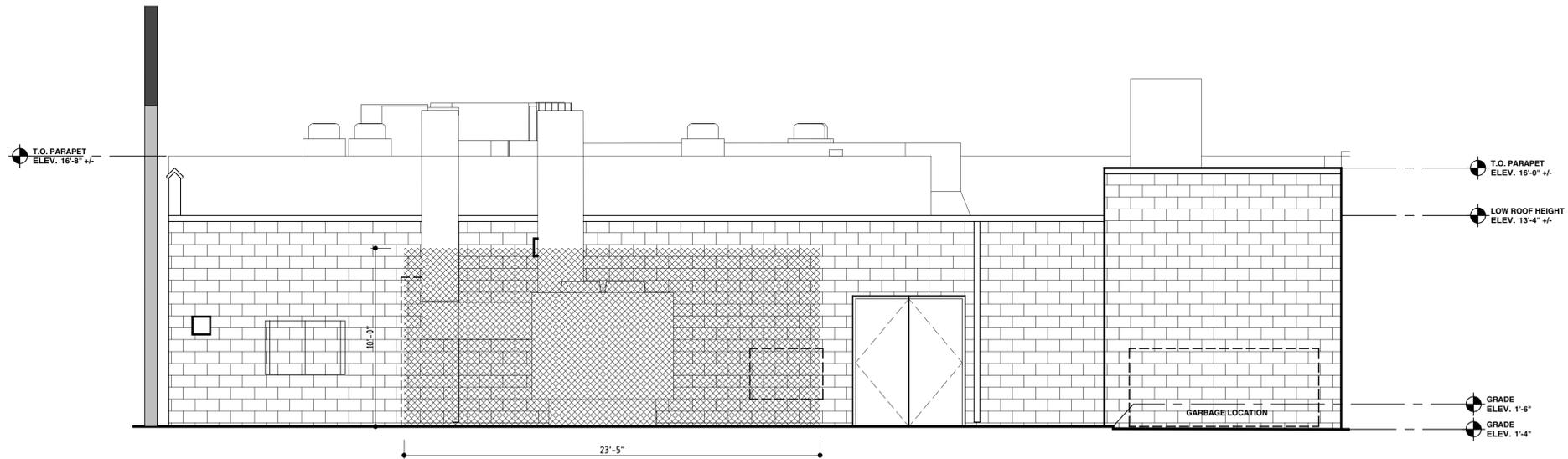
3/7/2022

DH Intern 02



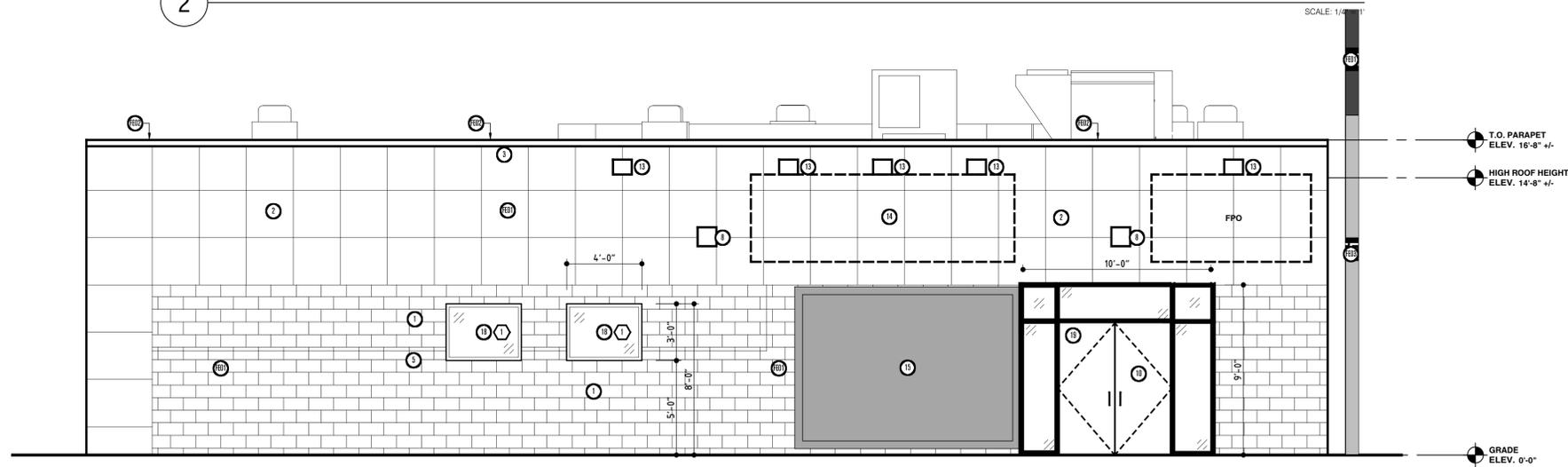
3 WEST - EXTERIOR ELEVATION

SCALE: 1/4" = 1'



2 WEST - FACADE WITH FENCE

SCALE: 1/4" = 1'



1 EAST - EXTERIOR ELEVATION

SCALE: 1/4" = 1'

PLAN LEGEND	
SYMBOL	DESCRIPTION
1	MASONRY WALL
2	CEMENT BOARD SIDING
3	PARAPET CAP FLASHING
4	MASONRY BUILDING ADDITION IN POOR CONDITION - TO BE REMOVED
5	MASONRY SILL
6	MASONRY WALL BEYOND
7	GUTTERS
8	SURFACE MOUNTED LIGHT FIXTURE
9	ELECTRICAL BOX
10	NEW STOREFRONT GLAZING SYSTEM
11	NEW DOUBLE HOLLOW METAL DOOR
12	NEW PUNCH IN GLAZING
13	LIGHT FIXTURE
14	ACM PANELS
15	EXISTING SECURITY GATE
16	EXISTING BOLLARD
17	SECURITY FENCE PER OWNERS SPECS
18	WINDOWS
19	STOREFRONT

FINISH SCHEDULE		
MARK	MFG	COLOR
10	PPG	VICTORY BLUE 1165-7
11	PPG	BURNT RED 1188-7
12	PPG	SOLSTICE 1010-3

BOLLARDS	
ALL BOLLARDS TO BE PAINTED WITH SOLSTICE 1010-3 SEE FINISH SCHEDULE	

PPG CONTACT INFO	
PPG PAINTS PH: 800.441.5695 E: techservicerequests@ppg.com	

LIGHTING LEGENDS			
CODE	DESCRIPTION	NOTES	QTY
EL01	POLE MOUNT TYPE IV DISTRIBUTION	EXTERIOR	-
EL02	LED EMERGENCY BATTERY UNIT. SELF-DIAGNOSTICS	EXTERIOR	-
EL03	EXTERIOR WALL WASHER LED	EXTERIOR	-
L	INSTALL BLACK LIGHTING FIXTURE	EXTERIOR	PULL POWER

*** SEE ADDENDUM SCHEDULES FOR PRODUCT SPECIFICATION

ELEVATION NOTES	
1.	G.C. TO POWER-WASH ALL EXTERIOR ELEVATIONS PRIOR TO PAINTING. PATCH & REPAIR CMU TO PAINTABLE CONDITIONS AS NEEDED
2.	G.C. TO ENSURE THAT ALL PENETRATIONS IN THE BUILDING ENVELOPE ARE THOROUGHLY SEALED AND THAT THE EXTERIOR PRIMER AND PAINT APPLIED OVER THE EXTERIOR CMU WALL CONSTITUTES A CONTINUOUS AIR BARRIER.

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

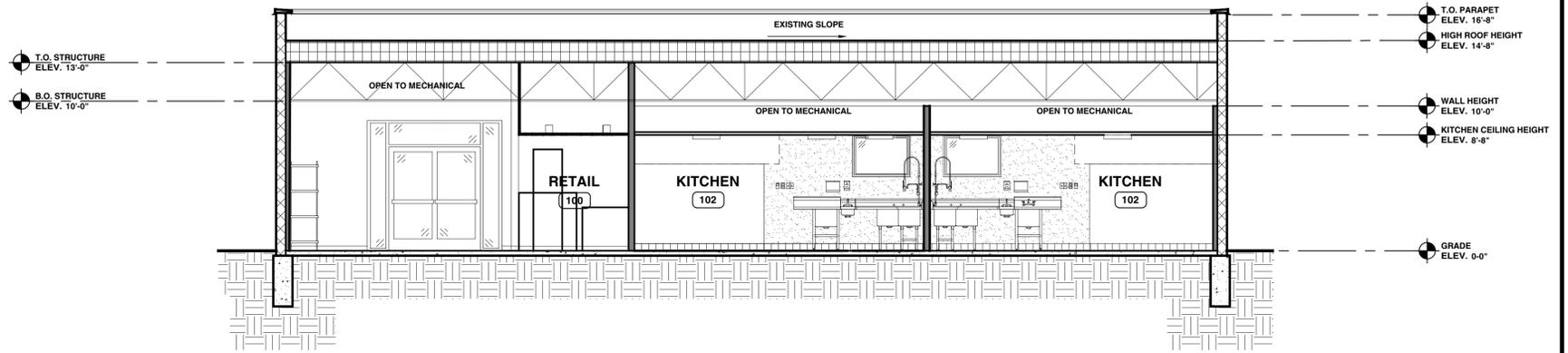


3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

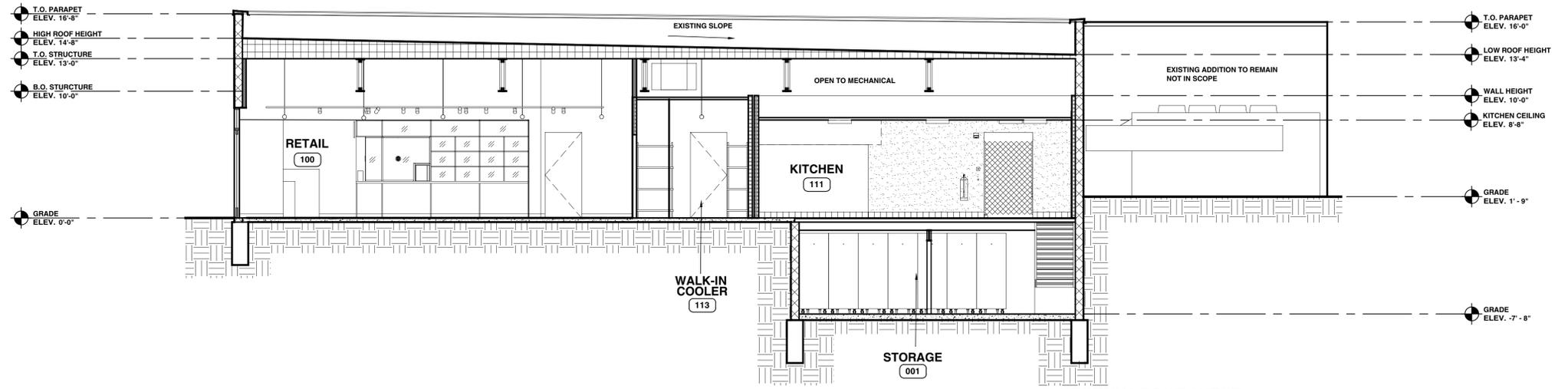
Exterior Elevations

021293

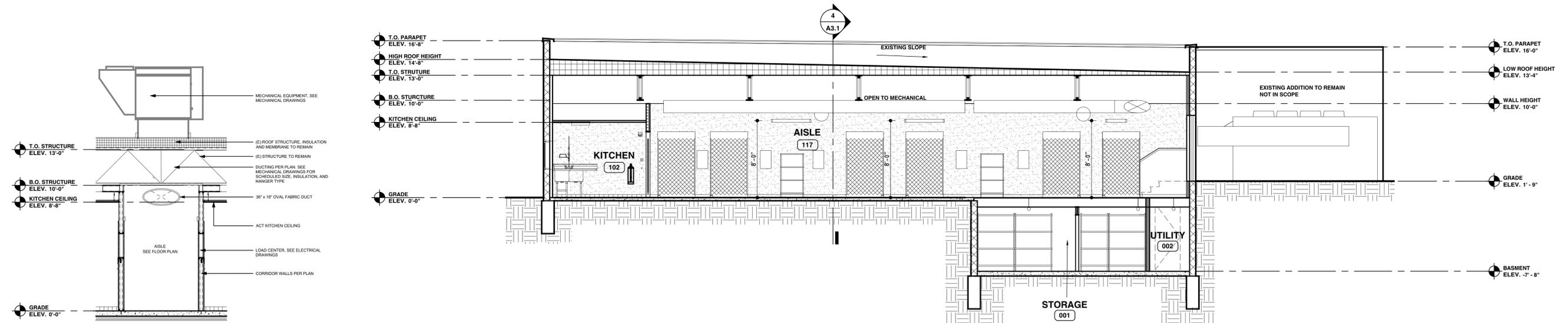
A2.2



3 SECTION NORTH-SOUTH SCALE: 3/16" = 1"



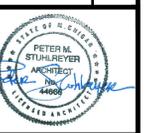
2 SECTION EAST-WEST SCALE: 3/16" = 1"



4 SECTION NORTH-SOUTH SCALE: 1/4" = 1"

1 SECTION EAST-WEST SCALE: 3/16" = 1"

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

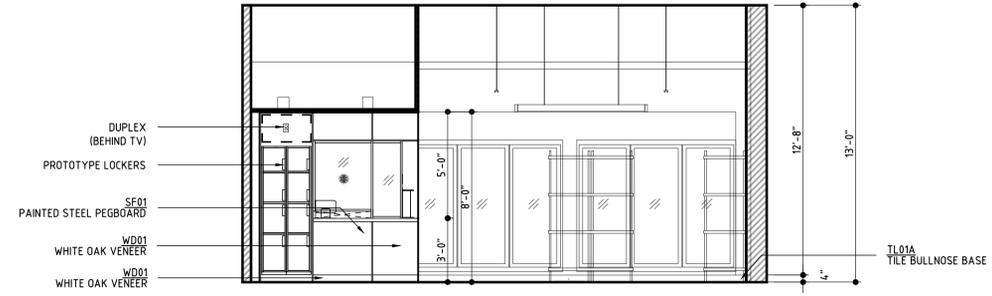


3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

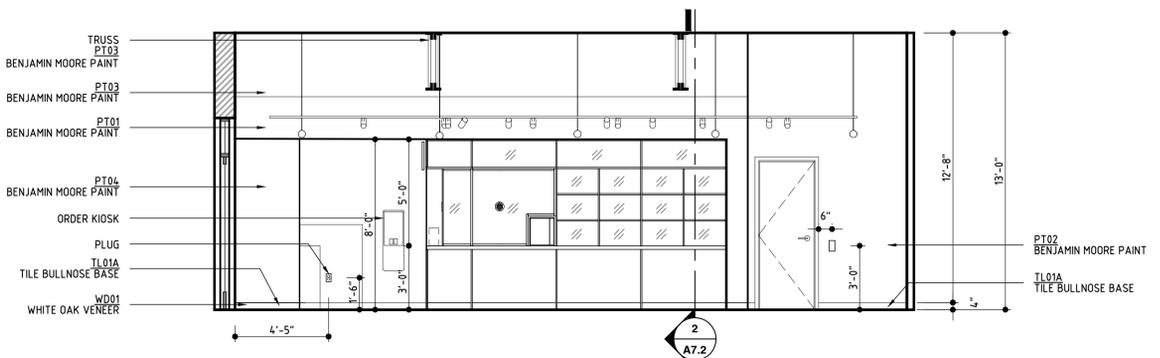
Building Sections

021293

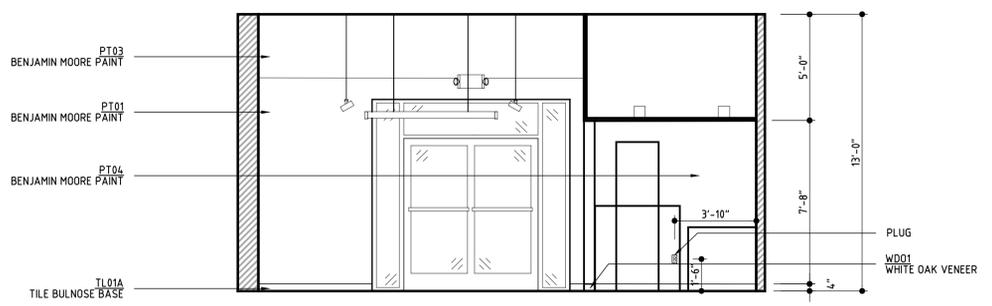
A3.1



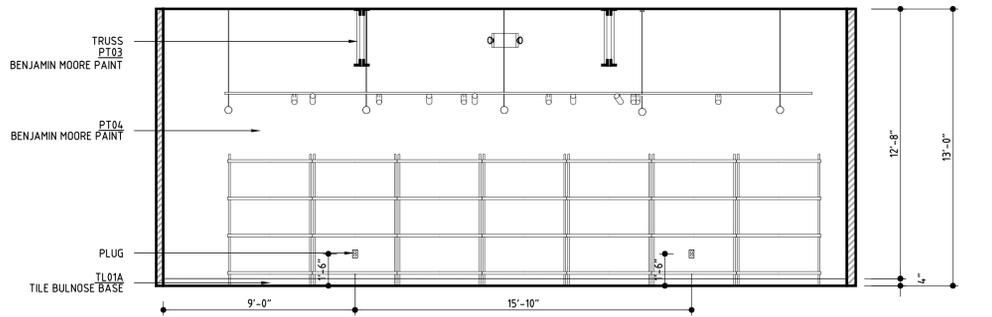
6 ELEVATION RETAIL
1/4" = 1"



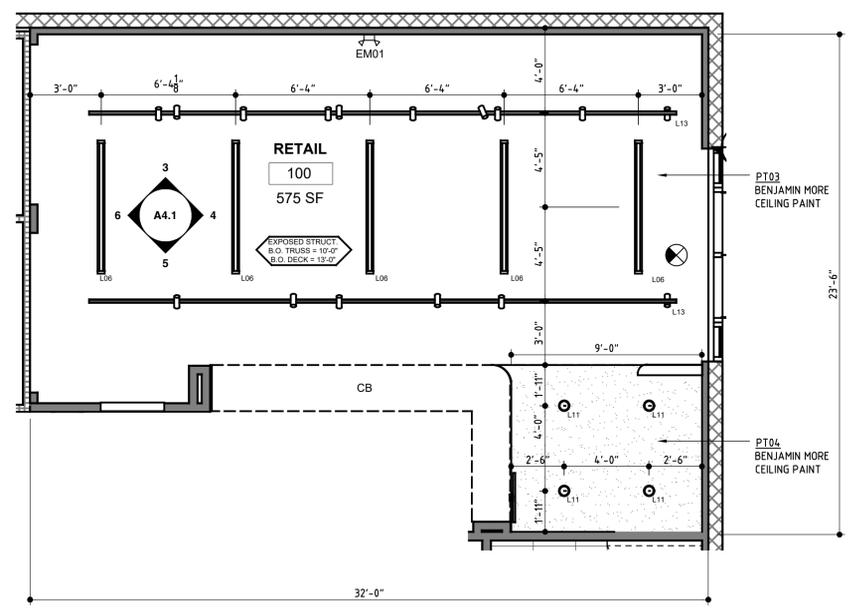
5 ELEVATION RETAIL
1/4" = 1"



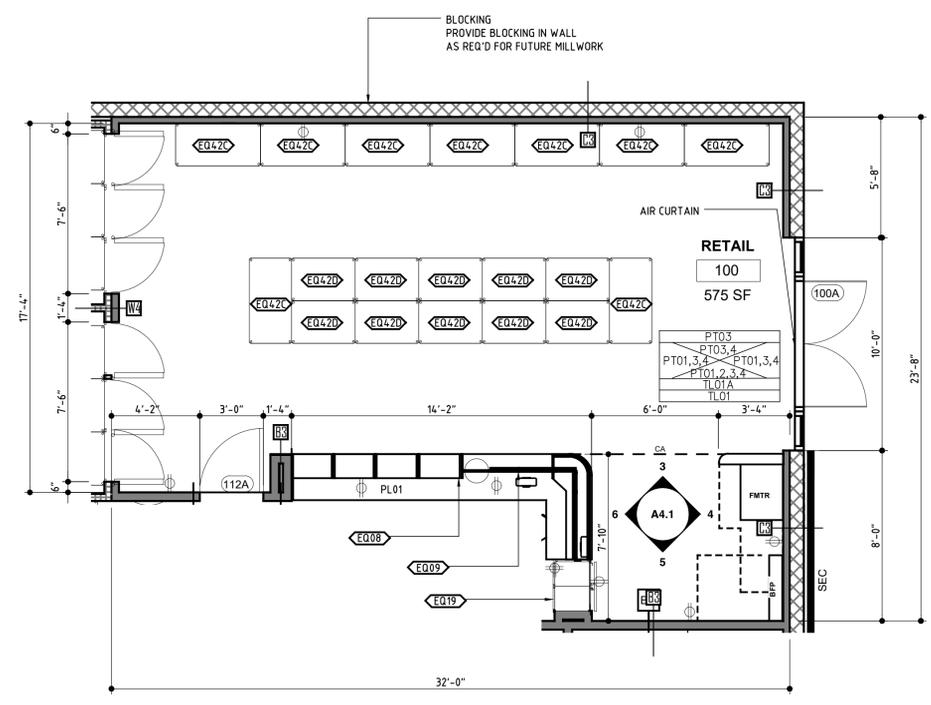
4 ELEVATION RETAIL
1/4" = 1"



3 ELEVATION RETAIL
1/4" = 1"



2 ENLARGED REFLECTED CEILING PLAN RETAIL
1/4" = 1"



1 ENLARGED PLAN RETAIL
1/4" = 1"

PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	MASONRY WALL
[Symbol]	INTERIOR PARTITION
[Symbol]	EXISTING DOOR
[Symbol]	DOOR TAG
[Symbol]	6'-0" SUSPENDED LED LIGHT FIXTURE
[Symbol]	LED SURFACE MOUNTED CAN LIGHT
[Symbol]	LED TRACK LIGHTS
[Symbol]	WALL MOUNTED EMERGENCY LIGHT FIXTURE 10' A.F.F. OR HIGHER TO ACCOMMODATE FUTURE MILLWORK
[Symbol]	WALL ASSEMBLY
[Symbol]	SUSPENDED GYP. BOARD
[Symbol]	EXIT SIGN
[Symbol]	EQUIPMENT TAG
[Symbol]	FIRE METER
[Symbol]	BACKFLOW PREVENTER

FINISH LEGEND		
[Symbol]	CEILING	
[Symbol]	WALL	
[Symbol]	WALL	
[Symbol]	BASE	
[Symbol]	FLOOR	

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
RETAIL	L06	6' SUSPENDED LINEAR LED		3000K. B.O LIGHT FIXTURE AT 8' AFF
RETAIL	L11	RECESSED DOWNLIGHT		3000K.
RETAIL	L12	SUSPENDED LINEAR TRACK		9'AFF

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
RETAIL	EQ08	LIQUOR DISPLAY		
RETAIL	EQ09	PICKUP COUNTER		
RETAIL	EQ12	FIRE EXTINGUISHER BRACKET		
RETAIL	EQ18	AIR CURTAIN		
RETAIL	EQ19	LOCKER		
RETAIL	EQ42C	DRY RACK 24" X 48"		
RETAIL	EQ42D	DRY RACK 24" X 36"		

*** SEE A8.4 FOR PRODUCT SPECIFICATION

FINISHES			
LOCATION	CODE	DESCRIPTION	NOTES
RETAIL	FF01	SEALED CONCRETE	LEVEL 02 FINISH
RETAIL	FB01	RUBBER BASE	
RETAIL	PL01	PLASTIC LAMINATE	
RETAIL	WD01	WHITE OAK VENEER	
RETAIL	PT01	BENJAMIN MOORE PAINT SCUFF-X	
RETAIL	PT02	BENJAMIN MOORE PAINT SCUFF-X	
RETAIL	PT03	BENJAMIN MOORE CEILING PAINT SCUFF-X	PAINT CEILING, STRUCTURE, ALL DUCTWORK EXPOSED PIPED, CONDUIT
RETAIL	PT04	BENJAMIN MOORE PAINT	
RETAIL	TL01A	TILE BULLNOSE BASE	
RETAIL	TL01	12" X 12" TILE	

*** SEE A8.1 FOR PRODUCT SPECIFICATION

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

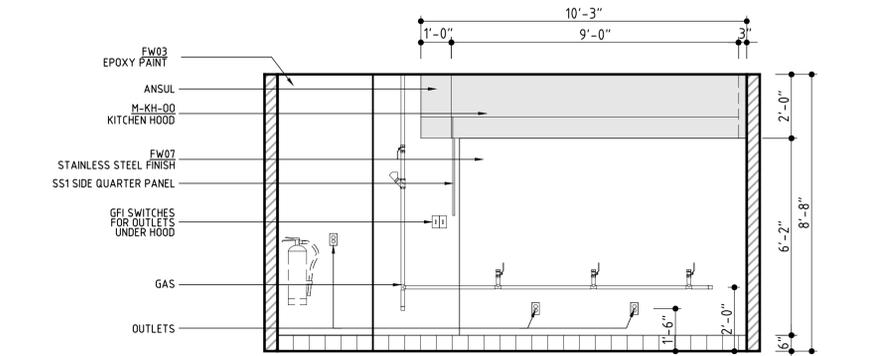
3rd Ave. Detroit

3181 3rd Ave.
Detroit, MI 48201

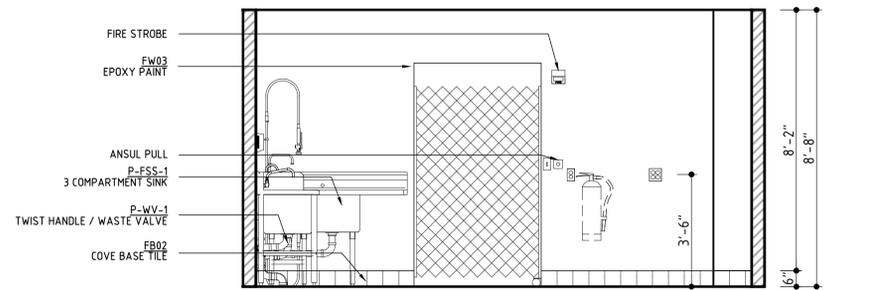
Enlarged Plans & Elevations - Retail

021293

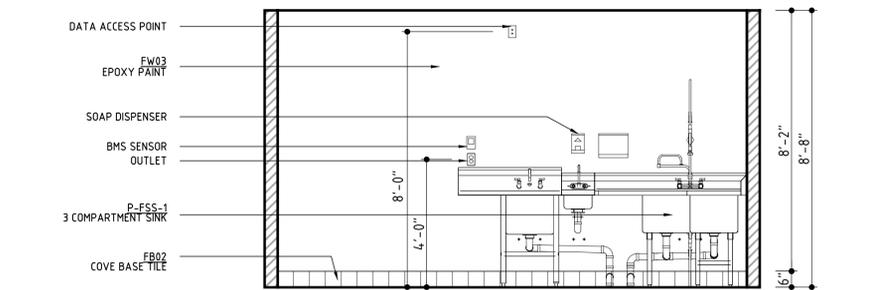
A4.1



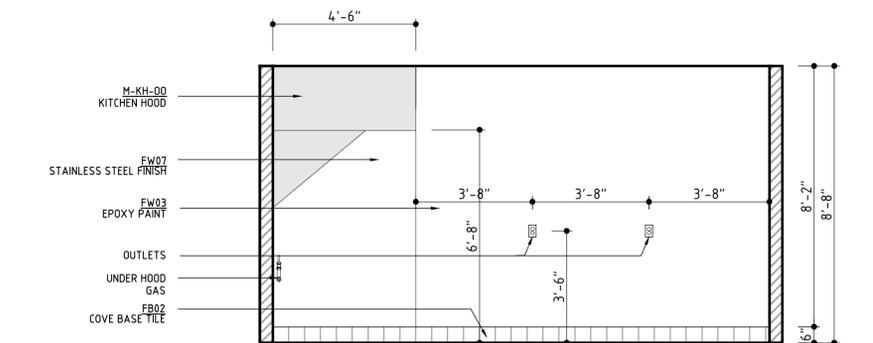
6 ELEVATION KITCHEN 101



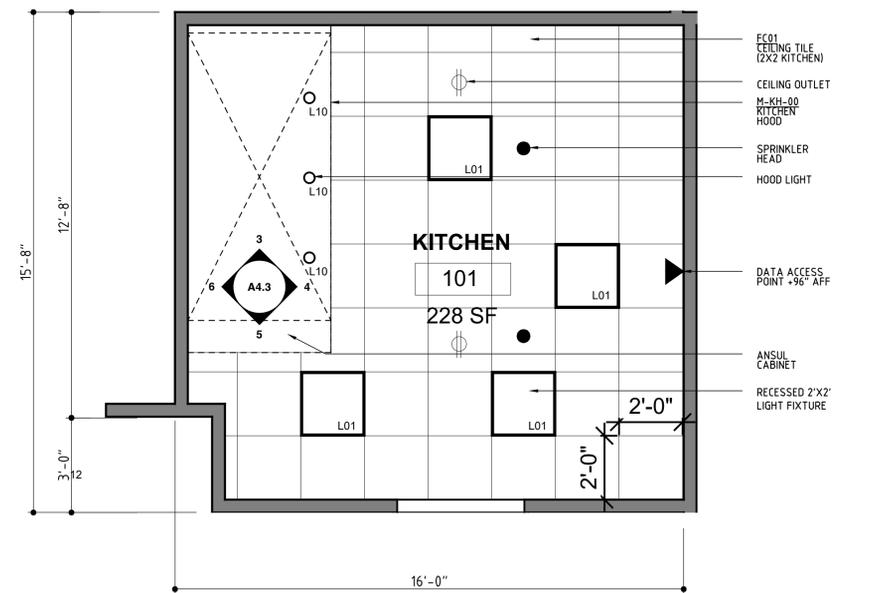
5 ELEVATION KITCHEN 101



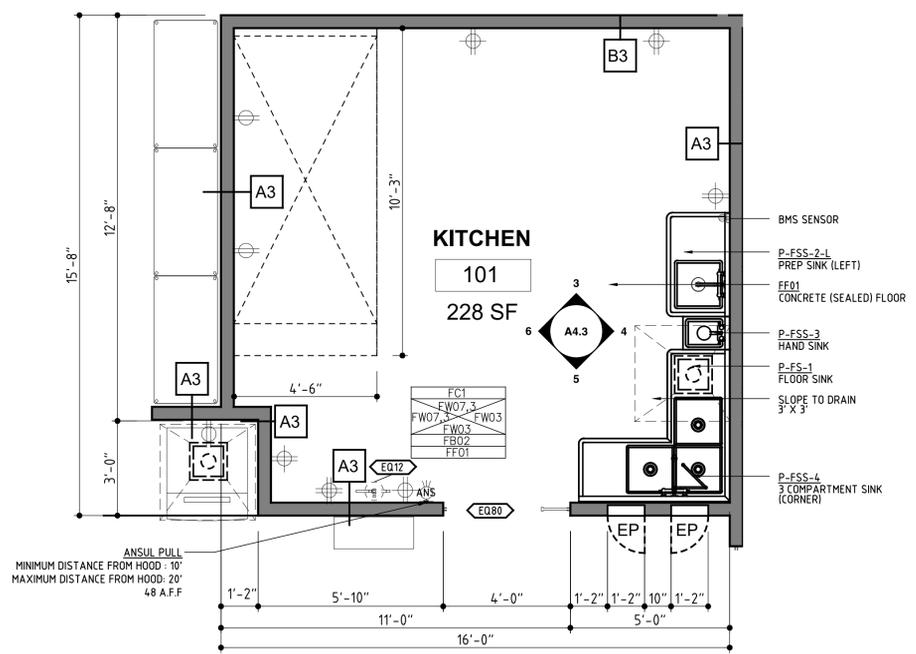
4 ELEVATION KITCHEN 101



3 ELEVATION KITCHEN 101



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 101



1 ENLARGED PLAN KITCHEN 101

MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3'	A3/A6.1
A6	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3'	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	PARTITION TYPE 'E3'	E3/A6.1
F3	-	-
W4	PARTITION TYPE 'W4'	NO DETAIL
EXC	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

MARK	DESCRIPTION
---	MASONRY WALL
---	INTERIOR PARTITION
---	EXISTING DOOR
(000)	DOOR TAG
---	2' X 2' LAY-IN SMOOTH VINYL CEILING TILE
L01	RECESSED 2X2 LED LIGHT FIXTURE
---	SUPPLY AIR DIFFUSER
L10	HOOD LAMPS
---	SPRINKLER
---	DATA ACCESS POINT
---	WALL ASSEMBLY
EQ00	EQUIPMENT TAG
EP	ELECTRICAL PANEL

FINISH LEGEND
CEILING
WALL
WALL
WALL
BASE
FLOOR

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
KITCHEN	P-FSS-3	HAND SINK		
KITCHEN	P-FS-1	FLOOR SINK		
KITCHEN	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ00	SECURITY GATES		

LOCATION	CODE	DESCRIPTION	NOTES
KITCHEN	FB02	COVE BASE TILE	
KITCHEN	CG01	CORNER GUARD	ALL EXPOSED CORNERS
KITCHEN	FC01	CEILING TILE 2X2 (KITCHEN)	
KITCHEN	FF01	CONCRETE (SEALED) FLOOR	
KITCHEN	FF02	VCT. TILE	
KITCHEN	FW03	EPOXY PAINT	
KITCHEN	FW07	STAINLESS STEEL	

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

EST 1998

DESIGNHAUS ARCHITECTURE

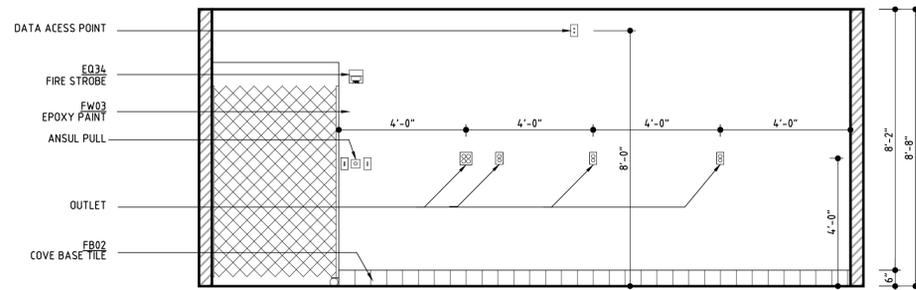
Permits 03.07.22
CD 90% 02.25.22
CD 50% 02.04.22
Second Investigation 10.08.21
Site Investigation 09.30.21
Revision/Issue Date

3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Enlarged Kitchen Plans & Elevations - Kitchen 101

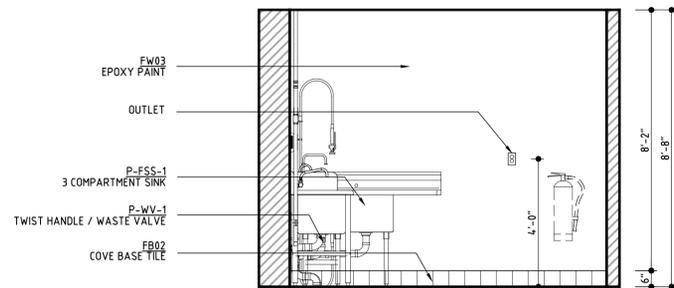
021293

A4.3



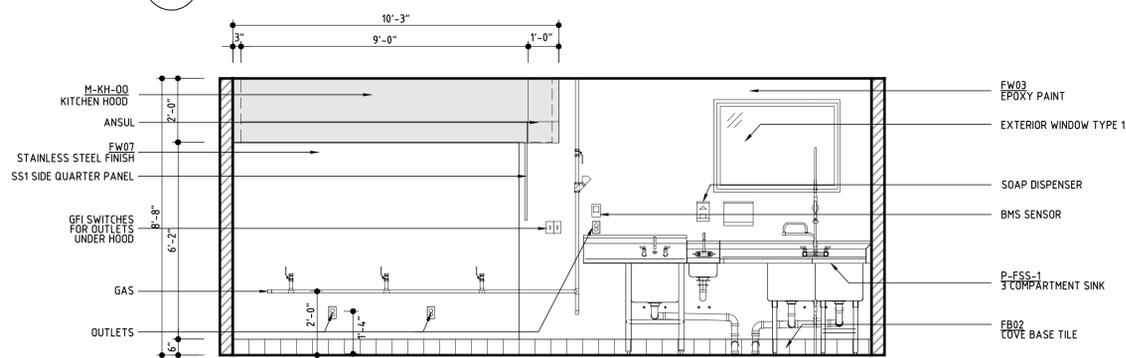
6 ELEVATION KITCHEN 102

3/8" = 1"



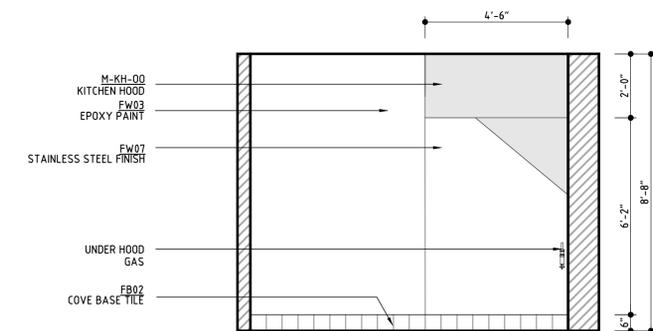
5 ELEVATION KITCHEN 102

3/8" = 1"



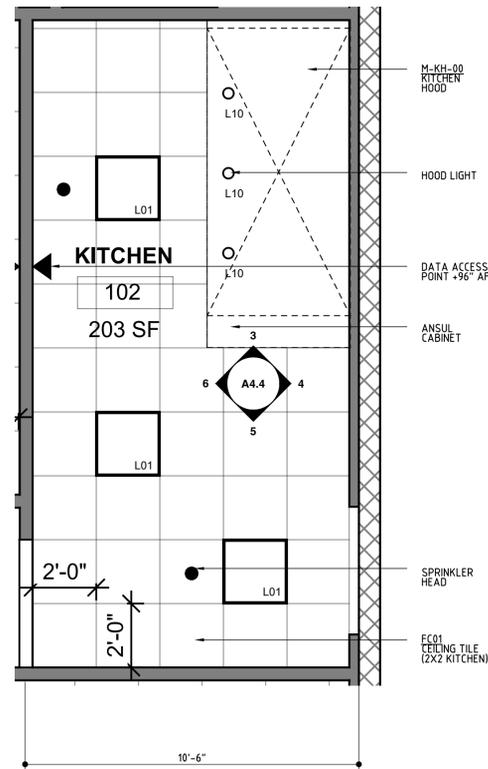
4 ELEVATION KITCHEN 102

3/8" = 1"



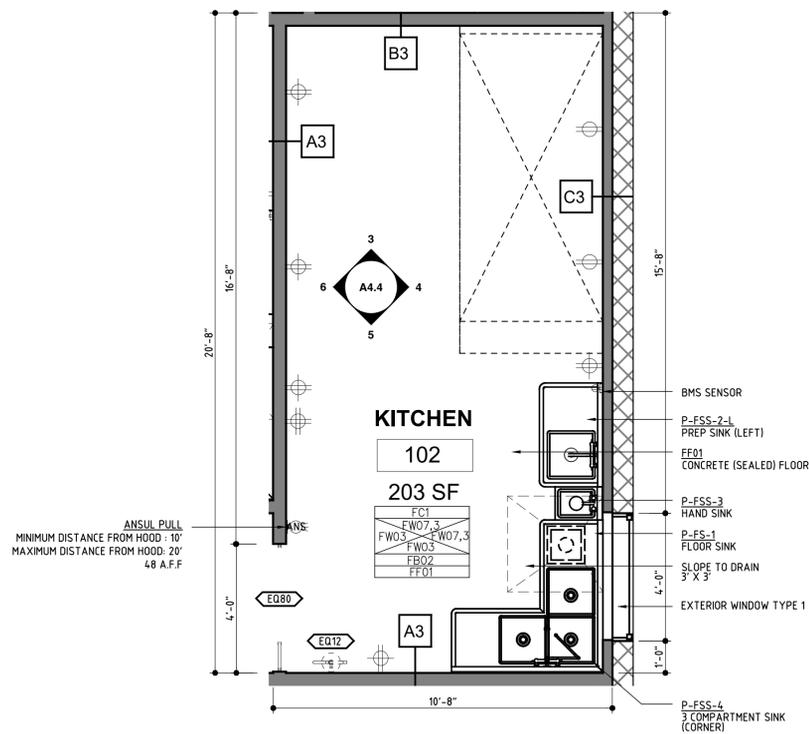
3 ELEVATION KITCHEN 102

3/8" = 1"



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 102

3/8" = 1"



1 ENLARGED PLAN KITCHEN 102

3/8" = 1"

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

PLAN LEGEND	
MARK	DESCRIPTION
[Hatched Box]	MASONRY WALL
[Dashed Line]	INTERIOR PARTITION
[Arrow]	EXISTING DOOR
[Circle with 000]	DOOR TAG
[Square with X]	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
[Square with L10]	RECESSED 2X2 LED LIGHT FIXTURE
[Square with X]	SUPPLY AIR DIFFUSER
[Circle with L10]	HOOD LAMPS
[Circle with dot]	SPRINKLER
[Square with dot]	DATA ACCESS POINT
[Square with X]	WALL ASSEMBLY
[Circle with EQ00]	EQUIPMENT TAG
[Square with EP]	ELECTRICAL PANEL

FINISH LEGEND	
MARK	DESCRIPTION
[Hatched Box]	CEILING
[Hatched Box]	WALL
[Hatched Box]	WALL
[Hatched Box]	WALL
[Hatched Box]	BASE
[Hatched Box]	FLOOR

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
	P-FSS-3	HAND SINK		
	P-FS-1	FLOOR SINK		
	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

*** SEE A8.4 FOR PRODUCT SPECIFICATION

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ00	SECURITY GATES		

*** SEE A8.4 FOR PRODUCT SPECIFICATION

FINISHES				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	FB02	COVE BASE TILE		
KITCHEN	CG01	CORNER GUARD		ALL EXPOSED CORNERS
KITCHEN	FC01	CEILING TILE 2X2 (KITCHEN)		
KITCHEN	FF01	CONCRETE (SEALED) FLOOR		
KITCHEN	FF02	VCT. TILE		
KITCHEN	FW03	EPOXY PAINT		
KITCHEN	FW07	STAINLESS STEEL		

*** SEE A8.1 FOR PRODUCT SPECIFICATION

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

EST 1998
DESIGNHAUS
ARCHITECTURE

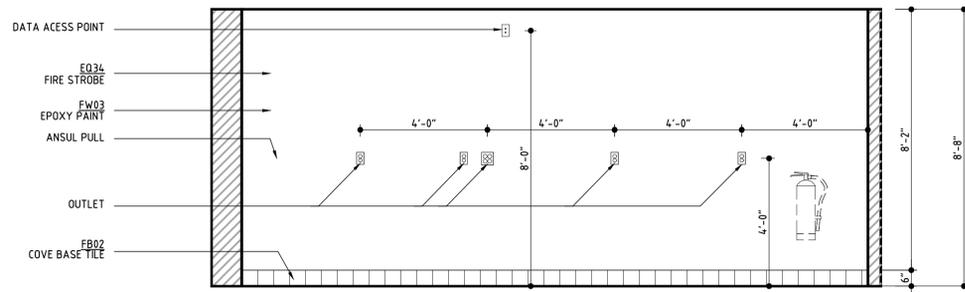
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

PETER M. STUHLREYER
REGISTERED ARCHITECT
NO. 44608

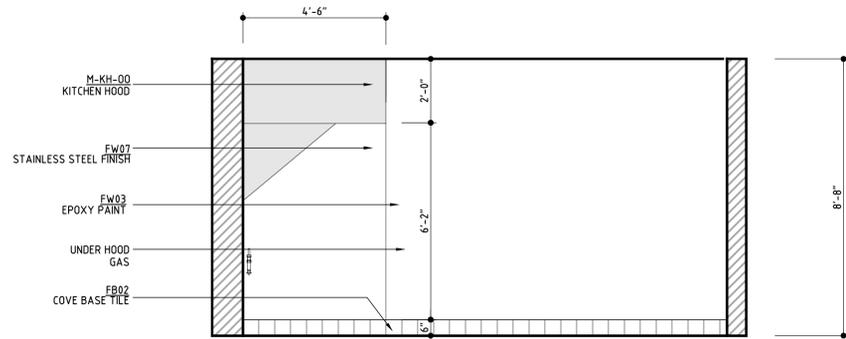
3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Enlarged Kitchen
Plans & Elevations
- Kitchen 102

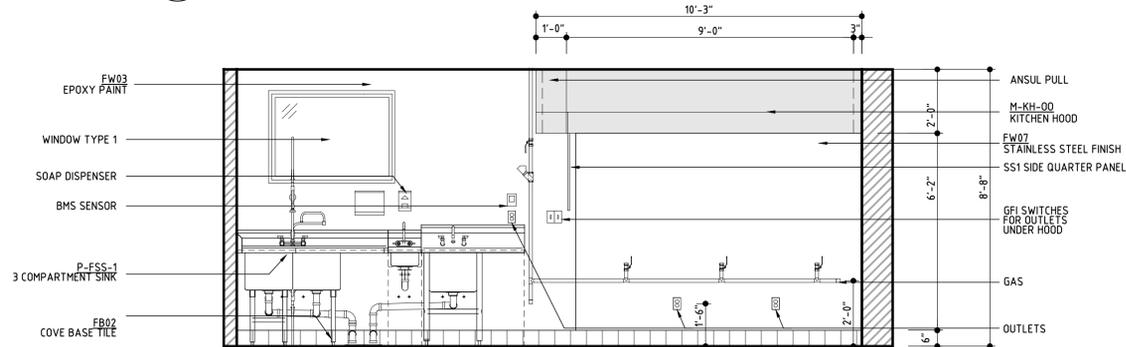
021293
A4.4



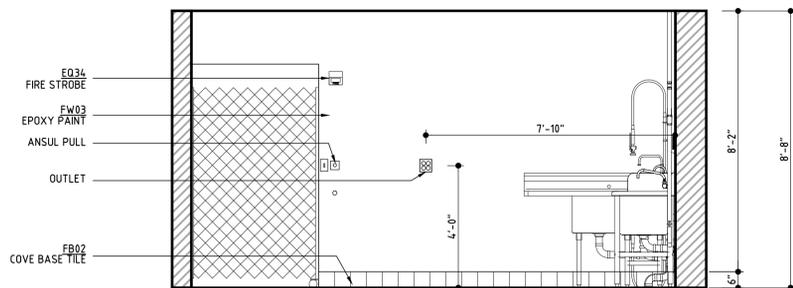
6 ELEVATION KITCHEN 103



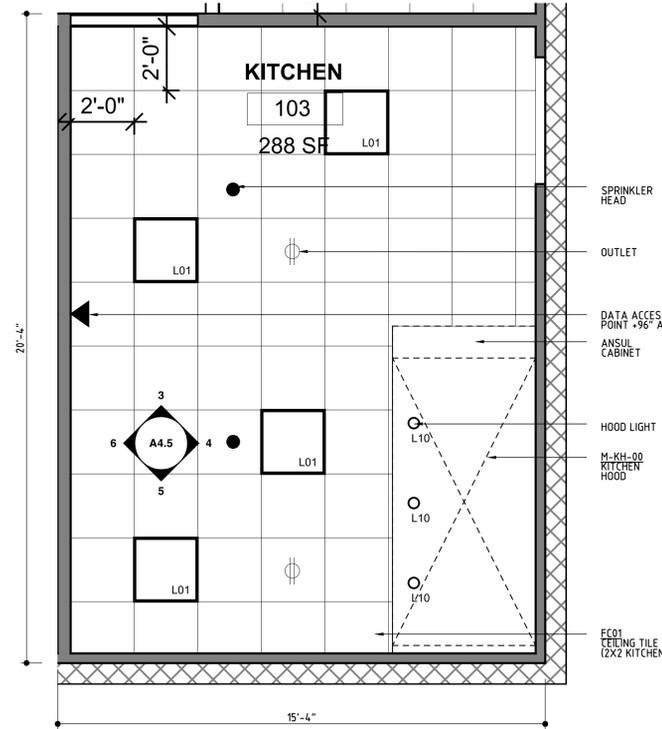
5 ELEVATION KITCHEN 103



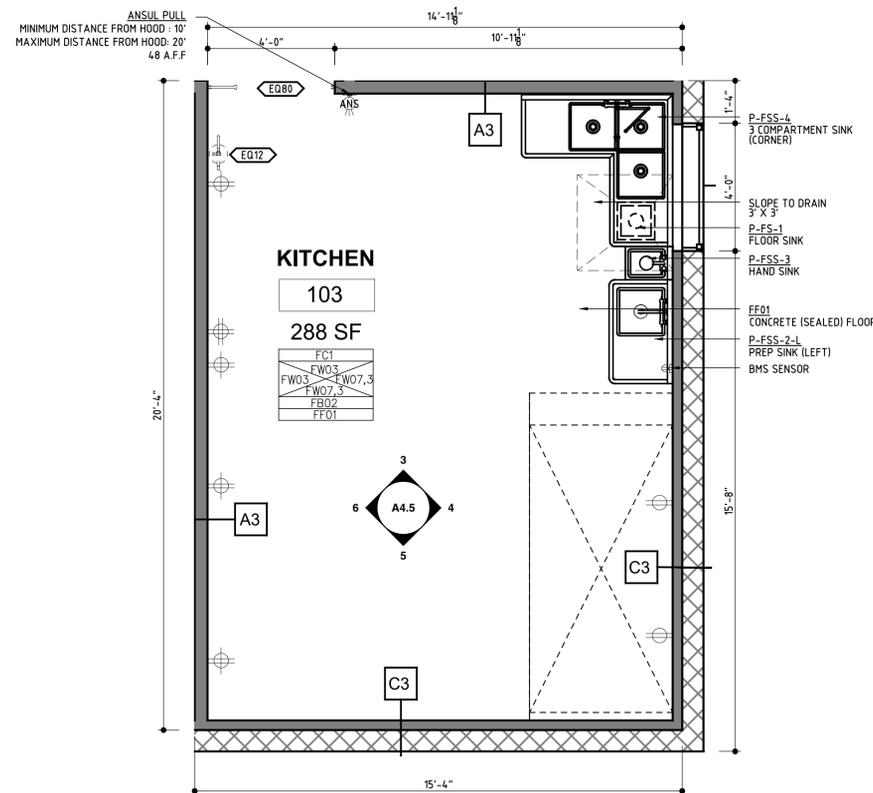
4 ELEVATION KITCHEN 103



3 ELEVATION KITCHEN 103



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 103



1 ENLARGED PLAN KITCHEN 103

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	MASONRY WALL
[Symbol]	INTERIOR PARTITION
[Symbol]	EXISTING DOOR
[Symbol]	DOOR TAG
[Symbol]	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
[Symbol]	RECESSED 2X2 LED LIGHT FIXTURE
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	HOOD LAMPS
[Symbol]	SPRINKLER
[Symbol]	DATA ACCESS POINT
[Symbol]	WALL ASSEMBLY
[Symbol]	OUTLET
[Symbol]	EQUIPMENT TAG
[Symbol]	ELECTRICAL PANEL

FINISH LEGEND	
MARK	DESCRIPTION
[Symbol]	CEILING
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	BASE
[Symbol]	FLOOR

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
	P-FSS-3	HAND SINK		
	P-FS-1	FLOOR SINK		
	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ80	SECURITY GATES		

FINISHES				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	FB02	COVE BASE TILE		
KITCHEN	CG01	CORNER GUARD		ALL EXPOSED CORNERS
KITCHEN	FC01	CEILING TILE 2X2 (KITCHEN)		
KITCHEN	FF01	CONCRETE (SEALED) FLOOR		
KITCHEN	FF02	VCT. TILE		
KITCHEN	FW03	EPOXY PAINT		
KITCHEN	FW07	STAINLESS STEEL		

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

EST 1998
DESIGNHAUS
ARCHITECTURE

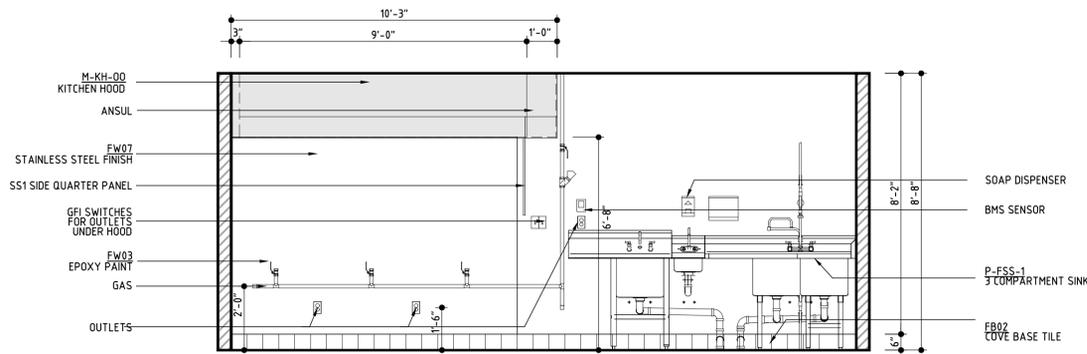
Permits 03.07.22
CD 90% 02.25.22
CD 50% 02.04.22
Second Investigation 10.08.21
Site Investigation 09.30.21
Revision/Issue Date

PETER M. STUHLREYER
REGISTERED ARCHITECT
NO. 44608

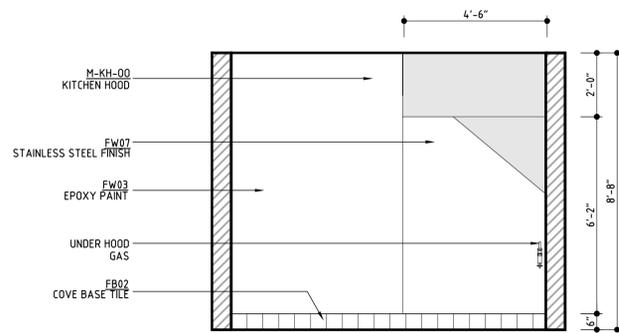
3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Enlarged Kitchen
Plans & Elevations
- Kitchen 103

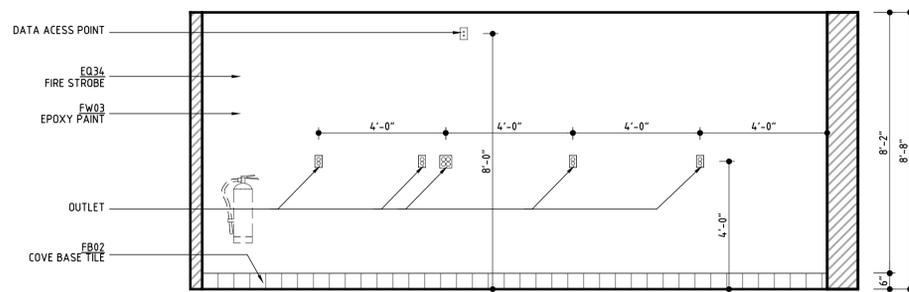
021293
A4.5



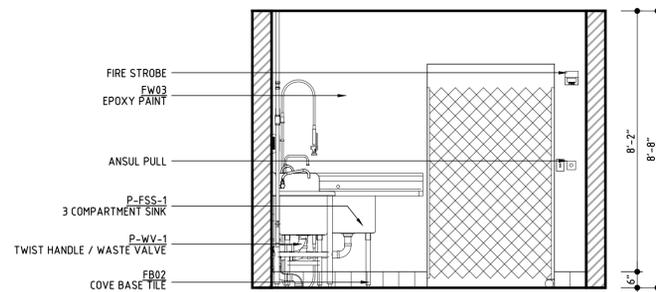
6 ELEVATION KITCHEN 104



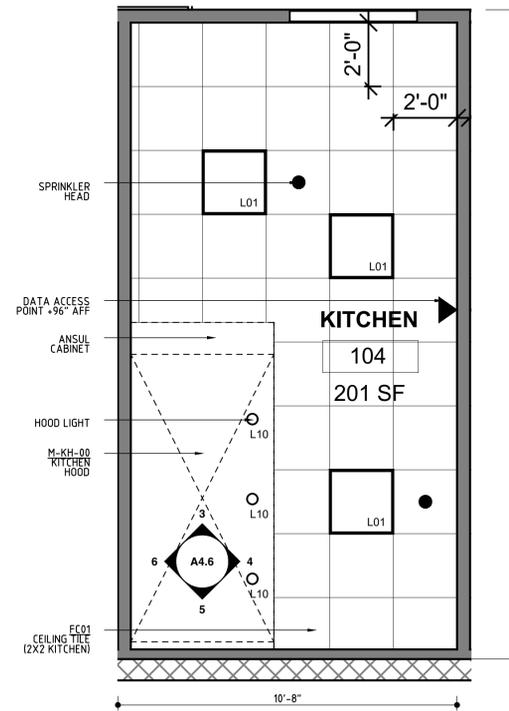
5 ELEVATION KITCHEN 104



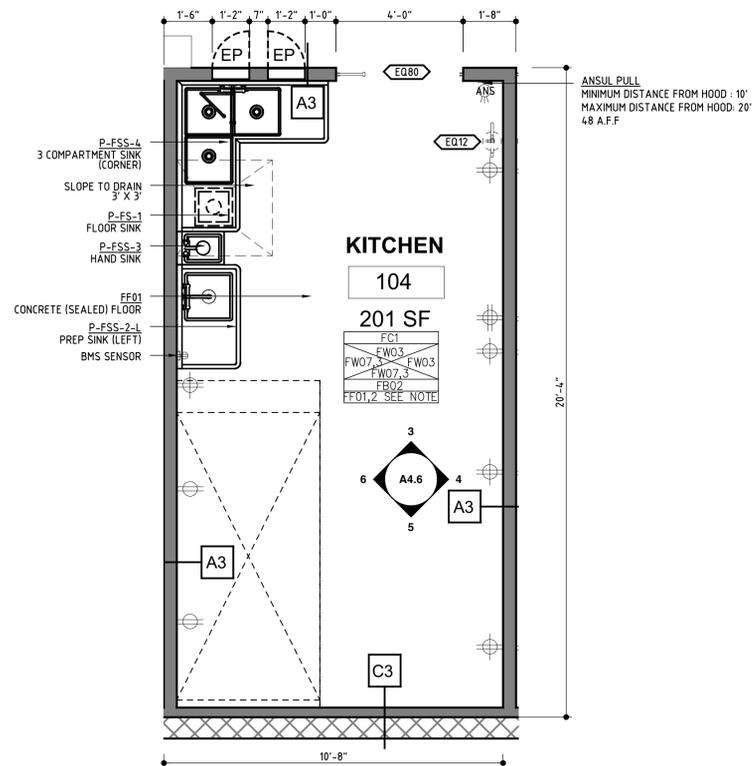
4 ELEVATION KITCHEN 104



3 ELEVATION KITCHEN 104



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 104



1 ENLARGED PLAN KITCHEN 104

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3'	
A6	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
B3	PARTITION TYPE 'A6'	A6/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	B3/A6.1
C3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
D3	PARTITION TYPE 'B3'	C3/A6.1
E3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	-
F3	PARTITION TYPE 'E3'	-
W4	3-5/8" MTL STUD & GYP BD. WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	E3/A6.1
EXC	PARTITION TYPE 'W4'	NO DETAIL
	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	MASONRY WALL
[Symbol]	INTERIOR PARTITION
[Symbol]	EXISTING DOOR
[Symbol]	DOOR TAG
[Symbol]	2' X 2' LAY-IN SMOOTH VINYL CEILING TILE
[Symbol]	RECESSED 2X2 LED LIGHT FIXTURE
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	HOOD LAMPS
[Symbol]	SPRINKLER
[Symbol]	DATA ACCESS POINT
[Symbol]	WALL ASSEMBLY
[Symbol]	OUTLET
[Symbol]	EQUIPMENT TAG
[Symbol]	ELECTRICAL PANEL

FINISH LEGEND	
MARK	DESCRIPTION
[Symbol]	CEILING
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	BASE
[Symbol]	FLOOR

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
	P-FSS-3	HAND SINK		
	P-FS-1	FLOOR SINK		
	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ80	SECURITY GATES		

FINISHES				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	FB02	COVE BASE TILE		
KITCHEN	CG01	CORNER GUARD		ALL EXPOSED CORNERS
KITCHEN	FF01	CONCRETE (SEALED) FLOOR		
KITCHEN	FF02	VCT. TILE		
KITCHEN	FW03	EPOXY PAINT		
KITCHEN	FW07	STAINLESS STEEL		

FINISH NOTE:
 1. KITCHENS 104 - 105 TO RECEIVE FF01
 2. KITCHENS 106 - 108 TO RECEIVE FF02
 3. -
 4. -

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

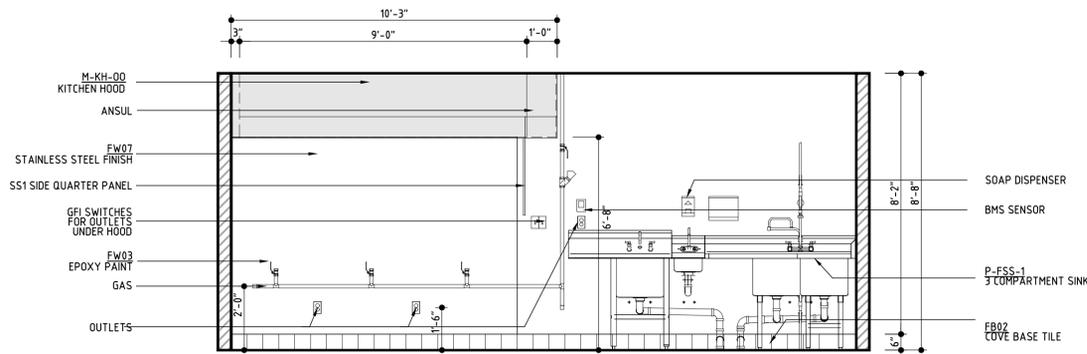
3rd Ave. Detroit

3181 3rd Ave.
 Detroit, MI 48201

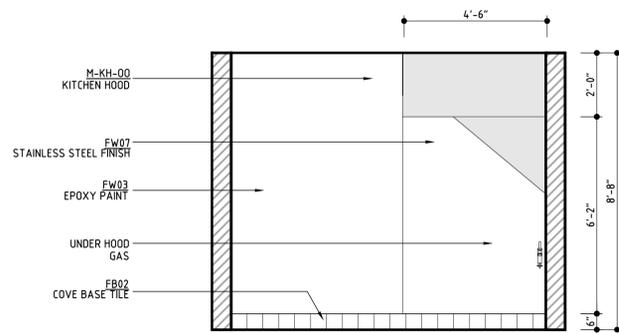
Enlarged Kitchen Plans & Elevations - Kitchen 104-107

021293

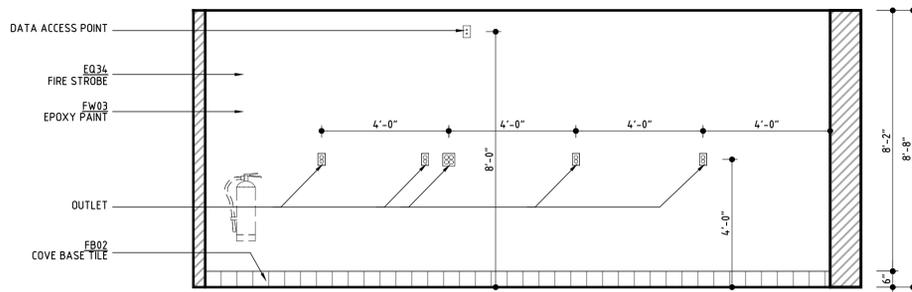
A4.6



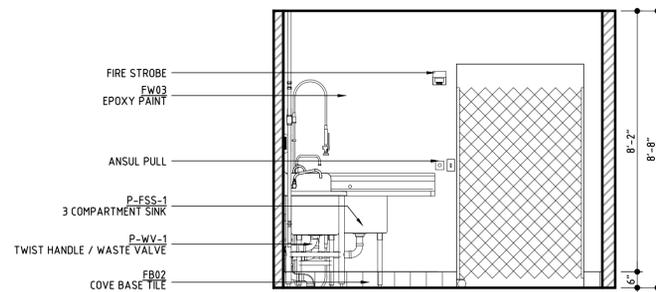
6 ELEVATION KITCHEN 108



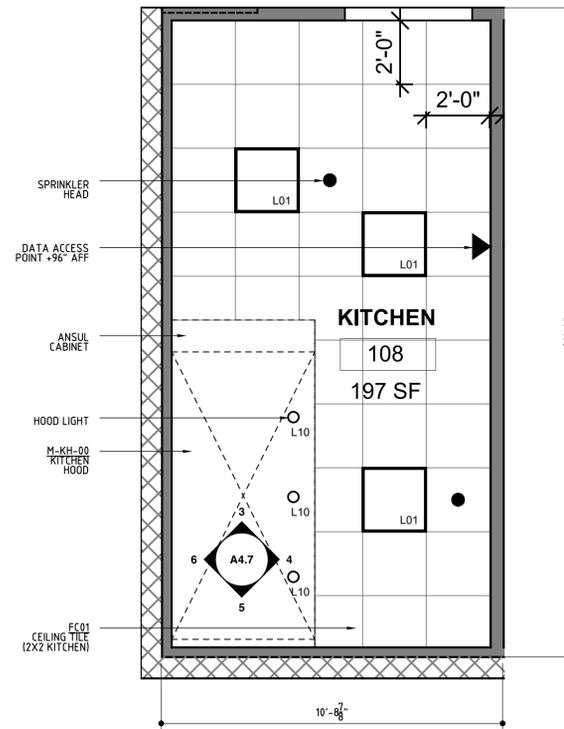
5 ELEVATION KITCHEN 108



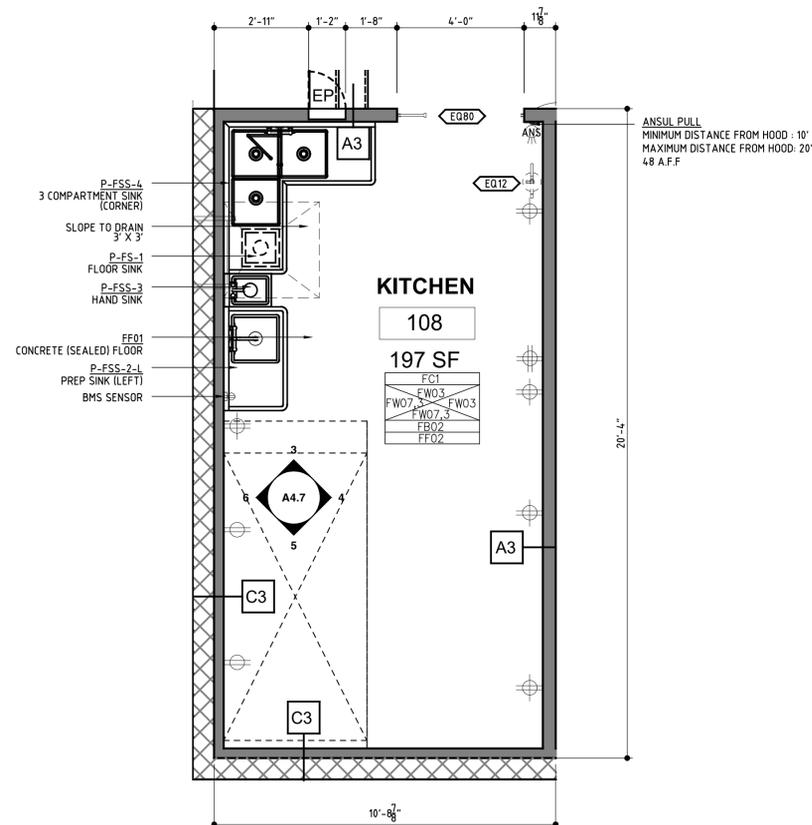
4 ELEVATION KITCHEN 108



3 ELEVATION KITCHEN 108



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 108



1 ENLARGED PLAN KITCHEN 108

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3'	A3/A6.1
A6	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3'	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	PARTITION TYPE 'E3'	E3/A6.1
F3	-	-
W4	PARTITION TYPE 'W4'	NO DETAIL
EXC	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	MASONRY WALL
[Symbol]	INTERIOR PARTITION
[Symbol]	EXISTING DOOR
[Symbol]	DOOR TAG
[Symbol]	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
[Symbol]	RECESSED 2X2 LED LIGHT FIXTURE
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	HOOD LAMPS
[Symbol]	SPRINKLER
[Symbol]	DATA ACCESS POINT
[Symbol]	WALL ASSEMBLY
[Symbol]	OUTLET
[Symbol]	EQUIPMENT TAG
[Symbol]	ELECTRICAL PANEL

FINISH LEGEND	
MARK	DESCRIPTION
[Symbol]	CEILING
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	BASE
[Symbol]	FLOOR

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
	P-FSS-3	HAND SINK		
	P-FS-1	FLOOR SINK		
	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

*** SEE A8.4 FOR PRODUCT SPECIFICATION

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ80	SECURITY GATES		

*** SEE A8.4 FOR PRODUCT SPECIFICATION

FINISHES			
LOCATION	CODE	DESCRIPTION	NOTES
KITCHEN	FB02	COVE BASE TILE	
	CG01	CORNER GUARD	ALL EXPOSED CORNERS
	FC01	CEILING TILE 2X2 (KITCHEN)	
	FF01	CONCRETE (SEALED) FLOOR	
	FF02	VCT. TILE	
	FW03	EPOXY PAINT	
KITCHEN	FW07	STAINLESS STEEL	

*** SEE A8.1 FOR PRODUCT SPECIFICATION

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

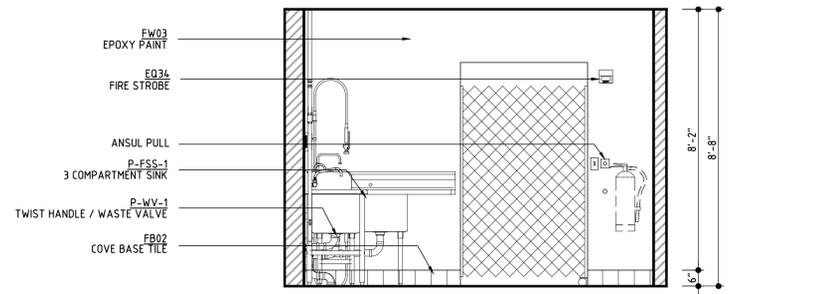
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

3rd Ave. Detroit

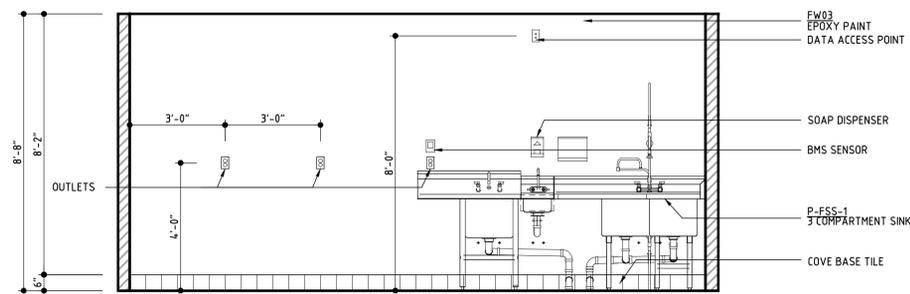
Enlarged Kitchen Plans & Elevations - Kitchen 108

021293

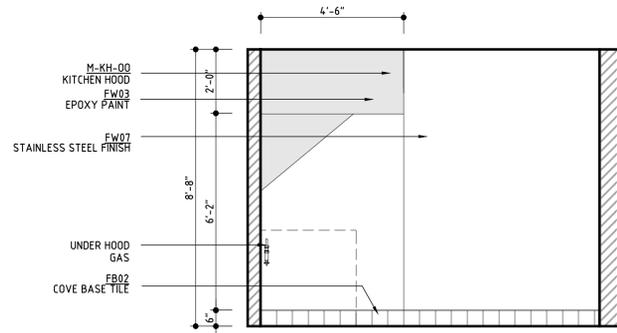
A4.7



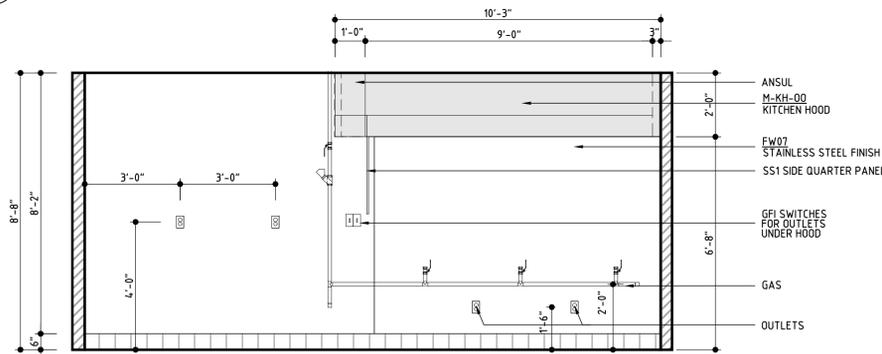
6 ELEVATION KITCHEN 110 3/8" = 1"



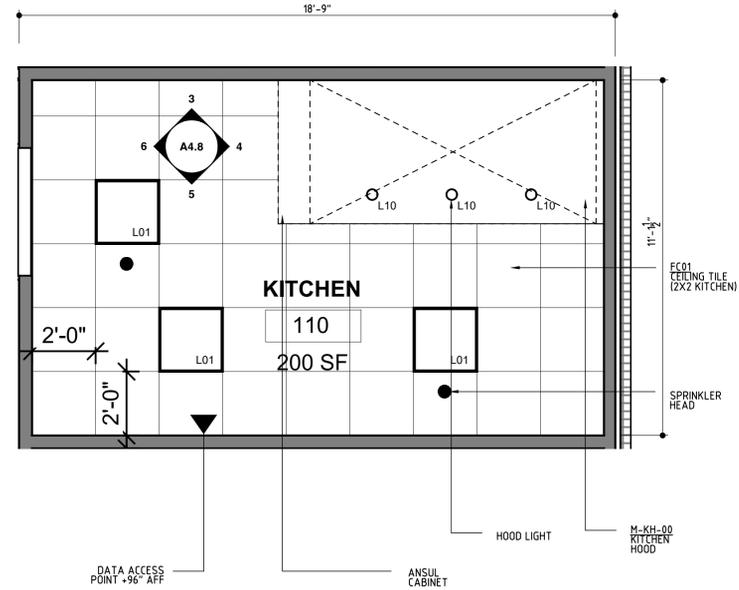
5 ELEVATION KITCHEN 110 3/8" = 1"



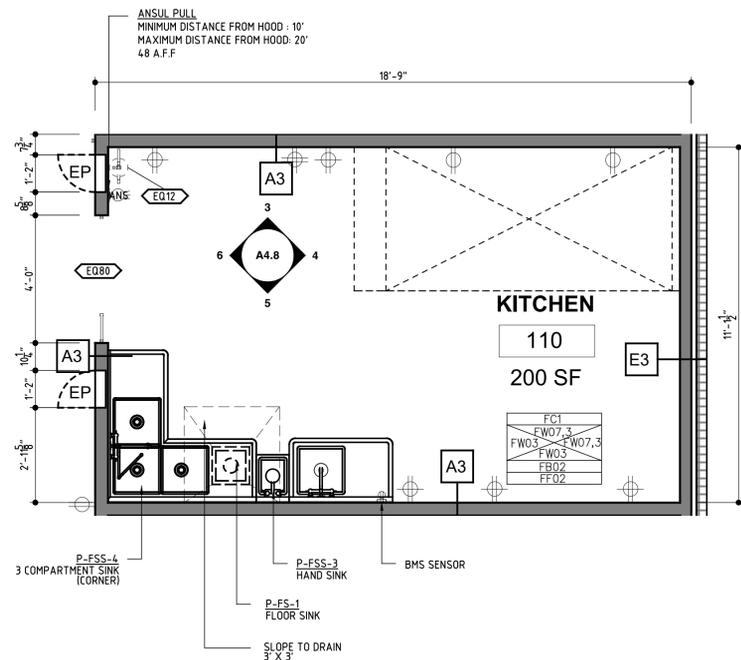
4 ELEVATION KITCHEN 110 3/8" = 1"



3 ELEVATION KITCHEN 110 3/8" = 1"



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 110 3/8" = 1"



1 ENLARGED PLAN KITCHEN 110 3/8" = 1"

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EXC	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

PLAN LEGEND	
MARK	DESCRIPTION
---	MASONRY WALL
---	INTERIOR PARTITION
---	EXISTING DOOR
(000)	DOOR TAG
---	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
L01	RECESSED 2X2 LED LIGHT FIXTURE
L10	SUPPLY AIR DIFFUSER
L10	HOOD LAMPS
•	SPRINKLER
•	DATA ACCESS POINT
---	WALL ASSEMBLY
EP	EQUIPMENT TAG
EP	ELECTRICAL PANEL

FINISH LEGEND	
MARK	DESCRIPTION
---	CEILING
---	WALL
---	WALL
---	WALL
---	BASE
---	FLOOR

LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
	P-FSS-3	HAND SINK		
	P-FS-1	FLOOR SINK		
	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ80	SECURITY GATES		

FINISHES			
LOCATION	CODE	DESCRIPTION	NOTES
KITCHEN	FB02	COVE BASE TILE	
	CG01	CORNER GUARD	ALL EXPOSED CORNERS
	FC01	CEILING TILE 2X2 (KITCHEN)	
	FF01	CONCRETE (SEALED) FLOOR	
	FF02	VCT. TILE	
KITCHEN	FW03	EPOXY PAINT	
KITCHEN	FW07	STAINLESS STEEL	

EST 1998

DESIGNHAUS ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

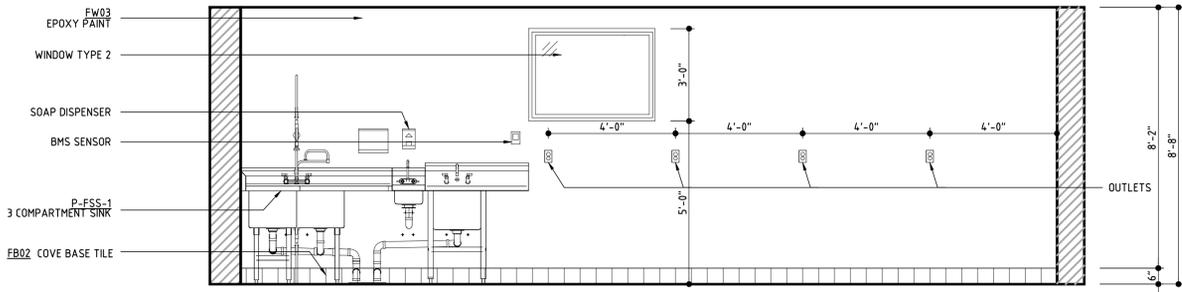
3rd Ave. Detroit

3181 3rd Ave.
Detroit, MI 48201

Enlarged Kitchen Plans & Elevations - Kitchen 109-110

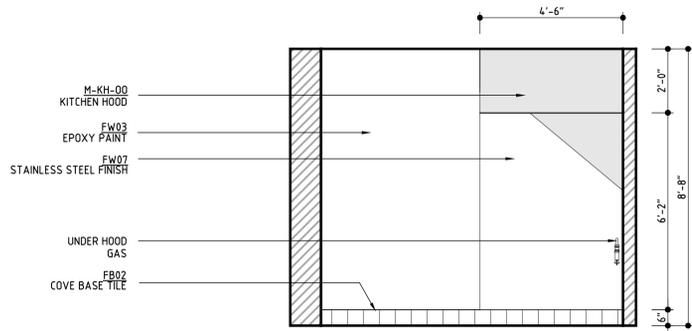
021293

A4.8



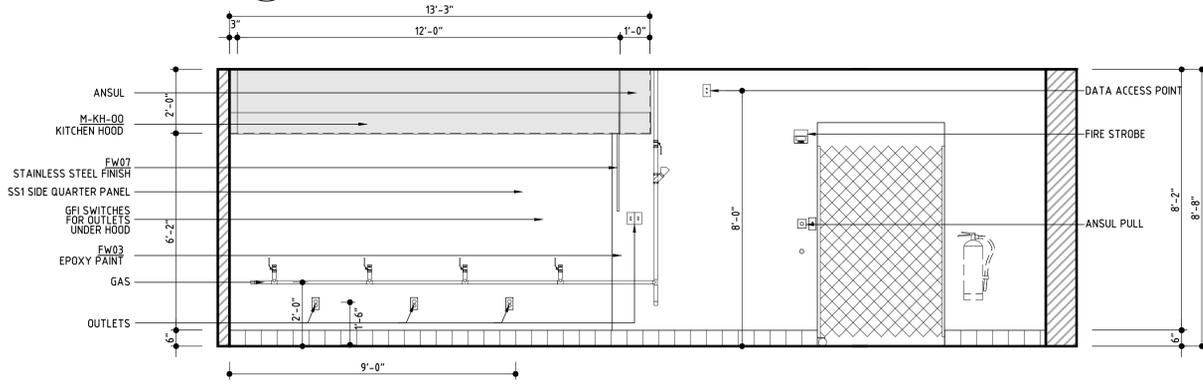
4 ELEVATION KITCHEN 111

3/8" = 1"



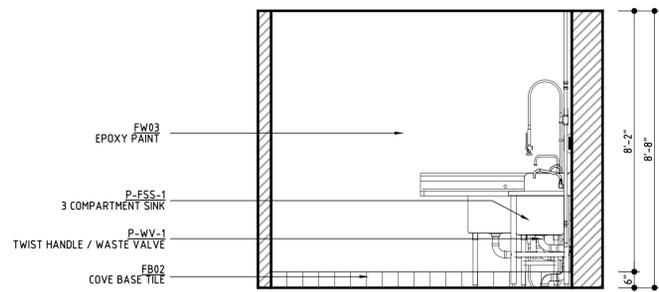
3 ELEVATION KITCHEN 111

3/8" = 1"



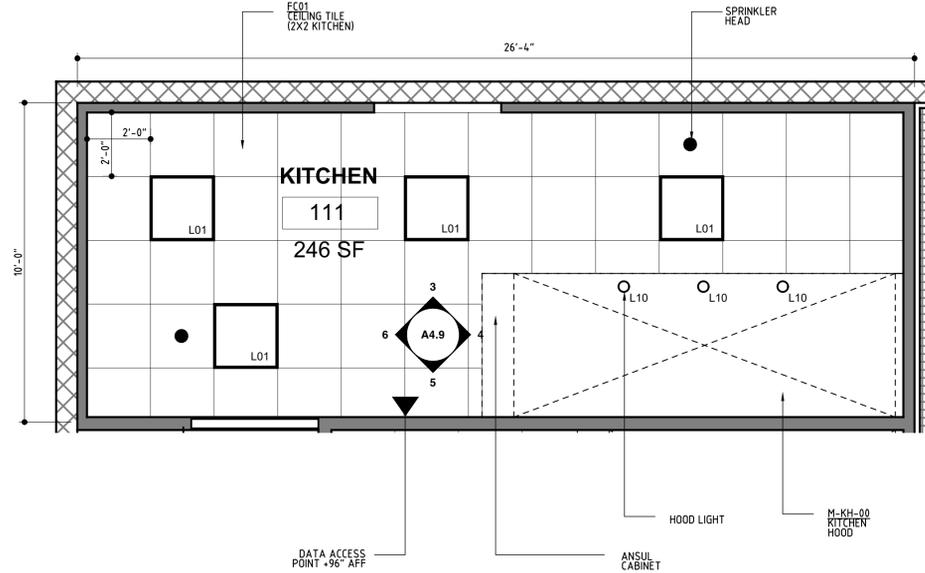
2 ELEVATION KITCHEN 111

3/8" = 1"



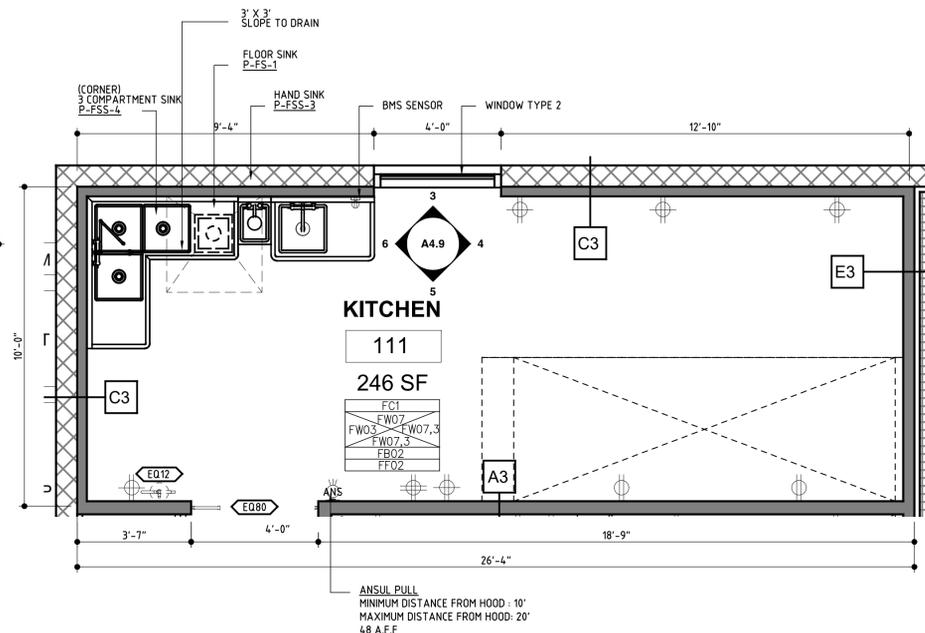
1 ELEVATION KITCHEN 111

3/8" = 1"



2 ENLARGED REFLECTED CEILING PLAN KITCHEN 111

3/8" = 1"



1 ENLARGED PLAN KITCHEN 111

3/8" = 1"

MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3'	A3/A6.1
A6	3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3'	B3/A6.1
B6	6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
E3	3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	PARTITION TYPE 'W4'	NO DETAIL
EXC	WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

MARK	DESCRIPTION
	MASONRY WALL
	INTERIOR PARTITION
	EXISTING DOOR
(000)	DOOR TAG
	2' x 2' LAY-IN SMOOTH VINYL CEILING TILE
L01	RECESSED 2X2 LED LIGHT FIXTURE
	SUPPLY AIR DIFFUSER
L10	HOOD LAMPS
	SPRINKLER
	DATA ACCESS POINT
	WALL ASSEMBLY
EQ00	EQUIPMENT TAG
EP	ELECTRICAL PANEL

FINISH LEGEND
CEILING
WALL
WALL
WALL
BASE
FLOOR

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	L01	RECESSED 2X2 LED		
KITCHEN	L10	HOOD LAMPS		

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	P-FSS-2-L	PREP SINK (LEFT)		W/ FAUCET P-F-1, AND DRAIN W/ TWIST HANDLE, WASTE VALVE P-WV-1.
KITCHEN	P-FSS-3	HAND SINK		
KITCHEN	P-FS-1	FLOOR SINK		
KITCHEN	P-FSS-4	3 COMPARTMENT SINK (CORNER)		W/ (1) P-PR-1 PRE-RINSE SPRAY W/ (1) P-PRF-1 ADD-ON FAUCET (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT), AND (3) P-WV-1 DRAIN AND TWIST HANDLE, WASTE VALVES (ONE AT EACH COMPARTMENT).

LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
KITCHEN	EQ12	FIRE EXTINGUISHER BRACKET		
KITCHEN	EQ33	SOAP DISPENSER		
KITCHEN	EQ34	FIRE STROBE		
KITCHEN	EQ35	PAPER TOWEL DISPENSER		
KITCHEN	EQ80	SECURITY GATES		

LOCATION	CODE	DESCRIPTION	NOTES
KITCHEN	FB02	COVE BASE TILE	
KITCHEN	CG01	CORNER GUARD	ALL EXPOSED CORNERS
KITCHEN	FC01	CEILING TILE 2X2 (KITCHEN)	
KITCHEN	FF01	CONCRETE (SEALED) FLOOR	
KITCHEN	FF02	VCT. TILE	
KITCHEN	FW03	EPOXY PAINT	
KITCHEN	FW07	STAINLESS STEEL	



3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T:248.601.4422 F:248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

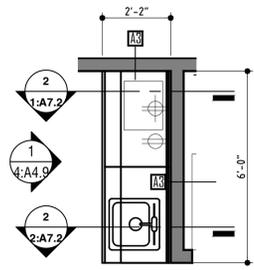
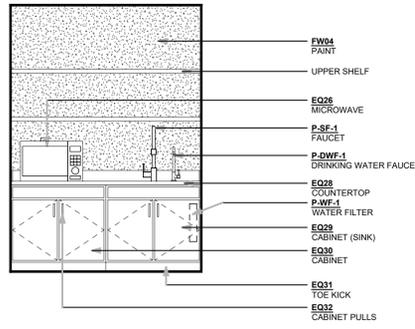
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

Enlarged Kitchen
 Plans & Elevations
 - Kitchen 111

021293
A4.9



LIGHTING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
BATHROOM	L03	RECESSED DOWNLIGHT		

PLUMBING				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
RESTROOM	P-WC-1	WATER CLOSET, FLOOR MOUNT, 1.28 GPF		
RESTROOM	P-WC-2	WATER CLOSET, FLOOR MOUNT, ADA 1.28 GPF		
BREAK STATION	P-SF-1	FAUCET		
BREAK STATION	P-S-1	SINK, SELF RIMMING, S.S., ADA		
BREAK STATION	P-DWF-1	DRINKING WATER FAUCET		
BREAK STATION	P-WF-1	WATER FILTER		
BREAK STATION	P-FS-2	FLOOR SINK, ICE MACHINE		

*** SEE A8.4 FOR PRODUCT SPECIFICATION

FINISHES				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
RESTROOM	FB02	COVE BASE TILE		
RESTROOM	FF03	QUARRY TILE		
RESTROOM	FW01	WALL TILE		
RESTROOM	FW03	EPOXY PAINT		GREEN WALL PAINT
RESTROOM	FW05A	ACCENT PAINT (EPOXY COATED)		
RESTROOM	FW09	CORNER GUARD		
BREAK STATION	FW04	PAINT		
BREAK STATION	FW09	CORNER GUARD		
BREAK STATION	FB01	RUBBER BASE		
UTILITIES	FW04	PAINT		
UTILITIES	FF01	CONCRETE (SEALED) FLOOR		

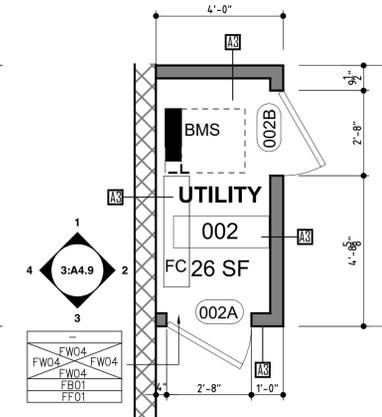
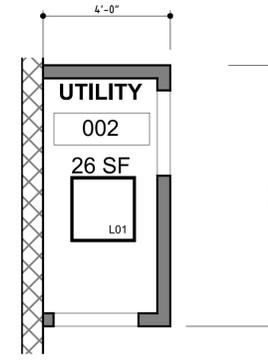
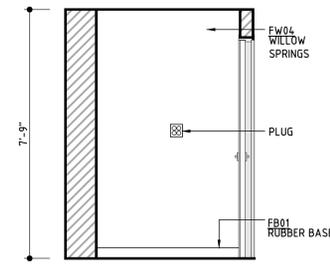
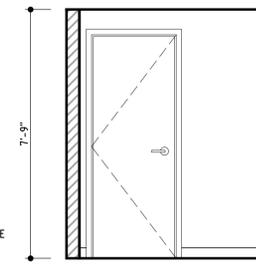
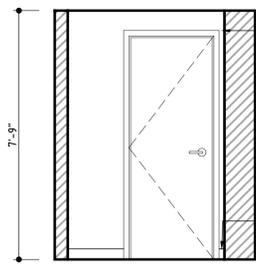
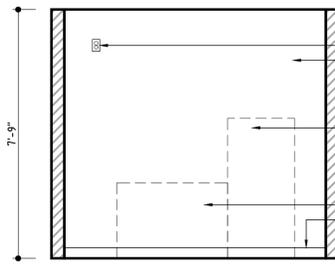
*** SEE A8.1 FOR PRODUCT SPECIFICATION

EQUIPMENT				
LOCATION	CODE	DESCRIPTION	QUANTITY	NOTES
RESTROOM	EQ33	SOAP DISPENSER		
RESTROOM	EQ52	HAND DRYER		
RESTROOM	EQ53	18" GRAB BAR		
RESTROOM	EQ54	36" GRAB BAR		
RESTROOM	EQ55	42" GRAB BAR		
RESTROOM	EQ56	SEAT COVER DISPENSER		
RESTROOM	EQ57	TISSUE DISPENSER		
RESTROOM	EQ58	MIRROR		
BREAK STATION	EQ26	MICROWAVE		
BREAK STATION	EQ28	COUNTERTOP		
BREAK STATION	EQ29	CABINET - SINK		
BREAK STATION	EQ30	CABINET		
BREAK STATION	EQ31	TOE KICK		

*** SEE A8.4 FOR PRODUCT SPECIFICATION

1
4 KITCHENETTE

3/8" = 1"



PLAN LEGEND	
MARK	DESCRIPTION
[Symbol]	MASONRY WALL
[Symbol]	INTERIOR PARTITION
[Symbol]	EXISTING DOOR
[Symbol]	DOOR TAG
[Symbol]	BUILDING MANAGEMENT SYSTEMS
[Symbol]	FAN COIL UNIT
[Symbol]	RECESSED 2X2 LED LIGHT FIXTURE

FINISH LEGEND	
[Symbol]	CEILING
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	WALL
[Symbol]	BASE
[Symbol]	FLOOR

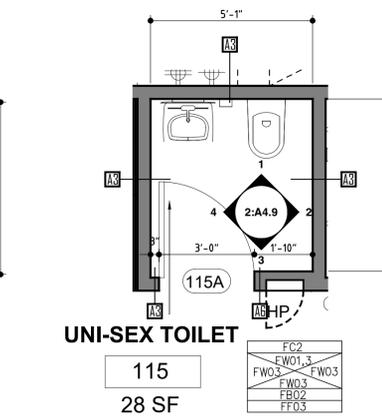
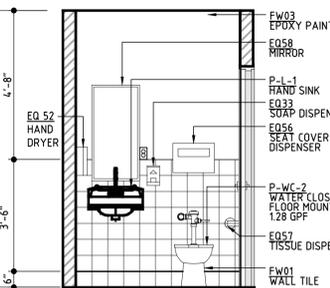
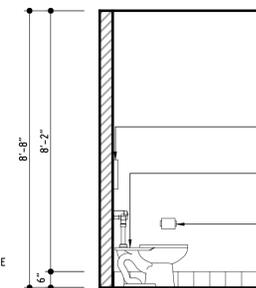
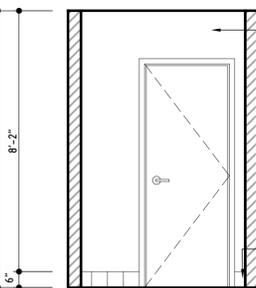
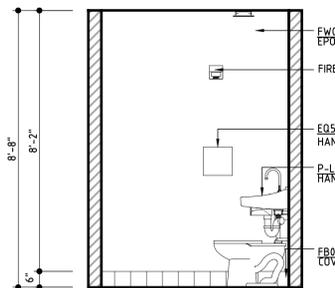
ACCESSIBILITY STANDARDS	
SEE SHEET G3.1 FOR ACCESSIBILITY STANDARDS	

KEY PLAN NOTES	
MARK	NOTE
1	LAVATORY CLEAR FLOOR AREA 30X48 CENTER ON LAVATORY
2	MANUEVERING SPACE BEYOND DOOR SWING 30X48
3	WATER CLOSET CLEAR FLOOR AREA 60X56
4	TURNING RADIUS 60"

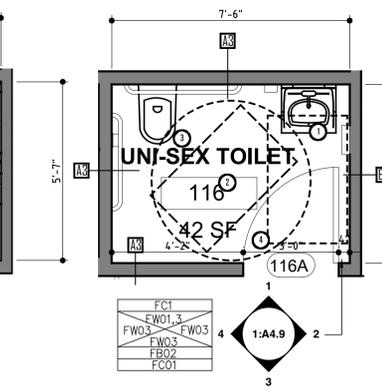
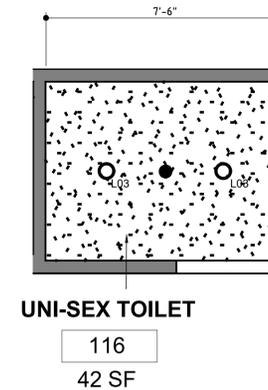
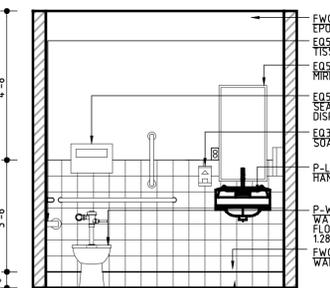
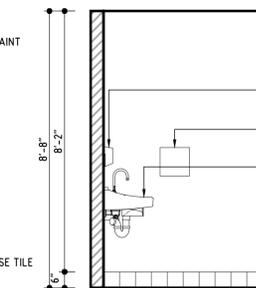
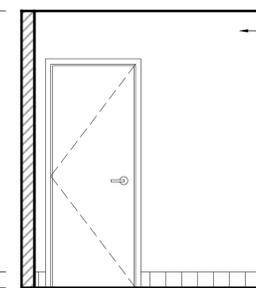
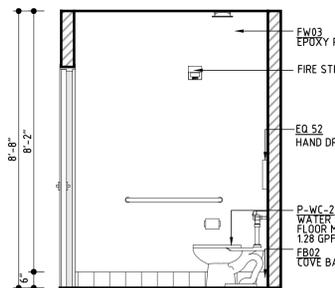
PLUMBING ACCESSORIES	
SEE SHEET A8.3 FOR TOILET ROOM ACCESSORY SCHEDULE	

ASSEMBLY TYPE		
MARK	DESCRIPTION	DETAIL
A3	PARTITION TYPE 'A3' 3-5/8" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A3/A6.1
A6	PARTITION TYPE 'A6' 6" MTL STUD & GYP BD. WALL HEIGHT = 10'-0"	A6/A6.1
B3	PARTITION TYPE 'B3' 3-5/8" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B3/A6.1
B6	PARTITION TYPE 'B6' 6" MTL STUD & GYP BD. WALL HEIGHT = B.O. ROOF DECK	B6/A6.1
C3	PARTITION TYPE 'C3' 3-5/8" MTL STUD & GYP BD. AT EXISTING MASONRY	C3/A6.1
D3	-	-
E3	PARTITION TYPE 'E3' 3-5/8" MTL STUD & GYP BD. AT WALK IN COOLER	E3/A6.1
F3	-	-
W4	PARTITION TYPE 'W4' WALK-IN COOLER PARTITION PER MANF. SPECIFICATION	NO DETAIL
EX	EXISTING 8" CMU FIELD VERIFY REPAIR & TUCKPOINT AS REQUIRED	NO DETAIL

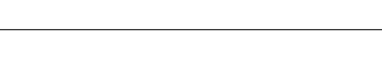
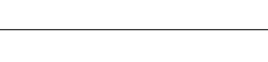
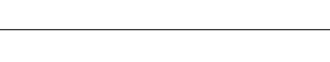
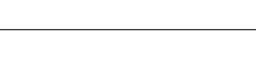
3
4 UTILITY ROOM



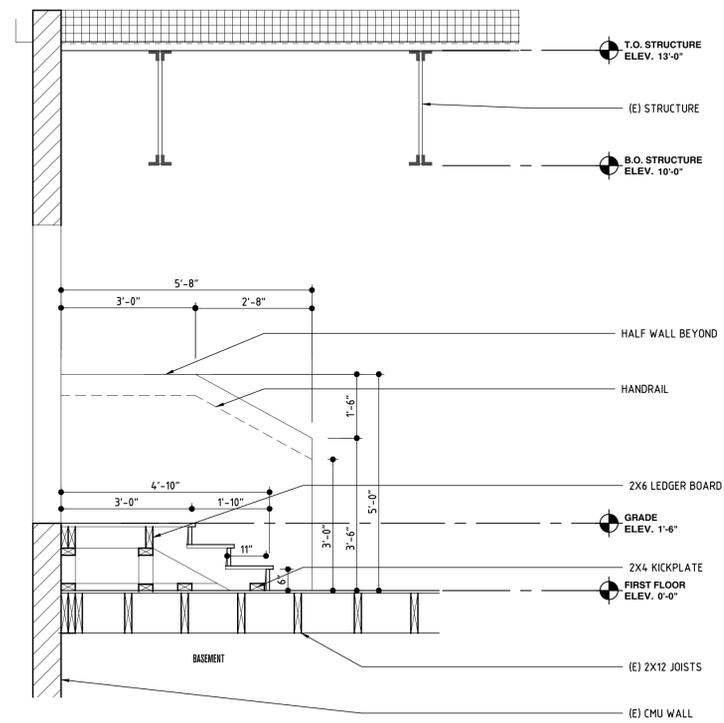
2
NON-ADA UNI-SEX TOILET - PLANS & ELEVATIONS



1
UNI-SEX TOILET - PLANS & ELEVATIONS

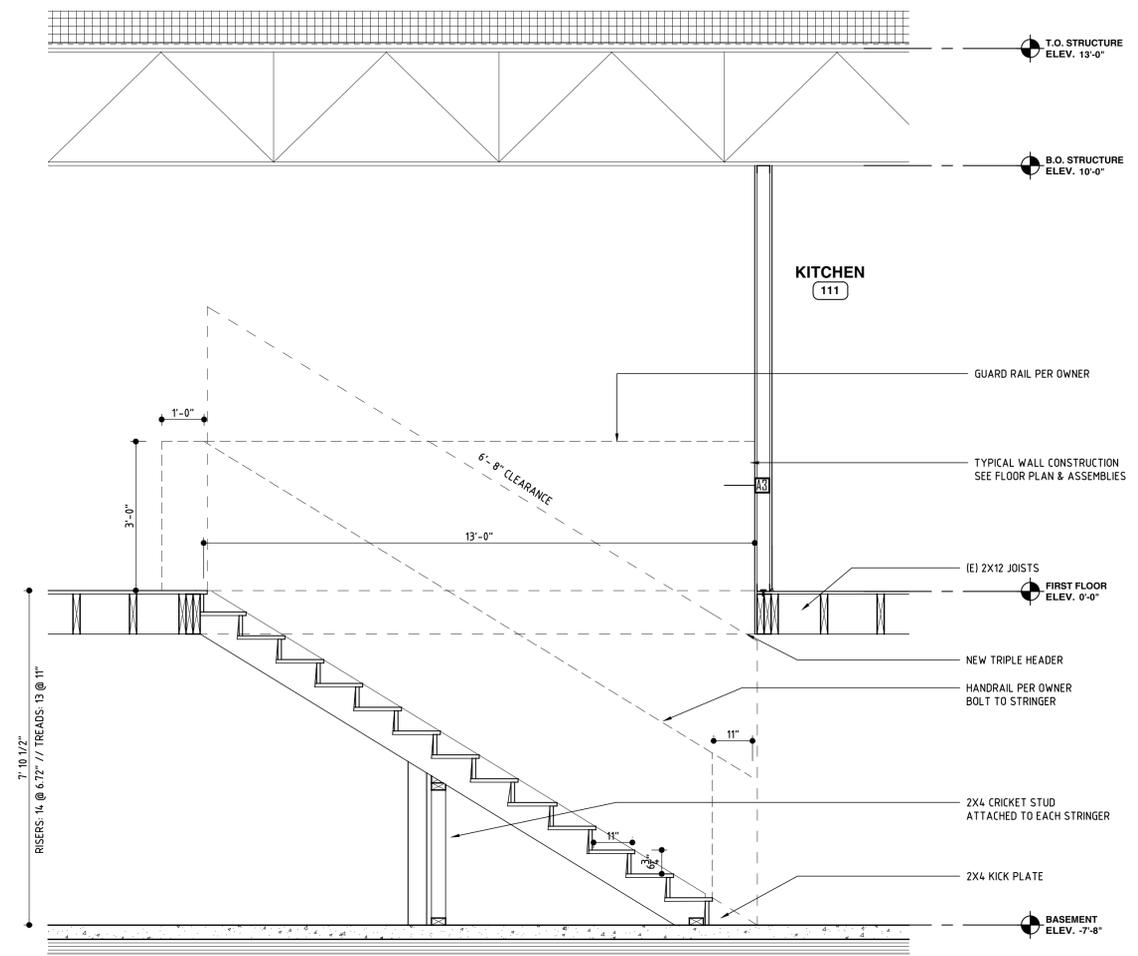


EST 1998
DESIGNHAUS
 ARCHITECTURE
 3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T:248.601.4422 F:248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM
 Permits 03.07.22
 CD 90% 02.25.22
 CD 50% 02.04.22
 Second Investigation 10.08.21
 Site Investigation 09.30.21
 Revision/Issue Date
 PETER M. STUHLREYER
 ARCHITECT
 4408
 3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201
 Enlarged Plans & Interior Elevations
 021293
A4.10



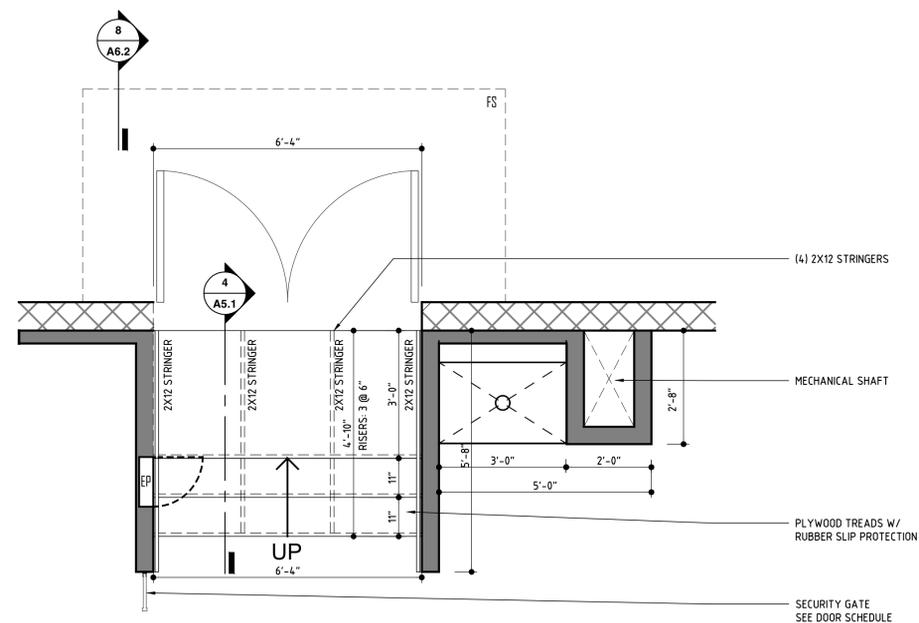
4 STAIR SECTION

SCALE: 1/2" = 1'



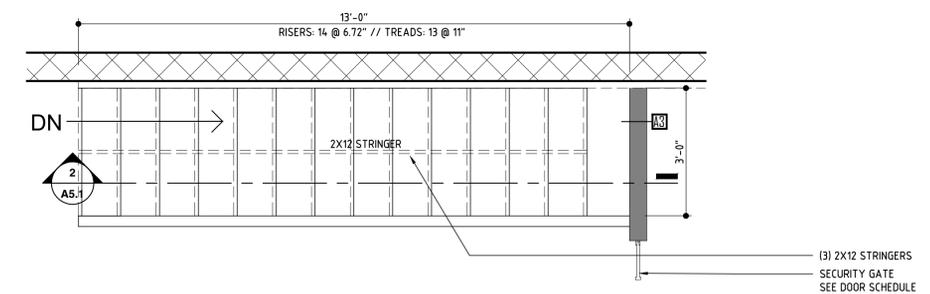
2 STAIR SECTION

SCALE: 1/2" = 1'



3 ENLARGED STAIR PLAN

SCALE: 1/2" = 1'



1 ENLARGED STAIR PLAN

SCALE: 1/2" = 1'



3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

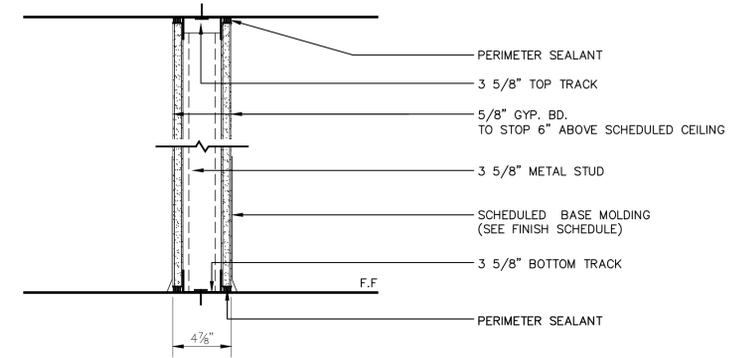
Enlarged Stair Plan
 & Sections

021293

A5.1

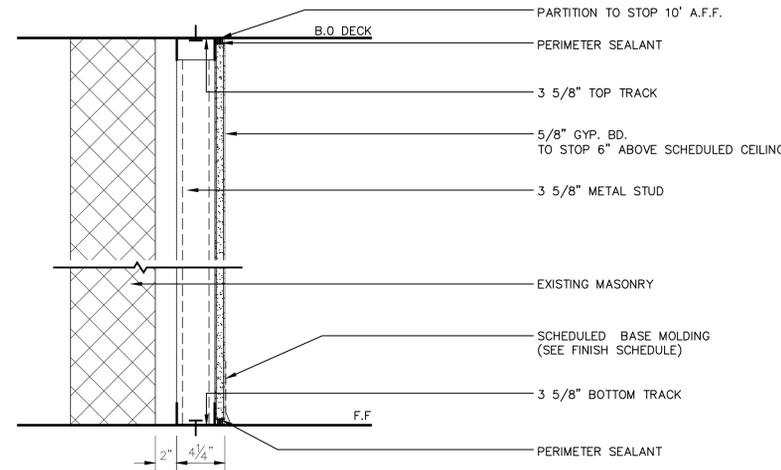
GENERAL NOTES:

1. USE 3 5/8" STUD WALLS AT ALL CORRIDOR AND KITCHEN WALLS
2. USE FURRING WALL ONLY WHEN NEEDED
3. USE "WALL TYPE E" IN FRONT OF W.I.C. LOCATIONS FOR EASE OF CONSTRUCTION
4. SCHEDULED CEILING SEE REFLECTED CEILING PLAN
5. -
6. -
7. -
8. -

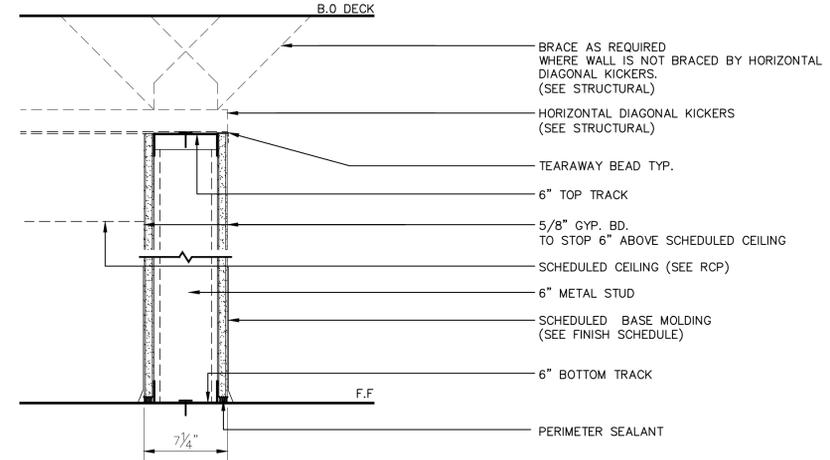


B3 PARTITION TYPE 'B3' - 3 5/8" MTL STUD + GYP. BD.
WALL HEIGHT: B.O. ROOF DECK SCALE: 1 1/2" = 1'

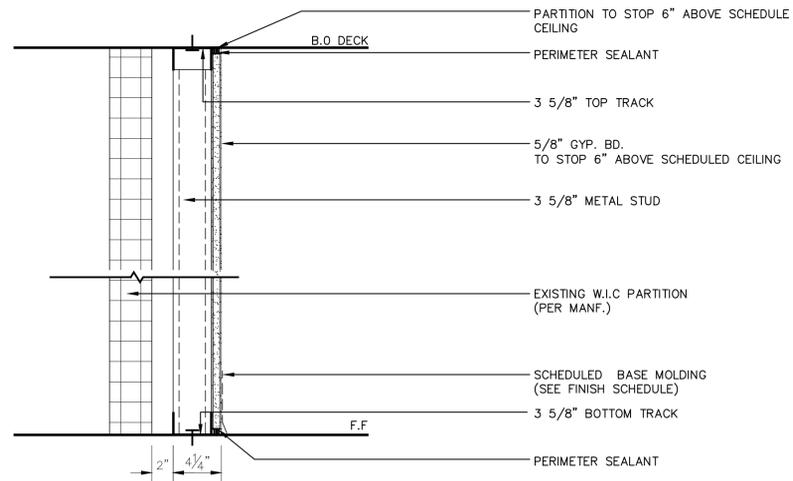
D3 NOT USED SCALE: 1 1/2" = 1'



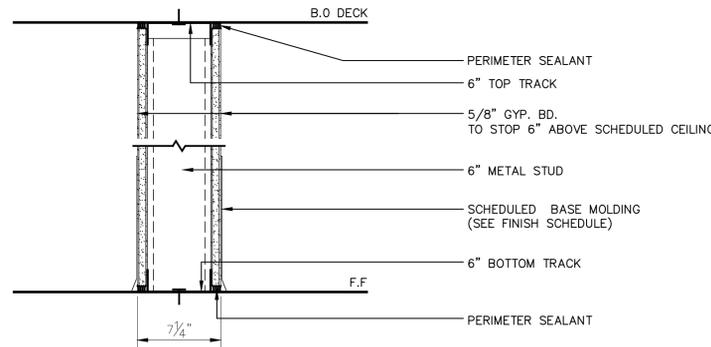
C3 PARTITION TYPE 'C3' - 3 5/8" MTL STUD + GYP. BD. @ EXIST. MASONRY
WALL HEIGHT: B.O. ROOF DECK SCALE: 1 1/2" = 1'



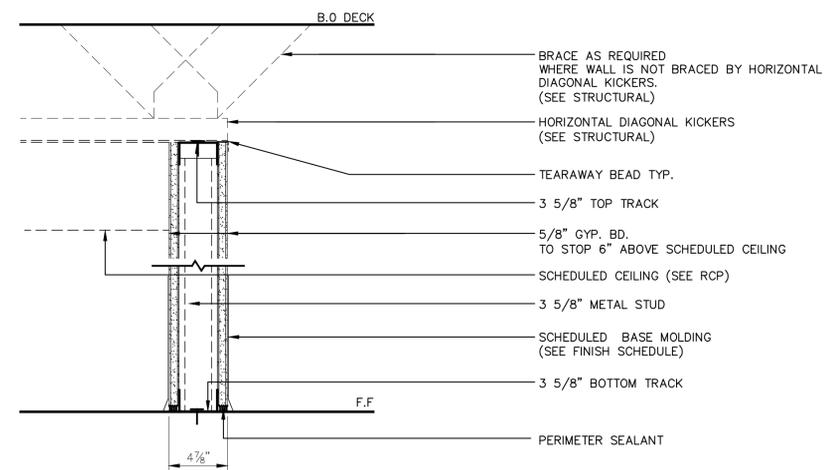
A6 PARTITION TYPE 'A6' - 6" MTL STUD + GYP. BD.
WALL HEIGHT: 10'-0" SCALE: 1 1/2" = 1'



E3 PARTITION TYPE 'E3' - 3 5/8" MTL STUD + GYP. BD. @ W.I.C. PARTITION
WALL HEIGHT: B.O. DECK SCALE: 1 1/2" = 1'



B6 PARTITION TYPE 'B6' - 6" MTL STUD + GYP. BD.
WALL HEIGHT: B.O. ROOF DECK SCALE: 1 1/2" = 1'



A3 PARTITION TYPE 'A3' - 3 5/8" MTL STUD + GYP. BD.
WALL HEIGHT: 10'-0" SCALE: 1 1/2" = 1'

DESIGNHAUS ARCHITECTURE
EST. 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

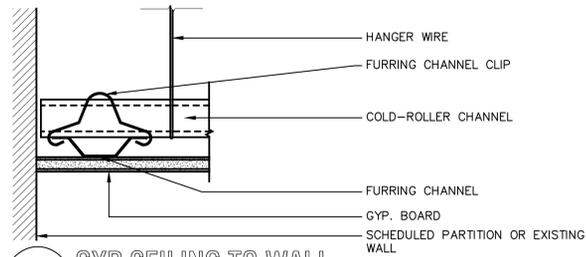


3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Partition Details

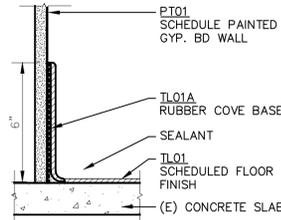
021293
A6.1

A6.1 Partition Details.dwg
3/4/2022
DH User 03



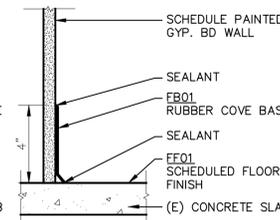
16 GYP CEILING TO WALL

NO SCALE



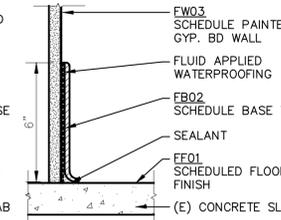
10 BASE DETAILS

NO SCALE



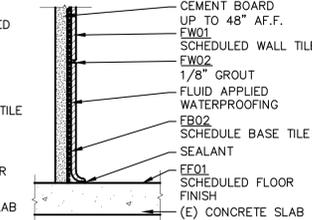
9 MAT WASH MOP SINK

NO SCALE



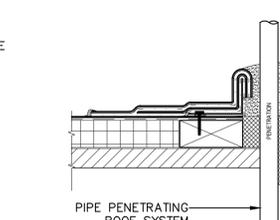
8 TYPICAL FROST SLAB DETAIL

SCALE: 1 1/2\"/>



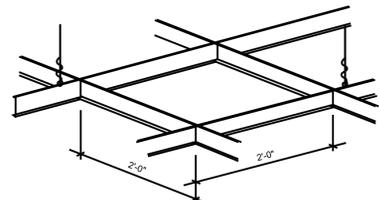
7 ROOF PENETRATION DETAIL

SCALE: 1 1/2\"/>



6 ROOF PENETRATION DETAIL

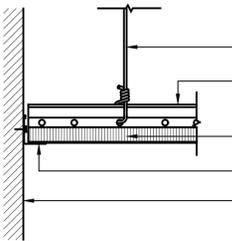
SCALE: 1 1/2\"/>



15 ACT CEILING GRID

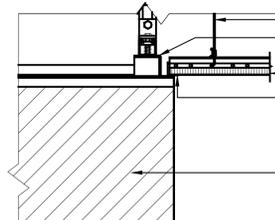
NO SCALE

1. METAL SUSPENSION SYSTEM FOR ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C635-87 FOR INTERMEDIATE DUTY SYSTEMS
2. INSTALLATION OF METAL CEILING SUSPENSION SYSTEM FOR ACOUSTICAL TILE AND LAY-IN PANELS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C636-86
3. MAIN RUNNERS @ 2'-0\"/>



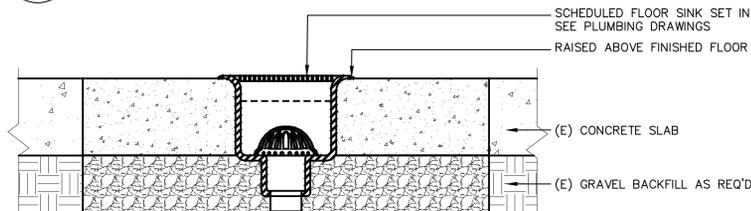
14 ACT CEILING TO WALL

NO SCALE



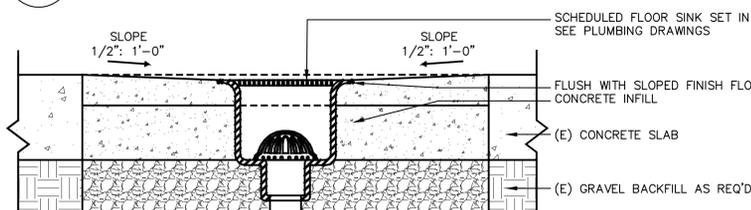
13 ACT CEILING TO KITCHEN HOOD

NO SCALE



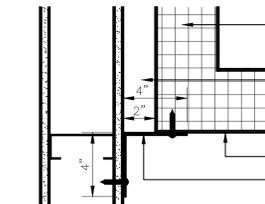
12 FLOOR SINK AT ICE MACHINE

NO SCALE



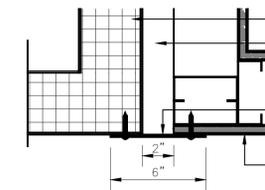
11 FLOOR SINK IN UTILITY ROOM & KITCHENS

NO SCALE



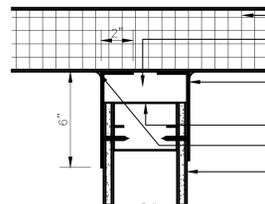
5 W.I.C. CLOSER PLATE JAMB CORNER

SCALE: 1 1/2\"/>



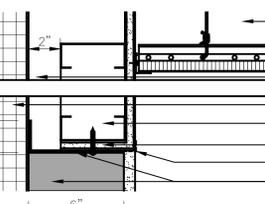
4 W.I.C. CLOSER PLATE JAMB TYP

SCALE: 1 1/2\"/>



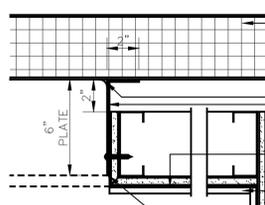
3 W.I.C. CLOSER PLATE DOUBLE JAMB

SCALE: 1 1/2\"/>



2 W.I.C. CLOSER PLATE HEAD

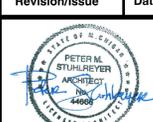
SCALE: 1 1/2\"/>



1 W.I.C. CLOSER PLATE HOOD JAMB

SCALE: 1 1/2\"/>

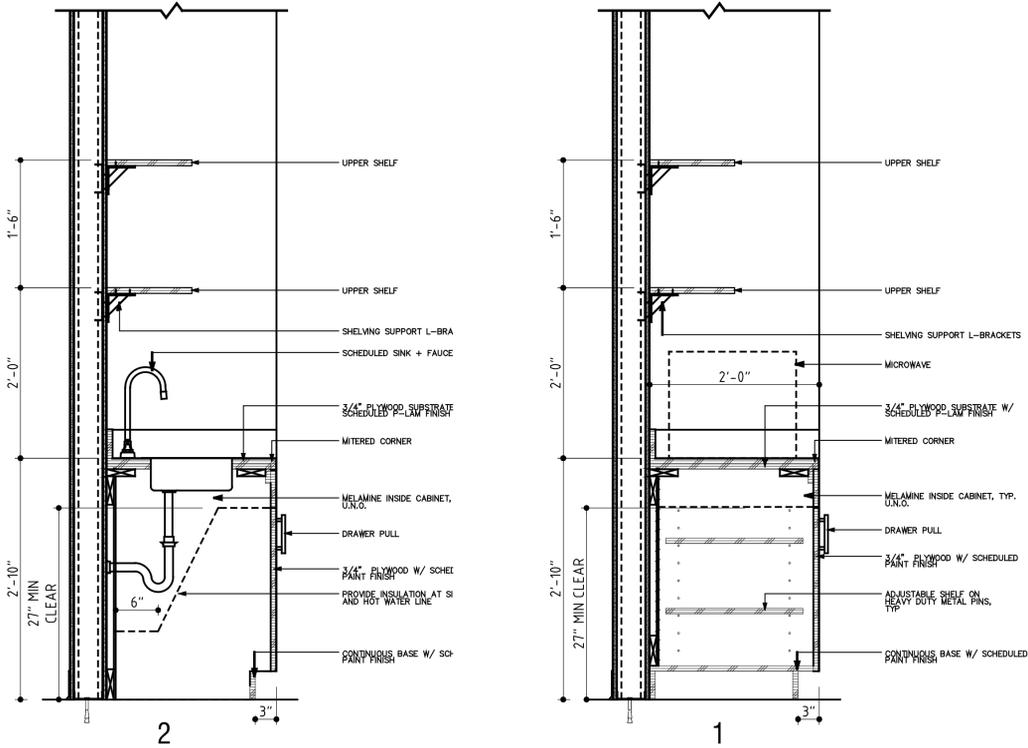
Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



A6.2_Details.dwg

3/3/2022

DH User 03



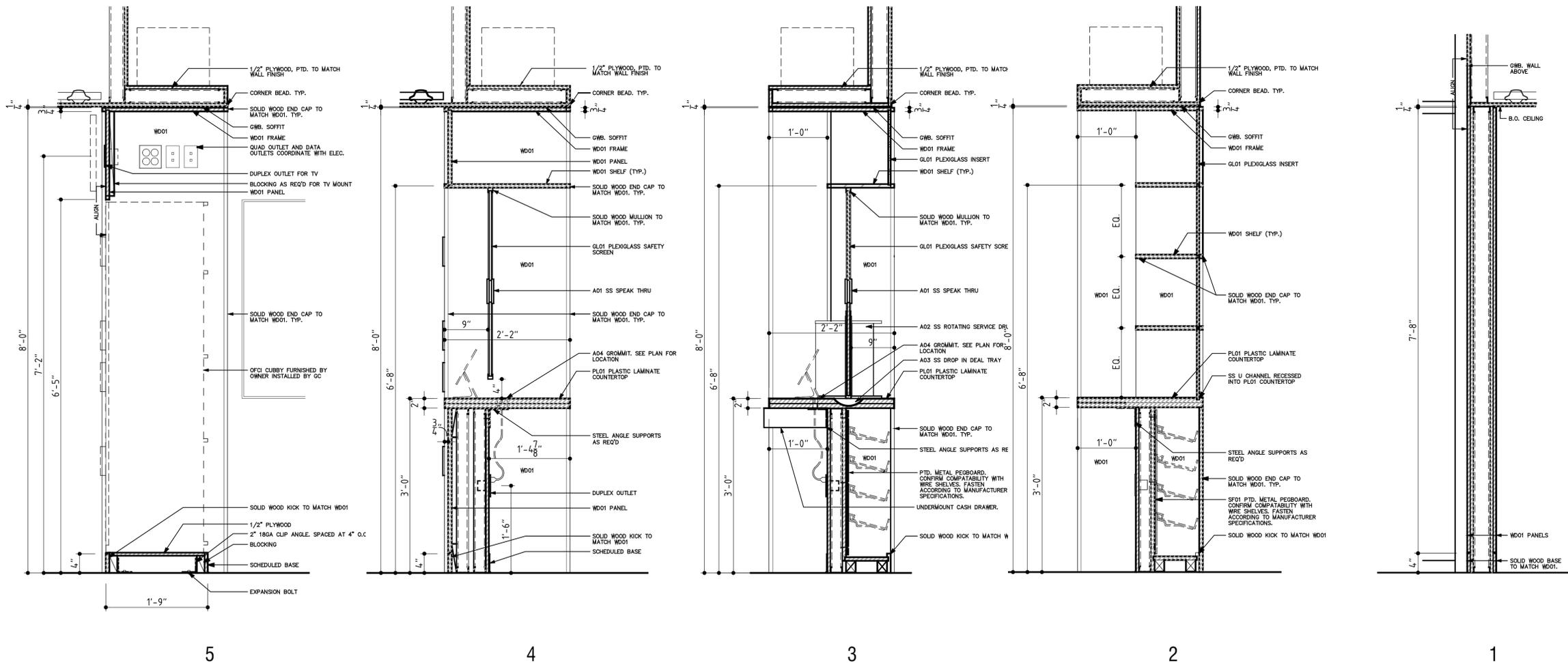
FINISHES			
LOCATION	CODE	DESCRIPTION	NOTES
	PT01	BENJAMIN MOORE PAINT	
	PT02	BENJAMIN MOORE PAINT	
	PT03	BENJAMIN MOORE CEILING PAINT	
	PT04	BENJAMIN MOORE PAINT	
	TL01	TILE BULLNOSE BASE	
	TL01A	12" X 12" TILE	
	FF01	SEALED CONCRETE	
	FB01	RUBBER BASE	
	PL01	PLASTIC LAMINATE	
	WD01	WHITE MAPLE VENEER	
	SF01	PAINTED STEEL PEGBOARD	

*** SEE A8.1 FOR PRODUCT SPECIFICATION

ACCESSORIES			
LOCATION	CODE	DESCRIPTION	NOTES
	A01	STAINLESS STEEL SPEAK THRU	
	A02	S.S. ROTATING SERVICE DRUM	
	A03	DROP IN DEAL TRAY	
	A04	2" S.S. GROMMIT	

*** SEE A8.4 FOR PRODUCT SPECIFICATION

2 SECTIONS KITCHENETTE



1 SECTIONS SERVICE COUNTER



3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T:248.601.4422 F:248.459.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

Millwork Details -
 Service Counter

021293

A7.1

TOILET ROOM ACCESSORY SCHEDULE					
MARK	ACCESSORY	DESCRIPTION	UNISEX	UNISEX	REMARKS
EQ33	SOAP DISPENSER	CINTAS / ARAMARK CLEAR / WHITE WALL MOUNTED	1	1	- WALL MOUNTED
EQ52	HAND DRYER	POWER PRESS	1	1	- COLOR/FINISH (BRUSHED) PRODUCT #
EQ53	18" LONG GRAB BAR (1820 X 18")	LAVEX 8120 1-1/2" DIA CONCEALED MOUNT GRAB BAR	-	1	- COLOR/FINISH (SATIN) PRODUCT # 600GB11218
EQ54	36" LONG GRAB BAR (1820 X 36")	LAVEX 8120 1-1/2" DIA CONCEALED MOUNT GRAB BAR	-	4	- COLOR/FINISH (SATIN) PRODUCT # 600GB11236
EQ55	42" LONG GRAB BAR (1820 X 36")	LAVEX 8120 1-1/2" DIA CONCEALED MOUNT GRAB BAR	-	1	- COLOR/FINISH (SATIN) PRODUCT # 600GB11242
TA-4	42" LONG GRAB BAR (1820 X 42")	BRADLEY 8120 1-1/2" DIA CONCEALED MOUNT GRAB BAR	-	1	-

GENERAL NOTES

- BARrier FREE** TOILET ROOM ACCESSORIES TO COMPLY WITH BARrier FREE AND ADA REQUIREMENTS. SEE ACCESSIBILITY STANDARDS SHEETS FOR ADDITIONAL INFO.
- BlockiNG** SECURE TO SOLID WALL BLOCKING AT DRYWALL PARTITIONS. METAL STUDS TO BE REINFORCED TO ACCEPT 300 LB FORCE AT ALL GRAB BAR AND PERSONAL SUPPORT LOCATIONS.
- COORDINATION** GENERAL CONTRACTOR AND CARPENTER TO COORDINATE LOCATIONS AND OTHER REQUIREMENTS WITH OWNER PRIOR TO BOARDING WALL AND PROVIDE HIDDEN BLOCKING AS REQUIRED.

REMARKS	CONTACT
1 MOUNT UNDER GRAB BAR - CONTRACTOR TO COORDINATE BLOCKING AND OTHER REQUIREMENTS.	BRADLEY TOILET ACCESSORIES REP.
2 MOUNT TO AVOID INTERFERENCE WITH OTHER TOILET ROOM ACCESSORIES. MOUNT AT CONVENIENT HEIGHT. FIELD VERIFY LOCATIONS & QUANTITY WITH OWNER.	ROB RITTNER FRENCH ASSOCIATES 150 ELIZABETH LANE ROCHESTER, MI 48307 P: (248) 651-1333 E: ROBB@RITTNERFRENCH.COM CONTACT: ROB RITTNER
3 CENTER MIRROR ON LAVATORY	
4 BY OWNER	
5 SEE FLOOR PLANS FOR DESIGN PARAMETERS	

INTERIOR FINISH SCHEDULE

FLOOR FINISH				
CODE	MFG / CONTACT	SPECIFICATIONS	REMARKS	
FF01	MFG: TBD CONTACT: - NUMBER: - WEB: -	TYPE: CONCRETE SEALED FLOOR ITEM #: - SERIES: - COLOR: LEVEL 2 SATIN CONCRETE FINISH	-CHEMICALLY STRIPPED & SEALED / PATCH AND REPAIR AS NEEDED	
FF02	MFG: TARKETT CONTACT: LOCAL DISTRIBUTOR NUMBER: - WEB: LEGACY.TARKETTNA.COM / EXPRESSIONS	TYPE: COMPOSITE TILE ITEM #: TBD SERIES: TBD COLOR: BY OWNER	- TO BE INSTALLED IN CORRIDOR ABOVE BASEMENT. - INSTALLED IN KITCHEN: 106,107,108,109,110,111	
FF03	MFG: DAL TILE CONTACT: LOCAL DISTRIBUTOR NUMBER: (877) 556-5728 WEB: -	TYPE: QUARRY TILE ITEM #: TBD SERIES: TBD COLOR: BY OWNER	- TO BE INSTALLED IN UNI-SEX TOILET ROOMS.	
TL01	MFG: NEMO TILE CONTACT: LOCAL DISTRIBUTOR NUMBER: - WEB: WWW.NEMOTILE.COM	TYPE: PORCELAIN TILE ITEM #: MEDLEY95 SERIES: TBD COLOR: MATTE PINK SIZE: 24"X24"	-	

BASE FINISH				
FB01	MFG: TARKETT CONTACT: - NUMBER: - WEB: -	TYPE: RUBBER BASE ITEM #: - SERIES: 4" DURACOVE COLOR: 38 PEWTER CG SIZE: 4"	- ALL EXCEPT KITCHEN, RESTROOM AND EXTERIOR - 4"X120" ROLL	
FB02	MFG: DAL TILE CONTACT: - NUMBER: - WEB: -	TYPE: COVE BASE ITEM #: S-3619TN SERIES: ARCTIC WHITE 0190 COLOR: - SIZE: -	- KITCHEN	
FB03	MFG: WALK-IN MANU CONTACT: - NUMBER: - WEB: -	TYPE: COVE GALVANISED ALUM ITEM #: TBD SERIES: TBD COLOR: - SIZE: -	- WALK-INS	
TL01A	MFG: NEMO TILE CONTACT: LOCAL DISTRIBUTOR NUMBER: - WEB: WWW.NEMOTILE.COM	TYPE: BULLNOSE TILE BASE ITEM #: MEDLEY03 SERIES: TBD COLOR: MATTE PINK SIZE: 3"X24"	-	

WALL FINISH				
FW01	MFG: DAL TILE CONTACT: - NUMBER: - WEB: -	TYPE: WALL TILE ITEM #: - SERIES: COLOR WHEEL COLOR: MATTE ARCTIC WHITE SIZE: 6 X 6	- RESTROOM SINK AREA	
FW02	MFG: MAPEI CONTACT: - NUMBER: - WEB: -	TYPE: GROUT ITEM #: - SERIES: KERACOLOR COLOR: CHARCOAL 47	- KITCHEN, RESTROOM	
FW03	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PITT-GLAZE ACRYLIC EPOXY ITEM #: PPG1007-1 SERIES: - COLOR: EGGSHELL	- KITCHEN	
FW04	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PAINT ITEM #: PPG1007-1 SERIES: - COLOR: WILLOW SPRINGS	- GENERAL (EXCEPT KITCHEN, EXTERIOR AND OTHERWISE NOTED ON A PER PROJECT BASIS) - EGGSHELL ON WALLS FLAT ON GWB CEILINGS	
FW05	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PAINT ITEM #: TBD SERIES: - COLOR: EGGSHELL	- GENERAL ACCENT PAINT - SEE BRAND PACKAGE FOR PAINT SPECS	
FW05A	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PITT-GLAZE ACRYLIC EPOXY ITEM #: PPG1007-1 SERIES: - COLOR: -	- RESTROOM PAINT AT PLUMBING WALL - SEE BRAND PACKAGE FOR PAINT SPECS	
FW06	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PAINT ITEM #: TBD SERIES: CONTACT OWNER COLOR: SEMI GLOSS	- INTERIOR DOORS - SEE BRAND PACKAGE FOR PAINT SPECS	
FW07	MFG: HOOD MANF. CONTACT: - NUMBER: - WEB: -	TYPE: HOOD MANF. ITEM #: TBD SERIES: - COLOR: TBD SIZE: -	- COOKLINE - STAINLESS STEEL BACKING	
FW08	MFG: CRANE CONTACT: - NUMBER: - WEB: -	TYPE: MAT-WASH ITEM #: FRP PSIF 7091 SERIES: - COLOR: SMOOTH WHITE SIZE: -	- 4"X8" PER SHEET	
FE_	MFG: PPG CONTACT: - NUMBER: - WEB: -	TYPE: PAINT ITEM #: PROJECT SPECIFIC SERIES: - COLOR: EGGSHELL SIZE: -	- SEE BRAND PACKAGE FOR PAINT SPECS	

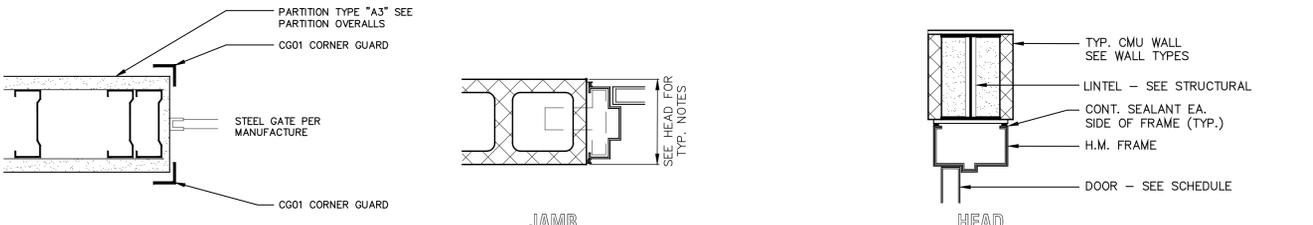
CEILING FINISH				
C1	MFG: CERTAINTED CONTACT: - NUMBER: - WEB: -	TYPE: VINYLEROCK ITEM #: - SERIES: - COLOR: WHITE SIZE: 2' X 2'	- KITCHEN CEILING TILE	
C2	MFG: WALK-IN COOLER MANF. CONTACT: JOE MILLS NUMBER: 734.469.4504 EMAIL: SEE SHEET G11 FOR CONTACT INFO.	TYPE: WALK-IN CEILING ITEM #: TBD BY MANF. SERIES: - COLOR: MANF. SIZE: TBD	- CEILING PER COOLER MANF.	

DOOR FINISH				
D1	MFG: LOCKNET CONTACT: JEFF KIRKNER NUMBER: 859-887-9119 EMAIL: JEFFK@LOCKNET.COM	TYPE: SINGLE HOLLOW METAL ITEM #: 18 GAUGE SERIES: TBD COLOR: MANF. SIZE: -	- ALL DOORS	
D2	MFG: LOCKNET CONTACT: JEFF KIRKNER NUMBER: 859-887-9119 EMAIL: JEFFK@LOCKNET.COM	TYPE: DOUBLE HOLLOW METAL ITEM #: 18 GAUGE SERIES: TBD COLOR: MANF. SIZE: -	- EXTERIOR LOADING	
D3	MFG: LOCKNET CONTACT: JEFF KIRKNER NUMBER: 859-887-9119 EMAIL: JEFFK@LOCKNET.COM	TYPE: WALK-IN COOLER DOOR ITEM #: TBD SERIES: - COLOR: MANF. SIZE: TBD	- COOLER DOOR TO BE PROVIDED BY MANF.	

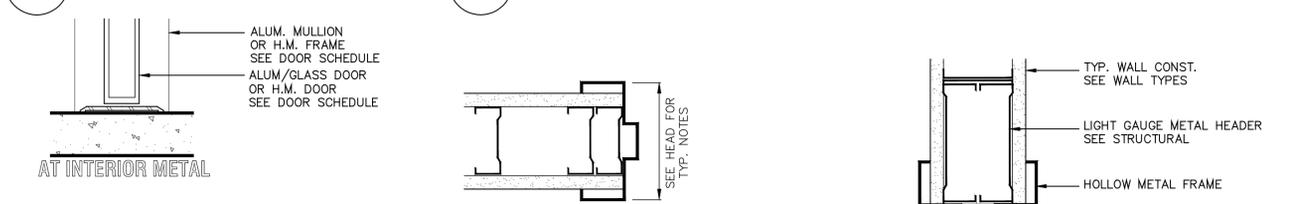
DOOR SCHEDULE

BASEMENT															
IDENTIFICATION	DOOR						FRAME			DETAILS			LABEL	HOWR	REMARKS
#	ROOM NAME	SIZE	THICK	MATL	FINISH	ELEV	MATL	FINISH	ELEV	HEAD	JAMB	SILL			
002A	UTILITY	3'-0" X 7'-0"	1 3/4"	HM	PNT	3	HM	MANF.	8	3/AB1	3/AB1	3/AB1	-	-	4, 8, 10, 11, 12, 13, 17
002B	UTILITY	3'-0" X 7'-0"	1 3/4"	HM	PNT	3	HM	MANF.	8	3/AB1	3/AB1	3/AB1	-	-	4, 8, 10, 11, 12, 13, 14, 17

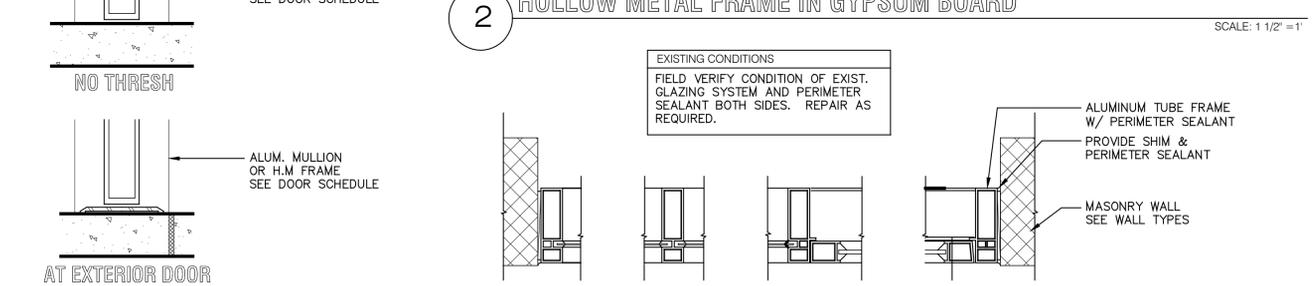
FIRST FLOOR															
#	ROOM	SIZE	THICK	MATL	FINISH	ELEV	MATL	FINISH	ELEV	HEAD	JAMB	SILL	LABEL	HOWR	REMARKS
100A	RETAIL	12'-0" X 7'-0"	1 3/4"	AL/GL	FACT	1	AL	MANF.	4	1/AB1	1/AB1	1/AB1	-	-	7, 9, 10, 11, 12, 13, 15, 16
104A	WALK-IN FREEZER	3'-0" X 7'-0"	1 3/4"	MANF.	MANF.	3	MANF.	MANF.	MANF.	MANF.	MANF.	MANF.	-	-	13, 15, 17
103A	WALK-IN COOLER	3'-0" X 7'-0"	1 3/4"	MANF.	MANF.	3	MANF.	MANF.	MANF.	MANF.	MANF.	MANF.	-	-	13, 15, 17
112	SERVICE COUNTER	3'-0" X 7'-0"	1 3/4"	HM	MANF.	3	HM	MANF.	8	3/AB1	3/AB1	3/AB1	-	-	4, 8, 10, 11, 12, 13, 14
105A	UNI-SEX TOILET	3'-0" X 7'-0"	1 3/4"	HM	PNT	4	HM	MANF.	8	3/AB1	3/AB1	3/AB1	-	-	8, 11, 12, 13, 17
105A	UNI-SEX TOILET	3'-0" X 7'-0"	1 3/4"	HM	PNT	4	HM	MANF.	8	3/AB1	3/AB1	3/AB1	-	-	8, 11, 12, 13, 17
107A	CORRIDOR	12'-0" X 7'-0"	1 3/4"	HM	PNT	1	HM	MANF.	8	2/AB1	2/AB1	2/AB1	-	-	4, 8, 10, 11, 12, 13, 14



5 SECURITY GATE IN GYP. BD. SCALE: 1 1/2" = 1'
 3 HOLLOW METAL FRAME IN MASONRY SCALE: 1 1/2" = 1'



4 AT INTERIOR METAL
 2 HOLLOW METAL FRAME IN GYPSUM BOARD SCALE: 1 1/2" = 1'

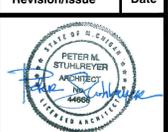


4 AT EXTERIOR DOOR
 1 ALUMINUM FRAME AT MASONRY SCALE: 1 1/2" = 1'



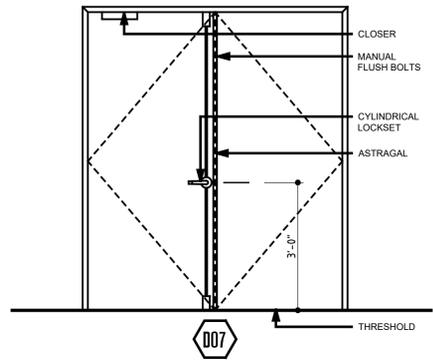
3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

---	---
---	---
---	---
---	---
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



3rd Ave. Detroit
 3181 3rd Ave.
 Detroit, MI 48201

Door & Finish
 Schedule
 021293
 A8.1

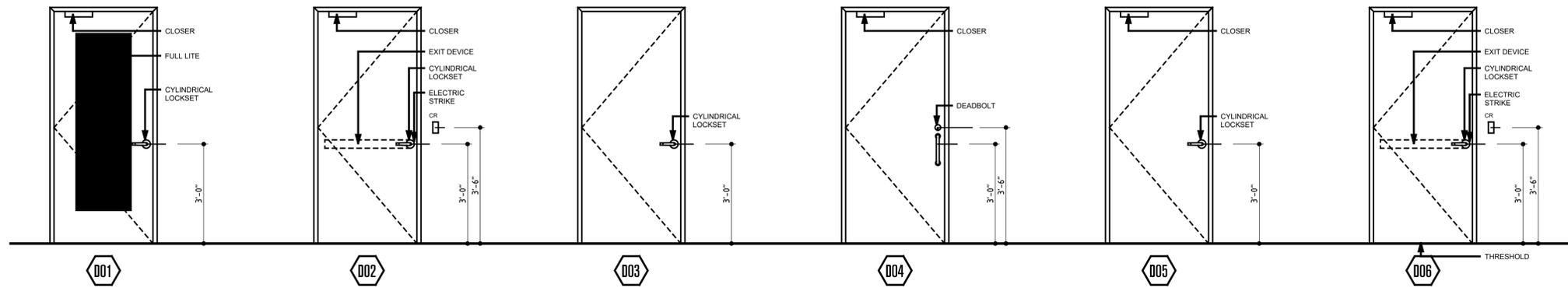


WINDOW SCHEDULE							
WDW #	WINDOW TYPE	RO. WIDTH	RO. HEIGHT	SILL HEIGHT	VENTING	COUNT	NOTES
SF1	ALUM. FRAMED STOREFRONT WINDOW	10'-0"	9'-1"	0'-0"	0X00 00X0	1	-
1	ALUM. FRAMED FIXED WINDOW	4'-0"	3'-0"	5'-0"	0	2	-
2	ALUM. FRAMED FIXED WINDOW	4'-0"	3'-0"	3'-6"	0	1	-

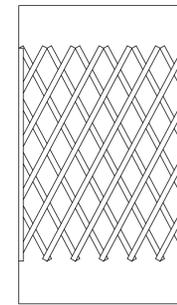
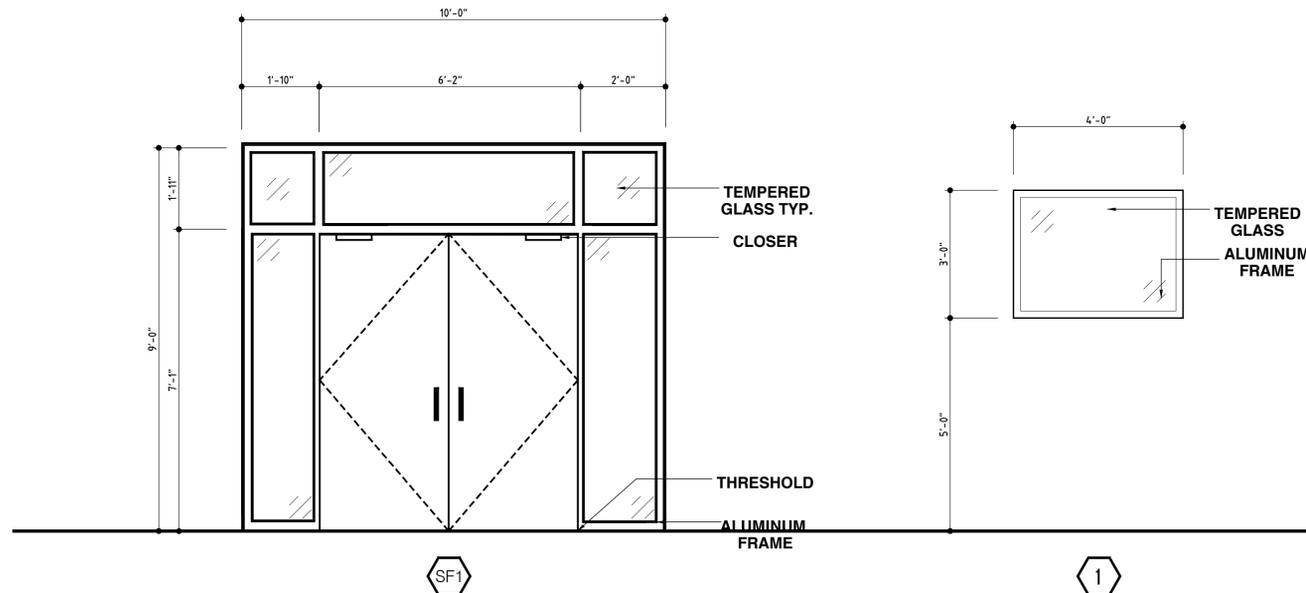
GENERAL NOTES:	
1.	ALUMINUM FIXED WINDOW FRAME
2.	DUAL INSULATING GLAZING UNIT PER CODE TEMPERED/ LOW E WHERE REQUIRED
3.	-
4.	-
5.	-
6.	-
7.	-
8.	-

EGRESS-ALUMINUM FRAMED STOREFRONT GLAZING SYSTEM	
(1)	ALUMINUM FIXED WINDOW FRAME
(1)	ALUMINUM FRAMED STOREFRONT DOOR
(1)	DUAL INSULATING GLAZING UNIT PER CODE TEMPERED/ LOW E WHERE REQUIRED
(3)	HINGES
(1)	SURFACE MOUNT DOOR CLOSER
(1)	THRESHOLD
(1)	WEATHER SEALS
(1)	MORTISE LOCK AND THUMBTURN
(1)	INTERIOR PUSH BAR
(1)	GLASS DECAL

"DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS"



DOOR TYPES:		
DOOR TYPE	LOCATION	NOTES
D01	KITCHEN	(1) "ENTRY" CYLINDRICAL LOCKSET W/ SMALL FORMAT IC CORES (1) HM / SINGLE INTERIOR (1) 3 PIECE KNOCK DOWN MTL. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP (1) FULL LITE KIT
D02	LOBBY / CORRIDOR	(1) "ENTRY" CYLINDRICAL LOCKSET W/ SMALL FORMAT IC CORES (1) HM / SINGLE INTERIOR (1) 3 PIECE KNOCK DOWN MTL. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) RIM PANIC EXIT DEVICE (1) CARD READER (1) ELECTRIC STRIKE
D03	IT ROOM	(1) "STOREROOM" CYLINDRICAL LOCKSET W/ SMALL FORMAT IC CORES (1) HM / SINGLE INTERIOR (1) 3 PIECE KNOCK DOWN MTL. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP
D04	RESTROOM	(1) "PRIVACY" DEADBOLT W/ OCC INDICATOR KEY ON THE EXTERIOR & THUMBTURN ON THE INTERIOR (1) HM / SINGLE INTERIOR (1) 3 PIECE KNOCK DOWN MTL. FRAME (1) DOOR HANDLE (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP
D05	UTILITY	(1) "STOREROOM" CYLINDRICAL LOCKSET W/ SMALL FORMAT IC CORES (1) HM / SINGLE INTERIOR (1) 3 PIECE KNOCK DOWN MTL. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP
D06	EXTERIOR EXIT	(1) "ENTRY" CYLINDRICAL LOCKSET (1) HM/SINGLE EXTERIOR (1) FULLY WELDED MT. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP (1) RIM PANIC EXIT DEVICE (1) THRESHOLD (1) WEATHER SEALS (1) CARD READER (1) ELECTRIC STRIKE
D07	EXTERIOR LOADING	(1) "ENTRY" CYLINDRICAL LOCKSET (1) HM/DOUBLE EXTERIOR (1) FULLY WELDED MT. FRAME (3) HINGES (1) SURFACE MOUNT DOOR CLOSER (1) DOOR STOP (1) ASTRAGAL (1) MANUAL FLUSH BOLT AT INACTIVE LEAF (1) THRESHOLD (1) WEATHER SEALS (1) DOORBELL
EQ80	KITCHEN UNITS	PROVIDE CG01 AT EXPOSED CORNERS



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

---	---
---	---
---	---
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Enlarged Glazing Elevation

021293

A8.2

EQUIPMENT SCHEDULE			
PLUMBING			
MFG / CONTACT:	WATERDROP	TYPE:	DRINKING WATER FAUCET
P-DWF-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ITEM #: WD-17UB FINISH: SS QUANTITY: 1 LOCATION: BREAK AREA	-INTEGRAL TO P-S-1 -INCLUDES P-WF-1 (WATER FILTER) WITH INITIAL ORDER, REPLACEMENT P-WP-1 TO BE ORDERED BY OPS
P-FSS-2-L	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	STEELTON ITEM #: PREP SINK (LEFT) 522CS1818 LFT FINISH: SS QUANTITY: 5 KITCHENS: 104,106,108,109,111	-OWNER FURNISHED/CONTRACTOR INSTALLED PRODUCT INCLUDES 1 COMPARTMENT STAINLESS STEEL SINK W/ LEFT DRAINBOARD, (1) P-PR-1 PRE-RISE SPRAY AND DRAIN W/ TWIST HANDLE-WASTE VALVES P-WV-1 CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES/ ANGLE STOPS TO FAUCET, IN LINE CHECK VALVES IF NOT INTEGRAL TO FAUCET, AND INDIRECT WASTE PIPING TO FLOOR SINK
P-FSS-2-R	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	STEELTON ITEM #: PREP SINK (RIGHT) 522CS1818 RHT FINISH: SS QUANTITY: 6 KITCHENS: 101,102,103,105,107,110	-OWNER FURNISHED/CONTRACTOR INSTALLED PRODUCT INCLUDES 1 COMPARTMENT STAINLESS STEEL SINK W/ LEFT DRAINBOARD, (1) P-PR-1 PRE-RISE SPRAY AND DRAIN W/ TWIST HANDLE-WASTE VALVES P-WV-1 CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES/ ANGLE STOPS TO FAUCET, IN LINE CHECK VALVES IF NOT INTEGRAL TO FAUCET, AND INDIRECT WASTE PIPING TO FLOOR SINK
P-FSS-3	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY ITEM #: HAND SINK 60HS12SP FINISH: SS QUANTITY: 11	- OWNER FURNISHED / CONTRACTOR INSTALLED PRODUCT. INCLUDES STAINLESS STEEL HAND SINK W/ INTEGRAL FAUCET AND SPLASH GUARDS. CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES, ANGLE STOPS, DRAIN & TAILPIECE, 17GA, CHROME PLATED P-TRAP AND SUPPLIES, PROVIDE WITH THERMOSTATIC MIXING VALVE P-TMV-2
P-FSS-4	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: 3-COMP. SINK (CORNER) 600S31818CX FINISH: STAINLESS STEEL QUANTITY: 11 LOCATION: ALL KITCHENS	-OWNER FURNISHED/CONTRACTOR INSTALLED PRODUCT INCLUDES STAINLESS STEEL SINK W/ INTEGRAL FAUCET P-F-1, AND SPLASH GUARDS CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES/ ANGLE STOPS TO FAUCET, IN LINE CHECK VALVES IF NOT INTEGRAL TO FAUCET, AND INDIRECT WASTE PIPING TO FLOOR SINK
P-PR-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SPLASH LOCAL PROVIDER ITEM #: PRE-RINSE UNIT SPL325W-20 FINISH: CHROME-PLATED BRASS QUANTITY: 11 LOCATION: ALL KITCHENS	- INTEGRAL TO P-FSS-1 AND P-FSS-4, PROVIDE WITH 1/2" FNTP x 1/2" MNPT CHECK VALVES AT THE HOT AND COLD WATER SUPPLY ANGLE STOP OUTLETS.
P-F-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SPLASH ITEM #: FAUCET/WALL MOUNT SPL812-12 FINISH: SS QUANTITY: 11 LOCATION: ALL KITCHENS	-INTEGRAL TO P-FSS-2-L AND P-FSS-2-R
P-WV-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	KROWNE ITEM #: TWIST HANDLE/ WASTE VALVE 22-204 FINISH: SS QUANTITY: -	-INTEGRAL TO P-FSS-1, P-FSS-2-R, AND P-FSS-4, -INSTALL AT AN ANGLE SUCH THAT THE TWIST-HANDLE LEVER DOES NOT EXTEND BEYOND THE FOOTPRINT OF THE COMPARTMENT THAT IT SERVES AND IS NOT SUBJECT TO DAMAGE FROM KITCHEN OPERATIONS
P-MW-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	MUSTEE LOCAL PROVIDER ITEM #: UTILITY BASIN 65M FINISH: WHITE QUANTITY: 1	-MOP SERVICE BASIN, 10" X 36" X 24" D, WHITE DURASTONE STRUCTURAL FIBERGLASS, SELF DRAINING SHELF AND REMOVEABLE STRAINER, 3" OUTLET DRAIN AND P-TRAP, PROVIDE COMPLETE W/ P-MW-1. REFER TO DETAIL ON ARCHITECTURAL SHEETS
P-MWF-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	T&S LOCAL PROVIDER ITEM #: UTILITY FAUCET B-0665 BSTRM FINISH: CHROME QUANTITY: 1	-ROUGH CHROME FINISH 8" CENTERSET WALL MOUNT FAUCET W/ INTEGRAL STOPS, VACUUM BREAKER, SPRING CHECKS, WALL SUPPORT ROD & PAIL HOOK. INTEGRAL TO P-MW-1
P-L-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ZURN LOCAL PROVIDER ITEM #: LAVATORY, WALL HUNG, ADA, 0.5 GPM 2L3M W/ 1231 CARRIER FINISH: WHITE QUANTITY: 2	-PROVIDE COMPLETE WITH LAVATORY, FAUCET, GRID DRAIN, P-TRAP, AND SUPPLY STOPS, CONCEALED ARM CARRIER, AND THERMOSTATIC MIXING VALVE P-TMV-2 (NOT TO EXCEED 115 DEG. F)
P-WC-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ZURN LOCAL PROVIDER ITEM #: WATER CLOSET, FLUSH VALVE, FLOOR MOUNT, 128 GPF 2 W 4 L M FINISH: WHITE QUANTITY: 2	-PROVE COMPLETE WITH WATER CLOSET, MANUAL FLUSH VALVE, SEAT, BOLT/WAX RING KIT, AND WATER HAMMER ARRESTOR P-WHA-1 ON PEX SUPPLY LINE
P-WC-3	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ZURN ITEM #: WATER CLOSET, FLUSH TANK, FLOOR MOUNT, 128 GPF ITEM #: 25535-K FINISH: WHITE	-PROVIDE COMPLETE WITH WATER CLOSET, SEAT, ANGLE STOP, BOLT/WAX RING KIT
P-WC-4	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ZURN ITEM #: WATER CLOSET, FLUSH TANK, FLOOR MOUNT, ADA 128 GPF ITEM #: 25555 FINISH: WHITE	-PROVIDE COMPLETE WITH WATER CLOSET, SEAT, ANGLE STOP, BOLT/WAX RING KIT
P-GWH-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	BOCK ITEM #: GAS FIRED WATER HEATER, TANK TYPE "OPTITHERM" OF SERIES SIZE: SEE PLUMBING QUANTITY: 1	-150-300 MBH GAS INPUT RANGE -WATER HEATERS -200 MBH AND -120 GALLON TANK SIZE DO NOT NEED ASME TANK CERTIFICATION
P-GWH-2	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	BRADFORD WHITE ITEM #: GAS FIRED WATER HEATER, TANK TYPE BTH SERIES SIZE: SEE PLUMBING QUANTITY: 1	-400-500 MBH GAS INPUT RANGE -WATER HEATERS -200 MBH AND -120 GALLON TANK SIZE DO NOT NEED ASME TANK CERTIFICATION
P-WCO-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	CHARLOTTE ITEM #: WALL CLEANOUT PVC 4.45 X CHROME QUANTITY: -	-TOP ASSEMBLY ADJUSTABLE FLOOR CLEANOUT WITH E21 TECHNOLOGY, PVC OR ABS SOLVENT WELD BODY, GAS AND WATER TIGHT ABS THREADED TAPERED PLUG AND TOP ASSEMBLY, INTEGRATED SELF-CONTAINED ROUND LIGHT DUTY SCRORIATED NICKEL BRONZE COVER. DRAIN OUTLET SIZE SHALL MATCH SIZE OF PIPING SERVED. CLEANOUT IS DESIGNED IN ACCORDANCE WITH ASME A112.36.2M. SIZE SHALL MATCH FULL SIZE OF PIPING SERVED. ALL CLEANOUTS 3" AND LARGER SIZE SHALL BE FLOOR CLEANOUTS

EQUIPMENT SCHEDULE			
LOW VOLTAGE			
MFG / CONTACT:	BLACK BOX	TYPE:	24 PORT PATCH PANEL
LV10	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ITEM #: JMP624A FINISH: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS
LV11	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	APC ITEM #: UPS SRT5KRMXLT FINISH: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS
LV12	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	UBIQUITI ITEM #: PHYSICAL SECURITY NVR UNVR OR UNVR-PRO FINISH: WHITE QUANTITY: -	-SEE EQUIPMENT PLANS
LV13	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	UBIQUITI ITEM #: PHYSICAL SECURITY CAMERAS UVC-G4-DOME FINISH: - QUANTITY: -	-SEE EQUIPMENT PLANS
LV14	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	UBIQUITI ITEM #: PHYSICAL SECURITY CAMERAS UVC-G4-BULLET OR UVC-G4-PRO FINISH: - QUANTITY: 30	-SEE EQUIPMENT PLANS
LV15	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	APC ITEM #: PDU AP7541 FINISH: - QUANTITY: -	-SEE EQUIPMENT PLANS
MK-KH-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: HOOD ASSEMBLY P-FSS-4 FINISH: - QUANTITY: -	-9" HOOD IN CORNER, 24" TALL WITH CABINET -ASP 14" WIDE, 2 COLLARS W/O MBD W/ CABINET -MBDS FOR ASP -20" CABINET ADD -12" HOOD IN CORNER, 24" TALL WITH CABINET -ASP 14" WIDE, 2 COLLARS W/O MBD W/ CABINET -MBDS FOR ASP (QTY 3) -3" INTEGRAL AIRSPACE (UNFINISHED END) W/ BACKSPLASH AND W/ ASP -INCLUDES PRICE FOR BACKSPLASH (111" x 80") AND ASP GROWING 3"
M-FSS-GV	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: FIRE SUPPRESSION MECHANICAL DETECTION FOR (1) 9" HOOD (1) 2" MECH. GAS VALVE FINISH: - QUANTITY: -	-FIRE SUPPRESSION SYSTEM MECHANICAL DETECTION FOR (1) 9" HOOD (1) 2" MECH. GAS VALVE -FIRE SUPPRESSION SYSTEM MECHANICAL DETECTION FOR (1) 12" HOOD, (1) 2" MECH. GAS VALVE
M-KEF-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: KITCHEN EXHAUST FANS P-FSS-4 FINISH: - QUANTITY: -	-1800 CFM 3/4 HP, MIAMI DADE RATED -EXHAUST FAN THROUGH WALL 16" FLAT CURB -1800 CFM, ECM UPBLAST EF NEMA 3R -3/4 HP -EXHAUST FAN UPBLAST 24" FLAT CURB -2400 CFM, ECM UPBLAST EF NEMA 3R -1HP
M-MAU-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: MAU P-FSS-4 FINISH: - QUANTITY: -	-5-1 XDGX MAU -5-1 XDGX MAU 12" FLAT CURB -6-1 XDGX MAU -6-1 XDGX MAU 12" FLAT CURB
M-EF-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: NON-KITCHEN EXHAUST FAN P-FSS-4 FINISH: - QUANTITY: -	- 100-300 CFM/KITCHEN
P-DOAS-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ACCUREX ITEM #: DOAS UNITS P-FSS-4 FINISH: - QUANTITY: -	-XRV SERIES, 0-810CFM/KITCHEN -XRV SERIES, 12" FLAT CURB
M-CU-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	RUSSELL/HEATCRAFT ITEM #: WALK-IN COOLER P-FSS-4 FINISH: - QUANTITY: -	-CUSTOM -PURCHASED THROUGH WIC/F VENDOR
M-EVAP	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	RUSSELL/HEATCRAFT ITEM #: WALK-IN COOLER P-FSS-4 FINISH: - QUANTITY: -	-CUSTOM -PURCHASED THROUGH WIC/F VENDOR
M-FCU-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	LG ITEM #: FAN COIL UNIT P-FSS-4 FINISH: - QUANTITY: -	-
M-FSS-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	JOHNSON CONTROLS ITEM #: ANSUL FIRE SUPPRESSION P-FSS-4 FINISH: - QUANTITY: -	-ANSUL R-102 SYSTEM -IN EACH EXHAUST HOOD
M-EUH	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	N/A ITEM #: ELECTRIC UNIT HEATER P-FSS-4 FINISH: - QUANTITY: -	-QMARK/LFK204F
M-GV	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	GREENHECK ITEM #: GRAVITY VENTILATOR P-FSS-4 FINISH: - QUANTITY: -	-GRSR - 20
M-SD	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	TITUS ITEM #: SUPPLY AIR DIFFUSER P-FSS-4 FINISH: - QUANTITY: -	-
M-C-00	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	VARIES ITEM #: MECHANICAL CURB P-FSS-4 FINISH: - QUANTITY: -	-APPLIES TO KEF, M, ACCUREX FOR ACCUREX EQUIPMENT
PLUMBING			
P-SF-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ELKAY ITEM #: SINK/FAUCET LK1000R FINISH: CHROME QUANTITY: 1 LOCATION: BREAK AREA	-INTEGRAL TO P-S-1
P-S-1	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ELKAY ITEM #: SINK, SELF RIMMING, S.S., ADA PSR40191955L FINISH: SS QUANTITY: 1	-PROVIDE COMPLETE WITH SINK, DRAIN & TAILPIECE, 17 GA. CHROME PLATED P-TRAP AND SUPPLIES, SINK FAUCET P-SF-1, AND DRINKING WATER FAUCET P-DWF-1

EQUIPMENT SCHEDULE			
EQUIPMENT / FURNITURE			
CODE	MFG / CONTACT:	TYPE:	REMARKS
E044	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY POST 460ECP74 FINISH: 74" SIZE: 252 LOCATION: WALK-INS	-
E045A	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: COLD RACK 460EG248 FINISH: 21" x 48" SIZE: 3 LOCATION: WALK-INS	-
E045B	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: COLD RACK 460EG215 FINISH: 21" x 36" SIZE: 15 LOCATION: WALK-INS	-
E047	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: COLD POST 460EGP74 FINISH: 74" SIZE: 3 LOCATION: WALK-INS	-
E048	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: RUBBER CASTERS 4605MPBK FINISH: 324 SIZE: STORAGE RACKS LOCATION: BACKROOM	-
E060	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	BOBRICK LOCAL PROVIDER ITEM #: MOP/BROOM HOLDERS B-223 FINISH: STAINLESS STEEL SIZE: - LOCATION: BACKROOM	-
E061A	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	GLOBAL INDUSTRIAL LOCAL PROVIDER ITEM #: WALL MOUNT UTILITY CABINET H-447BL FINISH: BLACK SIZE: 1 LOCATION: BACKROOM	-
E080	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ULINE LOCAL PROVIDER ITEM #: FOLDING SECURITY GATE H-3091 FINISH: GALVANIZED STEEL SIZE: 11 LOCATION: ALL KITCHENS	-
EQUIPMENT / FURNITURE: ALTERNATIVES			
E050A	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: SECURITY CAGE KIT 460CS2448KM FINISH: CHROME/WIRE SIZE: 24" x 48" LOCATION: STORAGE	-
E050A	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: SECURITY CAGE KIT 460CS1836KM FINISH: CHROME/WIRE SIZE: 18" x 36" LOCATION: STORAGE	-
E051	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: SECURITY CAGE KIT 460CS2448KM FINISH: EPOXY WIRE SIZE: 24" x 48" LOCATION: STORAGE	-
E064	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY RACK 460EC184B FINISH: 18" x 48" SIZE: - LOCATION: DRY RACK	-
E068	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY POST 460ECP86 FINISH: 86" SIZE: - LOCATION: WALK-INS	-
E069	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: WALL MOUNTED SHELVING 460EC184BWSK FINISH: CHROME SIZE: 18" x 48" LOCATION: STORAGE	-
E070	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: WALL MOUNTED SHELVING 460EB184BWSK FINISH: EPOXY WIRE SIZE: 18" x 48" LOCATION: STORAGE	-
LOW VOLTAGE			
LV01	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	N/A ITEM #: DATA CABLE CAT6 FINISH: - SIZE: - COLOR: N/A QUANTITY: -	-SEE EQUIPMENT PLANS
LV02	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	MISCELLANEOUS ITEM #: INFORMATION OUTLET MISCELLANEOUS FINISH: N/A SIZE: - COLOR: N/A QUANTITY: -	-SEE EQUIPMENT PLANS
LV03	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	OPENPATH ITEM #: TBD FINISH: - SIZE: - COLOR: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS
LV04	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	APC ITEM #: IT RACK AR3100 FINISH: BLACK SIZE: - COLOR: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS
LV05	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	PALO ALTO ITEM #: FIREWALL 440 FINISH: - SIZE: - COLOR: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS
LV06	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ARUBA ITEM #: POE SWITCH 2930M FINISH: - SIZE: - COLOR: WHITE QUANTITY: -	-SEE EQUIPMENT PLANS
LV07	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ARUBA ITEM #: WAP 505 FINISH: - SIZE: - COLOR: WHITE QUANTITY: -	-SEE EQUIPMENT PLANS
LV08	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ARUBA ITEM #: WAP 505H FINISH: - SIZE: - COLOR: WHITE QUANTITY: -	-SEE EQUIPMENT PLANS
LV09	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	BLACK BOX ITEM #: 48 PORT PATCH PANEL JPM648A FINISH: - SIZE: - COLOR: BLACK QUANTITY: -	-SEE EQUIPMENT PLANS

EQUIPMENT SCHEDULE			
EQUIPMENT / FURNITURE			
CODE	MFG / CONTACT:	TYPE:	REMARKS
E009	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	CUSTOM COUNTER OWNER ITEM #: PICK-UP COUNTER CUSTOM FINISH: PL01 LOCATION: SERVICE COUNTER	- SEE SHEET ENLARGED PLAN A4.2 & SECTIONS ON A7.1 FOR DETAILS
E011	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	BOSS LOCAL PROVIDER ITEM #: STUOL WGB2241820 FINISH: BLACK SIZE: 1 LOCATION: SERVICE COUNTER	-
E012	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ULINE LOCAL PROVIDER ITEM #: FIRE EXTINGUISHER BRACKET H-5936 FINISH: 14 LOCATION: SEE REMARKS	- TO BE LOCATED IN ALL KITCHEN, RETAIL SPACE, SERVICE COUNTER AND BASEMENT - SEE PLANS FOR SPECIFIC LOCATIONS
E013	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ULINE LOCAL PROVIDER ITEM #: SAFETY MIRROR CONVEX / H-1307-1 FINISH: CLEAR GLASS QTY: 3 LOCATION: IN AISLE	-
E014	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SCOTSMAN LOCAL PROVIDER ITEM #: ICE MACHINE (720C0530MA1A) C0530MA1 FINISH: GREY QTY: 1 LOCATION: AISLE	-SEE EQUIPMENT PLANS
E015	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SCOTSMAN LOCAL PROVIDER ITEM #: ICE MACHINE BIN (72B530S) B530S FINISH: GREY QTY: - LOCATION: AISLE	-SEE EQUIPMENT PLANS - CAN ONLY USE BIN IF FACILITY HAS HAND SINK NEXT TO ICE MACHINE
E016	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SCOTSMAN LOCAL PROVIDER ITEM #: ICE MACHINE DISPENSER (720HD30B1H) HD30B FINISH: GREY QTY: 1 LOCATION: AISLE	-SEE EQUIPMENT PLANS - IF NO HAND SINK BY ICE MACHINES, THEN YOU MUST HAVE ICE DISPENSERS
E017	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SCOTSMAN LOCAL PROVIDER ITEM #: ICE MACHINE FILTER (720ADSAP1) AP1-P FINISH: GREY QTY: 1 LOCATION: AISLE	-SEE EQUIPMENT PLANS
E018	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	YOSHIMASA LOCAL PROVIDER ITEM #: AIR CURTAIN MD0R1 36 FINISH: SEE MECH. DRAWING SIZE: WHITE COLOR: 1	- MECHANICAL DRAWINGS AND EQUIPMENT PLANS FOR SIZE & LOCATION
E019	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	HALLOWELL LOCAL PROVIDER ITEM #: LOCKER VALUEMAX FINISH: GREY QTY: 3 LOCATION: BASEMENT	- 3 TIER 1 WIDE
E020	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	ULINE LOCAL PROVIDER ITEM #: RUNNER SHELF H-2448-54 FINISH: BLACK QTY: 5 LOCATION: AISLE	- 1 PER 2 KITCHENS - SEE EQUIPMENT PLAN
E026	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SPECTRUM LOCAL PROVIDER ITEM #: MICROWAVE EMW-1000SD FINISH: STAINLESS STEEL QTY: 1 LOCATION: KITCHEN/ETTER	- 1.2 CU FT.
E027	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REAL SOLUTIONS LOCAL PROVIDER ITEM #: TRASH BIN RS-EKW10 FINISH: GREY QTY: 1 LOCATION: KITCHENETTE	-
E028	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	HAMPTON BAY LOCAL PROVIDER ITEM #: COUNTERTOP 11312010819529 FINISH: CUSTOM / SEA SALT QTY: 1 LOCATION: KITCHENETTE	-
E029	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	HAMPTON BAY LOCAL PROVIDER ITEM #: CABINET (SINK) KSB36-SDV FINISH: DOVE GRAY QTY: 1 LOCATION: KITCHENETTE	-
E030	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	HAMPTON BAY LOCAL PROVIDER ITEM #: CABINET KB36-SDV FINISH: DOVE GRAY QTY: 1 LOCATION: KITCHENETTE	-
E031	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	HAMPTON BAY LOCAL PROVIDER ITEM #: TOE KICK KATK-DV FINISH: DOVE GRAY QTY: 1 LOCATION: KITCHENETTE	-
E032	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	LIBERTY LOCAL PROVIDER ITEM #: CABINET PULLS P01012-PC-C FINISH: POLISHED CHROME QTY: 4 LOCATION: KITCHENETTE	-
E033	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	CINTAS / ARAMARK LOCAL PROVIDER ITEM #: WALL MOUNTED SOAP DISPENSER CLEAR/WHITE FINISH: - QTY: 17 LOCATION: SEE REMARKS	- LOCATED IN ALL TOILET ROOMS, KITCHENS & AT KITCHENETTE.
E034	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	SYSTEM SENSOR LOCAL PROVIDER ITEM #: FIRE STROBE COMPACT STROBE FINISH: WHITE QTY: 11 LOCATION: ALL KITCHENS	-
E035	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	CINTAS / ARAMARK LOCAL PROVIDER ITEM #: PAPER TOWEL DISPENSER PLASTIC FINISH: - QTY: 12 LOCATION: KITCHENS & KITCHENETTE	-
E037	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	AVANTCO LOCAL PROVIDER ITEM #: 1-DOOR REACH IN REF. 178A19RH FINISH: STAINLESS STEEL QTY: 17 LOCATION: BASEMENT	-
E041	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY RACK 460EC3036 FINISH: 30" x 36" SIZE: 6 LOCATION: WALK-IN FREEZER	-
E042C	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY RACK 460EC2448 FINISH: 24" x 48" SIZE: 42 LOCATION: FIRST FLOOR / BASEMENT	-
E042D	MFG: CONTACT: - NUMBER: - EMAIL: - NAME: -	REGENCY LOCAL PROVIDER ITEM #: DRY RACK 460EC2436 FINISH: 24" x 36" SIZE: 21 LOCATION: FIRST FLOOR / BASEMENT	-

EST 1998

DESIGNHAUS

ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



Peter M. Stuhldreier
Professional Engineer
State of Michigan
License No. 44608

3rd Ave. Detroit

3181 3rd Ave.
Detroit, MI 48201

Equipment Schedules

021293

A8.3

GENERAL NOTE:

1. PROVIDE BLOCKING AS REQUIRED.
2. CONTRACTOR TO COORDINATE EQUIPMENT DELIVERY WITH EQUIPMENT CONTRACTOR AND OWNER.
3. -

CLARK
2207 OLD PHILADELPHIA PIKE
LANCASTER, PA 17602
304.550.3992
BMINOR@CFSE.DIZ

GSW
AMERICAN CHEF SUPPLY
6640 SAN FERNANDO ROAD GLENDALE, CA 91201
323.388.6054
DAVID@AMERICANHELFSUPPLY.COM

TURBO AIR
ACTION SALES
415 S ATLANTIC BLVD, MONTEREY PARK, CA 91754
626.308.1988
TONY@ACTIONSALES.COM

EVERIDGE/THERMALRITE
15600 37TH AVE. N, SUITE 100, PLYMOUTH, MN 55446
805.551.0631
JIM COOK
JIM.COOK@THERMALRITE.COM

LOCKNET
859.887.9119
JEFF KIRKNER
JEFFK@LOCKNET.COM

EQUIPMENT SCHEDULE

PLUMBING				
CODE	MFG / CONTACT	SPECIFICATIONS	REMARKS	
P-PRV-1	MFG: MAXITROL CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: GAS PRESSURE REGULATING VALVE ITEM #: 325-7AL (W/ OPD 210D ATTACHED) FINISH: 325-7AL QUANTITY: 325-5L	- 5 PSI INLET PRESSURE LEVER ACTING DESIGN WITH OVERPRESSURE DEVICE 1-1/2" INLET x 1-1/2" OUTLET, 1250 CFH MAX FLOW CAPACITY, 5 PSIG INLET PRESSURE, 7"-11" SPRING RANGE, VENTLESS MEDIUM PRESSURE GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL. - 2 PSI INLET PRESSURE LEVER ACTING DESIGN, 1-1/4" INLET x 1-1/4" OUTLET, 1250 CFH MAX FLOW CAPACITY, 2 PSIG INLET PRESSURE, 7"-11" SPRING RANGE, VENTLESS MEDIUM PRESSURE GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL. - 14" W.C. INLET PRESSURE LEVER ACTING DESIGN, 1" INLET x 1" OUTLET, 275 CFH MAX FLOW CAPACITY, 14" W.C. INLET PRESSURE, 7"-11" SPRING RANGE, VENTLESS GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL.	
P-HB-1	MFG: MAPA CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: HOSE BIBB, ROOF (NON-FREEZE) ITEM #: MPH-24FP-24/9 FINISH: - QUANTITY: -		
P-HB-2	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: HOSE BIBB, WALL (NON-FREEZE) ITEM #: Z1321 FINISH: - QUANTITY: -		
P-HB-3	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: HOSE BIBB, ROOF ITEM #: Z1343 FINISH: - QUANTITY: -		
P-HB-4	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: HOSE BIBB, WALL ITEM #: Z1341XL-P34 FINISH: - QUANTITY: -		
P-TP-1	MFG: PPP CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: TRAP PRIMER ITEM #: P1 & P2 TRAP PRIMER UNIT W/ DU-2/4 FINISH: - QUANTITY: -		
P-WHA-1	MFG: OATLEY CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: WATER HAMMER ARRESTOR ITEM #: Z1341XL-P34 FINISH: - QUANTITY: -		
P-YP-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: YARD RECEPTOR ITEM #: Z122-AC FINISH: - QUANTITY: -	-12" DIAMETER INDIRECT DRAIN RECEIVER, NO-HUB OUTLET, ACID RESISTANT EPOXY COATED	
P-WS-1	MFG: CULLIGAN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: AUTOMATIC WATER SOFTENER ITEM #: DUPLEX HE-060 W/ ALTERNATING CONTROLS FINISH: - QUANTITY: -		
-	MFG: - CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: - ITEM #: - FINISH: - QUANTITY: -		
-	MFG: - CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: - ITEM #: - FINISH: - QUANTITY: -		

EQUIPMENT SCHEDULE

PLUMBING				
CODE	MFG / CONTACT	SPECIFICATIONS	REMARKS	
P-FCO-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: FLOOR CLEANOUT ITEM #: EZC FINISH: - QUANTITY: -	-SIZE SHALL MATCH THAT OF PIPING SERVED (NO SUBSTITUTIONS)	
P-COTG-1	MFG: BROOKS CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: CLEANOUT TO GRADE ITEM #: 1-RD-T FINISH: - QUANTITY: -	-SIZE SHALL MATCH THAT OF PIPING SERVED	
P-COTG-2	MFG: BROOKS CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: CLEANOUT TO GRADE, TRAFFIC RATED ITEM #: 1-RD-T FINISH: - QUANTITY: -	-SIZE SHALL MATCH THAT OF PIPING SERVED	
P-TMV-1	MFG: LEONARD CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: THERMOSTATIC MIXING VALVE (MASTER) ITEM #: LV-982-LF FINISH: - QUANTITY: -	-14.0 DEG. F INLET TEMPERATURE, 120 DEG. F OUTLET TEMPERATURE	
P-TMV-2	MFG: LEONARD CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: THERMOSTATIC MIXING VALVE (POINT OF USE) ITEM #: 170-LF-STSTL REC FINISH: - QUANTITY: -	-PROVIDE AT ALL LAVATORIES (NOT TO EXCEED 115 DEG F) AND HAND SINKS (NOT TO EXCEED 108 DEG F)	
P-FS-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: FLOOR SINK ITEM #: FS12-6-3-PV3-YS FINISH: WHITE QUANTITY: 11 LOCATION: KITCHENS	-12" SANITARY FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANI-LOC DOME STRAINER, STAINLESS STEEL MESH BUCKET, 3" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE TO ASME A112.6.7 & CSA B45.5/IAPMO Z124. NO SUBSTITUTES	
P-FS-2	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: FLOOR SINK, HALF GRATE ITEM #: FS12-6-PV2-H FINISH: WHITE QUANTITY: 1 LOCATION: ICE MAKER	-12" SANITARY FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANI-LOC DOME STRAINER, HALF PVC GRATE, 2" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE TO ASME A112.6.7 & CSA B45.5/IAPMO Z123	
P-FS-3	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: FLOOR SINK, HALF GRATE ITEM #: FS12-6-PV4-H FINISH: WHITE QUANTITY: -	-12" SANITARY FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANI-LOC DOME STRAINER, HALF PVC GRATE, 2" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE TO ASME A112.6.7 & CSA B45.5/IAPMO Z123. NO SUBSTITUTES	
P-FD-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: FLOOR DRAIN ITEM #: EZ1-PV2 OR EZ1-AB2 FINISH: NICKEL BRONZE QUANTITY: -	-EZ-15" TOP ASSEMBLY ADJUSTABLE FLOOR DRAIN WITH EZ-1 TECHNOLOGY, ROUND NICKEL BRONZE STRAINER, PVC OR ABS SOLVENT WELD BODY WITH BOTTOM OUTLET AND 1/2" TRAP PRIMER CONNECTION KNOCKOUT PLUG, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND TOP ASSEMBLY.	
P-BFP-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: BACKFLOW PREVENTER, DOMESTIC SERVICE ITEM #: 375XL FINISH: - QUANTITY: -	-REDUCED PRESSURE ZONE ASSEMBLY, 2" SIZE, LEAD FREE CONSTRUCTION PIPE DRAIN TO APPROVED RECEPTOR. INSTALLED AT READILY AVAILABLE HEIGHT. COMPLETE W/ STRAINER AND GATE VALVES. WHERE INSTALLED DOORS, ROUTE DRAIN TO TERMINATE WITH AIRGAP DISCHARGE AT ADJACENT RECEPTOR.	
P-DDC-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: BACKFLOW PREVENTORS, FIRE SERVICE, VERTICAL AND HORIZONTAL ITEM #: 350ASTDA-BF FINISH: - QUANTITY: -	-DOUBLE CHECK DETECTOR ASSEMBLY, (-) SIZE, COMPLETE W/ OS&Y GATE VALVES FOR STANDARD HORIZONTAL INSTALLATION. INSTALL AT READILY ACCESSIBLE HEIGHT. -DOUBLE CHECK DETECTOR ASSEMBLY, (-) SIZE, COMPLETE W/ BUTTERFLY VALVES FOR VERTICAL INSTALLATION IN-LINE WITH FIRE RISER. INSTALL AT READILY ACCESSIBLE HEIGHT	
P-GGI-1	MFG: JENSEN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: GRAVITY GREASE INTERCEPTOR ITEM #: JP SERIES FINISH: - QUANTITY: -	-GRAVITY GREASE INTERCEPTOR, (-) GALLON CAPACITY, (L) x (L) x (L) INCH, CONCRETE CONSTRUCTION. COMPLETE WITH (2) TRAFFIC RATED 24" DIA. CAST IRON FRAME, COVER & GASKET (GASTIGHT). PROVIDE #2432 RISERS AS NEEDED. INCLUDE SAMPLE BOX MODEL #2432 32" DIA. x 32" DEEP WITH #2432 RISER SECTIONS AS REQUIRED -EOR SIZING/ SELECTION PER APPLICATION	
P-BWV-1	MFG: RECTORSEAL CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: BACKWATER VALVE ITEM #: CLEAN CHECK FINISH: - QUANTITY: -	-PROVIDE WITH RISER TO EXTEND TO GRADE PER MANUFACTURER INSTRUCTIONS. PROVIDE W/ ROUND LIGHT DUTY SCORRIATED NICKEL BRONZE COVER MARKED WITH "BWV"	
P-HGI-1	MFG: SCHIER CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: HYDROMECHANICAL GREASE INTERCEPTOR ITEM #: GB-250 FINISH: - QUANTITY: -	-HYDROMECHANICAL GREASE INTERCEPTOR, 200 GPM FLOW RATE, 87" x 33" x 44" COMPLETE WITH (2) TRAFFIC RATED 24" DIA. COMPOSITE COVERS, GAS/WATER TIGHT. PROVIDE FCR2 RISERS FIELD CUT AS NEEDED	
P-DPRV-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: DOMESTIC WATER PRESSURE REDUCING VALVE ITEM #: 500XLYSBR-HR FINISH: - QUANTITY: -	-75 PSI TO 125 SPRING RANGE, FACTORY SET AT 85 PSI, FIELD RESET TO 80 PSI, THREADED CONNECTIONS (NPT), NSF 61 COMPLIANT, COMPLETE W/ BRONZE "Y" TYPE STRAINER W/ 20 MESH STAINLESS STEEL SCREEN, GATE VALVES, AND UNIONS (APPLICABLE TO SIZES 1/2" THRU 3"). ITEM SIZE SHALL CORRESPOND TO FULL LINE SIZE OF PIPING SERVED.	
P-PRV-2	MFG: MAXITROL CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: GAS PRESSURE REGULATING VALVE (L-1) PSI (PRESSURE) ITEM #: 325-L-1 SERIES FINISH: - QUANTITY: -	-LEVER ACTING DESIGN WITH OVERPRESSURE DEVICE, (L-1) INLET x (L-1) OUTLET, (L-1) CFH MAX FLOW CAPACITY (L-1) PSIG INLET PRESSURE, 7"-11" SPRING RANGE, VENTLESS GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL.	
P-RC-1	MFG: BELL & GOSSETT CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: DOMESTIC HOT WATER CIRCULATION PUMP ITEM #: NBF SERIES FINISH: - QUANTITY: -	-EOR SIZING/ SELECTION PER APPLICATION	
P-ET-1	MFG: ZURN CONTACT: - NUMBER: - EMAIL: - NAME: -	TYPE: DOMESTIC HOT WATER TANK EXPANSION ITEM #: WXTF SERIES FINISH: - QUANTITY: -	-EOR SIZING/ SELECTION PER APPLICATION	



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.459.8654
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

PERMITS	03.07.22
CD 90%	02.25.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



3rd Ave. Detroit
3181 3rd Ave.
Detroit, MI 48201

Equipment Schedule

021293

A8.4

Sheet List		60% CD 02.04.2022	Permits 02.25.2022	Permits 03.07.2022
Sheet Number	Sheet Name			
S0.0	Cover Sheet	X	X	X
S0.1	General Structural Notes	X	X	X
S0.2	Special Inspection Schedules	X	X	X
S2.1	First Floor - Foundation	X	X	X
S2.2	Kitchen Ceiling Framing Plan	X	X	X
S2.3	Roof Plan - Framing	X	X	X
S3.2	General Sections And Details	X	X	X
S8.0	Typical CFS Sections And Details	X	X	X
S8.1	General Sections And Details	X	X	X

IMEG PLAN AND DETAIL SYMBOLS	
Detail Symbol IMEG_Dummy Elevation Circle Type Dummy Elevation Circle	
Detail Symbol IMEG_Dummy Elevation Tag Left Type Dummy Elevation Tag Left	
Detail Symbol IMEG_Dummy Elevation Tag Right Type Dummy Elevation Tag Right	
Detail Symbol IMEG_Slab Detail & Fir Elev Type Slab, Detail & Fir Elev	
Detail Symbol IMEG_Slab Depression Type Slab Depression	
Detail Symbol IMEG_Dummy Grid Bubble Type Dummy Grid Bubble	
Detail Symbol IMEG_Dummy_Existing Grid Bubble Diamond Type Dummy_Existing Grid Bubble Diamond	
Detail Symbol IMEG_Text Symbol Circle Type Text Symbol Circle	
Detail Symbol IMEG_Text Symbol Square Type Text Symbol Square	
Detail Symbol IMEG_Dummy Hex Type Dummy Hex	
Detail Symbol IMEG_Keynote Oval Type with Arrow, with Dot	
Detail Symbol IMEG_Keynote Oval with Stick Leader Type Keynote Oval with Stick Leader	
Detail Symbol IMEG_Keynote Oval-Heavy Type Keynote with Arrow	
Detail Symbol IMEG_Leader Type with Arrow, with Dot	
Detail Symbol IMEG_Footing Step Type Footing Step	
Detail Symbol IMEG_Dummy_Section Tag_Within Dtl Ref Type Dummy_Section Tag_Within Dtl Ref	
Detail Symbol IMEG_Weld Symbol Type Weld Symbol	
Detail Symbol IMEG_Tiida Type Standard, Large	

IMEG SYMBOLS - TITLE BLOCKS	
Detail Symbol IMEG_Logo Address Phone Split Type Every team has a one	
Detail Symbol IMEG_Graphic Scale Type Standard - Imperial	
Detail Symbol IMEG_North Arrow Type North Arrow	

ANNOTATIVE TEXT SYMBOL	
SYMBOL	DESCRIPTION
	IMEG_Slope Symbol Bottom Left
	Bottom Right
	Top Left
	Top Right
	IMEG_Rebar Symbol (INSTANCE) 90° Dowel
	Hairpin
	Single Tie
	Stirrup
	Stirrup - S3
	U Bar
	Z Bar

STRUCTURAL ABBREVIATION KEY			
ABBR:	DESCRIPTION:	ABBR: DESCRIPTION:	
#	NUMBER OR POUNDS	LL	LIVE LOAD
@	AT	LLH	LONG LEG HORIZONTAL
°	DEGREE	LLV	LONG LEG VERTICAL
Ø	DIAMETER	LSH	LONG SIDE HORIZONTAL
3"	SLAB DEPRESSION	LSV	LONG SIDE VERTICAL
A.B.	ANCHOR BOLT	LO	LOW
AHU	AIR-HANDLING UNIT	LONG	LONGITUDINAL
ARCH	ARCHITECT, -URE, -URAL	LT WT	LIGHTWEIGHT
B.O.	BOTTOM OF	M.B.	MACHINE BOLT
bf	BEAM FLANGE WIDTH	MAX	MAXIMUM
BF	BRACE FRAME	MECH	MECHANICAL
BLKG	BLOCKING	MANUF	MANUFACTURER
BM	BEAM	MIN	MINIMUM
B.N.	BOUNDARY NAILING	MTL	METAL
B.O.F.	BOTTOM OF FOOTING	N	NORTH
BOTT	BOTTOM	(N)	NEW
BP	BASE PLATE	NIC	NOT IN CONTRACT
BTWN	BETWEEN	NTS	NOT TO SCALE
CFSF	COLD FORM STEEL FRAMING	OC	ON CENTER
CLR	CLEAR	OH	OPPOSITE HAND
CL	CENTERLINE	OPNG	OPENING
CMU	CONCRETE MASONRY UNIT	PC	PIECE
COL	COLUMN	PCF	POUNDS PER CUBIC FOOT
CONC	CONCRETE	P.H.	PENTHOUSE
CONT	CONTINUOUS	PL	PLATE
C.P.	COMPLETE JOINT PENETRATION WELD	PLF	POUNDS PER LINEAR FOOT
DIA	DIAMETER	PLYWD	PLYWOOD
DIM	DIMENSION	P.P.	PARTIAL JOINT PENETRATION WELD
DL	DEAD LOAD	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DWG	DRAWING	PTDF	PRESSURE TREATED DOUGLAS FIR
DWL	DOWEL	R	RADIUS
EA	EACH	REINF	REINFORCING, -MENT, -ED
EF	EACH FACE	REQD	REQUIRED
EL	ELEVATION	RTU	ROOF TOP UNIT
ELEC	ELECTRICAL	SC	TC WITH CLASS A FAYING SURFACE
ELEV	ELEVATOR	SCBF	SPECIAL CONCENTRIC BRACE FRAME
E.N.	EDGE NAILING	SCHED	SCHEDULE
EOD	EDGE OF DECK	SEPN	SEPARATION
EOS	EDGE OF SLAB	SIM	SIMILAR
EQ	EQUAL	SHTG	SHIELDING
EQUIP	EQUIPMENT	SL	SNOW LOAD
EW	EACH WAY	SLRS	SEISMIC LOAD RESISTING SYSTEM
(E)	EXISTING	SOG	SLAB ON GRADE
EXP	EXPANSION	SP	SPACE(S)
EXT	EXTERIOR	SPEC	SPECIFICATION(S)
f'c	CONCRETE COMPRESSIVE STRENGTH	SQ	SQUARE
FDN	FOUNDATION	STIFF	STIFFENER
FIN	FINISH, -ED	STL	STEEL
FLR	FLOOR	SUPPT	SUPPORT
F.N.	FIELD NAILING	SYM	SYMMETRICAL
F.O.S.	FACE OF STUD	TAB	TOP AND BOTTOM
F.O.W.	FACE OF WALL	T.O.	TOP OF
FRMG	FRAMING	T.O.S.	TOP OF STEEL
FT	FOOT	T.O.W.	TOP OF WALL
FTG	FOOTING	TC	PRE-TENSIONED BOLT
Fy	YIELD STRESS	TEMP	TEMPERATURE
GA	GAGE OR GAUGE	t	BEAM FLANGE THICKNESS
GALV	GALVANIZED	THK	THICK
GB	GRADE BEAM	TRANS	TRANSVERSE
HI	HIGH	TYP	TYPICAL
HORIZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
HSB	HIGH STRENGTH BOLT	VERT	VERTICAL
IN	INCH	VIF	VERIFY IN FIELD
INT	INTERIOR	VWA	VERIFY WITH ARCHITECTURAL DRAWINGS
JT	JOINT	W/	WITH
K, KIP	KILOPOUND (1,000 POUNDS)	WP	WORK POINT
KSP	KIPS PER SQUARE FOOT	WT	WEIGHT
LB	POUND	WWR	WELDED WIRE REINFORCING

33333 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1650
www.imegcorp.com
PROJECT # 21095310.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES

EST 1998

DESIGNHAUS

ARCHITECTURE

3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

Cover Sheet

021293

S0.0

STATEMENT OF SPECIAL INSPECTIONS

- SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 MICHIGAN (INTERNATIONAL) BUILDING CODE CHAPTER 17 AND AS MODIFIED HEREIN.
- DESIGNATIONS:**
 - SI SPECIAL INSPECTOR QUALIFIED WITH DEMONSTRATED COMPETENCE DOCUMENTED BY CERTIFICATIONS FROM RECOGNIZED AGENCIES SUCH AS AWS, ACI, MASONRY INSTITUTE OF MICHIGAN (MIM), ETC., AS SUBMITTED AND APPROVED BY THE BUILDING OFFICIAL. SPECIAL INSPECTOR MAY BE A FIRM WITH MULTIPLE SPECIALISTS AND A PROJECT MANAGER PROVIDING REPORTS.
 - TA TESTING AGENCY QUALIFIED TO TEST AND INSPECT MATERIALS AND ASSEMBLIES. TESTING AGENCY SHALL BE UNDER THE SUPERVISION OF THE SPECIAL INSPECTOR.
 - GE GEOTECHNICAL FIELD ENGINEER.
 - SE SPECIALTY ENGINEER RESPONSIBLE FOR DESIGNING ASSEMBLIES SUCH AS PRECAST CONCRETE, STEEL JOISTS, COLD FORMED FRAMING ASSEMBLIES, ETC. SPECIALTY ENGINEER SHALL PROVIDE OBSERVATION OF FABRICATED AND INSTALLED ITEMS OF THEIR DESIGN IN ADDITION TO THE SPECIAL INSPECTION.
- TA, GE, AND SE SHALL SUBMIT RECORDS OF THE INSPECTION RESULTS TO THE SI. THE SI SHALL COMPILER AND SUBMIT INSPECTION RECORDS TO THE ARCHITECT/ENGINEER AND BUILDING OFFICIAL. RECORDS SHALL INCLUDE STATEMENTS OF TESTS, WHETHER INSTALLED/FABRICATED ITEM COMPLIES WITH CONTRACT DOCUMENTS, REMEDIAL WORK PERFORMED, RETESTS.
- SI SHALL PROVIDE A DAILY REPORT OF ANY DISCREPANCIES FROM THE CONTRACT DOCUMENTS FOUND ON THE SAME DAY OF THE INSPECTION TO THE ENGINEER OF RECORD. FORMAL REPORTS OF COMPLIANCE CAN FOLLOW BY A MAXIMUM OF 2 WEEKS. SI SHALL PROVIDE AND SIGN FINAL REPORT WITH A SUMMARY OF ALL TESTS PERFORMED AND RESULTS TO THE ENGINEER OF RECORD AND BUILDING OFFICIAL, IN... SI, TA & GE SHALL BE ENGAGED BY THE OWNER IN COMPLIANCE WITH THE MICHIGAN (INTERNATIONAL) BUILDING CODE.
- WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING, OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION. SPECIAL INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE FABRICATOR MAINTAINS APPROVED DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND THE GOVERNING BUILDING CODE. APPROVAL SHALL BE BASED UPON REVIEW OF FABRICATION AND QUALITY CONTROL PROCEDURES AND PERIODIC INSPECTION OF FABRICATION PRACTICES BY THE BUILDING OFFICIAL. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED IN ACCORDANCE WITH SECTION 1704.2.5.1.
- REFER TO SPECIAL INSPECTION SCHEDULES AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL QUALITY CONTROL TESTING AND INSPECTIONS.

SPECIAL INSPECTION REQUIREMENTS - SOILS AND FOUNDATIONS

INSPECTION TASK	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	CONTINUOUS	PERIODIC			
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X	(VIF) COORD. W / GEOTECH. ENGINEER	1705.6	SI/GE
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X	(VIF) COORD. W / GEOTECH. ENGINEER	1705.6	SI/GE
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X	(VIF) COORD. W / GEOTECH...	1705.6	SI/GE/TA
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-	(VIF) COORD. W / GEOTECH. ENGINEER	1705.6	SI/GE/TA
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X	(VIF) COORD. W / GEOTECH. ENGINEER	1705.6	SI/GE/TA

SPECIAL INSPECTION REQUIREMENTS - POST-INSTALLED ANCHORS

INSPECTION TASK	REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
1. INSPECT AND TEST ALL POST-INSTALLED MECHANICAL AND ADHESIVE ANCHORS MANUFACTURER'S ICC-ESR EVALUATION REPORT FOR EACH ANCHOR.	ICC-ESR FOR EACH ANCHOR	1705.1.1	SI / TA

SPECIAL INSPECTION REQUIREMENTS - STRUCTURAL STEEL

INSPECTION TASK	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	CONTINUOUS	PERIODIC			
1. INSPECTION OF STEEL FABRICATED ITEMS SHALL BE PERFORMED ON PREMISES DURING FABRICATION.	-	X	AISC QUALITY CERTIFICATION	1704.2.5	SI
A. EXCEPTIONS: SPECIAL INSPECTIONS DURING FABRICATION NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED IN ACCORDANCE WITH SECTION 1704.2.5.1.	-	-			
2. SPECIAL INSPECTIONS AND NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN BUILDINGS, STRUCTURES AND PORTIONS THEREOF SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360.	X	X	AISC QUALITY CERTIFICATION	1705.2.1	SI
A. SPECIAL INSPECTION OF RAILING SYSTEMS COMPOSED OF STRUCTURAL STEEL ELEMENTS SHALL BE LIMITED TO WELDING INSPECTION OF WELDS AT THE BASE OF CANTILEVERED RAIL POSTS.	-	X	AISC QUALITY CERTIFICATION	1705.2.1	SI

INSPECTION TASK	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	QC	QA			

O: OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
P: PERFORM THESE TASKS FOR EACH BOLTED CONNECTION.

INSPECTION TASK	INSPECTION FREQUENCY	REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT		
INSPECTION OF WELDING:						
1. INSPECTION TASKS PRIOR TO WELDING:						
A. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	P	P	AISC 360, SECTION N5, TABLE N5.4-1	SI/TA		
B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	P	P				
C. MATERIAL IDENTIFICATION (TYPE/GRADE).	O	O				
D. WELDER IDENTIFICATION SYSTEM.	O	O				
F. CONFIGURATION OF FINISH AND ACCESS HOLES.	O	O				
G. FIT-UP OF FILLET WELDS: - DIMENSIONS (ALIGNMENT, GAPS AT ROOT) - CLEANLINESS (CONDITION OF STEEL SURFACES) - TACKING (TACK WELD QUALITY AND LOCATION)	O	O				
H. CHECK WELDING EQUIPMENT.	O	-				
2. INSPECTION TASKS DURING WELDING:						
A. USE OF QUALIFIED WELDERS.	O	O	AISC 360, SECTION N5, TABLE N5.4-2	SI/TA		
B. CONTROL AND HANDLING OF WELDING CONSUMABLES: - PACKAGING - EXPOSURE CONTROL	O	O				
C. NO WELDING OVER CRACKED TACK WELDS.	O	O				
D. ENVIRONMENTAL CONDITIONS: - WIND SPEED WITHIN LIMITS - PRECIPITATION AND TEMPERATURE						
E. WPS FOLLOWED: - SETTINGS ON WELDING EQUIPMENT - TRAVEL SPEED - SELECTED WELDING MATERIALS - SHIELDING GAS TYPE/FLOW RATE - PREHEAT APPLIED - INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) - PROPER POSITION (F, V, H, OH)	O	O				
F. WELDING TECHNIQUES: - INTERPASS AND FINAL CLEANING - EACH PASS WITHIN PROFILE LIMITATIONS - EACH PASS MEETS QUALITY REQUIREMENTS	O	O				
3. INSPECTION TASKS AFTER WELDING:						
A. WELDS CLEANED.	O	O			AISC 360, SECTION N5, TABLE N5.4-3	SI/TA
B. SIZE, LENGTH AND LOCATION OF WELDS.	P	P				
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA: - CRACK PROHIBITION - WELD/BASE-METAL FUSION - CRATER CROSS SECTION - WELD PROFILES - WELD SIZE - UNDERCUT - POROSITY.	P	P				
D. ARC STRIKES.	P	P				
F. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).	P	P				
G. REPAIR ACTIVITY.	P	P				
H. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	P	P				

O: OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
P: PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER.



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5654
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22

No.	Description	Date



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

Special Inspection Schedules

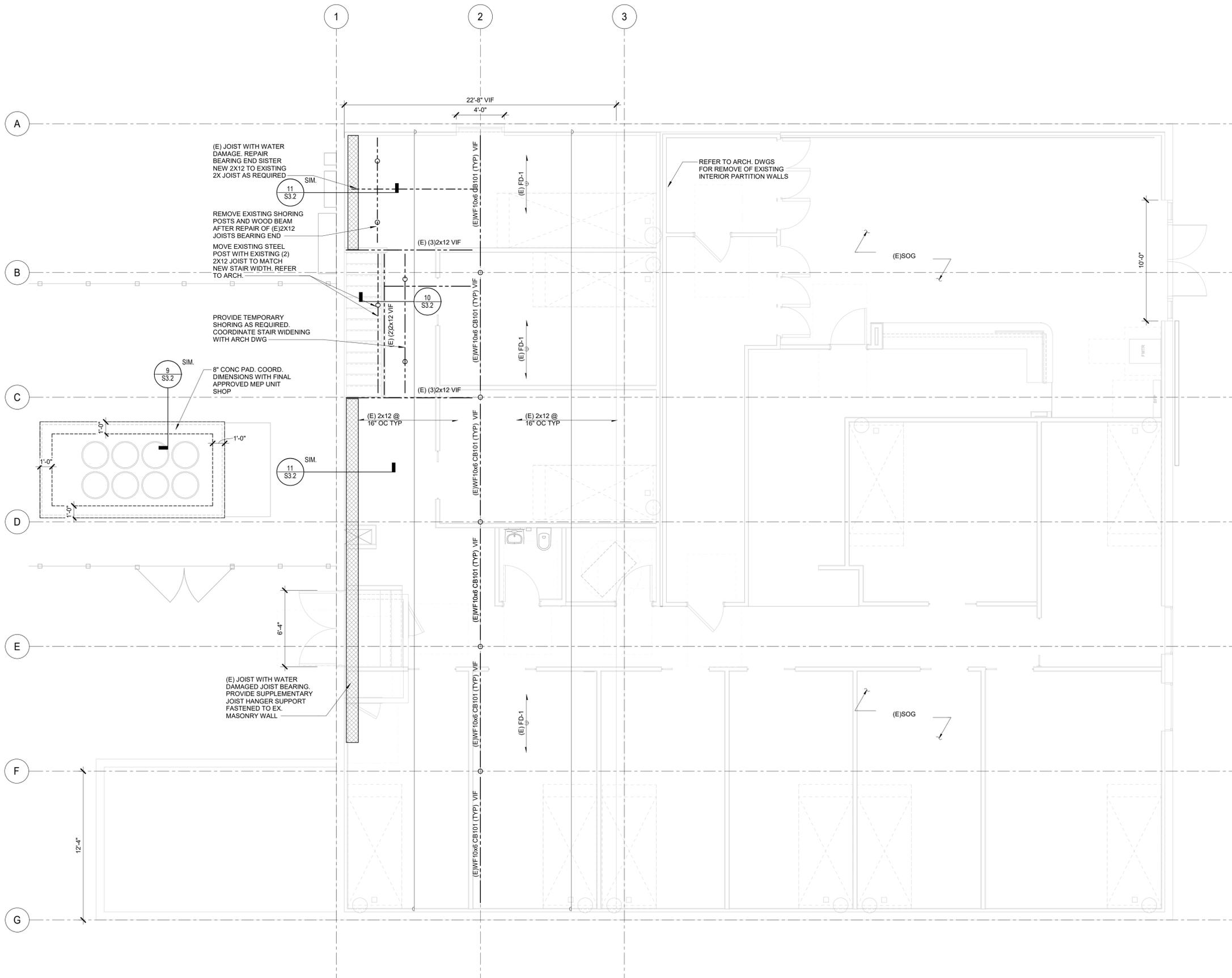
021293

S0.2

33333 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1699
www.imegcorp.com
PROJECT # 211063338.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES



FIRST FLOOR FRAMING NOTES:

1. FINISHED FLOOR REFERENCE ELEVATION = 0'-0" VIF UNO
2. FOOTINGS ARE DESIGNED TO BEAR ON UNDISTURBED NATURAL SOILS WITH A MINIMUM NET ALLOWABLE BEARING CAPACITY OF 2,500 PSF (ASSUMED) V.I.F.
3. **DESIGNATIONS:**
 (E)FD-1: EXISTING WOOD DECK VIF
 (E)SOG: EXISTING SLAB ON GRADE VIF
4. VERIFY SIZE AND LOCATION OF OPENINGS WITH ARCHITECTURAL AND MEP DRAWINGS.
5. **REFERENCE DRAWINGS:**

- S0.1 GENERAL STRUCTURAL NOTES
- S0.2 SPECIAL INSPECTION SCHEDULES
- S3.2 GENERAL SECTIONS AND DETAILS
- S8.0 TYPICAL CFS SECTIONS AND DETAILS
- S8.1 GENERAL CFS SECTIONS AND DETAILS



3300 AUBURN RD - SUITE - 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
 3181 3rd Ave.
 Detroit, MI 48201

**First Floor
 -Foundation**

021293

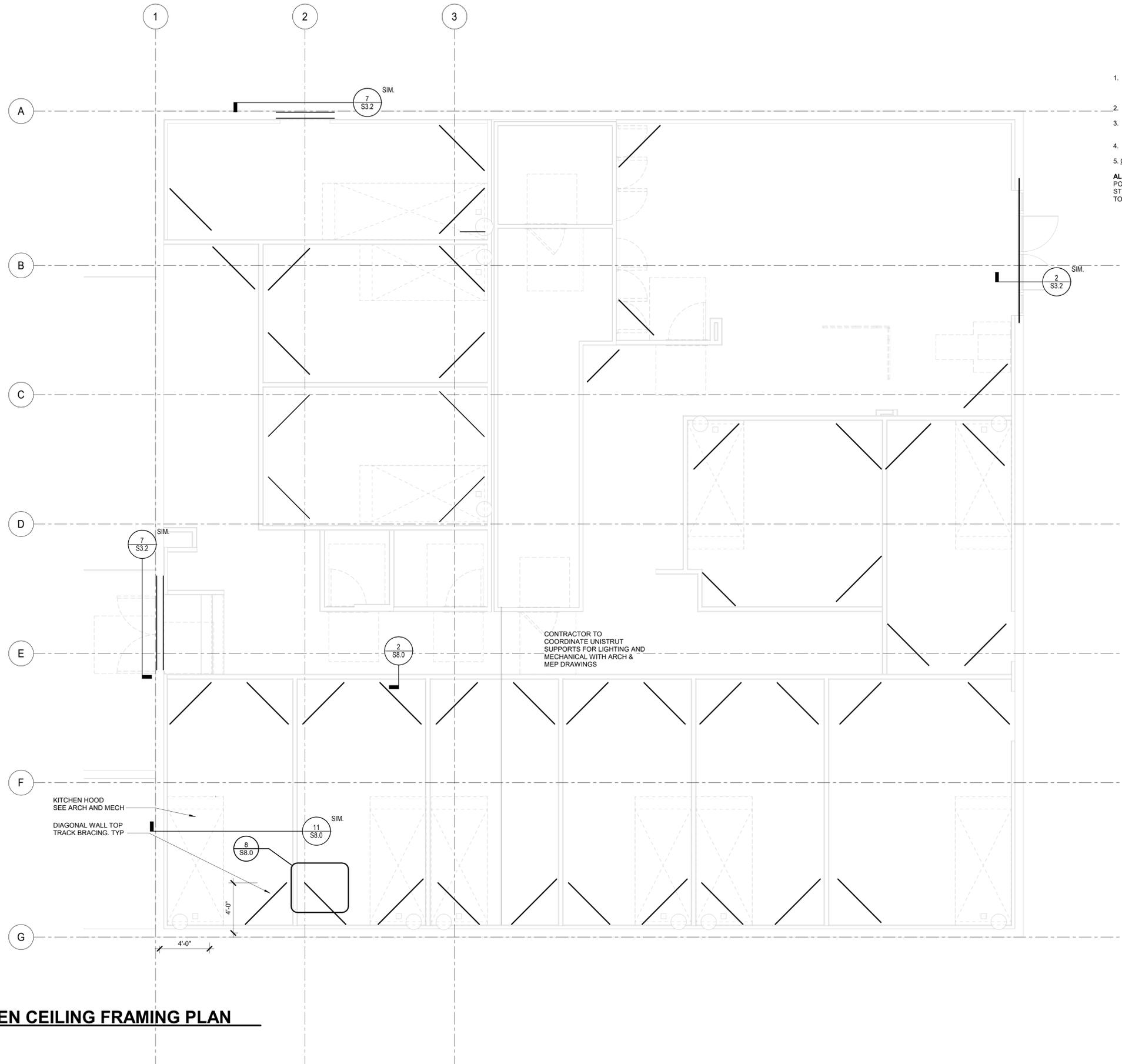
S2.1

1 FIRST FLOOR- FRAMING/FOUNDATION
 1/4" = 1'-0"

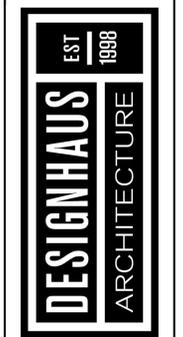
IMEG
 33333 W 12 MILE, SUITE 200
 FARMINGTON HILLS, MI 48331
 248.344.2000 FAX: 248.344.1650
 WWW.IMEG.CORP.COM
 PROJECT # 211063310.00

IMEG CORP. RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP. AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES
 0 1 2 3



1. VERIFY ALL CONDITIONS WITH ARCHITECTURAL DWGS. DIMENSIONS NOT SHOWN ARE PER APPROVED ARCHITECTURAL DRAWINGS. RESOLVE ANY DISCREPANCIES WITH THE ARCHITECT PRIOR TO BIDDING OR CONSTRUCTION.
 2. SEE SHEET S8.0 FOR TYPICAL KITCHEN WALL DETAILS.
 3. SEE 1/S/8.0 FOR INTERIOR WALL STUD SCHEDULE. SEE 4/S/8.0 FOR INTERIOR WALL HEADER DETAIL.
 4. KITCHEN HOODS TO BE HUNG BY EXISTING ROOF FRAMING.
 5. CEILING LOAD SCENARIOS:
- ALL REGIONS W/O CEILING JOISTS** - IN BOTH SEISMIC AND NON SEISMIC REGIONS, WHERE POSSIBLE, MEP SERVICES AND HOODS SHALL BE SUPPORTED BY THE PRIMARY STRUCTURE. CP'S CEILING JOISTS ARE NOT NEEDED IN THIS CONDITION. KITCHEN WALLS TO BE NON-BEARING PARTITIONS AND BRACED AT CORNERS FOR OUT-OF-PLANE.



3300 AUBURN RD - SUITE - 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
 3181 3rd Ave.
 Detroit, MI 48201

Kitchen Ceiling Framing Plan

021293

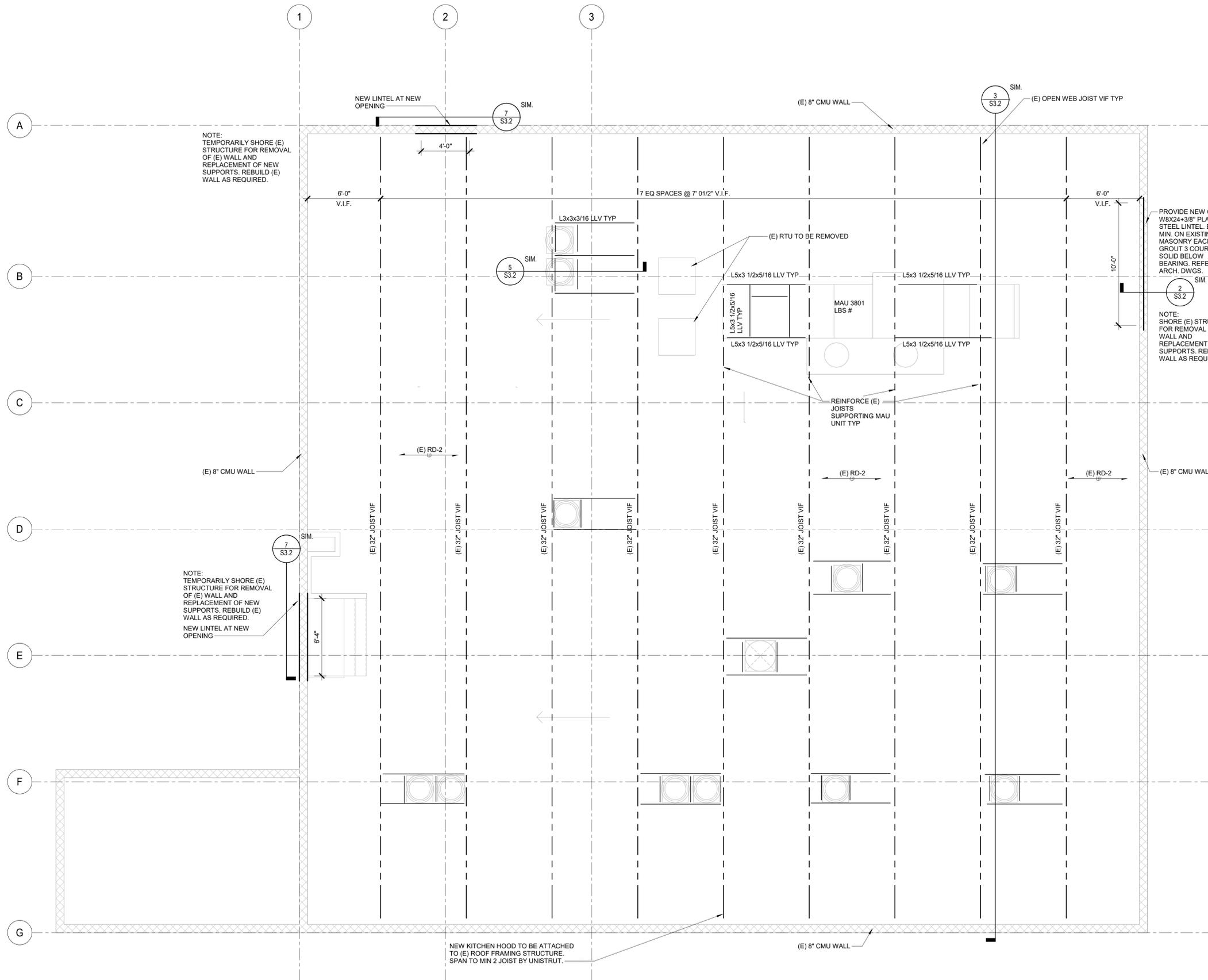
S2.2

1 KITCHEN CEILING FRAMING PLAN
 1/4" = 1'-0"

IMEG
 33333 W 12 MILE, SUITE 200
 FARMINGTON HILLS, MI 48331
 248.344.2000 FAX: 248.344.1650
 www.imegcorp.com
 PROJECT # 211063310.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES
 0 1 2 3



ROOF FRAMING NOTES:

- TOP OF STEEL REFERENCE ELEVATION (DECK BEARING ELEVATION) = 14'-0" VIF UNLESS NOTED
- DESIGNATIONS:**
(E)RD-2: EXISTING WOOD DECK TO REMAIN VIF
L-x LINTEL, REFER TO DETAILS
BP GALV. 7"x8"x5/8 WITH (2) 1/2"DIA. X 8" LONG HEADED STUDS
- VERIFY IN FIELD EXISTING JOIST MEMBER SIZE AND CONNECTION DETAILS PRIOR TO UNDERTAKING ANY REINFORCING WORK. IF FIELD INVESTIGATION INDICATES THAT EXISTING MATERIAL, JOIST SIZE AND LOCATION IS OTHER THAN THAT SHOWN ON THESE DESIGN DRAWINGS, NOTIFY THE ENGINEER IMMEDIATELY OF THE ACTUAL MEMBER SIZES.
- COORDINATE SIZES AND LOCATION OF ALL ROOF OPENINGS WITH ARCHITECTURAL AND MEP DRAWINGS. VERIFY SIZES, WEIGHTS, AND LOCATIONS OF ROOF TOP MECHANICAL EQUIPMENT WITH ARCHITECTURAL AND MEP DRAWINGS. REPORT ANY DISCREPANCIES WITH RESPECT TO SIZE AND WEIGHTS SHOWN ON THESE DRAWINGS TO THE ARCHITECT AND ENGINEER.
- FRAMING FOR ALL ROOF DRAINS AND OVERFLOW DRAINS SHALL BE L5x3 1/2x5/16 LLV TYPICAL, ALL SIDES OF SUPPORTED EDGE, UNLESS NOTED OTHERWISE.
- REFERENCE DRAWINGS:**
S0.1 GENERAL STRUCTURAL NOTES
S0.2 SPECIAL INSPECTION SCHEDULES
S3.2 GENERAL SECTIONS AND DETAILS
S8.0 TYPICAL CFS SECTIONS AND DETAILS
S8.1 GENERAL CFS SECTIONS AND DETAILS



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5654
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

Roof Plan - Framing

021293

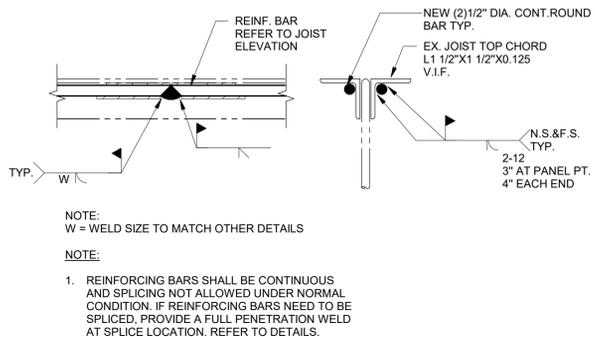
S2.3

2 ROOF PLAN - FRAMING
1/4" = 1'-0"

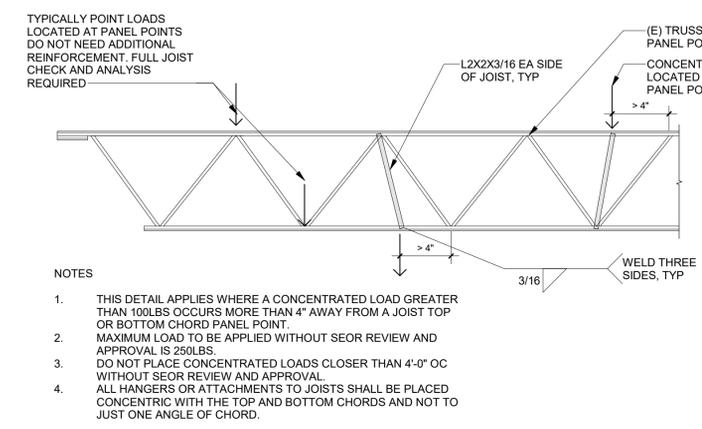
IMEG
33033 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1650
www.imegcorp.com
PROJECT # 211063310.00

IMEG CORP. RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

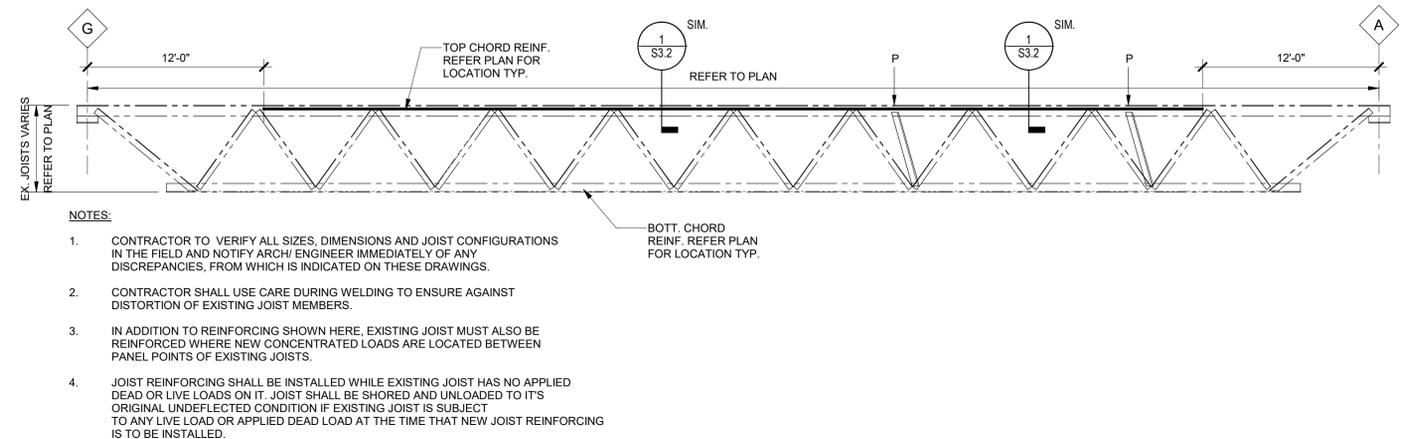
REFERENCE SCALE IN INCHES
0 1 2 3



1 TOP CHORD REINF. AND SPLICE
1/2" = 1'-0"

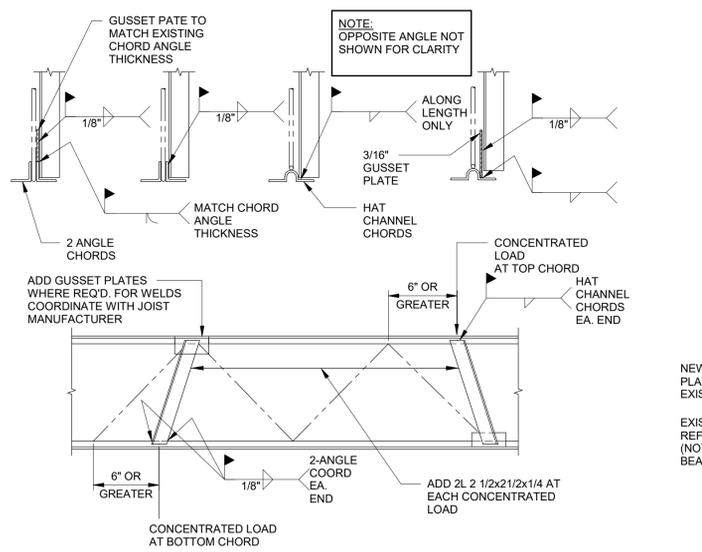


2 CMU WALL (N) OPENING REINFORCEMENT
3/4" = 1'-0"



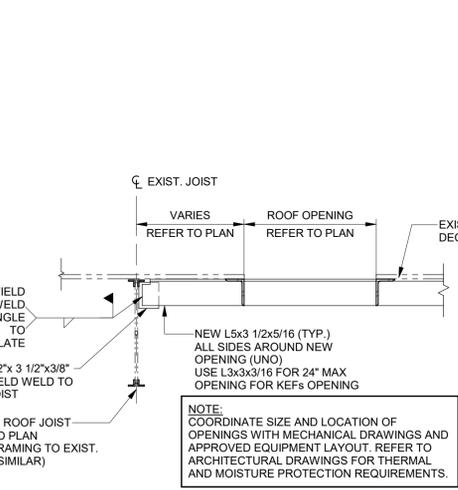
3 JOIST ELEVATION
1/2" = 1'-0"

4 TYP. JOIST REINF. AT CONCENTRATED LOAD
1/2" = 1'-0"



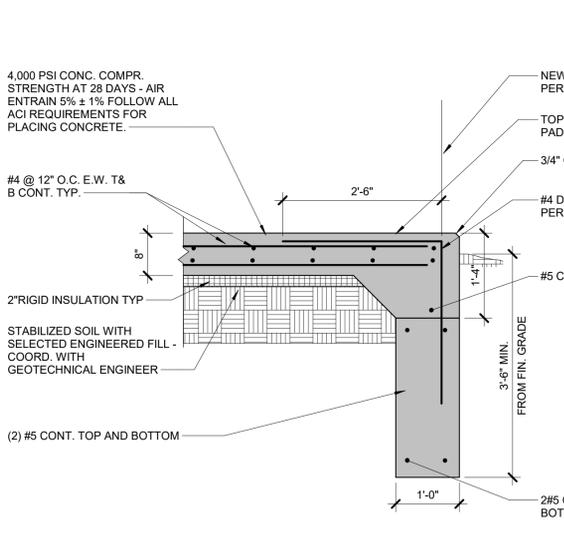
8 TYP. JOIST REINF. AT CONCENTRATED LOAD
3/4" = 1'-0"

10 SECTION
3/4" = 1'-0"



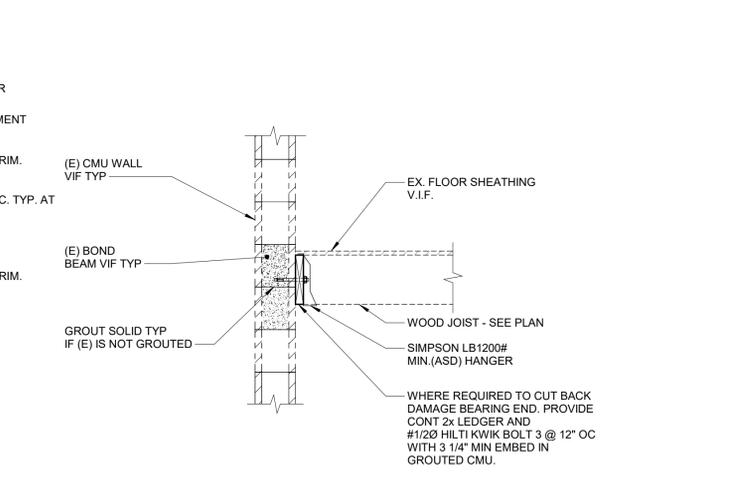
5 NEW OPENING AT EXIST. ROOF JOIST
3/4" = 1'-0"

6 TYPICAL MECH. UNIT PRE-FAB CURB AT JOIST
3/4" = 1'-0"



9 SECTION
3/4" = 1'-0"

7 CMU WALL (N) OPENING REINFORCEMENT
1/2" = 1'-0"



11 WOOD JOIST BEARING AT CMU WALL
3/4" = 1'-0"



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5654
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

General Sections
And Details

021293

S3.2

33033 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1650
www.imegcorp.com
PROJECT # 21093030.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

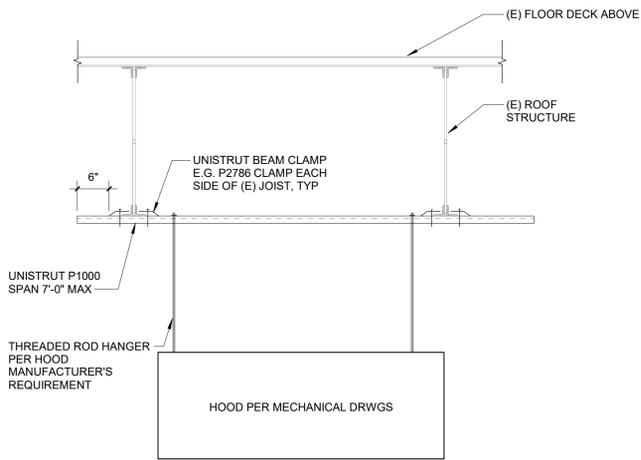
REFERENCE SCALE IN INCHES
0 1 2 3

METAL STUD WALL SCHEDULE

WALL USAGE	MAX STUD HEIGHT	STUD SIZE ¹	MIN STUD SHAPE ⁴	MAX STUD SPACING	MIN TOP/BOT TRACK
KITCHEN WALLS (NON-LOAD BEARING PARTITION)	10'-0"	3-5/8"	362S162-33 (20 GA.)	24" OC	362T150-43
NON-KITCHEN WALLS	12'-0"	3-5/8"	362S162-33 (20 GA.)	24" OC	362T150-43
NON-KITCHEN FURRING WALLS	12'-0"	2-1/2"	250S162-33 (20 GA.)	24" OC	250T150-33

- NOTES:
- REFER TO ARCHITECTURE DRAWING FOR WALL LOCATION, THICKNESS AND HEIGHTS.
 - PROVIDE MIN (1) LAYER OF 5/8" THK GYPSUM W/#8 SMS @ 12" OC AT EACH SIDE OF THE KITCHEN WALL. MID-SPAN STUD BRIDGING REQUIRED ONLY WHERE GYPSUM IS NOT PROVIDED ON BOTH SIDES. GYPSUM SHEATHING SHALL BE INSTALLED PRIOR TO LOADING THE STUD WALLS. LOCATE SHELVING SUPPORT AT STUD FLANGE OR PROVIDE BACKING STUD ENGAGING MIN TWO STUDS AT SHELVING SUPPORT LOCATIONS.
 - STUD YIELD STRENGTH:
A. FOR 43 MIL (18 GA.) AND LIGHTER, MIN Fy = 33KSI.
B. FOR 54 MIL (16 GA.) AND HEAVIER, MIN Fy = 50KSI.
 - WHERE CEILING JOISTS APPEAR, WALL STUD SHOULD ALIGN WITH CENTERLINE OF THE JOIST TO PROVIDE FULL SUPPORT.
 - PROVIDE BACK TO BACK STUD FOR WALL STUDS SUPPORTING CEILING MECHANICAL UNITS.

1 TYPICAL KITCHEN STUD FRAMING
1/4" = 1'-0"

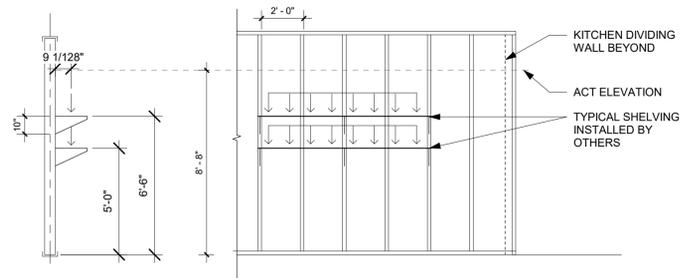


- NOTES
- LOADS ON (E) JOIST BOTTOM CHORDS AWAY FROM PANEL POINTS SHALL BE REINFORCED PER 4/S3.2
 - ALL HANGERS AND ATTACHMENTS SHALL BE CONCENTRIC WITH BOTTOM CHORD
 - DO NOT ADD POINT LOADS TO EXISTING DECK
 - DO NOT MODIFY EXISTING JOISTS UNO

11 HOOD SUPPORT TO EXISTING STEEL JOIST
3/4" = 1'-0"

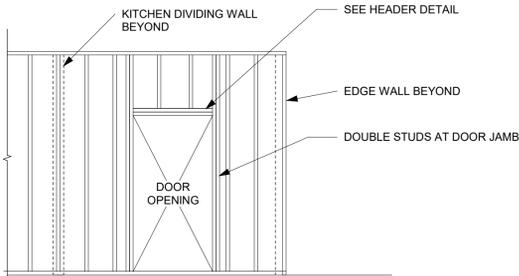


7 TYPICAL BOX BEAM / HEADER
1" = 1'-0"



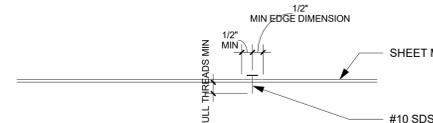
= 140LBS AT SHELF BRACKET LOCATION (EQUIVALENT TO 35PLF OF A 4FT SHELF AT A STUD SUPPORTING TWO SHELVES END-TO-END)

TYPICAL KITCHEN SHELVING LOAD

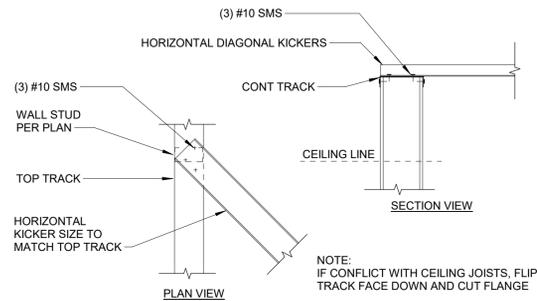


TYPICAL KITCHEN WALL FRAMING

FASTENED CONNECTION DESCRIPTION	MINIMUM REQ'D FASTENING
JOISTS TO TRACK	(2) #10 SDS
TRACK AT BOXED HEADER	#10 SDS @ 12" OC EA FLANGE
BACK TO BACK MEMBERS	#10 SDS STAGGERED @ 12" OC
TRACK TO STUD	(2) #10 SDS TOP & BOTTOM
JOIST PARALLEL TO TRACK	#10 SDS @ 12" OC
GYPSUM SHEATHING TO STUD	#8 SCREWS @ 12" OC



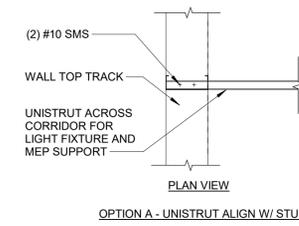
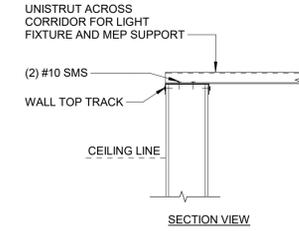
3 FASTENING SCHEDULE
3" = 1'-0"



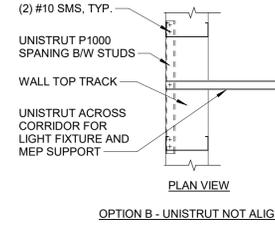
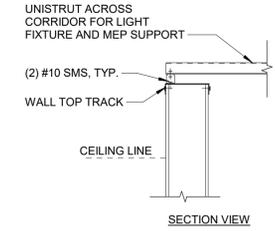
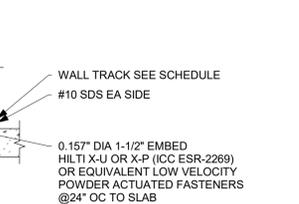
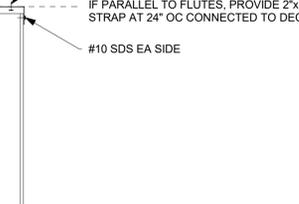
INTERIOR WALL TOP BRACING

HORIZONTAL DIAGONAL BRACING SHALL BE USED AS PRIMARY STRATEGY FOR WALL TOP BRACE. PROVIDE VERTICAL DIAGONAL BRACING AS ALTERNATIVE FOR LOCATION WHERE HORIZONTAL CANNOT BE USE. PROVIDE FULL HEIGHT PARTITION DETAIL AS ALTERNATIVE.

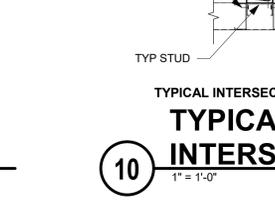
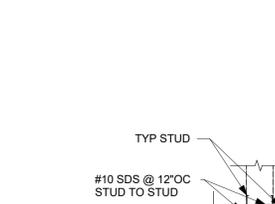
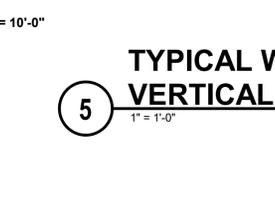
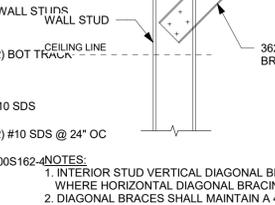
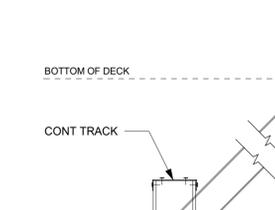
8 TYPICAL WALL TOP BRACE - HORIZONTAL DIAGONAL (W/O CEILING JOISTS)
1" = 1'-0"



2 TYPICAL UNISTRUT TO WALL DETAIL (W/O CEILING JOISTS)
1" = 1'-0"



2 TYPICAL UNISTRUT TO WALL DETAIL (W/O CEILING JOISTS)
1" = 1'-0"

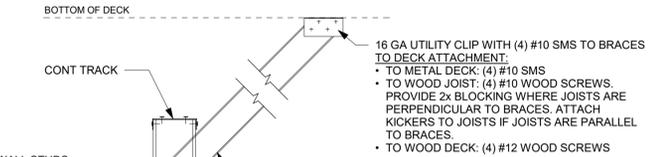


CORRIDOR UNISTRUT SCHEDULE

SIZE	MAX SPAN (FT)		
	6'-0"	8'-0"	12'-0"
P1000	186	127	-
P9000	286	215	172
P3001	484	336	251
P1001	630	432	317
P3001	484	336	251

CORRIDOR UNISTRUT

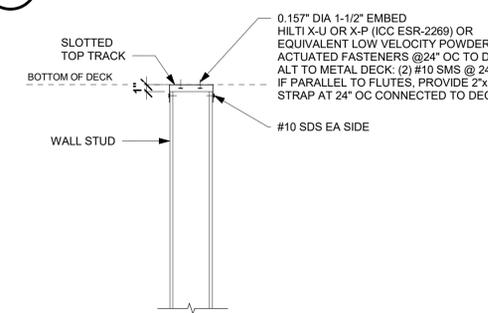
MAXIMUM POINT LOAD ASSUMED AT MIDSPAN. HIGHER LOADING MAY BE USED UPON CONFIRMATION BY ENGINEER.



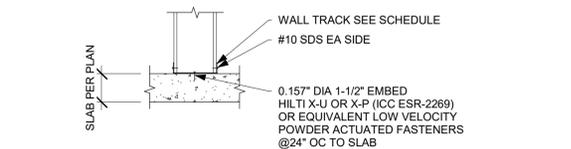
- NOTES
- INTERIOR STUD VERTICAL DIAGONAL BRACING ONLY REQUIRED AT LOCATION WHERE HORIZONTAL DIAGONAL BRACING CANNOT BE USED.
 - DIAGONAL BRACES SHALL MAINTAIN A 45 DEGREE ANGLE (+/- 10 DEGREES).

5 TYPICAL WALL TOP BRACE (ALT) - VERTICAL DIAGONAL
1" = 1'-0"

4 TYPICAL INTERIOR HEADER
1" = 1'-0"

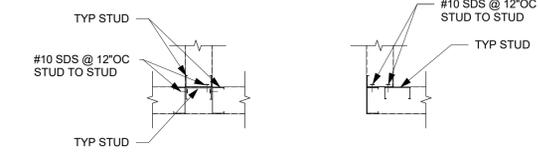


6 TYPICAL WALL TOP BRACE (ALT) - FULL HEIGHT PARTITION
1" = 1'-0"



9 TYPICAL BOTTOM TRACK DETAIL
1" = 1'-0"

10 TYPICAL WALL STUD AT INTERSECTION
1" = 1'-0"



IMEG
33033 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1690
www.imegcorp.com
PROJECT # 21090310.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. "AS-BUILT" DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES
0 1 2 3

DESIGNHAUS ARCHITECTURE
EST 1998

3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

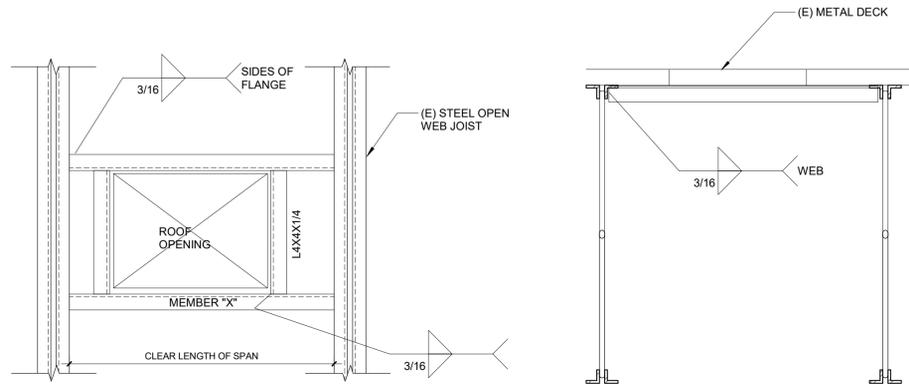
No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22
1	50% CD	02.04.22



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

Typical GFS
Sections And
Details

021293
S8.0



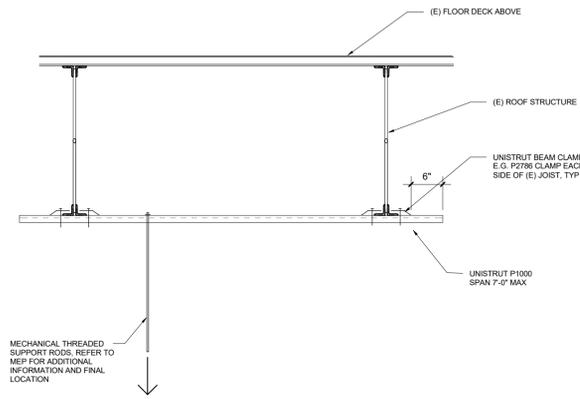
THIS DETAIL SHOWS TYPICAL ROOF OPENING FRAMING TYPICALLY USED FOR NEW ROOF PENETRATIONS. SEOR TO VERIFY THAT DETAIL SELECTED IS ACCESSIBLE FROM BELOW IF ROOF REPLACEMENT IS NOT REQUIRED FOR THE PROPERTY.

- NOTES:
1. OPENINGS LESS THAN 1'-0" X 1'-0" REQUIRE SUMP PAN ONLY.
 2. USE L3x3x3/16 FOR 24" MAX OPENING FOR KEFs OPENING
 3. VERIFY SIZE AND LOCATION OF OPENINGS WITH MECHANICAL AND ARCHITECTURAL ROOF PLANS.

LENGTH	MEMBER *X*
0 TO 1'-0"	NONE
1'-1" TO 4'-6"	L4X4X1/4
4'-7" TO 6'-0"	L4X4X5/16
6'-1" TO 8'-0"	L4X4X3/8
8'-1" TO 10'-0"	L6X4X3/8 (LLV)

1 STEEL JOIST - ROOF OPENING

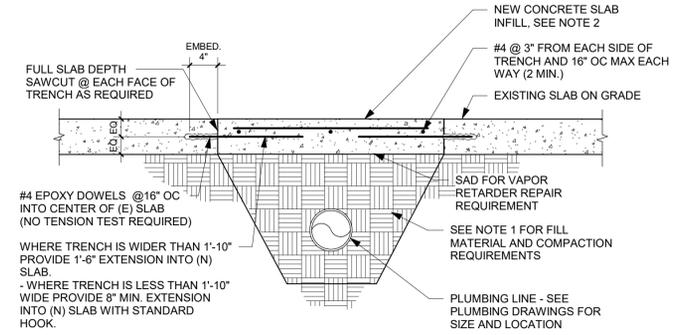
1 1/2" = 1'-0"



- NOTES:
1. LOADS ON (E) JOIST BOTTOM CHORDS AWAY FROM PANEL POINTS SHALL BE REINFORCED REINFORCEMENT FOR POINT LOAD DETAIL
 2. ALL HANGERS AND ATTACHMENTS SHALL BE CONCENTRIC WITH BOTTOM CHORD
 3. DO NOT ADD POINT LOADS TO EXISTING DECK
 4. DO NOT MODIFY EXISTING JOISTS UNO

2 STEEL JOIST - BOTTOM CHORD ATTACHMENT

3/4" = 1'-0"



- NOTES:
1. SOIL REMOVED FOR SLAB TRENCH SHALL BE REPLACED AND RECOMPACTED.
 2. SLAB TO MATCH EXISTING THICKNESS. SEE GEN NOTES FOR STRENGTH
 3. THE CONTRACTOR SHALL ENSURE THAT TRENCHING FOR THE UTILITY LINE IS NOT OVER-EXCAVATED AND THAT NO PORTION OF THE SURROUNDING SLAB-ON-GRADE IS LEFT UNSUPPORTED OVER 6 INCHES.
 4. CONTRACTOR SHALL PROVIDE A COLD JOINT EVERY 30 LINEAR FEET IN THE PORTION OF NEW CONCRETE SLAB THAT IS PLACED DUE TO UNDER-SLAB TRENCHING
 5. PROVIDE CONTROL/CONSTRUCTION JOINTS AT 12'-0" MAX IN EACH DIRECTION. LENGTH TO WIDTH RATIO SHALL NOT EXCEED 1.5.
 6. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF SLAB REPAIR.

3 TYPICAL TRENCH SLAB INFILL

1" = 1'-0"



3300 AUBURN RD - SUITE - 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

No.	Description	Date
3	Permits	03.07.22
2	Permits	02.25.22



3rd Ave. Detroit Commissary
3181 3rd Ave.
Detroit, MI 48201

General Sections
And Details

021293

S8.1

33033 W 12 MILE, SUITE 200
FARMINGTON HILLS, MI 48331
248.344.2000 FAX: 248.344.1650
www.imegcorp.com
PROJECT # 210953310.00

IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. S&B DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2022 IMEG CORP.

REFERENCE SCALE IN INCHES

ABBREVIATIONS	
ABV	ABOVE
AC	AIR CURTAIN
AFF	ABOVE FINISHED FLOOR
@	AT
BDD	BACK DRAFT DAMPER (GRAVITY)
BLDG.	BUILDING
BHP	BRAKE HORSEPOWER
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CL	CENTER LINE
CONT	CONTINUATION
CONN	CONNECTION
CU	CONDENSING UNIT
CD	CONDENSATE DRAIN
DB	DRY BULB TEMPERATURE
DF	DEGREE FAHRENHEIT
DN	DOWN
DOAS	DEDICATED OUTSIDE AIR SYSTEM
EA	EACH
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EL	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
EXIST	EXISTING
EXT	EXTERNAL
F	FAHRENHEIT
F.D.	FIRE DAMPER
FCU	FAN COIL UNIT
FL	FLOOR
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FM	FEET PER MINUTE
FSD	FIRE SMOKE DAMPER
FT	FEET
HP	HORSEPOWER
HR	HOUR
HZ	HERTZ
KEF	KITCHEN EXHAUST FAN
KH	KITCHEN EXHAUST HOOD
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CURRENT AMPACITY
MHP	MOTOR HORSE POWER
MIN	MINIMUM
M.O.D.	MOTOR OPERATED
MOP	MAXIMUM OVERCURRENT PROTECTION
MOC	MAXIMUM OVERCURRENT PROTECTION
NC	NOISE CRITERIA or NORMALLY CLOSED
N.C.	NORMALLY IN CONTRACT
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OD	OPEN END DUCT
PD	PRESSURE DROP
PH	PHASE
POC	POINT OF CONNECTION
PPM	POUNDS PER MILLION
PPM	PARTS PER MILLION
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RAF	RETURN AIR FAN
RF	RELIEF AIR
RG	RETURN GRILLE
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RM	ROOM
SA	SUPPLY AIR
SAF	SUPPLY AIR FAN
SD	SMOKE DETECTOR
SF	SQUARE FOOT
S.F.D.	COMBINATION SMOKE/FIRE DAMPER
SP	STATIC PRESSURE
SPEC.	PROJECT SPECIFICATIONS
STAT.	THERMOSTAT
STRUCT.	STRUCTURAL
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
TYP	TYPICAL
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
UON	UNLESS OTHERWISE NOTED
V	VOLT
VAC	VOLTS ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VCD	CONSTANT VOLUME REGULATOR
VFD	VARIABLE FREQUENCY DRIVE
VP	VELOCITY PRESSURE
VSD	VARIABLE SPEED DRIVE
W	WATTS
W	WITH
W/O	WITHOUT
WB	WET BULB
WMS	WIRE MESH

GENERAL SYMBOLS	
	DUCTWORK - LINEWEIGHT ON PLANS
	DETAIL OR SECTION NUMBER
	SHEET ON WHICH DETAIL OR SECTION APPEARS
	KEY NOTES
	REVISION NOTES
	EQUIPMENT DESIGNATIONS
	EQUIPMENT NUMBER
	FLOOR NUMBER
	BUILDING NUMBER
	CALLOUT ENLARGED PLAN NUMBER
	CALLOUT ENLARGED PLAN BORDER
	SHEET ON WHICH ENLARGED PLAN APPEARS
EQUIPMENT DESIGNATIONS	
	AIR CURTAIN
	CONDENSING UNIT
	DEDICATED OUTSIDE AIR SYSTEM
	TYPICAL
	EXHAUST FAN
	ELECTRIC UNIT HEATER
	FAN COIL UNIT
	KITCHEN EXHAUST FAN
	KITCHEN EXHAUST HOOD
	MAKE UP AIR UNIT
	EVAPORATOR (WALKIN INDOOR UNIT)
RISER DESIGNATIONS	
	MAKE-UP AIR
	SUPPLY AIR
	EXHAUST AIR
	KITCHEN EXHAUST

DUCTWORK AND HVAC SYMBOLS	
	RECTANGULAR DUCTWORK - W TAKE-OFF PLAN & PROFILE
	ROUND DUCTWORK - W TAKE-OFF PLAN & PROFILE
	SUPPLY DUCTWORK UP AND DOWN
	RETURN DUCTWORK UP AND DOWN
	EXHAUST OUTSIDE AIR DUCTWORK UP AND DOWN
	DUCTWORK UP (R), DN (D) IN DIRECTION OF ARROW
	DUCTWORK WITH ACOUSTICAL LINING
	FABRIC DUCTWORK
	FLEXIBLE CONNECTION
	FIRE DAMPER/ACCESS DOOR
	VOLUME DAMPER
	BACK DRAFT DAMPER
	FIRE SMOKE DAMPER
	SPLITTER DAMPER
	DUCT TRANSITION OR REDUCER
	SQUARE TO ROUND TRANSITION
	FLANGED METAL TAKE-OFF WITH GASKET AND VOLUME DAMPER
	RADIUSED ELBOW, USE RADIUSED ELBOWS WHEREVER SPACE PERMITS USE ON ALL MEDIUM PRESSURE DUCTWORK

DUCTWORK AND HVAC SYMBOLS (CONT'D)	
	ELBOW WITH TURNING VANES. USE RADIUSED ELBOWS WHEREVER SPACE PERMITS NOT ALLOWED ON MEDIUM PRESSURE DUCTWORK
	MOTORIZED DAMPER
	SMOKE DAMPER
	STATIC PRESSURE SENSOR
	SMOKE DETECTOR
	FIRESTAT
	RETURN OR TRANSFER AIR REGISTER TYPE B, 200 CFM 6x4 NECK
	CEILING GRILLE
	RECTANGULAR DUCT SIZE IN INCHES (FIRST DIMENSION IS SIDE SHOWN)
	FLAT-OVAL DUCT SIZE IN INCHES (FIRST DIMENSION IS SIDE SHOWN)
	ROUND DUCT
	UNDERCUT DOOR (BY ARCHITECT)
DUCTWORK AND HVAC SYMBOLS (CONT'D)	
	THERMOSTAT/TEMPERATURE SENSOR (MOUNT @ 48" AFF UNLESS OTHERWISE NOTED)
	PRESSURE SENSOR (DIFFERENTIAL TYPE) (MOUNT @ 48" AFF UNLESS OTHERWISE NOTED)

GENERAL NOTES

- WITH THE EXCEPTION OF OWNER FURNISHED EQUIPMENT, FURNISH AND INSTALL ALL ITEMS NECESSARY TO PROVIDE FULLY FUNCTIONING SYSTEMS AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED. ELEMENTS OF THE WORK SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PERMITS AND LICENSES.
- DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT REFLECT ALL WORK AND MATERIALS REQUIRED TO COMPLETE PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT WITHIN DESIGN. CONTRACTOR SHALL REQUEST ADDITIONAL INFORMATION AND DETAILS WHERE SCOPE IS UNCLEAR.
- ALL WORK SHALL COMPLY WITH THE MOST RECENT ADOPTED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY EXISTS, THE LOCAL ENFORCING AUTHORITY SHALL APPLY. ANY MODIFICATIONS TO THE DESIGN SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE CONTRACTOR SHALL REPORT TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE PROCEEDING WITH ANY MODIFICATIONS.
- WHERE THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE CODES, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THAT THEY ARE NOT IN CONFLICT WITH THE CODES.
- BEFORE SUBMITTING BIDS, EACH CONTRACTOR SHALL PERFORM A SITE VISIT AND UNDERSTAND THE CONDITIONS TO BE MET IN INSTALLING THE WORK, AND SHALL MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL BID. FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.
- MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE PERFORMED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED AND/OR INDICATED, SCHEDULED, OR IMPLIED ON THE CONTRACT DOCUMENTS, AND/OR REQUIRED BY THE NATURE OF THIS WORK.
- ALL WORK SHALL BE CARRIED OUT IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL EQUIPMENT TO PROVIDE ACCESS AND ARRANGE ALL WORK WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE, AND TO MAINTAIN PROPER CODE AND MANUFACTURERS' CLEARANCES.
- ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL LISTED, IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THIS PROJECT.
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED AND INSTALLED.
- THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:
 - EQUIPMENT AND MATERIALS SHOP DRAWINGS
 - COORDINATION DRAWINGS
 - RECORD DRAWINGS
 - OPERATING AND MAINTENANCE MANUALS
 - FIRE STOP MATERIALS AND DETAILS
- MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIAL STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT, WHICH ARE FOUND TO HAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE OWNER/TENANT AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER/TENANT.

DAMAGE CAUSED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS BEING REMOVED.

- THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACTOR SHALL X-RAY ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.

GENERAL NOTES (CONT'D)

- THIS CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND SHALL PAY ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.
- PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRE RATED TO COMPLY WITH ASTM E-814 (UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIALS FROM DAMAGE BY HIS WORK OR HIS PERSONNEL AND SHALL CORRECT ALL DAMAGE CAUSED WITHOUT ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNER. PROTECT ALL WORK AGAINST THEFT, INJURY, OR DAMAGE. CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH IS NOT IMMEDIATELY INSTALLED. THE CONTRACTOR SHALL CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT THE ENTRY OF DUST, DIRT, AND OBSTRUCTING MATERIAL.

MECHANICAL GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY THAT ALL EXISTING EQUIPMENT SO THAT ALL REQUIRED SERVICING AND MAINTENANCE CLEARANCES ARE MAINTAINED AT THE BOTTOM AND SIDES OF EACH UNIT. COORDINATE WITH ALL NEW ARCHITECTURAL WALLS TO STRUCTURE, AND RELOCATE TERMINAL UNITS AS REQUIRED TO MAINTAIN PROPER CLEARANCES.
- MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER MEP TRADES TO MAINTAIN A MINIMUM OF 9" CLEAR SPACE FOR TENANT EQUIPMENT, CABLE TRAY, WIRING, ETC.
- PRIMARY DUCTWORK SHALL HAVE EXTERNAL INSULATION INSTALLED ON TOP SIDE OF DUCTWORK PRIOR TO HANGING DUCTWORK TO ALLOW DUCT TO BE SUSPENDED WITH INSULATION TIGHT TO STRUCTURE. DO NOT COMPRESS INSULATION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING TO THE ENGINEER'S ATTENTION ANY WALLS THAT EXTEND FROM THE FINISHED FLOOR TO STRUCTURE AND TRANSFER AIR PATHWAYS. IN THIS CASE OPENINGS SHALL BE INSTALLED TO PROVIDE CROSS SECTIONAL AREA EQUIVALENT TO 500 FPM OF AIRFLOW BASED ON THE SUPPLY CFM TO THE KITCHEN ENCLOSED BY THE FULL HEIGHT WALLS.
- FINAL LOCATION OF ALL NEW EQUIPMENT SHALL BE APPROVED BY BUILDING OWNER OR PROJECT MECHANICAL ENGINEER PRIOR TO INSTALLATION.
- ROOF PENETRATIONS SHALL BE PERFORMED TO MAINTAIN THE WARRANTY ON THE ROOF. COORDINATE PENETRATIONS WITH THE ROOF MEMBRANE MANUFACTURER.
- MOUNT ALL TEMPERATURE CONTROL DEVICES IN THE LOCATIONS IDENTIFIED ON THE FLOORPLANS 48 INCHES ABOVE FINISHED FLOOR TO THE CENTER OF THE DEVICE TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT ANSI A117.1.
- SEAL ALL NEW DUCT PENETRATIONS THRU FIRE RATED WALLS WITH FIRE CAULKING. FIRE CAULKING SHALL BE EQUAL TO 3M BRAND CP25WP FIRE CAULK. INSTALL CAULKING IN STRICT ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS AND WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE UL DETAILS.
- CONTRACTOR SHALL MAINTAIN A SET OF CONSTRUCTION DOCUMENTS FOR THE SOLE PURPOSE OF INDICATING AS-BUILT CONDITIONS. SET SHALL NOT BE USED FOR ANY OTHER PURPOSE. AS-BUILT REVISIONS SHALL BE INDICATED USING RED PENCIL AND BE CLEARLY DRAWN AND LABELED TO BE LEGIBLE. ILLEGIBLE ENTRIES SHALL BE REVISED BY THE CONTRACTOR. PROVIDE AS-BUILT SET TO THE OWNER AT SUBSTANTIAL COMPLETION.
- CONTRACTOR SHALL COMPLETE START-UP FORMS AND CHECK-OUT UTILIZING MANUFACTURER CERTIFIED START-UP TECHNICIANS. EQUIPMENT START-UP AND CHECK-OUT FORMS SHALL BE INCLUDED IN THE O&M MANUALS.
- RECTANGULAR ELBOWS SHALL INCORPORATE TURNING VANES. VANES SHALL BE SINGLE-THICKNESS GALVANIZED STEEL VANES SET IN GALVANIZED STEEL RUNNERS. VANES AND RUNNERS SHALL BE CONSTRUCTED AND SECURED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."

BUILDING CODES BEING FOLLOWED	
BUILDING CODE:	2015 MICHIGAN BUILDING CODE
PLUMBING CODE:	2018 INTERNATIONAL PLUMBING CODE
MECHANICAL CODE:	2015 MICHIGAN MECHANICAL CODE
ELECTRICAL CODE:	2017 NATIONAL ELECTRICAL CODE
ENERGY CODE:	2015 INTERNATIONAL ENERGY CONSERVATION CODE

MECHANICAL SHEET INDEX	
M-001	MECHANICAL NOTES SYMBOLS AND ABBREVS
M-002	MECHANICAL SPECIFICATIONS
M-100	MECHANICAL PLAN -BASEMENT
M-101	MECHANICAL PLAN - LEVEL 1
M-201	MECHANICAL PLAN - ROOF LEVEL
M-300	MECHANICAL - AIR BALANCE PLAN & SCHEDULES
M-400	MECHANICAL - KITCHEN HOOD DETAILS
M-401	MECHANICAL - KITCHEN HOOD DETAILS
M-402	MECHANICAL - KITCHEN HOOD DETAILS
M-500	MECHANICAL - STANDARD DETAILS
M-501	MECHANICAL - STANDARD DETAILS
M-502	MECHANICAL - STANDARD DETAILS
M-600	MECHANICAL - SCHEDULES (OWNER FURNISHED EQUIPMENT)
M-601	MECHANICAL - SCHEDULES
M-700	MECHANICAL - RISER DIAGRAMS
M-800	BMS NOTES, SYMBOLS, SPECS, SOO, AND ABBREVS
M-801	MECHANICAL EQUIPMENT WIRING DETAILS
M-802A	BMS DCV DAMPER NETWORK RISER DIAGRAM
M-803	BMS MAIN CONTROL PANEL DETAIL
M-804	BMS FIELD CONTROLLER
M-805	BMS FIELD DEVICES & 3RD PARTY CONTROLLERS

EST 1998
 3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

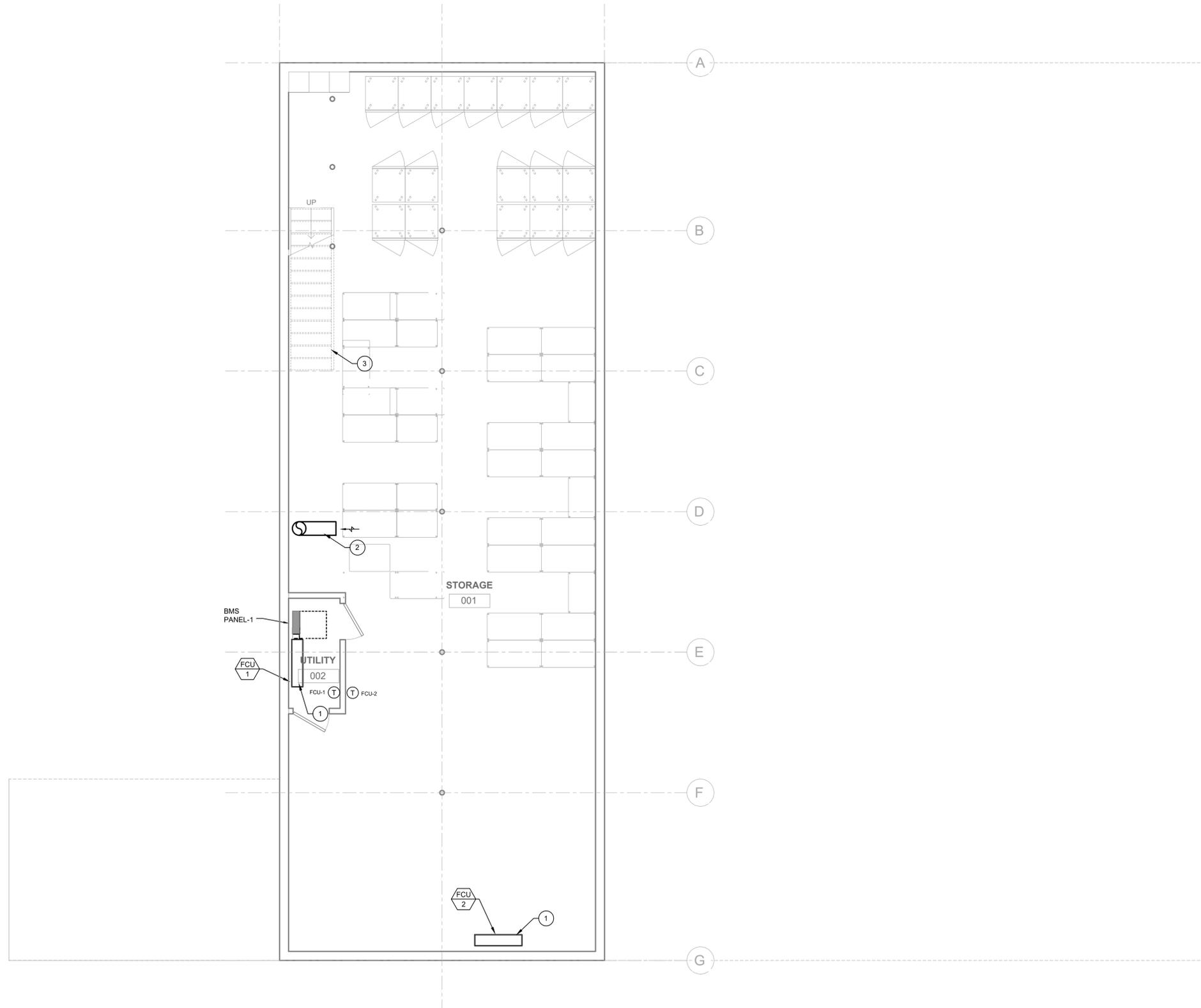
Revision/Issue	Date
Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21

Douglas M. Saylor
 State of Michigan
 Professional Engineer
 No. 86885

MECHANICAL NOTES, SYMBOLS AND ABBREVIATIONS

3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

021293
M-001



BASEMENT MECHANICAL KEYNOTES:

- 1 REFER TO PLUMBING SHEETS FOR CONDENSATE DRAINAGE.
- 2 12"Ø EA RISER FROM LEVEL 1. TERMINATE AT BASEMENT CEILING WITH OPEN DUCT STUB AND INSTALL WIRE MESH SCREEN OVER OPENING AS REQUIRED.
- 3 BASEMENT MAKE-UP AIR PROVIDED THROUGH OPEN STAIRWELL.

01 BASEMENT HVAC PLAN
Scale: 1/4" = 1'-0"



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

**MECHANICAL
BASEMENT PLAN**

021293

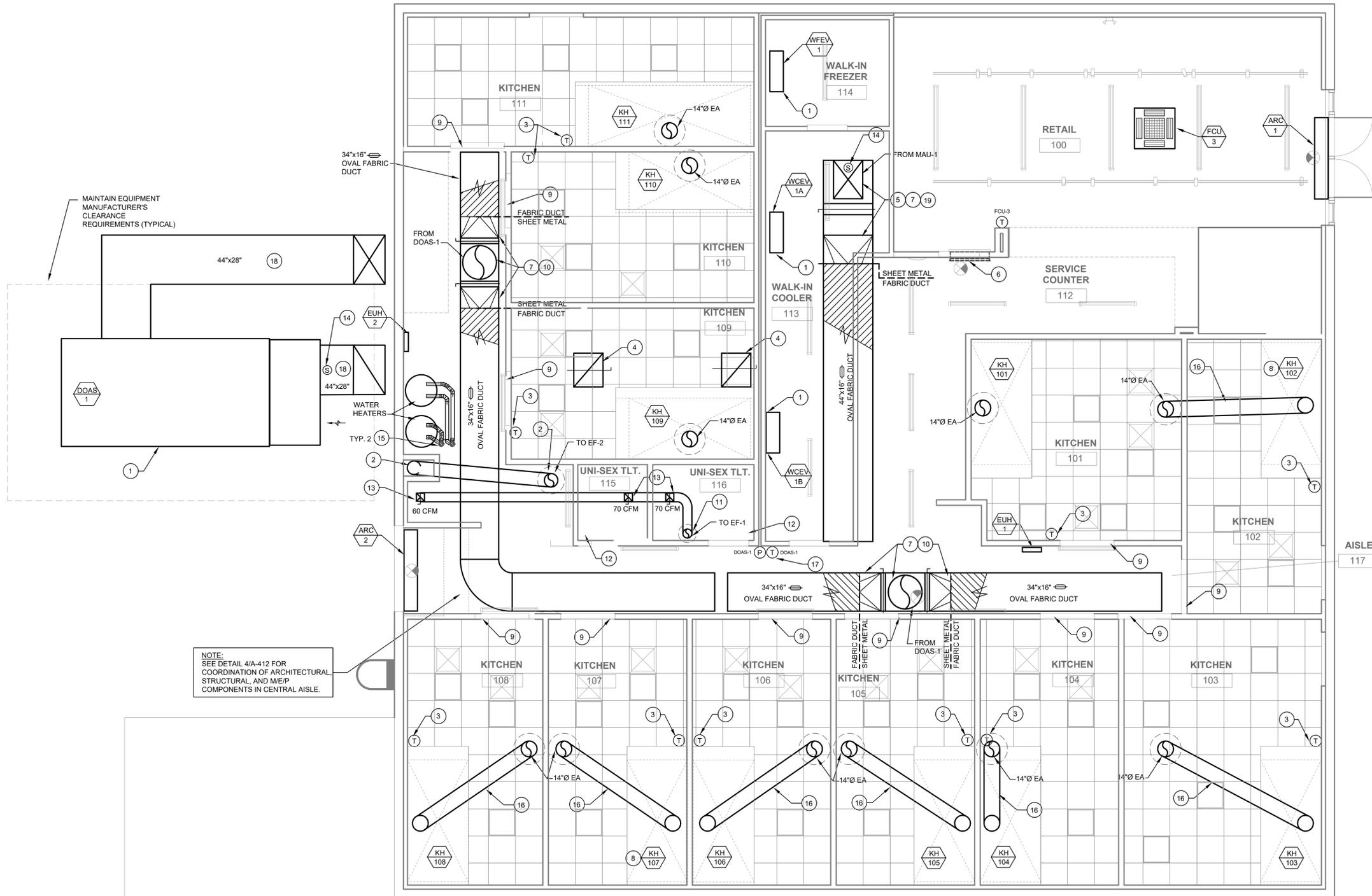
M-100

GENERAL NOTES

- A. ALL DUCT BRANCHES TO BE PROVIDED WITH MANUAL VOLUME CONTROL DAMPERS AND MOTORIZED CONTROL DAMPERS FOR KITCHEN ISOLATION AND AIRFLOW CONTROL. MOTORIZED DAMPER TO BE INSTALLED UPSTREAM OF MANUAL DAMPER. CONTROLS CONTRACTOR TO INSTALL ACTUATOR/CONTROLLER.
- B. DUCT INSULATION SHALL BE ON MAU SUPPLY AIR DUCTWORK ON VERTICAL DROPS AND LATER TRUNCH SECTIONS. R-VALUE SHALL BE PER CODE.
- C. EACH KITCHEN HAS MAKE UP AIR TRANSFER THROUGH FOLDING SECURITY GATES AT DOORWAY. POSITION CAN SHIFT AS DUCT DIMENSIONS INDICATED ON PLANS ARE FREE AREA DIMENSIONS.
- D. DUCT DIMENSIONS INDICATED ON PLANS ARE FREE AREA DIMENSIONS.
- E. BELLMOUTHS SHALL HAVE WIRE MESH SCREEN.
- F. REFER TO ENLARGED KITCHEN PLANS FOR HVAC LAYOUTS, TYPICAL.
- G. ELECTRIC UNIT HEATERS MOUNTED 1' ABOVE FINISHED FLOOR. COORDINATE LOCATION WITH OTHER TRADES.
- H. DRAWINGS ARE DIAGRAMMATIC TO SHOW INTENT OF ROUTING AND GENERAL SPACING REQUIREMENTS. IT IS NOT THE INTENT TO SHOW EVERY OFFSET, FITTING, OR ACCOMMODATION REQUIRED. CONTRACTOR SHALL COORDINATE BETWEEN TRADES AND IDENTIFY ANY ISSUES PRIOR TO INSTALLATION.

LEVEL 1 MECHANICAL KEYNOTES:

- 1 REFER TO PLUMBING SHEETS FOR CONDENSATE DRAINAGE.
- 2 12"Ø EA RISER FROM BASEMENT. ROUTE TO EF-2 ON ROOF.
- 3 LOCAL KITCHEN TSTAT TO BE WIRED TO THE BMS PANEL. LOCAL KITCHEN TSTATS ARE TO BE USED FOR KITCHEN TEMPERATURE MONITORING AND MANUAL OVERRIDE OF EXHAUST FANS TO PROVIDE MAXIMUM EXHAUST. COORDINATE WITH ARCHITECTURAL ELEVATION DRAWINGS.
- 4 30"x26" RA OPEN DUCT STUB. TERMINATE ABOVE CEILING. PROVIDE VOLUME DAMPER AND 1"x1" MESH SCREEN OVER OPENING.
- 5 34"x26" MAKE-UP AIR DUCT RISER THROUGH ROOF TO MAU-1. RIGID SUPPLY AIR DUCTWORK TO BE INSULATED WITH 2" DUCT WRAP.
- 6 36"x12" TRANSFER AIR GRILLE IN WALL ABOVE DOOR. GRILLE ON RETAIL SIDE, MESH ON OFFICE SIDE.
- 7 SHEET METAL DROP FROM DOAS-1 / MAU-1 TRANSITIONS TO FABRIC WITH CONNECTOR. PROVIDE VOLUME DAMPER(S) IN HORIZONTAL SHEET METAL DUCT BEFORE CONNECTOR(S).
- 8 MASTER HOOD CONTROLLER LOCATED WITH ANSUL SYSTEM IN THE SIDE UTILITY CABINET OF HOOD.
- 9 MAKE-UP AIR TRANSFER THROUGH FOLDING SECURITY GATES AT EACH KITCHEN.
- 10 30"Ø SUPPLY RISER THROUGH ROOF. RIGID SUPPLY DUCT WITHIN BUILDING ENVELOPE TO BE INSULATED WITH 2" DUCT WRAP.
- 11 8"Ø EXHAUST DUCT UP TO EF-1 ON ROOF.
- 12 GC TO PROVIDE 3/4" UNDERCUT AT DOOR FOR TRANSFER AIR.
- 13 6"x6" EXHAUST GRILLE WITH VOLUME DAMPER.
- 14 MC TO PROVIDE DUCT SMOKE DETECTOR. INSTALLED BY ELECTRICAL CONTRACTOR.
- 15 CONCENTRIC VENT KIT FOR WATER HEATER. TERMINATES AT ROOF LEVEL.
- 16 TYPE 1 GREASE DUCT TRANSFERS TO CONNECT TO UPBLAST FAN ON ROOF ABOVE.
- 17 DOAS-1 TEMPERATURE SENSOR (WIRED TO DOAS) & CORRIDOR SPACE PRESSURE SENSOR (WIRED TO BMS)
- 18 ROUTE 44"x28" SUPPLY AND RETURN DUCT RISERS FROM DOAS-1 AT GRADE UP TO ROOF. INSTALL TWO (2) LAYERS OF 2" THICK, MIN. R-6 DUCT WRAP ON ALL EXPOSED DUCTWORK AND PROVIDE WEATHERPROOF COVERING OVER EXPOSED DUCT WRAP.
- 19 COORDINATE DUCT ELEVATION WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.



NOTE:
SEE DETAIL 4/A-412 FOR
COORDINATION OF ARCHITECTURAL,
STRUCTURAL, AND MEP
COMPONENTS IN CENTRAL AISLE.

EST
1998

DESIGNHAUS

ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date



MECHANICAL PLAN - 3181 3RD AVE. - DETROIT

3181 3rd Ave,
Detroit, MI 48201

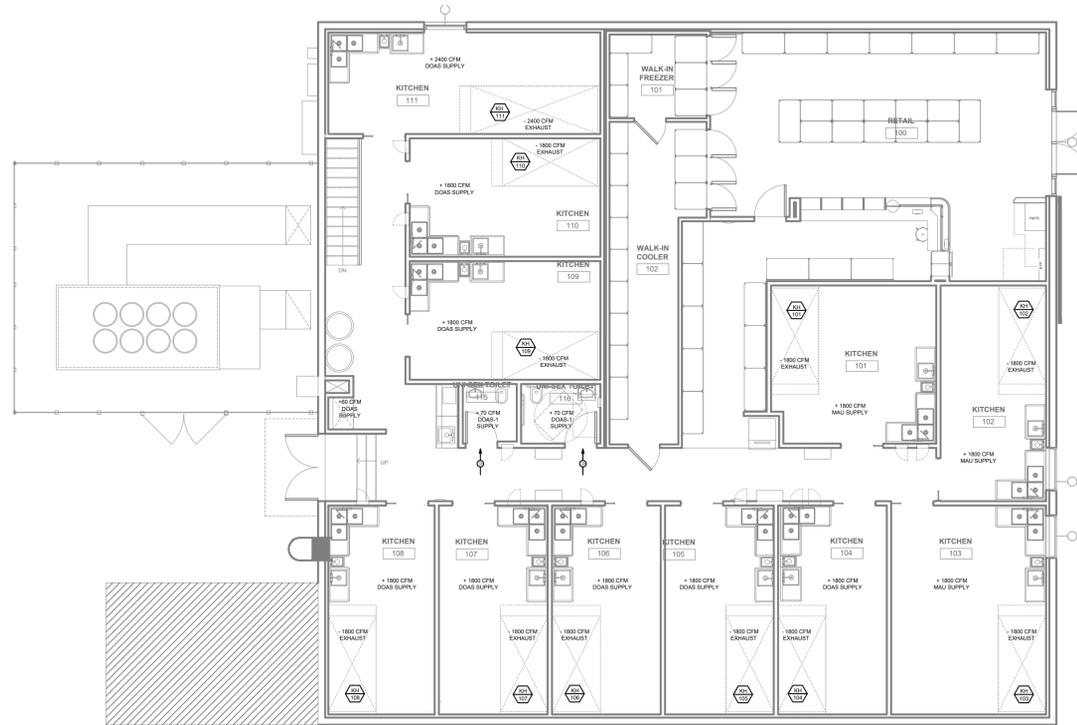
LEVEL 1

021293

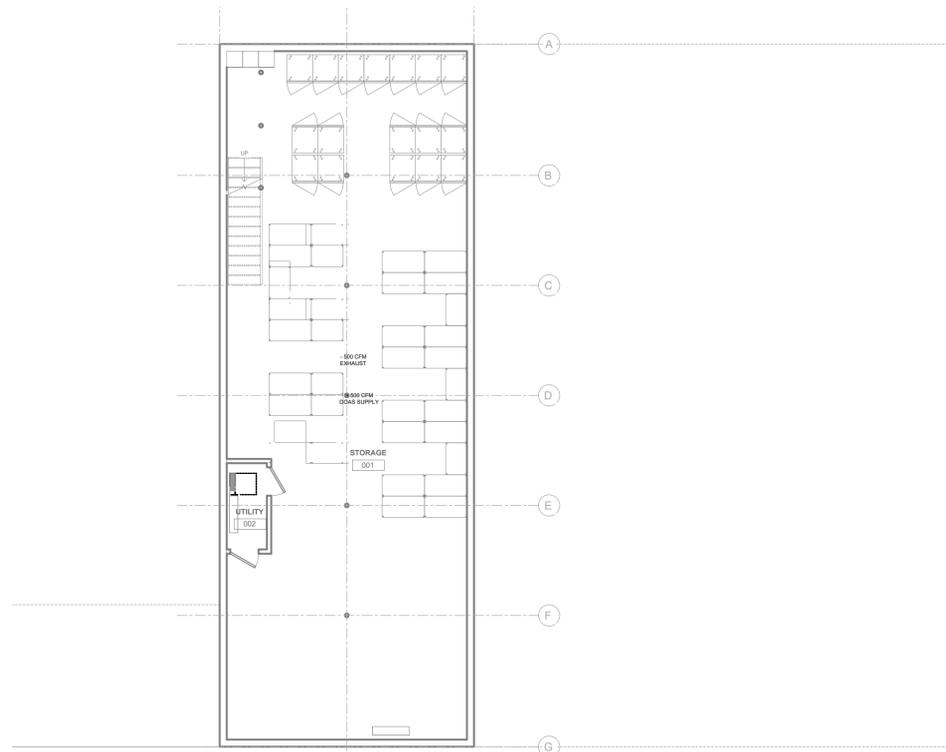
M-101

01 MECHANICAL PLAN - LEVEL 1

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



01 MECHANICAL PLAN - LEVEL 1
Scale: 1/4" = 1'-0"



01 BASEMENT HVAC PLAN
Scale: 1/8" = 1'-0"

BUILDING AIR BALANCE SUMMARY			
UNIT	OA CFM	EX. CFM	POSITIVE / NEGATIVE (CFM)
MAU-1	5,400	-	+ 5,400
DOAS-1	16,000	-	+ 16,000
KEF-101 thru -110	-	18,000	-18,000
KEF-111	-	2,400	- 2,400
EF 1	-	200	- 200
EF 2	-	500	- 500
TOTALS	+ 21,400	- 21,100	+ 300
PRESSURIZATION	-	-	+ 300
PERCENTAGE POSITIVE PRESSURIZATION	-	-	1.42%

BUILDING AIR BALANCE PER SPACE							
AREAS SERVED	EX. HOOD LENGTH	EX. EQUIP.	EX. CFM	MAU EQUIP.	MAU. CFM	DOAS EQUIP.	DOAS CFM
KITCHEN 101	9	KEF-101	1800	MAU-1	1800	-	-
KITCHEN 102	9	KEF-102	1800	MAU-1	1800	-	-
KITCHEN 103	9	KEF-103	1800	MAU-1	1800	-	-
KITCHEN 104	9	KEF-104	1800	-	-	DOAS-1	1800
KITCHEN 105	9	KEF-105	1800	-	-	DOAS-1	1800
KITCHEN 106	9	KEF-106	1800	-	-	DOAS-1	1800
KITCHEN 107	9	KEF-107	1800	-	-	DOAS-1	1800
KITCHEN 108	9	KEF-108	1800	-	-	DOAS-1	1800
KITCHEN 109	9	KEF-109	1800	-	-	DOAS-1	1800
KITCHEN 110	9	KEF-110	1800	-	-	DOAS-1	1800
KITCHEN 111	12	KEF-111	2400	-	-	DOAS-1	2400
EXHAUST FANS							
EF-1 (RESTRMS.)	-	EF-1	200	-	-	DOAS-1	200
EF-2 (BSMNT)	-	EF-2	500	-	-	DOAS-1	500

MICHIGAN MECHANICAL CODE 2015 VENTILATION SCHEDULE													
ROOM NO.	SPACE DESIGNATION	ROOM AREA SQ. FT.	NUMBER OF OCCUPANTS	CODE REQUIREMENTS					ACTUAL AIR VOLUME		REMARKS		
				Rp CFM/PERSON	Ra	Occupants *Rp CFM	Ra * Area CFM	TOTAL OA	ZONE EFFECTIVENESS	TOTAL CODE CFM		SUPPLY CFM	RETURN/EXHAUST CFM
001	STORAGE	1426	0						0.8		400	500	SERVED BY FCU-2, DOAS-1 & EF-2
002	UTILITY	32	0						0.8		400	400	SERVED BY FCU-1, DOAS-1 & EF-2
100	RETAIL	576	9	0	0.06	0	35	35	0.8	43	600	600	SERVED BY FCU-3 & MAU-1
101	KITCHEN	228	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY MAU-1 & KEF-101
102	KITCHEN	203	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY MAU-1 & KEF-102
103	KITCHEN	288	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY MAU-1 & KEF-103
104	KITCHEN	201	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-104
105	KITCHEN	201	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-105
106	KITCHEN	201	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-106
107	KITCHEN	201	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-107
108	KITCHEN	197	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-108
109	KITCHEN	201	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-109
110	KITCHEN	200	2	0	0	0	0	0	0.8	0	1800	1800	SERVED BY DOAS-1 & KEF-110
111	KITCHEN	246	2	0	0	0	0	0	0.8	0	2400	2400	SERVED BY DOAS-1 & KEF-111
112	SERVICE COUNTER	281	1	5	0.06	5	17	22	0.8	27	200	200	SERVED BY MAU-1 & FCU-3
113	WALK IN COOLER	221	0	0	0	0	0	0	0.8	0	0	0	
114	WALK IN FREEZER	72	0	0	0	0	0	0	0.8	0	0	0	
115	TOILET	28	0	0	0	0	0	0	0.8	0	0	70	SERVED BY DOAS-1, EF-1
116	TOILET	42	0	0	0	0	0	0	0.8	0	0	70	SERVED BY DOAS-1, EF-1
117	aisle	530	0	0	0.06	0	32	32	0.8	40	0	60	SERVED BY DOAS-1 & EF-1
TOTAL		5,575	32							110	22,000	22,300	

NOTES:
DOAS-1 PROVIDES 16,000 CFM OUTSIDE AIR AND IS TIED TO BUILDING PRESSURE SWITCH, KITCHEN EXHAUST FANS AND MODULATES ACCORDINGLY WITH DEMAND.
MAU-1 PROVIDES 5,400 CFM OUTSIDE AIR AND IS TIED TO KITCHEN EXHAUST FANS AND MODULATES ACCORDINGLY WITH DEMAND.

EST 1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	30.30.21
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

MECHANICAL - AIR
BALANCE PLAN &
SCHEDULES

021293

M-300

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	TOTAL CFM	EXHAUST COLLAR(S)					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT				WIDTH	LENGTH	DIA.	CFM	S.P.	MUA CFM	AC CFM		
1	KH (LCORNER) 12IN RCABINET	XBEW-108-S	108	54	24	430 SS WHERE EXPOSED	HEAVY	1800			14	1800	0.444			283.511	SINGLE

HOOD INFORMATION

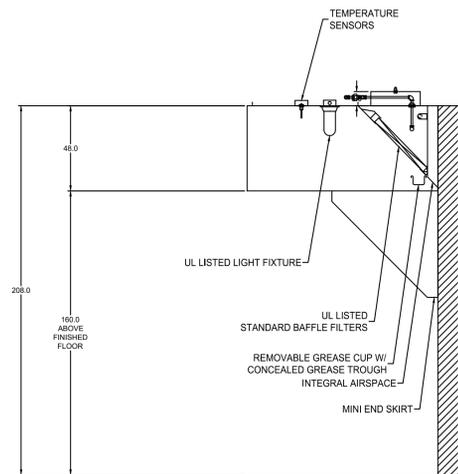
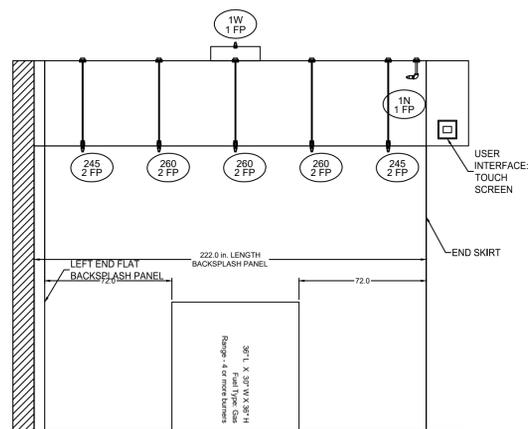
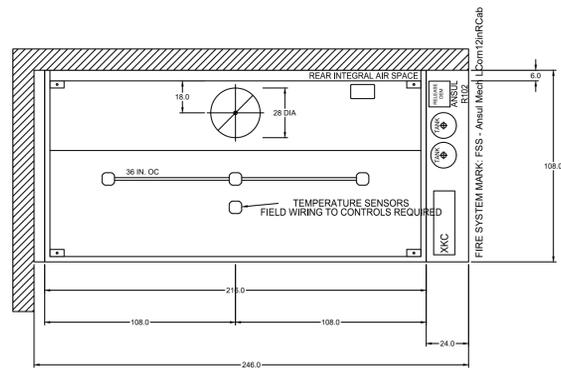
HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)					
		FIXTURE TYPE BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.) L H	LOCATION	FIRE SYSTEM		CONTROLS		
1	KH (LCORNER) 12IN RCABINET	INCANDESCENT (GLOBE) 100W A19 (BULBS NOT INCL.)	3	41.68	BAFFLE STAINLESS STEEL	3	16 20			TYPE	SIZE	MODEL	INTERFACE
								RIGHT	ANSUL R102 OVERLAP	6	XKC	TOUCHSCREEN	

HOOD OPTIONS

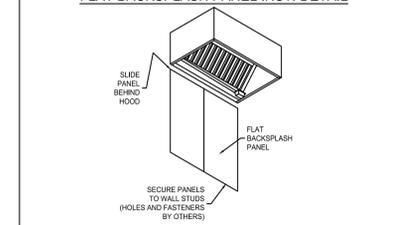
UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625
 BACK INTEGRAL AIR SPACE - 3 IN WIDE
 LEFT NON-INTEGRAL AIR SPACE - 3 IN WIDE
 FACTORY MOUNTED EXHAUST COLLAR(S)
 RIGHT MINI END SKIRT - 30 IN HIGH 30.00 IN TOP WIDTH 4.0 IN BOTTOM WIDTH
 BACKSPLASH 80.00 IN HIGH 111.00 IN LONG
 LEFT SIDESPLASH 80.00 IN HIGH 54.00 IN LONG
 PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
 STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

SPECIAL DESIGN REQUESTS

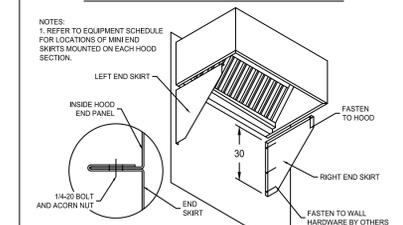
SDR #K2000481 - BOLT ON END SKIRTS



FLAT BACKSPLASH PANEL INST. DETAIL



MINI-END SKIRT INSTALLATION DETAIL



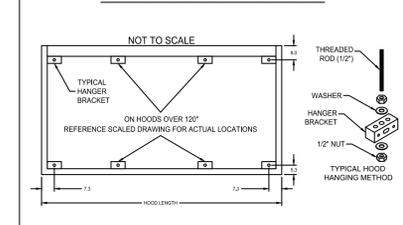
HOOD HANGING HEIGHT FOR FIRE SYSTEMS

VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

RECOMMENDED HANGING HEIGHT = 80" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.

OTHER HANGING HEIGHT = _____" FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

HOOD HANGER BRACKET DETAIL



3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

MECHANICAL -
 KITCHEN HOOD
 DETAILS

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	TOTAL CFM	EXHAUST COLLAR(S)					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT				WIDTH	LENGTH	DIA.	CFM	S.P.	MUA CFM	AC CFM		
1	KH (LCORNER) 12IN RCABINET 12'	XBEW-144-S	144	54	24	430 SS WHERE EXPOSED	HEAVY	2400			16	2400	0.458			361.228	SINGLE

HOOD INFORMATION

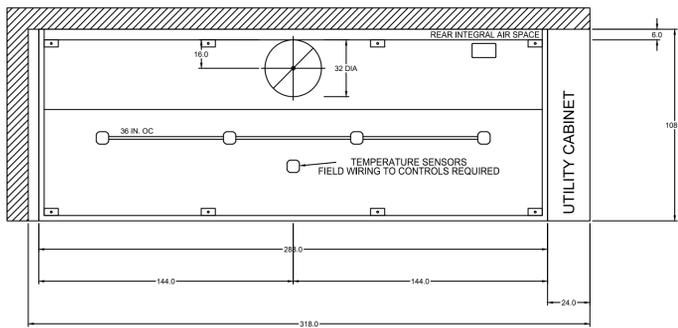
HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)				
		FIXTURE TYPE BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.) L H	LOCATION	FIRE SYSTEM TYPE	SIZE	MODEL	CONTROLS INTERFACE
1	KH (LCORNER) 12IN RCABINET 12'	INCANDESCENT (GLOBE) 100W A19 (BULBS NOT INCL.)	4	43.67	BAFFLE STAINLESS STEEL	4	16 20	RIGHT	ANSUL R102 OVERLAP	9		

HOOD OPTIONS

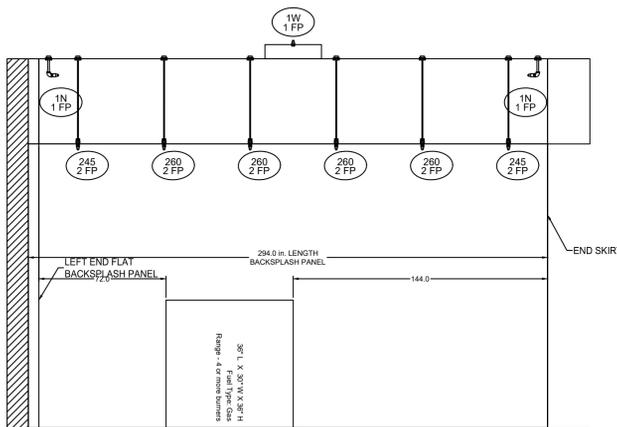
UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625
 BACK INTEGRAL AIR SPACE - 3 IN WIDE
 LEFT NON-INTEGRAL AIR SPACE - 3 IN WIDE
 FACTORY MOUNTED EXHAUST COLLAR(S)
 RIGHT MINI END SKIRT - 30 IN HIGH 30.00 IN TOP WIDTH 4.0 IN BOTTOM WIDTH
 BACKSPASH 80.00 IN HIGH 147.00 IN LONG
 LEFT SIDESPLASH 80.00 IN HIGH 54.00 IN LONG
 PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
 STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

SPECIAL DESIGN REQUESTS

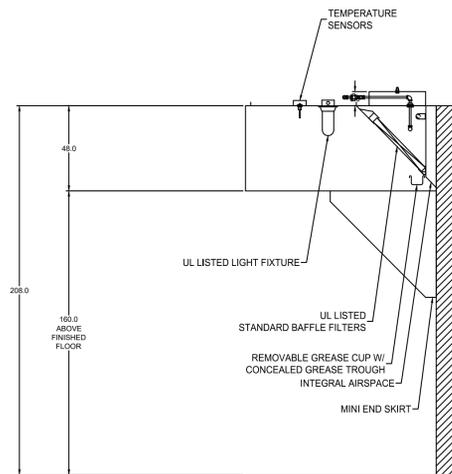
SDR #K2000481 - BOLT ON END SKIRTS



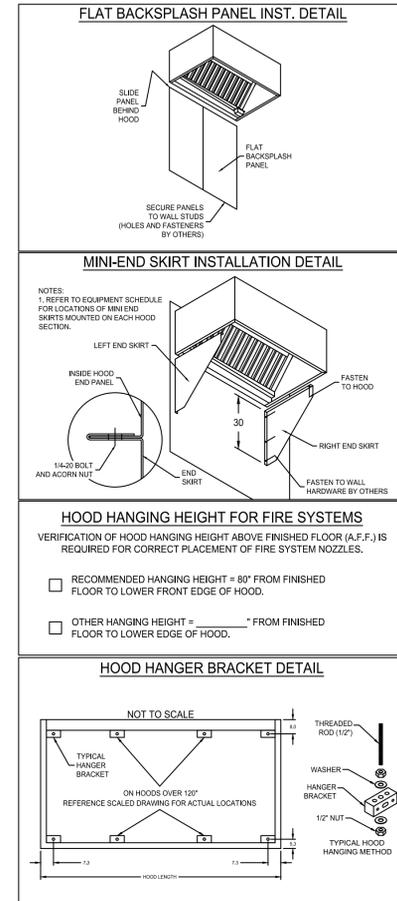
MARK: KH (LCorner) 12in RCabinet 12' - SECTION 1 PLAN VIEW



MARK: KH (LCorner) 12in RCabinet 12' - SECTION 1 ELEVATION VIEW



MARK: KH (LCorner) 12in RCabinet 12' SECTION VIEW



DESIGNHAUS
 EST 1998
 ARCHITECTURE

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

MECHANICAL - KITCHEN HOOD DETAILS

021293
M-401

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S)			MUA CFM	AC CFM			
								WIDTH	LENGTH	DIA.	CFM	S.P.				
1	KH (RCORNER) 12IN LCABINET	XBEW-108-S	108	54	24	430 SS WHERE EXPOSED	HEAVY	1800		14	1800	0.444			283.511	SINGLE

HOOD INFORMATION

HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)				
		FIXTURE TYPE BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.) L H	LOCATION	FIRE SYSTEM TYPE	SIZE	MODEL	CONTROLS INTERFACE
1	KH (RCORNER) 12IN LCABINET	INCANDESCENT (GLOBE) 100W A19 (BULBS NOT INCL.)	3	41.68	BAFFLE STAINLESS STEEL	3	16 20	LEFT	ANSUL R102 OVERLAP	6	XKC	TOUCHSCREEN

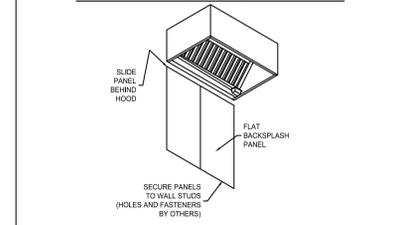
HOOD OPTIONS

UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625
 BACK INTEGRAL AIR SPACE - 3 IN WIDE
 RIGHT NON-INTEGRAL AIR SPACE - 3 IN WIDE
 FACTORY MOUNTED EXHAUST COLLAR(S)
 LEFT MINI END SKIRT - 30 IN HIGH 30.00 IN TOP WIDTH 4.0 IN BOTTOM WIDTH
 BACKSPLASH 80.00 IN HIGH 111.00 IN LONG
 RIGHT SIDESPLASH 80.00 IN HIGH 54.00 IN LONG
 PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
 STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

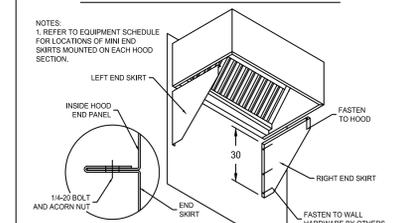
SPECIAL DESIGN REQUESTS

SDR #K2000481 - BOLT ON END SKIRTS

FLAT BACKSPLASH PANEL INST. DETAIL



MINI-END SKIRT INSTALLATION DETAIL

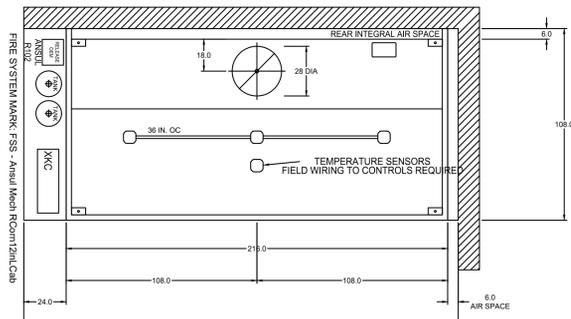
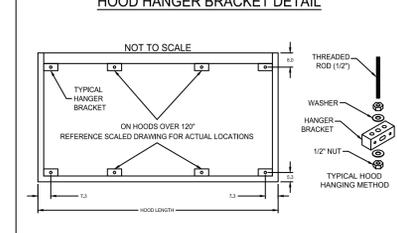


HOOD HANGING HEIGHT FOR FIRE SYSTEMS

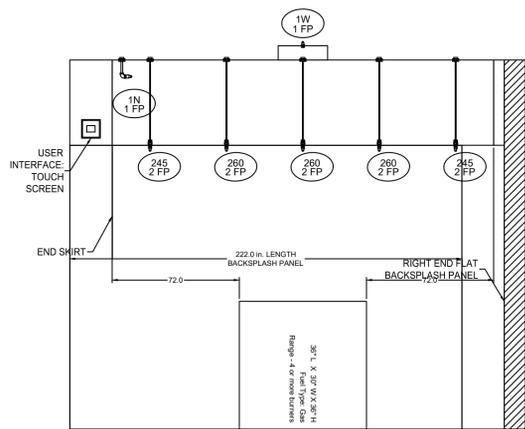
VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

- RECOMMENDED HANGING HEIGHT = 80" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.
- OTHER HANGING HEIGHT = _____" FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

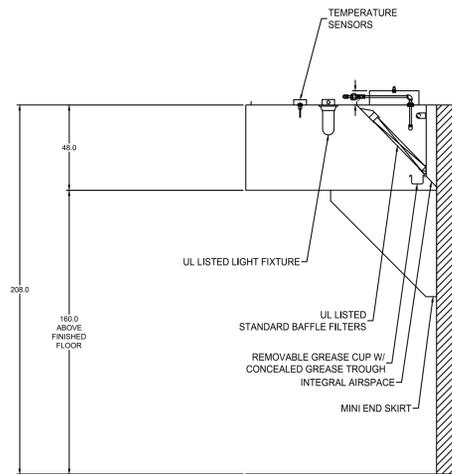
HOOD HANGER BRACKET DETAIL



MARK: KH (RCorner) 12in LCabinet - SECTION 1
 PLAN VIEW



MARK: KH (RCorner) 12in LCabinet - SECTION 1
 ELEVATION VIEW



MARK: KH (RCorner) 12in LCabinet
 SECTION VIEW

DESIGNHAUS
 EST 1998
 ARCHITECTURE

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

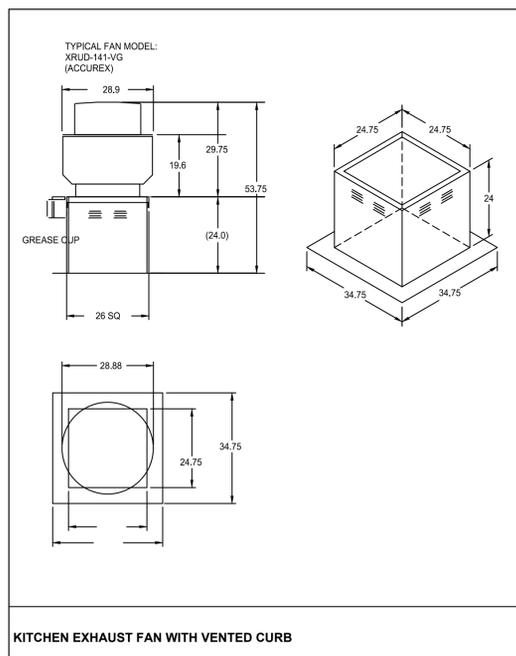
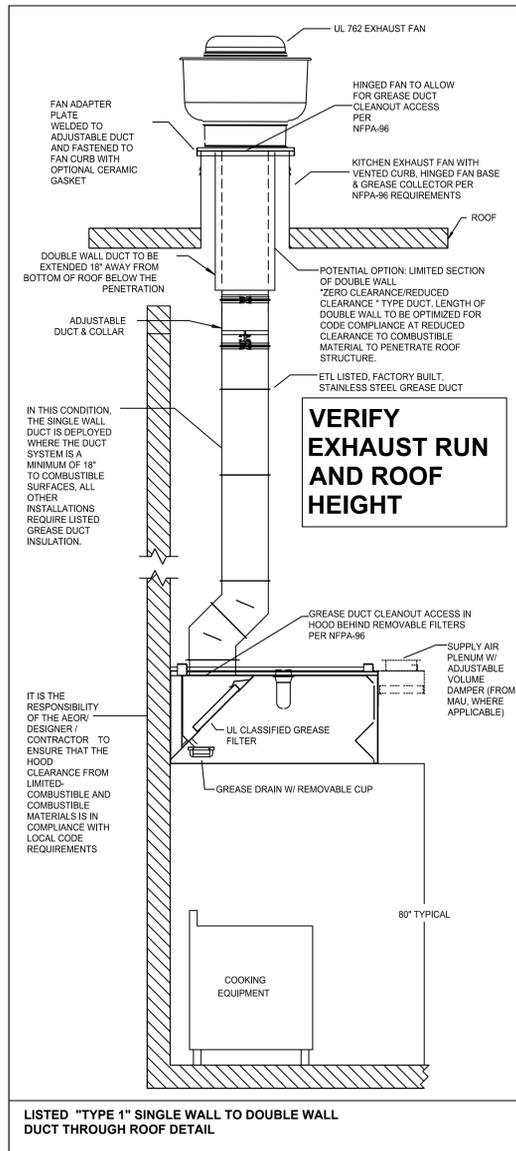


3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

**MECHANICAL -
 KITCHEN HOOD
 DETAILS**

021293

M-402



REFERENCED DOCUMENTS

IMC SECTION 308.4: ALLOWABLE REDUCTION REFERS YOU TO A REDUCTION TABLE FOUND IN 808.4.2 NFPA 96: 4.2 CLEARANCE

IMC REFERENCE - 506.3.6 GREASE DUCT CLEARANCES

WHERE ENCLOSURES ARE NOT REQUIRED, GREASE DUCT SYSTEMS AND EXHAUST EQUIPMENT SERVING A TYPE I HOOD SHALL HAVE A CLEARANCE TO COMBUSTIBLE CONSTRUCTION OF NOT LESS THAN 18 INCHES (457 MM), AND SHALL HAVE A CLEARANCE TO NONCOMBUSTIBLE CONSTRUCTION AND GYPSUM WALLBOARD ATTACHED TO NONCOMBUSTIBLE STRUCTURES OF NOT LESS THAN 3 INCHES (76 MM).

EXCEPTIONS:

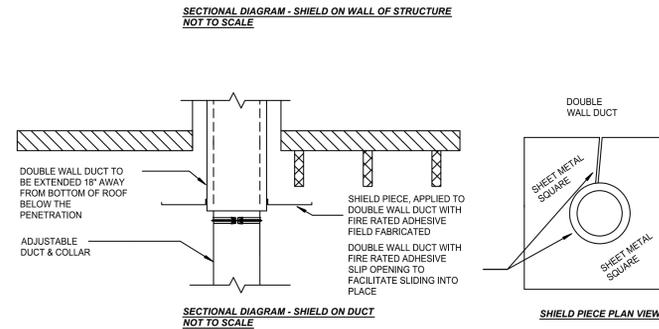
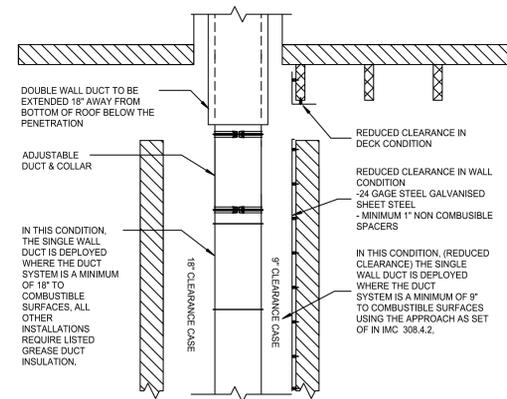
- FACTORY-BUILT COMMERCIAL KITCHEN GREASE DUCTS LISTED AND LABELED IN ACCORDANCE WITH UL 1978.
- LISTED AND LABELED EXHAUST EQUIPMENT INSTALLED IN ACCORDANCE WITH SECTION 304.1.
- WHERE COMMERCIAL KITCHEN GREASE DUCTS ARE CONTINUOUSLY COVERED ON ALL SIDES WITH A LISTED AND LABELED FIELD-APPLIED GREASE DUCT ENCLOSURE MATERIAL, SYSTEM, PRODUCT OR METHOD OF CONSTRUCTION SPECIFICALLY EVALUATED FOR SUCH PURPOSE IN ACCORDANCE WITH ASTM E2336, THE REQUIRED CLEARANCE SHALL BE IN ACCORDANCE WITH THE LISTING OF SUCH MATERIAL, SYSTEM, PRODUCT OR METHOD.

IMC REFERENCE - 308.4.2 REDUCTION TABLE

THE ALLOWABLE CLEARANCE REDUCTION SHALL BE BASED ON ONE OF THE METHODS SPECIFIED IN TABLE 308.4.2, WHERE REQUIRED CLEARANCES ARE NOT LISTED IN TABLE 308.4.2, THE REDUCED CLEARANCES SHALL BE DETERMINED BY LINEAR INTERPOLATION BETWEEN THE DISTANCES LISTED IN THE TABLE. REDUCED CLEARANCES SHALL NOT BE DERIVED BY EXTRAPOLATION BELOW THE RANGE OF THE TABLE.

TABLE 308.4.2
CLEARANCE REDUCTION METHODS^B

TYPE OF PROTECTIVE ASSEMBLY ^A	REDUCED CLEARANCE WITH PROTECTION (inches) ^B							
	Horizontal combustible assemblies located above the heat source				Horizontal combustible assemblies located beneath the heat source and all vertical combustible assemblies			
	Required clearance to combustibles without protection (inches) ^A				Required clearance to combustibles without protection (inches)			
	36	18	9	6	36	18	9	6
Galvanized sheet steel, having a minimum thickness of 0.0236 inch (No. 24 gage), mounted on 1-inch glass fiber or mineral wool batt reinforced with wire on the back, 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
Galvanized sheet steel, having a minimum thickness of 0.0236 inch (No. 24 gage), spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	2
Two layers of galvanized sheet steel, having a minimum thickness of 0.0236 inch (No. 24 gage), having a 1-inch airspace between layers, spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
Two layers of galvanized sheet steel, having a minimum thickness of 0.0236 inch (No. 24 gage), having 1 inch of fiberglass insulation between layers, spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
0.5-inch inorganic insulating board, over 1 inch of fiberglass or mineral wool batt, against the combustible assembly	24	12	6	4	18	9	5	3
3 1/2-inch brick wall, spaced 1 inch off the combustible wall	—	—	—	—	12	6	6	6
3 1/2-inch brick wall, against the combustible wall	—	—	—	—	24	12	6	5



NFPA REFERENCE - 4.2 CLEARANCE

4.2 CLEARANCE

4.2.1 WHERE ENCLOSURES ARE NOT REQUIRED, HOODS, GREASE REMOVAL DEVICES, EXHAUST FANS, AND DUCTS SHALL HAVE A CLEARANCE OF AT LEAST 457 MM (18 IN.) TO COMBUSTIBLE MATERIAL, 76 MM (3 IN.) TO LIMITED-COMBUSTIBLE MATERIAL, AND 0 MM (0 IN.) TO NONCOMBUSTIBLE MATERIAL.

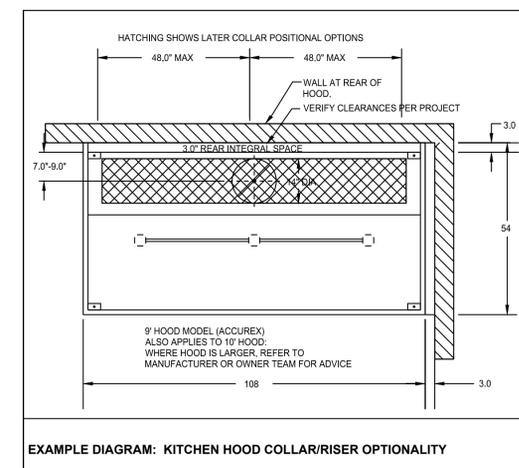
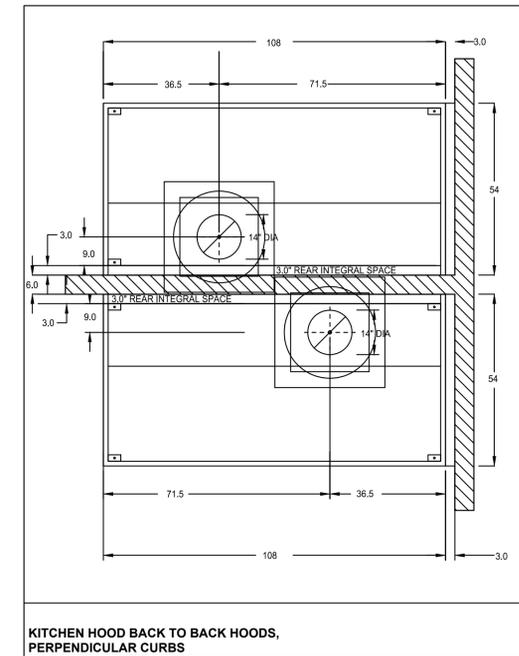
4.2.2 WHERE A HOOD, DUCT, OR GREASE REMOVAL DEVICE IS LISTED FOR CLEARANCES LESS THAN THOSE REQUIRED IN 4.2.1, THE LISTING REQUIREMENTS SHALL BE PERMITTED.

4.2.3 CLEARANCE REDUCTION

4.2.3.1 WHERE A CLEARANCE REDUCTION SYSTEM CONSISTING OF 0.33 MM (0.013 IN.) (28 GAUGE) SHEET METAL SPACED OUT 25 MM (1 IN.) ON NONCOMBUSTIBLE SPACERS IS PROVIDED, THERE SHALL BE A MINIMUM OF 229 MM (9 IN.) CLEARANCE TO COMBUSTIBLE MATERIAL.

4.2.3.2 WHERE A CLEARANCE REDUCTION SYSTEM CONSISTING OF 0.49 MM (0.027 IN.) (22 GAUGE) SHEET METAL ON 25 MM (1 IN.) MINERAL WOOL BATTS OR CERAMIC FIBER BLANKET REINFORCED WITH WIRE MESH OR EQUIVALENT SPACED 25 MM (1 IN.) ON NONCOMBUSTIBLE SPACERS IS PROVIDED, THERE SHALL BE A MINIMUM OF 76 MM (3 IN.) CLEARANCE TO COMBUSTIBLE MATERIAL.

REDUCED CLEARANCE - REDUCTION FROM COMBUSTIBLES (IMC 308.4.2 AND NFPA 96)



EST 1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

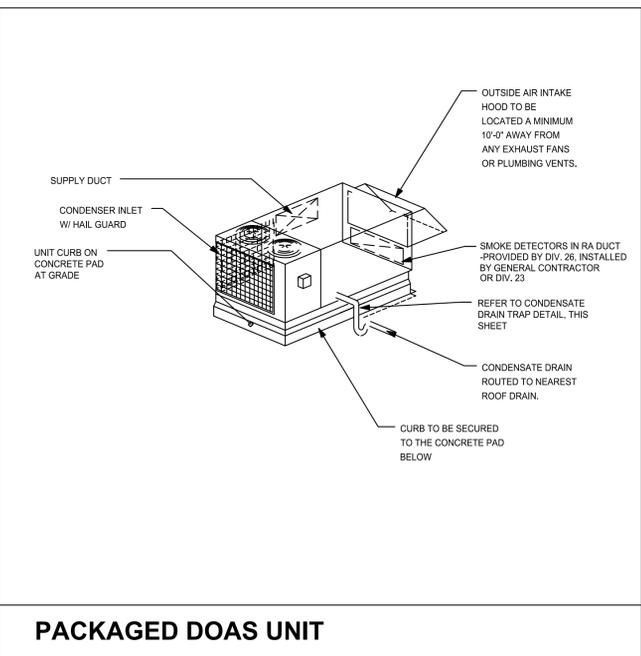
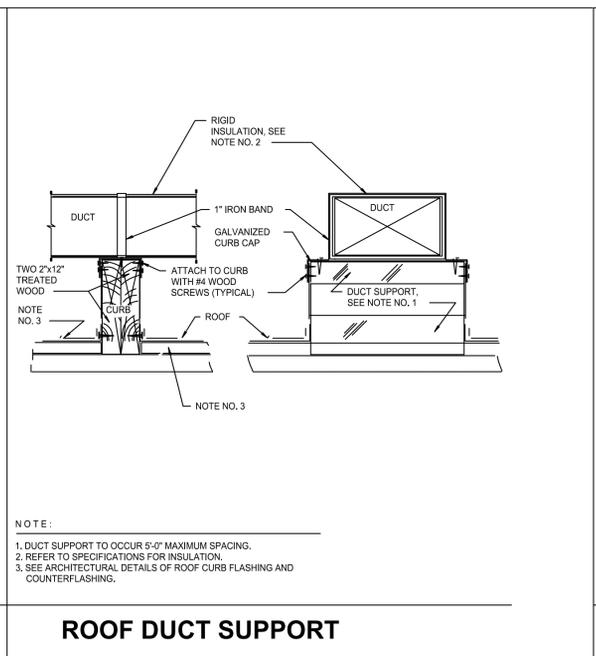
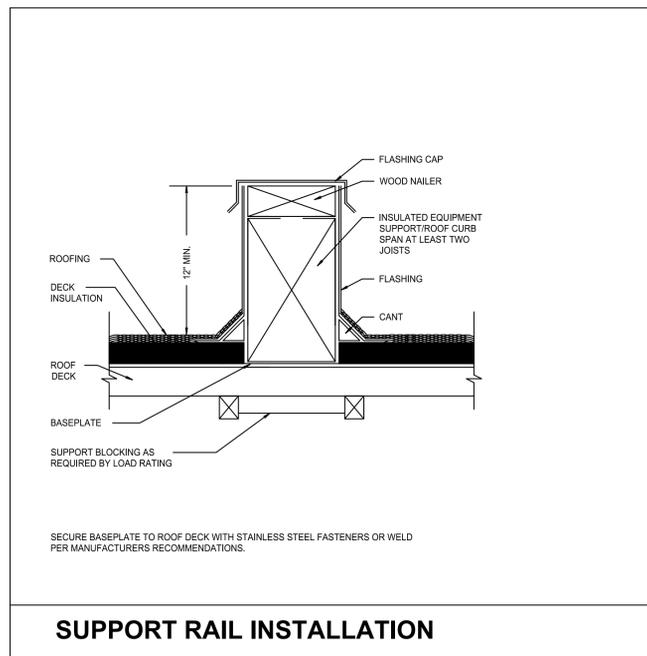
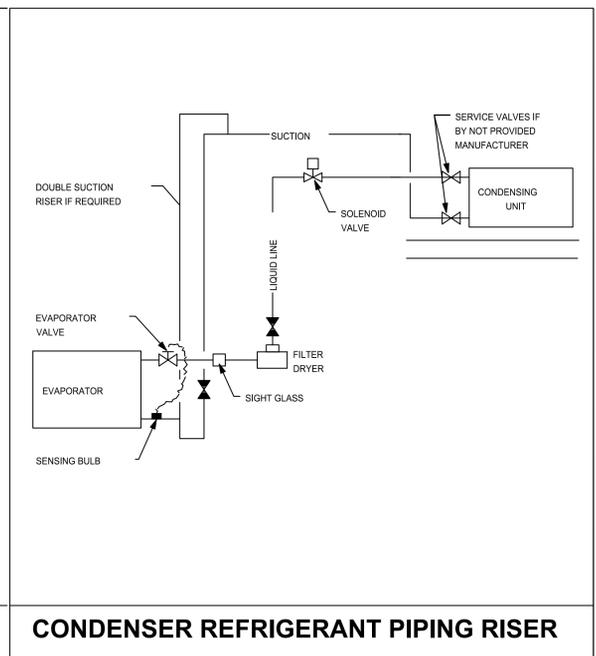
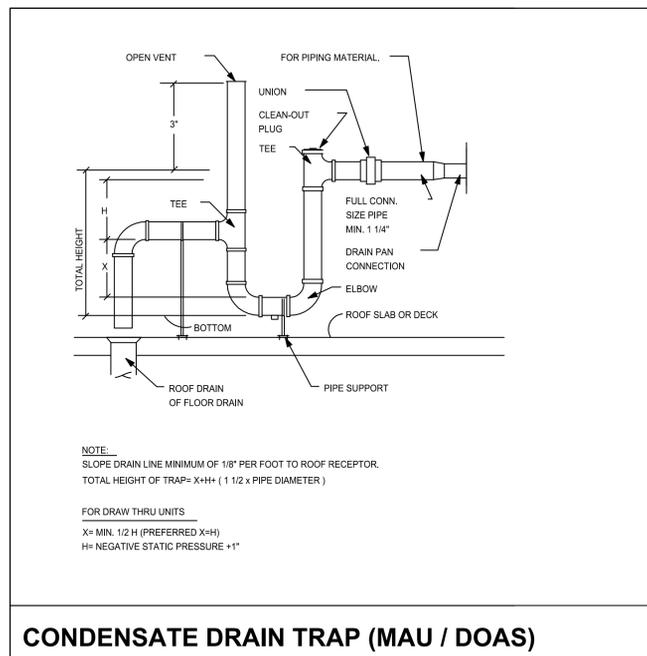
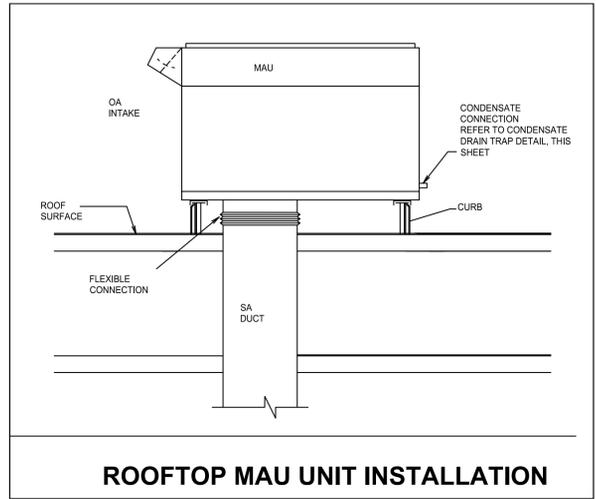


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

MECHANICAL -
STANDARD DETAILS

021293

M-500



EST 1998
DESIGNHAUS
ARCHITECTURE
3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

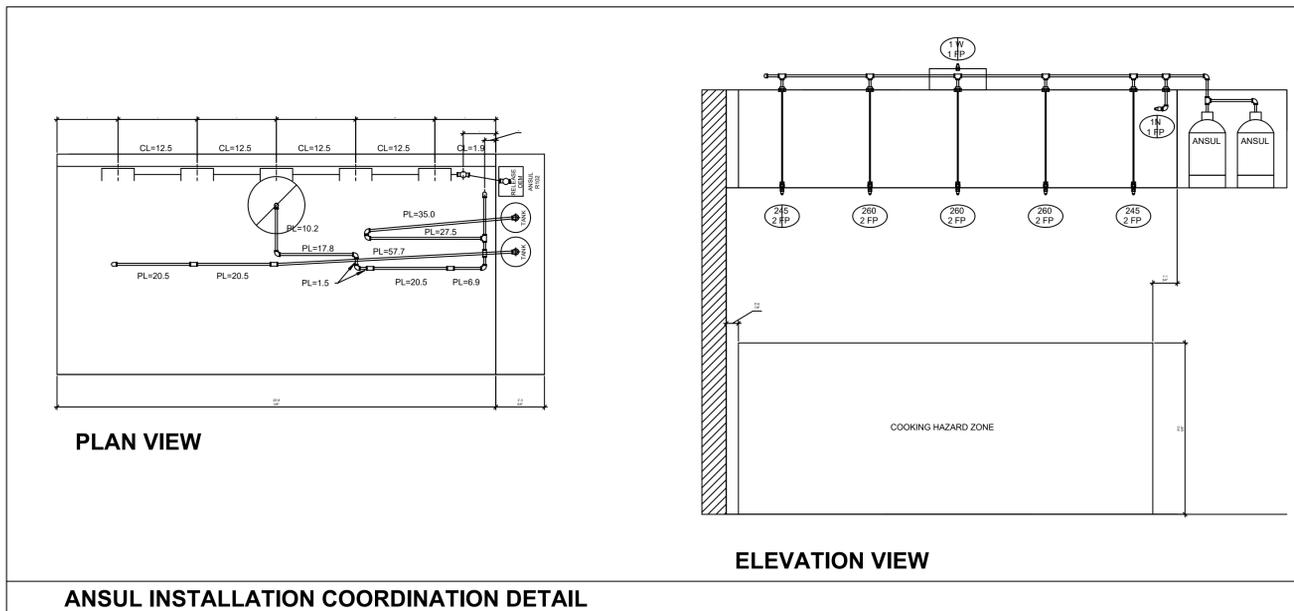
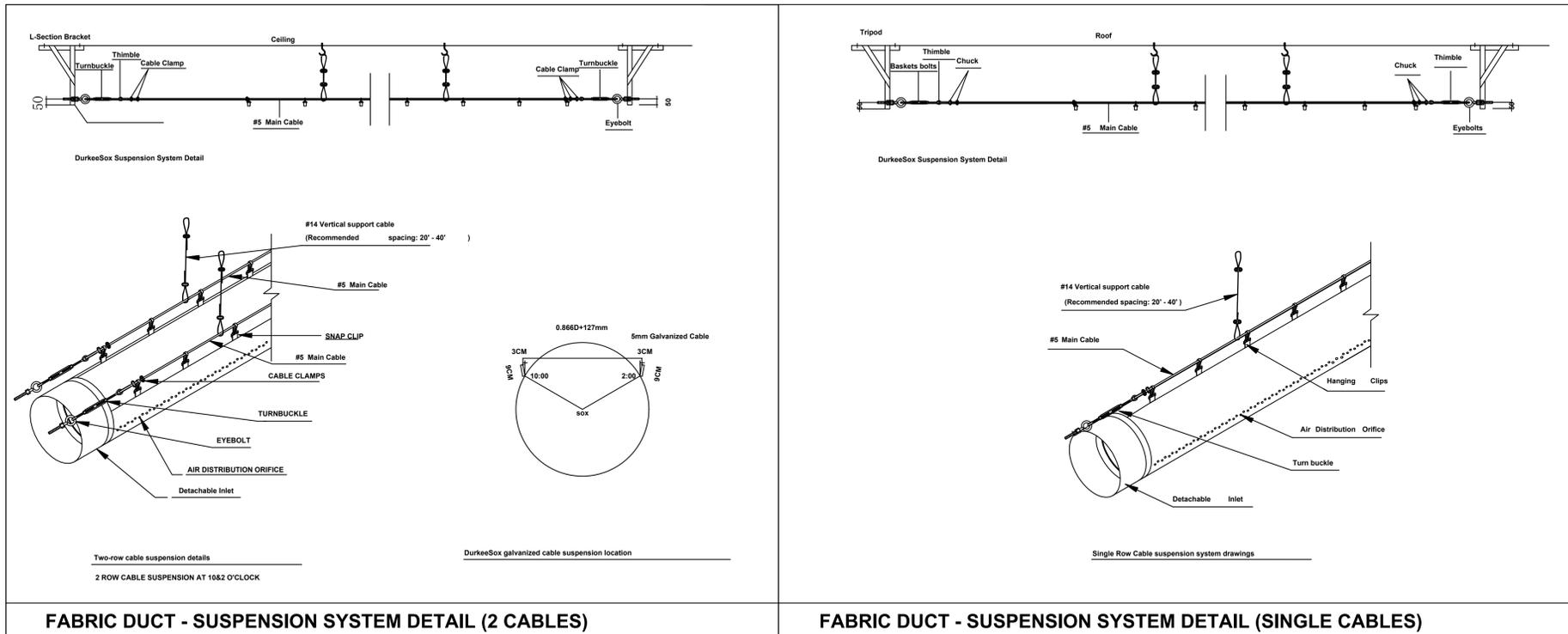
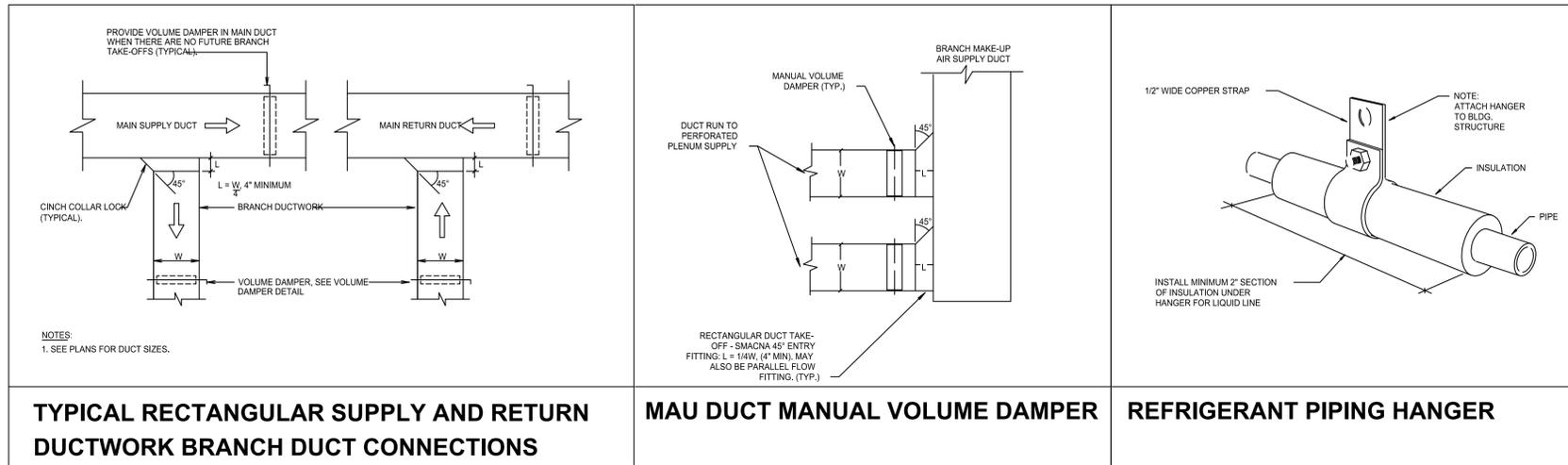
Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

MECHANICAL - STANDARD DETAILS

021293
M-501



EST
1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

**MECHANICAL -
STANDARD DETAILS**

021293
M-502

MAU UNITS (OWNER FURNISHED EQUIPMENT, CONTRACTOR INSTALLED)																						
SYMBOL	QTY	MANUFACTURER/ MODEL	SUPPLY FAN									DX COOLING COIL						FURNACE HEATING				
			FAN TYPE	DESIGN CFM	OA CFM	ESP (IN WG)	TSP (IN WG)	RPM	BHP	HP	TYPE	CAPACITY (MBH)		ENTERING		LEAVING		TYPE	INPUT (MBH)	OUTPUT (MBH)	EFF. (%)	TEMP. RISE (°F)
												TOTAL	SENSIBLE	DB	WB	DB	WB					
MAU-1	1	ACCUREX / XIGX-P120-H32-MF-16-N	MIXED FLOW	5400	5400	1	1.709	1357	3.81	5.0	STANDARD SCROLL	196.9	95.7	81.5	72.8	65.4	62.8	DIRECT	500	400	92%	68.6
											ELECTRICAL		DIMENSIONS (IN.)				WEIGHT (LBS)					
											VOLTAGE	PHASE	MCA	MOCP	L	W	H					
											208	3	86.3	110	293	100	48	3,801				

NOTES

- A. EQUIPMENT FURNISHED BY OWNER, INSTALLED BY THE MECHANICAL CONTRACTOR.
- B. PROVIDE INLET HOOD WITH CLEANABLE ALUMINUM MESH FILTERS.
- C. PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
- D. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT.
- E. FIRE ALARM CONTRACTOR SHALL PROVIDE SMOKE DETECTORS IN DISCHARGE DUCT.
- F. PROVIDE UNIT WITH DUCT CURB WITH MINIMUM HEIGHT OF 14".
- G. MAKE UP AIR UNIT DESIGNED FOR NATURAL GAS. MINIMUM / MAXIMUM GAS PRESSURE SHALL BE 6" W.C. / 0.5 PSI.
- H. PROVIDE HEATER TO MEET OR EXCEED SCHEDULED MINIMUM MBH OUTPUT. NOMINAL INPUT IS BASED ON LISTED MANUFACTURER'S STANDARD PRODUCT. COORDINATE EQUIPMENT GAS LOAD WITH PLUMBING CONTRACTOR IF DIFFERENT FROM THAT SCHEDULED. MEET MINIMUM EFFICIENCY SCHEDULED.
- I. PROVIDE FREEZESTAT IN THE SUPPLY AIR DUCT TO ALARM UNIT AND CLOSE THE OUTDOOR AIR DAMPER IF TEMPERATURE IN THE SUPPLY DUCT DROPS BELOW 40 DEGREES FAHRENHEIT.
- J. MAKEUP AIR UNIT SHALL BE CONTROLLED VIA BACNET/IP BY THE BMS CONTROL PANEL.
- K. DURING A FIRE EVENT, MAU SHUTDOWN SHALL ORIGINATE FROM THE FIRE ALARM CONTROL PANEL.

DOAS UNITS (OWNER FURNISHED EQUIPMENT, CONTRACTOR INSTALLED)																						
SYMBOL	QTY	MANUFACTURER/ MODEL	SUPPLY FAN									DX COOLING COIL						FURNACE HEATING				
			FAN TYPE	DESIGN CFM	OA CFM	ESP (IN WG)	TSP (IN WG)	RPM	BHP	HP	TYPE	CAPACITY (MBH)		ENTERING		LEAVING		TYPE	INPUT (MBH)	OUTPUT (MBH)	EFF. (%)	TEMP. RISE (°F)
												TOTAL	SENSIBLE	DB	WB	DB	WB					
DOAS-1	1	ACCUREX / XRV-110-70D-T	PLENUM	16,000	13,600	1.25	4.156	1990	4.91	7	DIGITAL SCROLL	969.1	462.4	81.5	72.8	55.3	55.2	INDIRECT	1,200	918	80	53.0
											ELECTRICAL		DIMENSIONS (IN.)				WEIGHT (LBS)					
											VOLTAGE	PHASE	MCA	MOCP	L	W	H					
											208	3	371.5	400	230	95.5	100.6	7,595				

NOTES

- A. EQUIPMENT FURNISHED BY OWNER, INSTALLED BY THE MECHANICAL CONTRACTOR.
- B. PROVIDE INLET HOOD WITH CLEANABLE ALUMINUM MESH FILTERS.
- C. PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
- D. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT.
- E. DIVISION 23 CONTRACTOR SHALL PROVIDE SMOKE DETECTORS IN RETURN AIR DUCT.
- F. PROVIDE UNIT WITH DUCT CURB WITH MINIMUM HEIGHT OF 14".
- G. PROVIDE HEATER TO MEET OR EXCEED SCHEDULED MINIMUM MBH OUTPUT. NOMINAL INPUT IS BASED ON LISTED MANUFACTURER'S STANDARD PRODUCT. COORDINATE EQUIPMENT GAS LOAD WITH PLUMBING CONTRACTOR IF DIFFERENT FROM THAT SCHEDULED. MEET MINIMUM EFFICIENCY SCHEDULED.
- H. MINIMUM / MAXIMUM GAS PRESSURE SHALL BE 6" W.C. / 10.5" W.C.
- I. PROVIDE FREEZESTAT IN THE SUPPLY AIR DUCT TO ALARM UNIT AND CLOSE THE OUTDOOR AIR DAMPER IF TEMPERATURE IN THE SUPPLY DUCT DROPS BELOW 40 DEGREES FAHRENHEIT.

KITCHEN HOOD (OWNER FURNISHED EQUIPMENT, CONTRACTOR INSTALLED)												
SYMBOL	QTY	TYPE / FILTER TYPE	MANUFACTURER/ MODEL	EXHAUST AIR (CFM)	ESP (IN W. G.)	SUPPLY PLENUM	SP (L X W X H)	VOLUME	SP (IN. W. G.)	OVERALL (L X W X H)	WEIGHT (LBS)	
KH-101 THRU K-110	10	WALL CANOPY / TYPE 1	ACCUREX / XBEW	1800	0.444	-	-	-	-	108 X 54 X 24	486	
KH-111	1	WALL CANOPY / TYPE 1	ACCUREX / XBEW	2400	0.458	-	-	-	-	144 X 54 X 24	401	

NOTES

- A. HOOD SUPPLIER SHALL PROVIDE HOOD PRE-PIPED FOR WET-TYPE FIRE EXTINGUISHING SYSTEM MEETING REQUIREMENTS OF NFPA-96 AND LOCAL CODES.
- B. HOOD SUPPLIER SHALL FURNISH HOOD WITH UL LISTED BAFFLE-TYPE GREASE FILTERS, GREASE DRAIN WITH REMOVABLE CUP, AND UL LISTED VAPORPROOF INCANDESCENT LIGHT FIXTURES.
- C. HOOD SUPPLIER SHALL FACTORY INSTALL THE HOOD CONTROL PACKAGE IN THE HOOD UTILITY CABINET.
- D. PROVIDE HOOD FIRE SUPPRESSION SYSTEM MEETING NFPA-96 AND LOCAL CODES.
- E. PROVIDE INTERLOCK KIT WITH ONE TEMPERATURE SENSOR PER GREASE EXHAUST COLLAR TO MEET IMC REQUIREMENTS.
- F. REFER TO REFERENCE DRAWINGS OF KITCHEN HOOD MANUFACTURER FOR KITCHEN EXHAUST HOOD DETAILS.
- G. PROVIDE SIDE PANELS FOR ALL HOOD. CONFIRM SIDE ON DRAWINGS (DOOR SIDE OF HOOD)
- H. HOOD SHALL BE INSTALLED BY DIVISION 23. (HVAC Contractor).

KITCHEN EXHAUST FANS (OWNER FURNISHED EQUIPMENT, CONTRACTOR INSTALLED)															
SYMBOL	QTY	TYPE	MANUFACTURER/ MODEL	EXHAUST AIR (CFM)	ESP (IN W. G.)	FAN RPM	BHP	HP	VOLTAGE/ PH	FLA	MOCP	OVERALL (L X W X H)	WEIGHT (LBS)		
KEF-101 thru KEF-110	10	UPBLAST	ACCUREX / XHUD-140-VG	1800	1.0	1450	0.57	1	120 / 1	13	25	28.9 X 28.9 X 53.8	125		
KEF-111	1	UPBLAST	ACCUREX / XHUD-140-VG	2400	1.0	1674	0.78	1	120 / 1	13	25	28.9 X 28.9 X 53.9	125		

NOTES

- A. EQUIPMENT SHALL BE FURNISHED WITH HOOD PACKAGE BY OWNER, INSTALLED BY DIVISION 23.
- B. PROVIDE STANDARD INSULATED ROOF CURB WITH MINIMUM HEIGHT OF 24 INCHES. PROVIDE SLOPED CURB IF NEEDED TO MATCH ROOF SLOPE.
- C. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
- D. PROVIDE WITH VENTED ROOF CURB EXTENSION FOR 40" MINIMUM DISCHARGE HEIGHT ABOVE ROOF SURFACE OR AT ELEVATION HIGHER THAN ADJACENT BUILDING STRUCTURE WITHIN 10 FEET WHICHEVER IS GREATER, GREASE TRAP WITH ABSORBANT MATERIAL AND DRAIN CONNECTION, HINGE KIT, BIRDSCREEN, ACCESS PORT FOR CLEANING FAN BLADES AND...
- E. PROVIDE WITH MANUFACTURER'S FAN SPEED CONTROLLER FOR BALANCING PURPOSES.
- F. STARTER TO BE FACTORY MOUNTED IN KITCHEN HOOD, LOCATE IN HOOD CONTROL PANEL.
- G. REFER TO ACCUREX DRAWINGS FOR ADDITIONAL INFORMATION.



3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T:248.601.4422 F:248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Permits	33,07.22
CD 50%	32,04.22
Second Investigation	10,08.21
Site Investigation	39,30.21
Revision/Issue	Date



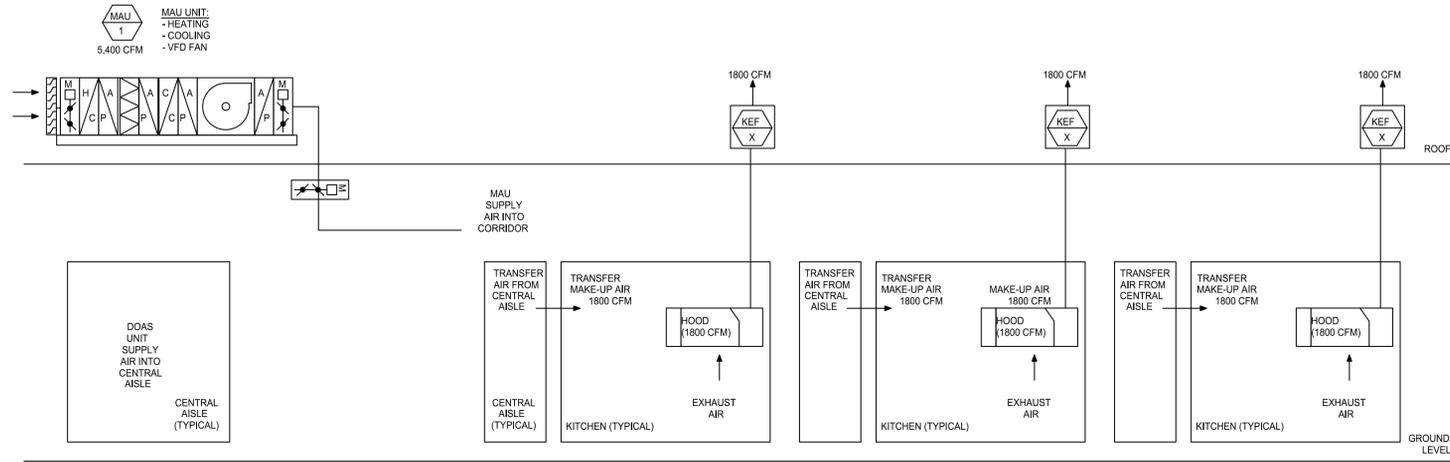
3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

MECHANICAL - SCHEDULES (OWNER FURNISHED EQUIP.)

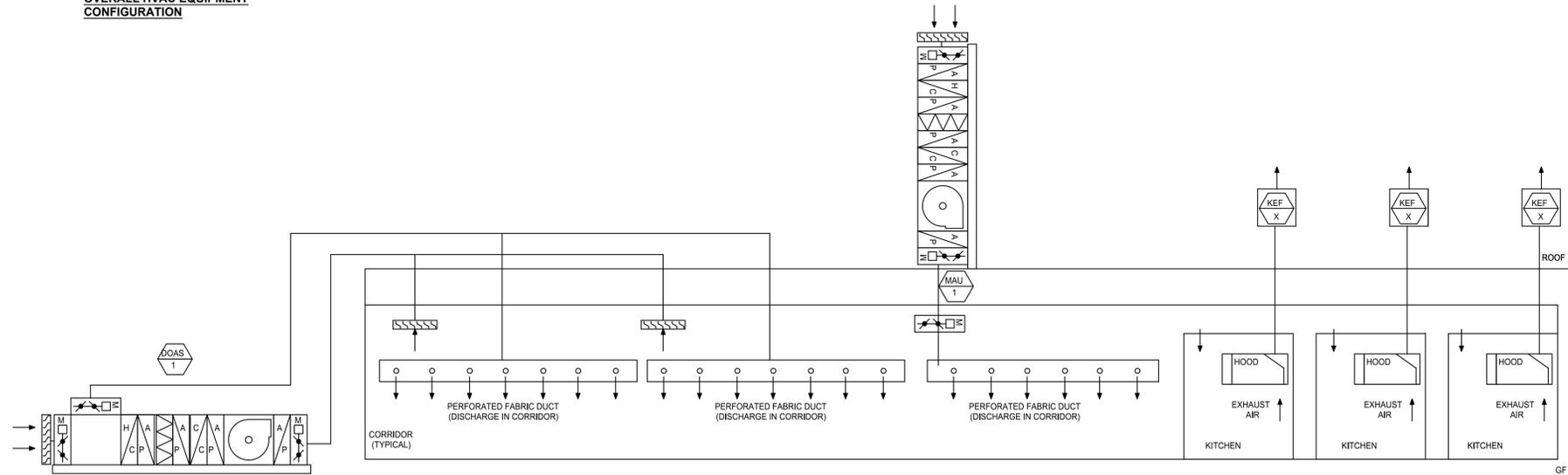
021293

M-600

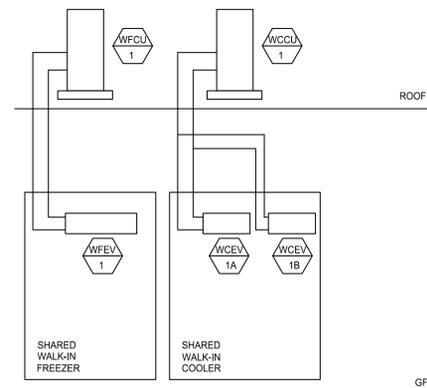
MAU TO KEF (3:1 CONFIGURATION)



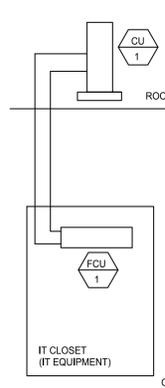
OVERALL HVAC EQUIPMENT CONFIGURATION



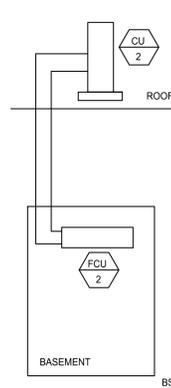
WALK-IN REFRIGERATION EQUIPMENT CONFIGURATION



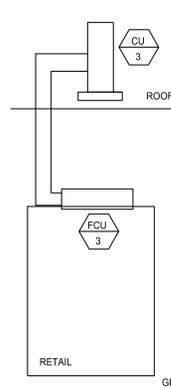
IT CLOSET HVAC EQUIPMENT CONFIGURATION



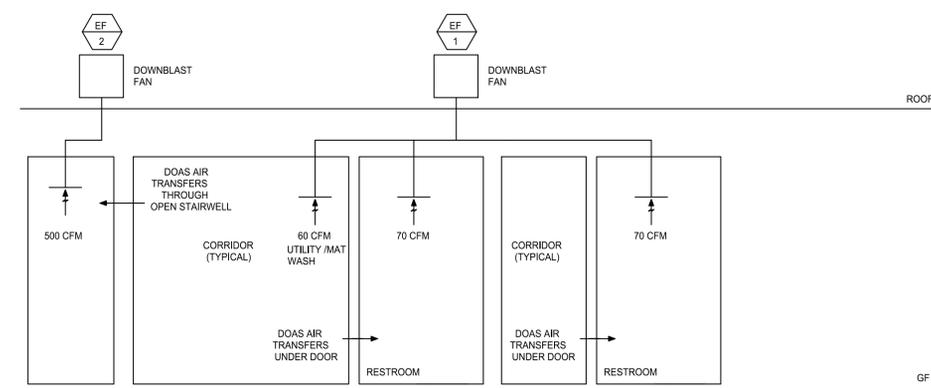
BASEMENT UNIT HVAC EQUIPMENT CONFIGURATION



RETAIL UNIT HVAC EQUIPMENT CONFIGURATION



GENERAL EXHAUST



EST 1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

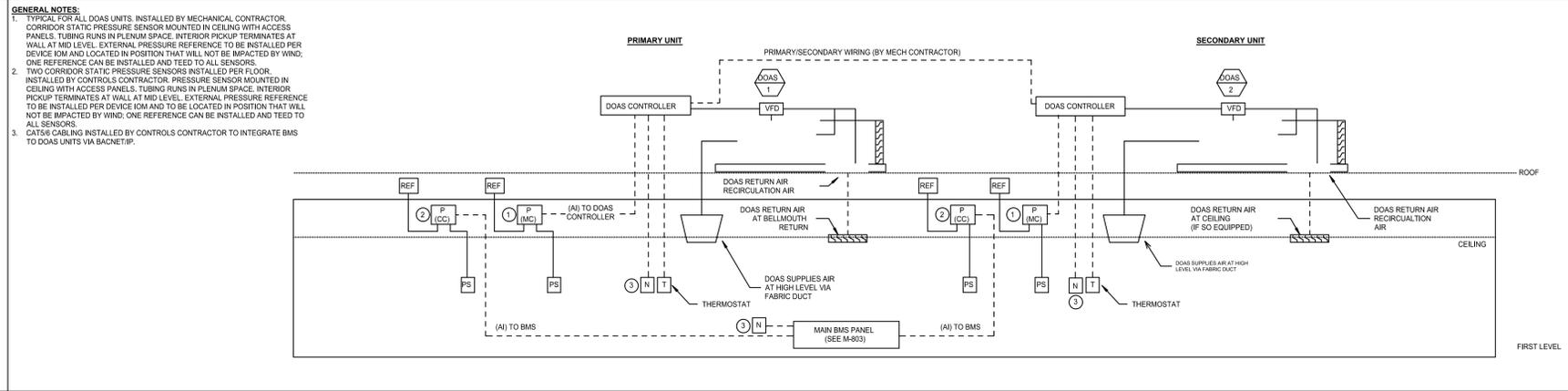
James M. Sayles
JAMES M. SAYLES
ENGINEER
No. 86685
PROFESSIONAL LICENSE

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

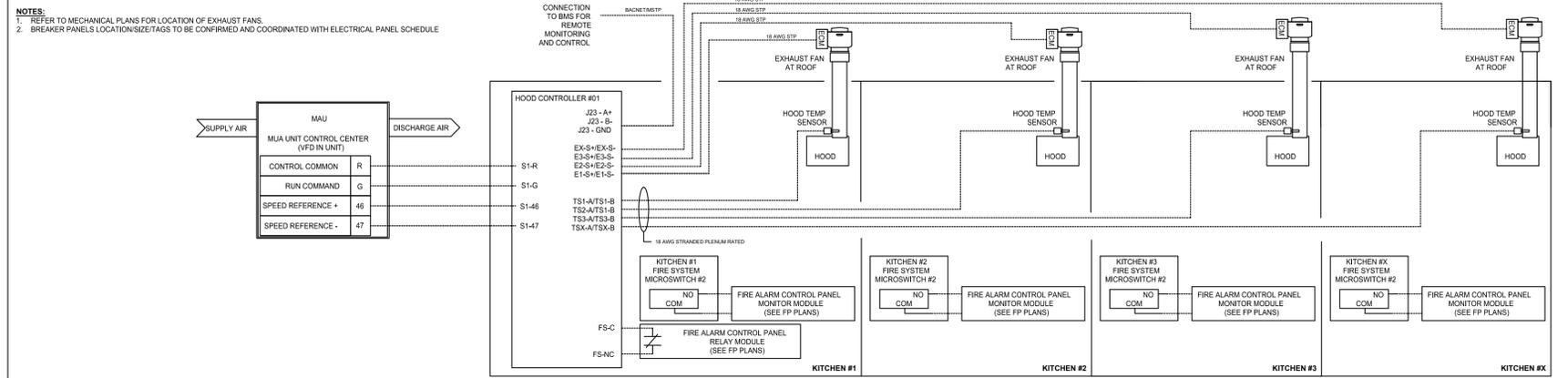
MECHANICAL - RISER DIAGRAMS

021293

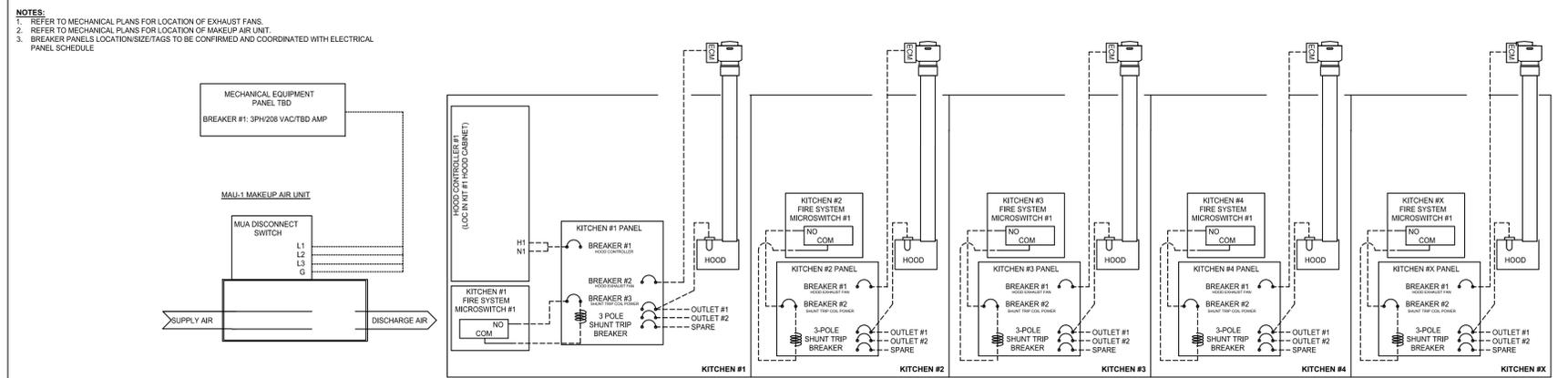
M-700



DOAS CONTROLS WIRING SCHEMATIC DIAGRAM



TYPICAL X KITCHEN HOOD - 1X MAU CONTROLLER - LOW VOLTAGE WIRING SCHEMATIC DIAGRAM



TYPICAL 5X KITCHEN HOOD OR MORE - 1X MAU CONTROLLER - HIGH VOLTAGE WIRING SCHEMATIC DIAGRAM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date



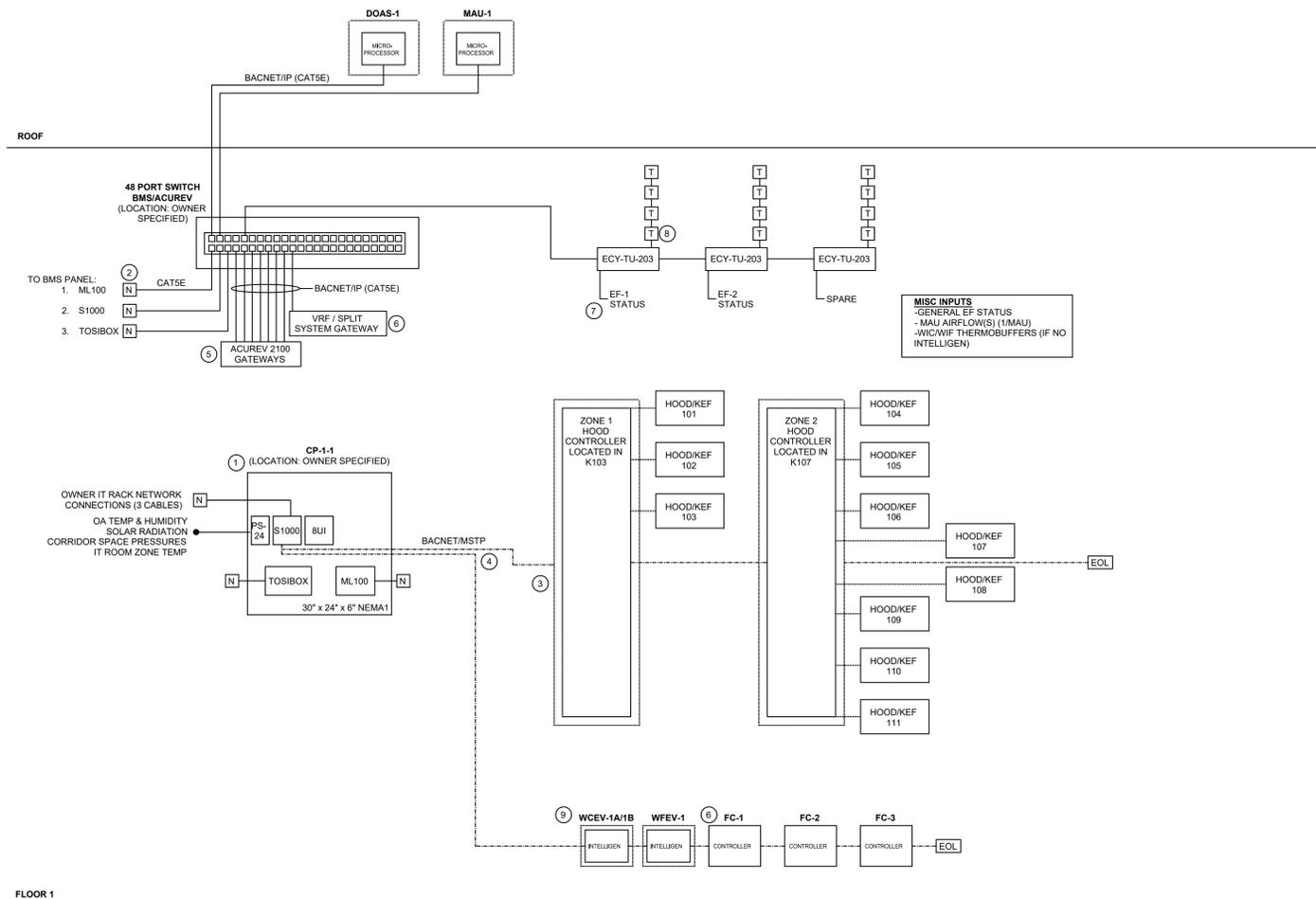
BMS - BACNET/IP DEVICE ADDRESS SCHEDULE - DCV PLENUM DOAS			
NETWORK NUMBER:			
SUBNET MASK:			
DEFAULT GATEWAY:			
#	BACNET/IP DEVICE	MAC ADDRESS	DEVICE ID
1	ECY-S1000		
2	DOAS-1		
3	MAU-1		
4	ECYTU203-1		
5	ECYTU203-2		
6	ACUREV2100 METER-1		
7	ACUREV2100 METER-2		
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

BMS - BACNET/MSTP DEVICE ADDRESS SCHEDULE - DCV PLENUM DOAS				
#	BACNET/MSTP DEVICE	ADDRESS	DEVICE ID	END-OF-LINE
1	ECY-S1000	0		
2	HOOD CONTROLLER-103			
3	HOOD CONTROLLER-107			
4	WCEV-1A1B			
5	WFEV-1			
6	FC-1			
7	FC-2			
8	FC-3			
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

BMS DCV PLENUM DOAS - SUMMARY BILL OF MATERIALS						
DID	DESCRIPTION	MANUFACTURER	PART NUMBER	QTY		
CS-1	CURRENT SWITCH, 0.15-200A, 0.15A FIXED, SPLIT CORE	VERIS	H600	2 EA		
E1-30246	NEMA-1 30X24X6.62 ENCLOSURE W/ 26X22.5 PANEL	HOFFMAN	A30N24ALP / A30N24MP	1 EA		
EC-8U1	ECLYPSE I/O - 8 INPUTS	DISTECH	ECY-8U1	1 EA		
EC-PS24	ECLYPSE 24VAC/DC POWER SUPPLY	DISTECH	ECY-PS24	1 EA		
EC-S1000	ECLYPSE CONNECTED SYSTEM CONTROLLER - 28 I/O, MSTP	DISTECH	ECY-S1000-28-MS	1 EA		
ECY-TU-203	3 UI, 2 DI, 1 SI, 4 DOR, 2 DOT, 2 AO, 2 DUO	DISTECH	ECY-TU-203	3 EA		
P-BSP	STATIC PRESSURE PICKUP, SS PLATE	DWYER	A-417A	2 EA		
P-OAP	OUTSIDE AIR PRESSURE PICKUP PORT	BAPI	ZPS-ACC10	1 EA		
P-VP	PITOT PRESSURE PROBE ASSEMBLY 6 LONG	BAPI	ZPS-ACC12	5 EA		
PNL-BR3	CIRCUIT BREAKER DIN MOUNT 3 AMP	CB1	OZ-1-13-D-2-03	1 EA		
PNL-WD2	WIRE DUCT, 1.5" (WIDTH) X 2.5" (HEIGHT) X 6' (LENGTH)	C3 CONTROLS	WD-840X60N	2 EA		
PNL-ZD3	WIRE DUCT, 12.36" (WIDTH) X 2.36" (HEIGHT) X 6' (LENGTH)	C3 CONTROLS	WD-860X60N	2 EA		
PNL-PRK	PANEL RECEPTACLE ASSEMBLY	KELE	PRK	1 EA		
PTD-A	DP TRANSMITTER, VELOCITY PRESSURE	BAPI	ZPS-20-SR72-EZ-NT-D	5 EA		
PTD-B	DP TRANSMITTER, BLDG STATIC PRESSURE	BAPI	ZPS-20-LR57-EZ-NT-D	2 EA		
R-ECSHM	THERMOSTAT W/ TEMP/HUM/SETPT ADJ/MOTION/OVRD	DISTECH CONTROLS	ALLURE EC-SMART-VUE-HM	11 EA		
R-WALL	WALL PLATE TEMP SENSOR, 10K, STEEL, SINGLE GANG	KELE	KTP24	1 EA		
S-SUP1	EC-NET 4/AX SUPERVISOR WITH 1 NIAGARA CONNECTION	DISTECH	SDTR-SUP-1	1 EA		
S-SUP1SMA	EC-NET 4/AX SUPERVISOR 1 - 18 MONTH SMA	DISTECH	SDTR-SUP-1-SMA-INIT	1 EA		
S-SUPD50	EC-NET 4/AX SUPERVISOR 50 DEVICE PACK	DISTECH	SDTR-SUP-DEVCIE-50	1 EA		
SR-1	PYRANOMETER SOLAR RADIATION SENSOR, 4-20mA	APOGEE INSTRUMENTS	SP-214-SS	1 EA		
SR-2	SOLAR MOUNTING BRACKET W/ LEVELING PLATE	APOGEE INSTRUMENTS	AL-120	1 EA		
TB-T10	SINGLE TERMINAL BLOCK, GRAY	AUTOMATION DIRECT	DN-T10-A	5 EA		
TO-1	OA TEMP/HUMIDITY SENSOR, 4-20mA, W/ SHIELD	DWYER	RHP-2R1B	1 EA		
TX-150	TRANSFORMER 150VA, 120-24VAC	FUNCTIONAL DEVICES	TR150VA001	1 EA		
TX-4	ENCLOSED 100VA 24VAC POWER SUPPLY	FUNCTIONAL DEVICES	PSH100A010	1 EA		
W-ML100	INDUSTRIAL FANLESS WINDOWS PC	ONLOGIC	ML100G-41	1 EA		

BMS DCV PLENUM DOAS & MAU SPECIFIC SEQUENCES OF OPERATIONS:

- DOAS CONTROL:**
- REFER TO DOAS SEQUENCE OF OPERATIONS ON M-800.
- MAKEUP AIR UNIT CONTROL:**
- GENERAL OPERATION:**
 - THE MAKEUP AIR UNIT SHALL BE PROVIDED WITH A BACNET NETWORK INTERFACE CARD CONNECTED TO THE BMS BY THE CONTROLS CONTRACTOR, TO ALLOW THE BMS TO MONITOR THE UNIT OPERATION AND PROVIDE ENABLE/DISABLE CONTROL AND SETPOINT ADJUSTMENT.
 - OCCUPIED GROUP UNIT AND FAN SPEED CONTROL:**
 - STAGE AND ROTATE ALL SUPPLY UNITS FOR EVEN WEAR. ROTATION ORDER SHALL BE SWITCHED WEEKLY AT AN ADJUSTABLE DAY AND TIME.
 - EXAMPLE FOR 5 UNITS: (1,2,3,4,5)→(2,3,4,5,1)→(3,4,5,1,2)→(4,5,1,2,3)→(5,1,2,3,4)
 - A. NUMBER OF OPERATING EXHAUST FANS
 - B. AVERAGE CORRIDOR STATIC PRESSURE
 - C. AVERAGE CORRIDOR STATIC PRESSURE
 - ONCE THE FIRST EXHAUST FAN TURNS ON, THE FIRST MAU SHALL ALSO BE ENABLED. IF ONE (OR MORE) OF THE MAUS HAS A RECIRCULATION DAMPER, THAT SHALL ALWAYS BE THE 'LOW LOAD' UNIT, AS IT BETTER EQUIPPED TO HANDLE THE 50% TURNDOWN LIMITATION.
 - THE OPERATING MAUS WILL MODULATE THEIR SUPPLY FANS TO CONTROL AVERAGE CORRIDOR STATIC PRESSURE TO SETPOINT. THE OPERATING DOAS (OR MAU-DOAS) UNITS WILL MODULATE THE OUTSIDE/RETURN AIR DAMPERS TO CONTROL AVERAGE CORRIDOR STATIC PRESSURE TO SETPOINT.
 - STAGE UP AND STAGE DOWN POINTS SHALL BE DETERMINED DURING TEST AND BALANCE & FUNCTIONAL TESTING BASED ON THE NUMBER OF OPERATING EXHAUST FANS. RAMP UNITS ACCORDINGLY TO PREVENT SUDDEN CHANGES IN CORRIDOR STATIC PRESSURE.
 - UNOCCUPIED MODE (CYCLE ON ROOM TEMP AS MEASURED BY THE AVERAGE BMS SPACE SENSOR VALUE):**
 - THE UNIT WILL CYCLE TO MAINTAIN UNOCCUPIED ROOM SETPOINTS IF THERE IS A CALL FOR UNOCCUPIED HEATING OR COOLING.
 - SUPPLY FAN OFF
 - ON A CALL FOR HEATING (ROOM TEMP SETPOINT - DIFFERENTIAL) SUPPLY FAN CYCLES ON, AND THE HEATING INCREASES THE ROOM TEMPERATURE. UNIT CYCLES OFF WHEN ROOM TEMPERATURE REACHES THE UNOCCUPIED SETPOINT (DEFAULT 65°F)
 - ON A CALL FOR COOLING (ROOM TEMP SETPOINT+ DIFFERENTIAL) SUPPLY FAN CYCLES ON, AND THE COOLING DECREASES THE ROOM TEMPERATURE. UNIT CYCLES OFF WHEN ROOM TEMPERATURE REACHES THE UNOCCUPIED SETPOINT (DEFAULT 65°F)
 - THE AVERAGE BMS SPACE SENSOR VALUE SHALL BE CALCULATED BY AVERAGING THE KITCHEN BMS SPACE TEMPERATURE SENSORS OF THE ZONES ORIGINALLY GROUPED (COUPLED) TO THAT MAU AND MASTER HOOD CONTROLLER.
 - SUPPLY AIR TEMPERATURE (SAT) CONTROL:**
 - THE MAU CONTROLLER SHALL BE CONFIGURED TO CONTROL ITS HEATING AND COOLING STAGES TO MAINTAIN THE SUPPLY AIR TEMPERATURE SETPOINT, WHICH WILL BE WRITTEN TO BY THE BMS VIA BACNET.
 - COOLING: THE COOLING IS CONTROLLED TO MAINTAIN THE SUPPLY TEMPERATURE SET POINT. THE MECHANICAL COOLING WILL BE LOCKED OUT WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW THE COOLING LOCKOUT (FACTORY DEFAULT: 80°F, ADJ.).
 - THE HEATING IS CONTROLLED TO MAINTAIN THE SUPPLY TEMPERATURE SET POINT. THE HEATING WILL BE LOCKED OUT WHEN THE OUTSIDE AIR TEMPERATURE IS ABOVE THE HEATING LOCKOUT (FACTORY DEFAULT: 65°F, ADJ.).
 - THE SUPPLY AIR TEMPERATURE SETPOINT SHALL BE FIXED (FACTORY DEFAULT: 70°F, ADJ.). THIS SETPOINT SHALL BE EASILY EDITABLE FROM THE FRONT END EQUIPMENT GRAPHIC.
 - AIRFLOW MONITORING:**
 - THE MAKEUP AIR UNITS REQUIRE THAT 50% AIRFLOW BE MAINTAINED IN ORDER FOR HEATING AND COOLING TO OPERATE. PER ACCUREX, THE VFD WILL HAVE LOWER FREQUENCY LIMITS SET TO ENSURE THIS AIRFLOW.
 - MAU TOTAL AIRFLOW SHALL BE MONITORED USING THE VELOCITY PRESSURE SENSOR AND CONVERTING TO AIRFLOW CFM.
 - FIRE SHUTDOWN:**
 - MAU SHALL BE INTERLOCKED WITH FIRE ALARM THROUGH THE FIRE ALARM PANEL. PREFERENCE IS FOR ONLY THE NEAREST MAU TO SHUTDOWN IN THE EVENT OF A KITCHEN FIRE EVENT (NOT ALL MAUS), BUT THAT IS SUBJECT TO LOCAL CODES. FIRE SHUTDOWN SHALL NOT INVOLVE THE BMS AT ALL.
 - ALARMS (MAU BACNET):**
 - GLOBAL ALARM (GENERAL); INDICATES 1 OR MORE ALARMS IS PRESENT.
 - SUPPLY AIR PROVING (CRITICAL); INDICATES THAT THE SUPPLY FAN HAS FAILED.
 - DIRTY FILTER (GENERAL); INDICATES THE FILTER PRESSURE DROP IS TOO HIGH AND THAT THE FILTERS SHOULD BE CHANGED OUT.
 - COMPRESSOR TRIP (CRITICAL); INDICATES THAT 1 OR MORE OF THE COMPRESSORS HAS TRIPPED, WHICH WILL DECREASE OR ELIMINATE THE UNIT'S ABILITY TO COOL THE AIR.
 - SUPPLY AIR LOW LIMIT (CRITICAL); IF THE SUPPLY AIR TEMPERATURE DROPS BELOW THE SUPPLY AIR LOW LIMIT (DEFAULT=35°F), THE MICROPROCESSOR CONTROLLER WILL DE-ENERGIZE THE UNIT AND ACTIVATE THE ALARM OUTPUT AFTER A PRESET TIME DELAY (DEFAULT=5 MIN).
 - OUTSIDE AIR TEMPERATURE SENSOR OUT OF RANGE (GENERAL); THE OAT SENSOR HAS FAILED.
 - SUPPLY AIR TEMPERATURE SENSOR OUT OF RANGE (CRITICAL); THE SAT SENSOR HAS FAILED. THE MICROPROCESSOR CONTROLLER WILL SHUT DOWN THE UNIT.



- GENERAL NOTES:**
- 120VAC POWER TO CONTROL PANELS TO BE PROVIDED BY ELECTRICAL CONTRACTOR. TOSIBOX LOCK 150 PROVIDED BY OWNER.
 - 48-PORT SWITCH, ETHERNET CABLING AND CONNECTION TO OWNER NETWORK TO BE PROVIDED BY LOW VOLTAGE/NETWORKING CONTRACTOR.
 - KITCHEN HOODS AND EXHAUST FANS TO BE CONTROLLED BY THE MAIN KITCHEN HOOD CONTROLLER. FIELD INTERLOCK WIRING REQUIRED. REFER TO M-801 FOR MORE DETAILED WIRING SCHEMATICS AND METANOTE REGARDING MAU DECOUPLING.
 - BACNET/MSTP DEVICE WIRING ORDER TO BE OPTIMIZED IN THE FIELD AND AS-BUILT. ALL DEVICES SHALL RESIDE ON 1 CONTINUOUS DAISSY CHAIN.
 - ACUREV SUBMETERS TO BE INSTALLED BY ELECTRICAL CONTRACTOR. CONTROLS CONTRACTOR TO PROVIDE BMS PROGRAMMING FOR MONITORING ONLY INTERFACE. REFER TO E-701 "ELECTRICAL SUBMETER".
 - INTEGRATION TYPE DEPENDENT UPON QUANTITY AND MANUFACTURER OF VRF/FCU EQUIPMENT. FOR PREFERRED LG EQUIPMENT, INTEGRATE VIA BACNET/MSTP TO ZONE CRC CONTROLLERS FOR 10 OR FEWER FCU, FOR 11 OR MORE FCU, INTEGRATE VIA BACNET/IT TO AC SMART 5. USE SIMILAR LOGIC FOR OTHER MANUFACTURERS TO PROVIDE MOST COST EFFECTIVE INTEGRATION.
 - MISC INPUTS WIRED TO NEAREST ECY-TU-203 CONTROLLER.
 - MAXIMUM OF 12 THERMOSTATS ON ECY-S1000 SUBNET, AND 4 ON ECY-TU-203 SUBNET.
 - ONE (1) IIC INTELIGEN INTEGRATION CARD/PER SYSTEM, INSTALLED ON THE EVAPORATOR CONTROL BOARD (IIC; INTELIGEN REFRIGERATION CONTROLLER). IF THERE ARE MULTIPLE EVAPORATORS IN A SYSTEM, THE IIC CAN BE INSTALLED ON ANY OF THE EVAPORATORS. THAT EVAPORATOR IS THEN THE MASTER, WITH ALL OTHERS BEING THE SLAVES. # OF CONDENSING UNITS = # OF SYSTEMS = # OF IIC.

DESIGNHAUS ARCHITECTURE

EST 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

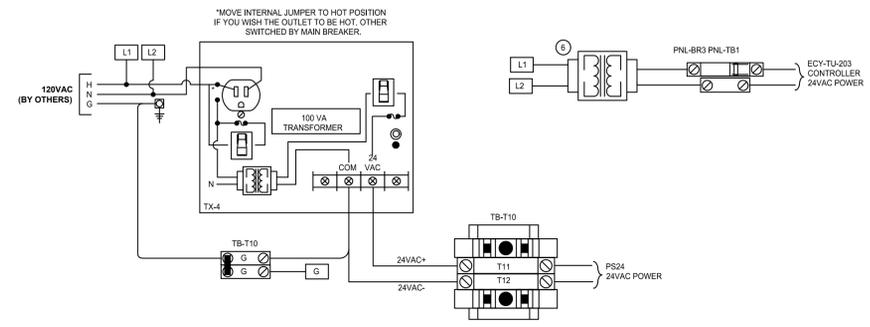
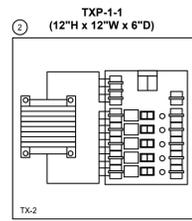
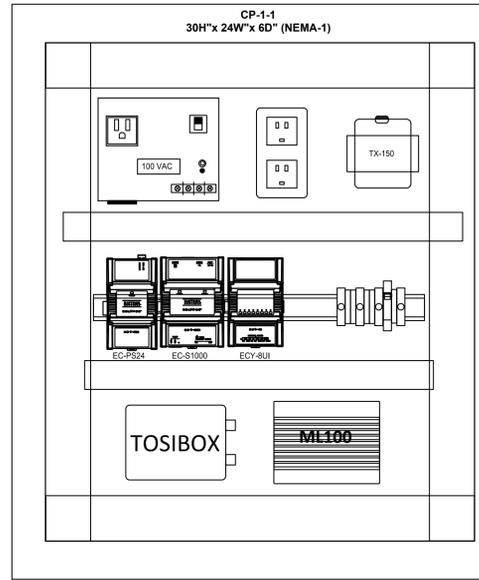
3181 3RD AVE. - DETROIT

3181 3rd Ave,
Detroit, MI 48201

BMS DCV DAMPER NETWORK RISER DIAGRAM

021293

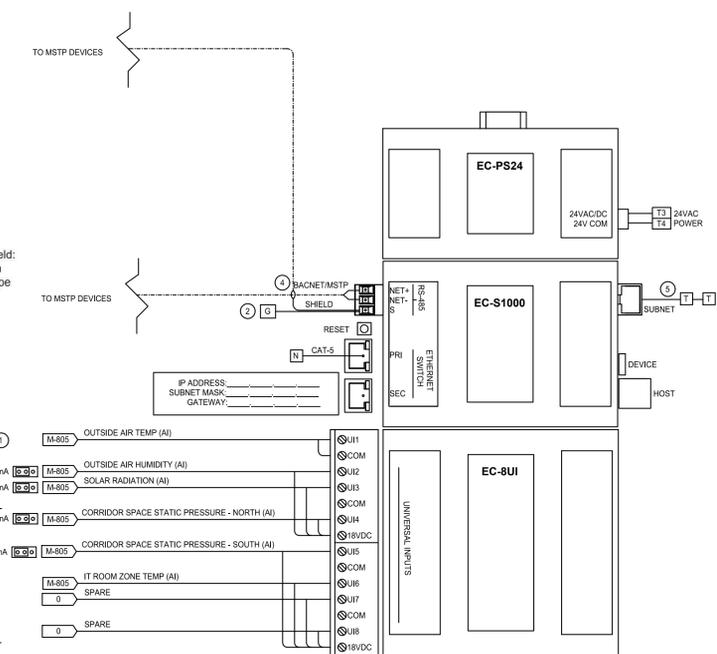
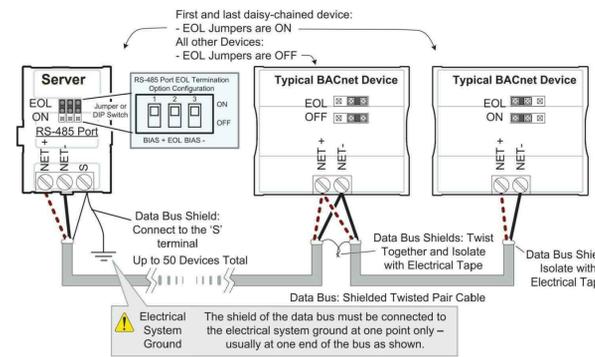
M-802A



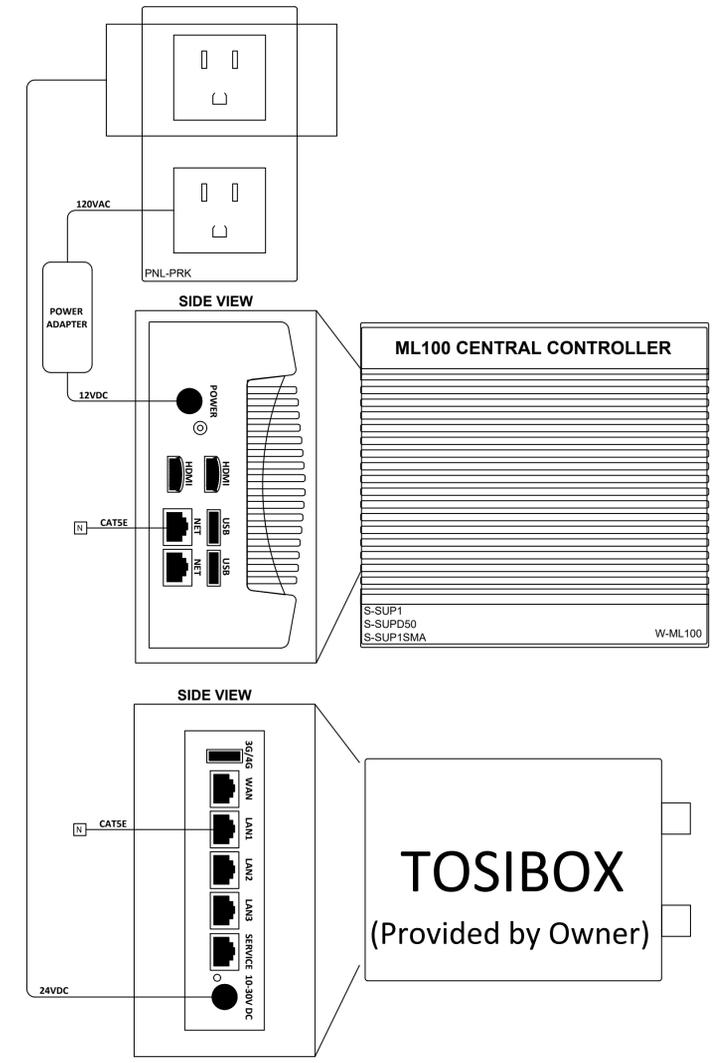
POWER CHECK TX-100				
DEVICES	VA	QTY	TOTAL	NOTES
PS24	60	1	60	
ALLURE THERMOSTATS	1	12	60	
TOTAL USED VA			72	
TOTAL SPARE VA			28	

POWER CHECK TX-150				
DEVICES	VA	QTY	TOTAL	NOTES
ECY-TU-203	10	5	50	
ALLURE THERMOSTATS	1	20	20	
TOTAL USED VA			70	
TOTAL SPARE VA			80	

BMS PANEL LAYOUT DETAIL



- T = THERMOSTAT
- N = ETHERNET NETWORK
- EOL = 120 OHM END-OF-LINE RESISTOR (IF NECESSARY)
- [] = FACTORY INSTALLED



- GENERAL NOTES:**
- LOOP POWERED DEVICES. SUPPLY POWER FROM CONTROLLER 18VDC. USE WIRE NUTS, IF NECESSARY. MOVE INTERNAL JUMPER TO mA.
 - GROUND THE SHIELD WIRE OF THE BACNET/MSTP TRUNK AND FOLLOW ALL OTHER WIRING SPECIFICATIONS, AS SHOWN IN THE FIGURE BELOW.
 - KITCHEN HOODS AND EXHAUST FANS TO BE CONTROLLED BY THE MAIN KITCHEN HOOD CONTROLLER. FIELD INTERLOCK WIRING REQUIRED.
 - BACNET/MSTP DEVICE WIRING ORDER TO BE OPTIMIZED IN THE FIELD AND AS-BUILT. ALL DEVICES SHALL RESIDE ON 1 CONTINUOUS DAISSY CHAIN.
 - MAXIMUM OF 12 THERMOSTATS ON ECY-S1000 SUBNET, AND 4 ON ECY-TU-203 SUBNET.
 - ADDITIONAL TRANSFORMER, CIRCUIT BREAKER AND TERMINAL BLOCK ONLY REQUIRED IN DCV PLENUM AND BASE DESIGNS TO POWER ECY-TU-203 CONTROLLERS.

DESIGNHAUS ARCHITECTURE
 EST 1998
 3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

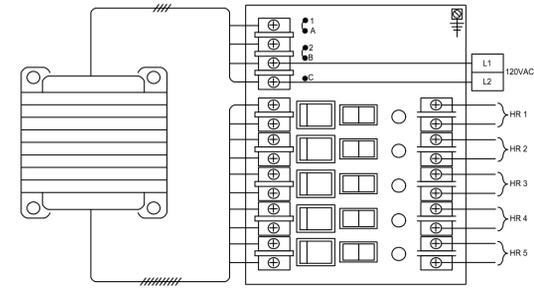
Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

DOUGLAS M. SAYLES
 ENGINEER
 No. 86685

BMS MAIN CONTROL PANEL DETAIL
 3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

BMS MAIN CONTROL PANEL DETAIL

021293
M-803

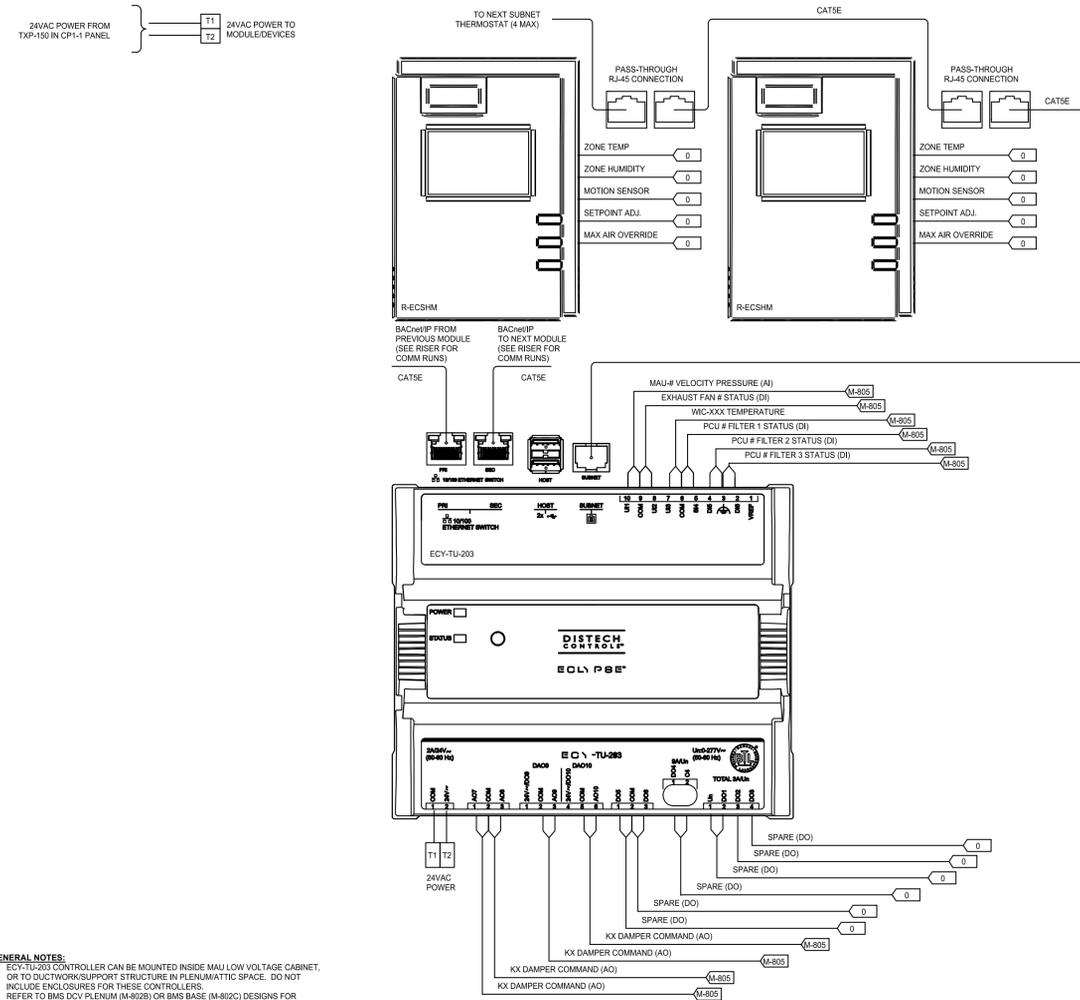


GENERAL NOTE:
 1. EACH PSHR ENCLOSURE HOUSES 500VA TRANSFORMER WITH PRE-PACKAGED 5 ISOLATED 100VA RUNS (SUGGESTED MAX OF 4 ECV-WAV PER RUN TO ACCOMMODATE FUTURE ADDITIONS).

TXP TRANSFORMER / CONTROLLER POWER LAYOUT

BMS - 1ST FLOOR POWER RUNS				
TXP-1-1				
HR 1				
HR 2				
HR 3				
HR 4				
HR 5				
TXP-1-2				
HR 1				
HR 2				
HR 3				
HR 4				
HR 5				

1ST FLOOR POWER RUNS



GENERAL NOTES:
 1. ECV-TU203 CONTROLLER CAN BE MOUNTED INSIDE MAU LOW VOLTAGE CABINET, OR TO DUCTWORK/SUPPORT STRUCTURE IN PLENUM/ATTIC SPACE. DO NOT INCLUDE ENCLOSURES FOR THESE CONTROLLERS.
 2. REFER TO BMS DCV PLENUM (M-802B) OR BMS BASE (M-802C) DESIGNS FOR INCORPORATION INTO BMS.

KITCHEN THERMOSTAT GATEWAY/CONTROLLER DETAIL

DESIGNHAUS ARCHITECTURE
 EST. 1998

3300 AUBURN RD., SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

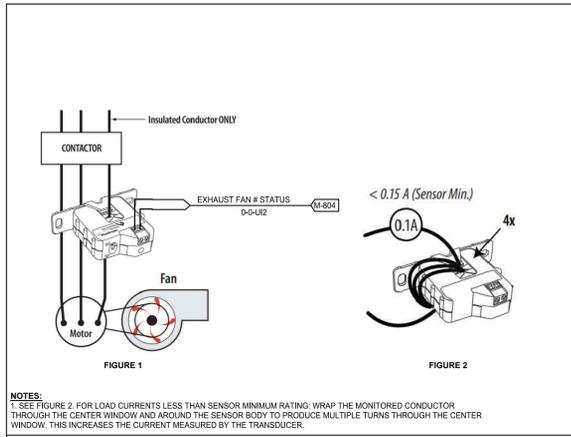


3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

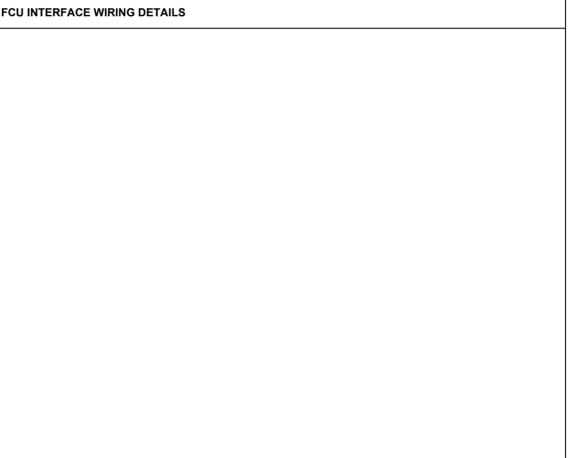
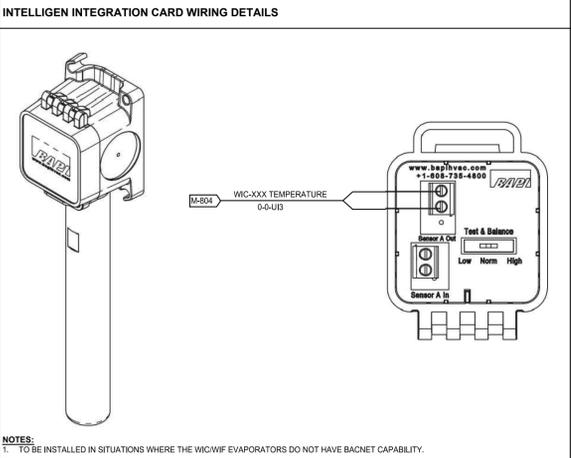
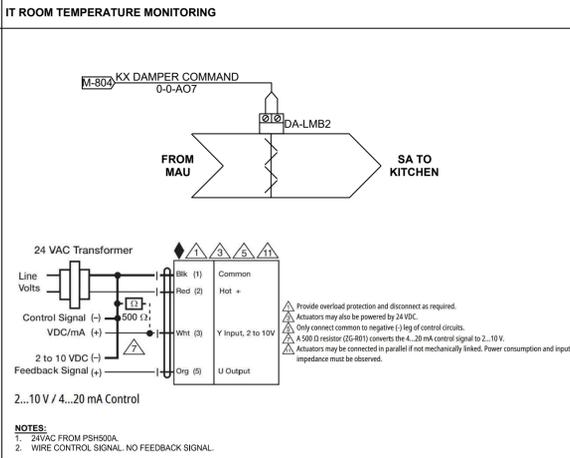
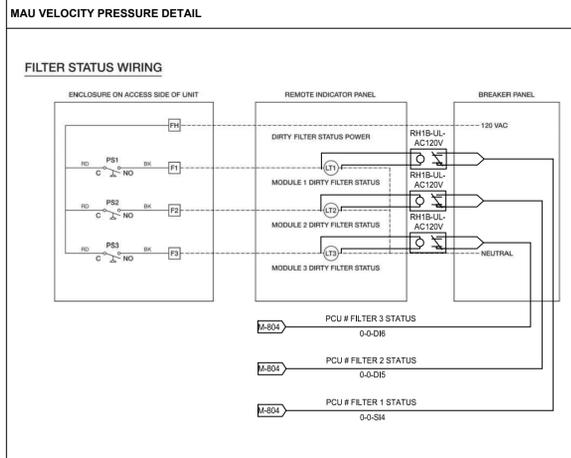
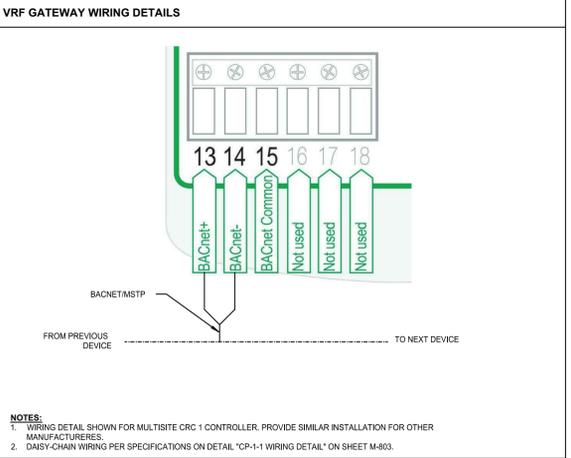
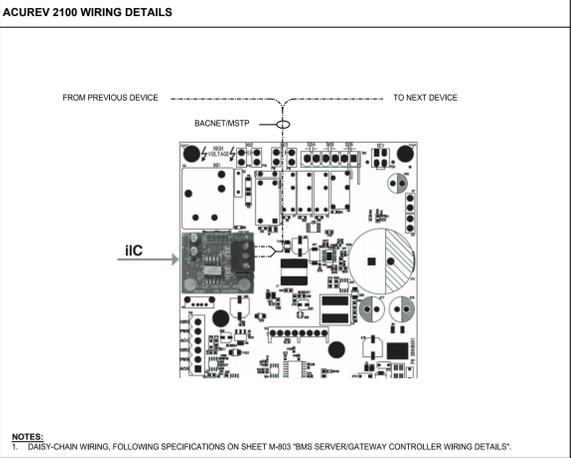
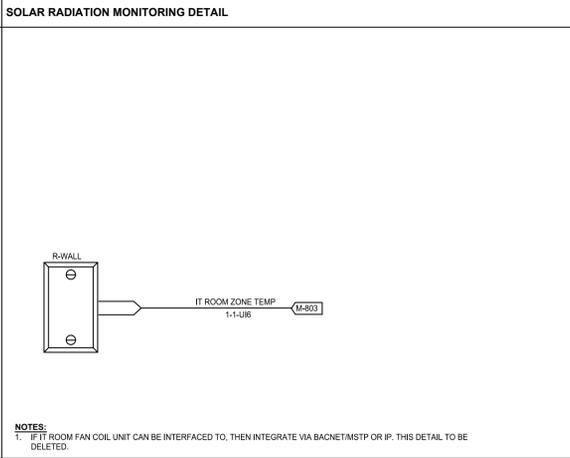
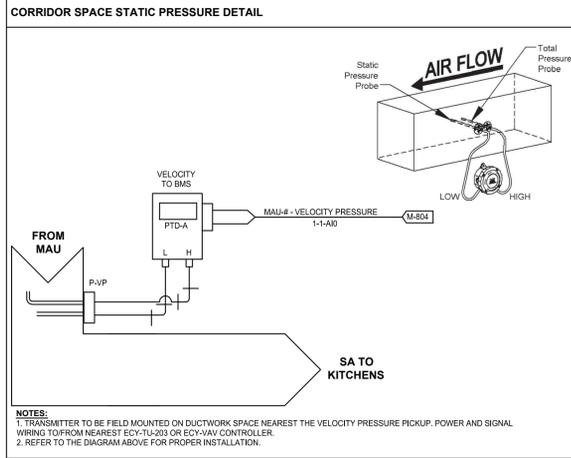
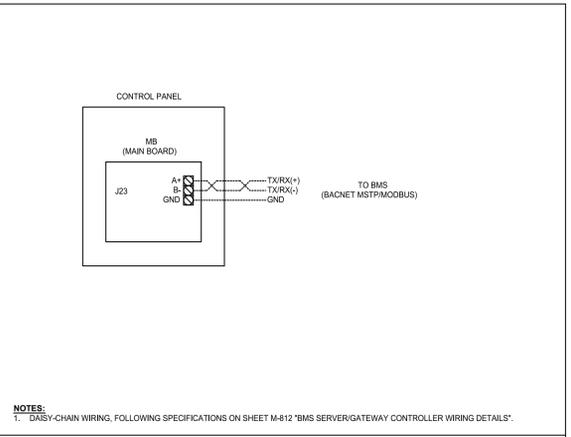
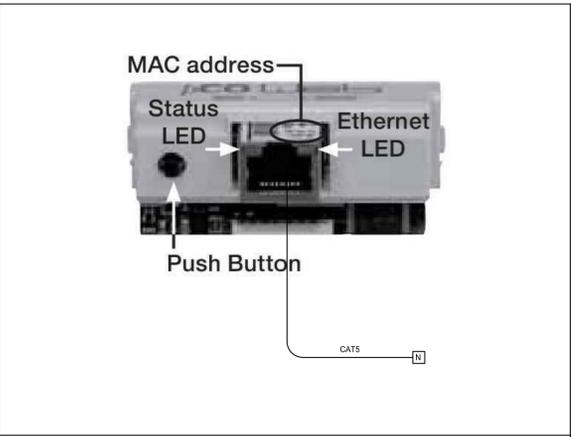
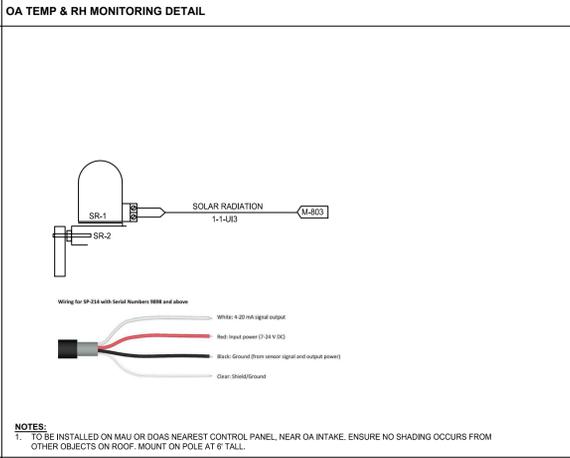
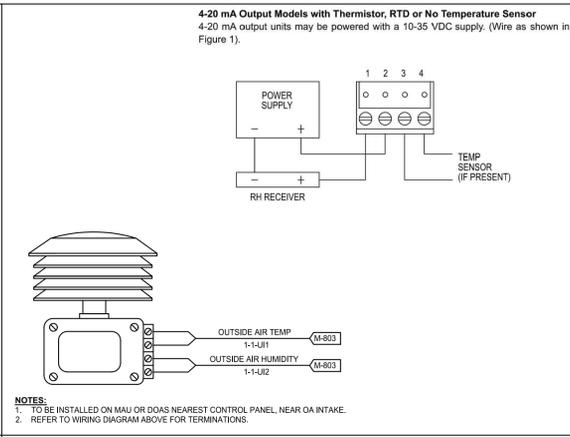
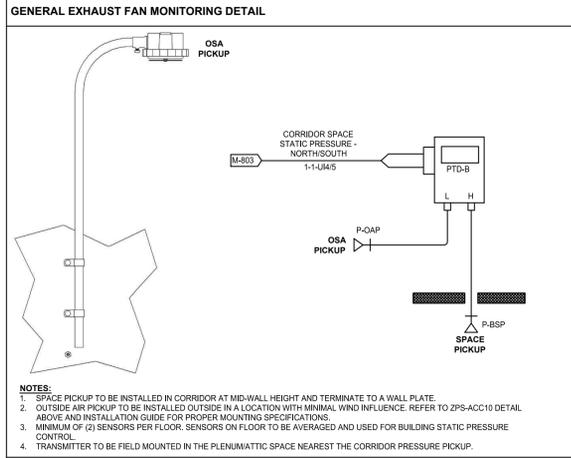
BMS FIELD CONTROLLER

021293

M-804



NOTES:
1. SEE FIGURE 2. FOR LOAD CURRENTS LESS THAN SENSOR MINIMUM RATING, WRAP THE MONITORED CONDUCTOR THROUGH THE CENTER WINDOW AND AROUND THE SENSOR BODY TO PRODUCE MULTIPLE TURNS THROUGH THE CENTER WINDOW. THIS INCREASES THE CURRENT MEASURED BY THE TRANSDUCER.



EST 1998

DESIGNHAUS

ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.22
Site Investigation	39.30.22
Revision/Issue	Date

Professional Engineer Seal: Joseph M. Saylor, No. 86865

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

BMS FIELD DEVICES & 3RD PARTY CONTROLLERS

021293

M-805

PLUMBING PIPING SYMBOLS		
SINGLE LINE SYMBOL	ABBR.	DESCRIPTION
-----DCW-----	DCW	DOMESTIC COLD WATER PIPING ABV SLAB/GRADE
-----DCW-----	DCW	DOMESTIC COLD WATER PIPING BEL SLAB/GRADE
-----DHW-----	DHW	DOMESTIC HOT WATER PIPING
-----DHW-----	DHW	DOMESTIC HOT WATER RETURN PIPING
-----TP-----	TP	TRAP PRIMER PIPING ABV SLAB/GRADE
-----TP-----	TP	TRAP PRIMER PIPING BEL SLAB/GRADE
-----ICW-----	ICW	INDUSTRIAL COLD WATER PIPING ABV SLAB/GRADE
-----SS-----	SS	SANITARY SOIL OR WASTE PIPING ABV SLAB/GRADE
-----SS-----	SS	SANITARY SOIL OR WASTE PIPING BEL SLAB/GRADE
-----V-----	V	SANITARY VENT PIPING
-----GW-----	GW	GREASE WASTE PIPING ABV SLAB/GRADE
-----GW-----	GW	GREASE WASTE PIPING BEL SLAB/GRADE
-----GV-----	GV	GREASE VENT PIPING
-----IW-----	IW	INDIRECT WASTE PIPING
-----C-----	C	CONDENSATE PIPING
-----OC-----	OC	OVERFLOW CONDENSATE PIPING
-----CC-----	CC	CONDENSING EQUIPMENT CONDENSATE PIPING
-----NG-----	NG	STD DELIVERY PRESSURE 8" WC NATURAL GAS PIPING ABV SLAB/GRADE
-----NG-----	NG	STD DELIVERY PRESSURE 8" WC NATURAL GAS PIPING BEL SLAB/GRADE
-----MG-----	MG	MEDIUM PRESSURE 5 PSI NATURAL GAS PIPING ABV SLAB/GRADE
-----MG-----	MG	MEDIUM PRESSURE 5 PSI NATURAL GAS PIPING BEL SLAB/GRADE
-----SD-----	SD	STORM DRAIN PIPING ABV SLAB/GRADE
-----SD-----	SD	STORM DRAIN PIPING BEL SLAB/GRADE
-----OFD-----	OFD	OVERFLOW DRAIN PIPING
-----F-----	F	FIRE PROTECTION PIPING ABV SLAB/GRADE
-----F-----	F	FIRE PROTECTION PIPING BEL SLAB/GRADE
-----SPR-----	SPR	AUTOMATIC FIRE SPRINKLER PIPING
		ELBOW
		PIPE RISER UP (ELBOW)
		PIPE RISER DOWN (ELBOW)
		TEE
		PIPE RISER UP (TEE)
		PIPE RISER DOWN (TEE)
		BRANCH LINE CONNECTION (TOP)
		BRANCH LINE CONNECTION (BOTTOM)
		SHUTOFF VALVE OR SHUTOFF COCK
		REDUCER
		WYE

ABBREVIATIONS	
&	AND
@	AT
ABV	ACCESS PANEL
ARCH	ARCHITECTURAL
A/C	AIR CONDITIONING
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AP	ACCESS PANEL
APPROX	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BEL	BELOW
BFF	BELOW FINISH FLOOR
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BOD	BASIS OF DESIGN
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONSTRUCTION DOCUMENTS
CFM	CUBIC FEET PER MINUTE
CFH	CUBIC FEET PER HOUR
CLG	CEILING
CO	CLEANOUT
CONT	CONTINUATION
CONTR	CONTRACTOR
CU FT	CUBIC FEET
DFU	DRAINAGE FIXTURE UNIT
DEMO	DEMOLISH / DEMOLITION
DET	DETAIL
DEPT	DEPARTMENT
DIA	DIAMETER
DISCH	DISCHARGE
DN	DOWN
DWG	DRAWING
(E)	EXISTING TO REMAIN
E	EAST
EL	ELEVATION
ELEC	ELECTRICAL
ENGR	ENGINEER
(F)	FUTURE
°F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FF	FINISH FLOOR
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FM	FACTORY MUTUAL
FPS	FEET PER SECOND
FT	FOOT / FEET
GAL	GALLON / GALLONS
GCO	GRADE CLEANOUT
GPF	GALLONS PER FLUSH
GPH	GALLONS PER HOUR
GPM	GALLON PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HZ	HERTZ
IE	INVERT ELEVATION
ID	INSIDE DIAMETER
IN	INCH
INT	INTEGRAL
LBS	POUND / POUNDS
MAX	MAXIMUM
MBTUH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
N	NORTH
NC	NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN / NUMBER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PG	PRESSURE GAUGE
PH	PHASE
PLBG	PLUMBING
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
RPM	REVOLUTIONS PER MINUTE
S	SOUTH
SAN	SANITARY
SO FT	SQUARE FEET
SS	SANITARY SEWER
STD	STANDARD
STRUC	STRUCTURAL
TDH	TOTAL DYNAMIC HEAD
THRU	THROUGH
TYP	TYPICAL

ABBREVIATIONS	
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VAC	VOLTS AC
VB	VACUUM BREAKER
VTR	SANITARY VENT THRU ROOF
W	WEST
W	WITH
W/O	WITHOUT
WC	WATER COLUMN
WCO	WALL CLEANOUT
WT	WEIGHT
WSFU	WATER SUPPLY FIXTURE UNIT
YB	YARD BOX

GENERAL NOTES	
1.	PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, PER MANUFACTURER'S RECOMMENDATIONS, AND IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND PERMITS.
2.	PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS FOR ALL OWNER FURNISHED CONTRACTOR INSTALLED (CFOI) EQUIPMENT AS INDICATED ON THE DRAWINGS, AS SPECIFIED, PER MANUFACTURER'S RECOMMENDATIONS, AND IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND PERMITS. PROVIDE ALL TRAPS, SUPPLIES, SHUTOFF VALVES, ESCUTCHEONS AND OTHER APPURTENANCES AND COMPONENTS AS REQUIRED.
3.	WHERE THERE IS A CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
4.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF ALL NEW CONSTRUCTION ON THE SITE.
5.	VERIFY ALL SITE CONDITIONS AND DIMENSIONS, AND EXACT LOCATIONS AND ELEVATIONS OF PIPING BEFORE STARTING WORK. SHOULD A DISCREPANCY APPEAR IN THE CONTRACT DOCUMENTS, OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS, NOTIFY THE OWNER'S REPRESENTATIVE AT ONCE FOR INSTRUCTION ON HOW TO PROCEED.
6.	PRIOR TO INSTALLATION OF ANY UPSTREAM PIPING, CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING UNDERGROUND SANITARY SEWER AND/OR STORM DRAIN PIPING (AS APPLICABLE TO WHICH NEW DRAINAGE LINES ARE TO BE CONNECTED IN ORDER TO ENSURE SUFFICIENT DEPTH TO ACCOMMODATE PIPE SLOPING REQUIREMENTS AND DRAINAGE INVERT ELEVATION DEPTHS OF ALL UPPER TERMINAL FIXTURES AND EQUIPMENT.
7.	ALL EXCAVATION AND TRENCHING SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
8.	ALL PIPING SHALL BE KEPT CLEARED FROM LOAD BEARING FOOTINGS. SEE STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9.	REMOVE ALL EXISTING EXPOSED NON-FUNCTIONAL PIPING OR PIPING RENDERED DEFUNCT AS PART OF THIS PROJECT AND CONDUCT PATCH OR BE TO BE PATCHED AS SPECIFIED. PATCH, REPAIR, RESURFACE AND REPAINT ALL AFFECTED SURFACES AS NECESSARY TO MATCH ADJACENT SURFACES. EXISTING CONCEALED FUNCTIONAL PIPING WHICH IS EXPOSED BY THE REMOVAL OF EXISTING WALLS, FLOORS, ROOF, OR PARTITIONS SHALL BE REMOVED AS NECESSARY. REMAINING SECTIONS OF PIPING SHALL BE INTERCEPTED, REROUTED, AND RECONNECTED TO THE CORRESPONDING EXISTING PIPING IN A LOCATION WHICH DOES NOT CONFLICT WITH THE NEW BUILDING LAYOUT AS NECESSARY TO MAKE THE SYSTEM FULLY FUNCTIONAL.
10.	SEWER, WATER, AND STORM DRAIN SYSTEMS INDICATED IN THESE DRAWINGS SHALL EXTEND TO PLUMBING CONNECTIONS AND BE LOCATED OUTSIDE OF THE BUILDING UNLESS OTHERWISE INDICATED. CONTINUATION OF SUCH PIPING SYSTEMS ARE INDICATED ON THE CIVIL DRAWINGS WITH CORRESPONDING ASSOCIATED MATERIALS SPECIFIED UNDER A SEPARATE SECTION OF THE PROJECT SPECIFICATIONS. ALL SUCH PIPING SHALL BE INSTALLED IN A MANNER TO PROVIDE PROPER CONNECTION TO INVERT ELEVATIONS INDICATED ON CIVIL DRAWINGS. WHERE CONFLICT BETWEEN PLUMBING AND CIVIL DRAWINGS, CONTRACTOR SHALL PROVIDE TRANSITION FITTINGS AS NECESSARY TO ALLOW FOR PROPER CONNECTION.
11.	NATURAL GAS PIPING SYSTEMS INDICATED IN THESE DRAWINGS INCLUDE ALL BUILDING AND SITE GAS PIPING EXTENDING AND CONNECT TO THE CURB OF THE GAS METER.
12.	CONTRACTOR SHALL INITIATE CONTACT WITH THE SERVING GAS UTILITY COMPANY AND MAKE ARRANGEMENTS FOR THE INSTALLATION OF NEW GAS SERVICE AND GAS METER OF THE CAPACITY AND LOCATION INDICATED ON THE DRAWINGS. OPERATE ALL ITEMS SERVED WITH GAS AT FULL FIRE AND MAKE REQUIRED ADJUSTMENTS AS NECESSARY FOR PROPER CALIBRATION OF GAS METER PRESSURE REGULATORS IN COOPERATION WITH GAS UTILITY AND IN ACCORDANCE WITH GAS UTILITY START UP REQUIREMENTS. ALL REQUIRED GAS UTILITY FEES SHALL BE PAID BY OWNER.
13.	NATURAL GAS PIPE SIZING CALCULATIONS ARE BASED ON A CALORIC CONTENT OF 1,000 BTUS PER CUBIC FOOT.
14.	REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS, ROUGH IN DIMENSIONS, AND MOUNTING HEIGHTS OF ALL EXPOSED ELEMENTS. SUCH ITEMS INCLUDE, BUT ARE NOT LIMITED TO PLUMBING FIXTURES, EQUIPMENT AND ACCESS PANELS. WHERE DIMENSIONS ARE NOT INDICATED, SEEK ARCHITECT'S DIRECTION AND/OR APPROVAL PRIOR TO INSTALLATION.
15.	THE INSTALLATION OF ALL VALVES, UNIONS, THERMOSTATS, GAUGES, SENSORS, METERS, OR OTHER INDICATING OR RECORDING EQUIPMENT OR SPECS SHALL BE KEPT IN FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION, OR REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
16.	PROVIDE ACCESS PANELS IN WALLS AND HARD SUSPENDED CEILINGS WHERE REQUIRED TO SERVICE TRAPS, CLEANOUTS, VALVES, TRAP PRIMERS, AND OTHER CONCEALED PLUMBING APPURTENANCES. WHERE POSSIBLE, LOCATE SUCH ACCESS PANELS IN THE SAME AREA AS ONE ITEM WHEN LOCATED DIRECTLY ADJACENT IN SAME IMMEDIATE VICINITY. REFER TO SPECIFICATIONS FOR ACCESS PANEL REQUIREMENTS.
17.	WATER HAMMER ARRESTOR SIZES SHALL CORRESPOND TO PLUMBING & DRAINAGE INSTITUTE (PDI) WATER HAMMER ARRESTORS STANDARD WITH 2019 CURRENT EDITION SIZING RECOMMENDATIONS. PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK CLOSING VALVES.
18.	HOSE BIBBS SHALL BE EQUIPPED WITH AN APPROVED NON REMOVABLE VACUUM BREAKER.
19.	ACCESS PANELS, DRAIN GRATES, CLEANOUT COVERS, AND OTHER FINISH EXPOSED COMPONENTS SHALL BE PROTECTED FROM DAMAGE. DAMAGED COMPONENTS SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
20.	CLEANOUTS LOCATED WITHIN THE BUILDING SHALL BE WALL CLEANOUTS RATHER THAN FLOOR CLEANOUTS UNLESS OTHERWISE INDICATED. SHALL BE READILY ACCESSIBLE AND SHALL BE CAREFULLY COORDINATED WITH CASEWORK, EQUIPMENT, AND OTHER ITEMS TO AVOID CONFLICT AND MAINTAIN SERVICE CLEARANCE. NOT ALL REQUIRED CLEANOUTS ARE INDICATED ON PLANS. CLEANOUTS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
21.	COORDINATE CONSTRUCTION OF ALL PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL AND OTHER DISCIPLINES' WORK SHOWN ON OTHER CONTRACT DOCUMENTS.
22.	DRAWINGS ARE DIAGRAMATIC AND MAY NOT INDICATE ALL REQUIRED OFFSETS, TRANSITIONS AND FITTINGS. PROVIDE ADDITIONAL OFFSETS, TRANSITIONS AND FITTINGS AS REQUIRED IN COORDINATION WITH OTHER TRADES.
23.	CAREFULLY COORDINATE ALL WORK WITH THE WORK OF OTHER CONTRACTORS AND TRADES PRIOR TO ORDERING OF MATERIALS AND/OR INSTALLATION. IF IN THE PROCESS OF INSTALLING NEW WORK, CONFLICTS WITH EXISTING CONDITIONS OR OTHER TRADES ARISE, NOTIFY THE OWNER'S REPRESENTATIVE AT ONCE FOR INSTRUCTION ON HOW TO PROCEED.
24.	LOCATIONS SHOWN FOR POINTS OF CONNECTION TO MECHANICAL UNITS AND EQUIPMENT INSTALLED BY OTHER TRADES ARE APPROXIMATE. USING MANUFACTURER'S CERTIFIED DRAWINGS, VERIFY WITH THE INSTALLING CONTRACTOR EXACT PLUMBING REQUIREMENTS, ROUGH-IN LOCATIONS AND CONNECTION POINTS OF ALL EQUIPMENT REQUIRING PLUMBING CONNECTIONS. WHERE PLANS INDICATE ASSOCIATED PLUMBING SERVICE PIPING PENETRATING THROUGH ADJACENT ROOF OR STRUCTURE, MAKE ADJUSTMENT TO PENETRATION LOCATIONS AS NECESSARY TO LIMIT EXPOSED HORIZONTAL PIPING DISTANCE TO MAXIMUM 3'-0" BETWEEN THE PENETRATION LOCATION AND POINT OF CONNECTION TO THE EQUIPMENT.
25.	CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED AT ALL OCCURRENCES OF FLOOR MOUNTED EQUIPMENT, INCLUDING BUT NOT LIMITED TO WATER HEATERS AND STORAGE TANKS. CONCRETE HOUSEKEEPING PADS SHALL BE SIZED AND LOCATED BY THE PLUMBING CONTRACTOR. MINIMUM CONCRETE PAD THICKNESS SHALL BE 4 INCHES. PADS SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE OR AS INDICATED IN STRUCTURAL DRAWINGS AND SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO COORDINATE SIZE AND LOCATION OF ALL REQUIRED HOUSEKEEPING PADS WITH THE GENERAL CONTRACTOR PRIOR TO BID. SEE STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
26.	PRIOR TO BID, COORDINATE WITH THE GENERAL CONTRACTOR ALL REQUIRED CUTTING, PATCHING, SAWCUTTING, CORE DRILLING, AND/OR TRENCHING NECESSARY TO ACCOMMODATE THE PLUMBING WORK. ALL AFFECTED EXISTING SURFACES SHALL BE REFILED, COMPACTED, PATCHED, REPAIRED, RESURFACED AND/OR REPAINTED AS APPLICABLE AND AS INDICATED IN OTHER SECTIONS OF THE CONTRACT DOCUMENTS. SURFACES NOT SPECIFICALLY ADDRESSED IN OTHER SECTIONS OF THE CONTRACT DOCUMENTS SHALL BE RESTORED TO MATCH CORRESPONDING EXISTING ADJACENT SURROUNDING SURFACES.
27.	REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL FIRE RATED ASSEMBLIES. PROVIDE FIRESTOPPING AT ALL PENETRATIONS THROUGH FIRE RETARDANT CONSTRUCTION USING APPROVED UL LISTED ASSEMBLIES.
28.	HORIZONTAL SANITARY DRAINAGE PIPING SHALL SLOPE AT 1/4" PER FOOT UNLESS OTHERWISE INDICATED.
29.	HORIZONTAL GREASE WASTE PIPING SHALL SLOPE AT 1/4" PER FOOT.
30.	HORIZONTAL STORM DRAIN AND OVERFLOW PIPING SHALL SLOPE AT 1/8" PER FOOT UNLESS OTHERWISE INDICATED.
31.	HORIZONTAL CONDENSATE PIPING SHALL SLOPE AT 1/8" PER FOOT UNLESS OTHERWISE INDICATED.
32.	PLUMBING VENT TERMINATIONS SHALL MAINTAIN MINIMUM CLEARANCES OF 10'-0" HORIZONTALLY FROM OR 3'-0" VERTICALLY ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHaft. CONTRACTOR SHALL FIELD COORDINATE LOCATIONS OF PLUMBING VENT TERMINATIONS RELATIVE TO SUCH BUILDING ELEMENTS, AND MAKE ADJUSTMENTS AS NECESSARY TO MAINTAIN CLEARANCES.
33.	DOMESTIC WATER PIPING AND COMPONENTS SHALL BE PROVIDED AND INSTALLED IN COMPLIANCE WITH NSF 61, WHICH LIMITS THE ALLOWABLE LEAD CONTENT IN CERTAIN DOMESTIC WATER SYSTEM COMPONENTS.
34.	DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING. INDICATED LOCATIONS AND ARRANGEMENTS ARE USED TO SIZE PIPE AND CALCULATE FRICTION LOSS, EXPANSION, AND OTHER DESIGN CONSIDERATIONS. INSTALL PIPING AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED ON COORDINATION DRAWINGS.
35.	PROVIDE INDIRECT WASTE LINES TO BE ROUTED FROM EQUIPMENT AND COMMERCIAL KITCHEN SINKS AS INDICATED TO SPILL INTO FLOOR SINK. PROVIDE AIR GAP OF TWO PIPE DIAMETERS MINIMUM PER CODE.
36.	COMPLY WITH HEALTH DEPARTMENT REGULATIONS. PROVIDE CLEARANCE FOR CLEANING BEHIND AND UNDER EXPOSED PIPING AS REQUIRED BY HEALTH DEPARTMENT.

GENERAL NOTES	
37.	PIPING BETWEEN EACH PLUMBING FIXTURE AND THE NEAREST BRANCH OR MAIN PIPING RUN SHALL BE SIZED TO MATCH THE CORRESPONDING FIXTURE SCHEDULE CONNECTION SIZE AT A MINIMUM UNLESS NOTED AS A LARGER SIZE ON PLANS.
38.	PROVIDE SHUTOFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES ONE OR MORE FIXTURES.
39.	WHERE THE SPECIFIED FAUCETS DO NOT INCLUDE INTEGRAL CHECK VALVES, PROVIDE VERTICAL LIFT SPRING LOADED CHECK VALVES IN HOT AND COLD WATER SUPPLIES FOR 3-COMPARTMENT SINKS, PREP SINKS, AND MAT WASH SINKS DOWNSTREAM OF SHUTOFF VALVES.
40.	EACH DOMESTIC HOT WATER RETURN BRANCH CONNECTION SHALL BE EQUIPPED WITH A BALL VALVE, CHECK VALVE, AND BALANCING VALVE.
41.	ALL EXPOSED DOMESTIC HOT WATER PIPING AT WATER HEATING EQUIPMENT (INCLUDING SUPPLIES) SHALL BE INSULATED.
42.	SHUTOFF VALVES, SHUT-OFF COCKS, CLEANOUTS AND OTHER PIPING APPURTENANCES SHALL BE THE SAME SIZE AS PIPING SERVED UNLESS OTHERWISE INDICATED.
43.	INSTALL PIPING IN A NEAT ORGANIZED LAYOUT COORDINATING WITH OTHER TRADES.
44.	PROVIDE HANGERS, CLAMPS, ANCHORS AND GUIDES ACCORDING TO SPECIFICATIONS TO PREVENT STRESS ON PIPING.
45.	INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
46.	UNIONS OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES, AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
47.	PROVIDE FLEXIBLE CONNECTORS IN ALL PIPING SYSTEMS WHICH CONNECT TO PUMPS OR OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE.
48.	PROVIDE EXPANSION LOOPS ON NATURAL GAS AND WATER PIPING CROSSING STRUCTURAL EXPANSION JOINTS.
49.	PROVIDE EXPOSED ACCESSIBLE SEDIMENT TRAP (DIRT LEG) AT EACH NATURAL GAS CONNECTION TO MECHANICAL, WATER HEATING OR OTHER GAS FIRED EQUIPMENT AND AT EACH KITCHEN COOK LINE WHERE NATURAL GAS PIPING TRANSITIONS FROM VERTICAL IN WALL PIPING TO HORIZONTAL WALL MOUNTED PIPING.
50.	PROVIDE ALL NECESSARY TEMPORARY OR PERMANENT CAPS OR PLUGS FOR PIPING. DO NOT LEAVE PIPING OPEN ENDED.
51.	DISINFECTION OF POTABLE WATER SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF LOCAL PLUMBING CODE, HEALTH AUTHORITY AND WATER PURVEYOR HAVING JURISDICTION. THE POTABLE WATER SYSTEM SHALL BE PURGED OF DELETED WATER AND DISINFECTED PRIOR TO UTILIZATION. PEKA TUBING AND COMPONENTS SHALL BE DISINFECTED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES SO AS TO NOT VOID WARRANTIES.
52.	ADA LAVATORIES AND SINKS SHALL BE PROVIDED WITH ADA INSULATED TRAP AND SUPPLY COVERS AS SPECIFIED.
53.	ADA WHEEL CHAIRS SHALL BE INSTALLED WITH FLUSH VALVE ACTUATOR HANDLE LOCATED ON THE WHEEL CHAIR ACCESS SIDE OF THE FIXTURE.
54.	PLUMBING PIPING SHALL NOT PENETRATE TOP TRACK OR VERTICAL STUDS IN KITCHEN WALLS, INCLUDING DOMESTIC HOT AND COLD WATER, NATURAL GAS, SANITARY VENT, OR OTHER PIPING.

PLUMBING SHEET INDEX	
P-001	PLUMBING NOTES SYMBOLS AND ABBREVIATIONS
P-002	PLUMBING SPECIFICATIONS
P-003	PLUMBING PIPE MATERIALS, SCHEDULES AND NOTES
P-004	PLUMBING SITE PLAN
P-100	PLUMBING PLAN - BASEMENT / BELOW GRADE
P-101	PLUMBING PLAN - LEVEL 1 - DRAINAGE
P-102	PLUMBING PLAN - LEVEL 1 - DOMESTIC WATER
P-103	PLUMBING PLAN - LEVEL 1 - NATURAL GAS
P-104	PLUMBING PLAN - ROOF LEVEL
P-400	PLUMBING ENLARGED PLANS
P-401	PLUMBING ENLARGED PLANS
P-402	PLUMBING ENLARGED PLANS
P-403	PLUMBING ENLARGED PLANS
P-500	PLUMBING DETAILS
P-501	PLUMBING DETAILS
P-502	PLUMBING DETAILS
P-600	PLUMBING SCHEDULES
P-601	PLUMBING CALCULATIONS
P-700	PLUMBING RISER DIAGRAM - DRAINAGE
P-701	PLUMBING RISER DIAGRAM - DOMESTIC WATER
P-702	PLUMBING RISER DIAGRAM - NATURAL GAS
FS-001	FIRE SPRINKLER - NOTES & SPECIFICATIONS
FS-002	FIRE SPRINKLER PLAN - LEVEL 1



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48226
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING NOTES,
SYMBOLS AND
ABBREVIATIONS

PLUMBING PIPE MATERIAL SCHEDULE													
SERVICE	LOCATION	PIPE MATERIAL											
		CTS SDR 11 CPVC	SCH. 40 CPVC	PEXA	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	SCH. 40 PVC	POLYETHYLENE	SCH. 40 BLACK STEEL	SCH. 40 GALV. STEEL	SCH. 40 PVC-DWV	NO-HUB CAST IRON
													REMARKS
DOMESTIC WATER SYSTEM (HOT WATER, HOT WATER RETURN, COLD WATER)	INSIDE BUILDING ABOVE FLOOR	■	■	■									CTS SDR 11 CPVC (FOR PIPE SIZES 2" AND SMALLER) AND SCH 40 CPVC (FOR PIPE SIZES 2-1/2" AND LARGER) WITH SOLVENT CEMENT JOINT FOR ALL DISTRIBUTION MAINS AND BRANCH PIPING EXCEPT AS NOTED BELOW. PEXA TUBING WITH PLASTIC FITTINGS TO SERVE INDIVIDUAL GROUPS OF PLUMBING FIXTURES LOCATED OFF CORRIDOR (I.E. KITCHENS, RESTROOMS, ETC.). ONLY WHERE EXPOSED IN PLENUM AREAS: PEXA TUBING SHALL BE INSULATED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AS NECESSARY TO ACHIEVE FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS IN ACCORDANCE WITH ASTM E 84. CIRCULATED DOMESTIC HOT WATER SUPPLY & RETURN PIPING SHALL BE INSULATED IN ACCORDANCE WITH GOVERNING CODES.
	OUTSIDE BUILDING EXPOSED				■								
	BELOW GRADE					■							COPPER PIPE BELOW GRADE SHALL BE INSTALLED WITH POLYSLEEVE FOR CORROSION PROTECTION.
TRAP PRIMER SYSTEM	ABOVE FLOOR				■								
	BELOW GRADE					■							COPPER PIPE BELOW GRADE SHALL BE INSTALLED WITH POLYSLEEVE FOR CORROSION PROTECTION.
CONDENSATE AND EVAPORATIVE COOLER DRAIN	INSIDE BUILDING ABOVE FLOOR				■		■						CONDENSATE DRAIN PIPING SHALL BE INSULATED, EXCEPT WHERE EXPOSED AND WALL MOUNTED IN KITCHEN SPACE. ONLY WHERE EXPOSED IN PLENUM AREAS OR EXPOSED IN KITCHEN SPACE: TYPE M COPPER TUBE & FITTINGS SHALL BE USED RATHER THAN SCH. 40 PVC.
	OUTSIDE BUILDING EXPOSED				■								
SANITARY AND GREASE WASTE DRAINAGE	INSIDE BUILDING ABOVE FLOOR								■	■			ONLY WHERE EXPOSED IN PLENUM AREAS: HUBLESS CAST IRON SOIL PIPE & FITTINGS SHALL BE USED RATHER THAN SCH. 40 SOLID WALL PVC-DWV.
	INSIDE OR OUTSIDE BUILDING BELOW GRADE								■	■			
SANITARY AND GREASE VENT	INSIDE BUILDING ABOVE FLOOR								■	■			ONLY WHERE EXPOSED IN PLENUM AREAS: HUBLESS CAST IRON SOIL PIPE & FITTINGS SHALL BE USED RATHER THAN SCH. 40 SOLID WALL PVC-DWV.
	OUTSIDE BUILDING EXPOSED								■	■			INCLUDING VENTS THROUGH ROOF.
	INSIDE OR OUTSIDE BUILDING BELOW GRADE								■	■			
KITCHEN SINK INDIRECT WASTE	INSIDE BUILDING ABOVE FLOOR							■	■				
STORM DRAINAGE	INSIDE BUILDING ABOVE FLOOR								■	■			ONLY WHERE EXPOSED IN PLENUM AREAS: HUBLESS CAST IRON SOIL PIPE & FITTINGS SHALL BE USED RATHER THAN SCH. 40 SOLID WALL PVC-DWV.
	INSIDE OR OUTSIDE BUILDING BELOW GRADE								■	■			
NATURAL GAS	INSIDE BUILDING ABOVE FLOOR								■	■			
	OUTSIDE BUILDING EXPOSED								■	■			
	OUTSIDE BUILDING BELOW GRADE								■	■			INSTALL COPPER TRACER WIRE MINIMUM AWG 14 & WARNING TAPE FOR PE PIPING. IF SCHEDULE 40 BLACK STEEL IS USED, IT SHALL BE WRAPPED FOR CORROSION PROTECTION.
WATER HEATER INTAKE AND FLUE	INSIDE BUILDING ABOVE FLOOR								■	■			
	OUTSIDE BUILDING								■	■			

PIPE MATERIAL	PIPE MATERIAL SPECIFICATION
CTS SDR 11 CPVC	CPVC CTS SDR 11 PIPE AND FITTINGS (2" AND SMALLER), ASTM D2946, NSF CERTIFIED TO NSF 14 AND NSF 61 FOR POTABLE WATER USE, W/ SOLVENT CEMENT JOINTS PER ASTM F493. PIPE AND FITTINGS LISTED TO ASTM E84UL723 FOR PLENUM USE. APPROVED PIPING AND/OR FITTINGS MANUFACTURER(S): SPEARS MANUFACTURING, CHARLOTTE PIPE AND FOUNDRY, IPEX, NIBCO, GF PIPING SYSTEMS; OR EQUAL.
SCH. 40 CPVC	CPVC SCHEDULE 40 PIPE (2-1/2" AND LARGER), ASTM D1784, ASTM F441, NSF CERTIFIED TO NSF 15, NSF 61 AND NSF 372 FOR POTABLE WATER USE, W/ SOLVENT CEMENT JOINTS PER ASTM F493 AND CPVC SCHEDULE 80 FITTINGS, ASTM D1784. PIPE AND FITTINGS LISTED TO ASTM E84UL723 FOR PLENUM USE. APPROVED PIPING AND/OR FITTINGS MANUFACTURER(S): SPEARS MANUFACTURING, IPEX, NIBCO, GF PIPING SYSTEMS; OR EQUAL.
PEXA	PEXA TUBING, ASTM F 876 AND F877, W/ PEXA FITTINGS PER ASTM F1960. PROVIDE FITTINGS FROM THE SAME MANUFACTURER OF THE PIPING. PEXA TO THREAD TRANSITION: ONE-PIECE BRASS FITTING WITH MALE OR FEMALE THREADED ADAPTER AND ASTM F 1960 COLD-EXPANSION END, WITH PEXA REINFORCING COLD-EXPANSION RING. PEXA TO CPVC TRANSITION: THERMOPLASTIC FITTING WITH ONE SPOOT OR SOCKET END AND ONE ASTM F 1960 COLD-EXPANSION END, WITH PEXA REINFORCING COLD-EXPANSION RING. COMPLY WITH MANUFACTURER'S PRODUCT DATA, INCLUDING PRODUCT TECHNICAL BULLETINS, INSTALLATION INSTRUCTIONS, WARRANTY REQUIREMENTS, AND DESIGN DRAWINGS. APPROVED MANUFACTURER(S): UPONOR OR REHAU.
TYPE M COPPER	CONTRACTOR'S CHOICE OF EITHER OF THE FOLLOWING PIPING/JOINING METHODS (FOR EACH OPTION LISTED, CONTRACTOR SHALL CONFIRM COMPLIANCE WITH ALL APPLICABLE LOCAL CODE REQUIREMENTS PRIOR TO BID): - TYPE M HARD TEMPER SEAMLESS COPPER DRAINAGE TUBE, ASTM B308 W/ VIEGA PROGRESS COPPER AND CAST COPPER ALLOY PRESS-CONNECT FITTINGS CONFORMING TO ASME B16.51, NSF 61, AND NSF 372. EPDM ELASTOMERIC SEALING ELEMENT RATED TO 300 PSI W/ VIEGA SMART CONNECT FEATURE TO DETECT UNPRESSURED FITTINGS DURING THE TESTING PROCESS AND COLOR-CODED MARKINGS ON EXTERIOR OF FITTING FOR READY IDENTIFYING/INSPECTING SEALING ELEMENT TYPE. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE STRICTLY ADHERED TO. ALL CONNECTIONS SHALL BEAR FULL INSERTION MARKS ON THE TUBING. NO MIXING OF MANUFACTURERS, TECHNOLOGIES AND INSTALLATION/TESTING INSTRUCTIONS VARY. THE INSTALLERS SHALL BE CREDENTIALLED BY APPROVED MANUFACTURER. APPROVED MANUFACTURER(S): VIEGA, LLC. - TYPE M HARD TEMPER SEAMLESS COPPER DRAINAGE TUBE, ASTM B308 W/ CAST BRASS SOLDER JOINT DRAINAGE JOINTS, ANSI B16.23 AND LEAD-FREE SOLDER JOINTS ASTM B32.
TYPE L COPPER	CONTRACTOR'S CHOICE OF EITHER OF THE FOLLOWING PIPING/JOINING METHODS (FOR EACH OPTION LISTED, CONTRACTOR SHALL CONFIRM COMPLIANCE WITH ALL APPLICABLE LOCAL CODE REQUIREMENTS PRIOR TO BID): - TYPE L HARD DRAWN SEAMLESS COPPER TUBE, ASTM B88 W/ VIEGA PROGRESS COPPER AND CAST COPPER ALLOY PRESS-CONNECT FITTINGS CONFORMING TO ASME B16.51, NSF 61, AND NSF 372. EPDM ELASTOMERIC SEALING ELEMENT RATED TO 300 PSI W/ VIEGA SMART CONNECT FEATURE TO DETECT UNPRESSURED FITTINGS DURING THE TESTING PROCESS AND COLOR-CODED MARKINGS ON EXTERIOR OF FITTING FOR READY IDENTIFYING/INSPECTING SEALING ELEMENT TYPE. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE STRICTLY ADHERED TO. ALL CONNECTIONS SHALL BEAR FULL INSERTION MARKS ON THE TUBING. NO MIXING OF MANUFACTURERS, TECHNOLOGIES AND INSTALLATION/TESTING INSTRUCTIONS VARY. THE INSTALLERS SHALL BE CREDENTIALLED BY APPROVED MANUFACTURER. APPROVED MANUFACTURER(S): VIEGA, LLC. - TYPE L HARD DRAWN SEAMLESS COPPER TUBE, ASTM B88 W/ WROUGHT COPPER SOLDER JOINTS, ANSI B16.22 AND LEAD-FREE SOLDER JOINTS ASTM B32.
TYPE K COPPER	TYPE K ANNEALED COPPER TUBE, ASTM B88 W/ WROUGHT COPPER SOLDER JOINTS, ANSI B16.22 AND LEAD-FREE SOLDER JOINTS ASTM B32.
SCH. 40 PVC-DWV	PVC SCHEDULE 40 PLASTIC PIPE ASTM D 1785 W/ PVC SCHEDULE 40 PLASTIC PIPE FITTINGS, ANSIASTM D2466
POLYETHYLENE	POLYETHYLENE PIPE ASTM D2513, SDR 11.5 W/ SOCKET TYPE FUSION WELDED FITTINGS, ASTM D2683 OR ASTM D2513
SCH. 40 BLACK STEEL	CONTRACTOR'S CHOICE OF ANY OF THE FOLLOWING PIPING/JOINING METHODS OR COMBINATION THEREOF, FOR ANY PIPE SIZE RANGE (FOR EACH OPTION LISTED, CONTRACTOR SHALL CONFIRM COMPLIANCE WITH ALL APPLICABLE LOCAL CODE REQUIREMENTS PRIOR TO BID): - SCHEDULE 40 BLACK STEEL, ASTM A53 PIPE W/ VIEGA MEGAPRESS FITTINGS FOR FUEL GAS PIPING SYSTEMS, ANSI LCA43A 6.32 (INCLUDES CONCEALED LOCATIONS), HNBR ELASTOMERIC SEALING ELEMENTS. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE STRICTLY ADHERED TO. ALL CONNECTIONS SHALL BEAR FULL INSERTION MARKS ON THE TUBING. NO MIXING OF MANUFACTURERS, TECHNOLOGIES AND INSTALLATION/TESTING INSTRUCTIONS VARY. THE INSTALLERS SHALL BE CREDENTIALLED BY APPROVED MANUFACTURER. APPROVED MANUFACTURER(S): VIEGA, LLC. - SCHEDULE 40 BLACK STEEL, ASTM A53 PIPE W/ ASTM A197, ASME B16.3, 150-POUND SCREWED MALLEABLE IRON FITTINGS. - SCHEDULE 40 BLACK STEEL, ASTM A53 PIPE W/ WELDED FITTINGS, ASTM A 105 AND ANSI B16.11; 2-1/2 INCH AND LARGER - ASTM A 234, GRADE A AND ANSI B16.9. ALL ELBOWS LONG RADII.
SCH. 40 GALVANIZED	CONTRACTOR'S CHOICE OF ANY OF THE FOLLOWING PIPING/JOINING METHODS OR COMBINATION THEREOF, FOR ANY PIPE SIZE RANGE (FOR EACH OPTION LISTED, CONTRACTOR SHALL CONFIRM COMPLIANCE WITH ALL APPLICABLE LOCAL CODE REQUIREMENTS PRIOR TO BID): - SCHEDULE 40 GALVANIZED STEEL, ASTM A53 PIPE W/ VIEGA MEGAPRESS FITTINGS FOR FUEL GAS PIPING SYSTEMS, ANSI LCA43A 6.32 (INCLUDES CONCEALED LOCATIONS), HNBR ELASTOMERIC SEALING ELEMENTS. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE STRICTLY ADHERED TO. ALL CONNECTIONS SHALL BEAR FULL INSERTION MARKS ON THE TUBING. NO MIXING OF MANUFACTURERS, TECHNOLOGIES AND INSTALLATION/TESTING INSTRUCTIONS VARY. THE INSTALLERS SHALL BE CREDENTIALLED BY APPROVED MANUFACTURER. APPROVED MANUFACTURER(S): VIEGA, LLC. - SCHEDULE 40 GALVANIZED STEEL, ASTM A53 PIPE W/ ASTM A197, ASME B16.3, ASTM A197, 150-POUND SCREWED MALLEABLE IRON FITTINGS. - SCHEDULE 40 GALVANIZED STEEL, ASTM A53 PIPE W/ WELDED FITTINGS, ASTM A 105 AND ANSI B16.11; 2-1/2 INCH AND LARGER - ASTM A 234, GRADE A AND ANSI B16.9. ALL ELBOWS LONG RADII.
SCH. 40 PVC-DWV	SCHEDULE 40 PVC DWV PIPE W/ SOLVENT WELD FITTINGS, ASTM D2665 OR D2661 AND SOLVENT WELD SOCKET TYPE JOINTS WITH SOLVENT RECOMMENDED BY PIPE MANUFACTURER. CELLULAR CORE PIPING IS NOT ACCEPTABLE.
NO-HUB CAST IRON	STANDARD WEIGHT NO-HUB CAST IRON PIPE AND FITTINGS, CISPI 301 OR ASTM A888, NSF CERTIFIED, CISPI TRADEMARK W/ CISPI 310 COUPLINGS

NOTE: ALL PIPE, TUBING, FITTINGS, VALVES AND COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.

CPVC PIPING SYSTEM INSTALLATION NOTES	
1.	CHEMICAL COMPATIBILITY: THE GENERAL CONTRACTOR(S) SHALL NOTIFY ALL SUBCONTRACTORS TO USE ANGLARY BUILDING PRODUCTS (INCLUDING, BUT NOT LIMITED TO: FIRE STOPS, THREAD SEALANTS, MOLD INHIBITORS, LEAK DETECTORS, COATED HANGERS, INSULATION, ETC.) THAT ARE CHEMICALLY COMPATIBLE WITH THE SPECIFIED CPVC COMPONENTS. THE CONTRACTOR(S) SHALL CONSULT THE PIPING SYSTEM COMPATIBILITY PROGRAM FOR GUIDANCE ON COMPATIBILITY BY VISITING WWW.FBCSYSTEMCOMPATIBLE.COM AND HTTPS://PARTS.SPEARSMFG.COM/CPL.ASPX
2.	ELECTRICAL AND LOW VOLTAGE CABLES CONTAIN PLASTICIZERS WHICH ARE KNOWN TO DAMAGE CPVC PIPING MATERIAL. WHERE CPVC PIPING SYSTEMS ARE INSTALLED IN CLOSE PROXIMITY TO ELECTRICAL AND/OR LOW VOLTAGE SYSTEM CABLE INSTALLATION, PLUMBING CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL AND/OR LOW VOLTAGE SYSTEM CABLE INSTALLING CONTRACTOR TO ENSURE THAT NO CONTACT IS MADE BETWEEN SUCH CABLES AND THE CPVC PIPING SYSTEM. SPECIAL CARE SHALL BE TAKEN WHERE CABLING CROSSES OVER OR UNDER CPVC PIPING AND WHERE THERE IS POTENTIAL FOR CONTACT BETWEEN THE MATERIALS. IN SUCH CASES AFFECTED SECTIONS OF PIPING SHALL BE INSULATED TO PREVENT CONTACT (ALL SERVICES INCLUDING COLD WATER PIPING).
3.	SECTIONS OF CPVC PIPING THAT ARE POTENTIALLY EXPOSED TO DIRECT SUNLIGHT FROM SKYLIGHTS, CLERESTORY WINDOWS, ETC. SHALL BE PROTECTED FROM U.V. EXPOSURE WITH WATER BASED PAINT SELECTED AND APPLIED IN ACCORDANCE WITH CPVC MANUFACTURER'S RECOMMENDATIONS. OPTIONALLY, COMPATIBLE INSULATION MAY ALSO BE USED AS AN ACCEPTABLE ALTERNATE MEANS OF U.V. PROTECTION.
4.	CPVC PIPE AND FITTINGS SHALL BE INSTALLED ONLY WITHIN THE CONDITIONED SPACE OF THE BUILDING. ANY PIPING INSTALLED IN ATTICS, CRAWL SPACES, CANTILEVERS, EXTERIOR WALLS OR OTHER AREAS EXPOSED TO THE ELEMENTS SHALL BE INSTALLED ON THE INTERNAL SIDE OF THE BUILDING INSULATION.
5.	INSTALLERS SHALL RECEIVE IN-PERSON TRAINING ON CPVC INSTALLATION EITHER FROM THE PIPE/FITTING MANUFACTURER OR DESIGNATED REPRESENTATIVE.
6.	PRESSURE TESTS SHALL BE COMPLETED IN COMPLIANCE WITH APPLICABLE LOCAL CODES AND SHALL BE CONDUCTED HYDROSTATICALLY. AIR TESTING SHALL NOT BE PERMITTED.
7.	HANGERS AND SUPPORTS SHALL BE CHEMICALLY COMPATIBLE WITH CPVC PIPING AND COMPONENTS. COATED HANGERS SHALL NOT BE USED. FELT LINED HANGERS ARE NOT REQUIRED FOR ACOUSTIC PROTECTION. HANGERS AND SUPPORTS SHALL NOT RESTRICT THE FREE LATERAL MOVEMENT CAUSED BY THERMAL EXPANSION AND CONTRACTION.
8.	METAL HANGERS AND SUPPORTS SHALL BE FREE OF SHARP EDGES WHICH MAY ABRASION THE PIPE.
9.	CONCENTRATED LOADS SUCH AS METAL VALVES AND OTHER APPURTENANCES SHALL BE DIRECTLY SUPPORTED, OR THE PIPE SUPPORTED IMMEDIATELY ADJACENT TO THE LOAD.
10.	VERTICAL PIPING SHALL BE SUPPORTED AT EACH FLOOR AND WITH A MID-STORY GUIDE.
11.	WHEN PENETRATING METAL STUDS, CHEMICALLY COMPATIBLE PLASTIC GROMMETS OR SIMILAR DEVICES SHALL BE USED TO ISOLATE THE PIPE FROM ABRASION.
12.	METAL TO CPVC TRANSITION FITTINGS SHALL BE USED AT CONNECTIONS TO TANK TYPE WATER HEATERS. CPVC PIPING SHALL BE KEPT MINIMUM SIX INCHES AWAY FROM THE FLUE.
13.	PIPING SHALL BE INSTALLED WITH CONSIDERATION FOR LINEAR EXPANSION AND CONTRACTION OF THE PIPE. FAILURE TO PROPERLY ACCOUNT FOR LINEAR THERMAL EXPANSION AND CONTRACTION CAN RESULT IN UP TO 1200PSI OF COMPRESSIVE STRESS ON THE SYSTEM.
14.	CONTRACTOR SHALL MAKE PROVISIONS FOR THERMAL EXPANSION AND CONTRACTION. METHODS OF ACCOMMODATING LINEAR THERMAL EXPANSION AND CONTRACTION INCLUDE OFFSETS AND CHANGES OF DIRECTION (IDEAL FOR SHORTER RUNS OF PIPE), EXPANSION LOOPS (IDEAL FOR LONGER RUNS OF PIPE), AND EXPANSION JOINTS.
15.	EXPANSION LOOPS, OFFSETS AND CHANGES IN DIRECTION SHALL BE PROPERLY SIZED, USING THE LUBRIZOL EXPANSION LOOP CALCULATOR. HTTPS://ONLINE.LUBRIZOL.COM/TEMPERATURESIZING, OR THE PPI EXPANSION ARM LOOP CALCULATOR. HTTP://WWW.PLASTICPIPECALCULATOR.COM/EXPANSIONARMLOOP.ASPX
16.	FLUSH PIPING AFTER INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODE REQUIREMENTS.

VALVE SCHEDULE						
SERVICE	LOCATION	HOST PIPE MATERIAL	APPLICATION / PIPE SIZE	PIPE SIZE RANGE	MFR / MODEL	
DOMESTIC WATER SYSTEM (HOT WATER, HOT WATER RETURN, COLD WATER)	INSIDE BUILDING ABOVE FLOOR	SCH 40 CPVC	SHUTOFF / DISTRIBUTION MAINS	2-1/2" AND LARGER	SPEARS CPVC COMPACT BALL VALVE W/ EPDM O-RINGS AND SOCKET CONNECTORS / #2122-XXXX SERIES.	
			CHECK VALVE		SPEARS TRUE UNION BALL CHECK VALVE (REGULAR STYLE) W/ EPDM O-RINGS AND SOCKET CONNECTORS / #2229-XXXX SERIES.	
		CTS SDR 11 CPVC	SHUTOFF / DISTRIBUTION MAINS AND BRANCH PIPING (EXCEPT AS NOTED FOR PEXA PIPING)	2" AND SMALLER	NIBCO CPVC-CTS BALL VALVE / #4770 SERIES; OR EQUAL BY SPEARS #1922 SERIES.	
			CHECK VALVE		SPEARS TRUE UNION BALL CHECK VALVE (REGULAR STYLE) W/ EPDM O-RINGS AND SOCKET CONNECTORS / #2229-XXXX SERIES. PROVIDE WITH CTS TRANSITION BUSHINGS.	
		PEXA	SHUTOFF / BRANCH LINES SERVING INDIVIDUAL GROUPS OF PLUMBING FIXTURES (LOCATED OFF CORRIDOR (I.E. KITCHENS, RESTROOMS, ETC.))	2" AND SMALLER	UPONOR PROPEX LEAD-FREE (LF) BRASS COMMERCIAL BALL VALVES / ALF042XXXXXX SERIES.	
					PEX x COPPER STUB ELL FITTING	BRASSCRAFT 1/2 IN. INLET X 1/2 IN. INLET 1/4-TURN ANGLE BALL STOP. CONNECT TO FAUCET INLETS WITH 1/2" BRAZED STAINLESS STEEL SUPPLY CONNECTOR.
	OUTSIDE BUILDING EXPOSED	TYPE L COPPER	SHUTOFF / DISTRIBUTION MAINS AND BRANCH PIPING	2-1/2" AND LARGER	NIBCO DUCTILE IRON BUTTERFLY VALVE / #LD-2000 SERIES.	
				2" AND SMALLER	NIBCO LEAD FREE BRONZE BALL VALVES / #S-585-80-LF SERIES OR #S-585-80-LF SERIES AS APPLICABLE.	
				2-1/2" AND LARGER	FOR VIEGA PROGRESS JOINING SYSTEM USE VIEGA PROGRESS BALL VALVE / #2971.1ZL SERIES; OR EQUAL BY NIBCO #PC-585-80-LF SERIES.	
		OUTSIDE BUILDING BELOW GRADE	TYPE K COPPER	SHUTOFF / DISTRIBUTION MAINS AND BRANCH PIPING	2-1/2" AND LARGER	NIBCO DUCTILE IRON BUTTERFLY VALVE / #LD-2000 SERIES.
					2" AND SMALLER	NIBCO LEAD FREE BRONZE BALL VALVES / #S-585-80-LF SERIES OR #S-585-80-LF SERIES AS APPLICABLE.
					2" AND SMALLER	FOR VIEGA PROGRESS JOINING SYSTEM USE VIEGA PROGRESS BALL VALVE / #2971.1ZL SERIES; OR EQUAL BY NIBCO #PC-585-80-LF SERIES.
NATURAL GAS	INSIDE BUILDING ABOVE FLOOR	SCH. 40 BLACK STEEL	SHUTOFF / DISTRIBUTION MAINS AND BRANCH PIPING	4" AND SMALLER	NIBCO BRASS TWO PIECE FULL PORT BALL VALVES / #T-FP 600A SERIES; OR EQUAL BY APOLLO #77-3X-01 SERIES, HAMMOND VALVE #901 SERIES; OR MILWAUKEE VALVE #9A-4758 SERIES.	
	OUTSIDE BUILDING EXPOSED	SCH. 40 GALV. STEEL				

NOTES:
1. DOMESTIC WATER VALVES SERVING BRANCH OR MAIN PIPING SHALL BE FULL LINE SIZE MATCHING PIPING SERVED.
2. NATURAL GAS VALVES SERVING BRANCH OR MAIN PIPING SHALL BE FULL LINE SIZE MATCHING PIPING SERVED.
3. NATURAL GAS EQUIPMENT SHUT OFF VALVES SHALL MATCH THE FULL SIZE OF THE FLEXIBLE CONNECTOR & EQUIPMENT GAS INLET CONNECTION, AND SHALL BE LOCATED NO LESS THAN 2 FEET FROM EQUIPMENT GAS INLET CONNECTION.



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

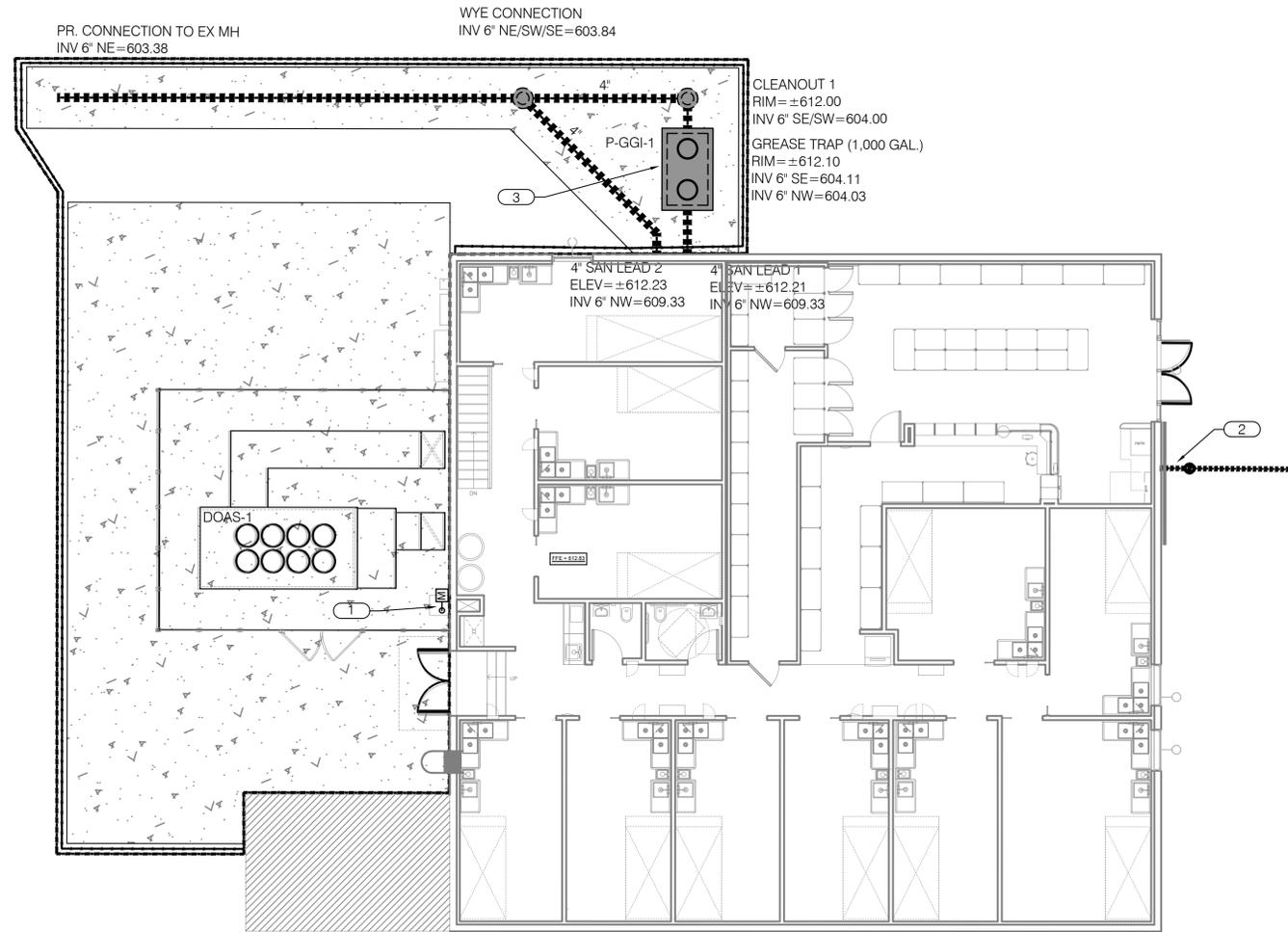


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING PIPE MATERIALS, SCHED. & NOTES

021293

P-003



- PLUMBING SITE PLAN KEYNOTES:**
- 1 GAS SERVICE AND METER. PROVIDE 4933 CFH AT 2 PSI DELIVERY. COORDINATE WITH SITE UTILITY PLAN.
 - 2 4" WATER SERVICE. SEPARATE FOR 2" DOMESTIC AND 4" FIRE PROTECTION SERVICES INSIDE BUILDING. COORDINATE LOCATION WITH SITE UTILITY PLAN.
 - 3 GREASE INTERCEPTOR. REFER TO DETAIL SHEET P-500.

1 PLUMBING SITE PLAN
1/8" = 1'-0"

EST
1998

DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	01.08.22
Site Investigation	09.30.21

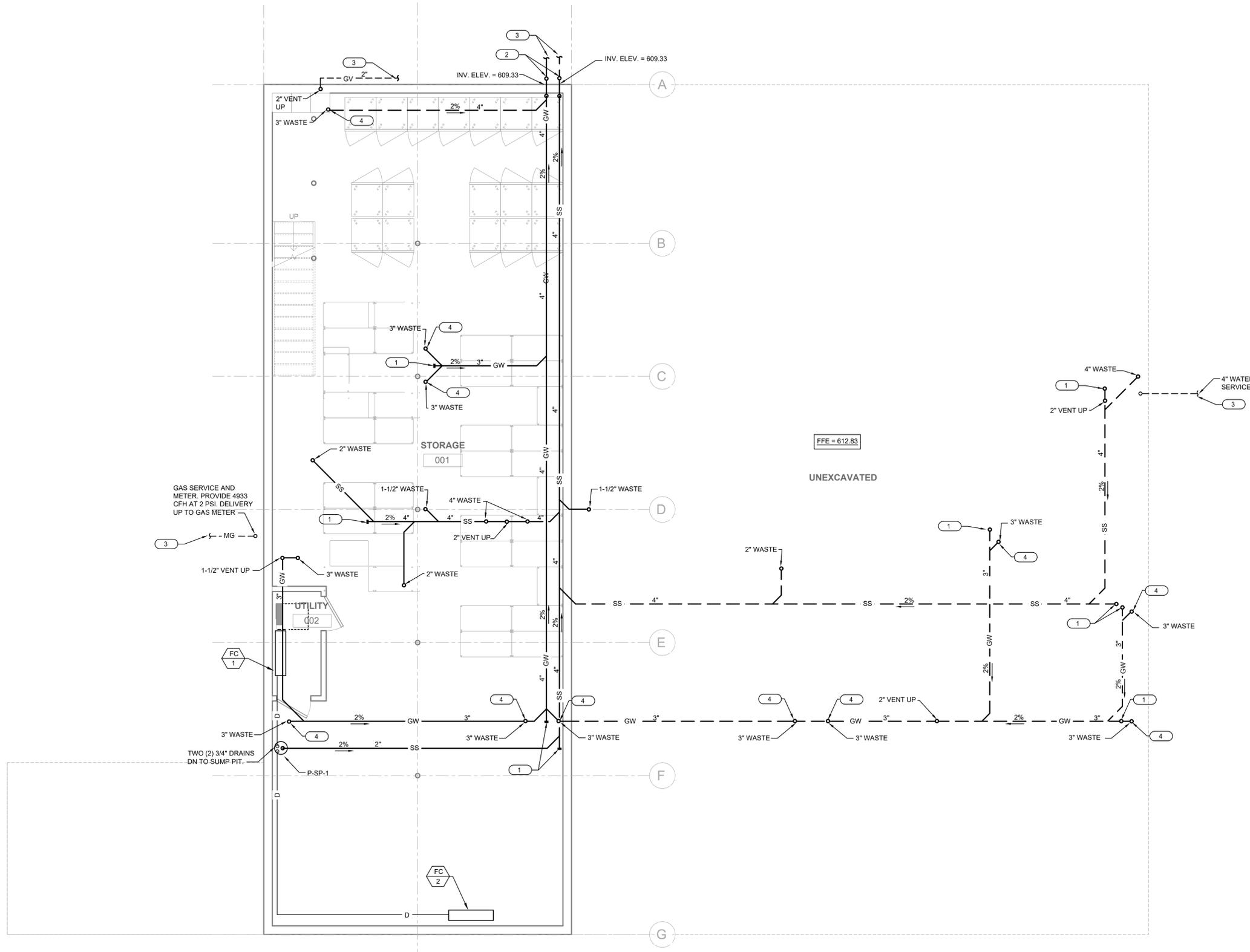


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING SITE PLAN

021293

P-004



- BASEMENT - PLUMBING PLAN KEYNOTES:**
- 1 FULL SIZE LINE CLEANOUT.
 - 2 FULL SIZE ONE-WAY CLEANOUT TO GRADE.
 - 3 SEE PLUMBING SITE PLAN & SITE UTILITY PLAN FOR CONTINUATION OF PIPING.
 - 4 LOCATIONS OF FLOOR SINKS SHALL BE COORDINATED WITH APPROVED SUBMITTALS FOR OWNER FURNISHED / CONTRACTOR INSTALLED ITEMS TO AVOID CONFLICT WITH FLOOR MOUNTED SINK AND EQUIPMENT LEGS AND OTHER FEATURES WHICH MIGHT INTERFERE WITH FLOOR SINK POSITIONING.

01 PLUMBING PLAN - BASEMENT / BELOW GRADE
 Scale: 1/4" = 1'-0"

DESIGNHAUS
EST. 1998
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

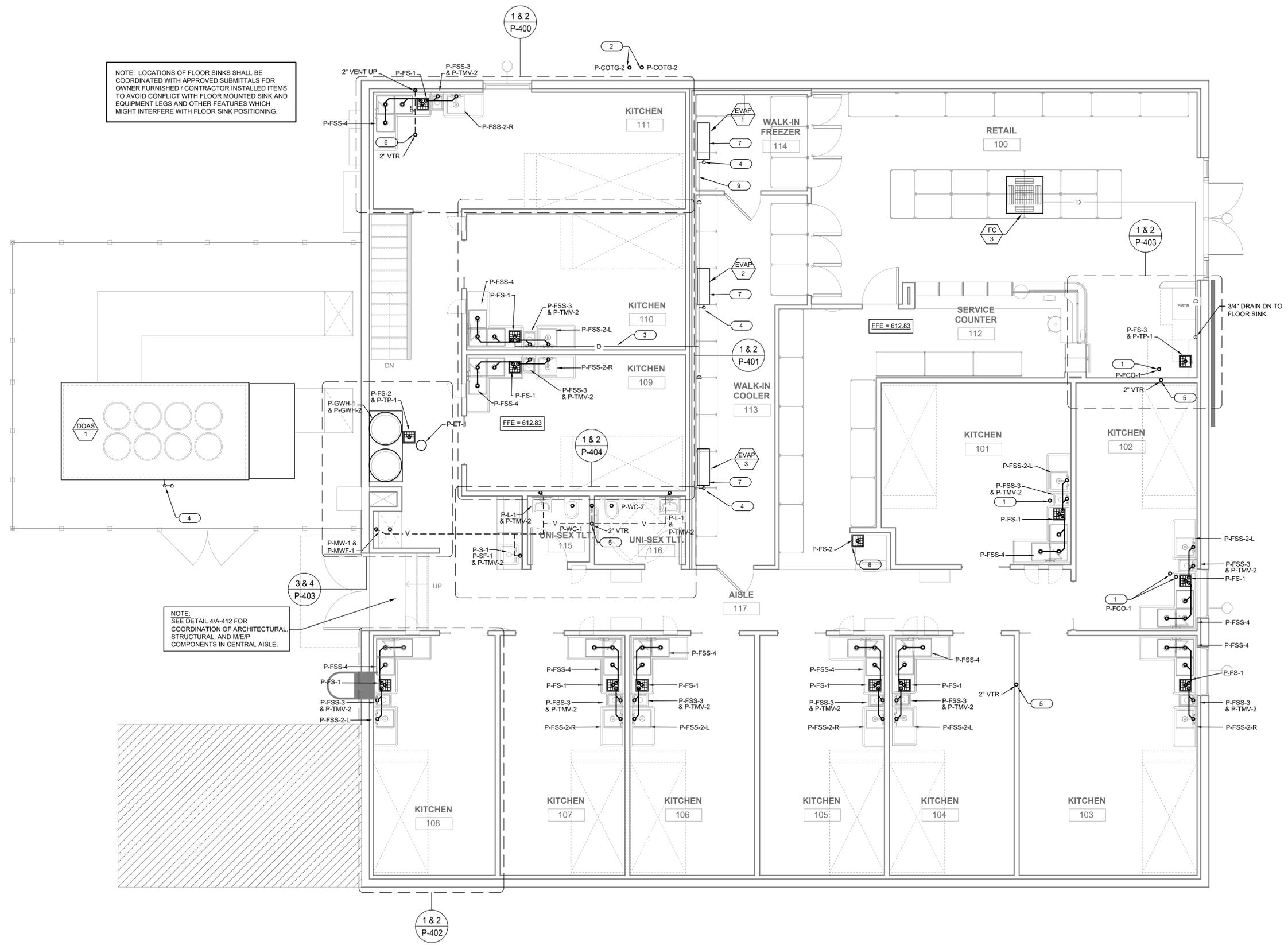
3181 3RD AVE. - DETROIT

3181 3rd Ave,
Detroit, MI 48201

PLUMBING PLAN -
BASEMENT /
BELOW GRADE

021293

P-100



NOTE: LOCATIONS OF FLOOR SINKS SHALL BE COORDINATED WITH APPROVED SUBMITTALS FOR OWNER FURNISHED / CONTRACTOR INSTALLED ITEMS TO AVOID CONFLICT WITH FLOOR MOUNTED SINK AND EQUIPMENT LEGS AND OTHER FEATURES WHICH MIGHT INTERFERE WITH FLOOR SINK POSITIONING.

NOTE: SEE DETAIL 4/A-412 FOR COORDINATION OF ARCHITECTURAL, STRUCTURAL, AND M/E/P COMPONENTS IN CENTRAL AISLE.

LEVEL 1 - PLUMBING PLAN - DRAINAGE KEYNOTES:

- 1 FULL LINE SIZE FLOOR CLEANOUT.
- 2 FULL LINE SIZE ONE WAY CLEANOUT TO GRADE.
- 3 WHERE EXPOSED IN KITCHEN, CONDENSATE PIPING SERVING EVAPORATOR UNITS SHALL BE 3/4" NON-INSULATED TYPE "M" COPPER, MOUNTED LOW ON THE WALL USING LOW PROFILE UNISTRUT, ROUTE VIA GRAVITY TO AIR GAP DISCHARGE AT ADJACENT KITCHEN FLOOR SINK.
- 4 CONNECT CONDENSATE PIPING TO MECHANICAL UNIT WITH CONDENSATE TRAP. DISCHARGE CONDENSATE AT KITCHEN FLOOR SINK.
- 5 VENT THROUGH ROOF.
- 6 GREASE VENT THROUGH ROOF.
- 7 MECHANICAL WALL MOUNTED UNIT SHOWN FOR REFERENCE ONLY. PROVIDE PLUMBING CONNECTIONS AS NOTED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 8 FLOOR SINK SHALL BE HALF EXPOSED (WITH GRATE) FROM UNDER THE FOOTPRINT OF ICEMAKER AS SHOWN.
- 9 PROVIDE HEAT TRACE FREEZE PROTECTION FOR ALL CONDENSATE PIPING LOCATED WITHIN WALK-IN FREEZER.

01 PLUMBING PLAN - LEVEL 1 - DRAINAGE
Scale: 1/4" = 1'-0"

EST
1998

DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

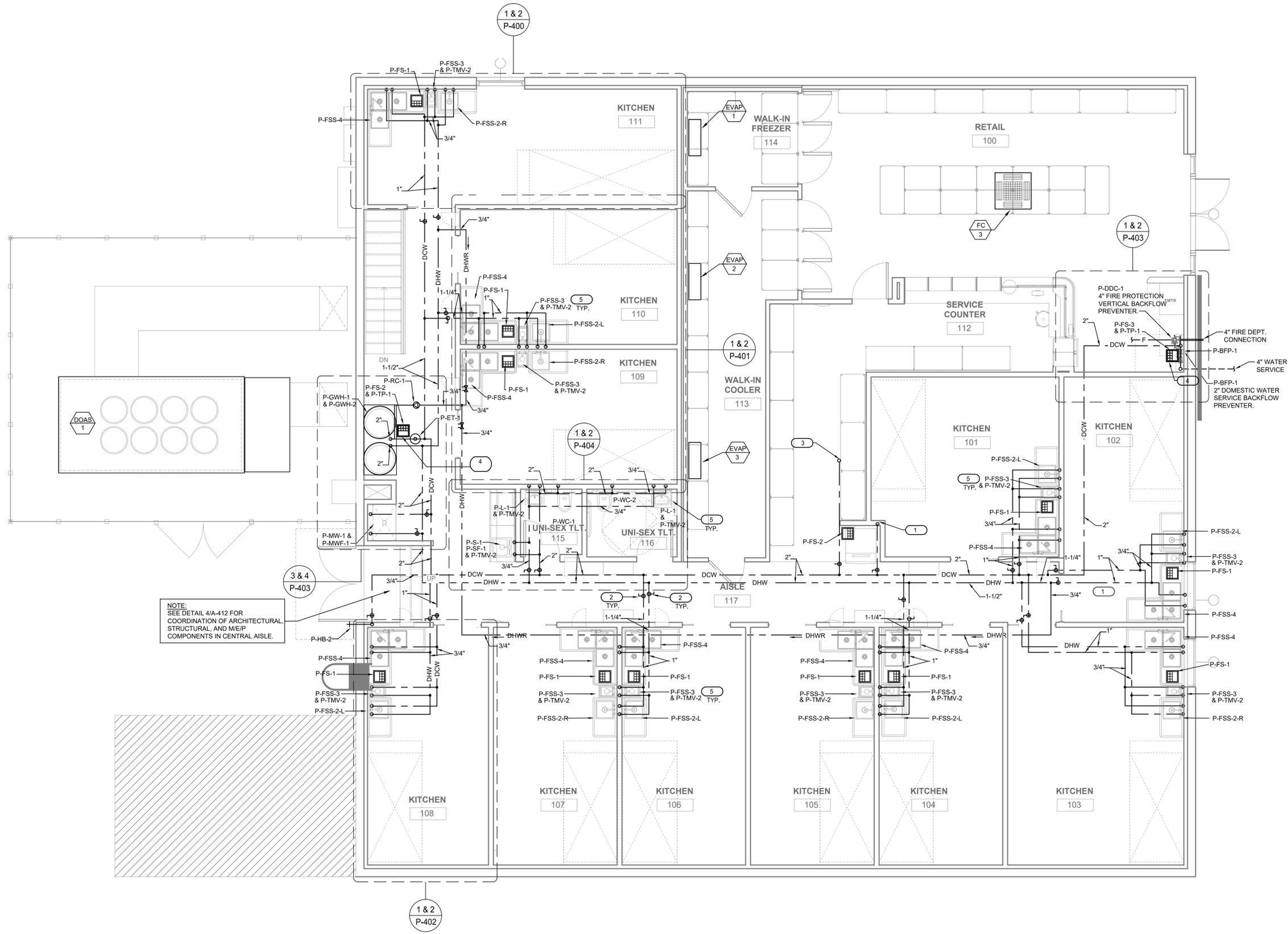
3181 3RD AVE. - DETROIT

3181 3rd Ave,
Detroit, MI 48201

PLUMBING PLAN -
LEVEL 1 -
DRAINAGE

021293

P-101



- LEVEL 1 - PLUMBING PLAN - DOMESTIC WATER KEYNOTES:**
- ROUGH-IN AND CONNECT 1/2" COLD WATER WITH SHUTOFF VALVE FOR ICEMAKER.
 - FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION ABOVE CORRIDOR.
 - 3/4" DCW UP TO P-HB-1 ON ROOF.
 - PROVIDE P-TP-1 TRAP PRIMER FOR FLOOR SINK.
 - PROVIDE TEMPERING VALVES (P-TMV-2) AT ALL LAVATORIES AND HAND SINKS.

NOTE:
SEE DETAIL 4/A-412 FOR
COORDINATION OF ARCHITECTURAL
STRUCTURAL, AND ME/P
COMPONENTS IN CENTRAL AISLE.

01 PLUMBING PLAN - LEVEL 1 - DOMESTIC WATER
Scale: 1/4" = 1'-0"

DESIGNHAUS ARCHITECTURE
EST. 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21
Revision/Issue	Date

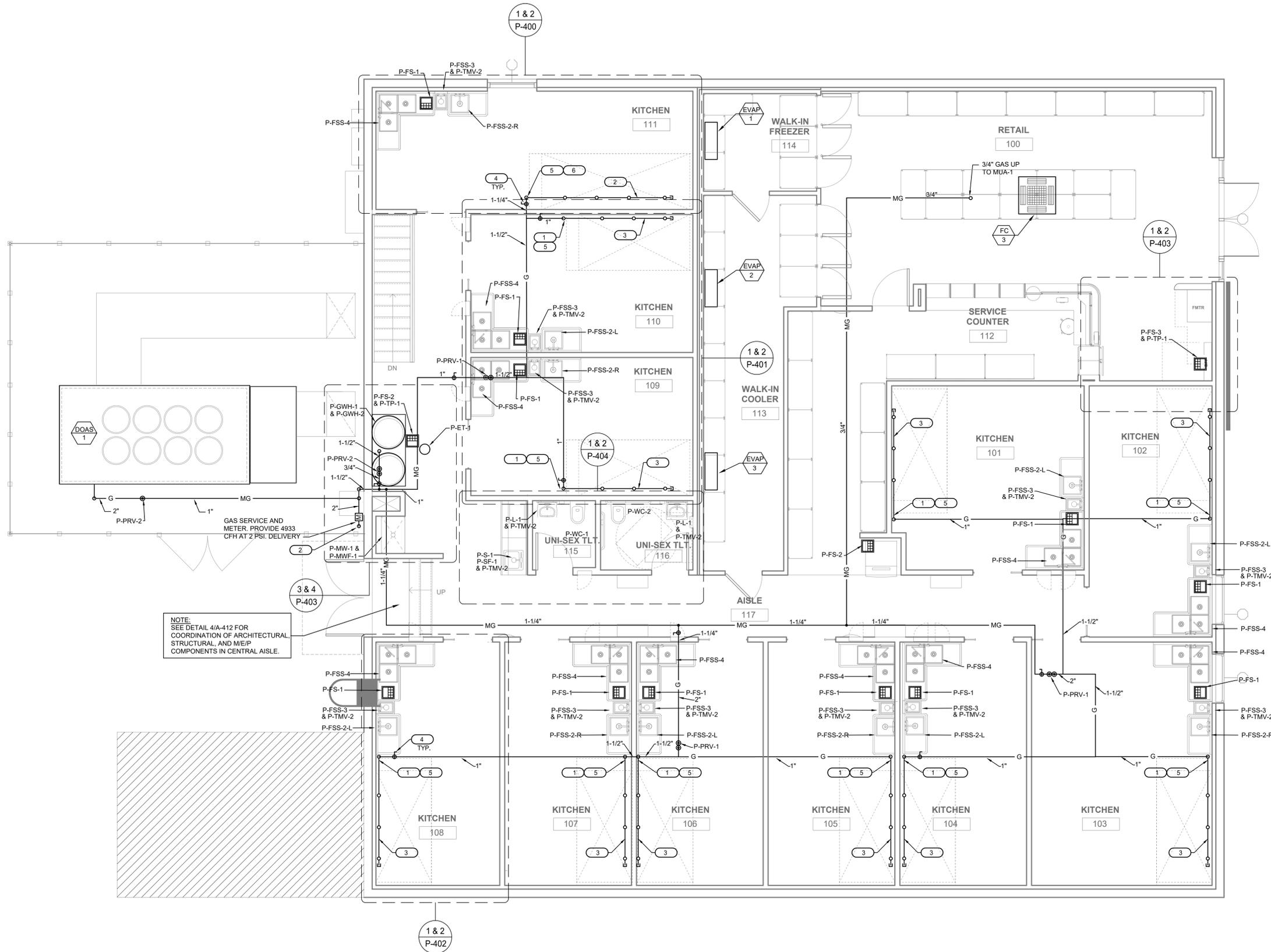
3181 3RD AVE. - DETROIT

3181 3rd Ave,
Detroit, MI 48201

PLUMBING PLAN -
LEVEL 1 -
DOMESTIC WATER

021293

P-102



NOTE:
SEE DETAIL 4/A-412 FOR
COORDINATION OF ARCHITECTURAL,
STRUCTURAL, AND MEIP
COMPONENTS IN CENTRAL AISLE.

LEVEL 1 - PLUMBING PLAN -
NATURAL GAS KEYNOTES:

- 1 9 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING. SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (3) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (250 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.
- 2 2 PSI GAS METER BY GAS UTILITY.
- 3 FACILITY MAIN GAS SHUTOFF VALVE AT BUILDING EXTERIOR.
- 4 GAS PRESSURE REGULATOR MOUNTED ABOVE KITCHEN STRUCTURE. PROVIDE W/ FULL LINE SIZE SHUTOFF COCK IN EXPOSED LOCATION ABOVE CORRIDOR.
- 5 ANSUL HOOD FIRE SUPPRESSION EMERGENCY GAS SHUTOFF VALVE ON EXPOSED GAS PIPING IN KITCHEN. GAS PIPING SHALL BE INSTALLED AND POSITIONED SUCH THAT IT WILL NOT INTERFERE WITH ACCESS TO THE ANSUL CABINET. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM INSTALLATION.
- 6 12 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING. SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (4) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (335 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.

01 PLUMBING PLAN - LEVEL 1 - NATURAL GAS
Scale: 1/4" = 1'-0"

EST
DESIGNHAUS
1998
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

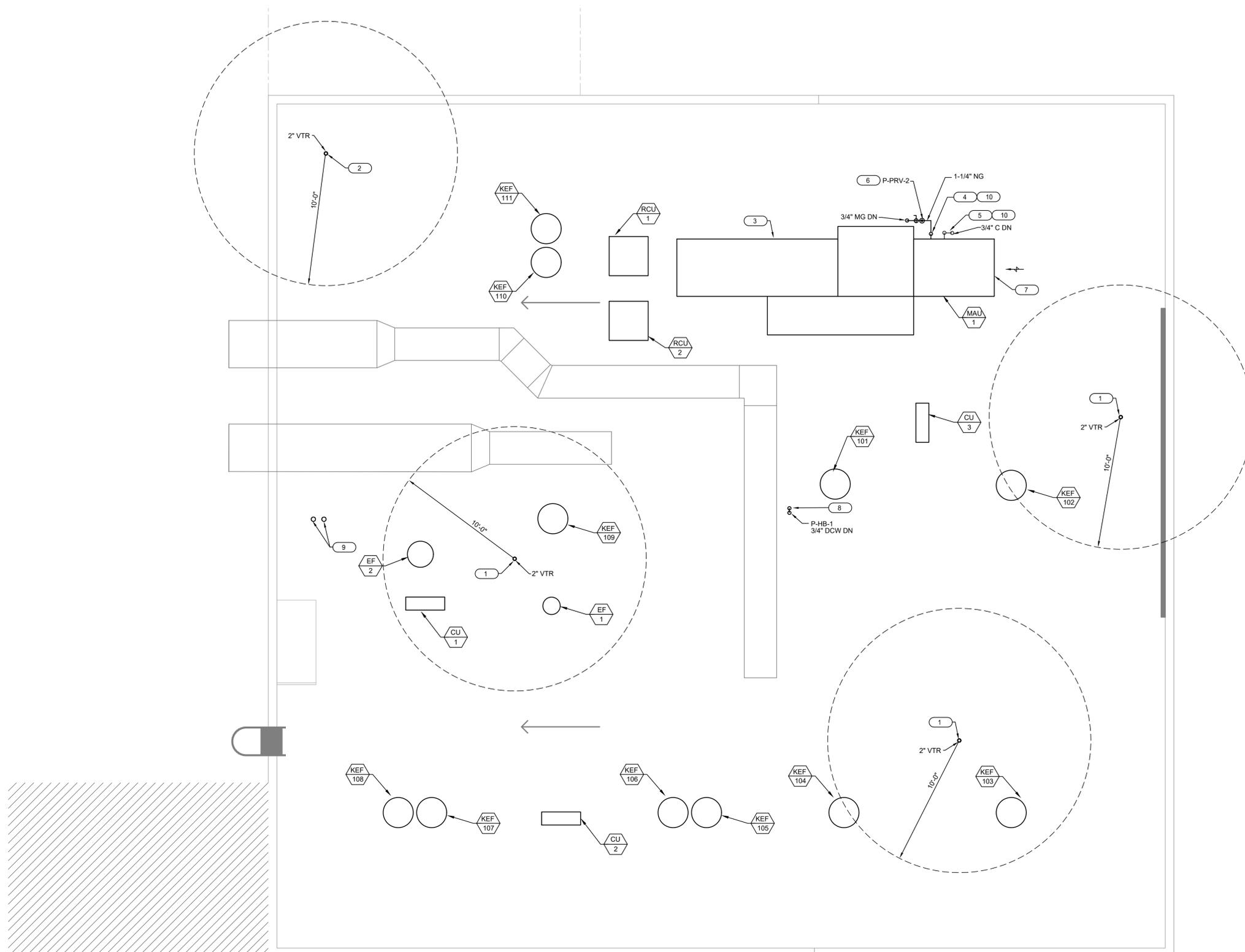
Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

**PLUMBING PLAN -
LEVEL 1 - NATURAL
GAS**

021293

P-103



ROOF - PLUMBING PLAN
KEYNOTES:

- 1 VENT THROUGH ROOF. PROVIDE MIN. 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES.
- 2 GREASE VENT THROUGH ROOF. PROVIDE MIN. 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES.
- 3 MECHANICAL ROOF MOUNTED UNIT SHOWN FOR REFERENCE ONLY. PROVIDE PLUMBING CONNECTIONS AS NOTED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 4 CONNECT GAS PIPING TO MECHANICAL UNIT WITH SEDIMENT TRAP (DIRT LEG) AND FULL LINE SIZE SHUTOFF COCK.
- 5 CONNECT CONDENSATE PIPING TO MECHANICAL UNIT WITH CONDENSATE TRAP.
- 6 GAS PRESSURE REDUCING VALVE W/ SOV ON INLET SIDE.
- 7 MECHANICAL SYSTEM OUTSIDE AIR INTAKE. SANITARY VENTS, GREASE WASTE VENTS, AND WATER HEATER FLUES SHALL BE LOCATED TO PROVIDE MIN. 10'-0" CLEARANCE.
- 8 3/4" DCW UP TO FREEZE PROOF HOSE BIBB.
- 9 WATER HEATER CONCENTRIC VENTS THROUGH ROOF (TYPICAL OF 2).
- 10 REFER TO SHEET P-501 FOR CONDENSATE DRAIN AND GAS CONNECTION DETAILS.

01 PLUMBING PLAN - ROOF LEVEL
Scale: 1/4" = 1'-0"

EST
1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

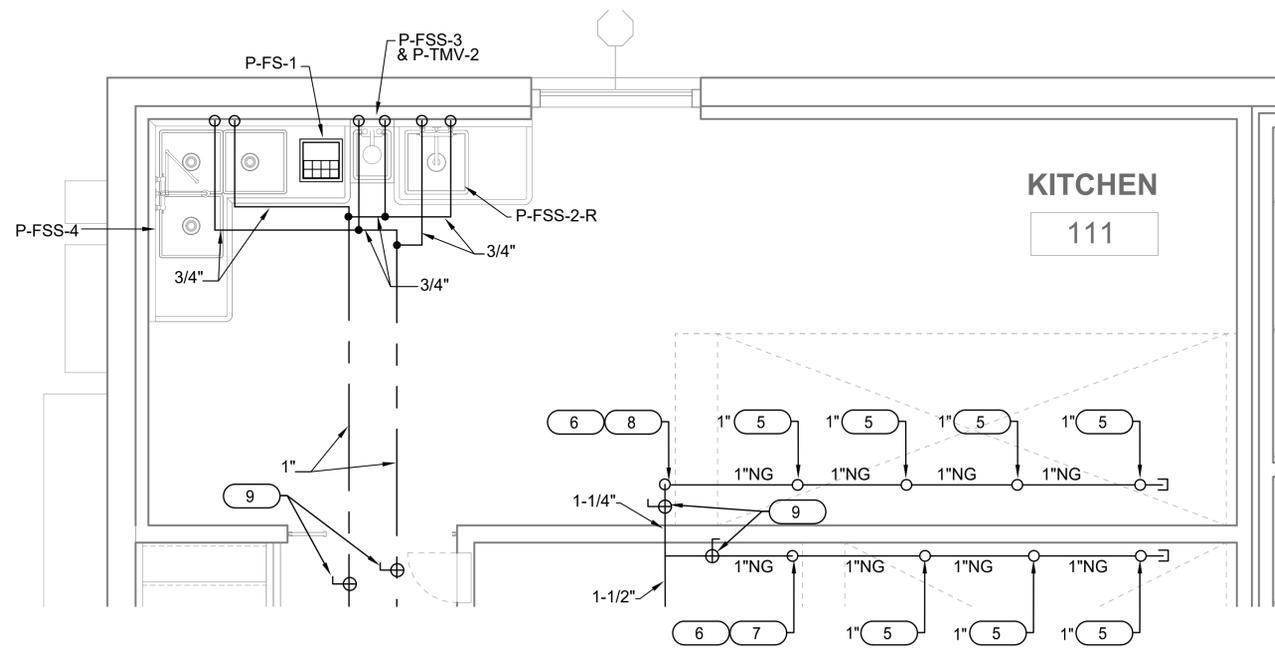


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

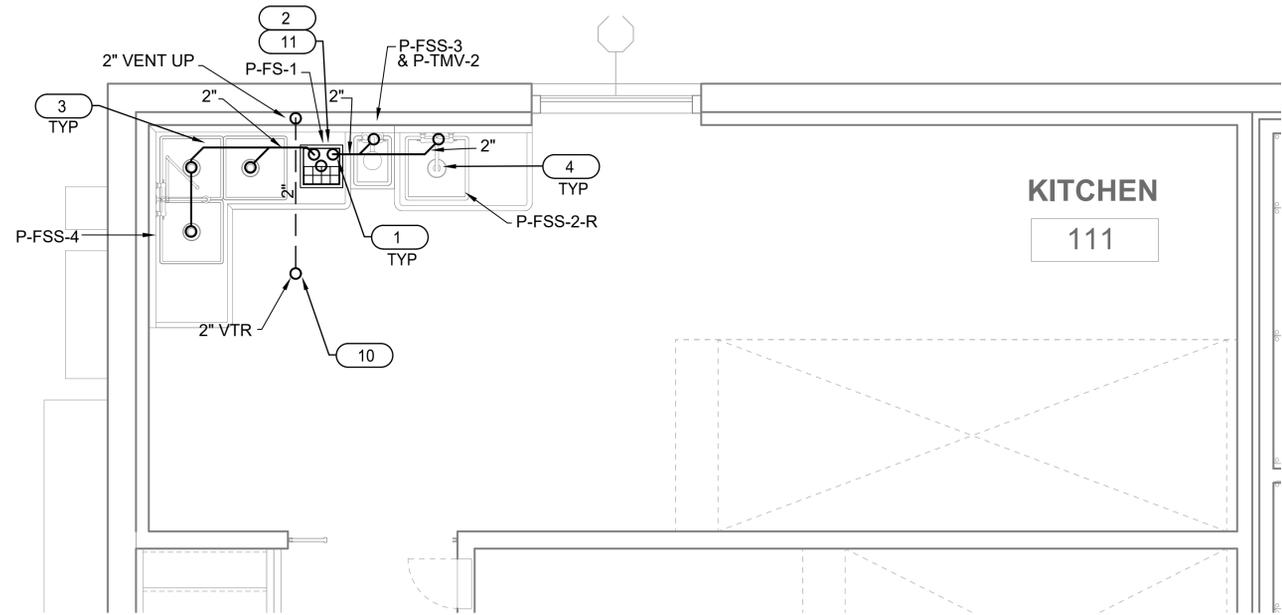
PLUMBING PLAN -
ROOF LEVEL

021293

P104



2 ENLARGED KITCHEN PRESSURE PLAN
1/2" = 1'-0"



1 ENLARGED KITCHEN DRAINAGE PLAN
1/2" = 1'-0"

NOTES

- NOT ALL PIPING SHOWN IS TYPICAL FOR ALL KITCHENS. SEE FLOOR PLANS AND RISER DIAGRAMS FOR INDIVIDUAL KITCHEN PIPING CONFIGURATION.
- REFER TO DETAILS ON SHEET M-500 SERIES FOR ADDITIONAL INFORMATION.

KEYNOTES

- EXPOSED 2" INDIRECT KITCHEN SINK WASTE PIPING DOWN TO POINT OF DISCHARGE OVER FLOOR SINK WITH MIN 2" AIRGAP.
- LOCATION OF FLOOR SINKS SHALL BE COORDINATED WITH APPROVED SUBMITTALS FOR OWNER FURNISHED / CONTRACTOR INSTALLED ITEMS TO AVOID CONFLICT WITH FLOOR MOUNTED SINK AND EQUIPMENT LEGS AND OTHER FEATURES WHICH MIGHT INTERFERE WITH FLOOR SINK POSITIONING.
- KITCHEN SINK INDIRECT WASTE PIPING SHALL BE FULLY SUPPORTED AND ANCHORED TO WALL USING LOW PROFILE UNISTRUT.
- ALL TWIST HANDLE / WASTE VALVES P-WV-1 (INTEGRAL TO 3-COMPARTMENT SINKS AND PREP SINKS) SHALL BE INSTALLED AT AN ANGLE SUCH THAT THE TWIST-HANDLE LEVER DOES NOT EXTEND BEYOND THE FOOTPRINT OF THE COMPARTMENT THAT IT SERVES AND IS NOT SUBJECT TO DAMAGE FROM KITCHEN OPERATIONS.
- FULL LINE SIZE SHUTOFF COCK IN EXPOSED LOCATION.
- ANSUL HOOD FIRE SUPPRESSION EMERGENCY GAS SHUTOFF VALVE ON EXPOSED GAS PIPING IN KITCHEN. GAS PIPING SHALL BE INSTALLED AND POSITIONED SUCH THAT IT WILL NOT INTERFERE WITH ACCESS TO THE ANSUL CABINET. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM INSTALLATION.
- 9 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING, SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (3) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (250 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.
- 12 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING, SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (4) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (335 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.
- FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION ABOVE CORRIDOR / KITCHEN CEILING.
- VENT THROUGH ROOF.
- PROVIDE FLOOR SINK WITH WATERLESS BARRIER-TYPE TRAP SEAL DEVICE AND HALF GRATE COVER.

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

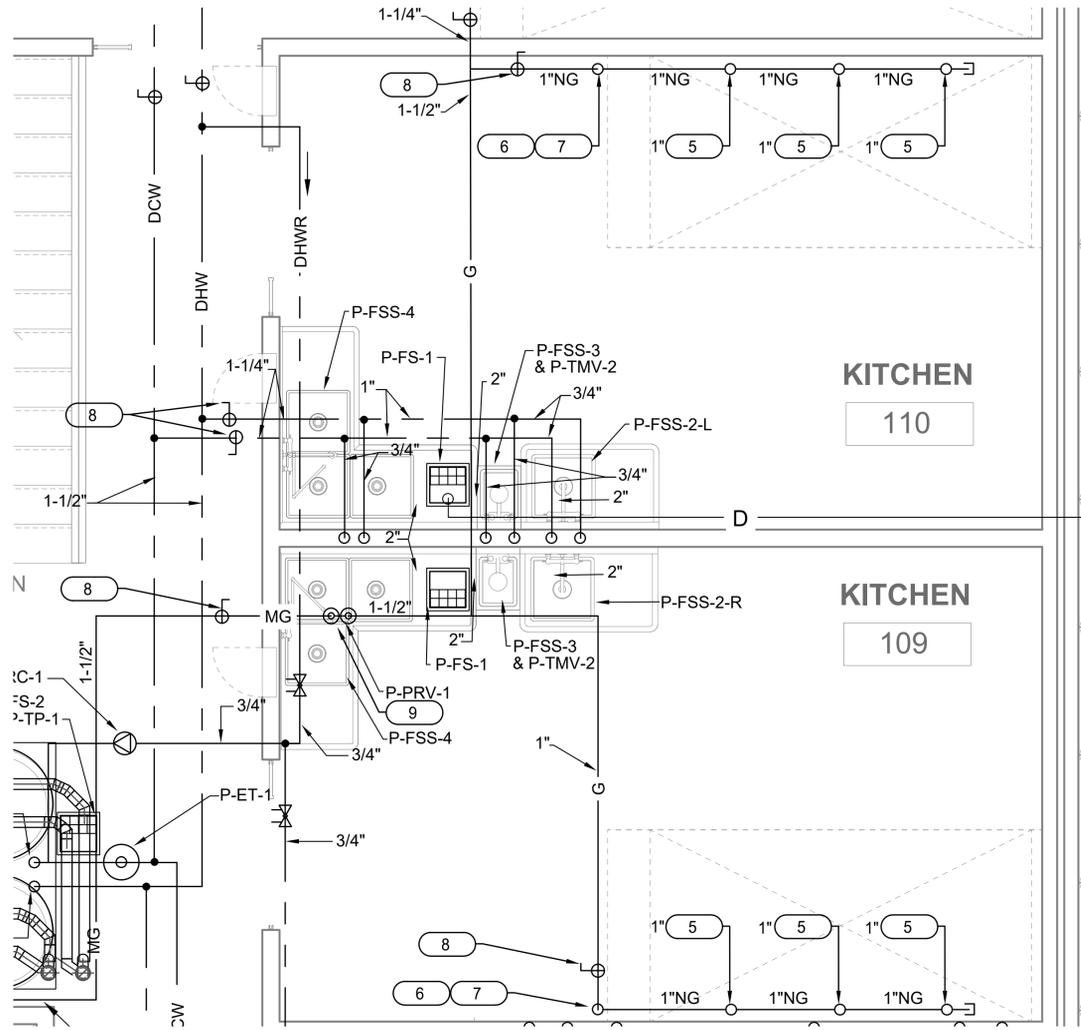


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

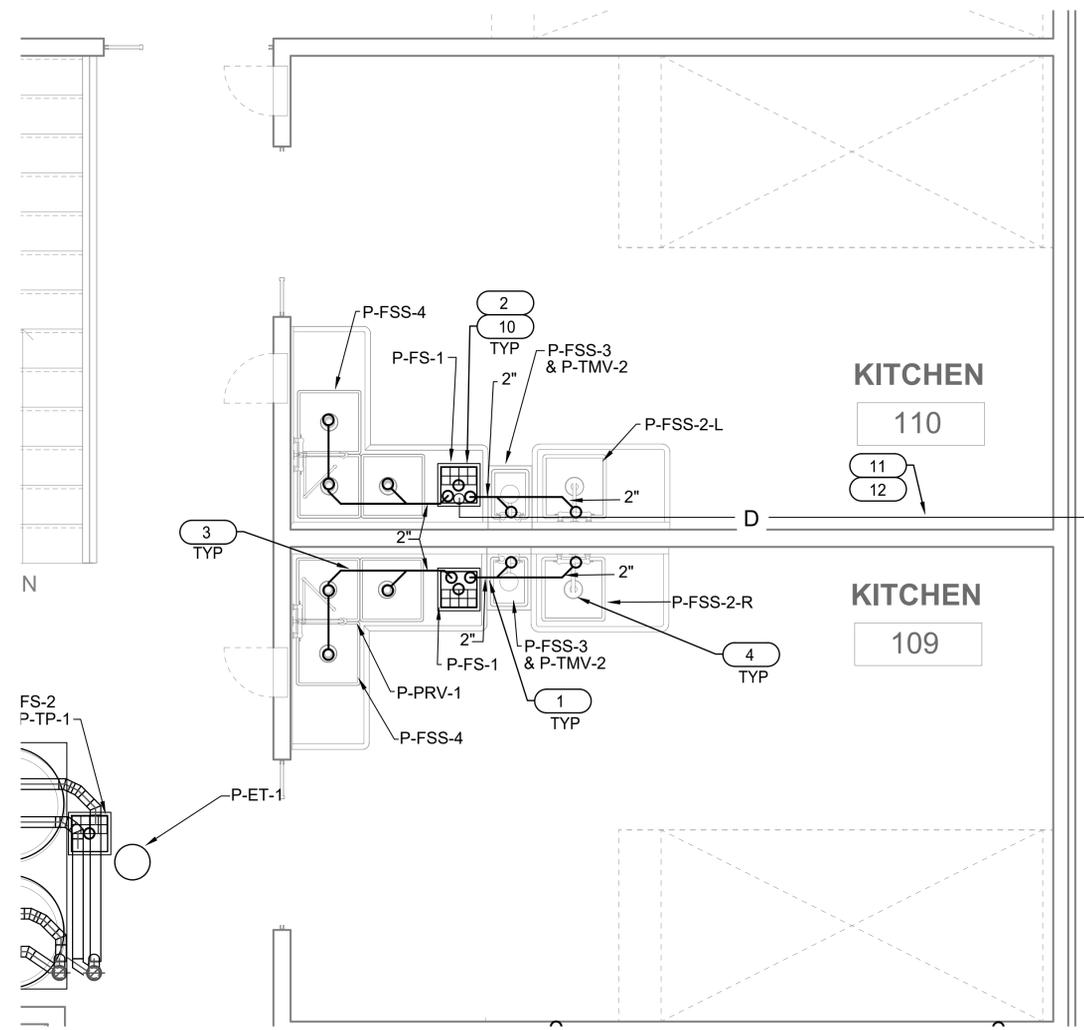
PLUMBING -
ENLARGED PLANS

021293

P-400



2 ENLARGED KITCHEN PRESSURE PLAN
1/2" = 1'-0"



1 ENLARGED KITCHEN DRAINAGE PLAN
1/2" = 1'-0"

NOTES

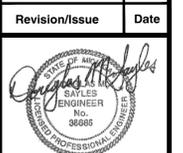
- NOT ALL PIPING SHOWN IS TYPICAL FOR ALL KITCHENS. SEE FLOOR PLANS AND RISER DIAGRAMS FOR INDIVIDUAL KITCHEN PIPING CONFIGURATION.
- REFER TO DETAILS ON SHEET M-500 SERIES FOR ADDITIONAL INFORMATION.

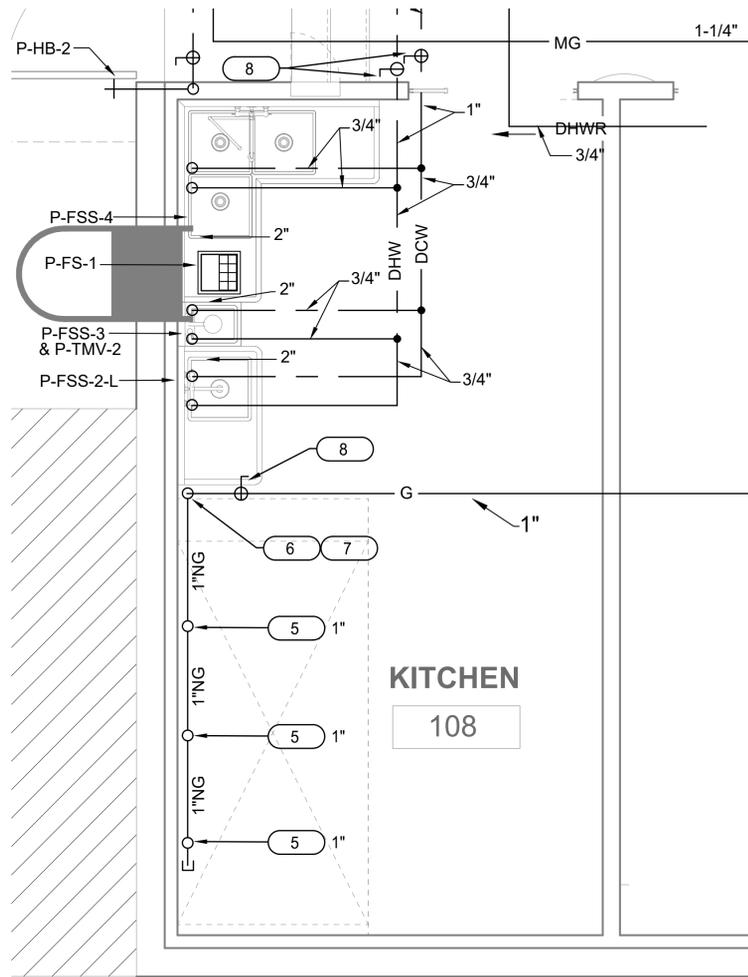
KEYNOTES

- EXPOSED 2" INDIRECT KITCHEN SINK WASTE PIPING DOWN TO POINT OF DISCHARGE OVER FLOOR SINK WITH MIN 2" AIRGAP.
- LOCATION OF FLOOR SINKS SHALL BE COORDINATED WITH APPROVED SUBMITTALS FOR OWNER FURNISHED / CONTRACTOR INSTALLED ITEMS TO AVOID CONFLICT WITH FLOOR MOUNTED SINK AND EQUIPMENT LEGS AND OTHER FEATURES WHICH MIGHT INTERFERE WITH FLOOR SINK POSITIONING.
- KITCHEN SINK INDIRECT WASTE PIPING SHALL BE FULLY SUPPORTED AND ANCHORED TO WALL USING LOW PROFILE UNISTRUT.
- ALL TWIST HANDLE / WASTE VALVES P-WV-1 (INTEGRAL TO 3-COMPARTMENT SINKS AND PREP SINKS) SHALL BE INSTALLED AT AN ANGLE SUCH THAT THE TWIST-HANDLE LEVER DOES NOT EXTEND BEYOND THE FOOTPRINT OF THE COMPARTMENT THAT IT SERVES AND IS NOT SUBJECT TO DAMAGE FROM KITCHEN OPERATIONS.
- FULL LINE SIZE SHUTOFF COCK IN EXPOSED LOCATION.
- ANSUL HOOD FIRE SUPPRESSION EMERGENCY GAS SHUTOFF VALVE ON EXPOSED GAS PIPING IN KITCHEN. GAS PIPING SHALL BE INSTALLED AND POSITIONED SUCH THAT IT WILL NOT INTERFERE WITH ACCESS TO THE ANSUL CABINET. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM INSTALLATION.
- 9 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING, SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (3) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (250 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.

- FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION ABOVE CORRIDOR / KITCHEN CEILING.
- GAS PRESSURE REGULATOR MOUNTED ABOVE KITCHEN STRUCTURE ADJACENT TO AND DIRECTLY ACCESSIBLE FROM THE CORRIDOR. PROVIDE W/ FULL LINE SIZE SHUTOFF COCK IN EXPOSED LOCATION ABOVE CORRIDOR.
- PROVIDE FLOOR SINK WITH WATERLESS BARRIER-TYPE TRAP SEAL DEVICE AND HALF GRATE COVER.
- CONNECT CONDENSATE PIPING TO MECHANICAL UNIT WITH CONDENSATE TRAP.
- WHERE EXPOSED IN KITCHEN, CONDENSATE PIPING SERVING WIC EVAPORATOR UNIT SHALL BE 3/4" NON-INSULATED TYPE "M" COPPER, MOUNTED LOW ON THE WALL USING LOW PROFILE UNISTRUT. ROUTE VIA GRAVITY TO AIR GAP DISCHARGE AT ADJACENT KITCHEN FLOOR SINK.

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21





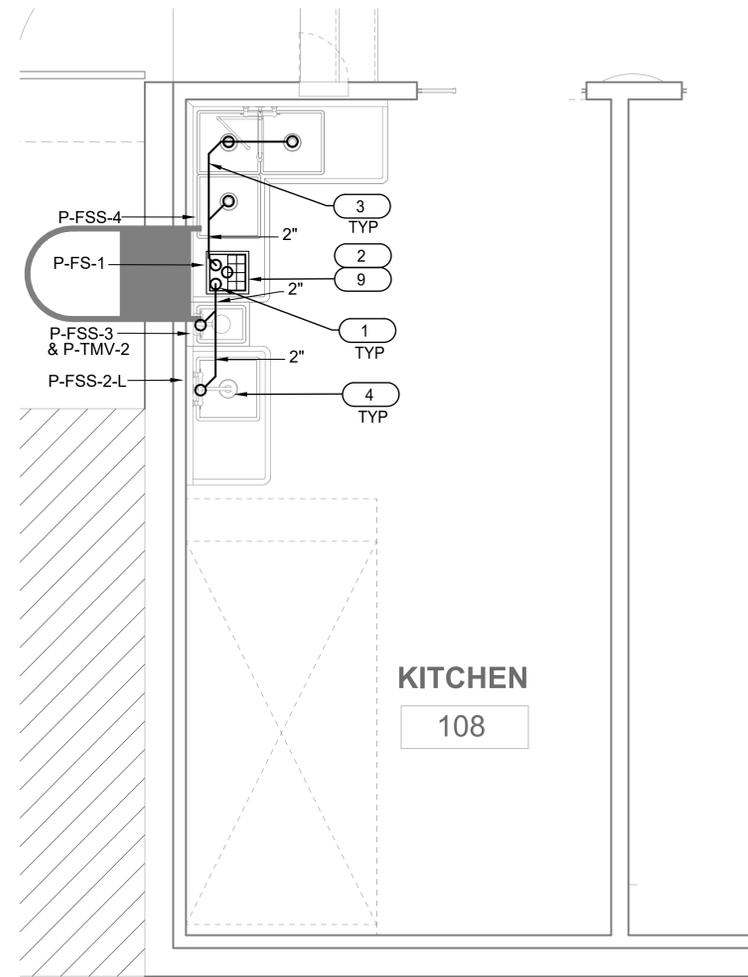
2 ENLARGED KITCHEN PRESSURE PLAN
1/2" = 1'-0"

NOTES

1. NOT ALL PIPING SHOWN IS TYPICAL FOR ALL KITCHENS. SEE FLOOR PLANS AND RISER DIAGRAMS FOR INDIVIDUAL KITCHEN PIPING CONFIGURATION.
2. REFER TO DETAILS ON SHEET M-500 SERIES FOR ADDITIONAL INFORMATION.

KEYNOTES

- 1 EXPOSED 2" INDIRECT KITCHEN SINK WASTE PIPING DOWN TO POINT OF DISCHARGE OVER FLOOR SINK WITH MIN 2" AIRGAP.
- 2 LOCATION OF FLOOR SINKS SHALL BE COORDINATED WITH APPROVED SUBMITTALS FOR OWNER FURNISHED / CONTRACTOR INSTALLED ITEMS TO AVOID CONFLICT WITH FLOOR MOUNTED SINK AND EQUIPMENT LEGS AND OTHER FEATURES WHICH MIGHT INTERFERE WITH FLOOR SINK POSITIONING.
- 3 KITCHEN SINK INDIRECT WASTE PIPING SHALL BE FULLY SUPPORTED AND ANCHORED TO WALL USING LOW PROFILE UNISTRUT.
- 4 ALL TWIST HANDLE / WASTE VALVES P-WV-1 (INTEGRAL TO 3-COMPARTMENT SINKS AND PREP SINKS) SHALL BE INSTALLED AT AN ANGLE SUCH THAT THE TWIST-HANDLE LEVER DOES NOT EXTEND BEYOND THE FOOTPRINT OF THE COMPARTMENT THAT IT SERVES AND IS NOT SUBJECT TO DAMAGE FROM KITCHEN OPERATIONS.
- 5 FULL LINE SIZE SHUTOFF COCK IN EXPOSED LOCATION.
- 6 ANSUL HOOD FIRE SUPPRESSION EMERGENCY GAS SHUTOFF VALVE ON EXPOSED GAS PIPING IN KITCHEN. GAS PIPING SHALL BE INSTALLED AND POSITIONED SUCH THAT IT WILL NOT INTERFERE WITH ACCESS TO THE ANSUL CABINET. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM INSTALLATION.
- 7 9 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING. SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DIRT LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPELINE SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (3) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (250 CFH). SEE DETAIL 3/P-500 FOR ADDITIONAL INFORMATION.
- 8 FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION ABOVE CORRIDOR.
- 9 PROVIDE FLOOR SINK WITH WATERLESS BARRIER-TYPE TRAP SEAL DEVICE AND HALF GRATE COVER.

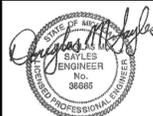


1 ENLARGED KITCHEN DRAINAGE PLAN
1/2" = 1'-0"

DESIGNHAUS
EST 1998
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

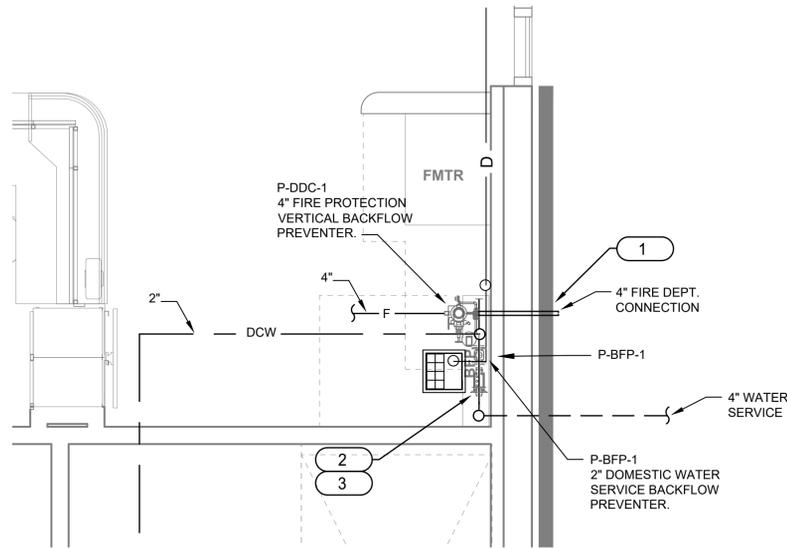


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

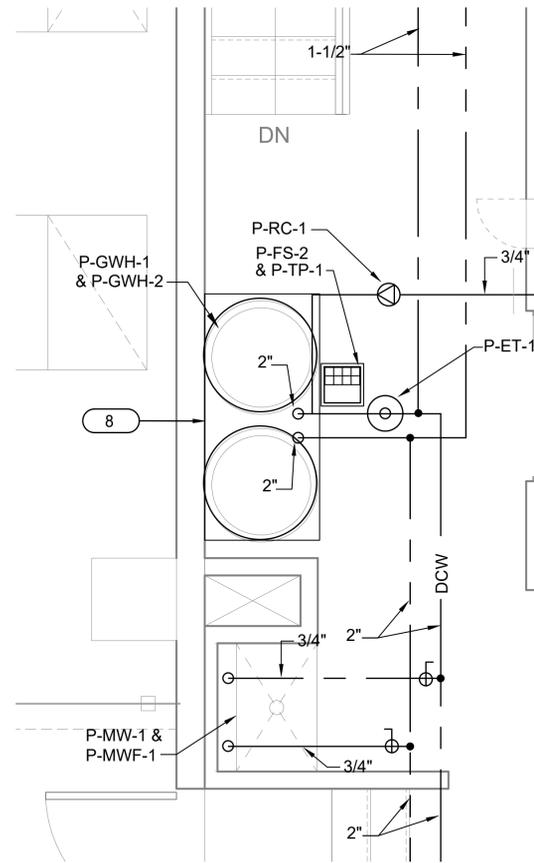
PLUMBING -
ENLARGED PLANS

021293

P-402



2 ENLARGED UTILITY AREAS PRESSURE PLAN
1/2" = 1'-0"



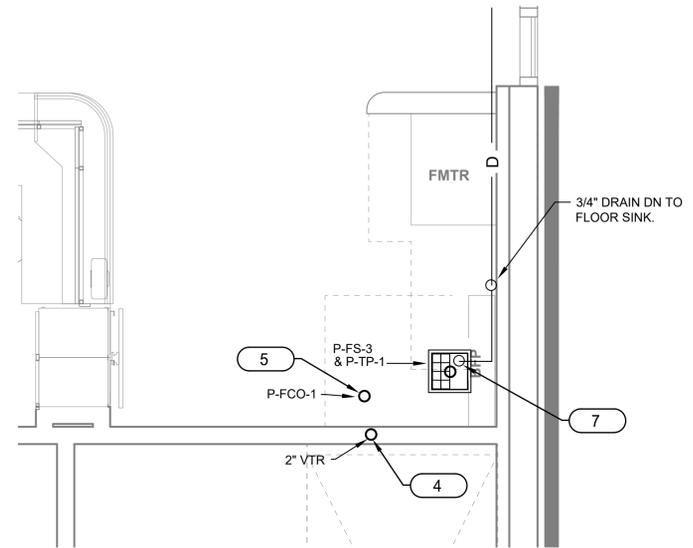
4 ENLARGED UTILITY AREAS PRESSURE PLAN
1/2" = 1'-0"

NOTES

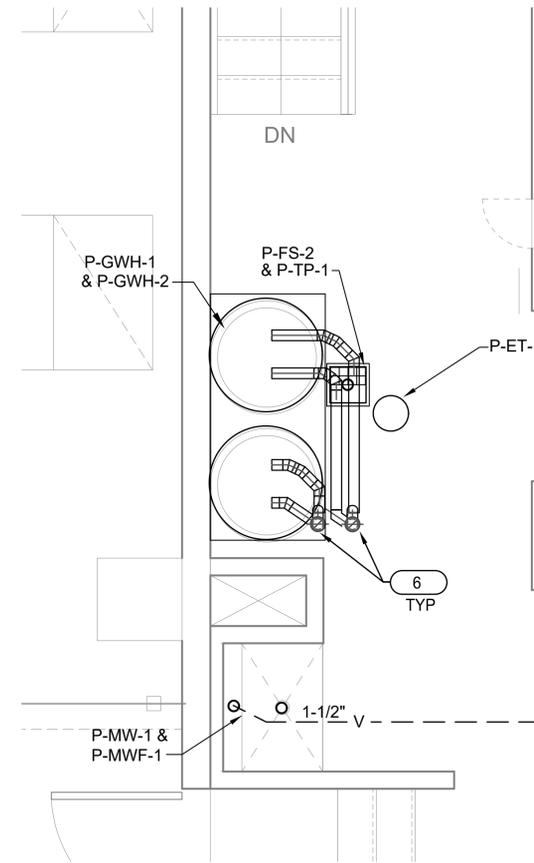
1. REFER TO DETAILS ON SHEET M-500 SERIES FOR ADDITIONAL INFORMATION.

KEYNOTES

1. FIRE DEPARTMENT CONNECTION.
2. DOMESTIC WATER METER BY WATER UTILITY.
3. FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION.
4. VENT THROUGH ROOF.
5. FULL LINE SIZE FLOOR CLEANOUT.
6. WATER HEATER CONCENTRIC (FLUE/COMBUSTION AIR) VENT THROUGH ROOF.
7. CONDENSATE DOWN IN WALL TO POINT OF DISCHARGE OVER FLOOR SINK WITH MIN 2" AIRGAP.
8. WATER HEATER HOUSEKEEPING PAD.



1 ENLARGED UTILITY AREAS DRAINAGE PLAN
1/2" = 1'-0"



3 ENLARGED UTILITY AREAS DRAINAGE PLAN
1/2" = 1'-0"

EST
1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

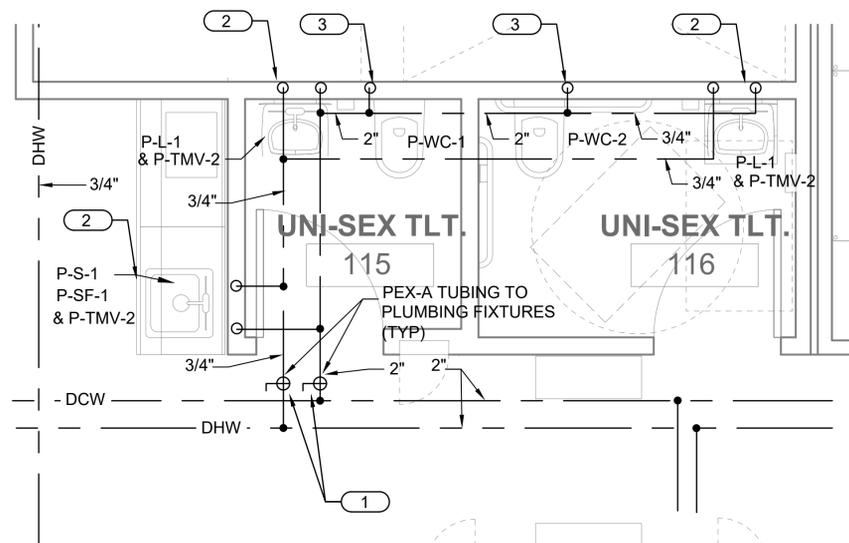


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING -
ENLARGED PLANS

021293

P-403



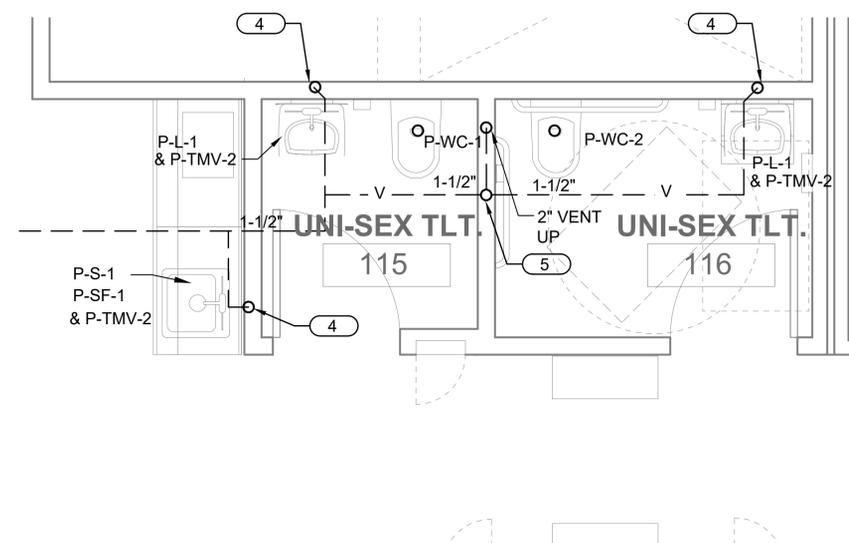
4 ENLARGED RESTROOM AREA PRESSURE PLAN
1/2" = 1'-0"

NOTES

1. REFER TO DETAILS ON SHEET M-500 SERIES FOR ADDITIONAL INFORMATION.

KEYNOTES

- 1 FULL LINE SIZE SHUTOFF VALVE IN EXPOSED LOCATION.
- 2 3/4" DCW & DHW DOWN TO LAVATORY / SINK.
- 3 2" DCW TO WATER CLOSET.
- 4 1-1/2" VENT.
- 5 2" VENT UP THROUGH ROOF.

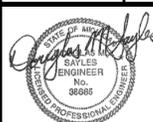


3 ENLARGED RESTROOM AREA DRAINAGE PLAN
1/2" = 1'-0"

DESIGNHAUS
ARCHITECTURE

EST
1998
3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

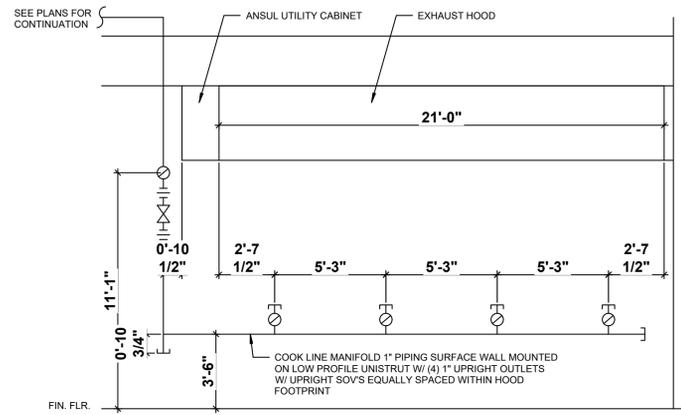


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

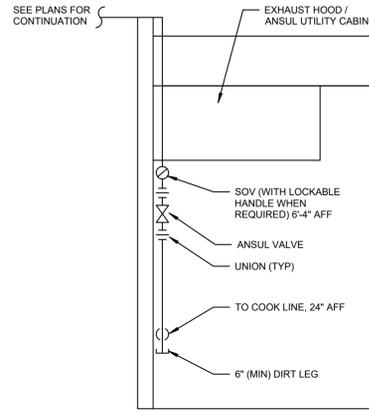
PLUMBING -
ENLARGED PLANS

021293

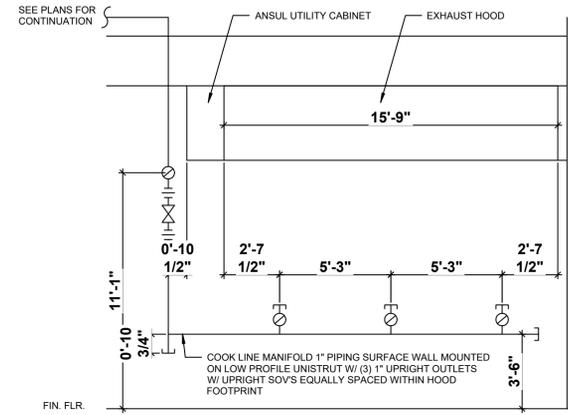
P-404



12 FT HOOD FRONT ELEVATION

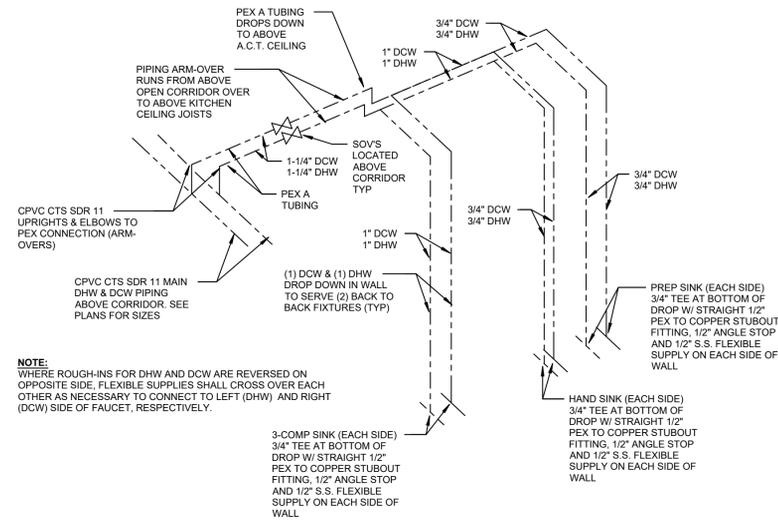


12 FT OR 9 FT HOOD SIDE ELEVATION



9 FT HOOD FRONT ELEVATION

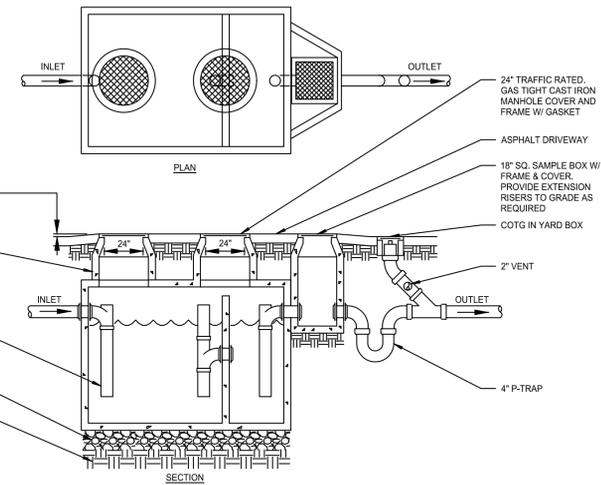
3 NATURAL GAS COOK LINE DETAIL
NTS



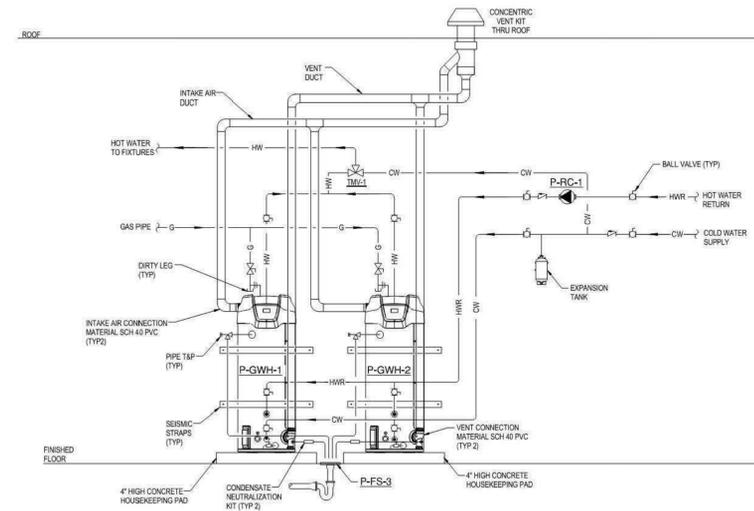
4 DOMESTIC WATER BRANCH LINES AT BACK TO BACK
KITCHEN PLUMBING WALLS
NTS

NOTE:

- TANK DESIGNED FOR H-20 TRAFFIC WHEEL LOAD WITH DRY SOIL CONDITIONS (WATER TABLE BELOW TANK).
- SUITABLE NATIVE SOIL OR GRANULAR SUB-BASE SHALL BE COMPACTED AND LEVELED TO HANDLE ANTICIPATED LOADS. SEE MANUFACTURER'S INSTALLATION PROCEDURES SHEET FOR ADDITIONAL INFO.



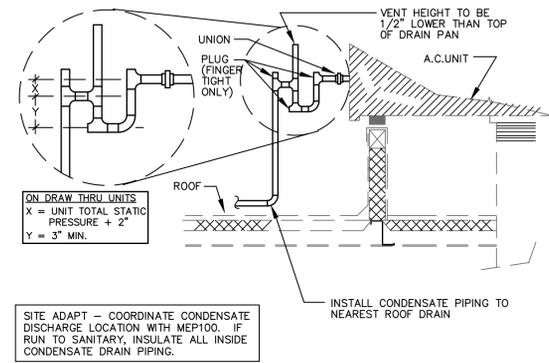
2 GREASE INTERCEPTOR
NTS



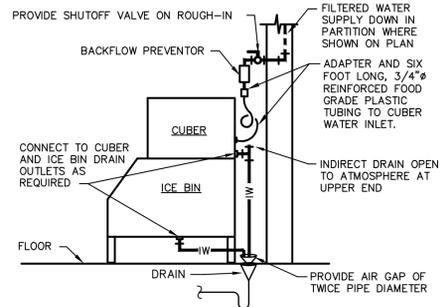
1 GAS WATER HEATER W/ RECIRCULATION PUMP
NTS

Revision/Issue	Date
Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21

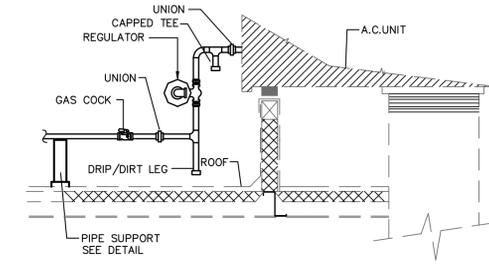




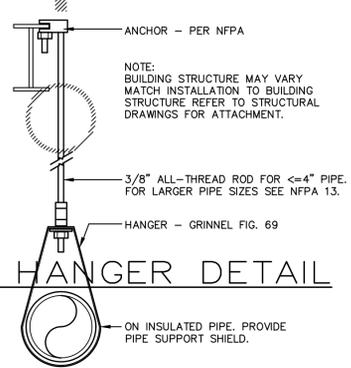
9 CONDENSATE CONNECTION
Scale: NONE



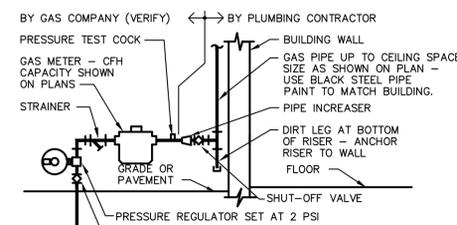
8 ICE MACHINE SUPPLY
Scale: NONE



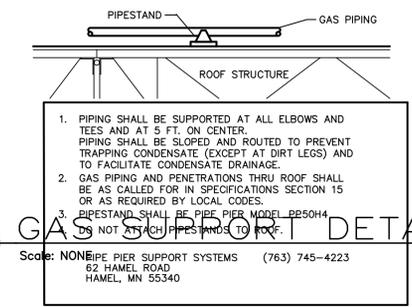
7 RTU GAS CONNECTION
Scale: NONE



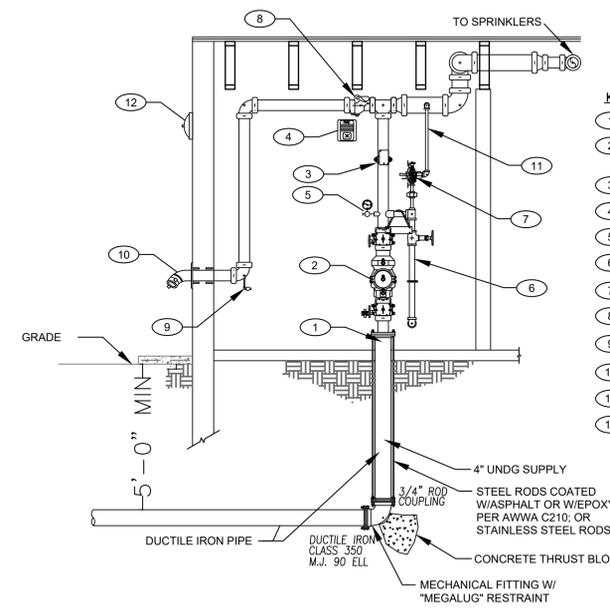
6 PIPE HANGER DETAIL
Scale: NONE



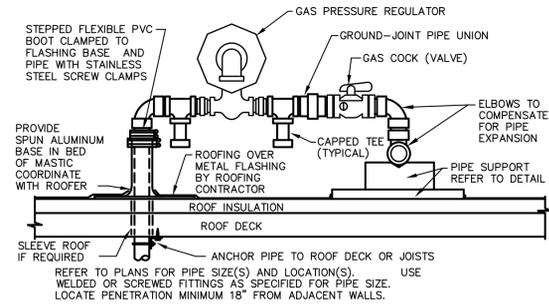
5 GAS METER DETAIL



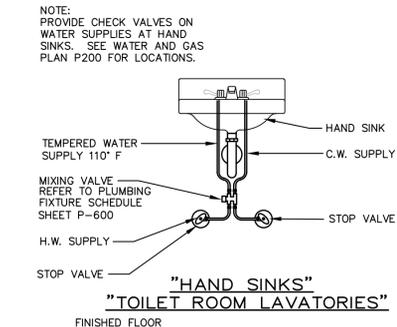
4 GAS SUPPORT DETAIL
Scale: NONE



3 TYPICAL FIRE PROTECTION RISER DETAIL
Scale: NONE



2 ROOF PENETRATION
Scale: NONE



1 MV-2 MIXING VALVE
Scale: NONE

EST 1998
DESIGNHAUS ARCHITECTURE
3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

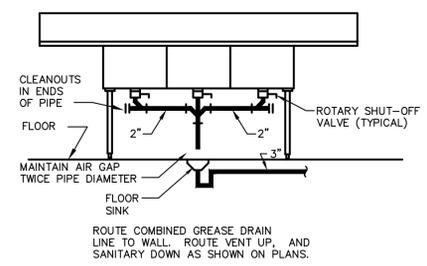
Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

Professional Engineer
No. 86685
SAYLES
ENGINEER

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING DETAILS
021293
P501

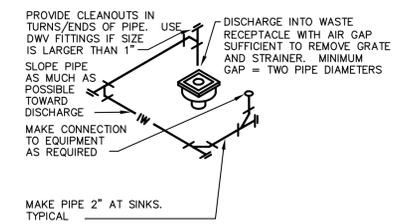
17 SCULLERY SINK DRAIN
Scale: NONE



ROUTE COMBINED GREASE DRAIN LINE TO WALL. ROUTE VENT UP, AND SANITARY DOWN AS SHOWN ON PLANS.

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS. DWV COPPER PIPE, FITTINGS AND CONNECTORS ALL AROUND SINK.

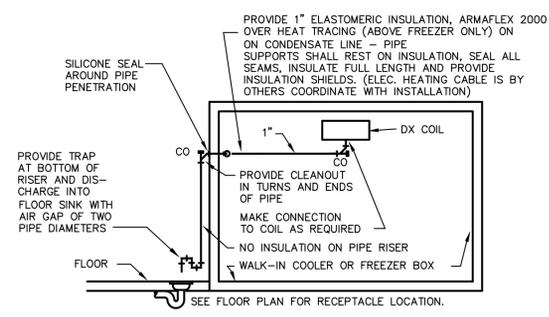
16 INDIRECT DRAIN
Scale: NONE



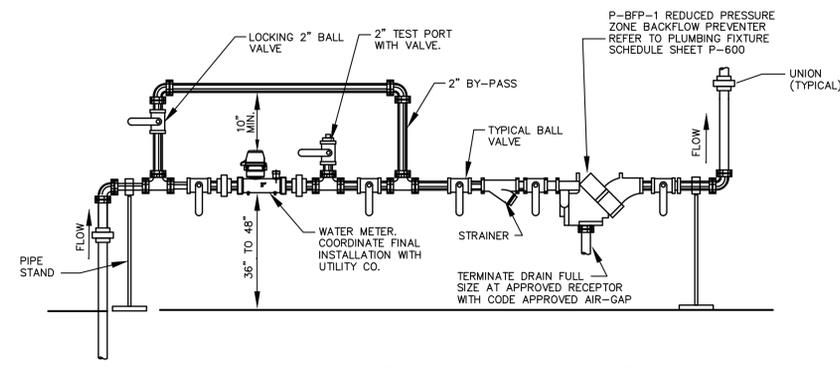
ROUTE PIPE INCONSPICUOUSLY AND UNOBTUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.

TYPICAL INDIRECT DRAIN FROM EQUIPMENT. ALL INDIRECT WASTE DRAIN PIPING SHALL TERMINATE WITH A 45° ANGLE CUT. TYPICAL. REMOVE ALL BURS AND FILE DOWN SHARP EDGES.

15 CONDENSATE DRAIN
Scale: NONE



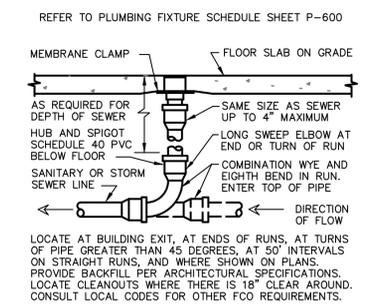
INSTALL PIPE HIGH AS POSSIBLE, ANCHORED TO WALL OF BOX WITH SUPPORTS AT MAXIMUM THREE FOOT CENTERS. USE TYPE "M" HARD COPPER TUBE AND FITTINGS WITH LEAD-FREE SOLDER JOINTS. SLOPE HORIZONTAL PIPE AT MINIMUM TWO PERCENT. REFER TO LOCAL CODE FOR INDIRECT DRAIN REQUIREMENTS.



DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. INSTALL ITEMS FURNISHED BY WATER COMPANY, OWNER TO PAY ANY FEES REQUIRED BY WATER COMPANY. FURNISH AND INSTALL ITEMS NOT PROVIDED BY THE WATER COMPANY. PROVIDE BACKFLOW PREVENTER OF TYPE & MANUFACTURER APPROVED BY LOCAL AUTHORITIES. STRAINER AND REDUCING VALVE MAY BE INSTALLED IN VERTICAL PIPE IF SPACE LIMITATIONS REQUIRE IT. CLEAN STRAINER BEFORE TURNING BUILDING OVER TO OWNER. PROVIDE ANY REQUIRED CERTIFICATION OF TESTING OF THE BACKFLOW PREVENTER TO LOCAL AUTHORITIES.

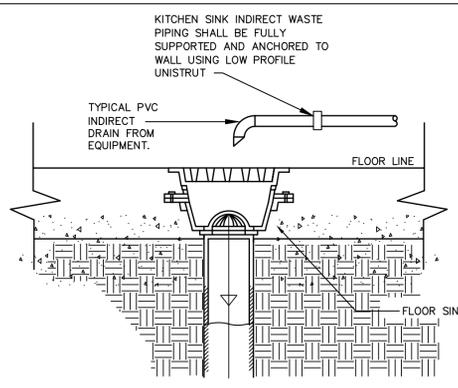
12 WATER SERVICE ENTRANCE
Scale: NONE

14 FLOOR CLEANOUT
Scale: NONE

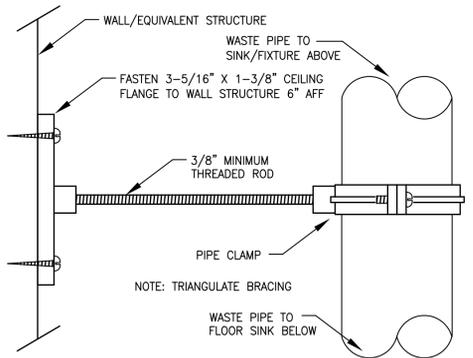


LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER FOOD REQUIREMENTS.

11 FLOOR SINK DETAIL
Scale: NONE

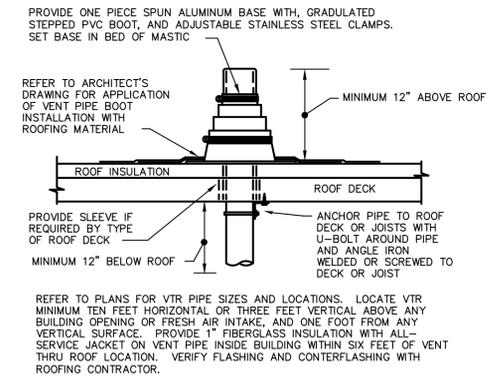


13 PIPE SUPPORT DETAIL
Scale: NONE



PROVIDE ONE PIECE SPUN ALUMINUM BASE WITH GRADUATED STEPPED PVC BOOT, AND ADJUSTABLE STAINLESS STEEL CLAMPS. SET BASE IN BED OF MASTIC

10 VENT PENETRATION
Scale: NONE



REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MINIMUM TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND CONTERFLASHING WITH ROOFING CONTRACTOR.

DESIGNHAUS ARCHITECTURE
EST 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22
CD 50%	02.04.22
Second Investigation	10.08.21
Site Investigation	09.30.21

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Professional Engineer
No. 86685

PLUMBING DETAILS

PLUMBING INSULATION	
A.	TYPE 1: ASTM C547, MOLDED GLASS FIBER PIPE INSULATION, CONFORM TO ASTM C795 FOR APPLICATION ON AUSTENITIC STAINLESS STEEL. 1. THERMAL CONDUCTIVITY: 0.23 AT 75 DEGREES F. 2. OPERATING TEMPERATURE RANGE: 0 TO 850 DEGREES F. 3. VAPOR BARRIER JACKET: ASTM C1136, TYPE I, FACTORY APPLIED REINFORCED FOIL KRAFT WITH SELF-SEALING ADHESIVE JOINTS. 4. JACKET TEMPERATURE LIMIT: MINUS 20 TO 150 DEGREES F.
B.	TYPE 2: ASTM C534, TYPE I, FLEXIBLE, CLOSED CELL ELASTOMERIC INSULATION, TUBULAR. 1. THERMAL CONDUCTIVITY: 0.27 AT 75 DEGREES F. 2. OPERATING TEMPERATURE RANGE: RANGE: MINUS 70 TO 180 DEGREE F.
C.	WALL THICKNESS: 0.5" FOR PIPE 1-1/4" OR SMALLER, 1.0" FOR PIPE 1-1/2" AND LARGER.
D.	ACCEPTABLE MANUFACTURERS: KNAUF, OWENS-CORNING, JOHNS MANSVILLE, ARMACELL, AEROFLEX, NOMACO.

PLUMBING FIXTURE & EQUIPMENT SCHEDULE										
SYMBOLS	FIXTURE	BRANCH CONNECTION SUPPLY SIZE					MFR / MODEL	REMARKS		
		WASTE	TRAP	VENT	CW	HW				
P-WC-1	WATER CLOSET, FLOOR MOUNT, 1.28 GPF	4"	Integral	2"	1"	-	ZURN MODEL Z5535-K	FLUSH TANK, FLOOR MOUNTED, PROVIDE COMPLETE WITH WATER CLOSET SEAT, ANGLE STOP, BOLT/WAX RING KIT.		
P-WC-2	WATER CLOSET, FLOOR MOUNT, ADA, 1.28 GPF	4"	Integral	2"	1"	-	ZURN MODEL Z5555	ADA COMPLIANT, FLUSH TANK, FLOOR MOUNTED, PROVIDE COMPLETE WITH WATER CLOSET SEAT, ANGLE STOP, BOLT/WAX RING KIT.		
P-L-1	LAVATORY, WALL HUNG, ADA, 0.5 GPM	2"	1-1/2"	1-1/2"	1/2"	1/2"	ZURN Z.L3.M WITH 1231 CARRIER	WHITE, WALL HUNG, PROVIDE COMPLETE WITH LAVATORY FAUCET, GRID DRAIN, P-TRAP, AND SUPPLY STOPS, CONCEALED ARM CARRIER, AND THERMOSTATIC MIXING VALVE P-TMV-2 (NOT TO EXCEED 115 DEG. F.)		
P-S-1	SINK, SELF RIMMING, S.S., ADA	2"	1-1/2"	1-1/2"	1/2"	1/2"	ELKAY MODEL PSRADQ191955L	STAINLESS STEEL, PROVIDE COMPLETE WITH SINK, DRAIN & TAILPIECE, 17 GA. CHROME PLATED P-TRAP AND SUPPLIES, SINK FAUCET P-SF-1 AND DRINKING WATER FAUCET P-DW-1.		
P-SF-1	SINK FAUCET	-	-	-	-	-	ELKAY MODEL LK1000CR	CHROME, INTEGRAL TO P-S-1		
P-MW-1	MAT WASH STATION	3"	3"	2"	-	-	MUSTEE MODEL 65M	WHITE, MOP SERVICE BASIN, 10"X16"X24" D, WHITE DURASTONE STRUCTURAL FIBERGLASS, SELF DRAINING SHELF AND REMOVABLE STRAINER, 3" OUTLET DRAIN AND P-TRAP, PROVIDE COMPLETE WITH P-MW-1. REFER TO DETAIL ON ARCHITECTURAL SHEETS.		
P-MWF-1	MAT WASH FAUCET	-	-	-	3/4"	3/4"	T & S MODEL B-0665 B8TRM	ROUGH CHROME FINISH, 8" CENTER SET WALL MOUNT FAUCET W/ INTEGRAL STOPS, VACUUM BREAKER, SPRING CHECKS, WALL SUPPORT ROD & PAL HOOK, INTEGRAL TO P-MW-1.		
P-HB-1	HOSE BIBB (ROOF)	-	-	-	3/4"	-	MAPA MODEL MPH-24FP-249	ROOF HYDRANT, FREE STANDING, NON-FREEZE		
P-HB-2	HOSE BIBB (EXTERIOR)	-	-	-	3/4"	-	ZURN MODEL Z1321	HOSE BIBB, WALL MOUNT, NON-FREEZE, LOOSE KEY-OPERATOR		
P-TP-1	TRAP PRIMER	-	-	-	1/2"	-	PPP P1 & P2 TRAP PRIMER UNIT W/ DU-24	TRAP PRIMER UNIT W/ DISTRIBUTION UNIT AS NEEDED		
P-WHA-1	WATER HAMMER ARRESTOR	-	-	-	1/2" x 1/2"	1/2" x 1/2"	DATEY MODEL Z1341XL-P34	WATER HAMMER ARRESTORS WITH PEY CONNECTOR. PROVIDE AT ALL QUICK CLOSING VALVES.		
P-TMV-2	THERMOSTATIC MIXING VALVE (POINT OF USE)	-	-	-	1/2"	1/2"	LEONARD MODEL 1704-F-STSTL REC	PROVIDE AT ALL LAVATORIES (NOT TO EXCEED 115 DEG. F.) AND HAND SINKS (NOT TO EXCEED 108 DEG. F.)		
P-FS-1	FLOOR SINK (KITCHEN)	3"	3"	2"	-	-	ZURN MODEL FS12-6-3-PV3-YS	12" SANITARY PVC FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANILOC DOME STRAINER, STAINLESS STEEL WESH BUCKET, 3" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE WITH ASME A112.8.7 & CSA B45.5/MAPPO Z124. NO SUBSTITUTIONS.		
P-FS-2	FLOOR SINK, HALF GRATE (ICE MAKER & WATER HEATERS)	2"	2"	2"	-	-	ZURN MODEL FS12-6-PV2-H	12" SQUARE SANITARY PVC FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANILOC DOME STRAINER, HALF PVC GRATE, 2" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE WITH ASME A112.8.7 & CSA B45.5/MAPPO Z124. NO SUBSTITUTIONS.		
P-FS-3	FLOOR SINK, HALF GRATE (WATER UTILITY ROOM)	4"	4"	2"	-	-	ZURN MODEL FS12-6-PV4-H	12" SQUARE SANITARY PVC FLOOR SINK WITH 14" SQUARE TOP, 6-3/8" DEEP SUMP WITH SMOOTH INTERNAL SURFACE, SANILOC DOME STRAINER, HALF PVC GRATE, 4" PVC SOLVENT WELD OUTLET, DESIGNED IN ACCORDANCE WITH ASME A112.8.7 & CSA B45.5/MAPPO Z124. NO SUBSTITUTIONS.		
P-WCD-1	WALL CLEANOUT	2" x 3"	-	-	-	-	CHARLOTTE MODEL PVC 445 X	CHROME, TOP ASSEMBLY ADJUSTABLE FLOOR CLEANOUT WITH E21 TECHNOLOGY PVC OR ABS SOLVENT WELD BODY, GAS AND WATER TIGHT ABS THREADED TAPERED PLUG AND TOP ASSEMBLY INTEGRATED SELF CONTAINED ROUND LIGHT DUTY SCORATED NICKEL BRONZE COVER, DRAIN OUTLET SIZE SHALL MATCH SIZE OF PIPING SERVED. CLEANOUT IS DESIGNED IN ACCORDANCE WITH ASME A112.38.2M. ALL CLEANOUTS 3" AND LARGER SIZE SHALL BE FLOOR CLEANOUTS.		
P-FCO-1	FLOOR CLEANOUT	2" x 4"	-	-	-	-	ZURN MODEL E2C	SIZE SHALL MATCH THAT OF PIPING SERVED (NO SUBSTITUTIONS). ALL CLEANOUTS 3" AND LARGER SHALL BE FLOOR CLEANOUTS.		
P-COTG-1	CLEANOUT TO GRADE	4" x 6"	-	-	-	-	BROOKS MODEL 1-RD-T	SIZE SHALL MATCH THAT OF PIPING SERVED.		
P-COTG-2	CLEANOUT TO GRADE, TRAFFIC RATED	4" x 6"	-	-	-	-	BROOKS MODEL 1-RD-CI	SIZE SHALL MATCH THAT OF PIPING SERVED.		
P-PRV-1	GAS PRESSURE REGULATING VALVE (SERVING KITCHENS)	-	-	-	-	-	MAXITROL MODEL 325-7AL	LEVER ACTING DESIGN, 1-1/4" INLET x 1-1/4" OUTLET, 1250 CFM MAX FLOW CAPACITY, 2 PSIG INLET PRESSURE, 7-1/11" SPRING RANGE, VENTLESS MEDIUM GAS PRESSURE GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL.		
P-PRV-2	GAS PRESSURE REGULATING VALVE (SERVING EQUIPMENT)	-	-	-	-	-	MAXITROL MODEL 325-7AL	LEVER ACTING DESIGN, 1-1/4" INLET x 1-1/4" OUTLET, 1250 CFM MAX FLOW CAPACITY, 2 PSIG INLET PRESSURE, 7-1/11" SPRING RANGE, VENTLESS MEDIUM GAS PRESSURE GAS REDUCING STATION W/ LOW PRESSURE CUT-OFF, VENT LIMITER AND EXTERNAL CONTROL.		
P-BFP-1	BACKFLOW PREVENTER, DOMESTIC SERVICE	-	-	-	1-1/2"	-	ZURN MODEL 375XL	REDUCED PRESSURE ZONE ASSEMBLY, 1-1/2" SIZE, LEAD FREE CONSTRUCTION, PIPE DRAIN TO APPROVED RECEPTOR, INSTALLED AT READILY ACCESSIBLE HEIGHT. COMPLETE W/ STRAINER AND GATE VALVES. WHERE INSTALLED INDOORS, ROUTE DRAIN TO TERMINATE WITH AIR GAP DISCHARGE AT ADJACENT RECEPTOR.		
P-DDC-1	BACKFLOW PREVENTER, FIRE SERVICE, VERTICAL IN-LINE (INTEGRAL TO FIRE RISER)	-	-	-	4"	-	ZURN MODEL 350ASTDA-8F	DOUBLE CHECK DETECTOR ASSEMBLY, 4" SIZE, COMPLETE WITH BUTTERFLY VALVES FOR VERTICAL POSITION IN-LINE WITH FIRE RISER. INSTALL AT READILY ACCESSIBLE HEIGHT.		
P-GGI-1	GRAVITY GREASE INTERCEPTOR	4"	4"	3"	-	-	JENSEN MODEL JF750G	GRAVITY FREASE INTERCEPTOR, 750 GALLON CAPACITY, 8-1/16" x 4-0/16" x 6-0/16", CONCRETE CONSTRUCTION. COMPLETE WITH (2) TRAFFIC RATED 24" DIA. CAST IRON FRAME, COVER & GASKET (GAS TIGHT). PROVIDE #2432 SERIES RISERS AS NEEDED. INCLUDE SAMPLE BOX MODEL #2432Z 32" DIA. x 32" DEEP WITH #2432 RISER SECTIONS AS REQUIRED.		
P-SP-1	SUMP PUMP	1-1/2"	-	1-1/2"	-	-	ZOELLER MODEL BN151	SINGLE SUBMERSIBLE EFFLUENT PUMP, CAST IRON PUMP HOUSING, 20FT. HD., 29 GPM MAX., 1/3 HP, 115V-1PH-60HZ, 3450 RPM, 6.0 AMPS. COMPLETE WITH FLOAT SWITCH, COORD AND PLUGS.		

FOOD SERVICE SINK SCHEDULE										
SYMBOLS	FIXTURE	BRANCH CONNECTION SUPPLY SIZE					MFR / MODEL	REMARKS		
		WASTE	TRAP	VENT	CW	HW				
P-FSS-4	3 COMPARTMENT SINK (CORNER)	2" IW	-	-	3/4"	3/4"	REGENCY MODEL 600S31818XC	OWNER FURNISHED/ CONTRACTOR INSTALLED. INCLUDES 3-COMPARTMENT STAINLESS STEEL SINK, (1) PRE-RINSE SPRAY (LESS 12" SPOUT & ADD (1) P-F-2 24" SWING JOINT FAUCET SPOUT) AND (3) P-WV-1 DRAIN AND TWIST HANDLE WASTE VALVES/ONE AT EACH COMPARTMENT. CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES / ANGLE STOPS W/ WATER HAMMER ARRESTOR P-WHA-1 ON COW AND DHW LINES TO PRE-RINSE FAUCET, AND INDIRECT WASTE PIPING TO FLOOR SINK. CONTRACTOR SHALL PLUG EXTRA FAUCET HOLES ON NON-PLUMBING WALL WITH 1-3/4" CHROME PLATED COCK HOLE COVERS.		
P-FSS-2-L	PREP SINK (LEFT)	2" IW	-	-	3/4"	3/4"	STEELTON MODEL 522CS11818 LFT	OWNER FURNISHED/ CONTRACTOR INSTALLED PRODUCT INCLUDES STAINLESS STEEL SINK W/ LEFT DRAINBOARD, P-F-1 FAUCET AND DRAIN W/ TWIST HANDLE - WASTE VALVE P-WV-1. CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES / ANGLE STOPS TO FAUCET, IN-LINE CHECK VALVES IF NOT INTERNAL TO FAUCET AND INDIRECT WASTE PIPING TO FLOOR SINK.		
P-FSS-2-R	PREP SINK (RIGHT)	2" IW	-	-	3/4"	3/4"	STEELTON MODEL 522CS11818 RHT	OWNER FURNISHED/ CONTRACTOR INSTALLED PRODUCT INCLUDES STAINLESS STEEL SINK W/ RIGHT DRAINBOARD, P-F-1 FAUCET AND DRAIN W/ TWIST HANDLE - WASTE VALVE P-WV-1. CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES / ANGLE STOPS TO FAUCET, IN-LINE CHECK VALVES IF NOT INTERNAL TO FAUCET AND INDIRECT WASTE PIPING TO FLOOR SINK.		
P-FSS-3	LAVATORY (HAND SINK)	2"	1-1/2"	-	1/2"	1/2"	REGENCY MODEL 60HS12SP	OWNER FURNISHED/ CONTRACTOR INSTALLED PRODUCT INCLUDES STAINLESS STEEL HAND SINK W/ INTEGRAL FAUCET AND SPLASH GUARDS. CONTRACTOR SHALL ADDITIONALLY PROVIDE SUPPLIES/ ANGLE STOPS, DRAIN & TAILPIECE, 17 GA. CHROME PLATED P-TRAP AND SUPPLIES. PROVIDE WITH THERMOSTATIC MIXING VALVE P-TMV-1 (NOT TO EXCEED 108 DEG. F.)		
P-PR-1	PRE-RINSE SPRAY	-	-	-	-	-	SPLASH MODEL SPL325W-20	CHROME PLATED BRASS, INTEGRAL TO P-FSS-1.		
P-F-1	FAUCET	-	-	-	-	-	SPLASH MODEL SPL812L-12	STAINLESS STEEL, INTEGRAL TO P-FSS-2-L AND P-FSS-2-R.		
P-F-2	24" SWING JOINT FAUCET SPOUT	-	-	-	-	-	TBD	CHROME, 24" SWING SPOUT TO REACH NON-PLUMBING WALL COMPARTMENT. INTEGRAL TO P-FSS-1.		
P-WV-1	DRAIN W/ TWIST HANDLE - WASTE VALVE	-	-	-	-	-	KROWNE MODEL 22-204	INTEGRAL TO P-FSS-1, P-FSS-2-L, P-FSS-2-R. INSTALL AT AN ANGLE SUCH THAT THE TWIST LEVER HANDLE DOES NOT EXTEND BEYOND THE FOOTPRINT OF THE COMPARTMENT THAT IT SERVES AND IS NOT SUBJECT TO DAMAGE FROM KITCHEN OPERATIONS.		

DOMESTIC WATER HEATER SCHEDULE												
SYMBOL	MFR / MODEL	TYPE	LOCATION	SERVICE	NATURAL GAS INPUT (BTU/HR.)	EFFICIENCY	STORAGE TANK SIZE (GAL.)	ELECTRICAL REQUIREMENT	DELIVERABLE GPH AT 70 F TEMP RISE	INTAKE / EXHAUST VENT SIZE (IN.)	SHIP. WT. (LBS)	REMARKS
P-GWH-1	BOCK "OPTI-THERM" SERIES MODEL OT199N	GAS FIRED WATER HEATER	UTILITY AREA	DOMESTIC HOT WATER	199	99%	99	5.0 AMP 120 V	328	3"	670	HOT WATER TEMPERATURE TO BE SET AT 140F MAXIMUM. 3" EXHAUST CONCENTRIC VENT THRU ROOF, LOW NOX BURNER. ASME TANK CONSTRUCTION. MAXIMUM OPERATING WATER PRESSURE 150 PSIG. MINIMUM 6" W.C. / MAXIMUM 14" W.C. GAS PRESSURE REQUIREMENT. FACTORY INSTALLED T&P RELIEF VALVE.
P-GWH-2	BOCK "OPTI-THERM" SERIES MODEL OT199N	GAS FIRED WATER HEATER	UTILITY AREA	DOMESTIC HOT WATER	199	99%	99	5.0 AMP 120 V	328	3"	670	HOT WATER TEMPERATURE TO BE SET AT 140F MAXIMUM. 3" EXHAUST CONCENTRIC VENT THRU ROOF, LOW NOX BURNER. ASME TANK CONSTRUCTION. MAXIMUM OPERATING WATER PRESSURE 150 PSIG. MINIMUM 6" W.C. / MAXIMUM 14" W.C. GAS PRESSURE REQUIREMENT. FACTORY INSTALLED T&P RELIEF VALVE.

DOMESTIC HOT WATER EXPANSION TANK SCHEDULE										
SYMBOL	MFR / MODEL	TYPE	LOCATION	SERVICE	MAX. ACCEPTANCE VOL. (GAL.)	WIDTH (DIA.)	HEIGHT (IN)	WORKING PRESS. (PSI)	OPER. WT. (LBS)	REMARKS
P-ET-1	ZURN WXTP-50V	BLADDER TYPE STAND MODEL	UTILITY ROOM	DOMESTIC HOT WATER	14	16"	21-1/2"	150	149	1" FNPT CONNECTION.

CIRCULATING PUMP SCHEDULE											
SYMBOL	MFR / MODEL	TYPE	LOCATION	SERVICE	FLUID TYPE	FLOW (GPM)	TDH (FT)	WATTS	VOLT	RPM	REMARKS
P-RC-1	BELL & GOSSETT NBF SERIES	IN-LINE CIRCULATOR	UTILITY ROOM	DOMESTIC HOT WATER RETURN	WATER	5.00	8	77	115	2800	LEAD FREE BODY. PROVIDE WITH AQUASTAT AND TIME CLOCK.



EST 1998

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48226
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33,07.22
CD 50%	32,04.22
Second Investigation	10,08.21
Site Investigation	39,30.21
Revision/Issue	Date

3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING SCHEDULES

021293

P600

NATURAL GAS LOAD SUMMARY				
LOAD TYPE	MIN. / MAX. GAS PRESSURE REQUIREMENT	QUANTITY	CFH	SUBTOTAL
COOKING EQUIPMENT - KITCHEN W/ 9 FT. HOOD	8" W.C. / 10.5" W.C.	10	250	2500
COOKING EQUIPMENT - KITCHEN W/ 12 FT. HOOD	8" W.C. / 10.5" W.C.	1	335	335
WATER HEATING EQUIPMENT - GAS FIRED WATER HEATER (P-GWH-1)	6" W.C. / 14" W.C.	1	199	199
WATER HEATING EQUIPMENT - GAS FIRED WATER HEATER (P-GWH-2)	6" W.C. / 14" W.C.	1	199	199
SPACE HEATING EQUIPMENT - MAKEUP AIR UNIT (MAU 1)	8" W.C. / 10.5" W.C.	1	500	500
SPACE HEATING EQUIPMENT - DEDICATED OUTSIDE AIR SUPPLY (DOAS 1)	7" W.C. / 10.5" W.C.	1	1,200	1,200
			TOTAL CFH	4933

NATURAL GAS PIPE SIZING CHART - 2 PSI INLET PRESSURE WITH 3.5 PSI PRESSURE DROP							
DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE						
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
250	414	636	1,530	3,140	4,700	9,060	14,400

THE STEEL PIPE MATERIAL PORTION OF THE MEDIUM PRESSURE (2 PSI) GAS SYSTEM IS SIZED IN ACCORDANCE WITH INTERNATIONAL FUEL GAS CODE (IFGC) TABLE 402.4(3). INLET PRESSURE = 2.0 PSI, PRESSURE DROP = 3.5 PSI, SPECIFIC GRAVITY = 0.60, BASED ON TOTAL DEVELOPED LENGTH OF 250 FEET AND FLOW RATE OF 13,397 CFH.

NATURAL GAS PIPE SIZING CHART - LESS THAN 2 PSI WITH 3.0 IN. W.C. PRESSURE DROP							
DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE						
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
50	190	397	748	1540	2,300	4,430	7,070

THE STEEL PIPE MATERIAL PORTION OF THE STANDARD DELIVERY PRESSURE (1" W.C.) GAS SYSTEM IS SIZED IN ACCORDANCE WITH INTERNATIONAL FUEL GAS CODE (IFGC) TABLE 402.4(3). INLET PRESSURE = 1.5 PSI, PRESSURE DROP = 3.0 PSI, SPECIFIC GRAVITY = 0.60, BASED ON TOTAL DEVELOPED LENGTH OF 50 FEET AND CFH FLOW RATES AS NOTED ON RISER DIAGRAM.

NATURAL GAS PIPE SIZING CHART - LESS THAN 2 PSI WITH 0.5 IN. W.C. PRESSURE DROP							
DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE						
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
50	72	151	284	583	873	1,690	2,680

THE STEEL PIPE MATERIAL PORTION OF THE STANDARD DELIVERY PRESSURE (1" W.C.) GAS SYSTEM IS SIZED IN ACCORDANCE WITH INTERNATIONAL FUEL GAS CODE (IFGC) TABLE 402.4(2). INLET PRESSURE = 1.0 PSI, PRESSURE DROP = 0.5 PSI, SPECIFIC GRAVITY = 0.60, BASED ON TOTAL DEVELOPED LENGTH OF 50 FEET AND CFH FLOW RATES AS NOTED ON RISER DIAGRAM.

GAS FIRED WATER HEATER SIZING CALCULATION			
FIXTURE	QUANTITY	GPH EACH	SUBTOTAL
3 COMPARTMENT SCULLERY SINK	11	38	418
1 COMPARTMENT PREP SINK	11	5	55
HAND SINK	11	5	55
MAT WASH STATION	1	15	15
LAVATORY	2	5	15
PANTRY SINK	1	10	10
TOTAL WITH 80% FACTOR			568

- CRITERIA**
- WATER HEATER SET AT 140 DEG F, MASTER MIXING VALVE SET AT 120 DEG F FOR FACILITY DISTRIBUTION.
 - COLD WATER INLET TEMP 47 DEG F, DISTRIBUTION AT 120 DEG F (73 DEG F DELTA T).
 - TOTAL WATER HEATING INPUT 800 MBH.
 - TOTAL WATER HEATING SYSTEM SUPPLY 1350 GPH
- WATER HEATER SELECTION**
- (2) BOCK OT199N-(A) WATER HEATER, HAVING 99 GAL. STORAGE CAPACITY, 199.0 MBH INPUT, 229 GPH RECOVERY @ 100 DEG. F RISE, 97% EFFICIENCY.

DRAINAGE FIXTURE UNIT (DFU) CALCULATION							
SYMBOLS	FIXTURE TYPE	FIXTURE QUANTITY	SAN DFU	SAN DFU SUBTOTAL	GW DFU	GW DFU SUBTOTAL	
P-WC-1	WATER CLOSET, PUBLIC (ADA)	1	4	4	0	0	
P-WC-2	WATER CLOSET, PUBLIC	1	4	4	0	0	
P-L-1	LAVATORY, PUBLIC	2	2	4	0	0	
P-S-1	SINK, PUBLIC	1	2	2	0	0	
P-FSS-3	HAND SINK	11	1	0	1	11	
P-MW-1	MAT WASH	1	0	0	2	2	
P-FS-1	FLOOR SINK (KITCHEN GROUP)	11	0	0	5	55	
P-FS-2	FLOOR SINK 2" OUTLET	1	3	3	0	0	
P-FS-3	FLOOR SINK 4" OUTLET	2	6	12	0	0	
TOTAL COMBINED:			97	TOTAL SAN:	29	TOTAL GW:	68

CALCULATION BASED ON INTERNATIONAL PLUMBING CODE (IPC) DRAINAGE FIXTURE UNITS

- GRAVITY GREASE INTERCEPTOR SIZING CALCULATION**
- TOTAL GREASE WASTE DFU = 57.
 - 57 DFU @ 2% SLOPE = 4" PIPE SIZE.
 - 4" PIPE MAX. CAPACITY @ 2% SLOPE = 216 DFU PER IPC TABLE 710.1(1). SANITARY DRAINAGE MAX. CAPACITY PIPE SIZING IS BASED ON HALF-FULL FLOW.
 - Explanatory Note: Maximum DFU capacities listed in IPC Table 710.1(1) are derived based on half full flow, which allows the necessary air flow within the piping system to achieve +/- 2" water column pressure fluctuations, thus protecting all of the trap seals. See also ASPE Plumbing Engineering Design Handbook - Vol. 2, Chapters 1 and 3.
 - 57 DFU LOADING ON 4" PIPE @ 2% SLOPE WITH MAX CAPACITY OF 216 DFU = 26% LOADING.
 - 4" PIPE FLOWING HALF-FULL @ 2% SLOPE = 93.4 GPM PER MANNING FORMULA.
 - APPLYING 26% LOADING FACTOR TO 4" PIPE FLOWING HALF-FULL @ 2% SLOPE (93.4 GPM PER MANNING FORMULA) = 14 GPM GREASE WASTE FLOW RATE
 - 14 GPM x 30 MINUTE RETENTION TIME = 423 GALLON MINIMUM CAPACITY REQUIREMENT.
 - PRODUCT SELECTION = 750 GALLON GRAVITY GREASE INTERCEPTOR (SEE GRAVITY GREASE INTERCEPTOR SCHEDULE ITEM P-GGI-1).
- CALCULATION BASED ON INTERNATIONAL PLUMBING CODE (IPC) REQUIREMENTS

WATER SUPPLY FIXTURE UNIT (WSFU) CALCULATION							
SYMBOLS	FIXTURE TYPE	FIXTURE QUANTITY	100% CW WSFU	100% CW WSFU SUBTOTAL	75% & 100% CW WSFU	75% & 100% CW WSFU SUBTOTAL	75% HW WSFU SUBTOTAL
P-WC-1	WATER CLOSET, PUBLIC	1	10	10	10	10	0
P-WC-2	WATER CLOSET, PUBLIC	1	10	10	10	10	0
P-L-1	LAVATORY, PUBLIC	2	2	4	1.5	3	1.5
P-S-1	SINK, PUBLIC	1	4	4	3	3	3
P-FSS-1	3 COMPARTMENT SINK (CORNER)	11	4	44	3	33	33
P-FSS-2-L	PREP SINK (LEFT)	6	2	12	1.5	9	1.5
P-FSS-2-R	PREP SINK (RIGHT)	5	2	10	1.5	7.5	1.5
P-FSS-3	HAND SINK	11	1	11	0.75	8.25	0.75
P-MW-1	MAT WASH	1	3	3	2.25	2.25	2.25
P-HB-1A	HOSE BIBB (ROOF)	1	2.5	2.5	2.5	2.5	0
P-HB-2A	HOSE BIBB (WALL)	1	1	1	1	1	0
EQ14	ICE MACHINE	12	1	12	1	1	0
100% TOTAL WSFU:			112.5	CW WSFU:	90.5	HW WSFU:	66

CALCULATION BASED ON INTERNATIONAL PLUMBING CODE (IPC) WATER SUPPLY FIXTURE UNITS

DOMESTIC COLD AND HOT WATER PIPE SIZING CALCULATION					
METER SIZE (IN)	2"	METER ELEVATION (FT)	0		
METER PEAK FLOW PREDOMINANTLY FLUSH TANK CURVE (GPM)	80	COLD WATER HIGHEST FIXTURE ELEVATION (FT)	15		
		HOT WATER HIGHEST FIXTURE ELEVATION (FT)	8		
		MIN. DAILY AVG. PSI AVAILABLE AT STREET	59		
OVERALL PRESSURE LOSSES		COLD WATER / HOT WATER			
METER LOSS PSI	2.6		2.6		
STATIC LOSS OR GAIN PSI	6.5		3.5		
PRV LOSS PSI	0.0		0.0		
BFP LOSS PSI	11.0		11.0		
SERVICE LATERAL PIPING LOSS PSI	2.7		2.7		
INDIVIDUAL SYSTEM LOSSES		COLD WATER		HOT WATER	
RESIDUAL PRESSURE REQUIRED PSI	25.0		15.0		
120 DEG. F. MASTER MIXING VALVE LOSS PSI	0.0		5.0		
WATER SOFTENER LOSS PSI	0.0		0.0		
TOTAL SYSTEM LOSSES PSI	49.8		41.8		
MIN. DAILY AVG. PSI AVAILABLE AT STREET	59		59		
PRESSURE AVAILABLE FOR FRICTION [MIN. DAILY AVG. STREET PRESSURE] - [TOTAL SYSTEM LOSSES]	11.2		19.2		
ACTUAL LENGTH OF SYSTEM IN FEET	200.0		340		
DEVELOPED LENGTH MULTIPLIER	1.25		1.25		
TOTAL DEVELOPED LENGTH	250.0		425		
[PRESSURE AVAILABLE FOR FRICTION] / [TOTAL DEV. LENGTH] X 100 FT. AVG. PRESSURE DROP (PSI/100 FT.)	4.5		4.5		

PIPE SIZING CRITERIA			
COLD WATER SIZING BASED ON	4.5	MAX. PSI/100 FT. AVERAGE OR 8 FPS VELOCITY, WHICHEVER IS MORE RESTRICTIVE.	
HOT WATER SIZING BASED ON	4.5	MAX. PSI/100 FT. AVERAGE OR 5 FPS VELOCITY, WHICHEVER IS MORE RESTRICTIVE.	

DOMESTIC COLD WATER PIPE SIZING (TYPE L COPPER)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
8 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	1	2	3.1
3/4"	7	6	4.0
1"	18	13	5.0
1-1/4"	36	23	5.9
1-1/2"	66	35	6.5
2"	225	70	7.9
2-1/2"	474	119	8.0

DOMESTIC HOT WATER PIPE SIZING (TYPE L COPPER)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
5 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	1	2	3.1
3/4"	7	6	4.0
1"	18	13	5.0
1-1/4"	28	19	5.0
1-1/2"	46	27	5.0
2"	115	47	5.0
2-1/2"	231	71	5.0

DOMESTIC COLD WATER PIPE SIZING (CTS SDR 11 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
8 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	0	1.8	2.8
3/4"	6	5	4.0
1"	13	10	4.8
1-1/4"	23	16	5.5
1-1/2"	44	26	6.1
2"	135	52	7.3

DOMESTIC HOT WATER PIPE SIZING (CTS SDR 11 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
8 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	0	1.8	2.8
3/4"	6	5	4.0
1"	13	10	4.8
1-1/4"	23	16	5.5
1-1/2"	44	26	6.1
2"	135	52	7.3

DOMESTIC COLD WATER PIPE SIZING (SCH. 40 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
5 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
2-1/2"	241	73	5.0

DOMESTIC HOT WATER PIPE SIZING (SCH. 40 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
5 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
2-1/2"	241	73	5.0

DOMESTIC COLD WATER PIPE SIZING (PEX-A TUBING)				
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE				
10 FPS MAX. VELOCITY				
PIPE SIZE	WSFU (FLUSH TANK)	WSFU (FLUSH VALVE)	GPM	FPS
1/2"	-	-	1.6	2.9
3/4"	4	-	4.0	3.7
1"	10	1	8.0	4.4
1-1/4"	19	2	13.9	5.1
1-1/2"	33	4	21.6	5.7
2"	103	35	44.8	6.9

DOMESTIC HOT WATER PIPE SIZING (PEX-A TUBING)				
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE				
8 FPS MAX. VELOCITY				
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS	
1/2"	-	-	1.6	2.9
3/4"	4	-	4.1	3.7
1"	10	8.0	4.4	



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

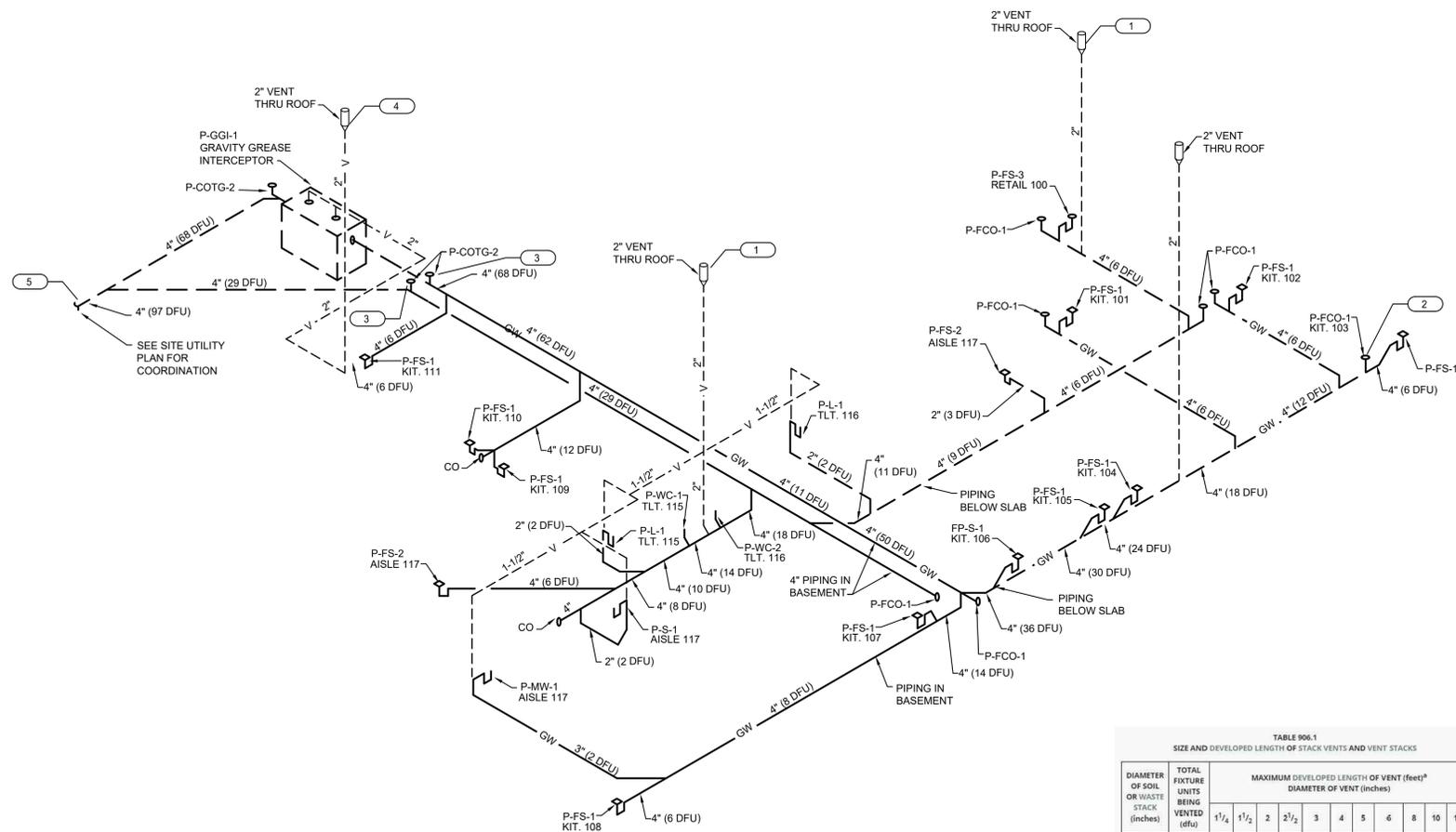
PLUMBING SCHEDULES

021293

P601

DRAINAGE FIXTURE UNIT (DFU) CALCULATION						
SYMBOLS	FIXTURE TYPE	FIXTURE QUANTITY	SAN DFU	SAN DFU SUBTOTAL	GW DFU	GW DFU SUBTOTAL
P-WC-1	WATER CLOSET, PUBLIC (ADA)	1	4	4	0	0
P-WC-2	WATER CLOSET, PUBLIC	1	4	4	0	0
P-L-1	LAVATORY, PUBLIC	2	2	4	0	0
P-S-1	SINK, PUBLIC	1	2	2	0	0
P-FSS-3	HAND SINK	11	1	0	1	11
P-MW-1	MAT WASH	1	0	0	2	2
P-FS-1	FLOOR SINK (KITCHEN GROUP)	11	0	0	5	55
P-FS-2	FLOOR SINK 2" OUTLET	1	3	3	0	0
P-FS-3	FLOOR SINK 4" OUTLET	2	6	12	0	0
TOTAL COMBINED:		97	TOTAL SAN:	29	TOTAL GW:	68

CALCULATION BASED ON INTERNATIONAL PLUMBING CODE (IPC) DRAINAGE FIXTURE UNITS



DIAMETER OF SOIL OR WASTE STACK (inches)	TOTAL FIXTURE UNITS VENTED (dfu)	MAXIMUM DEVELOPED LENGTH OF VENT (feet) ^a										
		1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
1 1/4"	2	30										
1 1/2"	8	50	150									
1 3/4"	10	30	100									
2"	12	12	75	200								
2"	20	30	50	150								
2 1/2"	42	26	30	100	300							
3"	10	10	42	150	360	1,040						
3"	21		32	110	270	810						
3"	53		27	94	230	680						
3"	102		25	86	210	620						
4"	43		35	85	250	980						
4"	140		27	65	200	750						
4"	320			55	170	640						
4"	540			23	50	150	580					

DIAMETER OF PIPE (inches)	MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS CONNECTED TO ANY PORTION OF THE BUILDING DRAIN OR THE BUILDING SEWER, INCLUDING BRANCHES OF THE BUILDING DRAIN ^a			
	Slope per foot			
1/4"	1/16 inch	1/8 inch	1/4 inch	1/2 inch
1/2"	—	—	1	1
1 1/2"	—	—	3	3
2"	—	—	21	26
2 1/2"	—	—	24	31
3"	—	36	42	50
4"	—	180	216	250
5"	—	390	480	575
6"	—	700	840	1,000
8"	1,400	1,800	1,920	2,300
10"	2,500	2,900	3,500	4,200
12"	3,900	4,600	5,600	6,700
15"	7,000	8,300	10,000	12,000

^a For S₁: 1 inch = 25.4 mm, 1 inch per foot = 83.3 mm/m.
^a The minimum size of any building drain serving a water closet shall be 3 inches.

1 RISER DIAGRAM - DRAINAGE

NOTES

- THIS DETAIL IS DIAGRAMMATIC. NOT ALL REQUIRED CLEANOUTS, FITTINGS, AND COMPONENTS ARE SHOWN. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

KEYNOTES

- VENT THROUGH ROOF.
- FULL LINE SIZE FLOOR CLEANOUT.
- FULL LINE SIZE ONE-WAY CLEANOUT TO GRADE.
- GREASE VENT THROUGH ROOF.
- POC BUILDING PIPING TO SITE UTILITY PIPING. SEE CIVIL DRAWINGS FOR CONTINUATION.



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING SCHEMATIC - DRAINAGE

021293

P700

DOMESTIC COLD WATER PIPE SIZING (CTS SDR 11 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
8 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	0	1.8	2.8
3/4"	6	5	4.0
1"	13	10	4.8
1-1/4"	23	16	5.5
1-1/2"	44	26	6.1
2"	135	52	7.3

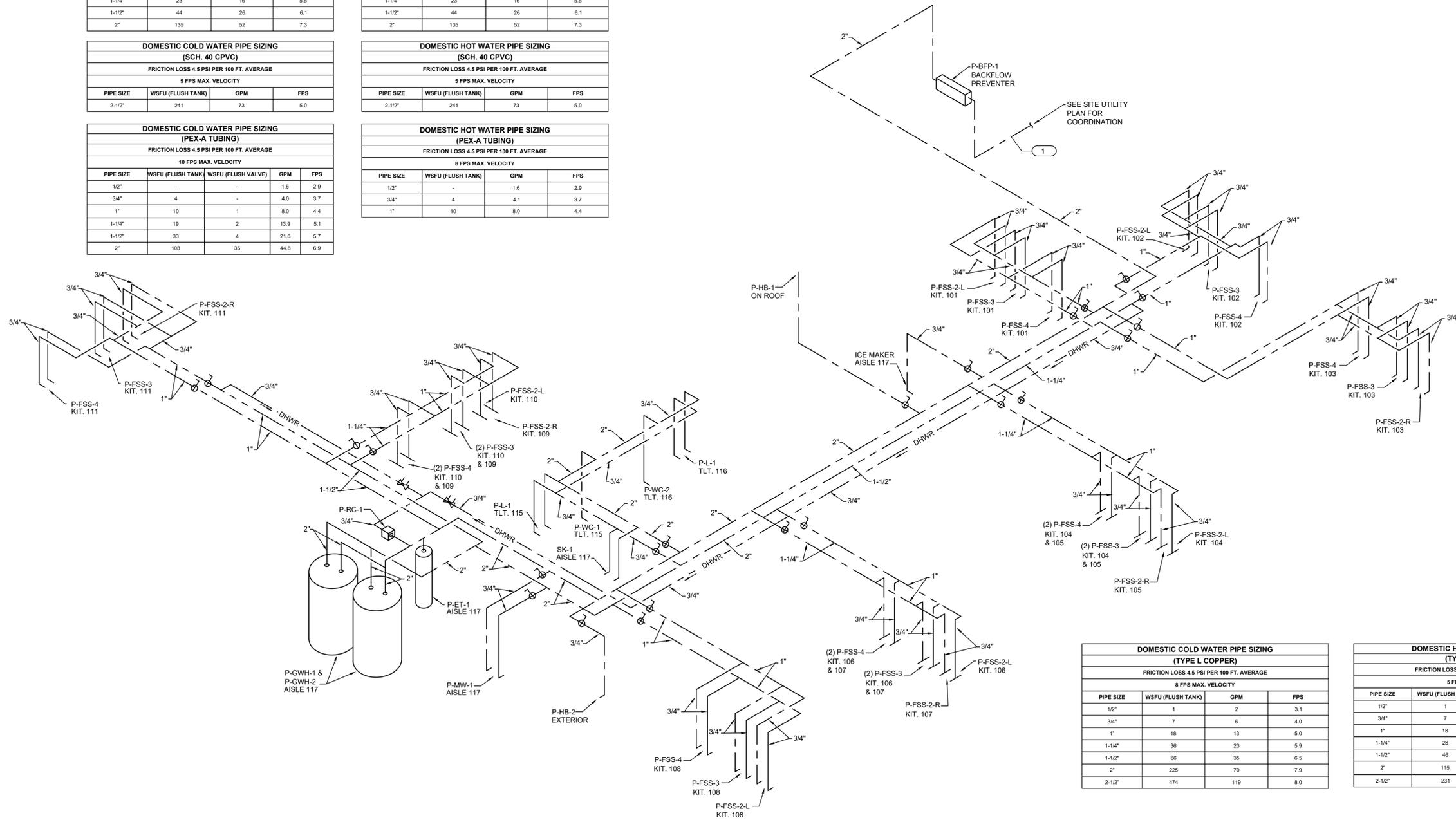
DOMESTIC HOT WATER PIPE SIZING (CTS SDR 11 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
8 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
1/2"	0	1.8	2.8
3/4"	6	5	4.0
1"	13	10	4.8
1-1/4"	23	16	5.5
1-1/2"	44	26	6.1
2"	135	52	7.3

DOMESTIC COLD WATER PIPE SIZING (SCH. 40 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
5 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
2-1/2"	241	73	5.0

DOMESTIC HOT WATER PIPE SIZING (SCH. 40 CPVC)			
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE			
5 FPS MAX. VELOCITY			
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS
2-1/2"	241	73	5.0

DOMESTIC COLD WATER PIPE SIZING (PEX-A TUBING)				
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE				
10 FPS MAX. VELOCITY				
PIPE SIZE	WSFU (FLUSH TANK)	WSFU (FLUSH VALVE)	GPM	FPS
1/2"	-	-	1.6	2.9
3/4"	4	-	4.0	3.7
1"	10	1	8.0	4.4
1-1/4"	19	2	13.9	5.1
1-1/2"	33	4	21.6	5.7
2"	103	35	44.8	6.9

DOMESTIC HOT WATER PIPE SIZING (PEX-A TUBING)				
FRICTION LOSS 4.5 PSI PER 100 FT. AVERAGE				
8 FPS MAX. VELOCITY				
PIPE SIZE	WSFU (FLUSH TANK)	GPM	FPS	
1/2"	-	-	1.6	2.9
3/4"	4	-	4.1	3.7
1"	10	-	8.0	4.4



1 RISER DIAGRAM - DOMESTIC WATER

WATER SUPPLY FIXTURE UNIT (WSFU) CALCULATION								
SYMBOLS	FIXTURE TYPE	FIXTURE QUANTITY	100% CW WSFU	100% CW WSFU SUBTOTAL	75% & 100% CW WSFU	75% & 100% CW WSFU SUBTOTAL	75% HW WSFU	75% HW WSFU SUBTOTAL
P-WC-1	WATER CLOSET, PUBLIC	1	10	10	10	10	0	0
P-WC-2	WATER CLOSET, PUBLIC	1	10	10	10	10	0	0
P-L-1	LAVATORY, PUBLIC	2	2	4	1.5	3	1.5	3
P-S-1	SINK, PUBLIC	1	4	4	3	3	3	3
P-FSS-1	3 COMPARTMENT SINK (CORNER)	11	4	44	3	33	3	33
P-FSS-2-L	PREP SINK (LEFT)	6	2	12	1.5	9	1.5	9
P-FSS-2-R	PREP SINK (RIGHT)	5	2	10	1.5	7.5	1.5	7.5
P-FSS-3	HAND SINK	11	1	11	0.75	8.25	0.75	8.25
P-MW-1	MAT WASH	1	3	3	2.25	2.25	2.25	2.25
P-HB-1A	HOSE BIBB (ROOF)	1	2.5	2.5	2.5	2.5	0	0
P-HB-2A	HOSE BIBB (WALL)	1	1	1	1	1	0	0
EQ14	ICE MACHINE	12	1	1	1	1	0	0
			100% TOTAL WSFU:	112.5	CW WSFU:	90.5	HW WSFU:	66

CALCULATION BASED ON INTERNATIONAL PLUMBING CODE (IPC) WATER SUPPLY FIXTURE UNITS

NOTES

- THIS DETAIL IS DIAGRAMMATIC. NOT ALL REQUIRED VALVES, FITTINGS, AND COMPONENTS ARE SHOWN. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- EXCEPT WHERE SHOWN AS A TYPICAL EXAMPLE, PEX BRANCH LINE TUBING AND FITTINGS OMITTED THIS VIEW FOR CLARITY. REFER TO ENLARGED PLANS FOR PEX TUBING AND FITTING LAYOUT.

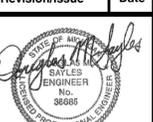
KEYNOTES

- COMBINED 4" FIRE/DOMESTIC SERVICE CONNECTION.



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date



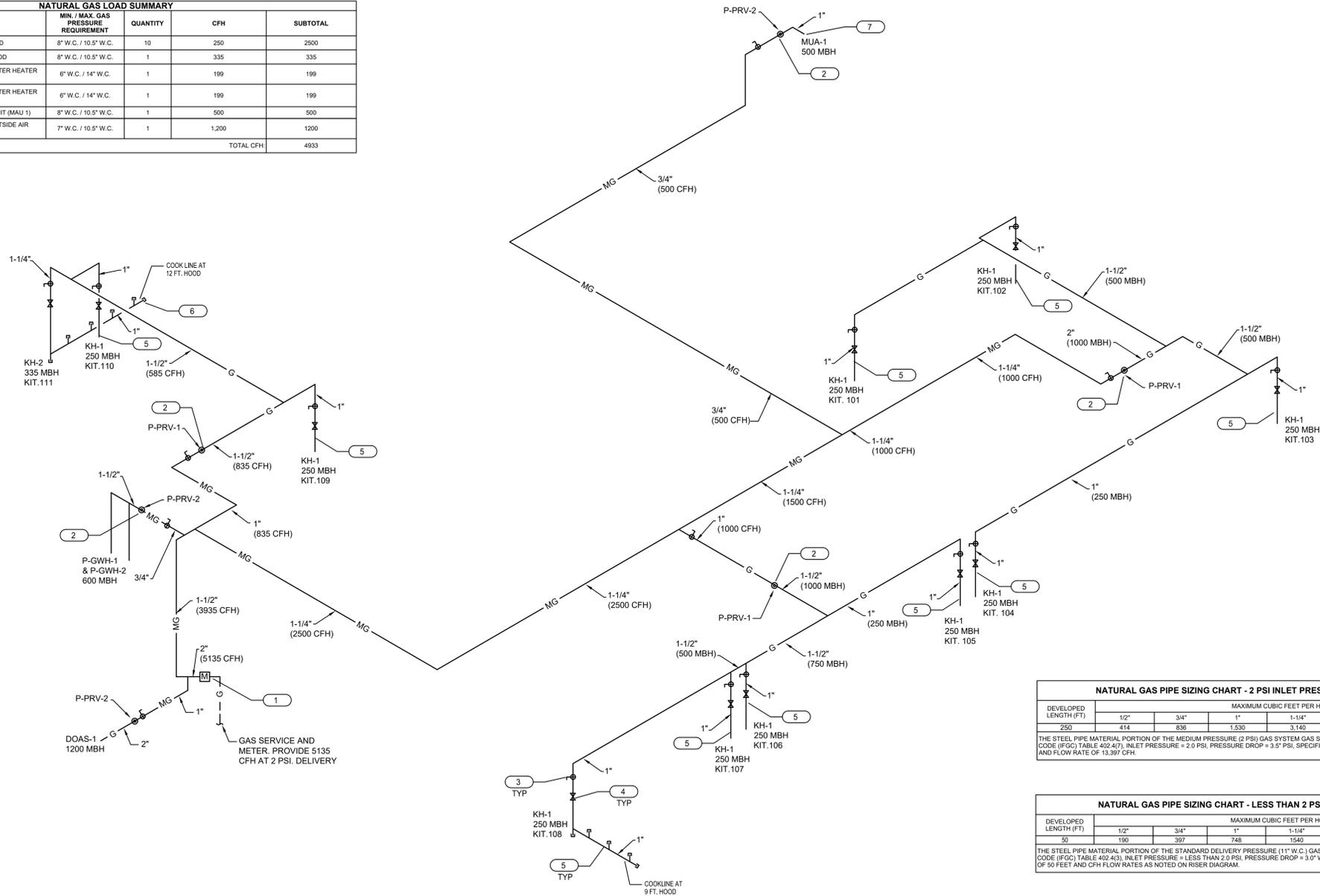
3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING SCHEMATIC - DOMESTIC WATER

021293

P701

NATURAL GAS LOAD SUMMARY				
LOAD TYPE	MIN. / MAX. GAS PRESSURE REQUIREMENT	QUANTITY	CFH	SUBTOTAL
COOKING EQUIPMENT - KITCHEN W/ 9 FT. HOOD	8" W.C. / 10.5" W.C.	10	250	2500
COOKING EQUIPMENT - KITCHEN W/ 12 FT. HOOD	8" W.C. / 10.5" W.C.	1	335	335
WATER HEATING EQUIPMENT - GAS FIRED WATER HEATER (P-GWH-1)	6" W.C. / 14" W.C.	1	199	199
WATER HEATING EQUIPMENT - GAS FIRED WATER HEATER (P-GWH-2)	6" W.C. / 14" W.C.	1	199	199
SPACE HEATING EQUIPMENT - MAKEUP AIR UNIT (MAU 1)	8" W.C. / 10.5" W.C.	1	500	500
SPACE HEATING EQUIPMENT - DEDICATED OUTSIDE AIR SUPPLY (DOAS 1)	7" W.C. / 10.5" W.C.	1	1,200	1200
			TOTAL CFH	4933



1 RISER DIAGRAM - NATURAL GAS

DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE				
	1/2"	3/4"	1"	1-1/4"	2"
250	414	836	1,530	3,140	9,060

NATURAL GAS PIPE SIZING CHART - 2 PSI INLET PRESSURE WITH 3.5 PSI PRESSURE DROP

DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE				
	1/2"	3/4"	1"	1-1/4"	2"
50	199	397	748	1,540	4,430

NATURAL GAS PIPE SIZING CHART - LESS THAN 2 PSI WITH 3.0 IN. W.C. PRESSURE DROP

DEVELOPED LENGTH (FT)	MAXIMUM CUBIC FEET PER HOUR (CFH) PER PIPE SIZE				
	1/2"	3/4"	1"	1-1/4"	2"
50	72	151	284	583	1,680

NATURAL GAS PIPE SIZING CHART - LESS THAN 2 PSI WITH 0.5 IN. W.C. PRESSURE DROP

NOTES

- THIS DETAIL IS DIAGRAMMATIC. NOT ALL REQUIRED VALVES, FITTINGS, AND COMPONENTS ARE SHOWN. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- EXCEPT WHERE NOTED AS TYPICAL EXAMPLES, 1/2" W.C. GAS PIPING DROPS TO COOK LINE MANIFOLDS OMITTED THIS VIEW FOR CLARITY. REFER TO ENLARGED PLANS FOR PIPING, SOV, AND ANSUL VALVE LAYOUT
- EXCEPT WHERE NOTED OTHERWISE, GAS PIPE SIZING DOWNSTREAM OF PRV'S IS BASED ON <2 PSI, 3.0" W.C. PRESSURE DROP GAS PIPE SIZING CHART.

KEYNOTES

- 2 PSI GAS METER BY GAS UTILITY.
- GAS PRESSURE REDUCING VALVE W/ SOV ON INLET SIDE
- FULL LINE SIZE SHUTOFF COOK IN EXPOSED LOCATION.
- ANSUL HOOD FIRE SUPPRESSION EMERGENCY GAS SHUTOFF VALVE ON EXPOSED GAS PIPING IN KITCHEN. GAS PIPING SHALL BE INSTALLED AND POSITIONED SUCH THAT IT WILL NOT INTERFERE WITH ACCESS TO THE ANSUL CABINET. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM INSTALLATION.

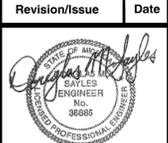
KEYNOTES

- 9 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING, SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DRY LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (3) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (50 CFH). SEE DETAIL 3P-500 FOR ADDITIONAL INFORMATION.
- 12 FT HOOD W/ ADJACENT EXPOSED VERTICAL GAS PIPING DROPPING DOWN FROM ABOVE CEILING, SURFACE WALL MOUNTED WITH EXPOSED SOV MOUNTED AT 80" A.F.F. IMMEDIATELY UPSTREAM OF EXPOSED ANSUL VALVE W/ UNIONS ON INLET AND OUTLET SIDES FOR SERVICING. EXTEND PIPING DOWN TO 24" A.F.F. WITH SEDIMENT TRAP (DRY LEG) AND TEE FITTING TRANSITIONING TO EXPOSED HORIZONTAL COOK LINE MANIFOLD 1" PIPING SURFACE WALL MOUNTED ON LOW PROFILE UNISTRUT AT 24" A.F.F. W/ (4) 1" UPRIGHT OUTLETS W/ UPRIGHT SOV'S EQUALLY SPACED WITHIN HOOD FOOTPRINT AS SHOWN (50 CFH). SEE DETAIL 3P-500 FOR ADDITIONAL INFORMATION.
- PIPE SIZING DOWNSTREAM OF THIS PRV BASED ON <2 PSI 0.5" W.C. PRESSURE DROP GAS PIPE SIZING CHART.



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33,07.22
CD 50%	32,04.22
Second Investigation	10,08.22
Site Investigation	39,30.22
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

PLUMBING SCHEMATIC - NATURAL GAS

021293

P-702

FIRE PROTECTION SPECIFICATIONS																					
<p>GENERAL</p> <ol style="list-style-type: none"> THE SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH THE RELEVANT VERSION OF NFPA 13 AS AN ORDINARY HAZARD 1 (OH1), WET-TYPE SYSTEM. CONCEALED DRY HEADS SHALL BE PROVIDED IN WALK IN COOLER & FREEZER AREAS. STANDARD PENDENT HEADS TO BE USED IN KITCHENS AND COMMON AREAS. <p>SUBMITTALS</p> <ol style="list-style-type: none"> INCLUDE ON EACH LAYOUT WORKING DRAWING, A CERTIFICATION THAT ALL RELATED CONDITIONS HAVE BEEN CHECKED WITH ALL TRADES AND THAT NO CONFLICT EXISTS. WORKING DRAWING SUBMISSIONS WILL NOT BE APPROVED WITHOUT SUCH CERTIFICATION. SUBMIT FOR APPROVAL TO THE ENGINEER, A LIST OF ALL MATERIAL AND EQUIPMENT MANUFACTURERS WHOSE PRODUCTS ARE PROPOSED, INCLUDING DELIVERY DATES. MAKE ALL SUBMITTALS SUFFICIENTLY IN ADVANCE OF FIELD REQUIREMENTS TO ALLOW TIME FOR CHECKING. NO CLAIM FOR EXTENSION OF TIME WILL BE GRANTED BY REASON OF FAILURE IN THIS RESPECT AND NO WORK IN THE FIELD MAY BE STARTED WITHOUT APPROVED SHOP DRAWINGS, APPROVED BY THE ENGINEER. APPROVAL OF ANY SUBMITTAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF FURNISHING MATERIALS AND SYSTEMS OF PROPER DIMENSIONS, CAPACITIES, SIZES, QUANTITIES, QUALITY AND INSTALLATION DETAILS, TO EFFICIENTLY PERFORM THE REQUIREMENTS AND INTENT OF THE CONTRACT DOCUMENTS. SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR ERRORS IN SUBMITTALS. IF THE SUBMITTALS DIFFER FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, MAKE SPECIFIC MENTION OF SUCH DIFFERENCE IN LETTERS OF TRANSMITTAL, WITH A REQUEST FOR SUBSTITUTION, TOGETHER WITH REASONS THEREFORE, SO THAT IF ACCEPTABLE, SUITABLE ACTION MAY BE TAKEN FOR PROPER ADJUSTMENT. FAILING THIS, THE CONTRACTOR WILL NOT BE RELIEVED OF THE RESPONSIBILITY FOR EXECUTING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALL SUBMISSIONS MUST CLEARLY IDENTIFY SYSTEM APPLICATIONS, SIZES, ACCESSORIES AND ALL OPTIONS. FAILURE TO DO SO WILL RESULT IN A "REVISE AND RESUBMIT" ACTION. ALL SUBSTITUTIONS MUST BE CLEARLY IDENTIFIED AND PROVIDED WITH THE REQUISITE DOCUMENTATION. <p>SHOP DRAWINGS</p> <p>THE FOLLOWING SHALL BE PROVIDED:</p> <ol style="list-style-type: none"> PIPING, LOCATION, LAYOUTS INCLUDING METHOD AND LOCATION OF SUPPORTS. HYDRAULIC CALCULATIONS, SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE RELEVANT STATE. COORDINATION DRAWINGS SHOWING H.V.A.C., ELECTRICAL AND PLUMBING COORDINATION. FIRE HYDRANT FLOW TEST. <p>CATALOGUES AND BROCHURES</p> <ol style="list-style-type: none"> PIPES AND FITTINGS. SPRINKLER HEADS. HANGERS AND SUPPORTS. SLEEVES AND ESCUTCHEONS. VALVES. <p>MATERIALS, DELIVERY, STORAGE AND HANDLING</p> <ol style="list-style-type: none"> DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED PROTECTIVE PACKAGING. STORE MATERIALS IN ORIGINAL PACKAGING IN A MANNER TO PREVENT SOILING, PHYSICAL DAMAGE, WETTING OR CORROSION PRIOR TO INSTALLATION. HANDLE IN A MANNER TO PREVENT DAMAGE TO FINISHED SURFACES. WHERE POSSIBLE, MAINTAIN PROTECTIVE COVERINGS UNTIL INSTALLATION IS COMPLETE AND REMOVE SUCH COVERS AS PART OF FINAL CLEAN UP. TOUCH UP ANY DAMAGE DONE TO FINISHES TO MATCH ADJACENT SURFACES TO SATISFACTION OF ENGINEER. <p>INSPECTION</p> <ol style="list-style-type: none"> ALL MATERIALS AND EQUIPMENT DELIVERED TO THE SITE SHALL BE INSPECTED. MATERIAL AND EQUIPMENT THAT IS DEFECTIVE OR FAILS TO CONFORM TO THE REQUIREMENTS OF THESE SPECIFICATIONS SHALL BE REMOVED IMMEDIATELY FROM THE CONSTRUCTION SITE AND REPLACED WITH NEW MATERIAL AND EQUIPMENT SATISFACTORY TO THE ENGINEER. ARRANGE FOR ALL INSPECTIONS WITH THE AUTHORITIES HAVING JURISDICTIONS AND REQUIRED FEES. 	<p>RECORD DRAWINGS</p> <ol style="list-style-type: none"> FURNISH TO THE ENGINEER A COPY OF EACH APPLICABLE CONTRACT DRAWING, NEATLY MARKED UP INDICATING THE ACTUAL FINAL INSTALLATION INCLUDING ALL DEVIATIONS OR REVISIONS NOT SHOWN ON THE ISSUED SET. THE CONTRACTOR MUST PROVIDE 'AS BUILT' DRAWINGS TO THE OWNER'S BUILDING MANAGEMENT AT COMPLETION OF WORK. <p>CUTTING AND PATCHING</p> <ol style="list-style-type: none"> WHERE CUTTING AND PATCHING OF CONSTRUCTION PERFORMED UNDER THIS CONTRACT BECOMES NECESSARY BECAUSE OF FAILURE TO PROPERLY COORDINATE THE MECHANICAL INSTALLATION WITH OTHER CONSTRUCTION, ARRANGE FOR PATCHING TO BE PERFORMED BY THE VARIOUS TRADES INVOLVED AND IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS HEREIN SO AS TO MATCH ADJACENT SURFACES. PERFORM ALL PATCHING TO MATCH EXISTING ADJACENT CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER AND USING THE BEST POSSIBLE WORKMANSHIP OF THE VARIOUS TRADES INVOLVED. <p>TESTS</p> <ol style="list-style-type: none"> PERFORM TESTS AS HEREIN SPECIFIED ON THE VARIOUS PIPING SYSTEMS OR PORTIONS THEREOF PRIOR TO BACKFILLING, PAINTING, CONCEALING OR INSULATING. ALL SPRINKLER SYSTEMS SHALL BE AIR AND WATER TESTED. NOTIFY THE ENGINEER REPRESENTATIVES OF AGENCIES OR OTHER ENTITIES WHICH WOULD HAVE JURISDICTION AT LEAST 48 HOURS IN ADVANCE OF MAKING THE REQUIRED TESTS, SO THAT ARRANGEMENTS MAY BE MADE FOR THEIR PRESENCE TO WITNESS THE TESTS. FURNISH AND INSTALL ALL DEVICES, MATERIALS, SUPPLIES, LABOR AND POWER REQUIRED IN CONNECTION WITH TESTS. MAKE ALL TESTS IN THE PRESENCE AND TO THE SATISFACTION OF THE ENGINEER AND REPRESENTATIVE OF THE AFORESAID AGENCIES OR OTHER ENTITIES. ALL SPRINKLER SYSTEMS SHOULD BE AIR AND WATER TESTED. SHOULD THE TESTS REVEALS ANY LEAKS OR OTHER EVIDENCE OF UNSATISFACTORY MATERIALS OR WORKMANSHIP, MAKE NECESSARY REPAIRS IMMEDIATELY, OR IF REQUIRED BY THE ENGINEER, REPLACE DEFECTIVE WORK WITH NEW WORK WITHOUT ADDITIONAL COST TO THE OWNER. REPEAT TESTS AS DIRECTED UNTIL THE ENTIRE INSTALLATION IS PROVEN SATISFACTORY. NO TEMPORARY METHOD OF REPAIRING LEAKS WILL BE PERMITTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PROPERTY OR INSTALLATION DAMAGED BY THE TESTS AND SHALL RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION SATISFACTION OF THE OWNER OF REPLACE THEM WITH NEW ITEMS. DISPOSE OF WATER REMOVED FROM PIPE LINES IN A MANNER THAT WILL NOT CAUSE DAMAGE TO THE PROPERTY. DISCHARGE FROM EACH SPRINKLER HEAD SHALL NOT BE LESS THAN FOR REQUIRED AREA COVERED BY THIS HEAD. AREA COVERAGE PER AREA SHALL BE DETERMINED IN ACCORDANCE WITH NFPA 13. THE ENTIRE SYSTEM SHALL BE TESTED AND REMAIN TIGHT AGAINST NOT LESS THAN TWO HUNDRED POUNDS GAUGE HYDROSTATIC PRESSURE, FOR A PERIOD OF NOT LESS THAN TWO CONSECUTIVE HOURS, WITH NO LOSS OF PRESSURE. ALL CONTRACTOR'S MATERIAL AND TEST CERTIFICATES SHOULD BE COMPLETED FOR EACH SYSTEM AND FORWARDED TO THE ENGINEER FOR REVIEW AND FINAL ACCEPTANCE OF THE SYSTEM. <p>PRODUCTS</p> <ol style="list-style-type: none"> MANUFACTURER'S NAME AND NUMBERS ARE USED TO IDENTIFY THE TYPE AND QUALITY OF PRODUCTS REQUIRED, HOWEVER, PRODUCTS OF OTHER MANUFACTURERS WHICH ARE EQUAL MAY BE SUBMITTED FOR APPROVAL. WET SPRINKLER PIPES SHALL BE BLACK STEEL ASTM A756/A53 SCHEDULE 40. FITTING AND FLANGES - BLACK CAST IRON ANSI B16.4 OF MALLEABLE CAST IRON AWWA C110, 300 LBS CLASS, 500 PSI W.W.P., THREADED, COMPANION FLANGES - CAST IRON ANSI B16.1, 300 LBS CLASS, DUCTILE IRON ASTM A536, GROOVED MECHANICAL TYPE COUPLING AND GASKETS, 300 LBS CLASS PRESSURE RATING. SCHEDULE 40 PIPES AND FITTINGS SHALL BE SCREWED, STANDARD WEIGHT, UL AND FM APPROVED, MECHANICAL GROOVE COUPLINGS, VICTAULIC STYLE 75, OR AS APPROVED, MAY BE USED IN LIE OF SCREWED FITTINGS, WHEN USED WITH SCHEDULE 10 PIPE, COUPLINGS SHALL BE ROLLED GROOVE, EITHER ROLL OR CUT GROOVE MAY BE USED WITH SCHEDULE 40 PIPE. FOR PIPING 2 INCHES AND LARGER, VICTAULIC STYLE 920 MECHANICAL-T WITH LOCATING COLLAR ENGAGING INTO THE PIPE MAY BE USED FOR LESS THAN FULL SIZE BRANCH CONNECTIONS. FITTINGS SIMILAR TO VICTAULIC STYLE 921 AND HOOKER FITTINGS WILL NOT BE APPROVED. 	<p>PIPE HANGERS AND SUPPORTS</p> <ol style="list-style-type: none"> PROVIDE SUFFICIENT HANGERS, SUPPORTS, BEAM CLAMPS WITH RETAINER, SUPPLEMENTAL STEEL, INSERTS, FISH PLATES, MOUNTING DEVICES, ETC., TO SUPPORT PIPING IN PERFECT ALIGNMENT WITHOUT SAGGING OR INTERFERENCE, PERMIT COMPLETE DRAINAGE AND FREE EXPANSION AND CONTRACTION AS DIRECTED BY THE ARCHITECT. ALL HANGERS, INSERTS, SUPPORTS AND DEVICES SHALL BE UL, NFPA AND FM UNDERWRITERS APPROVED. ALL PIPE HANGERS, INSERTS, SUPPORTS, SUPPLEMENTAL STEEL, RODS, ETC. SHALL BE GALVANIZED, PIPE HANGER SPACING, ROD DIAMETER ETC. SHALL BE IN LINE WITH THE REQUIREMENTS OF NFPA 13. TABS IN METAL DECK CONSTRUCTION SHALL NOT BE USED TO SUPPORT PIPING. PERFORATED BAND IRON, STRAP IRON OR WIRE SHALL NOT BE ACCEPTED. PIPING SHALL NOT BE SUPPORTED FROM OTHER PIPING, DUCT WORK OR CONDUIT. EXPANSION ANCHORS, SELF DRILLING EXPANSION SHELLS, POWER DRIVEN STUDS AND SIMILAR DEVICES SHALL NOT BE INSTALLED. HORIZONTAL PIPING WITH GROOVED MECHANICAL COUPLINGS SHALL BE SUPPORTED BETWEEN ANY TWO COUPLINGS. THE USE OF RODS OVER 2 TO 3 FEET LONG TO SUPPORT FEEDS OR CROSS MAINS SHOULD BE AVOIDED, WHERE RODS ARE IN EXCESS OF THIS LENGTH THE FEEDS OR CROSS MAINS SHOULD BE ADEQUATELY SUPPORTED. SPACE SUPPORTS SO THAT THERE IS AT LEAST ONE HANGER FOR EACH LENGTH OF PIPE, WITH ONE HANGER WITHIN 30 INCHES OF THE END SPRINKLER HEAD, WHERE THIS WOULD REQUIRE HANGERS CLOSER THAN 6' 0" APART, HANGER SPACING MAY BE INCREASED TO 10' 0" BETWEEN HANGERS FOR PIPES UP TO AND INCLUDING 2 INCH PIPES AND 12' 9" BETWEEN HANGERS FOR PIPES 2-1/2" AND LARGER. ON CROSS MAINS THERE SHALL BE AT LEAST ONE HANGER BETWEEN BRANCH CONNECTIONS. STEEL LADDERS SHALL BE PROVIDED FOR ACCESS TO SPRINKLER AND FIRE STANDPIPE VALVES LOCATED 7' 0" OR MORE ABOVE FINISHED FLOOR LEVEL AS REQUIRED BY NFPA 13 AND 14, LADDERS SHALL BE 12" WIDE AND SHALL BE SECURELY FASTENED. <p>VALVES</p> <ol style="list-style-type: none"> SPRINKLER CONTROL VALVES SHALL BE VICTAULIC SERIES 727 WITH BUILT-IN SUPERVISORY SWITCH, WATERFLOW DETECTOR SHALL BE "SYSTEM SENSOR" WFD SERIES. SPRINKLER DRAIN VALVE SHALL BE VICTAULIC STYLE 720 TEST MASTER. <p>PIPING</p> <ol style="list-style-type: none"> INSTALL PIPING AS INDICATED ON THE CONTRACT DRAWINGS AND APPROVED SHOP DRAWINGS AS STRAIGHT AND DIRECT AS POSSIBLE, FORMING RIGHT ANGLES OR PARALLEL LINES WITH BUILDING WALLS, NEATLY SPACES, RISERS PLUMB AND TRUE AND AVOID INTERFERENCE WITH OTHER CONSTRUCTION. PIPING SHALL PITCH BACK TOWARD SYSTEM DRAIN VALVE AND ANY INSTALLED LOW POINTS OF POCKETS SHALL HAVE A HOSE END DRAIN VALVE. AVOID TOOL MARKS AND UNNECESSARY PIPE THREADS, BURRS FORMED WHEN CUTTING PIPE SHALL BE REMOVED BY REAMING, BEFORE INSTALLING PIPE, THOROUGHLY CLEAN THE INSIDE FREE OF CUTTINGS AND FOREIGN MATTER. CUT ALL PIPE SQUARE AND SMOOTH, MAKE UP ALL JOINTS TO REQUIRED LIMITS. ERECT ALL PIPING TO OBTAIN SUFFICIENT FLEXIBILITY TO PREVENT EXCESSIVE STRESSES IN MATERIALS AND EXCESSIVE BENDING MOMENTS AT JOINTS OR CONNECTIONS. INSTALL EXPANSION LOOPS, EXPANSION JOINTS AND SVING CONNECTION WHERE SHOWN ON THE CONTRACT DRAWINGS. MAKE CHANGES IN PIPE SIZE BY THE USE OF REDUCING FITTINGS, DO NOT USE REDUCING BUSHINGS EXCEPT BY APPROVAL OF THE ENGINEER. DO NOT USE CLOSE OF SHOULDER NIPPLES. ARRANGE WATER PIPING SO THAT SYSTEM CAN BE COMPLETED DRAINED, WHERE LINES ARE PURPOSEFULLY PITCHED FOR DRAINAGE, A UNIFORM GRADE SHALL BE MAINTAINED, LINES SHALL BE SUPPORTED AS TO PREVENT POCKETING OF LIQUID, NO LINES SHALL HAVE POCKETS DUE TO CHANGES IN ELEVATION. INSTALLED PIPING SHALL NOT INTERFERE WITH THE OPERATION OR ACCESSIBILITY OF DOORS OF WINDOWS, SHALL NOT ENCROACH ON AISLES, PASSAGEWAYS OR EQUIPMENT AND SHALL NOT INTERFERE WITH THE SERVICING OR MAINTENANCE OF ANY EQUIPMENT. ADJACENT PIPE LINES SHALL BE GROUPED IN THE SAME HORIZONTAL OR VERTICAL PLANE. COORDINATE AS NECESSARY TO INSURE THAT ALL HANGERS, SUPPORTS, SLEEVES AND OTHER BUILT-IN DEVICES ARE INCORPORATED IN FORMS OF IN MASONRY TO AVOID NECESSITY OF CUTTING EXISTING STRUCTURE. 	<ol style="list-style-type: none"> INSULATE ALL SPRINKLER PIPING WITHIN 15' OF EXTERIOR WALLS, SLEEVE FIRESTOPPING, CAULKING AND PACKING, THE FIRE STOPPING CAULK SHALL BE A ONE-PART INTUMESCENT, LATEX ELASTOMER, THE CAULK SHALL BE CAPABLE OF EXPANDING A MINIMUM OF THREE TIMES, THE MATERIAL SHALL BE THIXOTROPIC AND BE APPLICABLE TO OVERHEAD, VERTICAL AND HORIZONTAL FIRESTOPS, THE CAULK SHALL BE LISTED TO AND PASS THE CRITERIA OF ASTM E814 FIRE TEST, TESTED UNDER POSITIVE PRESSURE. FIRESTOPPING METHODS - SPACE BETWEEN PIPE AND SLEEVE SHALL BE FILLED WITH MINERAL WOOL DAMMING MATERIAL AND CAULKED WITH A FIRE BARRIER CAULK ON BOTH SIDES. DEPTH OF MINERAL WOOL, DEPTH OF DAMMING AND ANNULAR SPACE SHALL BE AS RECOMMENDED BY MANUFACTURER TO PROVIDE A UL APPROVED SYSTEM WHICH MEETS ASTM E814. <p>PROTECTION AND CLEANING</p> <ol style="list-style-type: none"> PROTECT ENTIRE INSTALLATION FROM DAMAGE DURING CONSTRUCTION AND BE RESPONSIBLE FOR ALL DAMAGE UNTIL FINAL ACCEPTANCE OF THE WORK. ALL PIPES SHALL BE PROTECTED WITH SUITABLE COVERINGS AS SOON AS THEY ARE SET. ALL OPEN ENDS OF PIPES SHALL BE CLOSED BY A PLUG FITTING TO PREVENT OBSTRUCTION AND DAMAGE. ALL OPENINGS IN FLOORS SHALL BE COVERED AND PROTECTED DURING THE COURSE OF CONSTRUCTION, BEFORE FINAL CONNECTIONS ARE MADE AND BEFORE OPERATION OF EQUIPMENT AND PIPING. ALL PIPING SHALL BE THOROUGHLY BLOWN OUT, RODDED OUT, OR WASHED OUT AT LEAST TWICE IN A MANNER AS DIRECTED AND, OR APPROVED BY THE ENGINEER, TO REMOVE ALL ACCUMULATION OF DIRT, CHIPS, OR OTHER DELETERIOUS MATERIAL. MAKE ALL TEMPORARY CONNECTIONS AND FURNISH ALL APPLIANCES REQUIRED FOR THE PURPOSE OF CLEANING. UPON COMPLETION OF THE INSTALLATION AND WHEN DIRECTED BY THE ENGINEER, REMOVE ALL PROTECTION MATERIALS, ALL SCALE, DIRT, GREASE, STAINS AND THE LIKE, AND LEAVE IN CONDITION FOR PAINTING. <p>SPRINKLER HEADS</p> <ol style="list-style-type: none"> SPRINKLER HEADS INSTALLED IN AREAS WITH HUNG CEILING, SHALL BE RELIABLE MODEL KFR QUICK-RESPONSE PIPED HEADS, WITH A 5.6 K-FACTOR AND SHALL HAVE 1/2" ORIFICE AND BE RATED AT 165F. CONCEALED HEADS SHOULD BE USED IN STORAGE AREAS. RELIABLE MODEL GS-56 DRY, CONCEALED HEADS SHOULD BE USED IN WALK-IN COOLERS AND WALK-IN FREEZERS. IN UNFINISHED AREAS: UPRIGHT HEADS WHERE POSSIBLE. PENDENT HEADS WHERE NECESSARY. HEADS SHALL BE BRONZE FINISH. <p>MISC</p> <ol style="list-style-type: none"> PROVIDE HYDRAULIC CALCULATED SYSTEM IDENTIFICATION SIGN, SIMILAR TO RELIABLE MODEL A STYLE E, ATTACH NEAR CONTROL VALVE. FILL IN ALL REQUIRED INFORMATION. THREADED JOINTS - MAKE TIGHT USING TEFLON PAST OR TAPE PLACED ON THE MALE THREAD ONLY. UNIT PRICE NOTES - CONTRACTOR US TO SUBMIT UNIT PRICE ADD FOR ADD PER NEW SPRINKLER HEAD AND UNIT PRICE DEDUCT FOR DELETION OF NEW SPRINKLER HEAD. <p>DESIGN CRITERIA</p> <ol style="list-style-type: none"> SYSTEM IS TO BE ORDINARY HAZARD 1 CLASSIFICATION - DESIGNED TO 0.15 GPM PER SQ. FT. OVER MOST HYDRAULICALLY REMOTE 1,500 SQ. FT. EXACT LOCATIONS OF SPRINKLER HEADS IN FINISHED AREAS WITH SUSPENDED CEILING SHALL BE AS INDICATED ON REFLECTED CEILING PLANS. MINIMUM PRESSURE AT SPRINKLER HEAD 7 PSI. EQUIVALENT FITTING LENGTHS USED IN HYDRAULIC CALCULATIONS SHALL BE IN ACCORDANCE WITH NFPA 13. DISCHARGE FROM EACH SPRINKLER HEAD SHALL NOT BE LESS THAN FOR REQUIRED AREA COVERED BY THIS HEAD. AREA COVERAGE PER AREA SHALL BE DETERMINED IN ACCORDANCE WITH NFPA 13. HYDRAULIC CALCULATIONS SHALL BE BROUGHT BACK TO CONNECTION TO RISER. FLOW VELOCITY IN PIPING SHALL NOT EXCEED 20 FPS. A 10 PSI SAFETY FACTOR SHALL BE INCLUDED IN ALL SPRINKLER CALCULATIONS. 																		
<p>FIRE PROTECTION GENERAL NOTES</p> <ol style="list-style-type: none"> THE SCOPE OF WORK SHALL INCLUDE THE DESIGN, FABRICATION, INSTALLATION AND TESTING IN ORDER TO PROVIDE A COMPLETE AND FUNCTIONAL FIRE PROTECTION SYSTEM. THIS INCLUDES MODIFICATIONS TO EXISTING SPRINKLER INFRASTRUCTURE IF NECESSARY. THE WORK SHALL INCLUDE ALL MATERIAL, LABOR AND SUPERVISION INCLUDING ALL MISCELLANEOUS AND INCIDENTAL ITEMS REQUIRED FOR A COMPLETE SYSTEM. THE SYSTEM SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: SPRINKLER PIPING, SPRINKLER HEADS, HANGERS AND SUPPORTS, AUXILIARY DRAIN ASSEMBLIES, ACCESS DOORS AND PANELS, HYDRAULIC CALCULATIONS AND DRAWINGS, FLOW TEST(S). THE CONTRACTOR SHOULD HAVE H.V.A.C., ELECTRICAL & PLUMBING DRAWINGS TO ENSURE A COORDINATED AND INCLUSIVE FIRE PROTECTION CONSTRUCTION SET. SPRINKLER SYSTEM TO COMPLY WITH THE RELEVANT VERSION OF NFPA 13 AND LOCAL CODE REQUIREMENTS. SYSTEM SHALL BE TESTED TO THE REQUIREMENTS OF THE RELEVANT VERSION OF NFPA 13, LOCAL, MECHANICAL AND FIRE PREVENTION CODES, OWNER'S INSURANCE CARRIER REQUIREMENTS AND OTHER APPLICABLE FEDERAL, STATE AND CITY CODES AND AGENCIES HAVING JURISDICTION. CONCEALED PIPING SHALL BE INSPECTED BEFORE COVERING. SYSTEM SHALL BE TESTED IN LINE WITH THE RELEVANT VERSION OF NFPA 13 AND LOCAL CODE REQUIREMENTS. SPECIFICATIONS, THE SYSTEM SHALL BE TESTED AND APPROVED BY LOCAL FIRE CODE OFFICIAL. CERTIFICATION OF THE SYSTEM MUST BE PRESENTED TO THE OWNER AND OWNER'S INSURANCE CARRIER. SYSTEMS MUST BE ARRANGED IN SUCH A MANNER THAT NO EXPOSED PIPES MAY APPEAR IN ANY FINISHED AREAS AND NO TEST OR DRAIN COCKS MAY BE LOCATED IN ANY FINISHED AREAS. A SET OF TWELVE (12) OF EXTRA SPRINKLER HEADS OF DIFFERENT TEMPERATURE RATINGS, AS USED IN THE PREMISES, TOGETHER WITH A REPLACEMENT TOOL, SHALL BE LOCATED IN A SPECIAL CABINET FOR EMERGENCY REPLACEMENTS AS PER THE REQUIREMENTS OF NFPA 13. ALL SPRINKLER HEADS SHOULD BE INSTALLED IN THE CENTER OF CEILING TILES IN BOTH DIRECTIONS IF POSSIBLE. WHERE APPLICABLE, SEISMIC RESTRAINTS SHALL BE USED TO SUPPORT SYSTEM PIPING IN ACCORDANCE WITH AHJ REQUIREMENTS. CONTRACTOR TO OBTAIN ALL NECESSARY APPROVALS AND PERMITS. FILINGS FOR PERMITS FOR SPRINKLER WORKS AS WELL AS PAYMENT OF ALL APPLICABLE FEES AND PREPARATION OF ALL SHOP DRAWINGS REQUIRED FOR FILING PLANS AND PERMITS SHALL BE PERFORMED BY THE CONTRACTOR AS PART OF THE SCOPE OF WORK. THE CONTRACTOR SHALL PREPARE HYDRAULIC CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN THE RELEVANT STATE. COPIES OF ALL PERMITS AND DRAWINGS SHALL BE SENT TO THE OWNER. CONTRACTOR SHALL INFORM LOCAL AUTHORITIES IN REGARD TO SYSTEM SHUT-DOWN AND START-UP AND SHALL CONFIRM THAT THE SYSTEMS HAVE BEEN REFILLED AND ARE OPERATIONAL INCLUDING SYSTEM ALARMS. CONTRACTOR'S PRICE SHALL INCLUDE ALL HANGERS, INSERTS, COUPLINGS, TESTING, TOOLS, SUPERVISION, LABOR, COORDINATION, MATERIALS, EQUIPMENT, REMOVALS, CAPPING, PATCHING, DISPOSAL AND OTHER NECESSARY ITEMS TO PROVIDE SPRINKLER INSTALLATION. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION, INSTALLATION OR OPERATION OF ANY PART OF THE WORK AS DETERMINED BY THE ENGINEER SHALL BE INCLUDED IN THE WORK AS IS SPECIFIED OR INDICATED ON THE DRAWINGS. 																					
<p>FIRE PROTECTION SYMBOLS</p> <table border="1"> <tr> <td>●</td> <td>PENDANT HEAD</td> </tr> <tr> <td>⊠</td> <td>CONCEALED HEAD</td> </tr> <tr> <td>▷</td> <td>SIDEWALL HEAD</td> </tr> <tr> <td>⊠</td> <td>EXISTING HEAD TO BE REMOVED</td> </tr> <tr> <td>⊠</td> <td>EXISTING HEAD TO BE RELOCATED</td> </tr> <tr> <td>—SP—</td> <td>FIRE SPRINKLER LINE</td> </tr> <tr> <td>—CA—</td> <td>COMPRESSED AIR LINE</td> </tr> <tr> <td>⊕</td> <td>PRESSURE GAUGE</td> </tr> <tr> <td>ANS</td> <td>ANSUL MANUAL PULL STATION</td> </tr> </table>				●	PENDANT HEAD	⊠	CONCEALED HEAD	▷	SIDEWALL HEAD	⊠	EXISTING HEAD TO BE REMOVED	⊠	EXISTING HEAD TO BE RELOCATED	—SP—	FIRE SPRINKLER LINE	—CA—	COMPRESSED AIR LINE	⊕	PRESSURE GAUGE	ANS	ANSUL MANUAL PULL STATION
●	PENDANT HEAD																				
⊠	CONCEALED HEAD																				
▷	SIDEWALL HEAD																				
⊠	EXISTING HEAD TO BE REMOVED																				
⊠	EXISTING HEAD TO BE RELOCATED																				
—SP—	FIRE SPRINKLER LINE																				
—CA—	COMPRESSED AIR LINE																				
⊕	PRESSURE GAUGE																				
ANS	ANSUL MANUAL PULL STATION																				
<p>BACKFLOW DEVICE SCHEDULE</p> <table border="1"> <thead> <tr> <th>SYMBOL</th> <th>MFR / MODEL</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>P-DDC-1</td> <td>ZURN MODEL 350ASTDA-BF</td> <td>DOUBLE CHECK DETECTOR ASSEMBLY 4" SIZE, COMPLETE WITH BUTTERFLY VALVES FOR VERTICAL POSITION IN-LINE WITH FIRE RISER. INSTALL AT READILY ACCESSIBLE HEIGHT.</td> </tr> </tbody> </table>				SYMBOL	MFR / MODEL	REMARKS	P-DDC-1	ZURN MODEL 350ASTDA-BF	DOUBLE CHECK DETECTOR ASSEMBLY 4" SIZE, COMPLETE WITH BUTTERFLY VALVES FOR VERTICAL POSITION IN-LINE WITH FIRE RISER. INSTALL AT READILY ACCESSIBLE HEIGHT.												
SYMBOL	MFR / MODEL	REMARKS																			
P-DDC-1	ZURN MODEL 350ASTDA-BF	DOUBLE CHECK DETECTOR ASSEMBLY 4" SIZE, COMPLETE WITH BUTTERFLY VALVES FOR VERTICAL POSITION IN-LINE WITH FIRE RISER. INSTALL AT READILY ACCESSIBLE HEIGHT.																			



3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48226
T: 248.601.4422 F: 248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21
Revision/Issue	Date

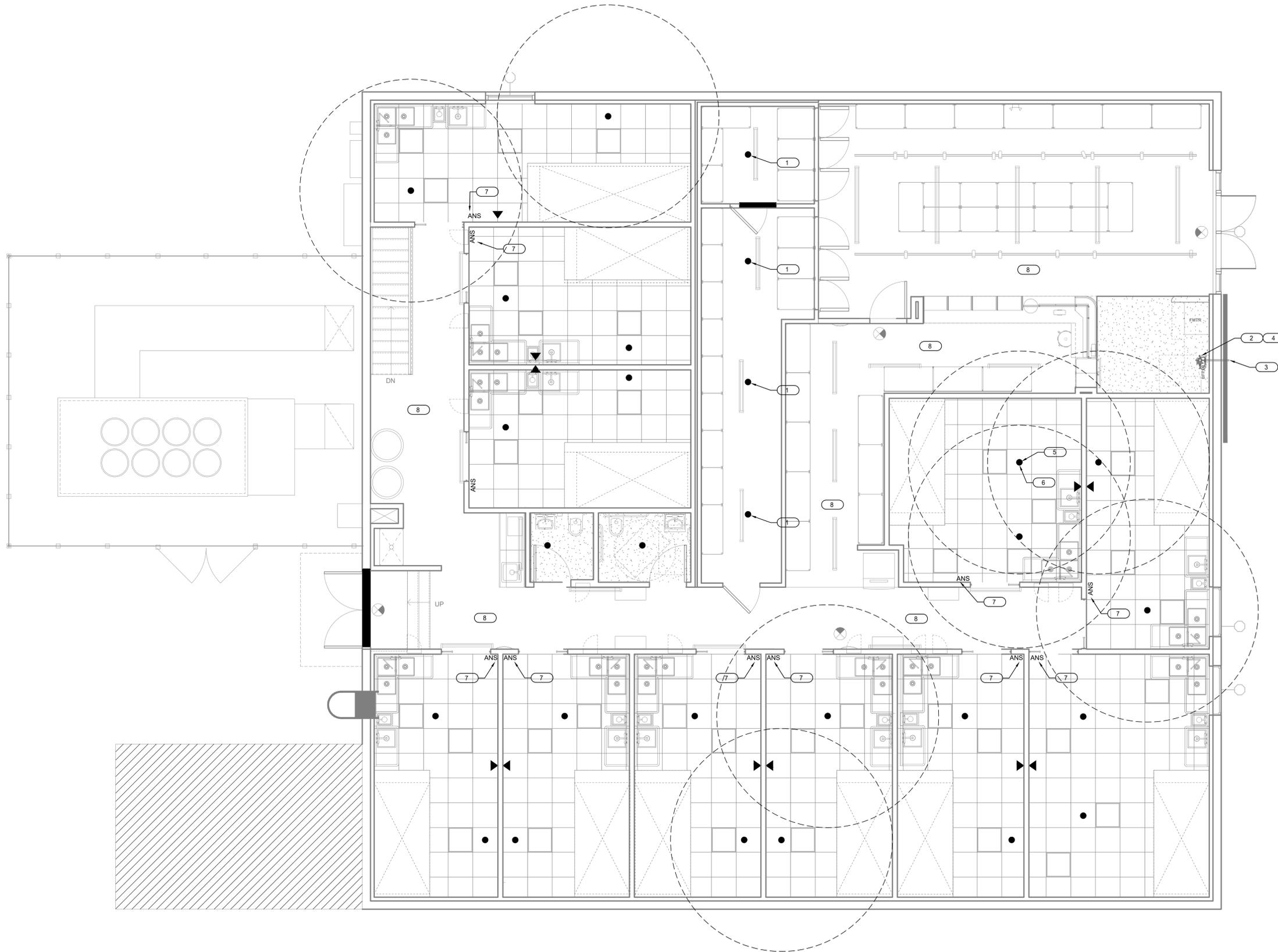


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

FIRE SPRINKLER -
NOTES &
SPECIFICATIONS

021293

FS-001



LEVEL 1 - FIRE PROTECTION KEYNOTES:

- 1 SPRINKLER HEADS IN WALK-IN COOLERS AND FREEZERS SHALL BE DRY CONCEALED TYPE (TYP).
- 2 AUTOMATIC FIRE SPRINKLER RISER.
- 3 FIRE DEPARTMENT CONNECTION.
- 4 DOUBLE DETECTOR CHECK VALVE.
- 5 SPRINKLER HEADS IN KITCHENS AND COMMON AREAS SHALL BE STANDARD PENDENT TYPE (TYP).
- 6 ALL SPRINKLER HEADS TO BE MOUNTED AT CEILING LEVEL AND CENTERED ON CEILING TILES.
- 7 ANSUL PULL STATION LOCATED AT EXIT DOOR, INSIDE THE KITCHEN.
- 8 PROVIDE STANDARD SPRAY UPRIGHT SPRINKLER HEADS IN EXPOSED CEILING AREAS.

SPRINKLER HEAD TYPES

EXPOSED CEILING AREAS: STANDARD SPRAY UPRIGHT.

AREAS WITH CEILINGS: STANDARD SPRAY PENDANT.

WALK-IN COOLERS AND WALK-IN FREEZER: DRY TYPE CONCEALED.

3 LEVEL 1 FIRE PROTECTION PLAN

EST
1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD., SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	33.07.22
CD 50%	32.04.22
Second Investigation	10.08.21
Site Investigation	39.30.21

Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

**FIRE SPRINKLER
PLAN - LEVEL 1**

021293

FS-002

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
\$	SINGLE POLE TOGGLE SWITCH		QUAD ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		NORMALLY OPEN CONTACTS
\$2	TWO POLE TOGGLE SWITCH		QUAD FLOOR MOUNTED RECEPTACLE		NORMALLY CLOSED CONTACTS
\$3	3 WAY TOGGLE SWITCH		DUPLEX FLOOR MOUNTED RECEPTACLE		N.O. PUSH BUTTON SINGLE CIRCUIT
\$4	4 WAY TOGGLE SWITCH		SPECIAL RECEPTACLE-NEMA CONFIGURATION AS NOTED		N.C. PUSH BUTTON SINGLE CIRCUIT
\$k	KEY OPERATED SWITCH		QUAD RECEPTACLE/LOW VOLTAGE SYSTEM FLOOR BOX		SPEAKER
\$3k	3 WAY KEY OPERATED SWITCH		DUPLEX RECEPTACLE/LOW VOLTAGE SYSTEM FLOOR BOX		DOUBLE FACE SPEAKER - WALL MOUNTED
\$4k	4 WAY KEY OPERATED SWITCH		VERTICAL RISER FOR SURFACE RACEWAY		SPEAKER - WALL MOUNTED
\$d	DIMMER SWITCH MATCH LIGHTING FOR LINE OR 0-10V		SURFACE RACEWAY		MICROPHONE
\$3d	3 WAY DIMMER SWITCH		BUS DUCT		VOLUME CONTROL
\$p	PILOT SWITCH		PANEL 480/277 VOLT		SINGLE FACE CLOCK - CEILING MOUNTED
\$os	MANUAL ON/AUTO OFF OCCUPANCY SENSOR WALL SWITCH		PANEL 208Y/120 VOLT		SINGLE FACE CLOCK WALL MOUNTED (MOUNT 7'-6" AFF TO CENTER)
\$L	LOCKABLE SINGLE POLE SWITCH		DISTRIBUTION PANEL		DOUBLE FACE CLOCK - WALL MOUNTED
\$m	HORSE POWER RATED SWITCH		MAIN DISTRIBUTION PANEL/MAIN SWITCHBOARD MOTOR CONTROL CENTER		MOTOR DETECTOR
\$o	MANUAL ON/AUTO OFF OCCUPANCY SENSOR WITH DIMMING - MATCH LIGHTING FOR LINE OR 0-10V		TRANSFORMER		DOOR CONTACT
\$os	MANUAL ON/AUTO OFF OCCUPANCY SENSOR WITH DIMMING - MATCH LIGHTING FOR LINE OR 0-10V		ELECTRIC MOTOR		KEY PAD
OS	CEILING MOUNTED OCCUPANCY SENSOR		MANUAL MOTOR STARTER		SECURITY CAMERA
D	CEILING MOUNTED DAYLIGHT SENSOR		MANUAL MOTOR STARTER WITH PILOT LIGHT		CARD READER
P	OCCUPANCY SENSOR POWER PACK		MOTOR STARTER		NURSE CALL DEVICE
LC	PROGRAMMABLE LIGHT CONTROL SWITCH		MOTOR STARTER		MANUAL FIRE ALARM STATION
BLTC	BALLAST LOAD TRANSFER CONTROL		COMBINATION MOTOR STARTER		SMOKE DETECTOR
TC	TIMER CONTROLLER		NON-FUSED DISCONNECT SWITCH		DUCT SMOKE DETECTOR
C	CONTACTOR		FUSED DISCONNECT SWITCH		DUCT SMOKE DAMPER. CONNECT 120V TO SMOKE DAMPER AND FIRE ALARM CONNECTION TO SMOKE DAMPER AS WELL AS DUCT SMOKE DETECTORS AS REQUIRED PER NFPA - COORDINATE WITH MESH TRACES. PROVIDE RESET SWITCH IN ACCESSIBLE LOCATION IN AREA SERVED BY DUCT.
PE	PHOTOELECTRIC CONTROLLER		PUSH BUTTON		DUCT SMOKE AUDIBLE/VISUAL ALARM DEVICE WITH KEYPAD TEST AND RESET SWITCH
	SINGLE RECEPTACLE		JUNCTION BOX		THERMAL DETECTOR
	DUPLEX RECEPTACLE		HARD WIRE POWER CONNECTION		KITCHEN FIRE CONTROLS
	QUAD RECEPTACLE		HARD WIRE CONNECTION AT FLOOR BOX		FIRE ALARM HORN
	DUPLEX RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP. (UNLESS NOTED OTHERWISE) (SIMILAR FOR EMERGENCY RECEPTACLES)		CIRCUIT BREAKER		FIRE ALARM STROBE
	DUPLEX RECEPTACLE-GROUND FAULT INTERRUPTER		SWITCH		FIRE ALARM HORN/STROBE
	DUPLEX RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP (UNLESS NOTED OTHERWISE) WITH GROUND FAULT INTERRUPTER		AUTOMATIC OR MANUAL TRANSFER SWITCH		MAGNETIC DOOR RELEASE
	DUPLEX ISOLATED GROUND RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP (UNLESS NOTED OTHERWISE) WITH DEDICATED NEUTRAL CONDUCTOR		ENGINE GENERATOR		TAMPER SWITCH
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		FUSE		FLOW SWITCH
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		TRANSFORMER		FIRE ALARM CONTROL PANEL
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		CURRENT TRANSFORMER		FIRE ALARM ANNUNCIATOR PANEL
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		POTENTIAL TRANSFORMER		
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		PANEL (LIGHTING OR RECEPTACLE)		
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		NODE		
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		GROUND		
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		TRANSFORMER GROUND		
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		TRANSIENT VOLTAGE SURGE SUPPRESSION		

SPECIAL SYSTEMS

- SINGLE GANG OUTLET BOX FOR LOW VOLTAGE SYSTEMS, STUB RACEWAY UP INTO ACCESSIBLE CEILING SPACE. PROVIDE BUSHING. PROVIDE BLANK COVERPLATE. WIRING BY OTHERS.
- SINGLE GANG OUTLET BOX FOR LOW VOLTAGE SYSTEMS MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP (COORDINATE WITH MILLWORK) OR WIRELESS ACCESS POINT (WAP) IN THE KITCHEN OR OFFICE AREA MOUNTED 96" AFF UNLESS NOTED OTHERWISE. STUB UP RACEWAY INTO ACCESSIBLE CEILING SPACE. PROVIDE BUSHING. PROVIDE BLANK COVERPLATE. WIRING BY OTHERS.
- SINGLE GANG OUTLET BOX FOR TV, STUB UP RACEWAY INTO ACCESSIBLE CEILING SPACE. PROVIDE BUSHING. PROVIDE BLANK COVERPLATE. WIRING BY OTHERS.
- TELECOMMUNICATIONS BACKBOARD

ALL "SPECIAL SYSTEMS" (TYPICALLY TELEPHONE, TV, AND DATA) WIRING AND DEVICES BY OTHERS, UNLESS NOTED ON PLANS OR SPECIFICATIONS. E.G. TO PROVIDE BOXES, RACEWAYS, BACKBOARDS, AND COVERPLATES (PER SPECIFICATIONS IF APPLICABLE) COORDINATE EXACT REQUIREMENTS OF RACEWAY AND BOX SIZES WITH LOW VOLTAGE CONTRACTOR PRIOR TO INSTALLATION.

STANDARD MOUNTING HEIGHTS

CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE	18" AFF TO CENTER OF BOX
OUTLETS AND LOW VOLTAGE SYSTEMS OUTLETS NOT OTHERWISE SPECIFIED	
CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE	24" AFF TO TOP OF BOX
OUTLETS AND LOW VOLTAGE SYSTEMS OUTLETS NOT OTHERWISE SPECIFIED IN CMU WALLS	
LIGHT SWITCHES, MOTOR CONTROL DEVICES AND FIRE ALARM PULL STATIONS NOT OTHERWISE SPECIFIED	48" AFF TO CENTER OF BOX
FIRE ALARM HORNS, SPEAKERS, STROBES	80" AFF OR 6" BELOW CEILING, WHICHEVER IS LESS
CLOCKS AND COMBINATION DEVICES NOT OTHERWISE SPECIFIED	96" AFF OR 6" BELOW CEILING, WHICHEVER IS LESS
GF RECEPTACLES IN TOILET ROOMS AND JANITOR CLOSETS NOT OTHERWISE SPECIFIED	42" AFF TO CENTER OF BOX
LIGHTING AND RECEPTACLE BRANCH CIRCUIT PANELBOARDS AND LIGHTING CONTROLLERS NOT OTHERWISE SPECIFIED	6'-6" AFF TO TOP OF ENCLOSURE

** COORDINATE EXACT MOUNTING HEIGHTS WITH ARCHITECT/MILLWORK PRIOR TO ROUGH-IN. **

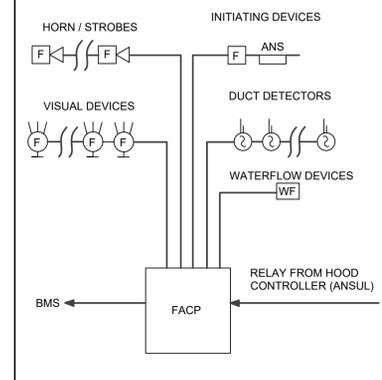
GENERAL FIRE ALARM NOTES

- ALL WIRING, POWER, CONDUCTORS, CONTROL EQUIPMENT ETC. SHALL MEET LOCAL CODE REQUIREMENTS.
- ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODE AND THE REQUIREMENTS OF NFPA 72.
- ALL FIRE ALARM EQUIPMENT SHOULD BE INSTALLED WITH AESTHETICS IN MIND. CABINETS SHALL BE SEMI-FLUSH MOUNTED AND CABLE RUNS HIDDEN.
- ALL FIRE ALARM CIRCUITS SHALL BE SIZED TO A MAXIMUM 80% OF CAPACITY.
- CLASS AND STYLE OF WIRE - ALL FIRE ALARM CIRCUITS SHALL BE WIRED NFPA CLASS A. ALL FIRE ALARM CIRCUIT RISERS SHALL BE NFPA CLASS X. ALL AUDIBLE AND VISUAL CIRCUITS SHALL BE CLASS B.
- ALL FIRE ALARM CABINETS AND JUNCTION BOXES SHOULD BE PAINTED FIRE DEPARTMENT RED. ALL FIRE ALARM CABINETS SHOULD BE CLEARLY LABELED WITH LOCALLY APPROVED LABELLING.
- ALL FIRE ALARM WIRE SHALL BE CLEARLY LABELLED IN JUNCTION BOXES AND CABINETS. ALL TERMINALS SHALL BE NUMBERED AND LABELLED. ALL CONNECTIONS SHALL EITHER BE SOLDERED, APPROVED TERMINAL STRIPS, APPROVED WIRE NUTS (APPROVED TEMPERATURE) OR SCOTCH LOCKS.
- FIRE ALARM CABLES SHALL NOT BE MIXED WITH NON FIRE ALARM CABLES. LOW VOLTAGE FIRE ALARM CABLES SHALL NOT BE MIXED OR WIRED NEAR ANY AC CIRCUIT.
- ALL LOW VOLTAGE FA WIRING SHALL BE FPLP 150 DEGREE C CERTIFIED WIRE. ALL NOTIFICATION CIRCUITS SHALL BE A MINIMUM OF 14 AWG AND ALL OTHER LOW VOLTAGE FIRE ALARM CIRCUITS SHOULD BE 18 AWG MINIMUM.
- ALL WIRING SHOULD BE INSPECTED TO ENSURE THAT THERE ARE NO OPENS, SHORTS OR EARTH GROUNDS.
- ALL AREA OR DUCT SMOKE DETECTORS SHOULD BE PHOTO-ELECTRIC TYPE.
- DEVICE LOCATIONS MUST BE READILY ACCESSIBLE TO ALLOW FOR MAINTENANCE AND REPAIR.
- DUCT MOUNTED DETECTORS SHALL BE MOUNTED ON THE DUCTWORK IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. ALL DUCT DETECTORS SHOULD BE PROVIDED WITH A REMOTE LED.
- MANUAL PULL STATIONS SHALL BE MOUNTED 48 INCHES ABOVE THE FINISHED FLOOR TO THE HANDLE OF THE STATION AND SHALL BE PAINTED FIRE DEPARTMENT RED. ALL MANUAL PULL STATIONS SHALL BE INSTALLED SUCH THAT THEY ARE NOT IMPEDED BY OTHER BUILDING CONSTRUCTION.
- NOTIFICATION DEVICES THAT INCLUDE A STROBE SHOULD BE LOCATED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 INCHES AND NOT GREATER THAN 96 INCHES ABOVE FINISHED FLOOR LEVEL.
- ACTIVATION OF THE FIRE ALARM SHOULD CAUSE FULL SHUT DOWN OF ALL SUPPLY AIR HANDLING UNITS IN THE FACILITY VIA SHUNT TRIP.
- A CENTRAL STATION DIALLER AND TWO REMOTE PHONE LINES SHOULD BE PROVIDED. THE DIALLER SHOULD BE CAPABLE OF SENDING THE FOLLOWING EVENTS: ALARM, TROUBLE, SUPERVISORY, WATER FLOW AND IF PROVIDED OR REQUIRED, CARBON MONOXIDE, PUMP RUNNING, PUMP PHASE REVERSAL, PUMP TROUBLE, GENERATOR RUNNING, GENERATOR TROUBLE AND GENERATOR LOW FUEL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY AND ALL ABANDONED FIRE ALARM CABINETS, DEVICES AND WIRE. PAINT, PATCH AND CLEANUP SHALL ALSO BE PROVIDED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE SCHEDULING OF ALL INSPECTIONS WITH THE LOCAL FIRE AND BUILDING DEPARTMENTS IN ORDER TO OBTAIN A FINAL LETTER OF APPROVAL FROM THE RELEVANT AUTHORITIES. CONTRACTOR TO INCLUDE IN HIS SCOPE ANY RE-INSPECTIONS REQUIRED UNTIL FINAL LETTER OF APPROVAL IS OBTAINED.
- FIRE ALARM SYSTEM NOTED ON PLANS INDICATES BASIC REQUIREMENTS ONLY. THE COMPLETE SYSTEM SHALL BE DESIGNED BY A LICENCED FIRE PROTECTION ENGINEER, WHO WILL PROVIDE DOCUMENTATION THAT THE FIRE ALARM DESIGN HAS BEEN REVIEWED AND IS IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND MANUFACTURERS RECOMMENDATIONS.
- THE SYSTEM SHALL BE DESIGNED SO AS TO ENSURE THAT POTENTIAL FOR PHYSICAL DAMAGE IS MINIMIZED.

FIRE DETECTION AND ALARM SINGLE LINE DIAGRAM SYMBOLS

	SPEAKER
	HORN WITH STROBE
	ANSUL MANUAL PULL STATION
	WALL MOUNTED STROBE
	FLOW DETECTOR/SWITCH
	PRESSURE DETECTOR / SWITCH
	TAMPER DETECTOR
	MANUAL STATION - PULL STATION / FIRE ALARM BOX
	FIRE ALARM CONTROL PANEL
	ANNUNCIATOR PANEL
	ANSUL RELAY

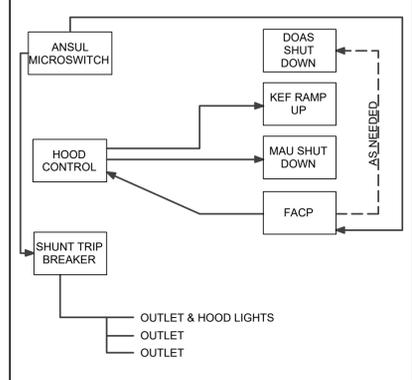
FIRE ALARM SINGLE LINE DIAGRAM



ANSUL SEQUENCE NOTES

- MANUAL OR AUTOMATIC ANSUL ACTIVATION WILL CLOSE THE ANSUL MICROSWITCH, COMPLETING THE CIRCUIT FOR THE SHUNT TRIP BREAKER IN THE KITCHEN PANEL AND SENDING A SIGNAL TO THE HOOD CONTROLLER.
- GAS TO KITCHEN OF FIRE ORIGIN IS SHUT OFF VIA MECHANICAL GAS SOV.
- HOOD CONTROLLER SHUTS DOWN MAU ASSOCIATED WITH KITCHEN OF FIRE ORIGIN. KEF IN KITCHEN OF FIRE ORIGIN RAMPS UP TO FULL EXTRACT. SIGNAL IS ALSO SENT TO FACP.
- IN JURISDICTIONS WHERE GLOBAL MAU SHUT DOWN IS REQUIRED, SEQUENCING REMAINS THE SAME, BUT A MEANS OF PROVIDING NATURAL AIR RELIEF PATH MUST BE PROVIDED TO PREVENT NEGATIVE PRESSURIZATION. MAU SHUT DOWN SHOULD BE RUN FROM THE FACP.

ANSUL WIRING SEQUENCE



ELECTRICAL ABBREVIATION LIST

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPHERE	GF	GROUND FAULT INTERRUPTER	NC	NORMALLY CLOSED
AFF	ABOVE FINISH FLOOR	GRD	GROUND	NF	NON-FUSIBLE
AFG	ABOVE FINISH GRADE	GRD	GALVANIZED RIGID CONDUIT	NC	NOT IN CONTRACT
AHU	AIR HANDLING UNIT	HOA	HAND-OFF-AUTO	NL	NIGHT LIGHT
AIC	AMPS INTERRUPTING CAPACITY	HP	HORSEPOWER	NO	NORMALLY OPEN
BKR	BREAKER	HZ	HERTZ	NTS	NOT TO SCALE
BPS	BOLTED PRESSURE SWITCH	IG	ISOLATED GROUND	RECEPT.	RECEPTACLE
CB	CIRCUIT BREAKER	JB	JUNCTION BOX	RP	RECEPTACLE PANEL
CB/CXT	CIRCUIT BREAKER	KB	KILOWATT	RTU	ROOF TOP UNIT
CLG	CEILING	KW	KILOWATT	SD	SMOKE DETECTOR
CP	CIRCULATION PUMP	KWH	KILOWATT - HOURS	SPEC	SPECIFICATION
CUH	CABINET UNIT HEATER	KVA	KILO VOLT-AMPERES	TELECOM	TELECOMMUNICATIONS
DED	DEDICATED	LP	LIGHTING PANEL	TYP	TYPICAL
DISC	DISCONNECT	LO	LOCK-ON	UH	UNIT HEATER
DP	DISTRIBUTION PANEL	MCA	MINIMUM CIRCUIT AMPACITY	U.O.N.	UNLESS OTHERWISE NOTED
DWG	DRAWING	MCC	MAIN CIRCUIT BREAKER	WP	WEATHERPROOF
EBU	EMERGENCY BATTERY UNIT	MCC	MOTOR CONTROL CENTER	WG	WIRE GUARD
EF	EXHAUST FAN	MCP	MAIN DISTRIBUTION PANEL		
EM	EMERGENCY	MLO	MAIN LUGS ONLY		
EM/NL	EMERGENCY/NIGHT LIGHT	MSB	MAIN SWITCHBOARD		
ELH	ELECTRIC UNIT HEATER	MTD	MOUNTED		
EWC	ELECTRIC WATER COOLER	MUA	MAKE-UP AIR UNIT	(E)	EXISTING
EW	ELECTRIC WATER HEATER			(R)	RELOCATED
FLA	FULL LOAD AMPS			(N)	NEW
F	FUSE				

EST 1998
DESIGNHAUS
ARCHITECTURE

3300 AUBURN RD, SUITE 300
 AUBURN HILLS, MI 48326
 T:248.601.4422 F:248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

Permits 03.07.22

Revision/Issue Date

Professional Engineer
 No. 36685

3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

Electrical Symbols List, FA Notes & Details

021293

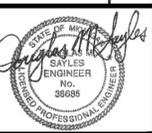
EO.O

A. GENERAL PROVISIONS	
1. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION BE PROVIDED FOR ALL THE EQUIPMENT DESCRIBED OR SHOWN AS BEING IN THESE DRAWINGS. TOWARD THIS END, CONTRACTOR SHALL FURNISH ALL LABOR AND TOOLS NECESSARY, FURNISH AND INSTALL ALL APPARATUS, MATERIALS, AND EQUIPMENT IN A MANNER COMPLYING WITH ALL APPLICABLE CODES, INCLUDING ITEMS REQUIRED BUT NOT NECESSARILY SHOWN, SUCH AS LAMPS, COUPLINGS, HANGERS, BRACKETS, CLAMPS, BOXES, CONNECTORS, AND HARDWARE.	
2. CONDUCTORS SHALL BE COPPER/ALUMINUM (SEE FEEDER SCHEDULES AND EQUIPMENT SCHEDULES FOR REFERENCE), TYPE "THWN/THHN" 90 DEGREE INSULATION. ALL LUGS SHALL BE 75 DEGREE MINIMUM. ALL CONDUIT SHALL BE EMT OF RIGID STEEL. USE OF FLEX IS NOT ALLOWED EXCEPT UP TO 6 FOOT FOR FINAL CONNECTION TO LIGHTING FIXTURES OR VIBRATING EQUIPMENT.	
3. PROVIDE A CODE APPROVED DISCONNECT SWITCH OR BREAKER WITHIN SIGHT OF EVERY MOTOR. FOR LOCATION OF DISCONNECT SWITCH, COORDINATE WITH EQUIPMENT SUPPLIER TO DETERMINE THE BEST LOCATION ON SITE WHILE REMAINING ACCESSIBLE.	
4. PROVIDE PULL ROPE IN ALL EMPTY CONDUITS.	
5. COORDINATE ROUTING OF RACEWAYS FEEDERS AND HOMERUNS IN COOPERATION WITH THE WORK OF OTHER TRADES.	
6. NO INTERMEDIATE SPLICING OF FEEDERS OR BRANCH CIRCUITS SHALL BE DONE WITHOUT PRIOR APPROVAL.	
7. MINIMUM SIZE FOR EXTERIOR BELOW GRADE CONDUIT SHALL BE 1-1/4 INCH.	
8. FOR 120V, 20 AMP CIRCUITS, WHERE CIRCUIT DISTANCE FROM PANELBOARD TO FARTHEST DEVICE EXCEEDS 75 FEET, PROVIDE #10 SIZE CONDUCTOR.	
B. LIGHTING	
1. ALL LIGHTING FIXTURES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.	
2. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT DIMENSIONS, CEILING CONFIGURATION, LIGHTING PLACEMENT AND QUANTITIES.	
3. ALL EQUIPMENT, ELECTRICAL CHARACTERISTICS, LOCATIONS, AND CONNECTION REQUIREMENTS SHALL BE VERIFIED PRIOR TO ANY ROUGH-IN WORK.	
4. ALL EXTERIOR EQUIPMENT SHALL BE RATED FOR WET LOCATION AND THE IP RATING OF ALL EQUIPMENT SHALL CONFORM TO THE CONDITIONS IN WHICH THE LUMINAIRE IS MOUNTED.	
5. ALL LUMINAIRES SHALL BE SUPPLIED WITH LAMPS, COLOR FILTERS AND ACCESSORIES AS SPECIFIED:	
COLOR FILTERS SHALL BE GLASS, DICHROIC OR FADE-NOT AS SPECIFIED UNLESS OTHERWISE INDICATED ON DRAWINGS OR LIGHTING DOCUMENTATION PACKAGE. ALL GLASS AND DICHROIC FILTERS SHALL INCLUDE MESH FRAMES AND SAFETY CABLES PER OVERHEAD SAFETY REQUIREMENTS.	
C. POWER	
1. PROVIDE CONCRETE PADS (MINIMUM 4" HIGH OR AS INDICATED) FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT INSTALLED IN EQUIPMENT ROOMS AND IN AREAS SUSCEPTIBLE TO BEING WET OR HOSED DOWN. SUBMIT PAD DETAIL PLANS INCLUDING DIMENSIONS FOR APPROVAL.	
2. THE LOCATION OF ALL OUTLETS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS BY THE CONTRACTOR PRIOR TO INSTALLATION. MOUNTING HEIGHTS OF RECEPTACLES, SWITCHES, WIRING DEVICES AND DEDICATED EQUIPMENT OUTLETS SHALL BE COORDINATED WITH OTHER TRADES PRIOR TO INSTALLATION.	
3. ALL DISCONNECT SWITCHES SHALL BE PAD-LOCKABLE IN THE "OFF" POSITION.	
4. ALL FEEDER LENGTH SHOWN ON SINGLE LINE DIAGRAM ARE FOR VOLTAGE DROP CALCULATION ONLY. DO NOT USE FOR ANY OTHER PURPOSES.	
5. VERIFY AND COORDINATE EXACT LOCATION, POWER REQUIREMENTS AND METHOD OF CONNECTION OF ALL MECHANICAL EQUIPMENT AND PERTINENT ITEMS AND DEVICES PRIOR TO INSTALLATION OF ELECTRICAL SYSTEM.	
6. PROVIDE A MINIMUM OF 12" SEPARATION BETWEEN POWER AND COMMUNICATION CONDUITS, WHERE THEY ARE INSTALLED IN PARALLEL OR IN THE SAME TRENCH.	
7. LABEL ALL RECEPTACLES, J-BOXES, DISCONNECT SWITCHES AND CONTROL DEVICES WITH THEIR SERVING CIRCUIT NUMBERS. LABELS SHALL BE PER THE SPECIFICATION.	
8. PROVIDE A MINIMUM 24" HORIZONTAL SEPARATION THAT USUALLY APPLIES BETWEEN BOXES INSTALLED ON OPPOSITE SIDES OF THE WALL. IN ORDER TO MAINTAIN THE FIRE-RESISTIVE RATING OF ASSEMBLIES WHERE PENETRATION OR OPENINGS ARE MADE.	
D. GROUNDING	
1. THE EQUIPMENT GROUNDING CONDUCTOR SHALL RUN CONTINUOUS FROM PANEL TO LAST OUTLET. THIS WIRE SHALL BE PIGTAILED TO BOX AND DEVICE. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED GREEN CONDUCTORS.	
2. PROVIDE EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING AND POWER CONDUITS.	
E. PENETRATIONS	
1. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED MATERIAL IN ACCORDANCE WITH CBC SECTION 709.6. SPACE BETWEEN PENETRATING MATERIALS (DESCRIBED BELOW) MUST BE DESIGNED TO PREVENT THE SPREAD OF HOT FLAME OR GASES.	
2. COPPER OR FERROUS PIPES OR CONDUITS MAY PENETRATE THE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRESTOPPED.	
3. OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED PROVIDED OPENINGS DO NOT AGGREGATE MORE THAN 100 SQUARE INCHES OR 100 SQUARE FEET OF WALL OF PARTITIONS. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.	
F. AESTHETIC CRITERIA NOTES	
1. WHERE BENDING MULTIPLE CONDUITS ALONG A COMMON PATH, FIELD BEND THE CONDUITS AROUND A COMMON CENTER POINT FOR ALL CONDUITS SO THAT THE SEPARATION BETWEEN CONDUITS REMAINS CONSTANT THROUGH ENTIRE LENGTH OF BEND.	
2. CONDUIT FITTING SHALL BE ALIGNED AND PERPENDICULAR TO THE DIRECTION OF THE RACEWAYS. FITTINGS SHALL HAVE SET SCREWS LOCATED ON TOP OF RACEWAYS AND NOT VISIBLE FROM THE FLOOR.	
3. ALL EXPOSED CONDUIT, RACEWAYS AND BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT BUILDING ELEMENTS AND FASTENED NEATLY AND CONSISTENTLY. IN PUBLIC AREAS, GROUP RACEWAYS IN MINIMUM GROUPS OF THREE RACEWAYS ON A COMMON SUPPORT SYSTEM.	
4. ALL NEW DEVICES, OUTLETS, SWITCHES, CONTROLS, ETC. SHALL BE INSTALLED WITH CONCERN FOR ALIGNMENT WITH WORK OF OTHER TRADES. PROVIDE VERTICAL AND HORIZONTAL ALIGNMENT WITH EQUAL SPACING BETWEEN CENTER LINES. IF DOCUMENTS DO NOT INDICATE ALIGNMENT AND/OR SPACING CONSULT WITH ARCHITECT PRIOR ROUGH IN.	
G. ACOUSTICAL NOTES	
1. ALL PENETRATIONS INTO SOUND RATED PARTITIONS OR FLOOR-CEILING ASSEMBLIES WILL BE SEALED, LINED OR INSULATED WITH APPROVED PERMANENT RESILIENT ACOUSTIC SEALANT AND FIRE CAULK (WHERE APPLIES).	
2. ALL RIGID CONDUIT LOCATED IN SOUND ASSEMBLIES WILL BE ISOLATED FROM THE BUILDING CONSTRUCTION BY MEANS OF RESILIENT SLEEVES, MOUNTS OR MINIMUM 1/4" THICK APPROVED RESILIENT MATERIAL.	
3. ELECTRICAL OUTLETS BOXES IN OPPOSITE FACES OF SEPARATION WALLS WILL BE SEPARATED HORIZONTALLY BY 24" AND NOTE THAT BACK AND SIDES OF BOXES WILL BE SEALED WITH 1/8" RESILIENT SEALANT AND BACKED BY MINIMUM OF 2" THICK MATERIAL FIBER INSULATION. (TV, TELEPHONE AND INTERCOM OUTLETS MUST BE INSTALLED IN BOXES ACCORDINGLY).	
4. NO ELECTRICAL TRANSFORMER OR RELAYS SHALL BE INSTALLED ON OR IN SOUND RATED PARTITIONS.	
H. STRUCTURAL NOTES	
1. DO NOT EMBED CONDUITS OR SLEEVES IN STRUCTURAL CONCRETE, INCLUDING CONCRETE ON METAL DECK WITHOUT SPECIFIC ACCEPTANCE FROM ARCHITECT. LOCATE ELECTRICAL CONDUIT MINIMUM OF 3" APART AND WITHIN MIDDLE 1/3 OF MEMBER.	
2. CONDUITS MUST BE SUPPORTED ON APPROVED CHAIRS AFFIXED TO THE SLAB FORMWORK, AND TIGHTLY SECURED TO ADJACENT REINFORCING STEEL WHERE FEASIBLE SO AS TO ASSURE NO MOVEMENT DURING CONCRETE PLACEMENT.	
3. MULTIPLE LAYERS OF CONDUIT CROSSING EACH OTHER WITHIN THE 1/3" PLACEMENT ZONE IS ACCEPTABLE; HOWEVER, NO LESS THAN 3/4" VERTICAL CLEARANCE BETWEEN STACKED CONDUITS IS ALLOWED, AND NO MORE THAN THREE LAYERS OF CONDUIT WITHIN THE 1/3" PLACEMENT ZONE ARE ALLOWED AT ANY ONE LOCATION.	
4. NO CONCRETE FLOOR SLABS ARE ALLOWED TO BE POURED WITHOUT APPROVAL OF THE CONDUIT LAYOUT PLAN.	
5. CONDUIT "BANKS" CONSISTING OF 4 OR MORE CONDUITS MUST BE PLACED IN PLAN VIEW WITHIN THE MIDDLE THIRD OF THE DISTANCE BETWEEN COLUMNS OR BETWEEN COLUMNS AND ENDS/FACES OF WALLS. NO SINGLE "BANK" OF CONDUITS SHALL EXCEED 25 CONDUITS OR A TOTAL WIDTH OF 5 FEET, INCLUDING REQUIRED SPACING BETWEEN CONDUITS.	
6. NO CONDUITS ARE ALLOWED TO CROSS OVER THE STUD RAILS/BETWEEN STUDS LOCATED AT COLUMNS AND CERTAIN WALL LOCATIONS. CONDUITS RUNNING ADJACENT TO STUD RAILS MUST HAVE AT LEAST 12" CLEARANCE BETWEEN STUDS AND CONDUIT.	
7. JUNCTION BOXES ARE NOT ALLOWED IN THE ZONE AROUND COLUMNS OR ENDS OF WALLS WHERE STUD RAILS ARE LOCATED. THE OUTER PERIMETER OF THE ZONE OF EXCLUSION IS DEFINED BY CONNECTING THE ENDS OF ALL STUD RAILS BY A STRAIGHT LINE.	
8. WHERE NO STUD RAILS ARE SHOWN NEAR COLUMNS OR ENDS OF WALLS, JUNCTION BOXES ARE NOT ALLOWED WITHIN 18" OF THE COLUMN FACE OR WITHIN A ZONE DEFINED BY A 36" DIAMETER CIRCLE CENTERED ON THE FACE OF THE WALL AT THE CENTER OF THE WALL.	
9. JUNCTION BOXES MAY NOT BE PLACED CLOSER TO EACH OTHER THAN THE LARGEST PLAN DIMENSION OF THE BOX IN EITHER DIRECTION. NO MORE THAN TWO JUNCTION BOXES MAY BE PLACED ADJACENT TO EACH OTHER.	
10. THE CONTRACTOR MUST SUBMIT FOR APPROVAL A DETAILED LAYOUT OF CONDUIT BANKS. THE LOCATIONS OF INDIVIDUAL CONDUIT RUNS OR RUNS OF UP TO THREE ADJACENT CONDUITS DO NOT NEED TO BE PRE-APPROVED, BUT MUST FOLLOW ALL APPLICABLE REQUIREMENTS SET FORTH IN THE DOCUMENTS.	
11. EXCEPTIONS TO THE ABOVE RULES WILL BE EVALUATED BY THE STRUCTURAL ON A CASE-BY-CASE BASIS.	



3300 AUBURN RD. SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical
General Notes
& Code

021293

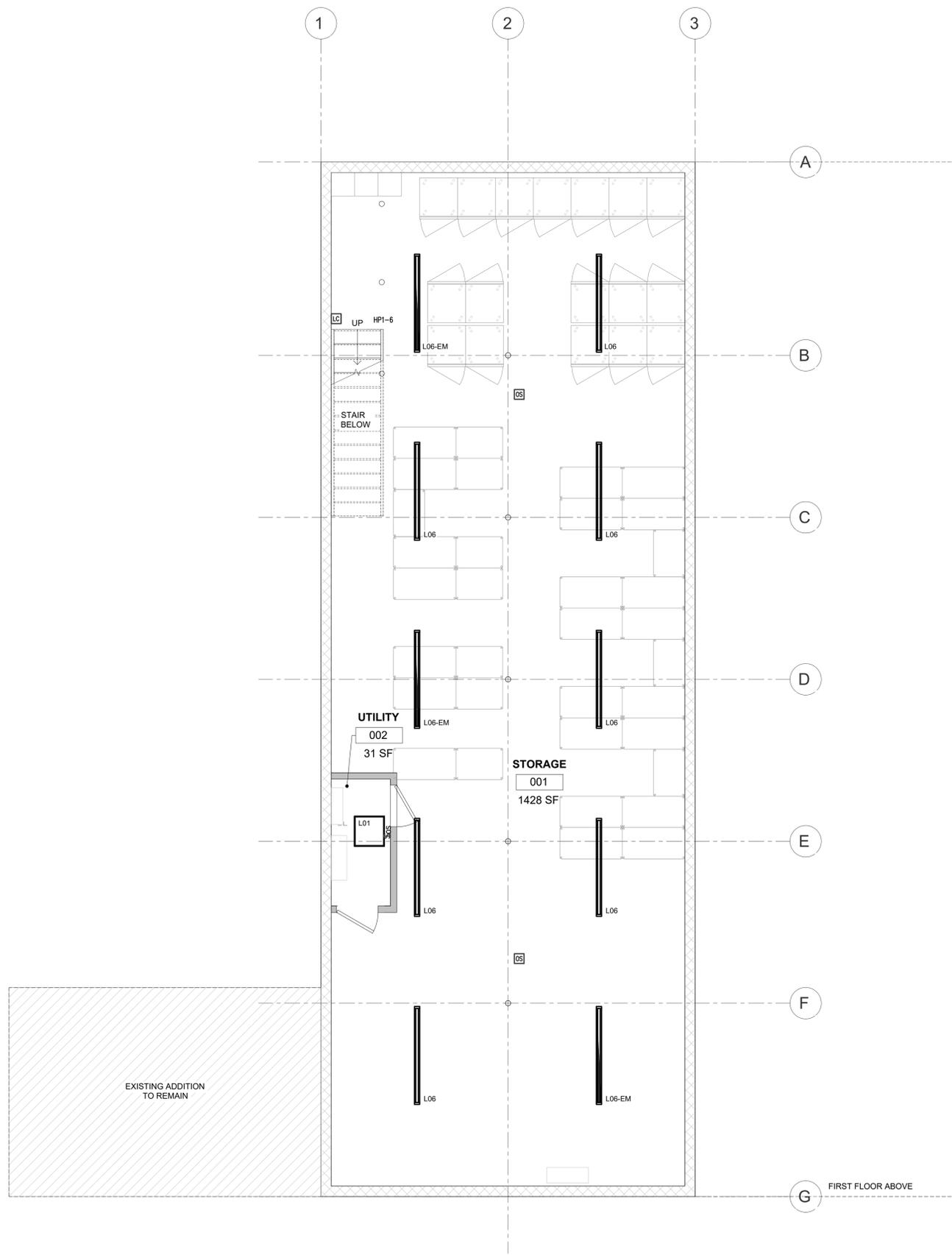
EO.1

EO1 ELEC GENERAL NOTES & CODE.rmg

3/7/2022

Brion

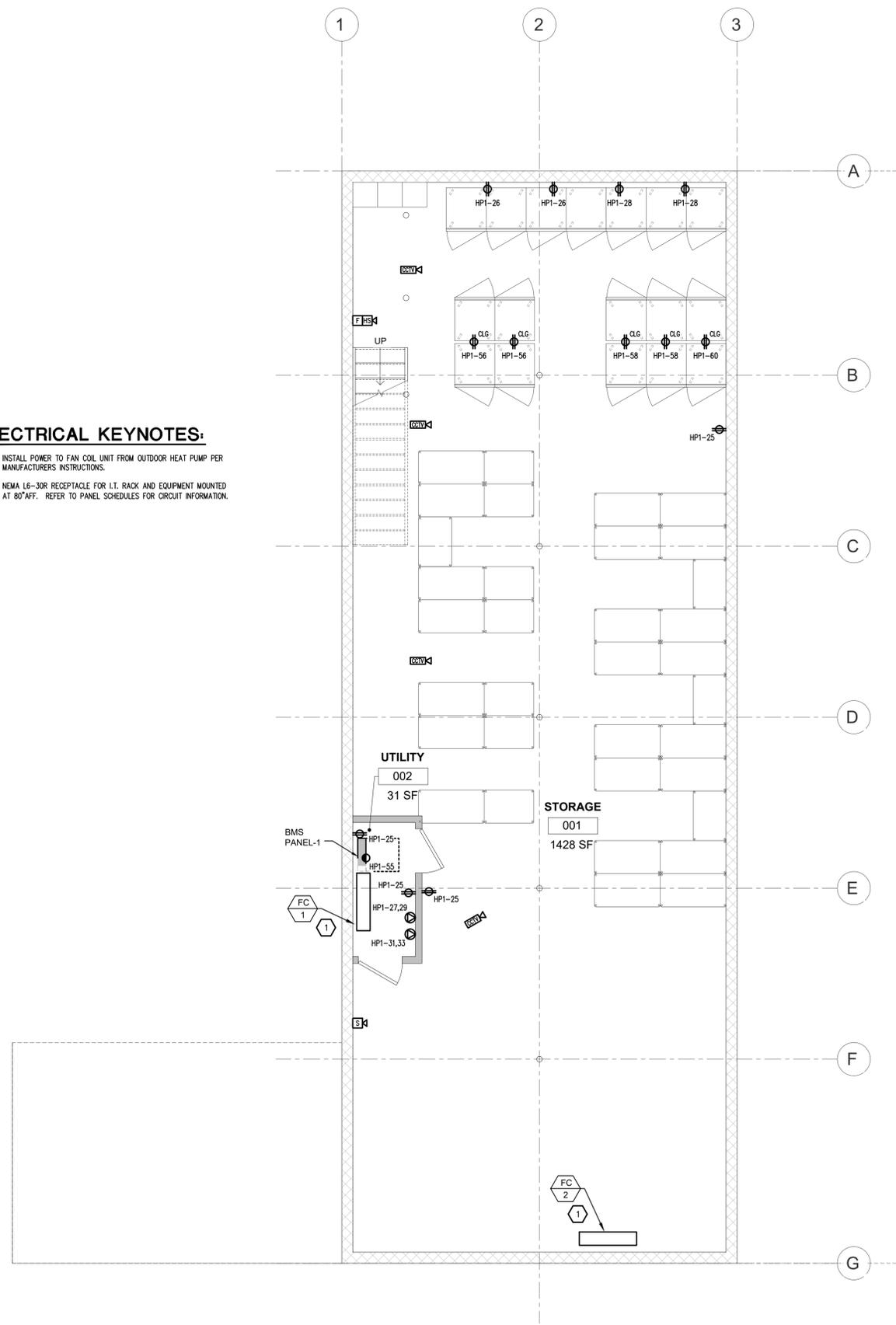
X:\Projects\Designhaus\3181 3rd Ave Detroit\EO1 ELEC GENERAL NOTES & CODE.rmg_031_3/7/2022 15:43:39 AM ARCH full sheet D:\0100 - 24.00 (inches)



1 BASEMENT LIGHTING PLAN
SCALE: 1/4"=1'-0"
NORTH

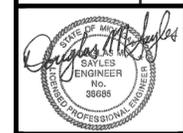
ELECTRICAL KEYNOTES:

- ① INSTALL POWER TO FAN COIL UNIT FROM OUTDOOR HEAT PUMP PER MANUFACTURERS INSTRUCTIONS.
- ② NEMA 16-30R RECEPTACLE FOR LT. RACK AND EQUIPMENT MOUNTED AT 80" AFF. REFER TO PANEL SCHEDULES FOR CIRCUIT INFORMATION.



1 BASEMENT POWER PLAN
SCALE: 1/4"=1'-0"
NORTH

Permits	Date
	03.07.22
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

**Electrical
Basement Plans**

021293

E1.0

E1.0 ELEC BSMT PWR & LIG PLAN.dwg
 3/7/2022
 X:\Projects\Design\3181 3rd Ave Detroit\E1.0 ELEC BSMT PWR & LIG PLAN.dwg
 3/7/2022 1:52:48 PM
 3181 3rd Ave Detroit (3181 3rd Ave Detroit)

GENERAL LOW-VOLTAGE NOTES:

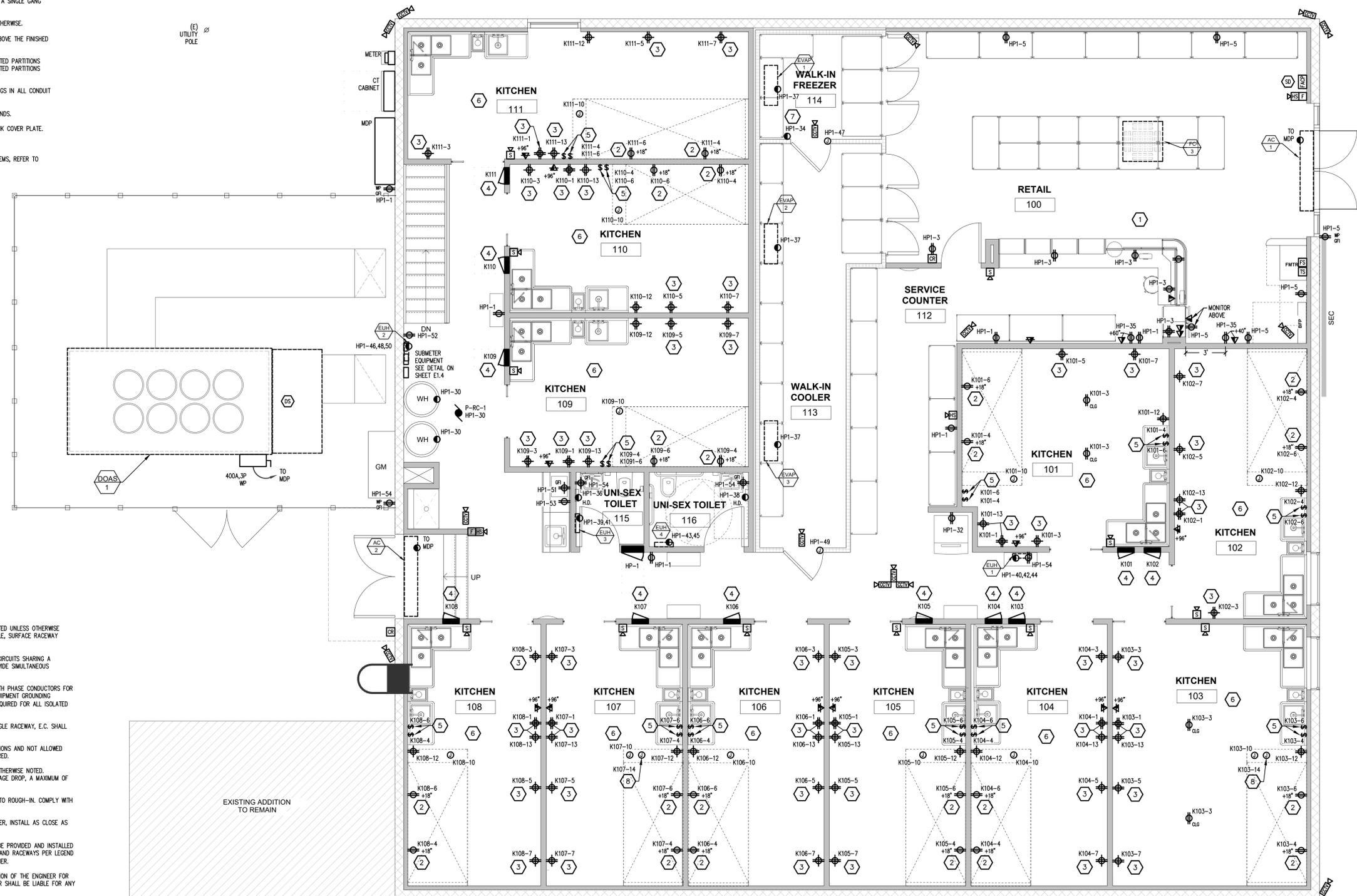
- A. ALL LV WIRE RUNS SHALL BE SUPPORTED BY J-HOOKS EXCEPT FOR WHEN CONDUIT IS REQUIRED BY LOCAL CODES WHERE ALL CONDUIT RUNS SHALL BE 1" EMT UNLESS NOTED OTHERWISE.
- B. ALL BOXES SHALL BE A MINIMUM OF 4-11/16"x4-11/16"x2-1/8" DEEP BOX WITH A SINGLE GANG TRIM RING MOUNTED FLUSH TO THE WALL SURFACE, UNLESS NOTED OTHERWISE.
- C. ALL MOUNTING HEIGHTS ARE THE CENTERLINE OF THE BACKBOX UNLESS NOTED OTHERWISE.
- D. WHERE REQUIRED BY LOCAL CODE, ALL CONDUITS IN WALLS SHALL STUB UP 6" ABOVE THE FINISHED CEILING. ALL STUBS SHALL BE REAMED AND BUSHED AT BOTH ENDS.
- E. WHERE REQUIRED BY LOCAL CODE, ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED PARTITIONS SHALL BE SEALED AS REQUIRED BY CODE. ALL BACKBOXES MOUNTED WITHIN FIRE RATED PARTITIONS SHALL MEET THE FIRE RATING OF THE PARTITION AS REQUIRED BY CODE.
- F. WHERE CONDUITS ARE REQUIRED BY LOCAL CODES, EC SHALL PROVIDE PULL STRINGS IN ALL CONDUIT RUNS LONGER THAN 10-FEET.
- G. PROVIDE PULL BOXES EVERY 100 LINEAR FEET OR AFTER TWO SUCCESSIVE 90° BENDS.
- H. ALL JUNCTIONS AND PULL BOXES SHALL BE FURNISHED WITH ACCOMPANYING BLANK COVER PLATE.
- I. ALL BOXES IN EXTERIOR LOCATIONS SHALL BE WEATHERPROOF AND WATERPROOF.
- J. BMS (BUILDING MANAGEMENT SYSTEM) TERMINATION POINTS TO ALL BUILDING SYSTEMS, REFER TO NETWORK DIAGRAMS ON SHEET M-802A, M-802B, AND M-802C.

POWER KEYNOTES:

- 1. INSTALL POWER TO FAN COIL UNIT FROM OUTDOOR HEAT PUMP PER MANUFACTURER'S INSTRUCTIONS.
- 2. ALL CIRCUITS FOR OUTLETS AND EQUIPMENT LOCATED UNDER KITCHEN HOODS SHALL BE SHUT DOWN UPON ACTIVATION OF THE ANSUL SYSTEM. PROVIDE CONTROL WIRING AS REQUIRED.
- 3. ALL 120V OUTLETS IN KITCHENS SHALL BE GFCI PROTECT VIA RECEPTACLE, BREAKER OR REMOTE GFCI SWITCH AS SHOWN.
- 4. TYPICAL KITCHEN LOAD CENTER PANELS SHALL BE FLUSH-MOUNTED IN CORRIDOR WALL. OWNER STANDARD DETAILS INDICATE APPROXIMATELY 1'-0" FROM HINGE SIDE OF KITCHEN DOOR. COORDINATE WITH OTHER TRADES. ALL PANELS MUST BE INSTALLED WITH DEDICATED EQUIPMENT SPACE AND CLEAR WORK SPACE REQUIRED BY NEC.
- 5. GFCI REMOTE SWITCH WIRE TO CONTROL GFCI OUTLET UNDER HOOD. SWITCH SHALL BE WIRED TO CONTROL THE INDIVIDUAL GFCI OUTLET SHARING THE SAME CIRCUIT NUMBER AND SHALL BE INSTALLED IN A MANNER MEETING THE NATIONAL ELECTRIC CODE DEFINITION OF READILY ACCESSIBLE. SWITCH MOUNTED @ 48" AFF.
- 6. ALL RECEPTACLES TO BE GFCI & MOUNTED @ 48" AFF UNLESS OTHERWISE NOTED.
- 7. POWER CONNECTION TO HEAT TRACE FOR FREEZER EVAPORATOR.
- 8. 120V POWER CONNECTION TO HOOD CONTROLLER.

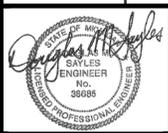
GENERAL POWER NOTES:

- 1. ALL ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. ALL CONDUIT AND WIRING SHALL BE CONCEALED WHERE PHYSICALLY POSSIBLE, SURFACE RACEWAY SHALL ONLY BE PERMITTED WHERE NOTED.
- 2. PROVIDE (1) NO. 10 AWG NEUTRAL CONDUCTOR FOR ANY 20 AMP SINGLE PHASE CIRCUITS SHARING A NEUTRAL IN A SINGLE CONDUIT. WHERE MULTIWIRE BRANCH CIRCUITS ARE USED, PROVIDE SIMULTANEOUS DISCONNECTING MEANS IN PLACE OF SINGLE POLE BREAKERS.
- 3. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAYS ALONG WITH PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS. CONDUIT IS NOT PERMITTED TO ACT AS AN EQUIPMENT GROUNDING CONDUCTOR UNLESS NOTED. AN ISOLATED GROUND CONDUCTOR (GREEN/WHITE) IS REQUIRED FOR ALL ISOLATED GROUND CIRCUITS.
- 4. WHEREVER 4 OR MORE CURRENT CARRYING CONDUCTORS ARE INSTALLED IN A SINGLE RACEWAY, E.C. SHALL INCREASE CONDUCTOR SIZE AS REQUIRED FOR DERATING PER NEC 315.B.2.9.
- 5. GROUND FAULT INTERRUPTING DEVICES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS AND NOT ALLOWED BEHIND FIXED IN PLACE OR UNMOVABLE EQUIPMENT. REMOTE DEVICES MAY BE REQUIRED.
- 6. ALL CIRCUITS SHALL USE A MINIMUM OF 12 AWG FOR 20 AMP CIRCUITS UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR SHALL CONFIRM CONDUCTOR AND CONDUIT SIZES FOR VOLTAGE DROP, A MAXIMUM OF 3% FOR BRANCH AND FEEDER AND 5% OVERALL.
- 7. COORDINATE WITH OTHER TRADES FOR ANY ELECTRICAL DEVICE LOCATIONS PRIOR TO ROUGH-IN. COMPLY WITH ALL APPLICABLE CODES FOR PROPER MOUNTING HEIGHTS, NFPA, NEC, ADA, ETC.
- 8. WHERE LOW VOLTAGE DEVICES AND RECEPTACLES ARE SHOWN NEXT TO EACH OTHER, INSTALL AS CLOSE AS POSSIBLE. DO NOT SCALE DRAWINGS.
- 9. ALL "SPECIAL SYSTEMS" WIRING AND DEVICES (IE. TELEPHONE, DATA, TV) SHALL BE PROVIDED AND INSTALLED BY OTHERS UNLESS NOTED ON PLANS OR SPECIFICATIONS. E.C. TO PROVIDE BOXES AND RACEWAYS PER LEGEND AND SPECIFICATIONS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER/SUPPLIER.
- 10. ALL DISCREPANCIES WITH THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO BIDS. IN OTHERWISE DOING SO, THE ELECTRICAL CONTRACTOR SHALL BE LIABLE FOR ANY REQUIRED REVISIONS.
- 11. E.C. TO COORDINATE EXACT EQUIPMENTS OF ALL OTHER SYSTEMS WITH MANUFACTURER AND OTHER TRADES PRIOR TO ROUGH-IN AND PURCHASE OF ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH SYSTEM. ANY DISCREPANCIES WITH THIS PLAN AND MANUFACTURER REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PURCHASE OR ELECTRICAL ROUGH-IN OF THIS EQUIPMENT.
- 12. ALL ITEMS SHOWN ON PLAN ARE NEW UNLESS MARKED AS (E) FOR EXISTING OR (R) FOR RELOCATED.



1 ELECTRICAL POWER PLAN - First Floor
SCALE: 1/4"=1'-0"

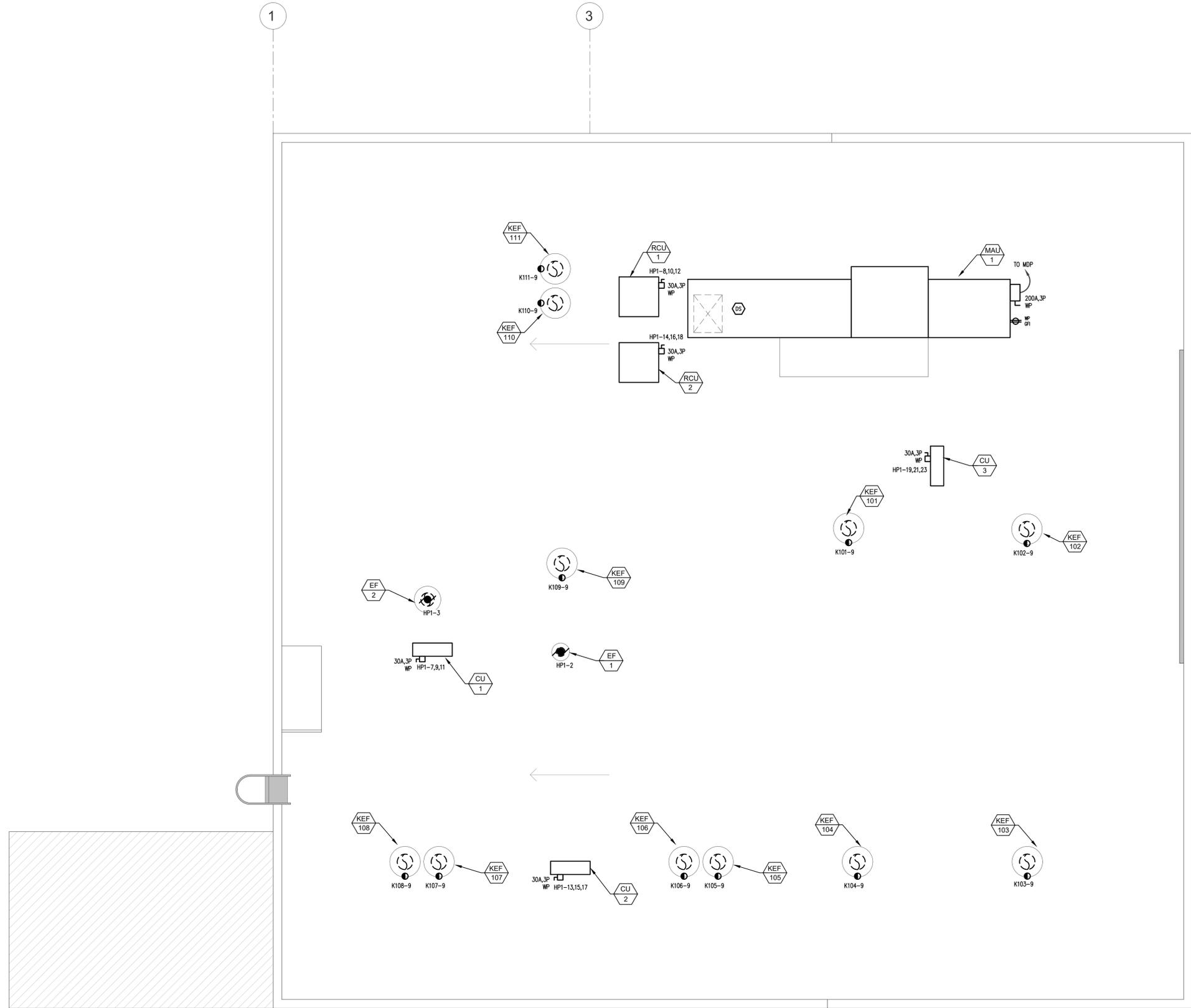
Permits	03.07.22
Revision/Issue	Date



E11 ELEC 1ST FLOOR POWER PLAN.dwg

3/7/2022

B10n

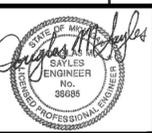


1 ELECTRICAL ROOF PLAN
SCALE: 1/4"=1'-0" NORTH

DESIGNHAUS
ARCHITECTURE

EST. 1998
3300 AUBURN RD. SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Revision/Issue	Date
Permits	03.07.22



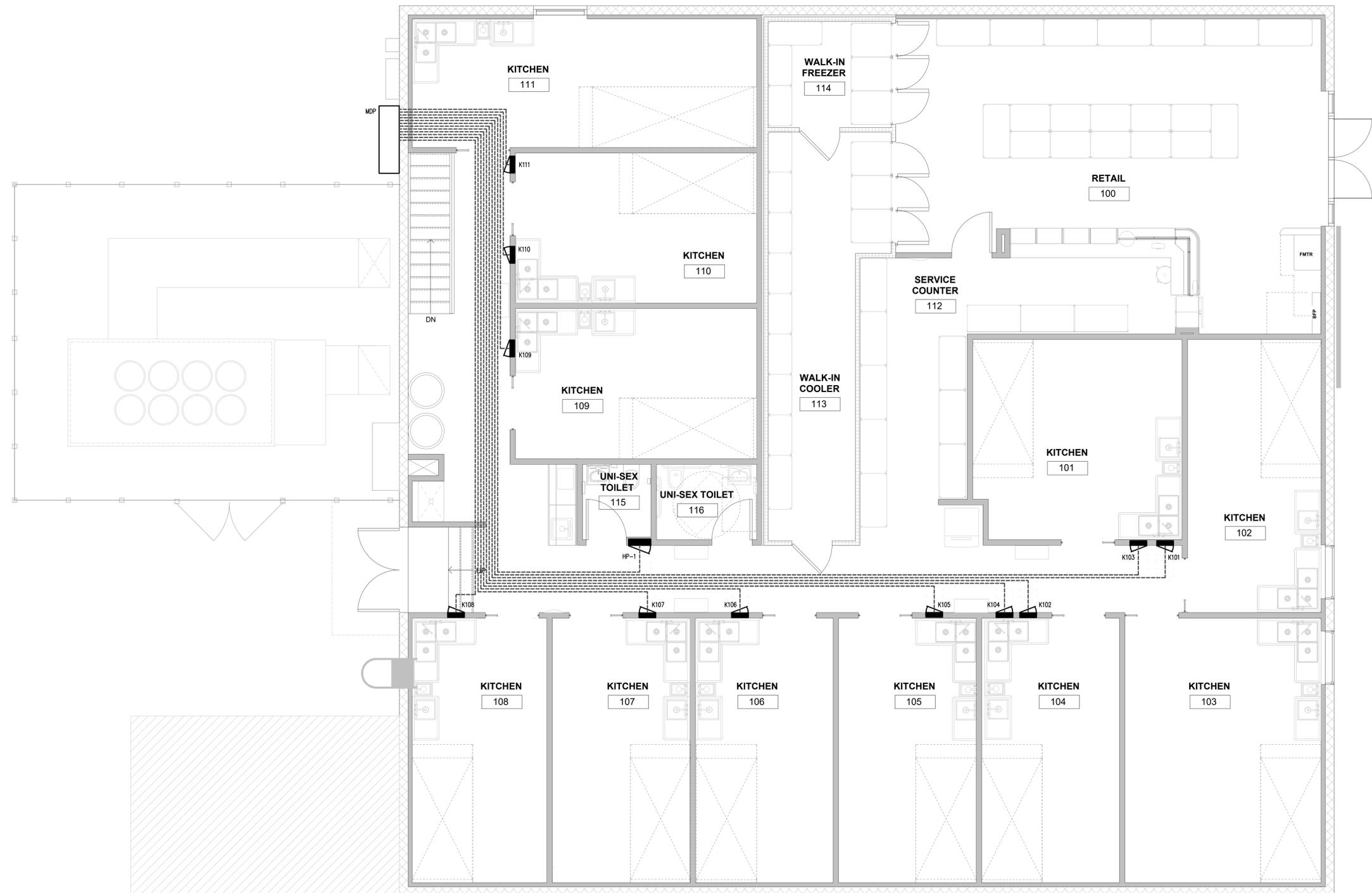
3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical
Roof Plan

021293

E1.2

X:\Projects\Designhaus\3181 3rd Ave Detroit\E1.3 ELEC PWR CABLE ROUTING PLAN.dwg E1.3 3/7/2022 1:52:27 PM ARCH full sheet D (30x9.24x0 inches)
3/7/2022
E1.3 ELEC PWR CABLE ROUTING PLAN.dwg



1 ELECTRICAL CABLE ROUTING PLAN
SCALE: 1/4"=1'-0"
NORTH

DESIGNHAUS EST. 1998
ARCHITECTURE

3300 AUBURN RD, SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
Revision/Issue	Date



3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical
Power Cable
Routing Plan

021293

E1.3

Electrical Sheet Schedule - Submeter Elec, Water & Gas										
Load Name	Panel	Breaker Rating	Current Transformer			Meter #	Meter Channel			
			Required	Rating	Model #		Qty	Phase A	Phase B	Phase C
K101	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I1	I2	I3
K102	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I4	I5	I6
K103	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I7	I8	I9
K104	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I10	I11	I12
K105	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I13	I14	I15
K107	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	1	I16	I17	I18
K106	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	2	I1	I2	I3
K108	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	2	I4	I5	I6
K109	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	2	I7	I8	I9
K110	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	2	I10	I11	I12
K111	MDP	60 A	Yes	60A	AcuCT-H040-60:333	3	2	I13	I14	I15
MAU-1	MDP	110 A	Yes	120A	AcuCT-H100-120:333	3	3	I1	I2	I3
DOAS-1	MDP	400 A	Yes	400A	AcuCT-H138-400:333	3	3	I4	I5	I6
HP-1	MDP	200 A	Yes	200A	AcuCT-H200-200:333	3	4	I4	I5	I6

SUBMETER NOTES
A. ALL CURRENT TRANSFORMERS AND METERS ARE OWNER FURNISHED AND GC INSTALLED
B. CT'S ARE REQUIRED FOR EVERY MAJOR MECHANICAL LOADS (DOAS, MAU'S, RTU'S), KITCHEN PANELS (CT'S SHALL BE INSTALLED AT UPSTREAM BREAKER) AND HOUSE PANELS.

CT & METER COUNT	
DESCRIPTION	MODEL #
ACUREV 2100 METER 18 CHANNELS	ACUREV 2100
ACUCT CT 60A	ACUCT-H040-60:333
ACUCT CT 120A	ACUCT-H100-120:333
ACUCT CT 150A	ACUCT-H063-150: 333
ACUCT CT 250A	ACUCT-H100-250:333
ACUCT CT 400A	ACUCT-H138-400:333

Permits	03.07.22
Revision/Issue	Date

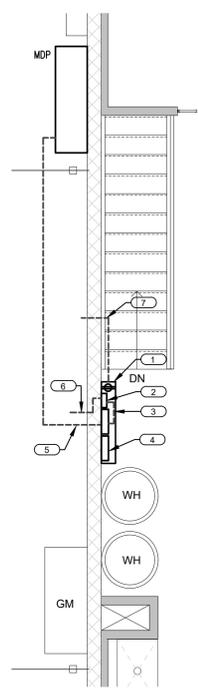


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical Submeter Plan & One-Line Diagram

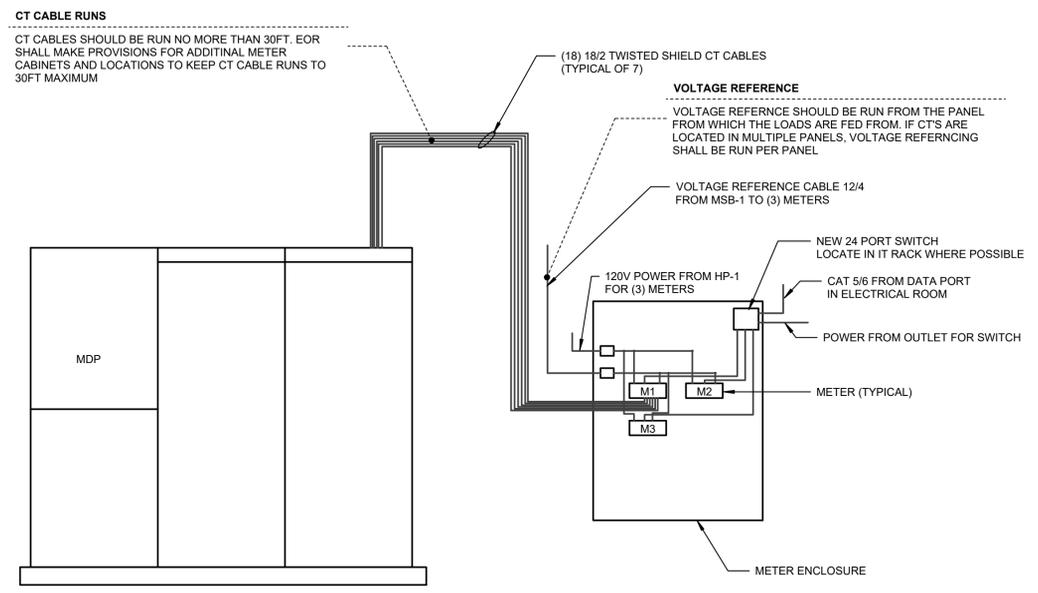
021293

E1.4



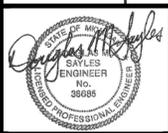
- KEY NOTES**
- NEMA 1 METER ENCLOSURE CABINET.
 - NEW UNIFI SWITCH 24 PORT ETHERNET SWITCH.
 - (3) CAT 5 CABLES FROM ETHERNET SWITCH. ONE (1) PER METER.
 - LOCATE SEVEN (3) ACCUENERGY ACUREV 2100 METERS IN ENCLOSURE
 - (4) 18/2 TWISTED SHIELD CT CABLES + (1) VOLTAGE REFERENCE CABLE 12/4
 - CAT 5 ETHERNET CABLE FROM SWITCH IN IT ROOM TO SWITCH FOR SUBMETER(S).
 - POWER FEED FOR METERS AND SWITCH.

1 ELECTRICAL SUBMETER FLOOR PLAN
1/4"=1'-0"



2 ELECTRICAL SUBMETER SINGLE LINE
NTS

Permits	03.07.22
Revision/Issue	Date



3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

**First Floor
 Electrical
 Lighting Plan**

021293

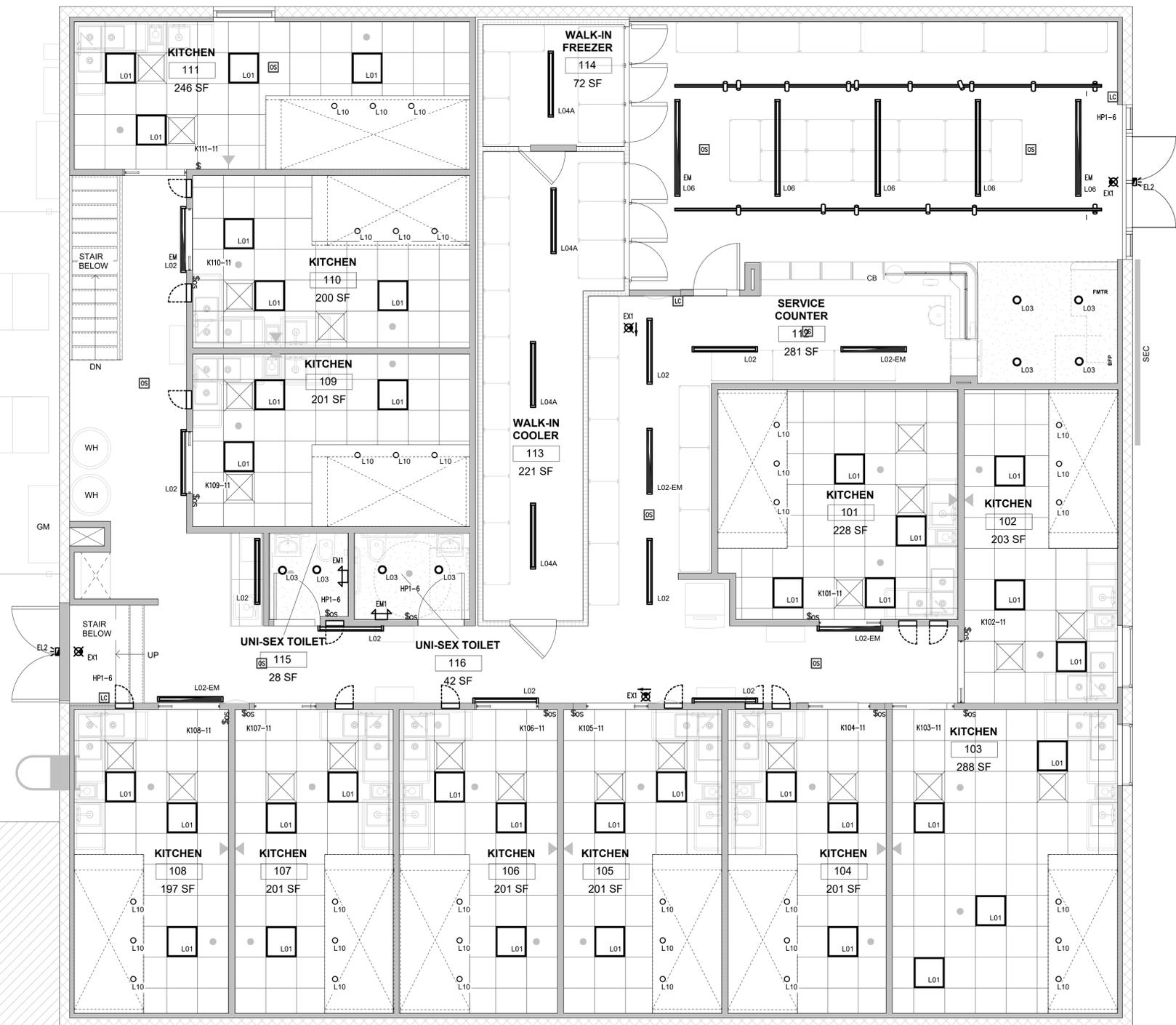
E2.1

E21 ELEC 1ST FLR LIGHTING PLAN.dwg

3/7/2022

GENERAL LIGHTING NOTES:

1. FOR LUMINAIRE INFORMATION, REFER TO LUMINAIRES SCHEDULE UNLESS OTHERWISE NOTED.
2. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LUMINAIRES PRIOR TO INSTALLATION. COORDINATE ALL CEILING TRIMS AND MOUNTING HARDWARE WITH ARCHITECTURAL AND STRUCTURAL TRADES.
3. REFER TO ARCHITECTURAL DETAILS FOR ALL MOUNTING HEIGHTS OF LUMINAIRES IN EXPOSED CEILING AREAS. COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS TO AVOID INTERFERENCE WITH MECHANICAL DUCTWORK, PIPING AND STRUCTURAL STEEL.
4. ALL EMERGENCY AND EXIT LIGHTS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF CONTROLS, UNLESS OTHERWISE STATED. FOR LUMINAIRES SHOWN AS EMERGENCY (EM ONLY), POWER LOSS SENSING LEAD TO BE CONNECTED AHEAD OF CONTROL AND LUMINAIRES TO BE SWITCHED.
5. LUMINAIRES SHOWN AS NIGHT LIGHTS (NL ONLY) SHALL REMAIN ON 24 HOURS AND SHALL BE CONNECTED TO LOCAL CIRCUIT AHEAD OF CONTROL (UNLESS OTHERWISE NOTED).
6. LUMINAIRES SHOWN AS NL/EM OR EM/NL SHALL BE WIRED WITH EMERGENCY BATTERY AND SHALL REMAIN ON 24 HOURS CONNECTED TO LOCAL CIRCUIT AHEAD OF CONTROL (UNLESS OTHERWISE NOTED).
7. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE LIGHTING CONTROL REQUIREMENTS TO MEET ASHRAE 2013 90.1 WITH SELECTED PRODUCT MANUFACTURE FOR ALL OCCUPANCY/VACANCY SENSORS, DIMMING CONTROLS AND DAYLIGHT SENSORS REQUIRED. MANUFACTURE TO PROVIDE DOCUMENTS FOR LAYOUT AND CONNECTIONS FOR CONTROLS USING A WIRED OR WIRELESS SYSTEM.
8. ELECTRICAL CONTRACTOR TO INCLUDE COST FOR FUNCTIONAL TESTING FOR LIGHTING CONTROLS AND SHALL BE PERFORMED BY A THIRD PARTY COMMISSIONING AGENT NOT RESPONSIBLE FOR THE DESIGN. VERIFY THAT THE INSTALLED LIGHTING CONTROLS MEET OR EXCEED ALL DOCUMENTED PERFORMANCE CRITERIA PER ASHRAE 2013 9.4.3 WHEN REQUIRED BY A.H.A.
9. ALL DISCREPANCIES WITH THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO BIDS. IN OTHERWISE DOING SO, THE ELECTRICAL CONTRACTOR SHALL BE LIABLE FOR ANY REQUIRED REVISIONS.
10. ALL ITEMS SHOWN ON PLAN ARE NEW UNLESS MARKED AS (E) FOR EXISTING OR (R) FOR RELOCATED.



1 ELECTRICAL LIGHTING PLAN - First Floor
 SCALE: 1/4"=1'-0" NORTH

SECTION 6.0 LIGHTING

DESIGN CODE	LOCATION	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR/FINISH	LIGHT TEMP	NOTES
EL01	EXTERIOR	POLE MOUNT TYPE IV DISTRIBUTION	LITHONIA	RSX1-LED-P2-40K-R3-MVOLT-RPA	DARK BRONZE	4000K	
EL02	EXTERIOR	EXTERIOR WALL MOUNT LIGHT WITH EM	EXITRONICS	TRL-ACEM-BR	BRONZE	5000K	WITH BATTERY BACK UP
EL03	EXTERIOR	EXTERIOR WALL MOUNT LIGHT W/O EM	COMMERCIAL ELECTRIC	FSN15-4K-BZ	BLACK	4000K	WITHOUT BATTERY BACKUP
EL04	EXTERIOR	GOOSENECK FIXTURE	MILLENIUM	RAS10-RGN10			FOR UNLIT EXTERIOR SIGNAGE
L01	KITCHEN	2X2 LED FLAT PANEL	HE WILLIAMS	LP-22-LS0-8-35-DIM-UNV	WHITE	4000K	DAMP-RATED
L02	GENERAL	SUSPENDE LINEAR LED	DELVIRO	ZIP4-40-4K-U-FR-WH	WHITE	4000K	4' / DIRECT
L02-EM	GENERAL	SUSPENDE LINEAR LED W/ EMERGENCY BATTERY DRIVER	DELVIRO	ZIP4-40-4K-U-FR-WH-EMBAT	WHITE	4000K	4' / DIRECT
L03	RESTROOM	DOWNLIGHT	GREEN CREATIVE	CLK-6H0-9-40-DIM120V		4000K	
L04A	COOLER	COLD STORAGE VAPOR TIGHT LED	DELVIRO	VT4s-40C-840-U-FR-GRYV-OC	WHITE	4000K	48" LED Vaporproof (-10F), INTERGRAL OC SENSOR
L04B	FREEZER	COLD STORAGE VAPOR TIGHT LED	DELVIRO	VT4s-40C-840-U-FR-GRYV-SBOR-10-EOX	WHITE	4000K	48" LED Vaporproof (-10F), ADD ON FREEZER TEMP RATED OC SENSOR
L05	LOBBY	SUSPENDE LINEAR LED	DELVIRO	DTL SD 225-CR4- D1000-30K-U-FR-WH	WHITE	3000K	
L10	KITCHEN	HOOD LIGHT	SYLVANIA	LED12A19/DIM/0835/U/B		4000K	
EM01	EMERGENCY	EMERGENCY LIGHT WITH DOUBLE HEAD	ASTRALIGHT	EU4-LED-W-SD	WHITE		SELF-DIAGNOSTIC
EX01	EMERGENCY	EXIT SIGN	ASTRALIGHT	TP-J-U-R-W-EM-SD	WHITE		SELF-DIAGNOSTIC

Alternatives (only use if base spec is not available or specific project requires)

DESIGN CODE	LOCATION	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR/FINISH	LIGHT TEMP	NOTES
EL03A	EXTERIOR	EXTERIOR WALL MOUNT LIGHT W/O EM	RAB	X34-16L-840/120	DARK BRONZE	4000K	

Electrical Sheet Schedule - Lighting Fixture Schedule

TYPE	DESCRIPTION	LAMP				DRIVER TYPE	MOUNTING	REMARKS
		TYPE	COLOR TEMP	INPUT WATTS	VOLTS			
EL1	POLE MOUNT TYPE IV DISTRIBUTION	LED	4000K	50 W	120 V	-	18' - 0"	2,3,4
EL2	EXTERIOR LED WITH EM BATTERY UNIT. SELF-DIAGNOSTICS	LED	4000K	11 W	120 V	-	ABOVE DOOR / SEE PLANS	2,3,4
EL3	EXTERIOR WALL WASHER LED	LED	4000K	11 W	120 V	-	13' - 0"	2,3,4
L1	RECESSED 2X2 LED	LED	4000K	40 W	120 V	0-10V DIMMABLE	RECESSED	2,3
L2	SUSPENDE LINEAR LED	LED	4000K	38 W	120 V	NON DIMMABLE	PENDANT	2,3
L2-EM	SUSPENDE LINEAR LED WITH EMERGENCY BATTERY DRIVER	LED	4000K	38 W	120 V	NON DIMMABLE	PENDANT	2,3
L3	RECESSED LED DOWNLIGHTS	LED	4000K	11 W	120 V	0-10V DIMMABLE	RECESSED	2,3
L4A	COLD STORAGE VAPOR TIGHT LED WITH INTERGRATED OCCUPANCY SENSOR (WIC)	LED	4000K	40 W	120 V	NON DIMMABLE	SURFACE	2,3
L4B	COLD STORAGE VAPOR TIGHT LED WITH INTERGRATED OCCUPANCY SENSOR (WIF)	LED	4000K	40 W	120 V	NON DIMMABLE	SURFACE	2,3
L5	SUSPENDE LINEAR LED	LED	3000K	40 W	120 V	NON DIMMABLE	PENDANT	2,3
L10	HOOD LAMPS	LED	3500K	12 W	120 V	-	HOOD	2,3

Electrical Sheet Schedule - Emergency Lighting Schedule

TYPE	DESCRIPTION	LAMP TYPE	VOLTAGE	INPUT WATTS	REMARKS
EM1	LED EMERGENCY BATTERY UNIT. SELF-DIAGNOSTICS	LED	120 V	5 W	2
EX1	EXIT SIGN SURFACE MOUNTED	LED	120 V	2 W	2,5

Electrical Sheet Schedule - Lighting Device Schedules

TYPE	DESCRIPTION	REMARKS
LV	MOMENTARY WALL SWITCH	1,2,6
OS	DUAL TECH. WALL MOUNTED SWITCH AND OCCUPANCY SENSOR	1,2,6
OS1	CEILING MOUNTED DUAL TECH OCCUPANCY SENSOR	1,2,6

Electrical Sheet Schedule - Interior Lighting Control Matrix

NUMBER	NAME	CONTROL ZONE	
		TYPE 1	TYPE 2
101	KITCHEN	•	
102	KITCHEN	•	
103	KITCHEN	•	
104	KITCHEN	•	
105	KITCHEN	•	
106	KITCHEN	•	
107	KITCHEN	•	
108	KITCHEN	•	
109	KITCHEN	•	
110	KITCHEN	•	
111	KITCHEN	•	
100	RETAIL		•
113	WIF STORAGE		•
114	WIC STORAGE		•
--	CORRIDOR-1		•
115	RESTROOM		•
116	RESTROOM		•
002	UTILITY/I.T.	•	

Electrical Sheet Schedule - Lighting Control Zones

ZONE TYPE	ZONE DESCRIPTION	SEQUENCE OF OPERATION
1	VACANCY SENSOR CONTROL	LOW VOLTAGE SWITCH SHALL ACTIVATE FIXTURES 'ON' OR 'OFF'. SENSOR SHALL MONITOR THE SPACE FOR OCCUPANCY AND ACTIVATE THE FIXTURES 'OFF' AFTER A MAXIMUM OF 30 MINUTES OF NO DETECTED OCCUPANCY. SENSORS SHALL BE PROVIDED WITH SELF ADAPTIVE TECHNOLOGY TO AUTOMACIALLY ADJUST THE SENSITIVITY AND TIME OUT AND SHALL ACTIVATE FIXTURES 'OFF' ONCE THE SPACE IS UNOCCUPIED. SENSORS SHALL NOT BE USED TO ACTIVATE FIXTURES 'ON'
2	OCCUPANCY SENSOR CONTROL	SENSORS SHALL ACTIVATE FIXTURES 'ON' UPON DETECTION OF OCCUPANCY. FIXTURE SHALL REMAIN 'ON' WHILE THE SPACE IS OCCUPIED AND FOR NO LONGER THAN 30 MINUTES OF NO DETECTED OCCUPANCY. SENSORS SHALL BE PROVIDED WITH SELF ADAPTIVE TECHNOLOGY TO AUTOMACIALLY ADJUST THE SENSITIVITY AND TIME OUT AND SHALL ACTIVATE FIXTURES 'OFF' ONCE THE SPACE IS UNOCCUPIED.

SCHEDULE GENERAL NOTES:

- FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS.
- MANUFACTURERS' CATALOG NUMBERS ARE INTENTIONALLY INCOMPLETE. VERIFY AND COORDINATE REQUIRED TRIM KITS, MOUNTING BRACKETS, LAMPS, FINISHES, ETC. WITH CONTRACT DOCUMENTS, SPECIFICATIONS.
- PROVIDE ALL NECESSARY ACCESSORIES FOR FIXTURES AND SENSORS IN ORDER TO ENSURE A COMPLETE AND PROPER OPERATION.
- PROVIDE FUSING FOR FIXTURES AS REQUIRED BY CODE
- LAMPS FOR ALL FIXTURES SHALL HAVE THE SAME COLOR TEMPERATURE PER SPECIFICATIONS.
- ALL 'HATCHED' AND 'EM' FIXTURES IN DRAWING ARE EMERGENCY FIXTURES.
- ALL DIMMABLE FIXTURES SHALL BE SUPPLIED WITH APPROPRIATE DIMMING BALLASTS AND DRIVERS TO ENSURE A COMPLETE AND OPERABLE SYSTEM.

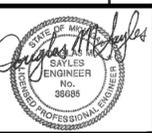
REMARKS

- COORDINATE WITH MANUFACTURERS INSTRUCTIONS AND ROOM LAYOUT FOR PROPER PLACEMENT OF THE SENSOR.
- PROVIDE ALL ACCESSORIES REQUIRED FOR A COMPLETE AND PROPER OPERATION.
- COORDINATE MOUNTING, FINISH, AND DIFFUSER WITH ARCHITECT.
- WET LOCATION LISTED.
- REFER TO PLANS FOR EXIT SIGN MOUNTING, FACE TYPE, AND ARROW REQUIREMENTS.
- REFER TO PLANS FOR SWITCHES LOCATIONS AND OPERATIONS.



3300 AUBURN RD, SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

Permits	03.07.22
Revision/Issue	Date

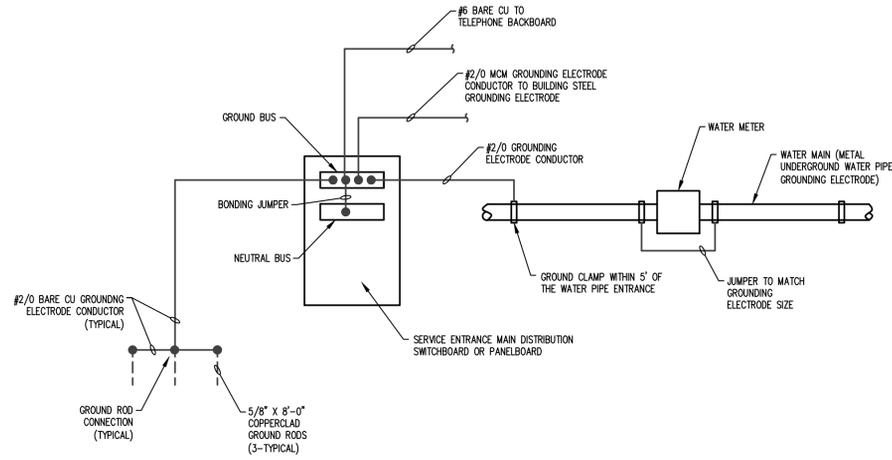


3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical
Lighting
Schedules

021293

E2.2

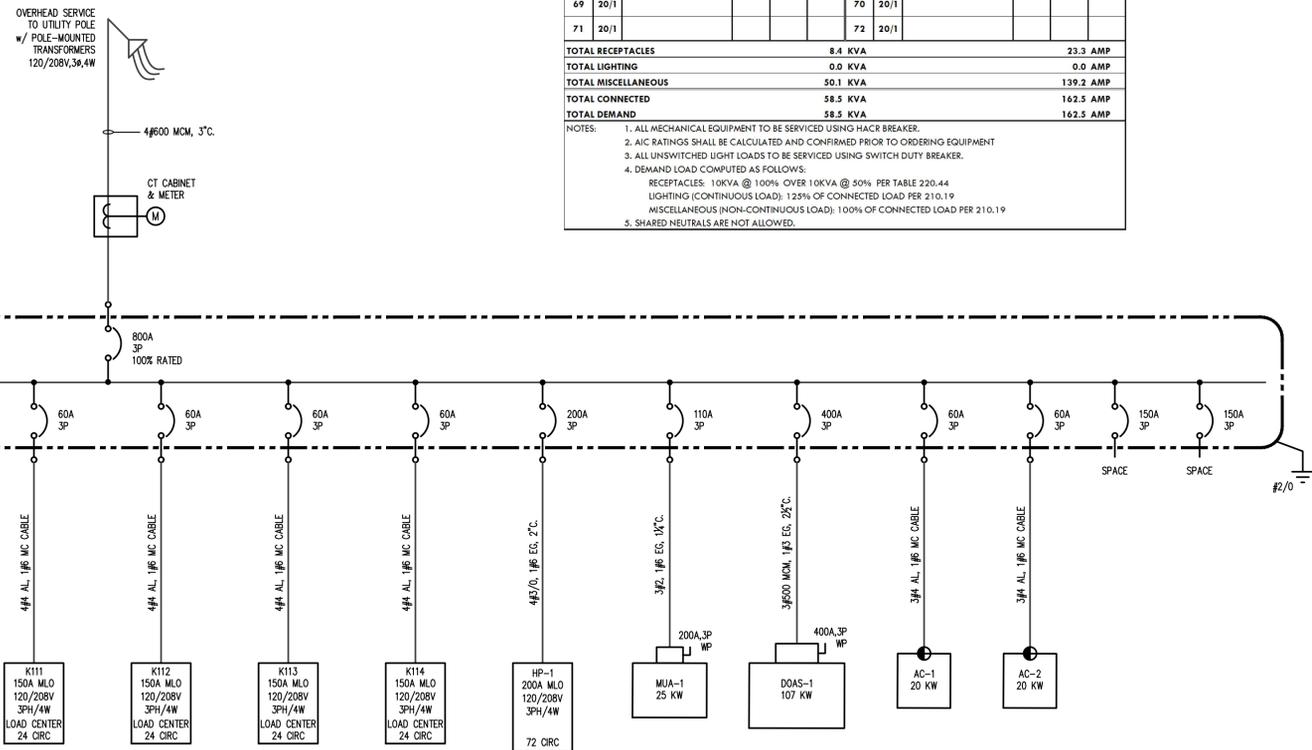


2 SYSTEM GROUNDING CONNECTIONS DETAIL
NO SCALE

LOAD	CONNECTED		DEMAND	
	KVA	A	KVA	A
K101	4.0	11.2	4.1	11.3
K102	4.0	11.1	4.0	11.2
K103	4.1	11.5	4.2	11.6
K104	3.6	10.1	3.7	10.2
K105	3.6	10.1	3.7	10.2
K106	3.6	10.1	3.7	10.2
K107	3.7	10.4	3.8	10.4
K108	3.6	10.1	3.7	10.2
K109	3.6	10.1	3.7	10.2
K110	3.6	10.1	3.7	10.2
K111	3.7	10.2	3.7	10.3
HP-1	58.5	162.5	58.5	162.5
AC-1	20.0	55.6	20.0	55.6
AC-1	20.0	55.6	20.0	55.6
MUA-1	25.0	69.5	25.0	69.5
DOAS-1	107.0	297.4	107.0	297.4
TOTAL	271.8	755.4	272.2	756.4

HP-1											
LOCATION - CORRIDOR											
MTG - FLUSH											
MINIMUM AIC - 10K											
BKR. TYPE - BOLT-ON											
CIR. NO.	BKR	DESCRIPTION	REC. VA	LTG. VA	MISC. VA	CIR. NO.	BKR	DESCRIPTION	REC. VA	LTG. VA	MISC. VA
1	20/1	(6) RECEPTACLES	1080			2	15/1	EF-1			230
3	20/1	(7) RECEPTACLES	1260			4	15/1	EF-2			230
5	20/1	(6) RECEPTACLES	1080			6	20/1	HOUSE LIGHTING			600
7	20/3	CU-1			3745	8	20/3	RCU-1			5760
9		3#1/2, 1#1/2EG, 3/4\"				10		3#1/2, 1#1/2EG, 3/4\"			
11						12					
13	30/3	CU-2			6625	14	15/3	RCU-2			4320
15		3#1/2, 1#1/2EG, 3/4\"				16		3#1/2, 1#1/2EG, 3/4\"			
17						18					
19	30/3	CU-3			6625	20	15/3	RCU-3			4320
21		3#1/2, 1#1/2EG, 3/4\"				22		3#1/2, 1#1/2EG, 3/4\"			
23						24					
25	20/1	(4) RECEPTACLES	720			26	20/1	(2) RECEPTACLES	360		
27	30/2	IT TWIST LOCK	100			28	20/1	(2) RECEPTACLES	360		
29						30	20/1	(2) WH-1, P-RC-1			1000
31	30/2	IT TWIST LOCK	100			32	20/1	(1) REC MACHINE	800		
33						34	20/1	HEAT TRACE			500
35	20/1	(2) RECEPTACLES	360			36	20/1	HAND DRYER			500
37	20/1	EVAPORATORS 1-3			450	38	20/1	HAND DRYER			500
39	20/2	EUH-3			2000	40	20/3	EUH-1			4800
41		2#1/2, 1#1/2EG, 3/4\"				42		3#1/2, 1#1/2EG, 3/4\"			
43	20/2	EUH-4			2000	44					
45		2#1/2, 1#1/2EG, 3/4\"				46	20/3	EUH-2			4800
47	20/1	WALK IN FREEZER DOOR HEATER			500	48		3#1/2, 1#1/2EG, 3/4\"			
49	20/1	WALK IN COOLER DOOR HEATER			500	50					
51	20/1	(1) KITCHENETTE REC	180			52	20/1	(1) REC METERING EQUIP.	180		
53	20/1	(1) KITCHENETTE REC	180			54	20/1	(4) RECEPTACLES	720		
55	20/1	BMS PANEL			100	56	20/1	(2) RECEPTACLES	360		
57	20/1	SPARE				58	20/1	(2) RECEPTACLES	360		
59	20/1	SPARE				60	20/1	(1) RECEPTACLES	180		
61	20/1	SPARE				62	20/1	SPARE			
63	20/1	SPARE				64	20/1	SPARE			
65	20/1	SPARE				66	20/1	SPARE			
67	20/1	SPARE				68	20/1	SPARE			
69	20/1					70	20/1				
71	20/1					72	20/1				
TOTAL RECEPTACLES			8.4 KVA			TOTAL RECEPTACLES			23.3 AMP		
TOTAL LIGHTING			0.0 KVA			TOTAL LIGHTING			0.0 AMP		
TOTAL MISCELLANEOUS			50.1 KVA			TOTAL MISCELLANEOUS			139.2 AMP		
TOTAL CONNECTED			58.5 KVA			TOTAL CONNECTED			162.5 AMP		
TOTAL DEMAND			58.5 KVA			TOTAL DEMAND			162.5 AMP		

NOTES:
 1. ALL MECHANICAL EQUIPMENT TO BE SERVICED USING HACR BREAKER.
 2. AIC RATINGS SHALL BE CALCULATED AND CONFIRMED PRIOR TO ORDERING EQUIPMENT.
 3. ALL UNSWITCHED LIGHT LOADS TO BE SERVICED USING SWITCH DUTY BREAKER.
 4. DEMAND LOAD COMPUTED AS FOLLOWS:
 RECEPTACLES: 10KVA @ 100% OVER 10KVA @ 50% PER TABLE 220.44
 LIGHTING (CONTINUOUS LOAD): 125% OF CONNECTED LOAD PER 210.19
 MISCELLANEOUS (NON-CONTINUOUS LOAD): 100% OF CONNECTED LOAD PER 210.19
 5. SHARED NEUTRALS ARE NOT ALLOWED.



1 ELECTRICAL ONE-LINE DIAGRAM
SCALE: NONE

GENERAL ONE-LINE NOTES:

- THE ELECTRICAL CONTRACTOR SHALL CONTACT THE LOCAL UTILITY COMPANY AND SUBMIT REQUIRED INFORMATION FOR PERMANENT ELECTRICAL SERVICE WHEN REQUIRED PRIOR TO CONSTRUCTION. ALL UTILITY ARRANGEMENTS SHALL BE CONFIRMED BY THE LOCAL UTILITY PRIOR TO ORDERING EQUIPMENT. ALL UTILITY EQUIPMENT LOCATIONS SHOWN ON THIS DRAWING SHALL BE VERIFIED WITH THE LOCAL UTILITY PRIOR TO INSTALLATION.
- ALL CONCRETE PADS REQUIRED SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND MEET ALL LOCAL UTILITY AND MUNICIPALITY REQUIREMENTS.
- ALL ITEMS SHOWN AS HATCHED SHALL BE DISCONNECTED AND REMOVED BY THE ELECTRICAL CONTRACTOR. REMOVE ASSOCIATED WIRING, TERMINATIONS AND CONDUIT BACK TO THE SOURCE.
- ALL WIRE SIZES INDICATED ON THIS DRAWING SHALL BE COPPER WITH TEMP RATING OF 75 DEGREES C. PER 2017 NEC TABLE 310.15(B)(16) UNLESS OTHERWISE NOTED.
- PROVIDE AND INSTALL "ARC-FLASH" LABELS IN ACCORDANCE WITH NEC 110.16.
- ALL DISCREPANCIES WITH THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO BIDS. IN OTHERWISE DOING SO, THE ELECTRICAL CONTRACTOR SHALL BE LIABLE FOR ANY REQUIRED REVISIONS.
- ALL ITEMS SHOWN ON PLAN ARE NEW UNLESS MARKED AS (E) FOR EXISTING OR (R) FOR RELOCATED.
- WHERE MAIN G.F.I. IS SHOWN FOR PROJECT, E.C. TO PROVIDE PROPER SETTINGS FOR MAIN G.F.I. RELAY TRIP SETTINGS AND TIME DELAY PERFORMED BY AN INDEPENDENT TESTING COMPANY INCLUDED IN E.C. CONTRACT. PROVIDE ACTUAL DOCUMENTATION AT THE COMPLETION OF THE PROJECT FROM THE INDEPENDENT TESTING COMPANY.
- E.C. TO COORDINATE EXACT EQUIPMENTS OF ALL OTHER SYSTEMS (INCLUDING ELEVATORS AND HVAC EQUIPMENT) WITH MANUFACTURER AND OTHER TRADES PRIOR TO ROUGH-IN AND PURCHASE OF ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH SYSTEM. ANY DISCREPANCIES WITH THIS PLAN AND MANUFACTURER REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PURCHASE OR ELECTRICAL ROUGH-IN OF THIS EQUIPMENT.

DESIGNHAUS EST 1998 ARCHITECTURE
 3300 AUBURN RD, SUITE 300
 AUBURN HILLS, MI 48326
 T: 248.601.4422 F: 248.453.5854
 WWW.DESIGNHAUS.COM
 INFO@DESIGNHAUS.COM

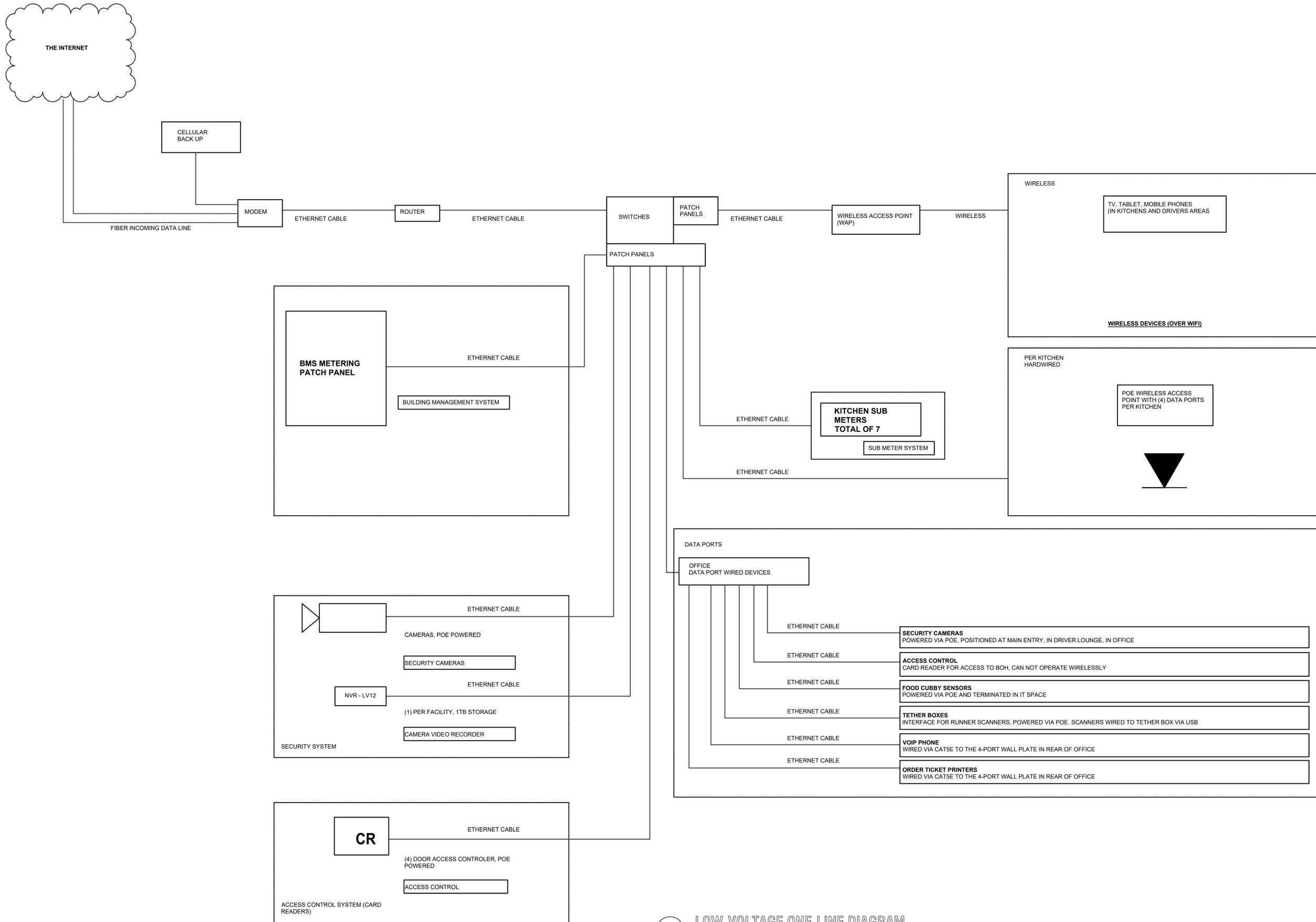
Permits 03.07.22
 Revision/Issue Date
 State of Michigan
 JAMES M. BAYLES
 ENGINEER
 No. 38685
 PROFESSIONAL SEAL

3181 3RD AVE. - DETROIT
 3181 3rd Ave,
 Detroit, MI 48201

Electrical One-Line Diagram & House Panel

021293
 E3.0

E3.0 ELEC TLINE DIAGRAM.dwg 3/7/2022 14:29:36 ARCH Full sized D:06.00 - 24.00 inches
 X:\Project\Design\3181 3rd Ave Detroit\E3.0 ELEC TLINE DIAGRAM.dwg 3/7/2022 14:29:36 ARCH Full sized D:06.00 - 24.00 inches
 Biron



1 LOW-VOLTAGE ONE-LINE DIAGRAM

SCALE: NONE

Revision/Issue	Date
Permits	03.07.22



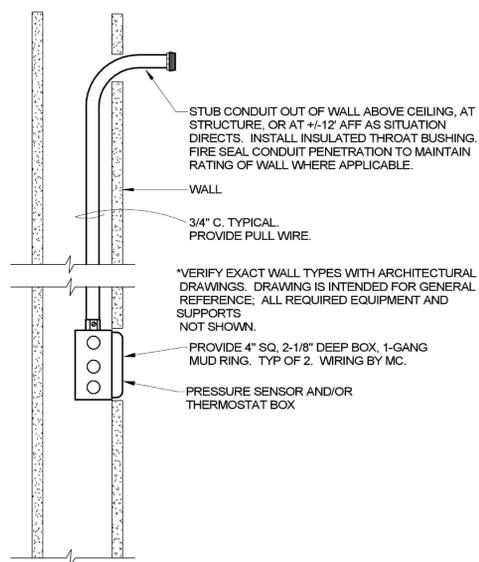
3181 3RD AVE. - DETROIT
3181 3rd Ave,
Detroit, MI 48201

Electrical
Low-Voltage
One-Line Diagram

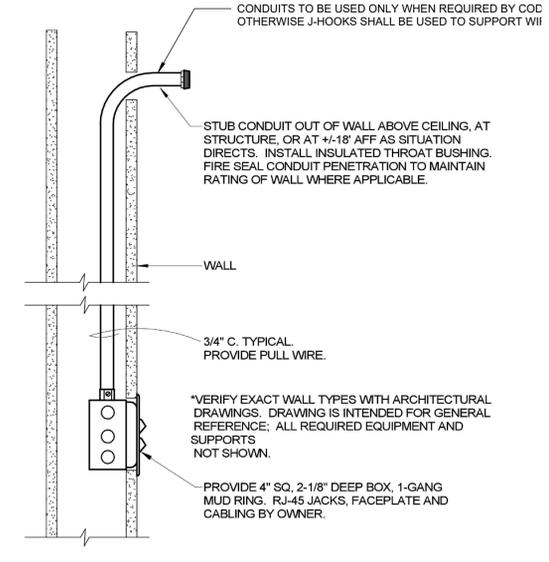
E3.2 ELEC LOW VOLTAGE ONE LINE DIAGRAM.dwg

3/7/2022

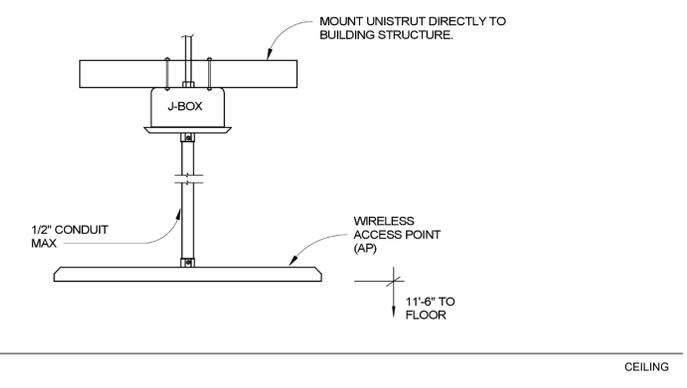
X:\Projects\Designhaus\3181 3rd Ave Detroit\E3.2 ELEC LOW VOLTAGE ONE LINE DIAGRAM.dwg, E3.2 3/7/2022 1:57:02 PM, ARCH: Full Speed D (08/09, 24/00 inches)



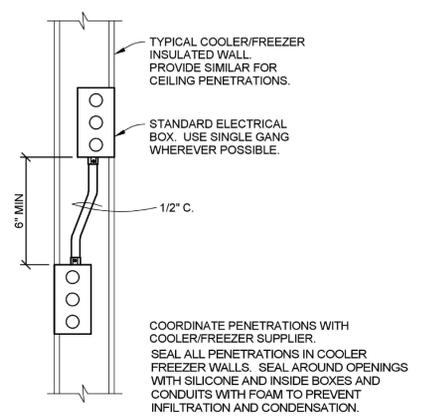
1 T-STAT-PRESSURE SENSOR ROUGH-IN DETAIL
NTS



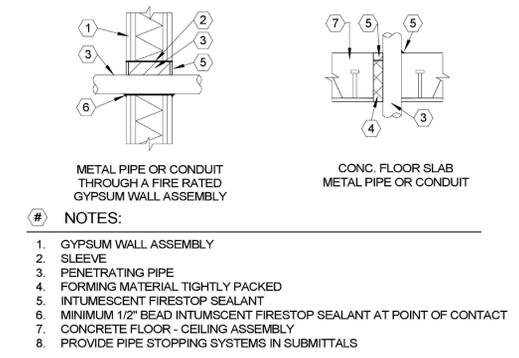
2 VOICE DATA ROUGH-IN DETAIL
NTS



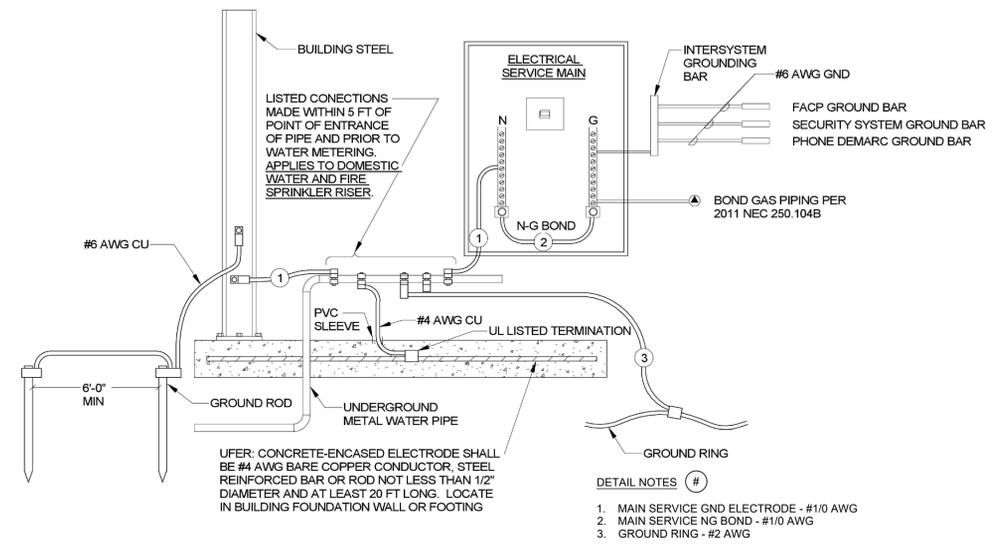
3 WAP J-BOX CONNECTION DETAIL
NTS



4 REFRIGERATED WALL DETAIL
NTS



5 FIRE STOPPING PENETRATION DETAILS
NTS



6 BUILDING GROUNDING ELECTRODE SYSTEM DETAIL
NTS

Permits	03.07.22
Revision/Issue	Date

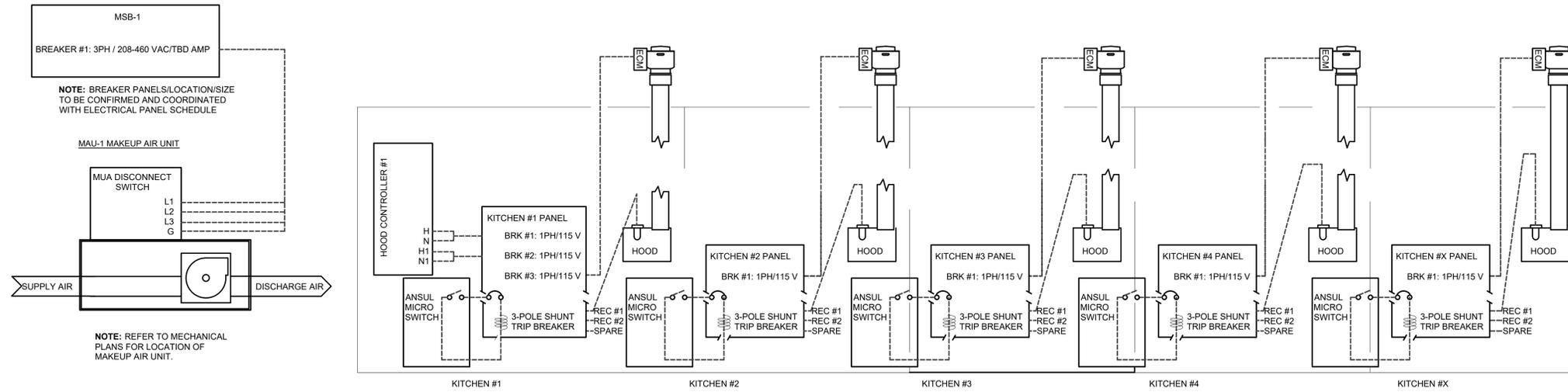


TYPICAL 5X HOODS OR MORE - 1X MAU HOOD CONTROLLER - LINE VOLTAGE

KITCHEN HOOD LIGHTS:

NOTE: REFER TO MECHANICAL PLANS FOR LOCATION OF EXHAUST FANS.

THE KITCHEN HOOD LIGHTS WILL BE POWERED BY BY SHUNT TRIP BREAKER IN PARALLEL WITH OUTLET #1 UNDER HOOD. IN THE EVENT OF A FIRE THE SHUNT TRIP BREAKER WILL DISCONNECT POWER TO THE HOOD LIGHTS.



NOTE: BREAKER PANELS/LOCATION/SIZE TO BE CONFIRMED AND COORDINATED WITH ELECTRICAL PANEL SCHEDULE

MAU-1 MAKEUP AIR UNIT

MUA DISCONNECT SWITCH

L1

L2

L3

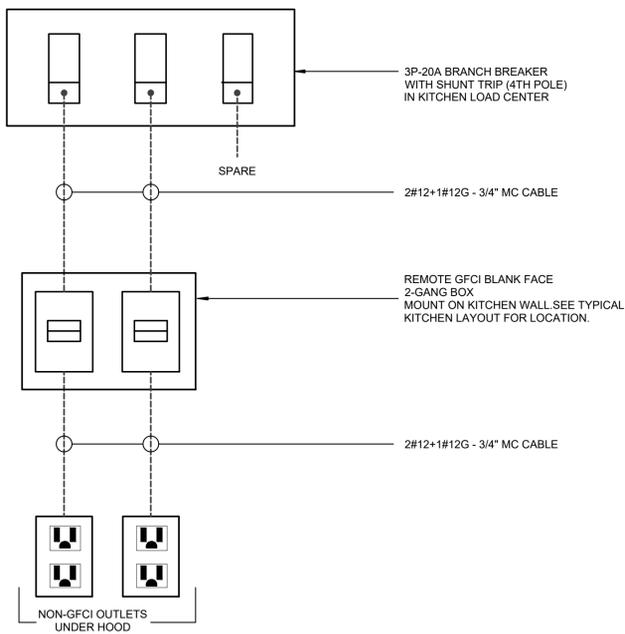
G

NOTE: REFER TO MECHANICAL PLANS FOR LOCATION OF MAKEUP AIR UNIT.

NOTE: BREAKER PANELS/LOCATION/SIZE TO BE CONFIRMED AND COORDINATED WITH ELECTRICAL PANEL SCHEDULE

MECHANICAL SYSTEM WIRING DIAGRAM - VENTILATION & EXHAUST

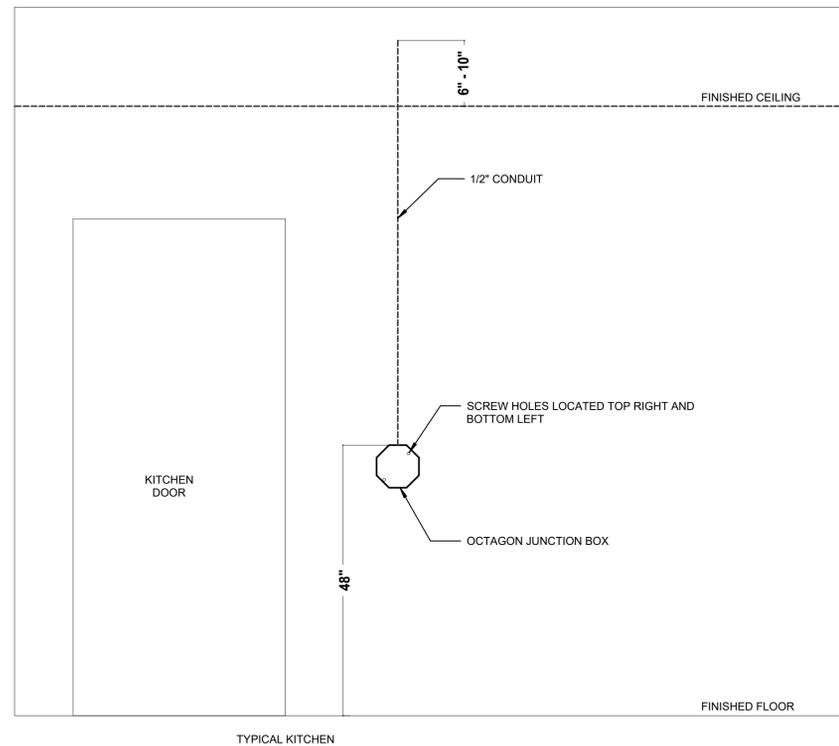
1



ELECTRICAL - SHUNT TRIP DETAIL

3

TYPICAL MANUAL PULL STATION ROUGH-IN DETAIL



TYPICAL KITCHEN

MANUAL PULL STATION DETAIL

4

NOTES

ELECTRICIAN TO ROUGH IN OCTAGON JUNCTION BOX WITH MOUNTING SCREWS POSITIONED IN THE TOP RIGHT AND BOTTOM LEFT ORIENTATION AT 48" TO THE TOP OF BOX AFTER FINISHED FLOOR.

ELECTRICIAN TO INSTALL AND SECURE 1/2" CONDUIT TO OCTAGON JUNCTION BOX AND UP THROUGH THE CEILING LEAVING 6"-10" IN STUB OUT.

ELECTRICIAN TO INSTALL ONE OCTAGON JUNCTION BOX PER KITCHEN UNLESS PLANS INDICATE OTHERWISE

REFER TO ARCHITECTURAL PAGES FOR LOCATION OF MANUAL PULL STATIONS FOR ROUGH-IN.

Permits	03.07.22
Revision/Issue	Date

