

2 ENLARGED CAMPUS AERIAL MAP  
A1.0 1/4" = 1'-0" NORTH

**GENERAL NOTES**

1. PARTITION DIMENSIONS ARE TYPICALLY FACE OF STUD.
2. SEE ARCHITECTURAL DIMENSION PLANS AD1.X SERIES FOR DIMENSIONS AND WALL TYPES.
3. SEE CODE REVIEW PLAN CR1.1 FOR FIRE RATED WALL LOCATIONS.
4. SEE A2.1 DRAWING FOR ROOM FINISH SCHEDULE AND DETAILS.
5. SEE A4.X SERIES DRAWINGS FOR ROOF PLANS.
6. SEE A8.X FOR ENLARGED FLOOR PLANS, INTERIOR ELEVATIONS AND DETAILS.
7. SEE A10.X SERIES DRAWINGS FOR DOOR INFORMATION.
8. SEE A11.X SERIES DRAWINGS FOR REFLECTED CEILING PLANS.
9. PROVIDE TEMPORARY BARRICADE DURING CONSTRUCTION AS NECESSARY BY LOCAL ORDINANCES, COORDINATE WITH PROJECT AND FACILITIES MANAGERS.
10. SOFFITS AND SUSPENDED CEILINGS SHALL BE SECURED TO STRUCTURAL FRAMING ONLY; SEE DETAILS.
11. FLOOR DRAINS REQUIRED IN ALL KITCHENS, FOOD PREPARATION AREAS, ANY OTHER LOCATIONS WHERE WATER IS USED.
12. PROTECT AND MAINTAIN ACCESS TO ANY EXISTING HVAC, ELECTRICAL AND PLUMBING SYSTEMS INCLUDING, BUT NOT LIMITED TO, CLEANOUTS, VALVES, DAMPERS, JUNCTION BOXES, SMOKE DETECTORS, ETC.
13. ALL TRANSITIONS BETWEEN DISIMILAR FLOOR MATERIALS MUST BE FLUSH AND LEVEL.
14. CONTRACTOR IS REQUIRED TO PURCHASE CAMPUS PARKING PERMITS THROUGH THE UNIVERSITY POLICE.

**ARCHITECTURAL STAGING NOTES** NOTED THUS: (X)

- ① STAND UNION BUILDING (SUB) - CONTRACTOR CONSTRUCTION ZONE IN UNION MARKET (RM 253).
- ② LOCATION OF ELEVATED LOADING DOCK FOR CONTRACTOR USE
- ③ CONTRACTOR ACCESS VEHICULAR ROUTING TO PROJECT SITE

**MECHANICAL STAGING NOTES**

1. AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE OPERATIONAL THROUGH THE ENTIRE PROJECT.

**CONTRACTOR STAGING GENERAL NOTES**

1. THE CONTRACTOR SHALL MINIMIZE INTERFERENCE WITH ADJOINING STREETS, SIDEWALKS, PARKING AREAS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT BLOCK STREETS, SIDEWALKS, OR ACCESS TO DUMPSTER LOCATIONS AT ANY TIME.
2. THE CONTRACTOR SHALL PROTECT EXISTING SITE IMPROVEMENTS AND LANDSCAPING FROM DAMAGE CAUSED BY CONSTRUCTION OPERATIONS TO CURRENT MSU STANDARDS OR AS DIRECTED BY THE OWNER PRIOR TO SUBSTANTIAL COMPLETION.
3. THE CONTRACTOR SHALL PROTECT EXISTING BUILDINGS FROM DAMAGE, CONTAMINATION, AND SOILING CAUSED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL KEEP BUILDING ENTRANCES, CORRIDORS, AND STAIRWELLS CLEAR OF CONSTRUCTION MATERIAL, TOOLS, AND EQUIPMENT AT ALL TIMES. CONTRACTOR SHALL RESTORE EXISTING BUILDINGS DAMAGED BY CONSTRUCTION OPERATIONS AS DIRECTED BY THE OWNER PRIOR TO SUBSTANTIAL COMPLETION.
4. THE CONTRACTOR SHALL ACCESS THE SITE FROM WEST GRANT STREET.
5. ALL CONTRACTOR VEHICLES PARKED ON CAMPUS, INCLUDING VEHICLES OWNED BY EMPLOYEES AND CONTRACTOR, SHALL BE PARKED IN DESIGNATED PARKING AREAS ONLY.
6. CONSTRUCTION STAGING AREA: SHOULD THE CONTRACTOR REQUIRE ON SITE CONSTRUCTION STAGING, AN AREA FOR THIS PURPOSE WILL BE PROVIDED. THE CONTRACTOR SHALL RESTORE AREAS USED FOR CONSTRUCTION STAGING THAT ARE DAMAGED DURING THE COURSE OF CONSTRUCTION OPERATIONS TO CURRENT MSU STANDARDS OR AS DIRECTED BY THE OWNER PRIOR TO SUBSTANTIAL COMPLETION.
7. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND JOB SITE CONDITIONS BEFORE COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER.
8. THE OWNER WILL OCCUPY ADJACENT ROOMS UNTIL CONSTRUCTION IS COMPLETE IN THE AREA. CONTRACTOR TO SEQUENCE WORK IN COORDINATION WITH OWNERS OCCUPANCY.



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BOZEMAN, MONTANA  
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**MSU / SUB / FOOD VENDOR RENOVATION PROJECT**



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REVIEWED BY:		
REV.	DESCRIPTION	DATE



PPA#22-0056

A/E#00-00-00

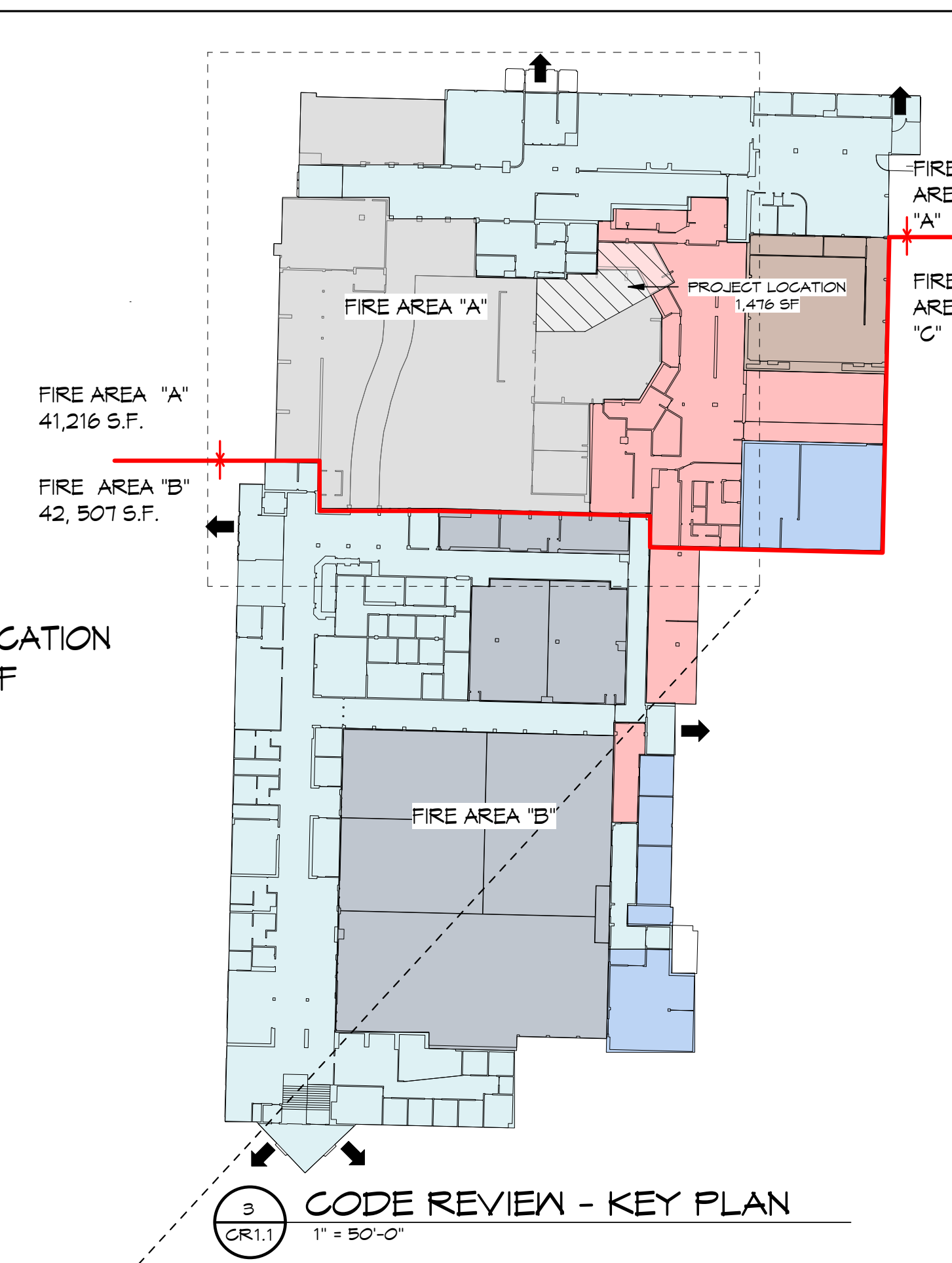
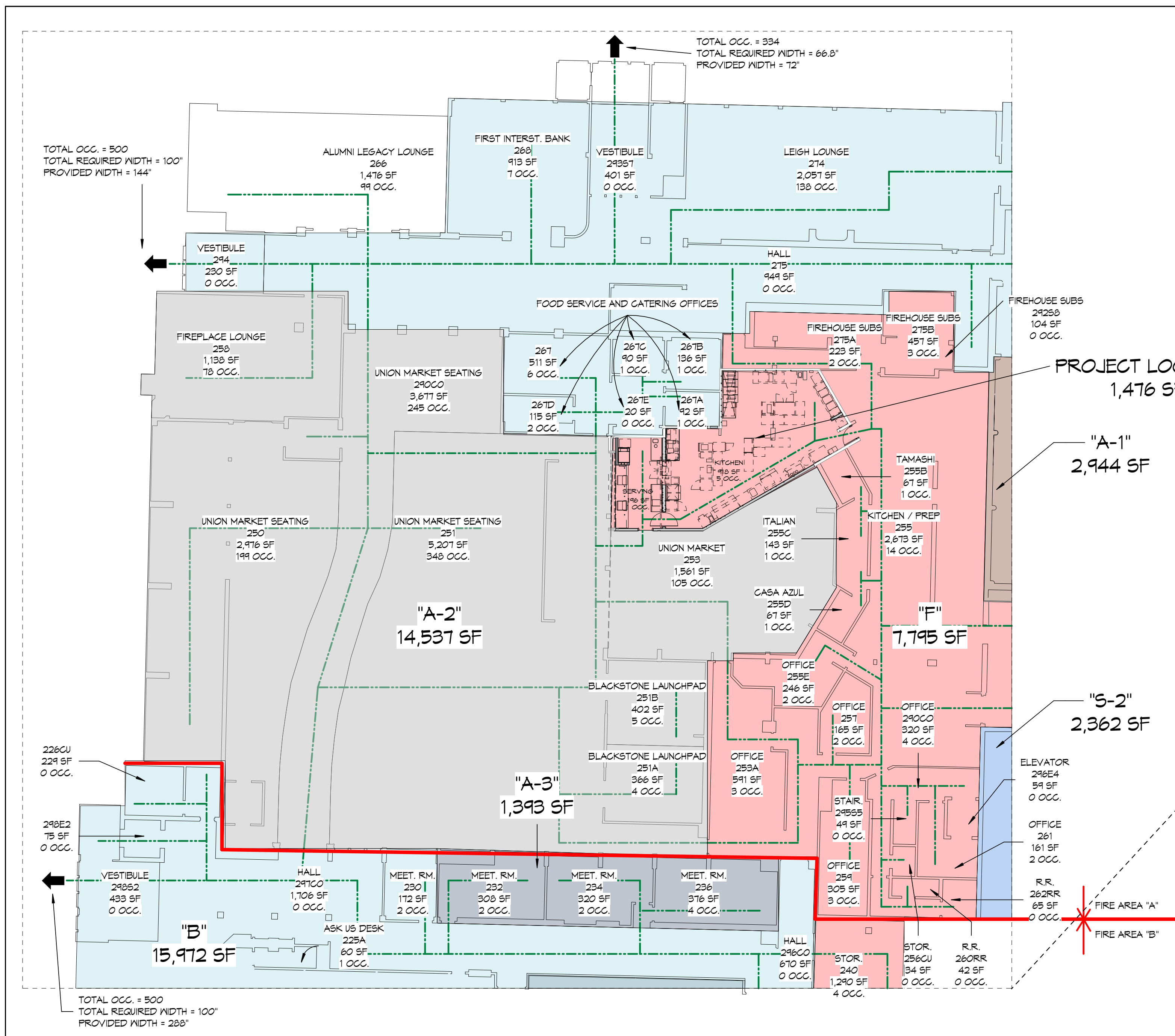
Consultant #:

**SHEET TITLE**  
CAMPUS MAP

**SHEET**  
**A1.0**

**DATE**  
**16.06.2023**





1  
CR1.1  
1/16" = 1'-0"

**NOTE**  
THIS SHEET MUST BE  
PRINTED/VIEWED IN  
COLOR

**LEGEND**

- OVERALL EXIT ACCESS TRAVEL DISTANCE
- 1-HOUR FIRE WALL (U407)  
WALL CONSTRUCTION IS FLOOR TO STRUCTURE, U.L. #U-407
- 1-HOUR FIRE BARRIER (OCC. SEPARATION) (UL 415)  
WALL CONSTRUCTION IS FULL HEIGHT, STRUCTURE TO STRUCTURE, U.L. #U-415B, SEE CR1.3 FOR WALL ASSEMBLY DETAILS
- EGRESS/EXIT
- LOCATION OF PROJECT

**GOVERNING CODES**

BUILDING:	2021 IBC / MT AMENDMENTS
LIFE SAFETY:	2021 IBC
HVAC:	2021 IMC
PLUMBING:	2021 IPC
ELECTRICAL:	2021 NEC
COMPLIANCE WITH IECC 2021	

**OCUPANCY SEPARATION**

A-1	B
A-2	F
A-3	S-2

NAME: ROOM NAME, ROOM NUMBER, SQUARE FOOTAGE OF ROOM, NUMBER OF OCCUPANTS

**IBC 2021 - GENERAL CODE REQUIREMENTS  
NEW CONSTRUCTION**

PROJECT NUMBER: 2253	BUILDING CODE APPLICABLE: 2021 IBC (WITH MT AMENDMENTS)
PROJECT NAME: MSU SUB FOOD VENDOR RENOVATION PROJECT	
LOCATION: BOZEMAN, MONTANA	
LOCAL ZONING: PL1	
DESCRIPTION: RENOVATION OF EXISTING FOOD SERVICE SPACE	83,723 SF (ENTIRE BUILDING) 1,476 SF (FOOD VENDOR & RENOVATION)
OCCUPANCY: A-2	
TYPE OF CONSTRUCTION: IIB	
<b>OCCUPANT LOAD FACTORS</b>	<b>ACTUAL OCCUPANT LOADS</b>
CIRCULATION 0	CLASSROOMS 20
TOILETS 0	SHOPS 50
KITCHEN 200	OFFICE 100
STORAGE 300	LOBBY 15
MECH./ELECT. 300	
BUSINESS 150	
ASSEMBLY - STANDING ONLY 5	
ASSEMBLY - NON-FIXED CHAIRS 7	
ASSEMBLY - NON-FIXED CHAIRS & TABLES 15	
ASSEMBLY - FIXED CHAIRS - DECIDED BY # OF CHAIRS	
	MAIN LEVEL OCCUPANT LOAD = 2,783
	<b>TOTAL OCCUPANT LOAD = 2,783</b>

**DETERMINED SPECIFIC CODE NOTES**

- REQUIREMENTS FOR GROUP A-2 OCCUPANCY
- 1 HOUR SEPARATION OF ELECTRICAL ROOMS
  - 1 HOUR SEPARATION OF MECHANICAL ROOMS - EQUIPMENT OVER 400,000 BTU'S
  - 1 HOUR FIRE RATING AROUND STORAGE ROOMS THAT EXCEEDED 100 SQUARE FEET

**CORRIDORS**  
(SECTION 1020.1)

MINIMUM CLEAR WIDTH	(SECTION 1005.1, 1020.3 & TABLE 1020.3)	44"
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**EXITS**  
(SECTION 1016, 1017 & TABLE 1006.3.3)

REQ'D.	ACTUAL
4	6

**AUTOMATIC SPRINKLER SYSTEMS**  
(SECTION 903.2.1.2)

PER 903.2.1.2	SPRINKLERED
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**FIRE PROTECTION SYSTEMS**

FIRE SPRINKLER SYSTEM:  YES  NO

FIRE ALARM SYSTEM:  YES  NO

**CONSTRUCTION CLASSIFICATION**  
(SECTION 602 & TABLE 601)

TYPE IIB	
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**FIRE-RESISTANCE RATING - BUILDING ELEMENTS**  
(TABLE 601)

STRUCTURE	REQUIRED RATING	UL LISTING
STRUCT FRAME, INCLUDING COLS, GIRDERS & TRUSSES	0 HOUR	
BEARING WALLS, EXTERIOR	(SEE DWGS)	
BEARING WALLS, INTERIOR	(SEE DWGS)	
NONBEARING WALLS, EXTERIOR	0 HOUR	
NONBEARING WALLS, INTERIOR	0 HOUR	
FLOOR CONST INCLUDING SUPPORT BEAMS AND JOISTS	0 HOUR	
ROOF CONST INCLUDING SUPPORT BEAMS AND JOISTS	0 HR / CLASS A	(SEE DWGS)

**ALLOWABLE AREA (SEPARATE OCCUPANCY)**  
(SECTION 506.2 & TABLE 506.2)

BASE ALLOWABLE AREA (PER FLOOR) PER A-2	(SECTION 506)	70,000 SF
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**MAXIMUM AREA (ALLOWABLE AREA OF 1ST FLR x STORIES)**  
TABLE 506.2

UNLIMITED AREA BUILDING?	(SECTION 507)	NO
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**ACTUAL AREA**

ACTUAL AREA	83,723 SF
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**ALLOWABLE HEIGHT**  
(SECTION 504.3, 504.4 & TABLE 504.3, 504.4)

ALLOWABLE HEIGHT	75' / 2 STORIES
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**ACTUAL STORIES**

ACTUAL STORIES	3
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**ACTUAL HEIGHT**

ACTUAL HEIGHT	25 FT.
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**MEANS OF EGRESS**  
(SECTION 1003)

DESIGN OCCUPANT LOAD	(SECTION 1004.1)	2,783
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**EGRESS WIDTH**  
(SECTION 1005.1)

STAIRWAY WIDTH PER OCCUPANT	0.2"
STAIRWAY WIDTH REQUIRED	0.2"
STAIRWAY WIDTH PROVIDED	0.2"
OTHER EGRESS COMPONENT WIDTH PER OCCUPANT	0.2"



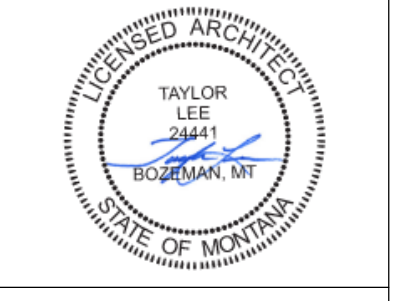
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VENDOR RENOVATION  
PROJECT**



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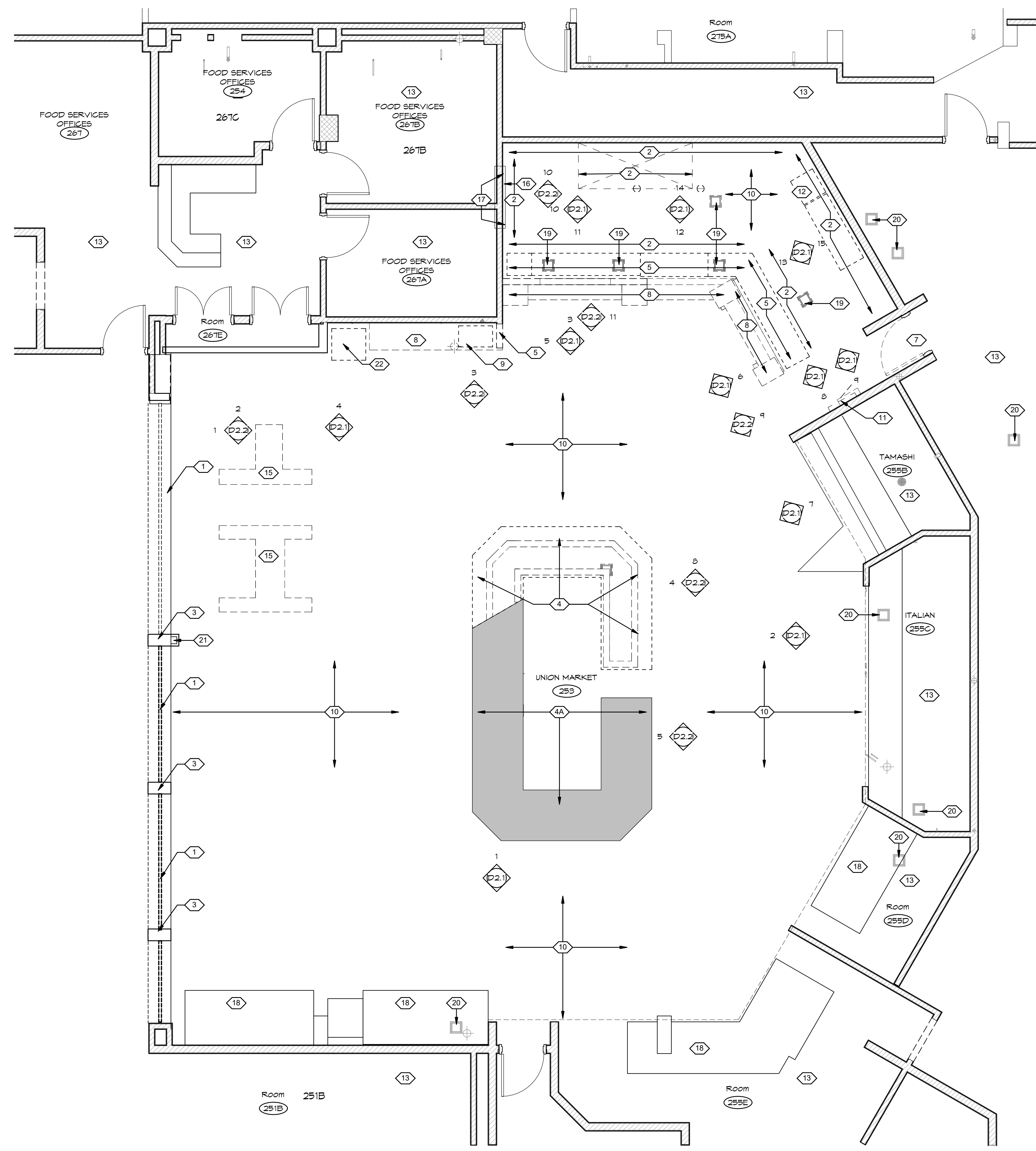
**CODE REVIEW PLAN**

**SHEET**

**CR1.1**

DATE  
**16.06.2023**





1 DEMO FLOOR PLAN  
D1.1 1/4" = 1'-0"

**GENERAL NOTES**

1. ALL DIMENSIONS TO BE FIELD VERIFIED
2. REMOVE ALL DEMOLISHED MATERIALS NOT TO BE REUSED FROM THE PROJECT SITE AND DISPOSE OF IT IN A SAFE AND LAWFUL MANNER - OWNER RETAINS FIRST RIGHT TO SALVAGEABLE ITEMS REMOVED.
3. COORDINATE DEMOLITION WORK WITH ALL NEW WORK TO BE DONE. ADDITIONAL DEMOLITION, OTHER THAN THAT SHOWN ON THESE DRAWINGS MAY BE REQUIRED FOR COMPLETION OF NEW WORK.
4. EXISTING MATERIALS TO REMAIN ARE TO BE PROTECTED DURING CONSTRUCTION. REPAIR ANY MATERIALS TO REMAIN DAMAGED BY CONSTRUCTION ACTIVITIES.
5. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
6. MOST AREAS OF THE PROJECT RECEIVE NEW CEILING
7. ALL ABANDONED ELECTRICAL AND MECHANICAL SYSTEMS AND COMPONENTS ARE TO BE REMOVED.
8. PATCH ALL HOLES IN FLOORS, WALLS, AND CEILINGS TO MATCH ADJACENT SURFACE FINISH.
9. SEPARATE FIRE ALARM, FIRE SPRINKLER, & HOOD SUPPRESSION SYSTEM PLANS / SHOP DRAWINGS SHALL BE DESIGNED & SUBMITTED FOR REVIEW WITHIN 30 DAYS AFTER BUILDING PERMIT HAS BEEN ISSUED. THE DESIGN SHALL MEET 2021 IBC CHAPTER 9 & 2019 NFPA 13/13R, NFPA 12 STANDARDS. THESE ARE TO BE PERMITTED PRIOR TO FRAMING / MEP ROUGH-IN INSPECTIONS.
10. FIRE SPRINKLER MODIFICATIONS ARE EXPECTED IN THIS PROJECT. SEE G.N. #9 ABOVE FOR DESIGN & SUBMITTAL REQUIREMENTS.
11. SEE MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL M/E/P DEMOLITION SCOPE.
12. (E) O.H. SECURITY GRILL WALL MOUNTED HAND CRANK WILL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

**DEMOLITION NOTES**

- NOTED THIS: (X)
- 1 (E) SECURITY GRILL TO REMAIN, PROTECT FROM DAMAGE.
  - 2 (E) KITCHEN EQUIPMENT TO BE REMOVED, COORDINATE WITH M/E/P SUBCONTRACTORS - SEE M/E/P DRAWINGS FOR ADDITIONAL DEMO SCOPE
  - 3 (E) STRUCTURAL COLUMN TO REMAIN, PROTECT FROM DAMAGE
  - 4 PORTION OF (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO BE REMOVED.
  - 4A PORTION OF (E) SALAD BAR CASEWORK, COUNTERTOPS, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN - MAINTAIN UTILITIES TO ALL PLUMBING & ELECTRICAL ITEMS THAT REMAIN
  - 5 (E) WALL TO BE REMOVED, PREP FLOOR FOR NEW FINISH - SEE FINISH SCHEDULE ON A2.2
  - 6 REMOVE (E) SOFFIT/BULKHEAD, CONFIRM WITH MEP, EXISTING UTILITIES TO REMAIN
  - 7 (E) DOOR & FRAME / HARDWARE TO BE REMOVED - PREP HEAD & JAMB TO RECEIVE NEW DOOR
  - 8 REMOVE (E) COUNTERTOPS & CASEWORK IN ITS ENTIRETY
  - 9 REMOVE (E) BEVERAGE TOWER IN ITS ENTIRETY
  - 10 (E) FLOORING TO BE REMOVED - PREP FLOOR SLAB - WILL RECEIVE NEW FLOORING - SEE FINISH SCHEDULE ON A2.2
  - 11 REPLACE (E) ELECTRICAL WALL MOUNTED PANEL - SEE ELECTRICAL DRAWINGS
  - 12 REMOVE (E) PLUMBING FIXTURE - SEE PLUMBING DRAWINGS
  - 13 NO WORK IN THIS ROOM
  - 14 MOVE OR REPLACE (E) SIGN, REFINISH WALL
  - 15 (E) MOVEABLE FURNITURE TO BE REMOVED BY OWNER
  - 16 (E) IN-WALL OLD ANSUL SYSTEM EQUIPMENT IS TO BE REMOVED
  - 17 REPAIR (E) WALL & FINISH AFTER OLD EQUIP REMOVED - WALL FINISH TO MATCH ADJACENT WALL SURFACE FINISH
  - 18 (E) CASEWORK TO REMAIN - PROTECT FROM DAMAGE
  - 19 (E) FLOOR DRAINS / SINKS TO BE REMOVED - PATCH FLOOR & PREP FOR NEW FLOORING
  - 20 (E) FLOOR DRAINS / SINKS TO REMAIN - PROTECT IN PLACE
  - 21 (E) O.H. SECURITY GRILL WALL MOUNTED HAND CRANK TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION
  - 22 (E) VENDING MACHINE TO BE REMOVED - BY OWNER



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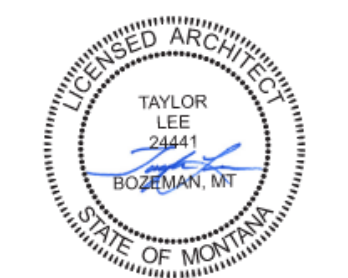
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A/E#00-00-00  
Consultant #:  
SHEET TITLE  
DEMO FLOOR PLAN  
SHEET  
**D1.1**  
DATE  
16.06.2023



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**GENERAL NOTES**

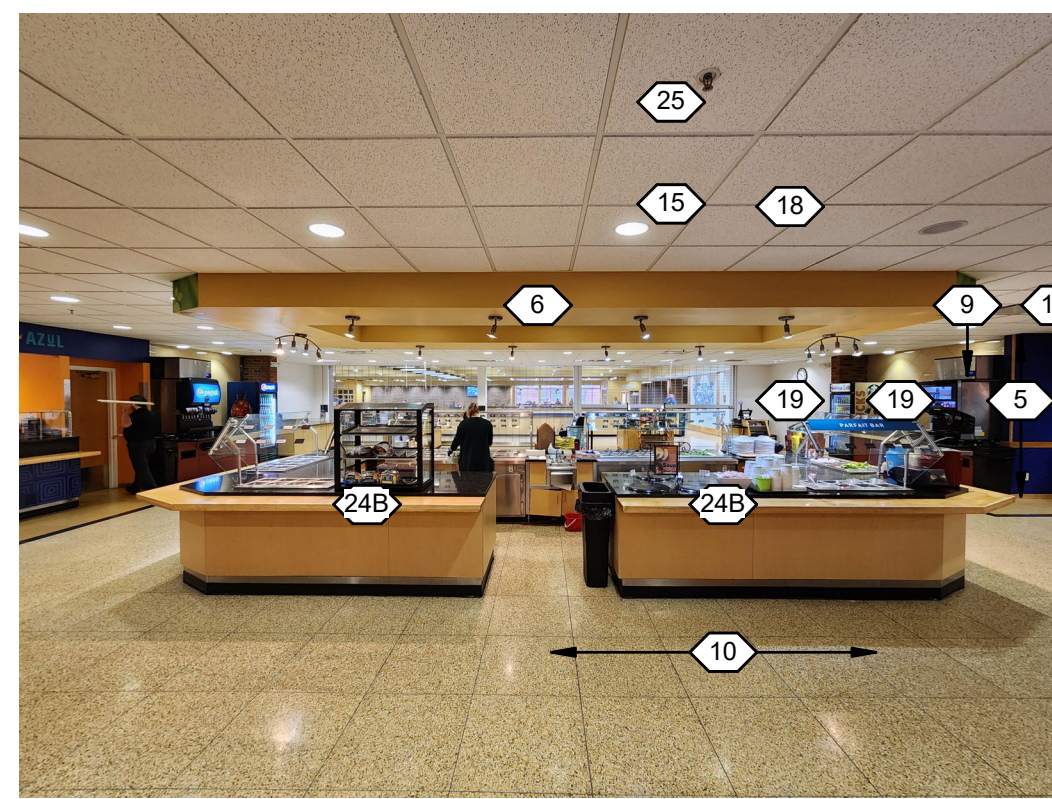
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- SEE MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL M/E/P DEMOLITION SCOPE.
- (E) O.H. SECURITY GRILL WALL MOUNTED HAND CRANK WILL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

**DEMOLITION NOTES**

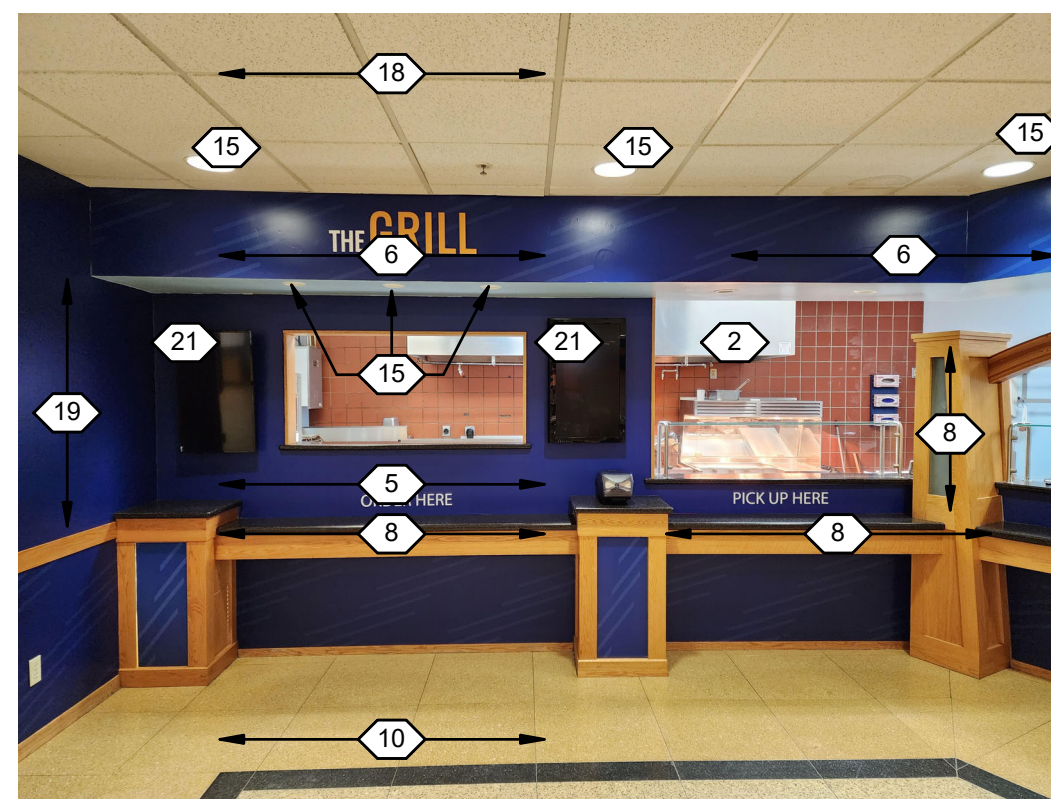
- NOTED THIS:  X
- (E) SECURITY GRILL TO REMAIN, PROTECT FROM DAMAGE
  - (E) KITCHEN EQUIPMENT TO BE REMOVED, COORDINATE WITH FOOD SERVICE.
  - (E) COLUMN TO REMAIN, PROTECT FROM DAMAGE
  - (E) STOREFRONT TO REMAIN, PROTECT FROM DAMAGE
  - (E) WALL TO BE REMOVED, PREP FLOOR FOR NEW FINISH
  - REMOVE (E) SOFFIT/BULKHEAD, COORDINATE WITH M.E.P. EXISTING UTILITIES TO REMAIN
  - REMOVE (E) DOOR
  - REMOVE (E) CASEWORK
  - REMOVE (E) BEVERAGE TOWER
  - (E) FLOORING & WALL BASE TO BE REMOVED, SEE ROOM FINISH SCHEDULE ON A2.1 - PREP FLOOR TO RECEIVE NEW FLOORING
  - DEMO PANEL NF & ASSOCIATED FEEDERS - SEE ELECTRICAL DWGS
  - REMOVE (E) PLUMBING FIXTURE & ASSOCIATED PLUMBING LINES - PROVIDE FLOOR INFILL TO MATCH ADJACENT FLOOR STRUCTURE
  - NO WORK IN THIS ROOM
  - MOVE OR REPLACE (E) SIGN, REFINISH WALL
  - REMOVE (E) RECESSED LIGHT FIXTURE - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
  - REMOVE (E) SURFACE MOUNTED LIGHT FIXTURE - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
  - REMOVE (E) AIR DEVICES - SEE MECH. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
  - (E) CEILING TO BE REMOVED, SEE DEMO CEILING PLAN ON SHEET D11.1
  - REFINISH WALL SURFACE - SEE ROOM FINISH SCHEDULE ON A2.1 & INTERIOR ELEVATIONS ON S.X SHEETS
  - REMOVE (E) TILE WALL FINISH - PREP WALL FOR NEW FINISH - SEE INTERIOR ELEVATIONS & SHEET A2.1 FOR FINISH INFORMATION
  - REMOVE (E) WALL MOUNTED ELECTRICAL DEVICES - SEE ELECTRICAL DWGS
  - REMOVE (E) OLD ANSUL HOOD FIRE SUPPRESSION SYSTEM EQUIPMENT IN ENTIRETY - SEE MECH. DRAWINGS
  - REMOVE (E) WALL MOUNTED ACCESSORIES & SUPPORTS AS REQUIRED
  - (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO BE REMOVED
  - (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN, SEE FLOOR PLANS ON SHEET A1.1
  - (E) FIRE SPRINKLER HEADS TO REMAIN - SOME MINOR ADJUSTMENTS MAY BE REQUIRED FOR PROPER PLACEMENT INTO NEW CEILING TILE CEILING - SEE SHEET A11.1 & MECH. DWGS
  - REMOVE (E) STAINLESS STEEL CORNER GUARD
  - REMOVE (E) WOOD CHAIR RAIL



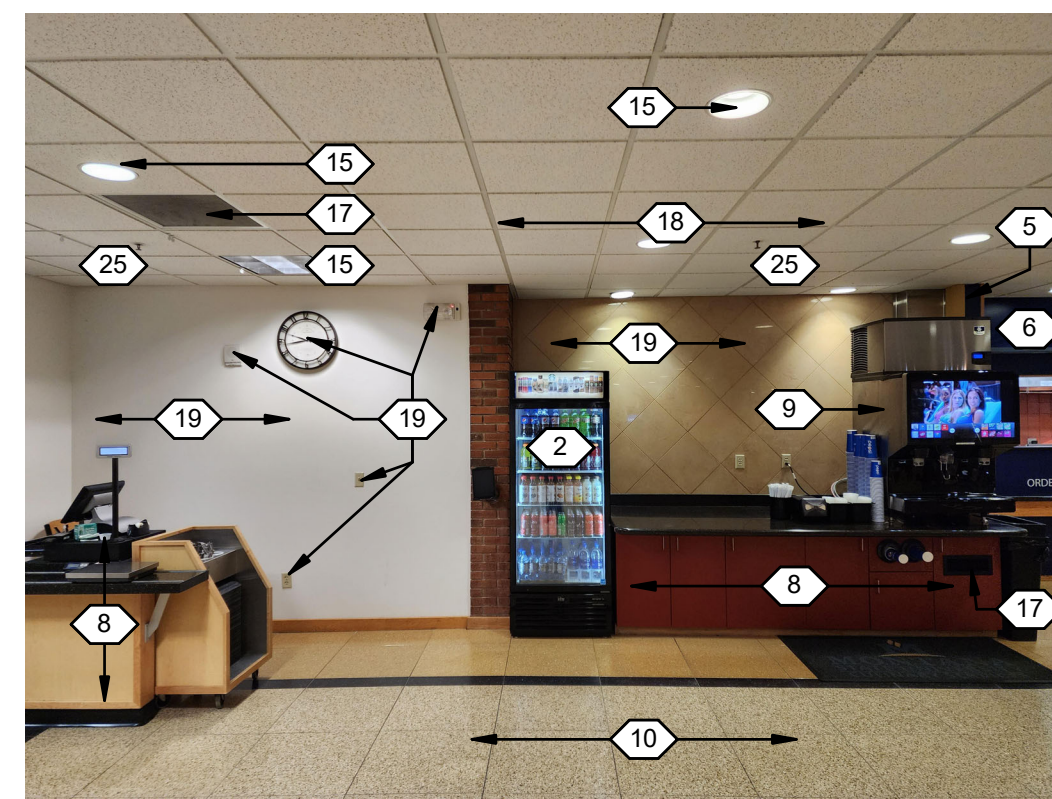
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D2.1 NOT TO SCALE



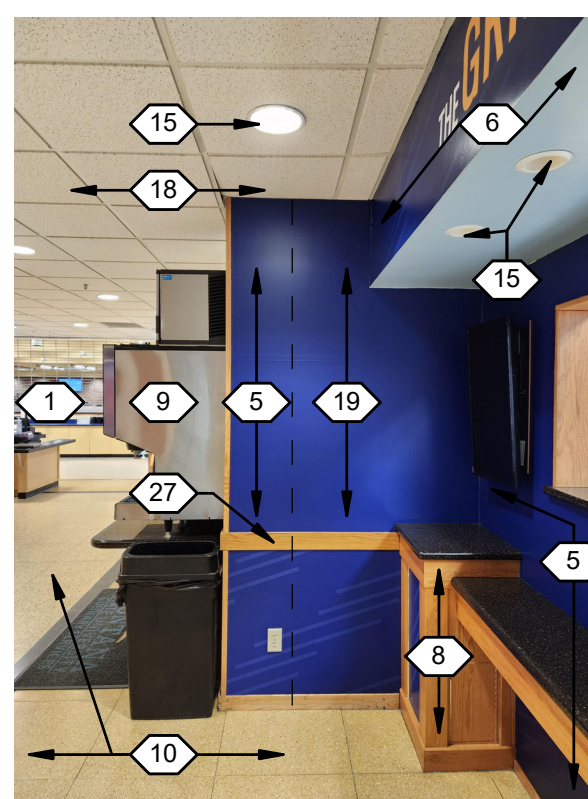
2 SALAD BAR - EAST  
D2.1 NOT TO SCALE



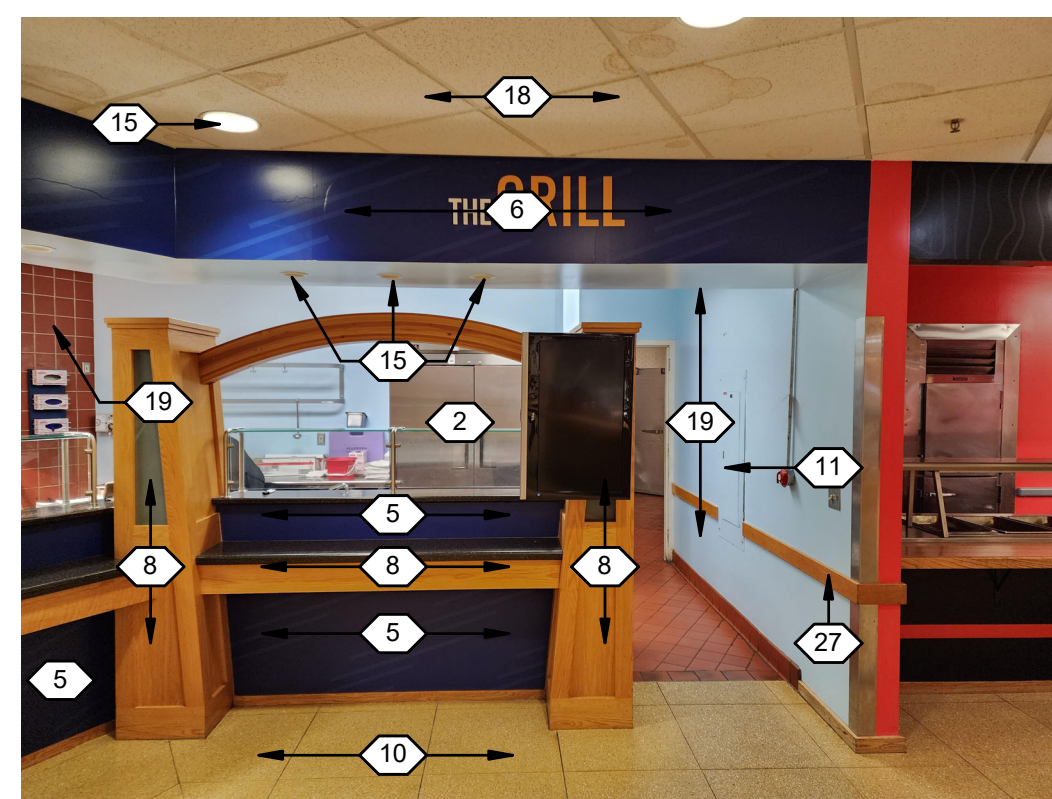
3 THE GRILL - NORTH  
D2.1 NOT TO SCALE



4 SODA STATION - NORTH  
D2.1 NOT TO SCALE



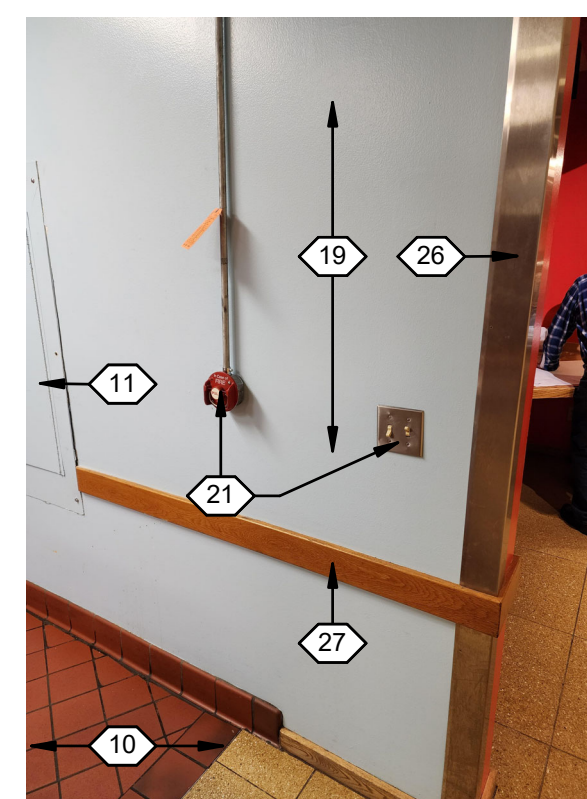
5 THE GRILL - WEST  
D2.1 NOT TO SCALE



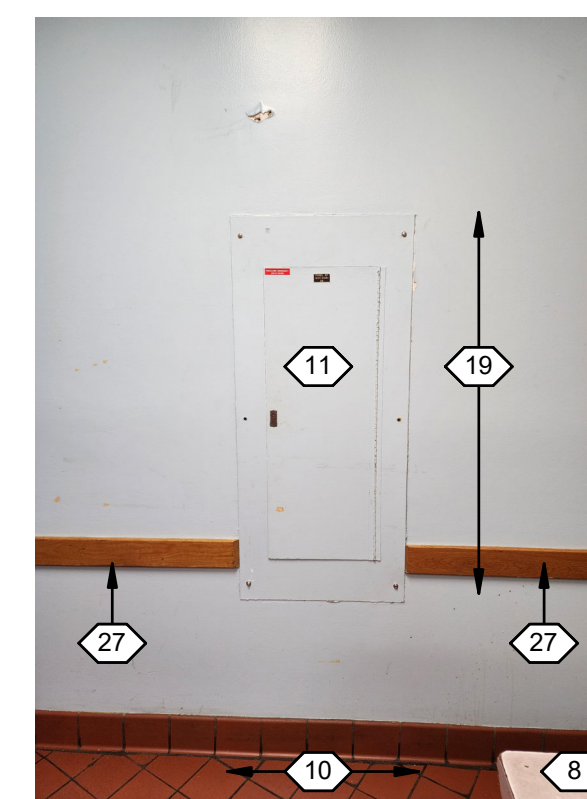
6 THE GRILL - NORTHEAST  
D2.1 NOT TO SCALE



7 ADJACENT FOOD STAND - NORTHEAST  
D2.1 NOT TO SCALE



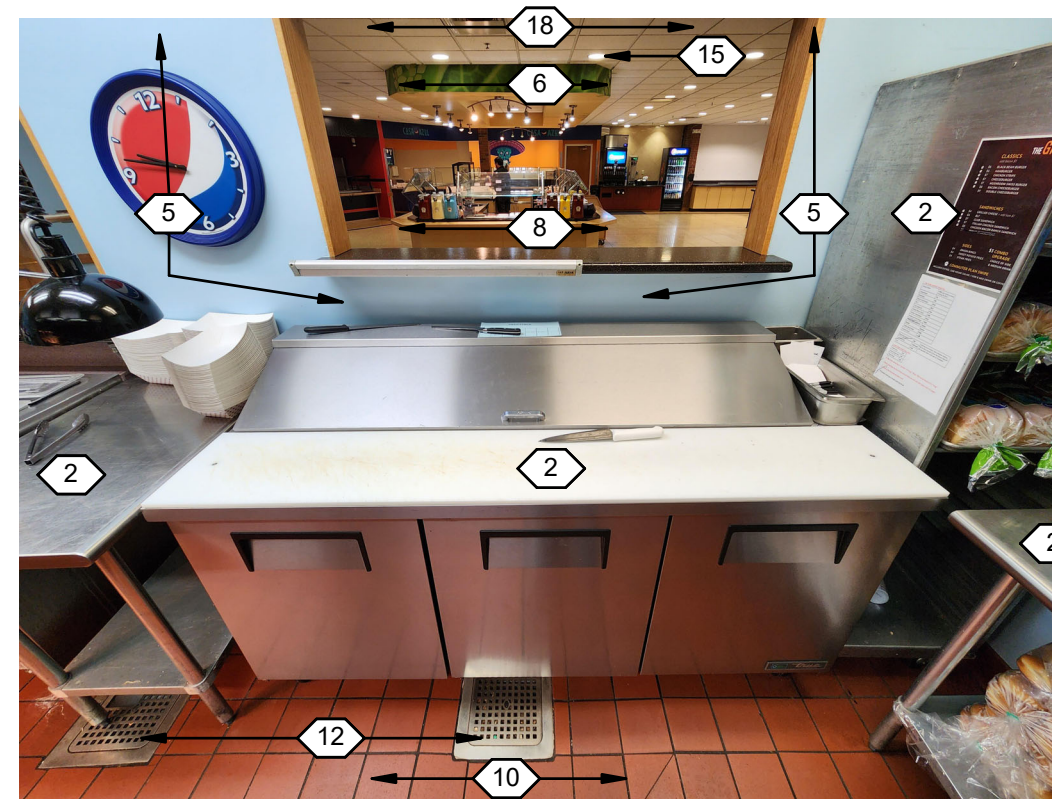
8 SWITCH AND FIRE STOP  
D2.1 NOT TO SCALE



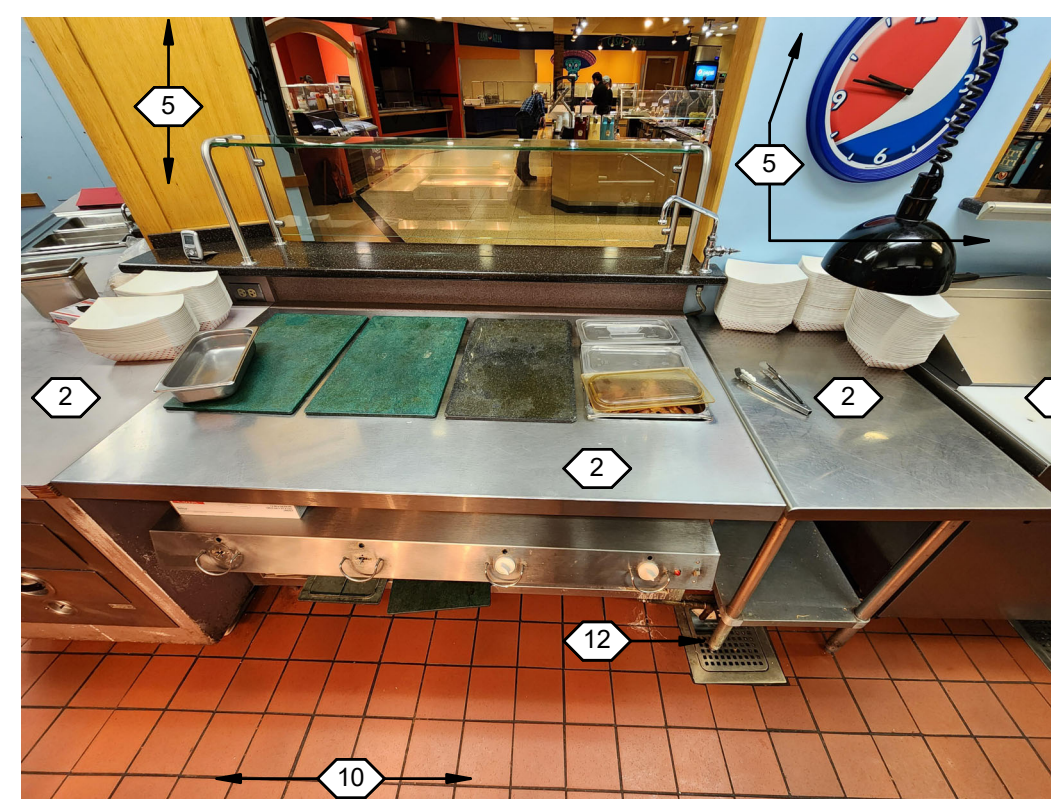
9 ELECTRICAL PANEL  
D2.1 NOT TO SCALE



10 THE GRILL - WEST  
D2.1 NOT TO SCALE



11 THE GRILL - SOUTH  
D2.1 NOT TO SCALE



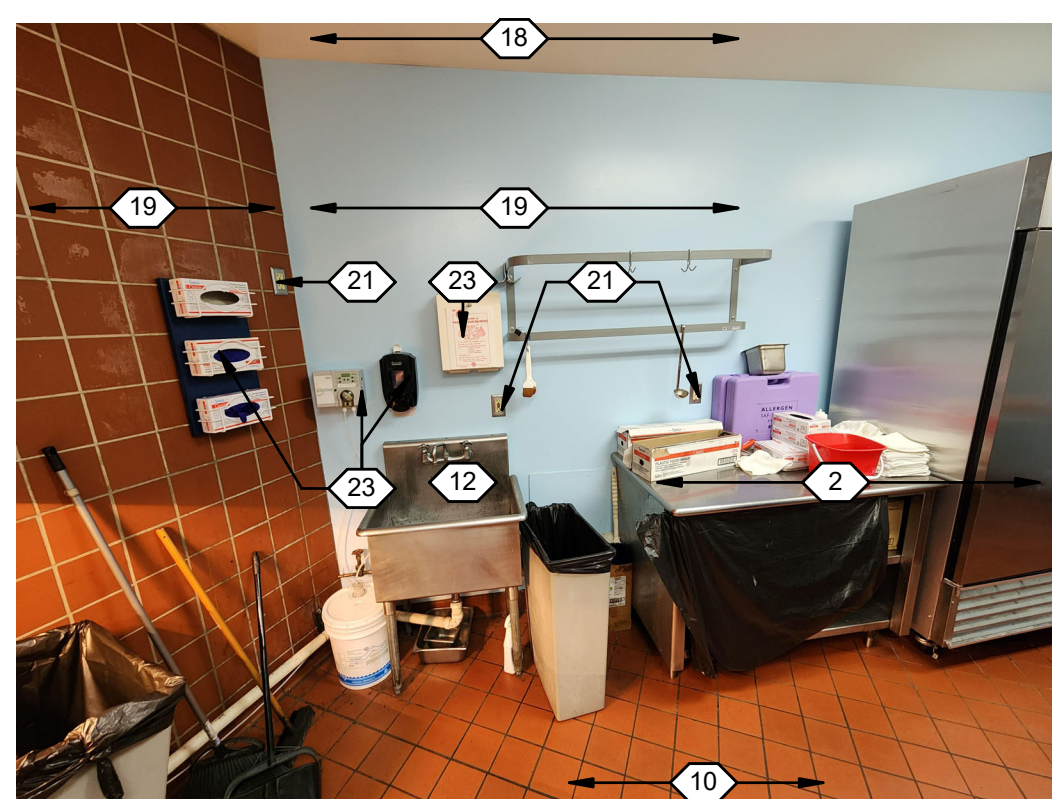
12 THE GRILL - SOUTH  
D2.1 NOT TO SCALE



13 THE GRILL - SOUTHWEST  
D2.1 NOT TO SCALE



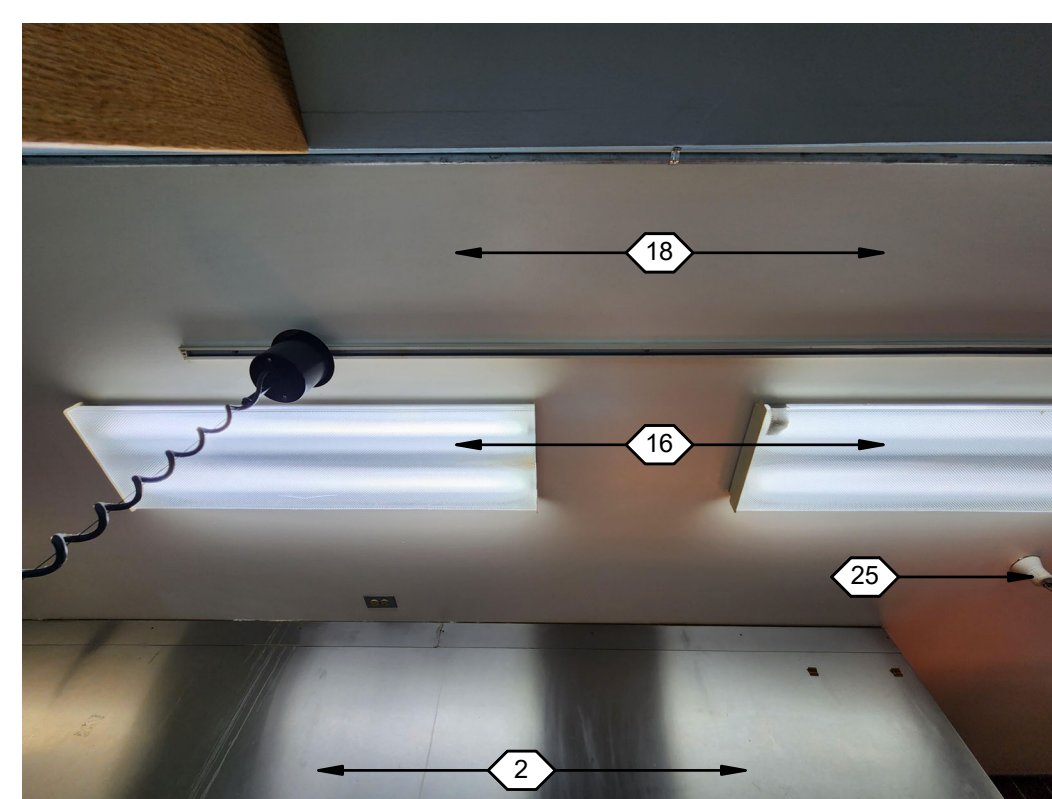
14 THE GRILL - NORTH  
D2.1 NOT TO SCALE



15 THE GRILL - NORTHEAST  
D2.1 NOT TO SCALE



16 THE GRILL - CEILING  
D2.1 NOT TO SCALE



17 THE GRILL - CEILING  
D2.1 NOT TO SCALE



**MSU / SUB / FOOD VENDOR RENOVATION PROJECT**



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Consultant #:  
SHEET TITLE  
DEMO PHOTOS

SHEET  
**D2.2**  
DATE  
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**GENERAL NOTES**

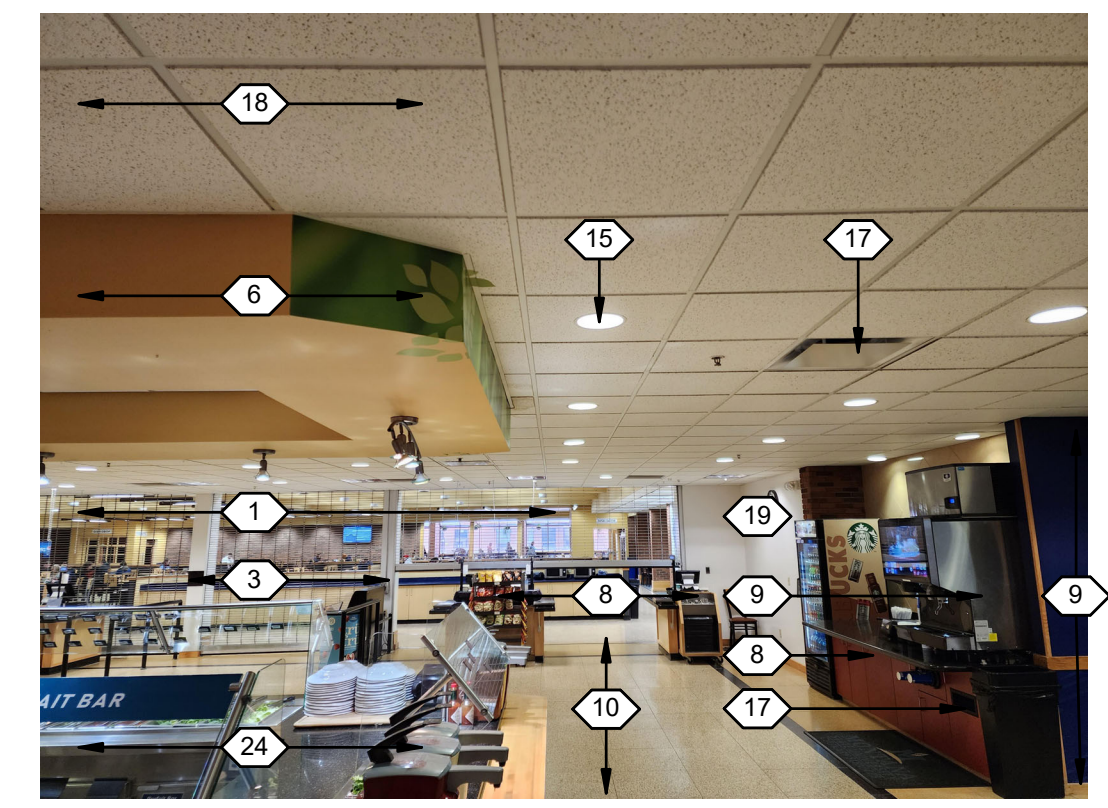
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- MOST AREAS OF THE PROJECT RECEIVE NEW CEILINGS
- ALL ABANDONED ELECTRICAL AND MECHANICAL SYSTEMS AND COMPONENTS ARE TO BE REMOVED.
- PATCH ALL HOLES IN FLOORS, WALLS, AND CEILINGS TO MATCH ADJACENT SURFACE FINISH.
- SEPARATE FIRE ALARM, FIRE SPRINKLER, & HOOD SUPPRESSION SYSTEM PLANS / SHOP DRAWINGS SHALL BE DESIGNED & SUBMITTED FOR REVIEW WITHIN 30 DAYS AFTER BUILDING PERMIT HAS BEEN ISSUED. THE DESIGN SHALL MEET 2021 IBC CHAPTER 9 & 2019 NFPA 13/13R, NFPA 12 STANDARDS. THESE ARE TO BE PERMITTED PRIOR TO FRAMING / MEP ROUGH-IN INSPECTIONS.
- FIRE SPRINKLER MODIFICATIONS ARE EXPECTED IN THIS PROJECT. SEE G.N. #9 ABOVE FOR DESIGN & SUBMITTAL REQUIREMENTS.
- SEE MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL M/E/P DEMOLITION SCOPE.
- (E) O.H. SECURITY GRILL WALL MOUNTED HAND CRANK WILL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

**DEMOLITION NOTES** NOTED THIS: (X)

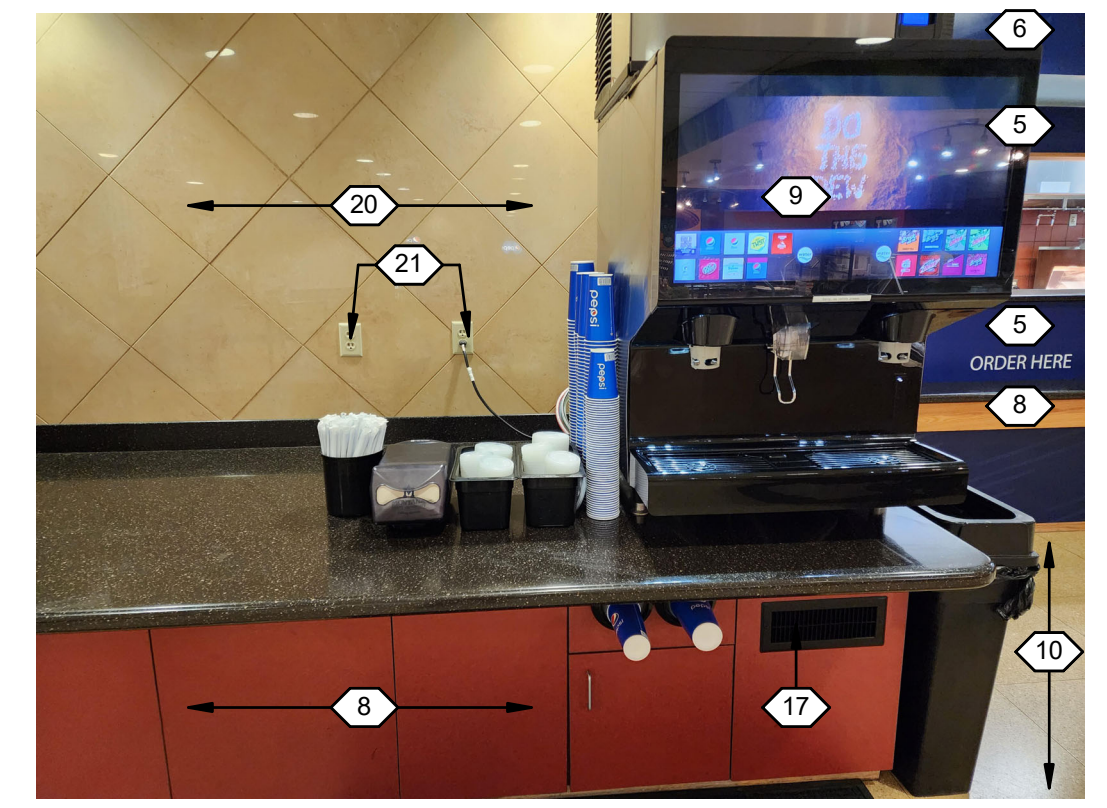
- (E) SECURITY GRILL TO REMAIN, PROTECT FROM DAMAGE.
- (E) KITCHEN EQUIPMENT TO BE REMOVED, COORDINATE WITH FOOD SERVICE.
- (E) COLUMN TO REMAIN, PROTECT FROM DAMAGE
- (E) STOREFRONT TO REMAIN, PROTECT FROM DAMAGE
- (E) WALL TO BE REMOVED, PREP FLOOR FOR NEW FINISH
- REMOVE (E) SOFFIT/BULKHEAD, COORDINATE WITH M.E.P. EXISTING UTILITIES TO REMAIN
- REMOVE (E) DOOR
- REMOVE (E) CASEWORK
- REMOVE (E) BEVERAGE TOWER
- (E) FLOORING & WALL BASE TO BE REMOVED, SEE ROOM FINISH SCHEDULE ON A2.1 - PREP FLOOR TO RECEIVE NEW FLOORING
- DEMO PANEL NF & ASSOCIATED FEEDERS - SEE ELECTRICAL DWGS
- REMOVE (E) PLUMBING FIXTURE & ASSOCIATED PLUMBING LINES - PROVIDE FLOOR INFILL TO MATCH ADJACENT FLOOR STRUCTURE
- NO WORK IN THIS ROOM
- MOVE OR REPLACE (E) SIGN, REFINISH WALL
- REMOVE (E) RECESSED LIGHT FIXTURE - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
- REMOVE (E) SURFACE MOUNTED LIGHT FIXTURE - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
- REMOVE (E) AIR DEVICES - SEE MECH. DWGS. FOR ADDITIONAL INFORMATION AND SCOPE
- (E) CEILING TO BE REMOVED, SEE DEMO CEILING PLAN ON SHEET D11.1
- REFINISH WALL SURFACE - SEE ROOM FINISH SCHEDULE ON A2.1 & INTERIOR ELEVATIONS ON 8.X SHEETS
- REMOVE (E) TILE WALL FINISH - PREP WALL FOR NEW FINISH - SEE INTERIOR ELEVATIONS & SHEET A2.1 FOR FINISH INFORMATION
- REMOVE (E) WALL MOUNTED ELECTRICAL DEVICES - SEE ELECTRICAL DWGS
- REMOVE (E) OLD ANSUL HOOD FIRE SUPPRESSION SYSTEM EQUIPMENT IN ENTIRETY - SEE MECH. DRAWINGS
- REMOVE (E) WALL MOUNTED ACCESSORIES & SUPPORTS AS REQUIRED
- (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO BE REMOVED
- (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN, SEE FLOOR PLANS ON SHEET A1.1
- (E) FIRE SPRINKLER HEADS TO REMAIN - SOME MINOR ADJUSTMENTS MAY BE REQUIRED FOR PROPER PLACEMENT INTO NEW CEILING TILE CEILING - SEE SHEET A11.1 & MECH. DWGS
- REMOVE (E) STAINLESS STEEL CORNER GUARD
- REMOVE (E) WOOD CHAIR RAIL



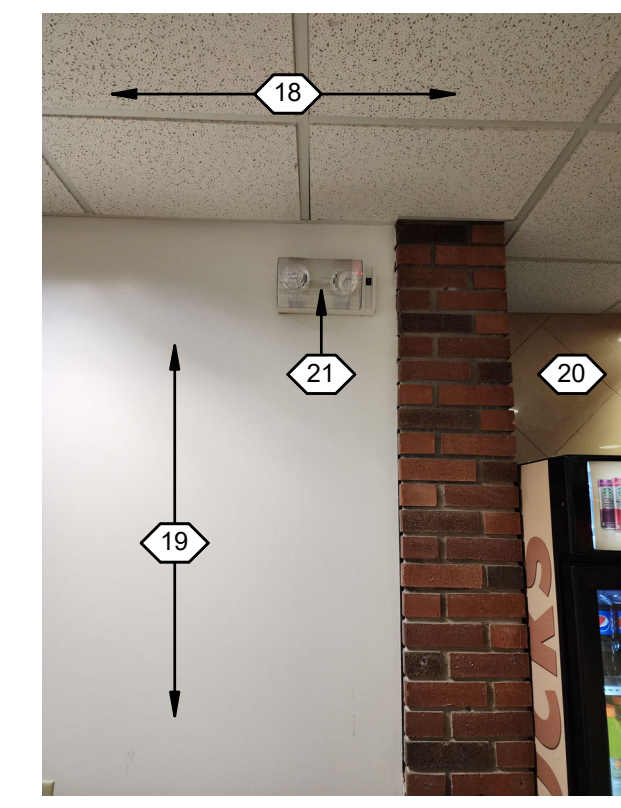
5 SALAD BAR CEILING - WEST  
NOT TO SCALE



4 SALAD BAR CEILING - WEST  
NOT TO SCALE



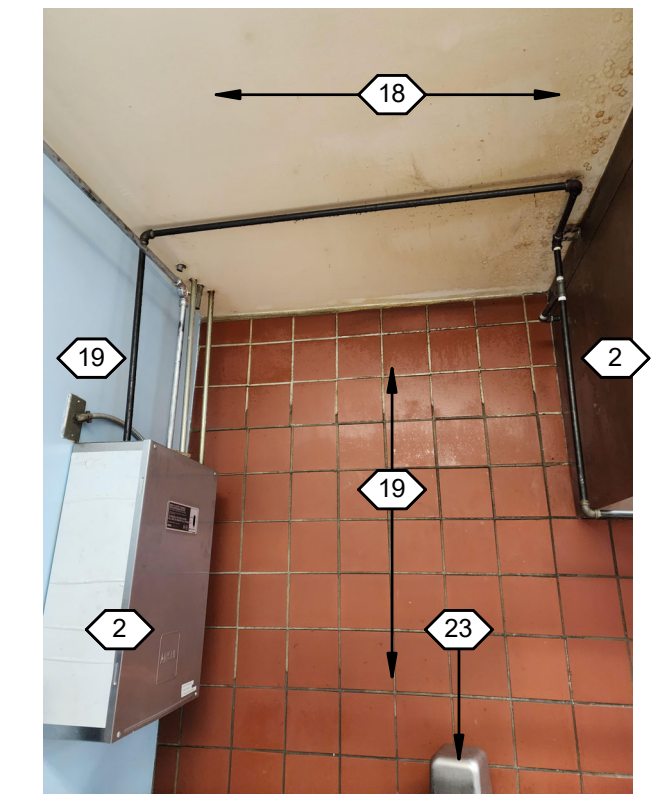
3 SODA STATION - NORTH  
NOT TO SCALE



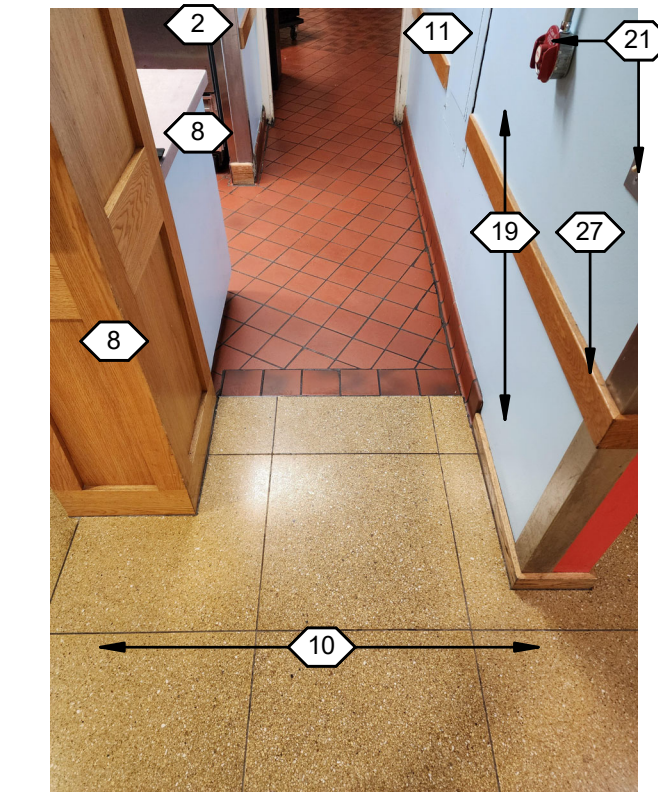
2 ENTRANCE - NORTH  
NOT TO SCALE



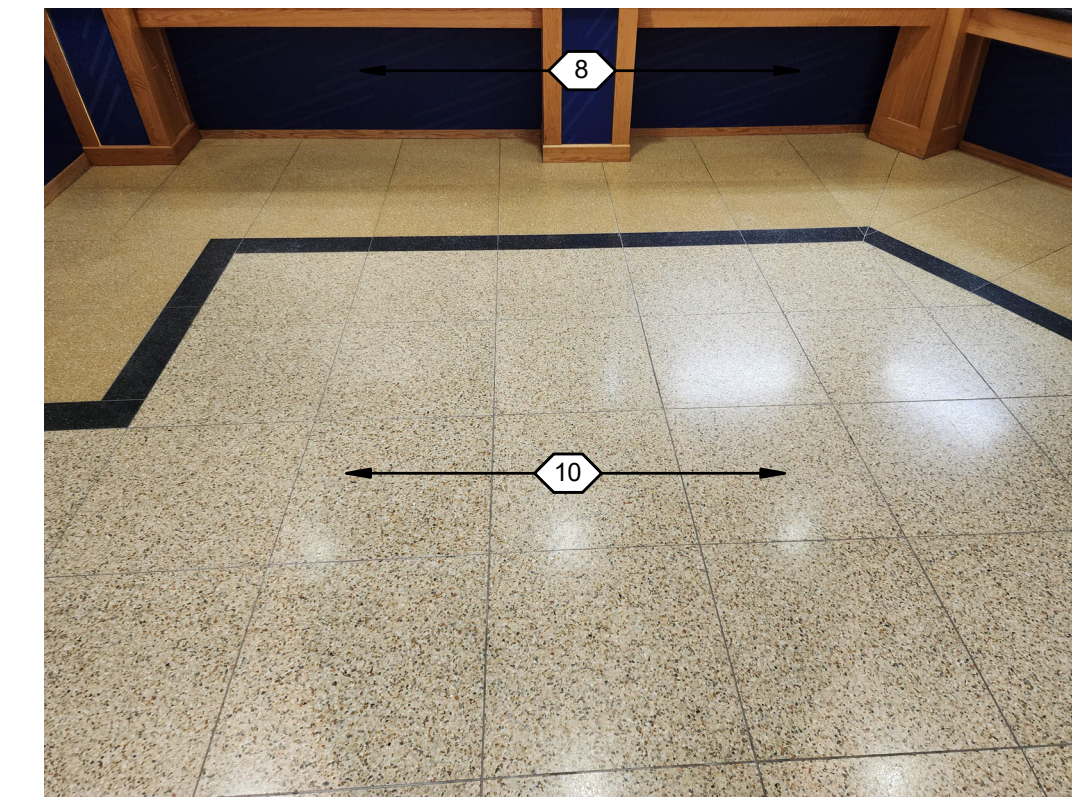
1 ENTRANCE - WEST  
NOT TO SCALE



10 THE GRILL - NORTH  
NOT TO SCALE



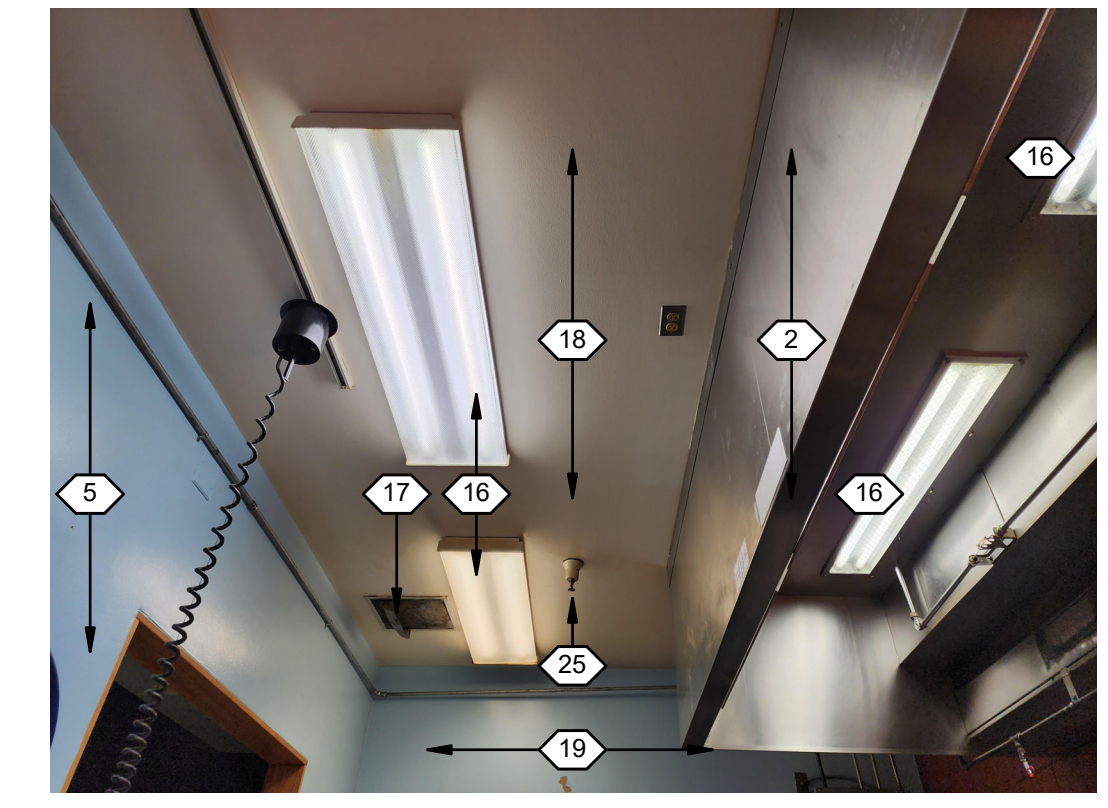
9 FLOORING TRANSITION - NORTHEAST  
NOT TO SCALE



8 FLOORING - NORTH  
NOT TO SCALE



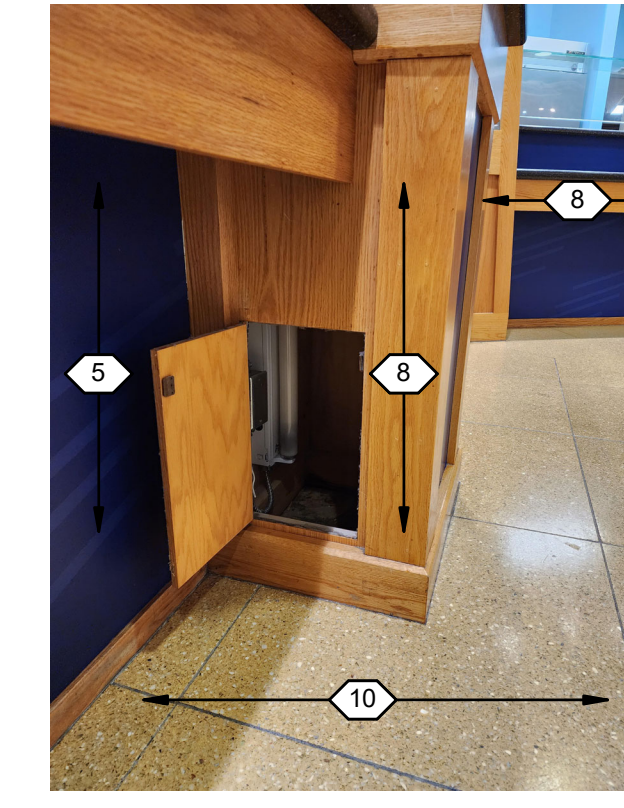
7 THE GRILL - CEILING AND HOOD  
NOT TO SCALE



6 THE GRILL - CEILING  
NOT TO SCALE



11 SECURITY GRILL - EAST  
NOT TO SCALE



11 THE GRILL - ILLUMINATED COLUMNS  
NOT TO SCALE



**GENERAL NOTES**

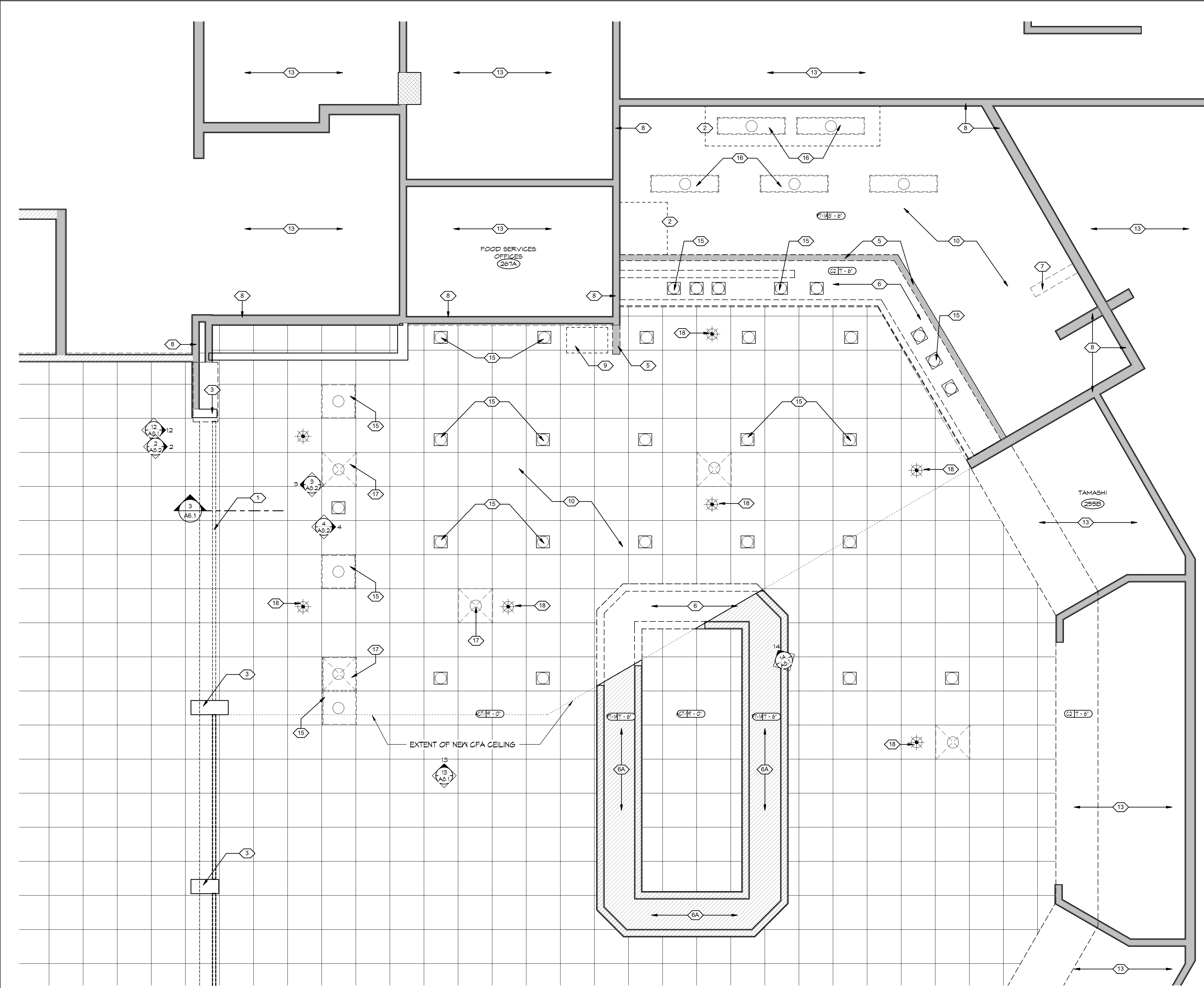
- ALL DIMENSIONS TO BE FIELD VERIFIED
- REMOVE ALL DEMOLISHED MATERIALS NOT TO BE REUSED FROM THE PROJECT SITE AND DISPOSE OF IT IN A SAFE AND LAWFUL MANNER - OWNER RETAINS FIRST RIGHT TO SALVAGEABLE ITEMS REMOVED.
- COORDINATE DEMOLITION WORK WITH ALL NEW WORK TO BE DONE. ADDITIONAL DEMOLITION, OTHER THAN THAT SHOWN ON THESE DRAWINGS MAY BE REQUIRED FOR COMPLETION OF NEW WORK.
- EXISTING MATERIALS TO REMAIN ARE TO BE PROTECTED DURING CONSTRUCTION. REPAIR ANY MATERIALS TO REMAIN DAMAGED BY CONSTRUCTION ACTIVITIES.
- SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- MOST AREAS OF THE PROJECT RECEIVE NEW CEILING
- ALL ABANDONED ELECTRICAL AND MECHANICAL SYSTEMS AND COMPONENTS ARE TO BE REMOVED.
- PATCH ALL HOLES IN FLOORS, WALLS, AND CEILINGS TO MATCH ADJACENT SURFACE FINISH.
- SEPARATE FIRE ALARM, FIRE SPRINKLER, & HOOD SUPPRESSION SYSTEM PLANS / SHOP DRAWINGS SHALL BE DESIGNED & SUBMITTED FOR REVIEW WITHIN 30 DAYS AFTER BUILDING PERMIT HAS BEEN ISSUED. THE DESIGN SHALL MEET 2021 IBC CHAPTER 9 & 2019 NFPA 13/13R, NFPA 12 STANDARDS. THESE ARE TO BE PERMITTED PRIOR TO FRAMING / MEP ROUGH-IN INSPECTIONS.
- FIRE SPRINKLER MODIFICATIONS ARE EXPECTED IN THIS PROJECT. SEE G.N. #9 ABOVE FOR DESIGN & SUBMITTAL REQUIREMENTS.
- SEE MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL M/E/P DEMOLITION SCOPE.
- (E) O.H. SECURITY GRILL, WALL MOUNTED HAND CRANK WILL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

**DEMOLITION NOTES**

- NOTED THIS: (X)
- (E) SECURITY GRILL TO REMAIN, PROTECT FROM DAMAGE.
  - (E) KITCHEN EQUIPMENT TO BE REMOVED, COORDINATE WITH M/E/P SUBCONTRACTORS - SEE M/E/P DRAWINGS FOR ADDITIONAL DEMO SCOPE
  - (E) COLUMN TO REMAIN, PROTECT FROM DAMAGE - PAINT
  - (E) STOREFRONT TO REMAIN, PROTECT FROM DAMAGE
  - (E) WALL TO BE REMOVED, PREP FLOOR FOR NEW FINISH
  - REMOVE PORTION OF (E) SOFFIT/BULKHEAD, CONFIRM WITH MEP. EXISTING UTILITIES TO REMAIN
  - PORTION OF (E) SOFFIT/BULKHEAD, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN - MAINTAIN UTILITIES TO ALL MECHANICAL & ELECTRICAL ITEMS THAT REMAIN
  - REMOVE (E) WALL PORTION - PREP. FLOOR & WALL TO RECEIVE NEW FINISH
  - (E) WALLS TO REMAIN - PREP FOR NEW FINISH
  - REMOVE (E) BEVERAGE TOWER
  - (E) CEILING TO BE REMOVED, PROVIDE CEILING SUPPORT AS NEEDED UNTIL REINSTALLATION - SEE ROOM FINISH SCHEDULE ON A2.1
  - REPLACE (E) CONTROL PANEL
  - REMOVE (E) PLUMBING FIXTURE
  - NO WORK IN THIS ROOM
  - MOVE OR REPLACE (E) SIGN, REFINISH WALL
  - REMOVE (E) LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND DEMO SCOPE
  - REMOVE (E) AIR DEVICES - SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND DEMO SCOPE
  - REMOVE (E) FIRE SPRINKLER HEAD - SEE PLUMBING DRAWINGS FOR ADDITIONAL SCOPE

**SYMBOL KEY**

- RECESSED LIGHT FIXTURE - LOCATED AS PER THIS SHEET - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION & SCOPE
- SURFACE MOUNTED OR SUSPENDED LIGHT FIXTURES - LOCATE AS PER THIS SHEET - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION
- RECESSED CAN LIGHT - LOCATED AS PER THIS SHEET. SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION & SCOPE
- AIR DEVICES - LOCATE AS PER THIS SHEET - SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- RETURN - SEE MECHANICAL DRAWINGS
- SUPPLY - SEE MECHANICAL DRAWINGS
- FIRE SPRINKLER - SEE MECHANICAL DRAWINGS



1 D11.1 DEMO REFLECTED CEILING PLAN  
3/8" = 1'-0"  
NORTH



**GENERAL NOTES**

- PARTITION DIMENSIONS ARE TYPICALLY FACE OF STUD.
- SEE ARCHITECTURAL DIMENSION PLANS AD1.X SERIES FOR DIMENSIONS AND WALL TYPES.
- SEE CODE REVIEW PLAN CR.1.1 FOR FIRE RATED WALL LOCATIONS.
- SEE A2.1 DRAWING FOR ROOM FINISH SCHEDULE AND DETAILS.
- SEE A4.X SERIES DRAWINGS FOR ROOF PLANS.
- SEE A8.X FOR ENLARGED FLOOR PLANS, INTERIOR ELEVATIONS AND DETAILS.
- SEE A10.X SERIES DRAWINGS FOR DOOR INFORMATION.
- SEE A11.X SERIES DRAWINGS FOR REFLECTED CEILING PLANS.
- PROVIDE TEMPORARY BARRICADE DURING CONSTRUCTION AS NECESSARY BY LOCAL ORDINANCES, COORDINATE WITH PROJECT AND FACILITIES MANAGERS.
- SOFFITS AND SUSPENDED CEILING SHALL BE SECURED TO STRUCTURAL FRAMING ONLY; SEE DETAILS.
- FLOOR DRAINS REQUIRED IN ALL KITCHENS, FOOD PREPARATION AREAS, ANY OTHER LOCATIONS WHERE WATER IS USED.
- PROTECT AND MAINTAIN ACCESS TO ANY EXISTING HVAC, ELECTRICAL AND PLUMBING SYSTEMS INCLUDING, BUT NOT LIMITED TO, CLEANOUTS, VALVES, DAMPERS, JUNCTION BOXES, SMOKE DETECTORS, ETC.
- ALL TRANSITIONS BETWEEN DISSIMILAR FLOOR MATERIALS MUST BE FLUSH AND LEVEL.
- CONTRACTORS IS REQUIRED TO PURCHASE CAMPUS PARKING PERMITS THROUGH THE UNIVERSITY POLICE.

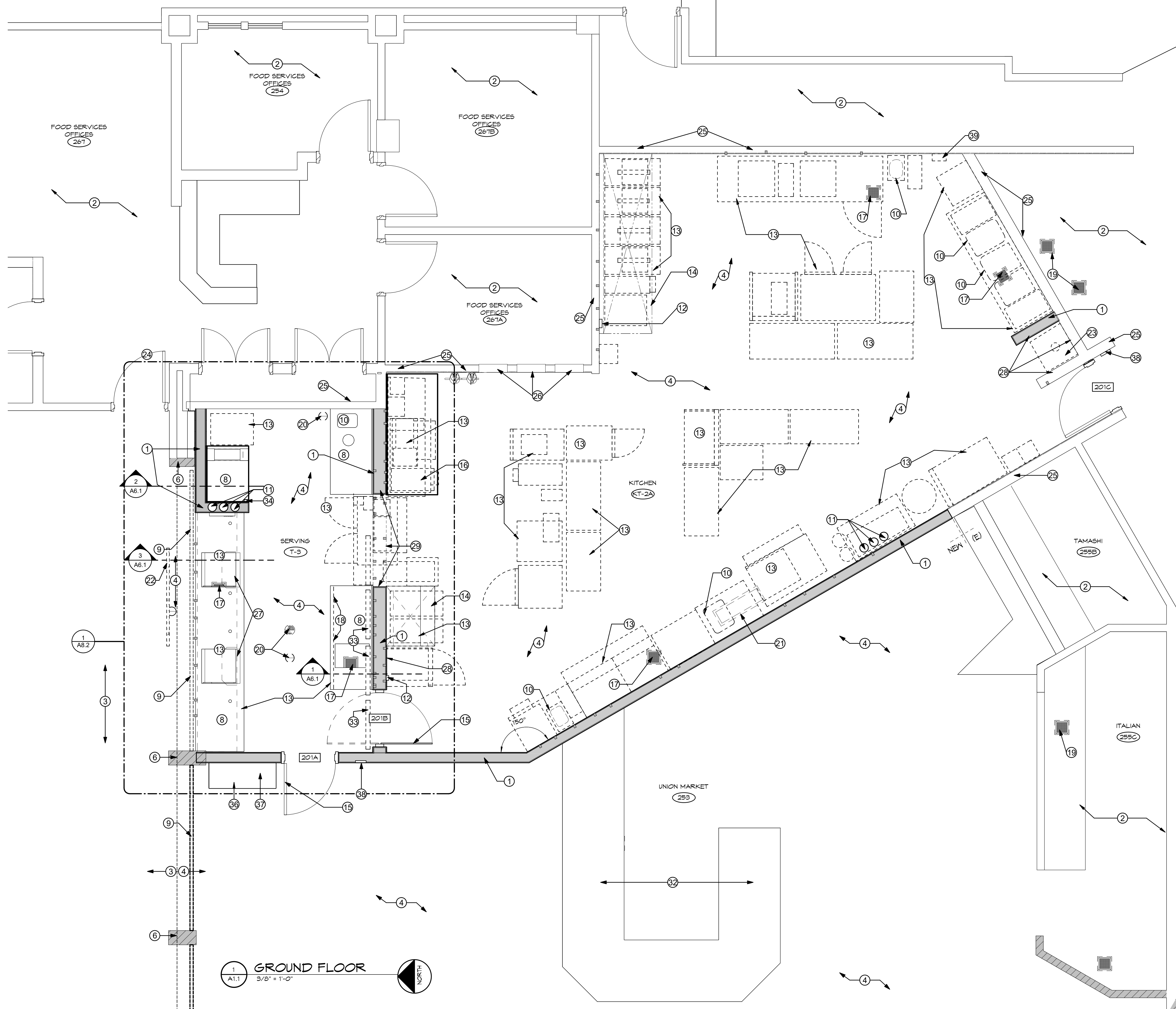
**KEYED NOTES**

NOTED THIS: (X)

- NEW METAL STUD FRAMED WALL, SEE AD1.1 FOR WALL TYPES
- NO WORK IN THIS ROOM- PATCH & FINISH ANY WALL FROM DEMO AS NECESSARY
- EXISTING FLOORING TO REMAIN - PROTECT FROM DAMAGE
- NEW FLOOR FINISH - SEE ROOM FINISH SCHEDULE ON A2.1 & SPECS.
- NEW WALL MOUNTED ELECTRICAL DEVICE - SEE ELECTRICAL DRAWINGS
- EXISTING STRUCTURAL COLUMN TO REMAIN - PROTECT FROM DAMAGE
- (E) WALL MOUNTED ELECTRICAL DEVICE TO REMAIN - SEE ELECTRICAL DRAWINGS
- SOLID SURFACE COUNTERTOP WITH P-LAM BASE CASEWORK - SEE DETAILS ON SHEET A8.2 - CONTRACTOR FURNISH CONTRACTOR INSTALL
- EXISTING SECURITY GRILL TO REMAIN - PROTECT FROM DAMAGE
- NEW PLUMBING FIXTURE, SEE PLUMBING DRAWINGS
- NEW 4" PVC BEVERAGE CHASES - ROUTE FROM 6" BELOW CEILING & THROUGH THE WALL, DOWN TO BELOW THE CASEWORK COUNTER TOP - MSU VENDOR TO PROVIDE SHOP DRAWINGS FOR COORDINATION
- NEW ANSUL PULL LOCATIONS FOR HOODS, SEE MECHANICAL AND ELECTRICAL DRAWINGS
- KITCHEN EQUIPMENT - O.F.C.I. - GC TO PROVIDE ALL REQUIRED MECHANICAL & ELECTRICAL INFRASTRUCTURE AS REQUIRED
- NEW KITCHEN HOOD - ALIGN WITH EDGE OF WALL OR PASS-THRU - O.F.C.I. - SEE MECH. DWGS
- NEW DOOR, SEE A10.1 FOR DOOR SCHEDULE
- STAINLESS STEEL COUNTERTOP
- NEW FLOOR SINK - SEE PLUMBING DRAWINGS
- PRESSURE TREATED CURB BELOW - SECURE TO EXISTING SUB FLOOR
- (E) FLOOR SINK TO REMAIN - SEE PLUMBING DRAWINGS
- NEW FLOOR DRAIN - SEE PLUMBING DRAWINGS
- NEW FLOOR RECEPTOR - SEE PLUMBING DRAWINGS
- SIGNAGE - SEE SPECS
- NEW MOP SINK - SEE PLUMBING DRAWINGS
- (E) DOOR TO REMAIN - PROTECT FROM DAMAGE
- (E) WALLS TO REMAIN - SEE FINISH SCHEDULE
- WALL MOUNTED ELECTRICAL PANELS - SEE ELECTRICAL DRAWINGS
- POINT OF SALE (POS) REGISTERS - BY OWNER - N.I.C
- STAINLESS STEEL WALL PANELS - SEE INTERIOR ELEVATIONS ON SHEET A8.1
- STAINLESS STEEL CASED OPENING HEAD & JAMB
- PORTION OF (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN - PROTECT REMAINING FINISHES
- DIGITAL MENU BOARDS - OWNER FURNISH VENDOR (CINEPLEX) INSTALL - COORDINATE REQUIRED ELECTRIC WITH ELECTRICAL DRAWINGS
- RELOCATED CONTROLS FOR THE EXISTING O.H. SECURITY GRILL
- CEILING MOUNTED "PICK UP" SIGN - OWNER FURNISHED, OWNER INSTALLED - SEE SPECS
- "PICK UP" SHELVING RACK - BY OWNER
- ACCESS CONTROL DEVICE - SEE ELECTRICAL DRAWINGS & DOOR HARDWARE SPECIFICATION SECTION 08 71 00

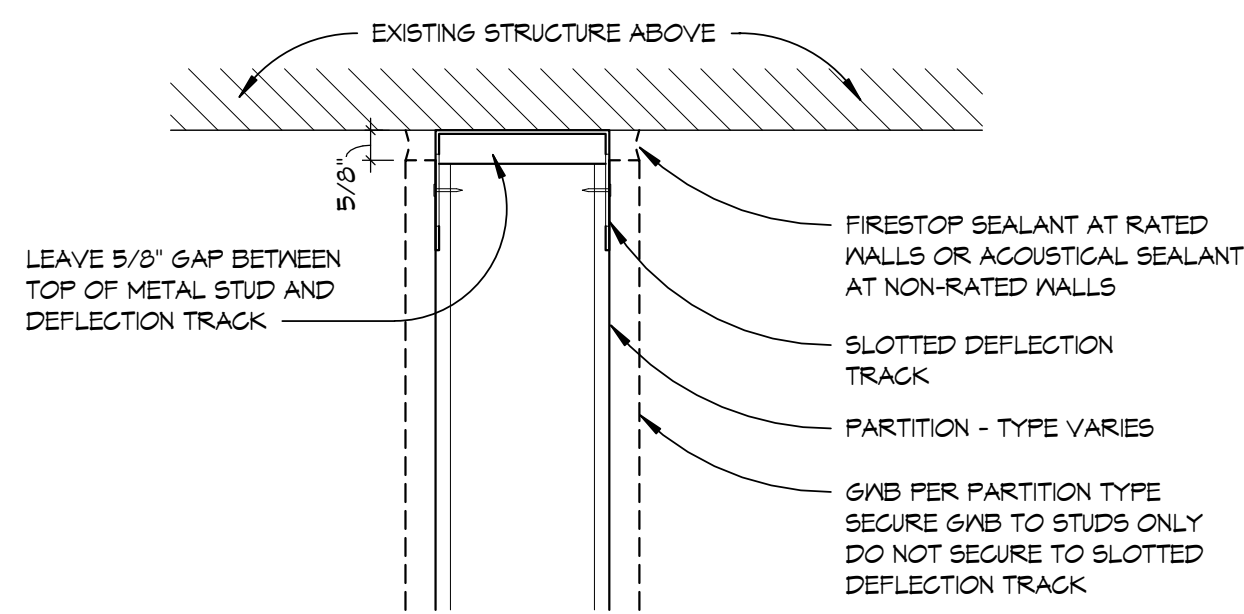
**SYMBOL KEY:**

- ELECTRICAL OUTLET, SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- EXISTING WALL
- NEW WALL

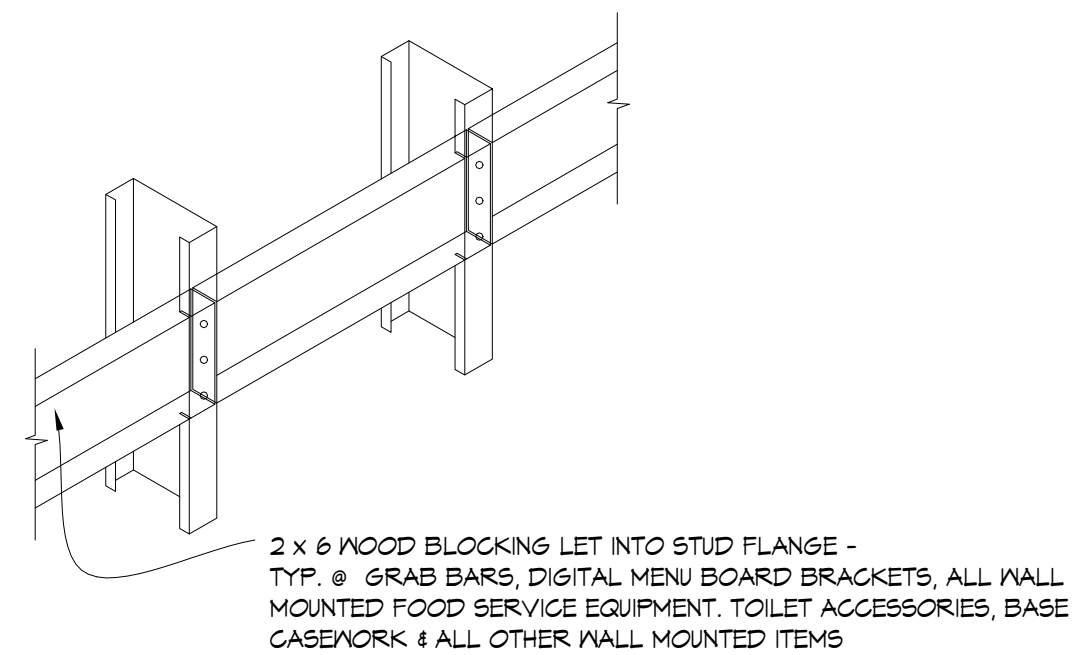


**GROUND FLOOR**  
3/8" = 1'-0"  
NORTH

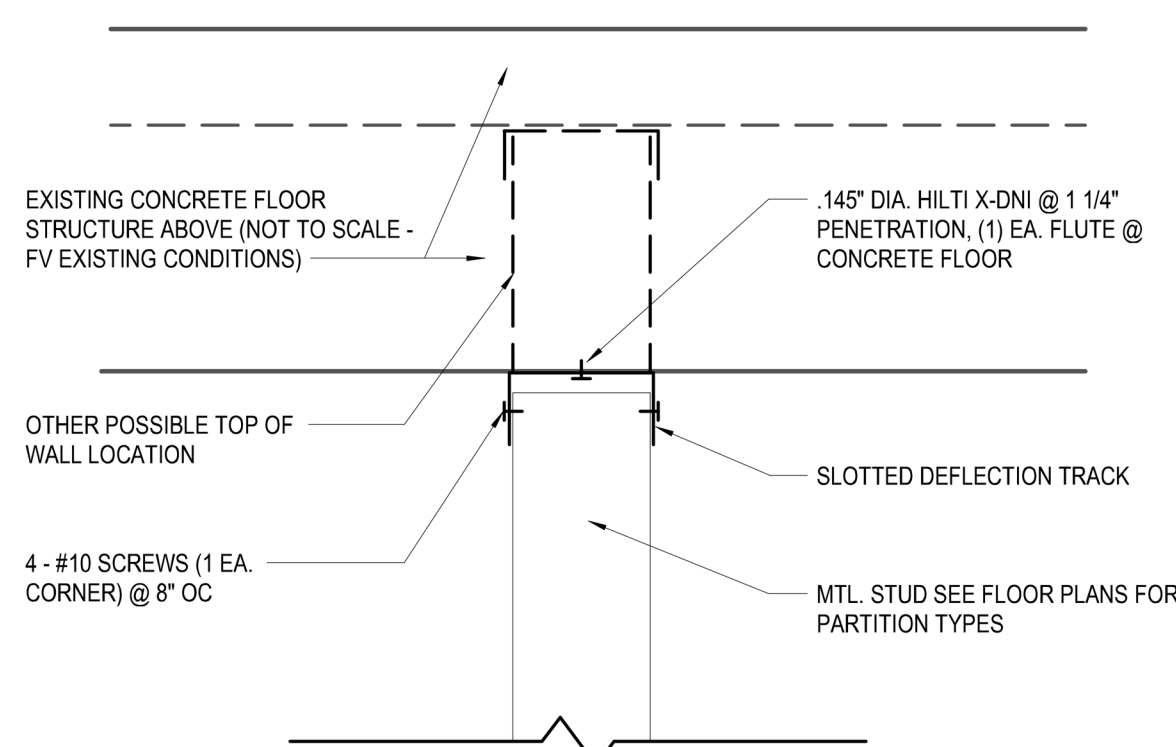




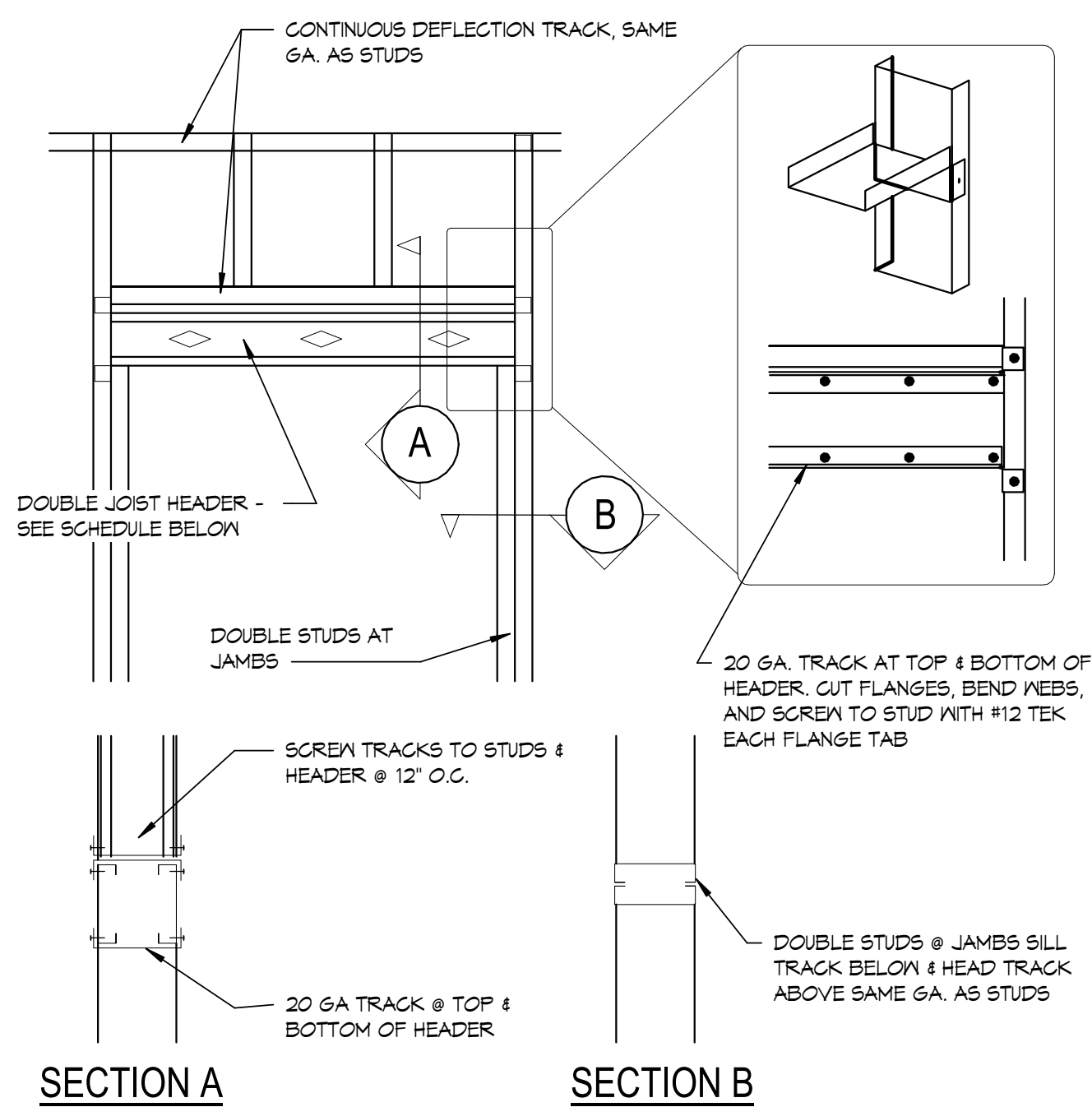
2 TOP OF WALL DEFLECTION TRACK  
A2.1 3" = 1'-0"



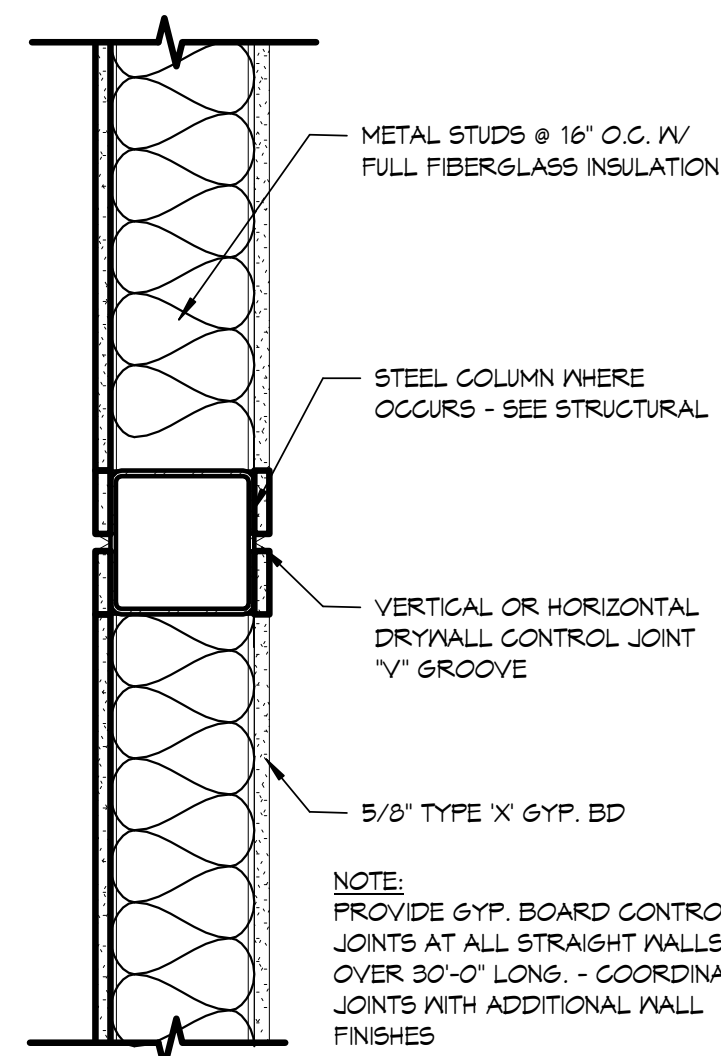
6 BACKING DETAIL  
A2.1 1" = 1'-0"



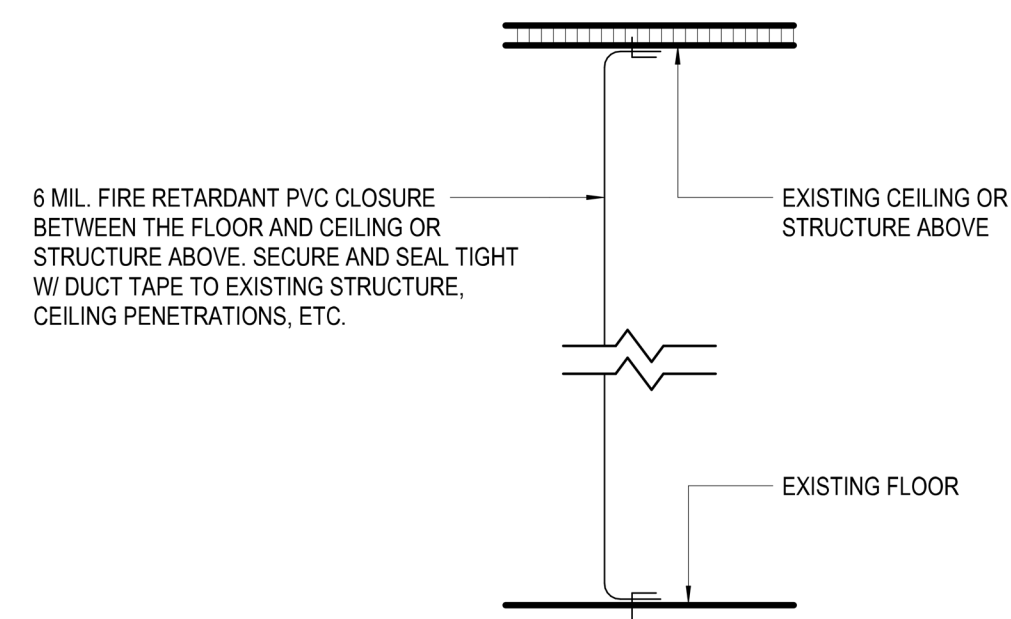
8 DETAIL OF TRACK PERPENDICULAR TO B.O. STRUCTURE  
A2.1 12" = 1'-0"



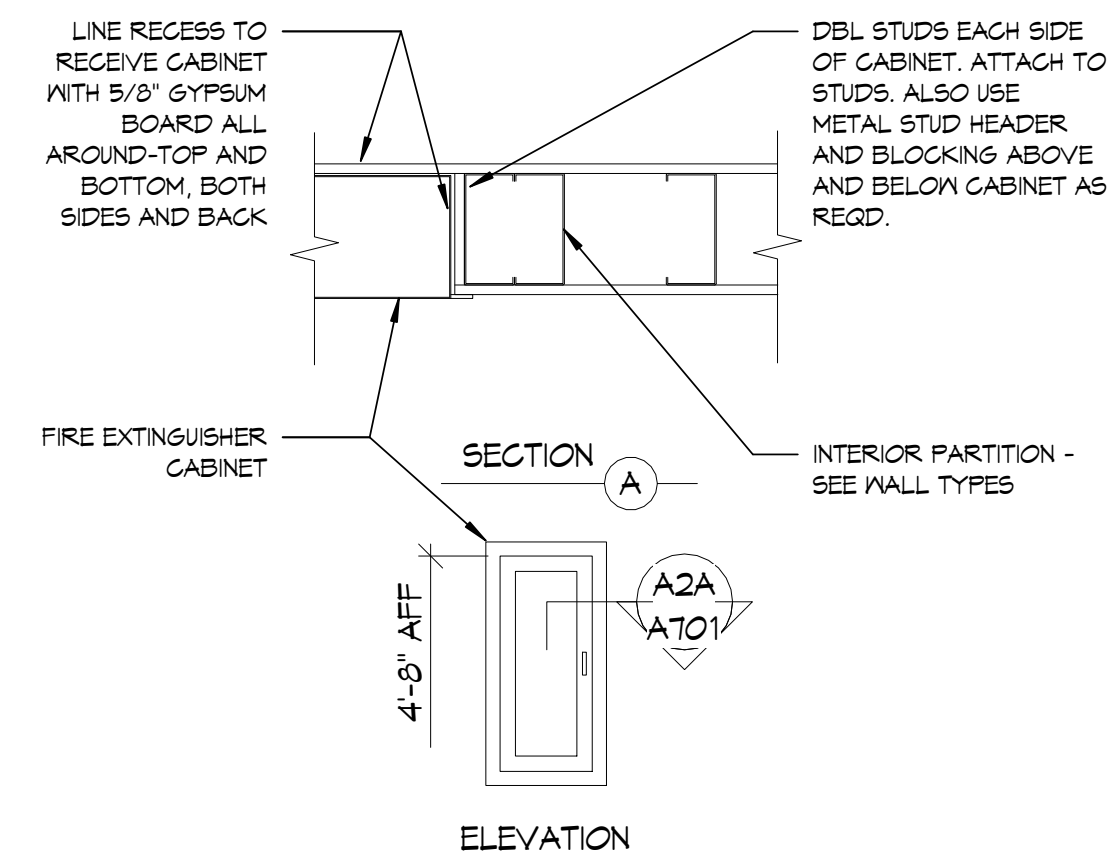
5 TYPICAL STUD DETAILS  
A2.1 1 1/2" = 1'-0"



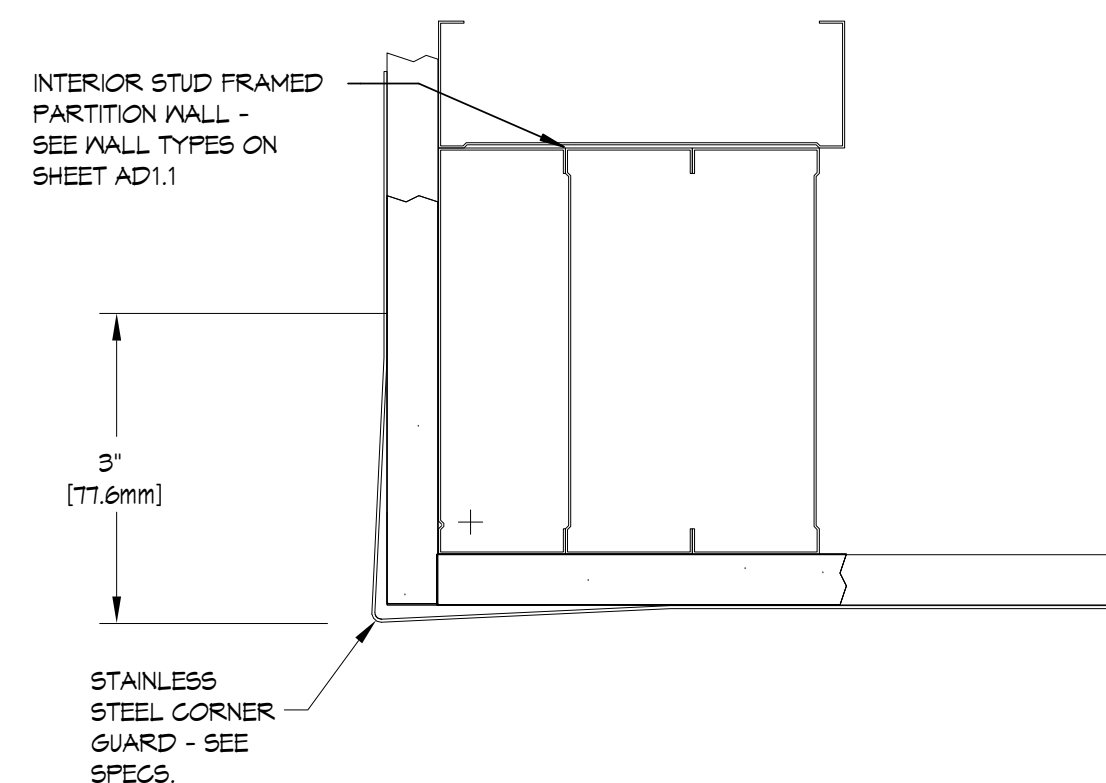
1 GYP. BD. CTRL. JOINT  
A2.1 1 1/2" = 1'-0"



7 DUST PARTITION - PROTECTION  
A2.1 12" = 1'-0"



4 CLASS K PORTABLE FIRE EXTINGUISHER  
A2.1 3" = 1'-0"



3 CORNER GUARD DETAIL  
A2.1 3" = 1'-0"

MAIN FLOOR ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS			CEILING	REMARKS
				NORTH	EAST	SOUTH		
KT-2A	KITCHEN	KT-2A	KT-2 B	S-1/FRP-2 P-2	S-1/FRP-2 FRP-2	S-1/FRP-2 S-1/FRP-2	ACT-1	
T-3	SERVING	T-3	T-4	T-1A	T-2/MD-1	T-1A T-1A	ACT-1/PT-1A	

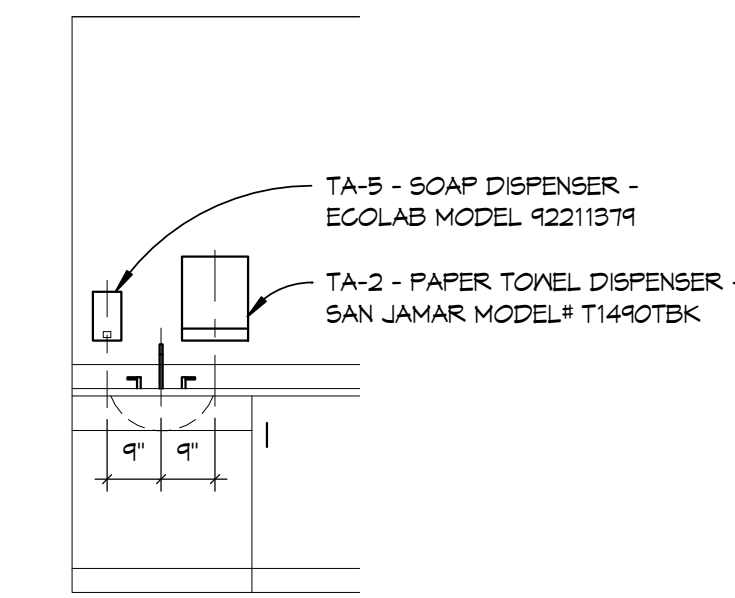
GENERAL WALL & FINISH NOTES

- PROVIDE IN-WALL BLOCKING/BACKING AND 16 GAUGE STUDS FOR WALL MOUNTED ITEMS - SEE DETAIL 6/A2.1. PROVIDE CASING BEAD & CAULK WHERE G.V.B. BUTTS AGAINST DISSIMILAR MATERIAL.
- ADDITIONAL FRAMING AND BLOCKING IS REQUIRED FOR THE INSTALLATION OF VARIOUS MECHANICAL, & ELECTRICAL ITEMS, PANELS, ETC.
- PROVIDE DESIGNATED BASE AROUND BOTTOM OF CABINETS, UNLESS NOTED OTHERWISE.
- SEE A11.1 SERIES FOR REFLECTED CEILING PLANS, CEILING TYPES, AND SPECIAL CEILING FEATURES.
- SEE AS-X SERIES FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.
- PROVIDE FLOOR FILLER AS REQUIRED TO PREPARE SLABS FOR SCHEDULED FINISH FLOORING.
- BRACE ALL SOFFIT WALLS WITH 4" METAL STUDS, 45 DEGREE DIAGONAL TO STRUCTURE @ 48" O.C. MAX (ALT. DIRECTIONS).
- PROVIDE MOISTURE RESISTANT G.V.B. @ ALL NET AREAS.
- PROVIDE BACKER BOARD BEHIND ALL TILE WALL FINISHES - DELETE G.V.B.
- PROVIDE FLOORING TRANSITIONS BENEATH CENTER OF DOOR IN CLOSED POSITION AND AT ALL FLOOR TRANSITION LOCATIONS.
- SEE INTERIOR ELEVATIONS FOR LOCATIONS OF WALL TILE.
- FIRE SEAL ALL PENETRATIONS THROUGH NEW/EXISTING FIRE RATED WALLS. SEE SPECIFICATION SECTION 01 84 13.
- AT ACOUSTIC PARTITIONS (THOSE WITH SOUND BATTS) APPLY ACOUSTIC SEALANT AT ALL PENETRATIONS AND SET WALL G.V.B. IN SEALANT AT FLOOR/WALL & STRUCTURE JUNCTION.
- ALL INTERIOR PARTITIONS GO FULL HEIGHT TO BOTTOM OF STRUCTURE. SEE TYPICAL PARTITION DETAIL 240/A2.1.
- ALL OPENINGS IN PARTITIONS (DOORS, WINDOWS, DUCTS, GRILLES, ETC.) ARE TO RECEIVE BOXED HEADERS PER DETAIL 5/A2.1 & FULL PERIMETER FRAMING.
- PROVIDE BOXED HEADERS AND FULL PERIMETER FRAMING FOR MECHANICAL GRILLES IN WALLS. SEE MECHANICAL DRAWINGS FOR LOCATIONS. SEE DETAIL 5/A2.1.
- PROVIDE IN-WALL BLOCKING/BACKING AND 16 GAUGE STUDS FOR WALL MOUNTED ITEMS - SEE DETAIL 6/A2.1
- ALL CASEWORK TO RECEIVE THE SAME WALL BASE MATERIAL AS SCHEDULED FOR ROOM.
- ALL EXPOSED CONDUIT AND PIPE TO BE PAINTED TO MATCH ADJACENT WALL OR CEILING SURFACE.
- ALL EXPOSED STRUCTURE AND WALL SURFACES ARE TO BE CLEANED AND PREPPED PRIOR TO RECEIVING NEW FINISH.
- PROVIDE SLOPE IN SLAB (2% MAX (WHERE POSSIBLE)) TO FLOOR DRAINS.
- START WOOD INSTALLATION AT BOTTOM OF SOFFIT OR TOP OF BASE TILE AS APPLICABLE.
- TILE SETTING METHODS TO BE PER THE LATEST PRINTED EDITION OF "HANDBOOK FOR CERAMIC TILE INSTALLATION" AS PUBLISHED BY THE TILE COUNCIL OF AMERICA, INC.
- START TILE INSTALLATION AT TOP OF BASE TILE.
- WHERE BASE TILE IS UNDER MILLWORK OR HAS TILE INSTALLED ABOVE; BULLNOSE IS TO BE REMOVED SO THAT TILE CAN BE INSTALLED WITH TOP OF CUT TILE AT 5 1/2" ABOVE FINISHED CONCRETE SLAB.
- TILE TO EXTEND BEHIND MILLWORK.
- INSTALL TILE (T-6) PRIOR TO ANY ADJACENT TILE.
- GENERAL CONTRACTOR IS TO ENSURE THAT SHOP DRAWINGS ARE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF PRODUCTION FOR THE FOLLOWING ITEMS: ALLOW (5) BUSINESS DAYS FOR REVIEW.
  - A. MILLWORK
  - B. ELECTRICAL ITEMS
    - a. ELECTRICAL DISCONNECT SWITCHES
    - b. TRANSFORMERS
    - c. PANELS AND SUB-PANELS
    - d. DISTRIBUTION
  - C. KITCHEN EXHAUST SYSTEMS/HOODS

FINISH SCHEDULE LEGEND

<b>FLOOR FINISHES:</b>		<b>BASE</b>	
G-1	FLOOR TILE GROUT	KT-2B	KITCHEN QUARRY TILE COVE BASE
G-3	FLOOR TILE GROUP	T-4	PORCELAIN TILE COVE BASE
KT-2A	KITCHEN QUARRY TILE		
T-3	PORCELAIN TILE		
<b>WALL FINISHES:</b>		<b>CEILING</b>	
FRP-2	FRP WALL PANELS @ KITCHEN	ACT-1	ACOUSTICAL CEILING PANEL AND GRID
G-2	WALL TILE GROUT	PT-1A	INTERIOR CEILING PAINT
PT-1B	WALL PAINT		
S-1	STAINLESS STEEL WALL PANEL		
T-1A	SUBWAY WALL TILE		
T-2	STAINLESS STEEL WALL TILE		
WD-1	PREFINISHED WHITE OAK WOOD BOARDS		
EX	MATCH BUILDING STANDARD, PATCH AND REPAIR TO LIKE NEW IF EXISTING		
		<b>MISCELLANEOUS FINISHES</b>	
		PL-1	PLASTIC LAMINATE
		PL-3	PLASTIC LAMINATE
		S-1	STAINLESS STEEL WALL PANELS
		SS-1	SOLID SURFACE
		SS-4	SOLID SURFACE
		<b>TRIM</b>	
		CG-3A	CORNER GUARD (KITCHEN ONLY)
		CG-3B	WALL END CAP

TOILET ACCESSORIES NOTED THIS: X



TYPICAL SOAP & PAPER TOWEL DISPENSERS @ SINKS



MSU-  
MONTANA STATE  
UNIVERSITY  
BOZEMAN, MONTANA  
PHONE: 406.994.5413

MSU / SUB / FOOD  
VENDOR RENOVATION  
PROJECT



DRAWN BY:

REVIEWED BY:

REV. DESCRIPTION DATE

△		
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PPA#22-0056

A/E#00-00-00

Consultant #:

SHEET TITLE

ROOM FINISH

SCHEDULE

SHEET


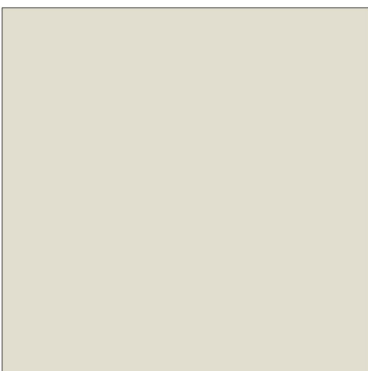

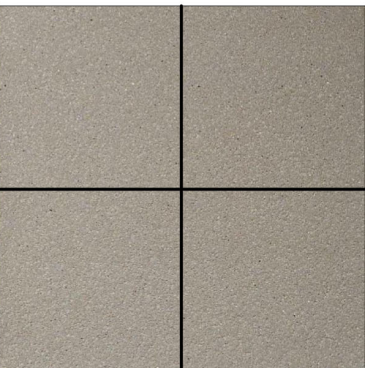


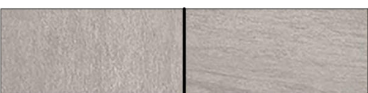

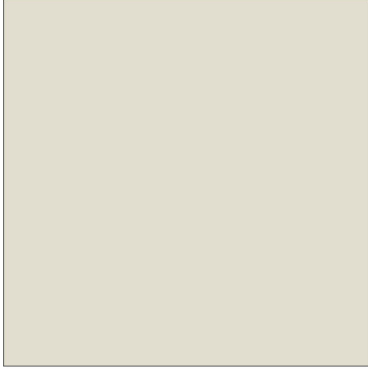
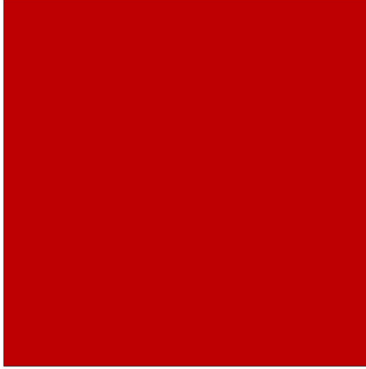

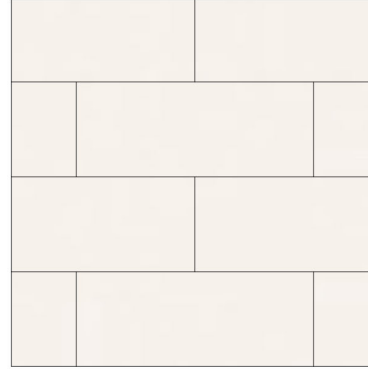

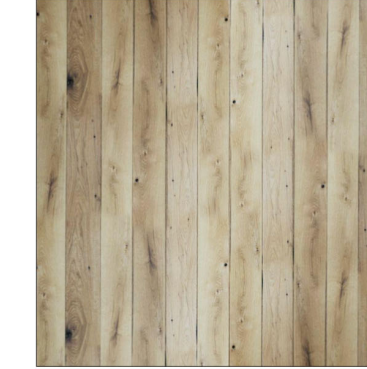

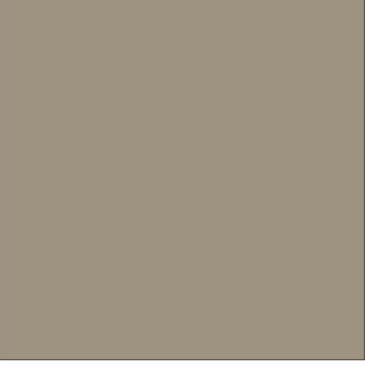



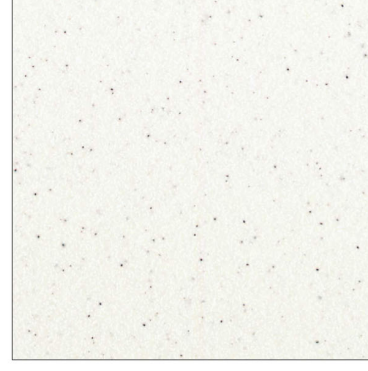
A2.1

DATE

16.06.2023



MATERIAL SCHEDULE							
MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	SIZE	NOTE
EX.	EXISTING FINISH						EXISTING FINISH TO REMAIN. PROTECT DURING DEMOLITION AND CONSTRUCTION
<b>01 CEILING FINISHES</b>							
ACT-1	ACOUSTICAL CEILING PANEL AND GRID	CERTAINTEED CEILINGS	PERFORMA VINYLROCK	1142-CRF-1	WHITE	24" x 24" x 1/2"	GRID STANDARD 15/16" SQUARE LAY-IN GRID, WHITE
PT-1A	INTERIOR CEILING PAINT	SHERWIN WILLIAMS	PRO MAR 200 ZERO VOC PAINT	SW-7011	NATURAL CHOICE		FINISH: FLAT (SEMI-GLOSS ON HORIZONTAL SURFACES) - FURR DOWN FOH
<b>02 FLOOR FINISHES</b>							
G-1	FLOOR TILE GROUT	MAPEI	ULTRA COLOR GROUT		47 / CHARCOAL		USED WITH PORCELAIN TILE
G-3	FLOOR TILE GROUT	MAPEI	KERAPoxy IEG CQ		47 / CHARCOAL		USED WITH QUARRY TILE, GC TO INSTALL WITH STANDARD THINSET MORTAR
KT-2A	KITCHEN QUARRY TILE	DAL TILE	GRAY	507	GRAY	8" X 8"	JOINT WIDTH: 3/8" W THINSET MORTAR; 6"X6" ACCEPTABLE SIZE ALTERNATE WHEN NECESSARY
T-3	PORCELAIN TILE	DAL TILE	LAVA LIGHT GREY		LAVA LIGHT GREY	12" X 12"	JOINT WIDTH: 3/16"; INSTALL TILE AT 45 DEGREE OR 90 DEGREE; COORDINATE WITH FINISH PLAN
<b>03 WALL BASE FINISHES</b>							
KT-2B	KITCHEN QUARRY TILE COVE BASE	DAL TILE	GRAY	507	GRAY	6" X 8"	JOINT WIDTH: 3/8" WITH THINSET MORTAR; WHEN TILE IS UNDER MILLWORK CABINET OR BELOW TILE - REMOVE BULLNOSE
T-4	PORCELAIN TILE COVE BASE	DAL TILE	LAVA LIGHT GREY		LAVA LIGHT GREY	6" X 12" COVE	JOINT WIDTH: 3/16"
<b>04 WALL FINISHES</b>							
FRP-2	FRP WALL PANELS @ KITCHEN	MARLITE	STANDARD FRP	P-199	BRIGHT WHITE	.090" THICK X 4 X 10 PANELS	PROVIDE MARLITE CORNER GUARDS AT ALL OUTSIDE CORNERS IN KITCHEN AREAS, U.N.O.
G-2	WALL TILE GROUT	MAPEI	KERACOLOR U WITH GROUT MAXIMIZER LATEX ADDITIVE	UNSANDED	09/GRAY		
PT-1B	PRIMARY WALL PAINT	SHERWIN WILLIAMS	PRO MAR 200 ZERO VOC PAINT	SW-7011	NATURAL CHOICE		FINISH: EGGSHELL
S-1	STAINLESS STEEL WALL PANEL	CUSTOM	18 GAUGE STAINLESS STEEL WALL PANEL		GRADE 304		
T-1A	SUBWAY WALL TILE	DAL TILE	CMC BONE			4-1/4" X 8-1/2"	GROUT: G2, JOINT WIDTH: 1/8"
T-2	STAINLESS STEEL WALL TILE	DAL TILE			VOGUE STAINLESS STEEL	1" X 2" BRICK, 12 X 12 SHEET	GROUT: G2
WD-1	PREFINISHED WHITE OAK WOOD BOARDS	SKYLAR MORGAN	5" W NATURAL WHITE OAK BOARDS, CUSTOM CHARACTER GRADE				FINISH: OILED OR WATERLOX WITH BLACK EPOXY FILLED KNOTHOLES
<b>05 MISCELLANEOUS FINISHES</b>							
PL-1	PLASTIC LAMINATE	WILSONART	CONTRACT COLLECTION	D-96	SHADOW		FINISH: MATTE #60
PL-3	PLASTIC LAMINATE	WILSONART	CONTRACT COLLECTION	4878	PEWTER MESH		
S-1	STAINLESS STEEL WALL PANELS		18 GAUGE STAINLESS STEEL PANELS, BRUSHED #4 MATTE FINISH	GRADE 430			LOCATED BEHIND KITCHEN EXHAUST HOODS, PREP SINK, AND WASH SINK, RE: ELEVATIONS
SS-1	SOLID SURFACE	AVONITE	FOUNDATIONS MINERALS COLLECTION	F1-8901	ALTITUDE		SERVING COUNTERTOP, REFER TO DRAWINGS
SS-4	SOLID SURFACE	AVONITE	FOUNDATIONS MINERALS COLLECTION	F1-6065	ARTICA		BACK LINE COUNTERTOP, REFER TO DRAWINGS
<b>05 TRIM</b>							
CG-3A	CORNER GUARD (KITCHEN ONLY)	CUSTOM	STAINLESS STEEL CORNER GUARD; 2" X 2" LEGS		STAINLESS STEEL		
CG-3B	WALL END CAP	CUSTOM	STAINLESS STEEL CORNER GUARD; WALL CAP WITH 2" LEG AT ADJACENT WALL FACES		STAINLESS STEEL		

<b>01 CEILING</b>								
	FINISH TYPE: CEILING ACT-1	FINISH TYPE: WALL/CEILING (PAINT) PT-1A	FINISH TYPE: WALL/CEILING (PAINT) PT-3B					
<b>02 FLOOR</b>								
	FINISH TYPE: FLOOR KT-2A	FINISH TYPE: FLOOR T-3						
<b>03 WALL BASE</b>								
	FINISH TYPE: WALL BASE KT-2B	FINISH TYPE: WALL BASE T-4 (BASE)						
<b>04 WALL</b>								
	FINISH TYPE: WALL FRP-2	FINISH TYPE: WALL/CEILING (PAINT) PT-1A	FINISH TYPE: WALL/CEILING (PAINT) PT-3B	FINISH TYPE: WALL S-1	FINISH TYPE: WALL T-1A, T-1E	FINISH TYPE: WALL T-2	FINISH TYPE: WALL WD-1	FINISH TYPE: TRIM CG-1A, CG-1B
<b>06 MILLWORK</b>								
	FINISH TYPE: MILLWORK PL-1	FINISH TYPE: MILLWORK PL-3	FINISH TYPE: MILLWORK S-1	FINISH TYPE: MILLWORK SS-1	FINISH TYPE: MILLWORK SS-4			

NOTE: PRINTED REPRESENTATION OF FINISHES MAY DIFFER FROM ACTUAL FINISHES



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REV.	DESCRIPTION	DATE



PPA#22-0056

A/E#00-00-00

Consultant #:

**SHEET TITLE**

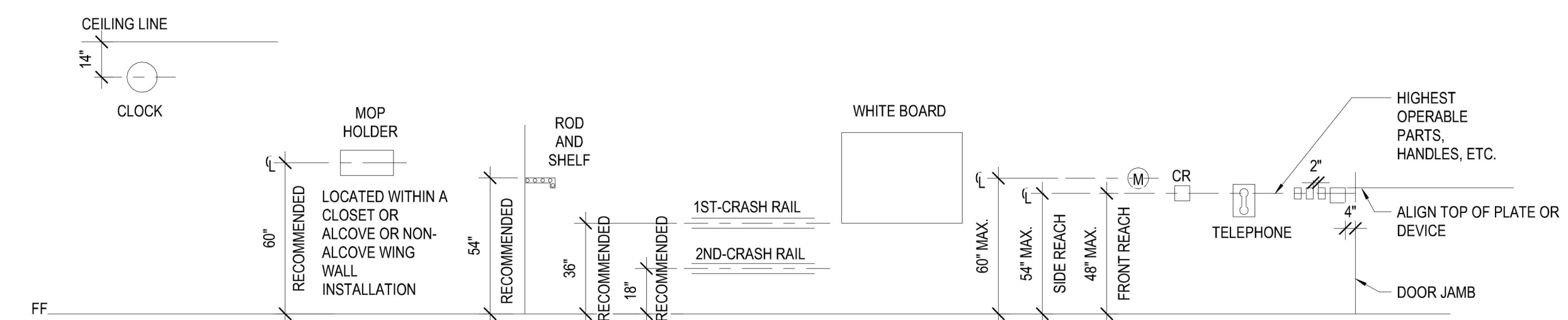
**CFA FINISH SCHEDULE**

**SHEET**

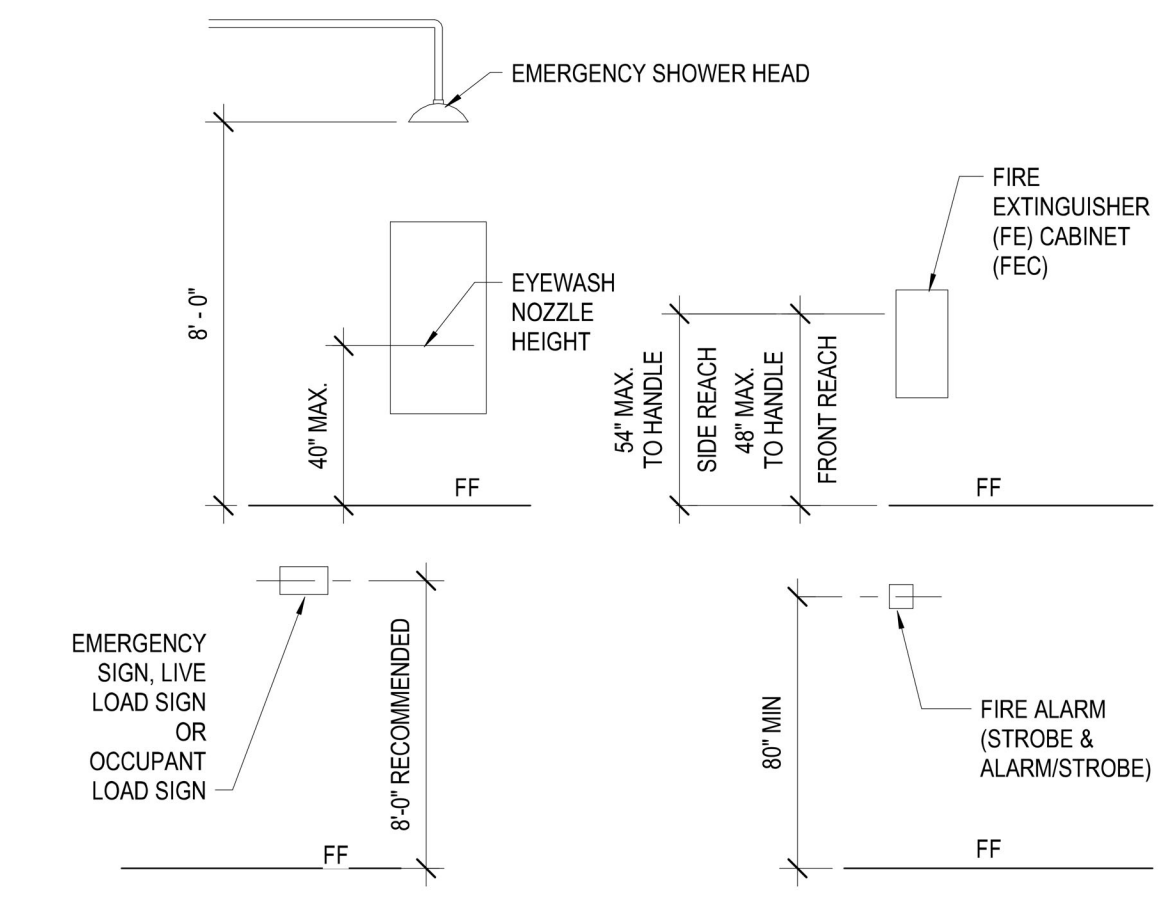
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DATE  
**16.06.2023**

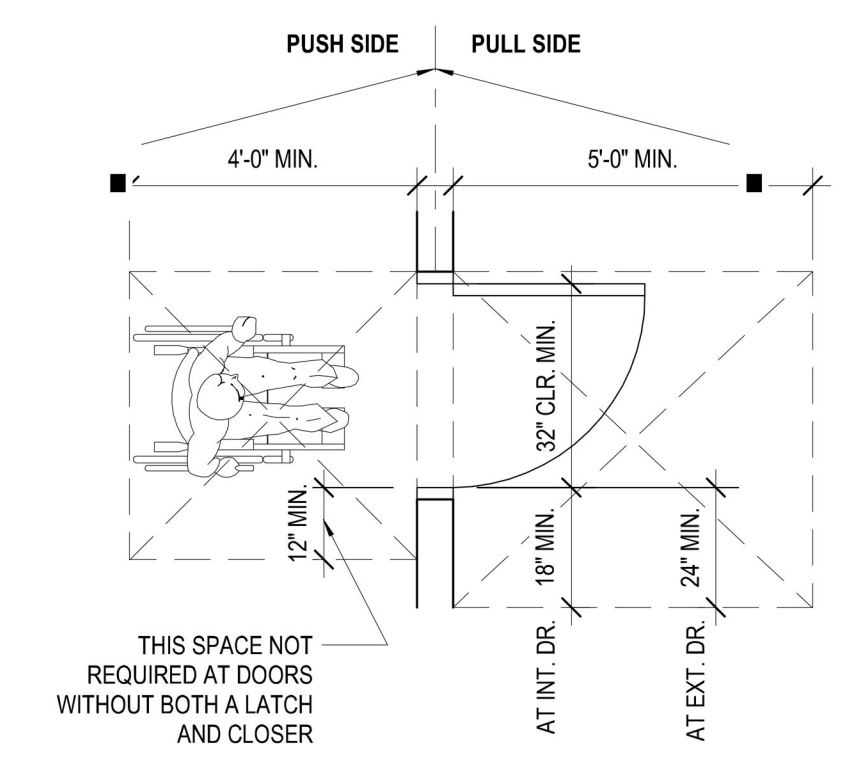




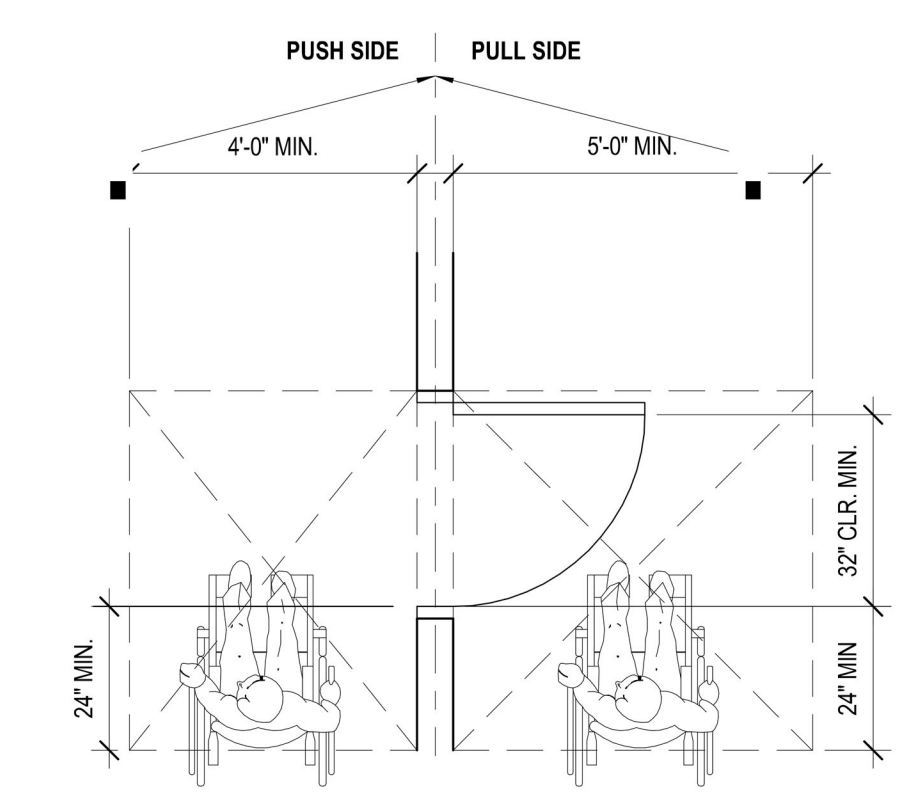
**2 OTHER BUILDING ELEMENTS**  
1/4" = 1'-0"



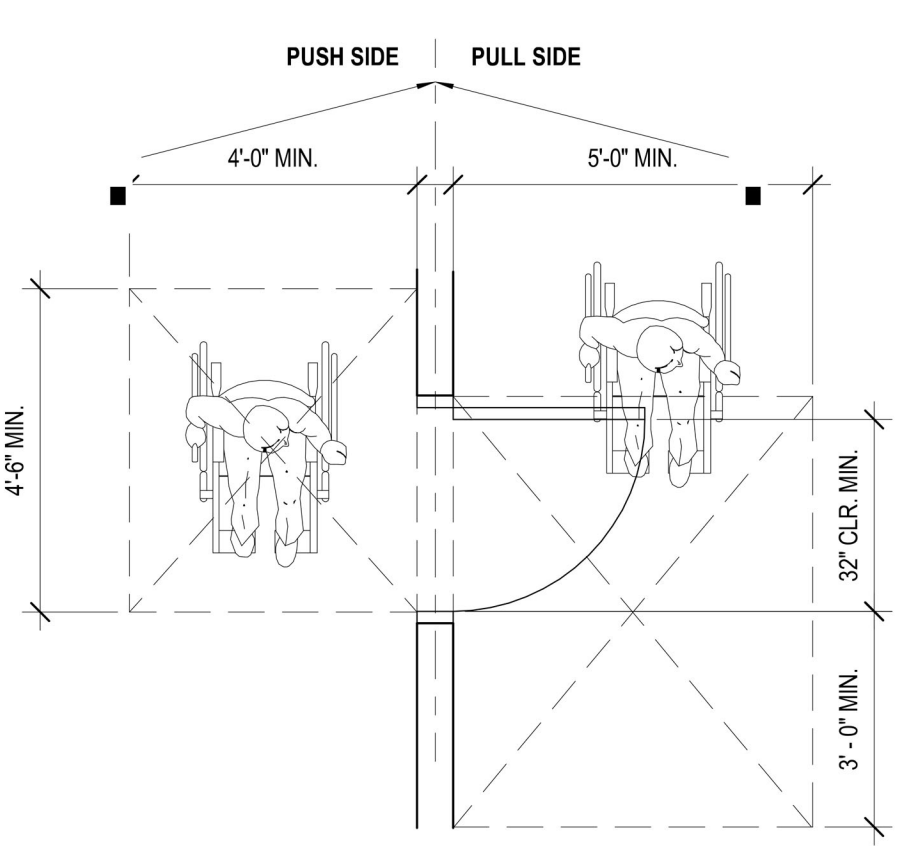
**7 LIFE SAFETY EQUIPMENT**  
1/4" = 1'-0"



**FRONT APPROACH**

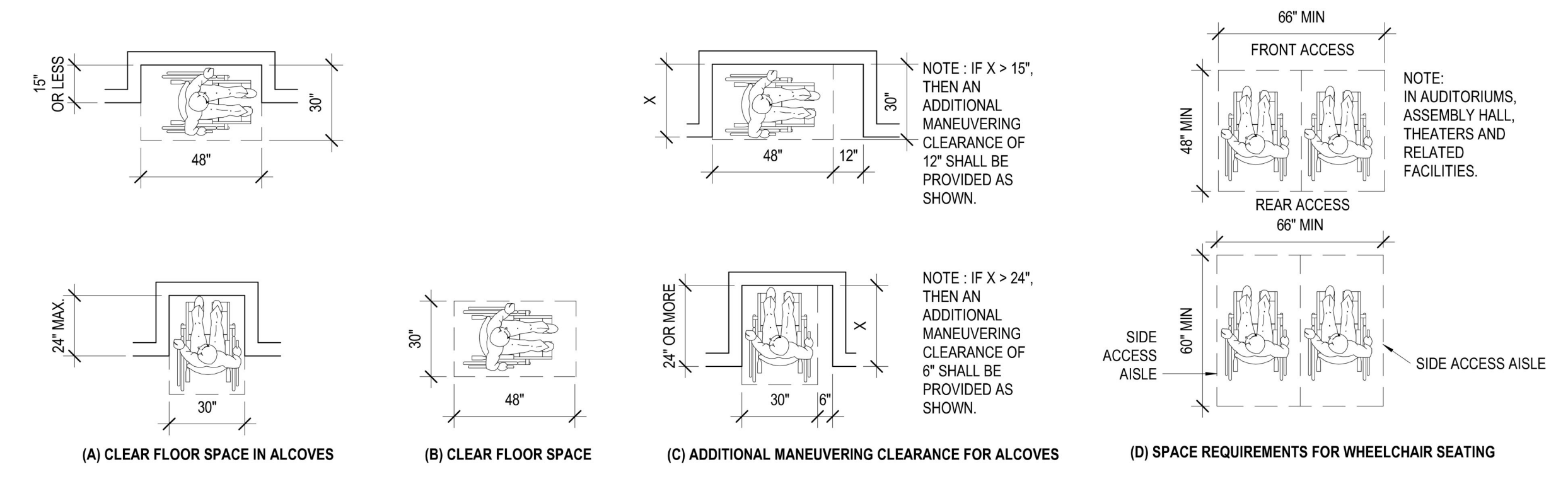


**LATCH APPROACH**

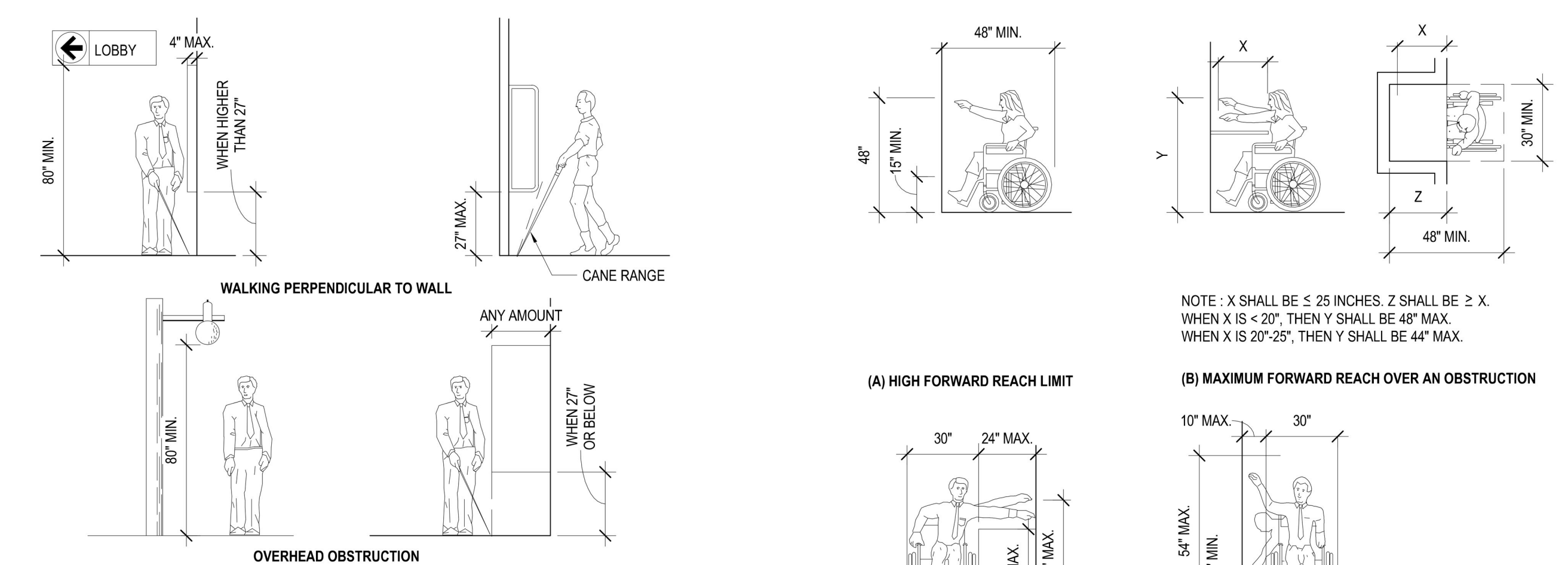


**HINGE APPROACH**

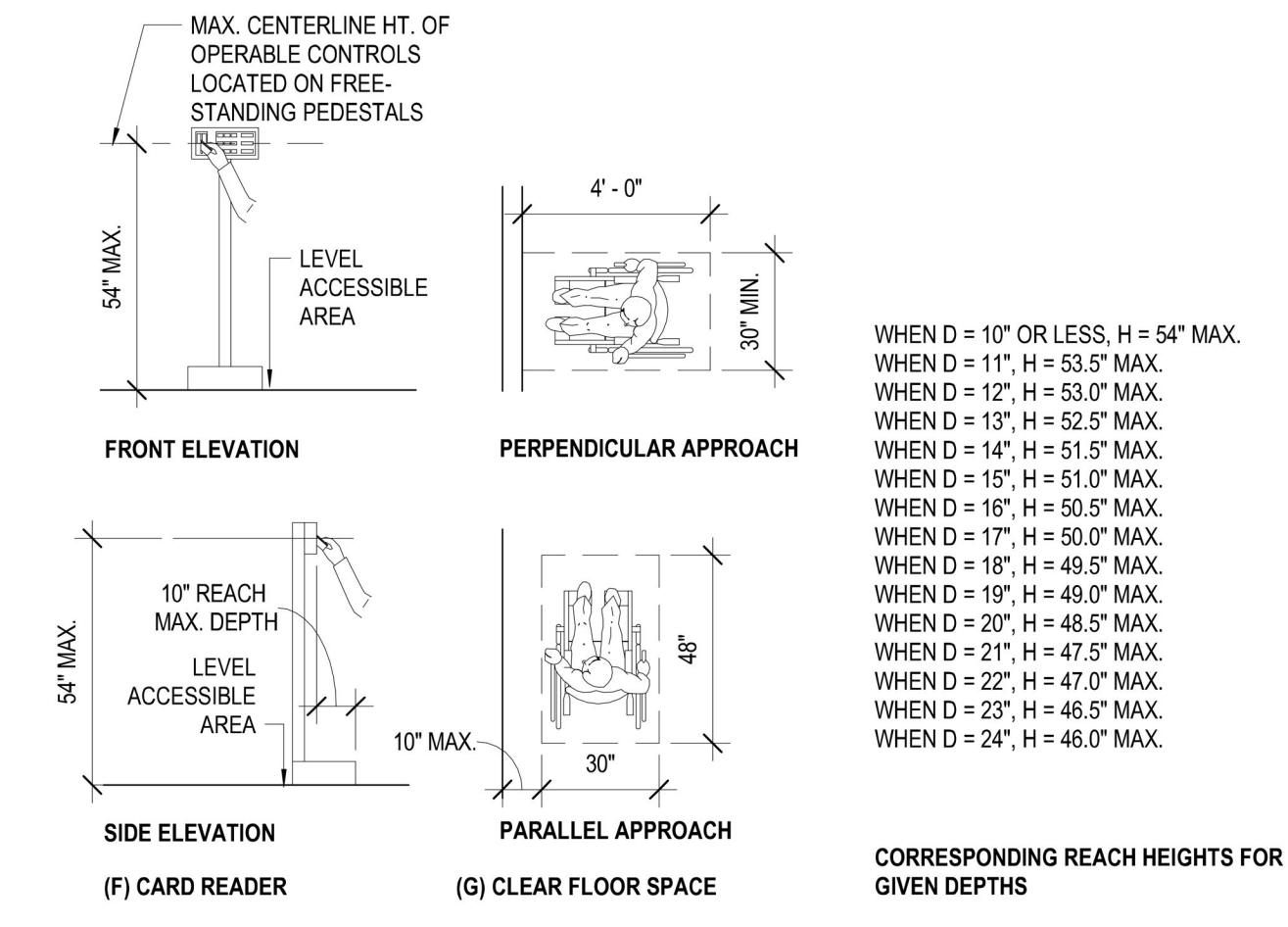
**1 HC ACCESSIBILITY @ DOOR**  
3/8" = 1'-0"



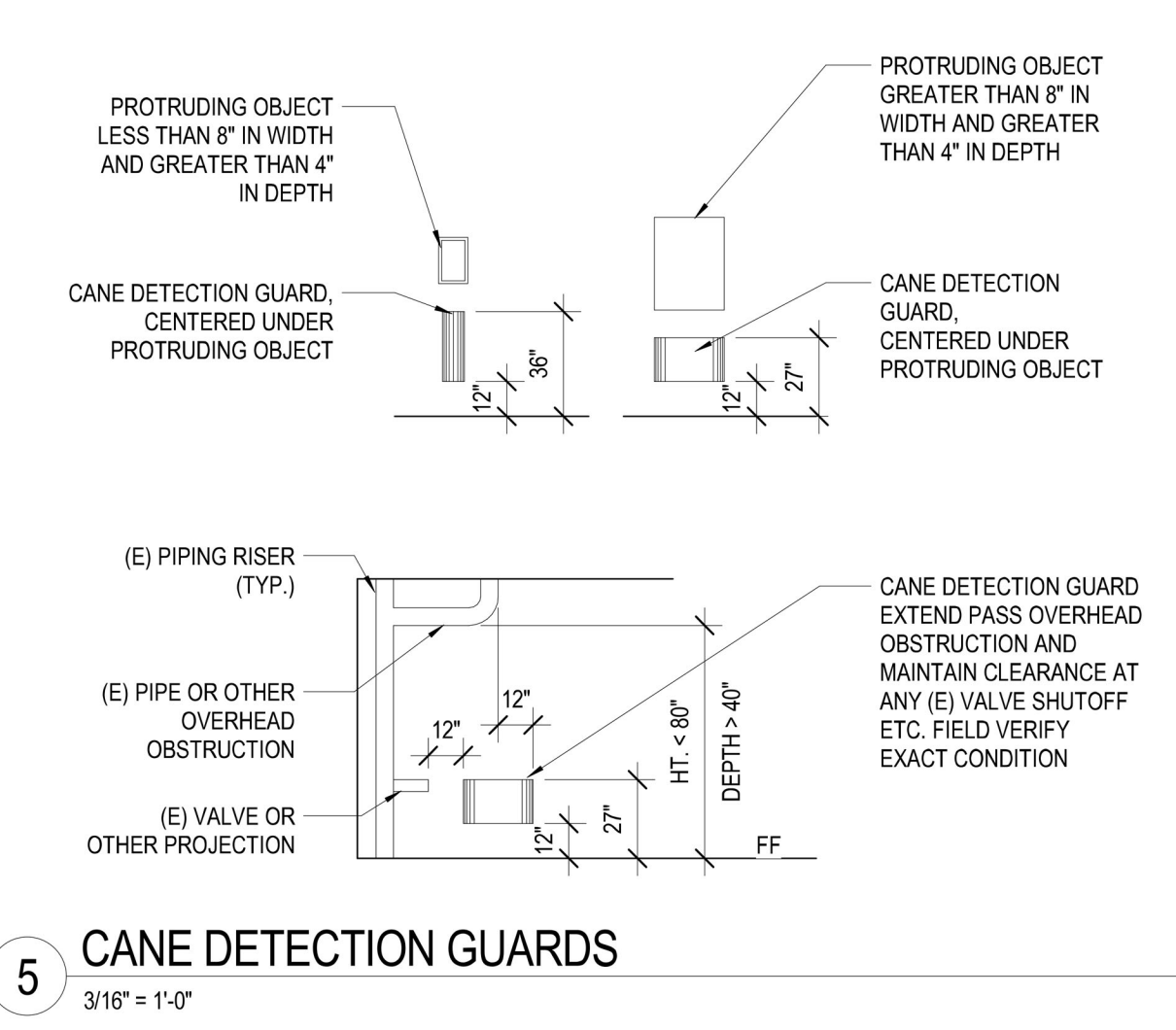
**3 FLOOR CLEARANCE FOR WHEELCHAIRS**  
1/4" = 1'-0"



**4 PROTRUDING OBJECTS**  
1/4" = 1'-0"

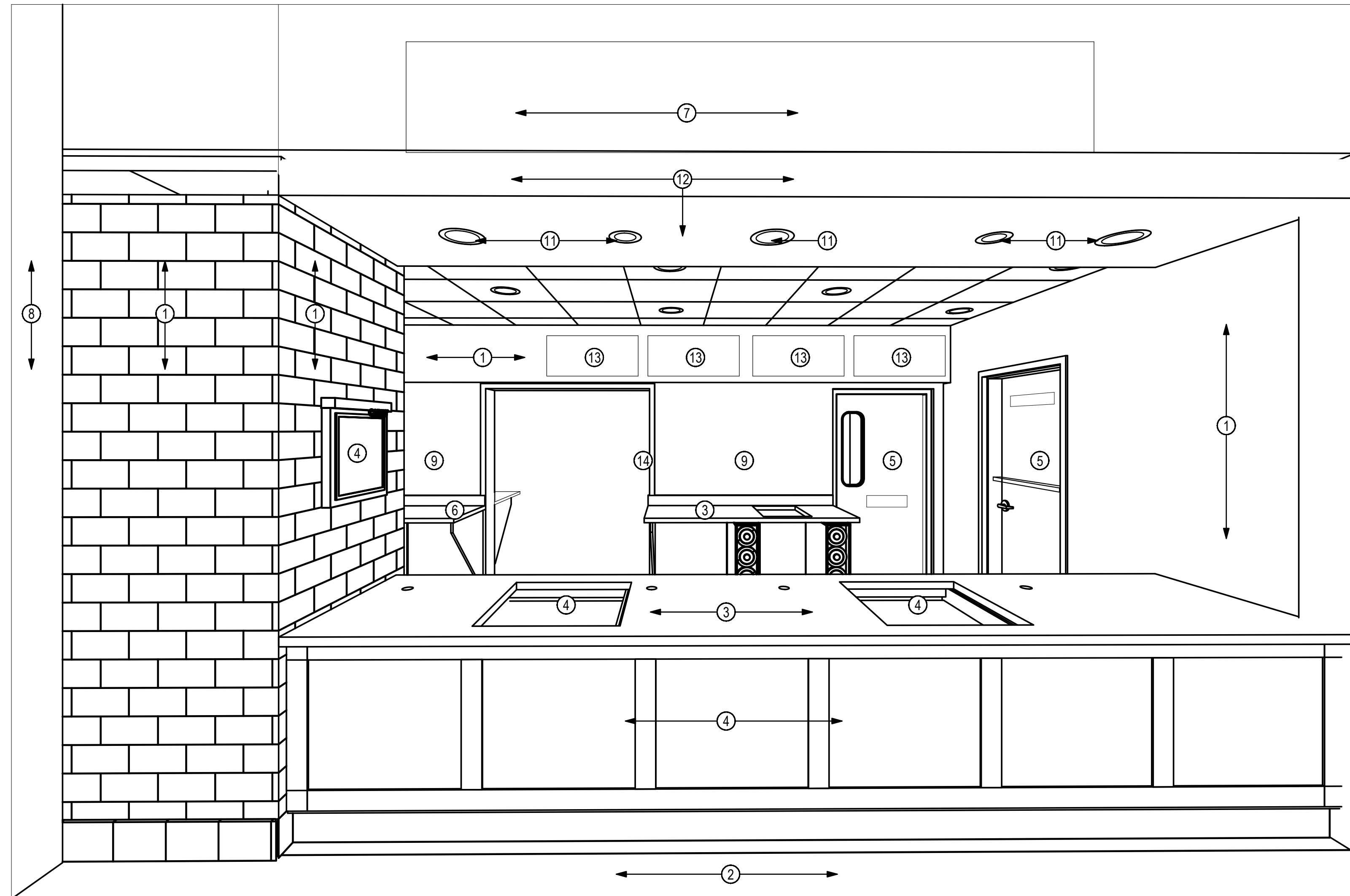


**6 REACH RANGES**  
1/4" = 1'-0"

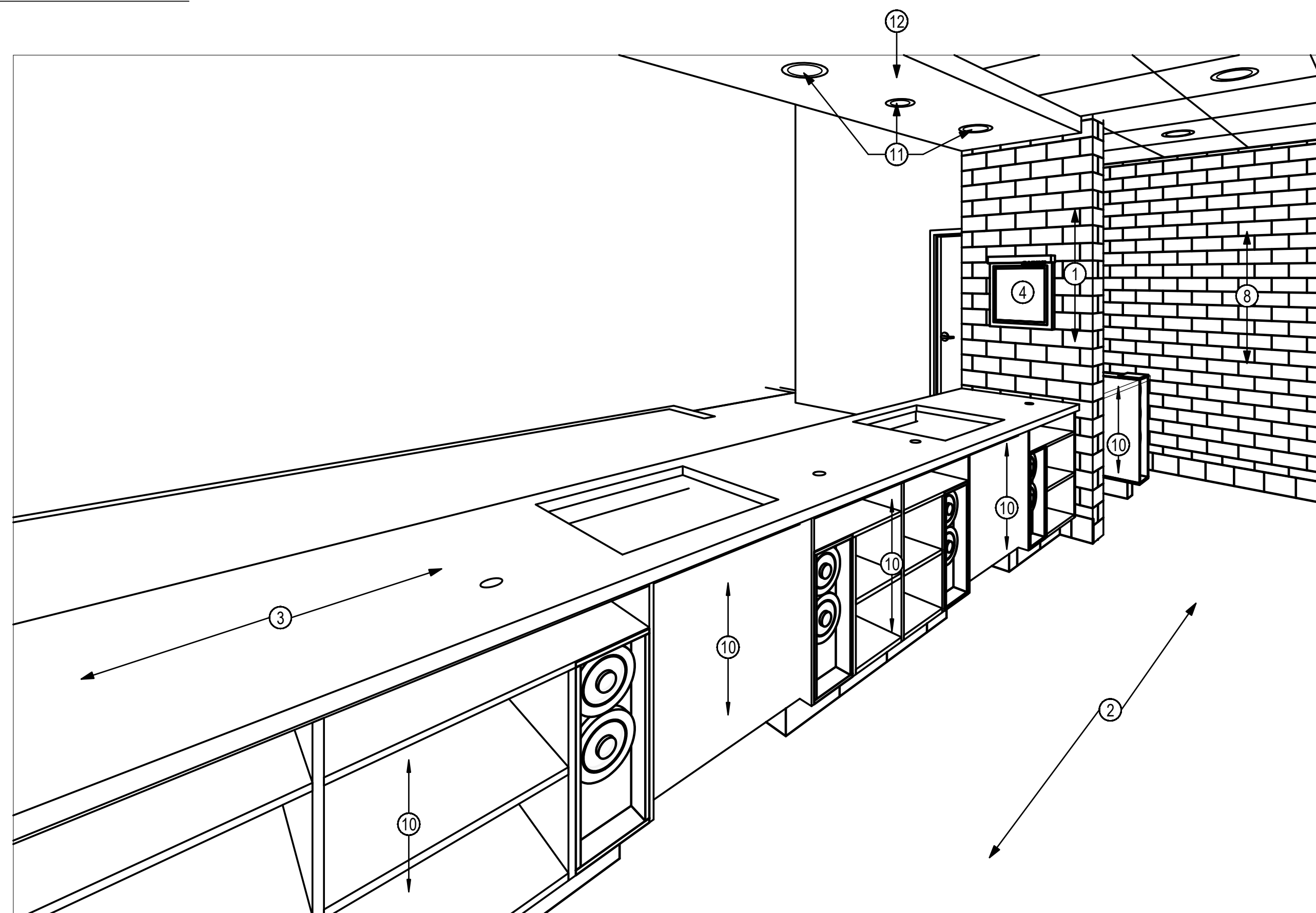


**5 CANE DETECTION GUARDS**  
3/16" = 1'-0"





1 ORDERING PERSPECTIVE  
A3.1



2 SERVING PERSPECTIVE  
A3.1

**GENERAL NOTES**

1. PARTITION DIMENSIONS ARE TYPICALLY FACE OF STUD.
2. SEE ARCHITECTURAL DIMENSION PLANS AD1.X SERIES FOR DIMENSIONS AND WALL TYPES.
3. SEE CODE REVIEW PLAN GR1.1 FOR FIRE RATED WALL LOCATIONS.
4. SEE A2.1 DRAWING FOR ROOM FINISH SCHEDULE AND DETAILS.
5. SEE A4.X SERIES DRAWINGS FOR ROOF PLANS.
6. SEE A8.X FOR ENLARGED FLOOR PLANS, INTERIOR ELEVATIONS AND DETAILS.
7. SEE A10.X SERIES DRAWINGS FOR DOOR INFORMATION.
8. SEE A11.X SERIES DRAWINGS FOR REFLECTED CEILING PLANS.
9. PROVIDE TEMPORARY BARRICADE DURING CONSTRUCTION AS NECESSARY BY LOCAL ORDINANCES; COORDINATE WITH PROJECT AND FACILITIES MANAGERS.
10. SOFFITS AND SUSPENDED CEILINGS SHALL BE SECURED TO STRUCTURAL FRAMING ONLY; SEE DETAILS.
11. FLOOR DRAINS REQUIRED IN ALL KITCHENS, FOOD PREPARATION AREAS, ANY OTHER LOCATIONS WHERE WATER IS USED.
12. PROTECT AND MAINTAIN ACCESS TO ANY EXISTING HVAC, ELECTRICAL AND PLUMBING SYSTEMS INCLUDING, BUT NOT LIMITED TO, CLEANOUTS, VALVES, DAMPERS, JUNCTION BOXES, SMOKE DETECTORS, ETC.
13. ALL TRANSITIONS BETWEEN DISSIMILAR FLOOR MATERIALS MUST BE FLUSH AND LEVEL.
14. CONTRACTORS IS REQUIRED TO PURCHASE CAMPUS PARKING PERMITS THROUGH THE UNIVERSITY POLICE.

**KEYED NOTES**

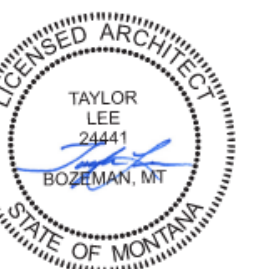
NOTED THIS: (X)

- 1 METAL STUD FRAMED WALL WITH PLASTIC LAMINATE PANEL FACE FINISH - SEE SHEET AD1.1 FOR WALL TYPES & INTERIOR ELEVATIONS ON SHEET A8.1
- 2 NEW FLOOR FINISH - SEE ROOM FINISH SCHEDULE ON A2.1 AND SPECS.
- 3 SOLID SURFACE COUNTER TOP- SEE INTERIOR ELEVATIONS ON A8.1
- 4 KITCHEN EQUIPMENT - SEE VENDOR EQUIPMENT SCHEDULE ON K2.X SERIES AND SPECS.
- 5 NEW DOOR, FRAME AND HARDWARE, SEE A10.1 FOR DOOR SCHEDULE AND DOOR HARDWARE SPECS.
- 6 STAINLESS STEEL COUNTERTOP - SEE VENDOR PROVIDED SCHEMATIC DRAWING PACKAGE
- 7 LO-PRO SCRIPT WALL MOUNTED SIGNAGE MOUNTED ON FACE OF (E) SOFFIT ABOVE FRONT SERVING COUNTER, SEE INTERIOR ELEVATIONS ON A8.X SERIES DRAWINGS, O.F.C.I. (E) WALLS TO REMAIN - SEE FINISH SCHEDULE ON SHEET A2.2 FOR SCHEDULED FINISH & PAINTING SPECS.
- 9 STAINLESS STEEL WALL TILE - SEE FINISH SCHEDULE ON A2.2 AND INTERIOR ELEVATIONS ON A8.X SERIES
- 10 PLASTIC LAMINATE CABENORK - SEE A8.X SERIES DRAWINGS FOR INTERIOR ELEVATIONS & DETAILS
- 11 NEW RECESSED CAN LIGHT FIXTURE - SEE ELECTRICAL
- 12 MENU BOARD SOFFIT - SEE REFLECTED CEILING PLAN ON SHEET A11.1
- 13 DIGITAL MENU BOARDS PROVIDED BY OWNER, INSTALLED BY CONTRACTOR (O.S.C.I.) COORDINATE WITH ELECTRICAL DRAWINGS
- 14 STAINLESS STEEL CASED OPENING HEAD & JAMB - SEE DETAILS 8 & 9 ON A10.1

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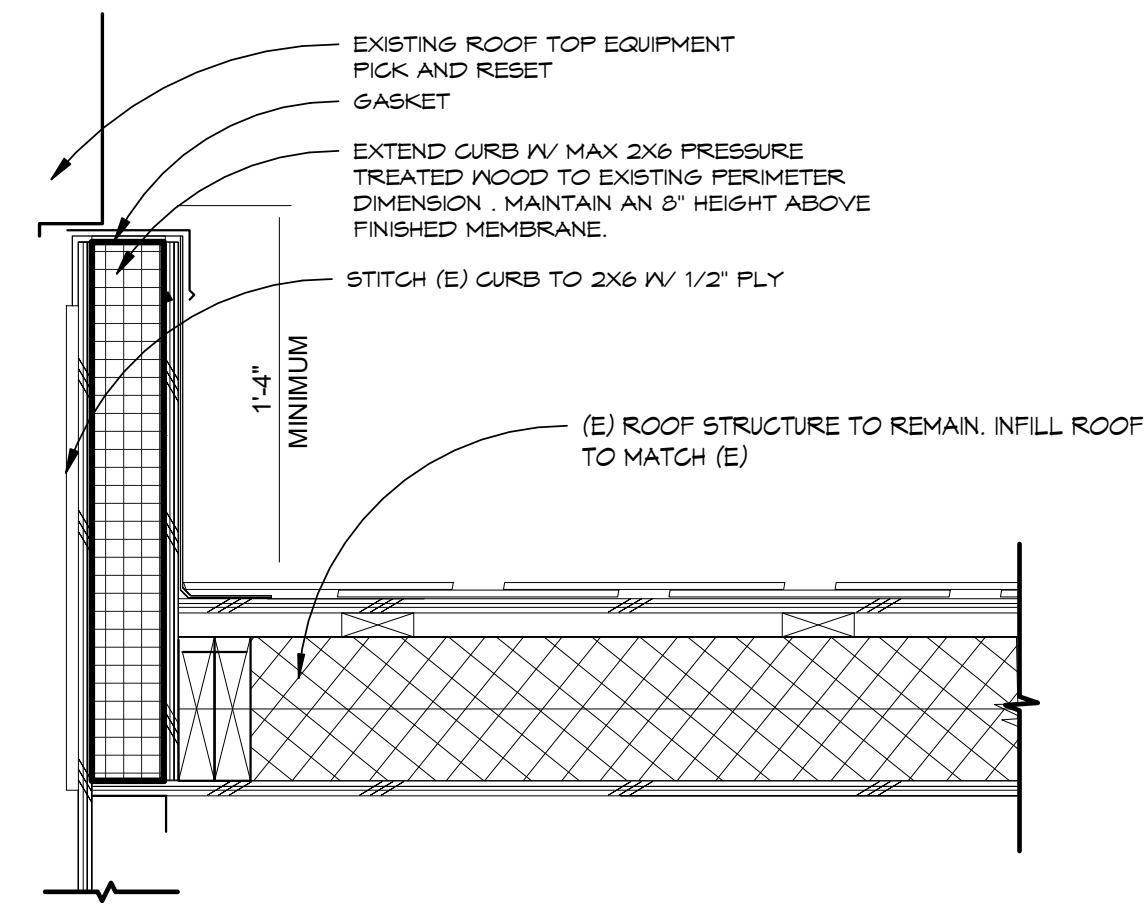
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**SHEET TITLE**  
3D VIEWS

**SHEET**  
**A3.1**

**DATE**  
**16.06.2023**



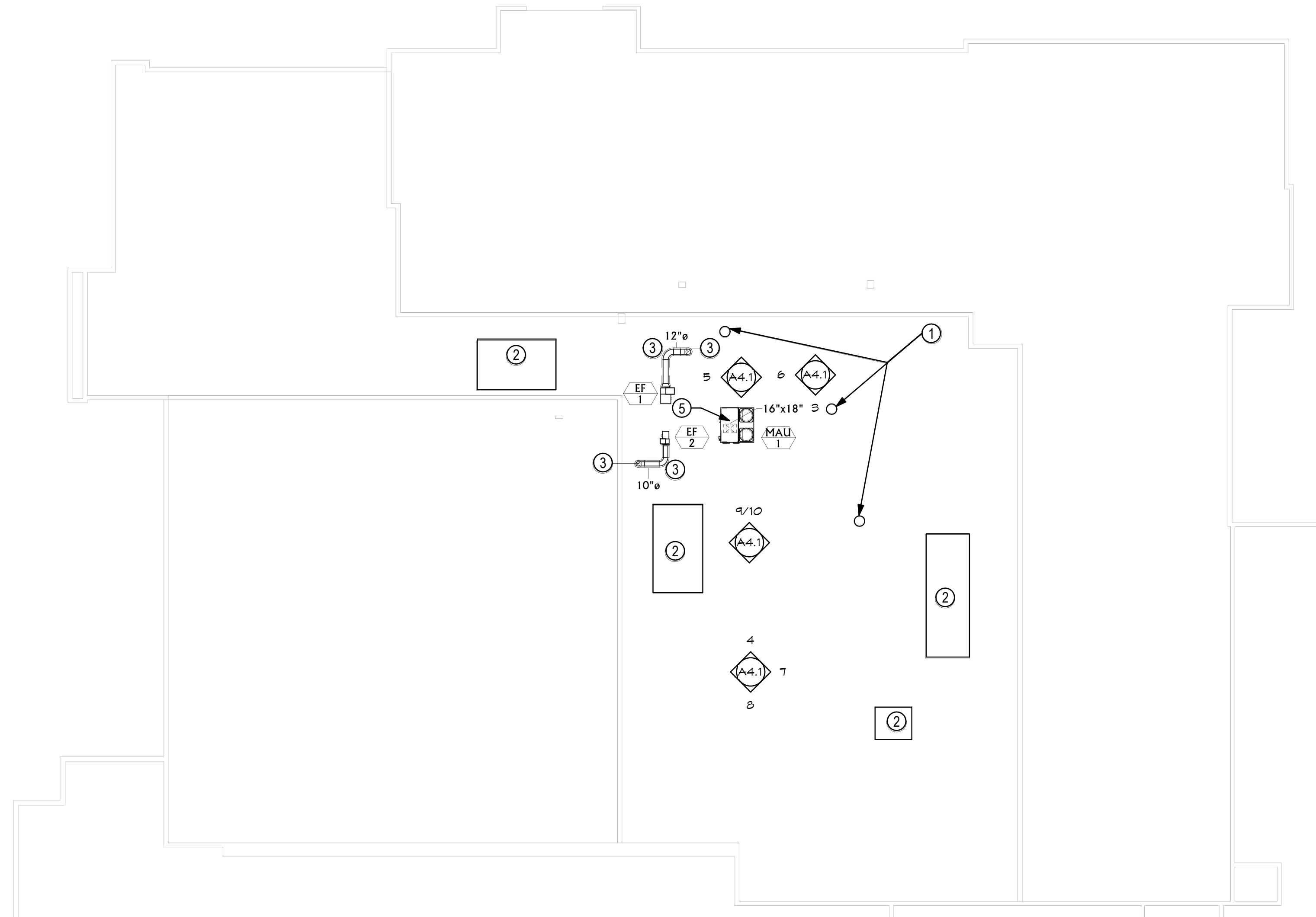


NOTE:  
ALL ROOF PENETRATIONS TO BE SEALED  
WITH SELF-ADHERING UNDERLAYMENT

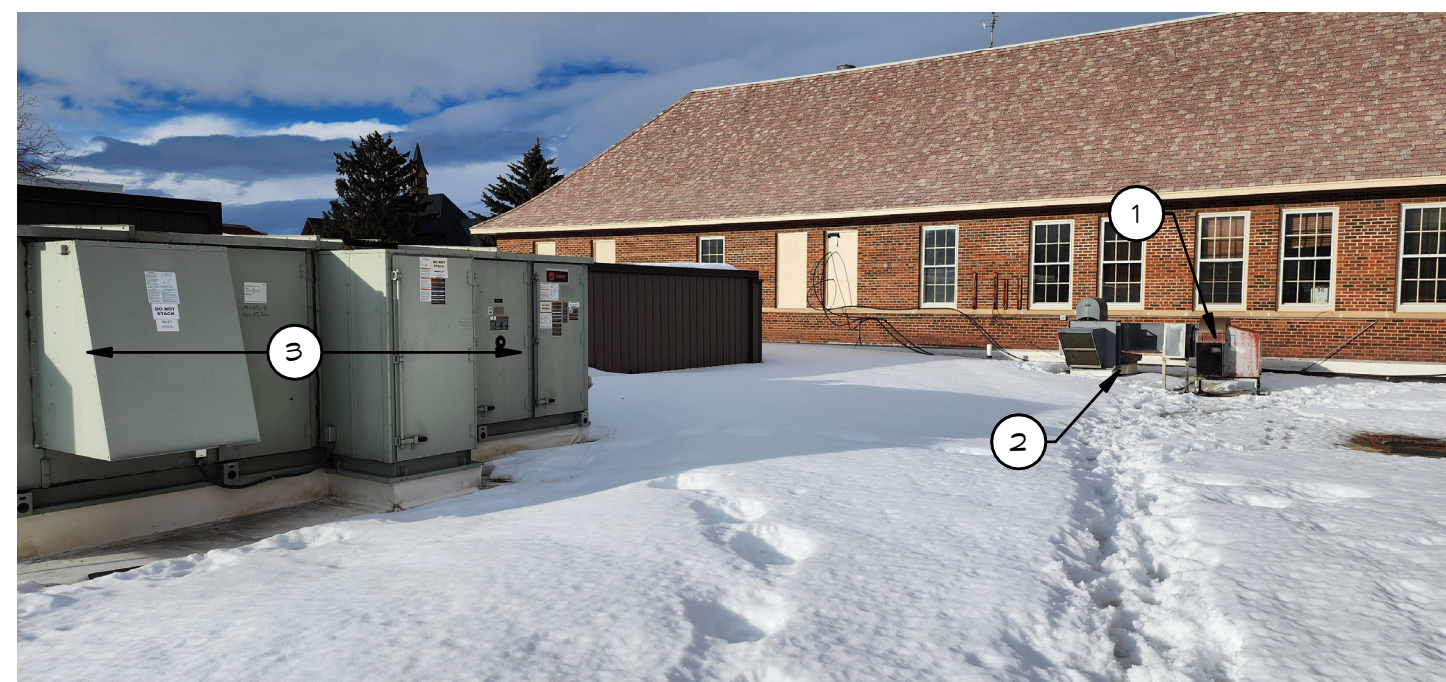
2 MECHANICAL CURB DETAIL  
A4.1 1 1/2" = 1'-0"



3 ROOF PHOTO  
A4.1 NOT TO SCALE



1 PARTIAL ROOF PLAN  
A4.1 1/16" = 1'-0" NORTH



4 ROOF PHOTO  
A4.1 NOT TO SCALE



5 ROOF PHOTO  
A4.1 NOT TO SCALE



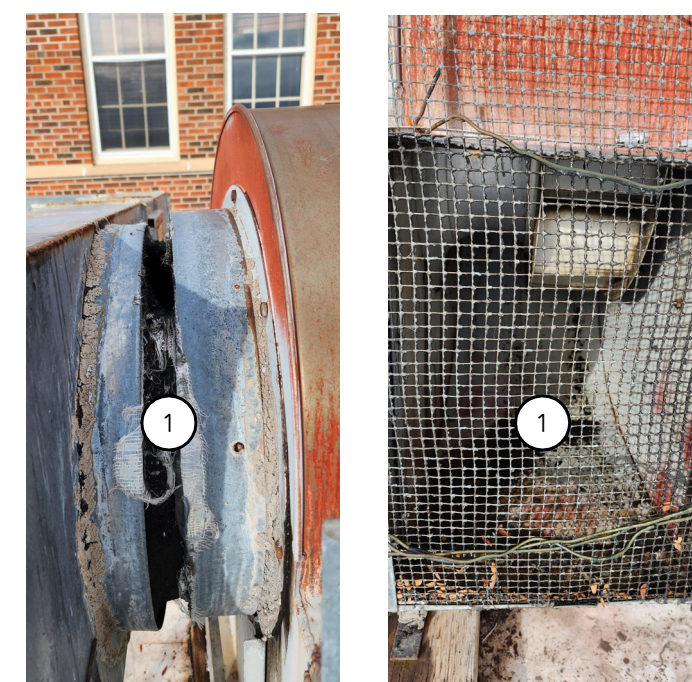
6 ROOF PHOTO  
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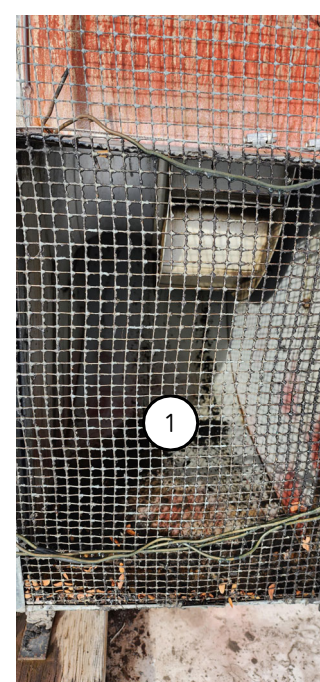
7 ROOF PHOTO  
A4.1 NOT TO SCALE



8 ROOF PHOTO  
A4.1 NOT TO SCALE



9 ROOF PHOTO  
A4.1 NOT TO SCALE



10 ROOF PHOTO  
A4.1 NOT TO SCALE

GENERAL NOTES

- REFER TO MECHANICAL DRAWINGS FOR NUMBER AND LOCATION OF V.T.R.'S, EXHAUST VENTS, ROOF DRAINS, MISC. ROOF PENETRATIONS, AND ADDITIONAL INFORMATION. PROVIDE CRICKETS BEHIND CURBS ON SLOPED ROOFS.
- VERIFY EXACT NUMBER OF V.T.R.'S AND OTHER EQUIPMENT WITH MECHANICAL DRAWINGS, NOT ALL ARE SHOWN ON THIS ROOF PLAN.
- COMPLY WITH MANUF. STANDARD DETAILS @ V.T.R.'S, MECH. CURBS, ETC. TO MAINTAIN WARRANTY.
- ROOFING CONTRACTOR TO USE APPROPRIATE MANUF. DETAILS TO OBTAIN/MAINTAIN ROOF WARRANTIES. FOLLOW ROOFING MANUF. SYSTEM REQUIREMENTS FOR ALL TERMINATIONS AND SEAMS.
- PROVIDE A 115 MPH WIND SPEED WARRANTY FOR ALL ROOF SYSTEMS.
- WHERE VAPOR BARRIER IS PENETRATED AND AT PERIMETERS OF VAPOR BARRIER, ENSURE VAPOR BARRIERS ARE SEALED TIGHT. REFER TO ELECTRICAL DRAWINGS FOR ALL CONDUIT PENETRATIONS REQUIRED AT ROOF.

KEYED NOTES

NOTED THUS: (X)

- (E) PLUMBING VENT LOCATED AT APPROXIMATE LOCATION - SEE MECHANICAL DRAWINGS
- (E) ROOFTOP EQUIPMENT LOCATED AT APPROXIMATE LOCATION - SEE MECHANICAL DRAWINGS
- NEW ROOFTOP DUCTWORK - SEE MECHANICAL DRAWINGS
- NEW ROOFTOP AIR HANDLING UNIT - SEE MECHANICAL & ELECTRICAL DRAWINGS



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Consultant #:  
SHEET TITLE  
ROOF PLAN

SHEET  
A4.1

DATE  
16.06.2023



**GENERAL NOTES**

1. NOT ALL CEILING, WALL AND FLOOR FINISHES SHOWN, REFER TO FINISH SCHEDULE ON SHEET K2.1.



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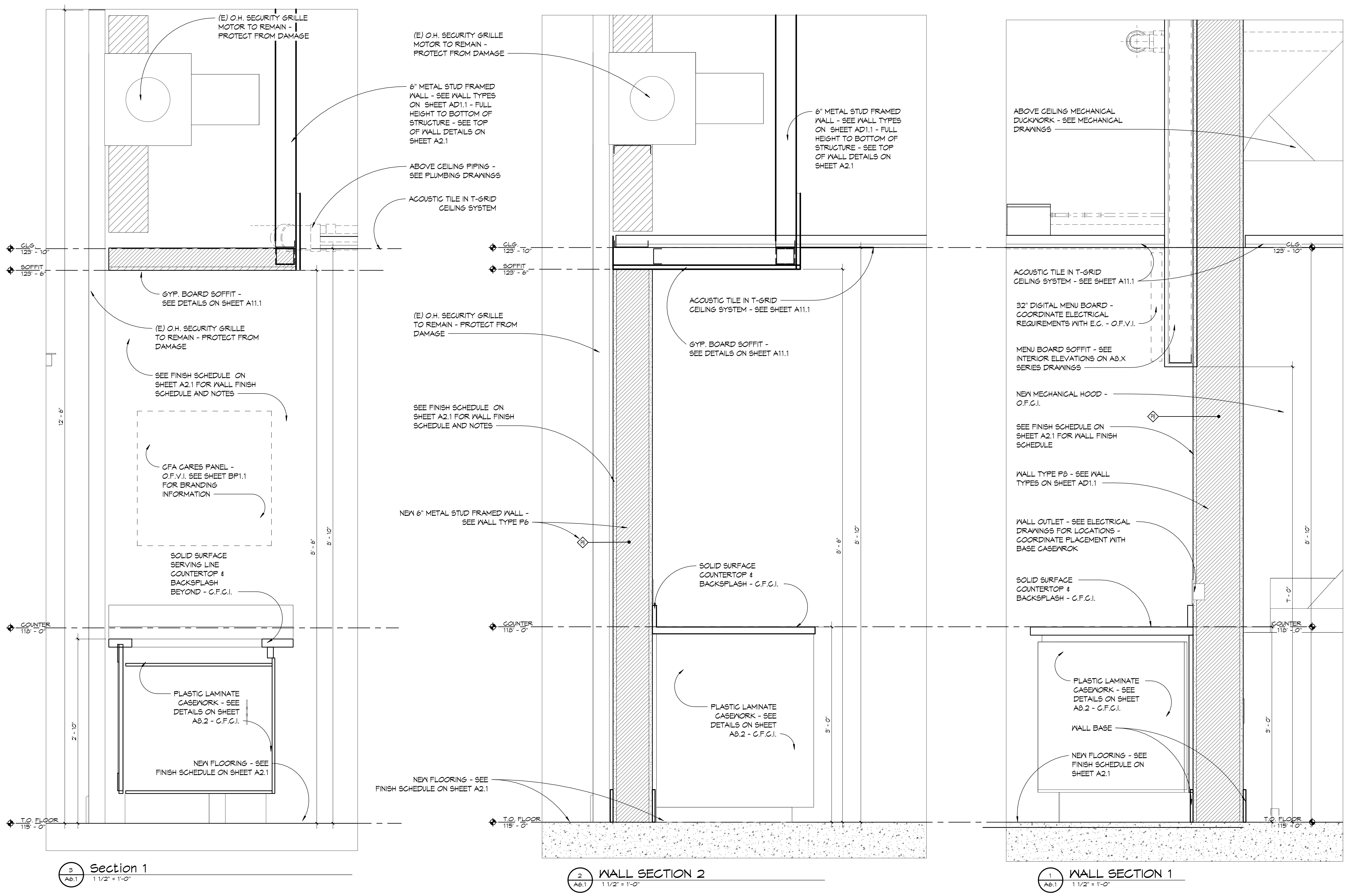
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A/E#00-00-00  
Consultant #:  
**SHEET TITLE**  
WALL SECTIONS

**SHEET**  
**A6.1**

DATE  
**16.06.2023**



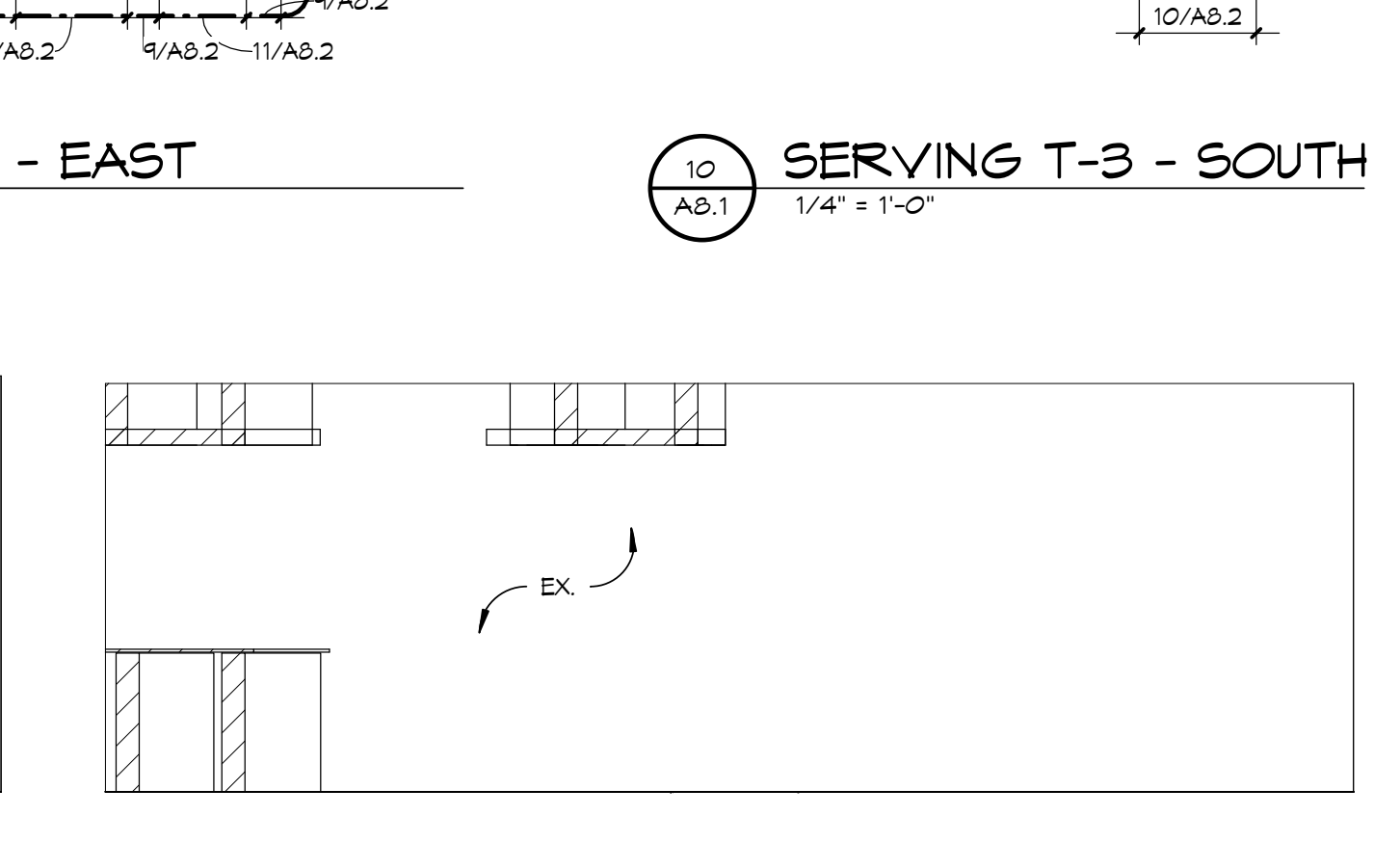
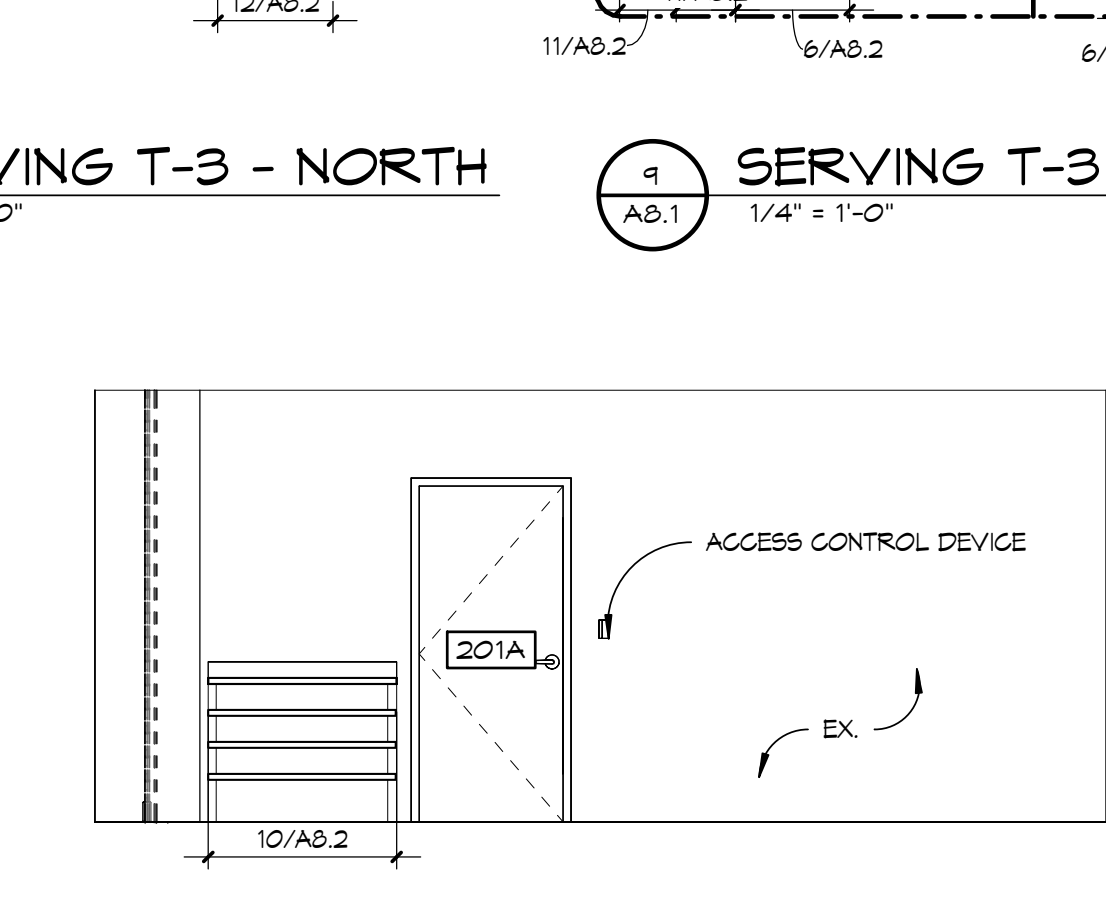
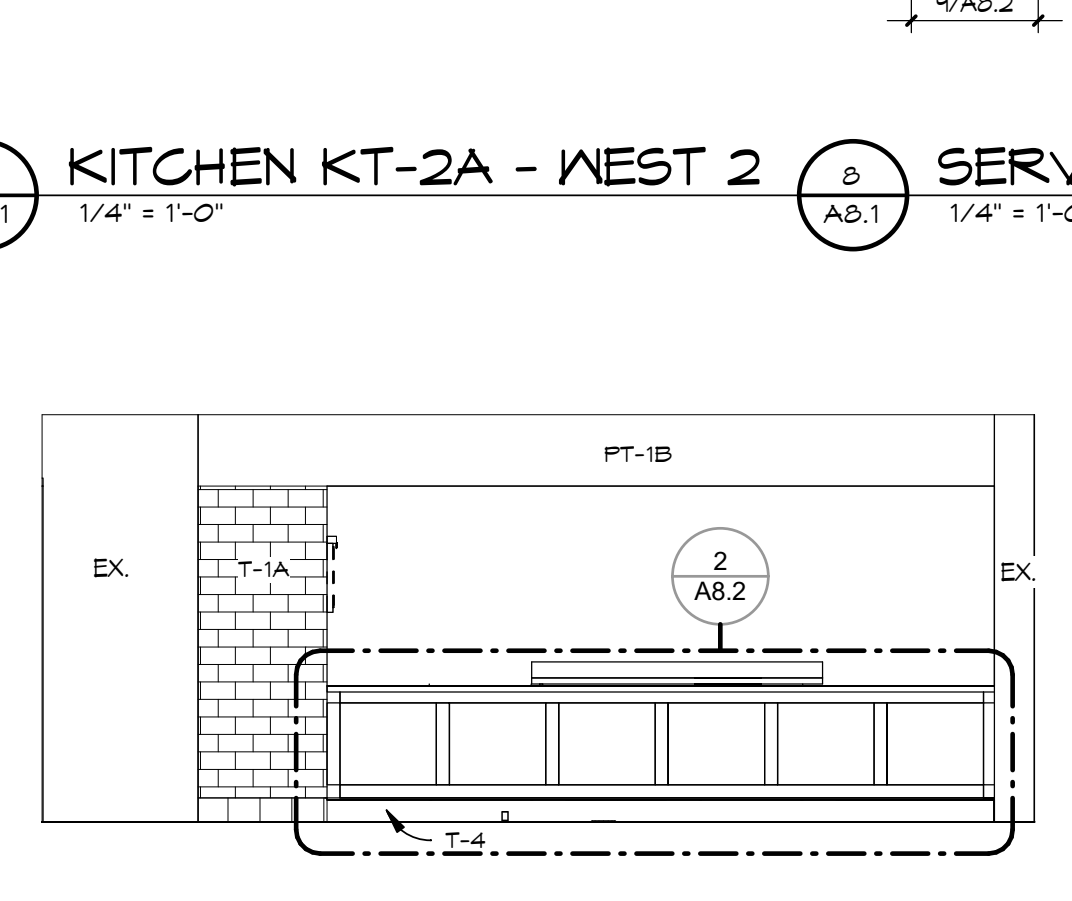
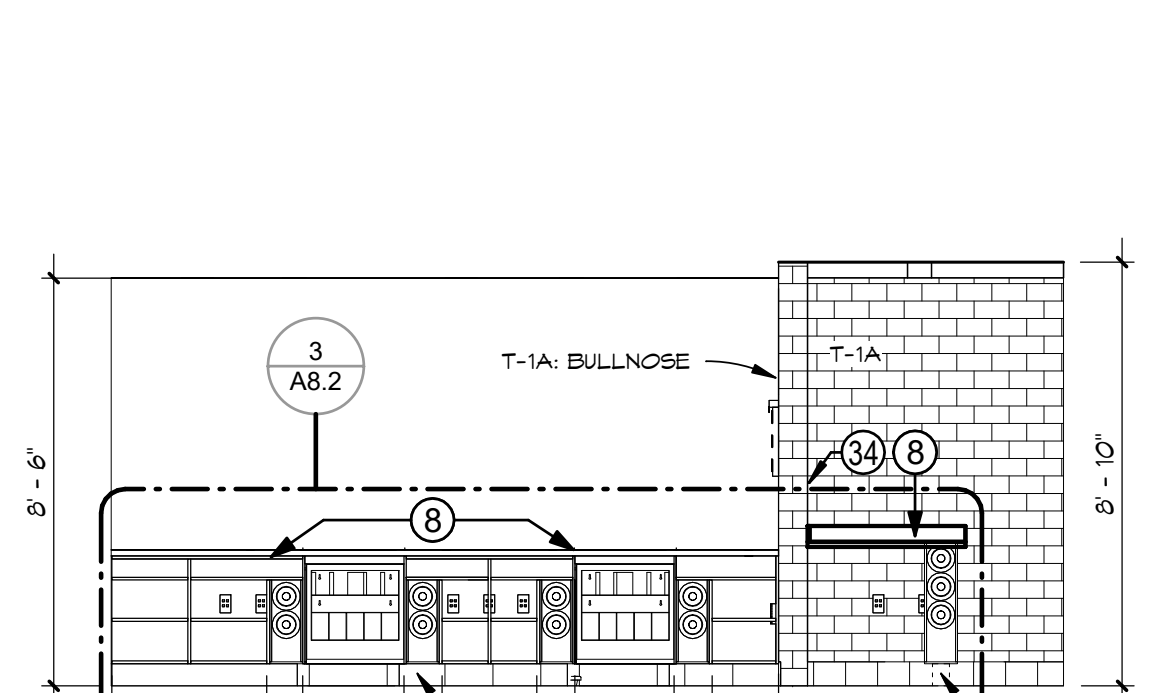
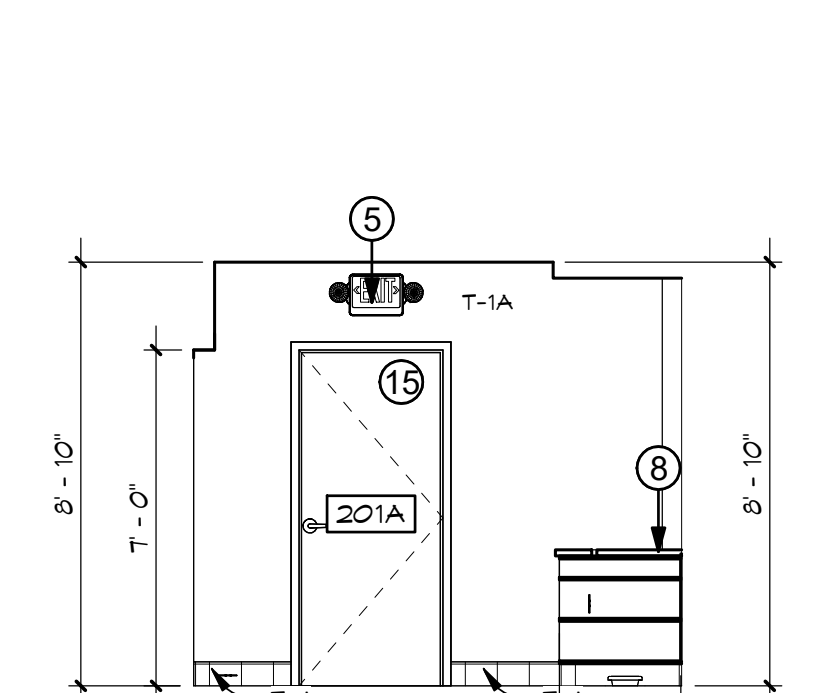
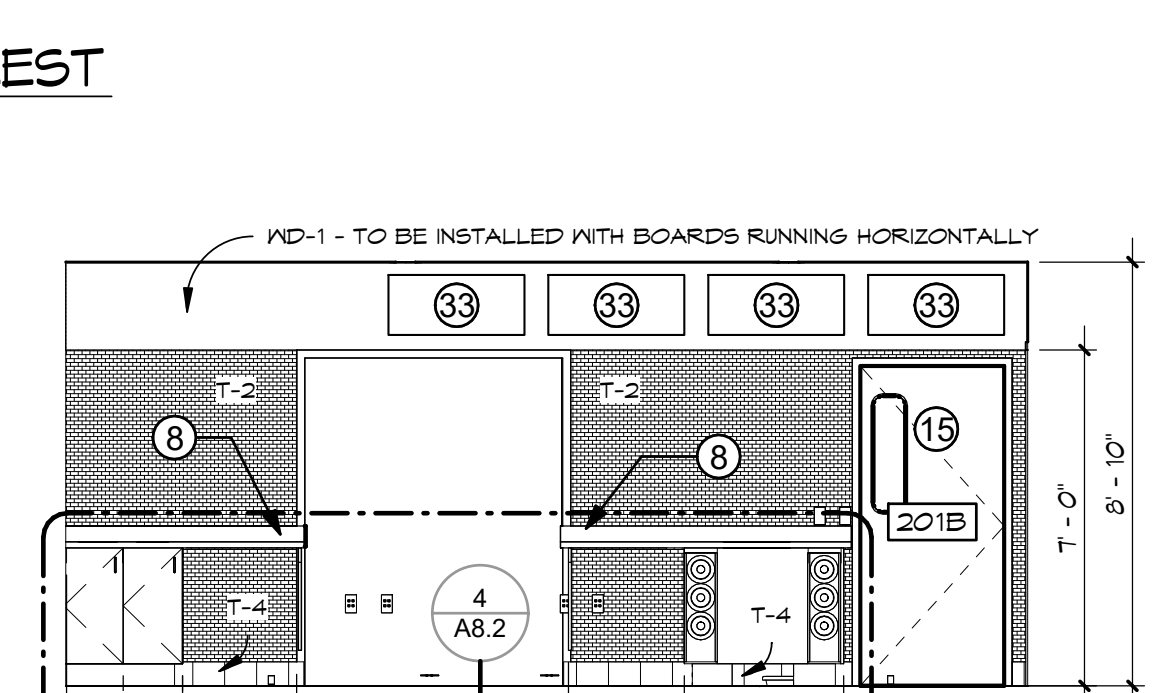
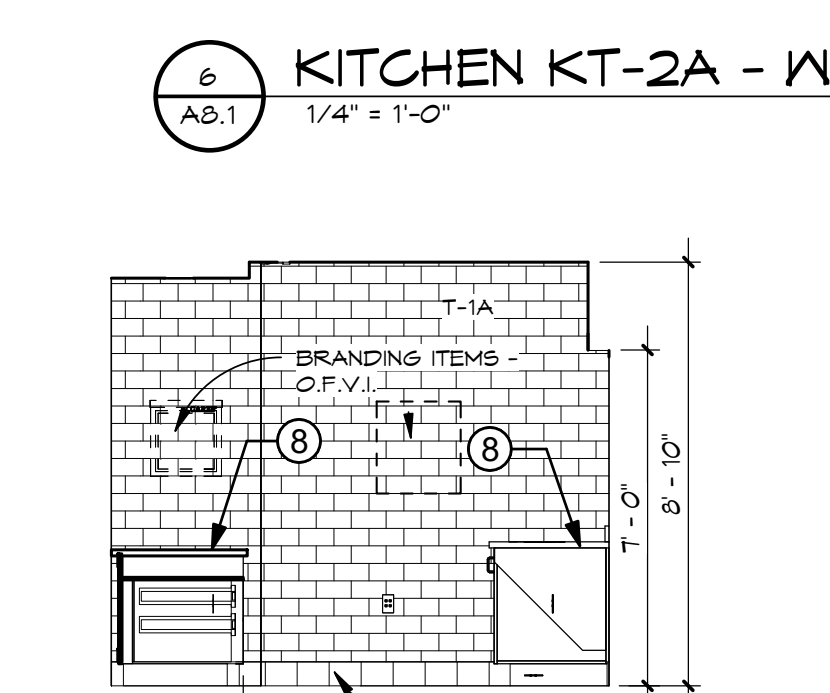
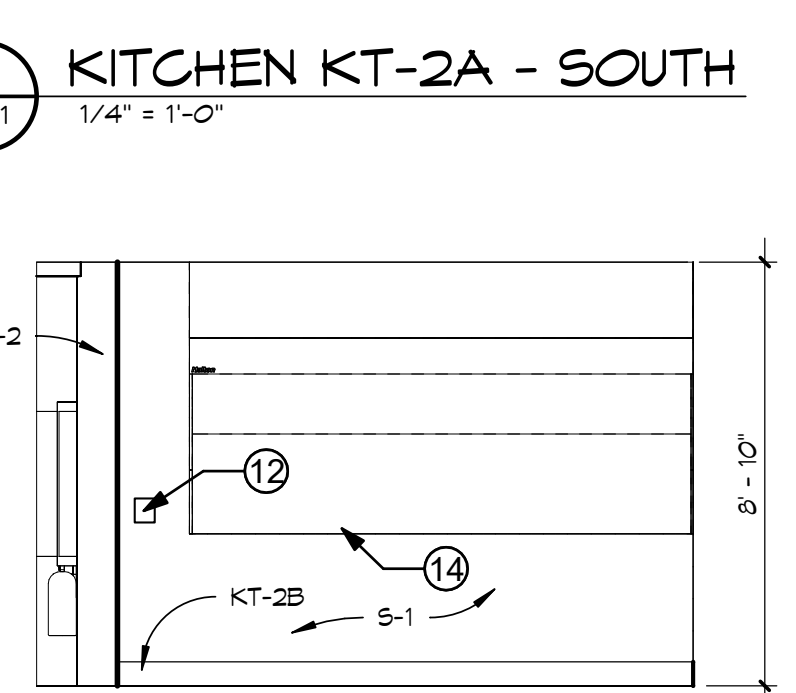
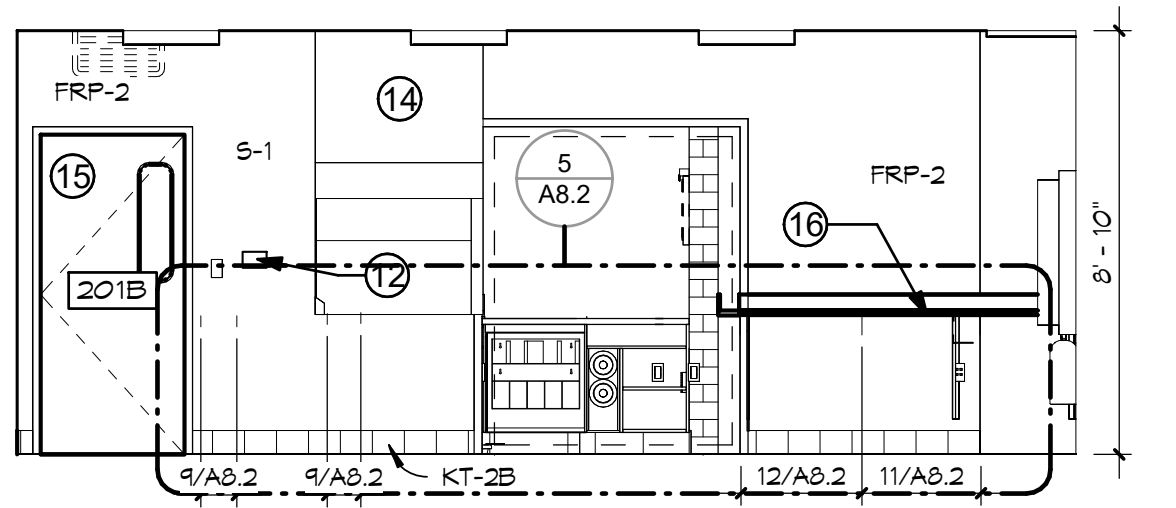
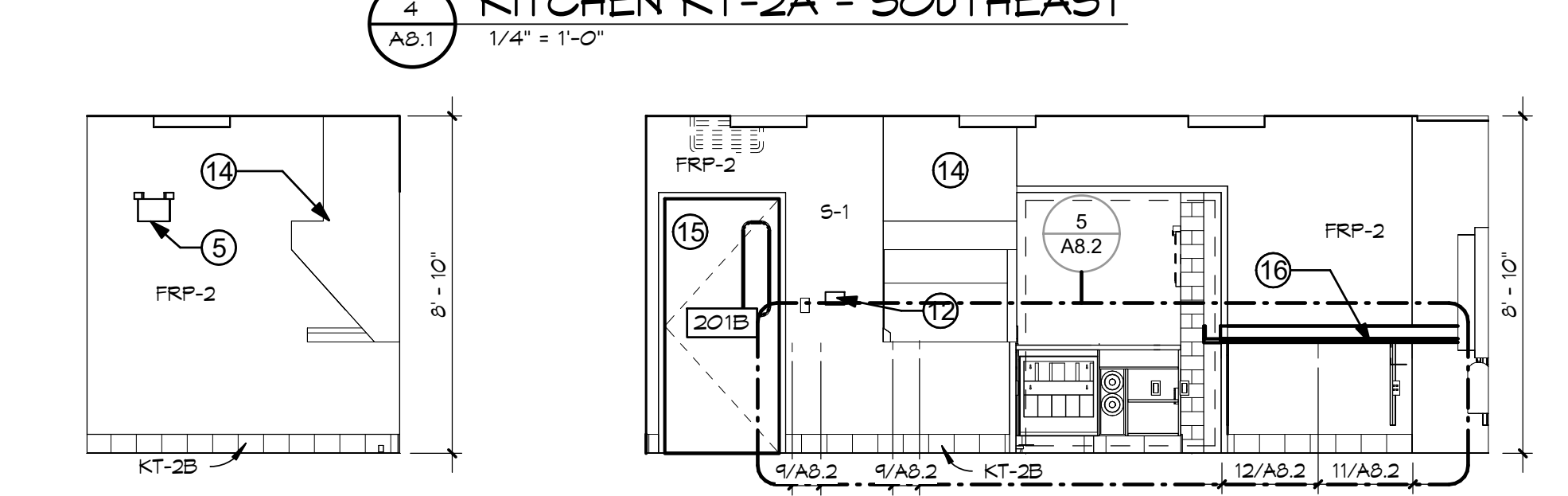
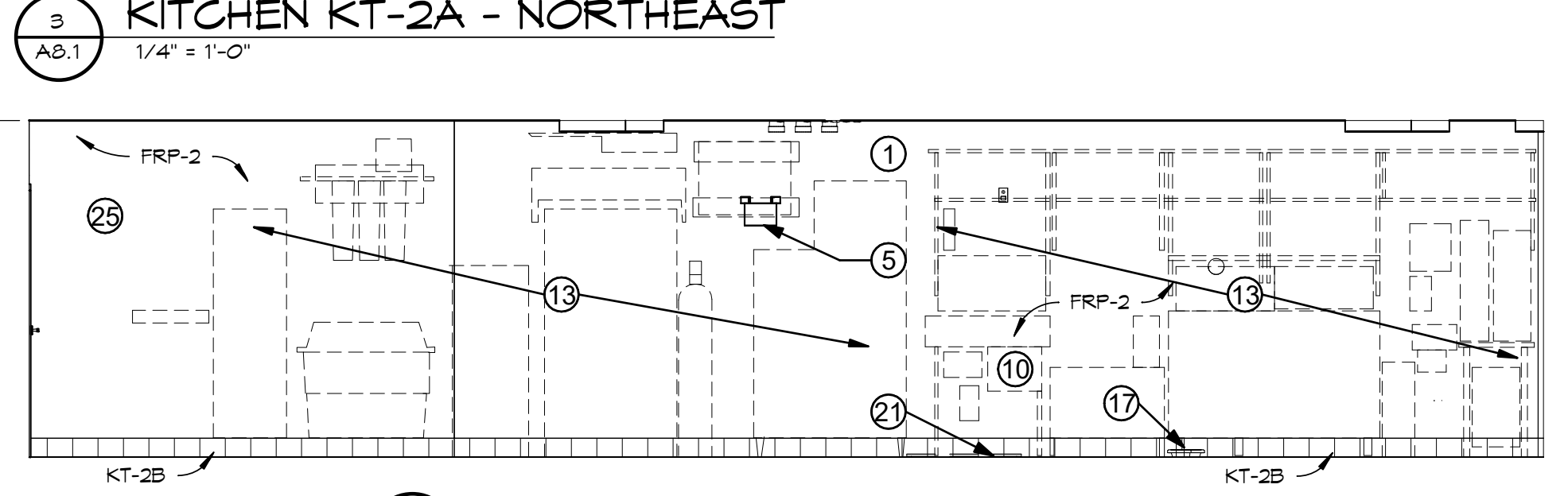
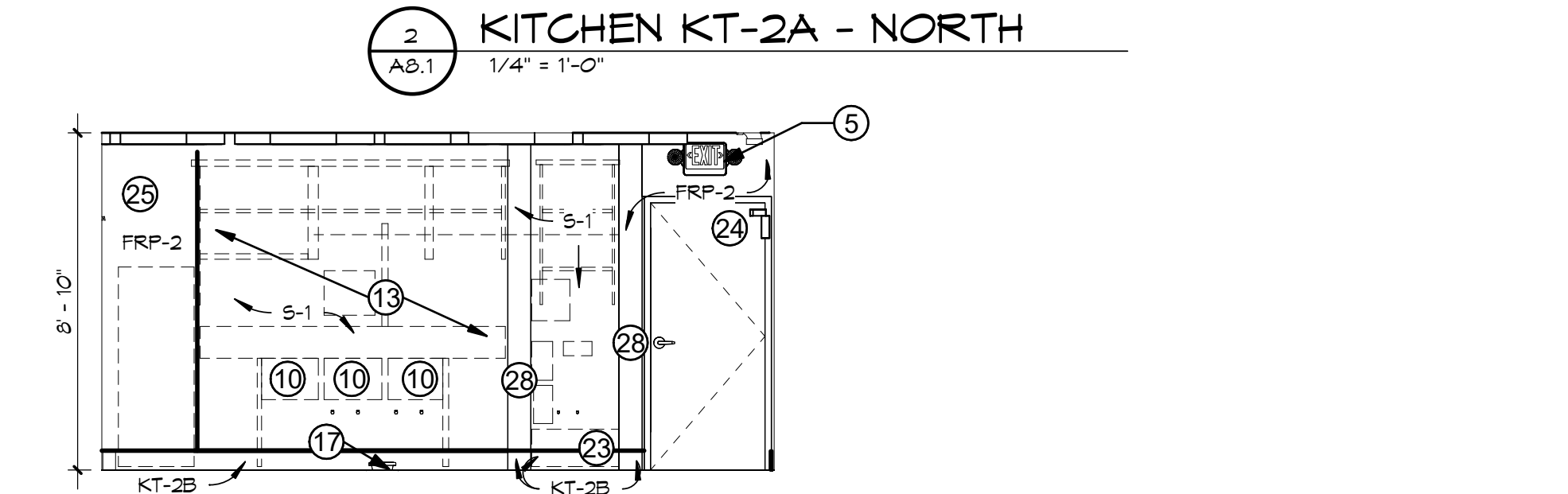
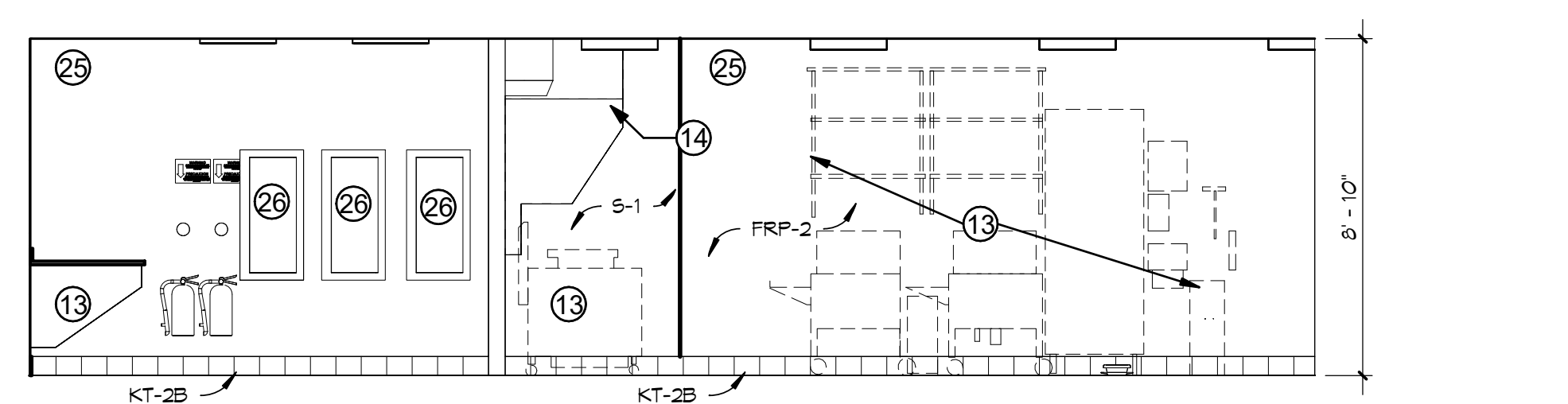
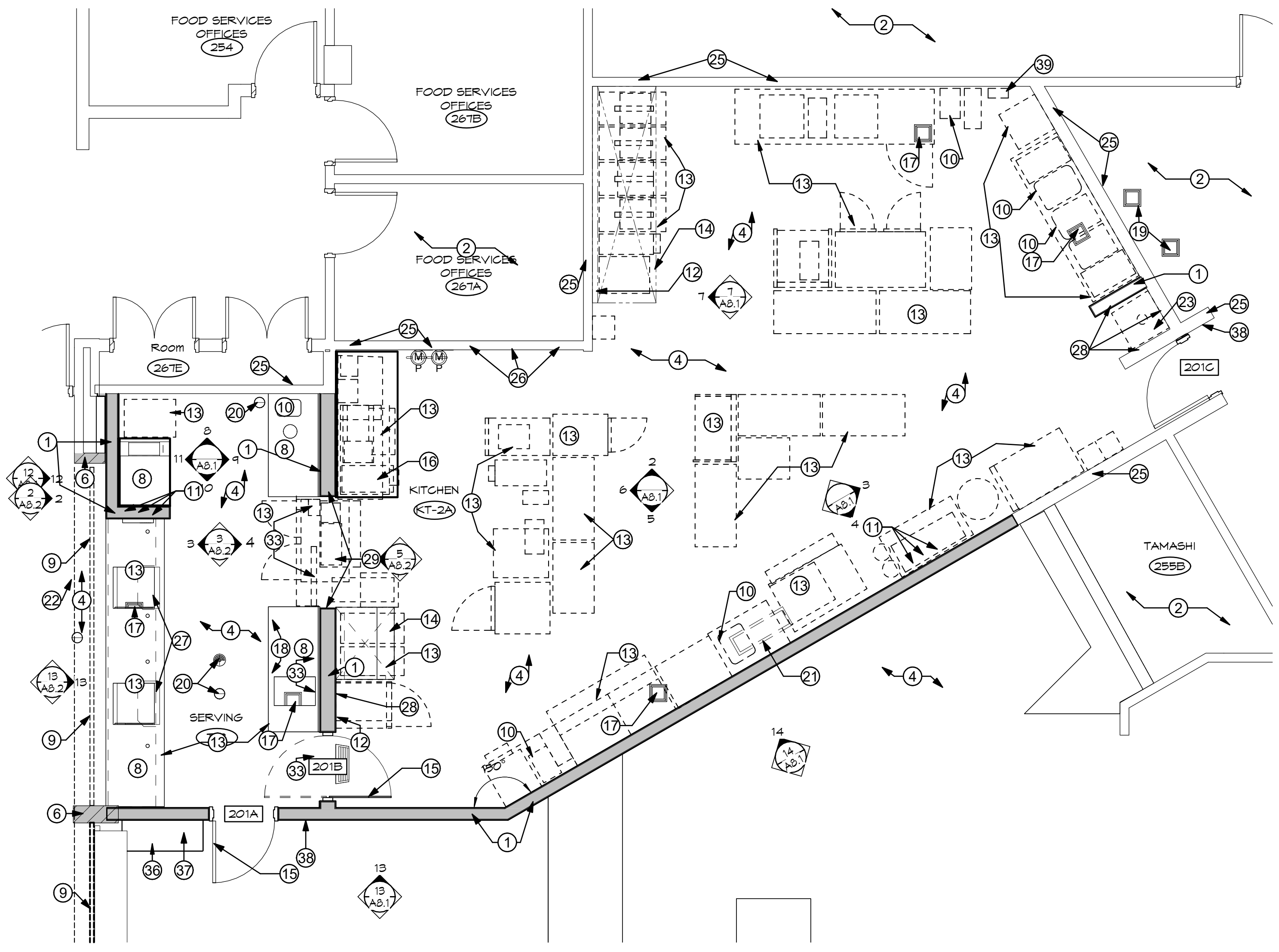


**GENERAL NOTES**

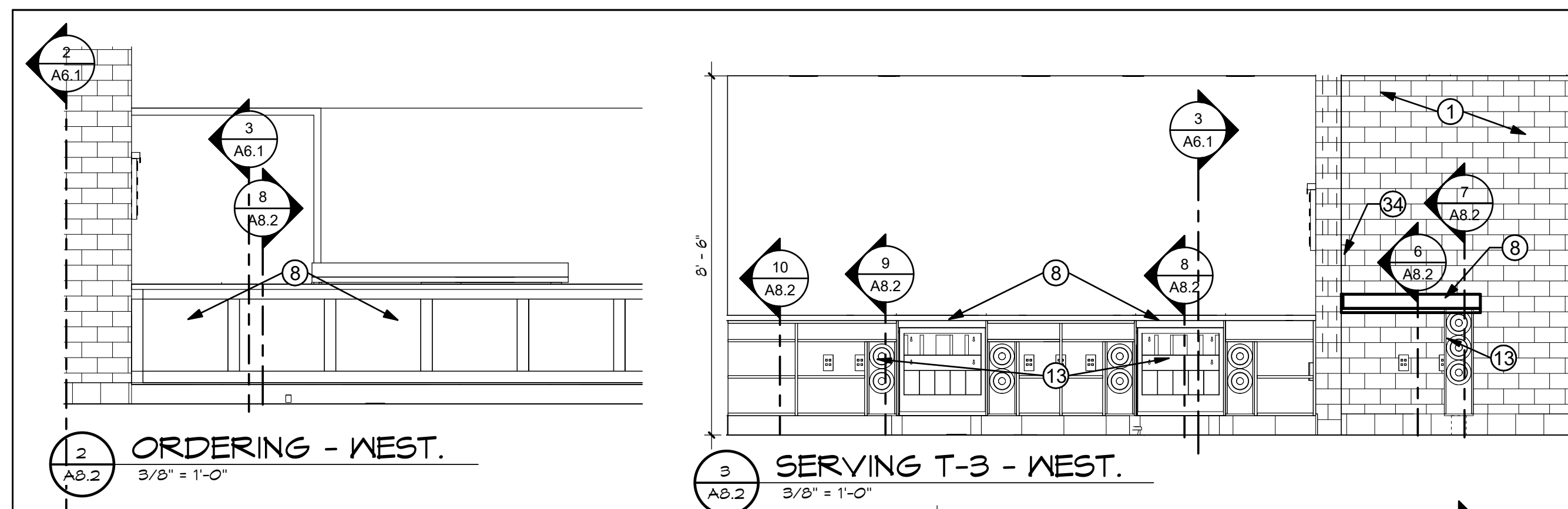
- VERIFY ALL ROOM FINISH DIMENSIONS PRIOR TO FABRICATION OF CABINETS.
- SEE FINISH SCHEDULE ON SHEET A2.1 AND PROVIDE DESIGNATED BASE AT BOTTOM OF ALL BASE CABINETS.
- ALL INTERIOR ELEVATIONS ARE DRAWN AT 1/4" = 1'-0" UNLESS NOTED OTHERWISE.
- PROVIDE WALL BLOCKING FOR ALL CASEWORK, ACCESSORIES, AND EQUIPMENT AS REQUIRED - SEE SHEET A2.1
- SEE ELECTRICAL DRAWINGS FOR ALL OUTLET & DEVICE LOCATIONS, NOT ALL SHOWN ON THESE ELEVATIONS.
- HORIZONTAL DIMENSIONS SHOWN ON THESE ELEVATIONS ARE APPROXIMATE. DIMENSIONS SHOWN ON AD1.X SERIES FLOOR PLANS GOVERN.
- SEE A10.X SERIES DRAWINGS FOR ACTUAL DOOR AND WINDOW ELEVATIONS (TRIM, paneled DOORS, ETC.).
- GENERAL CONTRACTOR IS TO CUT HOLES FOR INSTALLATION OF ELECTRICAL FIXTURES IN ALL COUNTERTOP TYPES - COORDINATE WITH ELECTRICAL.
- INTERIOR ELEVATIONS DO NOT SHOW ENTIRE DETAIL AT DOOR AND WINDOW SYSTEMS (BLINDS, SILLS, APRONS, TRIM, ETC.)
- SEE A2.1 FOR FINISH ABBREVIATIONS.
- COORDINATE ELECTRICAL WALL OUTLETS & THEIR PLACEMENT WITHIN OPEN CASEWORK BELOW COUNTERTOPS

**KEYED NOTES** NOTED THIS: (X)

- NEW METAL STUD FRAMED WALL, SEE AD1.1 FOR WALL TYPES
- NO WORK IN THIS ROOM - PATCH & FINISH ANY WALL FROM DEMO AS NECESSARY
- EXISTING FLOORING TO REMAIN - PROTECT FROM DAMAGE
- NEW FLOOR FINISH - SEE ROOM FINISH SCHEDULE ON A2.1 & SPECS.
- NEW WALL MOUNTED ELECTRICAL DEVICE - SEE ELECTRICAL DRAWINGS
- EXISTING STRUCTURAL COLUMN TO REMAIN - PROTECT FROM DAMAGE
- (E) WALL MOUNTED ELECTRICAL DEVICE TO REMAIN - SEE ELECTRICAL DRAWINGS
- SOLID SURFACE COUNTERTOP WITH P-LAM BASE CASEWORK - SEE DETAILS ON SHEET A8.2 - CONTRACTOR FURNISH CONTRACTOR INSTALL
- EXISTING SECURITY GRILL TO REMAIN - PROTECT FROM DAMAGE
- NEW PLUMBING FIXTURE, SEE PLUMBING DRAWINGS
- NEW 4" PVC BEVERAGE CHASES - ROUTE FROM 6" BELOW CEILING & THROUGH THE WALL, DOWN TO BELOW THE CASEWORK COUNTER TOP - MSU VENDOR TO PROVIDE SHOP DRAWINGS FOR COORDINATION
- NEW ANSUL FULL LOCATIONS FOR HOODS, SEE MECHANICAL AND ELECTRICAL DRAWINGS
- KITCHEN EQUIPMENT - O.F.C.I. - GC TO PROVIDE ALL REQUIRED MECHANICAL & ELECTRICAL INFRASTRUCTURE AS REQUIRED
- NEW KITCHEN HOOD - ALIGN WITH EDGE OF WALL OR PASS-THRU - O.F.C.I. - SEE MECH. DNGS
- NEW DOOR, SEE A10.1 FOR DOOR SCHEDULE
- STAINLESS STEEL COUNTERTOP
- NEW FLOOR SINK - SEE PLUMBING DRAWINGS
- PRESSURE TREATED CURB BELOW - SECURE TO EXISTING SUB FLOOR
- (E) FLOOR SINK TO REMAIN - SEE PLUMBING DRAWINGS
- NEW FLOOR DRAIN - SEE PLUMBING DRAWINGS
- NEW FLOOR RECEPTOR - SEE PLUMBING DRAWINGS
- SIGNAGE - SEE SPECS
- NEW MOP SINK - SEE PLUMBING DRAWINGS
- (E) DOOR TO REMAIN - PROTECT FROM DAMAGE
- (E) WALLS TO REMAIN - SEE FINISH SCHEDULE
- WALL MOUNTED ELECTRICAL PANELS - SEE ELECTRICAL DRAWINGS
- POINT OF SALE (POS) REGISTERS - BY OWNER - N.I.C
- STAINLESS STEEL WALL PANELS - SEE INTERIOR ELEVATIONS ON SHEET A8.1
- STAINLESS STEEL CASSED OPENING HEAD & JAMB
- PORTION OF (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN - PROTECT REMAINING FINISHES
- DIGITAL MENU BOARDS - OWNER FURNISH VENDOR (GNEPLEX) INSTALL - COORDINATE REQUIRED ELECTRIC WITH ELECTRICAL DRAWINGS
- RELOCATED CONTROLS FOR THE EXISTING O.H. SECURITY GRILL
- CEILING MOUNTED "PICK UP" SIGN - OWNER FURNISHED, OWNER INSTALLED - SEE SPECS
- "PICK UP" SHELVING RACK - BY OWNER
- ACCESS CONTROL DEVICE - SEE ELECTRICAL DRAWINGS & DOOR HARDWARE SPECIFICATION SECTION 08 11 00

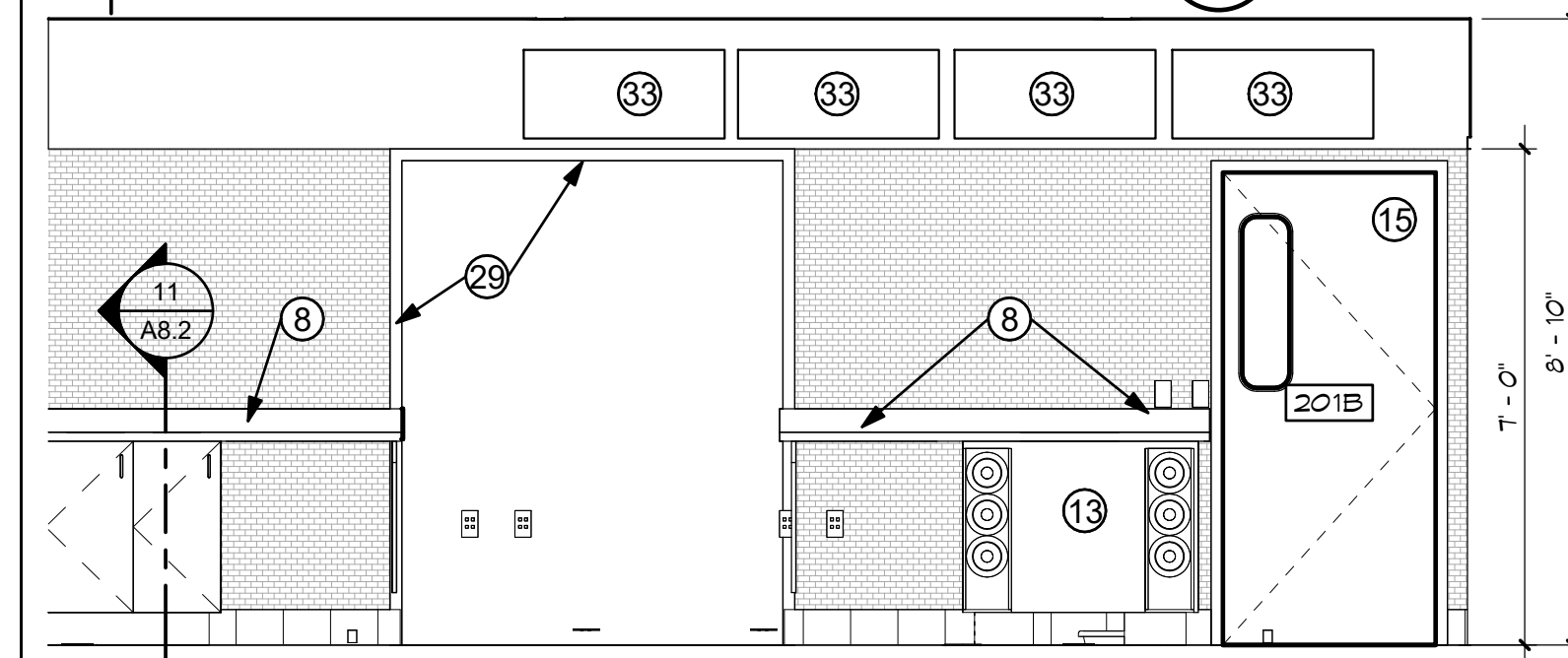




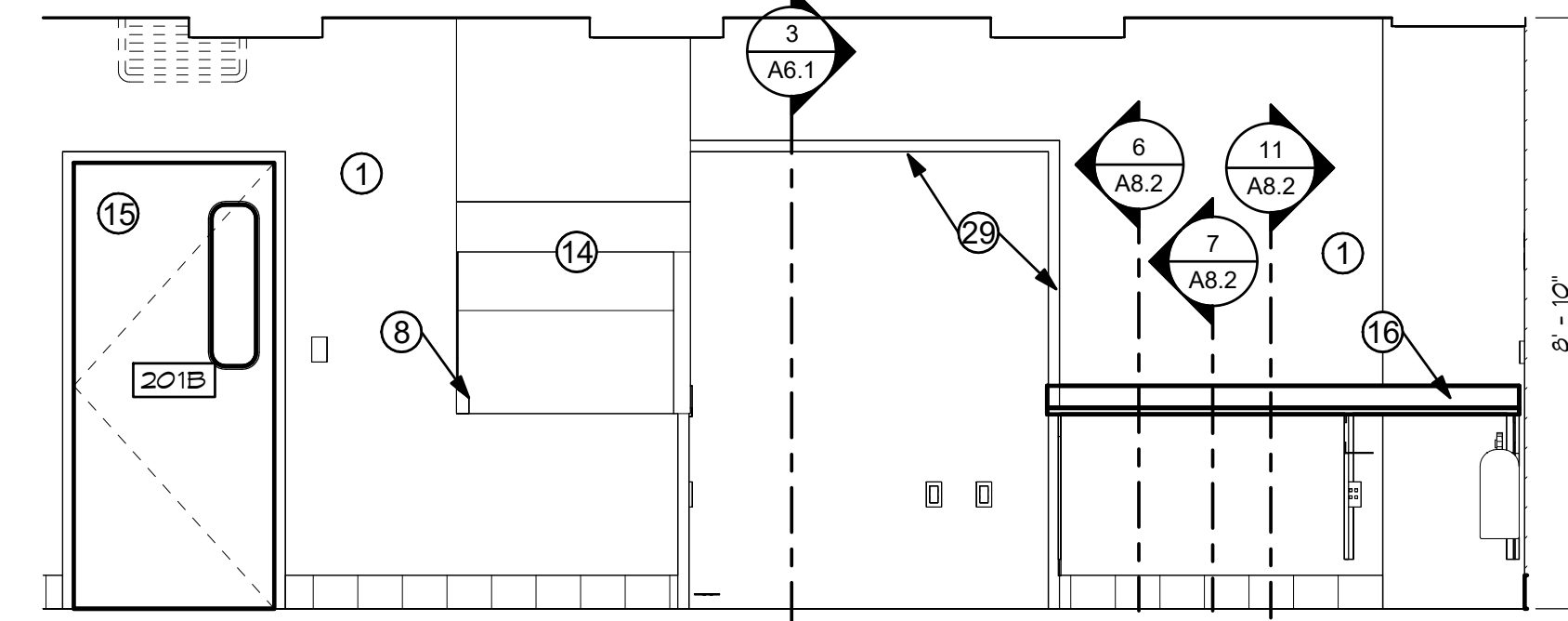


2 ORDERING - WEST.  
3/8" = 1'-0"

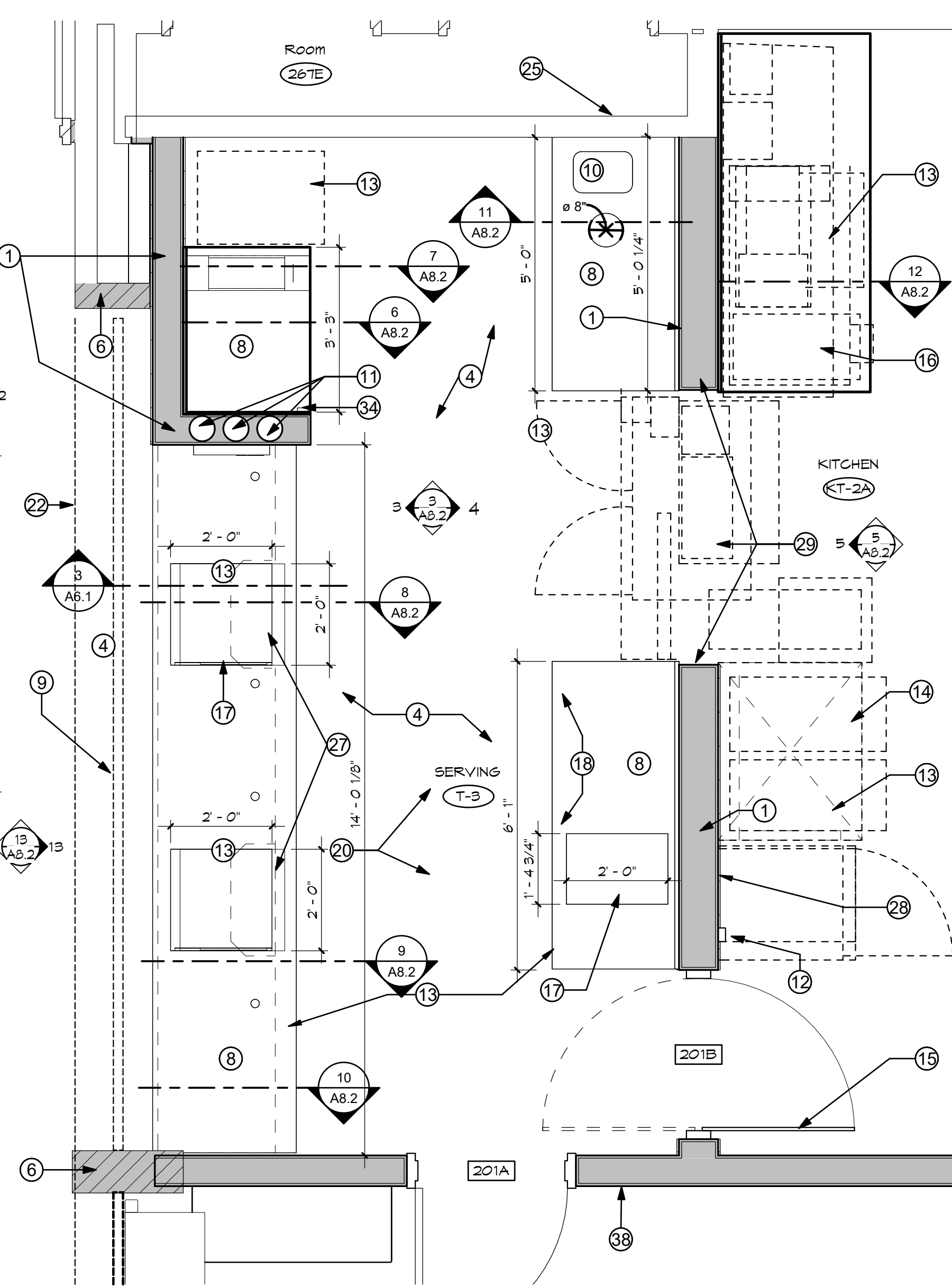
3 SERVING T-3 - WEST.  
3/8" = 1'-0"



4 SERVING T-3 - EAST.  
3/8" = 1'-0"



5 KITCHEN KT-2A - WEST.  
3/8" = 1'-0"



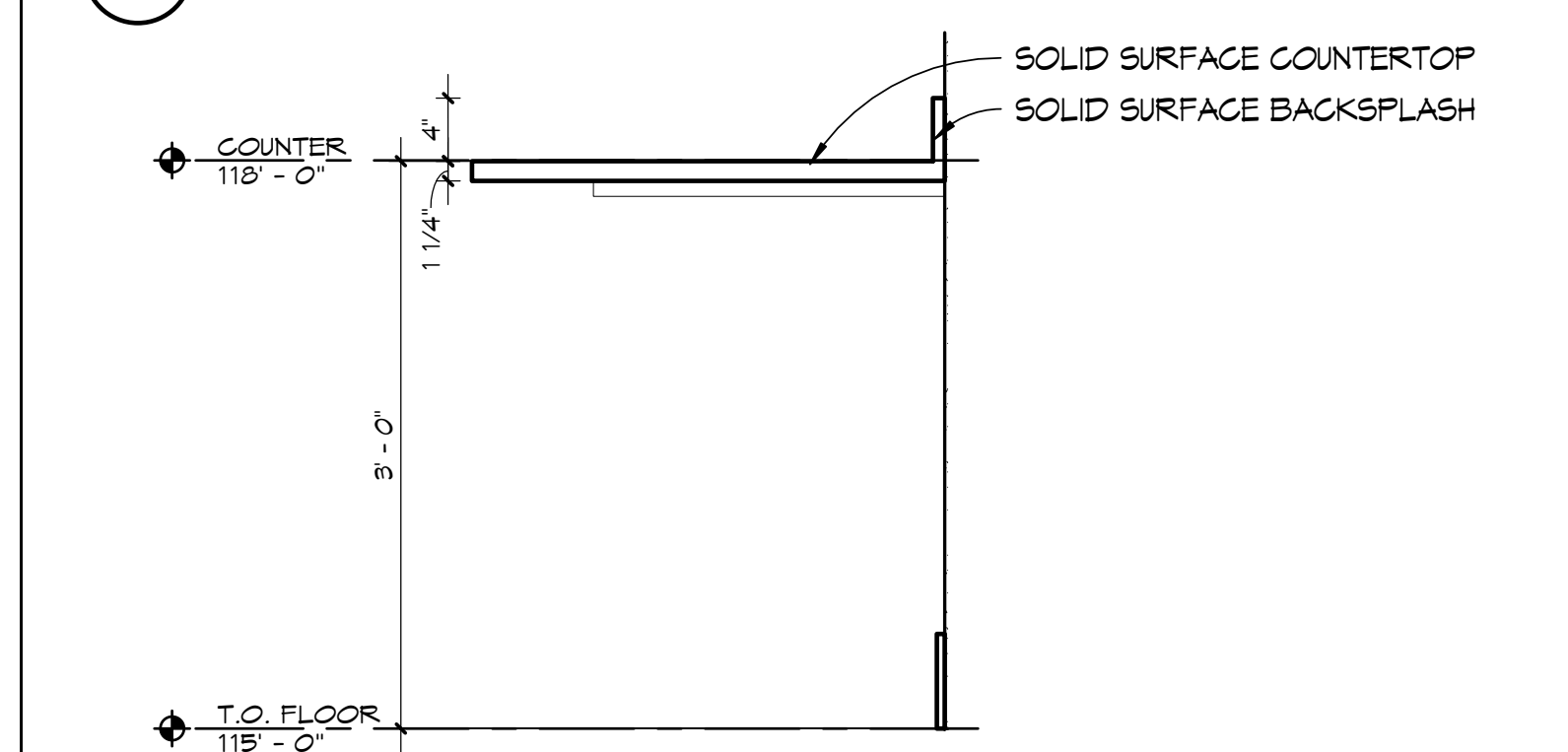
1 CASEWORK DETAIL LOCATIONS  
1/2" = 1'-0"

**GENERAL NOTES**

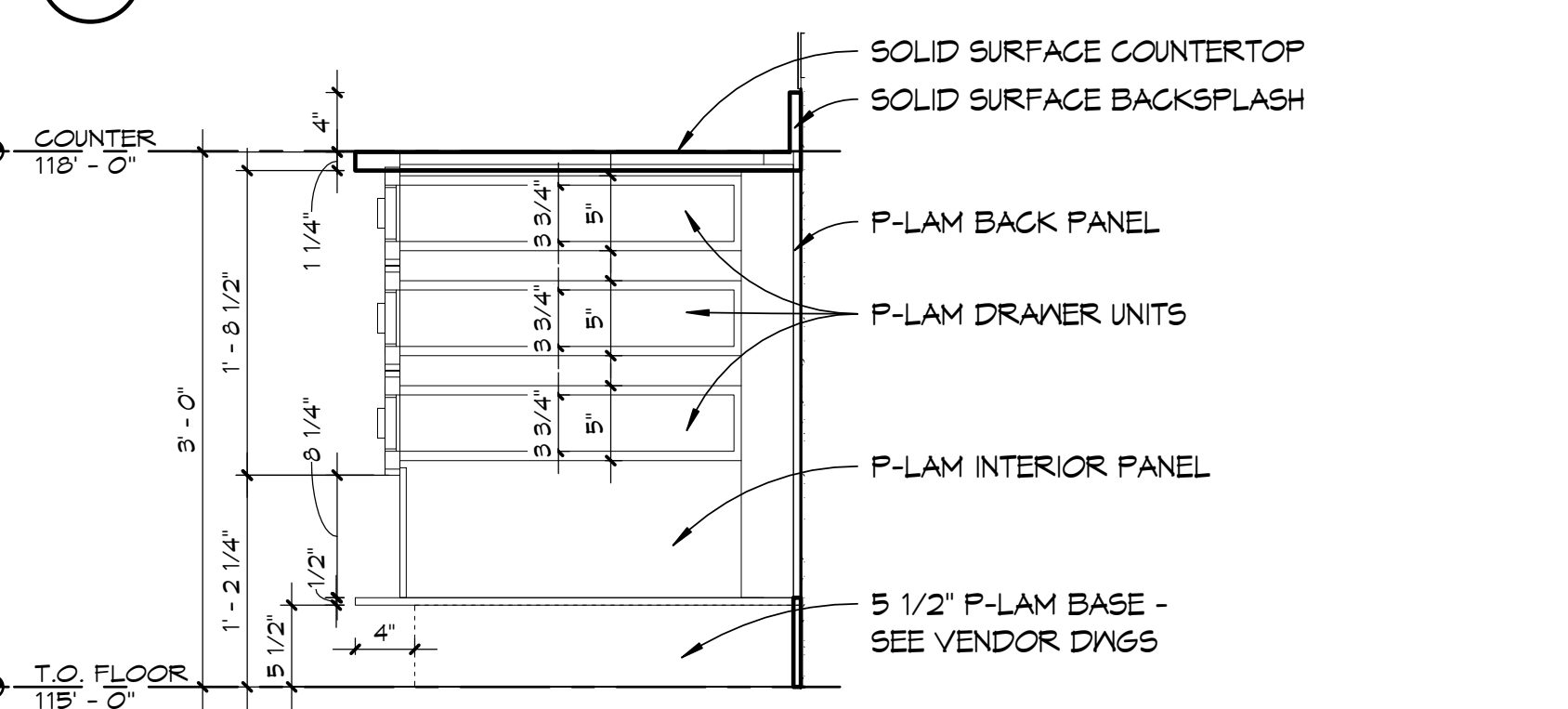
1. VERIFY ALL ROOM FINISH DIMENSIONS PRIOR TO FABRICATION OF CABINETS.
2. SEE FINISH SCHEDULE ON SHEET A2.1 AND PROVIDE DESIGNATED BASE AT BOTTOM OF ALL BASE CABINETS.
3. ALL INTERIOR ELEVATIONS ARE DRAWN AT 1/4" = 1'-0" UNLESS NOTED OTHERWISE.
4. PROVIDE WALL BLOCKING FOR ALL CASEWORK, ACCESSORIES, AND EQUIPMENT AS REQUIRED - SEE SHEET A2.1
5. SEE ELECTRICAL DRAWINGS FOR ALL OUTLET & DEVICE LOCATIONS, NOT ALL SHOWN ON THESE ELEVATIONS.
6. HORIZONTAL DIMENSIONS SHOWN ON THESE ELEVATIONS ARE APPROXIMATE. DIMENSIONS SHOWN ON AD1.X SERIES FLOOR PLANS GOVERN.
7. SEE A10.X SERIES DRAWINGS FOR ACTUAL DOOR AND WINDOW ELEVATIONS (TRIM, paneled doors, ETC.).
8. GENERAL CONTRACTOR IS TO CUT HOLES FOR INSTALLATION OF ELECTRICAL FIXTURES IN ALL COUNTERTOP TYPES - COORDINATE WITH ELECTRICAL.
9. INTERIOR ELEVATIONS DO NOT SHOW ENTIRE DETAIL AT DOOR AND WINDOW SYSTEMS (BLINDS, SILLS, AFRONS, TRIM, ETC.)
10. SEE A2.1 FOR FINISH ABBREVIATIONS.
11. COORDINATE ELECTRICAL WALL OUTLETS & THEIR PLACEMENT WITHIN OPEN CASEWORK BELOW COUNTERTOPS

**KEYED NOTES** NOTED THIS: (X)

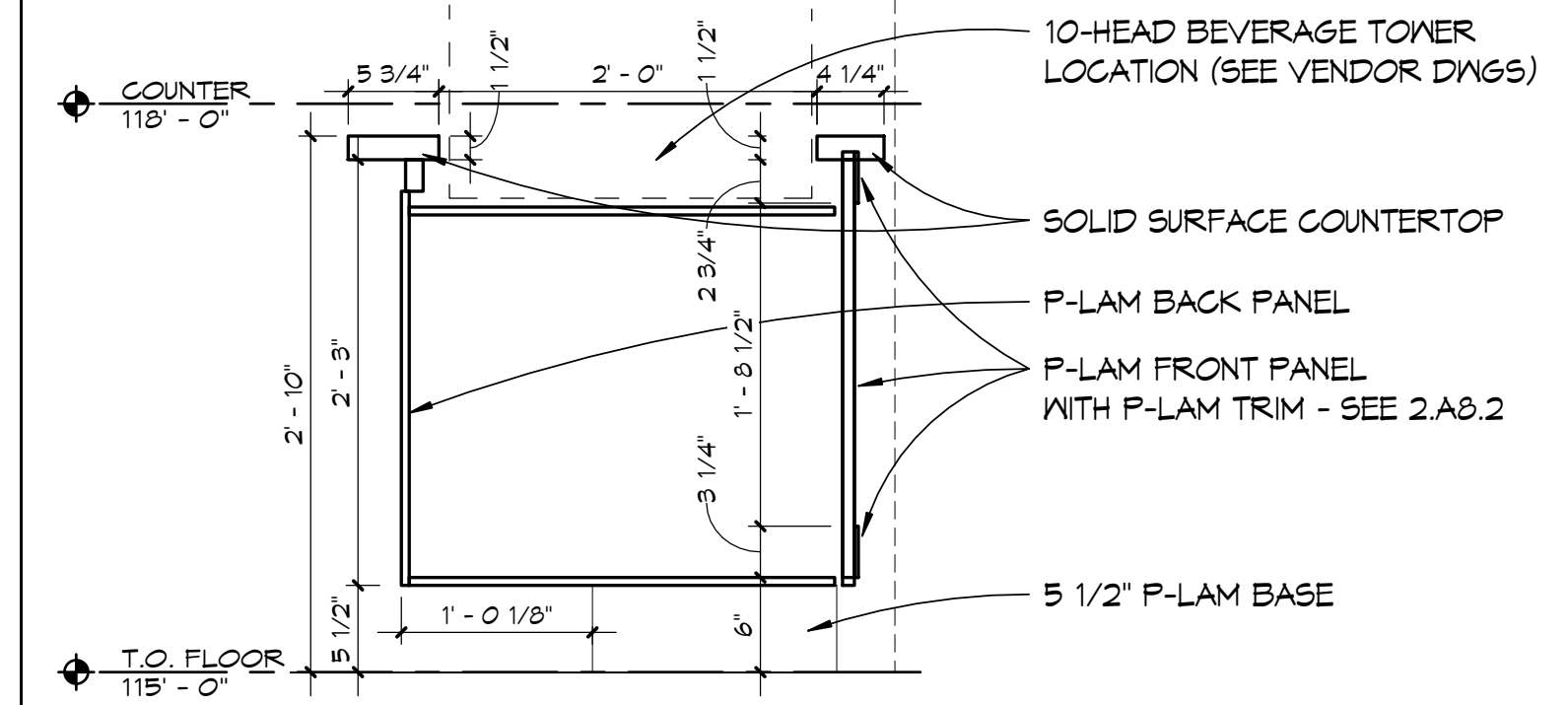
1. NEW METAL STUD FRAMED WALL, SEE AD1.1 FOR WALL TYPES
2. NO WORK IN THIS ROOM - PATCH & FINISH ANY WALL FROM DEMO AS NECESSARY
3. EXISTING FLOORING TO REMAIN - PROTECT FROM DAMAGE
4. NEW FLOOR FINISH - SEE ROOM FINISH SCHEDULE ON A2.1 & SPECS.
5. NEW WALL MOUNTED ELECTRICAL DEVICE - SEE ELECTRICAL DRAWINGS
6. EXISTING STRUCTURAL COLUMN TO REMAIN - PROTECT FROM DAMAGE
7. (E) WALL MOUNTED ELECTRICAL DEVICE TO REMAIN - SEE ELECTRICAL DRAWINGS
8. SOLID SURFACE COUNTERTOP WITH P-LAM BASE CASEWORK - SEE DETAILS ON SHEET A8.2 - CONTRACTOR FURNISH CONTRACTOR INSTALL
9. EXISTING SECURITY GRILL TO REMAIN - PROTECT FROM DAMAGE
10. NEW PLUMBING FIXTURE, SEE PLUMBING DRAWINGS
11. NEW 4" PVC BEVERAGE CHASES - ROUTE FROM 6" BELOW CEILING & THROUGH THE WALL, DOWN TO BELOW THE CASEWORK COUNTER TOP - MSU VENDOR TO PROVIDE SHOP DRAWINGS FOR COORDINATION
12. NEW ANGUL FULL LOCATIONS FOR HOODS, SEE MECHANICAL AND ELECTRICAL DRAWINGS
13. KITCHEN EQUIPMENTS - O.F.C.I. - GC TO PROVIDE ALL REQUIRED MECHANICAL & ELECTRICAL INFRASTRUCTURE AS REQUIRED
14. NEW KITCHEN HOOD - ALIGN WITH EDGE OF WALL OR PASS-THRU - O.F.C.I. - SEE MECH. DWGS
15. NEW DOOR, SEE A10.1 FOR DOOR SCHEDULE
16. STAINLESS STEEL COUNTERTOP
17. NEW FLOOR SINK - SEE PLUMBING DRAWINGS
18. PRESSURE TREATED CURB BELOW - SECURE TO EXISTING SUB FLOOR
19. (E) FLOOR SINK TO REMAIN - SEE PLUMBING DRAWINGS
20. NEW FLOOR DRAIN - SEE PLUMBING DRAWINGS
21. NEW FLOOR RECEPTOR - SEE PLUMBING DRAWINGS
22. SIGNAGE - SEE SPECS
23. NEW MOP SINK - SEE PLUMBING DRAWINGS
24. (E) DOOR TO REMAIN - PROTECT FROM DAMAGE
25. (E) WALLS TO REMAIN - SEE FINISH SCHEDULE
26. WALL MOUNTED ELECTRICAL PANELS - SEE ELECTRICAL DRAWINGS
27. POINT OF SALE (POS) REGISTERS - BY OWNER - N.I.C
28. STAINLESS STEEL WALL PANELS - SEE INTERIOR ELEVATIONS ON SHEET A8.1
29. STAINLESS STEEL CASED OPENING HEAD & JAMB
30. PORTION OF (E) SALAD BAR CASEWORK, EQUIPMENT, PLUMBING FIXTURES & ELECTRICAL TO REMAIN - PROTECT REMAINING FINISHES
31. DIGITAL MENU BOARDS - OWNER FURNISH VENDOR (GNEFLEX) INSTALL - COORDINATE REQUIRED ELECTRIC WITH ELECTRICAL DRAWINGS
32. RELOCATED CONTROLS FOR THE EXISTING O.H. SECURITY GRILL
33. CEILING MOUNTED "PICK UP" SIGN - OWNER FURNISHED, OWNER INSTALLED - SEE SPECS
34. "PICK UP" SHELVING RACK - BY OWNER
35. ACCESS CONTROL DEVICE - SEE ELECTRICAL DRAWINGS & DOOR HARDWARE SPECIFICATION SECTION 08 71 00



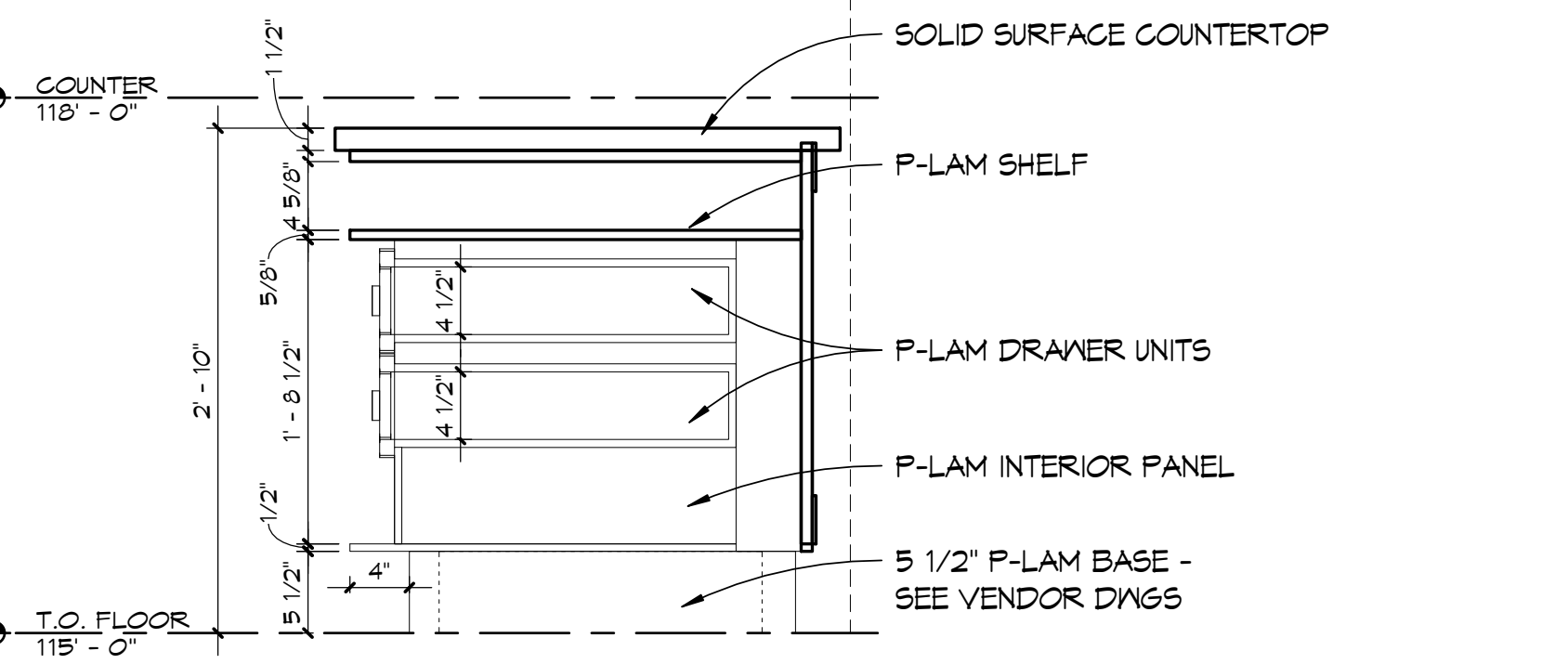
6 CASEWORK SECTION 1  
1" = 1'-0"



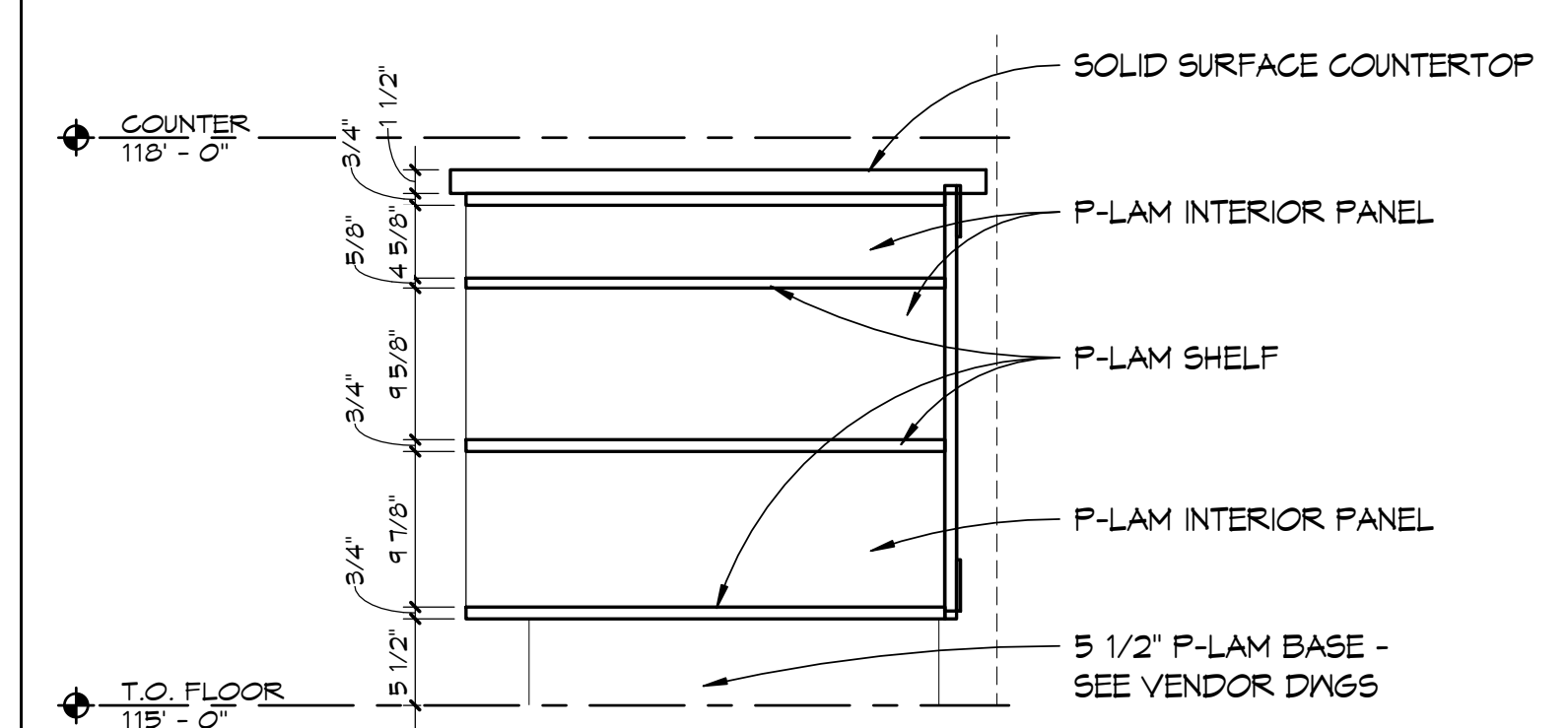
7 CASEWORK SECTION 2  
1" = 1'-0"



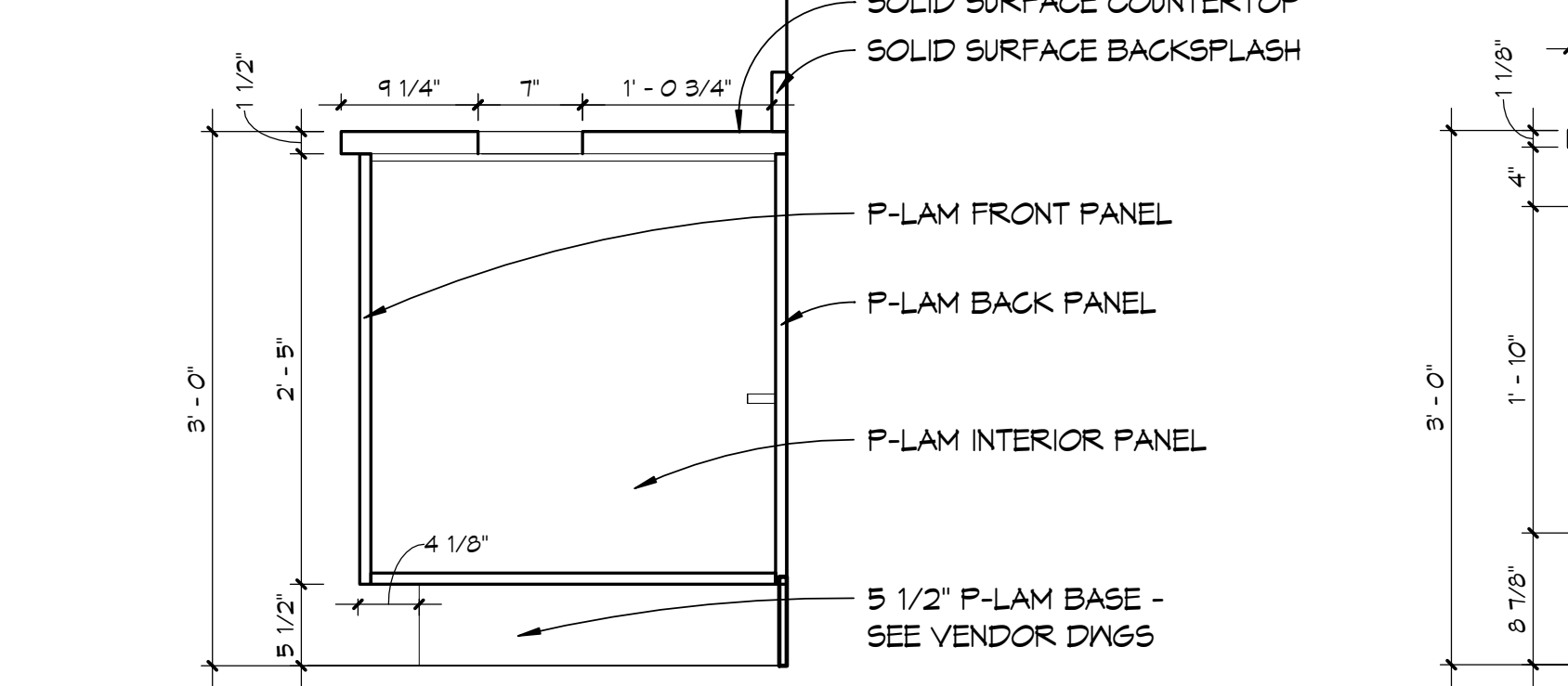
8 CASEWORK SECTION 3  
1" = 1'-0"



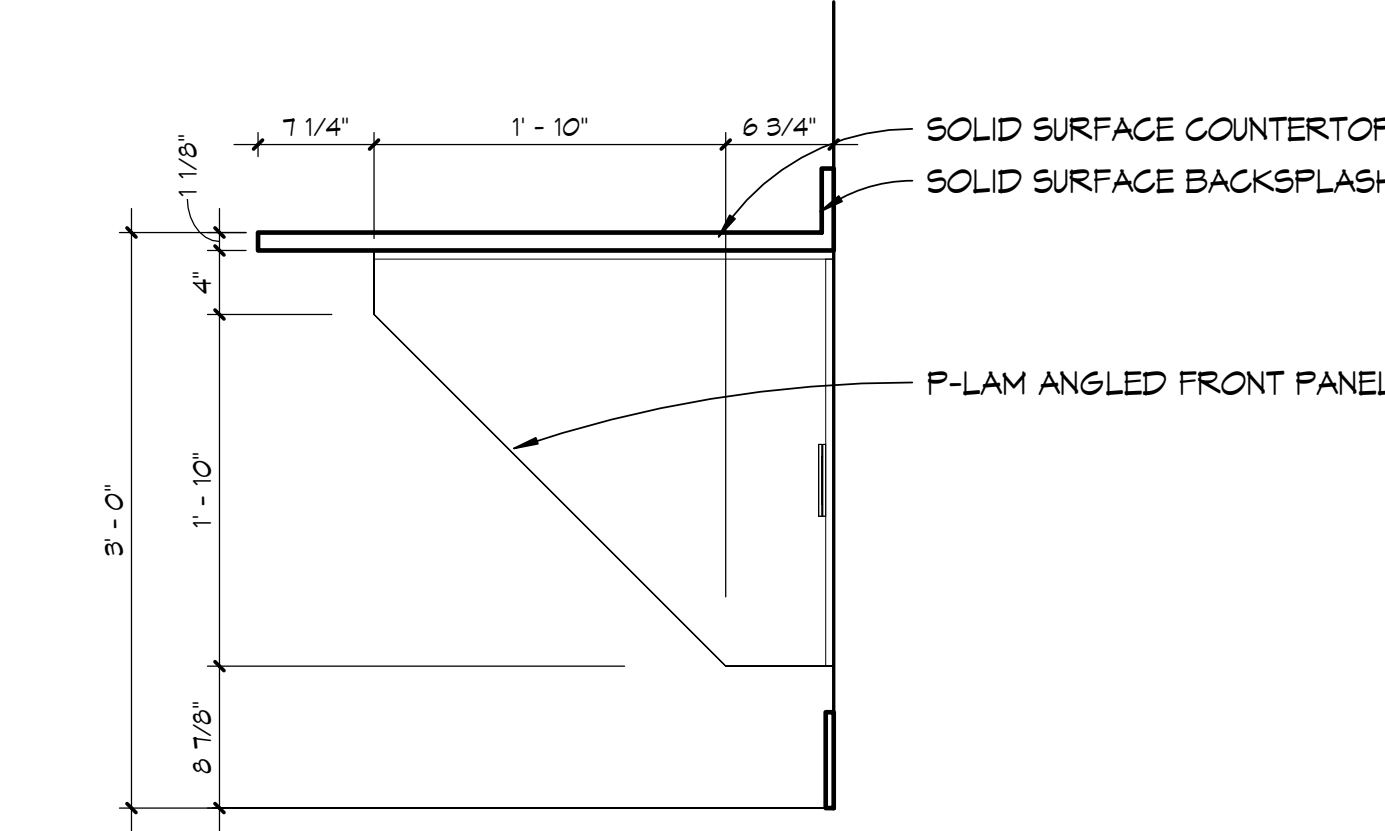
9 CASEWORK SECTION 4  
1" = 1'-0"



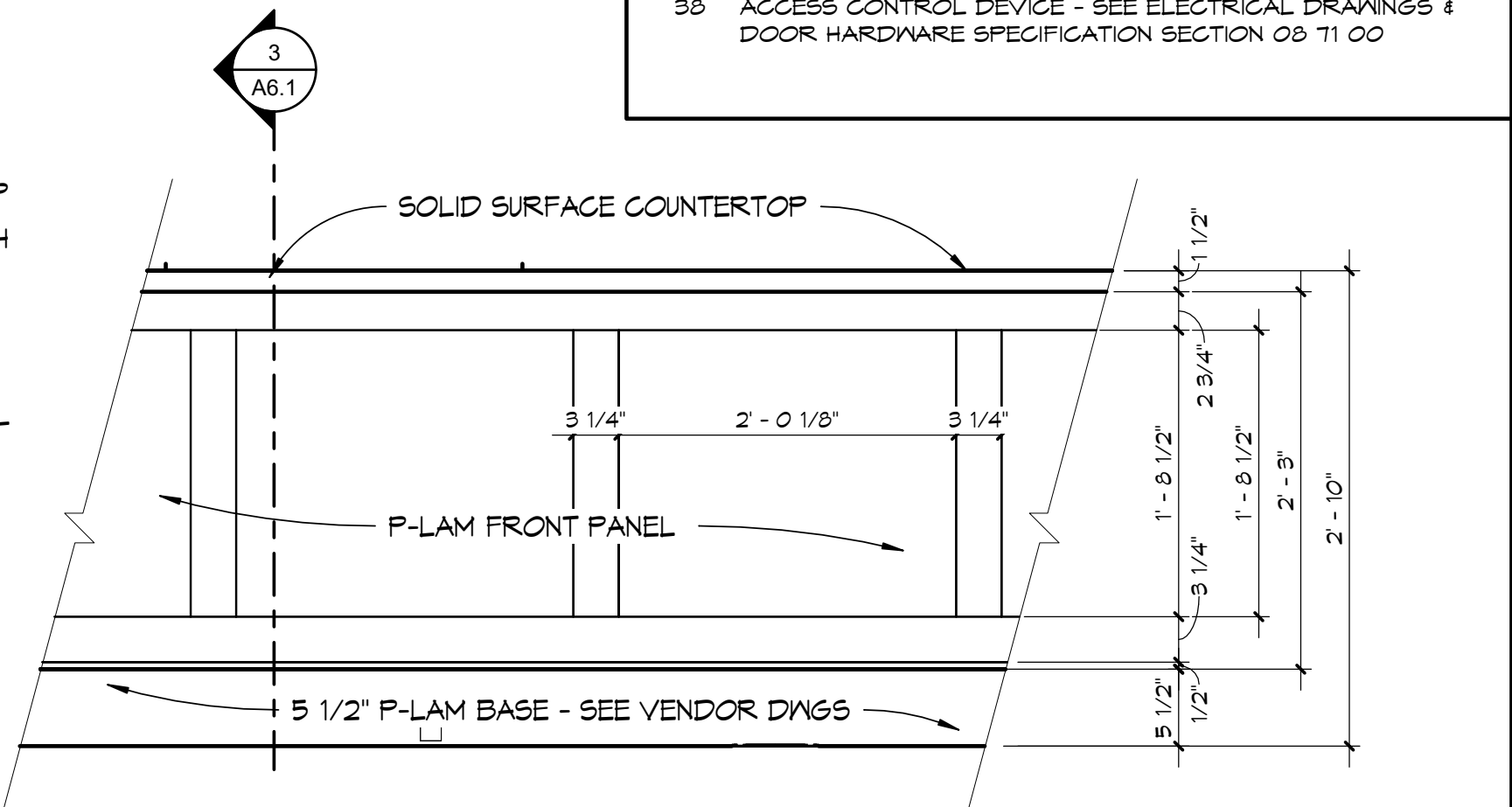
10 CASEWORK SECTION 5  
1" = 1'-0"



11 CASEWORK SECTION 6  
1" = 1'-0"



12 CASEWORK SECTION 7  
1" = 1'-0"



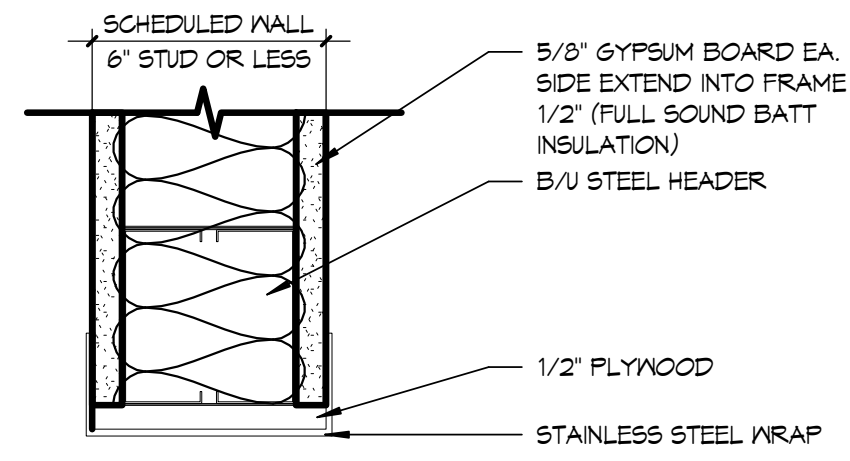
13 ENLARGED ORDERING CASEWORK DETAIL  
1" = 1'-0"

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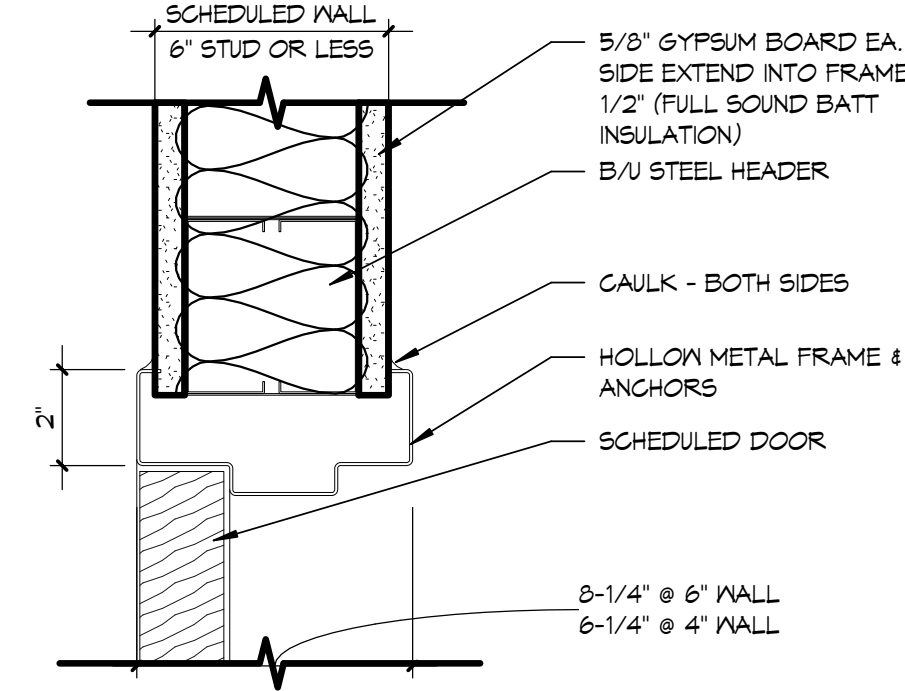
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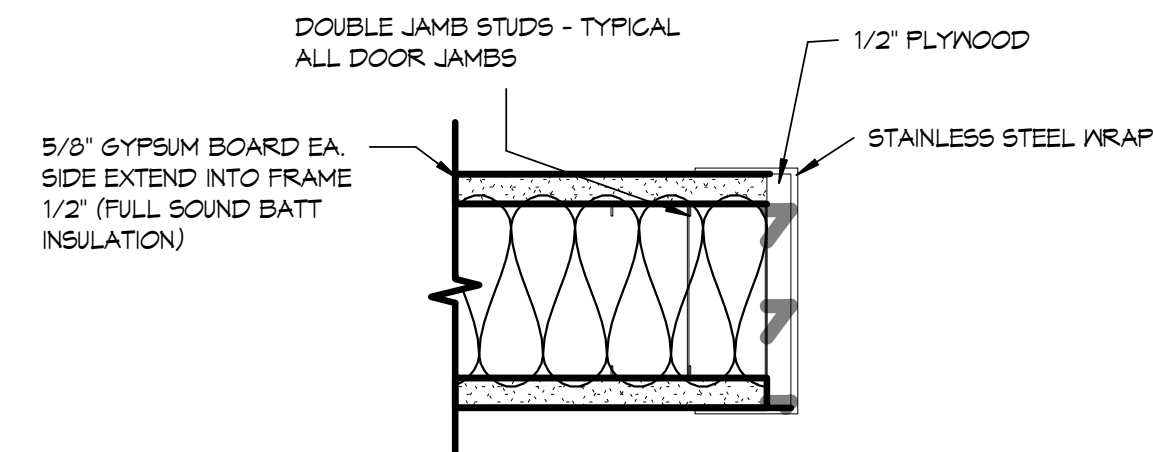
DOOR DETAILS



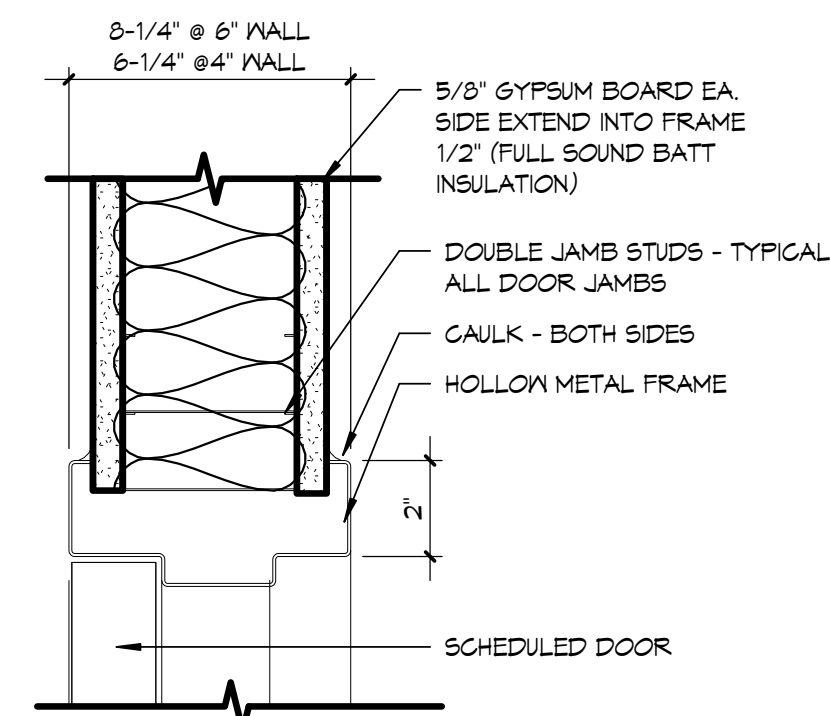
8  
A10.1  
INTERIOR STEEL CASED OPENING HEAD DETAIL  
3" = 1'-0"



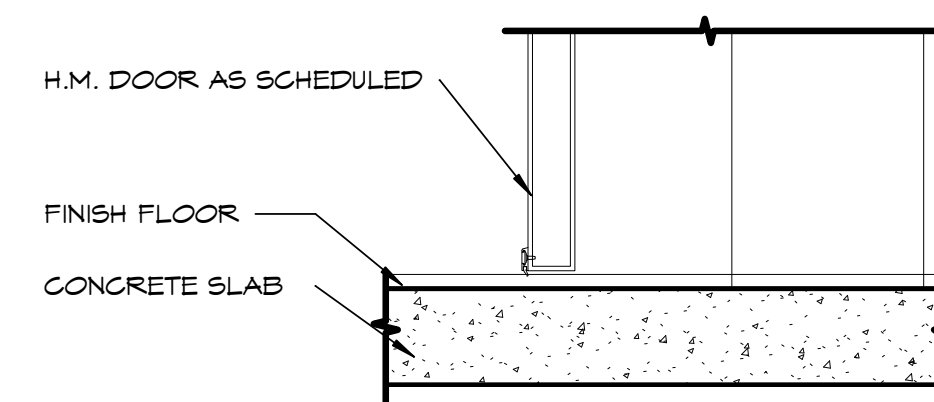
5  
A10.1  
INTERIOR H.M. HEAD DETAIL  
3" = 1'-0"



9  
A10.1  
INTERIOR STEEL CASED OPENING JAMB DETAIL  
3" = 1'-0"



6  
A10.1  
INTERIOR H.M. JAMB DETAIL  
3" = 1'-0"



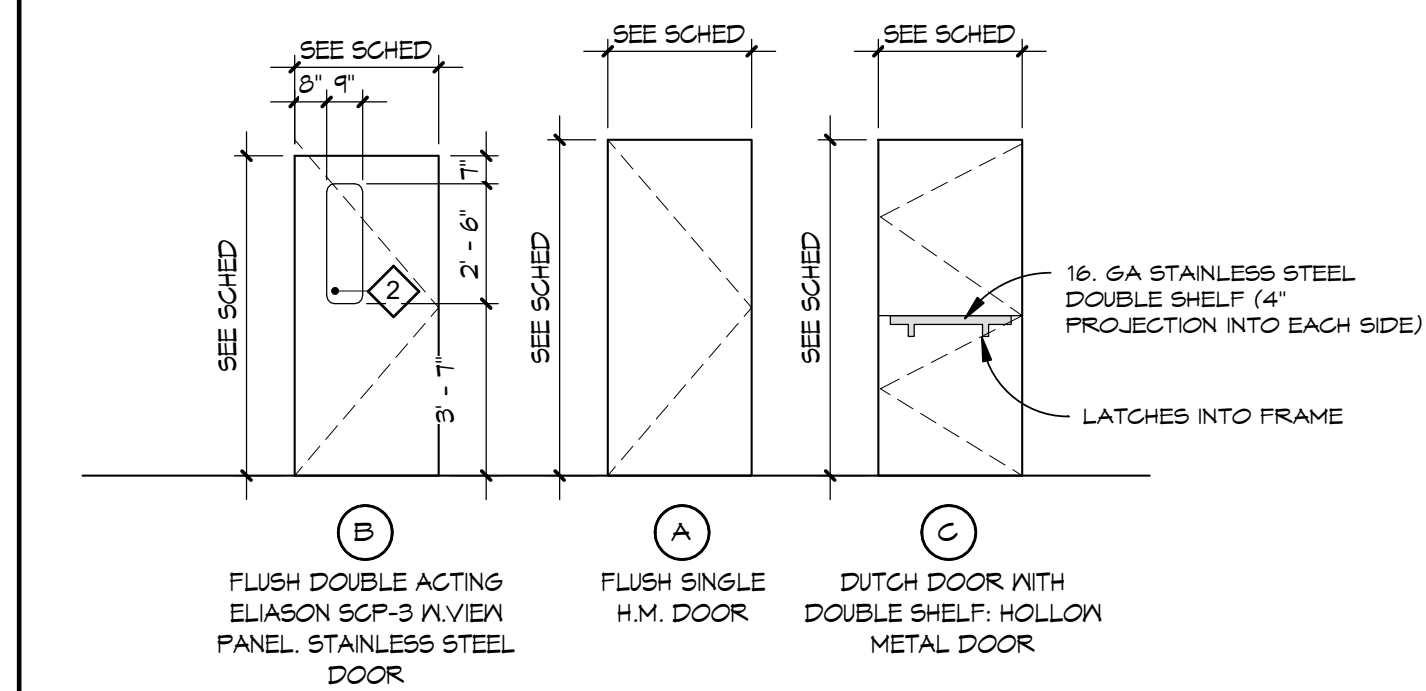
7  
A10.1  
H.M. DOOR THRESHOLD - TYP  
1 1/2" = 1'-0"

DOOR SCHEDULE

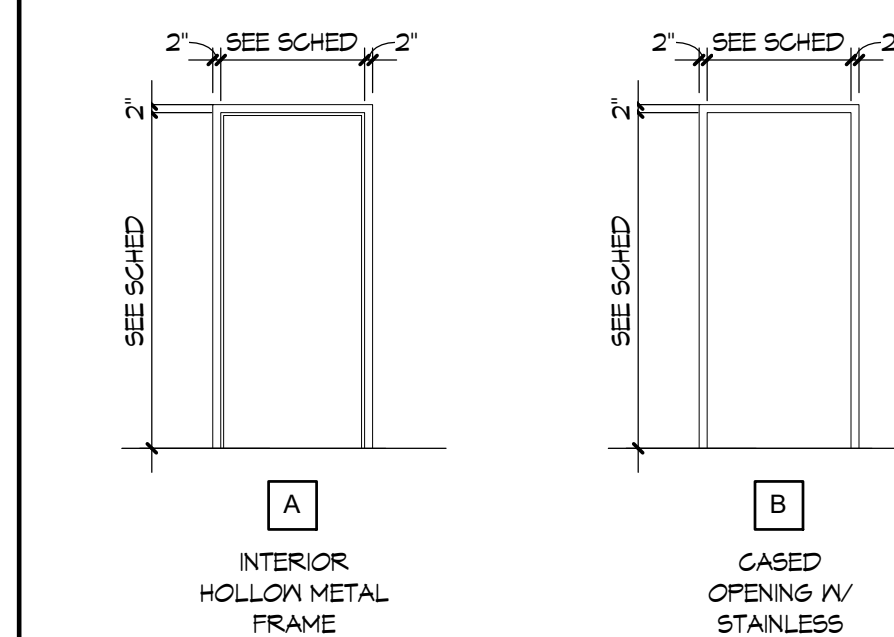
DOOR NUMBER	DOOR TYPE	DOOR SIZE	FRAME TYPE	HEAD DETAIL	JAMB DETAIL	HDWR	REMARKS
201A	B	3' - 0" X 7' - 0"	A	5/A10.1	6/A10.1	1	
201B	C	3' - 0" X 6' - 8"	A	5/A10.1	6/A10.1	2	
201C	A	3' - 0" X 6' - 8"	B	5/A10.1	6/A10.1	3	

FOR ADDITIONAL INFORMATION ON DOOR HARDWARE GROUPS - SEE SPEC SECTION 08 71 00

DOOR TYPES



DOOR FRAMES



DOOR NOTES

- FIELD VERIFY ALL ROUGH OPENINGS PRIOR TO FABRICATION OF DOOR AND WINDOW FRAMES.
- PROVIDE SEALANT ENTIRE PERIMETER OF ALL DOOR AND WINDOW FRAMES - BOTH SIDES.
- PROVIDE ADEQUATE BARRIER AGAINST CORROSION BETWEEN DIFFERENT TYPES OF MATERIALS THAT MAY COME IN CONTACT.
- ALL HOLLOW METAL FRAME THROAT DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO FRAME FABRICATION.
- REFER TO A1.X, AD1.X AND AS.X SERIES DRAWINGS FOR DOOR AND CASED OPENING LOCATIONS.
- SEE SHEET A2.1 FOR ROOM FINISH SCHEDULE FOR WALL AND FLOOR FINISHES.
- ACCESS DOORS DO NOT APPEAR ON THE DOOR SCHEDULE. SEE FLOOR, CEILING, MECHANICAL AND PLUMBING PLANS FOR REQUIRED ACCESS DOORS.
- COORDINATE HARDWARE WITH FACILITY STANDARDS, HANDLE STYLE & FINISH.
- ALL LOCKSETS TO BE KEYPED TO MATCH FACILITY STANDARDS.
- GROAT FULL ALL HOLLOW METAL DOOR FRAMES IN EXCESS OF 5'-0".

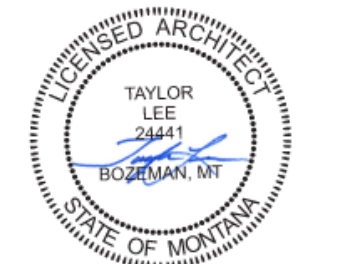


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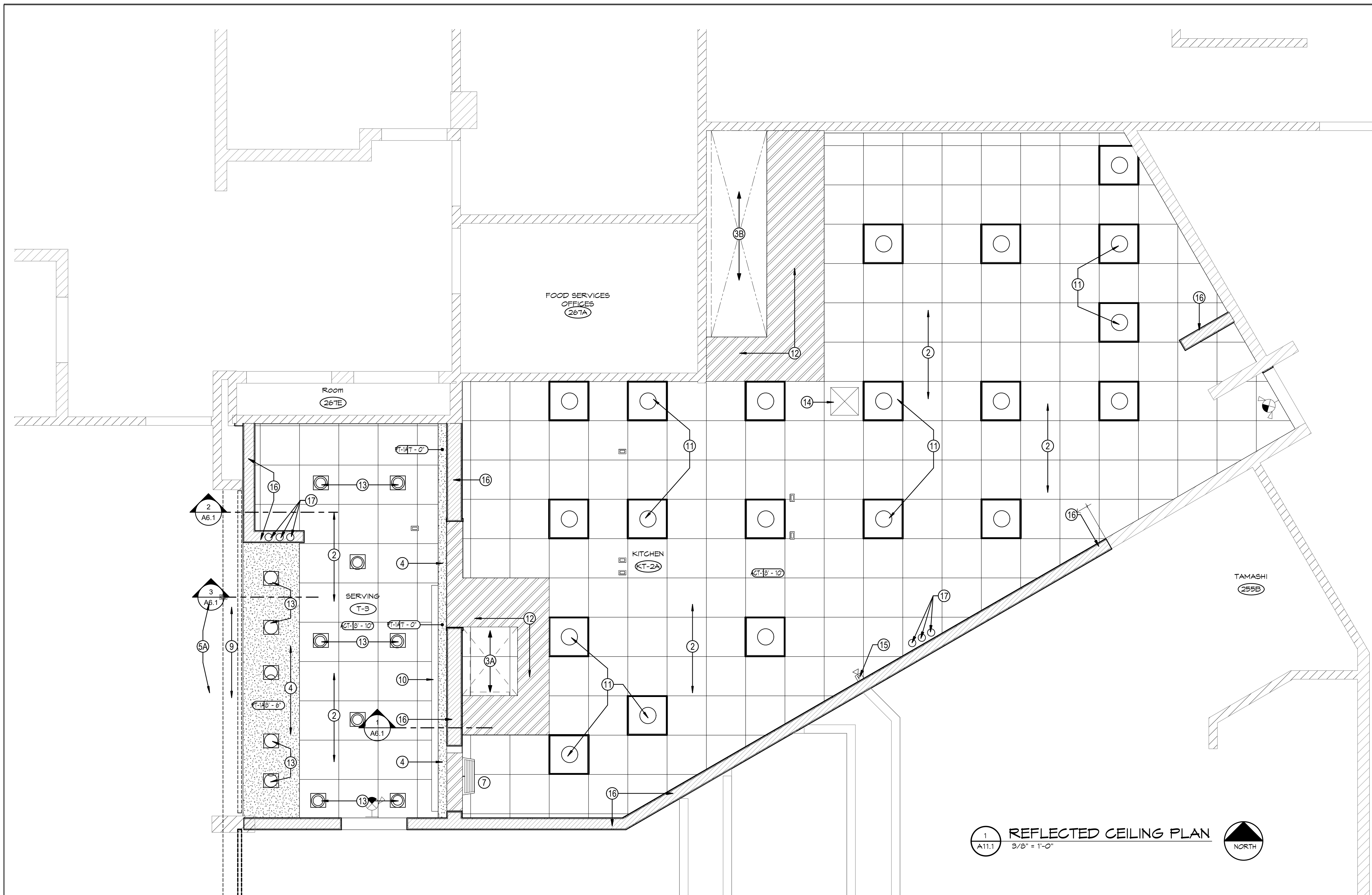


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Consultant #:  
SHEET TITLE  
DOOR SCHEDULE

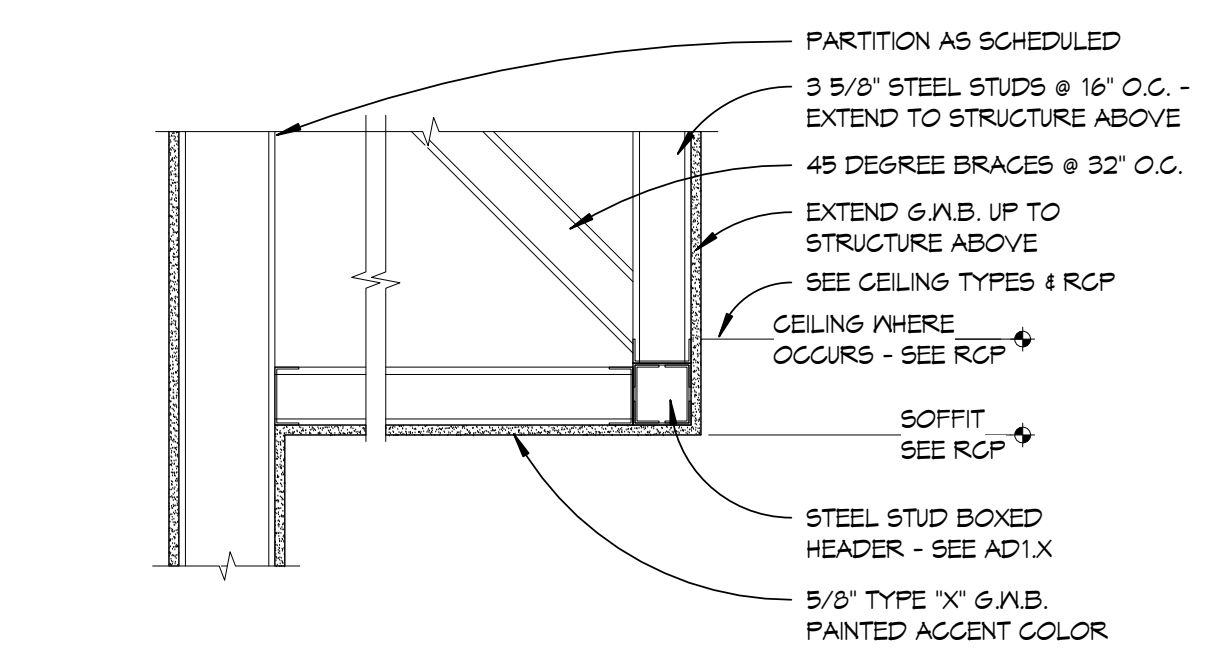
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A10.1

DATE  
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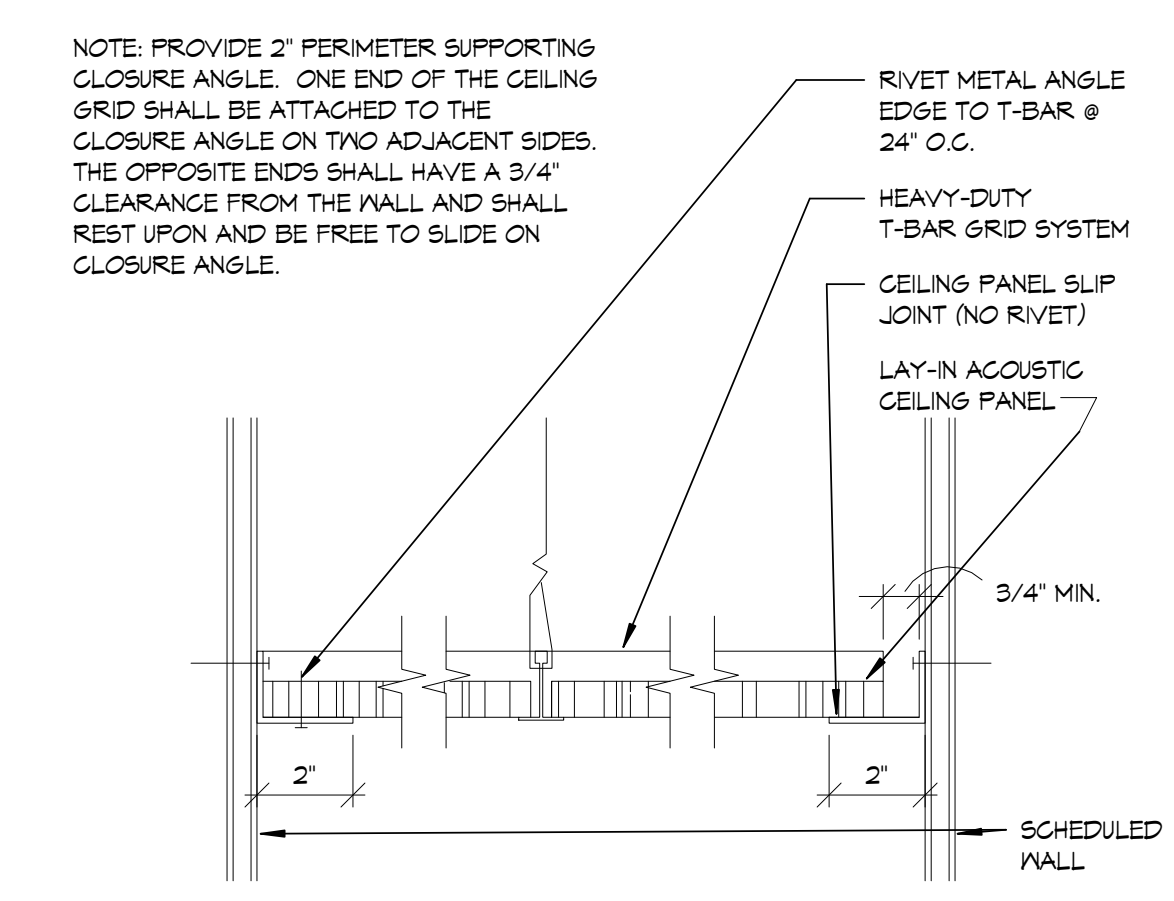




1 REFLECTED CEILING PLAN  
 3/8" = 1'-0"  
 NORTH



3 SOFFIT @ 315B  
 1" = 1'-0"

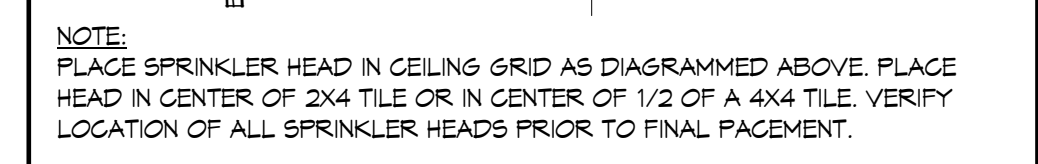


2 LAY-IN CEILING TILE EDGE  
 3/8" = 1'-0"

NOTE: PROVIDE 2" PERIMETER SUPPORTING CLOSURE ANGLE. ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE CLOSURE ANGLE ON TWO ADJACENT SIDES. THE OPPOSITE ENDS SHALL HAVE A 3/4" CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON CLOSURE ANGLE.

**GENERAL NOTES**

- CENTER LIGHT FIXTURES, ETC. IN CEILING TILES OR SPACES SHOWN.
- LIGHT FIXTURES WHICH OCCUR IN GYPSUM BOARD CEILINGS ARE TO BE CENTERED BETWEEN WALL AND/OR CASEWORK - UNLESS OTHERWISE NOTED.
- COORDINATE PLACEMENT OF MECHANICAL AND ELECTRICAL ITEMS TO AVOID CONFLICT WITH OBSTRUCTIONS ABOVE CEILING.
- SUSPENDED GYP. BOARD CEILINGS MAY BE EITHER OF THE FOLLOWING CONTRACTORS OPTION: 5/8" TYPE 'X' GNB ON 1/2" RESILIENT FURRING CHANNELS @ 24" O.C., SECURED TO 2 1/2" 'C' CHANNELS @ 48" O.C., SUSPENDED FROM STRUCTURE OR 5/8" TYPE 'X' GNB ON LIGHT GAUGE METAL FRAMING AS REQUIRED FOR SPANS SPACED @ 24" O.C.
- THIS BUILDING IS FULLY SPRINKLERED - SPRINKLER HEAD LOCATIONS AND QUANTITIES TO BE IN ACCORDANCE WITH NFPA-13 AND ADMINISTRATIVE AUTHORITY. HEADS TO BE EXACTLY CENTERED IN CEILING TILES, ROOMS OR BETWEEN OTHER CEILING ELEMENTS - SUCH AS LIGHT FIXTURES, SMOKE DETECTORS, ETC.



- PROVIDE ACCESS PANELS IN HARD CEILINGS WHERE REQUIRED TO ACCESS ABOVE CEILING VALVES, EQUIPMENT, ETC. SEE DETAIL 3/A11.2
- PROVIDE HOOD SUPPRESSION SYSTEM. SEE MECHANICAL DRAWINGS.
- PATCH AND REPAIR EXISTING DRYWALL CEILINGS THAT ARE SCHEDULED TO REMAIN 'LIKE NEW' CONDITION.
- ALL FIXTURES IN FOOD PREP. AREAS MUST HAVE LENS TYPE DIFFUSERS.
- ALL CEILING GRILLES, TRACKS, DIFFUSERS, ETC. SHALL BE FINISHED TO MATCH ADJACENT CEILING.
- CEILING SYSTEMS OR ANY CONSTRUCTION MUST ONLY BE ATTACHED TO STRUCTURE ABOVE.
- DIMENSIONS ON THIS SHEET ARE FROM THE FACE OF FINISH.
- CONNECT TO (E) FIRE ALARM SYSTEM AS REQUIRED BY LOCAL AHJ
- PROVIDE HOOD SUPPRESSION SYSTEM - SEE MECH. DWGS
- PROVIDE ACCESS PANELS AS NECESSARY WHERE ACCESS IS REQUIRED FOR FOOD SERVICE, MECHANICAL & ELECTRICAL EQUIPMENT

**KEYED NOTES** NOTED THIS: (X)

- EXISTING CEILING TO REMAIN, PROTECT FROM DAMAGE
- NEW LAY IN TILE & T-GRID CEILING SYSTEM - SEE DETAILS ON THIS SHEET
- NEW KITCHEN HOOD - ALIGN WITH EDGE OF WALL OR PASS-THRU - O.F.C.I. - SEE MECH. DWGS
- NEW KITCHEN HOOD, O.F.C.I. - SEE MECHANICAL DRAWINGS
- NEW GYP. BOARD SOFFIT - SEE DETAIL 3/A11.1
- LO-PRO SCRIPT WALL MOUNTED SIGNAGE MOUNTED ON FACE OF (E) SOFFIT ABOVE FRONT SERVING COUNTER, SEE INTERIOR ELEVATIONS ON A&X SERIES DRAWINGS AND SPECS
- SHELVING SUSPENDED FROM OVERHEAD, SEE VENDOR DRAWINGS
- OVERHEAD ELECTRICAL POWER BOX, SEE ELECTRICAL
- 6" PVC BEVERAGE CHASES, SEE VENDOR DRAWINGS
- EXISTING SECURITY GRILL TO REMAIN
- DIGITAL MENU BOARDS - OWNER FURNISH SUPPLIER INSTALL - COORDINATE REQUIRED ELECTRIC WITH ELECTRICAL DRAWINGS
- LAY IN LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- STAINLESS STEEL CEILING TILE - EXTEND BEYOND 18" FROM HOOD
- RECESSED CAN LIGHT - SEE ELECTRICAL DRAWINGS
- MECHANICAL GRILLE - SEE MECHANICAL DRAWINGS
- WALL MOUNTED HORN STROBE - SEE ELECTRICAL DRAWINGS
- NEW WALL SYSTEM - SEE AD1.1 FOR WALL TYPES
- NEW 4" PVC BEVERAGE CHASES - COORDINATE ABOVE CEILING CONDUIT ROUTING WITH M/E/P EQUIPMENT & FIXTURES - SEE MECHANICAL DRAWINGS

**CEILING TYPES**

- (X) INDICATES CEILING MATERIAL
- (Z) INDICATES CEILING HEIGHT
- ACT-1 ACOUSTICAL CEILING PANEL AND GRID
- PT-1A GYPSUM BOARD FINISHED WITH INTERIOR CEILING PAINT
- STAINLESS STEEL LAY IN CEILING PANEL

**SYMBOL KEY**

- RECESSED LIGHT FIXTURE - LOCATED AS PER THIS SHEET - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION & SCOPE
- SURFACE MOUNTED OR SUSPENDED LIGHT FIXTURES - LOCATE AS PER THIS SHEET - SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION
- RECESSED CAN LIGHT - LOCATED AS PER THIS SHEET. SEE ELECT. DWGS. FOR ADDITIONAL INFORMATION & SCOPE
- AIR DEVICES - LOCATE AS PER THIS SHEET - SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- RETURN - SEE MECHANICAL DRAWINGS
- SUPPLY - SEE MECHANICAL DRAWINGS
- FIRE SPRINKLER - SEE MECHANICAL DRAWINGS

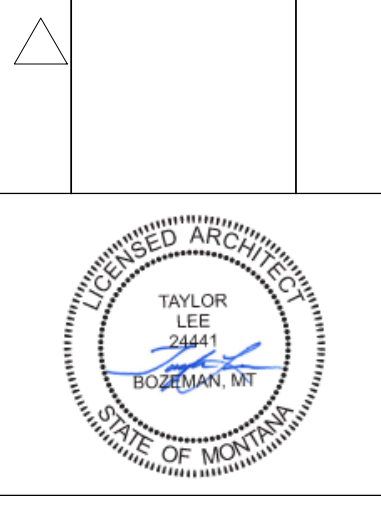


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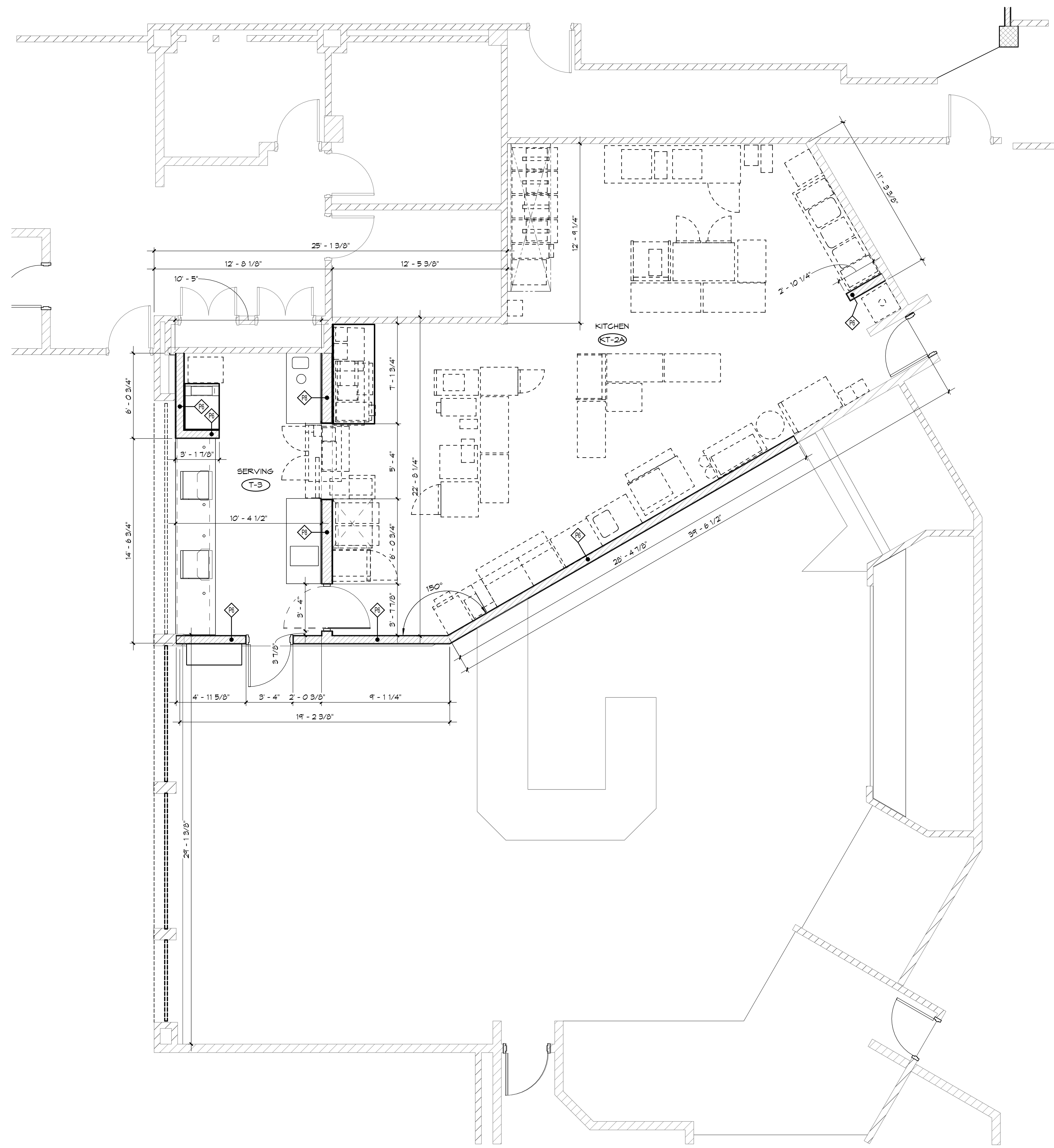
Consultant #:

**SHEET TITLE**  
 REFLECTED CEILING PLANS  
 SHEET

**A11.1**

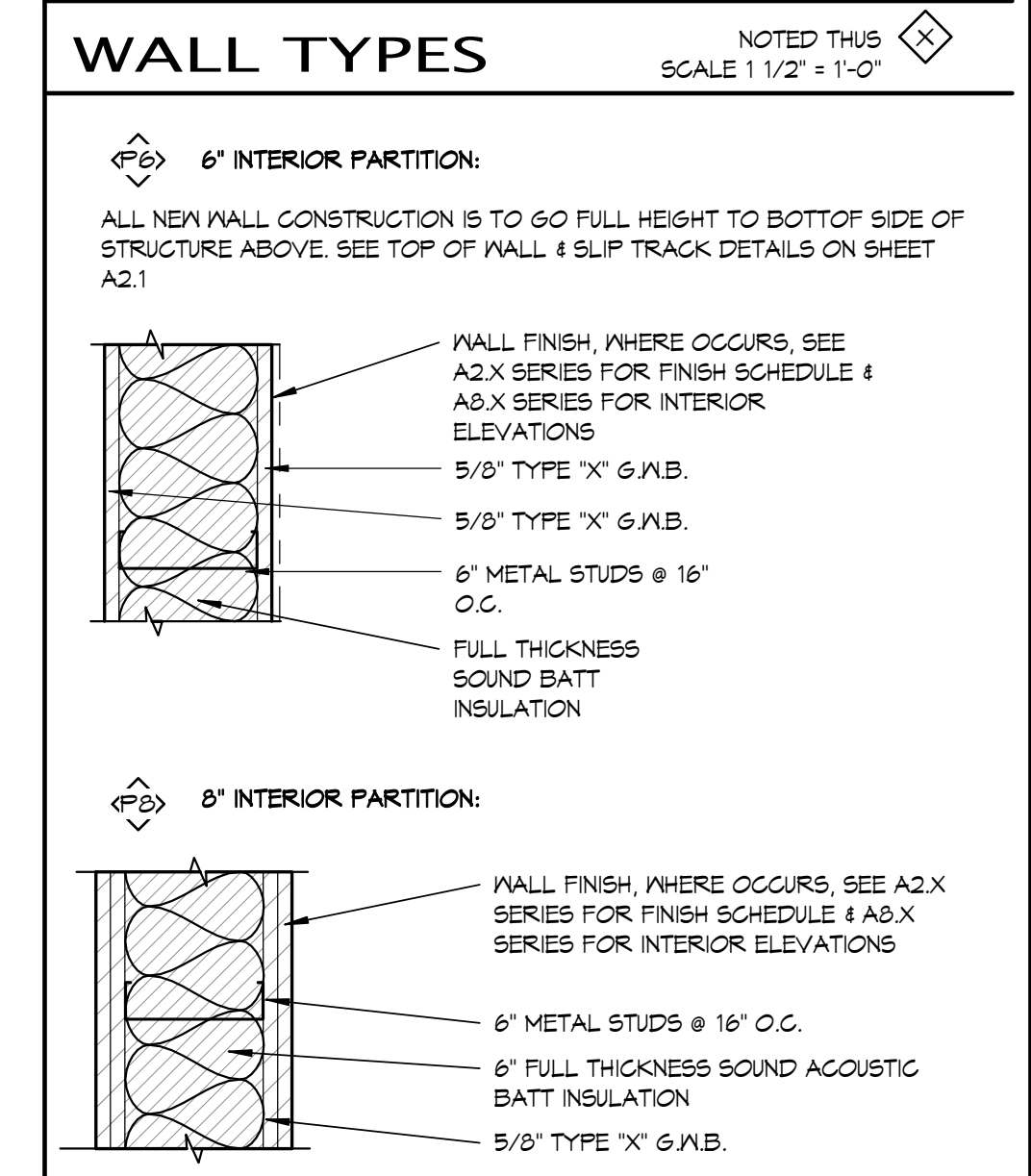
DATE  
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1  
AD1.1 ENLARGED DIMENSION FLOOR PLAN  
1/4" = 1'-0" NORTH

- ### GENERAL NOTES
1. THE LOCATION OF MANY INTERIOR PARTITIONS IS DICTATED BY THE STRUCTURAL COLUMNS THAT ARE CENTERED IN PARTITIONS - SEE STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
  2. SEE FLOOR PLANS ON A1.X AND A8.X SERIES FOR KEYED NOTES.
  3. SEE DRAWING A2.1 FOR ROOM FINISH SCHEDULE.
  4. SEE SPEC SECTION 09 22 16 FOR INTERIOR NON-LOAD BEARING STUD WALL REQUIREMENTS.
  5. SEE ENLARGED PLANS ON A8.X SERIES DRAWINGS FOR DETAILED INFORMATION.
  6. SEE PLUMBING DRAWINGS FOR LOCATIONS OF FLOOR DRAINS.
  7. IF A CONFLICT OR DISCREPANCY OCCURS BETWEEN FLOOR PLANS OF ARCHITECTURAL, STRUCTURAL, MECHANICAL OR ELECTRICAL DRAWINGS - CONTACT ARCHITECT FOR CLARIFICATION.
  8. SEE DRAWING AD1.1A FOR WALL TYPE LEGEND.
  9. SEE DRAWING A2.1 FOR GENERAL WALL AND FINISH NOTES.
  10. ALL NEW WALL CONSTRUCTION IS TO GO FULL HEIGHT TO BOTTOM SIDE OF STRUCTURE ABOVE. SEE TOP OF WALL & SLIP TRACK DETAILS ON SHEET A2.1



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Consultant #:  
SHEET TITLE  
DIMENSION  
FLOOR PLAN  
SHEET  
**AD1.1**  
DATE  
16.06.2023





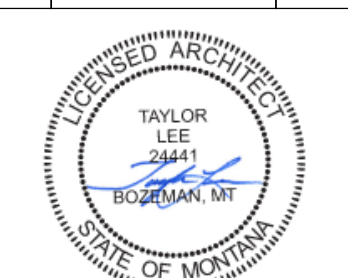


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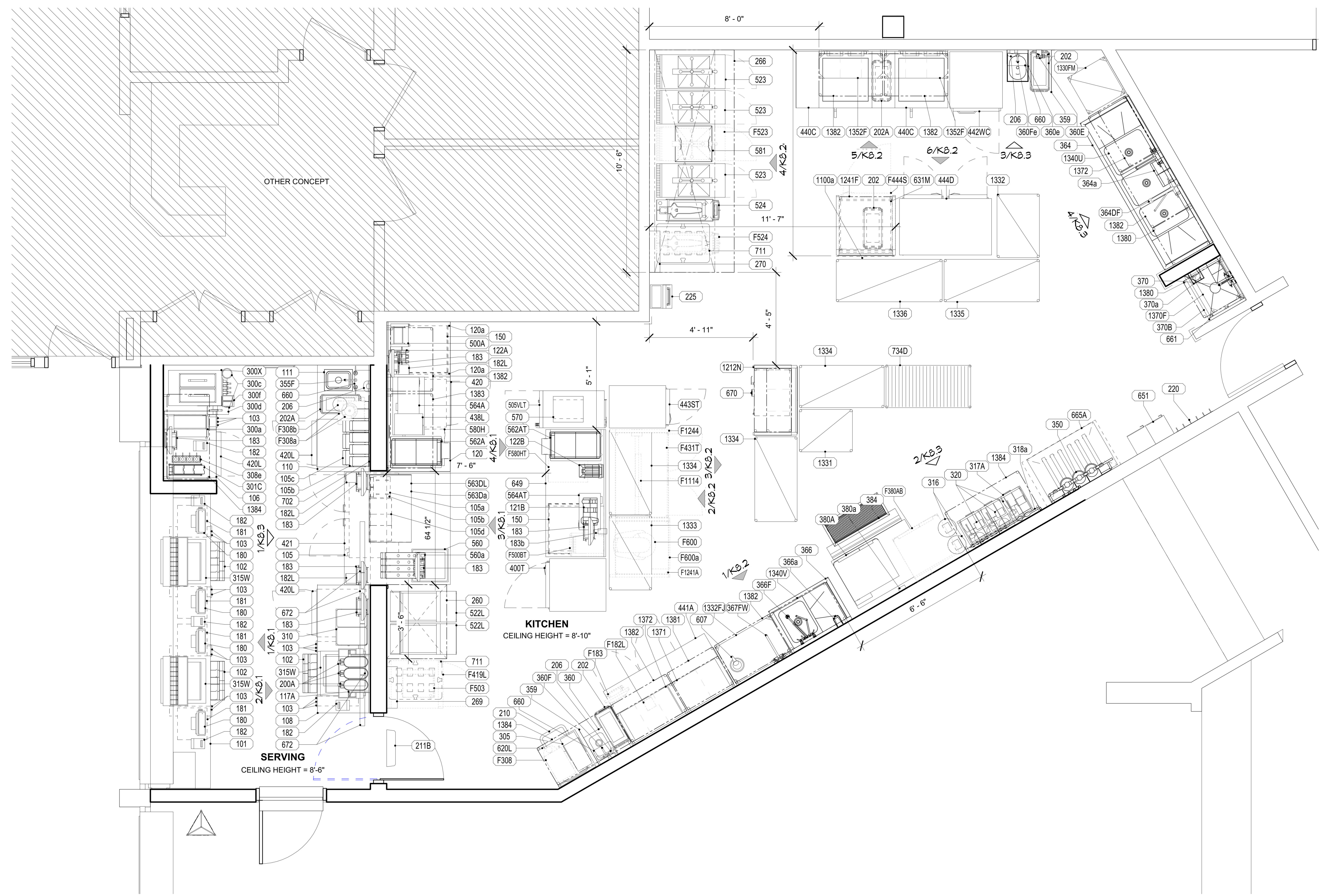
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Consultant #:

**SHEET TITLE  
KITCHEN EQUIP.  
PLAN**

**SHEET  
K1.1**

DATE  
**16.06.2023**



1 KITCHEN EQUIPMENT PLAN  
3/8" = 1'-0"



**EQUIPMENT SCHEDULE** CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

IF CLAYTON FIXTURE IS PROVIDING ALL THE MILLWORK IN THE MILLWORK PACKAGE, PLEASE CONTACT DONALD WILSON AT CLAYTON FIXTURE (404) 363-1665 - DONALD.WILSON@ACCESSCFA.COM - IF NOT, CONTACT THE CONTRACTED MILLWORK PROVIDER.

ITEM NO.	QUANTITY	DESCRIPTION OF EQUIPMENT	APPROVED MANUFACTURER	MECHANICAL												ITEM NO.	REMARKS	
				ELECTRICAL				PLUMBING				MECHANICAL						
				VOLT	PH	KW	AMP	HP	NEMA-RATING	HW	CW	FW	FW2	IW	DW	ROUGH-IN		
101	1	FRONT SERVING COUNTER	G.C.MILLWORK MANUFACTURER			-	-										101	REFER TO MANUFACTURER SHOP DRAWINGS
103	17	DOUBLE WALL PAPER CUP DISPENSER	SAN JAMAR MODEL #C2410C														103	REFER TO MANUFACTURER SHOP DRAWINGS
106	1	DESSERT COUNTER	G.C.MILLWORK MANUFACTURER			-	-										106	REFER TO MANUFACTURER SHOP DRAWINGS
108	1	BACK SERVING COUNTER	G.C.MILLWORK MANUFACTURER			-	-										108	REFER TO MANUFACTURER SHOP DRAWINGS
110	1	BACK SERVING COUNTER	G.C.MILLWORK MANUFACTURER			-	-										110	REFER TO MANUFACTURER SHOP DRAWINGS
111	1	STAINLESS STEEL UNDER MOUNT HAND SINK	VOLLRATH MODEL #10101-1												2"		111	REFER TO MANUFACTURER SHOP DRAWINGS
120	1	PRIMARY BOARDS COUNTER	G.C.MILLWORK MANUFACTURER			-	-										120	REFER TO MANUFACTURER SHOP DRAWINGS
120a	2	BUILT-IN BREAD RACK SLIDES	G.C.MILLWORK MANUFACTURER			-	-										120a	INCLUDE 2 BRACKETS PER SET. REFER TO MANUFACTURER SHOP DRAWINGS

**EQUIPMENT SCHEDULE** OWNER FURNISHED, CONTRACTOR INSTALLED

ITEM NO.	QUANTITY	DESCRIPTION OF EQUIPMENT	APPROVED MANUFACTURER	MECHANICAL												ITEM NO.	REMARKS			
				ELECTRICAL				PLUMBING				MECHANICAL								
				VOLT	PH	KW	AMP	HP	NEMA-RATING	HW	CW	FW	FW2	IW	DW	ROUGH-IN				
150	2	BREAD RACK	LOCAL SUPPLIER														150			
180	4	ORDER REGISTER	GC/FSP VENDOR	120	1		0.70		5-20P								180			
181	4	CASH DRAWER	GC/FSP VENDOR														181			
182	5	RECEIPT PRINTER	GC/FSP VENDOR	120	1		1.80		5-20P								182	PROVIDE WITH 120V/24V POWER SUPPLY ADAPTER FOR USE WITH 120V IG OUTLET		
182L	3	LABEL PRINTER	GC/FSP VENDOR	120	1		1.7		5-20P								182L	PROVIDED WITH 120V/24V POWER SUPPLY ADAPTER FOR USE WITH 120V IG OUTLET		
183	7	ORDER MONITOR	GC/FSP VENDOR	120	1		0.10		5-20P								183			
183a	6	RADIAL ARM	GC/FSP VENDOR														183a	USED TO MOUNT ORDER MONITORS - NOT SHOWN ON PLAN		
183b	1	MONITOR MOUNTING POLE	GC/FSP VENDOR														183b			
202	3	UNDER-COUNTER SLIM JIM TRASH CAN	RUBBERMAID MODEL #F0354060GRAY														202			
202A	2	UNDER-COUNTER SLIM JIM TRASH CAN	RUBBERMAID MODEL #1971258														202A			
206	3	SOAP DISPENSER	ECOLAB MODEL #92211379														206	RE: ARCHITECTURAL SHEETS FOR DETAILS ON MOUNTING HEIGHTS AND LOCATIONS		
210	1	INGREDIENT BIN	RUBBERMAID MODEL #3602-88														210			
211B	1	FLY SYSTEM	GC/FSP VENDOR	120	1	0.017			5-15P								211B	CLOCK STYLE RECEPTACLE REQUIRED		
220	1	COAT RACK	SAFCO MODEL #4162-24H														220			
225	1	FAT VAT	PRICO FRULATOR MODEL FAT VAT														225			
260	1	42" VENT HOOD	HALTON HOODS			-	-										260	HOOD SHROUD BY VENT HOOD MANUFACTURER; REFER TO SHOP DRAWINGS		
266	1	126" VENT HOOD	HALTON HOODS			-	-										266	HOOD SHROUD BY VENT HOOD MANUFACTURER; REFER TO SHOP DRAWINGS		
269	1	ANSUL FIRE SUPPRESSION SYSTEM	HALTON HOODS	120	1				DIRECT CONNECTION								269	REFER TO MANUFACTURER SHOP DRAWINGS		
270	1	ANSUL FIRE SUPPRESSION SYSTEM	HALTON HOODS	120	1				DIRECT CONNECTION								270	REFER TO MANUFACTURER SHOP DRAWINGS		
308a	1	SYRUP RACK	MONIN MODEL #P573														308a			
315W	3	10-HEAD BEVERAGE TOWER	GC/FSP VENDOR	115	1		10.00		5-15P/5-15P					3/4"			315W	PROVIDED WITH (2) CORDS AND PLUGS PER TOWER		
316	2	CO2 TANK	GC/FSP VENDOR														316	ORDER WITH WS1.25TC CONTROLLER; FLOOR DRAIN REQUIRED		
317A	1	BEVERAGE RACK SYSTEM (8 SHELF - 3 WIDE)	GC/FSP VENDOR														317A			
318a	1	B-STOP WATER MANIFOLD PANEL	GC/FSP VENDOR									3/4"				P-28	318a	RE: PLUMBING SHEETS FOR DETAILS		
320	3	TURBO CARBONATOR	GC/FSP VENDOR	115	1		6.2		5-20P								320	ORDER (8) #44231, (3) #44233, (8) DR. PEPPER PUMPS, & (3) #T5274SN-01		
355F	1	FAUCET FOR DECK MOUNTED HAND SINK	T&S MODEL #B-0328-CR-VF05							1/2"	1/2"						P-6	355F	SEE DETAILS PAGE K-901 FOR TYP.	
359	2	WALL MOUNTED SPLASH GUARD	GC/FSP VENDOR														P-5	359	SEE DETAILS PAGE K-901 FOR TYP.	
360	1	HAND SINK	EAGLE MODEL #HSAN-10														P-5	360	SEE DETAILS PAGE K-901 FOR TYP.	
360E	1	EMERGENCY EYEWASH STATION	ACORN MODEL #S0660-RH														P-42	360E	TO BE MOUNTED TO WALL BETWEEN 33 IN AND 45 IN AFF	
360F	1	FAUCET FOR WALL MOUNTED HAND SINK	T&S MODEL #B-1146-CFA-VF05							1/2"	1/2"						P-5	360F		
360Fb	1	SENSOR FAUCET FOR WALL MOUNTED HAND SINK	TOTO MODEL #TEL165-C20E/RCP							1/2"	1/2"						P-5	360Fb		
364	1	3 COMPARTMENT UTENSIL SINK	EAGLE MODEL #314-18-3-18											1 1/2"				364	SEE DETAILS PAGE K-901 FOR TYP.	
364a	1	3 COMPARTMENT SINK CHEMICAL DISPENSER	SOLIDSENSE															364a		
364DF	1	FAUCETS FOR UTENSIL SINK	T&S MODEL #B-0152-14-CRBC							1/2"	1/2"							P-9	364DF	
366	1	SINGLE BOWL VEGETABLE PREP SINK	EAGLE MODEL #314-16-1-18L											1 1/2"					366	SEE DETAILS PAGE K-901 FOR TYP.
366a	1	VEGETABLE WASH DISPENSER	ECOLAB																366a	
366F	1	FAUCETS FOR VEGETABLE PREP SINK	T&S BRASS MODEL #B-0154-CR-C							1/2"	1/2"							P-8	366F	
367FW	1	FILTERED WATER FAUCET (WALL MOUNTED)	T&S MODEL #B-0236-CR-063X							1/2"	1/2"	1/2"						(2) P-30	367FW	
370	1	MOP SINK FAUCET	GC/FSP VENDOR							1/2"	1/2"							P-7	370	
370b	1	MOP SINK CHEMICAL DISPENSER	SOLIDSENSE							1/2"	1/2"							(2) P-7	370b	
370b	1	MOP SINK	GC/FSP VENDOR											3"					370b	
651	1	LOCKERS	GC/FSP VENDOR																651	2 TIERS, 12 OPENINGS
660	3	PAPER TOWEL DISPENSER	SAN JAMAR #T1490TBK																660	RE: ARCHITECTURAL SHEETS FOR DETAILS ON MOUNTING HEIGHTS AND LOCATIONS
661	1	MOP RACK	GC/FSP VENDOR																661	
665A	1	TRASH CART WITH LID	GC/FSP VENDOR																665A	
670	1	SAFE	AMERICAN SECURITY PRODUCTS MODEL #9336356																670	DIGITAL KEYPAD OUTER DOOR HINGE RIGHT
672	4	MENU BOARD	CINEPLEX	120	0	-	12.5		5-20P										672	REFER TO MANUFACTURER SHOP DRAWINGS



MSU-  
MONTANA STATE  
UNIVERSITY  
BOZEMAN, MONTANA  
PHONE: 406.994.5413

**MSU / SUB / FOOD /  
VENDOR RENOVATION  
PROJECT**

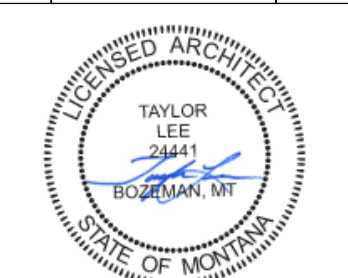


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REVIEWED BY:

REV.	DESCRIPTION	DATE

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PPA#22-0056

A/E#00-00-00

Consultant #:

SHEET TITLE

CFA KITCHEN

EQUIP. SCHED.

SHEET

**K2.1**

DATE

16.06.2023







**MSU / SUB / FOOD / VENDOR RENOVATION PROJECT**

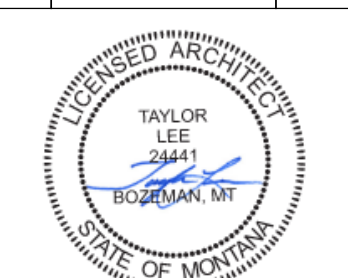


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REV. DESCRIPTION DATE

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PPA#22-0056

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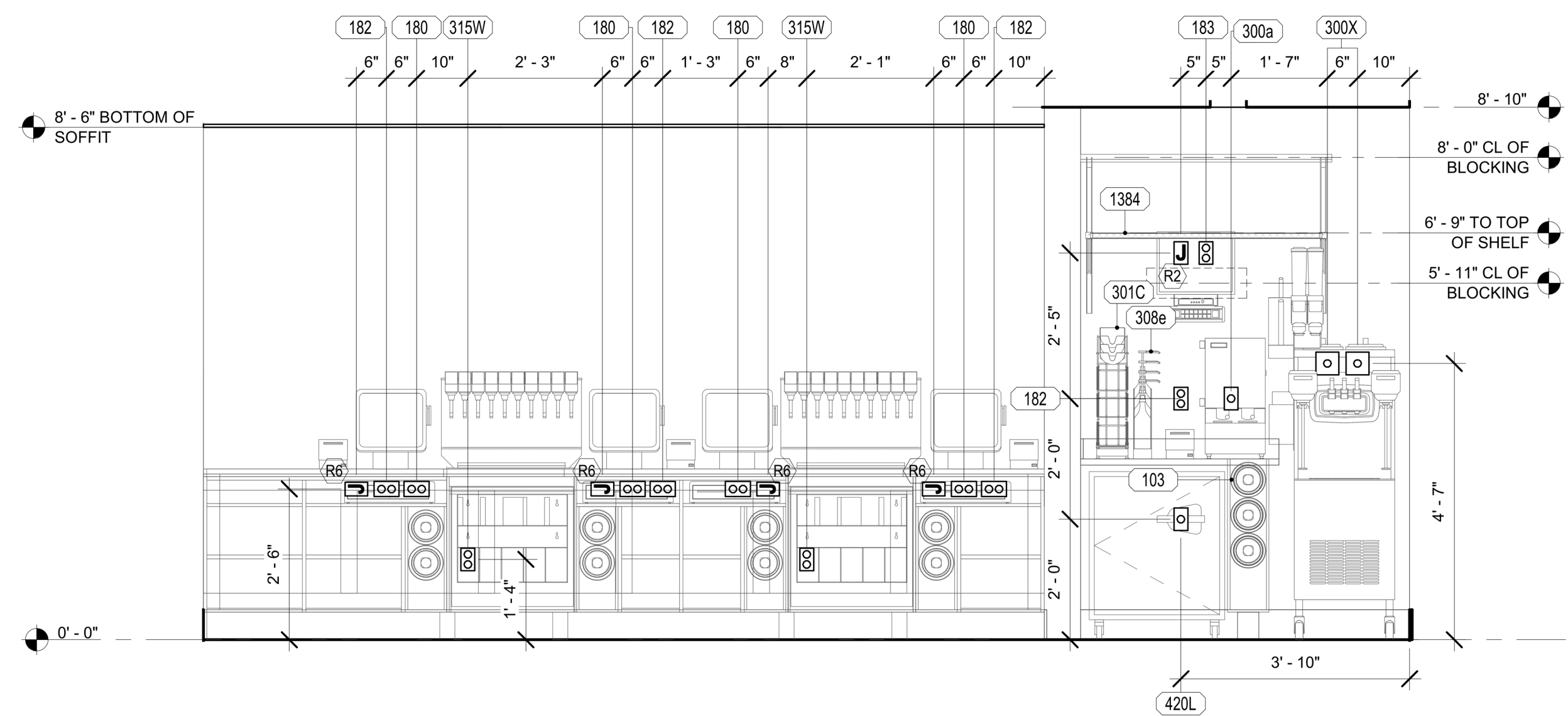
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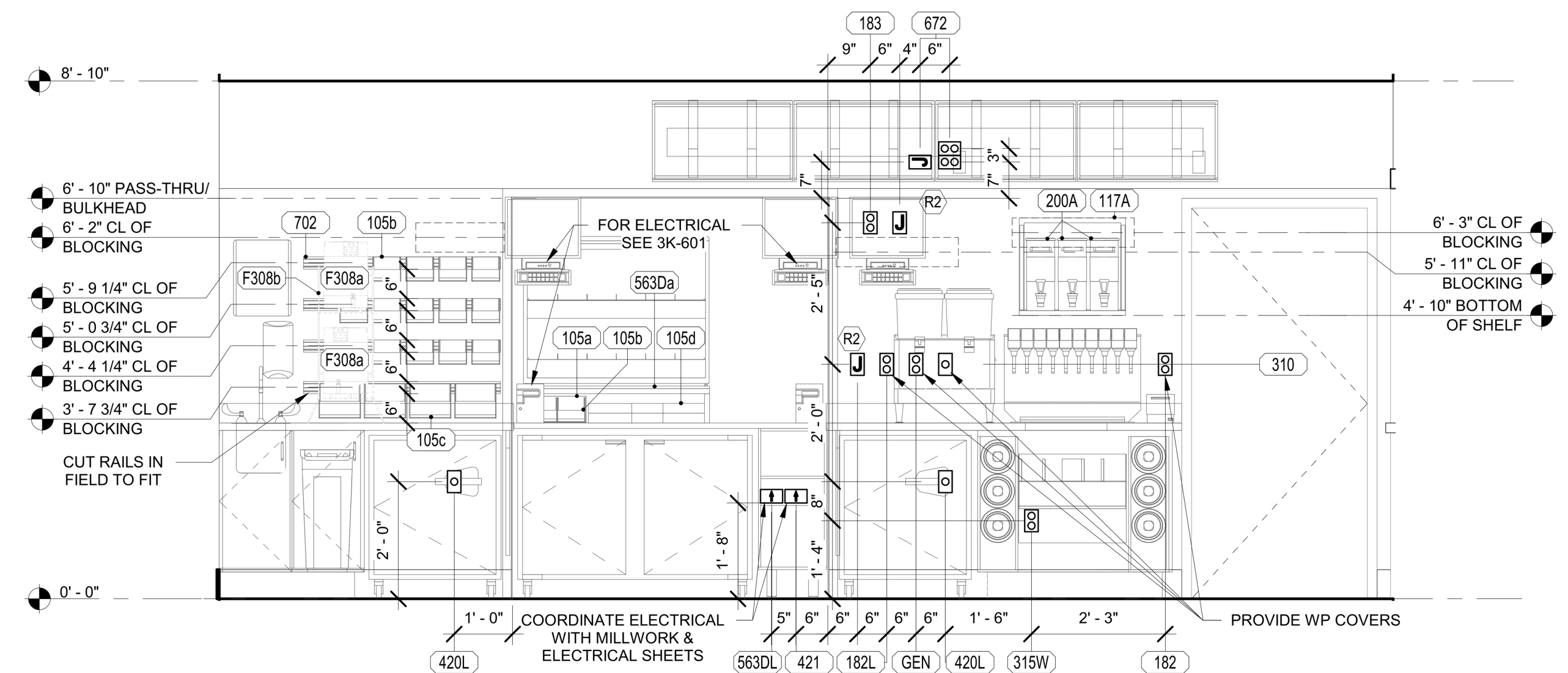
**ELECTRICAL  
ROUGH IN  
ELEVATION**

**K8.1**

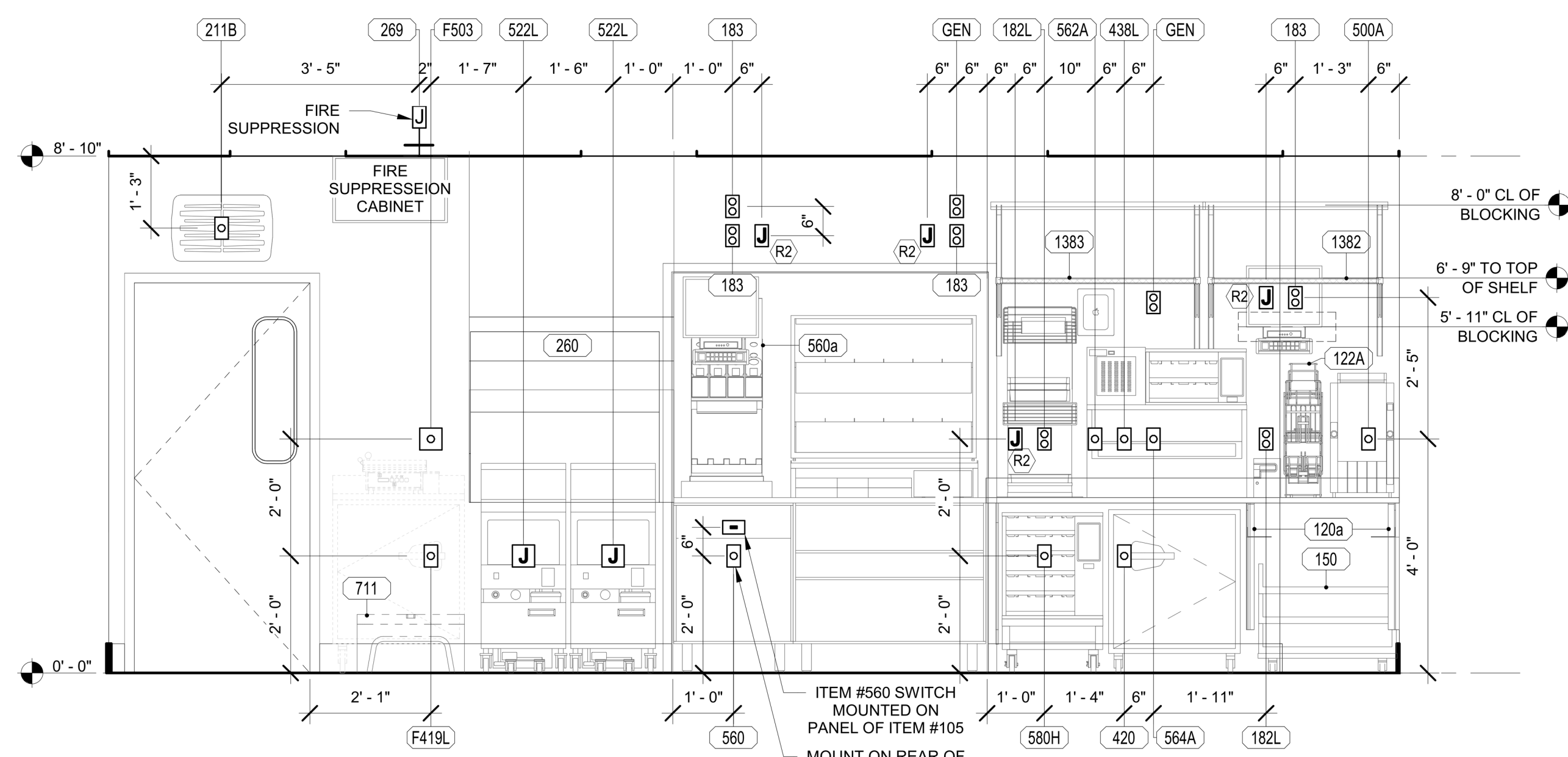
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**16.06.2023**



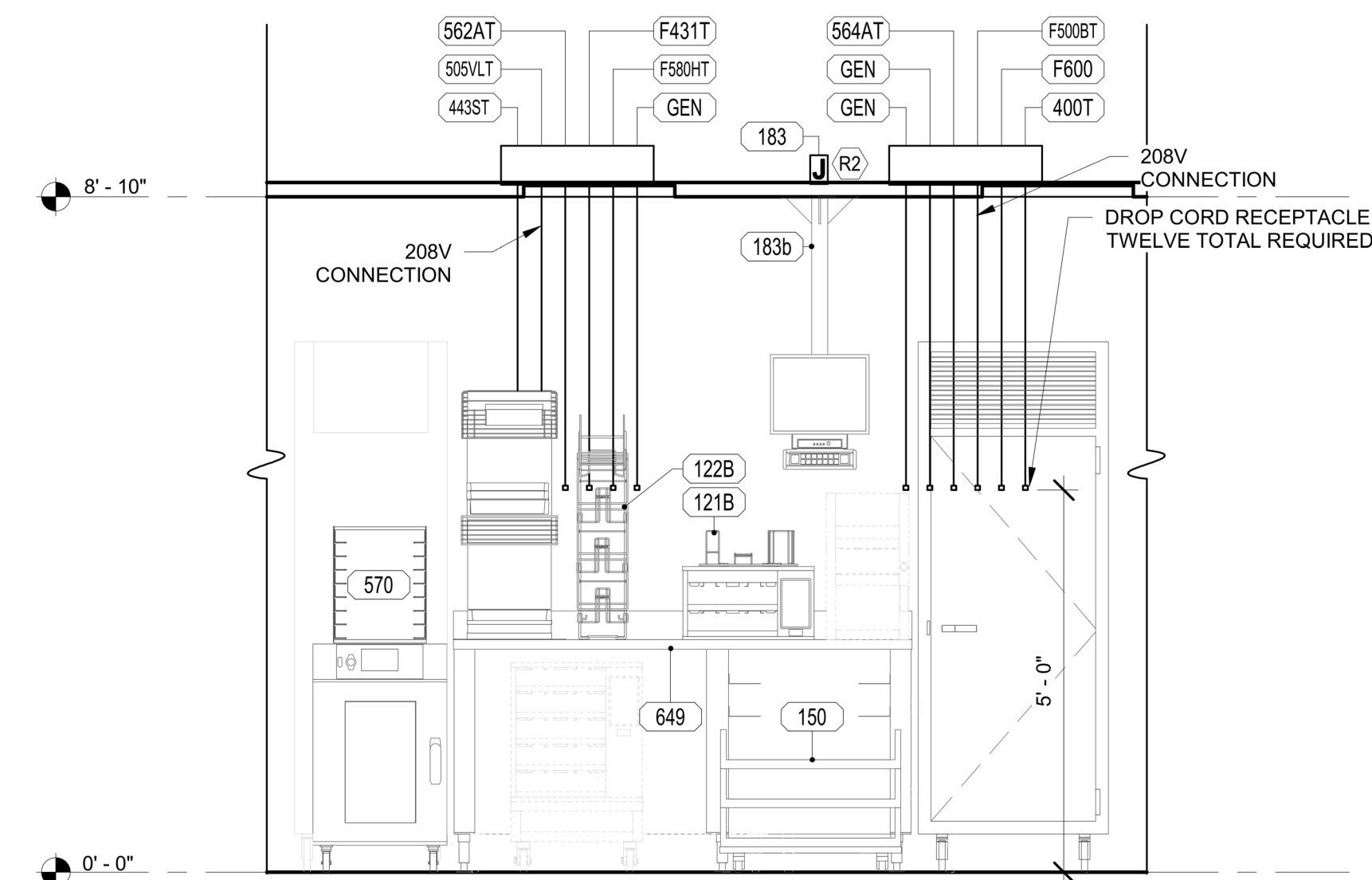
1 SERVING  
1/2" = 1'-0"



2 SERVING  
1/2" = 1'-0"



3 KITCHEN  
1/2" = 1'-0"



4 KITCHEN  
1/2" = 1'-0"

**ELECTRICAL LEGEND**

888Aa	EQUIPMENT NUMBER
R3	INDICATES NOTE ON SHEET E2
J	JUNCTION BOX
J	6x6 JUNCTION BOX
□	SIMPLEX RECEPTACLE
□	DUPLEX RECEPTACLE
□	SWITCH
□	PHONE TERMINATION OF PVC CONDUIT FOR RADIANT POS SYSTEM
□	DOUBLE DUPLEX RECEPTACLE
□	SPECIAL RECEPTACLE
H	HUMIDITY SENSOR
T	TEMPERATURE SENSOR
D	SMOKE DETECTOR LED (2 GANG BOX)
SK	SECURITY KEYPAD
□	SIDE VIEW SURFACE MOUNTED RECEPTACLE

**ELECTRICAL KEYNOTES LEGEND**

- (R2) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.
- (R3) PROVIDE A 2" CONDUIT FROM FACE OF WALL AND EXTEND CONDUIT TO JUNCTION BOX IN CEILING SPACE ABOVE SERVING AREA. CONDUIT SHALL TERMINATE FLUSH WITH FACE OF WALL BELOW COUNTER. CUSTOM STAINLESS STEEL COVER PLATE IN WALL WITH GROMMET ON 2" DIAMETER HOLE AT CONDUIT TERMINATION IN WALL.
- (R6) PROVIDE SINGLE GANG EXTRA DEEP JUNCTION BOX MOUNTED ON THE MOUNTING PLATE WITHIN THE FRONT SERVING COUNTER CASEWORK. MOUNT BOX ADJACENT TO THE RECEPTACLE FOR EQUIPMENT 180. DO NOT MOUNT BOX BETWEEN EQUIPMENT 180 AND EQUIPMENT 182 RECEPTACLES.
- (R7) PROVIDE A SINGLE GANG BOX FLUSH MOUNTED IN THE CEILING FOR THE POS DATA PLATE (BY OTHERS) FOR THE SALAD PREP AREA POS MONITOR AND PRINTER.
- (S9) PROVIDE SINGLE GANG JUNCTION BOX WITHOUT COVERPLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.

\* KEYNOTE INFORMATION PER PROTOTYPE E-SHEET STANDARDS

- REFER TO K-901 & K-904 FOR:
  - SHELVING INSTALLATION AND MOUNTING DETAILS
  - OEP DETAILS
  - DIRECT CONNECTION - ISLAND LOCATION
  - WATER FILTRATION DETAILS
  - ANSUL DETAILS



**MSU / SUB / FOOD / VENDOR RENOVATION PROJECT**



DRAWN BY:

REVIEWED BY:

REV.	DESCRIPTION	DATE



PPA#22-0056

A/E#00-00-00

Consultant #:

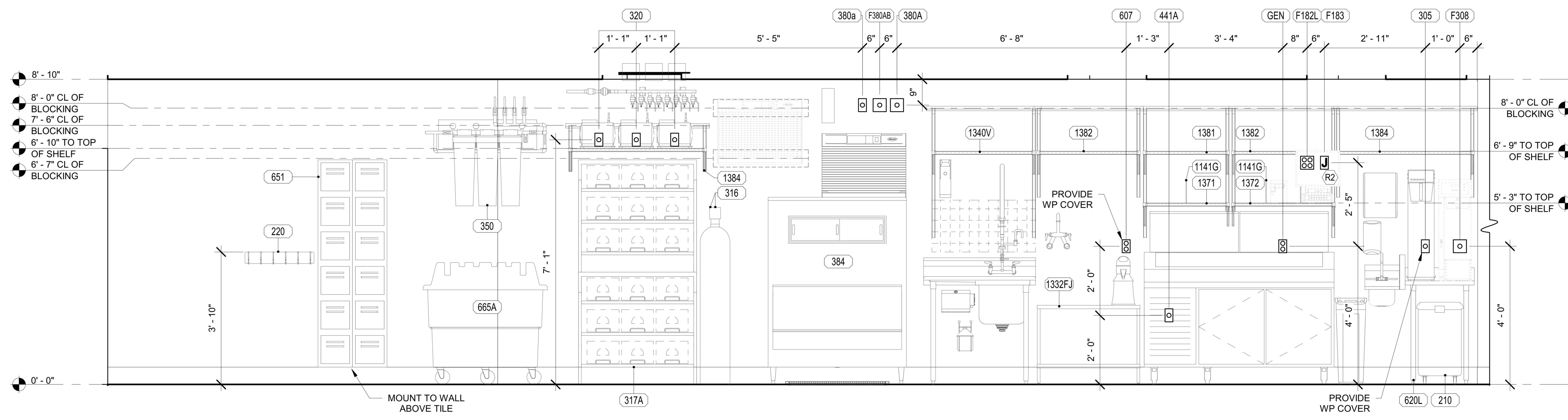
SHEET TITLE

**ELECTRICAL  
ROUGH IN  
ELEVATION**

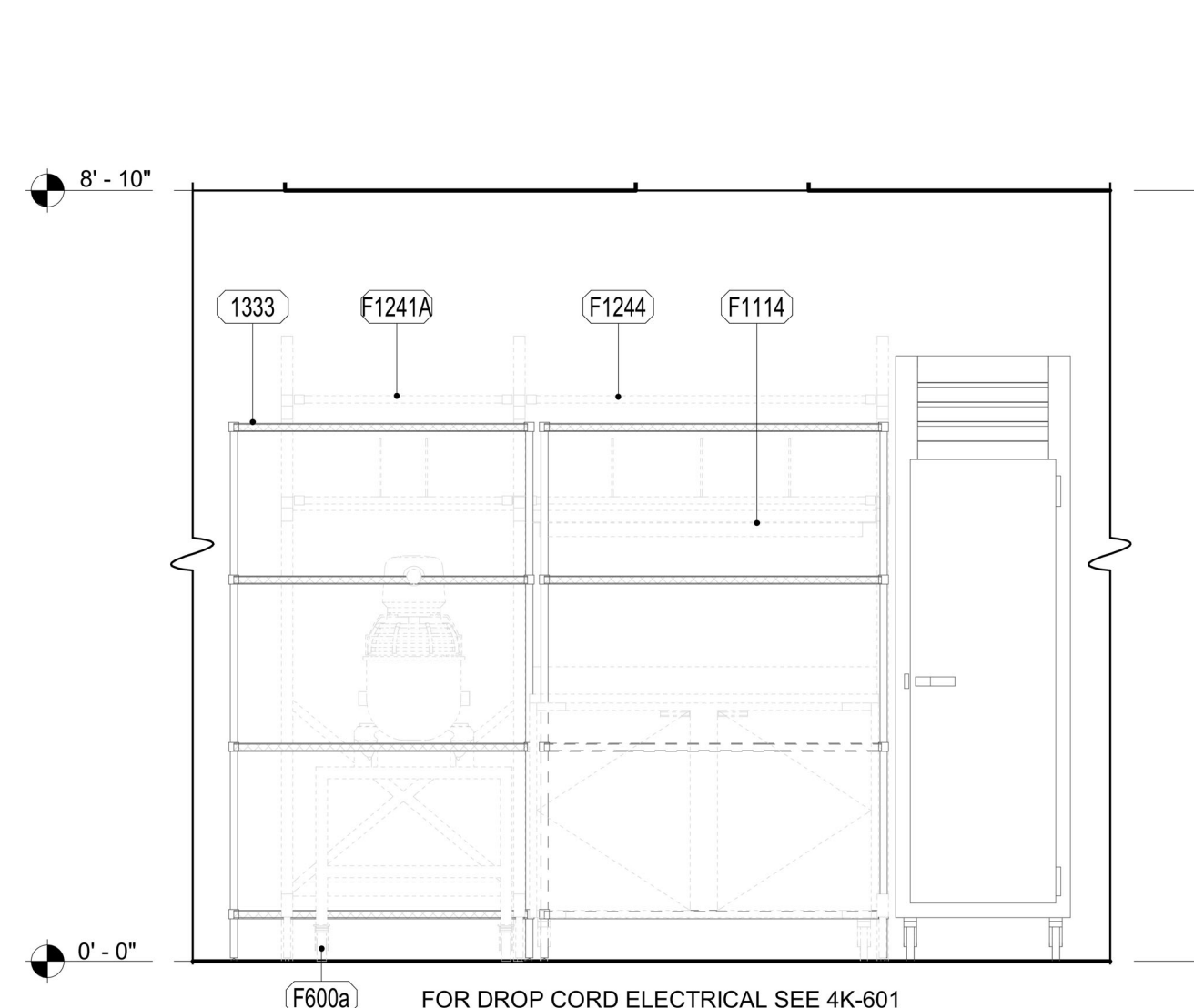
**K8.2**

DATE

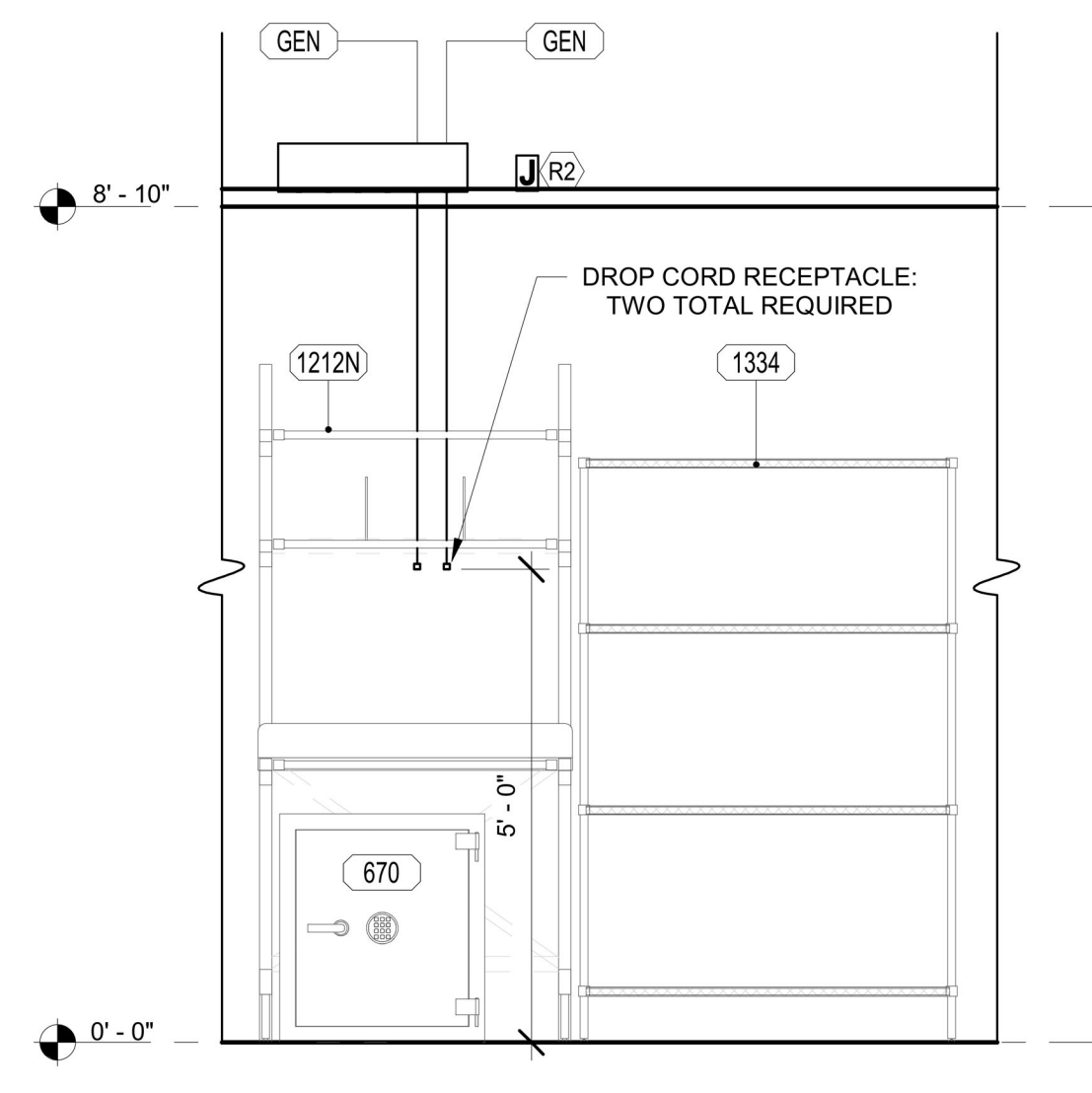
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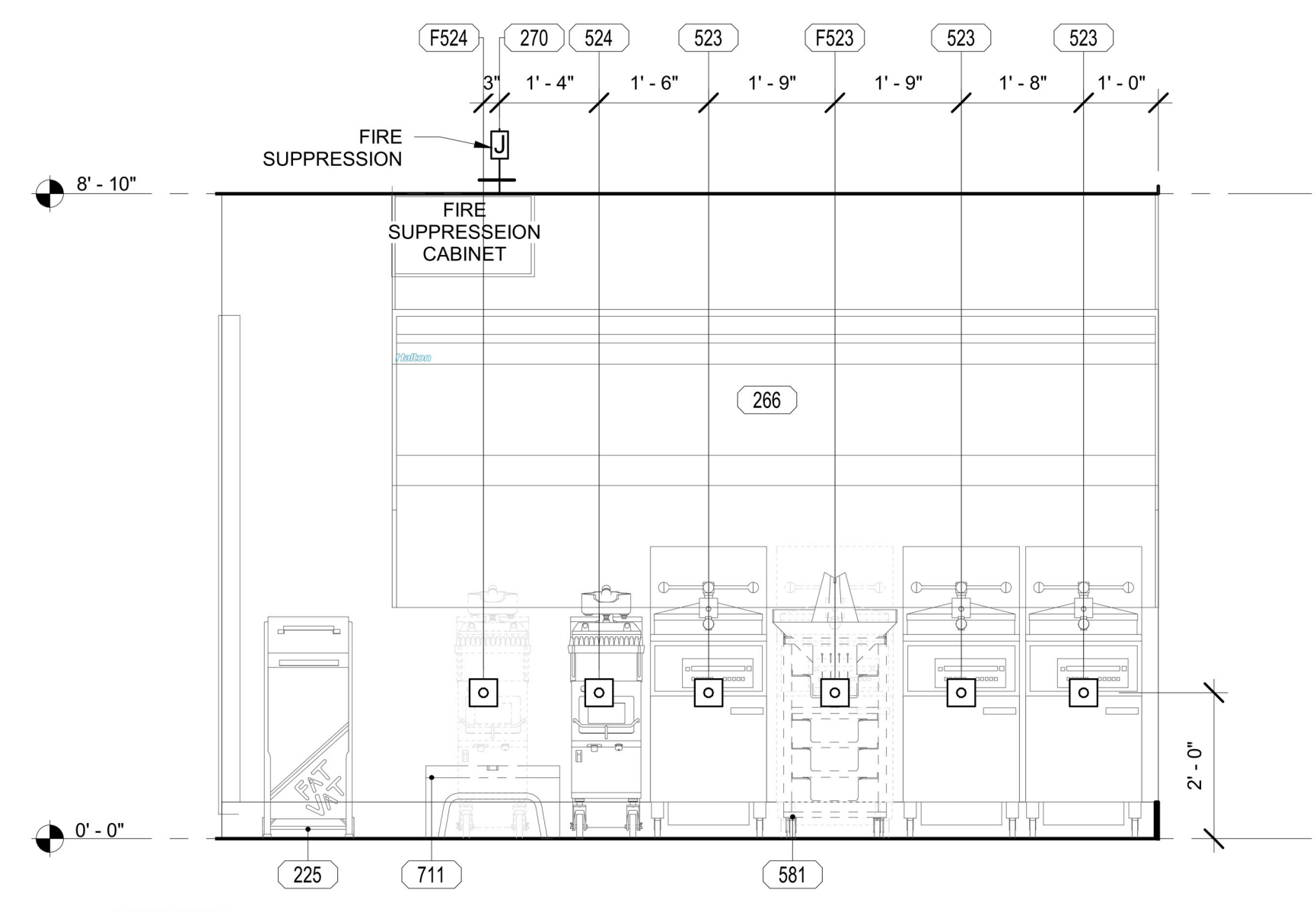
1 KITCHEN  
1/2" = 1'-0"



2 KITCHEN  
1/2" = 1'-0"



3 KITCHEN  
1/2" = 1'-0"



4 KITCHEN  
1/2" = 1'-0"

**ELECTRICAL LEGEND**

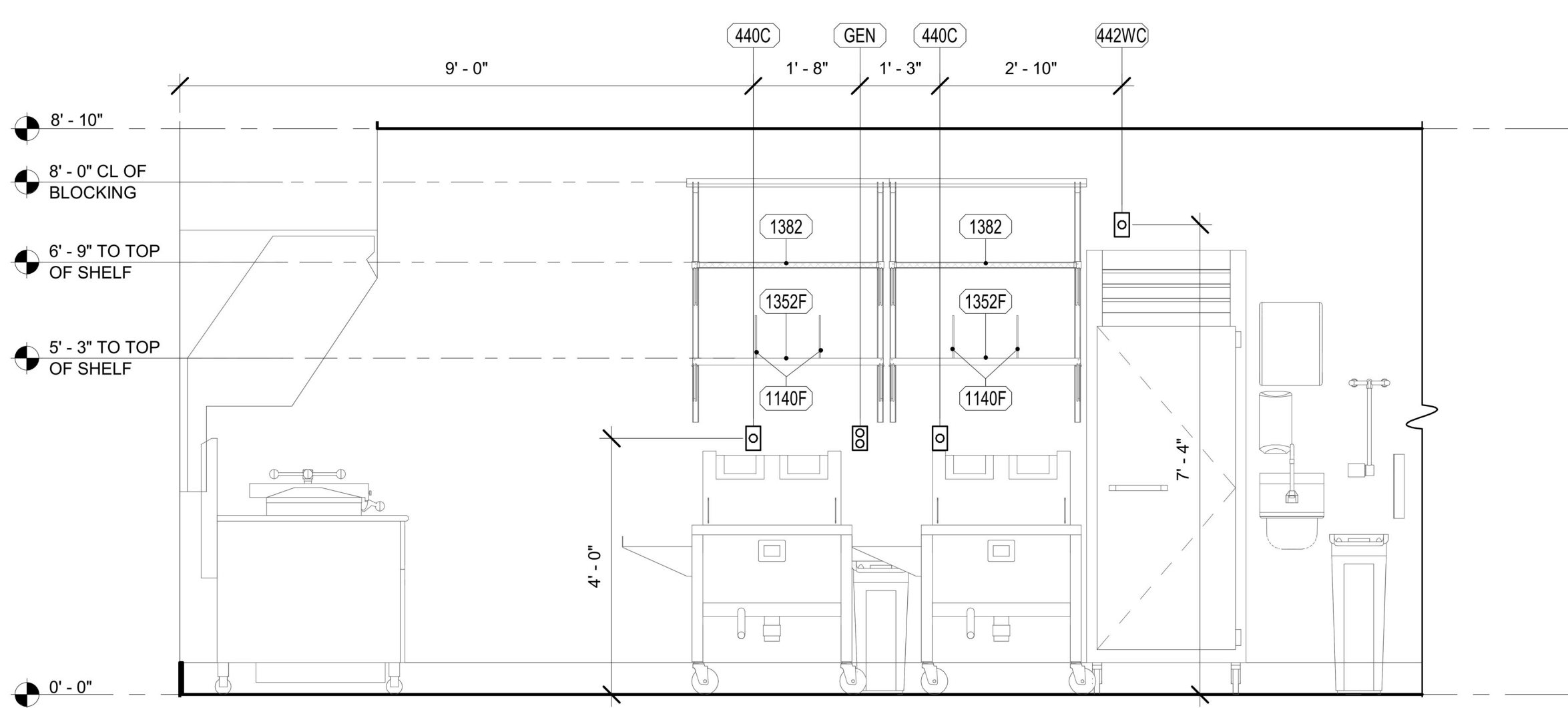
888Aa	EQUIPMENT NUMBER
(R2)	INDICATES NOTE ON SHEET
J	JUNCTION BOX
J	6x6 JUNCTION BOX
□	SIMPLEX RECEPTACLE
□	DUPLEX RECEPTACLE
□	SWITCH
□	PHONE TERMINATION OF PVC CONDUIT FOR RADIANT POS SYSTEM
□	DOUBLE DUPLEX RECEPTACLE
□	SPECIAL RECEPTACLE
H	HUMIDITY SENSOR
T	TEMPERATURE SENSOR
D	SMOKE DETECTOR LED (2 GANG BOX)
SK	SECURITY KEYPAD
□	SIDE VIEW SURFACE MOUNTED RECEPTACLE

**ELECTRICAL KEYNOTES LEGEND**

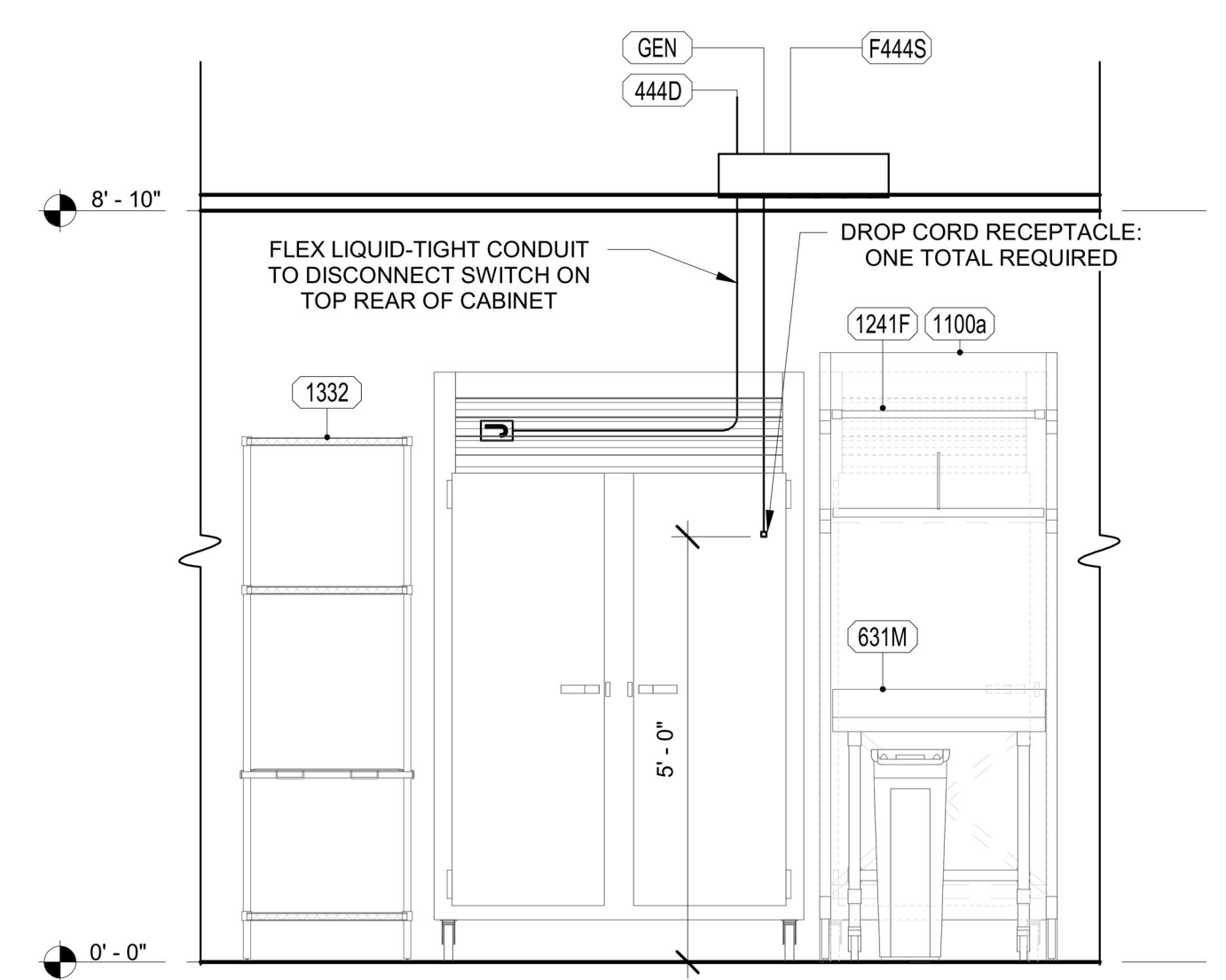
- (R2) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.
- (R3) PROVIDE A 2" CONDUIT FROM FACE OF WALL AND EXTEND CONDUIT TO JUNCTION BOX IN CEILING SPACE ABOVE SERVING AREA. CONDUIT SHALL TERMINATE FLUSH WITH FACE OF WALL BELOW COUNTER. CUSTOM STAINLESS STEEL COVER PLATE IN WALL WITH GROMMET ON 2" DIAMETER HOLE AT CONDUIT TERMINATION IN WALL.
- (R6) PROVIDE SINGLE GANG EXTRA DEEP JUNCTION BOX MOUNTED ON THE MOUNTING PLATE WITHIN THE FRONT SERVING COUNTER CASEWORK. MOUNT BOX ADJACENT TO THE RECEPTACLE FOR EQUIPMENT 180. DO NOT MOUNT BOX BETWEEN EQUIPMENT 180 AND EQUIPMENT 182 RECEPTACLES.
- (R7) PROVIDE A SINGLE GANG BOX FLUSH MOUNTED IN THE CEILING FOR THE POS DATA PLATE (BY OTHERS) FOR THE SALAD PREP AREA. POS MONITOR AND PRINTER.
- (S9) PROVIDE SINGLE GANG JUNCTION BOX WITHOUT COVERPLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.

\*KEYNOTE INFORMATION PER PROTOTYPE E-SHEET STANDARDS

REFER TO K-801 & K-804 FOR:  
- SHELVING INSTALLATION AND MOUNTING DETAILS  
- OEP DETAILS  
- DIRECT CONNECTION - ISLAND LOCATION  
- WATER FILTRATION DETAILS  
- ANSUL DETAILS



5 KITCHEN  
1/2" = 1'-0"



6 KITCHEN  
1/2" = 1'-0"



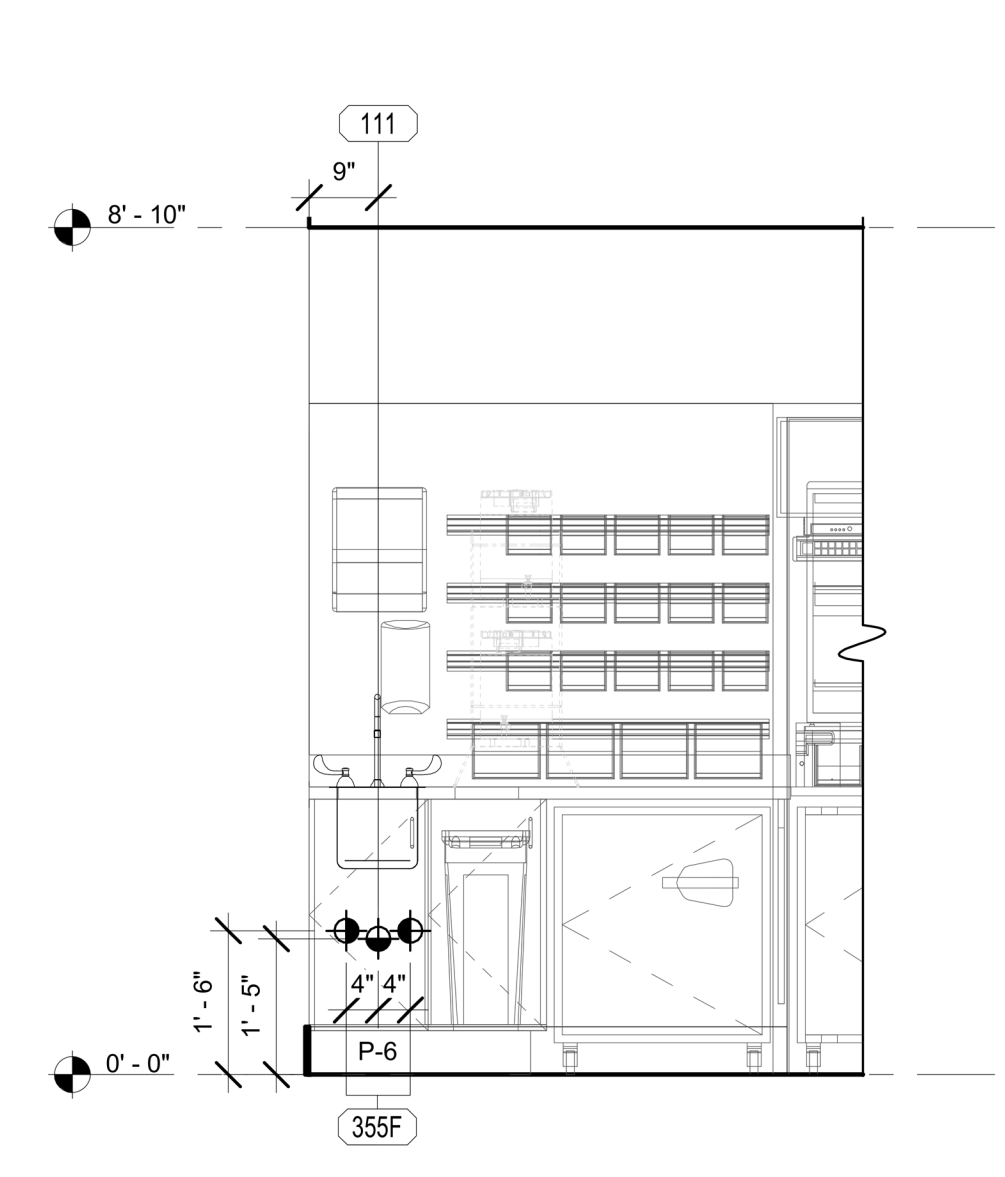
# MSU / SUB / FOOD VENDOR RENOVATION PROJECT



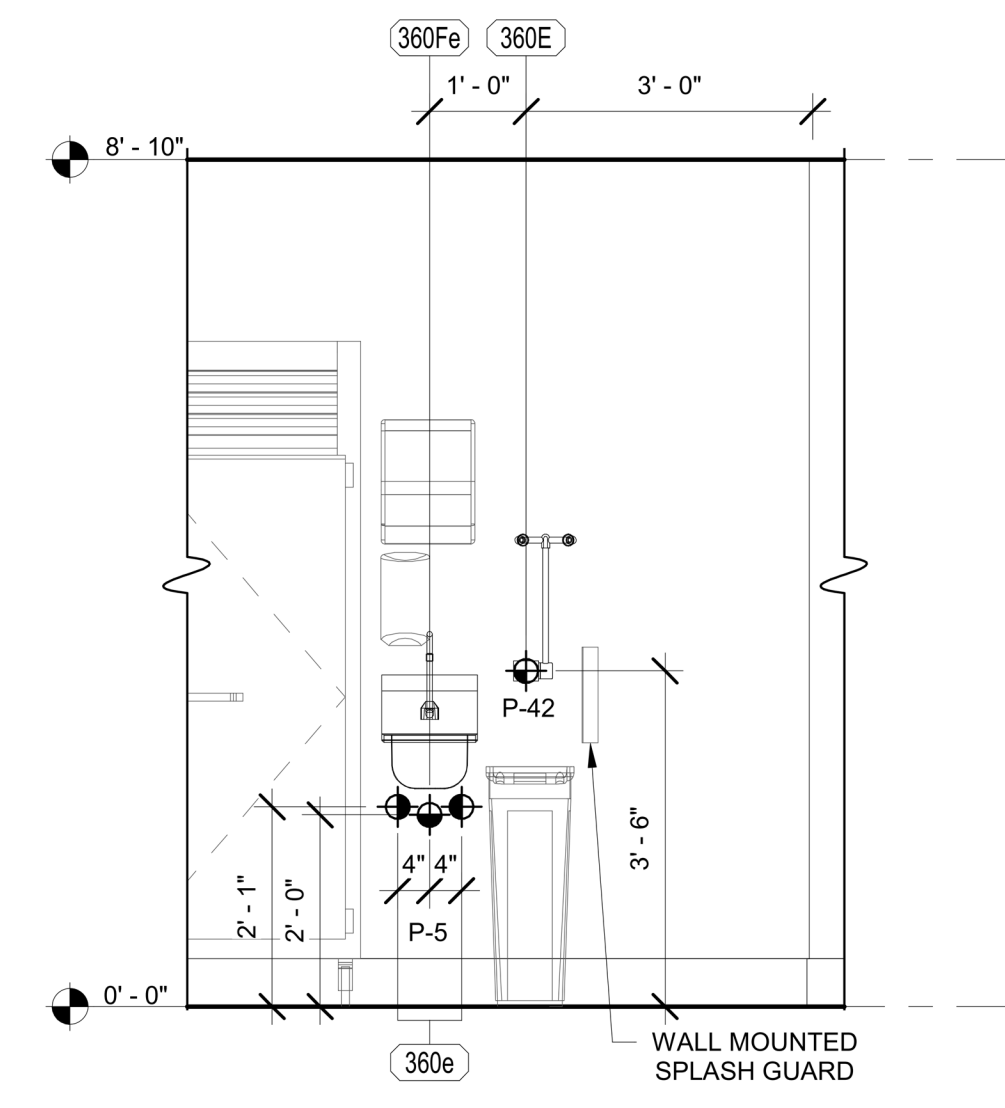
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REV.	DESCRIPTION	DATE

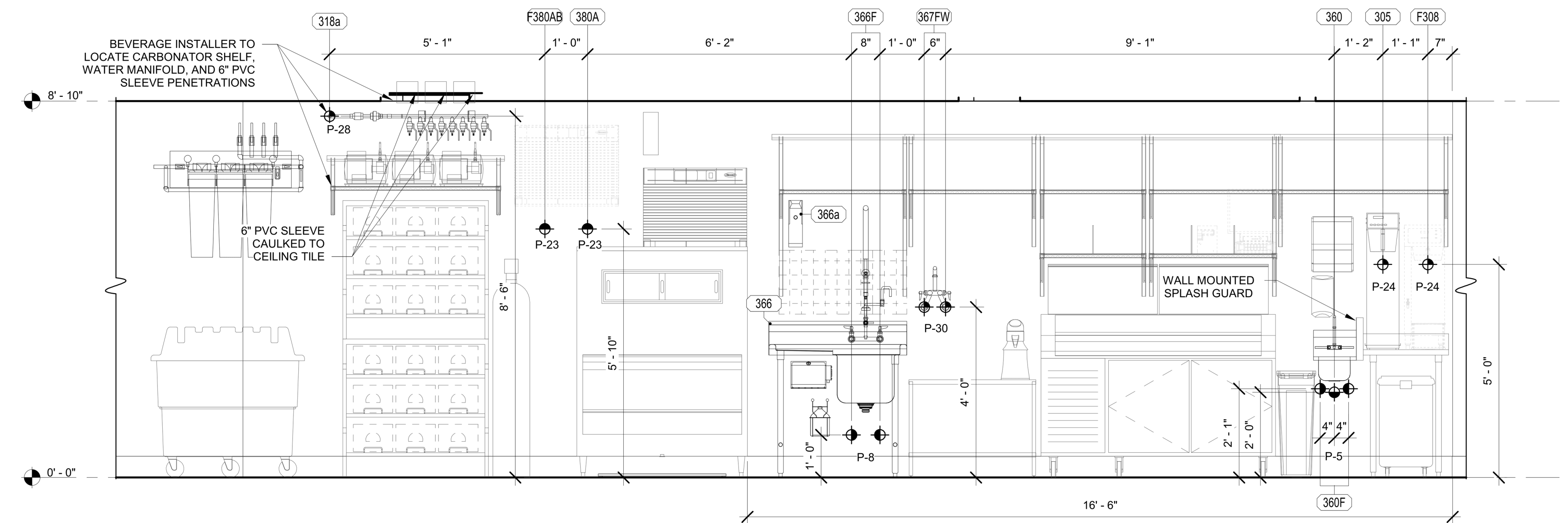
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A/E#00-00-00  
Consultant #:  
**SHEET TITLE**  
**PLUMBING  
ROUGH IN  
ELEVATION**  
**K8.3**  
DATE  
**16.06.2023**



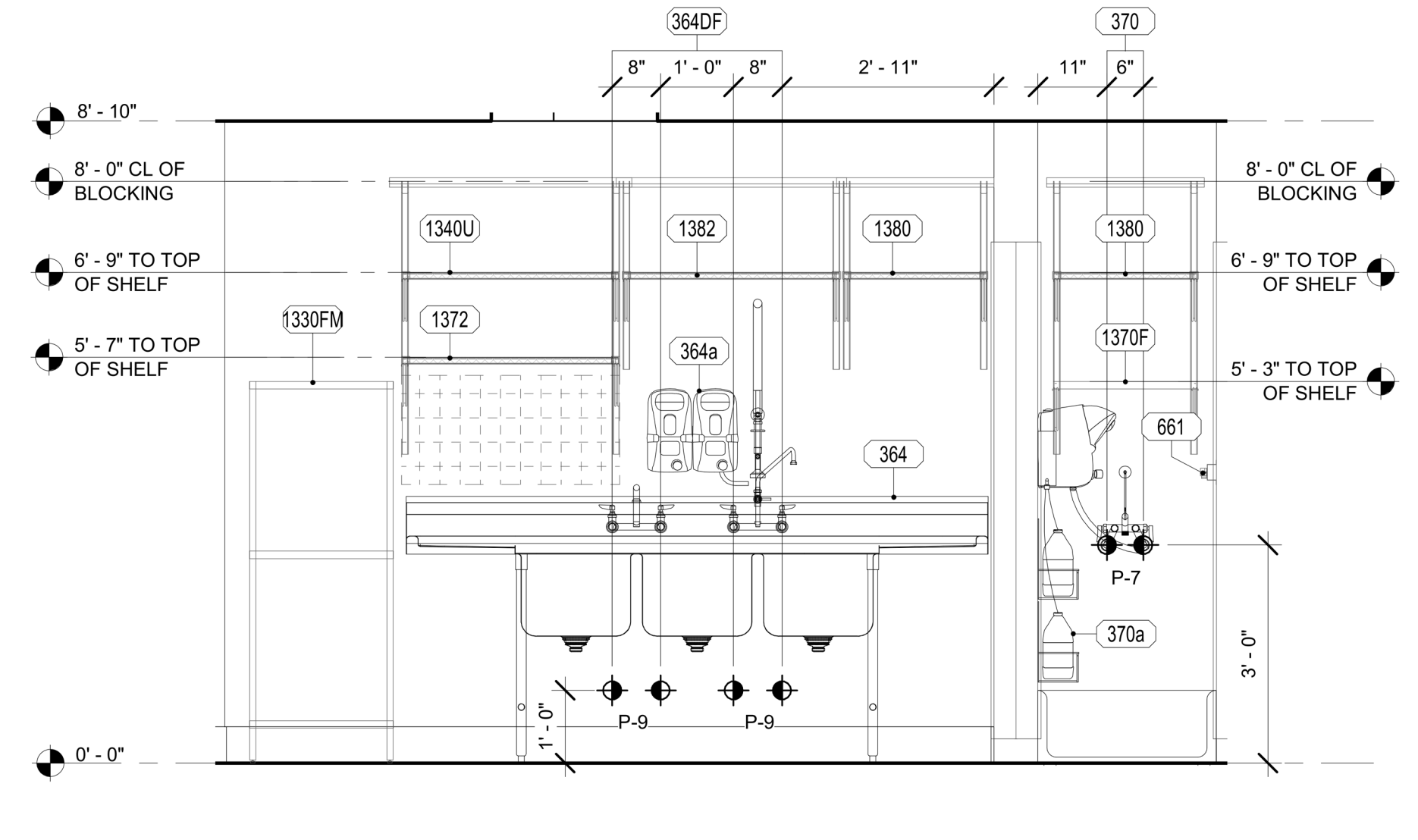
1 SERVING - PLUMBING  
1/2" = 1'-0"



3 KITCHEN - PLUMBING  
1/2" = 1'-0"



2 KITCHEN - PLUMBING  
1/2" = 1'-0"



4 KITCHEN - PLUMBING  
1/2" = 1'-0"

**PLUMBING LEGEND**

888Aa	EQUIPMENT NUMBER
	HOT WATER
	COLD WATER
	TEPID WATER
	FILTERED WATER (FW)
	FILTERED WATER (FW2)
	SAN.
	GAS

REFER TO K-901 & K-902 FOR:  
- SHELVING INSTALLATION AND MOUNTING DETAILS  
- OEP DETAILS  
- DIRECT CONNECTION - ISLAND LOCATION  
- WATER FILTRATION DETAILS  
- ANSUL DETAILS

**PLUMBING KEYNOTES LEGEND**

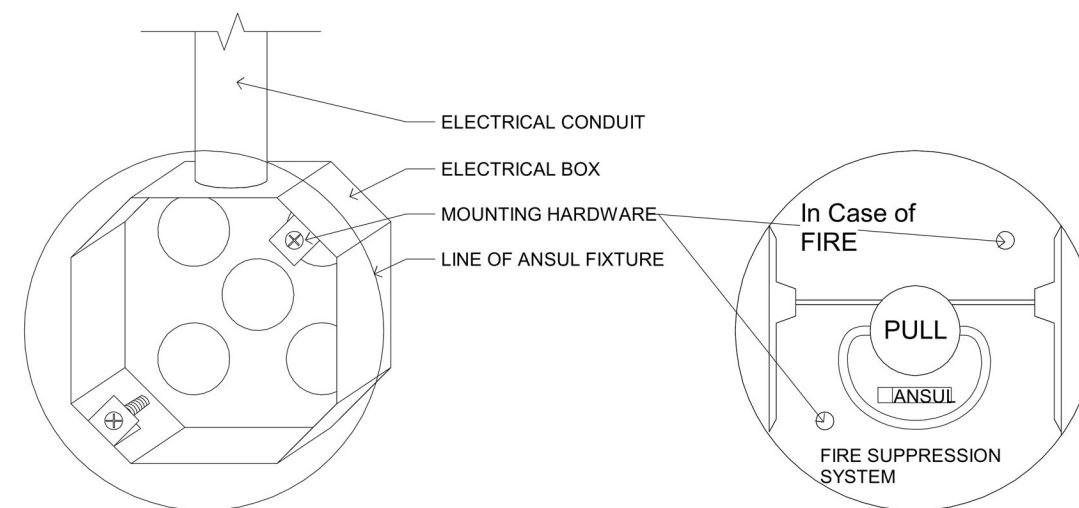
P-5	KITCHEN HAND SINK ROUGH IN: (SINK AND FAUCET WITH 1.0 GPM AERATOR FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL WALL HUNG, STAINLESS STEEL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LF175 SUPPLIES WITH STOPS AND A MCGUIRE 8912 POLISHED CHROME P-TRAP. ADJUST FAUCET OUTLET TEMPERATURE TO 100 DEGREES F (OR HIGHER AS REQUIRED BY LOCAL JURISDICTION).
P-6	SERVING COUNTER DROP IN SINK ROUGH IN: (SINK AND FAUCET WITH 1.0 GPM AERATOR FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE 8912 POLISHED CHROME P-TRAP AND MCGUIRE LF175 STOPS WITH 20" CHROME PLATED 3/8" COPPER RISERS. ADJUST FAUCET OUTLET TEMPERATURE TO 100 DEGREES F (OR HIGHER AS REQUIRED BY LOCAL JURISDICTION).
P-7	MOP SINK FAUCET: (MOP SINK BASIN BUILT BY GENERAL CONTRACTOR) PROVIDE T&S BRASS MODEL B-2345 FAUCET WITH CERAMA SPRING CHECK VALVE CARTRIDGES, HOSE THREAD SPOUT OUTLET, TOP BRACE, ADJUSTABLE INLETS SPREAD FROM 3" TOP 8". INCLUDE T&S BRASS MODEL 43-072 HOSE THREAD X 3/4" FEMALE NPT CHROME ADAPTOR. NO SUBSTITUTIONS. SEE ALSO P-16.
P-8	VEGETABLE PREP SINK ROUGH IN: (SINK AND FAUCET WITH 0.65 GPM SPRAY HEAD FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LF175 STOPS AND BRASS CRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC. ASSEMBLE AND MOUNT TWO HANDLE FAUCET WITH PRE-RINSE SPRAY ARM. INSTALL ADD-ON FAUCET WITH 15" SPOUT AT BASE OF PRE-RINSE RISER. SEE K-SHEET ELEVATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE MANIFOLD FROM SINK BASIN TO FLOOR SINK P-13B. NO P-TRAP REQUIRED. INSTALL CLEANOUT AT TURN.

**PLUMBING KEYNOTES LEGEND**

P-9	THREE OR FOUR COMPARTMENT POT SINK ROUGH IN: (SINK AND FAUCETS WITH 0.65 GPM SPRAY HEAD FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK ASSEMBLY & MOUNT TWO FAUCETS. AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LF175 STOPS AND BRASS CRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC. ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH PRE-RINSE SPRAY. INSTALL ADD-ON FAUCET WITH 18" SPOUT AT BASE OF PRE-RINSE RISER. ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH DOUBLE JOINT SPOUT ON OPPOSITE SIDE. SEE K-SHEET ELEVATIONS FOR FAUCET LOCATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE MANIFOLD FROM EACH SINK BASIN TO FLOOR SINK P-13A. NOP-TRAPS REQUIRED. PROVIDE CLEANOUT AT EACH END.
P-23	UTILITY CONNECTION (ICE MAKER): PROVIDE A MCGUIRE MODEL LFHST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET. PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34. SEE DETAIL 3/P-201 FOR PIPING AT ICE MAKERS.
P-24	UTILITY CONNECTION (COFFEE & TEA BREWERS): PROVIDE A MCGUIRE MODEL LFHST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET. PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34.
P-28	BALL VALVE: NIBCO MODEL 4660-T, 3/4", WITH IPS INLET AND OUTLET.
P-30	FILTERED WATER FAUCET: (FAUCET PROVIDED BY OWNER) TWO-HANDLE WALL MOUNT FAUCET WITH SWING SPOUT MOUNT ON WALL AS SHOWN ON K-SHEETS. PIPE FILTERED WATER TO BOTH SIDES OF FAUCET. CONNECT TO SUPPLY PIPING WITH BRASS OR CHROME NIPPLES; GALVANIZED NOT ALLOWED.
P-42	EMERGENCY THERMOSTATIC MIXING VALVE (EMERGENCY EYEWASH): BRADLEY MODEL S19-2000 EF88 THERMOSTATIC TEMPERING VALVE (PROVIDED BY HJC); ANSI Z358.1 CERTIFIED FOR EMERGENCY FIXTURES, ASSE 1071 COMPLIANT, WITH DIAL THERMOMETER, INLET CHECK STOPS, ADJUSTABLE SETPOINT, ACCURATE WITHIN +/- 3 DEG F. INCLUDES INTEGRAL COLD WATER BYPASS WITH POSITIVE HOT WATER SHUT-OFF WHEN COLD WATER SUPPLY IS LOST. FACTORY SETPOINT OF 85 DEG F. MOUNTING BRACKET INCLUDED. FACTORY ASSEMBLED AND TESTED, ROUGH BRASS FINISH. NO SUBSTITUTIONS. CONTACT CHICK-FIL-A NATIONAL ACCOUNTS AT HAYNES, JONES & CADBURY FOR PRICING AND DELIVERY.

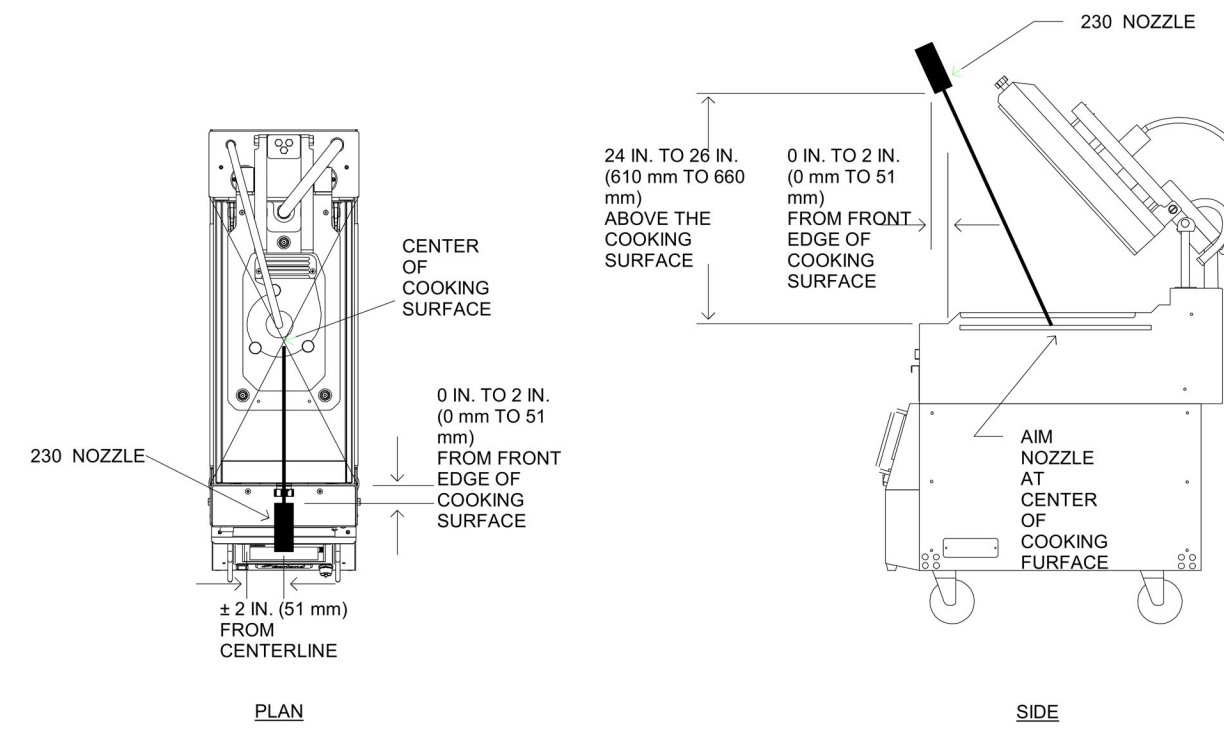
KEYNOTE INFORMATION PER PROTOTYPE P-SHEET STANDARDS



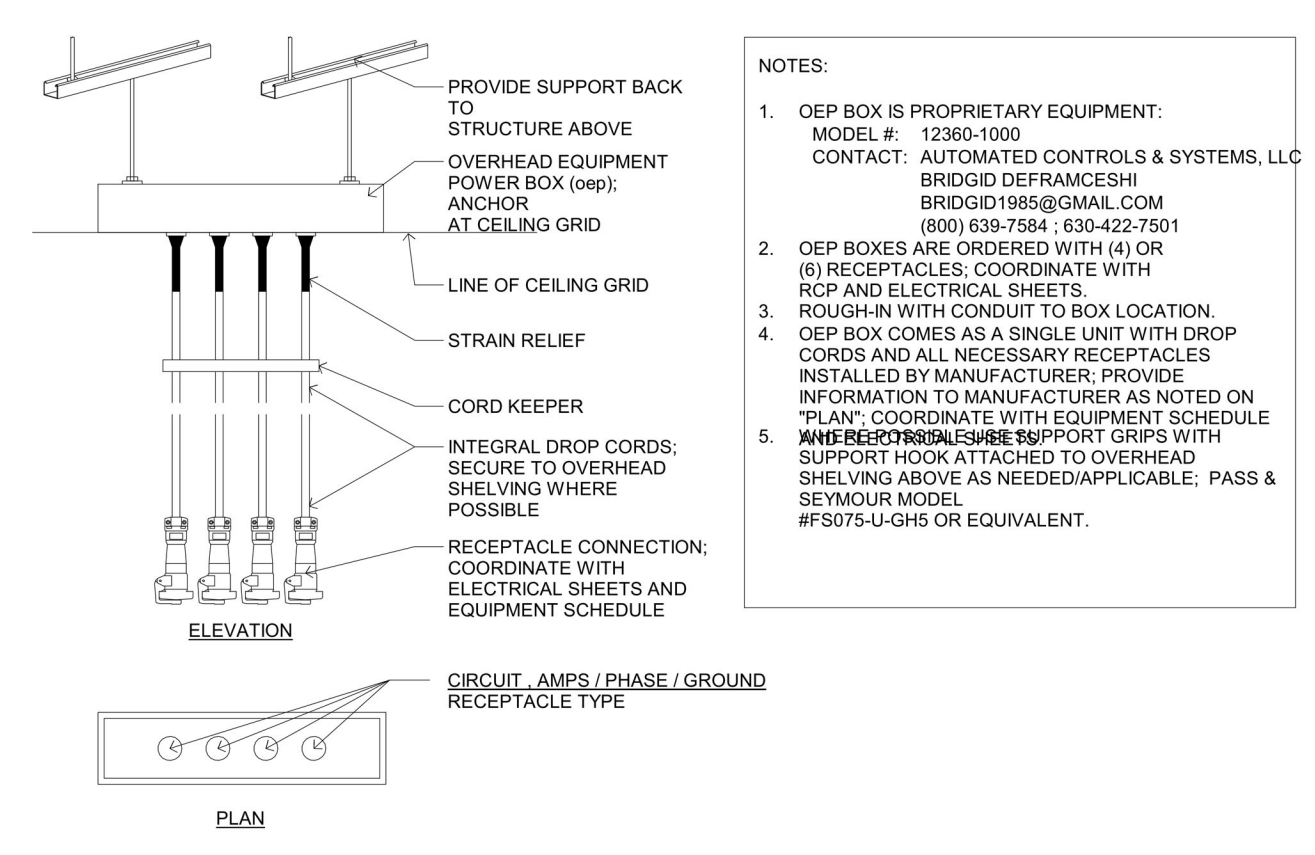


- NOTES:
1. REFER TO KITCHEN ELEVATIONS FOR ANSUL FIXTURE LOCATION
  2. G.C. TO COORDINATE ELECTRICAL BOX REQUIREMENTS WITH SELECTED ANSUL SYSTEM.
  3. VERIFY NECESSARY ORIENTATION OF ELECTRICAL BOX WITH MANUFACTURER PROVIDED COVER PLATE MOUNTING HARDWARE PRIOR TO INSTALLATION
  4. ELECTRICAL BOX AND ALL ASSOCIATED CONDUIT TO BE RECESSED IN WALL.

**1 ANSUL PULL MOUNTING DETAIL**  
SCALE: N.T.S.

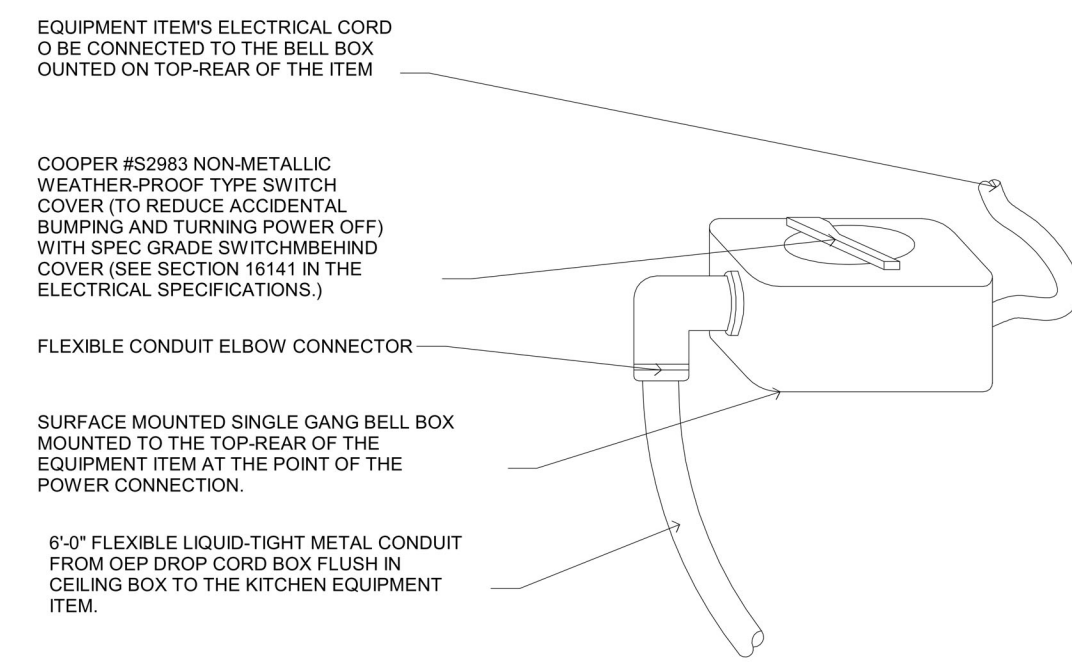


**2 ANSUL NOZZLE AT GRILL ON HOOD**  
SCALE: N.T.S.

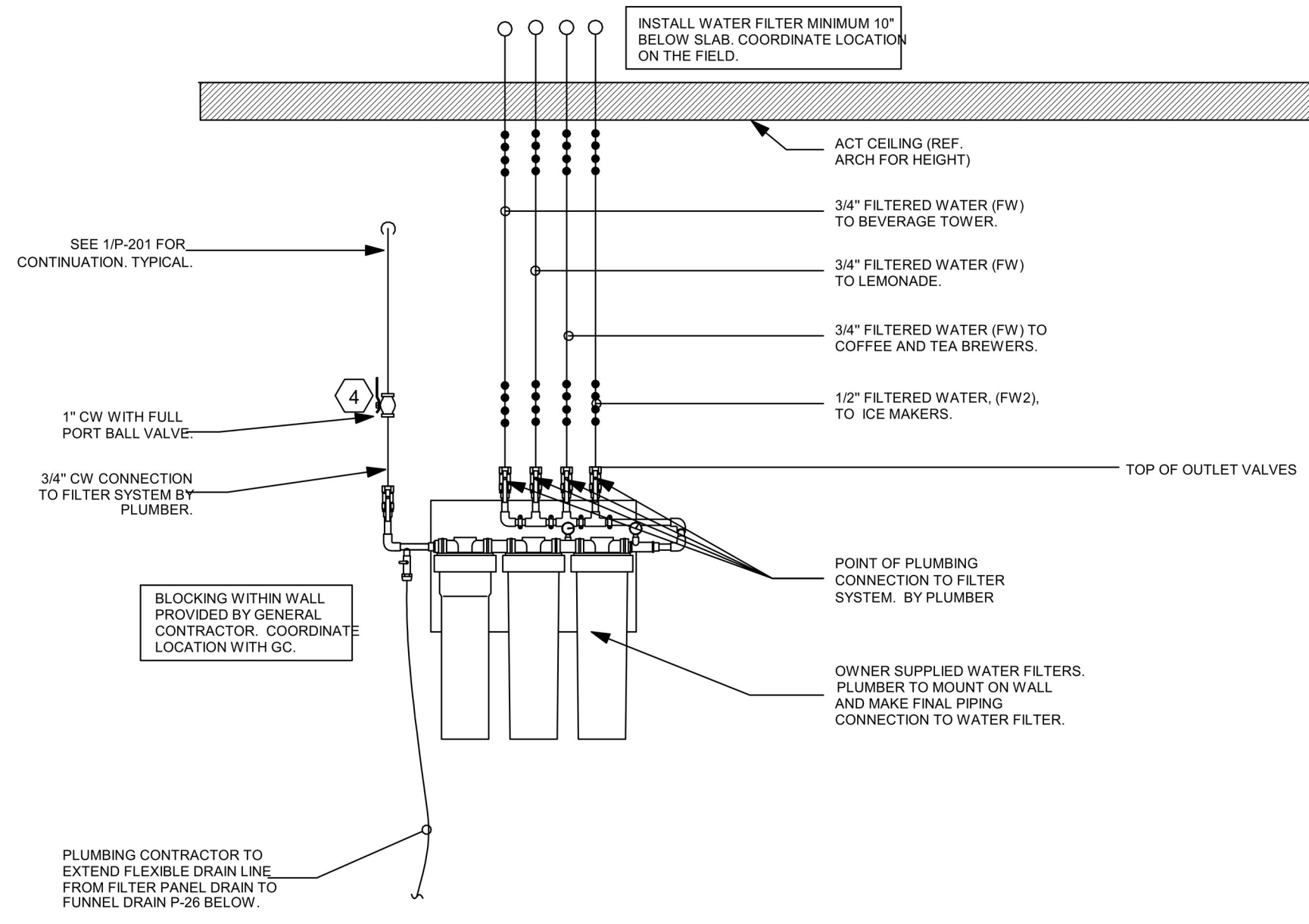


**3 OEP DETAILS**  
SCALE: N.T.S.

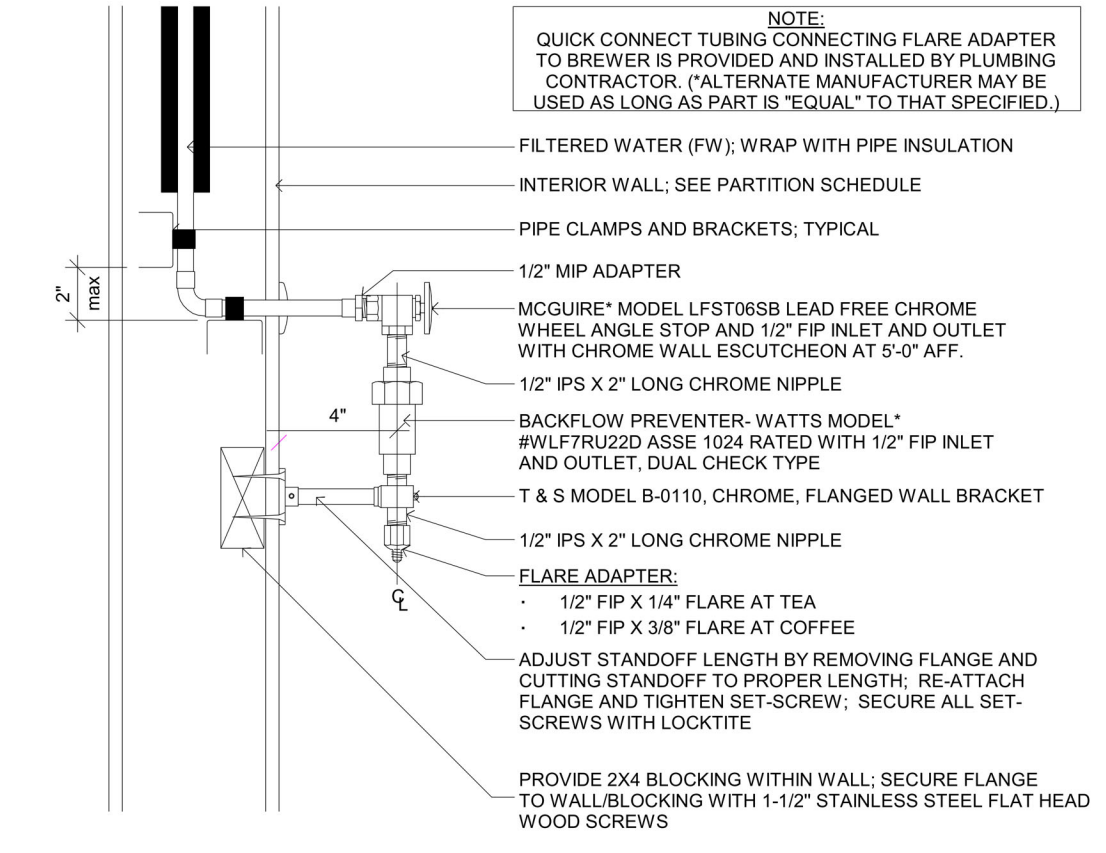
- NOTES:
1. OEP BOX IS PROPRIETARY EQUIPMENT. MODEL #: 12360-1000 CONTACT: AUTOMATED CONTROLS & SYSTEMS, LLC BRIDGD@FRAMESHI.BRIDGD1@FRAMESHI.COM (800) 639-7684 / 630-422-7501
  2. OEP BOXES ARE ORDERED WITH (4) OR (6) RECEPTACLES; COORDINATE WITH RCP AND ELECTRICAL SHEETS.
  3. ROUGH-IN WITH CONDUIT TO BOX LOCATION.
  4. OEP BOX COMES AS A SINGLE UNIT WITH DROP CORDS AND ALL NECESSARY RECEPTACLES INSTALLED BY MANUFACTURER; PROVIDE INFORMATION TO MANUFACTURER AS NOTED ON "PLAN"; COORDINATE WITH EQUIPMENT SCHEDULE.
  5. ~~IN THE EVENT OF A FIRE, THE OEP BOXES SHOULD BE SECURE TO OVERHEAD SHELVING ABOVE AS NEEDED/APPLICABLE. PASS & SEYMOUR MODEL #PFS-U-GRD OR EQUIVALENT.~~



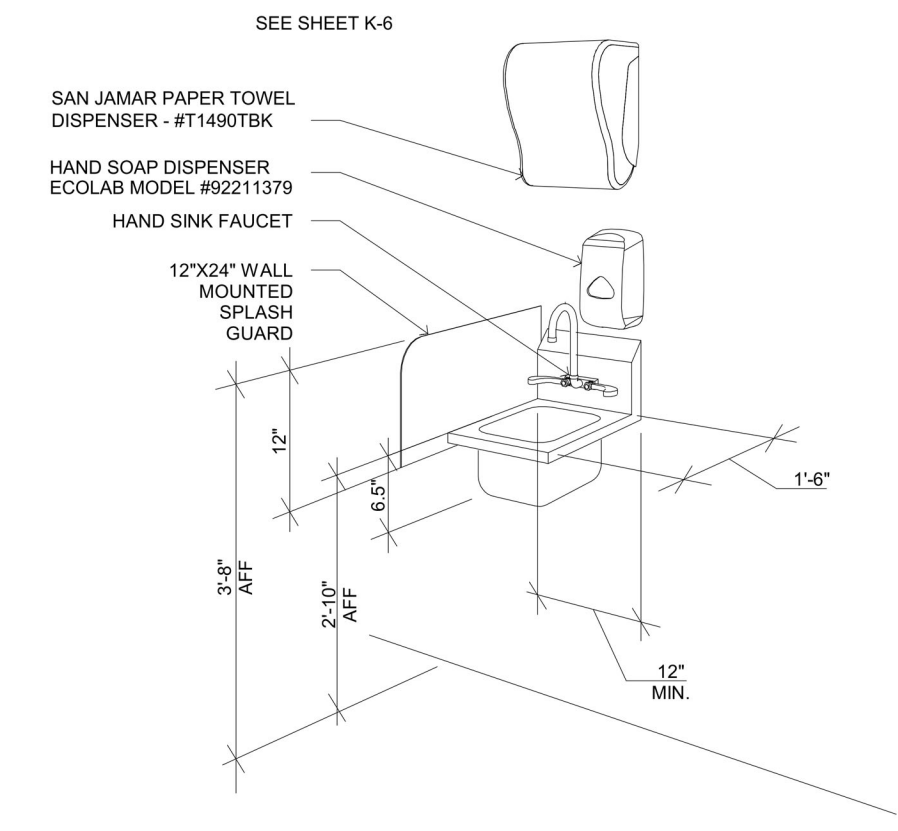
**4 DIRECT CONNECTION - ISLAND LOCATION**  
SCALE: N.T.S.



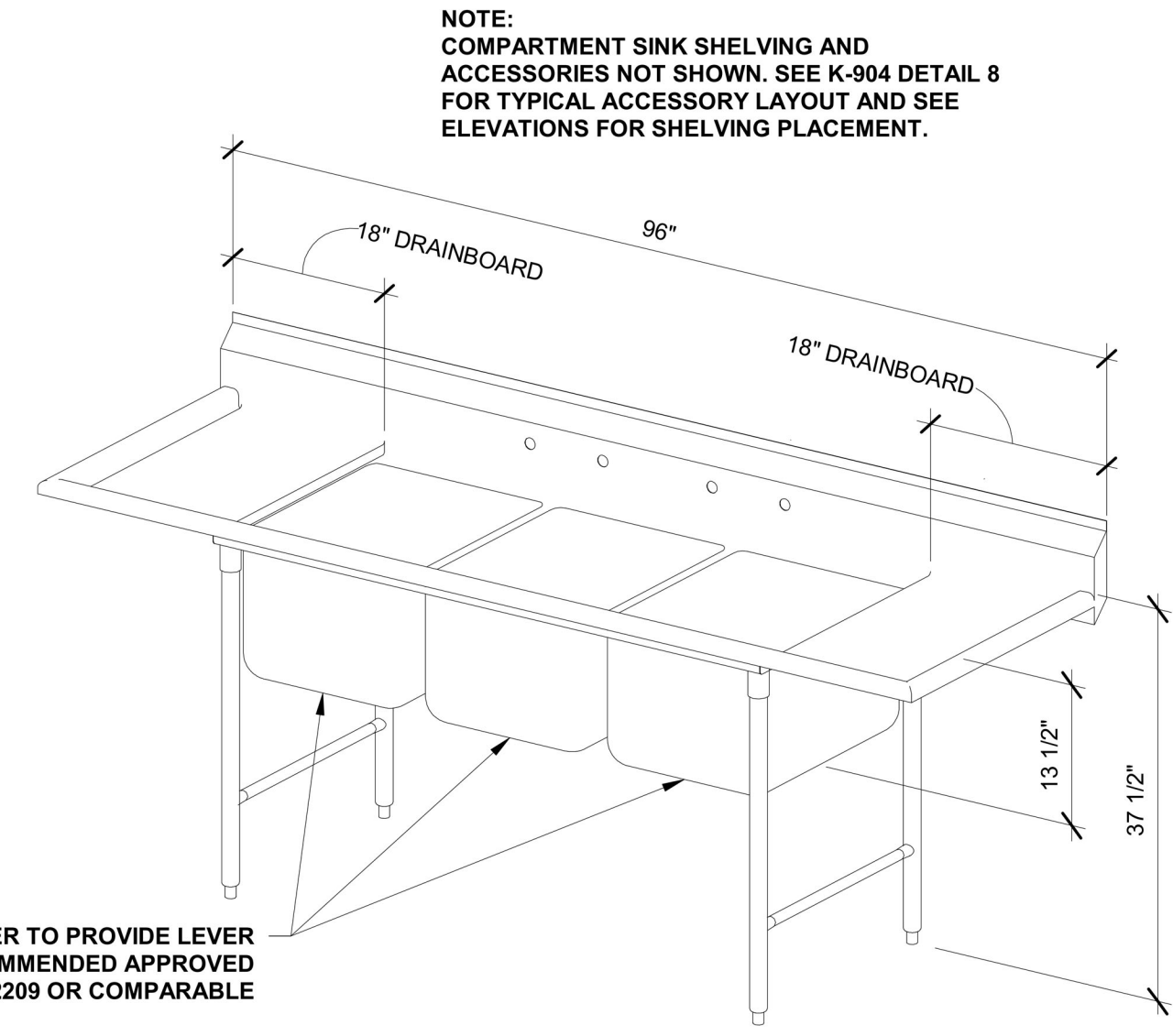
**5 PIPING AT WATER FILTER**  
SCALE: N.T.S.



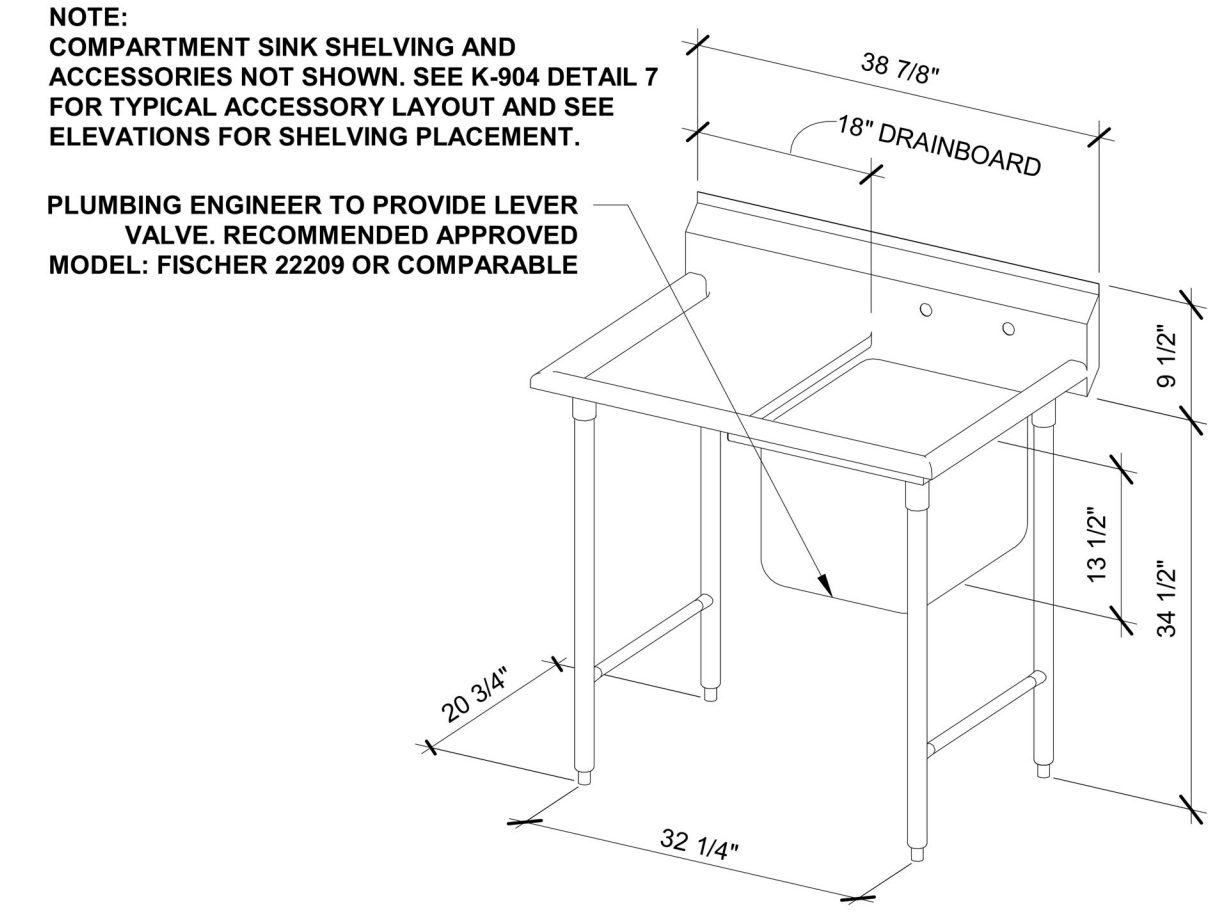
**6 COFFEE & TEA BREWER STOP & BFP**  
SCALE: N.T.S.



**7 TYP. HAND SINK DIMENSIONS**  
SCALE: N.T.S.



**8 TYP. 3-COMP SINK DIMENSIONS**  
SCALE: N.T.S.



**9 TYP. 1-COMP SINK W/ DRAINBOARD**  
SCALE: N.T.S.

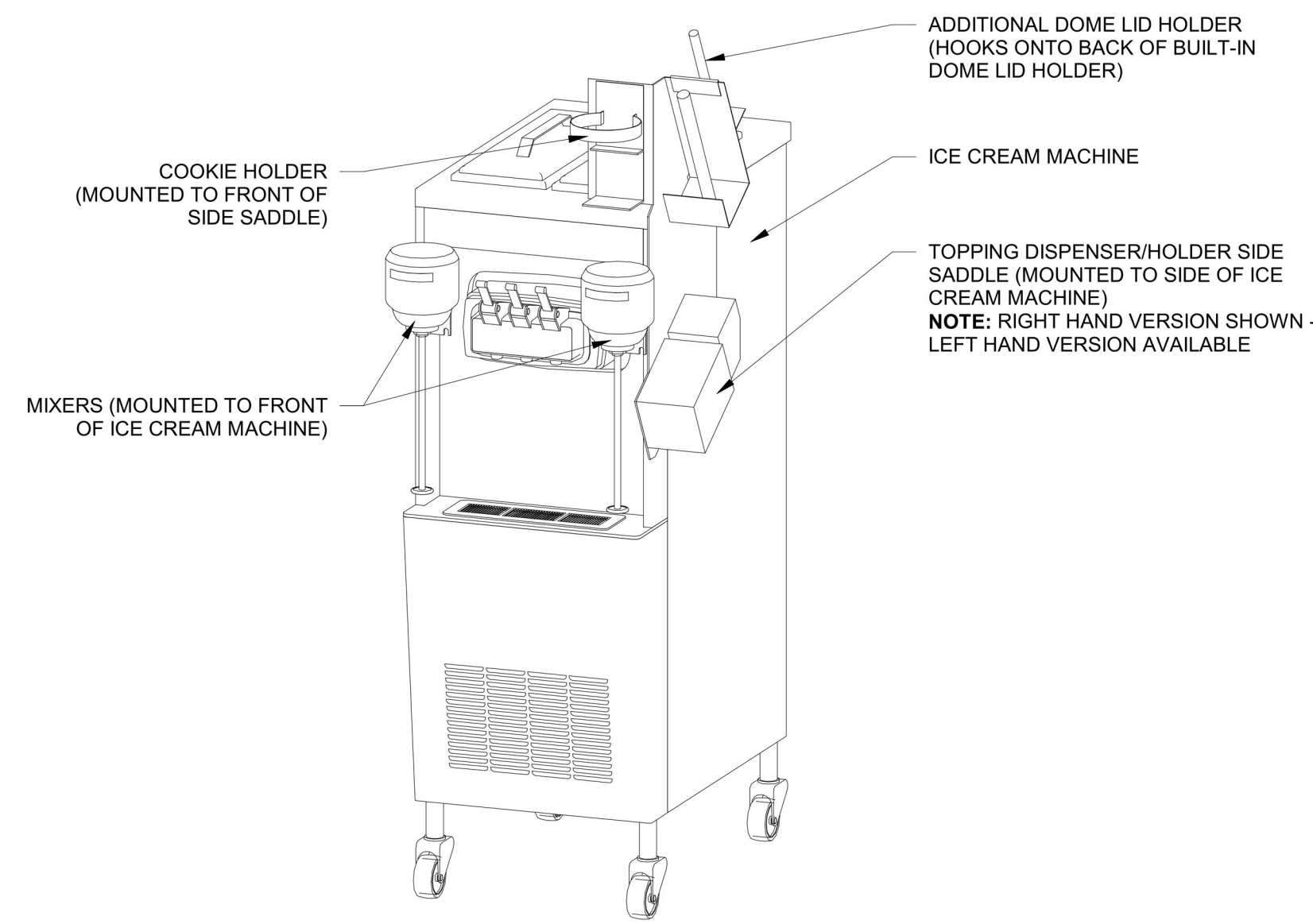
\* INFORMATION ON THIS SHEET IS FOR REFERENCE ONLY - SEE MANUFACTURER DOCUMENTATION FOR FINAL INSTALLATION INSTRUCTIONS AND OTHER DETAILS

DRAWN BY:		
REVIEWED BY:		
REV.	DESCRIPTION	DATE



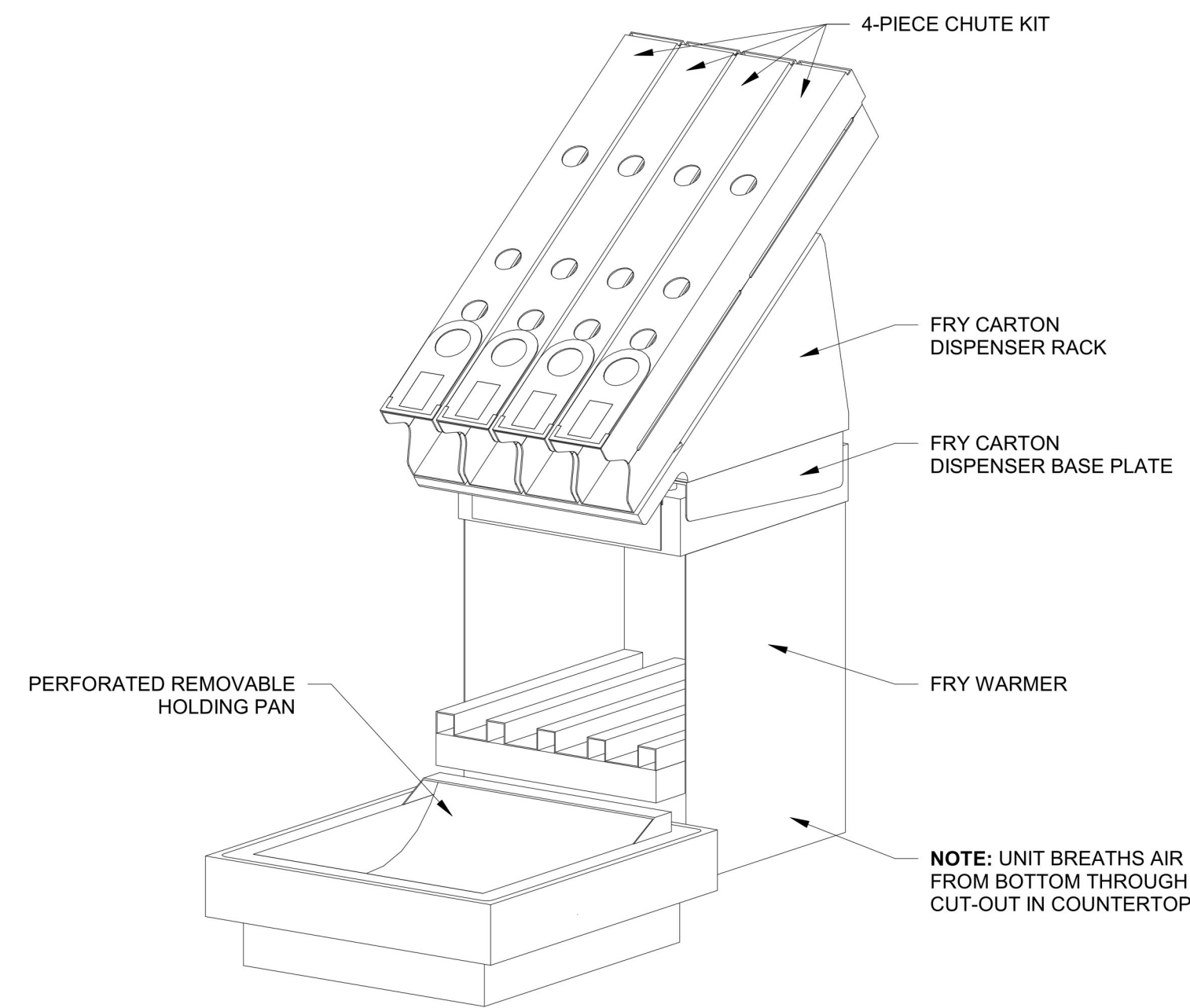
PPA#22-0056
A/E#00-00-00
Consultant #:
<b>SHEET TITLE</b>
KITCHEN DETAILS
<b>SHEET</b>
<b>K8.4</b>
DATE
16.06.2023



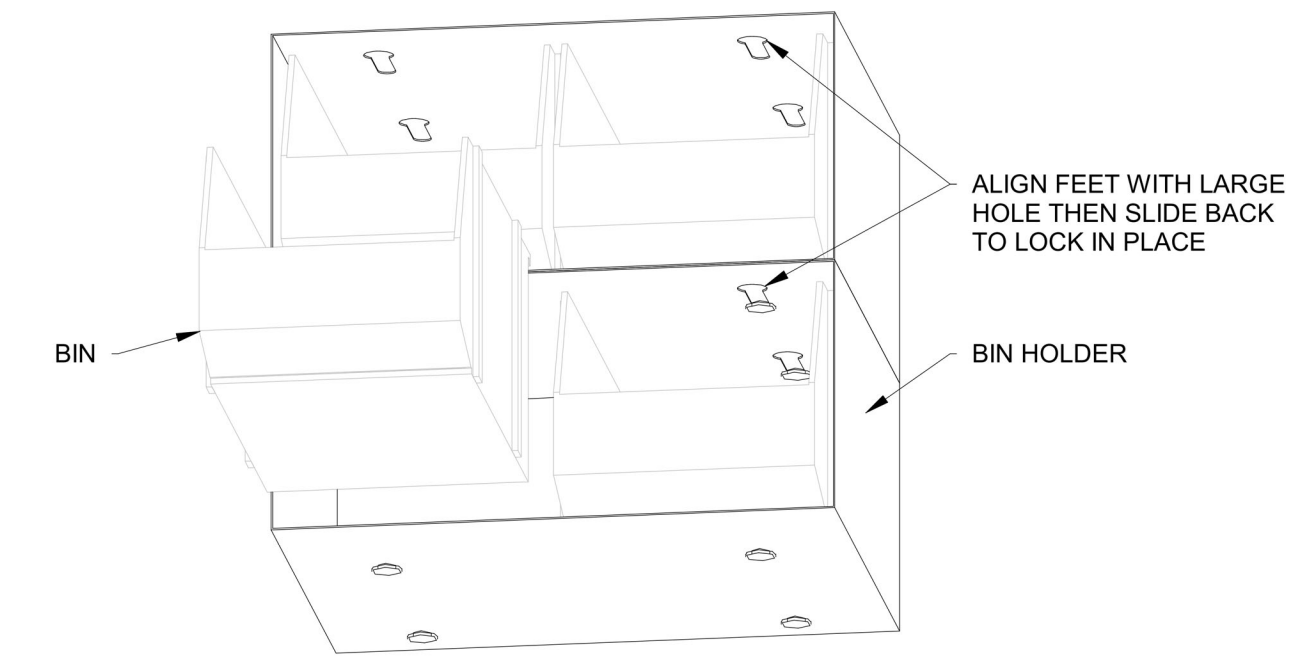


1 ICE CREAM MACHINE & ACCESSORIES  
SCALE: N.T.S.

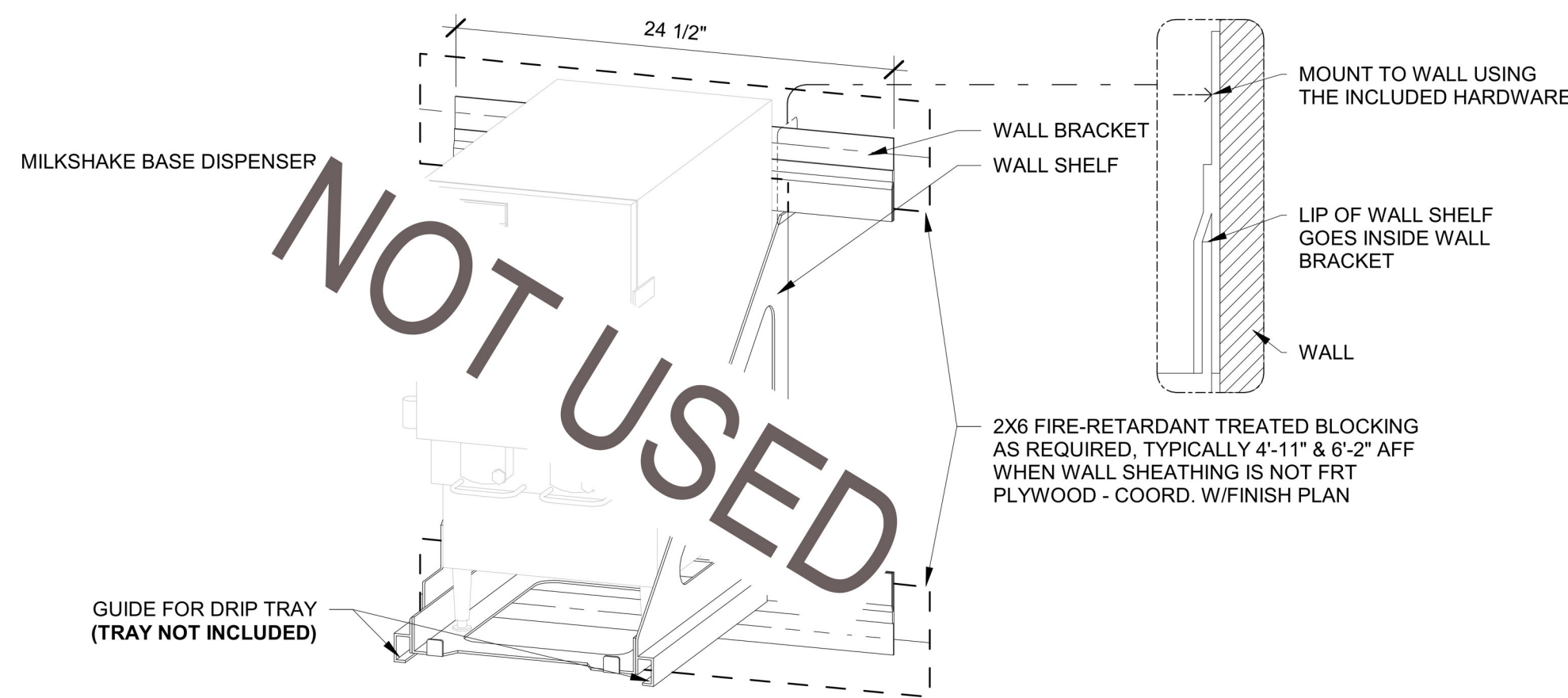
NOTE:  
- MACHINE & PAN HOOK TOGETHER TO FORM ONE UNIT  
- HOT AIR PASSES FROM BASE OF MACHINE TO INSERT PAN, HEATING THE UNDERSIDE OF THE PERFORATED PAN  
- CUT-OUTS REQUIRED FOR INSERT PAN AND BOTTOM BREATHING AREA OF PACKAGE CHUTE



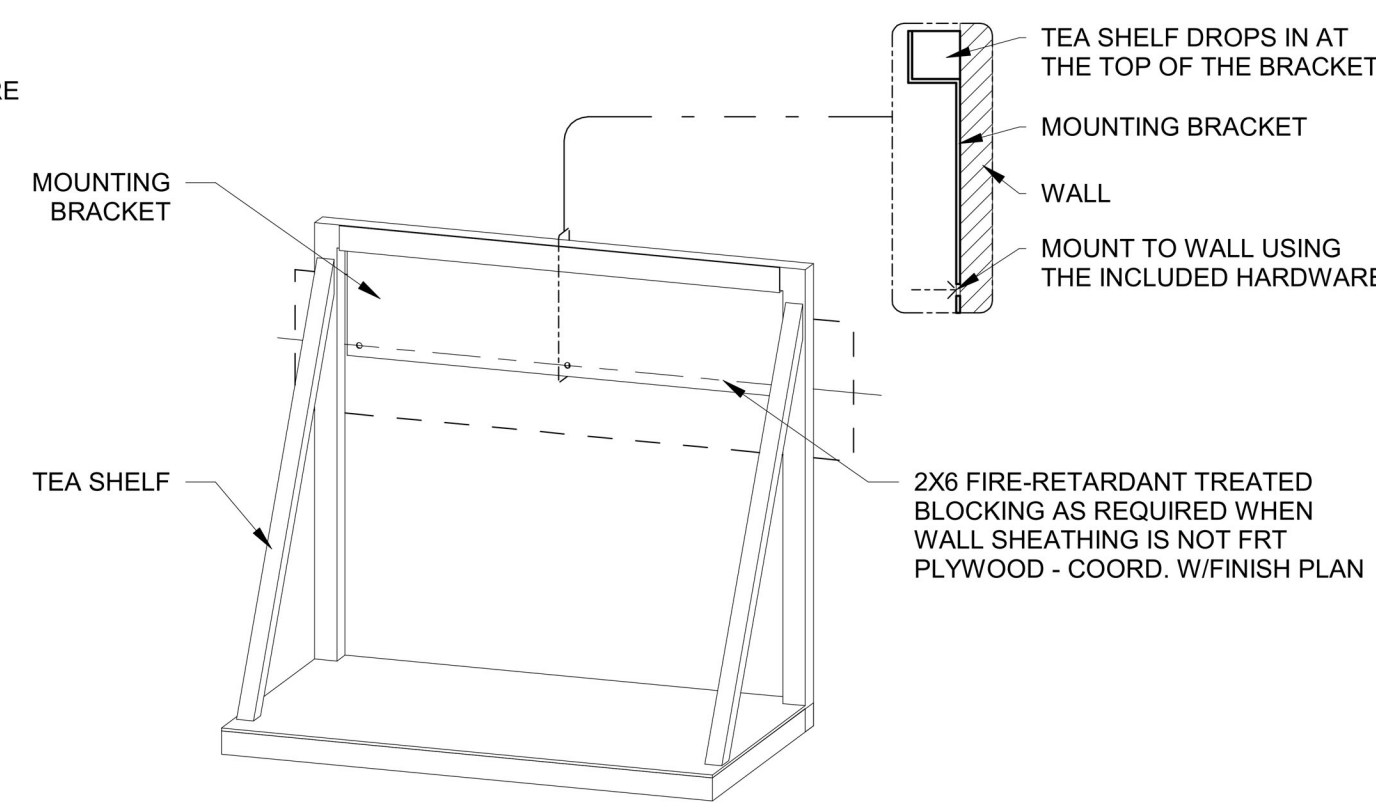
2 FRY PACKAGING & FRY DUMP  
SCALE: N.T.S.



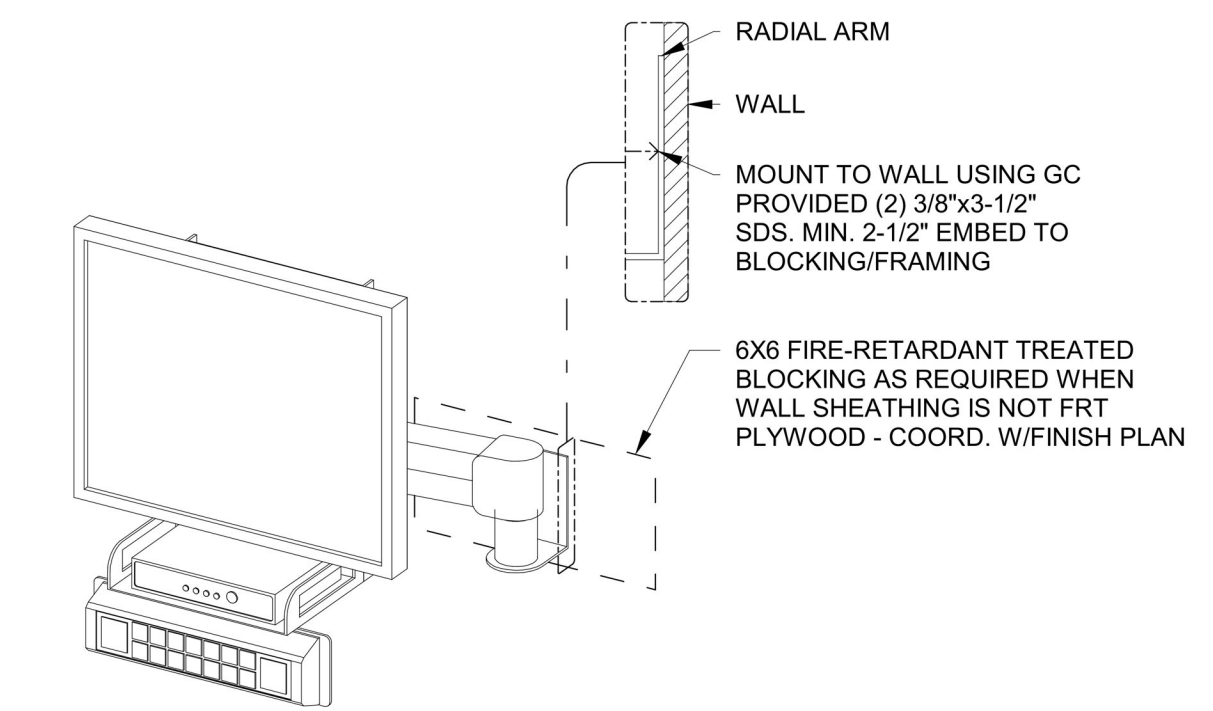
3 BIN HOLDER WITH BINS  
SCALE: N.T.S.



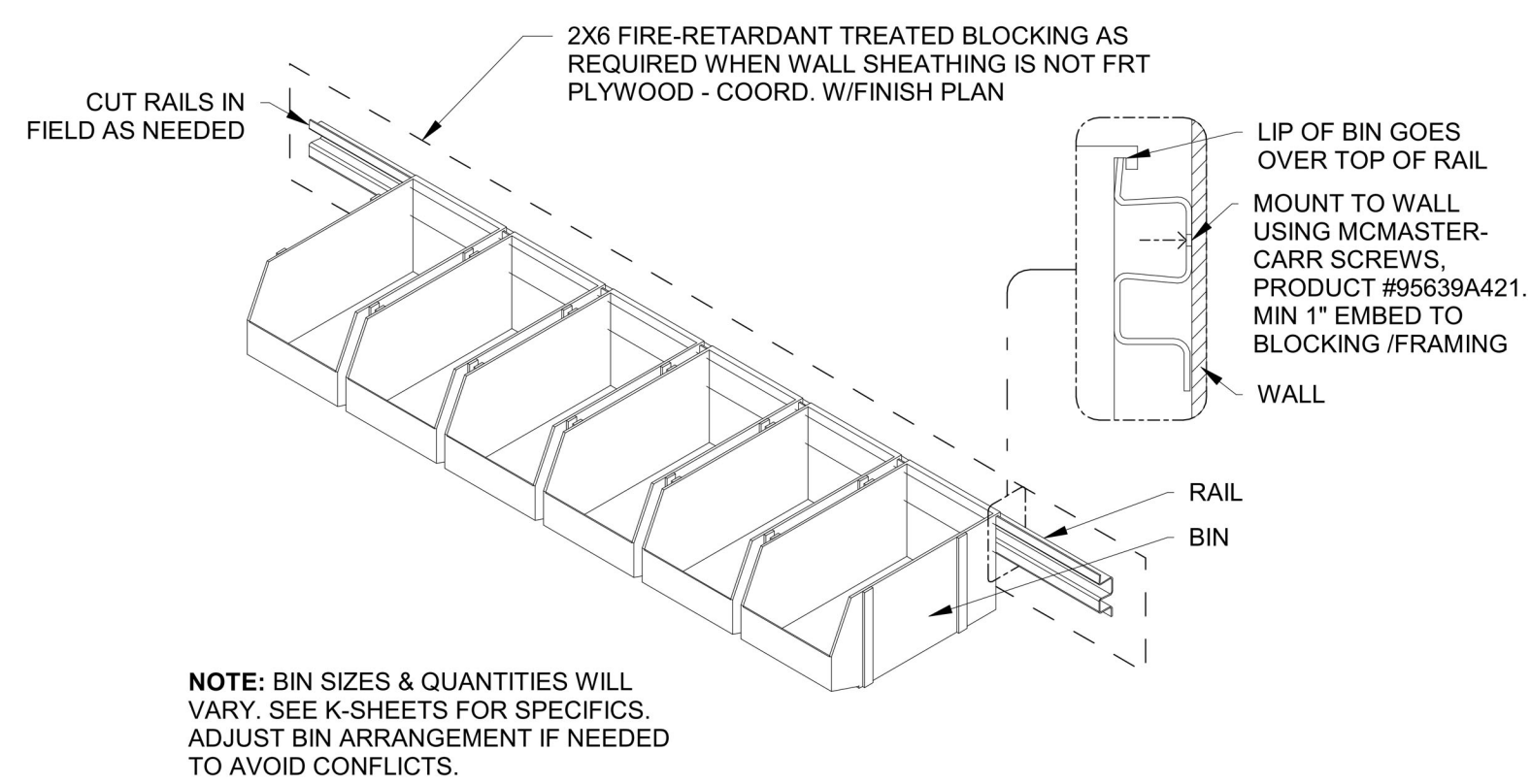
4 MILKSHAKE BASE DISPENSER & SHELF  
SCALE: N.T.S.



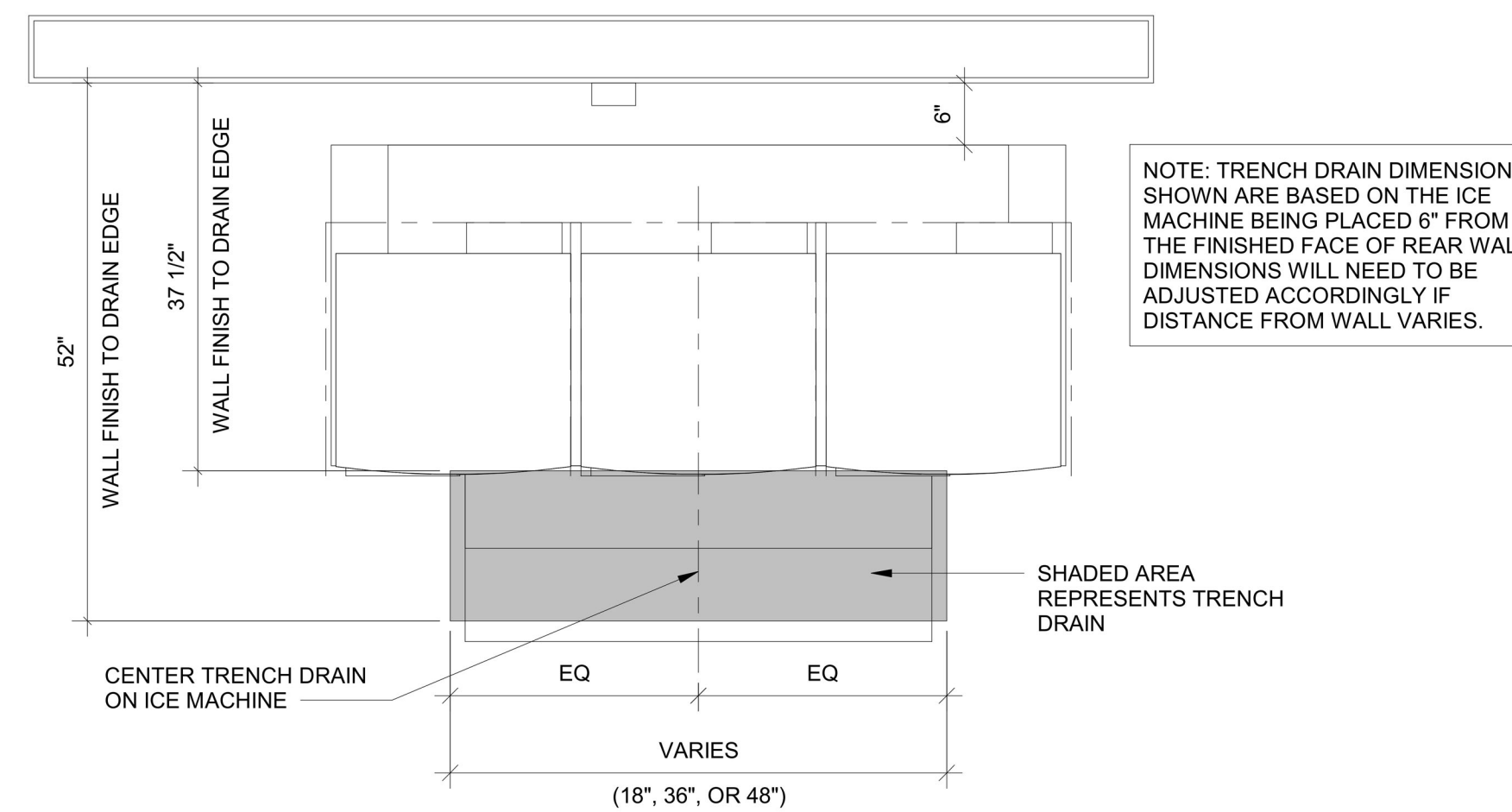
5 TEA SHELF  
SCALE: N.T.S.



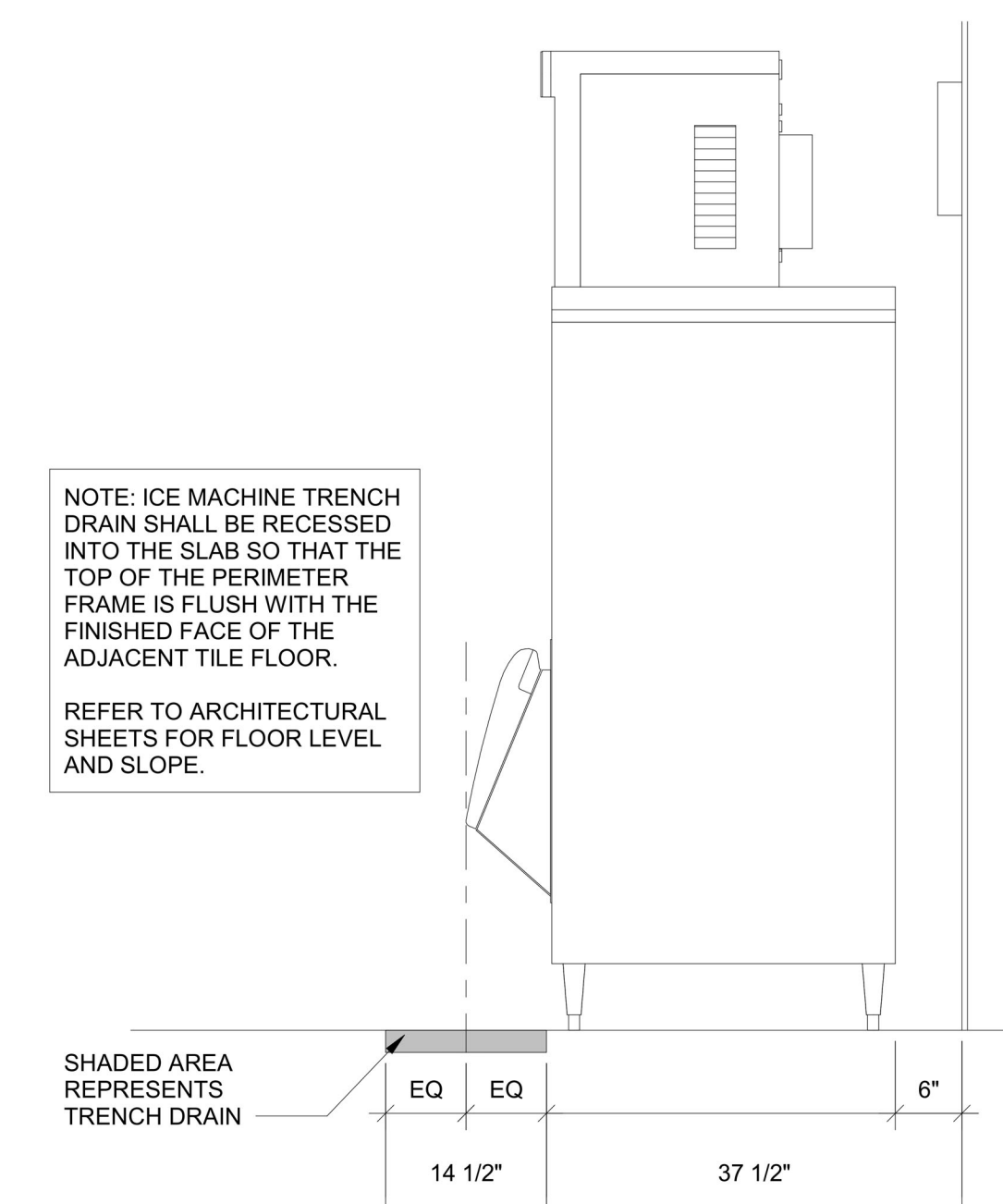
6 KPS ARM  
SCALE: N.T.S.



7 RAIL & BINS  
SCALE: N.T.S.



8 TYP. TRENCH DRAIN AT ICE MACHINE: PLAN  
SCALE: N.T.S.

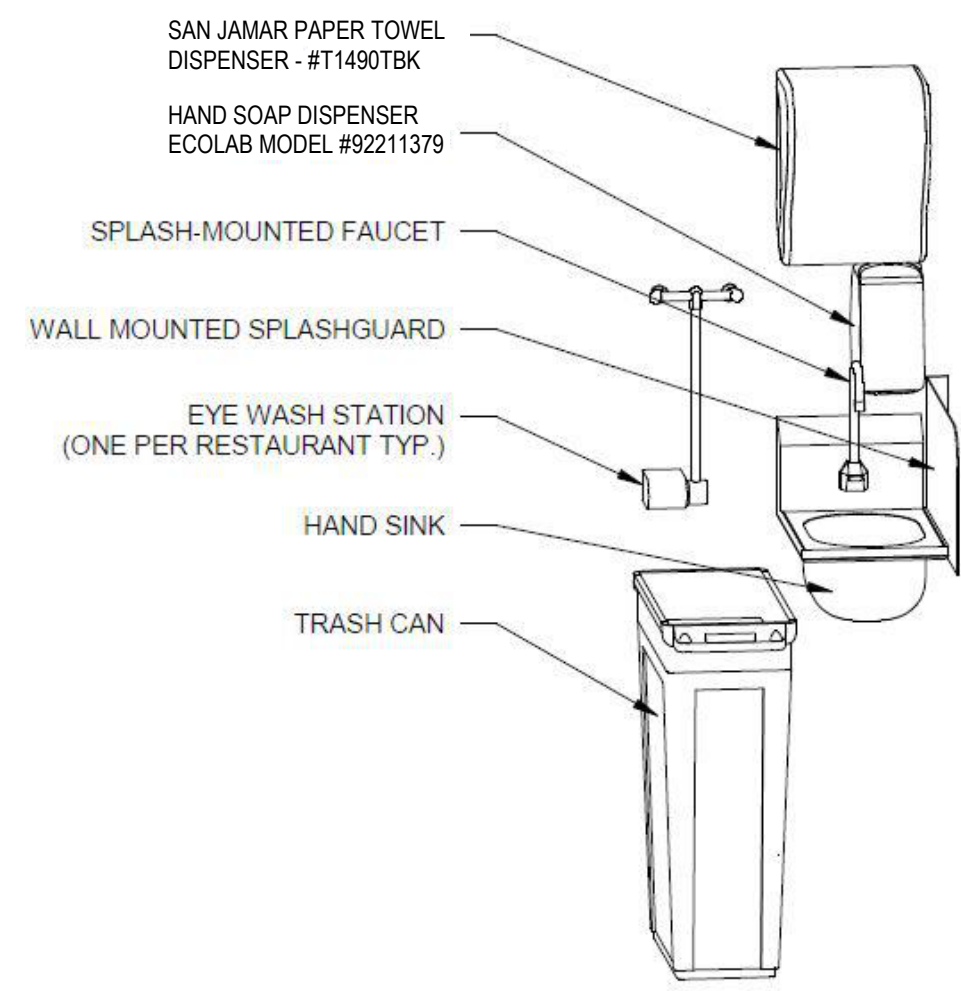


9 TYP. TRENCH DRAIN AT ICE MACHINE: ELEVATION  
SCALE: N.T.S.

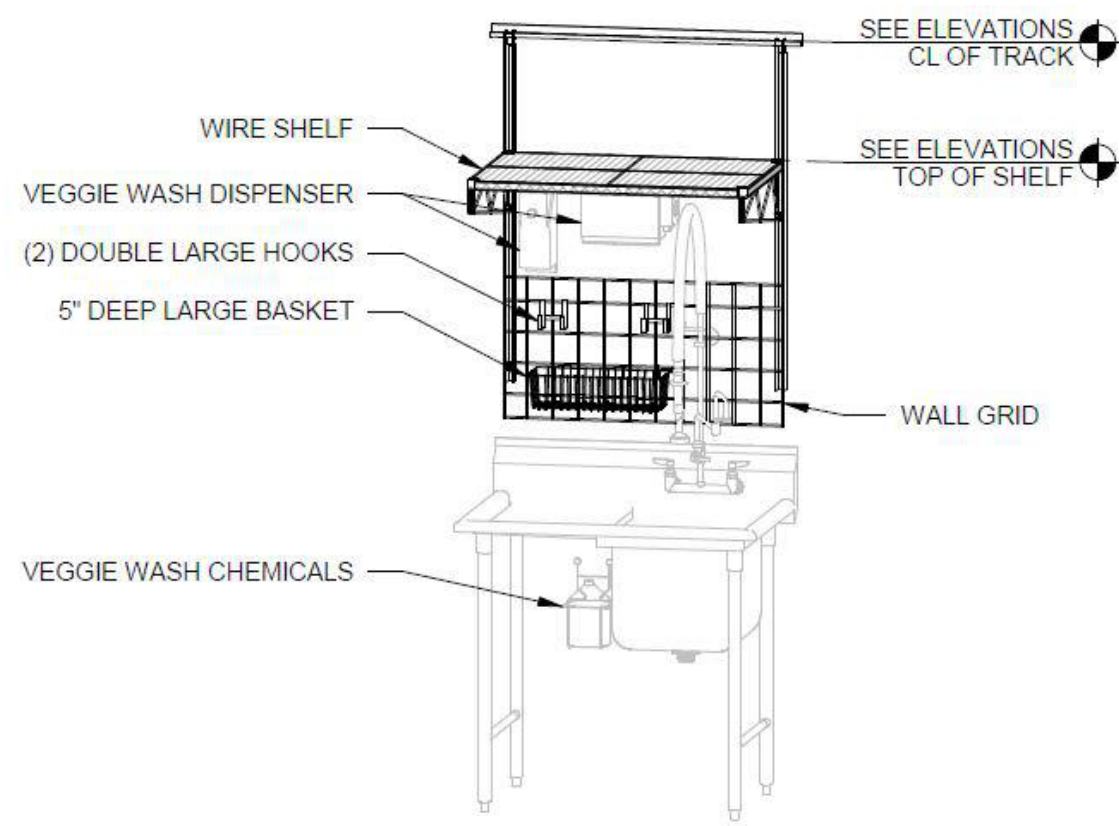
\* INFORMATION ON THIS SHEET IS FOR REFERENCE ONLY - SEE MANUFACTURER DOCUMENTATION FOR FINAL INSTALLATION INSTRUCTIONS AND OTHER DETAILS

REV.	DESCRIPTION	DATE

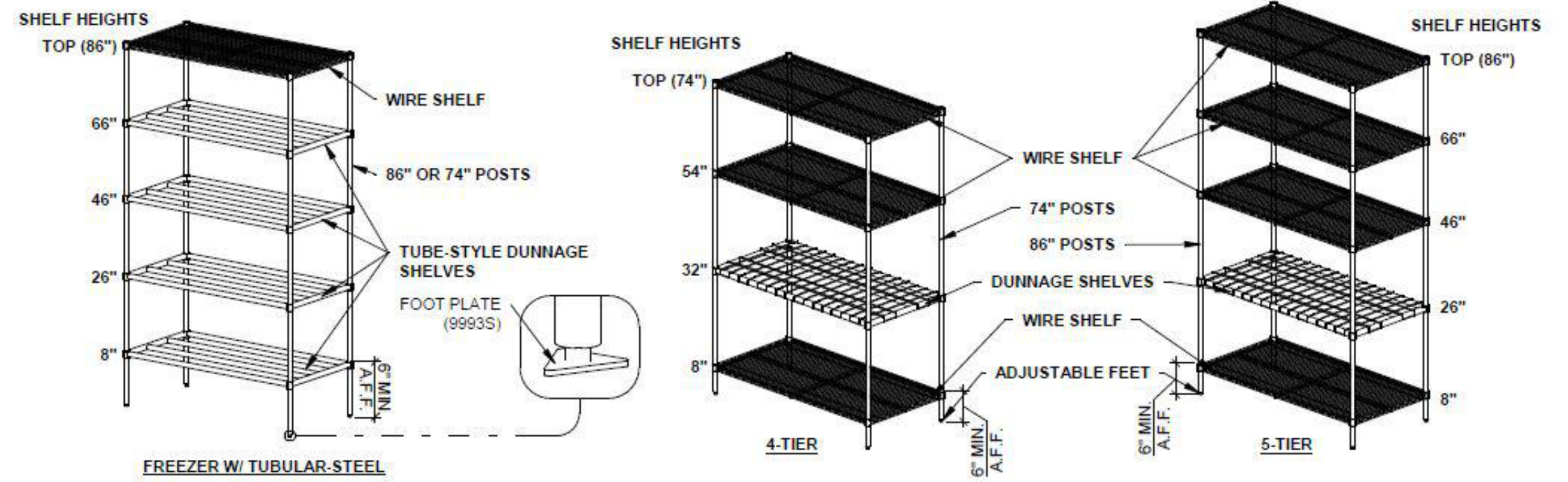




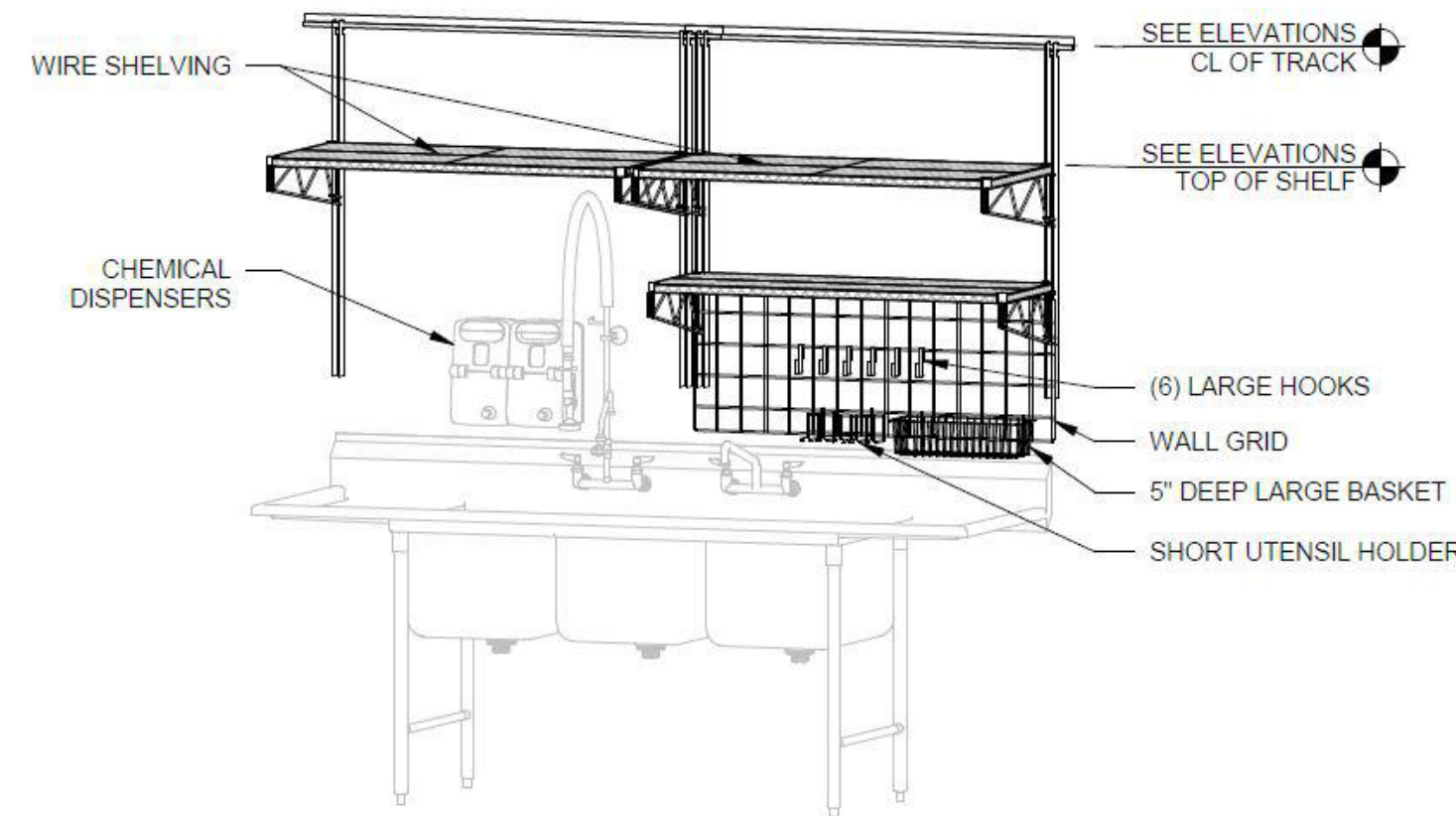
7 HAND SINK & ACCESSORIES  
 SCALE: N.T.S.



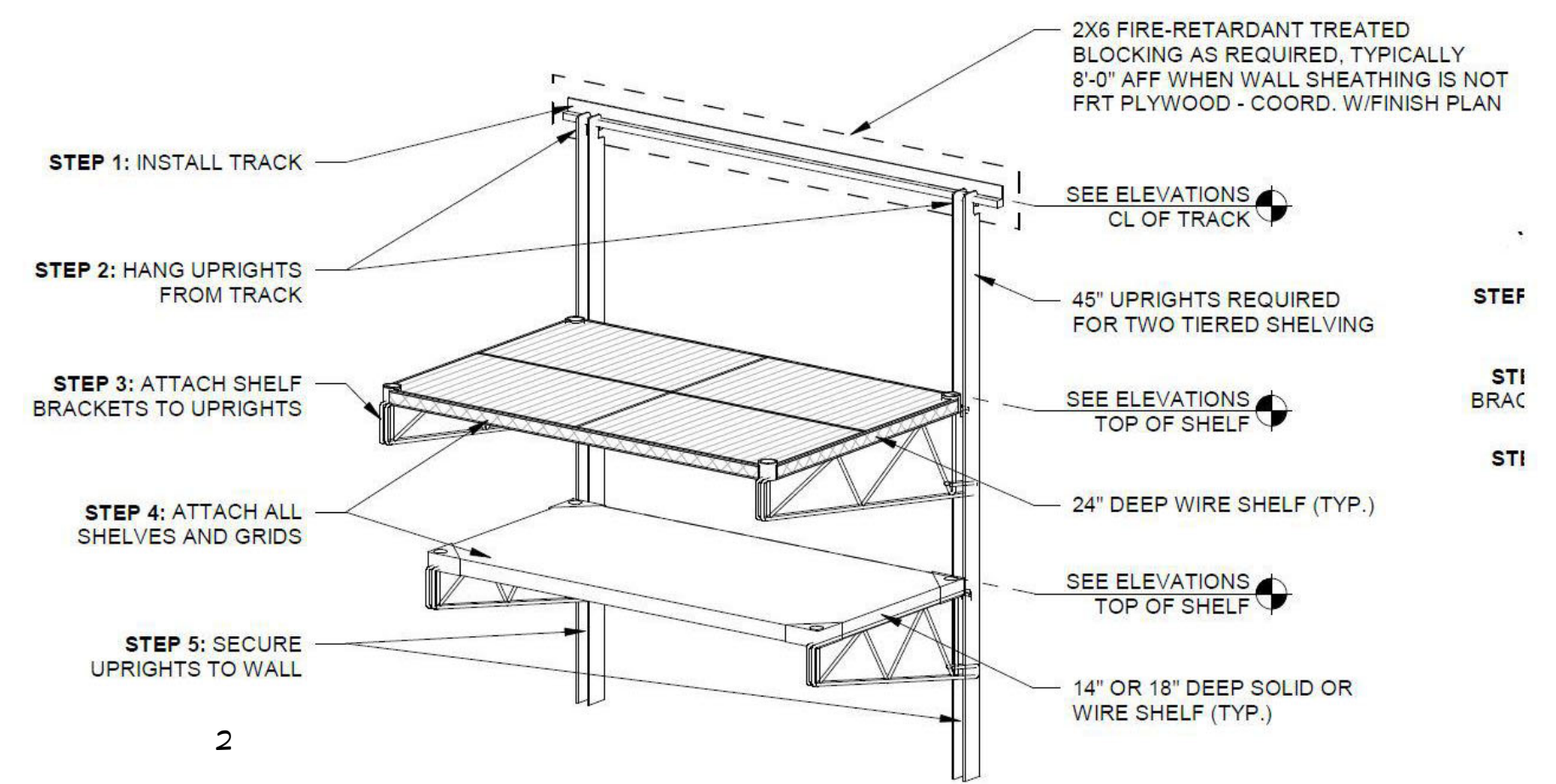
4 1-COMP VEGGIE PREP SINK SHELF & ACCESSORIES  
 SCALE: N.T.S.



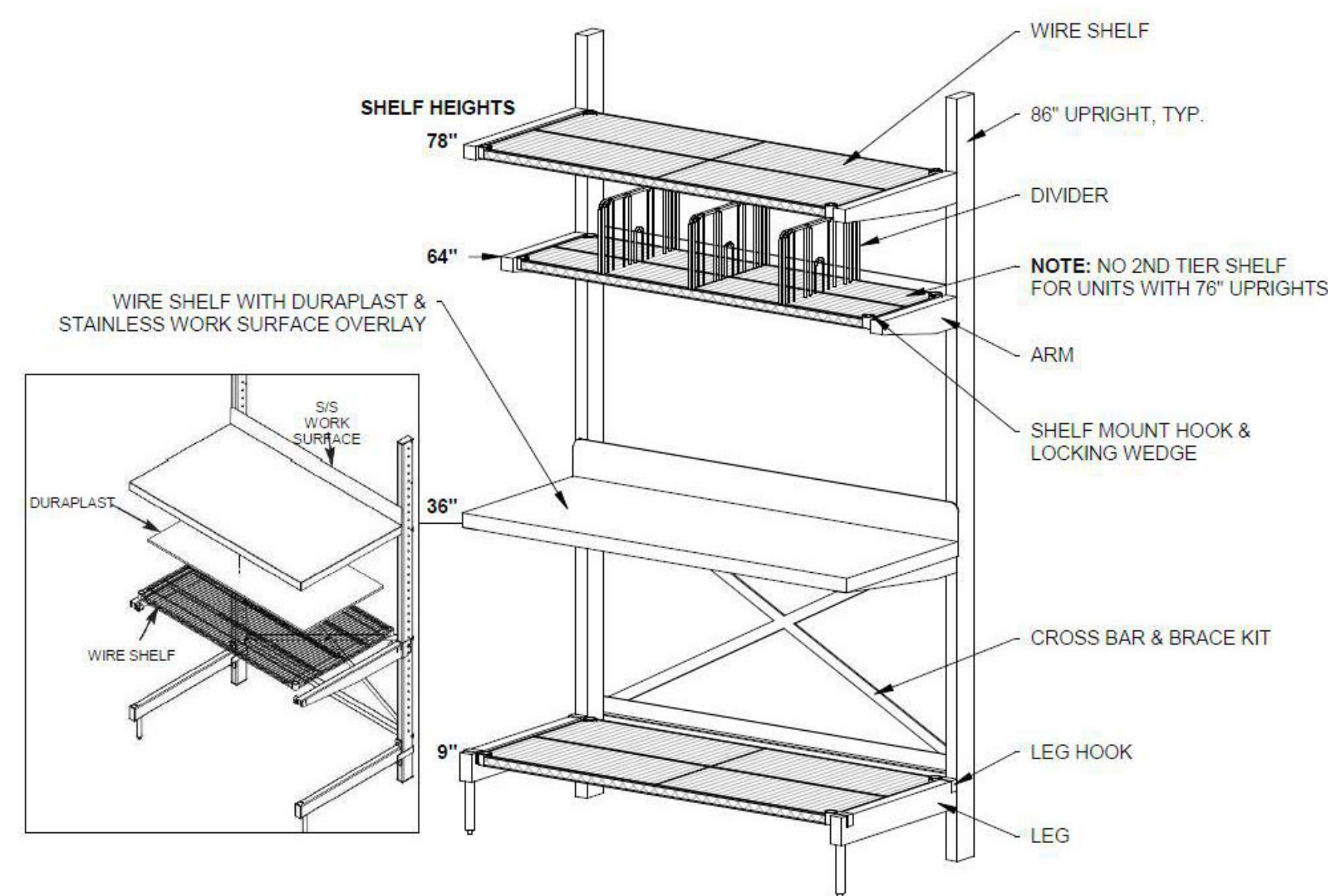
6 SHELVING DETAIL: FLOOR SHELVES  
 SCALE: N.T.S.



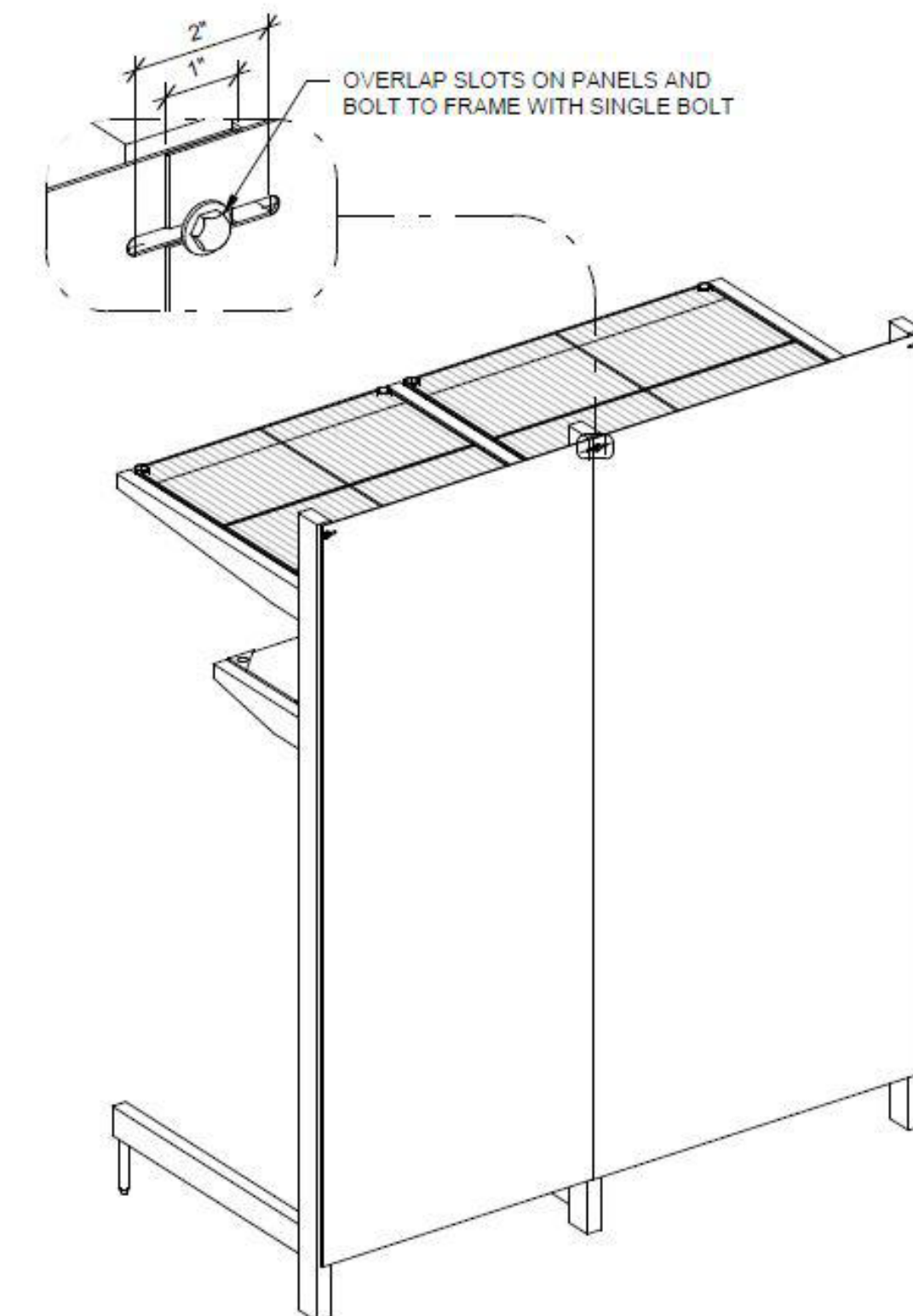
5 3 COMP UTILITY SINK SHELVES & ACCESSORIES  
 SCALE: N.T.S.



1 SHELVING INSTALL DETAIL: WALL MTD.  
 SCALE: N.T.S.



6 CANTILEVER SHELVING - WORK SURFACE  
 SCALE: N.T.S.



5 STAINLESS STEEL PANELS  
 SCALE: N.T.S.



## ELECTRICAL LEGEND

### FIRE ALARM DEVICES

[E]	MANUAL PULL STATION
[E<]	AUDIO/VISUAL HORN/STROBE DEVICE
[E>]	VISUAL STROBE DEVICE
[E]	AUDIO SPEAKER DEVICE
[E<]	CEILING MOUNTED AUDIO/VISUAL SPEAKER/STROBE DEVICE
[E>]	CEILING MOUNTED AUDIO SPEAKER DEVICE
[M]	MAGNETIC DOOR HOLDER
[SD]	SMOKE DETECTOR
[HD]	HEAT DETECTOR
[CO]	CARBON MONOXIDE DETECTOR
[SD]	DUCT SMOKE DETECTOR
[FSB]	FIRE SMOKE DAMPER
[EACP]	FIRE ALARM CONTROL PANEL
[EAA]	FIRE ALARM REMOTE ANNUNCIATOR
[E]	ADDRESSABLE INTERFACE DEVICE BY EC FOR FIRE/SMOKE DAMPERS
[ESV]	ELEVATOR SHAFT VENT, CONNECT TO FIRE ALARM SYSTEM
[PS]	SPRINKLER CONNECTION, PRESSURE SWITCH
[TS]	SPRINKLER CONNECTION, TAMPER SWITCH
[FS]	SPRINKLER CONNECTION, FLOW SWITCH
[LAA]	SPRINKLER CONNECTION, LOW AIR ALARM

### LIGHTING DEVICES

[L]	LAY-IN OR RECESSED LIGHTING FIXTURE
[S]	SURFACE MOUNTED LIGHTING FIXTURE
[D]	DIRECT/ INDIRECT LIGHTING PENDANT MOUNTED FIXTURE.
[S]	SURFACE MOUNTED OR CHAIN HUNG STRIP FIXTURE
[W]	WALL BRACKET LIGHTING FIXTURE
[O]	RECESSED DOWN LIGHT, HALF MOON INDICATES WALL WASH TRIM AND DIRECTION.
[C]	SURFACE MOUNTED CYLINDER FIXTURE
[W]	WALL MOUNTED FIXTURE
[H]	WALL SCONCE FIXTURE
[E]	FILLED CENTER OR SLASH INDICATES FIXTURE IS AN EMERGENCY DEVICE WITH EMERGENCY BATTERY PACK OR CONNECTED TO EMERGENCY POWER.
[E]	EXIT SIGN, BRACKET INDICATES WALL MOUNTING. NUMBER OF FACES AND DIRECTION INDICATED BY FILLED AREAS.
[E]	REMOTE DOUBLE HEAD EGRESS FIXTURE
[E]	SITE GROUND MOUNTED FLOOD FIXTURE
[E]	DOUBLE HEAD WALL MOUNTED BATTERY PACK POWERED EGRESS FIXTURE.
[E]	SQUARE HEAD POLE MOUNTED SITE LIGHT FIXTURE.
[E]	ROUND HEAD POLE MOUNTED SITE LIGHT FIXTURE.

### FOOD SERVICE COORDINATION

CAREFULLY COORDINATE WITH FOOD SERVICE PLANS AND KITCHEN DESIGNER FOR FINAL LOCATION, HEIGHT, AND ALL OTHER INSTALLATION REQUIREMENTS OF ALL DEVICES PRIOR TO ROUGH-IN.

COORDINATE WITH FOOD SERVICE PLANS FOR ANY ADDITIONAL DATA REQUIREMENTS FOR EQUIPMENT.

### LOW VOLTAGE ROUGH-IN NOTE

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL ROUGH-IN'S ASSOCIATED WITH SYSTEMS INSTALLED IN PROJECT, INCLUDING BUT NOT LIMITED TO, VOICE/DATA JACKS, FIRE ALARM, SPEAKERS, CLOCKS, CCTV, DOOR ACCESS CONTROL, ETC. EC SHALL COORDINATE ALL REQUIREMENTS, BOX SIZES, CONDUIT SIZES, LOCATIONS AND MOUNTING HEIGHTS WITH OWNER AND OWNER SELECTED CONTRACTOR PRIOR TO BID.

### POWER DEVICES

[S]	SINGLE POLE SWITCH, SUBSCRIPT INDICATES TYPE: P PILOT LIGHT 2 2 POLE MC MOMENTARY CONTACT 3 3-WAY 4 4-WAY K KEYED D DIMMER LV LOW VOLTAGE T TIMER, 1 HOUR TIMER, MOTOR RATED FOR EXHAUST FANS OS OCCUPANCY SENSOR
[D]	DUPEX RECEPTACLE SUBSCRIPT INDICATES TYPE: WP WEATHERPROOF GFCI GROUND FAULT CIRCUIT INTERRUPTER AC ABOVE COUNTER IG ISOLATED GROUND TR TAMPER RESISTANT WR WEATHER RESISTANT FILLED CENTER INDICATES GFCI DEVICE
[D]	DOUBLE DUPEX RECEPTACLE, SUBSCRIPT ABOVE INDICATE TYPE
[D]	DUPEX RECEPTACLE IN FLOOR BOX
[D]	DOUBLE DUPEX RECEPTACLE IN FLOOR BOX
[D]	SIMPLEX RECEPTACLE
[D]	DUPEX RECEPTACLE, CEILING MOUNTED. DEVICE AND COVER SHALL MATCH CEILING FINISH
[D]	SWITCHED DUPEX RECEPTACLE, BOX INDICATES DEVICE LOCATED IN FLOOR BOX
[D]	208V SINGLE PHASE RECEPTACLE, CONFIGURATION NOTED ON PLANS
[D]	208V THREE PHASE RECEPTACLE, CONFIGURATION NOTED ON PLANS
[D]	SIMPLEX RECEPTACLE IN FLOOR BOX
[D]	MUSHROOM HEAD PUSH BUTTON
[D]	PHOTO CELL
[D]	WALL MOUNTED CLOCK HANGER/ POWER RECEPTACLE
[D]	CORNER WALL MOUNTED OCCUPANCY SENSOR
[D]	CEILING MOUNTED OCCUPANCY SENSOR, LINE-VOLTAGE
[D]	CEILING MOUNTED OCCUPANCY SENSOR, STYLE 2
[D]	CEILING MOUNTED OCCUPANCY SENSOR, STYLE 3
[D]	OCCUPANCY SENSOR POWER PACK, BOX INDICATES WALL MOUNTING
[D]	SPECIAL PURPOSE CONNECTION, BRACKET INDICATES WALL MOUNTING, BOX INDICATES FLOOR MOUNTING
[D]	JUNCTION BOX, BRACKET INDICATES WALL MOUNTING, BOX INDICATES FLOOR MOUNTING
[D]	MOTOR CONNECTION
[D]	RELAY
[D]	NON-FUSED DISCONNECT SWITCH
[D]	FUSED DISCONNECT SWITCH
[D]	COMBINATION STARTER/DISCONNECT SWITCH
[D]	CONTACTOR
[D]	MANUAL MOTOR STARTER
[D]	AQUASTAT BY PLUMBING CONTRACTOR, WIRED BY EC.
[D]	VARIABLE FREQUENCY DRIVE
[D]	CO2 DETECTOR BY MC, ROUGH-IN BY EC
[D]	THERMOSTAT BY MC, ROUGH-IN BY EC
[D]	PAD MOUNTED UTILITY TRANSFORMER
[D]	ELECTRICAL PANEL - SEE PANEL SCHEDULES FOR MOUNTING CONFIGURATION

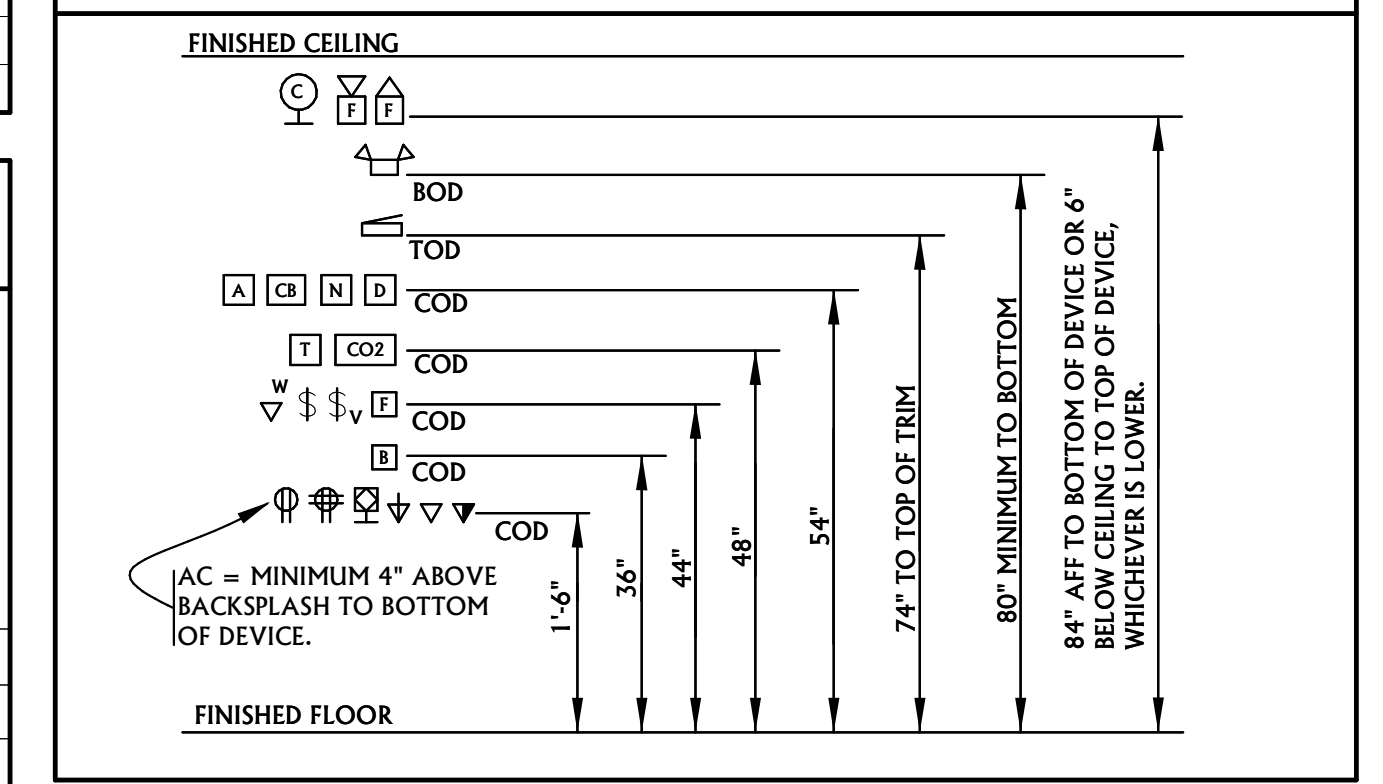
### MISCELLANEOUS LEGEND

[W/ AC EC (E) (R) (N) C BFG UC WP MC]	WITH ABOVE COUNTER ELECTRICAL CONTRACTOR EXISTING RELOCATED NEW DEVICE CONDUIT BELOW FINISHED GRADE UNDER COUNTER WEATHER PROOF MECHANICAL CONTRACTOR
[AFF AFG WM GC GND UG BOD TOD BOD BOP]	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE WIRE MOLD GENERAL CONTRACTOR GROUND UNDER GROUND BOTTOM OF DEVICE TOP OF DEVICE CENTER OF DEVICE BOTTOM OF FIXTURE PLUMBING CONTRACTOR
[1]	REFER TO ELECTRICAL NOTES
[H]	HOMERUN TO ELECTRICAL PANEL
[H]	NUMBER OF HASH MARKS INDICATES NUMBER OF CURRENT CARRYING CONDUCTORS. NO MARKS INDICATES TWO. GROUNDING CONDUCTOR NOT SHOWN BUT SHALL BE INCLUDED IN ALL CONDUITS.
[H]	NORMAL CIRCUIT CONCEALED IN WALL OR EXPOSED
[H]	UNDERGROUND OR BURIED CIRCUIT

### ELECTRICAL ABBREVIATIONS

A	AMP(S)	LTS	LIGHTS
ACCU	AIR CONDITIONING CONDENSING UNIT	LW	LIGHT WHITE
ADJ	AIR CONDITIONING UNIT	MC	MECHANICAL CONTRACTOR
ADMIN	ADMINISTRATION	MCA	MINIMUM CIRCUIT AMPS
AFF	ABOVE FINISH FLOOR	MOC	MOMENTARY CONTACT
AHU	AIR HANDLING UNIT	MCB	MAIN CIRCUIT BREAKER
AL	ALUMINIUM	MDP	MAIN DISTRIBUTION PANEL
AMP	AMPER(S)	MECH	MECHANICAL
APPL	APPLIANCE	MIN	MINIMUM
APPROX	APPROXIMATE	MOC	MAXIMUM OVERCURRENT
ATS	AUTOMATIC TRANSFER SWITCH	PROT	PROTECTION
BLDG	BUILDING	MLO	MAIN PANEL ONLY
BRK	BREAKER	MP	MAIN PANEL
BTU/HR	BRITISH THERMAL UNIT/HOUR	MTD	MOUNTED
C	CONDUIT	MFA	MINIMUM FEDER AMPACITY
CB	CIRCUIT BREAKER	MFG	MANUFACTURER
CCT	CIRCUIT	NIC	NOT IN CONTRACT
CCTV	CLOSED CIRCUIT TELEVISION	NO	NUMBER
CUH	CABINET UNIT HEATER	OC	OVER CURRENT PROTECTION
CFM	CUBIC FEET PER MINUTE	OFF	OFFICE
COM	COMMUNICATION	OH	OVERHEAD
COMM	COMMISSARY	P	PHASE
COMP	COMPRESSOR	PNL	PANEL
COND	CONDENSER	PREP	PREPARATION
CONTR	CONTRACTOR	PROD	PROVIDE & INSTALL
CU	COPPER	P/I	PROVIDE & INSTALL
CTV	CABLE TELEVISION	RA	REMOTE ANNUNCIATOR
CW	COLD WATER PUMP	RAF	RETURN AIR FAN
CWP	COLD WATER PUMP	RECP	RECEPTACLE
DIA	DIAMETER	RECP	RECEPTACLE
DISC	DISCONNECT	REF	REFRIGERATOR
DPS	DOOR POWER SUPPLY	REF	REFRIGERANT
DWG	DRAWING	REQD	REQUIRED
EC	ELECTRICAL CONTRACTOR	RM	ROOM
EF	EXHAUST FAN	RMS	ROOM(S)
ELEC	ELECTRIC	RR	RESTROOMS
EMD	ESTIMATED MAXIMUM DEMAND	RS	RAPID START
EMER	EMERGENCY	SDP	SUB DISTRIBUTION PANEL
ENGR	ENGINEER	SER	SERVICE
ETC	ETCETERA	SF	SUPPLY FAN
EWC	ELECTRIC WATER COOLER	SHT	SHEET
EXT	EXTERIOR	SN	SOLID NEUTRAL
FA	FIRE ALARM	SP	SWITCH, PILOT
FAC	FACILITY	SPECS	SPECIFICATIONS
FACP	FIRE ALARM CONTROL PANEL	SPST	SWITCH, SINGLE POLE-
FIX	FIXTURE	STD	STANDARD
FLA	FULL LOAD AMPS	STL	STEEL
FT	FOOT	STOR	STORAGE
GC	GENERAL CONTRACTOR	SW	SWITCH
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TBD	TELEPHONE BACK BOARD
GFI	GROUND FAULT INTERRUPTER	TV	TELEVISION
HP	HORSEPOWER	TYP	TYPICAL
HPS	HIGH PRESSURE SODIUM	UG	UNDERGROUND
HID	HIGH INTENSITY DISCHARGE	UGE	UNDERGROUND ELECTRICAL
HT	HEIGHT	UGT	UNDERGROUND TELEPHONE
HTRS	HEATERS	UH	UNIT HEATER
HW	HOT WATER	V	VOLT(S)
HWH	HOT WATER HEATER	VA	VOLT AMPERES
HWP	HOT WATER PUMP	VEST	VESTIBULE
HZ	HERTZ	W	WIRE
INC	INCORPORATED	W	WATT(S)
J-BOX	JUNCTION BOX	W/	WITH
KHZ	KILOHERTZ	WM	WATT MISER
KIT	KITCHEN	XFMR	TRANSFORMER
KVA	KILOVOLT AMPERE(S)		
KW	KILOWATT(S)		

### INTERIOR MOUNTING HEIGHTS



### ELECTRICAL SHEET LIST

E1.0	ELECTRICAL COVER SHEET
E2.0	PANEL SCHEDULES
E3.0	ELECTRICAL DEMOLITION PLAN
E3.0	FIRST FLOOR POWER AND DATA PLAN
E4.0	ROOF POWER PLAN
E5.0	FIRST FLOOR LIGHTING PLAN
E6.0	ELECTRICAL DETAILS





MSU-CPDC  
MONTANA STATE UNIVERSITY  
BOZEMAN, MONTANA  
PHONE: 406.994.5413  
FAX: 406.994.5665

**MSU / SUB / FOOD VENDOR RENOVIATION PROJECT**



ACE INC  
ASSOCIATED ELECTRICAL CONTRACTORS  
ACE JOB 22B25727

REV.	DESCRIPTION	DATE
1	CFA SALAD BAR COMMENTS	05/11/23



PPA#22-0056  
A/E#00-00-00  
Consultant #:

**SHEET TITLE**  
PANEL SCHEDULES

**SHEET**  
**E2.0**

**DATE**  
**06.16.2023**

100% CONSTRUCTION DOCUMENTS

Panel: NF2											
Location: KITCHEN KT-2A				Volts: 120/208 Wye				A.I.C. Rating: 14,000			
Supply From: NF1				Phases: 3				Mains Type: MLO			
Mounting: Surface				Wires: 4				Buss Rating: 225 A			
Enclosure: Type 1											
Notes: PROVIDE GFCI BREAKERS FOR ANY INACCESSIBLE GFCI DEVICES.											
CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Receptacle	20 A	1	720	1260		1	20 A	Receptacle	2	
3	Receptacle BEVERAGE TOWER	20 A	1		180	180	1	20 A	Receptacle BEVERAGE TOWER	4	
5	Receptacle	20 A	1			1620	180	1	20 A	Receptacle BEVERAGE TOWER	6
7	Receptacle LEMONADE BUBBLER	20 A	1	180	180		1	20 A	Receptacle REFRIGERATOR	8	
9	Receptacle REFRIGERATOR	20 A	1		180	540	1	20 A	Receptacle	10	
11	Receptacle TOASTER	20 A	1			180	360	1	20 A	Receptacle	12
13	Receptacle HOT HOLDING CABINET	20 A	1	180	180		1	20 A	Receptacle HOT HOLDING TOWER	14	
15	Receptacle FRY HOLDING STATION	20 A	1		180	865	2	20 A	Receptacle SANDWICH SLIDE	16	
17	Receptacle REF. WORK TABLE [FUTURE]	20 A	1			180	865	--	--	18	
19	Receptacle ANSUL FIRE SUPPRESSION	20 A	1	1800	1250		2	20 A	Receptacle EGG STATION [FUTURE]	20	
21	Receptacle VECTOR OVEN	30 A	3		2633	1250	--	--	--	22	
23	--	--	--			2633	180	1	20 A	Receptacle HOT HOLDING TOWER [FUTURE]	24
25	--	--	--	2633	180		1	20 A	Receptacle HOT HOLDING CAB. [FUTURE]	26	
27	Receptacle RADIANT TOASTER [FUTURE]	35 A	2		2750	360	1	20 A	Receptacle	28	
29	--	--	--			2750	180	1	20 A	Receptacle REACH IN FREEZER	30
31	Receptacle REFRIGERATOR	20 A	1	180	180		1	20 A	Receptacle REF. WORK TABLE [FUTURE]	32	
33	Receptacle SINGLE COFFEE MAKER [FUTURE]	20 A	2		2000	180	1	20 A	Receptacle MIXER [FUTURE]	34	
35	--	--	--			2000	540	1	20 A	Receptacle [FUTURE]	36
37	Receptacle PREP TABLE	20 A	1	180	180		1	20 A	Receptacle LEMON JUICER	38	
39	Receptacle	20 A	1		360	1550	2	20 A	Receptacle ICE MACHINE	40	
41	Receptacle ICE MACHINE [FUTURE]	20 A	2			1550	1550	--	--	42	
43	--	--	--	1550	1427		1	20 A	LIGHTING	44	
45	Receptacle RECEIPT PRINTER	20 A	1		180	900		1	20 A	Receptacle GENERAL POWER	46
47	Receptacle GENERAL POWER	20 A	1			900	1260	1	20 A	Receptacle DIGITAL BOARDS AND DISPLAYS	48
49	EMERGENCY LIGHTING	20 A	1	20	372		3	20 A	EF-1	50	
51	EF-2	20 A	3		228	372	--	--	--	52	
53	--	--	--			228	372	--	--	54	
55	--	--	--	228	360		1	20 A	Receptacle SERVICE RECEPTACLE	56	
57	MAU-1 CONNECTION #2	20 A	3		792					58	
59	--	--	--			792				60	
61	--	--	--	792						62	
63										64	
65										66	
67										68	
69										70	
71										72	
73										74	
75										76	
77										78	
79										80	
81										82	
83										84	
				<b>Total Load:</b>	14032 VA	15680 VA	18320 VA				
				<b>Total Amps:</b>	117 A	133 A	155 A				

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	4176 VA	114.22%	4770 VA	
Receptacle	3420 VA	100.00%	3420 VA	<b>Total Conn. Load: 48033 VA</b>
Lighting	1447 VA	100.00%	1447 VA	<b>Total Est. Demand: 34981 VA</b>
Kitchen Equipment	38990 VA	65.00%	25344 VA	<b>Total Conn.: 133 A</b>
				<b>Total Est. Demand: 97 A</b>

Notes:

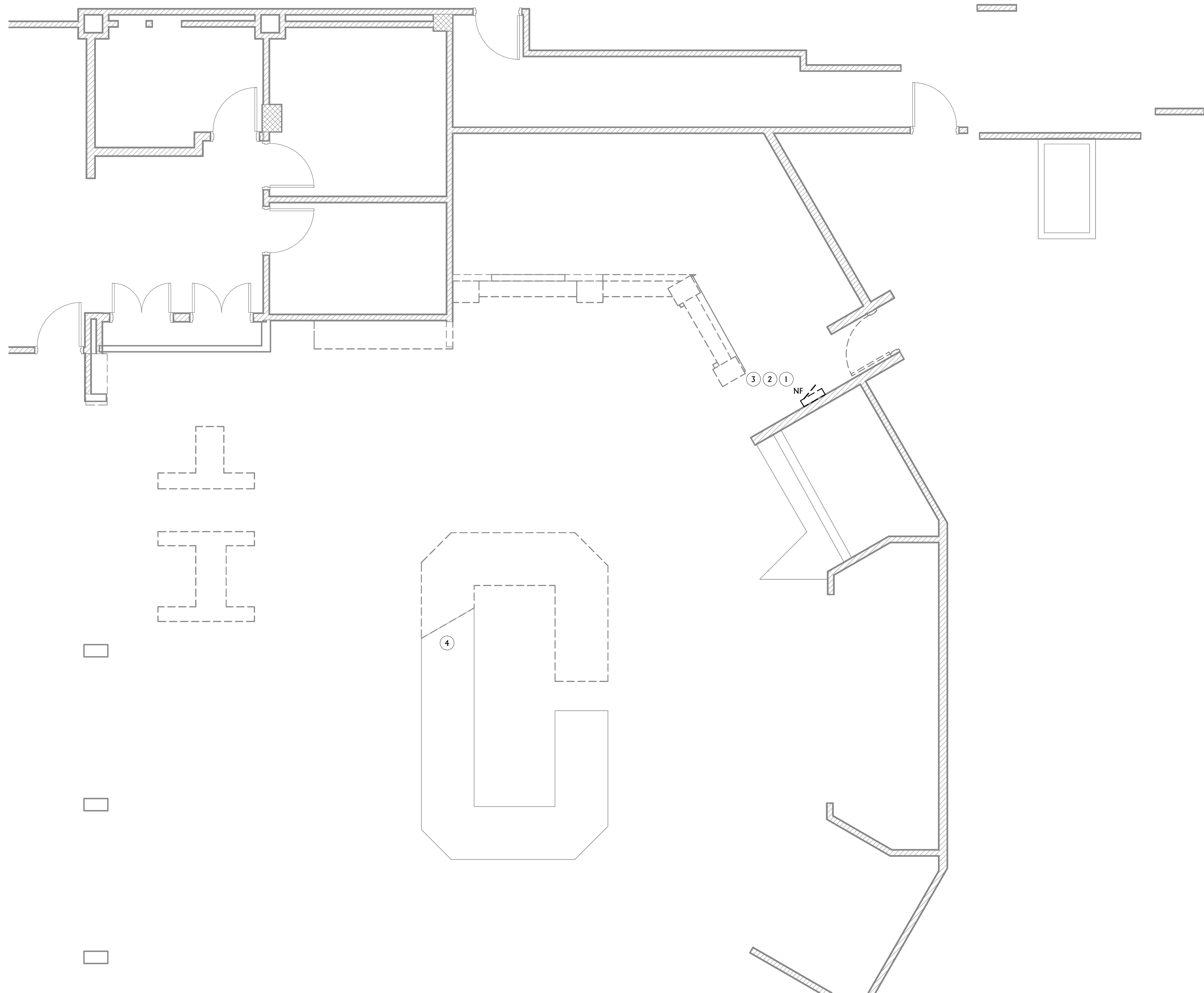
Panel: NF3											
Location: KITCHEN KT-2A				Volts: 120/208 Wye				A.I.C. Rating: 14,000			
Supply From: NF1				Phases: 3				Mains Type: MLO			
Mounting: Surface				Wires: 4				Buss Rating: 225 A			
Enclosure: Type 1											
Notes: PROVIDE GFCI BREAKERS FOR ANY INACCESSIBLE GFCI DEVICES.											
CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Receptacle THAWING CABINET	20 A	1	1920	180		1	20 A	Receptacle THAWING CABINET [FUTURE]	2	
3	Receptacle PRESSURE FRYER	50 A	3		4500	4500	3	50 A	Receptacle PRESSURE FRYER	4	
5	--	--	--			4500	4500	--	--	6	
7	--	--	--	4500	4500			--	--	8	
9	LOCK-OFF DEVICE	20 A	1		0	0	1	20 A	LOCK-OFF DEVICE	10	
11	Receptacle PRESSURE FRYER	50 A	3			4500	4500	3	50 A	Receptacle PRESSURE FRYER [FUTURE]	12
13	--	--	--	4500	4500			--	--	14	
15	--	--	--		4500	4500		--	--	16	
17	LOCK-OFF DEVICE	20 A	1			0	0	1	20 A	LOCK-OFF DEVICE	18
19	Receptacle GRILLE [FUTURE]	30 A	3	1100	1100			3	30 A	Receptacle GRILLE	20
21	--	--	--		1100	1100		--	--	22	
23	--	--	--			1100	1100	--	--	24	
25	LOCK-OFF DEVICE	20 A	1	0	0			1	20 A	LOCK-OFF DEVICE	26
27	Receptacle	20 A	1		540	180		1	20 A	Receptacle FIRE SUPPRESSION	28
29	Receptacle ICE CREAM MACHINE	20 A	3			760	0	1	20 A	LOCK-OFF DEVICE	30
31	--	--	--	760	180			1	20 A	GAS VALVE	32
33	--	--	--		760	0		1	20 A	LOCK-OFF DEVICE	34
35	HOOD CONTROL PANEL	20 A	1			180	1200	1	20 A	CIRCUIT FOR ANSUL PULLS	36
37										38	
39										40	
41										42	
43										44	
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71										72	
73										74	
75										76	
77										78	
79										80	
81										82	
83										84	
				<b>Total Load:</b>	23240 VA	21680 VA	22340 VA				
				<b>Total Amps:</b>	195 A	181 A	187 A				

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Receptacle	1380 VA	100.00%	1380 VA	
Kitchen Equipment	65880 VA	65.00%	42822 VA	<b>Total Conn. Load: 67260 VA</b>
				<b>Total Est. Demand: 44202 VA</b>
				<b>Total Conn.: 187 A</b>
				<b>Total Est. Demand: 123 A</b>

Notes:



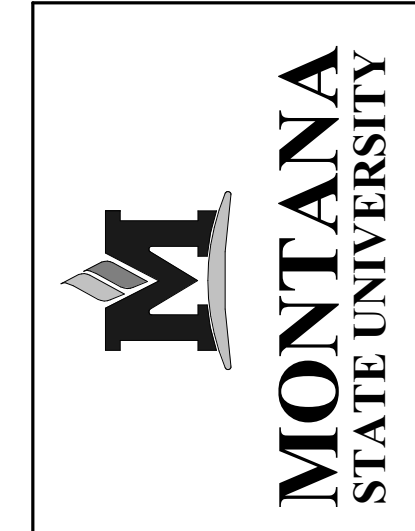


ELECTRICAL GENERAL DEMOLITION NOTES	
A	ELECTRICAL CONTRACTOR SHALL REMOVE ALL ELECTRICAL DEVICES IN AREAS OF THIS FACILITY AFFECTED BY REMODEL WORK INCLUDING BUT NOT LIMITED TO: JUNCTION BOXES, OUTLETS, LIGHTS, CABLE, CONDUIT AND WIRE. ALL DEVICES MAY NOT BE SHOWN ON THIS SHEET AND SITE INVESTIGATION IS REQUIRED FOR EXACT QUANTITIES. CONFIRM DEMOLITION SCOPE WITH GENERAL CONTRACTOR AT PRE-BID WALK AND RECYCLE WHERE FEASIBLE. DISPOSE OF ALL FLUORESCENT LAMPS AND BALLASTS IN A LEGAL AND ENVIRONMENTALLY FRIENDLY MANNER. PROVIDE PROPER DISPOSAL DOCUMENTATION STATING ITEMS DISPOSED OF AND QUANTITY TO OWNER FOR RETENTION.
B	EXISTING CONDUITS STUBBED THROUGH THE FLOOR THAT ARE NOT REUSED OR ARE ABANDONED SHALL BE CUT AT THE FLOOR SURFACE, GROUND FLUSH AND FILLED WITH GROUT. FLOOR FINISH SHALL MATCH THAT OF EXISTING.
C	DEVICES SHOWN ARE BASED ON EXISTING PLANS AND LIMITED VISUAL FIELD OBSERVATIONS AND ARE ONLY INTENDED TO CONVEY SCOPE. DEMO OR MODIFY ALL EXISTING ELECTRICAL INSTALLATIONS AS REQUIRED TO SUPPORT PROJECT. FIELD VERIFY ALL CONDITIONS PRIOR TO BIDDING.
D	ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NEC, STATE AND LOCAL BUILDING CODE.
E	RETURN ANY USABLE/ SALVAGEABLE ELECTRICAL DEVICES TO OWNER INCLUDING BUT NOT LIMITED TO: LIGHT FIXTURES, ELECTRICAL HEATERS, PANELS, CIRCUIT BREAKERS ETC. CONFIRM WITH OWNER ITEMS THAT ARE DESIRABLE FOR RETENTION.
F	ALL DASHED ITEMS ON DEMOLITION PLANS ARE TO BE REMOVED UNLESS NOTED OTHERWISE. SOLID ITEMS ARE TO REMAIN OR TO BE RELOCATED AS NOTED. NOTE - ITEMS SHOWN IN THE DEMOLITION PLANS ARE BASED ON "EXISTING DRAWINGS". ADDITIONAL ELECTRICAL ITEMS MAY BE ENCOUNTERED THAT ARE NOT SHOWN - ALL GENERAL ELECTRICAL ITEMS IN THE AREA OF REMODEL ARE TO BE REMOVED THAT ARE AFFECTED BY REMODEL. VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING.
G	ANY WORK THAT REQUIRES POWER DISRUPTIONS SHALL BE SCHEDULED AND APPROVED BY THE OWNER. ALL WORK SHALL BE PERFORMED WITH NO DISRUPTION OF THE OWNER'S BUSINESS.
H	DISCONNECT AND REMOVE ALL ELECTRICAL FROM MECHANICAL EQUIPMENT SHOWN TO BE DEMOLISHED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
I	SOME DEVICES AND SYSTEMS THAT ARE NOT REMOVED MAY BE AFFECTED BY DEMOLITION AND CONSTRUCTION. PROVIDE ALL LABOR AND MATERIALS REQUIRED TO MAINTAIN OR RESTORE CONTINUITY AND FUNCTION OF ALL EXISTING DEVICES AND SYSTEMS THAT ARE NOT REMOVED BUT ARE AFFECTED BY DEMO OR CONSTRUCTION WORK.
J	REMOVE ALL ABANDONED WIRE, RACEWAY AND CABLING IN THE PROJECT AREA.
K	PROVIDE UPDATED, TYPEWRITTEN DIRECTORIES FOR ALL EXISTING PANELS AFFECTED BY DEMOLITION WORK. LABEL ALL CIRCUIT BREAKERS THAT HAVE THEIR ENTIRE LOAD REMOVED AS 'SPARE'.
L	MAINTAIN OR RESTORE FUNCTIONALITY TO ALL SYSTEMS THAT ARE AFFECTED BY PROJECT PHASING. CONTRACTOR SHALL PROVIDE ALL WORK TO MAINTAIN, CONNECT, RECONNECT, MODIFY OR RESTORE THE FUNCTION OF ALL SYSTEMS THAT ARE AFFECTED IN ANY WAY BY PROJECT PHASING. PROVIDE ALL WORK FOR TEMPORARY CONNECTIONS OR SYSTEM MODIFICATIONS REQUIRED TO ACCOMMODATE PROJECT PHASING. REFER TO ARCHITECTURAL FOR PHASING INFORMATION.
M	ALL PANELS TO REMAIN IN SERVICE UNTIL NEW SERVICE AND DISTRIBUTION SYSTEM IS COMPLETE. CONNECT ALL LOADS REMAINING AFTER DEMO IS COMPLETE TO NEW PANELS. MODIFY AND EXTEND WIRING AS REQUIRED.

ELECTRICAL KEYNOTES	
1	REMOVE ALL EXISTING ELECTRICAL POWER AND LIGHTING DEVICES WITHIN PROJECT SCOPE AREA.
2	COORDINATE WITH MECHANICAL CONTRACTOR FOR REMOVAL OF EXISTING ROOFTOP MECHANICAL EQUIPMENT SERVING PROJECT SCOPE.
3	DEMO PANEL NF AND ASSOCIATED FEEDER. RELABEL BREAKER FOR NF IN MDP-X AS SPARE.
4	MAINTAIN CIRCUITING TO SALAD BAR.



**ELECTRICAL DEMOLITION PLAN**  
 ED3.0 1/4" = 1'-0"



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**MSU / SUB / FOOD VENDOR RENOVIATION PROJECT**

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DRAWN BY: <b>Author</b>		
REVIEWED BY: <b>Checker</b>		
REV.	DESCRIPTION	DATE
1	CFA SALAD BAR COMMENTS	05/11/23



**PPA#22-0056**  
**A/E#00-00-00**  
**Consultant #:**

**SHEET TITLE**  
 ELECTRICAL  
 DEMOLITION PLAN

**SHEET**  
**ED3.0**

**DATE**  
**06.16.2023**







**FIRST FLOOR POWER AND DATA PLAN**  
 1/4" = 1'-0"

ELECTRICAL POWER GENERAL NOTES	
A	REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON DEVICE LOCATIONS, DIMENSIONS, ETC. CAREFULLY EXAMINE ARCHITECTURAL FLOOR PLANS, CEILING PLANS, ELEVATIONS, ETC. FOR INFORMATION THAT AFFECTS ELECTRICAL WORK. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL PLANS.
B	ALL DARK ITEMS ARE NEW, UNLESS NOTED OTHERWISE. ALL SHADED ITEMS ARE EXISTING TO REMAIN.
C	ALL ITEMS DENOTED WITH AN (R) ARE RELOCATED OR REINSTALLED. ALL ITEMS DENOTED WITH AN (E) ARE EXISTING TO REMAIN.
D	EC SHALL COORDINATE EXACT FLOOR BOX LOCATION WITH ARCHITECTURAL FURNITURE PACKAGE PRIOR TO SETTING OF ANY BOXES, UNLESS SPECIFICALLY DIMENSIONED IN THE PLAN. SEE ARCHITECTURAL FURNITURE PLAN FOR DETAILS.
E	CONNECT ALL DEVICES TO EXISTING CIRCUITS SERVING THE AREA UNLESS NOTED OTHERWISE. VERIFY EXISTING LOAD PRIOR TO CONNECTING ADDITIONAL DEVICES.
F	CONNECT ALL FIRE ALARM DEVICES TO EXISTING FIRE ALARM SYSTEM.
G	CONNECT ALL SPEAKERS TO EXISTING OVERHEAD PAGING SYSTEM.
H	FIRE SEAL ALL PENETRATIONS IN FIRE RATED WALLS. COORDINATE WITH ARCHITECTURAL FOR LOCATIONS.
I	REFER TO FOOD SERVICE PLANS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND DETAILS. COORDINATE EXACT LOCATION OF EQUIPMENT AND DEVICES WITH FOOD SERVICE PLANS.

ELECTRICAL KEYNOTES	
1	PROVIDE PERMANENTLY MOUNTED LOCK-OFF AT BREAKER
2	FUTURE DEVICE. CIRCUIT INFO SUBJECT TO CHANGE FROM OWNER/ARCHITECT.
3	PROVIDE GFCI BREAKERS FOR INACCESSIBLE DEVICES.
4	COORDINATE WITH FOOD SERVICE PLANS FOR ALL CEILING POWERED DEVICES.
5	COORDINATE WITH FOOD SERVICE PLANS FOR ALL EQUIPMENT MOUNTING HEIGHTS.
6	RELOCATE EXISTING HORN STROBE DEVICE TO APPROXIMATE LOCATION. FIELD COORDINATE WITH EXISTING BUILDING FIRE ALARM SYSTEMS ARE REQUIRED.
7	DATA DROPS SHOWN OFFSET FOR CLARITY. COORDINATE WITH FOOD SERVICE FOR EXACT LOCATIONS & DEVICE TO BE SERVED.
8	QUADPLEX PROVIDED FOR DIGITAL MENU BOARD. COORDINATE WITH FOOD SERVICE FOR EXACT LOCATION.
9	PROVIDE ANSUL PULLS FOR UNDER HOOD DEVICES.
10	PROVIDE CONDUIT AND BOXES FOR CATCARD READER. COORDINATE WITH CADCARD FOR READER.



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**MSU / SUB / FOOD VENDOR**  
**RENOVATION PROJECT**



**ACE INC**  
 ASSOCIATED ELECTRICAL ENGINEERS  
 ACE JOB 22B25727

DRAWN BY: <b>Author</b>		
REVIEWED BY: <b>Checker</b>		
REV.	DESCRIPTION	DATE
1	MSU COMMENT REVISIONS	5/4/23
2	CFA SALAD BAR COMMENTS	05/11/23



PPA#22-0056

A/E#00-00-00

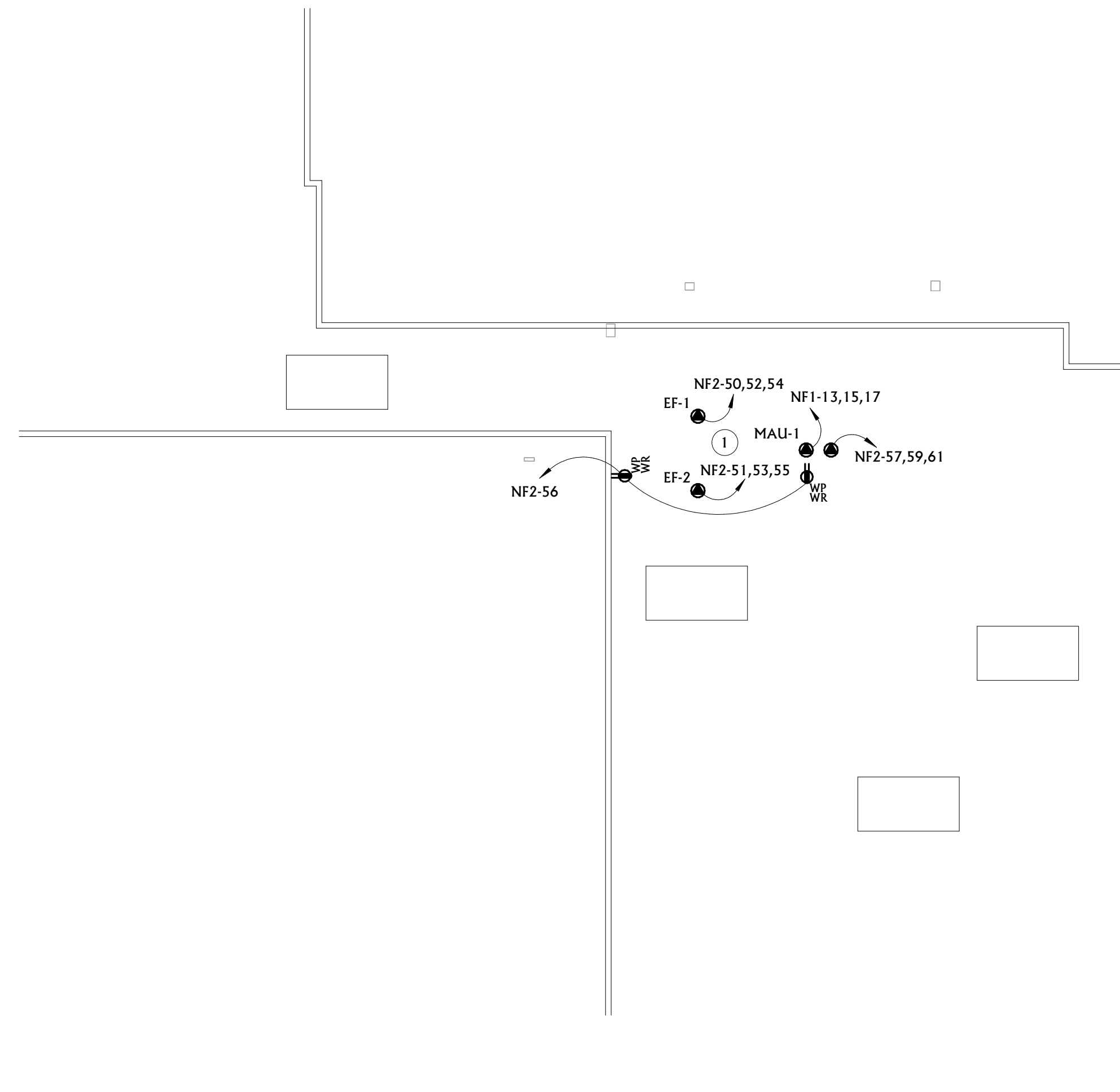
Consultant #:

**SHEET TITLE**  
FIRST FLOOR POWER AND DATA PLAN

**SHEET**  
**E3.0**

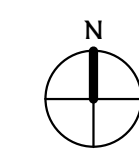
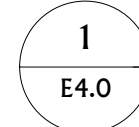
**DATE**  
**06.16.2023**





ELECTRICAL POWER GENERAL NOTES	
A	REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON DEVICE LOCATIONS, DIMENSIONS, ETC. CAREFULLY EXAMINE ARCHITECTURAL FLOOR PLANS, CEILING PLANS, ELEVATIONS, ETC. FOR INFORMATION THAT AFFECTS ELECTRICAL WORK. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL PLANS.
B	ALL DARK ITEMS ARE NEW, UNLESS NOTED OTHERWISE. ALL SHADED ITEMS ARE EXISTING TO REMAIN.
C	ALL ITEMS DENOTED WITH AN (R) ARE RELOCATED OR REINSTALLED. ALL ITEMS DENOTED WITH AN (E) ARE EXISTING TO REMAIN.
D	EC SHALL COORDINATE EXACT FLOOR BOX LOCATION WITH ARCHITECTURAL FURNITURE PACKAGE PRIOR TO SETTING OF ANY BOXES, UNLESS SPECIFICALLY DIMENSIONED IN THE PLAN. SEE ARCHITECTURAL FURNITURE PLAN FOR DETAILS.
E	CONNECT ALL DEVICES TO EXISTING CIRCUITS SERVING THE AREA UNLESS NOTED OTHERWISE. VERIFY EXISTING LOAD PRIOR TO CONNECTING ADDITIONAL DEVICES.
F	CONNECT ALL FIRE ALARM DEVICES TO EXISTING FIRE ALARM SYSTEM.
G	CONNECT ALL SPEAKERS TO EXISTING OVERHEAD PAGING SYSTEM.
H	FIRE SEAL ALL PENETRATIONS IN FIRE RATED WALLS. COORDINATE WITH ARCHITECTURAL FOR LOCATIONS.
I	REFER TO FOOD SERVICE PLANS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND DETAILS. COORDINATE EXACT LOCATION OF EQUIPMENT AND DEVICES WITH FOOD SERVICE PLANS.

ELECTRICAL KEYNOTES	
I	REFER TO MAU/EP'S MANUFACTURER'S WIRING DIAGRAM FOR INTERCONNECT TO HOOD CONTROLS. COORDINATE WITH FOOD SERVICE PROVIDER AND MECHANICAL CONTRACTOR.



**ROOF POWER PLAN**  
 1/16" = 1'-0"



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REV.	DESCRIPTION	DATE



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A/E#00-00-00

Consultant #:

**SHEET TITLE**  
ROOF POWER PLAN

**SHEET**  
**E4.0**

**DATE**  
**06.16.2023**



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REV.	DESCRIPTION	DATE
1	CFA SALAD BAR COMMENTS	05/11/23



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 Consultant #:

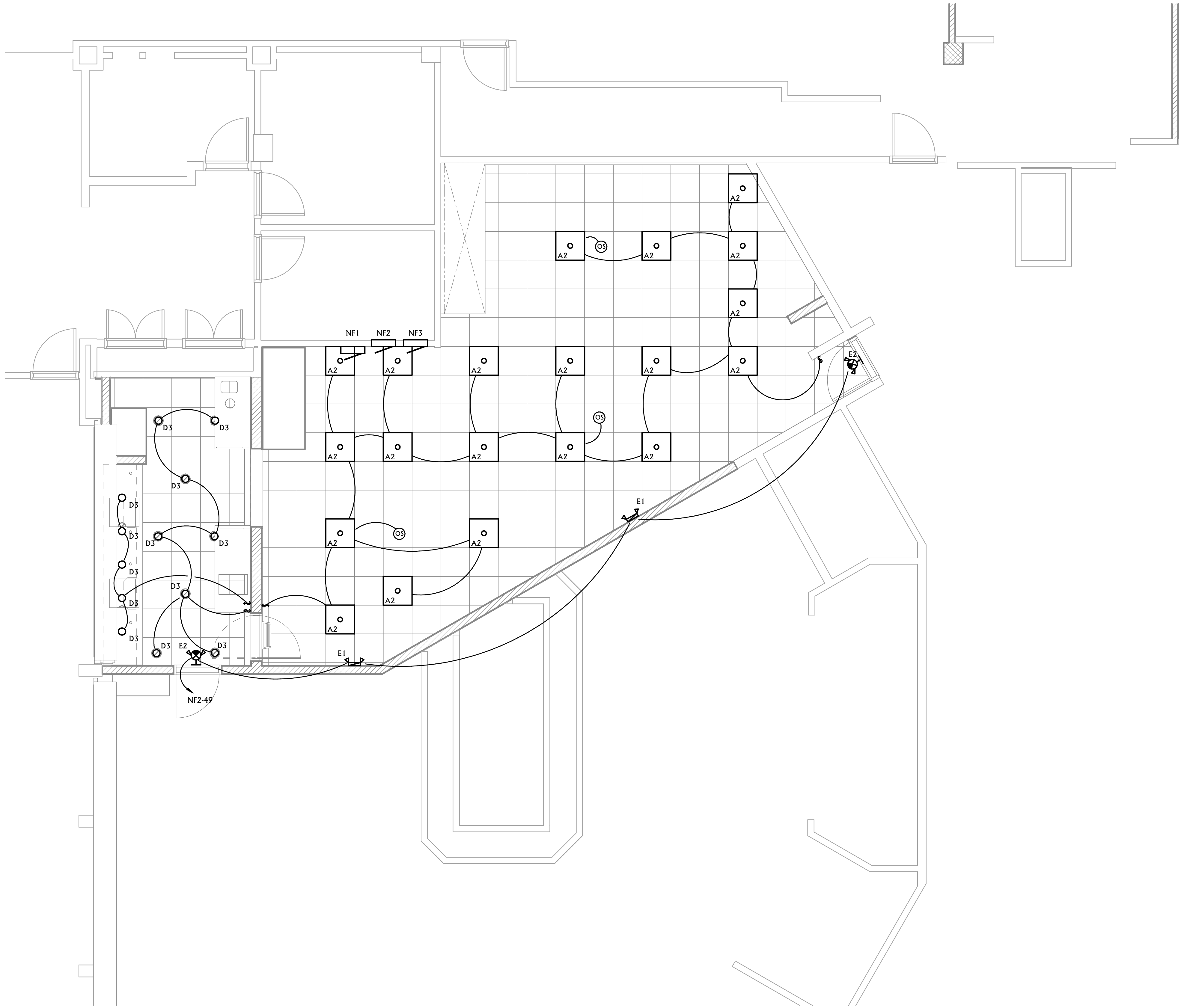
**SHEET TITLE**  
 FIRST FLOOR  
 LIGHTING PLAN

**SHEET**  
**E5.0**

**DATE**  
 06.16.2023

ELECTRICAL LIGHTING GENERAL NOTES	
A	REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON DEVICE LOCATIONS, DIMENSIONS, ETC. CAREFULLY EXAMINE ARCHITECTURAL FLOOR PLANS, CEILING PLANS, ELEVATIONS, ETC. FOR INFORMATION THAT AFFECTS ELECTRICAL WORK. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL PLANS.
B	ALL DARK ITEMS ARE NEW, UNLESS NOTED OTHERWISE. ALL SHADED ITEMS ARE EXISTING TO REMAIN.
C	ALL ITEMS DENOTED WITH AN (R) ARE RELOCATED OR REINSTALLED. ALL ITEMS DENOTED WITH AN (E) ARE EXISTING TO REMAIN.
D	MODIFY AND REUSE EXISTING CIRCUITS WHERE POSSIBLE. CIRCUITING SHALL BE AS SHOWN BUT CIRCUIT NUMBERS MAY BE CHANGED TO MAKE USE OF EXISTING AVAILABLE CIRCUITS. PROVIDE NEW BREAKERS AND WIRING AS NEED TO ACCOMMODATE NEW CIRCUITING.
E	CONNECT ALL LIGHTING FIXTURES TO EXISTING LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. VERIFY EXISTING LOAD PRIOR TO CONNECTING ADDITIONAL LIGHTING FIXTURES.
F	CONNECT ALL EXIT SIGNS AND EMERGENCY FIXTURES TO EXISTING EMERGENCY CIRCUITS SUPPLYING AREA UNLESS NOTED OTHERWISE. WIRING NOT SHOWN.
G	LOW VOLTAGE WIRING FOR OCCUPANCY SENSORS AND POWER PACKS NOT SHOWN. PROVIDE POWER PACKS AND WIRING AS REQUIRED FOR ALL OCCUPANCY SENSORS.
H	VERIFY VOLTAGE OF EXISTING LIGHTING CIRCUITS PRIOR TO SUBMITTALS. COORDINATE ANY MODIFICATIONS TO LIGHTING CIRCUITS OR FIXTURES WITH ENGINEER.
I	PROVIDE UNSWITCHED HOT CONDUCTOR FROM LOCAL LIGHTING CIRCUIT TO ALL EMERGENCY AND EXIT FIXTURES.
J	WHEN LIGHT SWITCHES ARE SHOWN LOCATED ON THE WALL THAT IS COMMON WITH THE END OF THE DOOR SWING INTO A SPACE, DO NOT LOCATE THE SWITCHES BEHIND THE DOOR BUT RATHER A MINIMUM OF 6" FROM THE END OF THE SWING. VERIFY EXACT DOOR SWING PRIOR TO ROUGH-IN.
K	FIRE SEAL ALL PENETRATIONS IN FIRE RATED WALLS. COORDINATE WITH ARCHITECTURAL FOR LOCATIONS.
L	REFER TO FOOD SERVICE PLANS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND DETAILS. COORDINATE EXACT LOCATION OF EQUIPMENT AND DEVICES WITH FOOD SERVICE PLANS.

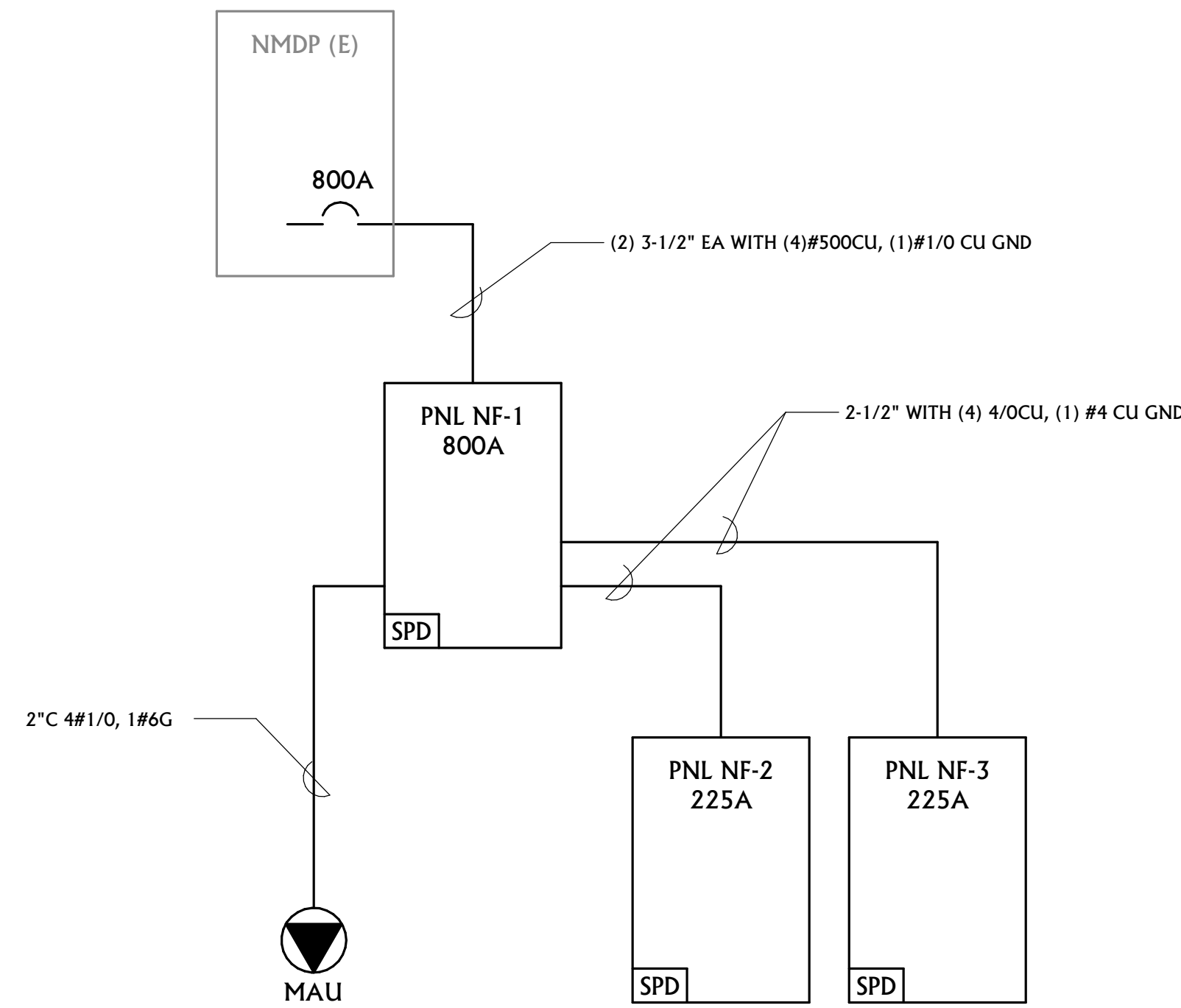
LUMINAIRE SCHEDULE						
CALLOUT	MANUFACTURER	MODEL	MOUNTING	LAMP	ELECTRICAL DATA	DESCRIPTION
A2	COOPER	24FP6440C	RECESSED	LED	120 V/1-59 VA	2'X4' LED FLAT PANEL RATED 6611 LUMENS, 4000K COLOR TEMP
D3	COOPER	PD6-20-DO108-PDM68-30-61VC	RECESSED	LED	120 V/1-19 VA	LED DOWNLIGHT WITH CLEAR REFLECTOR & TRIM RATED 2000 LUMENS, 3000K COLOR TEMP
E1	SURE-LITES	SELW25	WALL	LED	120 V/1-5 VA	
E2	SURE-LITES	APC7R	WALL	LED	120 V/1-5 VA	



**1 FIRST FLOOR LIGHTING PLAN**  
 1/4" = 1'-0"

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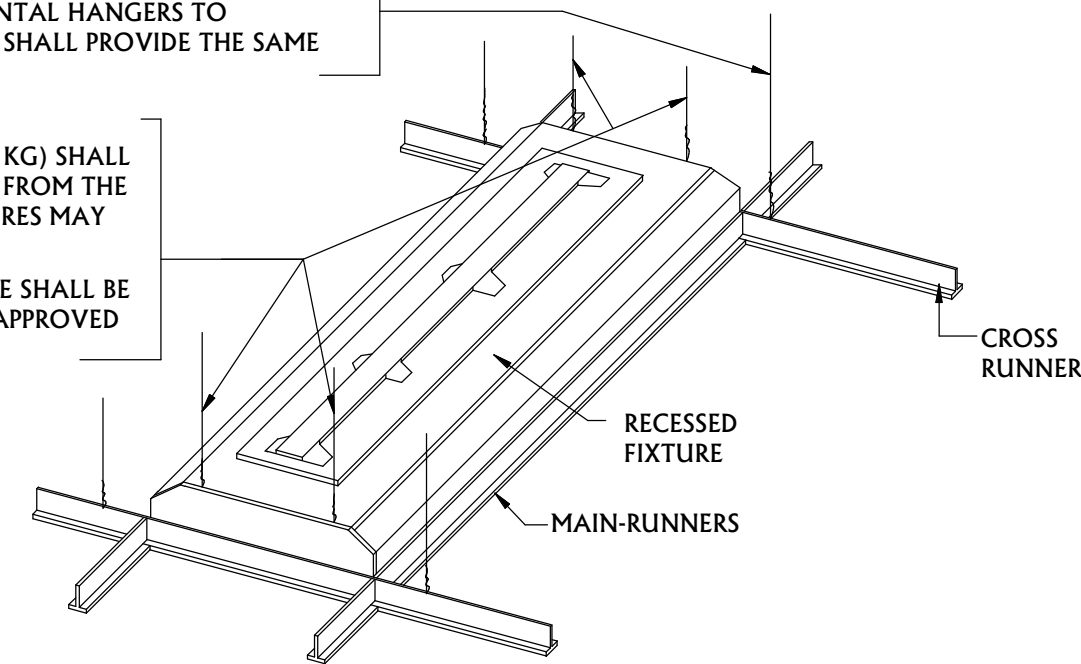
1 ONE-LINE DIAGRAM  
NOT TO SCALE

WHEN INTERMEDIATE CEILING SYSTEMS ARE USED, NO. 12 GA. (2.7 MM) HANGERS SHALL BE ATTACHED TO THE GRID MEMBERS WITHIN 3" (76 MM) OF EACH CORNER OF EACH FIXTURE. TANDEM FIXTURES MAY UTILIZE COMMON WIRES.

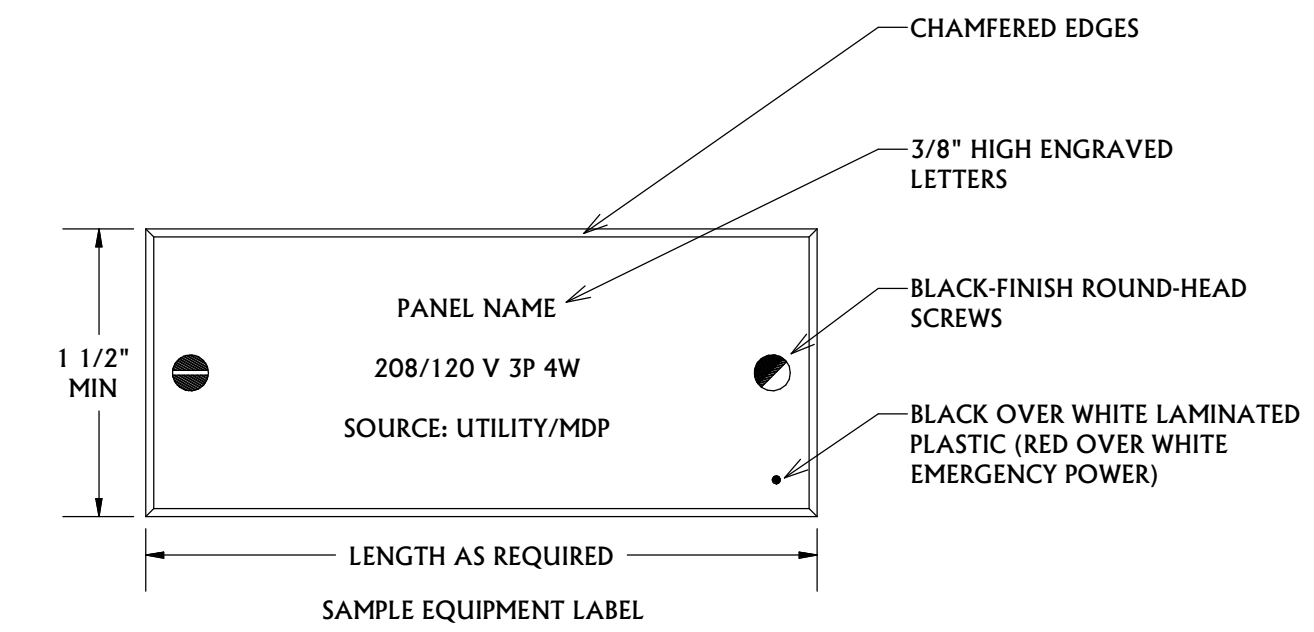
WHEN HEAVY-DUTY CEILING SYSTEMS ARE USED, SUPPLEMENTAL HANGERS ARE NOT REQUIRED IF A 48" (1219 MM) MODULAR HANGER PATTERN IS FOLLOWED. WHEN CROSS RUNNER ARE USED WITHOUT SUPPLEMENTAL HANGERS TO SUPPORT LIGHTING FIXTURES, THESE CROSS RUNNERS SHALL PROVIDE THE SAME CARRYING CAPACITY AS THE MAIN RUNNER.

LIGHTING FIXTURES WEIGHING LESS THAN 56 LBS. (25.4 KG) SHALL HAVE FOUR NO. 12 GA (2.7 MM) HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK.

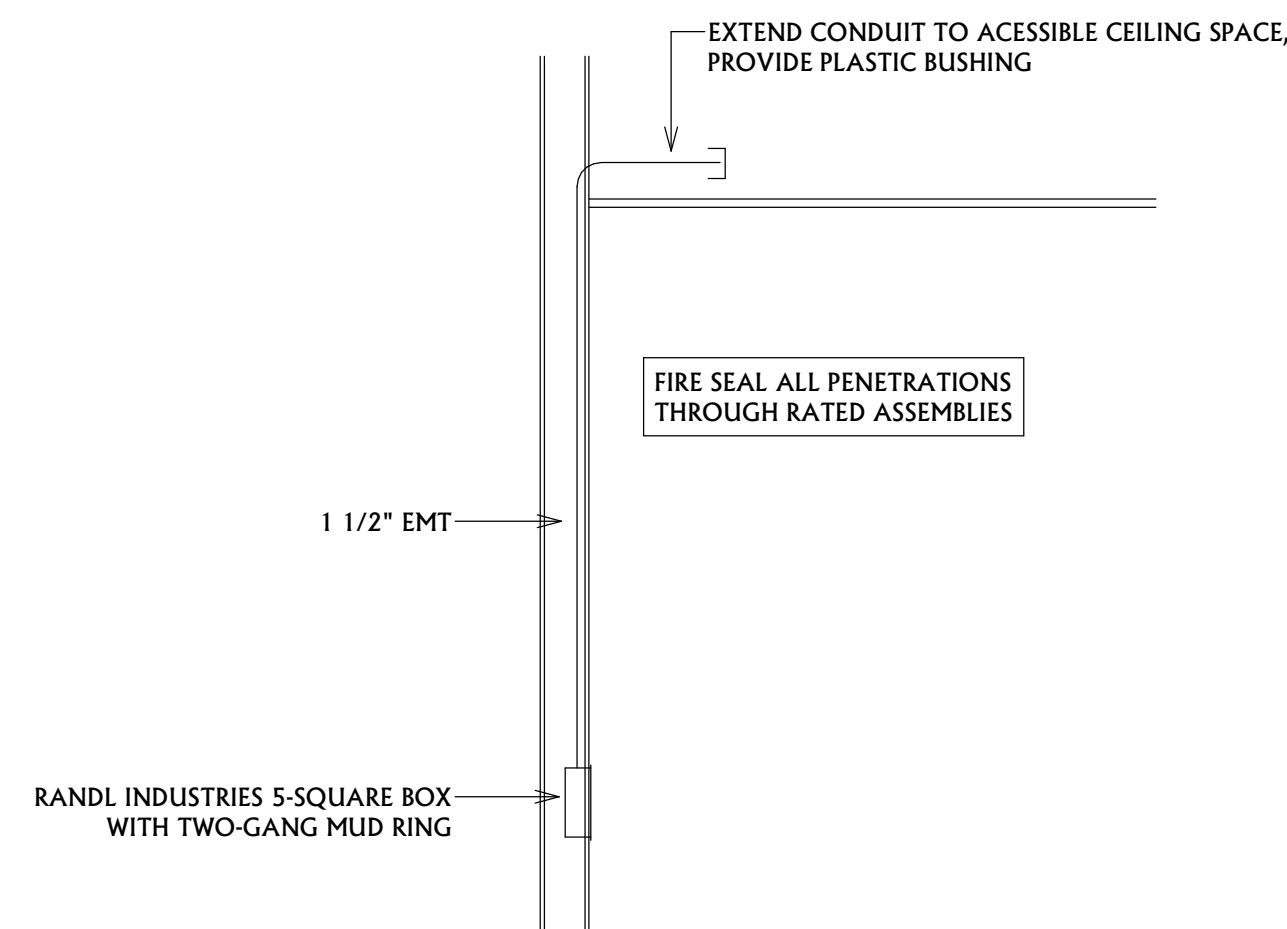
LIGHTING FIXTURES WEIGHING 56 LBS (25.4 KG) OR MORE SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY APPROVED HANGERS.



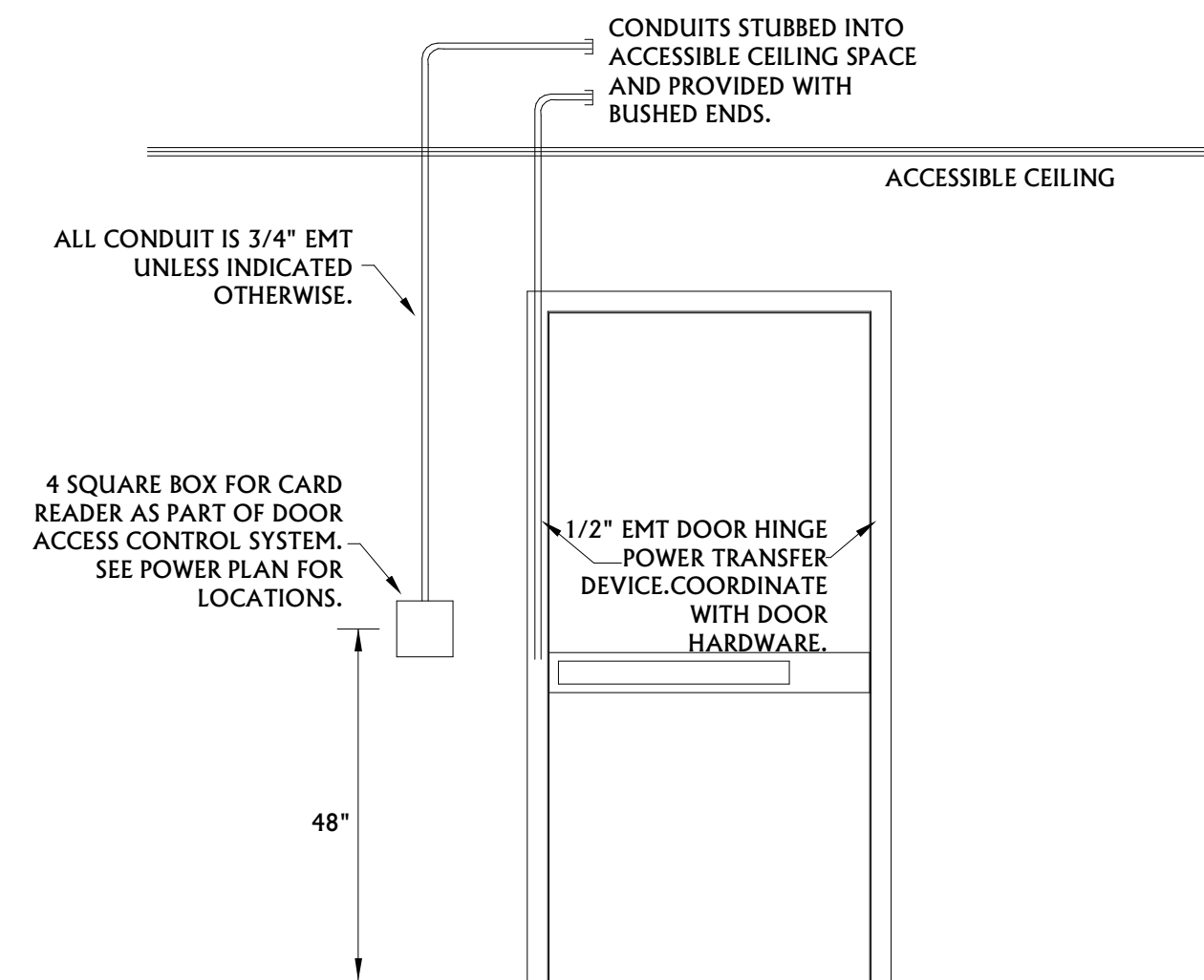
2 SEISMIC LIGHT FIXTURE MOUNTING DETAIL  
NOT TO SCALE



3 EQUIPMENT IDENTIFICATION LABEL  
NOT TO SCALE



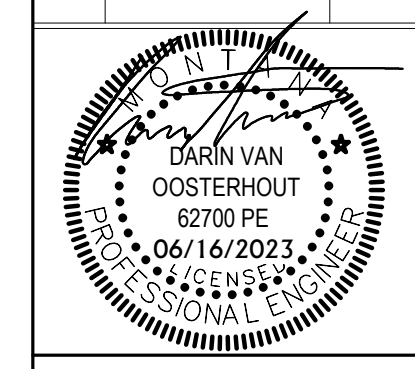
4 COMMUNICATIONS OUTLET ROUGH-IN DETAIL  
NOT TO SCALE



5 CARD READER ROUGH-IN DETAIL  
NOT TO SCALE

DRAWN BY:  
REVIEWED BY:

REV.	DESCRIPTION	DATE
1	CFA SALAD BAR COMMENTS	05/11/23



PPA#22-0056  
A/E#00-00-00  
Consultant #:

SHEET TITLE  
ELECTRICAL DETAILS

SHEET  
E6.0

DATE  
06.16.2023





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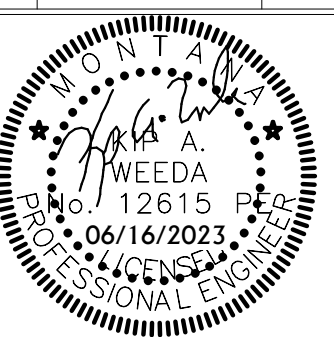
MSU / SUB / FOOD VENDOR RENOVIATION PROJECT

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ACE INC  
ASSOCIATED CONSULTANTS  
ACE JOB 22B25727

Table with columns: REV., DESCRIPTION, DATE



PPA#22-0056

A/E#00-00-00

Consultant #:

SHEET TITLE  
MECHANICAL COVER SHEET AND SCHEDULES

SHEET

M1.0

DATE  
06.16.2023

### KITCHEN HOOD FIRE PROTECTION NOTES

- 1. EACH TYPE I GREASE HOOD OR HOOD SYSTEM SHALL BE PROTECTED BY AN AUTOMATIC WET AGENT FIRE PROTECTION SYSTEM IN COMPLIANCE WITH NFPA 96.
UPON ACTIVATION OF THE HOOD OR HOOD SYSTEM FIRE PROTECTION SYSTEM:
A. ALL SOURCES OF FUEL AND ELECTRICAL POWER THAT PRODUCE HEAT TO ALL EQUIPMENT REQUIRING PROTECTION BY THAT SYSTEM SHALL AUTOMATICALLY SHUT OFF.
B. STEAM SUPPLIED FROM AN EXTERNAL SOURCE SHALL NOT BE REQUIRED TO AUTOMATICALLY SHUT OFF.
C. GAS APPLIANCES NOT REQUIRING PROTECTION BUT LOCATED UNDER THE HOOD OR HOOD SYSTEM WHERE PROTECTED APPLIANCES ARE LOCATED SHALL AUTOMATICALLY SHUT OFF.
D. HOOD SYSTEM EXHAUST FAN(S) SHALL CONTINUE TO OPERATE AFTER THE EXTINGUISHING SYSTEM HAS BEEN ACTIVATED
E. HOOD EXHAUST FAN(S) SHALL START UPON ACTIVATION OF THE EXTINGUISHING SYSTEM IF THE EXHAUST FAN AND ALL COOKING EQUIPMENT SERVED BY THE FAN HAVE BEEN SHUT DOWN.
F. MAKEUP AIR UNIT SHALL BE DISABLED.
3. EACH SYSTEM SHALL BE PROVIDED WITH A MANUAL METHOD OF ACTIVATION.

### MANUAL BALANCING DAMPERS

ALL MANUAL DAMPER OPERATORS SHALL BE LOCKING QUADRANT TYPE. PROVIDE DAMPER INDEPENDENT FROM HIGH EFFICIENCY TAKEOFFS IF NEEDED TO ACCOMPLISH THIS.

### TEST AND BALANCE NOTES

- 1. TEST AND BALANCE WORK IS TO BE IN ACCORDANCE WITH NEBB STANDARDS.
2. CONTRACTOR SHALL PROVIDE TEST AND BALANCE SERVICES FOR FAN COIL SYSTEM, EXHAUST SYSTEM, AND DOMESTIC HOT WATER RECIRCULATION SYSTEM.
3. CONTRACTOR SHALL PROVIDE A FINAL REPORT INCLUDING ALL SYSTEM RESULTS. REPORT SHALL NOTE ANY NON-TYPICAL SYSTEM CHARACTERISTICS ENCOUNTERED DURING THE TESTING PERIOD AND ANY MEASURED VALUES EXCEEDING +/- 10% FROM SCHEDULED DESIGN PARAMETERS UNLESS OTHERWISE NOTED BELOW.
A. -0% TO +10% FOR EXHAUST SYSTEMS.
B. -0% TO +10% FOR FRESH AIR SYSTEMS.
C. -5% TO +10% FOR FAN COIL UNIT SYSTEMS.
4. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

### SITE ELEVATION NOTES

- 1. THE BUILDING SITE IS LOCATED IN BOZEMAN, MONTANA AND IS APPROXIMATELY AT 4900 FEET ELEVATION ABOVE SEA LEVEL. ACCOUNT FOR THIS ELEVATION IN ALL EQUIPMENT SELECTIONS.

### PROJECT SEISMIC RESTRAINT NOTES

- 1. MECHANICAL/PLUMBING SYSTEMS AND EQUIPMENT ON THIS PROJECT SHALL BE INSTALLED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE (SEISMIC USE GROUP 'III', SEISMIC DESIGN CATEGORY 'D', COMPONENT IMPORTANCE FACTOR 1.5) AND THE LATEST EDITION OF SMACNA'S SEISMIC RESTRAINT MANUAL. SPRINKLER SYSTEMS AND EQUIPMENT SHALL BE INSTALLED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND PROFESSIONAL STRUCTURAL ENGINEER SEISMIC RESTRAINT DRAWINGS FOR REVIEW AND APPROVAL. SUBMIT SHOP DRAWING INFORMATION ON EACH MAJOR PIECE OF EQUIPMENT AND FOR EACH MAJOR CATEGORY OF COMMONLY INSTALLED EQUIPMENT.
3. SEE SPECIFICATION SECTION 220548 AND 230548.

### DUCTWORK CONSTRUCTION SCHEDULE

- 1. SUPPLY DUCTWORK SHALL BE CONSTRUCTED AS LOW-PRESSURE DUCTWORK OPERATING AT STATIC PRESSURES LESS THAN OR EQUAL TO 2" W.C.
2. GREASE DUCTWORK SHALL BE CONSTRUCTED AS ZERO CLEARANCE PRE-MANUFACTURED GREASE DUCTWORK.
3. INSULATED DUCTWORK SHALL INCLUDE THE FOLLOWING
A. ALL UN-LINED INTERIOR SUPPLY DUCTWORK
a. EXPOSED INTERIOR SUPPLY DUCTWORK IN PAINTED CEILING APPLICATIONS AND REQUIRING INSULATION SHALL BE PROVIDED AS BLACK OR WHITE PSK FACING W/O PRIME TO MATCH CEILING FINISH.
B. ALL EXHAUST DUCTWORK FROM THE BACKDRAFT DAMPER TO THE BUILDING EXTERIOR
C. ALL FRESH AIR AND COMBUSTION AIR DUCTWORK
6. LINED DUCTWORK SHALL INCLUDE THE FOLLOWING
A. ALL TRANSFER DUCTWORK
B. ALL SUPPLY AND RETURN DUCTWORK WITHIN 15' OF FAN COIL UNITS.
7. UN-INSULATED AND UN-LINED DUCTWORK SHALL INCLUDE THE FOLLOWING
A. ALL INTERIOR EXHAUST DUCTWORK UNLESS OTHERWISE NOTED
B. ALL INTERIOR RETURN DUCTWORK UNLESS OTHERWISE NOTED
C. ALL EXPOSED INTERIOR SUPPLY DUCTWORK DOWNSTREAM OF VAV TERMINAL UNITS AND WITHIN THE SPACE SERVED
8. INSULATED FLEXIBLE DUCTWORK MAY BE USED AT THE CONTRACTOR'S OPTION FOR A MAXIMUM OF 5 FT. LENGTH TO EACH DIFFUSER/REGISTER/GRIFFE UNLESS OTHERWISE NOTED.
9. DUCT INSULATION SHALL BE 1 1/2-INCH FIBERGLASS INSULATION WITH MINIMUM R-VALUE OF 5 AND A HEAVY DUTY FSK VAPOR BARRIER.
10. ACOUSTICAL DUCT LINER SHALL BE 1-INCH FIBERGLASS WITH REINFORCED ACRYLIC COATING TO MEET ASTM C 1071 WITH MINIMUM CONDUCTIVITY (K) NOT EXCEEDING 0.24 BTU PER INCH/H-SQ FT-F.
11. ALL DUCT DIMENSIONS SHOWN ON PLANS ARE CLEAR INTERIOR DIMENSIONS.
12. ALL INSULATION SYSTEMS SHALL NOT EXCEED THE 25/50 FLAME AND SMOKE SPREAD RATINGS AS DEFINED BY ASTM E 84.

### CONTROL NOTES

- 1. TEMPERATURE CONTROL CONTRACTOR TO PROVIDE BOX AND CONDUIT TO ACCESSIBLE CEILING SPACE FOR EACH THERMOSTAT.
2. TEMPERATURE CONTROL CONTRACTOR TO PROVIDE AND START UP VARIABLE FREQUENCY DRIVES.
3. SPACE ABOVE CEILING BEING USED AS A RETURN AIR PLENUM. TEMPERATURE CONTROL SYSTEM INSTALLATION SHALL UTILIZE PLENUM RATED CABLE.
4. TEMPERATURE CONTROL CONTRACTOR SHALL BE FICO. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

### BACKSHELF KITCHEN RANGE HOOD SCHEDULE

Table with columns: PLAN CODE, MANUF., MODEL NUMBER, RATING TYPE, HOOD DIMENSIONS (L" X W" X H"), COOKING DUTY TYPE, EXHAUST CFM, EXHAUST S.P. (IN. W.C.), EXHAUST CONNECTION SIZE (IN.), FIRE SUPPRESSION SYSTEM, MATERIAL, WEIGHT, REMARKS

- NOTES:
1. IN ADDITION TO THE BASE COMPONENTS, DEVICES, AND ACCESSORIES LISTED IN THE DRAWINGS, THE FOLLOWING ARE TO BE PROVIDED AND INCLUDED WITH THE TYPE I HOOD AND FIELD COORDINATED
A. COORDINATE THE EXHAUST OUTLET CONFIGURATION, SQUARE OR ROUND, PRIOR TO PROCURING. AVAILABLE SPACE ABOVE THE HOOD MAY NOT PERMIT A ROUND OUTLET.
B. PRIOR TO PROCURING, FIELD COORDINATE THE HEIGHT OF THE FIELD WRAPPER, THE LOCATION OF THE EXHAUST OUTLETS, AND THE LOCATION OF THE SUPPLY INLETS (REFER TO MECHANICAL PLANS).
C. HOOD SHALL BE PROVIDED WITH INSULATED STAINLESS STEEL BACKSPLASH AND TOP AND SIDES WHERE ADJACENT TO WALLS, UNLESS OTHERWISE NOTED. SEE ARCHITECTURAL AND FOOD SERVICE FINISH DRAWINGS FOR FURTHER REQUIREMENTS FIELD COORDINATE THE INSTALLATION WITH THE GENERAL CONTRACTOR AND FOOD SERVICE CONTRACTOR.
D. HOOD TOP SHALL BE FACTORY PROVIDED WITH 3M FIRE WRAP FOR ZERO CLEARANCE TO COMBUSTIBLES. HOOD SIDES AND BACK WHERE ADJACENT TO A WALL SHALL BE FACTORY PROVIDED WITH INSULATION FOR ZERO CLEARANCE APPLICATION.
E. MECHANICAL-TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ALL LOW VOLTAGE WIRING AND TERMINATIONS ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LINE VOLTAGE WIRING AND CONDUIT. EC ALSO RESPONSIBLE FOR LOW VOLTAGE CONDUIT AND WIRE PULL COORDINATE WITH THE ELECTRICAL CONTRACTOR CONTROLS CONTRACTOR SHALL REMOVE THE HOOD CONTROLLER FOR EACH SYSTEM FROM THE FIELD MOUNTED CONTROL CABINET AND MOUNT IN 2-GANG BOX WHERE INDICATED ON THE DRAWINGS PROVIDE CAT-6 WIRING FROM CONTROL CABINET TO CONTROLLER.
F. AN ANSUL PROTECTION SYSTEM SHALL BE PROVIDED AND INSTALLED WITHIN THE HOOD. FIRE PROTECTION SYSTEM SHALL BE PROVIDED WITH NECESSARY ACCESSORIES FOR CABLE ACTUATED GAS SUPPLY SHUT OFF. PROVIDE ANSUL HOSE ASSEMBLY AND OUTLET FOR MOVABLE KITCHEN EQUIPMENT WITH INTEGRAL FIRE PROTECTION PIPING. FIRE PROTECTION CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR FINAL FIRE PROTECTION SYSTEM LAYOUT COORDINATE AND PROVIDE ROUGH-IN FOR ACTUATION WIRE CONDUIT AND FIRE SUPPRESSION PIPE. ACTUATION WIRE CONDUIT AND FIRE SUPPRESSION PIPE SHALL BE FULLY CONCEALED IN WALLS AND CEILING SPACES. REFER TO FOOD SERVICE DRAWINGS FOR EQUIPMENT LAYOUT AND FURTHER REQUIREMENTS.
G. A FACTORY AUTHORIZED SERVICE TECHNICIAN SHALL PERFORM THE STARTUP, COMMISSIONING, AND OWNER TRAINING OF THE TYPE I KITCHEN HOOD AND ASSOCIATED FIRE SUPPRESSION SYSTEM. COORDINATE SYSTEM TESTING WITH THE AUTHORITY HAVING JURISDICTION PROVIDE STARTUP AND TEXT REPORTS IN THE PROJECT OSM MANUALS.
2. REFER TO THE MECHANICAL DRAWINGS FOR LOCATION OF SYSTEMS AND FURTHER INSTRUCTIONS AND DETAILS.

### KITCHEN MAKE UP AIR UNIT SCHEDULE

Table with columns: PLAN CODE, MANUF., MODEL NUMBER, SUPPLY FAN (CFM, ESP, HP), HEATING DATA - SCR ELECTRIC (DESIGN KW, DESIGN MBH, EAT, LAT), COOLING DATA (PACKAGED DX - R410A) (TOT MBH, SENS MBH, IEER, EAT DB/WB, LAT DB/WB), ELECTRICAL DATA #1 (VOLTS, PH, MCA, MOP, MAX KW, DESIGN KW), ELECTRICAL DATA #2 (VOLTS, PH, AMP), UNIT WEIGHT, REMARKS

- NOTES:
1. ELECTRIC MAKE UP AIR UNIT WITH DIRECT EXPANSION COOLING SECTION. UNIT SHALL BE CONFIGURED WITH A MOTORIZED BACKDRAFT DAMPER, INTAKE HOOD WITH FILTER SECTION, DIRECT EXPANSION COOLING SECTION, ELECTRIC HEATING SECTION, AND DOWN DISCHARGE BLOWER ASSEMBLY.
2. UNIT POWER SHALL HAVE TWO (2) POINT ELECTRICAL CONNECTIONS WITH FACTORY DISCONNECTS. ONE POINT FOR UNIT FAN AND COOLING POWER AND ONE FOR ELECTRIC HEAT DATA.
3. PROVIDE UNIT WITH 24" FIELD INSTALLED VIBRATION ISOLATED CURB (1.5" ISOLATOR). COORDINATE WITH UNIT PROFILE AND DISCHARGE CONFIGURATION AS REQUIRED.
4. PROVIDE MEANS FOR MONITORING AND ALARM BY EXISTING BUILDING DDC CONTROL SYSTEM. COORDINATE WITH TEMPERATURE CONTROLS CONTRACTOR AS REQUIRED.
5. A FACTORY AUTHORIZED SERVICE TECHNICIAN SHALL PERFORM THE STARTUP, COMMISSIONING, AND OWNER TRAINING OF THE MAKEUP AIR UNIT. PROVIDE STARTUP AND TEXT REPORTS IN THE O&M MANUALS.

### EXHAUST FAN SCHEDULE

Table with columns: PLAN CODE, MANUFACTURER, MODEL NUMBER, CFM, ESP, RPM, DRIVE TYPE, ELECTRICAL DATA (HP, VOLT, FLA, PH), STATIC EFFICIENCY, SONES, WEIGHT, CONTROL NOTES, AREA SERVED, REMARKS

- NOTES:
1. FAN SERVING TYPE I GREASE SYSTEM; INSTALL FAN PER NFPA 96. PROVIDE FAN WITH FACTORY MOUNTED DISCONNECT, GREASE CUP, AND CURB.

### GRIFFE - REGISTER - DIFFUSER SCHEDULE

Table with columns: PLAN CODE, MANUFACTURER, MODEL NUMBER, FUNCTION, FACE SIZE, MATERIAL, FINISH, CFM, VOLUME DAMPER, REMARKS

- NOTES:
1. PROVIDE ALL DUCT TRANSITIONS TO AND FROM GRILLES/REGISTERS/DIFFUSERS (GRD'S) AS REQUIRED.
2. CONTRACTOR TO VERIFY CEILING TYPE AND PROVIDE CORRECT FRAMES, CONNECTORS, AND FINISH TYPE AND COLOR FOR ALL AIR DIFFUSION PRODUCTS PRIOR TO PROCUREMENT. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL TYPE AND LOCATIONS OF CEILINGS.
3. PROVIDE MANUFACTURE STANDARD COLOR CHART WITH SHOP DRAWINGS. COLOR / FINISH SELECTION BY ARCHITECT.
4. REFER TO THE MECHANICAL DRAWINGS AND DETAILS FOR FURTHER REQUIREMENT.

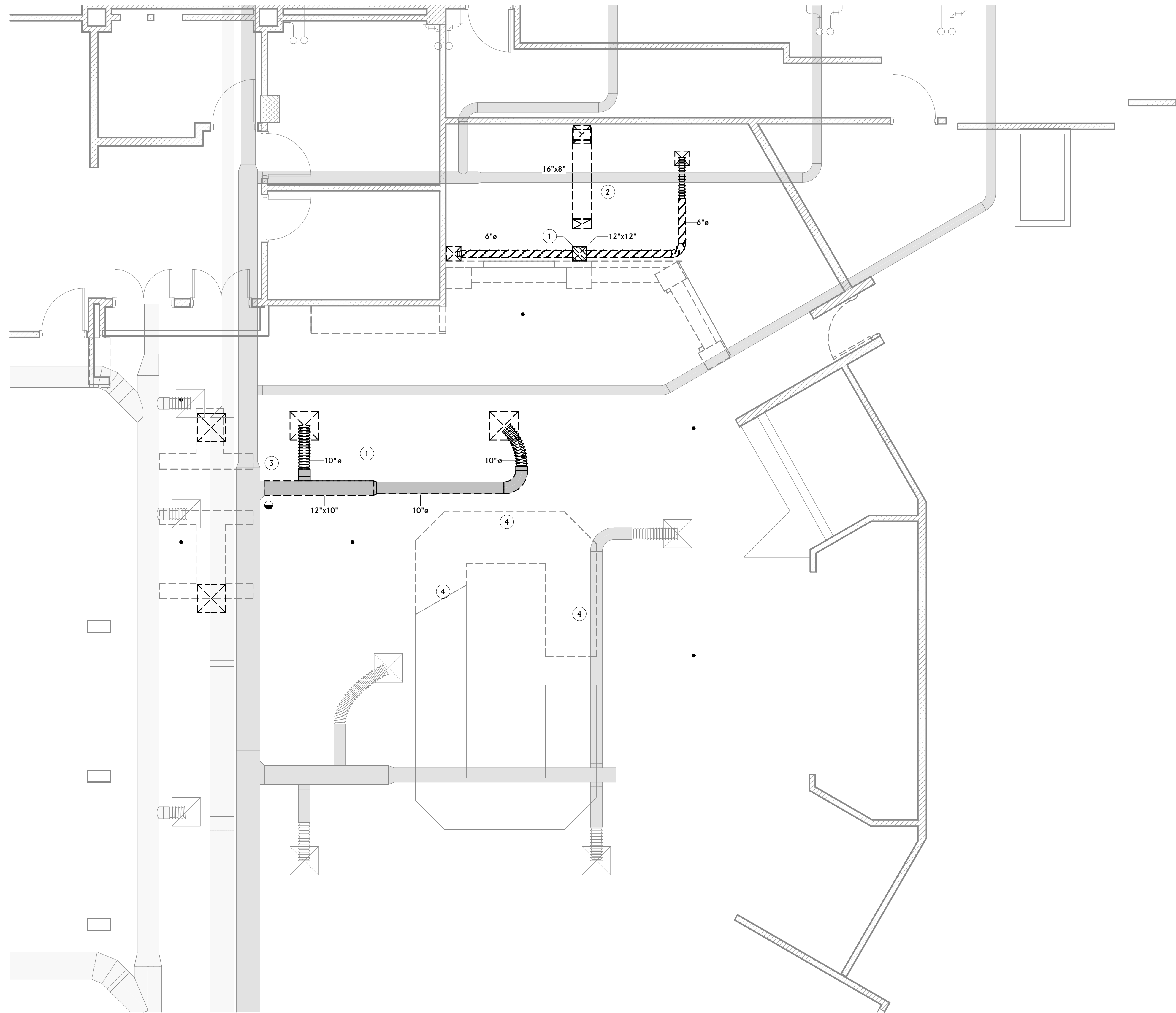
### MECHANICAL SYMBOLS LEGEND

MECHANICAL SYMBOLS LEGEND. AIR TERMINALS, EQUIPMENT & SPECIALTIES: NEW EQUIPMENT, EXISTING TO REMAIN, EXISTING EQUIP TO BE REMOVED OR RELOCATED, SUPPLY AIR TERMINAL (NEW, EXIST., DEMO.), RETURN AIR TERMINAL (NEW, EXIST., DEMO.), EXHAUST AIR TERMINAL (NEW, EXIST., DEMO.), LINEAR SLOT AIR TERMINAL, PUMP, P.O.D.C. - POINT OF DISCONNECTION, P.O.C. - POINT OF CONNECTION. EQUIPMENT TAG, DIFFUSER/GRIFFE TAG, WALL LOUVER, SIDEWALL AIR TERMINAL, T'STAT. (ELEC./PNEU.), SWITCH. DUCTWORK & ACCESSORIES: NEW DUCTWORK, EXISTING DUCTWORK TO REMAIN, EXISTING DUCTWORK TO BE REMOVED, DUCT BREAK, RISE IN DUCTWORK, FALL IN DUCTWORK, FIRE DAMPER, SMOKE DAMPER, FIRE/SMOKE DAMPER, BACKDRAFT DAMPER, MANUAL VOLUME DAMPER, MOTORIZED DAMPER. DUCTWORK SHADING: SUPPLY AIR, RETURN AIR, EXHAUST AIR, OUTSIDE AIR. HVAC/HYDRONIC PIPING: CHILLED WATER SUPPLY, CHILLED WATER RETURN, HOT WATER SUPPLY, HOT WATER RETURN, STEAM, LOW PRESSURE STEAM, MEDIUM PRESSURE STEAM, HIGH PRESSURE STEAM, CONDENSATE DRAIN, LOW PRESSURE CONDENSATE, MEDIUM PRESSURE CONDENSATE, HIGH PRESSURE CONDENSATE. THIS IS A STANDARDIZED SYMBOLS LEGEND, ALL SYMBOLS SHOWN MAY NOT APPEAR ON OR WITHIN THIS SET OF CONTRACT DOCUMENTS.

### MECHANICAL SHEET LIST

Table with columns: SHEET NO., DESCRIPTION







**1** FIRST FLOOR MECHANICAL DEMOLITION PLAN  
 M2.1 1/4" = 1'-0"

MECHANICAL GENERAL DEMOLITION NOTES	
A	CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
C	THE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FROM EXISTING DRAWINGS AND FIELD OBSERVATIONS. FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE DEMOLITION AS REQUIRED TO ACCOMMODATE EXISTING CONSTRUCTION.
D	NOTIFY THE OWNER OF ANY SYSTEM SHUT-DOWNS AND APPROXIMATE SHUT-DOWN TIME PRIOR TO COMMENCING WITH WORK.
E	CONTRACTOR SHALL REMOVE ALL DEMOLISHED MATERIALS FROM BUILDING, UNLESS SPECIFICALLY NOTED TO BE ABANDONED IN PLACE.
F	DRAWINGS SHOW GENERAL LOCATIONS OF MATERIALS TO BE REMOVED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXTENT OF WORK REQUIRED FOR A COMPLETE SYSTEM REMOVAL.
G	OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT/MATERIAL CALLED OUT TO BE REMOVED. CONTRACTOR SHALL PRESENT ALL DEMO'D EQUIPMENT/MATERIAL TO OWNER PRIOR TO REMOVING FROM SITE.
H	DEMO ALL T-STATS AND CONTROLS ASSOCIATED WITH DEMO'D MECHANICAL EQUIPMENT.

MECHANICAL KEYNOTES	
1	DEMOLISH DUCTING LOCATED AT APPROXIMATE LOCATION
2	DEMOLISH GREASE DUCTWORK LOCATED AT APPROXIMATE LOCATION.
3	DISCONNECT DUCTWORK AT APPROXIMATE LOCATION.
4	FOOD WELL AT APPROXIMATE LOCATION. REMOVE ASSOCIATED REFRIGERANT LIQUID AND SUCTION PIPING AND ASSOCIATED ACCESSORIES BACK TO REMOTE WATER COOLED CONDENSER RACK IN 224A. RECOVER EXISTING REFRIGERANT AS REQUIRED. COORDINATE WITH EXISTING CONDITIONS AS NECESSARY.



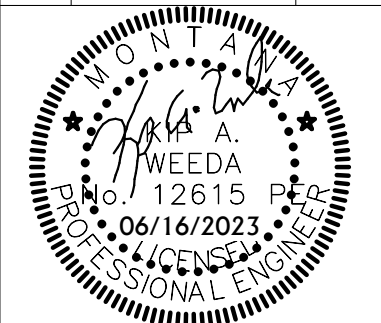
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 BOZEMAN, MONTANA  
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 FAX: 406.994.5665

100% CONSTRUCTION DOCUMENTS  
**MSU / SUB / FOOD VENDOR  
 RENOVATION PROJECT**



ACE INC  
 ASSOCIATED CONTRACTORS ENGINEERS  
 ACE JOB 22825727

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REVIEWED BY: <b>Checker</b>		
REV.	DESCRIPTION	DATE



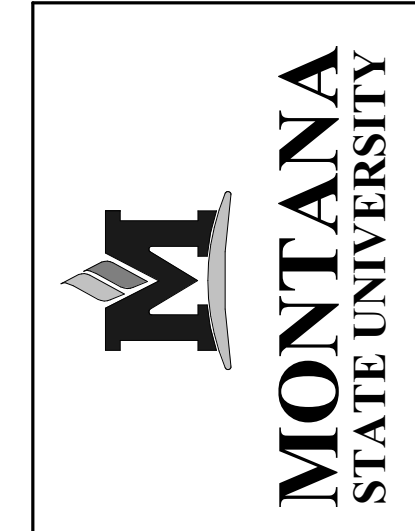
PPA#22-0056  
 A/E#00-00-00  
 Consultant #:

**SHEET TITLE**  
 FIRST FLOOR  
 MECHANICAL DEMO  
 PLAN

**SHEET**  
**M2.1**

DATE  
**06.16.2023**





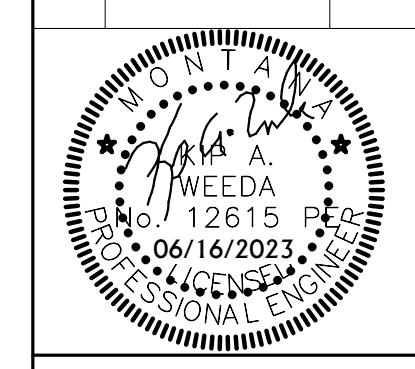
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PPA#22-0056  
 A/E#00-00-00  
 Consultant #:

**SHEET TITLE**  
 ROOF MECHANICAL  
 DEMO PLAN

**SHEET**  
**M2.2**

**DATE**  
**06.16.2023**

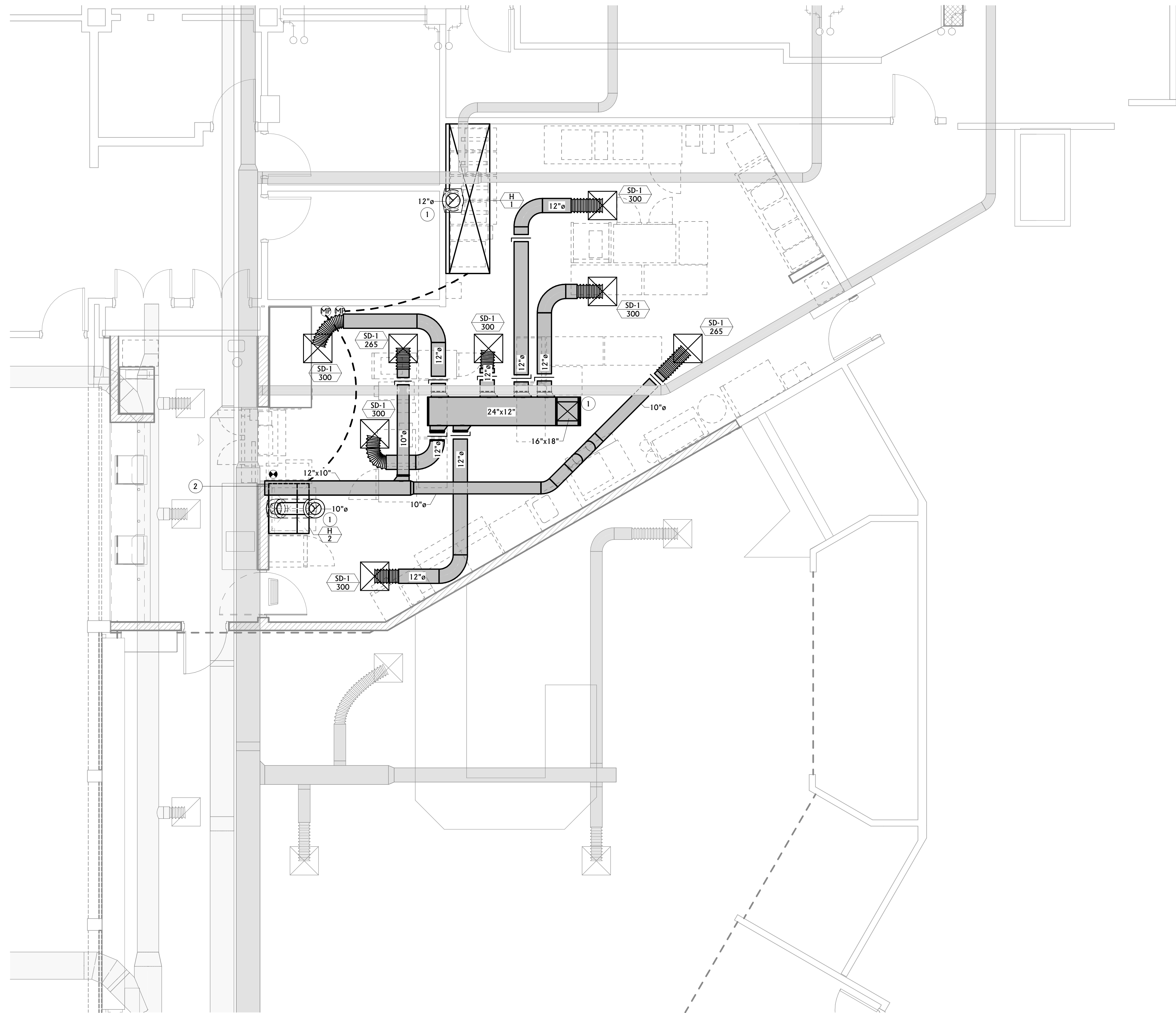
MECHANICAL GENERAL DEMOLITION NOTES	
A	CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
C	THE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FROM EXISTING DRAWINGS AND FIELD OBSERVATIONS. FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE DEMOLITION AS REQUIRED TO ACCOMMODATE EXISTING CONSTRUCTION.
D	NOTIFY THE OWNER OF ANY SYSTEM SHUT-DOWNS AND APPROXIMATE SHUT-DOWN TIME PRIOR TO COMMENCING WITH WORK.
E	CONTRACTOR SHALL REMOVE ALL DEMOLISHED MATERIALS FROM BUILDING, UNLESS SPECIFICALLY NOTED TO BE ABANDONED IN PLACE.
F	DRAWINGS SHOW GENERAL LOCATIONS OF MATERIALS TO BE REMOVED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXTENT OF WORK REQUIRED FOR A COMPLETE SYSTEM REMOVAL.
G	OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT/MATERIAL CALLED OUT TO BE REMOVED. CONTRACTOR SHALL PRESENT ALL DEMO'D EQUIPMENT/MATERIAL TO OWNER PRIOR TO REMOVING FROM SITE.
H	DEMO ALL T-STATS AND CONTROLS ASSOCIATED WITH DEMO'D MECHANICAL EQUIPMENT.

MECHANICAL KEYNOTES	
1	FAN LOCATED AT APPROXIMATE LOCATION TO BE DEMOLISHED.
2	ROOF PENETRATION LOCATED AT APPROXIMATE LOCATION TO BE BLOCKED OFF AND SEALED.
3	ROOFTOP EQUIPMENT LOCATED AT APPROXIMATE LOCATION. PROVIDED FOR REFERENCE.



**1**  
 M2.2  
 1/16" = 1'-0"  
**ROOF MECHANICAL DEMOLITION PLAN**





MECHANICAL GENERAL NOTES	
A	GENERAL CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE EXACT LOCATION OF DIFFUSERS AND GRILLES WITH REFLECTED CEILING PLAN AND LIGHTING LAYOUT.
C	FLEX DUCT RUN OUTS SHALL BE LIMITED TO 5'-0".
D	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
E	ALL CEILING DIFFUSERS TO BE 4-WAY UNLESS OTHERWISE NOTED.
F	DUCT PENETRATIONS THROUGH ROOF TO BE COORDINATED WITH JOIST LAYOUT.
G	ALL DUCTS ABOVE CORRIDOR AREAS TO BE MINIMUM 24 GUAGE SHEET METAL.
H	PROVIDE FLUSH CLIP CONCEALED OPERATORS ON ALL HAND DAMPERS LOCATED ABOVE HARD CEILINGS.
I	LINE ALL SUPPLY AND RETURN DUCTS WITH 1" A.L. WITHIN 15' OF FANS.
J	ALL DUCT DIMENSIONS SHOWN ON PLANS ARE CLEAR INTERIOR DIMENSIONS.
K	PROVIDE LOCKING COVERS FOR ALL THERMOSTATS/SENSORS.
L	PROGRAMMABLE THERMOSTATS SHALL BE PROVIDED WITH NEW BATTERIES AT TIME OF SUBSTANTIAL COMPLETION.
M	PROVIDE ACCESS PANELS FOR EACH FIRE DAMPER PER IMC STANDARDS/REQUIREMENTS.
N	VERIFY EXACT LOCATION OF T-STATS WITH ARCHITECT PRIOR TO INSTALLATION.
O	SEAL ALL MECHANICAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH UL-APPROVED FIRE RATED SYSTEM.

MECHANICAL KEYNOTES	
1	EXTEND DUCT UP THROUGH ROOF ABOVE. SEE 1/M3.2 FOR COORDINATION.
2	CONNECT NEW DUCTWORK AT APPROXIMATE LOCATION.



**1** FIRST FLOOR MECHANICAL REMODEL PLAN  
 M3.1 1/4" = 1'-0"



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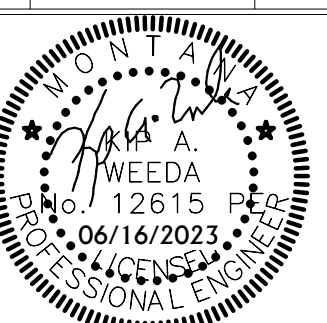
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1	MSU COMMENT RESPONSES	05/04/23



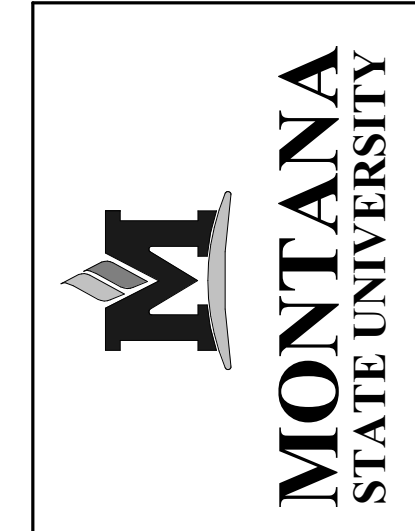
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**A/E#00-00-00**  
**Consultant #:**

**SHEET TITLE**  
 FIRST FLOOR  
 MECHANICAL  
 REMODEL PLAN

**SHEET**  
**M3.1**

**DATE**  
**06.16.2023**





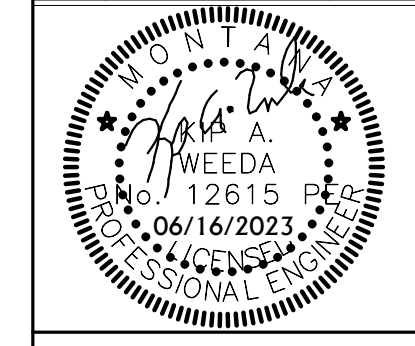
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1	MSU COMMENT RESPONSES	05/04/23



PPA#22-0056

A/E#00-00-00

Consultant #:

**SHEET TITLE**  
 ROOF MECHANICAL  
 REMODEL PLAN

**SHEET**  
**M3.2**

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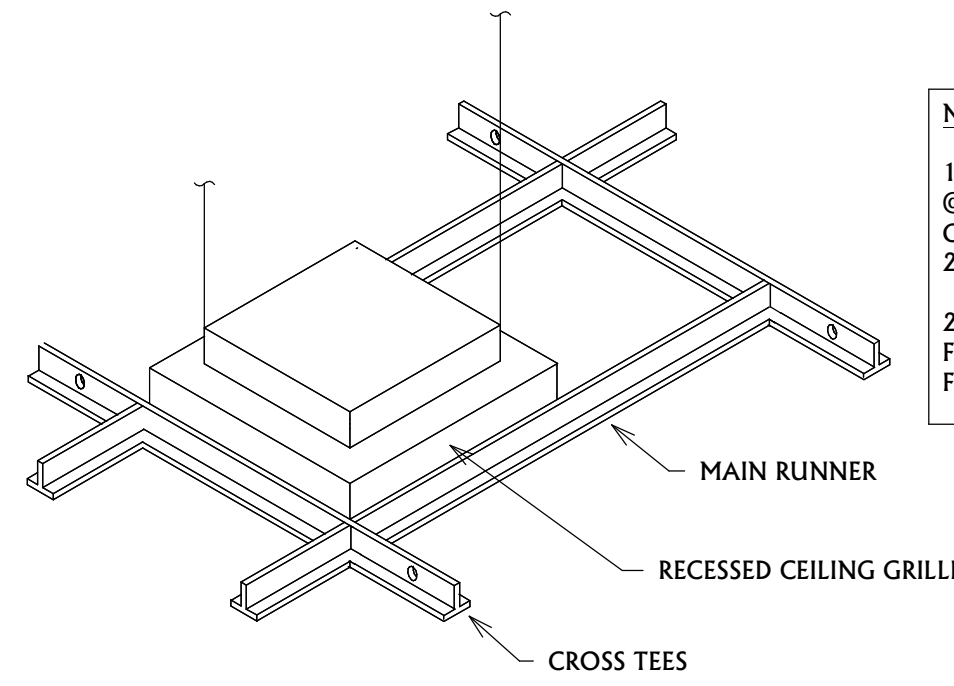
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C	FLEX DUCT RUN OUTS SHALL BE LIMITED TO 5'-0".
D	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
E	ALL CEILING DIFFUSERS TO BE 4-WAY UNLESS OTHERWISE NOTED.
F	DUCT PENETRATIONS THROUGH ROOF TO BE COORDINATED WITH JOIST LAYOUT.
G	ALL DUCTS ABOVE CORRIDOR AREAS TO BE MINIMUM 24 GAUGE SHEET METAL.
H	PROVIDE FLUSH CLIP CONCEALED OPERATORS ON ALL HAND DAMPERS LOCATED ABOVE HARD CEILINGS.
I	LINE ALL SUPPLY AND RETURN DUCTS WITH 1" A.L. WITHIN 15' OF FANS.
J	ALL DUCT DIMENSIONS SHOWN ON PLANS ARE CLEAR INTERIOR DIMENSIONS.
K	PROVIDE LOCKING COVERS FOR ALL THERMOSTATS/SENSORS.
L	PROGRAMMABLE THERMOSTATS SHALL BE PROVIDED WITH NEW BATTERIES AT TIME OF SUBSTANTIAL COMPLETION.
M	PROVIDE ACCESS PANELS FOR EACH FIRE DAMPER PER IMC STANDARDS/REQUIREMENTS.
N	VERIFY EXACT LOCATION OF T-STATS WITH ARCHITECT PRIOR TO INSTALLATION.
O	SEAL ALL MECHANICAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH UL-APPROVED FIRE RATED SYSTEM.

MECHANICAL KEYNOTES	
1	EXISTING PLUMBING VENT LOCATED AT APPROXIMATE LOCATION.
2	ROOFTOP EQUIPMENT LOCATED AT APPROXIMATE LOCATION. PROVIDED FOR REFERENCE.
3	PROVIDE DUCT CLEAN OUT AT TOP AND ELBOW AT APPROXIMATE LOCATION.
4	PROVIDE GREASE DUCT CLEAN OUT AT ELBOW.



**1** ROOF MECHANICAL REMODEL PLAN  
 M3.2 1/16" = 1'-0"



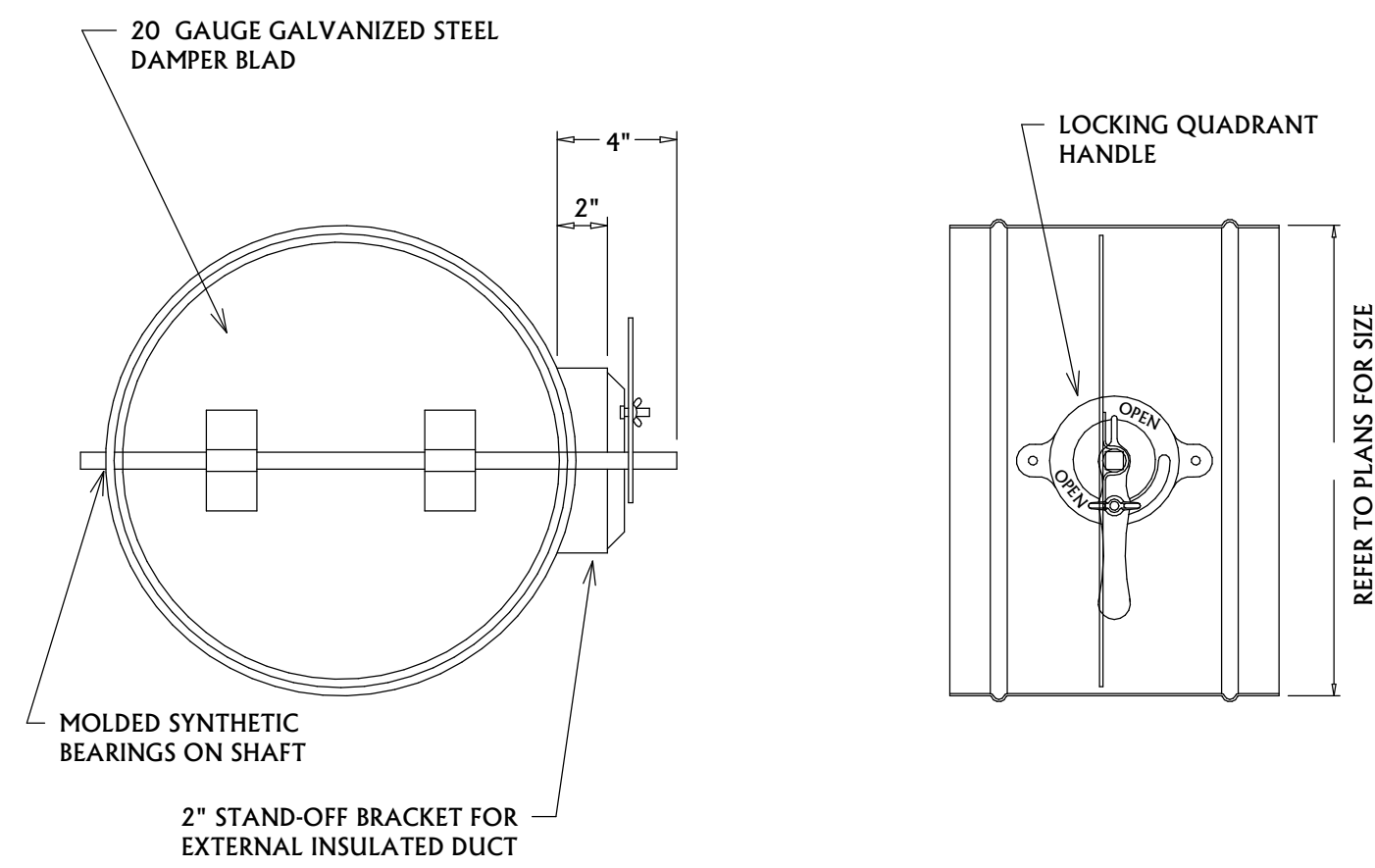


**NOTES:**

- CONNECT 2 NO. 12 GA. GRILLE SUPPORT WIRES @ DIAGONAL CORNERS OF EACH CEILING GRILLE. MAX. CEILING GRILLE WT. 55#. SEE SPEC. 230548 FOR MORE INFORMATION.
- EXCLUDE GRILLES LESS THAN 20LBS OR LESS FROM THIS REQUIREMENT WHERE IMPORTANCE FACTOR IP = 1.0

**1 CEILING GRILLE SUPPORT DETAIL**

NOT TO SCALE



**3 MANUAL DAMPER DETAIL**

NOT TO SCALE

THE MAKEUP AIR UNIT MANUFACTURER/SUPPLIER SHALL FURNISH THE MAKEUP AIR HEATING AND COOLING UNIT WITH CONTROLS FOR INTEGRATION INTO THE EXISTING BUILDING DDC SYSTEM. THE TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE WIRING AND PROGRAMMING AS REQUIRED FOR PROPER OPERATION OF THE MAKEUP AIR SYSTEM.

THE SYSTEM CONTROLS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING DEVICES, OPTIONS, AND SAFETIES:

- A SPACE THERMOSTAT.
- AN OUTDOOR AIR TEMPERATURE SENSOR.
- DISCHARGE DUCT THERMOSTAT.
- BUILDING AUTOMATION SYSTEM CONNECTION.

**CONTROL SEQUENCE:**

**KITCHEN HOODS/EXHAUST FANS:**

- EXHAUST FAN (EF-#) SHALL BE ENABLED FROM ITS RESPECTIVE HOOD CONTROL PANEL OR HOOD TEMPERATURE SENSOR.

**MAKEUP AIR UNIT:**

- MAKEUP AIR UNIT (MAU-1) SHALL BE CALLED TO RUN BY ANY RESPECTIVE HOOD EXHAUST FAN IN THE SPACE IT FEEDS AS SENSED THROUGH A SET OF CONTACTS AT ITS ASSOCIATED HOOD CONTROL PANEL.
- BEFORE ENABLING THE MAKEUP AIR UNIT SUPPLY FAN, ITS ASSOCIATED LOUVER DAMPER SHALL BE OPENED. PROOF OF DAMPER OPENING WILL ENABLE MAKEUP AIR SUPPLY FANS.
- PROVIDE MAKEUP AIR UNIT WITH A ROOM TEMPERATURE SENSOR. ROOM THERMOSTAT WILL DETERMINE UNIT HEATING OR COOLING MODE. ROOM SETPOINT SHALL BE ADJUSTABLE THROUGH THE BAS ONLY. HEATING/COOLING SWITCHOVER WILL OCCUR UPON A CONTINUOUS CALL FOR HEATING/COOLING FOR 10 MINUTES (ADJ.).

**HEATING MODE:**

- THE MAKEUP AIR UNIT SCR ELECTRIC HEAT WILL ENABLE AND MODULATE TO MAINTAIN THE COMMANDED DISCHARGE AIR TEMPERATURE.

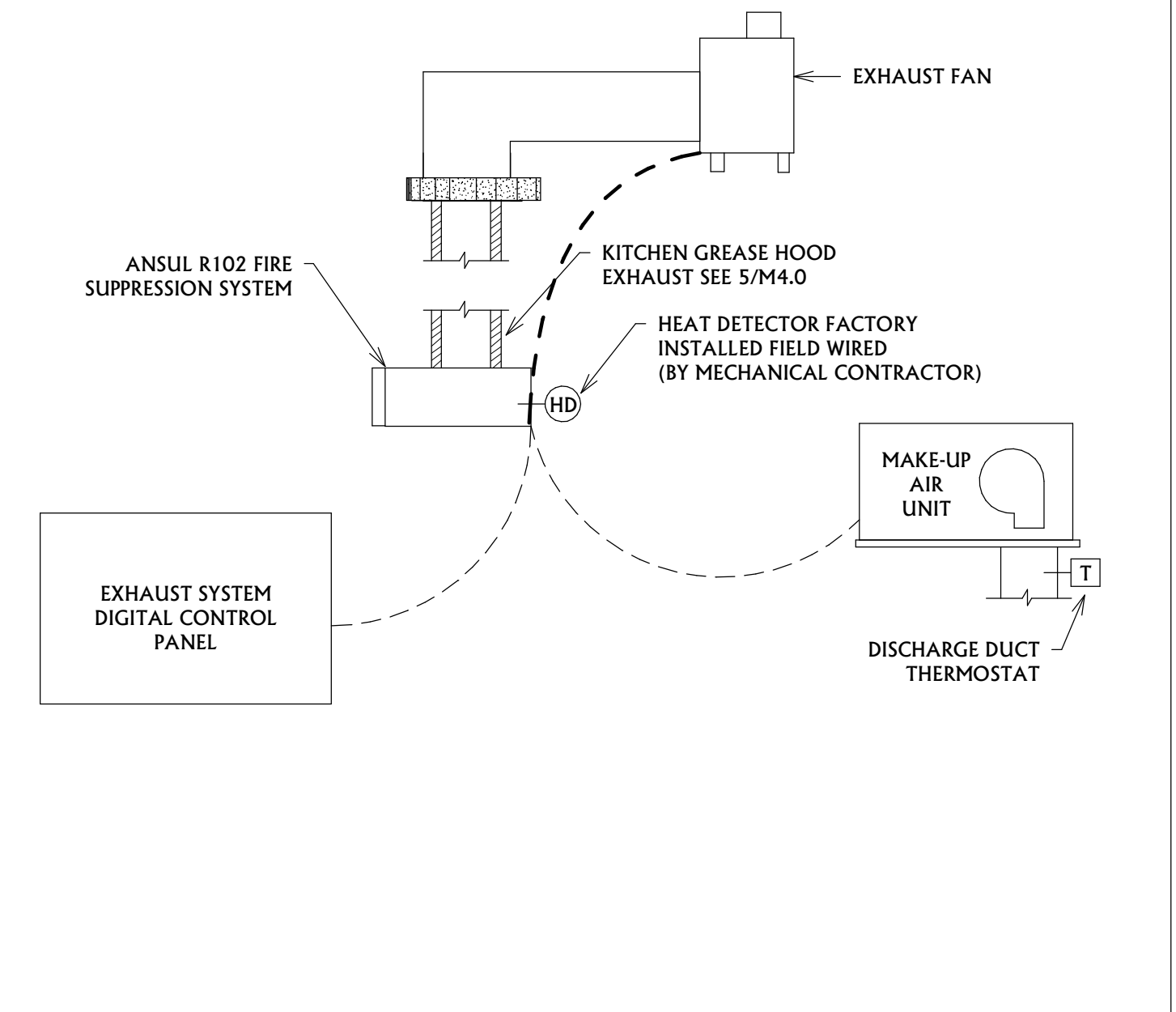
**COOLING MODE:**

- THE MAKEUP AIR UNIT WILL OPERATE IT'S PACKAGED DX COOLING SYSTEM TO MAINTAIN THE COMMANDED DISCHARGE AIR TEMPERATURE.

- IF NO EXHAUST FANS IN THE SPACE ARE IN OPERATION, MAKEUP AIR UNIT SHALL BE OFF AND OUTSIDE AIR DAMPER SHALL BE CLOSED.

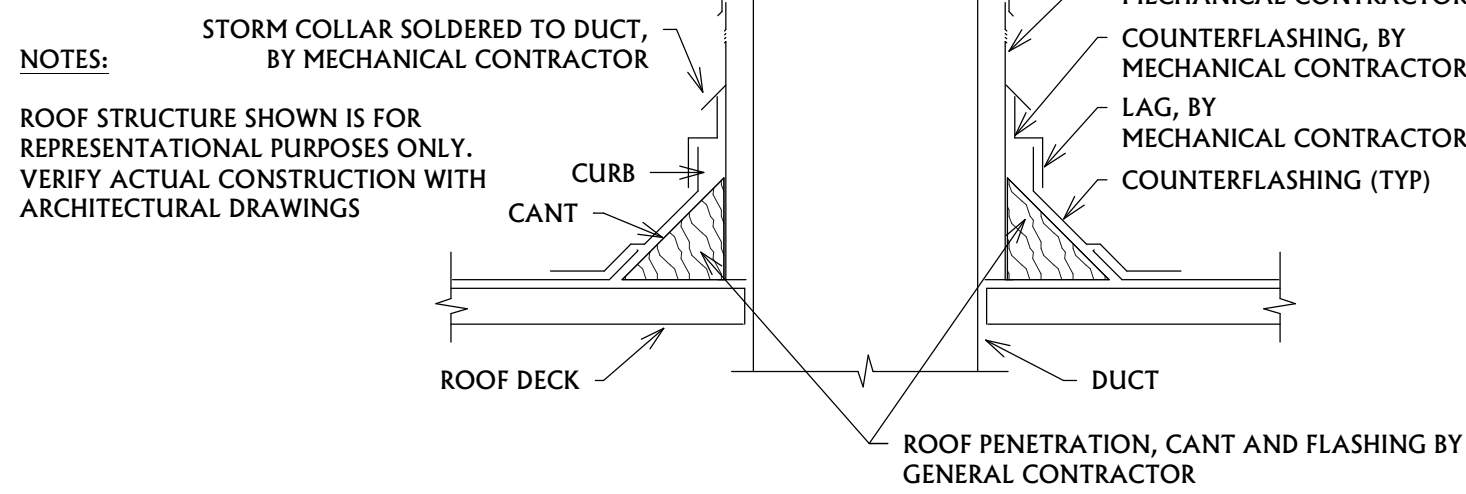
**SAFETIES:**

- AN INLET DUCT THERMOSTAT WILL SENSE THE OUTDOOR AIR TEMPERATURE AND LOCKOUT THE MAKEUP AIR ELECTRIC ELEMENT WHEN THE OUTDOOR AIR IS ABOVE 60F (ADJUSTABLE).
- A DISCHARGE THERMOSTAT WILL SENSE THE SUPPLY AIR TEMPERATURE AND SHALL PROVIDE LOW LIMIT CONTROL. IF SUPPLY AIR TEMPERATURE DROPS BELOW 40F (ADJUSTABLE) FOR 2 MINUTES (ADJUSTABLE), UNIT SHALL STOP AND OUTSIDE AIR DAMPER SHALL CLOSE. SYSTEM SHALL AUTO RESET WITH FOR TWO ATTEMPTS WITHIN 30 MINUTES. UPON A THIRD FAILURE WITHIN 30 MINUTES, AN ALARM SHALL BE GENERATED AND RESET SHALL BE MANUAL THROUGH THE BUILDING DDC SYSTEM.
- THE OUTSIDE AIR DAMPER SHALL SPRING CLOSE ON A LOSS OF POWER.
- UPON ACTIVEATION OF A HOOD FIRE SUPPRESSION SYSTEM, THE ASSOCIATED MAKEUP AIR UNIT SHALL DISABLE. ALL EXHAUST FANS ASSOCIATED WITH THE SAME CONTROL SYSTEM SHALL ENABLE IF OFF AND RUN AT MAXIMUM SETPOINT UNTIL THE SYSTEM IS RESET.



**2 MAKE-UP AIR UNIT CONTROLS DETAIL**

NOT TO SCALE

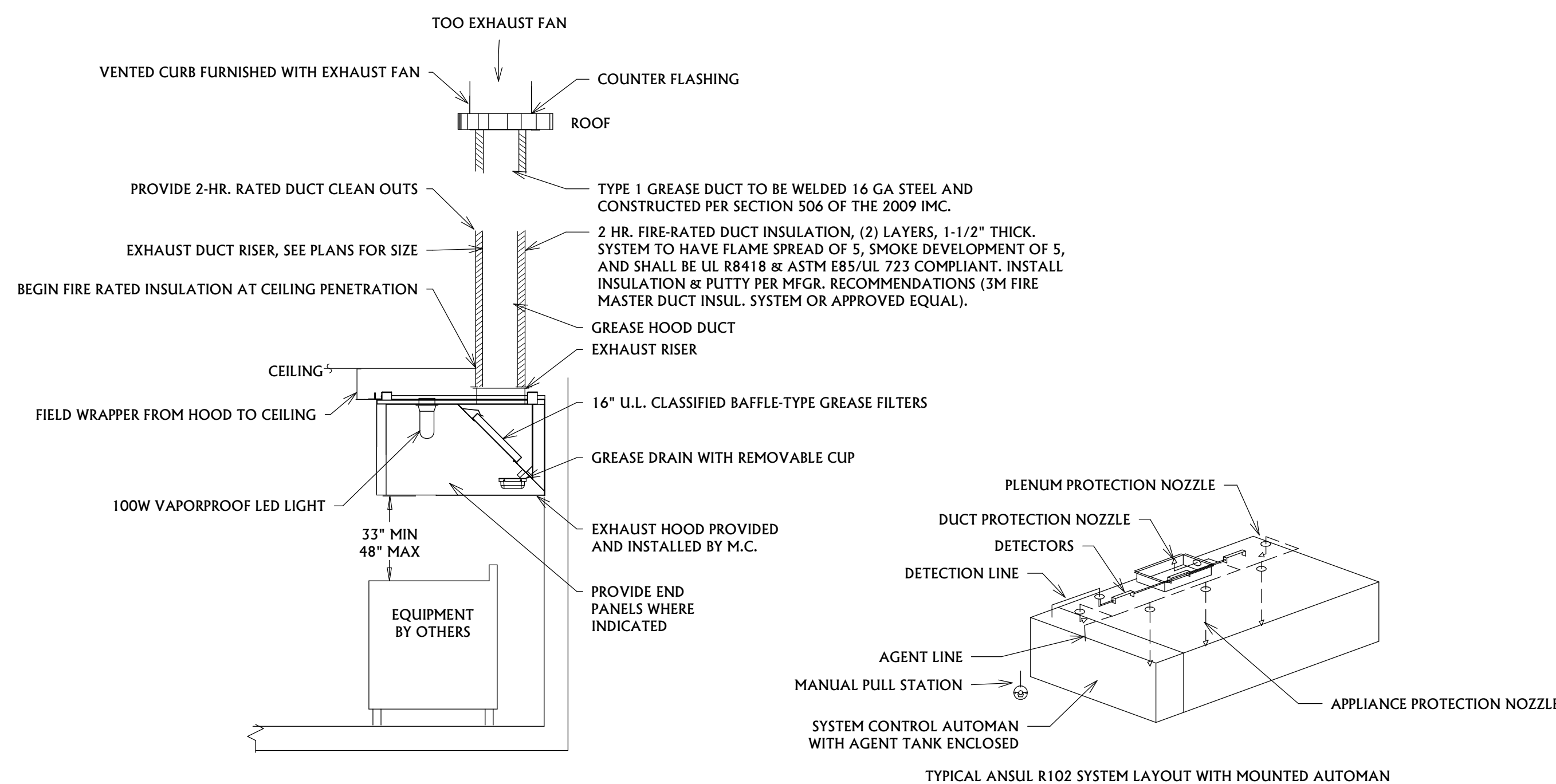


**NOTES:**

- STORM COLLAR SOLDERED TO DUCT, BY MECHANICAL CONTRACTOR
  - COUNTERFLASHING, BY MECHANICAL CONTRACTOR
  - VENTED ROOF COURB, BY MECHANICAL CONTRACTOR
  - COUNTERFLASHING, BY MECHANICAL CONTRACTOR
  - LAG, BY MECHANICAL CONTRACTOR
  - COUNTERFLASHING (TYP)
- ROOF STRUCTURE SHOWN IS FOR REPRESENTATIONAL PURPOSES ONLY. VERIFY ACTUAL CONSTRUCTION WITH ARCHITECTURAL DRAWINGS

**4 VENTED ROOF DUCT PENETRATION DETAIL**

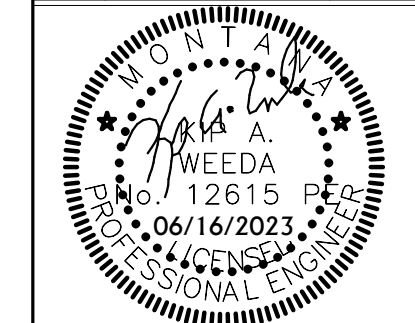
NOT TO SCALE



**5 KITCHEN HOOD/EXHAUST FAN DETAIL**

NOT TO SCALE

DRAWN BY: <b>Author</b>		
REVIEWED BY: <b>Checker</b>		
REV.	DESCRIPTION	DATE
1	MSU COMMENT RESPONSES	05/04/23



PPA#22-0056  
A/E#00-00-00  
Consultant #:

**SHEET TITLE**  
MECHANICAL  
DETAILS

**SHEET**  
**M4.0**

**DATE**  
**06.16.2023**



### PIPING MATERIALS SCHEDULE

**DOMESTIC WATER PIPING (DOMESTIC COLD WATER, HOT WATER, HOT WATER RECIRCULATION):**  
FOR ABOVE GROUND DOMESTIC SERVICE WATER PIPING CONTRACTOR SHALL PROVIDE ANY OF THE FOLLOWING:

- HARD COPPER TUBE, TYPE L; CAST-OR WROUGHT-COPPER, SOLDER-JOINT FITTINGS; AND SOLDERED JOINTS.
- HARD COPPER TUBE, TYPE L; COPPER PRESSURE-SEALED-JOINT FITTINGS, AND PRESSURE SEALED JOINTS.

FOR BELOW GROUND DOMESTIC WATER PIPING CONTRACTOR SHALL PROVIDE ANY OF THE FOLLOWING:

- SOFT COPPER TUBE, TYPE K; CAST-OR WROUGHT-COPPER, SOLDER-JOINT FITTINGS; AND SOLDERED JOINTS.
- SOFT COPPER TUBE, TYPE K; COPPER PRESSURE-SEALED-JOINT FITTINGS, AND PRESSURE SEALED JOINTS.

INDOOR DOMESTIC COLD WATER PIPING 2" AND SMALLER SHALL BE PROVIDED WITH 1" FIBERGLASS INSULATION WITH ASJ VAPOR BARRIER.  
INDOOR DOMESTIC HOT WATER PIPING 1 1/2" AND SMALLER SHALL BE PROVIDED WITH 1" FIBERGLASS INSULATION WITH ASJ VAPOR BARRIER.  
INDOOR DOMESTIC HOT WATER RECIRCULATION PIPING SHALL BE PROVIDED WITH 1" FIBERGLASS INSULATION WITH ASJ VAPOR BARRIER.

CEILING SPACE IS UTILIZED AS A RETURN AIR PLENUM. ALL PIPING INSULATION SHALL HAVE A FLAME SPREAD NOT EXCEEDING 25, A SMOKE DEVELOPMENT RATING NOT EXCEEDING 50, AND CONDUCTIVITY (K) NOT EXCEEDING 0.27 BTU PER INCH/H-SQ FT-F.

**SANITARY WASTE AND VENT PIPING:**  
CONTRACTOR SHALL PROVIDE ANY OF THE FOLLOWING FOR UNDERGROUND SANITARY WASTE AND VENT PIPING:

- SOLID-WALL CPVC PIPE, DWV PATTERN CPVC SOCKET FITTINGS, AND SOLVENT-CEMENTED JOINTS.

CONTRACTOR SHALL PROVIDE ANY OF THE FOLLOWING FOR ABOVE GROUND SANITARY WASTE AND VENT:

- SOLID-WALL CPVC PIPE, DWV PATTERN CPVC SOCKET FITTINGS, AND SOLVENT-CEMENTED JOINTS.

CONTRACTOR SHALL PROVIDE ANY OF THE FOLLOWING FOR ABOVE GROUND GREASE WASTE AND VENT PIPING:

- SOLID-WALL CPVC PIPE, DWV PATTERN CPVC SOCKET FITTINGS, AND SOLVENT-CEMENTED JOINTS.

CEILING SPACE IS UTILIZED AS A RETURN AIR PLENUM. ALL PIPING INSULATION SHALL HAVE A FLAME SPREAD NOT EXCEEDING 25, A SMOKE DEVELOPMENT RATING NOT EXCEEDING 50, AND CONDUCTIVITY (K) NOT EXCEEDING 0.27 BTU PER INCH/H-SQ FT-F.

### FIRE CAULKING

FIRE CAULK/SEAL ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS AS NEEDED TO PREVENT THE PASSAGE OF SMOKE. SEE M5-02 FOR FIRE CAULKING DETAILS.

### GENERAL PLUMBING NOTES

- ALL NEW PIPING, FITTINGS, VALVES, AND FIXTURES FOR DOMESTIC WATER SERVICE SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT OF 2011 WHICH IS BEING ENFORCED AS OF JANUARY 4, 2014.
- PLUMBING CONTRACTOR SHALL PROVIDE FOR FIRE STOPPING OF ALL PLUMBING PENETRATIONS OF RATED WALLS & FLOORS. SEE X/PX.X FOR FIRE STOP DETAILS.
- ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE INSTALLED FLUSH WITH THE FINISHED FLOOR. FLOOR SINKS SHALL BE UTILIZED AS INDIRECT DRAINS AND AREA DRAINS.
- PROVIDE WATER HAMMER ARRESTORS ON ALL LINES SERVING WASHING MACHINES AND/OR FLUSH VALVE FIXTURES.

### FOOD SERVICE NOTES

- ALL FOOD SERVICE EQUIPMENT INDICATED ON THE FOOD SERVICE DRAWINGS IS TO BE PROVIDED BY OTHERS AND PLUMBED BY THE PLUMBING CONTRACTOR. PROVIDE ALL REQUIRED VALVES AND ACCESSORIES TO PROVIDE A COMPLETE AND WORKABLE SYSTEM. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALL ALL FLOOR DRAINS AND FLOOR SINKS AS SHOWN AND LOCATED ON THE FOOD SERVICE DRAWINGS. INSTALL ALL EQUIPMENT PER THE MANUFACTURER'S INSTRUCTIONS/RECOMMENDATIONS. PLUMBING LINES SERVING FOOD SERVICE EQUIPMENT SHALL BE SECURED TO WALLS OR EQUIPMENT WHEN RECOMMENDED BY THE FOOD SERVICE CONTRACTOR. PLUMBING LINES SHALL NOT BE SECURED TO THE KITCHEN FLOORS. CONTRACTOR SHALL REFER TO THE FOOD SERVICE DRAWINGS FOR ADDITIONAL PLUMBING REQUIREMENTS.

### PROJECT SEISMIC RESTRAINT NOTES

- MECHANICAL/PLUMBING SYSTEMS AND EQUIPMENT ON THIS PROJECT SHALL BE INSTALLED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (SEISMIC USE GROUP 'III', SEISMIC DESIGN CATEGORY 'D', COMPONENT IMPORTANCE FACTOR 1.5) AND THE LATEST EDITION OF SMOCA'S SEISMIC RESTRAINT MANUAL. SPRINKLER SYSTEMS AND EQUIPMENT SHALL BE INSTALLED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND PROFESSIONAL STRUCTURAL ENGINEER SEISMIC RESTRAINT DRAWINGS FOR REVIEW AND APPROVAL. SUBMIT SHOP DRAWING INFORMATION ON EACH MAJOR PIECE OF EQUIPMENT AND FOR EACH MAJOR CATEGORY OF COMMONLY INSTALLED EQUIPMENT.
- SEE SPECIFICATION SECTION 220548 AND 230548.

### FIRE SPRINKLER NOTES & LEGEND

**FIRE SPRINKLER PERFORMANCE SPECIFICATION NOTES:**

- THE INTENT OF THESE DRAWINGS ARE TO PROVIDE PERFORMANCE BASED GUIDELINES FOR FIRE SPRINKLER HEAD PLACEMENT AND PIPE ROUTING IN CRITICAL AREAS. THE FIRE SPRINKLER CONTRACTOR IS RESPONSIBLE DESIGN OF THE NEW FIRE SPRINKLER SYSTEMS, PREPARATION OF FINAL SHOP DRAWINGS BASED ON THE PROCEEDING NOTES, DRAWINGS, AND THE PROJECT SPECIFICATIONS, AND THE COMPLETE INSTALLATION OF THE FIRE SPRINKLER SYSTEM WHICH MEETS ALL OF THE REQUIREMENTS OUTLINED WITHIN THESE DRAWINGS, SPECIFICATIONS, AND CODE(S). THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON COMPLETION OF WORK WHICH REFLECT ACTUAL INSTALLATION CONDITIONS.
- FIRE SPRINKLER CONTRACTOR SHALL DEVELOP, PRODUCE, AND SUBMIT ENGINEERED FIRE SPRINKLER DESIGN CALCULATIONS AND DRAWINGS (SHOP DRAWINGS) TO THE AUTHORITY HAVING JURISDICTION (AHJ) FOR REVIEW AND APPROVAL. AFTER AHJ HAS REVIEWED AND APPROVED THE CALCULATIONS AND DRAWINGS, FIRE SPRINKLER CONTRACTOR SHALL SUBMIT THE DRAWINGS AND CALCULATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY FIRE SPRINKLER INSTALLATION.
- REFER TO ARCHITECTURAL PLANS AND FIRE SPRINKLER PLANS FOR COMPLETE SECTIONS, ELEVATIONS, AND FLOOR PLAN DETAILS/NOTES. COORDINATE WITH FULL DRAWING PACKAGE FOR SCOPE OF WORK REQUIRED BY THIS CONTRACT.
- UPON THE CONTRACTORS REQUEST, ELECTRONIC DRAWING FILES OF THE PROJECTS FLOOR PLANS / REFLECTIVE CEILING PLANS CAN BE PROVIDED FOR CONVENIENCE AND USE IN THE PREPARATION OF SHOP DRAWINGS RELATED TO THE PROJECT SUBJECT TO AGREED UPON TERMS AND CONDITIONS. CONTRACTOR SHALL BE REQUIRED TO SUBMIT AN ACCEPTANCE LETTER OF THE TERMS AND CONDITIONS PRIOR TO RELEASE OF THE ELECTRONIC DRAWINGS. COORDINATE WITH THE PROJECT ENGINEER FOR ADDITIONAL REQUIREMENTS.
- THE PREPARATION OF ALL SHOP DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE ACCOMPLISHED BY A REGISTERED ENGINEER, LICENSED IN THE STATE OF MONTANA, IF REQUIRED BY LOCAL AUTHORITIES. AT A MINIMUM, WORK MUST BE DONE BY A NICET LEVEL 3 TECHNICIAN.

**FIRE SPRINKLER PROJECT NOTES:**

- FIRE SPRINKLER SYSTEM SHALL COMPLY WITH THE INSURANCE SERVICES OFFICE REQUIREMENTS, NFPA 13, ALL OTHER APPLICABLE STATE AND LOCAL CODES. REFER TO ALL NEW ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND SPECIFICATIONS FOR COMPLETE SECTIONS, ROOM NAMES, DETAILS, AND BUILDING PLANS.
- FIRE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROVIDE A HYDRAULIC DENSITY AS REQUIRED BY CODE.
- 1" THRU 2" PIPES SHALL BE SCHEDULE 40 WITH SCREWED FITTINGS. 2-1/2" THRU 4" PIPES SHALL BE SCHEDULE 10 WITH GROOVED FITTINGS.
- FIRE SPRINKLER SYSTEM TEST SHALL BE WITNESSED BY THE AUTHORITY HAVING JURISDICTION PRIOR TO ANY PORTION BEING CONCEALED. GIVE 48 HOURS NOTICE PRIOR TO SYSTEM TEST.
- NO INSTALLATION OF ANY PIPING OR EQUIPMENT IS TO BEGIN PRIOR TO APPROVAL OF THE PLANS AND ISSUANCE OF A PERMIT BY THE AUTHORITY HAVING JURISDICTION.
- COORDINATE ROUTING AND LOCATION OF FIRE SPRINKLER SYSTEM WITH ALL OTHER TRADES PRIOR TO SHOP DRAWING PREPARATION. DUCTWORK INSTALLATION SHALL HAVE ROUTING PRIORITY.
- PROTECT BUILDING OVERHANGS AND COMBUSTIBLE CONCEALED SPACES AS REQUIRED BY APPLICABLE CODES. REVIEW ALL ARCHITECTURAL SECTIONS AND PROVIDE PROTECTION AS REQUIRED AS PART OF THIS PROJECT. PROVIDE DRY PENDENT OR SIDEWALL HEADS IN AREAS SUBJECT TO FREEZING AS REQUIRED.
- FIRE SPRINKLER HEADS SHALL BE CENTERED IN THE LENGTH AND WIDTH OF 2'X2' AND 2'X4' OR OTHER SIZES OF CEILING TILES. THE USE OF NFPA APPROVED STAINLESS STEEL BRAIDED FLEXIBLE SPRINKLER HOSE ASSEMBLIES WITH CEILING MOUNTING BRACKET IS PERMISSIBLE.
- DO NOT INSTALL FIRE PROTECTION MAIN OR BRANCH LINES THROUGH ELECTRICAL, IT, OR DATA ROOMS. USE SIDEWALL HEADS IN THESE ROOMS.
- FIRE SPRINKLER HEADS SHALL BE FULLY-CONCEALED WITH WHITE ESCUTCHEON IN ALL NEW LAY-IN AND HARD LID CEILING CONFIGURATIONS. FIRE SPRINKLER HEADS SHALL BE BRASS, UPRIGHT STYLE HEADS IN ALL AREAS OPEN TO STRUCTURE. REFER TO DETAILS #FX/#.# AND #FX/#.# ON THIS SHEET AND THE PROJECT SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- ROUTE FIRE SPRINKLER PIPING AS HIGH AS FEASIBLE IN ALL EXPOSED AREAS. COORDINATE ALL EXPOSED PIPING IN FINISHED AREAS WITH THE ARCHITECT AS REQUIRED. PIPING SHALL BE LEFT CLEAN FOR PAINTING BY OTHERS.
- UPON THE CONTRACTORS REQUEST, ELECTRONIC DRAWING FILES OF THE PROJECTS FLOOR PLANS / REFLECTIVE CEILING PLANS CAN BE PROVIDED FOR CONVENIENCE AND USE IN THE PREPARATION OF SHOP DRAWINGS RELATED TO THE PROJECT SUBJECT TO AGREED UPON TERMS AND CONDITIONS. CONTRACTOR SHALL BE REQUIRED TO SUBMIT AN ACCEPTANCE LETTER OF THE TERMS AND CONDITIONS PRIOR TO RELEASE OF THE ELECTRONIC DRAWINGS. COORDINATE WITH THE PROJECT ENGINEER FOR ADDITIONAL REQUIREMENTS.

**FIRE SPRINKLER HAZARD CLASSIFICATIONS:**

LIGHT: OFFICES, COMMON SPACES, RESTROOMS, CONFERENCE ROOMS, ETC.

ORDINARY GROUP I: MECHANICAL ROOMS, STORAGE ROOMS, JANITOR'S CLOSETS

### PLUMBING SYMBOLS LEGEND

**GENERAL PIPING**

DIRECTION OF FLOW

REDUCER FITTING

ELBOW TURNED UP

ELBOW TURNED DN.

DROP IN HORIZ. RUN

TEE TURNED UP

TEE TURNED DN.

BELL AND SPIGOT

**PIPING PHASE**

EXISTING PIPING

NEW UNDERFLOOR PIPING

NEW ABOVE FLOOR PIPING

TEE IN HORIZ. RUN

BRANCH TEE W/ OFFSET

BRANCH TEE TURNED UP

BRANCH TEE TURNED DN.

CROSS IN HORIZ. RUN

90° AND 45° ELBOWS

END CAP CONNECTION

UNION FITTING

DOMESTIC COLD WATER

DOMESTIC HOT WATER

DOMESTIC HOT WATER RECIRC.

NON-POTABLE COLD WATER

NON-POTABLE HOT WATER

NON-POTABLE HOT WATER RECIRC.

SOFT COLD WATER

SOFT HOT WATER

FILTERED COLD WATER

SANITARY WASTE

STORM DRAINAGE - PRIMARY

STORM DRAINAGE - OVERFLOW

ACID WASTE

GREASE WASTE

VENT

ACID VENT

TEMPERED WATER

**MISCELLANEOUS/MECHANICAL PIPING TYPES**

CHILLED WATER SUPPLY

CHILLED WATER RETURN

HOT WATER SUPPLY

HOT WATER RETURN

COMPRESSED AIR

CONDENSATE DRAIN

LOW PRESSURE CONDENSATE

MEDIUM PRESSURE CONDENSATE

HIGH PRESSURE CONDENSATE

FUEL OIL RETURN

FUEL OIL SUPPLY

HOT GAS BYPASS

NATURAL GAS

LIQUID PETROLEUM GAS

FIRE PROTECTION WET

FIRE PROTECTION DRY

**PIPING FITTINGS, VALVES & SPECIALTIES**

EXIST. FIXTURE TO REMAIN

NEW PLUMBING FIXTURE

EXIST. FIXT. TO BE REMOVED

ANGLE VALVE

BUTTERFLY VALVE

PRESS. REDUCING

2-WAY (ELECTRIC)

2-WAY (PNEU. MTR.)

2-WAY (SOLENOID)

PNEUMATIC MOTOR

3-WAY (ELECTRIC)

3-WAY (PNEUMATIC)

3-WAY (PNEU. MTR.)

STRAINER

STRAINER W/ BLOW-OFF

VENT THRU ROOF

PUMP

P.O.D.C. - POINT OF DISCONNECTION

P.O.C. - POINT OF CONNECTION

**THIS IS A STANDARDIZED SYMBOLS LEGEND, ALL SYMBOLS SHOWN MAY NOT APPEAR ON OR WITHIN THIS SET OF CONTRACT DOCUMENTS.**

PLUMBING SHEET LIST	
P1.0	PLUMBING COVER SHEET
P1.1	PLUMBING SCHEDULES
P2.0	BASEMENT PLUMBING DEMO PLAN
P2.1	FIRST FLOOR PLUMBING DEMOLITION PLAN
P2.2	ROOF PLUMBING DEMO PLAN
P3.0	BASEMENT PLUMBING REMODEL PLAN
P3.1	FIRST FLOOR PLUMBING REMODEL PLAN
P3.2	ROOF PLUMBING REMODEL PLAN
P4.0	PLUMBING DETAILS





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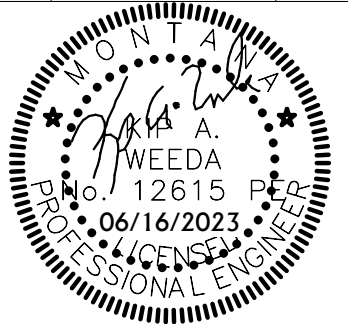
100% CONSTRUCTION DOCUMENTS  
MSU / SUB / FOOD VENDOR  
RENOVATION PROJECT



ACE INC  
ARCHITECTURAL CONSULTANTS & ENGINEERS  
ACE JOB 222825727

DRAWN BY: Author  
REVIEWED BY: Checker

REV.	DESCRIPTION	DATE



PPA#22-0056  
A/E#00-00-00  
Consultant #:

SHEET TITLE  
PLUMBING  
SCHEDULES

SHEET  
P1.1

DATE  
06.16.2023

### PLUMBING FIXTURE SCHEDULE

PLAN CODE	ITEM	MFR.	MODEL NUMBER	MATERIAL & FINISH	TRIM	ROUGH-IN SIZE				REMARKS
						CW	HW	SAN	VENT	
FCO	FLOOR CLEAN OUT	JAY R SMITH	#4103S	CAST IRON BODY BRONZE PLUG	---	---	SEE PLANS	---	HEAVY DUTY CLEANOUT WITH TAPER THREAD BRONZE PLUG AND NICKEL BRONZE TOP.	
FD-1	FLOOR DRAIN	JAY R SMITH	#2005Y-A	CAST IRON BODY NICKLE BRONZE STRAINER	TRAP GUARD	---	---	SEE PLANS	SEE PLANS	GENERAL PURPOSE FLOOR DRAIN WITH 5" DIAMETER NICKEL BRONZE STRAINER AND TRAP PRIMER CONNECTION.
FS-1	FLOOR SINK	JAY R SMITH	#3430Y-12	CAST IRON BODY W/ ARC INTERIOR CAST IRON GRATE W/ ARC	1/2" GRATE AND TRAP GUARD	---	---	SEE PLANS	SEE PLANS	FLOOR SINK WITH A.R.C. CAST IRON BODY AND GRATE. PROVIDE WITH TRAP PRIMER CONNECTION.
TD-1	TRENCH DRAIN	JAY R SMITH	9675-1236	STAINLESS STEEL	---	---	SEE PLANS	SEE PLANS	STAINLESS STEEL TRENCH DRAIN BODY WITH NO HUB OUTLET, SEDIMENT BUCKET, AND STAINLESS STEEL GRATE. PROVIDE WITH TRAP PRIMER CONNECTION.	
WCO	WALL CLEAN OUT	JAY R SMITH	#4472T	BRONZE PLUG	---	---	SEE PLANS	---	WALL CLEAN-OUT WITH BRASS TAPERED THREAD PLUG AND COVER PLATE. PROVIDE WITH STAINLESS STEEL COVER PLATE IN TILE FINISH APPLICATIONS. PROVIDE WITH PRIME COATED STEEL COVER PLATE IN PAINTED WALL FINISH APPLICATIONS AND FIELD PAINT TO MATCH WALL COVERING.	

- NOTES:  
 1. FIXTURE ROUGH-IN SIZES LISTED ABOVE FOR CW, HW, SAN, AND VENT ARE THE BRANCH RUN-OUT LINE SIZES TO THE FIXTURE. THE POINT-OF-CONNECTION AT THE FIXTURE MAY BE SMALLER OR LARGER PENDING ON THE SPECIFIC FIXTURE'S CONNECTION SIZES. CONTRACTOR TO MAKE THE APPROPRIATE CONNECTION SIZE TRANSITION AT THE FIXTURE.  
 2. VERIFY FLOOR FINISH AND FINISH THICKNESS BEFORE SETTING ANY FIXTURES.  
 3. PROVIDE FLUSH MOUNTED LOCKABLE ACCESS PANELS AS NEEDED FOR PLUMBING ACCESSORY ACCESS. COORDINATE LOCATION WITH ARCHITECT AND G.C. PRIOR TO ACCESSORY AND DOOR INSTALLATION. REFER TO ARCHITECTURAL SPECIFICATIONS FOR ACCESS DOOR REQUIREMENTS.

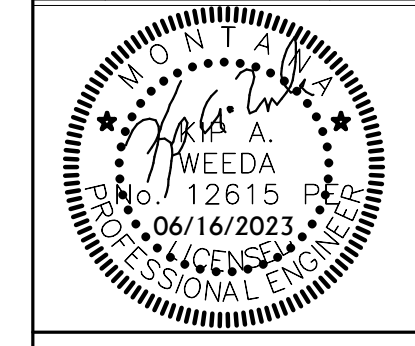
### KITCHEN EQUIPMENT PLUMBING CONNECTION SCHEDULE

KITCHEN EQUIPMENT CODE	ITEM - FIXTURES PROVIDED BY OTHERS	WATER			SANITARY WASTE		GREASE WASTE		PLUMBING CONTRACTOR FURNISHED & INSTALLED ITEMS (UNLESS OTHERWISE NOTED)	REMARKS
		COLD	COLD...	HOT 140°	DIRECT	INDIRECT	DIRECT	INDIRECT		
E-305	TEA BREWER	---	1/2"	---	---	---	---	---	DC WITH VENT	SEE NOTES
E-318a	8 STOP WATER MANIFOLD PANEL	---	3/4"	---	---	---	---	---	DC WITH VENT	SEE NOTES
E-350	WATER FILTERATION SYSTEM	3/4"	---	---	---	---	---	---	---	SEE NOTES
E-380A	AIR COOLED ICE MACHINE	---	1/2"	---	---	3/4"	---	---	DC WITH VENT	ROUTE INDIRECT DRAIN TO NEAREST FLOOR RECEPTOR AND AIR GAP.
F-308	FUTURE SINGLE COFFEE MAKER	---	1/2"	---	---	---	---	---	DC WITH VENT	SEE NOTES
F-380AB	FUTURE ICE MACHINE WITH RIDE SYSTEM	---	1/2"	---	---	3/4"	---	---	DC WITH VENT	ROUTE INDIRECT DRAIN TO NEAREST FLOOR RECEPTOR AND AIR GAP.
S-111	UNDERMOUNT HAND SINK	1/2"	---	1/2"	2"	---	---	---	ASSE 1070 THERMOSTATIC MIX VALVE	SEE NOTES
S-360	HAND SINK	1/2"	---	1/2"	2"	---	---	---	ASSE 1070 THERMOSTATIC MIX VALVE	SEE NOTES
S-360e	HAND SINK	1/2"	---	1/2"	2"	---	---	---	ASSE 1070 THERMOSTATIC MIX VALVE	SEE NOTES
S-364	THREE COMPARTMENT UTENSIL SINK	3/4"	---	3/4"	---	---	---	4"	INLET CHECK VALVES	ROUTE INDIRECT DRAINS INDEPENDENTLY TO NEAREST FLOOR RECEPTOR AND AIR GAP.
S-366	SINGLE BOWL VEGETABLE PREP SINK	1/2"	1/2"	1/2"	---	---	---	4"	INLET CHECK VALVES	ROUTE INDIRECT DRAIN TO NEAREST FLOOR RECEPTOR AND AIR GAP.
MS-370B	MOP SINK	1/2"	---	1/2"	2"	---	---	---	INLET CHECK VALVES	SEE NOTES

- NOTES:  
 1. SEE FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT LOCATIONS AND ADDITIONAL REQUIRMENTS.  
 2. CONNECTION SIZE NOTED FOR REFERENCE ONLY. COORDINATE WITH FOOD SERVICE DRAWINGS AND EQUIPMENT INSTALLATION GUIDLINES FOR FURTHER REQUIREMENTS.



DRAWN BY:	Author	
REVIEWED BY:	Checker	
REV.	DESCRIPTION	DATE
2	CFA SALAD BAR COMMENTS	05/10/23



PPA#22-0056

A/E#00-00-00

Consultant #:

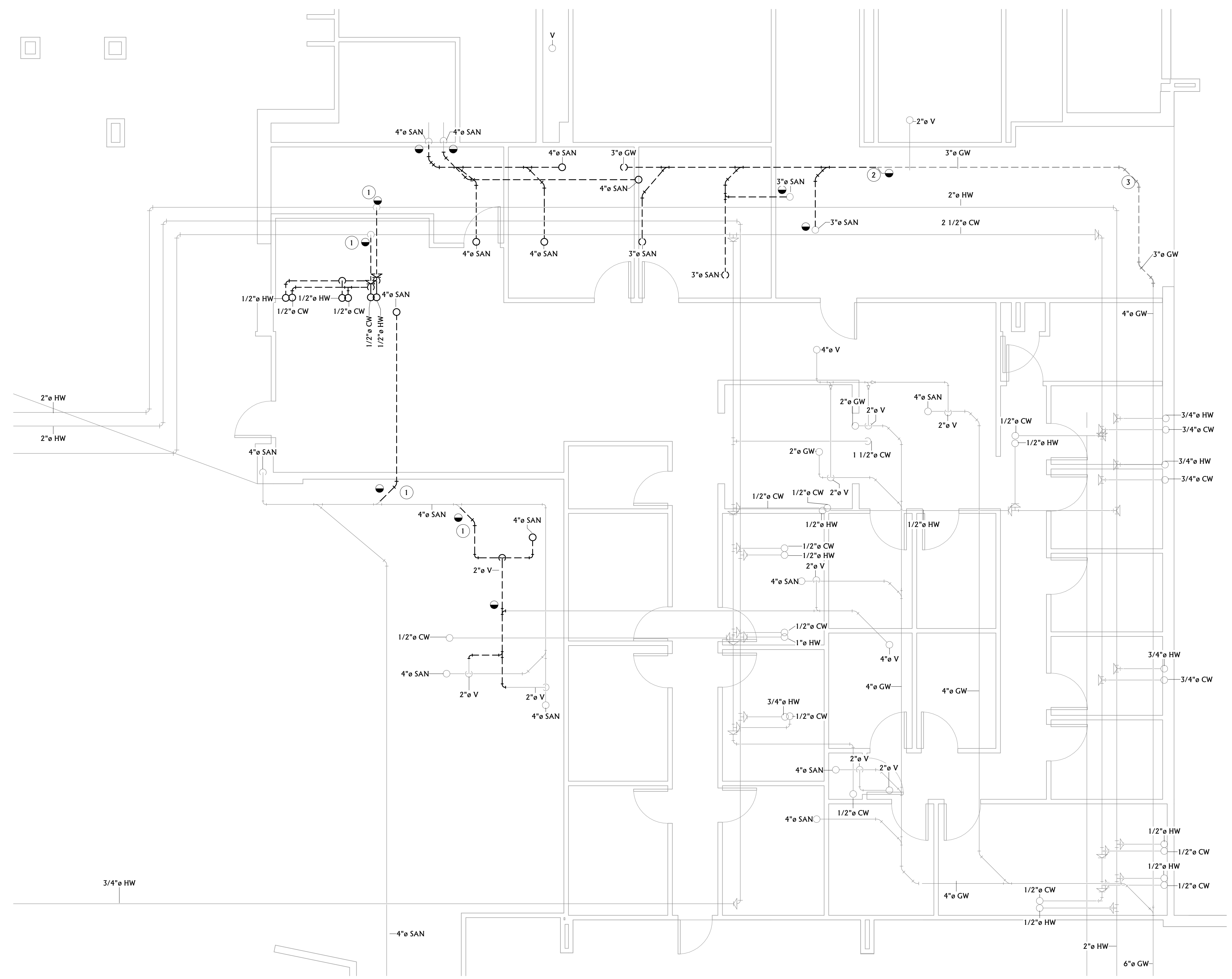
**SHEET TITLE**  
 BASEMENT  
 PLUMBING DEMO  
 PLAN

**SHEET**  
**P2.0**

**DATE**  
**06.16.2023**

PLUMBING GENERAL DEMOLITION NOTES	
A	CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
C	THE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FROM EXISTING DRAWINGS AND VISUAL FIELD OBSERVATIONS WHICH SHALL BE INCLUDED IN THE SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE DEMOLITION AS REQUIRED TO ACCOMMODATE CONSTRUCTION.
D	NOTIFY THE OWNER OF ANY SYSTEM SHUT-DOWNS AND APPROXIMATE SHUT-DOWN TIME PRIOR TO COMMENCING WITH WORK.
E	CONTRACTOR SHALL REMOVE ALL DEMO'D MATERIALS FROM BUILDING, UNLESS SPECIFICALLY NOTED TO BE ABANDONED IN PLACE OR RE-USED.
F	DRAWINGS SHOW GENERAL LOCATIONS OF MATERIALS TO BE REMOVED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXTENT OF WORK REQUIRED FOR A COMPLETE SYSTEM REMOVAL.
G	OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT/MATERIAL CALLED OUT TO BE REMOVED. CONTRACTOR SHALL PRESENT ALL DEMO'D EQUIPMENT/MATERIAL TO OWNER PRIOR TO REMOVING FROM SITE.
H	SEAL ALL ABANDONED PLUMBING PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH UL-APPROVED FIRE RATED SYSTEM.
I	CONTRACTOR SHALL REMOVE ALL HANGERS AND SUPPORTS SERVING EQUIPMENT AND PIPING DEMO'D IN THIS PROJECT. HANGERS WHICH ARE PERMANENTLY ATTACHED TO THE EXISTING STRUCTURE SHALL BE CUT BACK TO A MINIMUM OF NO LESS THAN 1" FROM THEIR EXISTING CONNECTION POINT TO THE EXISTING STRUCTURE. DEMO ALL ACCESSIBLE SEWER AND WATER LINES BACK TO AN ACTIVE MAIN. DEAD END LINES ARE NOT ACCEPTABLE.

PLUMBING KEYNOTES	
1	DISCONNECT EXISTING PIPING AT APPROXIMATE LOCATION AND CAP.
2	DISCONNECT PIPING AT APPROXIMATE LOCATION AND REMOVE AS INDICATED. DOWNSTREAM PIPING TO BE REMOVED AND REPLACED UNDER SEPARATE PROJECT BY OWNER. COORDINATE WITH OWNER AS REQUIRED.
3	PIPING TO BE REPLACED UNDER SEPARATE PROJECT BY OWNER. COORDINATE EXTENT AND MATERIAL AND COORDINATE CONNECTION AS REQUIRED.

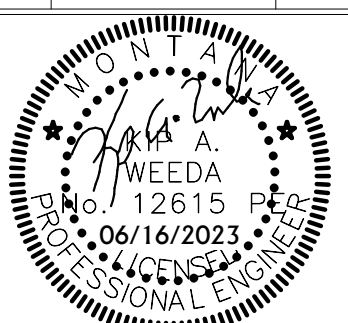


**BASEMENT PLUMBING DEMOLITION PLAN**  
 1/4" = 1'-0"

100% CONSTRUCTION DOCUMENTS



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REV.	DESCRIPTION	DATE
2	CFA SALAD BAR COMMENTS	05/10/23



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**A/E#00-00-00**  
**Consultant #:**

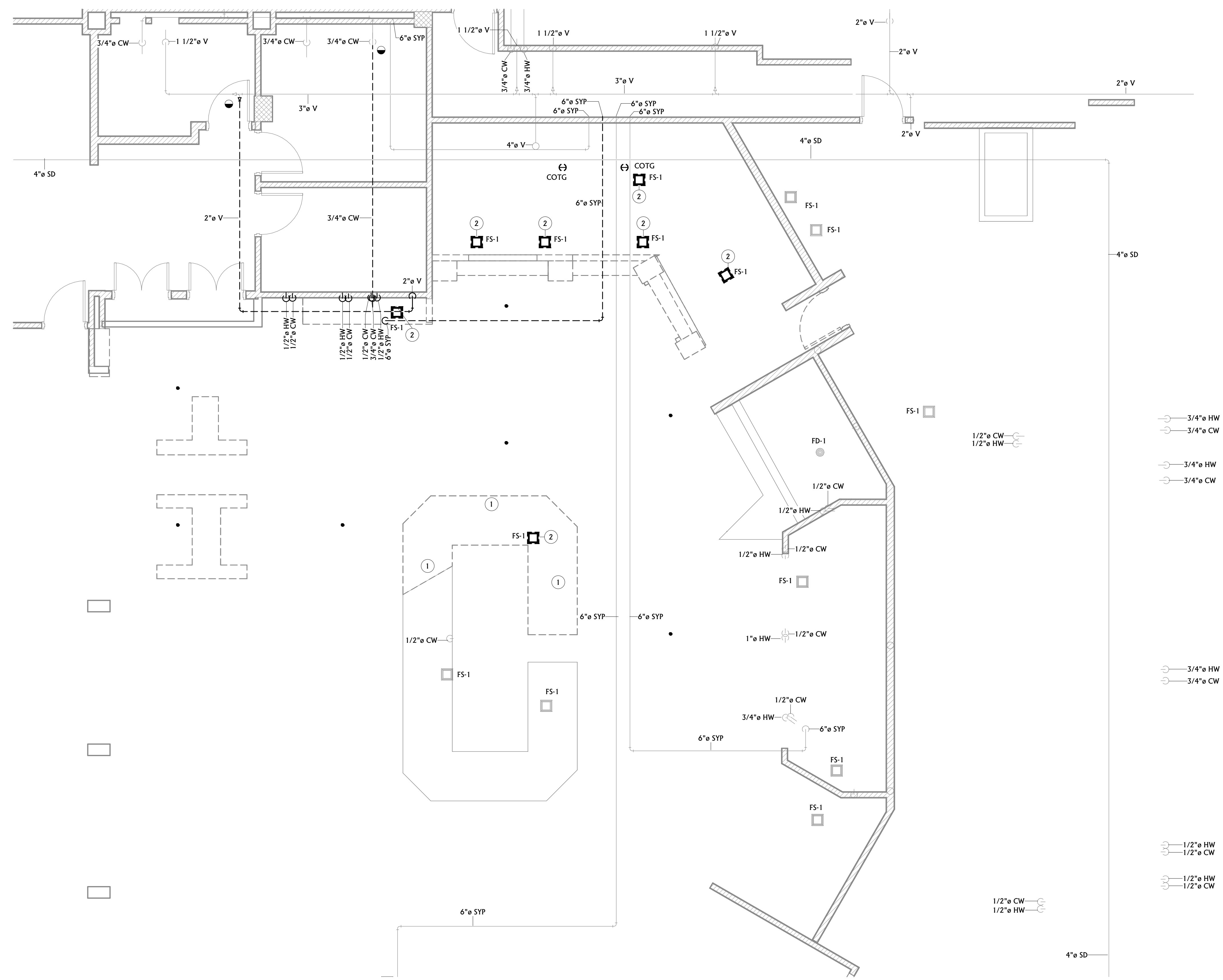
**SHEET TITLE**  
FIRST FLOOR  
PLUMBING  
DEMOLITION PLAN

**SHEET**  
**P2.1**

**DATE**  
**06.16.2023**

PLUMBING GENERAL DEMOLITION NOTES	
A	CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
C	THE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FROM EXISTING DRAWINGS AND VISUAL FIELD OBSERVATIONS WHICH SHALL BE INCLUDED IN THE SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE DEMOLITION AS REQUIRED TO ACCOMMODATE CONSTRUCTION.
D	NOTIFY THE OWNER OF ANY SYSTEM SHUT-DOWNS AND APPROXIMATE SHUT-DOWN TIME PRIOR TO COMMENCING WITH WORK.
E	CONTRACTOR SHALL REMOVE ALL DEMO'D MATERIALS FROM BUILDING, UNLESS SPECIFICALLY NOTED TO BE ABANDONED IN PLACE OR RE-USED.
F	DRAWINGS SHOW GENERAL LOCATIONS OF MATERIALS TO BE REMOVED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXTENT OF WORK REQUIRED FOR A COMPLETE SYSTEM REMOVAL.
G	OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT/MATERIAL CALLED OUT TO BE REMOVED. CONTRACTOR SHALL PRESENT ALL DEMO'D EQUIPMENT/MATERIAL TO OWNER PRIOR TO REMOVING FROM SITE.
H	SEAL ALL ABANDONED PLUMBING PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH UL-APPROVED FIRE RATED SYSTEM.
I	CONTRACTOR SHALL REMOVE ALL HANGERS AND SUPPORTS SERVING EQUIPMENT AND PIPING DEMO'D IN THIS PROJECT. HANGERS WHICH ARE PERMANENTLY ATTACHED TO THE EXISTING STRUCTURE SHALL BE CUT BACK TO A MINIMUM OF NO LESS THAN 1" FROM THEIR EXISTING CONNECTION POINT TO THE EXISTING STRUCTURE. DEMO ALL ACCESSIBLE SEWER AND WATER LINES BACK TO AN ACTIVE MAIN. DEAD END LINES ARE NOT ACCEPTABLE.

PLUMBING KEYNOTES	
1	FOOD WELL AT APPROXIMATE LOCATION. REMOVE ALL ASSOCIATED DOMESTIC WATER AND WASTE PIPING AND ASSOCIATED ACCESSORIES. FIELD COORDINATE UTILITIES SERVING EQUIPMENT AS REQUIRED.
2	DEMO FLOOR SINK AT APPROXIMATE LOCATION. PATCH FLOOR AS REQUIRED.



**1**  
**P2.1**  
**FIRST FLOOR PLUMBING DEMOLITION PLAN**  
1/4" = 1'-0"







**1 ROOF PLUMBING DEMO PLAN**  
 P2.2 1/16" = 1'-0"

PLUMBING GENERAL DEMOLITION NOTES	
A	CONTRACTOR SHALL CUT ALL FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILING, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
B	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
C	THE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FROM EXISTING DRAWINGS AND VISUAL FIELD OBSERVATIONS WHICH SHALL BE INCLUDED IN THE SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE DEMOLITION AS REQUIRED TO ACCOMMODATE CONSTRUCTION.
D	NOTIFY THE OWNER OF ANY SYSTEM SHUT-DOWNS AND APPROXIMATE SHUT-DOWN TIME PRIOR TO COMMENCING WITH WORK.
E	CONTRACTOR SHALL REMOVE ALL DEMO'D MATERIALS FROM BUILDING, UNLESS SPECIFICALLY NOTED TO BE ABANDONED IN PLACE OR RE-USED.
F	DRAWINGS SHOW GENERAL LOCATIONS OF MATERIALS TO BE REMOVED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXTENT OF WORK REQUIRED FOR A COMPLETE SYSTEM REMOVAL.
G	OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT/MATERIAL CALLED OUT TO BE REMOVED. CONTRACTOR SHALL PRESENT ALL DEMO'D EQUIPMENT/MATERIAL TO OWNER PRIOR TO REMOVING FROM SITE.
H	SEAL ALL ABANDONED PLUMBING PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH UL-APPROVED FIRE RATED SYSTEM.
I	CONTRACTOR SHALL REMOVE ALL HANGERS AND SUPPORTS SERVING EQUIPMENT AND PIPING DEMO'D IN THIS PROJECT. HANGERS WHICH ARE PERMANENTLY ATTACHED TO THE EXISTING STRUCTURE SHALL BE CUT BACK TO A MINIMUM OF NO LESS THAN 1" FROM THEIR EXISTING CONNECTION POINT TO THE EXISTING STRUCTURE. DEMO ALL ACCESSIBLE SEWER AND WATER LINES BACK TO AN ACTIVE MAIN. DEAD END LINES ARE NOT ACCEPTABLE.

PLUMBING KEYNOTES	
I	ROOFTOP EQUIPMENT LOCATED AT APPROXIMATE LOCATION. PROVIDED FOR REFERENCE.



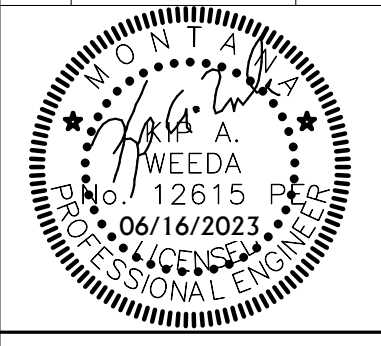
**MSU-CPDC**  
 MONTANA STATE UNIVERSITY  
 BOZEMAN, MONTANA  
 PHONE: 406.994.5413  
 FAX: 406.994.5665

**MSU / SUB / FOOD VENDOR  
 RENOVATION PROJECT**

100% CONSTRUCTION DOCUMENTS



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REVIEWED BY: <b>Checker</b>		
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**Consultant #:**

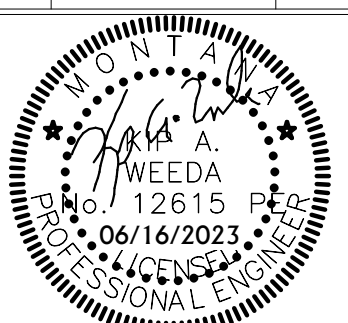
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**ROOF PLUMBING**  
**DEMO PLAN**

**SHEET**  
**P2.2**

**DATE**  
**06.16.2023**



DRAWN BY: <b>Author</b>		
REVIEWED BY: <b>Checker</b>		
REV.	DESCRIPTION	DATE
1	MSU COMMENT RESPONSES	05/04/23



PPA#22-0056  
A/E#00-00-00  
Consultant #:

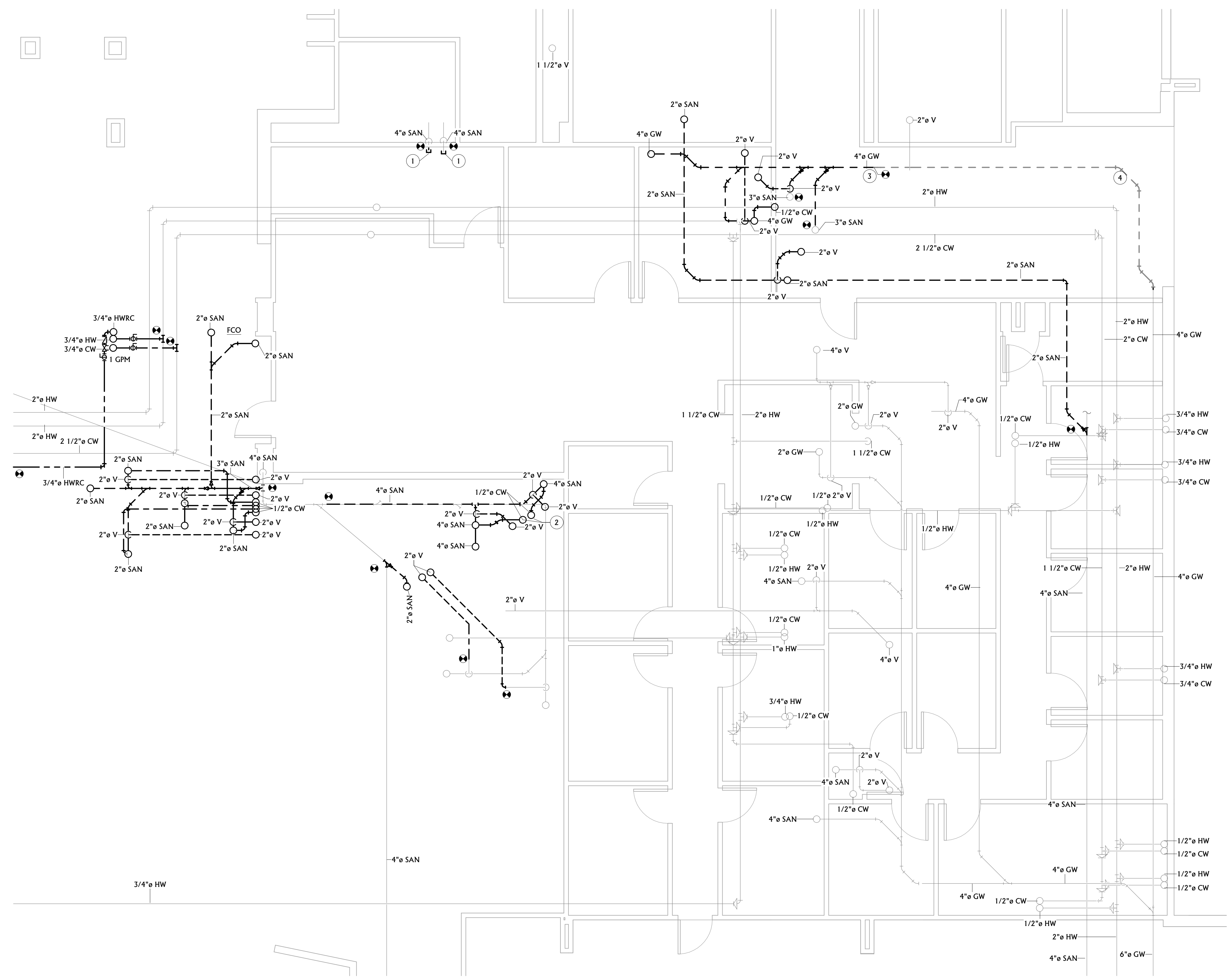
**SHEET TITLE**  
BASEMENT  
PLUMBING REMODEL  
PLAN

**SHEET**  
**P3.0**

**DATE**  
**06.16.2023**

PLUMBING GENERAL NOTES	
A	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
B	REFERENCE ARCHITECTURAL PLANS FOR EXACT FIXTURE LOCATIONS.
C	ALL VALVES LESS THAN 2" SHALL BE BALL VALVES UNLESS OTHERWISE NOTED.
D	COORDINATE UNDERSLAB PIPING WITH FOOTINGS AND STEM WALLS.
E	INSULATION ON ALL DOMESTIC COLD WATER PIPING SHALL BE PROVIDED WITH A CONTINUOUS VAPOR BARRIER. OVERSIZE HANGERS FOR INSULATION SO NO PENETRATION OF THE VAPOR BARRIER OCCURS. PROVIDE INSERTS AND SADDLES AS REQUIRED TO PREVENT INSULATION DAMAGE FROM SLIPP.
F	NO DOMESTIC WATER PIPING SHALL BE ROUTED IN ANY EXTERIOR WALLS.
G	PROVIDE ALL FLOOR DRAINS AND FLOOR SINKS WITH TRAP PRIMERS. PROVIDE WALL ACCESS PANEL FOR TRAP PRIMER ACCESS AS REQUIRED. ACCESS PANELS SHALL BE RATED WHERE REQUIRED.
H	ALL UNDERFLOOR VENT SHALL BE MINIMUM 2".
I	ALL UNDERFLOOR COPPER SHALL BE TYPE "K" SEAMLESS.
J	PROVIDE CLEANOUTS ON ALL LINES SERVING SINKS AND URINALS.
K	PROVIDE WALL CLEANOUTS ON ALL VENT RISERS SERVING FLOOR RECEPTOR WASTE PIPING.
L	SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.

PLUMBING KEYNOTES	
1	CAP EXISTING SANITARY WASTE PIPE AT APPROXIMATE LOCATION.
2	DOMESTIC WATER CONNECTIONS FOR TRAP PRIMERS AT APPROXIMATE LOCATION.
3	CONNECT NEW WASTE PIPING AT APPROXIMATE LOCATION. DOWNSTREAM PIPING TO BE REPLACED UNDER SEPARATE PROJECT BY OWNER. COORDINATE EXTENT AND MATERIAL AND COORDINATE CONNECTION AS REQUIRED.
4	PIPING TO BE REPLACED UNDER SEPARATE PROJECT BY OWNER. COORDINATE EXTENT AND MATERIAL AND COORDINATE CONNECTION AS REQUIRED.



**1** BASEMENT PLUMBING REMODEL PLAN  
P3.0 1/4" = 1'-0"

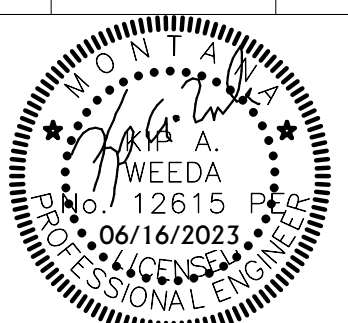
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 REVIEWED BY: **Checker**

REV.	DESCRIPTION	DATE



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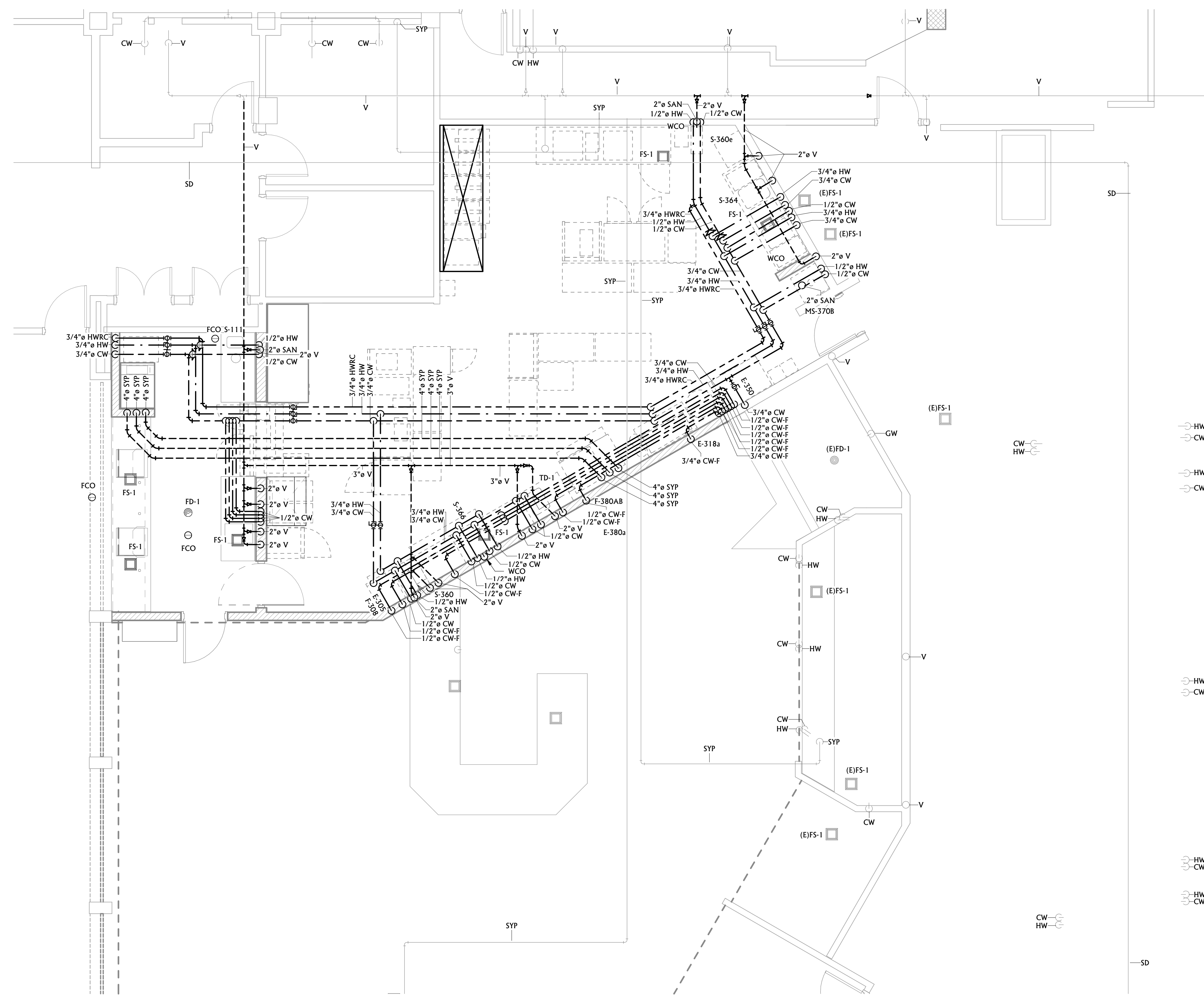
**SHEET TITLE**  
 FIRST FLOOR  
 PLUMBING REMODEL  
 PLAN

**SHEET**  
**P3.1**

**DATE**  
 06.16.2023

PLUMBING GENERAL NOTES	
A	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
B	REFERENCE ARCHITECTURAL PLANS FOR EXACT FIXTURE LOCATIONS.
C	ALL VALVES LESS THAN 2" SHALL BE BALL VALVES UNLESS OTHERWISE NOTED.
D	COORDINATE UNDERSLAB PIPING WITH FOOTINGS AND STEM WALLS.
E	INSULATION ON ALL DOMESTIC COLD WATER PIPING SHALL BE PROVIDED WITH A CONTINUOUS VAPOR BARRIER. OVERSIZE HANGERS FOR INSULATION SO NO PENETRATION OF THE VAPOR BARRIER OCCURS. PROVIDE INSERTS AND SADDLES AS REQUIRED TO PREVENT INSULATION DAMAGE FROM SLIP.
F	NO DOMESTIC WATER PIPING SHALL BE ROUTED IN ANY EXTERIOR WALLS.
G	PROVIDE ALL FLOOR DRAINS AND FLOOR SINKS WITH TRAP PRIMERS. PROVIDE WALL ACCESS PANEL FOR TRAP PRIMER ACCESS AS REQUIRED. ACCESS PANELS SHALL BE RATED WHERE REQUIRED.
H	ALL UNDERFLOOR VENT SHALL BE MINIMUM 2".
I	ALL UNDERFLOOR COPPER SHALL BE TYPE "K" SEAMLESS.
J	PROVIDE CLEANOUTS ON ALL LINES SERVING SINKS AND URINALS.
K	PROVIDE WALL CLEANOUTS ON ALL VENT RISERS SERVING FLOOR RECEPTOR WASTE PIPING.
L	SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.

PLUMBING KEYNOTES	
HW	Hot Water
CW	Cold Water
HW	Hot Water
CW	Cold Water
HW	Hot Water
CW	Cold Water



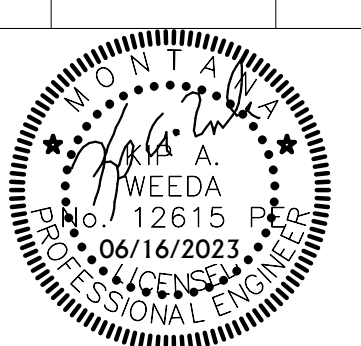
**FIRST FLOOR PLUMBING REMODEL PLAN**  
 1/4" = 1'-0"





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REVIEWED BY: **Checker**

REV.	DESCRIPTION	DATE



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A/E#00-00-00

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**SHEET TITLE**  
ROOF PLUMBING  
REMODEL PLAN

**SHEET**  
**P3.2**

**DATE**  
**06.16.2023**

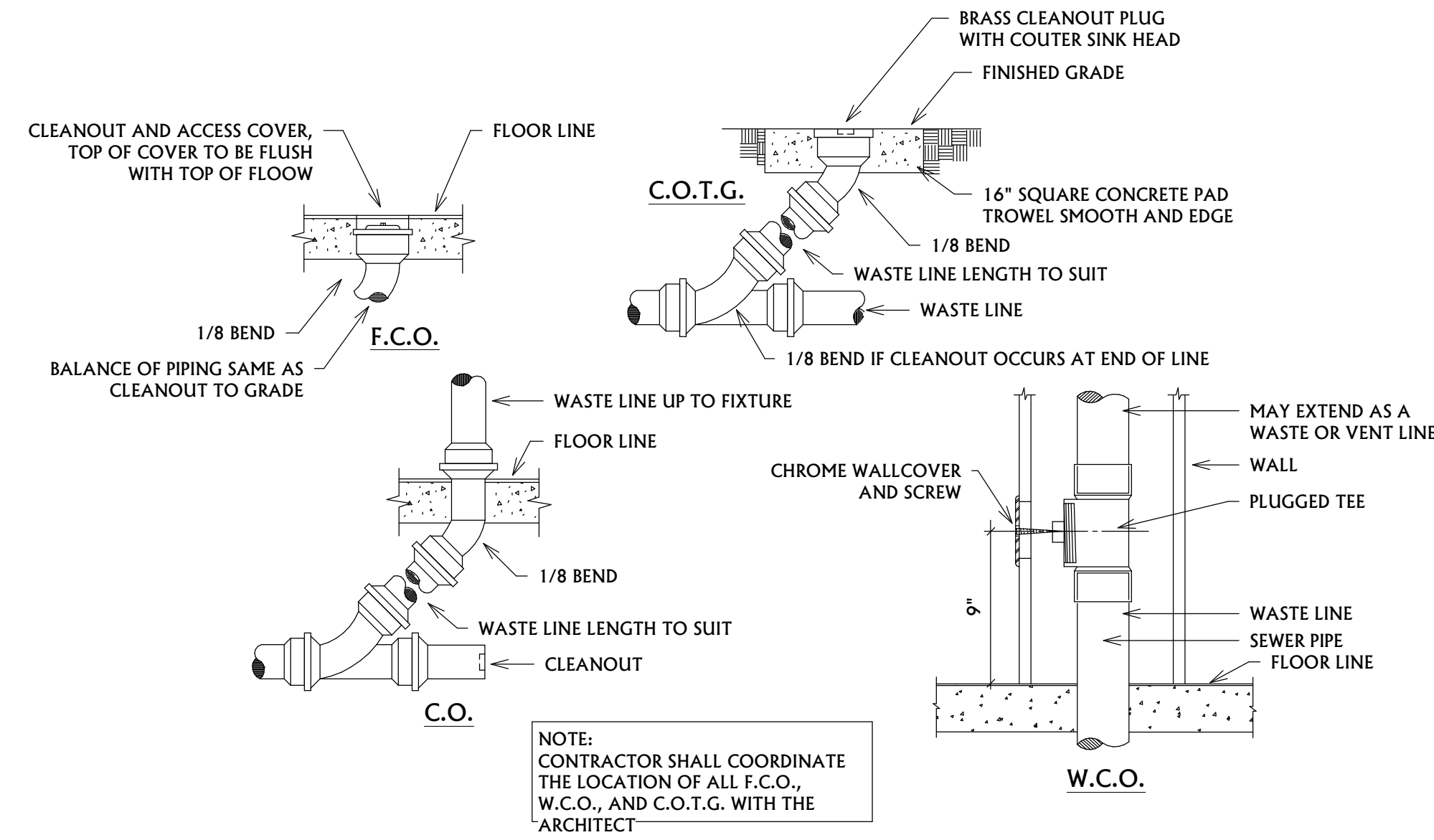
PLUMBING GENERAL NOTES	
A	COORDINATE HVAC AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AS REQUIRED.
B	REFERENCE ARCHITECTURAL PLANS FOR EXACT FIXTURE LOCATIONS.
C	ALL VALVES LESS THAN 2" SHALL BE BALL VALVES UNLESS OTHERWISE NOTED.
D	COORDINATE UNDERSLAB PIPING WITH FOOTINGS AND STEM WALLS.
E	INSULATION ON ALL DOMESTIC COLD WATER PIPING SHALL BE PROVIDED WITH A CONTINUOUS VAPOR BARRIER. OVERSIZE HANGERS FOR INSULATION SO NO PENETRATION OF THE VAPOR BARRIER OCCURS. PROVIDE INSERTS AND SADDLES AS REQUIRED TO PREVENT INSULATION DAMAGE FROM SLIPP
F	NO DOMESTIC WATER PIPING SHALL BE ROUTED IN ANY EXTERIOR WALLS.
G	PROVIDE ALL FLOOR DRAINS AND FLOOR SINKS WITH TRAP PRIMERS. PROVIDE WALL ACCESS PANEL FOR TRAP PRIMER ACCESS AS REQUIRED. ACCESS PANELS SHALL BE RATED WHERE REQUIRED.
H	ALL UNDERFLOOR VENT SHALL BE MINIMUM 2".
I	ALL UNDERFLOOR COPPER SHALL BE TYPE "K" SEAMLESS.
J	PROVIDE CLEANOUTS ON ALL LINES SERVING SINKS AND URINALS.
K	PROVIDE WALL CLEANOUTS ON ALL VENT RISERS SERVING FLOOR RECEPTOR WASTE PIPING.
L	SHALL CUT ALL FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO PERFORM THE WORK DEPICTED IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL PATCH ALL ASSOCIATED FLOORS, WALLS, CEILINGS, AND ROOF AS REQUIRED TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.

PLUMBING KEYNOTES	
1	EXISTING PLUMBING VENT LOCATED AT APPROXIMATE LOCATION.
2	ROOFTOP EQUIPMENT LOCATED AT APPROXIMATE LOCATION. PROVIDED FOR REFERENCE.

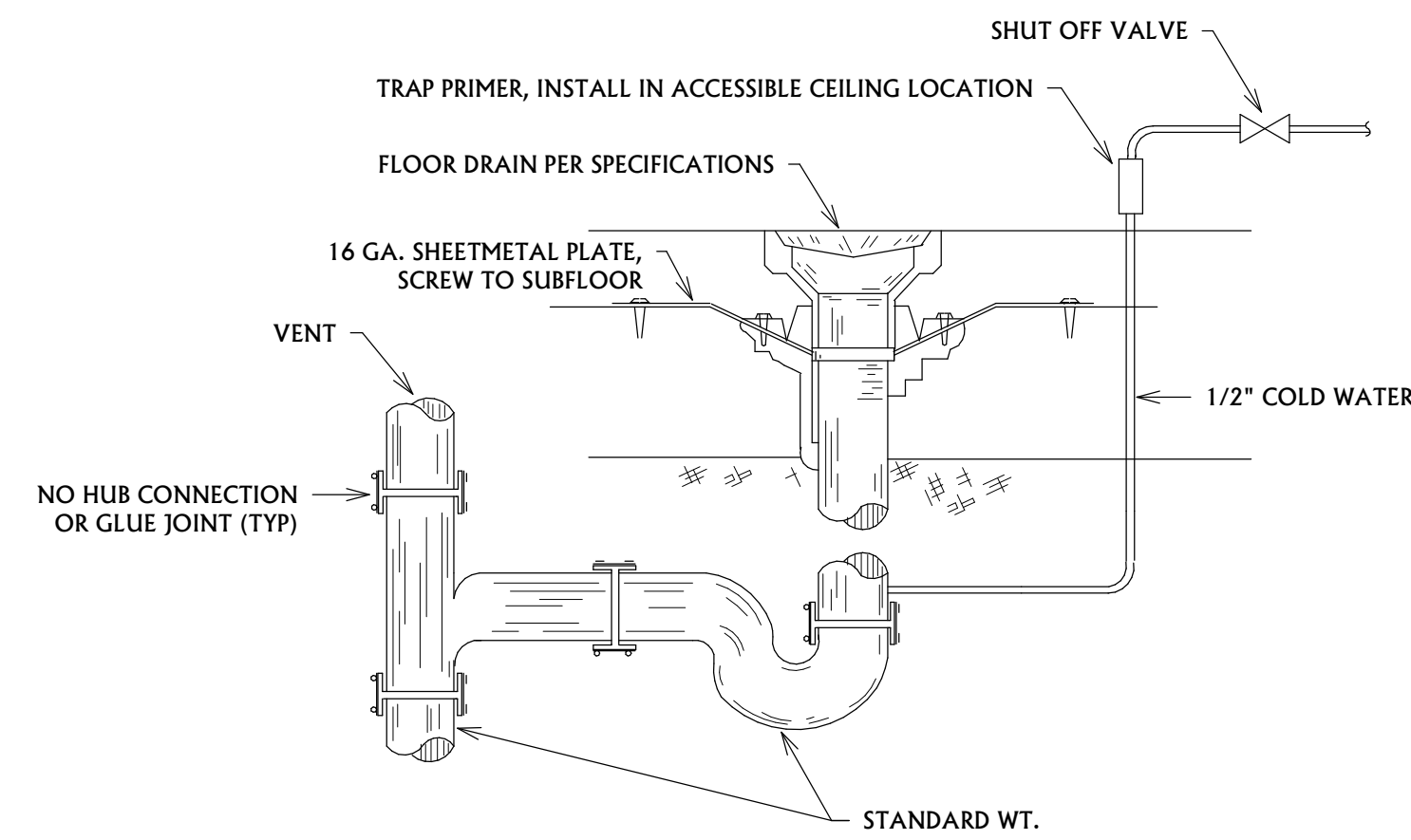


**1** ROOF PLUMBING REMODEL PLAN  
P3.2 1/16" = 1'-0"

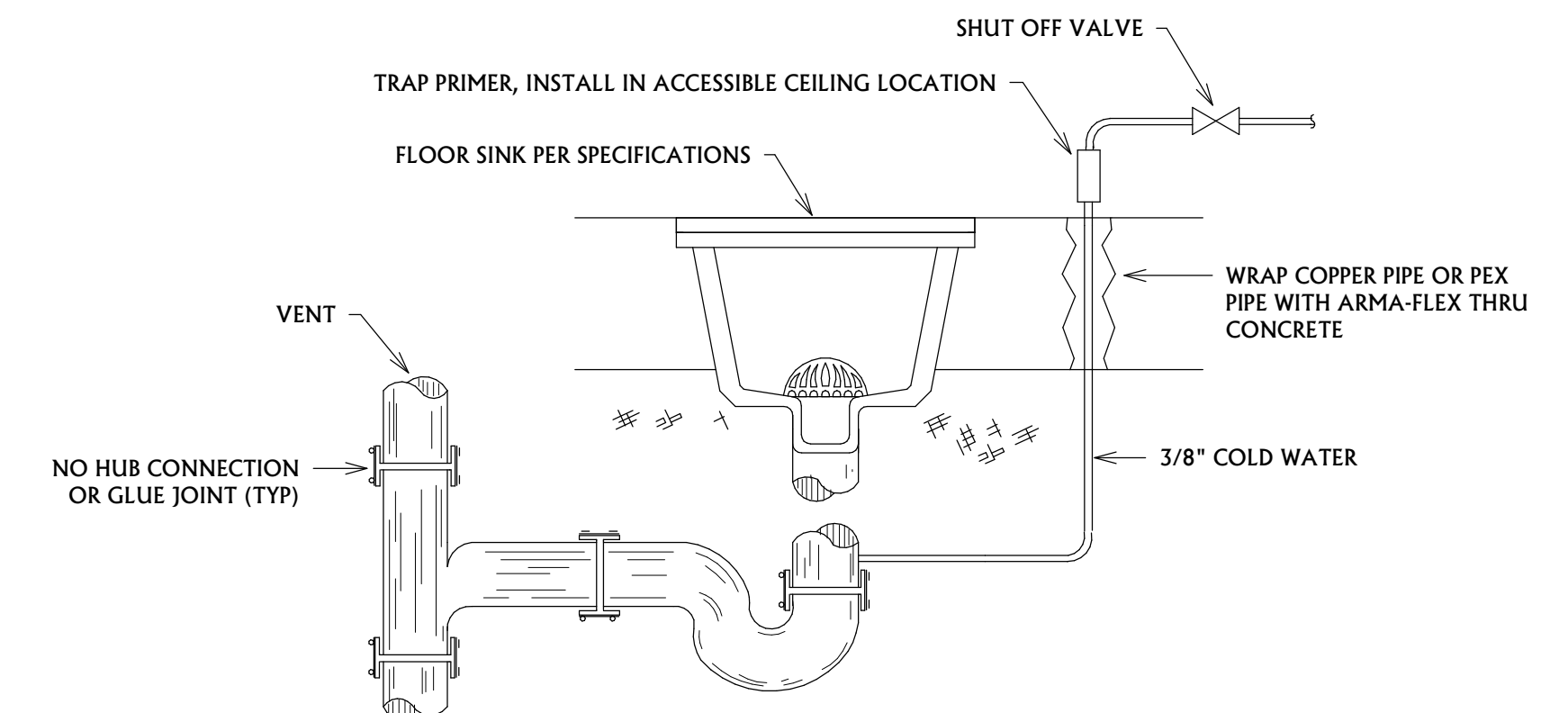




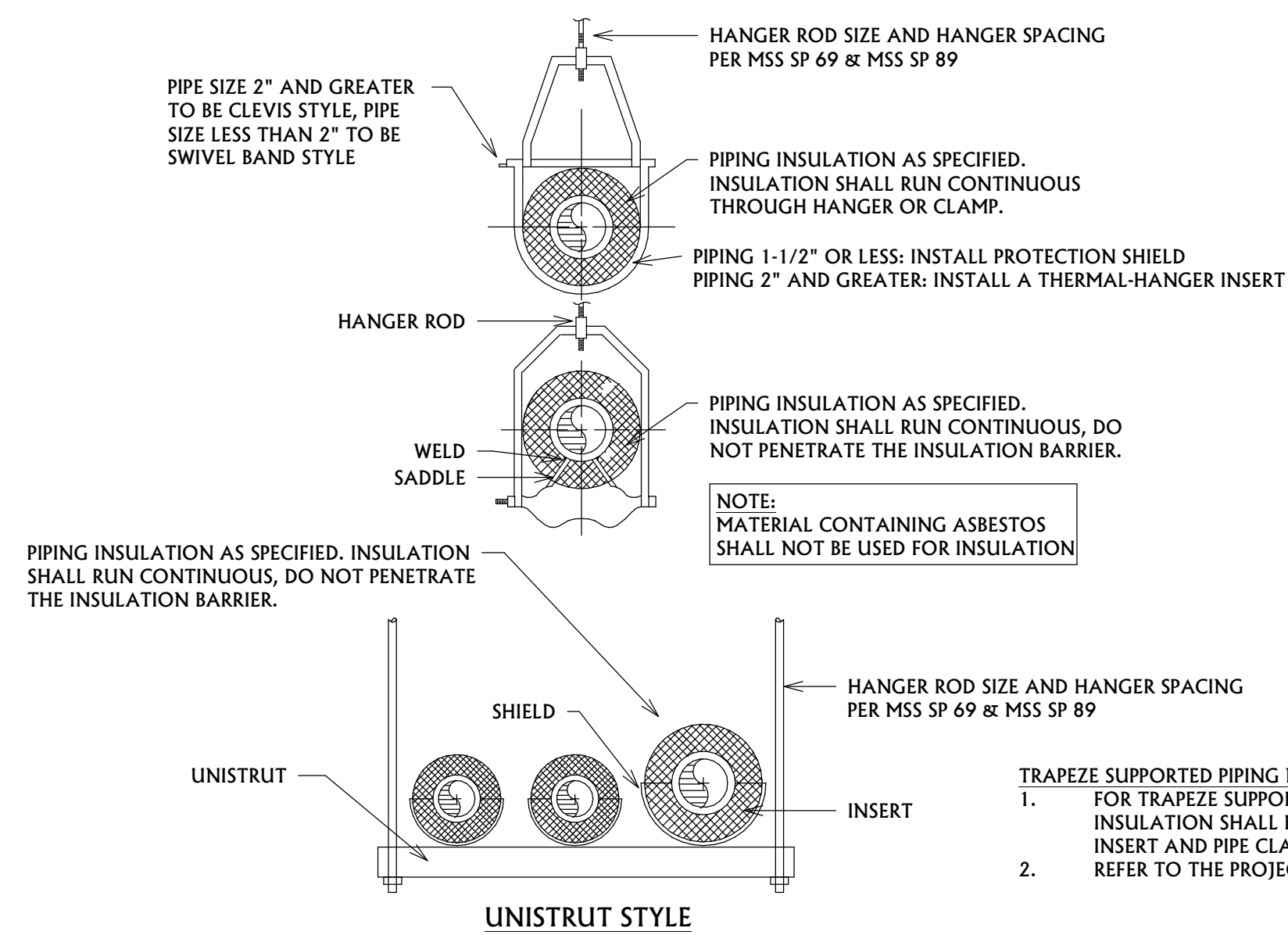
**1 CLEAN OUT DETAILS**  
NOT TO SCALE



**2 FLOOR DRAIN DETAIL**  
NOT TO SCALE



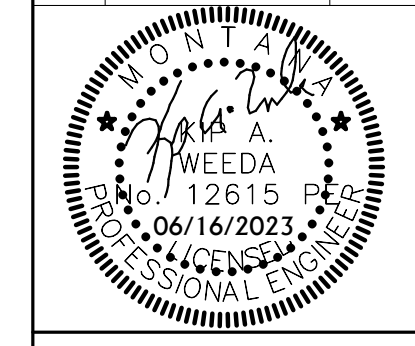
**3 FLOOR SINK DETAIL**  
NOT TO SCALE



**4 PIPE HANGER DETAILS**  
NOT TO SCALE

**TRAPEZE SUPPORTED PIPING NOTES:**  
1. FOR TRAPEZE SUPPORTED PIPING, 1-1/2" AND LESS PIPING INSTALL PROTECTION SHIELD AND PIPE CLAMP, INSULATION SHALL BE CONTINUOUS. 2" AND GREATER PIPING INSTALL THERMAL-HANGER SHIELD INSERT AND PIPE CLAMP, INSULATION SHALL BE CONTINUOUS.  
2. REFER TO THE PROJECT GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

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REVIEWED BY: Checker		
REV.	DESCRIPTION	DATE



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A/E#00-00-00  
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**SHEET TITLE**  
PLUMBING DETAILS

**SHEET**  
**P4.0**

**DATE**  
06.16.2023