

**ARCHITECT:**  
**TRAMONTE DESIGN STUDIO**  
4203 YOAKUM BLVD, SUITE 450  
HOUSTON, TX 77006  
713.874.6404  
CONTACT: OLIVER SANCHEZ  
OSANCHEZ@TRAMONTEDESIGN.COM

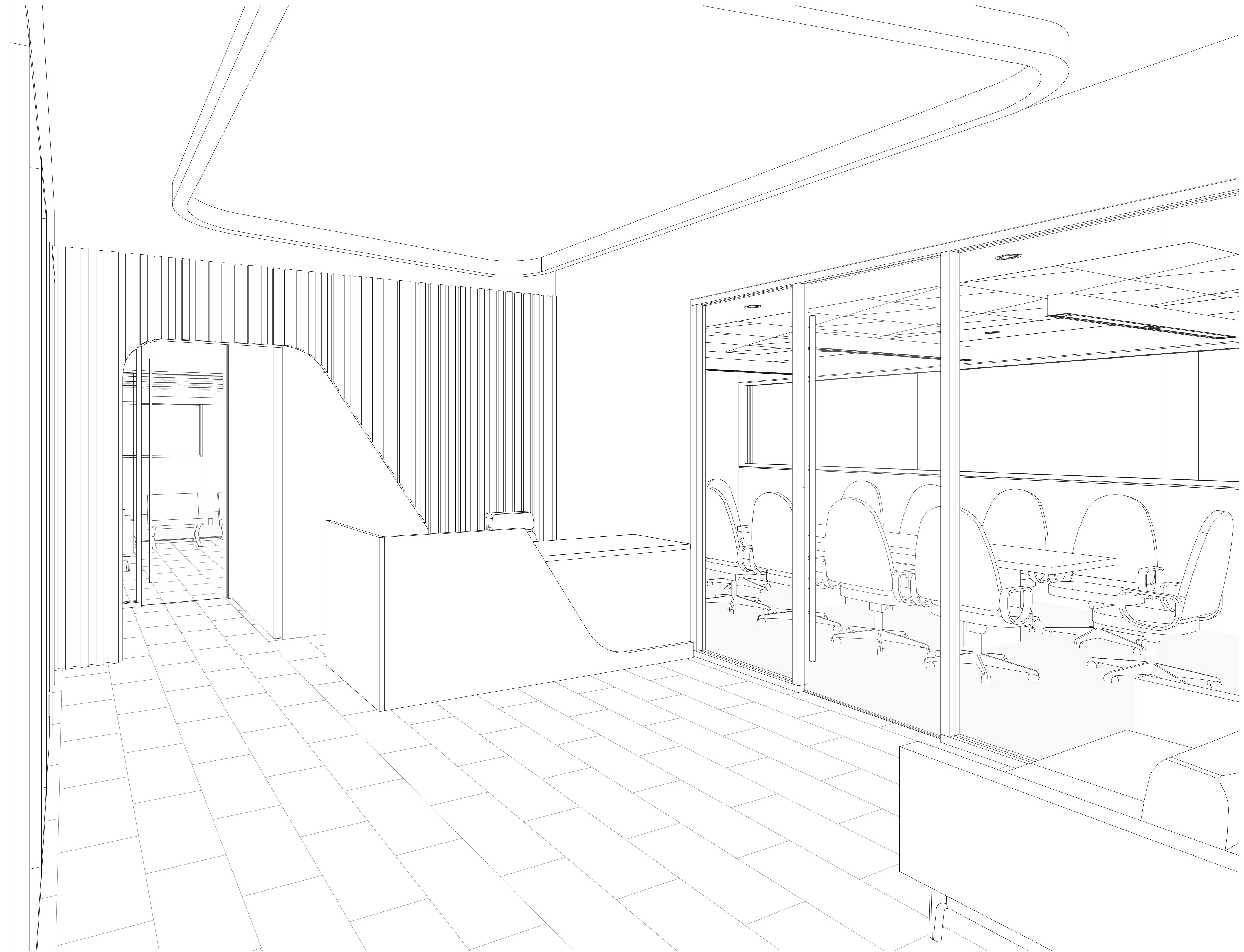
**INTERIOR DESIGNER:**  
**TRAMONTE DESIGN STUDIO**  
4203 YOAKUM BLVD, SUITE 450  
HOUSTON, TX 77006  
713.874.6404  
CONTACT: BLAIR MORGAN  
BMORGAN@TRAMONTEDESIGN.COM

**MEP ENGINEER:**  
**DIALECTIC ENGINEERING**  
310 W. 20TH ST. STE. 100  
KANSAS CITY, MO 64108  
816.997.9601  
CONTACT: SCOTT THRAEN  
SCOTT.THRAEN@DIALECTICENG.COM

**STRUCTURAL ENGINEER:**  
**FRACTAL STRUCTURAL**  
9722 GASTON RD STE. 150-241  
KATY, TX 77494  
832.404.2280  
CONTACT: OSCAR VALDEZ  
OSCAR.VALDEZ@FRACTALSTRUCTURAL.COM

**CIVIL ENGINEER:**  
**GOODE FAITH ENGINEERING**  
1620 LA JAITA DR STE 300  
CEDAR PARK, TX 78613  
CONTACT: SHERRY ALLSUP  
SHERRY@GOODEFAITHENG.COM

**OWNER:**  
**MIRA SAFETY**  
7301 RANCH RD 620 N STE 155 #259  
AUSTIN, TX 78726  
888.316.1462  
CONTACT: TATIANA MIRONOVA  
TANYA@MIRASAFETY.COM



# OFFICE REMODEL

# MIRA SAFETY 1713 HUR INDUSTRIAL BLVD, CEDAR PARK, TX 78613

tramonte  
design | studio  
4203 Yoakum Blvd, Suite 450 Houston, TX 77006



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

△ Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

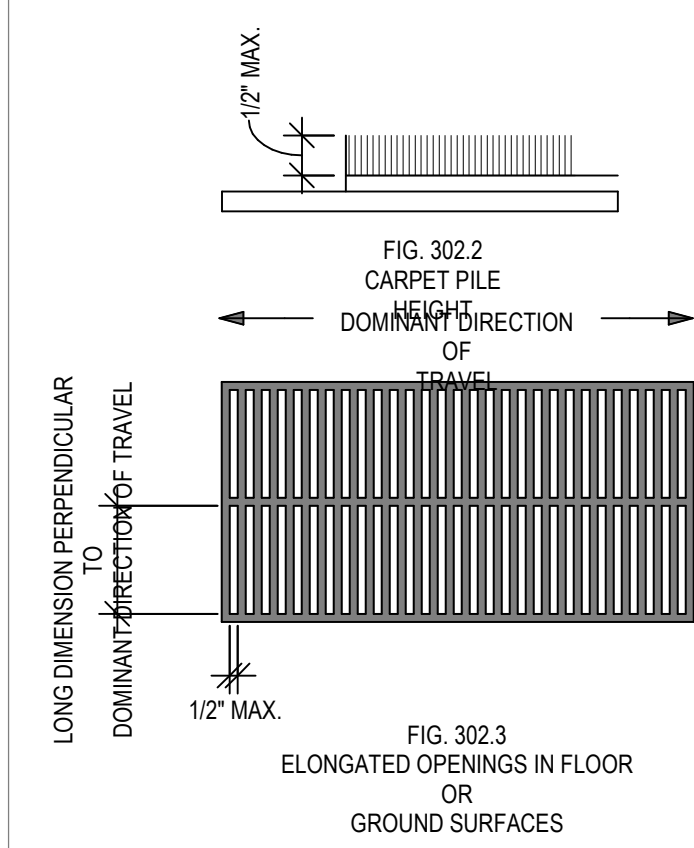
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

## G-001

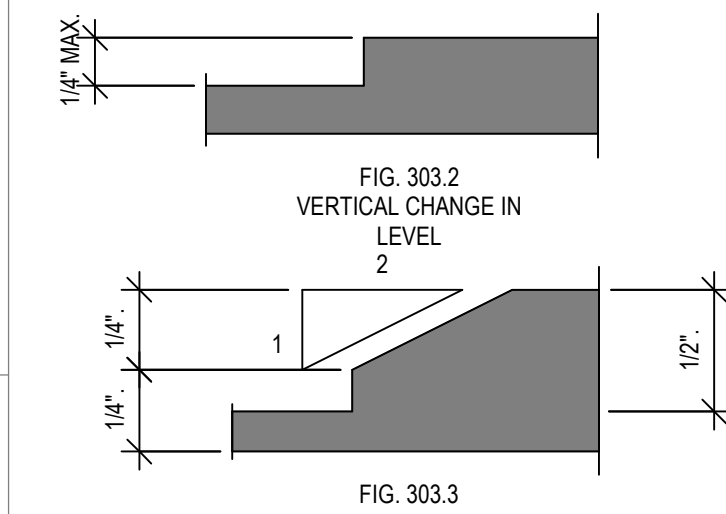
COVER SHEET



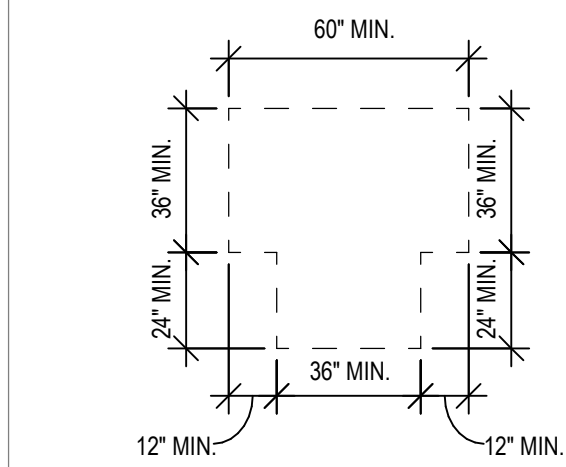
**302 FLOOR OR GROUND SURFACES**



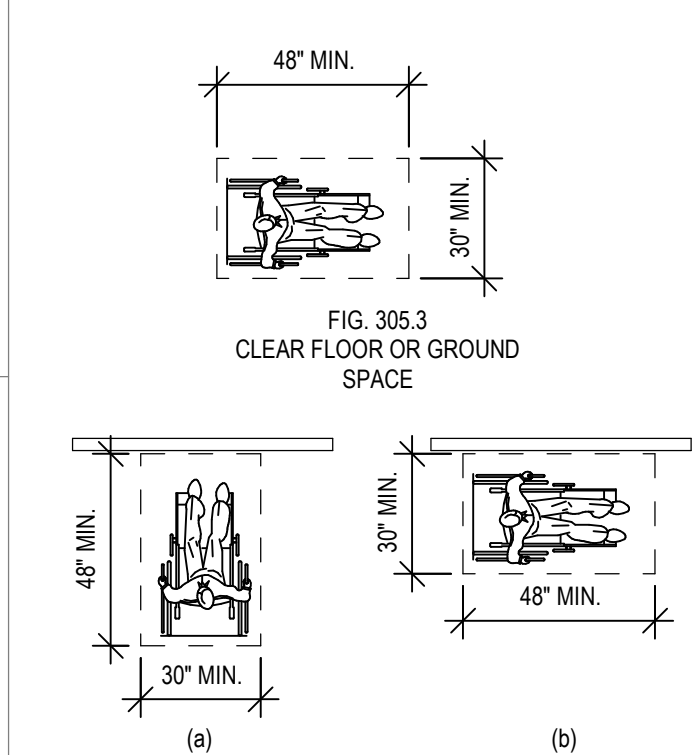
**303 CHANGES IN LEVEL**



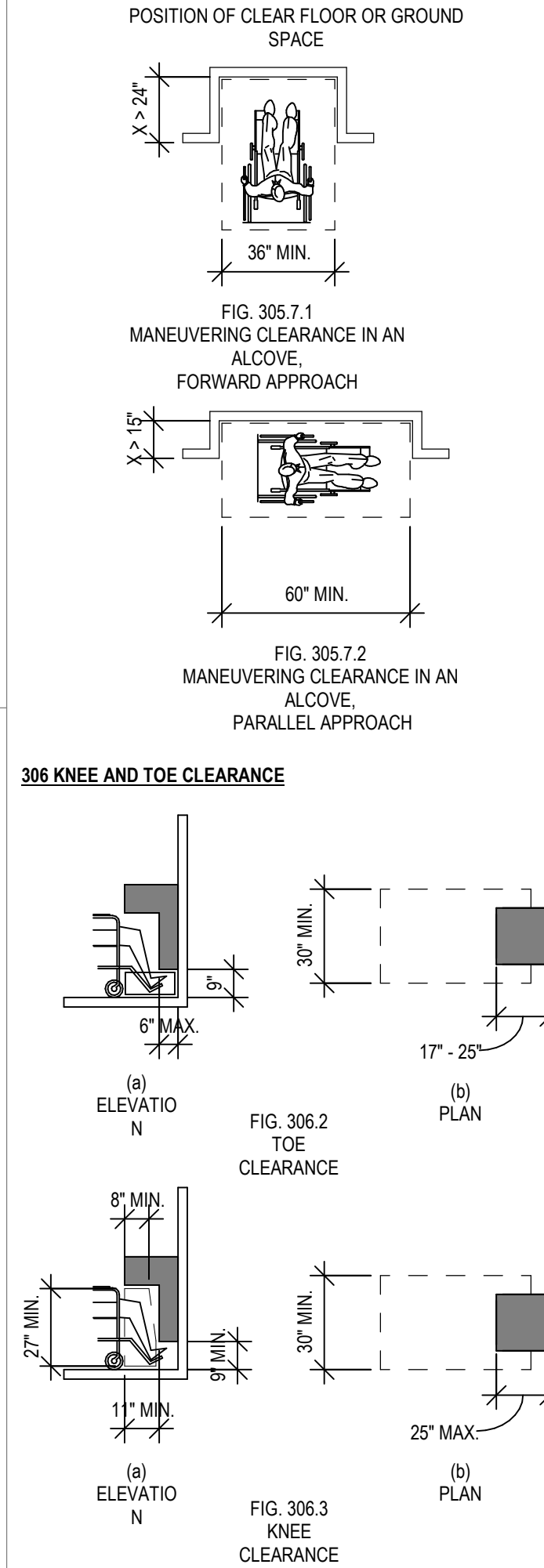
**304 TURNING SPACE**



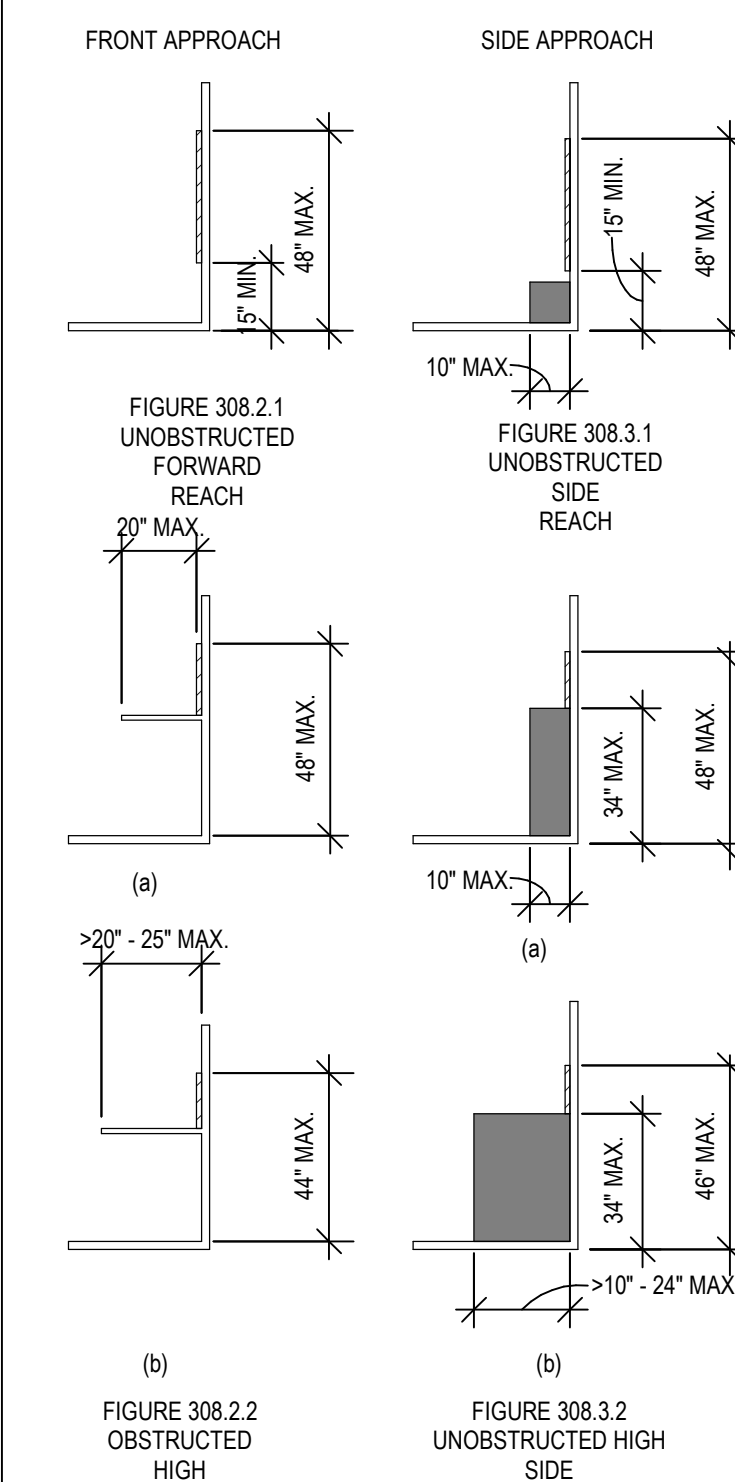
**305 CLEAR FLOOR OR GROUND SPACE**



**306 KNEE AND TOE CLEARANCE**



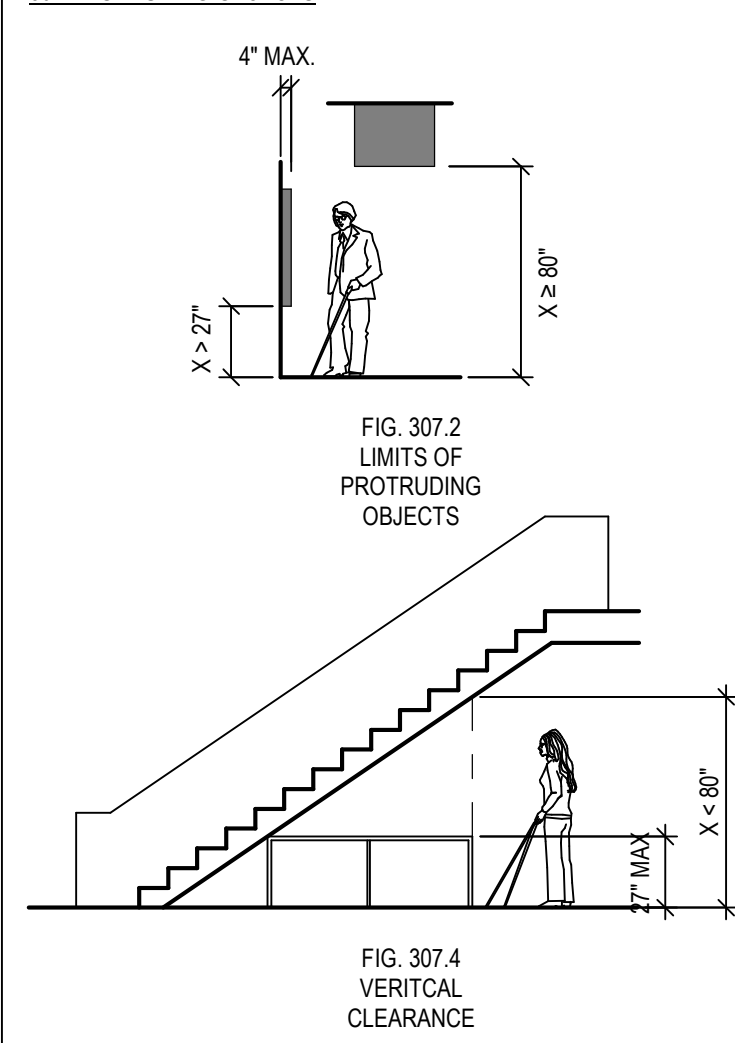
**308 REACH RANGES**



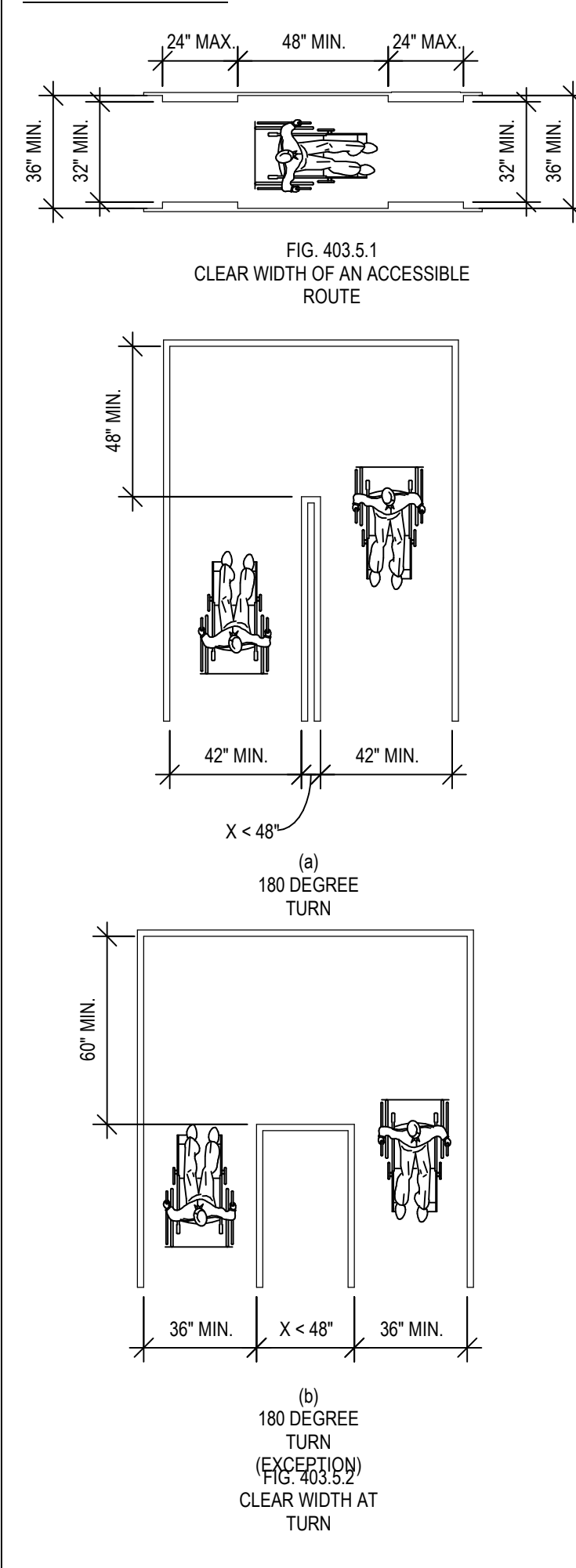
**CHILDREN'S REACH RANGES**

FORWARD OR SIDE REACH	AGES 3-4	AGES 5-8	AGES 9-12
HIGH (MAXIMUM)	36 in.	40 in.	44 in.
LOW (MINIMUM)	20 in.	18 in.	16 in.

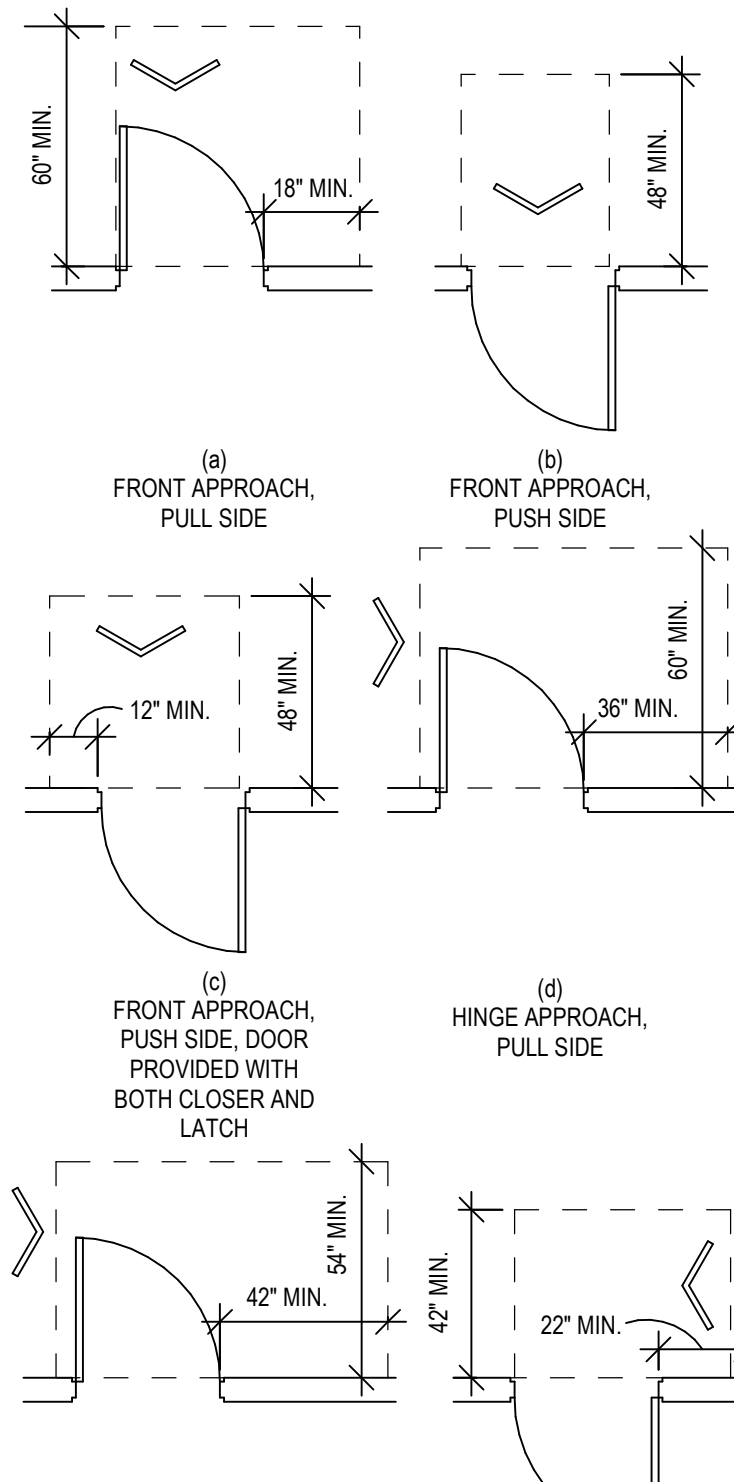
**307 PROTRUDING OBJECTS**



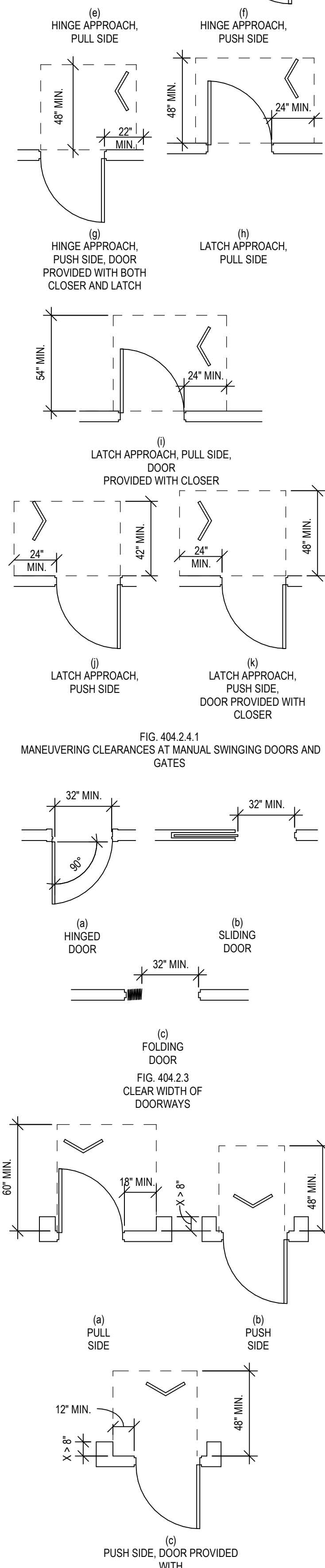
**403 WALKING SURFACES**



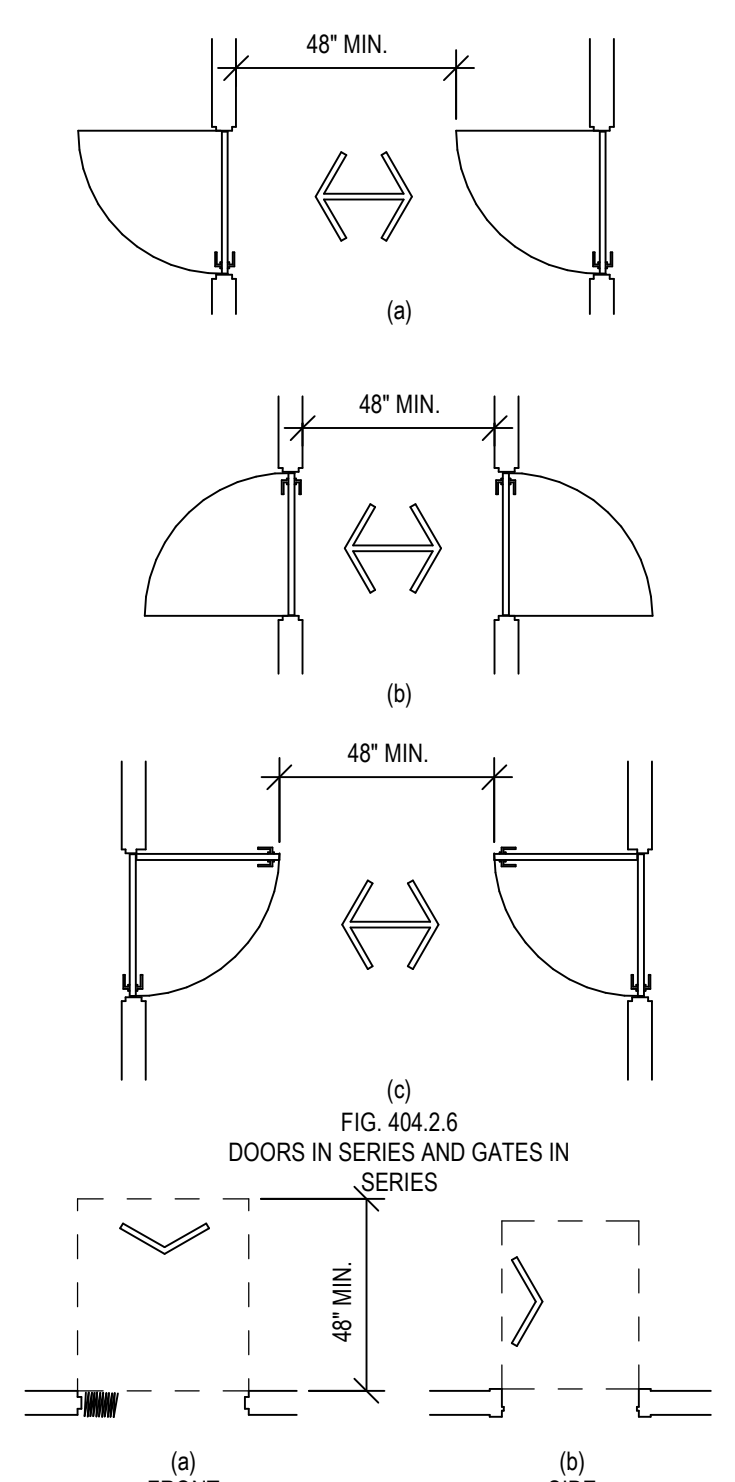
**404 DOORS, DOORWAYS, & GATES**



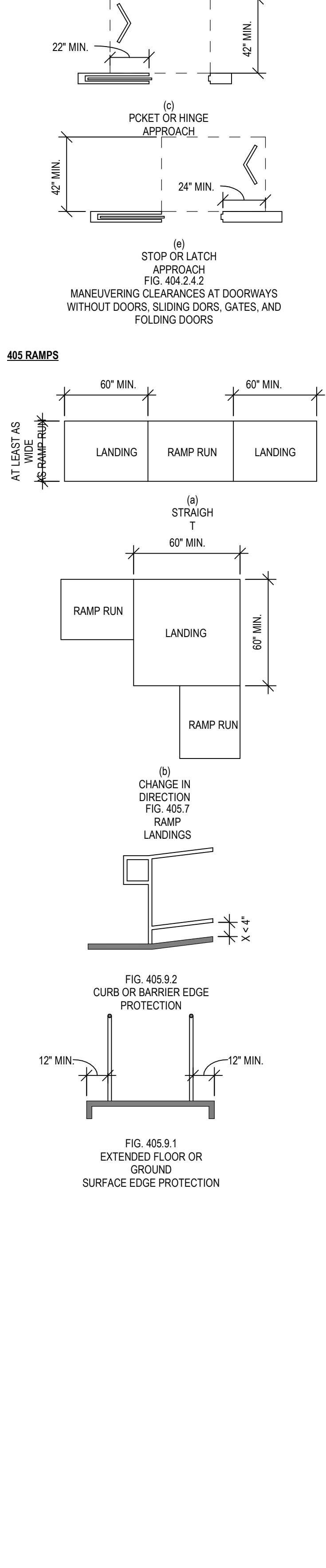
**405 RAMPS**



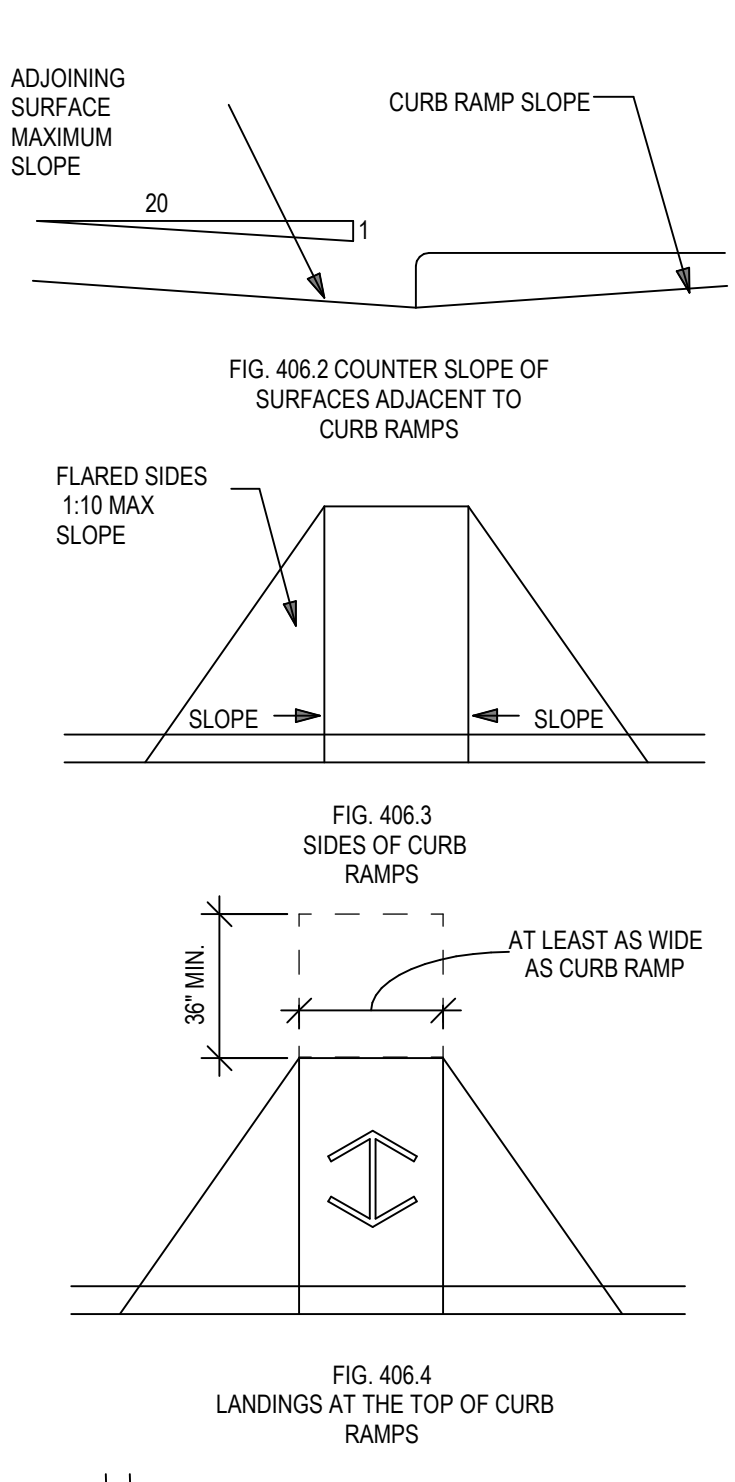
**404 DOORS, DOORWAYS, & GATES (CONT.)**



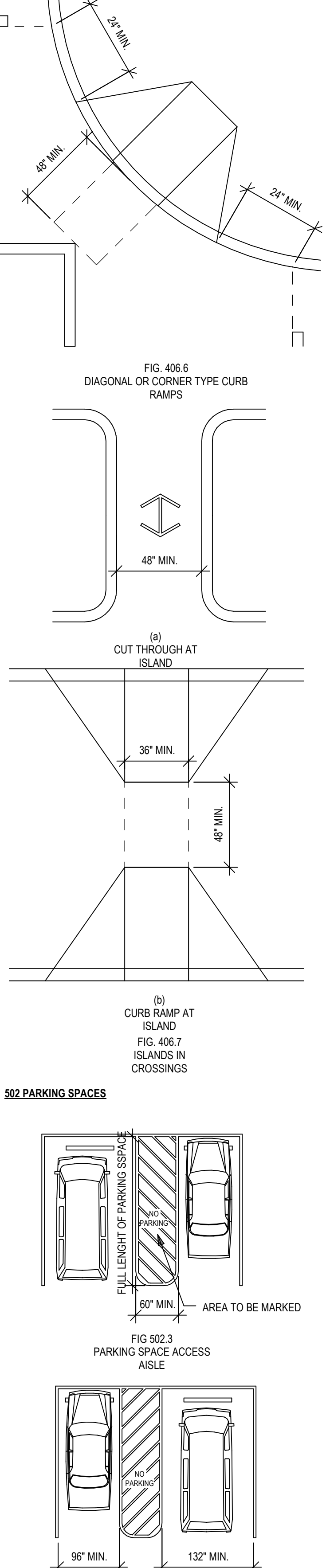
**405 RAMPS (CONT.)**



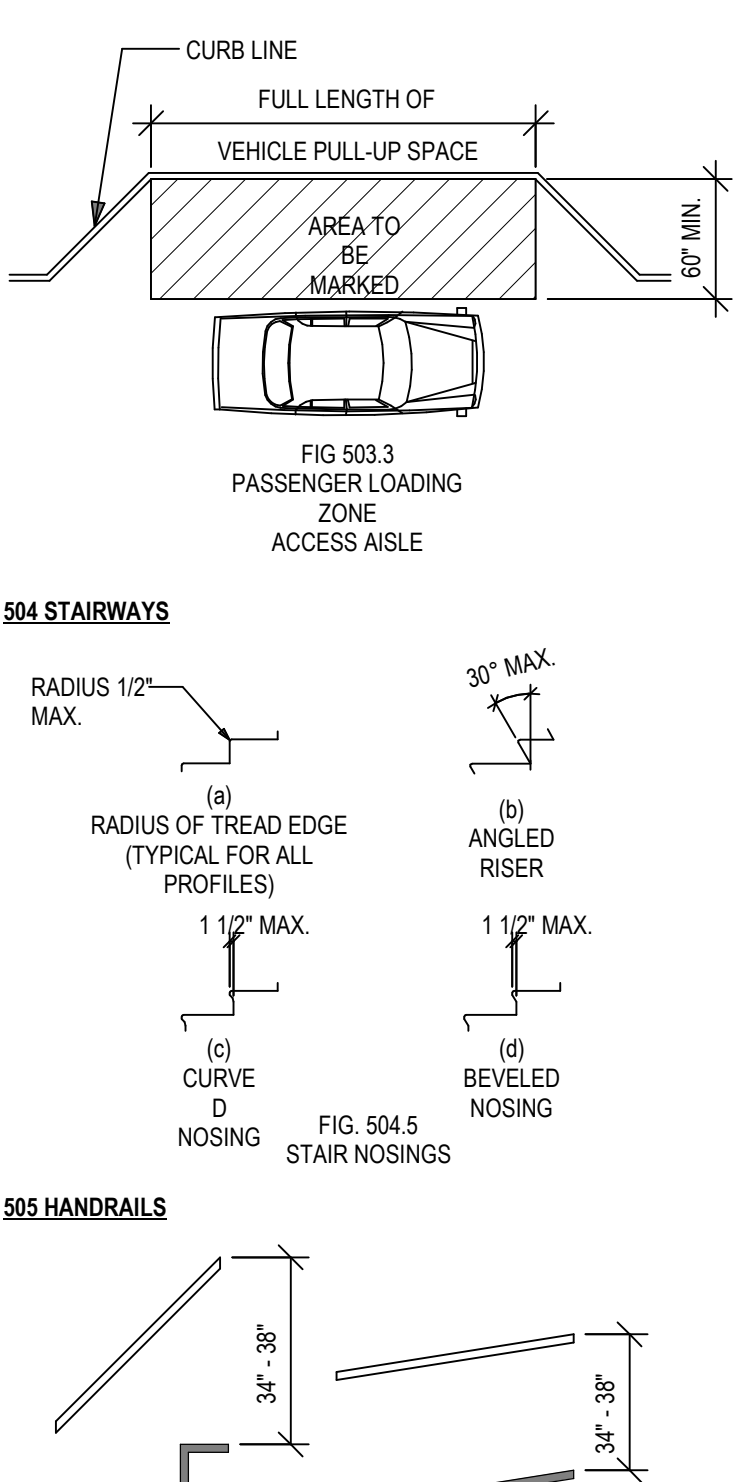
**406 CURB RAMPS**



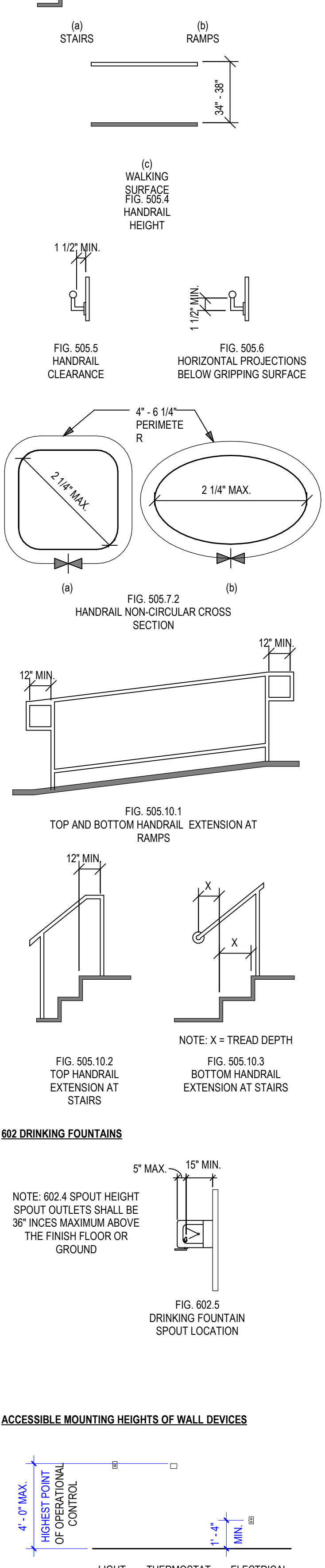
**502 PARKING SPACES**



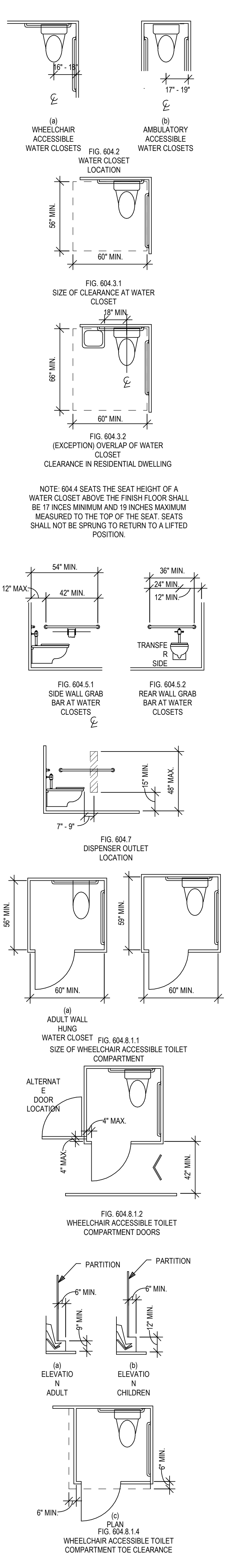
**503 PASSENGER LOADING ZONES**



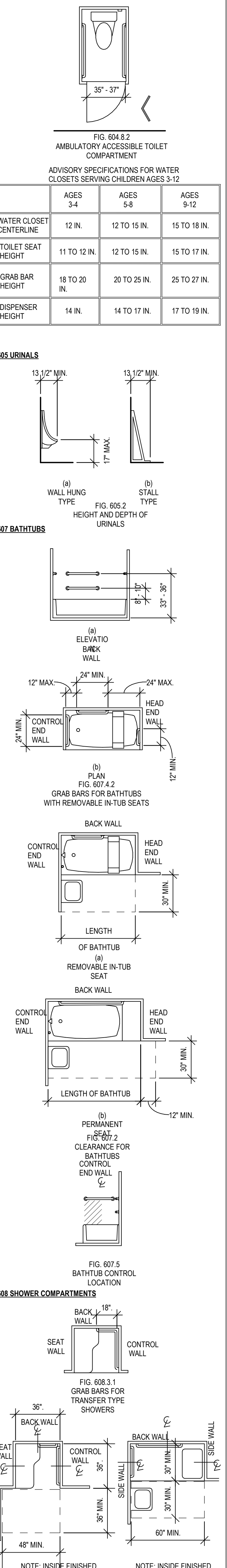
**504 STAIRWAYS**



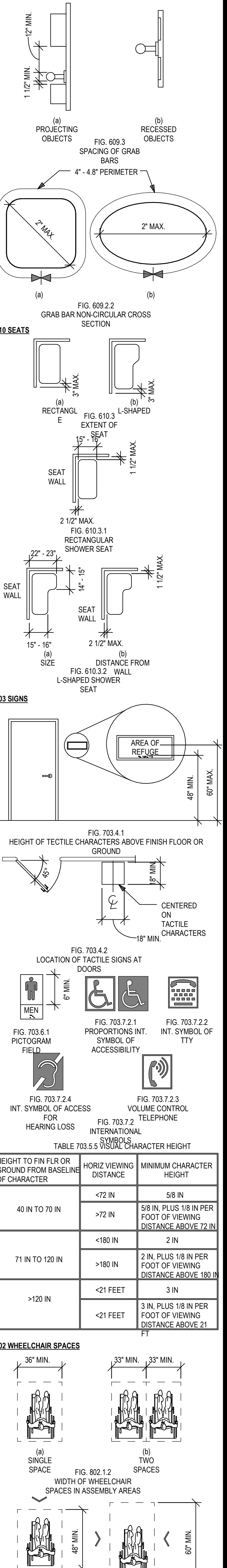
**604 TOILET AND BATH ROOMS**



**604 TOILET AND BATH ROOMS (CONT.)**



**608 GRAB BARS**









### 1.0 DEVELOPER AND SITE INFORMATION:

PROJECT: MIRA SAFETY - RENOVATION & MEZZANINE ADDITION  
 BUILDING OWNER / DEVELOPER: -  
 PRIMARY CONTACT: -  
 PHONE: -  
 EMAIL: -  
 SITE ADDRESS: 1713 HUR INDUSTRIAL BLVD  
 CEDAR PARK, TX 78614  
 COUNTY: - TRAVIS COUNTY  
 www.traviscountytx.gov  
 LEGAL DESCRIPTION: - LOT 2 BLK A HUR INDUSTRIAL PARK II SEC 1  
 LOT SIZE: 3.807 ACRES  
 ACCESSOR ACCOUNT NUMBER: - 487030  
 https://stage.travisprodgiscad.com/property-detail/487030  
 PARCEL NUMBER: - 0500400032  
 PIN (GIS MAPPING NUMBER): - 050147

### 4.0 OCCUPANCY / EXITING REQUIREMENTS:

OCCUPANCY CALCULATION:  
 "B" LEVEL 1: (1 PER 150) = 40 OCCUPANTS  
 "B" MEZZANINE: (1 PER 150) = 19 OCCUPANTS  
 "S": (1 PER 300) = 86 OCCUPANTS  
 TOTAL: = 145 OCCUPANTS (IBC TABLE 1004.1.1)

EXITING REQUIREMENTS: (IBC CHAPTER 10)  
 MIN. EGRESS WIDTH: (IBC TABLE 1005.3)  
 STAIRWAYS: 3 INCHES PER OCCUPANT  
 STAIR: 1' 3" x 19" (MEZZANINE OCC.) = 5.7" CLEAR (8" WIDE STAIR PROVIDED)  
 OTHER EGRESS COMPONENTS: 2 INCHES PER OCCUPANT  
 EXIT DOORS: 7.8" CLEAR REQUIRED (1/2 OF TOTAL OCCUPANT LOAD)  
 @ MAIN ENTRY: (ONE 3'-0" DOORS PROVIDED)  
 EGRESS ILLUMINATION: MIN. 1 FOOT-CANDLE (11 LUX) AT WALKING SURFACE (SEC. 1006)

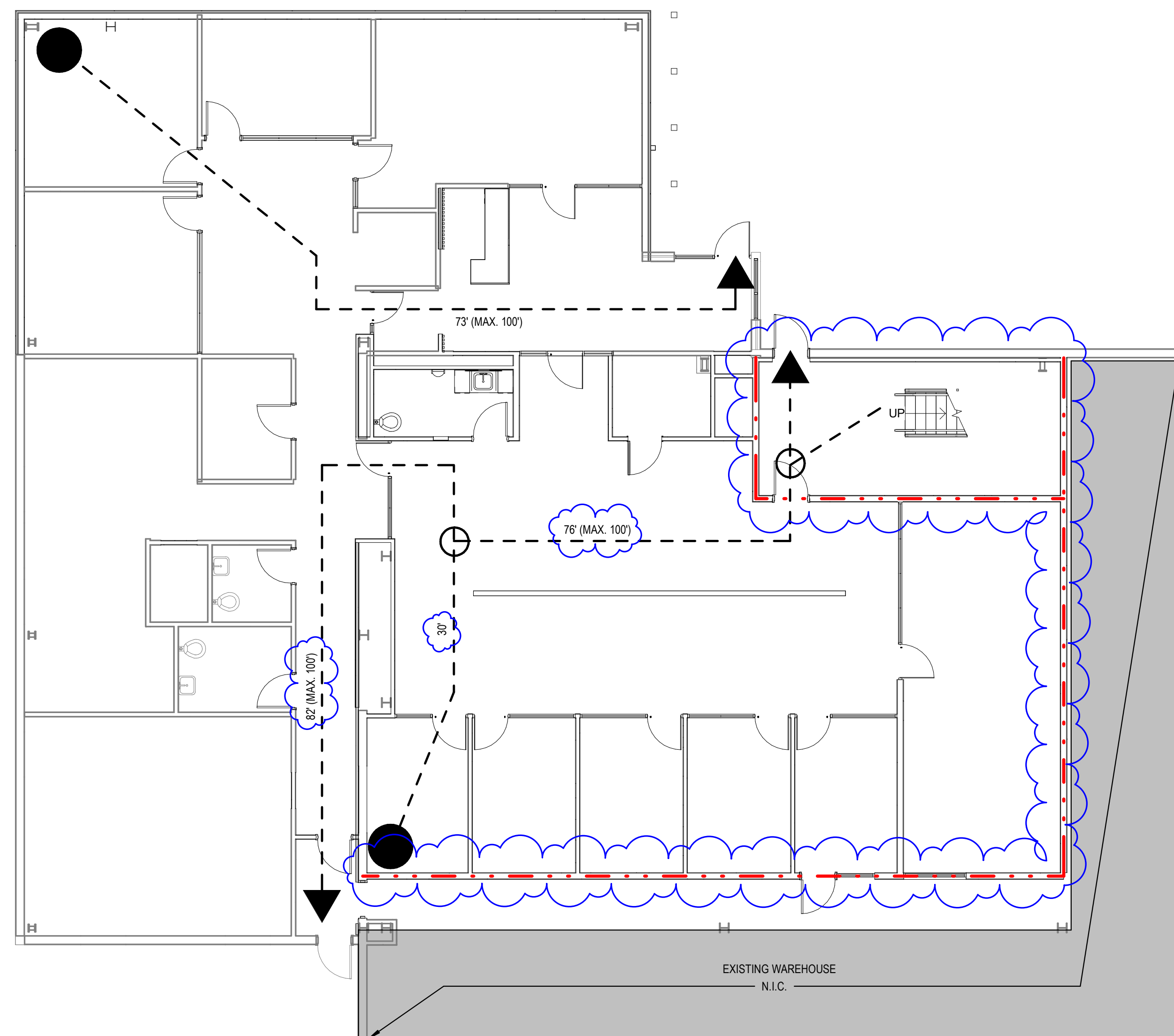
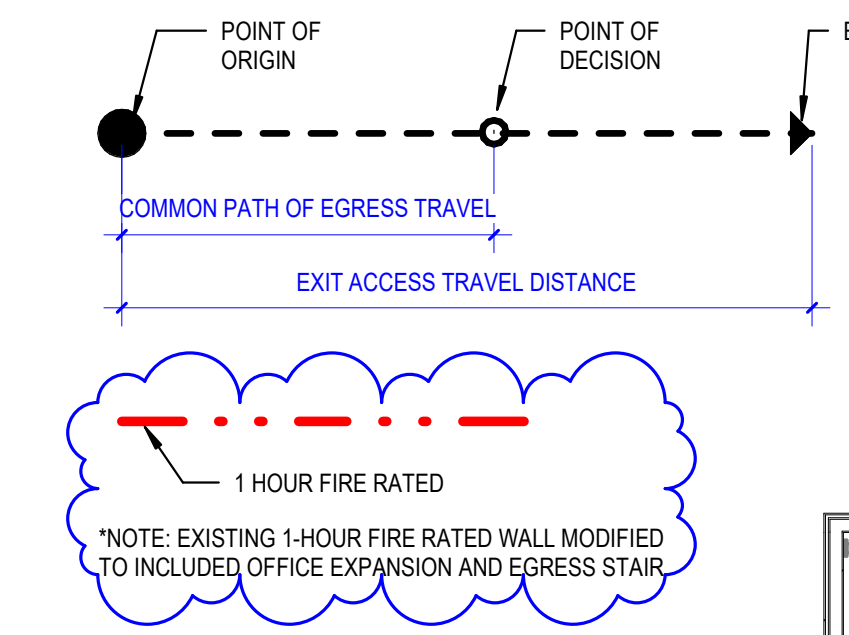
EXITING REQUIREMENTS: (IFC TABLE 1006.2.1; "B" OCCUPANCY WITH SPRINKLERS)  
 COMMON PATH LIMIT: 100 FEET  
 DEAD ENDS: 0 FEET  
 EXIT ACCESS TRAVEL DISTANCE: 100 FEET

CORRIDOR FIRE-RESISTANCE RATING: 0-HOUR (IFC TABLE 1017.1; "B" OCCUPANCY WITH SPRINKLERS)

### 6.0 EGRESS / LIFE-SAFETY PLAN:

#### EGRESS LEGEND

XX' / XXX' XX' = COMMON PATH OF EGRESS TRAVEL (MAX. ALLOWED = 100' - SPRINKLED)  
 XXX' = EXIT ACCESS TRAVEL DISTANCE (MAX. ALLOWED = 300' - SPRINKLED)



**A1** EGRESS PLAN - LV 01  
1/8" = 1'-0"

### 2.0 BUILDING CODE INFORMATION:

BUILDING CODE ENFORCEMENT: CEDAR PARK - DEVELOPMENT SERVICES  
 450 CYPRESS CREEK ROAD, BUILDING #1  
 CEDAR PARK, TX 78613  
 PHONE: (512) 401-5100  
 www.cedarparktx.gov  
 BUILDING CODES: 2021 INTERNATIONAL BUILDING CODE (IBC) W/ LOCAL AMENDMENTS  
 2021 INTERNATIONAL PLUMBING CODE (IPC) W/ LOCAL AMENDMENTS  
 2021 INTERNATIONAL MECHANICAL CODE (IMC) W/ LOCAL AMENDMENTS  
 2021 INTERNATIONAL FUEL & GAS CODE (IF&GC) W/ LOCAL AMENDMENTS  
 2020 NATIONAL ELECTRIC CODE (NEC) W/ LOCAL AMENDMENTS  
 FIRE CODES: 2021 INTERNATIONAL FIRE CODE (IFC) W/ LOCAL AMENDMENTS  
 ACCESSIBILITY CODES: 2012 TEXAS ACCESSIBILITY STANDARDS (TAS)

### 5.0 PLUMBING FIXTURE REQUIREMENTS:

(BASED ON OCCUPANT LOAD SUMMARY & MINIMUM PLUMBING FIXTURES TABLE 2902.1)

WATER CLOSETS	OCCUPANTS	FIXTURE COUNT
BUSINESS = 1 PER 25, FIRST 50 & 1 PER 50 REMAINDER EXCEEDING 50	86	4
STORAGE = 1 PER 100	86	1
<b>LAVATORIES</b>	<b>OCCUPANTS</b>	<b>FIXTURE COUNT</b>
BUSINESS = 1 PER 40, FIRST 80 & 1 PER 80 REMAINDER EXCEEDING 80	86	4
STORAGE = 1 PER 100	86	1
<b>DRINKING FOUNTAIN</b>	<b>OCCUPANTS</b>	<b>FIXTURE COUNT</b>
BUSINESS = 1 PER 100	86	1
STORAGE = 1 PER 1,000	86	1
<b>SERVICE SINK</b>	<b>FIXTURE COUNT</b>	
BUSINESS = 1 SERVICE SINK	1	1
STORAGE = 1 SERVICE SINK	1	1

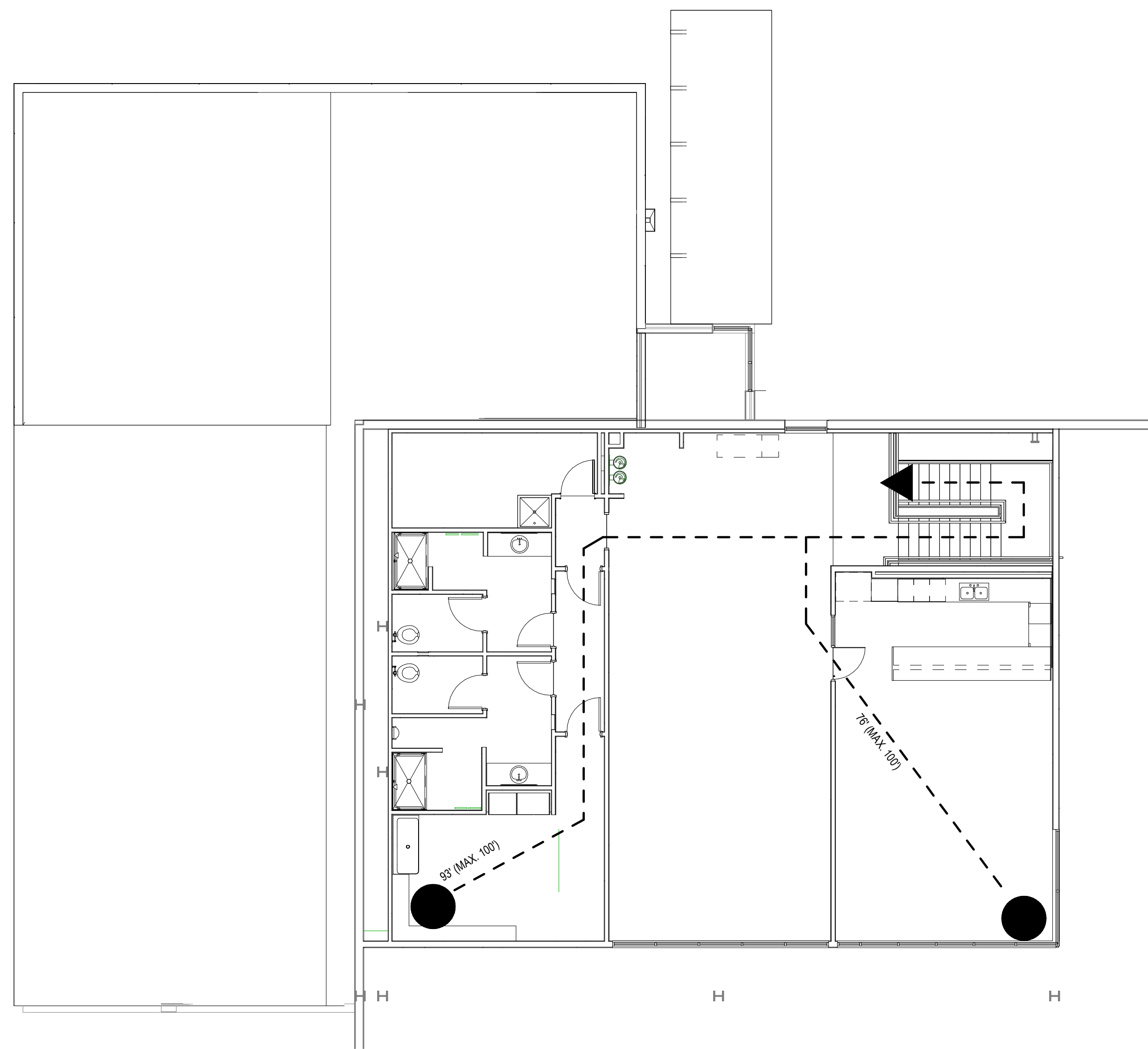
### 3.0 FIRE CODE REVIEW:

OCCUPANCY CLASSIFICATION:  
 space: "B" / BUSINESS (SECT. 306.2)  
 space: "S-1" / STORAGE (SECT. 304)  
 OCCUPANCY SEPARATION: NO SEPARATION REQUIREMENT (TABLE 508.4)  
 CONSTRUCTION TYPE: I-B (IBC TABLE 503 & SECT. 602.2)  
 STRUCTURAL DESIGN LOADS: SEE STRUCTURAL SHEETS  
 AUTOMATIC SPRINKLER SYSTEM: NFPA 13 / SPRINKLERED THROUGHOUT (SECT. 903.2.4)  
 STANDPIPES: NOT REQUIRED (SECT. 405)  
 AUTOMATIC FIRE DETECTION: [verify]  
 ALLOWABLE HEIGHT: 3 STORIES / 75 FEET (TABLE 503 (BASED ON " " OCCUPANCY))  
 (BASED ON MOST RESTRICTIVE OCCUPANCY TYPE (IBC SECT. 508.3.2))  
 2 STORIES / APPROXIMATELY 29'-6"

ACTUAL HEIGHT:  
 ALLOWABLE AREA (PER FLOOR):  
 BASIC: 70,000 SF PER LEVEL (TABLE 503 (BASED ON "S-1" OCCUPANCY))  
 (BASED ON MOST RESTRICTIVE OCCUPANCY TYPE (IBC SECT. 508.3.2))  
 W/ INCREASE (SEE CALC.):  
 GROSS FLOOR AREA:  
 GROUND LEVEL (GROSS): "B" / BUSINESS = 5,925 SQ. FT.  
 "S-1" / STORAGE = 25,625 SQ. FT.  
 TOTAL GROSS AREA: = 31,550 SQ. FT.  
 AREA CHECK: 28,000 SQ. FT. (GROUND LEVEL) < 31,550 SQ. FT. (ALLOWED)  
 THEREFORE OKAY

FIRE-RESISTANCE RATINGS:  
 0 HOUR (IBC TABLE 601, 602 & 704.8)

STRUCTURAL FRAME:  
 EXTERIOR WALLS (BEARING OR NON):  
 SEPARATION < 5' = 0-HOUR (NOT APPLICABLE TO PROJECT)  
 5' ≤ SEPARATION < 10' = 0-HOUR (NOT APPLICABLE TO PROJECT)  
 10' ≤ SEPARATION = 0-HOUR (SEPARATION ON THIS PROJECT IS GREATER THAN 30')  
 INTERIOR WALLS (BEARING OR NON): 0-HOUR  
 FLOOR CONSTRUCTION: 0-HOUR  
 ROOF CONSTRUCTION: 0-HOUR  
 STAIRWELL: 0-HOUR

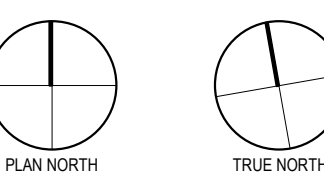


**A3** EGRESS PLAN - LV 02  
1/8" = 1'-0"



12/01/2023

**MIRA SAFETY**  
 1713 Hur Industrial Blvd  
 Cedar Park, TX 78613



1 ADDENDUM 01 01/10/2024  
 ISSUE FOR PERMIT 12/01/23

Issues  
 Project Number 23-01-014  
 Drawn By JO  
 Checked By OS

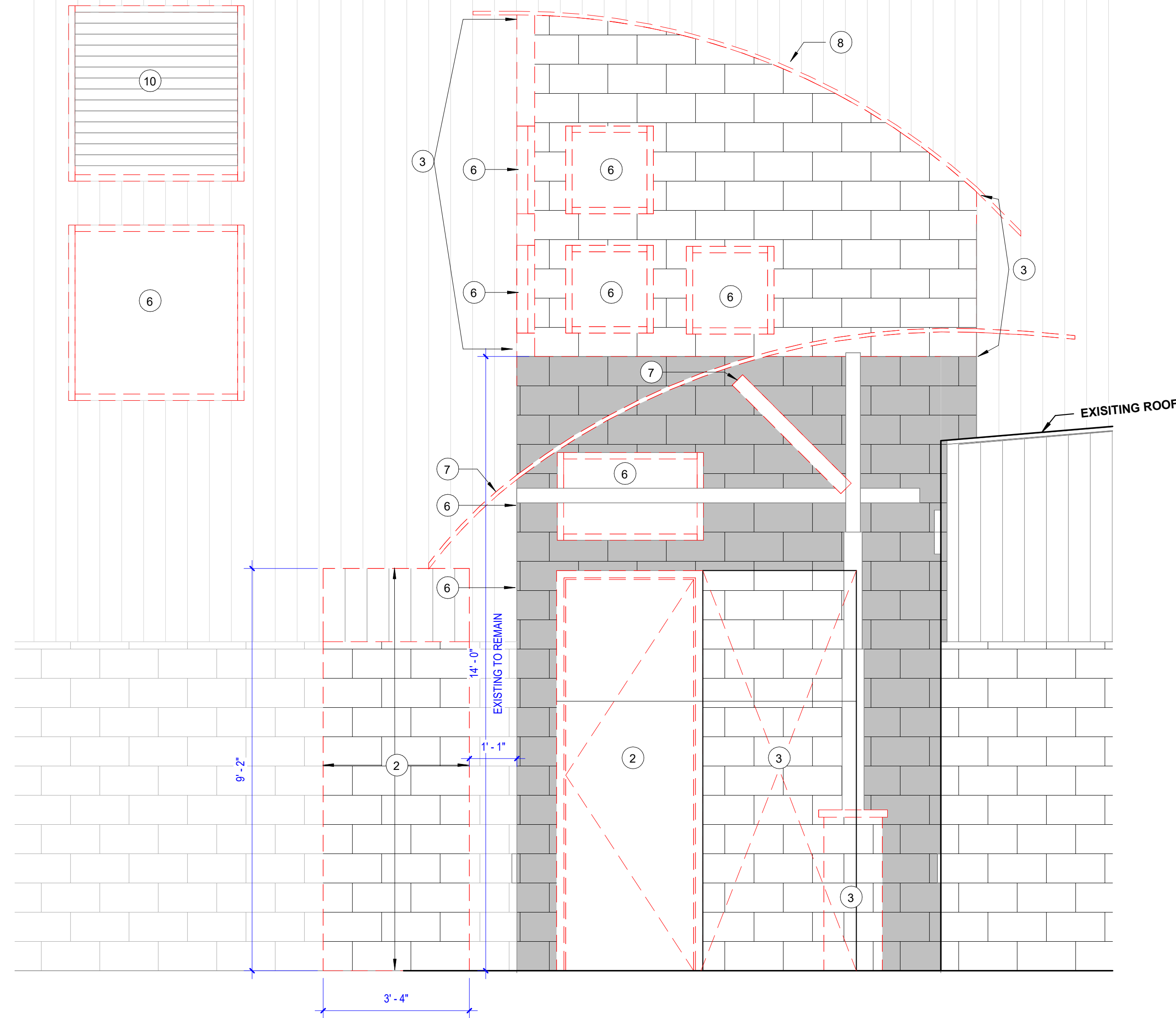
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

## G-007

CODE REVIEW & EGRESS PLAN

**GENERAL NOTES: DEMOLITION**

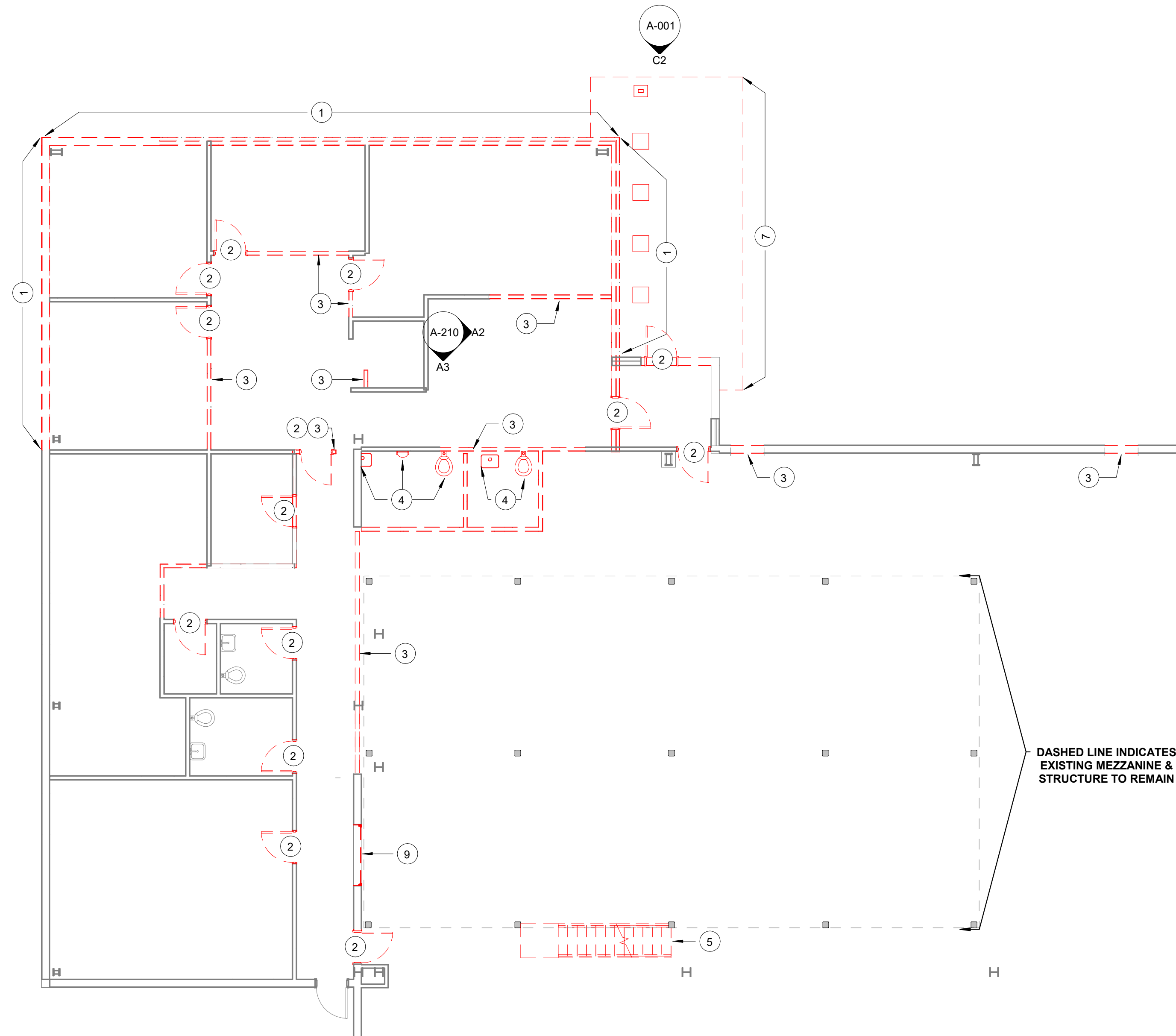
- A. ALL DEMOLITION WORK SHALL COMPLY WITH AND BE EXECUTED IN CONFORMANCE WITH ALL APPLICABLE CODES AND AS SET FORTH BY ALL GOVERNING AUTHORITIES, INCLUDING THE REGULATIONS OF THE ENVIRONMENTAL PROTECTION AGENCY, STATE DEPARTMENT OF HEALTH, AND REQUIREMENTS OF NFPA 241. GENERAL CONTRACTOR TO REQUEST MSDS SHEETS IDENTIFYING ALL ASBESTOS CONTAINING BUILDING MATERIALS FROM PROPERTY MANAGEMENT COMPANY.
- B. SEPARATE AREAS IN WHICH DEMOLITION IS BEING CONDUCTED FROM OTHER AREAS THAT ARE STILL OCCUPIED, PROVIDE, ERECT, AND MAINTAIN TEMPORARY DUSTPROOF BARRIERS, MINIMIZE EFFECTS ON AND INTERFERENCE WITH ADJACENT STRUCTURES AND OCCUPANTS, CONDUCT OPERATIONS TO MINIMIZE OBSTRUCTION OF PUBLIC AND PRIVATE ENTRANCES AND EXITS, DO NOT OBSTRUCT REQUIRED EXITS AT ANY TIME, PROTECT PERSONS USING ENTRANCES AND EXITS FROM REMOVAL OPERATIONS.
- C. IF HAZARDOUS MATERIALS ARE DISCOVERED DURING REMOVAL OPERATIONS, STOP WORK AND NOTIFY ARCHITECT AND OWNER, HAZARDOUS MATERIALS INCLUDE REGULATED ASBESTOS CONTAINING MATERIALS, LEAD, PCB'S, AND MERCURY.
- D. FIELD VERIFY EXISTING FIELD CONDITIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF ANY WORK INDICATED IN THE CONSTRUCTION DOCUMENTS THAT CANNOT BE PERFORMED DUE TO EXISTING FIELD CONDITIONS. DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS ONLY. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF DEMOLITION WORK CONSTITUTES ACCEPTANCE OF EXISTING CONDITIONS THAT WOULD BE APPARENT UPON EXAMINATION PRIOR TO STARTING DEMOLITION.
- E. NO WORK SHALL BE PERFORMED WITHIN THE BUILDING CORE OR OTHER NOT IN CONTRACT (NIC) AREAS, UNLESS NOTED OTHERWISE.
- F. GENERAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND SERVICES REQUIRED TO COMPLETE THE REMOVAL OF ALL ITEMS AS INDICATED ON THE CONSTRUCTION DOCUMENTS.
- G. GENERAL CONTRACTOR SHALL MAINTAIN THE JOB SITE IN SUCH A MANNER TO REDUCE EXCESSIVE DUST AND DEBRIS DURING DEMOLITION/CONSTRUCTION.
- H. GENERAL CONTRACTOR SHALL COMPLY WITH ALL TEMPORARY LIGHTING REQUIREMENTS SET FORTH BY ALL GOVERNING AUTHORITIES.
- I. REMOVE EXISTING CONSTRUCTION AS INDICATED. TYPICAL WALL REMOVAL INCLUDES MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS CONTAINED THEREIN. REMOVE DOORS, WINDOWS, FRAMES, AND OTHER ATTACHED FIXTURES AS REQUIRED. CONTRACTOR TO REMOVE MEP SYSTEMS TO THE GREATEST EXTENT POSSIBLE WHILE MAINTAINING THE ABILITY TO COMPLETE THE NEW SCOPE OF WORK.
- J. GENERAL CONTRACTOR TO PATCH AND RESTORE PREVIOUS FIRE RATINGS IN ALL WALLS AND FLOORS AS REQUIRED BY ALL GOVERNING AUTHORITIES.
- K. REMOVE ALL EXISTING LIGHTING UNLESS NOTED OTHERWISE IN SEPARATE CEILING DEMOLITION PLAN OR AS SHOWN ON THE REFLECTED CEILING PLAN.
- L. GENERAL CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO THE EXISTING BUILDING AND GROUNDS ARISING FROM DEMOLITION PROCESS. GC SHALL NOTIFY THE ARCHITECT AND PROPERTY MANAGER / OWNER OF ANY ITEMS SHOWN TO REMAIN THAT, IN THE OPINION OF THE GC, WILL BE DAMAGED OR DESTROYED BY THE WORK SHOWN ON THE PLANS. THE GC SHALL TAKE APPROPRIATE MEASURES TO PROTECT ALL ITEMS TO REMAIN INCLUDING, BUT NOT LIMITED TO, EXISTING PARTITIONS, CEILINGS, FLOORING, WINDOWS, SUN SHADE DEVICES, ELEVATORS, HVAC EQUIPMENT, ELECTRICAL, DOORS AND FRAMES.
- M. GENERAL CONTRACTOR TO REMOVE ALL EXISTING UNUSED DEBRIS INCLUDING, ABANDONED DUCT, WIRING, CONDUIT, AND CABLING WITHIN THE CEILING PLENUM.
- N. GENERAL CONTRACTOR TO COORDINATE WITH PROPERTY MANAGER ALL ITEMS TO BE RETURNED TO BUILDING STOCK.
- O. REMOVE ALL WALL COVERING, ABANDONED NAILS, MOUNTING DEVICES, AND OTHER HINDRANCES FROM WALLS TO RECEIVE NEW FINISHES, UNLESS NOTED OTHERWISE. REFER TO FINISH PLANS FOR WALL FINISHES.
- P. REMOVAL OF DOORS INCLUDES REMOVAL OF DOOR FRAMES, AND HARDWARE, UNLESS NOTED OTHERWISE.
- Q. GENERAL CONTRACTOR TO COORDINATE DISABLING ANY FIRE ALARM DEVICES WITH THE PROPERTY MANAGER.
- R. RELOCATION OF MEP SYSTEMS TO REMAIN IN ORDER TO MAINTAIN CONFLICT WITH NEW CONSTRUCTION IS THE RESPONSIBILITY OF THE GC AND MEP SUBCONTRACTORS.



**C2** DEMOLITION ELEVATION - ENTRY / VESTIBULE  
1/2" = 1'-0"

**KEYED NOTES - DEMOLITION PLAN**

- 1 DEMOLISH EXISTING EXTERIOR WALL AND WINDOWS, INCLUDE METAL PANEL, BRICK, AND SUBSTRATE. METAL BUILDING STRUCTURE TO REMAIN. REFER TO DEMO ELEVATION FOR DETAILED INFORMATION ON ITEMS TO BE REMOVED.
- 2 DEMOLISH EXISTING DOOR AND FRAME IN ITS ENTIRETY
- 3 DEMOLISH EXISTING WALL TO EXTENTS SHOWN. COORDINATE WITH BUILDBACK REQUIREMENTS, RE: A-110
- 4 REMOVE EXISTING PLUMBING FIXTURES AND PIPING TO THE EXTENT REQUIRED BY NEW LAYOUT. REFER TO FLOOR AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 5 DEMOLISH EXISTING STAIR IN ITS ENTIRETY
- 6 DEMOLISH EXISTING WINDOW
- 7 DEMOLISH EXISTING CANOPY & PARTIAL OF EXISTING STRUCTURE. REFER TO NEW ELEVATIONS AND DETAILS FOR FULL INTENT OF CANOPY STRUCTURE
- 8 DEMOLISH EXISTING ROOF AND STRUCTURE
- 9 DEMOLISH EXISTING WINDOW AND FRAME IN ITS ENTIRETY. PREP WALL FOR INFILL.
- 10 DEMOLISH EXISTING LOUVER IN IT ENTIRETY. PREP WALL TO RECEIVE SCHEDULED STOREFRONT

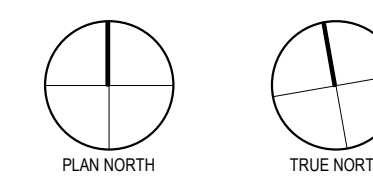


**A2** DEMOLITION PLAN  
1/8" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



ISSUE FOR PERMIT 12/01/23

Project Number	23-01-014
Drawn By	JO
Checked By	OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-001**

DEMOLITION PLAN -  
LVL. 01



**PARKING ANALYSIS:**

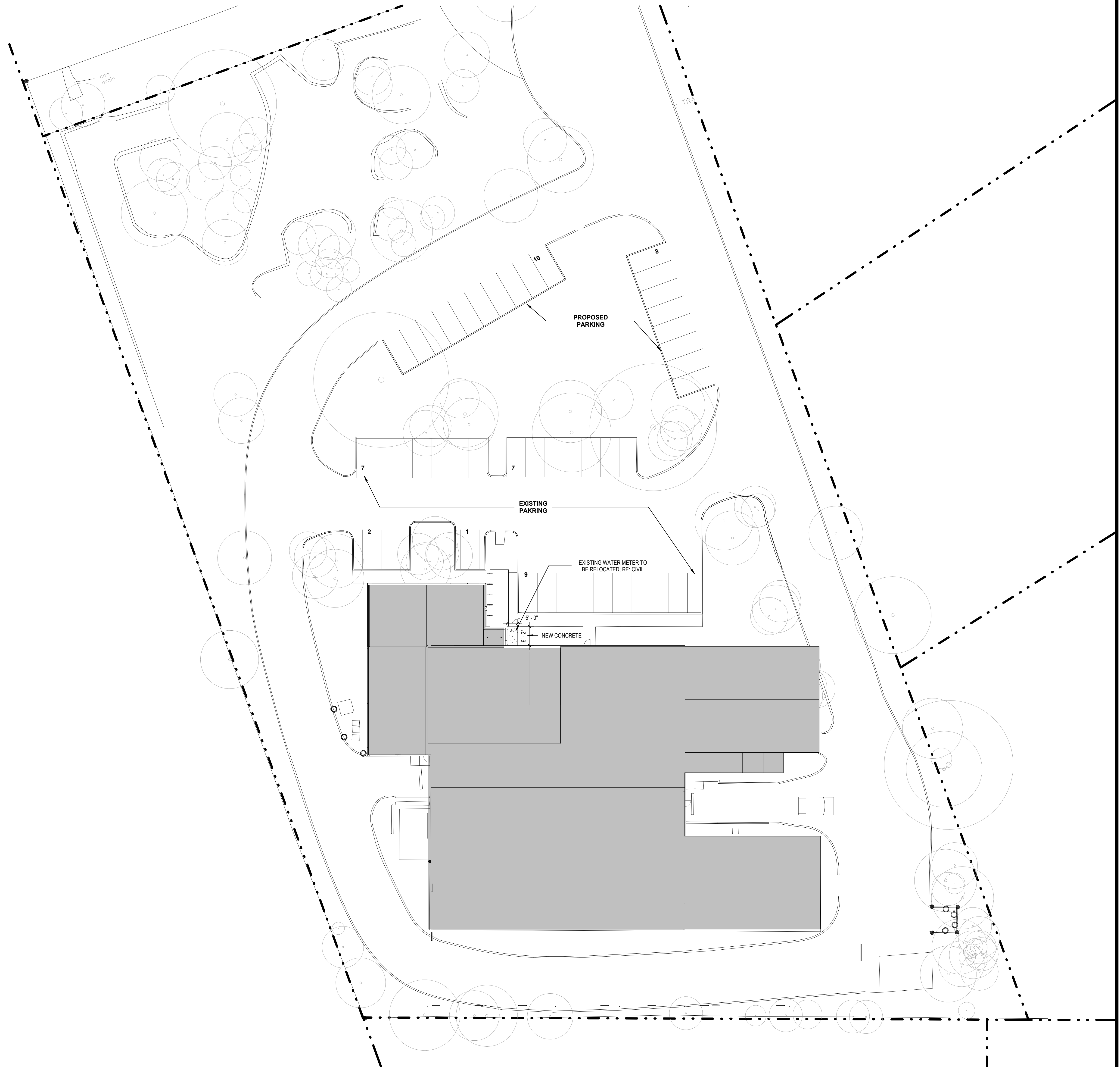
**GROSS FLOOR AREA:**

GROUND LEVEL (GROSS):	"B" / BUSINESS	= 5,925 SQ. FT.
	"S-1" / STORAGE	= 25,625 SQ. FT.
MEZZANINE:	"B" / BUSINESS	= 2,775 SQ. FT.
TOTAL GROSS AREA:		= 34,060 SQ. FT.

**RE: CEDAR PARK CITY CODE, SECTION 14.05.005(j)(2)**

WAREHOUSE (1 PER 2000 SQ. FT.)	25,625 SQ FT / 2000	= 12.8 (OR 13 PARKING SPACES)
OFFICE (1 PER 300 SQ. FT.)	8,200 SQ FT. / 300	= 27.3 (OR 28 PARKING SPACES)
TOTAL REQUIRED PARKING		= 41 TOTAL PARKING

EXISTING PARKING TOTAL	= 26
PROPOSED PARKING	= 18
<b>TOTAL</b>	<b>44</b>

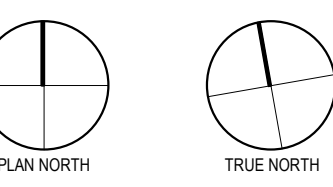


**A2 SITE PLAN**  
3/64" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



ISSUE FOR PERMIT 12/01/23

△ Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-100**

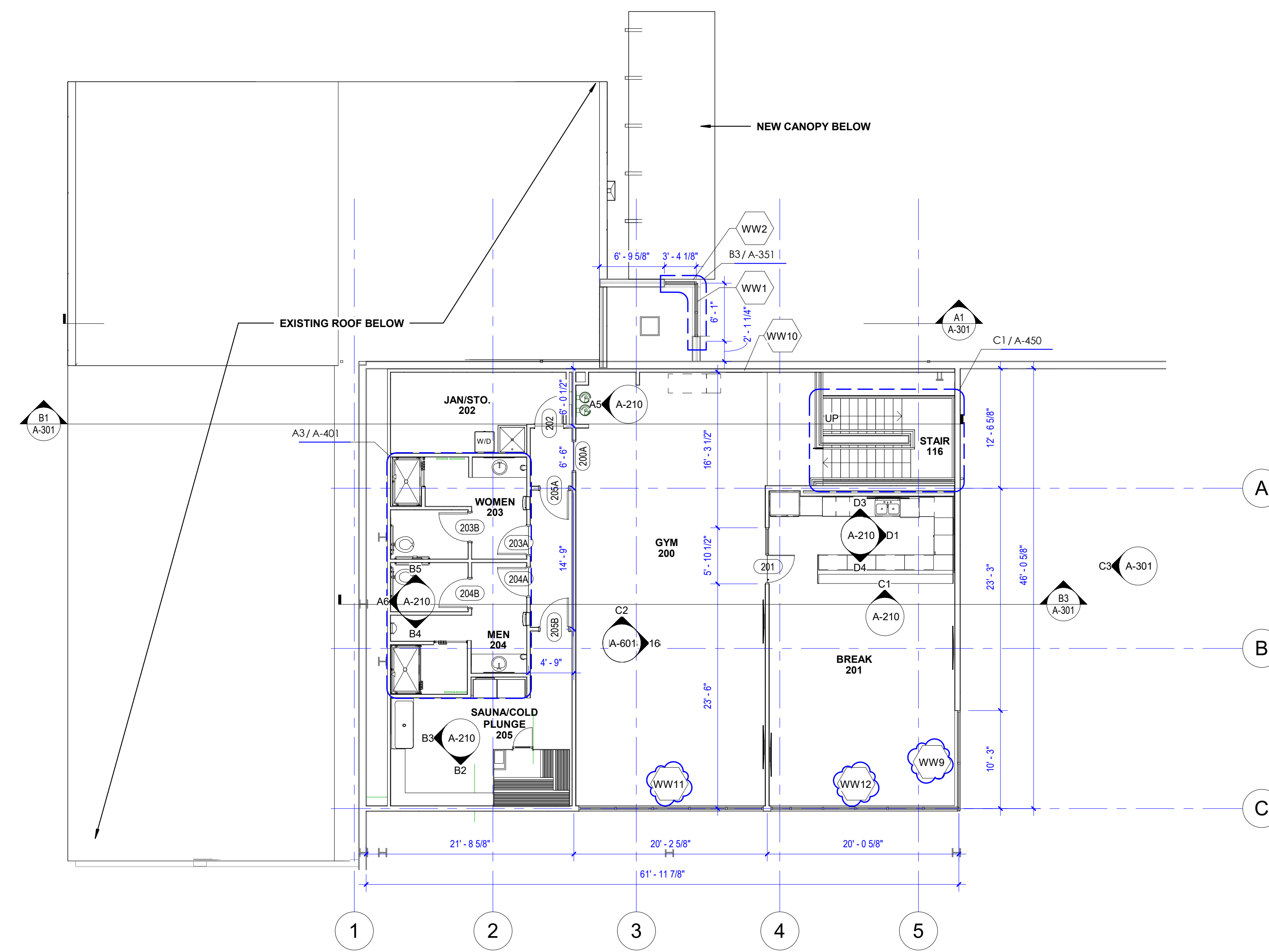
SITE PLAN

**GENERAL NOTES: FLOOR**

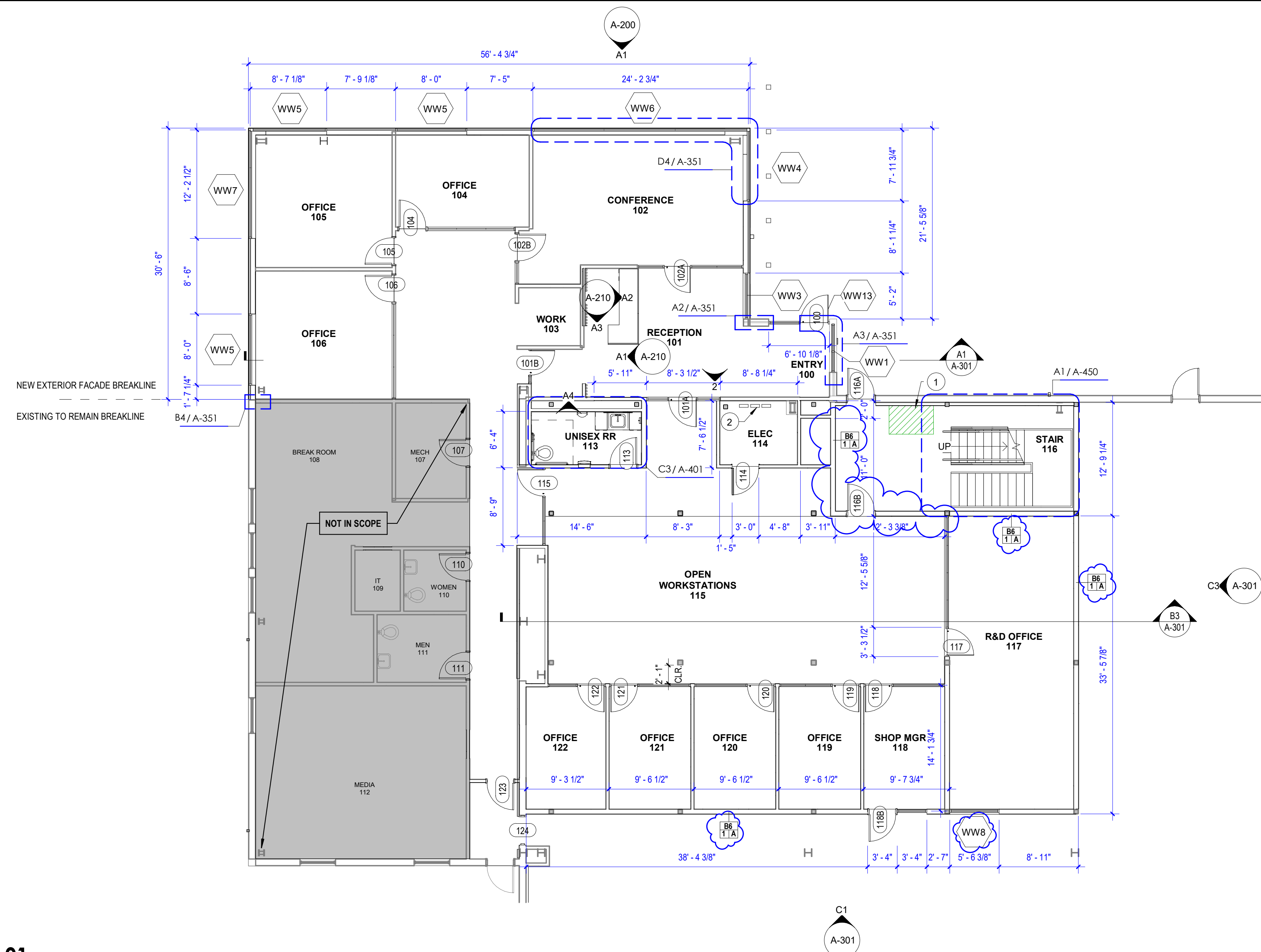
- A. ALL NEW PARTITIONS TO BE TYPE 'B' WITH FULL BATT INSULATION, UNLESS NOTED OTHERWISE. REFER TO PARTITION SCHEDULE FOR ADDITIONAL INFORMATION.
- B. ALL DIMENSIONS ARE FROM FINISH FACE OF PARTITIONS, UNLESS NOTED OTHERWISE.
- C. ALL AREAS SHOWN WITH A HALFTONE POCHÉ ARE NOT IN CONTRACT, AND NO WORK SHALL BE EXECUTED IN THESE AREAS, UNLESS NOTED OTHERWISE.
- D. ALL PARTITIONS SHOWN WITH A DARK GREY POCHÉ INFILL ARE EXISTING TO REMAIN. PATCH PARTITIONS WHERE INTERSECTING PARTITIONS OR OTHER ITEMS HAVE BEEN REMOVED, AND WHERE PARTITION IS SCHEDULED TO RECEIVE NEW FINISH.
- E. NO WORK SHALL BE EXECUTED ON THE CORE AREA (SHOWN SHADED), UNLESS NOTED OTHERWISE.
- F. FLOOR AREAS ARE TO BE PREPARED FOR FINISH MATERIALS IN ACCORDANCE WITH MANUFACTURER'S SPECIFIC REQUIREMENTS. RESPONSIBILITY INCLUDES FLASH PATCHING TO LEVEL AND SMOOTH FLOOR TO 1" IN 20' 0" NON-CUMULATIVE AND 1/4" PER 10' 0" AT CRITICAL AREAS UNDER MILLWORK, FLES, SPECIAL FINISH MATERIALS, AND TRANSITIONS.
- G. NEW CONSTRUCTION THAT MEETS EXISTING CONSTRUCTION IN THE SAME PLANE SHALL BE FLUSH WITHOUT VISIBLE JOINT, UNLESS OTHERWISE NOTED.
- H. ALL NEW PARTITIONS ARE TO BE PERPENDICULAR OR PARALLEL WITH CORE OR EXTERIOR WINDOW WALL ELEMENTS, UNLESS NOTED OTHERWISE. CENTER PARTITIONS ON COLUMNS OR MULLIONS, UNLESS NOTED OTHERWISE.
- I. ALL DOOR JAMBS ARE TO BE LOCATED 4" FROM AN INSIDE CORNER, UNLESS NOTED OTHERWISE.
- J. ALL WOODWORK, BLOCKING, AND MOUNTED BOARDS SHALL BE FIRE-RETARDANT-TREATED FOR USE IN NON-COMBUSTIBLE CONSTRUCTION.
- K. PROVIDE ACOUSTIC SOUND SEAL AT ALL PARTITION/MULLION AND PARTITION/COLUMN CONDITIONS.
- L. GENERAL CONTRACTOR TO VERIFY THAT ALL ELEVATOR CALL BUTTONS, CALL LATERNS, BRAILLE CHARACTERS, AND CAB CONTROL ARE TAS COMPLIANT AS SHOWN ON SHEET G-002. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND.
- M. PROTECT EXISTING WINDOW COVERINGS TO REMAIN DURING CONSTRUCTION. COORDINATE WITH PROPERTY MANAGER LOCATIONS THAT NEED TO BE REPLACED.
- N. PROVIDE FIRE STOPPING FOR ALL PENETRATIONS OF FIRE RATED WALLS AND HORIZONTAL ASSEMBLIES WHERE REQUIRED. REFER TO FIRE STOPPING SPECIFICATIONS ON G-103.L ASSEMBLIES WHERE REQUIRED. REFER TO FIRE STOPPING SPECIFICATIONS ON G-103.

**KEYED NOTES - FLOOR PLAN**

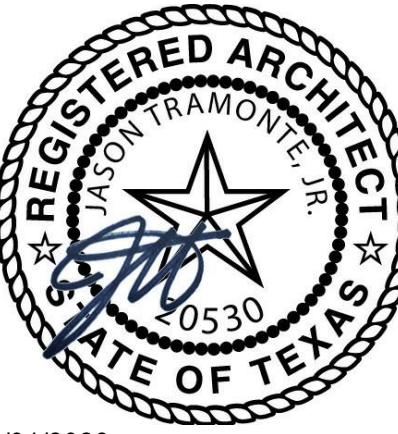
- 1. EXISTING FIRE RISER, GC TO MODIFY AS NECESSARY TO AVOID CONFLICT WITH STAIR
- 2. EXISTING ELECTRICAL PANELS TO REMAIN, RE. ELEC.



**C2 FLOOR PLAN - LV 02**  
1/8" = 1'-0"

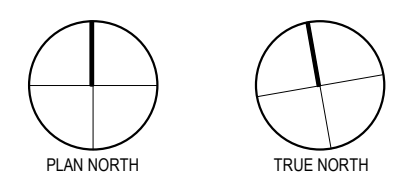


**A2 FLOOR PLAN - LV 01**  
1/8" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



1. ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-110**

FLOOR PLANS

**GENERAL NOTES: REFLECTED CEILING PLAN**

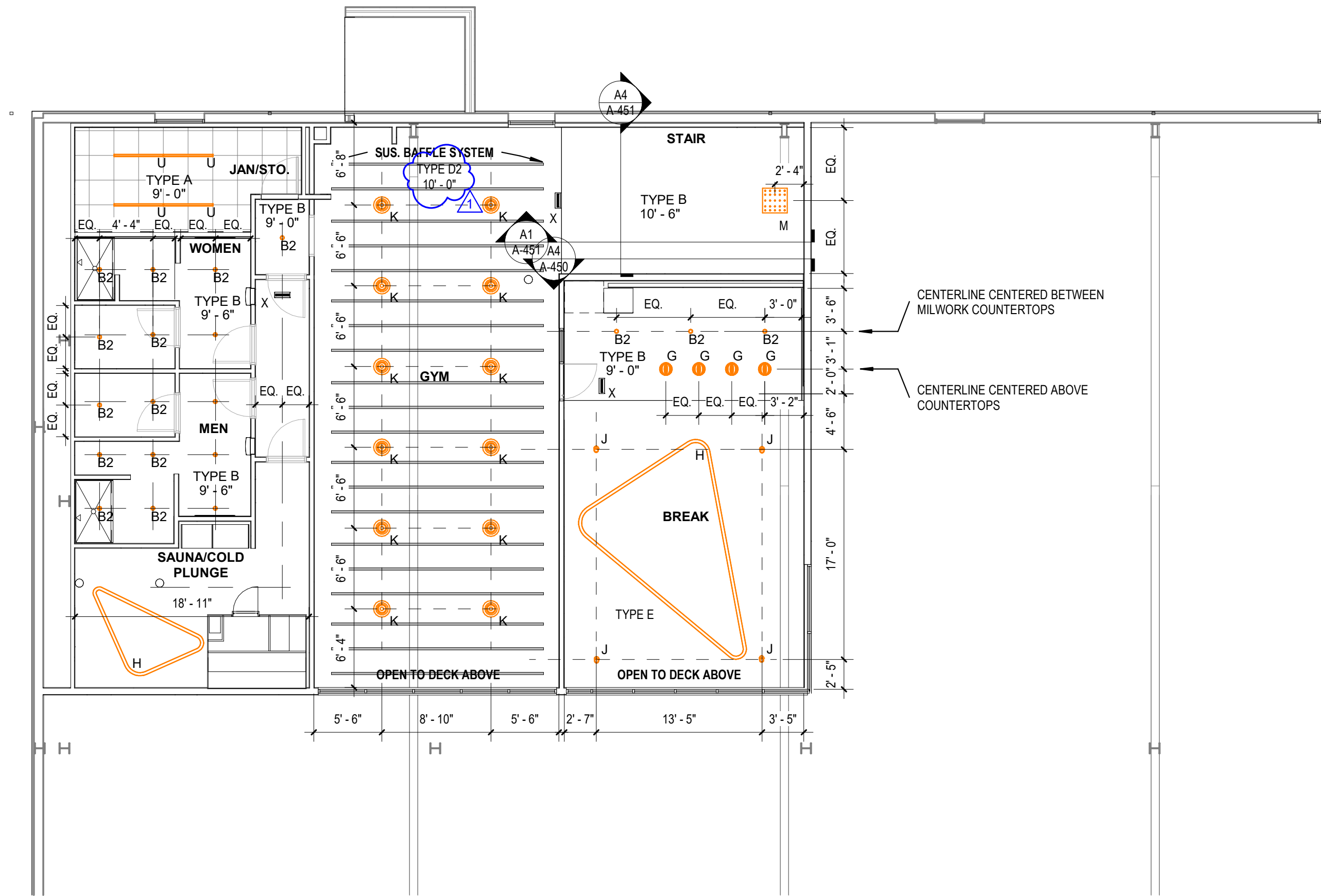
- A. TYPICAL CEILING TO BE TYPE C @ 9'-0" A.F.F. U.N.O. CONTRACTOR TO FIELD VERIFY ADEQUATE CLEARANCE IS MAINTAINED ABOVE PLENUM. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION OF DISCREPANCIES OR EXISTING CONFLICTS PRIOR TO PROCEEDING WITH WORK IN QUESTION. NEW STRUCTURAL ELEMENTS OR EQUIPMENT (HVAC UNITS, DUCTWORK, PLUMBING, ETC.) SHALL BE LOCATED AS TO NOT INTERFERE WITH ANY OTHER PORTION OF NEW CONSTRUCTION AS SHOWN.
- B. LIGHT FIXTURES, HVAC DEVICES AND OTHER CEILING-MOUNTED ELEMENT LOCATIONS ON ARCHITECTURAL REFLECTED CEILING PLANS TAKE PRECEDENCE OVER LOCATIONS SHOWN ON MEP DRAWINGS.
- C. EXISTING PERIMETER SLOT DIFFUSERS TO BE TOUCHED UP TO APPEAR "LIKE-NEW". NO AIR DIFFUSER SHALL STRADDLE OVER PARTITIONS. PROVIDE NEW BLANK-OFF PLATES AT INTERSECTIONS WITH PARTITIONS AND WHERE NO AIR DEVICE OCCURS. FINISH TO MATCH SLOT DIFFUSER SPECIFICATION.
- D. REFER TO ENGINEER'S DRAWINGS FOR FIRE ALARMS, ADA VISUAL STROBES, SMOKE DETECTORS, AND EXIT SIGN LOCATIONS. COMPLETE LIFE SAFETY SYSTEMS INSTALLATION AND TYS REQUIREMENTS TO BE COORDINATED BY THE GENERAL CONTRACTOR. COORDINATE CEILING DEVICE LOCATIONS WITH ARCHITECT FOR ALL GYP. BD., PREMIUM, AND UPGRADED CEILING SPACES.
- E. REFER TO MECHANICAL PLAN FOR SUPPLY REGISTERS AND RETURN AIR GRILLE LOCATIONS.
- F. ALL PRIVATE OFFICES AND CONFERENCE ROOMS SHALL BE INDIVIDUALLY SWITCHED, UNLESS NOTED OTHERWISE.
- G. REFLECTED CEILING PLANS ARE FOR LIGHTING LOCATION AND ARCHITECTURAL NOTES ONLY. REFER TO ENGINEER'S ELECTRICAL LIGHTING PLAN FOR SWITCHING, CIRCUITING, AND SPECIFICATIONS.
- H. ALL LAMPS TO BE OF CONSISTENT COLOR AND SHALL MATCH BUILDING STANDARD, UNLESS NOTED OTHERWISE.
- I. CENTER ALL CEILING-MOUNTED DEVICES IN UPGRADED CEILING WITH LIGHT FIXTURES.
- J. CENTER ALL DOWNLIGHTS, WALL WASHERS, AND OTHER CEILING DEVICES IN CEILING TILE, UNLESS OTHERWISE NOTED OR DIMENSIONED ON PLAN.
- K. ALL UNDER- AND ABOVE-CABINET LIGHTING TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR, WITH LAMPS MATCHING ALL OTHERS. CONDUIT TO BE COMPLETELY CONCEALED FROM VIEW.
- L. NEW LIGHT SWITCHES SHALL BE GANGED IF MORE THAN ONE IS NOTED.
- M. GENERAL CONTRACTOR SHALL PROVIDE SUBMITTALS AND SHOP DRAWINGS TO ARCHITECT FOR WRITTEN APPROVAL ON ALL EQUIPMENT, FIXTURES, LIGHTING DEVICES, AND SPECIALTY ITEMS PROVIDED BY THE GENERAL CONTRACTOR PRIOR TO ORDERING.
- N. ALL ROOM WITH MULTIPLE FIXTURE TYPES ARE TO BE SWITCHED WITH SEPARATE LIGHT SWITCHES PER FIXTURE TYPE.
- O. WHERE EXISTING CEILING REMAINS, SUSPENSION SYSTEM TO REMAIN CONTINUOUS THROUGHOUT, UNLESS OTHERWISE NOTED. NO MAIN TEES SHALL BE CUT UNLESS NOTED ON DRAWINGS. NOTIFY ARCHITECT IF LIGHTING CONFLICT OCCURS. REPAIR DAMAGED GRID WHERE SAGGING OR BROKEN TO LIKE-NEW CONDITION.
- P. COORDINATE WITH PROPERTY MANAGER TO REPAIR LEAKS AT AND ABOVE CEILING.
- Q. ACCESS PANELS IN GYP. BD. CEILINGS ARE TO BE FLOATABLE ACCESS PANELS. WIND-LOCK STEALTH ACCESS PANEL OR EQUAL.

**LIGHT FIXTURE LEGEND:**

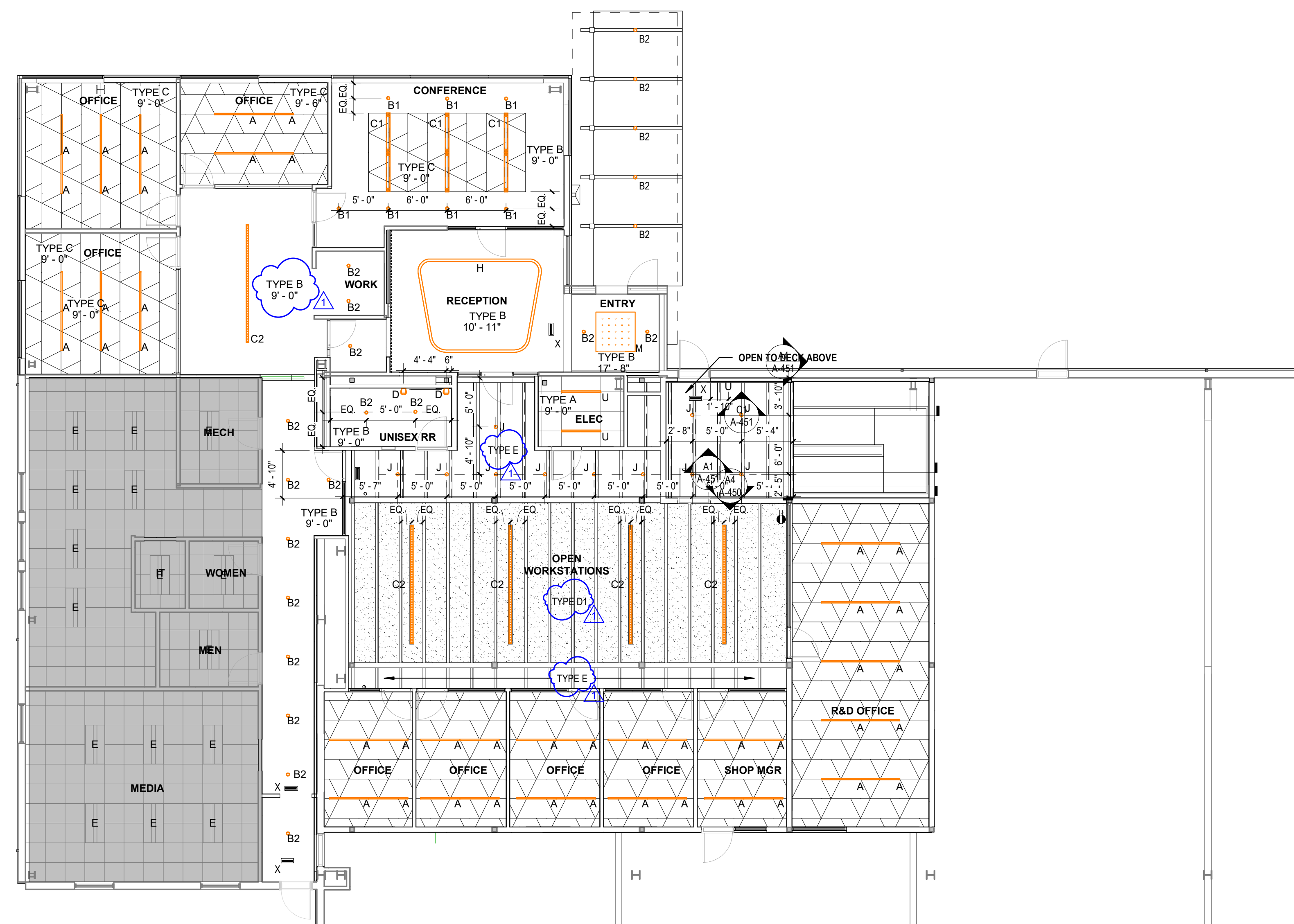
- A 48" APERTURE SLOT LED LUMINAIRE FIXTURE
- B1 4" RECESSED DOWNLIGHT, LOW OUTPUT
- B2 4" RECESSED DOWNLIGHT, MEDIUM OUTPUT
- C1 8" LINEAR SUSPENSION MOUNT
- C2 12" LINEAR SUSPENSION MOUNT
- D DECORATIVE WALL SCONCE
- J 4" CYLINDER PENDANT SUSPENSION MOUNT FIXTURE
- G DECORATIVE PENDANT FIXTURE
- H SUSPENSION MOUNT WITH CURVED CORNERS FIXTURE
- K GYM HIGHBAY SUSPENSION MOUNT FIXTURE
- U LED STRIP LIGHT FIXTURE
- M CEILING MOUNTED MODULAR PENDANT FIXTURE
- E EXISTING RECESSED 2X4 FIXTURE (OUT OF SCOPE)
- X CEILING MOUNTED EMERGENCY EXIT SIGNAGE

**CEILING TYPE LEGEND:**

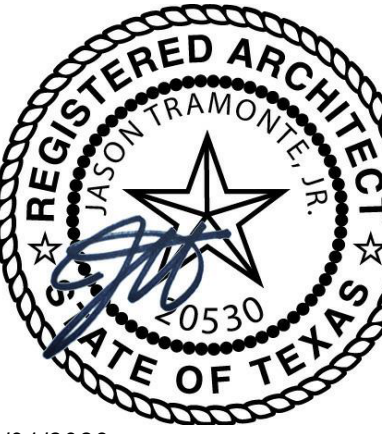
- TYPE A  
ACOUSTICAL CEILING TILE  
TILE - ARMSTRONG, DUINE, 24" X 24", WHITE  
GRID - SUPRAFINE XL, WHITE
- TYPE B  
SUSPENDED GYP. BD. CEILING  
USE DRYWALL SUSPENSION SYSTEM (OR EQUAL), STANDARD DETAILS.  
PREPARE SURFACE TO RECEIVE DRYFALL FLAT PAINT (PT-1)
- TYPE C  
TRAPEZOID ACOUSTICAL CEILING TILE  
TILE - ARMSTRONG, DESIGNFLEX SHAPES - PATTERN SH 31  
Lyra 9'10" Square Tegular 60Deg, 24in Base Triangle, Lyra 9'10" Square Tegular 60Deg, 48in Base Trapezoid  
GRID - SUPRAFINE (DUINE), COLOR: WHITE
- TYPE D1  
SUSPENDED ACOUSTICAL BAFFLE SYSTEM  
SPEC - TURF BEAM CEILING BAFFLE  
- LARGE RANGE LENGTH  
- REFERENCE CEILING PLAN FOR CUSTOM SIZING TO FIT BETWEEN EXPOSED STRUCTURE BEAMS  
- SUSPENDED FLAT, AS CLOSE AS POSSIBLE TO EXPOSED STRUCTURE  
- COLOR: ORANGE CRUSH
- TYPE D2  
SUSPENDED ACOUSTICAL BAFFLE SYSTEM  
SPEC - TURF BEAM CEILING BAFFLE  
- LARGE RANGE LENGTH  
- REFERENCE CEILING PLAN FOR SPACING  
- COLOR: ORANGE CRUSH
- TYPE E  
EXPOSED STRUCTURE  
- STRUCTURE TO BE PAINTED TYPICAL PAINT, "PT-1"



**C2 REFLECTED CEILING PLAN - LV 02**  
1/8" = 1'-0"

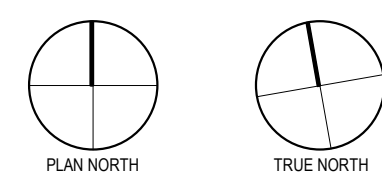


**A2 REFLECTED CEILING PLAN**  
1/8" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-120**

REFLECTED CEILING PLANS

# EQUIPMENT SCHEDULE

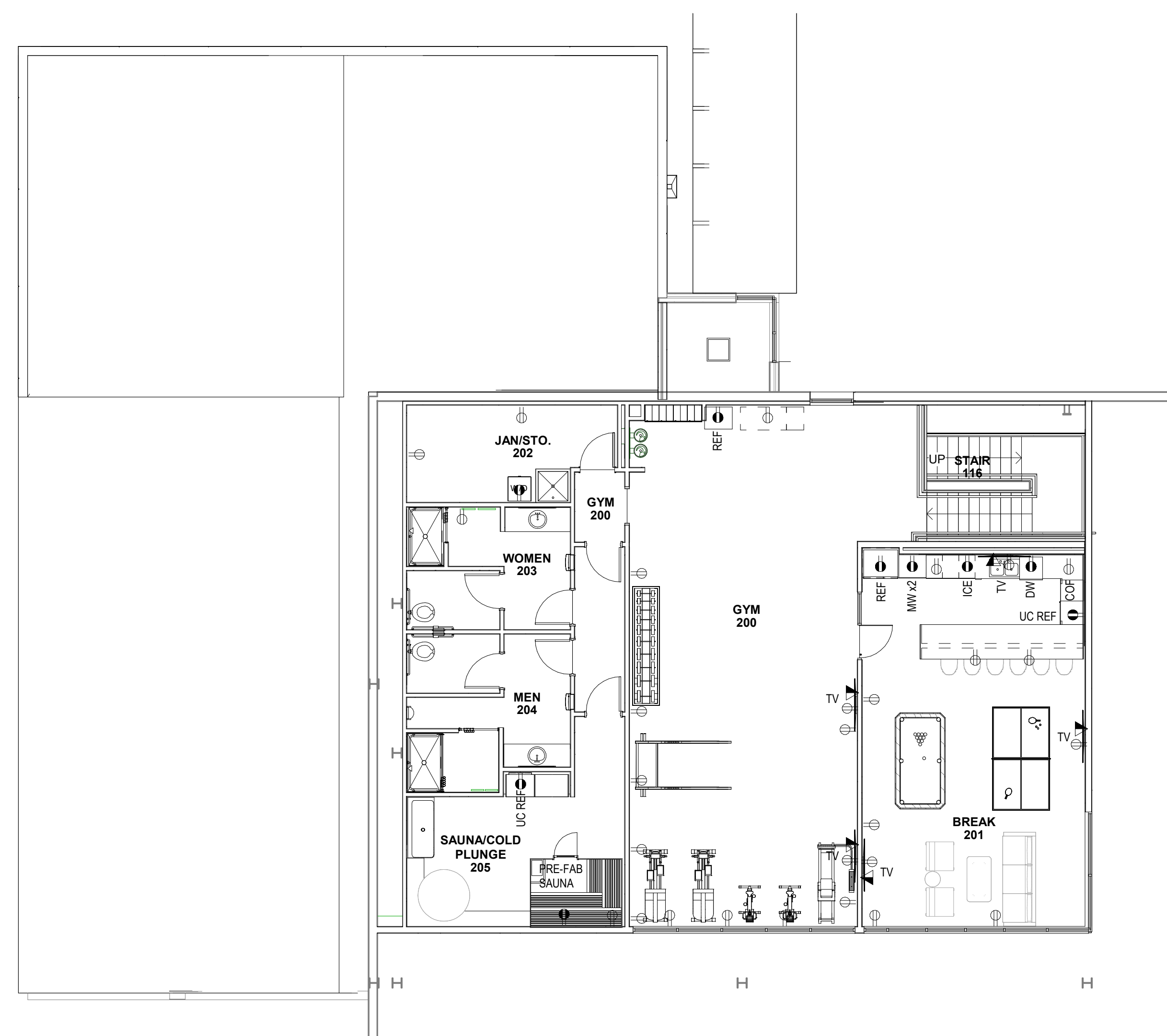
DESIGNATION	TYPE	MANUFACTURER	MODEL #	GC PROVIDED	FINISH	SIZE (WxHxD)	NOTES
COF	COFFEE			-			GC TO COORD PLUMBING REQUIREMENTS
COP	COPPER			-			GC TO COORD NEMA CONFIGURATION WITH TENANT
DW	DISHWASHER	GE	QD1796DSS	YES	STAINLESS STEEL	24" x 32 1/2" x 24"	
FCT	FAUCET	ELKAY	LKLF1031	YES	BRUSHED NICKEL		SINGLE HOLE
ICE	ICE MAKER	HOSHIZAKI	C-101BAHAD	YES	STAINLESS STEEL	14.88" x 31.5" x 20"	
MW	MICROWAVE	GE PROFILE SERIES	PEB7226FSS	YES	STAINLESS STEEL		
PLOT	PLOTTER			-			GC TO COORD NEMA CONFIGURATION WITH TENANT
REF	REFRIGERATOR	GE	GYE2KSHSS	YES	STAINLESS STEEL		
SHADE	MOTORIZED ROLLER SHADE	MECHOSHADOE		YES			
SHRED	PAPER SHRED BINS			YES			
SK	SINK	ELKAY	ECTRU01179	YES	STAINLESS STEEL	31.5" x 18.5" x 9"	WITH FAUCET
TR	TRASH	ULINE	S-13827	YES	GRAY		
TV	FLAT SCREEN DISPLAY			YES			PROVIDE RECESSED "ENTERTAINMENT BOX" FOR POWER, DATA, CABLE, ETC.
WID	WASHER & DRYER			YES			WASHER & DRYER (STACKED)

## GENERAL NOTES: POWER

- THIS PLAN IS FOR LOCATION OF OUTLETS, FURNISHINGS, EQUIPMENT, AND RELATED ARCHITECTURAL NOTES. REFER TO ENGINEER'S ELECTRICAL PLAN FOR CIRCUITING. STOP WORK AND NOTIFY ARCHITECT IF ANY DISCREPANCIES EXIST BETWEEN ARCHITECTURAL, ENGINEERING, AND EXISTING CONDITIONS. ANY WORK DONE PRIOR TO ARCHITECT'S WRITTEN AUTHORIZATION TO PROCEED SHALL BE AT THE GENERAL CONTRACTOR'S RISK.
- GENERAL CONTRACTOR TO PROVIDE EMPTY OUTLET BOX AND PULL STRING TO CEILING PLENUM ABOVE AT ALL COMMUNICATIONS, THERMOSTAT, SECURITY, AND MISC. CONTROL OUTLETS AS SHOWN ON THIS PLAN, ENGINEERED DRAWINGS, MECHANICAL DRAWINGS, AND OTHER PLANS & DRAWINGS AS PROVIDED BY OTHER VENDORS AND CONSULTANTS, WHERE THESE LOCATIONS OCCUR IN INSULATED PARTITIONS. CONTRACTOR TO PROVIDE CONDUIT AND PULL STRING TO CEILING PLENUM. TENANT'S CABLING VENDOR TO PROVIDE AND INSTALL ALL NECESSARY CABLING.
- ALL ELECTRICAL DEVICES AND COVER PLATES SHALL BE FLUSH, PLUMB, AT SAME HEIGHT AND OF CONSISTANT COLOR THROUGHOUT, UNLESS NOTED OTHERWISE.
- GC TO COORDINATE COLOR OF ALL COVER PLATES FOR SWITCHES AND ELECTRICAL OUTLETS ON ALL NONE WHITE WALLS WITH ARCHITECT. STYLE SHOULD BE RECTANGULAR AND SCREWLESS, UNLESS OTHERWISE NOTED.
- CONTACT ARCHITECT OR TENANT WHERE OUTLETS CAN NOT BE INSTALLED AS SHOWN ON DRAWINGS DUE TO CONFLICTS WITH BUILDING STRUCTURAL, MECHANICAL, OR ELECTRICAL ELEMENTS. DO NOT PROCEED WITH WORK IN THESE AREAS UNTIL CLARIFICATION IS OBTAINED.
- INSTALL WALL OUTLETS OCCURRING ON OPPOSITE SIDES OF A PARTITION WITH A MINIMUM SPACING OF 2'-0" O.C., UNLESS DIMENSIONED OTHERWISE.
- INSTALL ADJACENT TELEPHONE AND ELECTRICAL OUTLETS 6" ON CENTER, U.N.O.
- INSTALL WALL OUTLETS SO THAT CENTER LINE OF OUTLET IS 16" A.F.F., UNLESS NOTED OTHERWISE.
- TURN OUTLET BOXES MARKED AT 42" OR HIGHER (INCLUDING THOSE THAT OCCUR ABOVE COUNTER TOPS AND BACKSPASH) TO HORIZONTAL POSITION FOR INSTALLATION. INSTALL WITH OUTLET BOX AT 42" TO CENTERLINE OF BOX.
- DUPLEX RECEPTACLES MOUNTED ABOVE COUNTER TOPS IN WET AREAS SHALL BE GFCI TYPE AS REQUIRED BY CODE.
- GENERAL CONTRACTOR TO VERIFY ALL CORE DRILLS IN FIELD TO AVOID ANY EXISTING STRUCTURAL, ELECTRICAL, OR MECHANICAL ELEMENTS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING. CONTRACTOR TO X-RAY AND/OR VERIFY STRUCTURAL COMPONENTS AS REQUIRED BY FIELD CONDITIONS AND/OR PROPERTY MANAGER.
- ELECTRICAL SUBCONTRACTOR SHALL PROVIDE A RATED ASSEMBLY TO MATCH ADJACENT CONDITIONS AT ALL NEW, EXISTING, OR ABANDONED WALL AND FLOOR PENETRATIONS. WHERE FLOOR OUTLETS ARE REMOVED, PROVIDE ABANDONMENT CAP AND SEAL TO MAINTAIN FIRE RATING AND IN SUCH A MANNER WITHOUT NOTICEABLE DEFLECTION OR RISE IN CARPET OR FINISHED FLOOR SURFACE.
- EVERY OFFICE AND WORKSTATION HAS ONE PERSONAL COMPUTER. PC OUTLETS TO BE DESIGNATED WITH GRAY RECEPTACLES.

### FURNITURE COORDINATION

FURNITURE SHOWN FOR COORDINATION ONLY, AND IS NIC. HOLD TO DIMENSIONS FOR POWER/ELECTRICAL AND DATA IN ALL PRIVATE OFFICES; DIMENSIONS TO BE PROVIDED BY FURNITURE VENDOR.  
ALL FLOOR CORE DEVICE LOCATIONS SHALL BE COORDINATED WITH FURNITURE VENDOR.  
CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATIONS OF BASE END FEEDS WITH FURNITURE VENDOR.



**C1 FURNITURE / POWER PLAN - LV 02**  
1/8" = 1'-0"



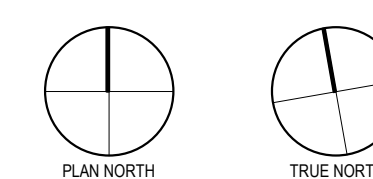
**A1 FURNITURE / POWER PLAN - LV 01**  
1/8" = 1'-0"



12/01/2023

### MIRA SAFETY

1713 Hur Industrial Blvd  
Cedar Park, TX 78613



1 ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

# A-130

POWER / FURNITURE  
PLANS

# FINISH SCHEDULE

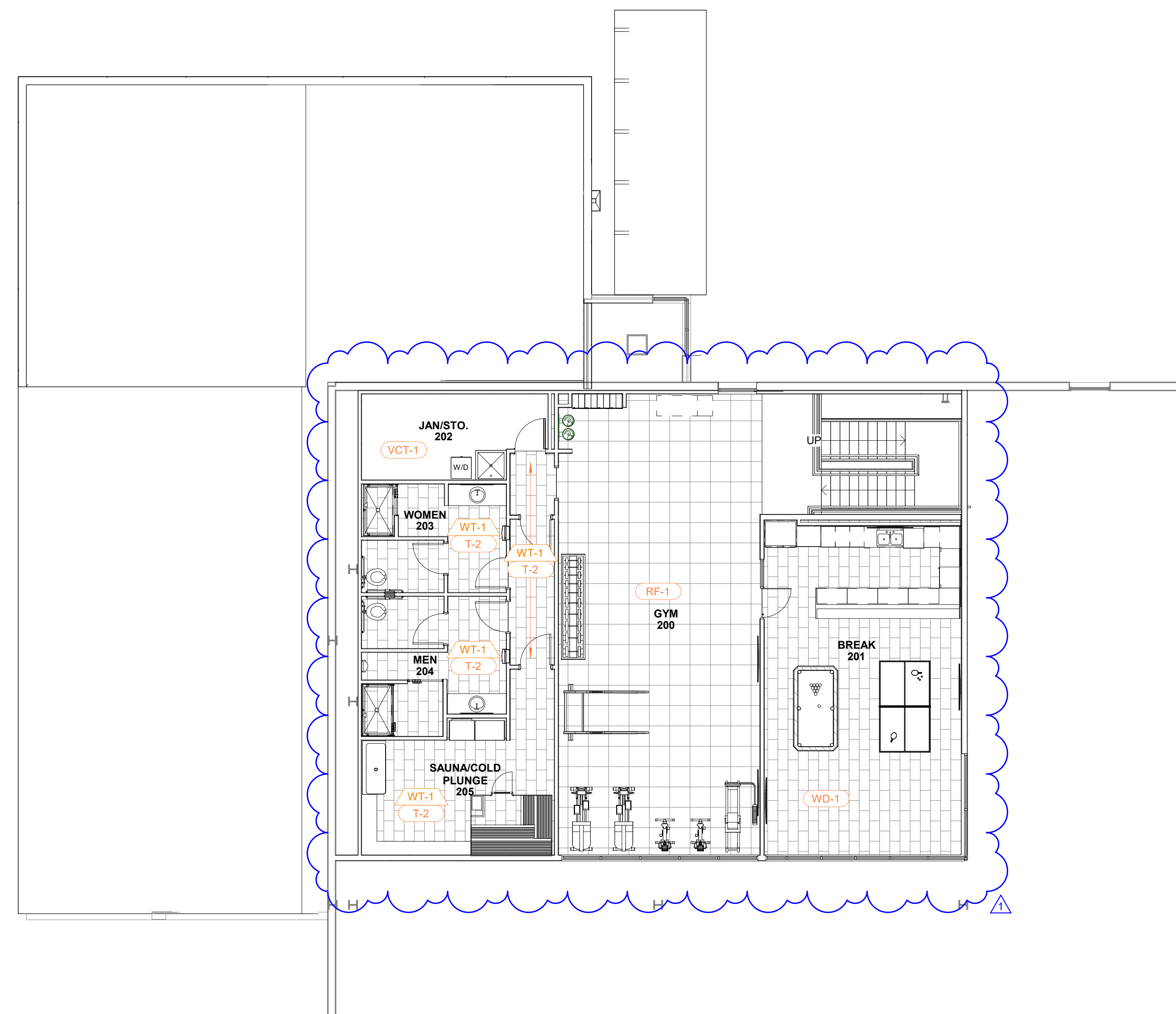
MARK	MATERIAL	MANUFACTURER	STYLE	COLOR	SIZE	LOCATION	ADDITIONAL COMPONENTS	FLAME SPREAD	NOTES
AC-1	ACOUSTICAL FELT PANELING	HUSH ACOUSTICS		APRICOT		OPENWORKSTATION CEILING		ASTM E 84, CLASS A	
CPT-1	CARPET	INTERFACE	NIGHT FLIGHT	106471 TITANIUM	50CM X 50CM	OPEN WORKSTATIONS / OFFICES / CONFERENCE		ASTM E 648, CLASS 1	
PL-1	PLASTIC LAMINATE	FELIX	STANDARD	J0724 GRIGIO BROMO		RECEPTION DESK / BREAKROOM MILLWORK		TO BE USED ON CASEWORK, CLASS B BONDED	
PL-2	PLASTIC LAMINATE	WILSONART	RIDGEWOOD TEXTURE FINISH	VALLEY FORGE ELM 8231K-79		RECEPTION WOOD SLATS		TO BE USED ON CASEWORK, CLASS B BONDED	
PT-1	PAINT	SHERWIN WILLIAMS	EGGSHELL	SNOWBOUND SW 7004		TYPICAL PAINT UNLESS NOTED OTHERWISE		EXEMPT, IBC 2012, 803.2 (THICKNESS)	
PT-2	PAINT	BENJAMIN MOORE	EGGSHELL	AFTER MIDNIGHT CSP-630		REF. ELEVATIONS		EXEMPT, IBC 2012, 803.2 (THICKNESS)	
PT-3	PAINT	BENJAMIN MOORE	EGGSHELL	CITY SHADOW CSP-60		REF. ELEVATIONS		EXEMPT, IBC 2012, 803.2 (THICKNESS)	
RB-1	RUBBER BASE	ROPPE	2.5" BASE	TBD	2.5" TALL	BASE FOR ALL WALLS WITH TYPICAL PAINT		ASTM E 848, CLASS 1, ASTM E 662 <450	
RF-1	RUBBER FLOORING SYSTEMS	CENTAUR FLOOR SYSTEMS	WORKOUT	CS21 TERRACOTTA 10	8mm x 4' x 50LF roll	GYM RUBBER FLOORING			
SS-1	SOLID SURFACE	SILESTONE	POLISHED	DESERT SILVER		RECEPTION DESK		UL 723 CLASS A	
SS-2	SOLID SURFACE	SILESTONE	SLEUDE	CHARCOAL SOAPSTONE		BREAKROOM COUNTER		UL 723 CLASS A	
T-1	PORCELAIN TILE	CONCEPT SURFACES	LONDON	ATHRACITE	12X24	FIRST FLOOR TILE		EXEMPT, NON-COMBUSTIBLE (PORCELAIN)	
T-2	PORCELAIN TILE	CONCEPT SURFACES	HARMONY - MATTE	ASH	12X24	SPA FLOOR TILE		EXEMPT, NON-COMBUSTIBLE (PORCELAIN)	
VCT-1	VINYL COMPOSITION TILE	ARMSTRONG	IMPERIAL TEXTURE	TBD	12X12			ASTM E 648, CLASS 1	
WC-1	WALLCOVERING	MOMENTUM / TRIKES	LOUIS	LIQUORICE LV-LU-14				ASTM E 84, CLASS A	
WC-2	WALLCOVERING	CARNEGIE	XOREL	TBD				ASTM E 84, CLASS A	
WD-1	WOOD FLOORING	DUCHATEAU	VINYL DELUXE LUXTECH 20 COLLECTION	BETTONY	9" PLANK	TACKABLE SURFACE AT RECEPTION DESK			
WT-1	WALL TILE	CONCEPT SURFACES	HARMONY - RIBBED	ASH	12X24	SPA WALL TILE		EXEMPT, NON-COMBUSTIBLE (PORCELAIN)	FINISH: NATURAL
WT-2	WALL TILE	STONESOURCE	SEGMENTS - LARGE	ICE (MATTE)	9" x 28"	BREAKROOM BACKSPLASH		EXEMPT, NON-COMBUSTIBLE (PORCELAIN)	

## GENERAL NOTES: FINISH

- NO SUBSTITUTIONS OF GRADE, QUALITY, OR MANUFACTURER SHALL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM ARCHITECT OR TENANT.
- REFER TO FINISH PLAN, REFLECTED CEILING PLAN, ELEVATIONS, AND DETAILS FOR ACCENT FINISH LOCATIONS, APPLICATION, AND TERMINATION.
- ALL FLOORING FINISH TRANSITIONS TO BE MADE AT CENTERLINE OF DOORS AND CASED OPENING FRAMES, UNLESS NOTED OTHERWISE.
- FLOORING TO HAVE ANTI-FRACTURE MEMBRANE APPLIED TO SUBFLOOR AT TILE LOCATIONS.
- LEVELING COMPOUND TO BEGIN SLOPE 4'-0" FROM EDGE OF TRANSITION STRIP. SLOPE NOT TO EXCEED 1/8" PER FOOT.
- PAINT ALL EXPOSED CONDUIT AT UNDER-CABINET TASK LIGHTING TO MATCH CABINET FINISH.
- WALL TEXTURE TO BE "LIGHT ROLLER STIPPLE", CUT IN STIPPLE WITHIN 1/4" OF FRAMES, CORNERS, AND OTHER ITEMS.
- SURFACES WHICH ARE TO RECEIVE FINISHES ARE TO BE CLEAN, TRUE, AND FREE FROM IRREGULARITIES.
- CONTRACTOR TO SUBMIT TWO SAMPLES OF EACH FINISH TO ARCHITECT FOR APPROVAL. SUBMITTALS TO BE IDENTIFIED WITH FINISH CODE, NAME, DATE, NUMBER, FORMULA, SHEEN, AND TEXTURE AS REQUIRED. CONTRACTOR TO PLACE FULL ORDER ONLY AFTER WRITTEN APPROVAL OR ACCEPTANCE IS RECEIVED. GENERAL CONTRACTOR TO ALLOW ADEQUATE TIME FOR REVIEW AND RE-SUBMITTAL AS REQUIRED.
- PROVIDE 8' X 8' (MINIMUM) MOCK-UP OF EACH WALL PAINT ON-SITE WITH FINAL LIGHTING FOR ARCHITECT AND TENANT'S APPROVAL.
- CARPET SHALL LAY IN SAME DIRECTION, UNLESS OTHERWISE SHOWN. CARPET TO RECEIVE A MINIMUM OF SEAMS WITH NO CROSS-JOINTS. AVOID SEAMING NEAR DOORS AND CORNERS. CONTRACTOR SHALL PROVIDE TWO COPIES OF SEAMING SUBMITTALS TO ARCHITECT FOR APPROVAL PRIOR TO PLACING ORDER. CARPET SHALL BE TRIMMED EVENLY AND NEATLY FOR A TIGHT FIT. FINAL INSTALLATION SHALL BE FREE FROM RIPPLES AND PUNCTURES AND PER MANUFACTURER'S AND INDUSTRY STANDARDS.
- REFER TO MANUFACTURER'S INSTRUCTION FOR TEMPERATURE OF SURFACES TO BE PAINTED AND OF SURROUNDING AIR. DO NOT APPLY MATERIALS WHEN RELATIVE HUMIDITY EXCEEDS 85% AND DO NOT APPLY TO DAMP OR WET SURFACES.
- ALL CARPETED AREAS TO BE CLEANED AND VACUUMED PRIOR TO FINAL INSPECTION. ALL VCT, WOOD, TILE, STONE, SEALED CONCRETE, OR OTHER HARD SURFACE FLOOR FINISHES TO BE CLEANED AND WAXED PER MANUFACTURER'S RECOMMENDATIONS PRIOR TO FINAL INSPECTION.
- PAINT ALL SIDE EDGES OF CUT CEILING TILES TO MATCH FINISH FACE.
- PROVIDE EPOXY GROUT AT ALL WET LOCATIONS. REFER TO FINISH SCHEDULE FOR COLOR.
- ALL FLOORS TO BE **CPT-1** UNLESS NOTED OTHERWISE.
- ALL WALLS TO BE **ECL-1** UNLESS NOTED OTHERWISE.
- ALL BASE TO BE **BE-1** UNLESS NOTED OTHERWISE.

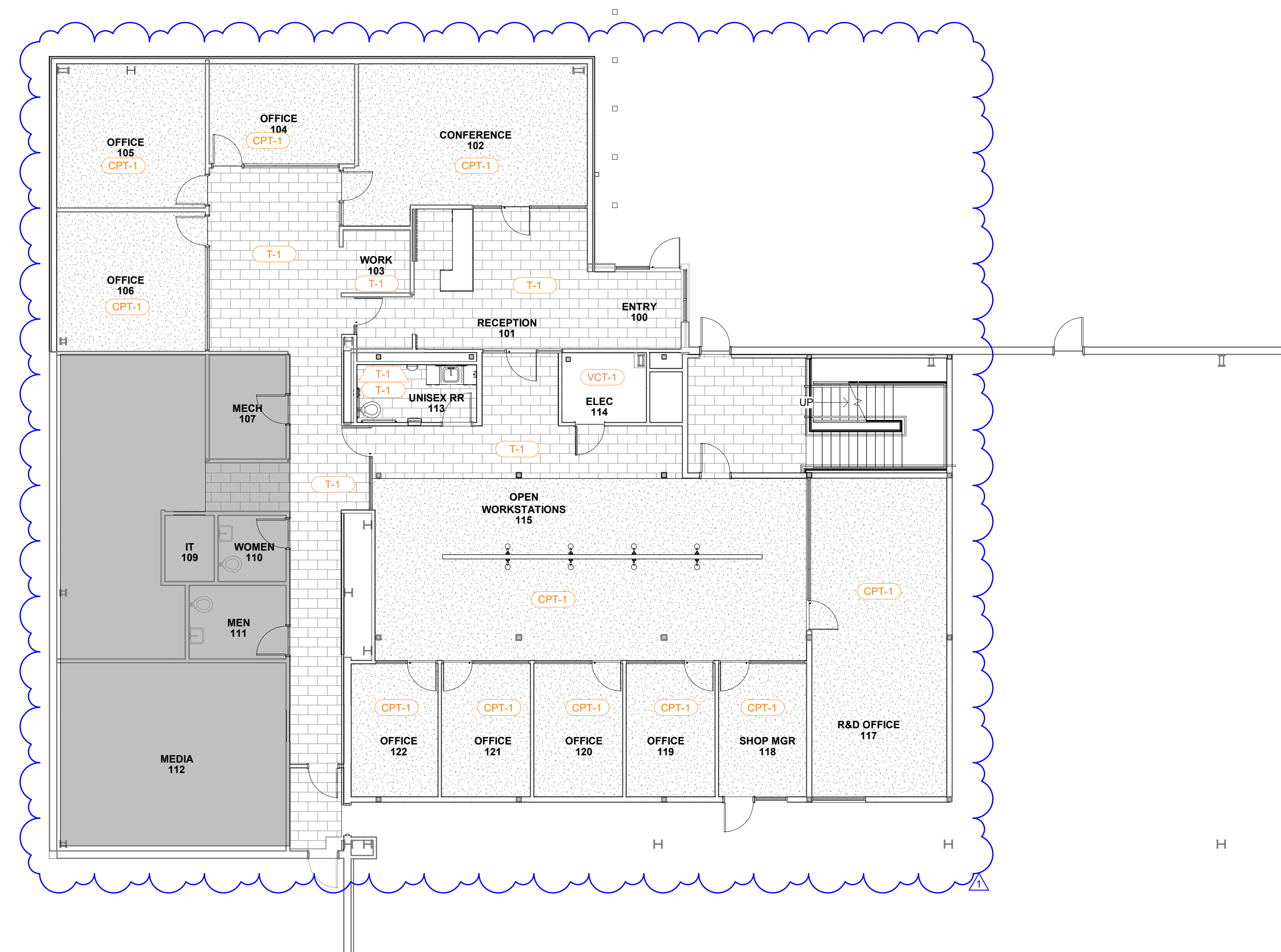
## 2 FINISH PLAN - LV 02

1/8" = 1'-0"



## 1 FINISH PLAN - LV 01

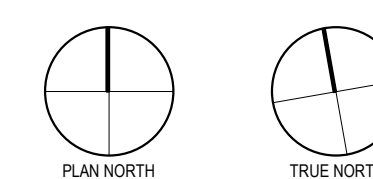
1/8" = 1'-0"



12/01/2023

### MIRA SAFETY

1713 Hur Industrial Blvd  
Cedar Park, TX 78613



1 ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

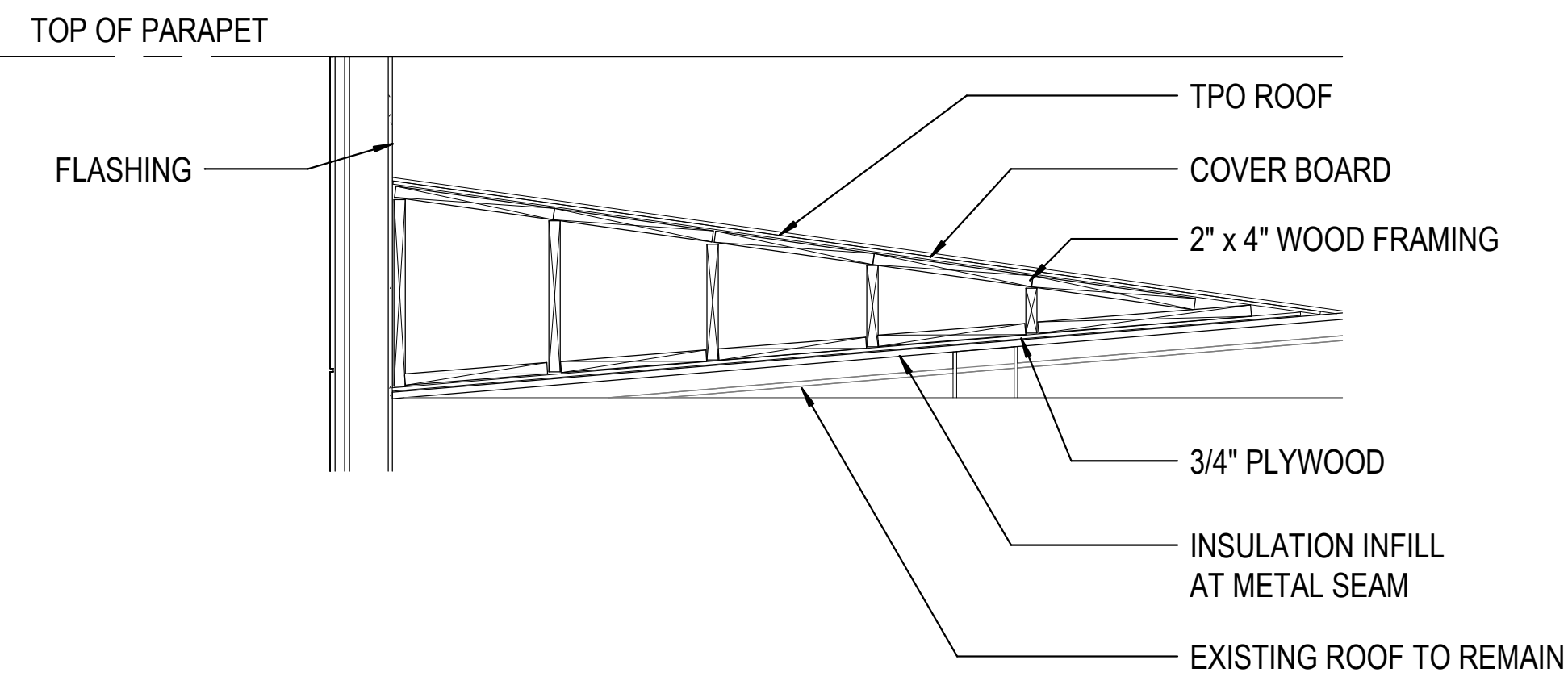
Drawn By JO

Checked By OS

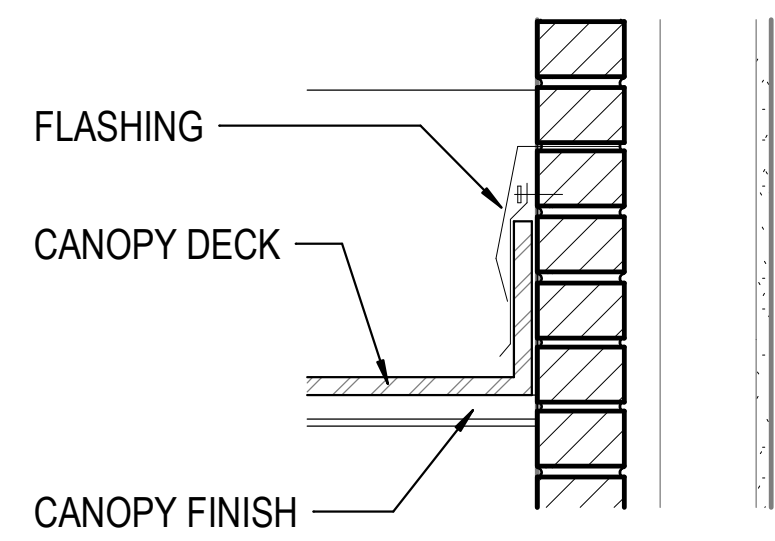
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

# A-140

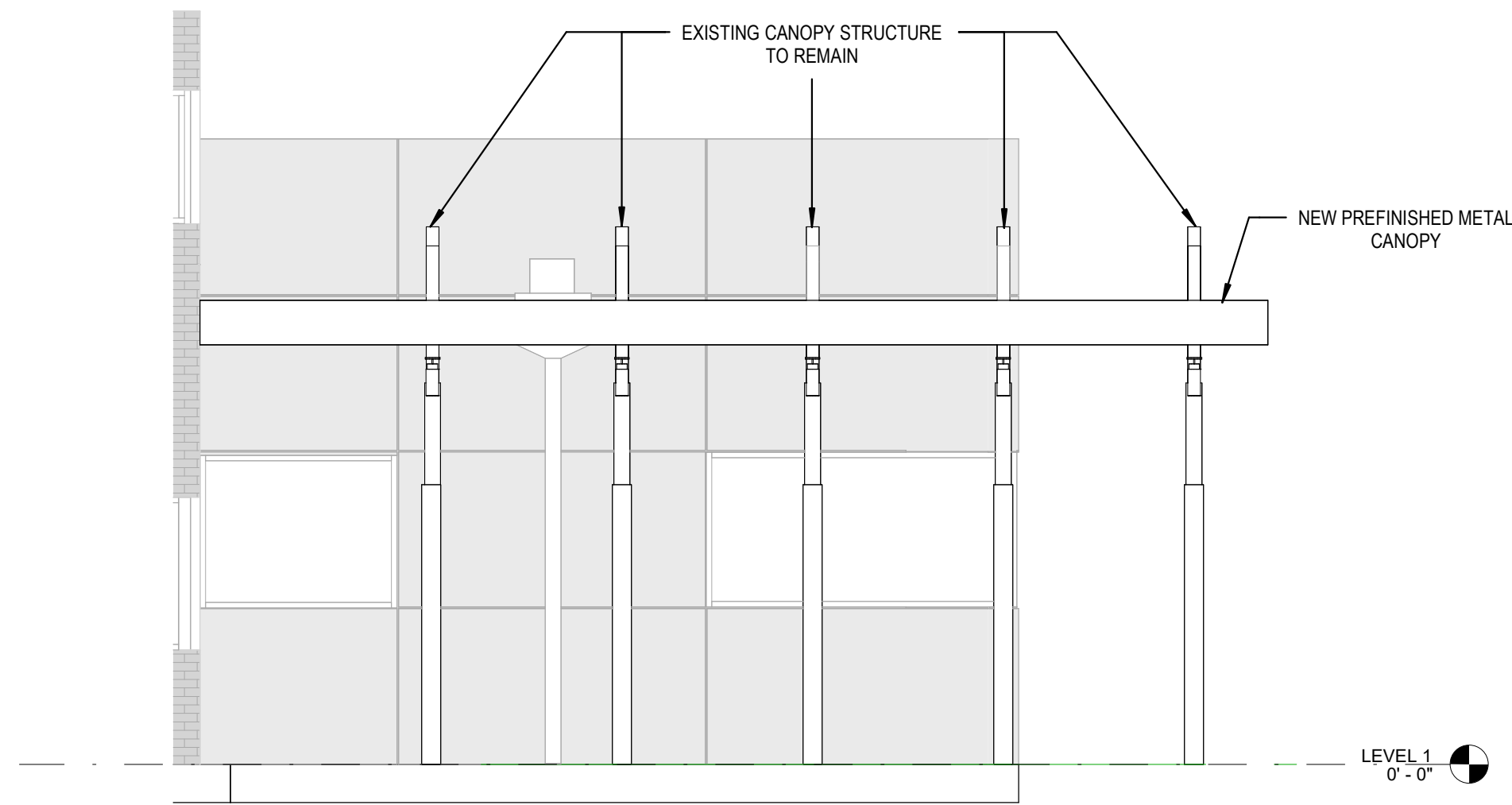
FINISH PLANS



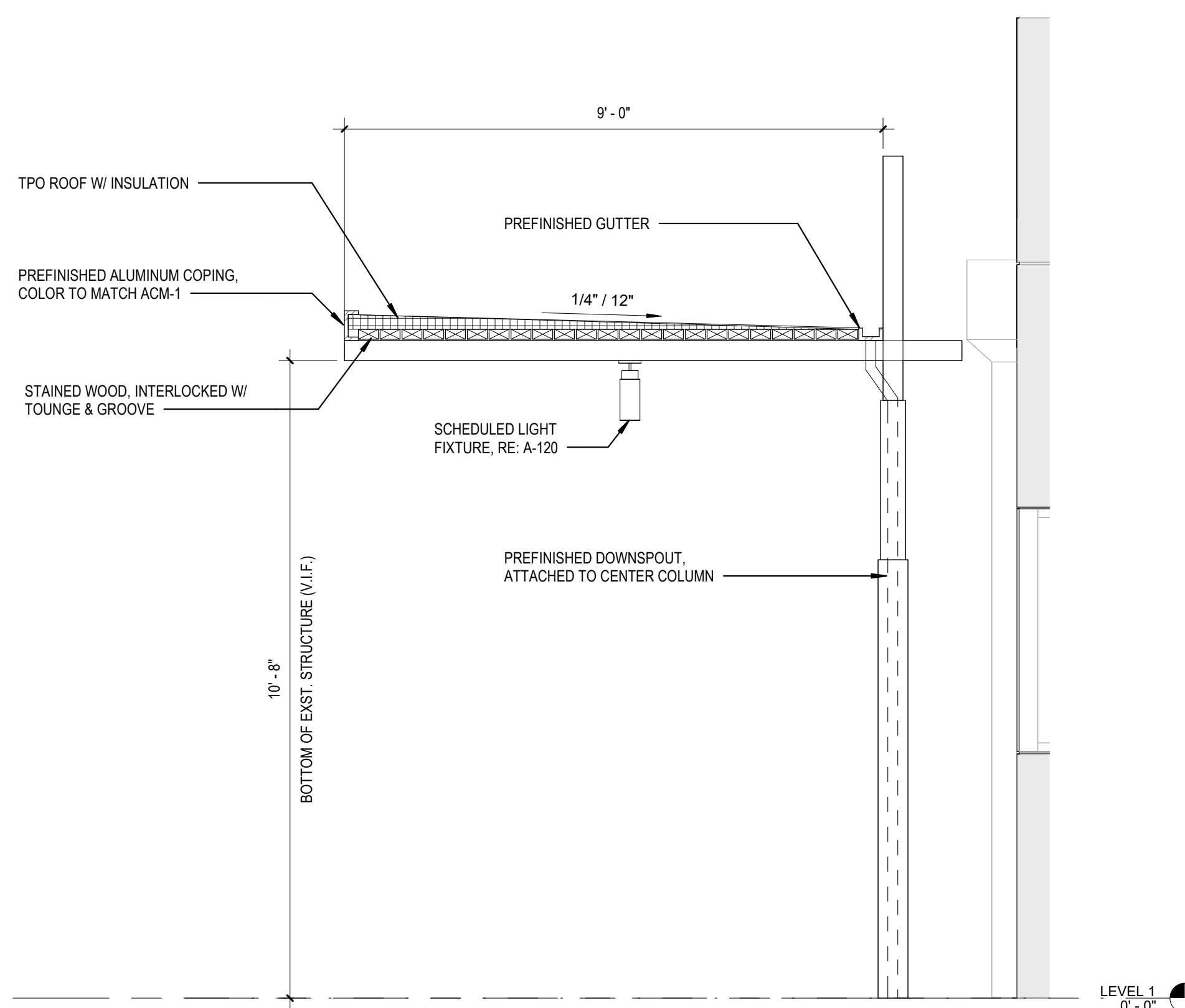
**D1 CRICKET FRAMING DETAIL**  
1/2" = 1'-0"



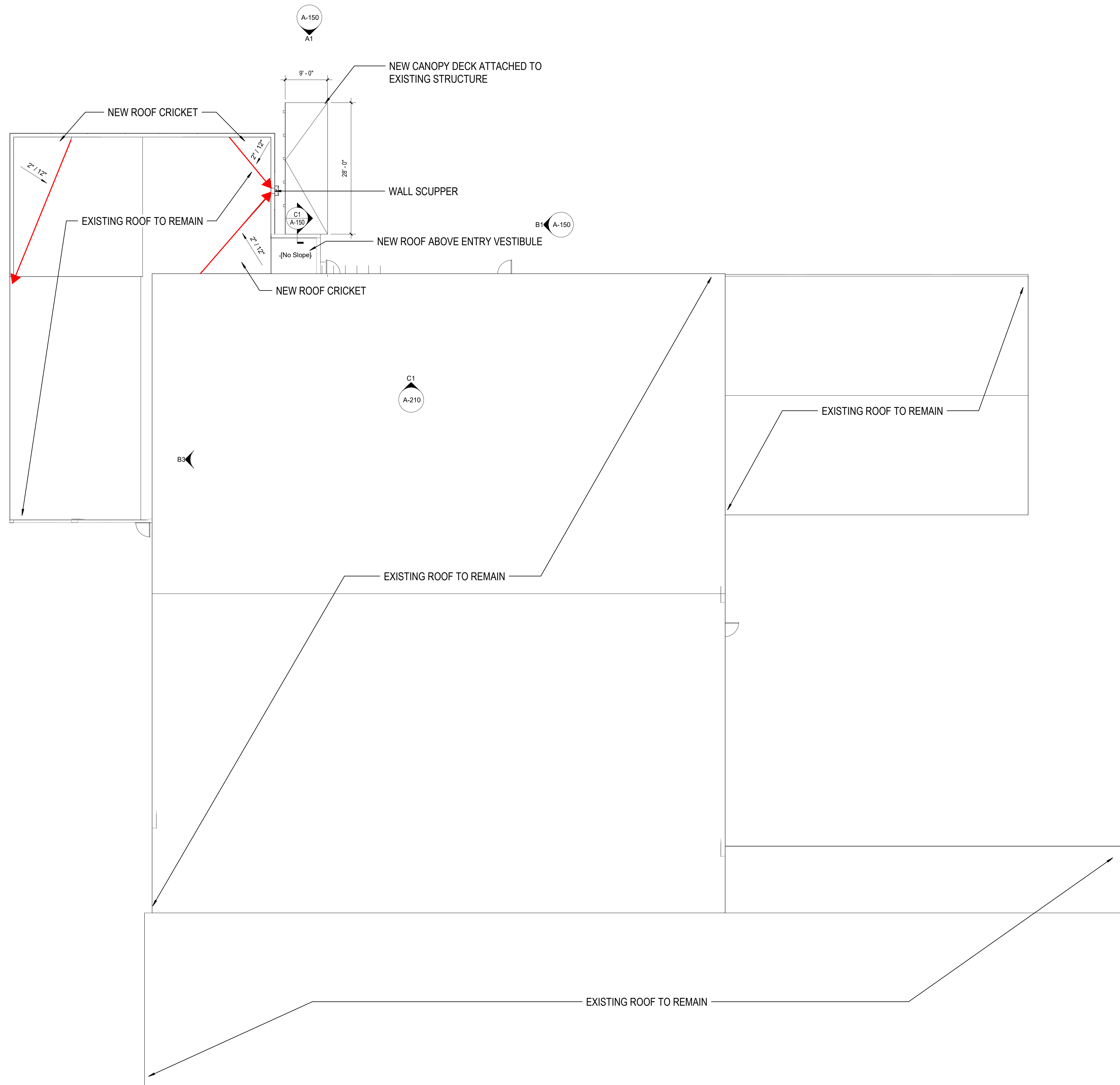
**C1 Section 14**  
1 1/2" = 1'-0"



**B1 CANOPY ELEVATION - EAST**  
1/4" = 1'-0"



**A1 CANOPY ELEVATION - NORTH**  
1/2" = 1'-0"

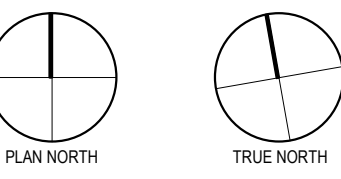


**A2 ROOF PLAN**  
3/32" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

Drawn By Author

Checked By Checker

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-150**

ROOF PLAN



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

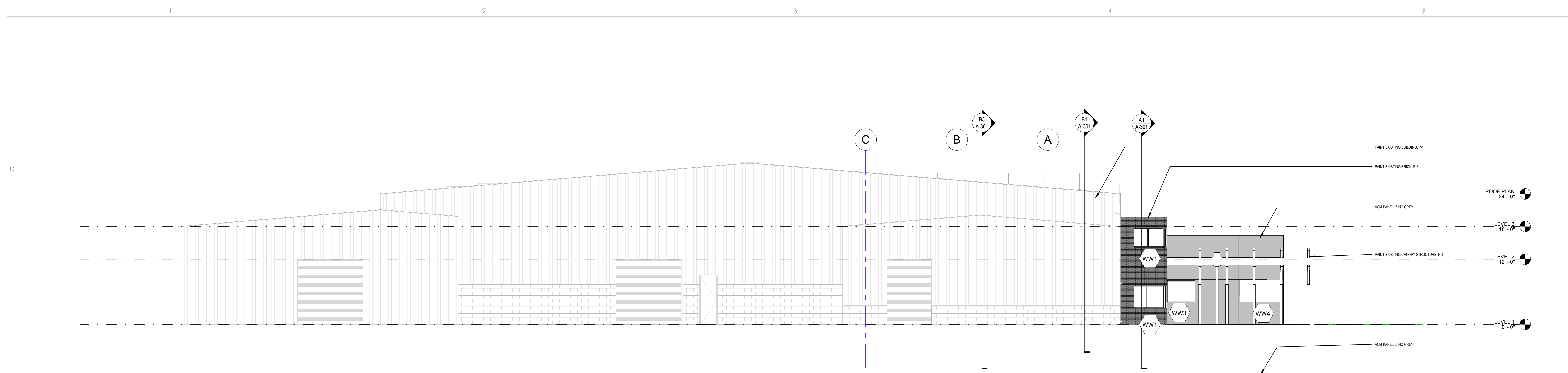
ISSUE FOR PERMIT 12/01/23

△ Issues  
Project Number 23-01-014  
Drawn By JO  
Checked By OS

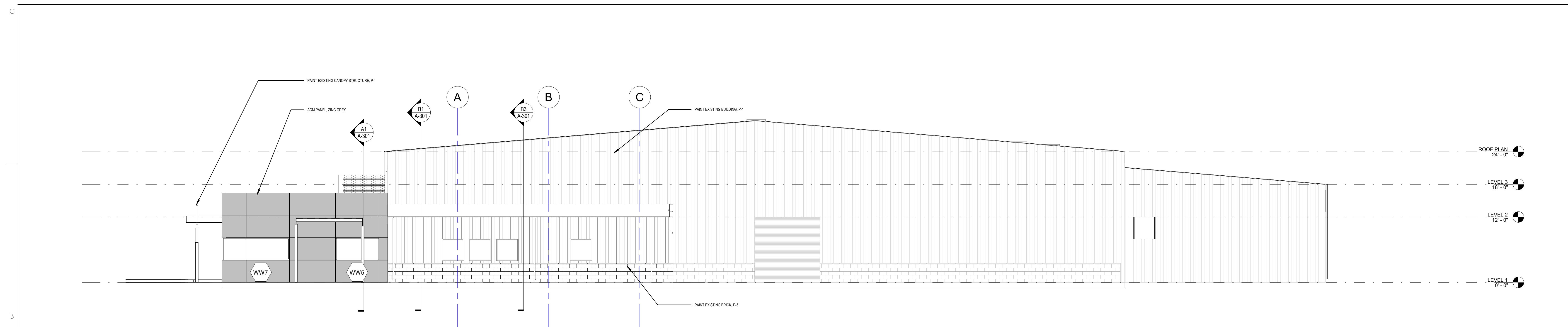
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-200**

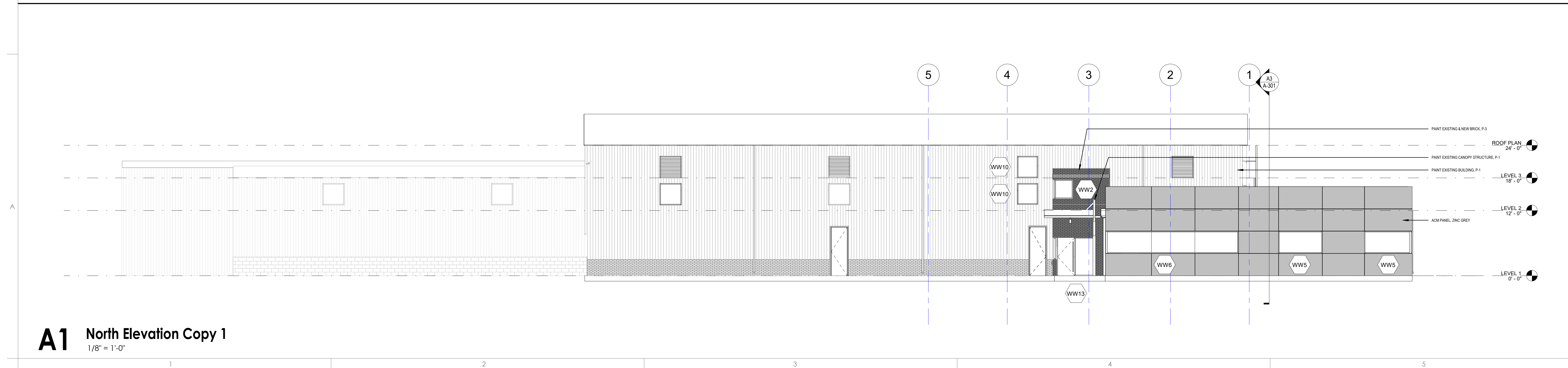
EXTERIOR  
ELEVATIONS



**C1 East Elevation Copy 1**  
1/8" = 1'-0"



**B1 West Elevation Copy 1**  
1/8" = 1'-0"

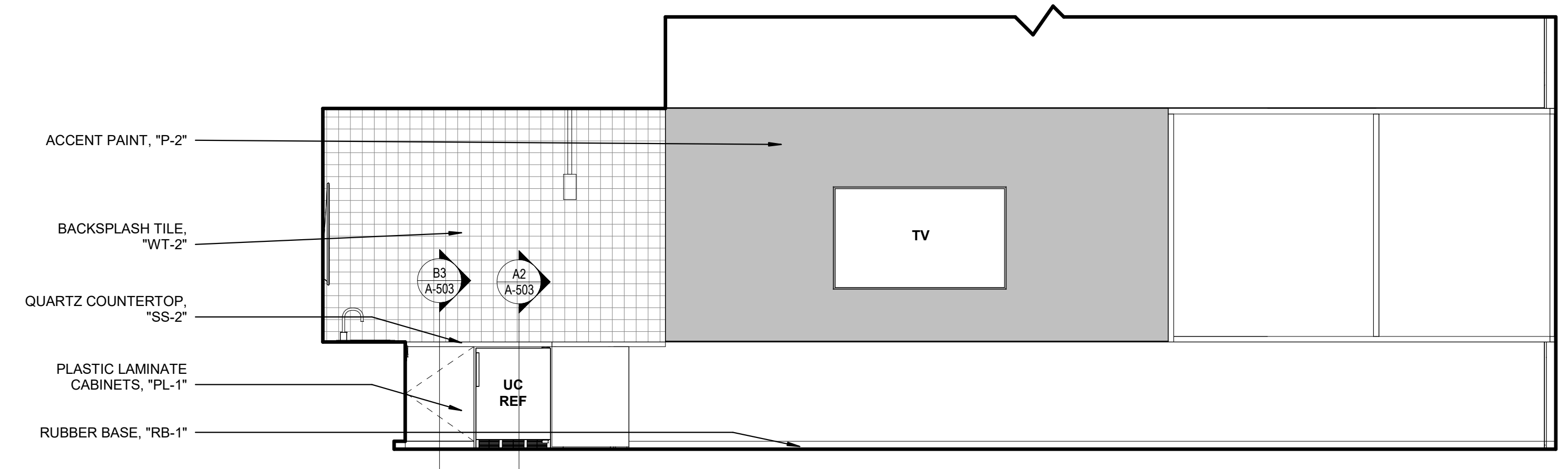


**A1 North Elevation Copy 1**  
1/8" = 1'-0"

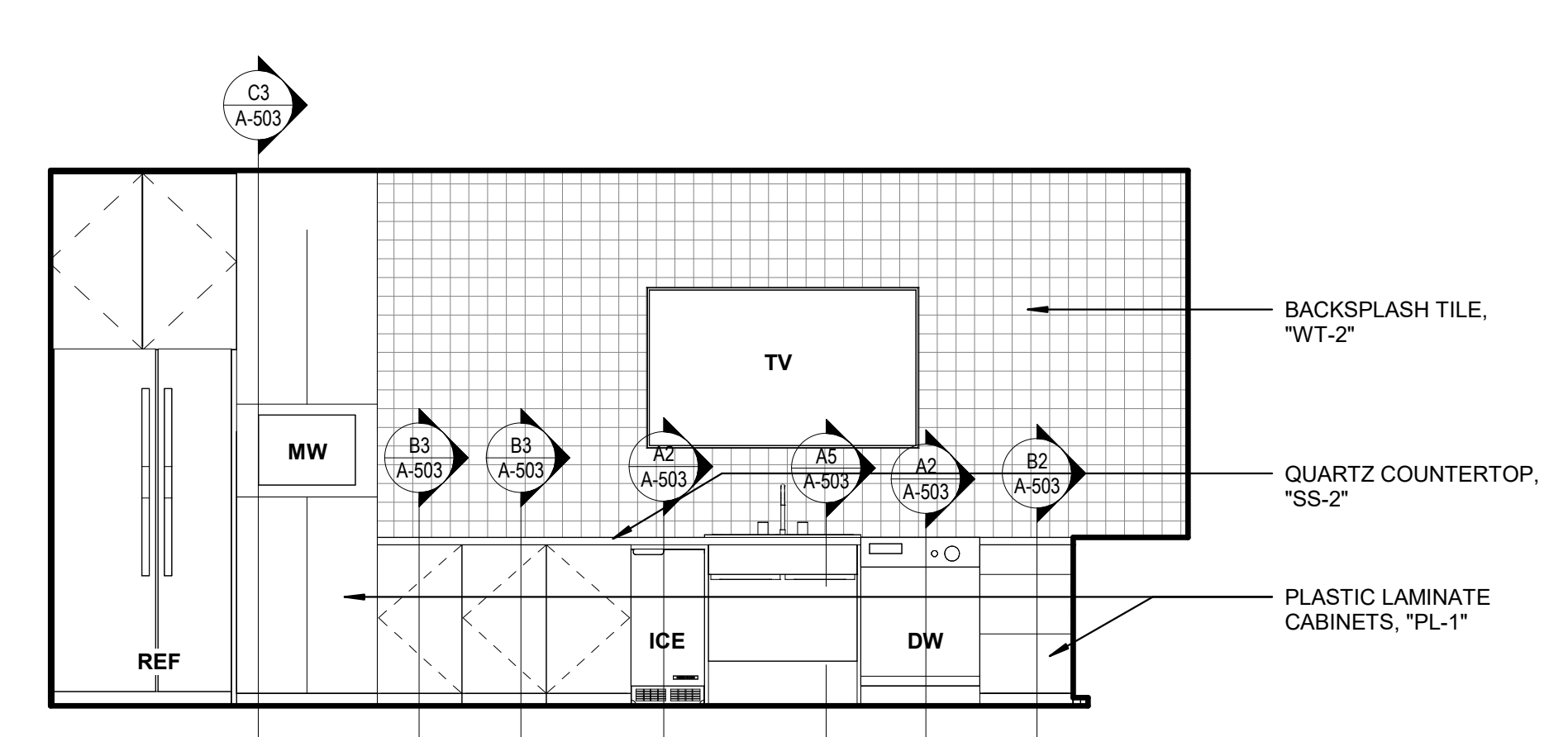


12/01/2023

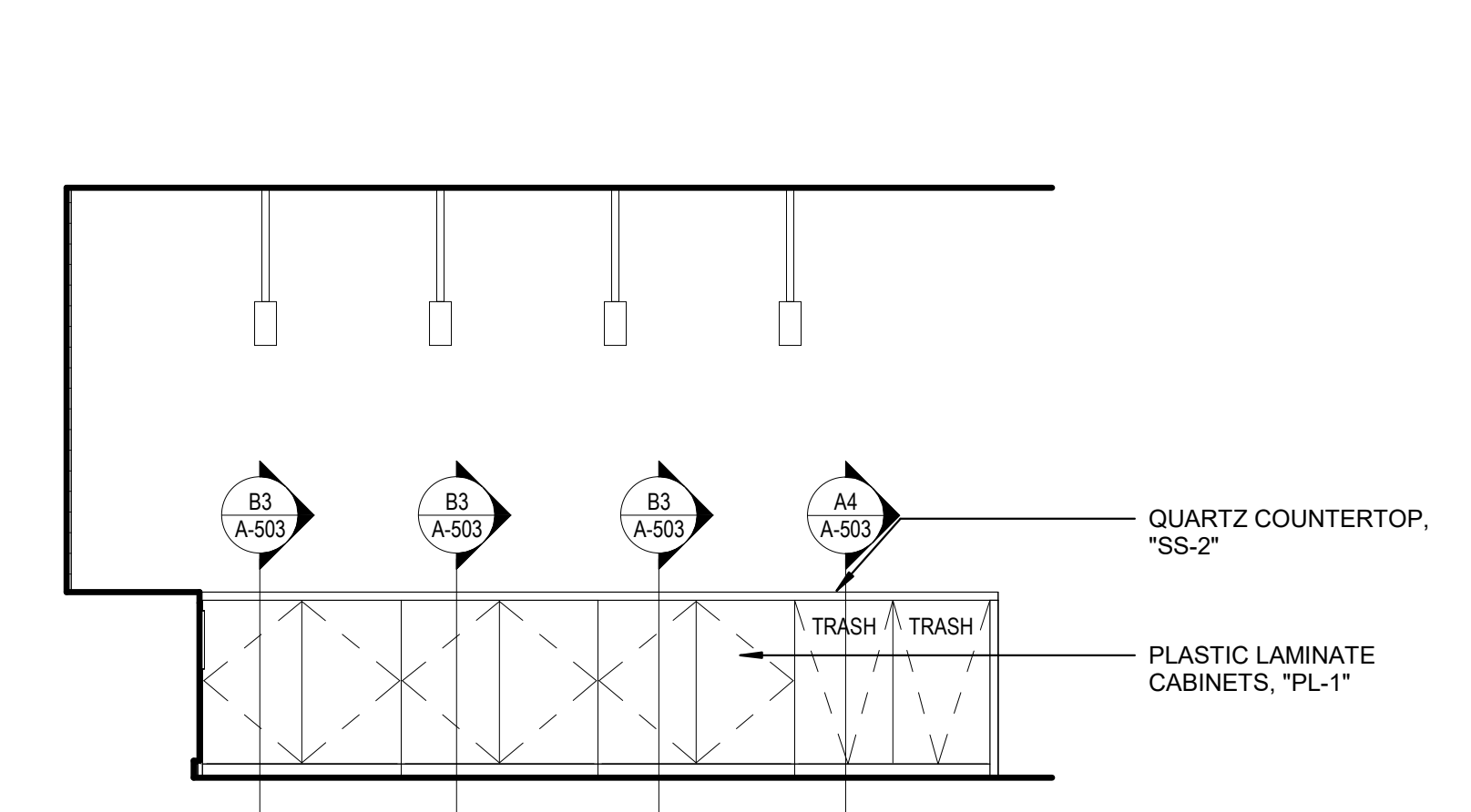
**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



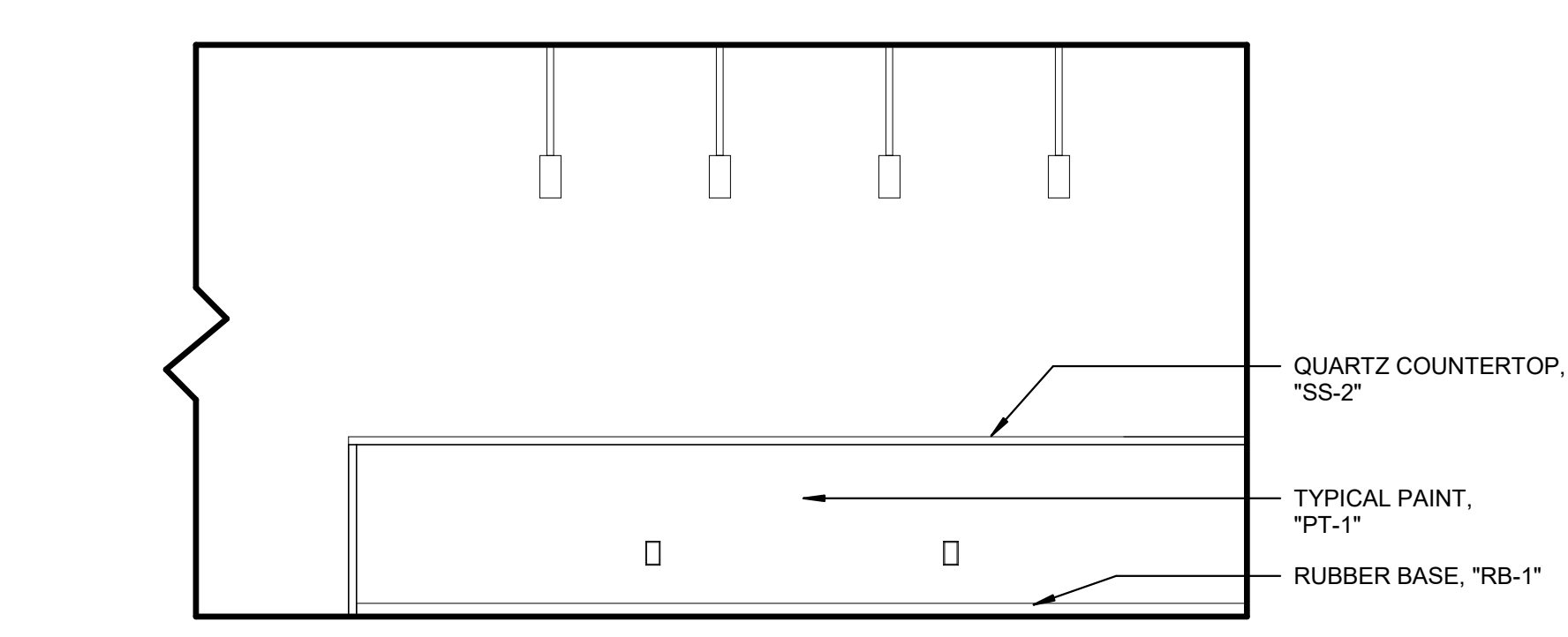
**D1 BREAKROOM - EAST**  
3/8" = 1'-0"



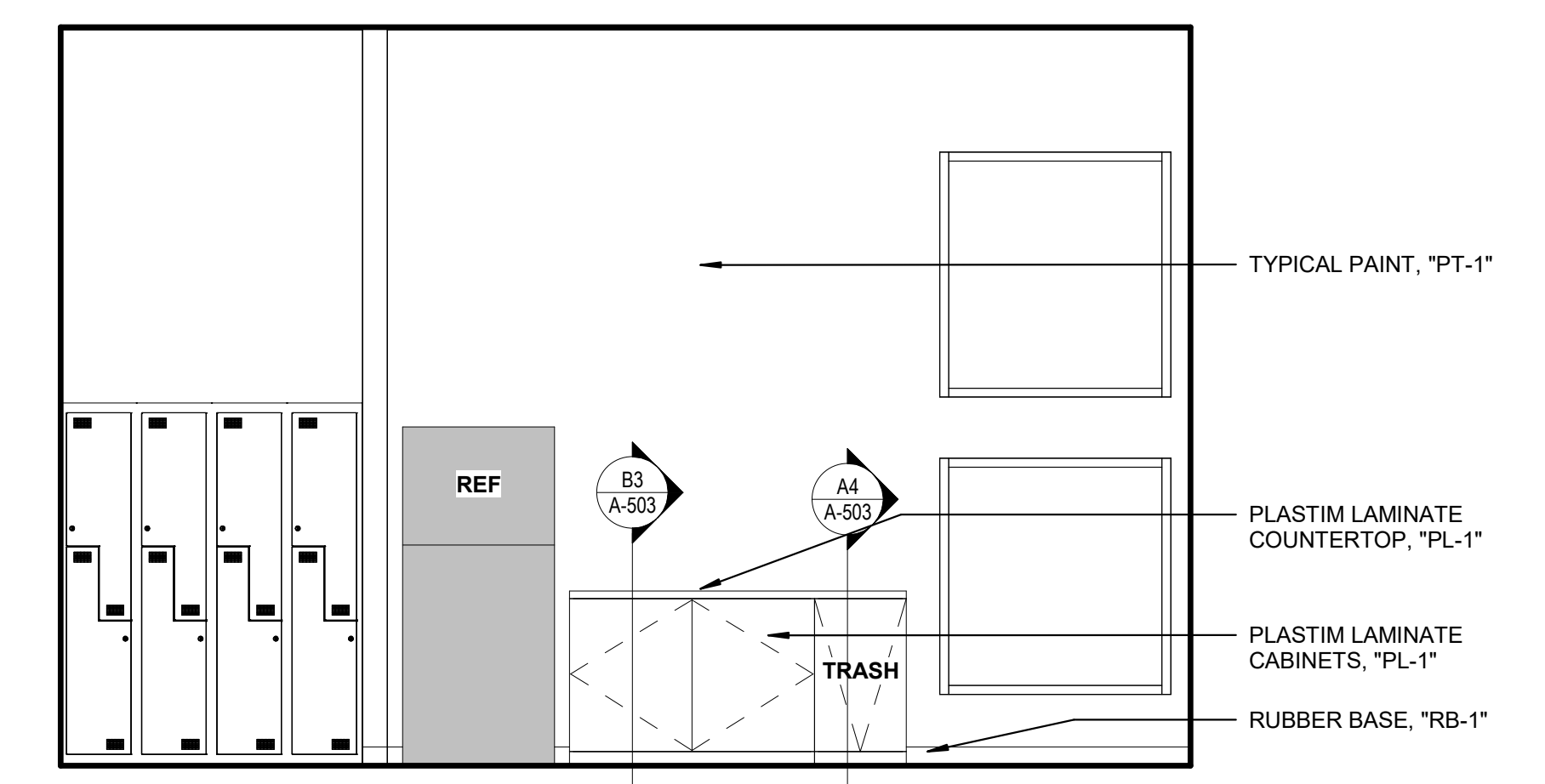
**D3 BREAKROOM - NORTH**  
3/8" = 1'-0"



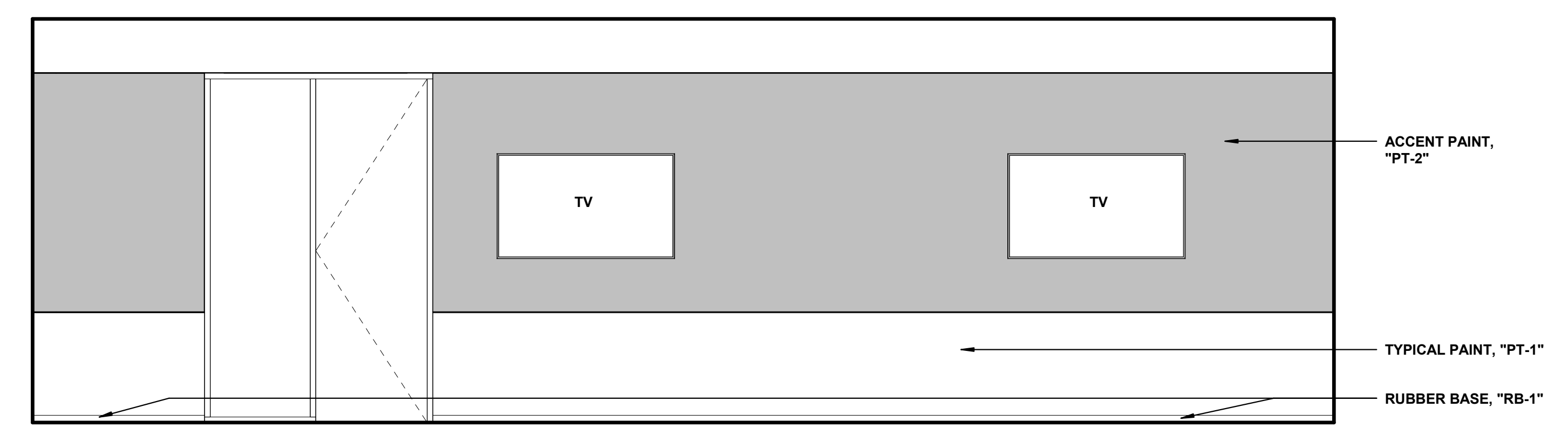
**D4 BREAKROOM - SOUTH**  
3/8" = 1'-0"



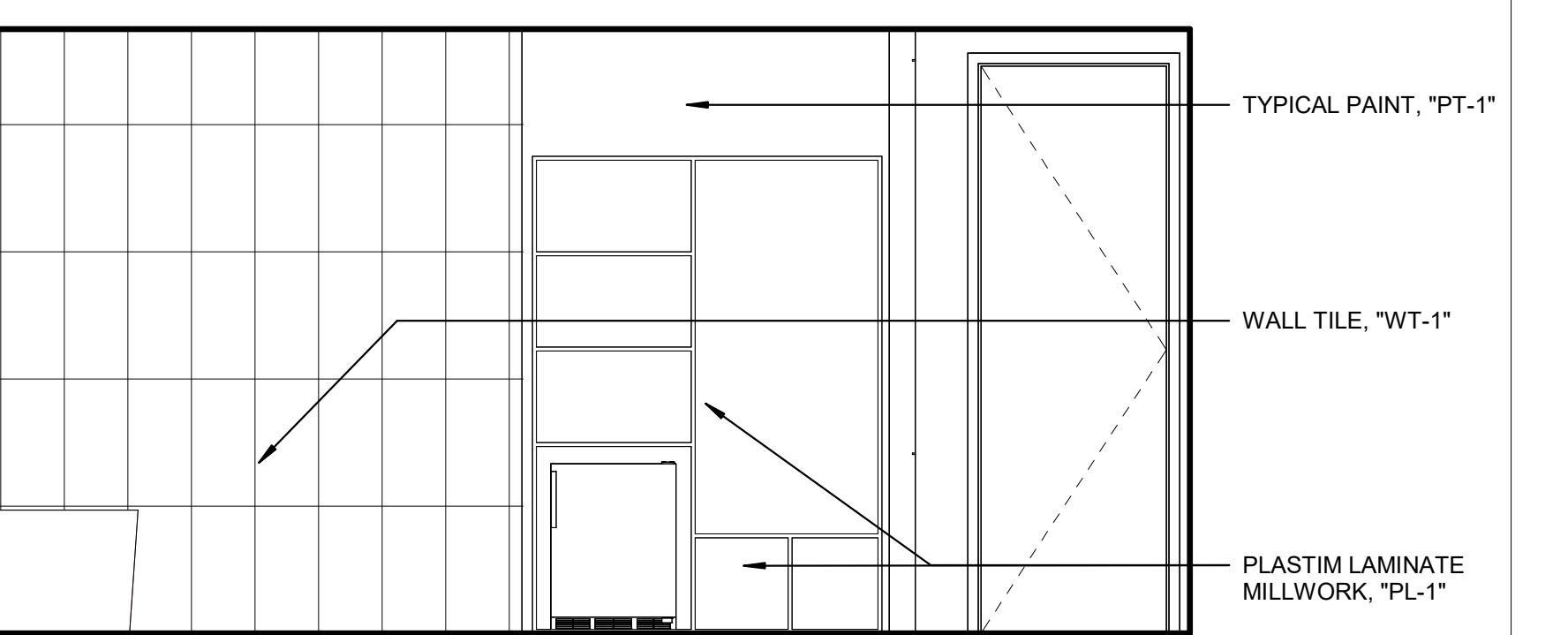
**C1 BREAKROOM ISLAND - NORTH**  
3/8" = 1'-0"



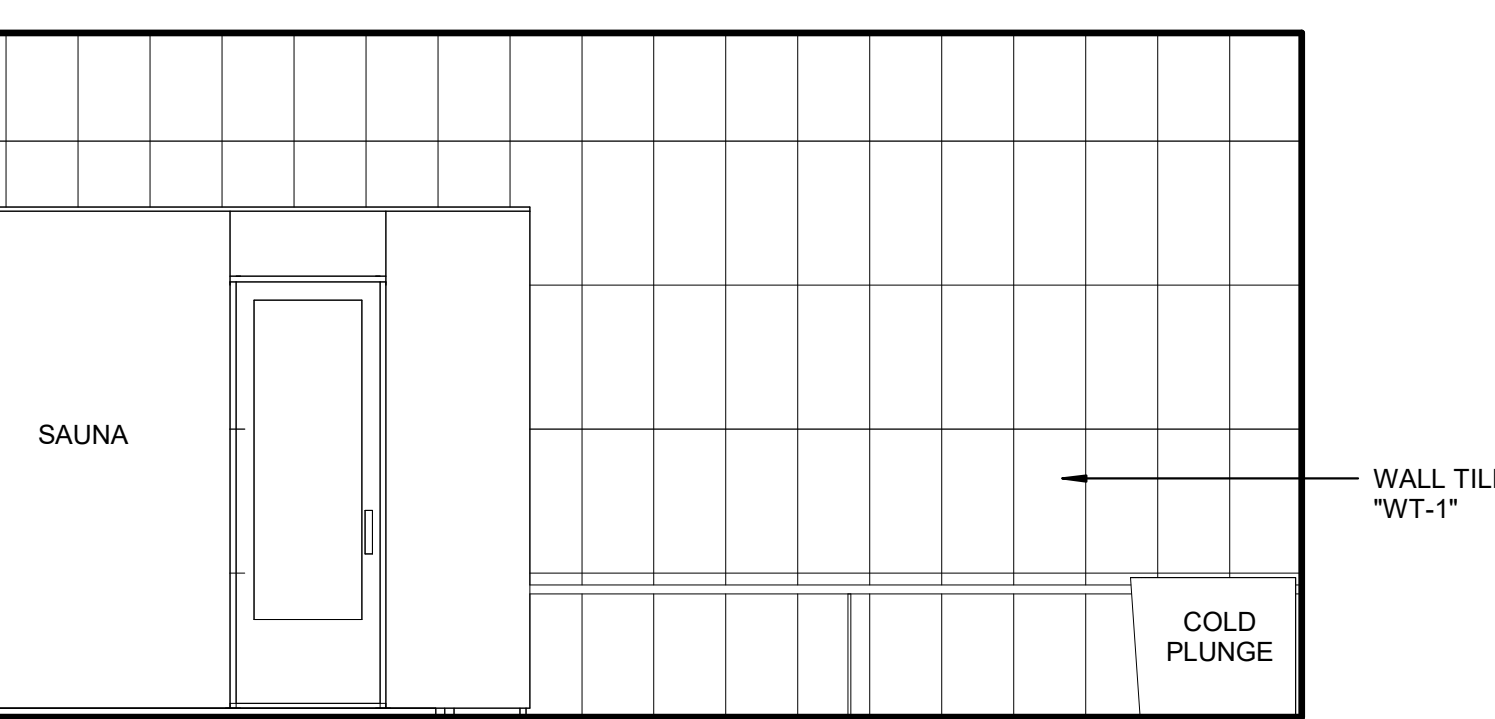
**C2 GYM - NORTH ELEVATION**  
3/8" = 1'-0"



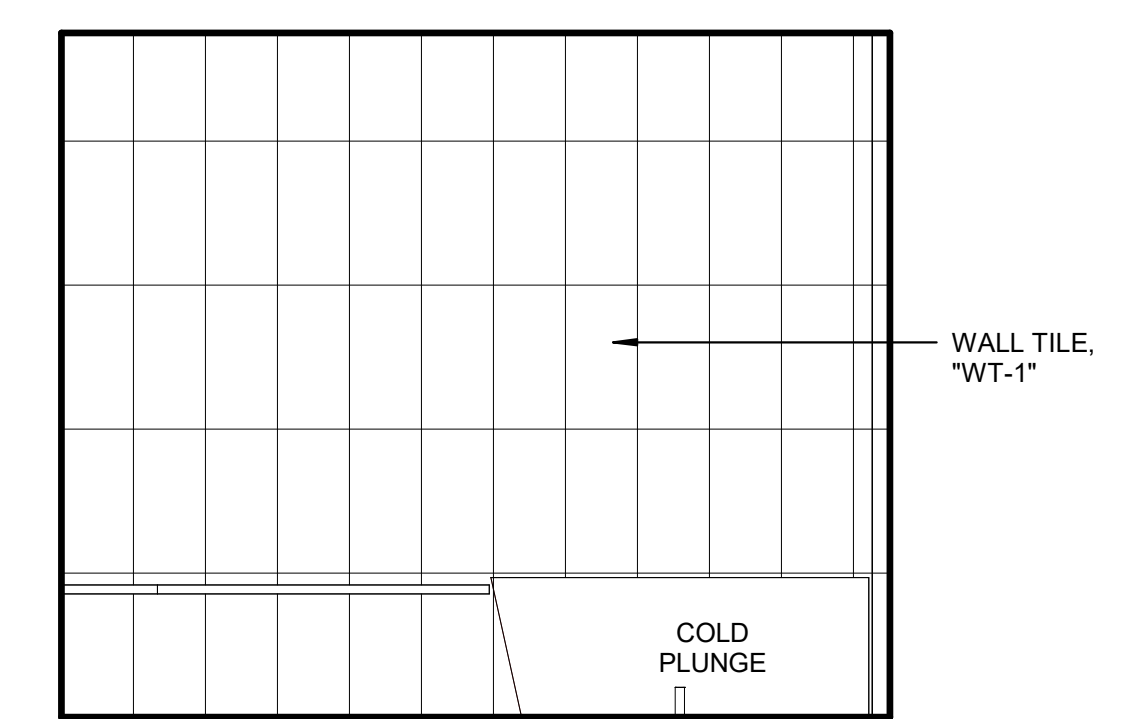
**C3 GYM - EAST ELEVATION**  
3/8" = 1'-0"



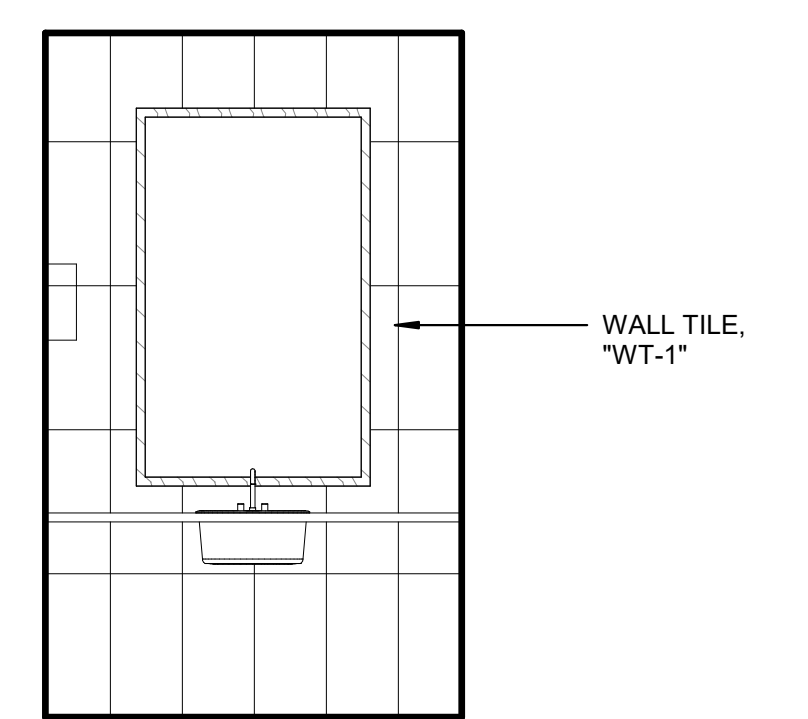
**B1 SPA ELEVATION - NORTH**  
3/8" = 1'-0"



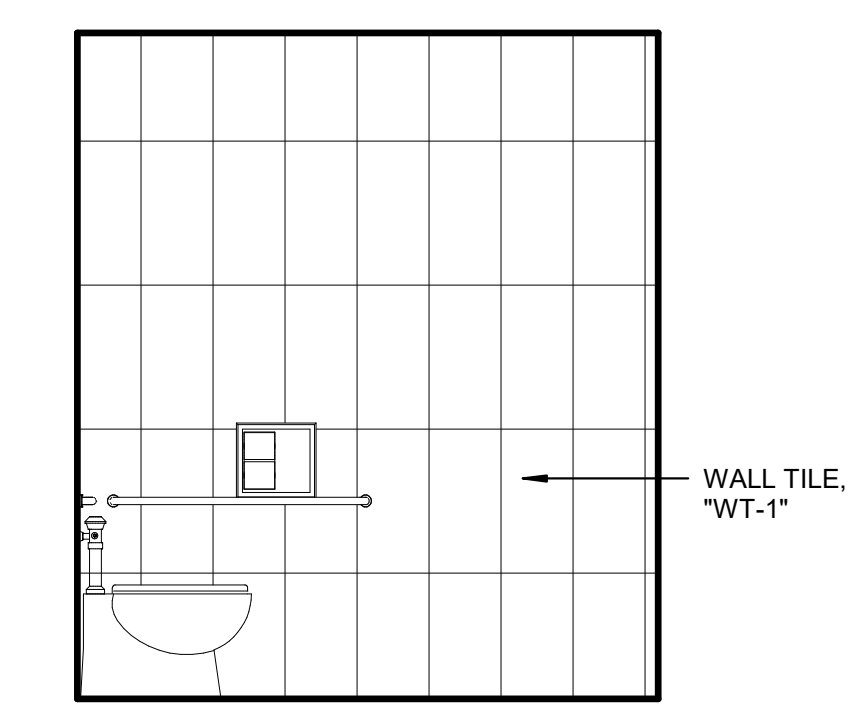
**B2 SPA ELEVATION - SOUTH**  
3/8" = 1'-0"



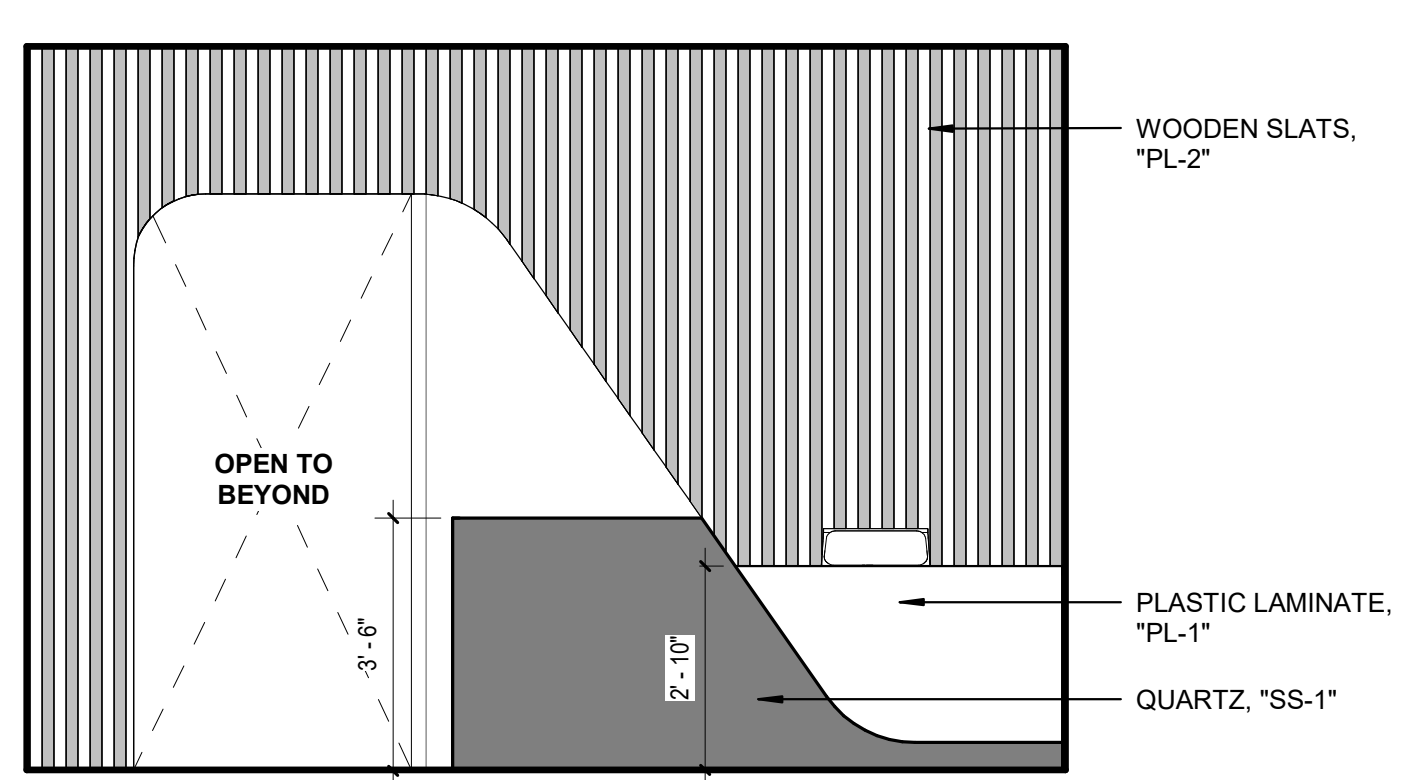
**B3 SAUNA - WEST**  
3/8" = 1'-0"



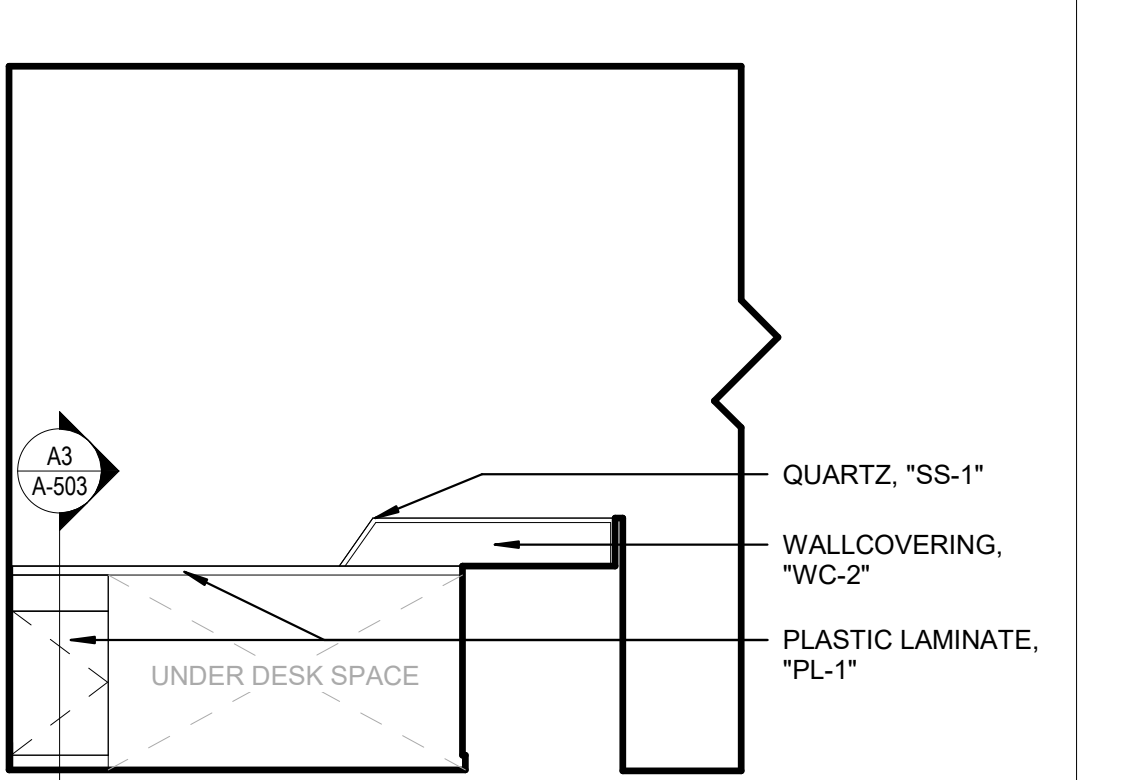
**B4 LEVEL 2 RESTROOM VANITY**  
3/8" = 1'-0"



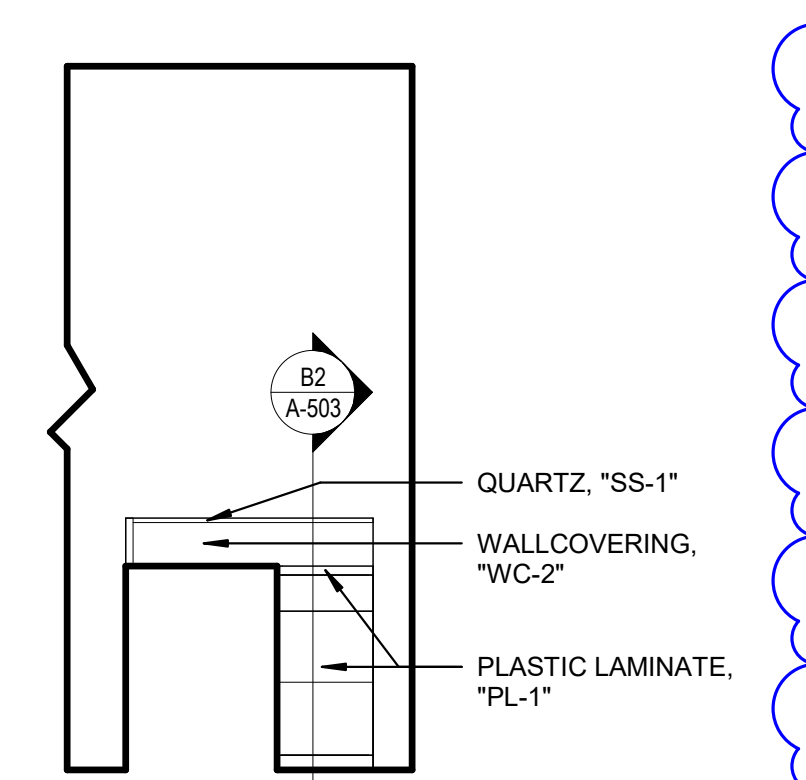
**B5 LEVEL 2 RESTROOM - NORTH**  
3/8" = 1'-0"



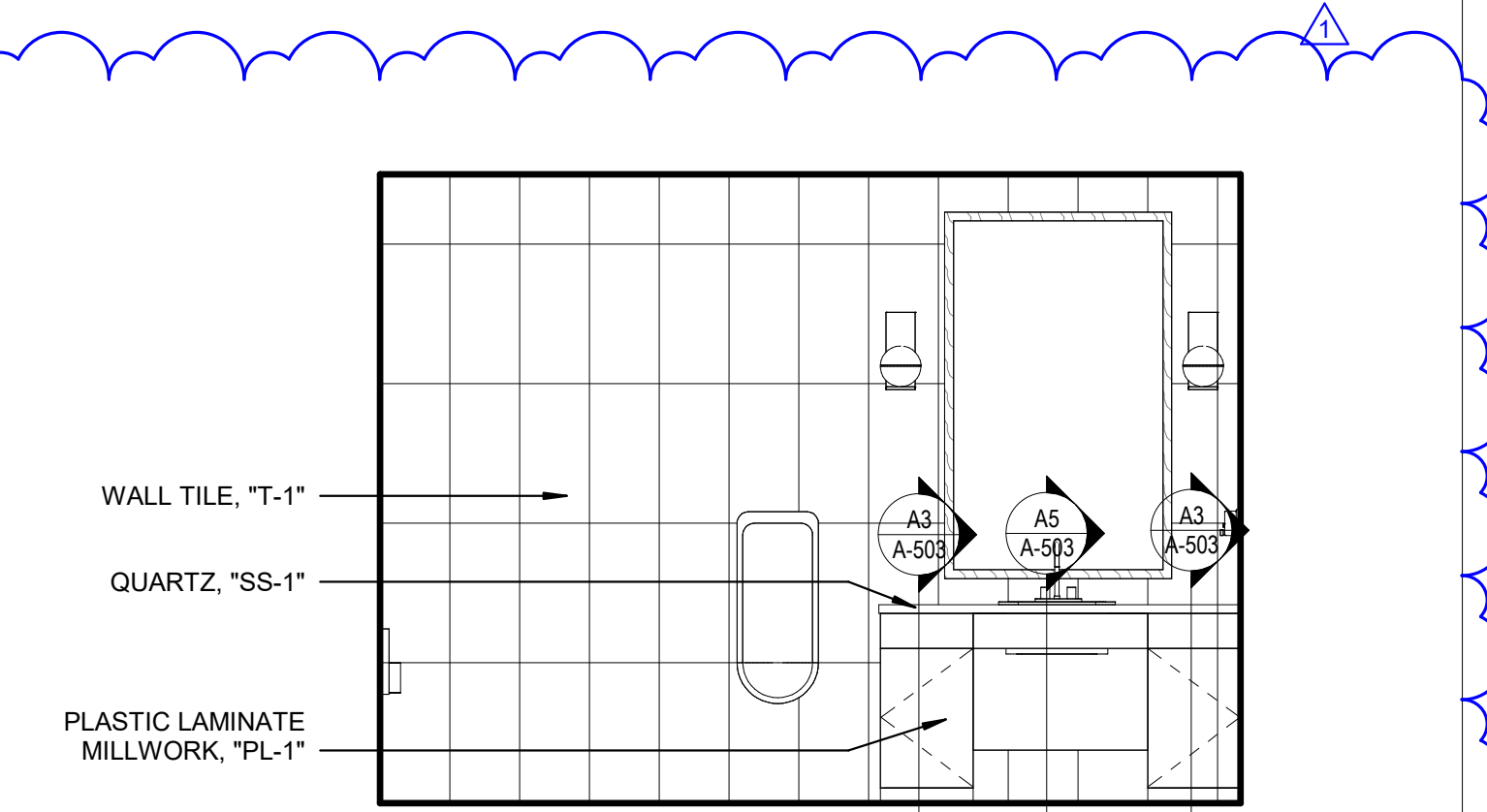
**A1 RECEPTION DESK - WEST**  
3/8" = 1'-0"



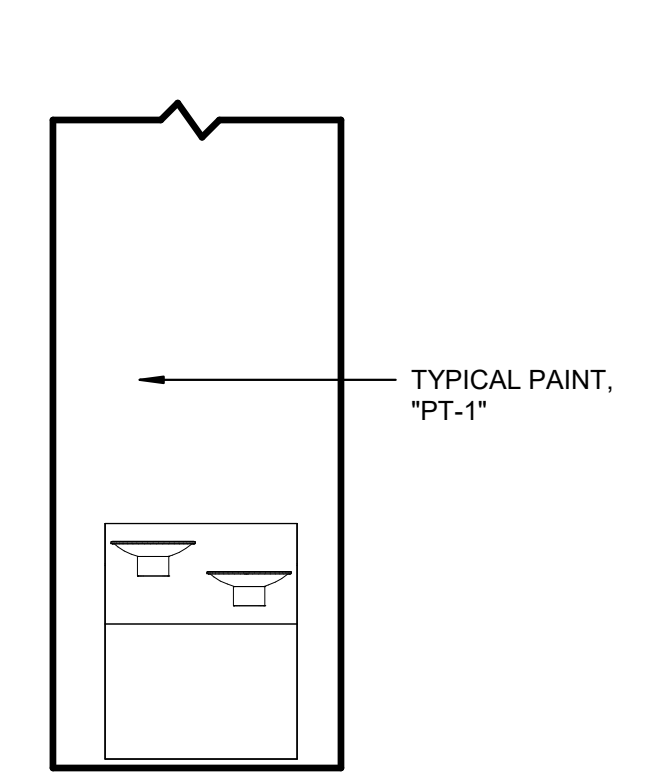
**A2 RECEPTION DESK - EAST**  
3/8" = 1'-0"



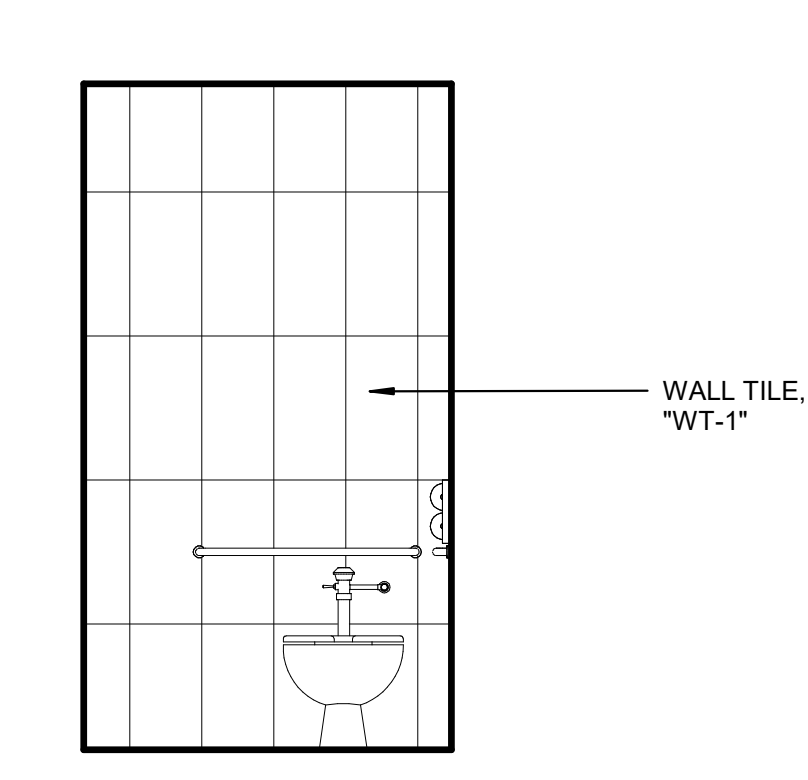
**A3 RECEPTION DESK - SOUTH**  
3/8" = 1'-0"



**A4 UNISEX RR - NORTH**  
3/8" = 1'-0"



**A5 DRINKING FOUNTAINS**  
3/8" = 1'-0"

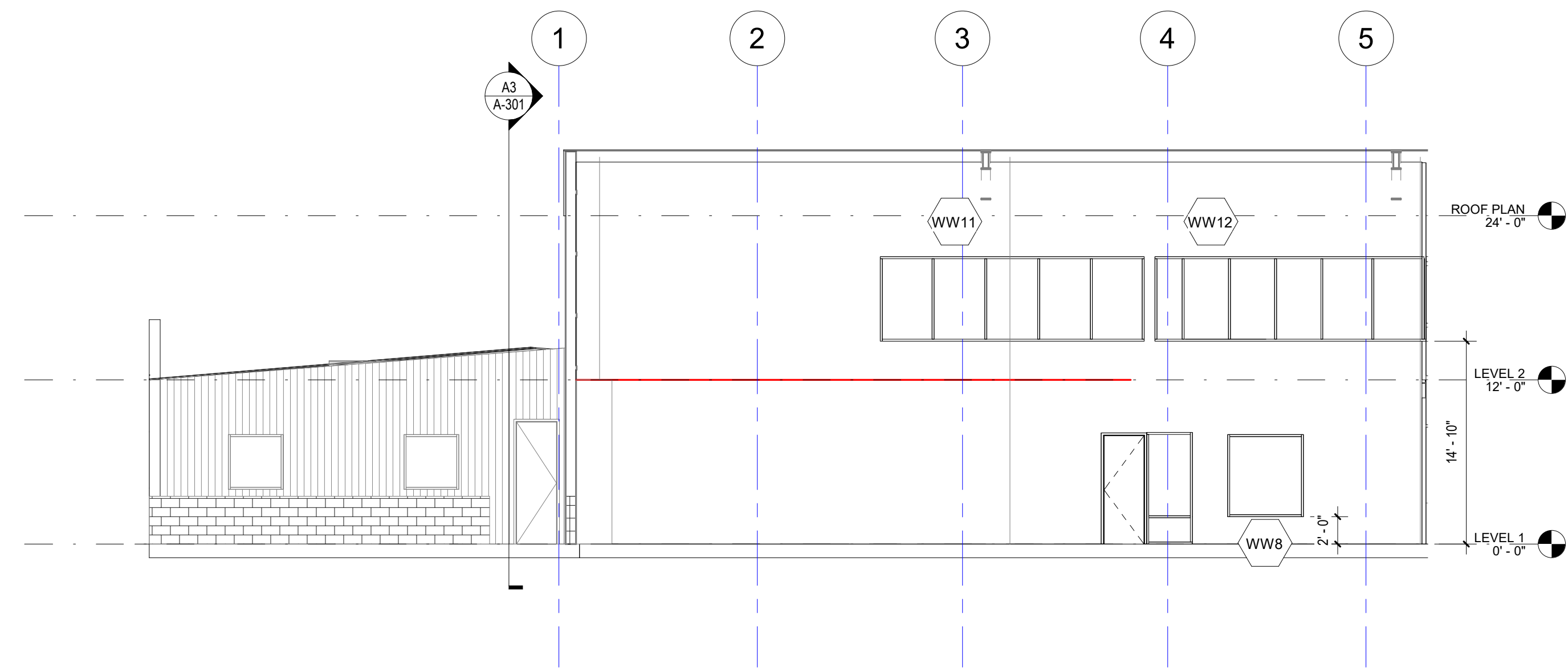


**A6 LEVEL 2 RESTROOM - WEST**  
3/8" = 1'-0"

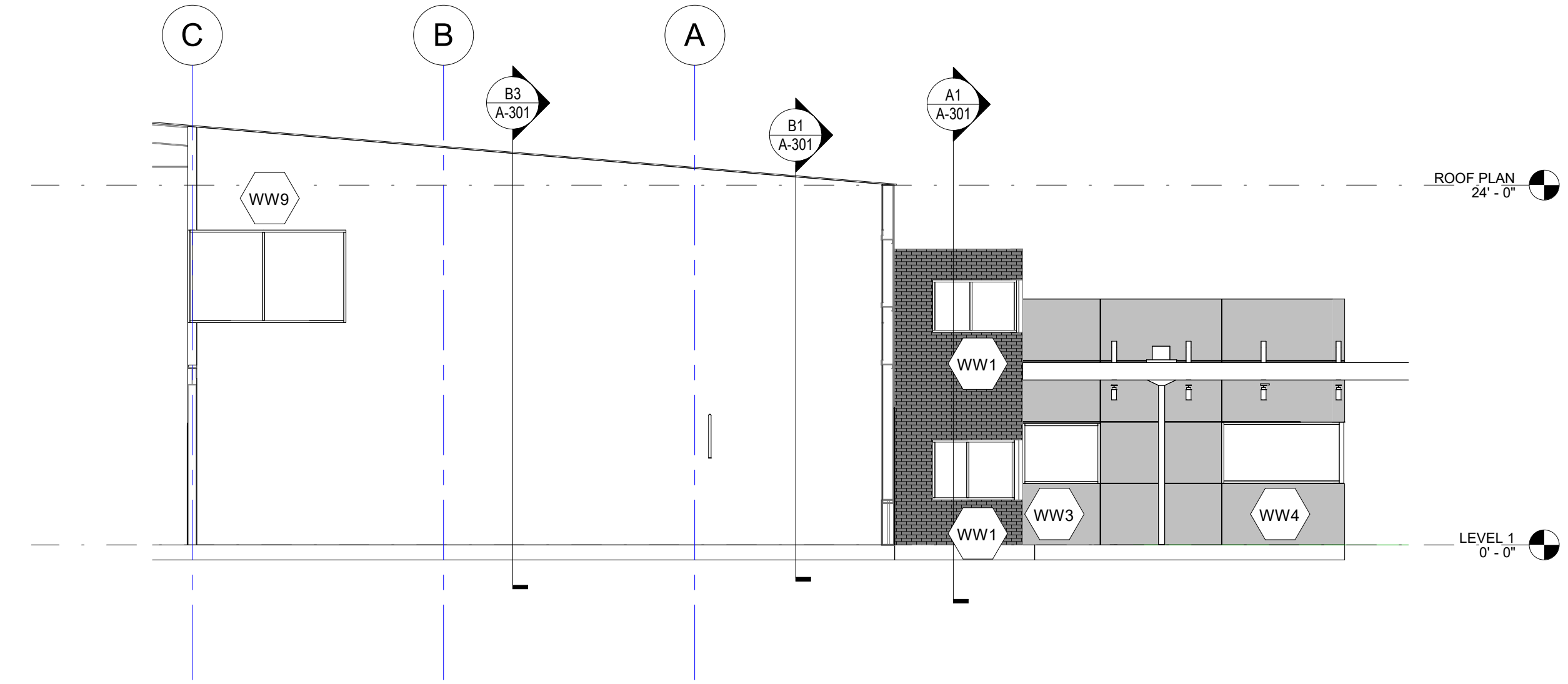
1 ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Project Number	23-01-014
Drawn By	JO
Checked By	OS

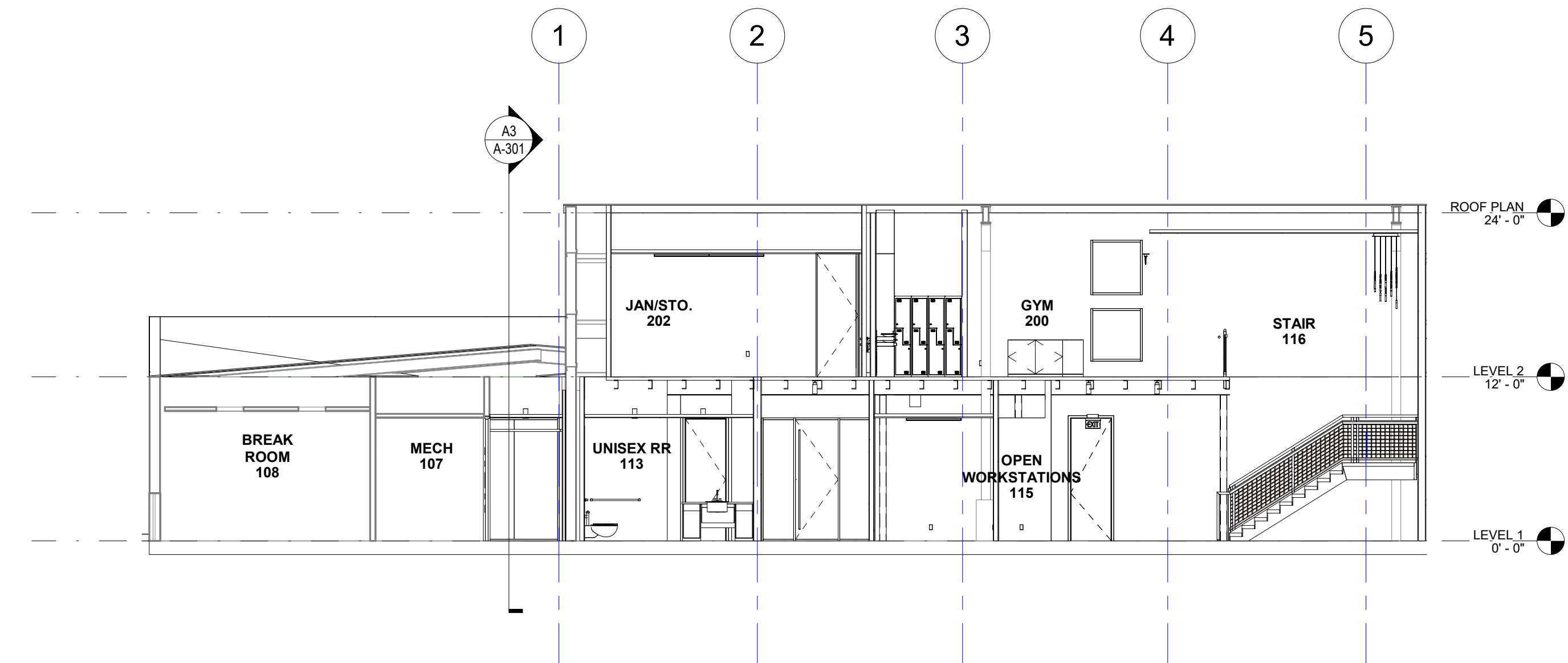




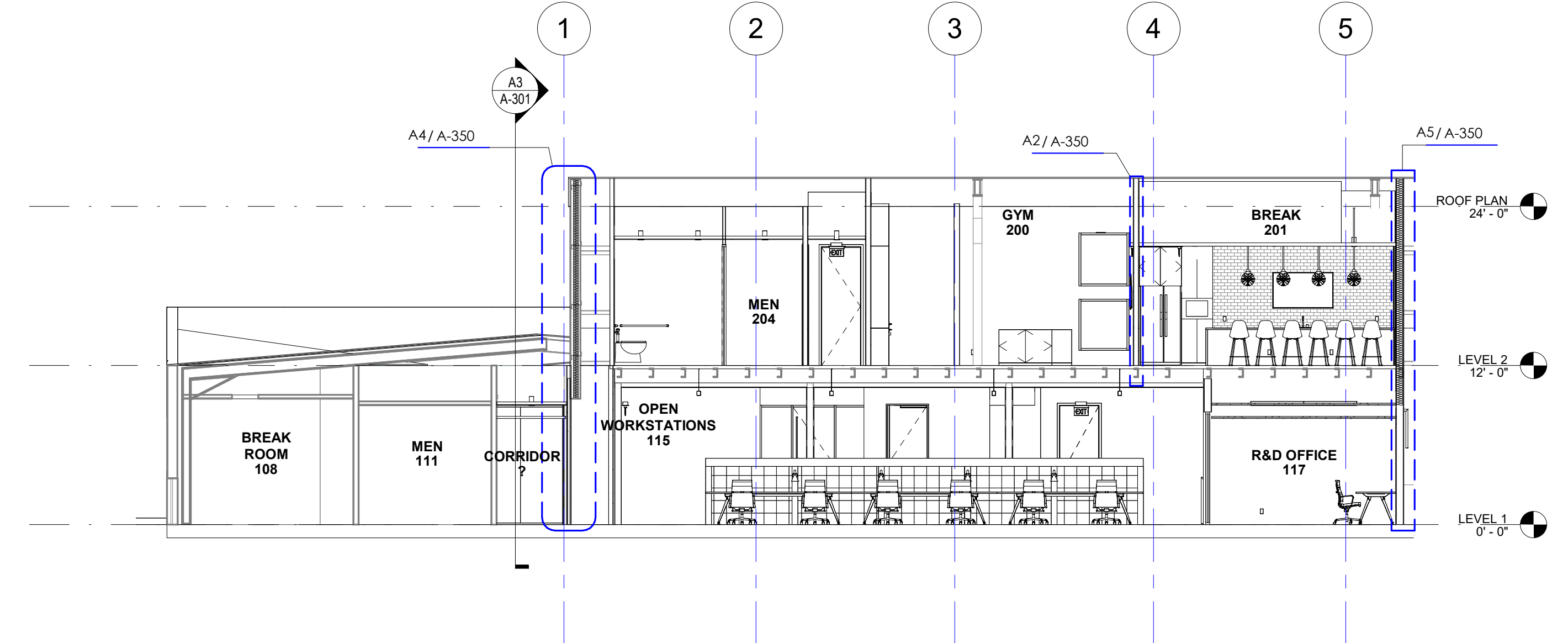
**C1** Elevation 6 - a  
1/8" = 1'-0"



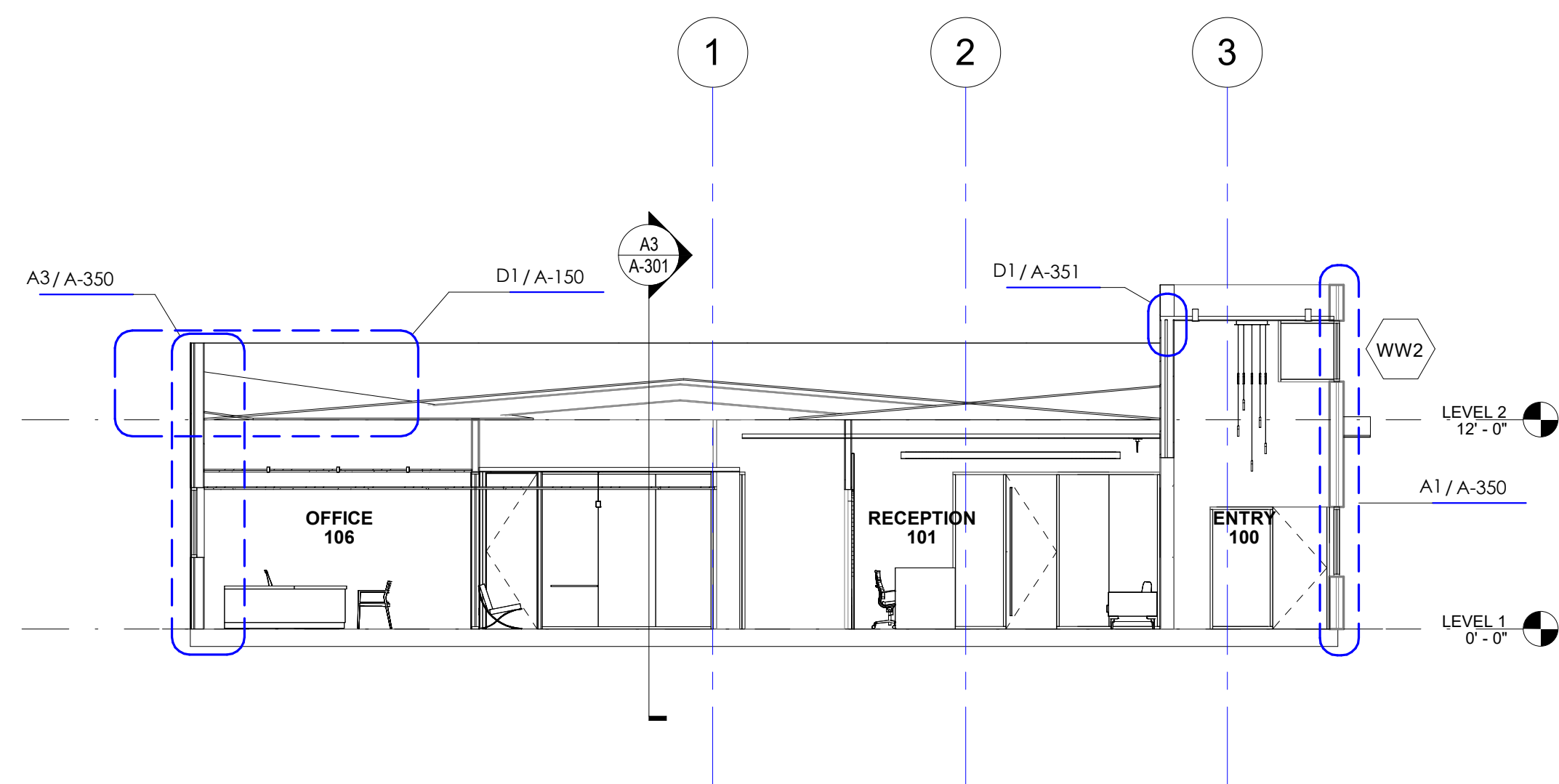
**C3** Elevation 7 - a  
1/8" = 1'-0"



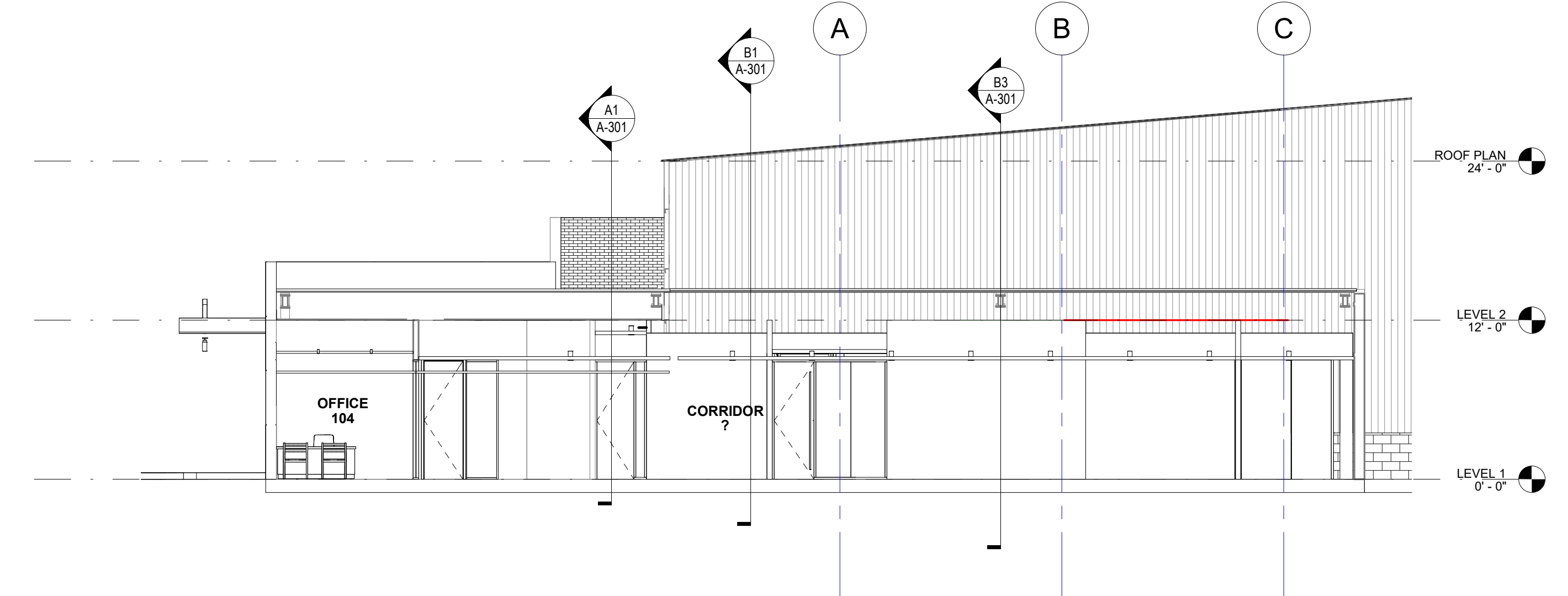
**B1** Section 6  
1/8" = 1'-0"



**B3** Section 3  
1/8" = 1'-0"



**A1** Section 4  
1/8" = 1'-0"



**A3** Section 1  
1/8" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

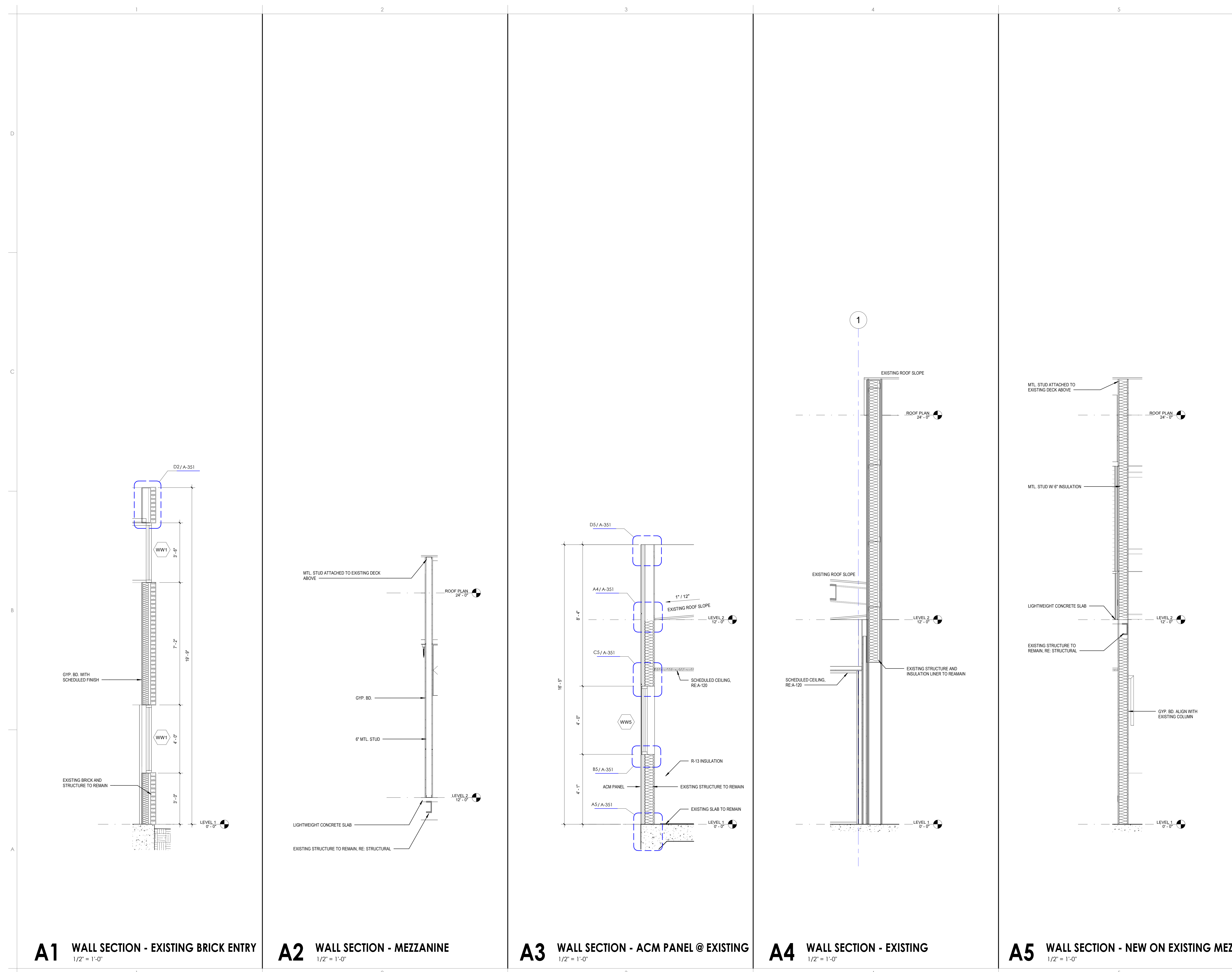
ISSUE FOR PERMIT 12/01/23

Issues	
Project Number	23-01-014
Drawn By	Author
Checked By	Checker

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

# A-350

WALL SECTIONS



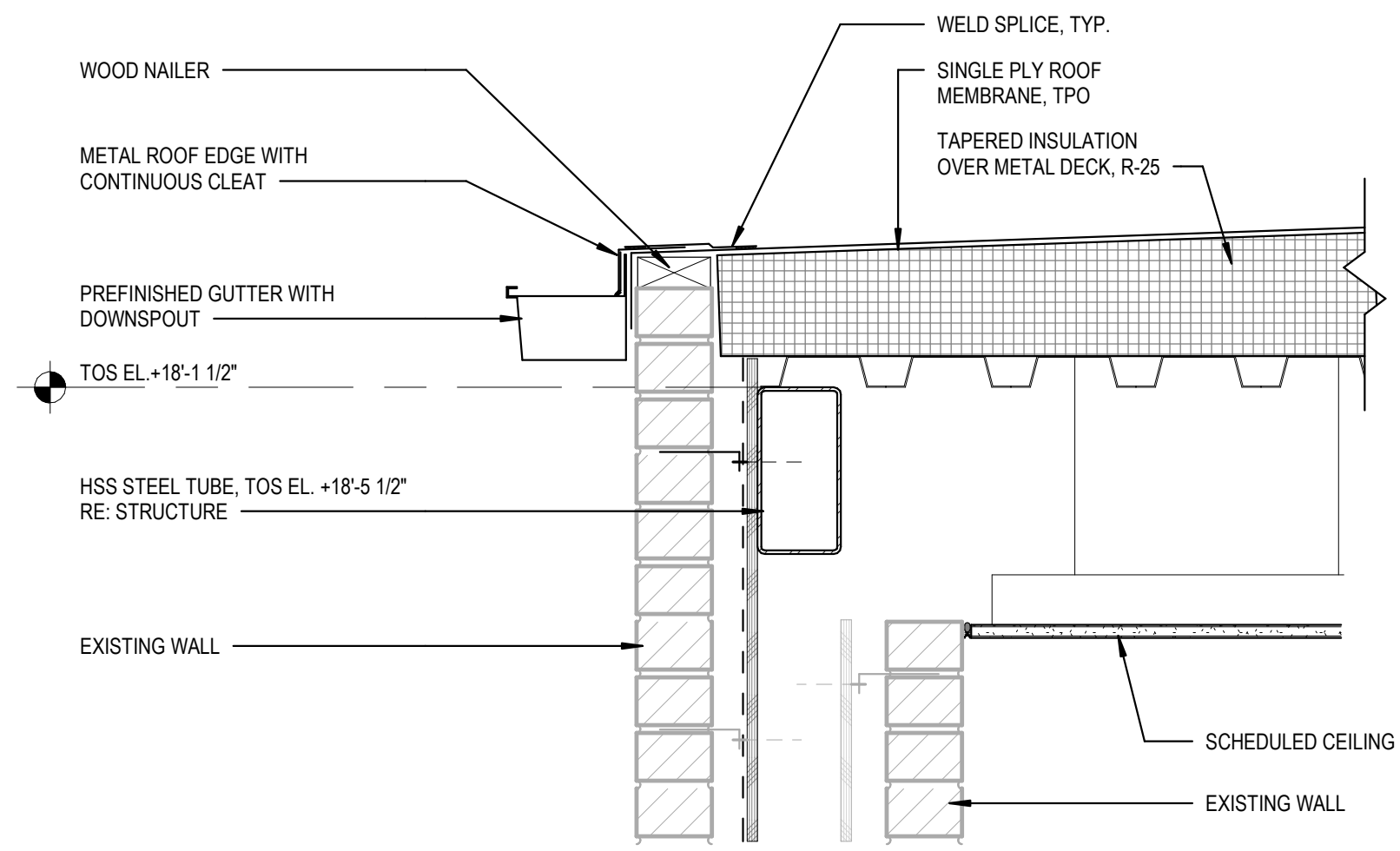
**A1** WALL SECTION - EXISTING BRICK ENTRY  
1/2" = 1'-0"

**A2** WALL SECTION - MEZZANINE  
1/2" = 1'-0"

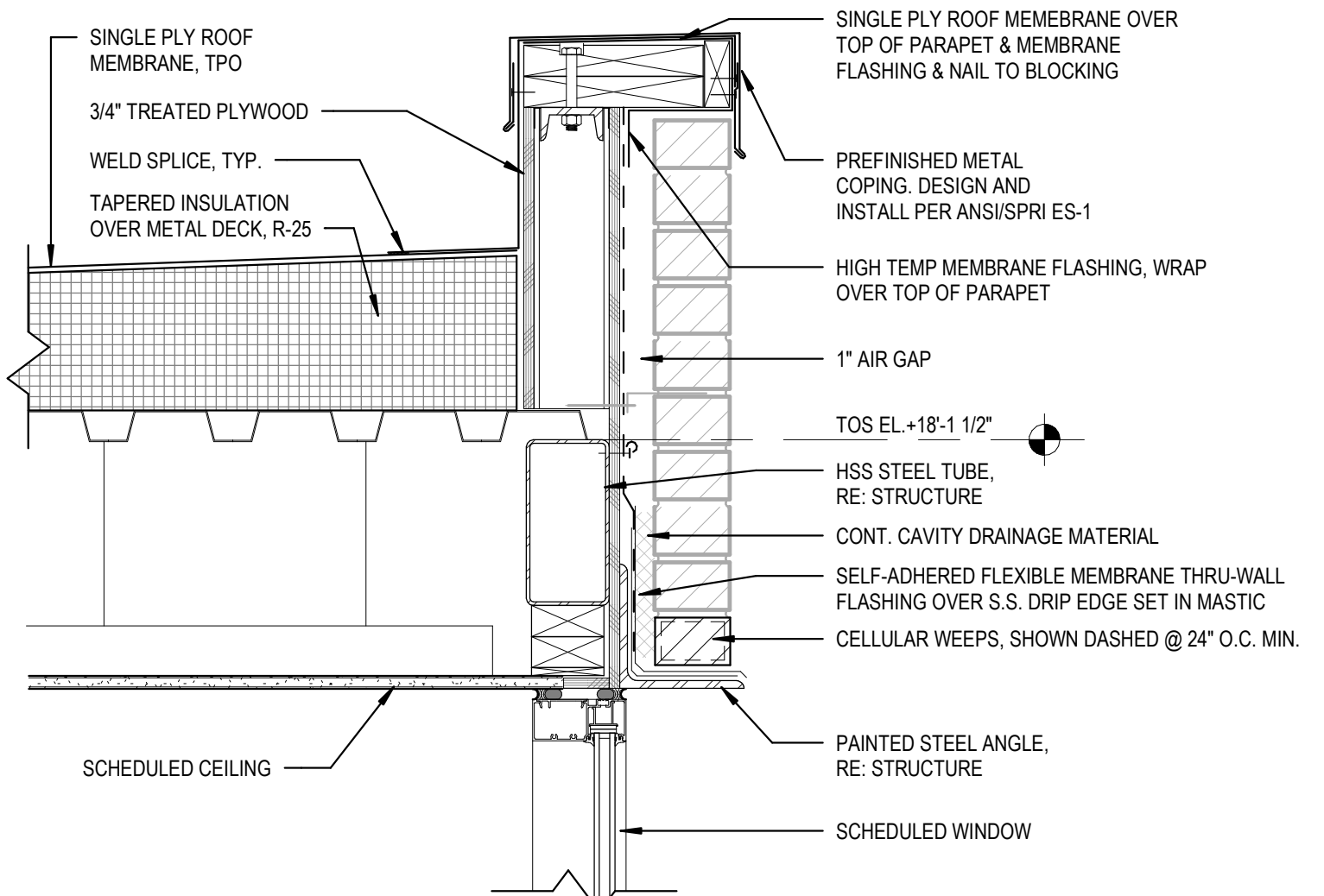
**A3** WALL SECTION - ACM PANEL @ EXISTING  
1/2" = 1'-0"

**A4** WALL SECTION - EXISTING  
1/2" = 1'-0"

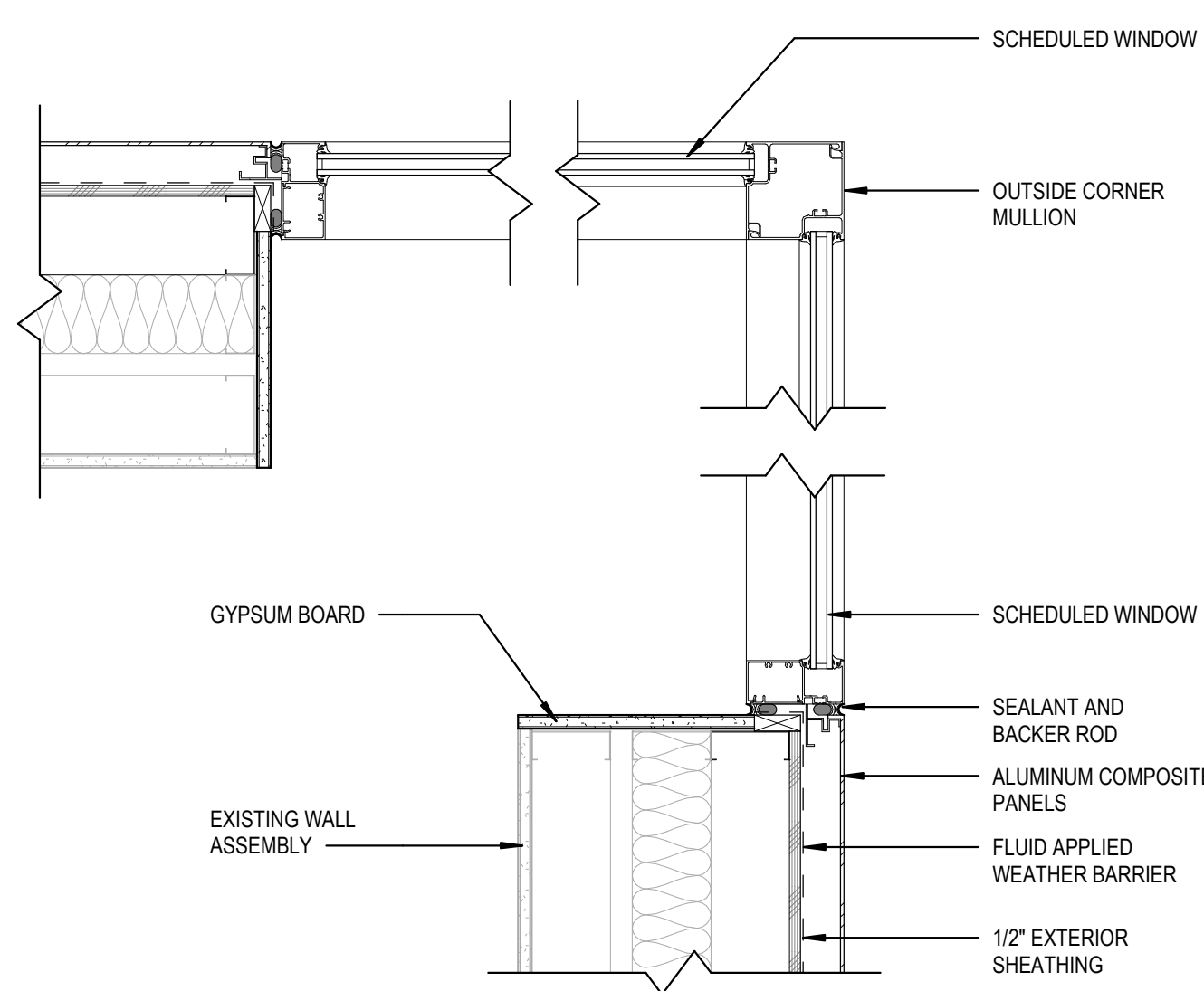
**A5** WALL SECTION - NEW ON EXISTING MEZZ.  
1/2" = 1'-0"



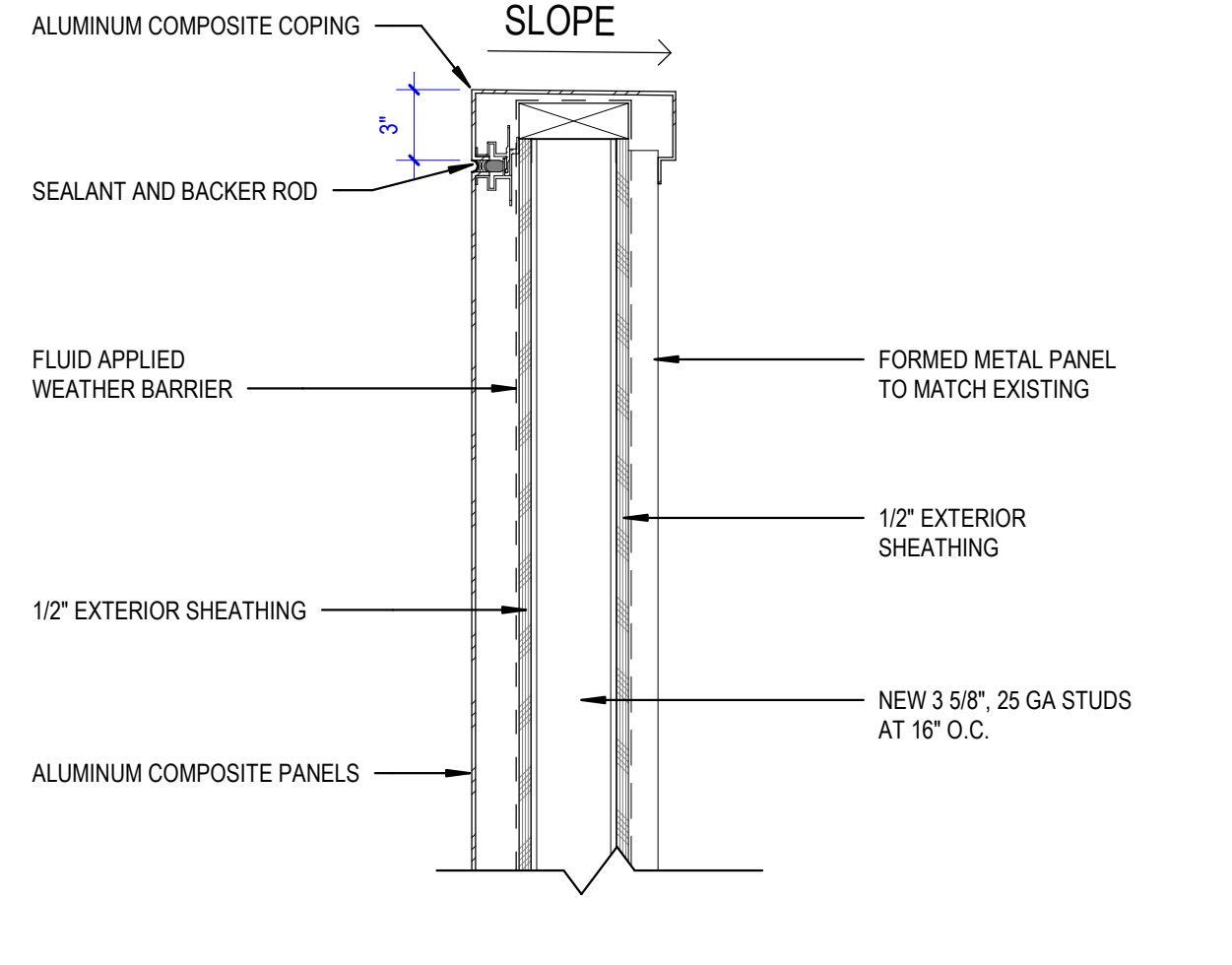
**D1 GUTTER AT EXT. BRICK**  
1 1/2" = 1'-0"



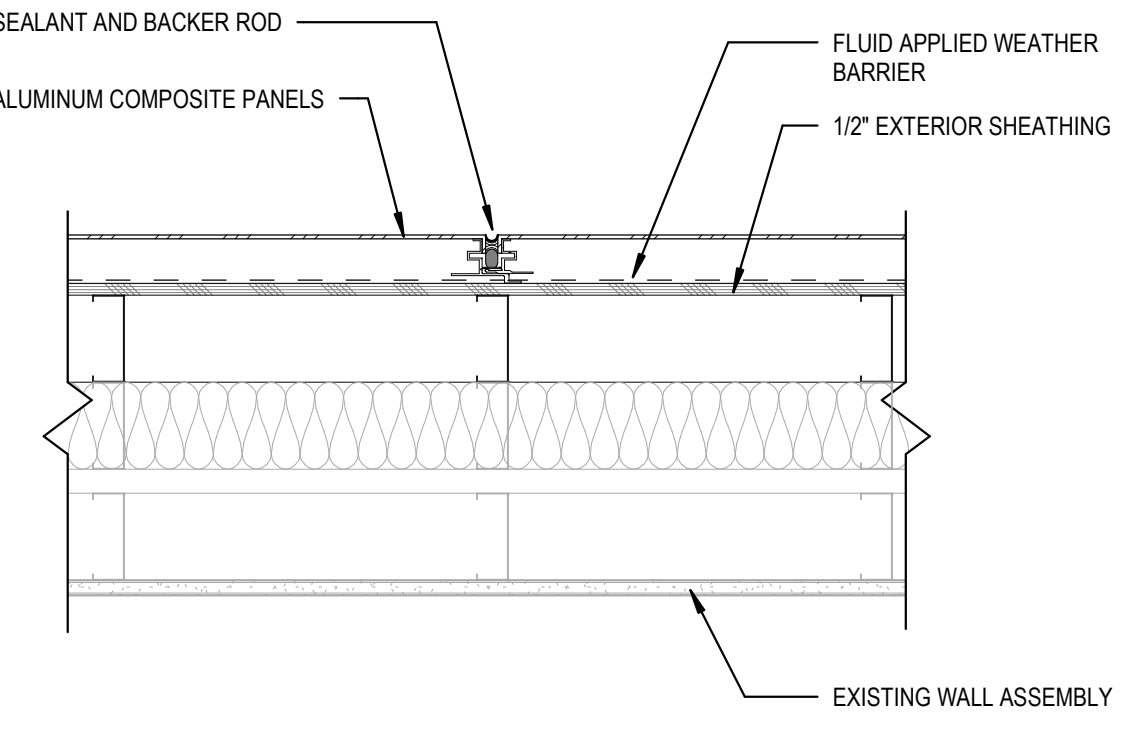
**D2 PARAPET @ EXT. BRICK**  
1 1/2" = 1'-0"



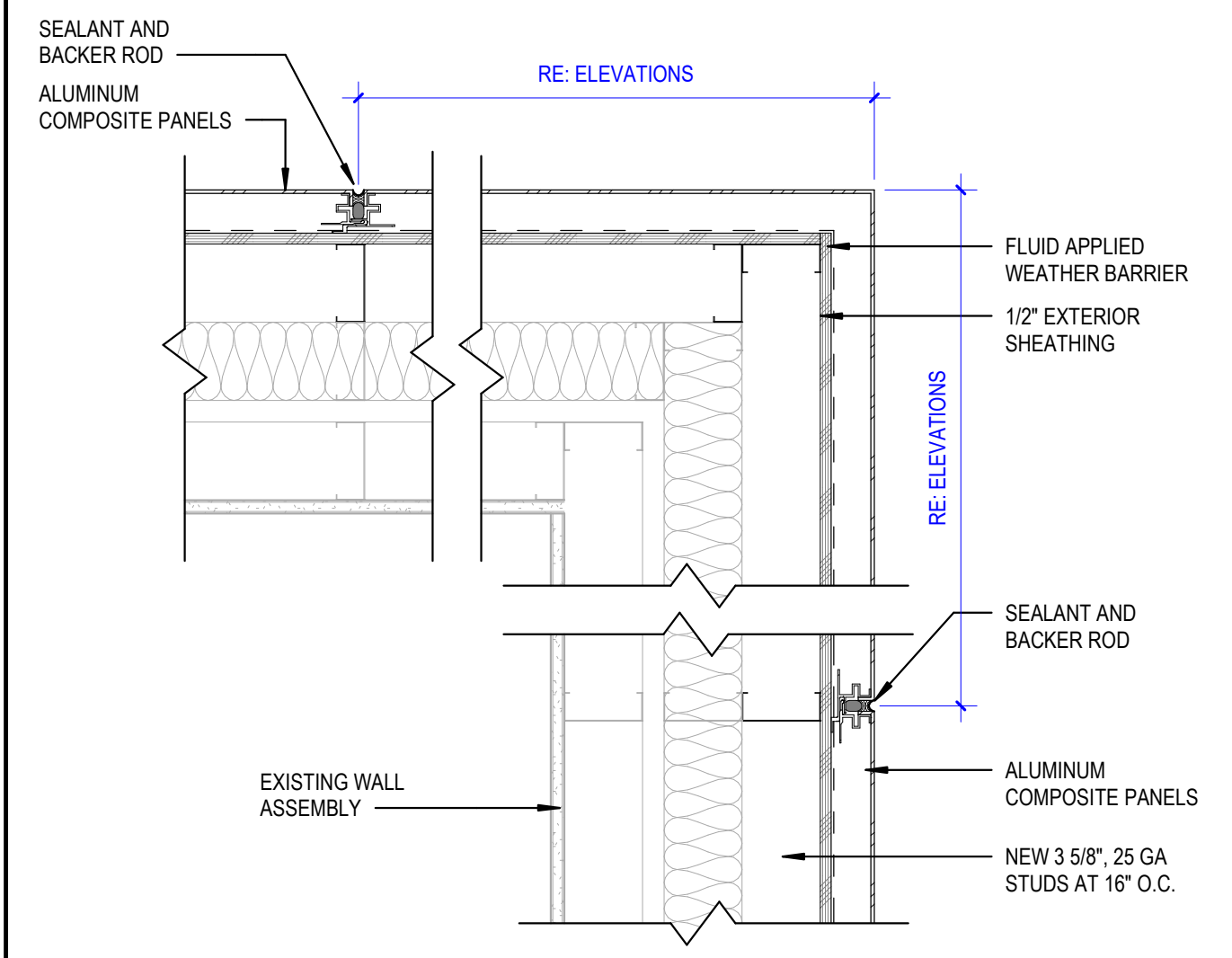
**D4 WINDOW JAMB AT ACM PANEL**  
1 1/2" = 1'-0"



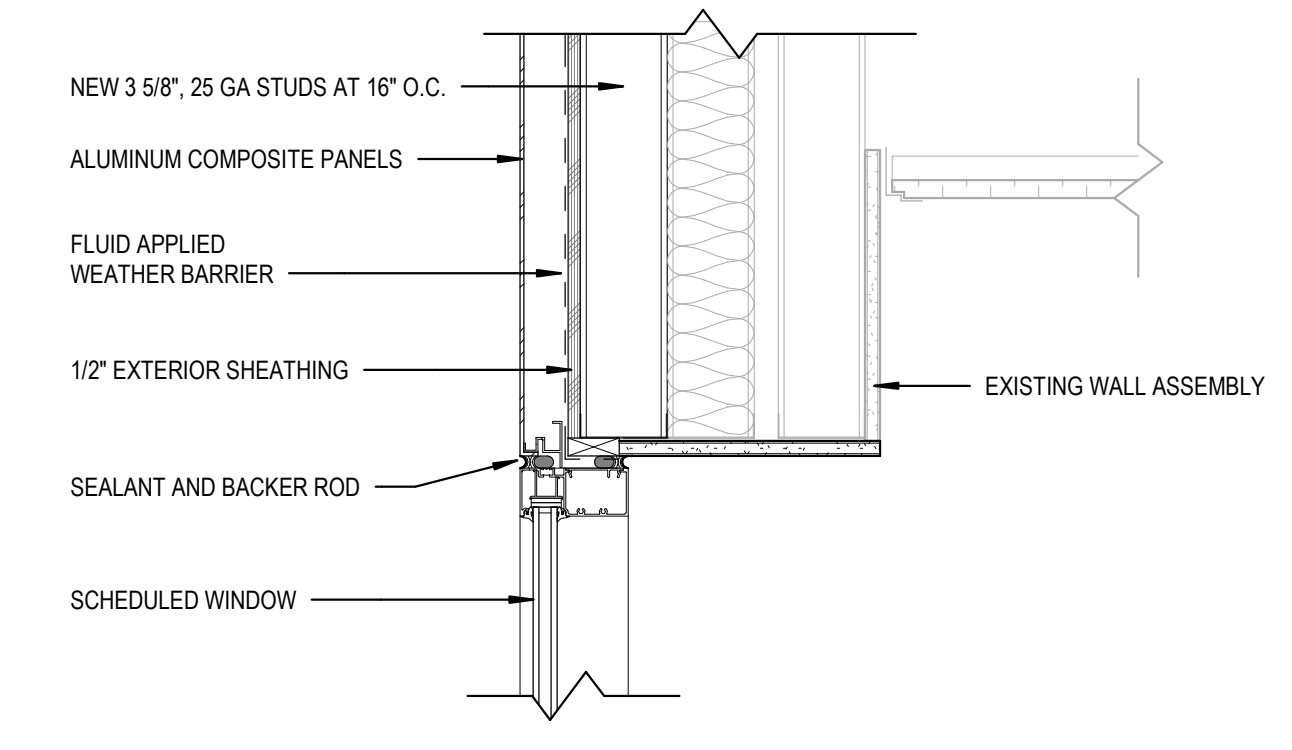
**D5 ACM PANEL AT COPING**  
1 1/2" = 1'-0"



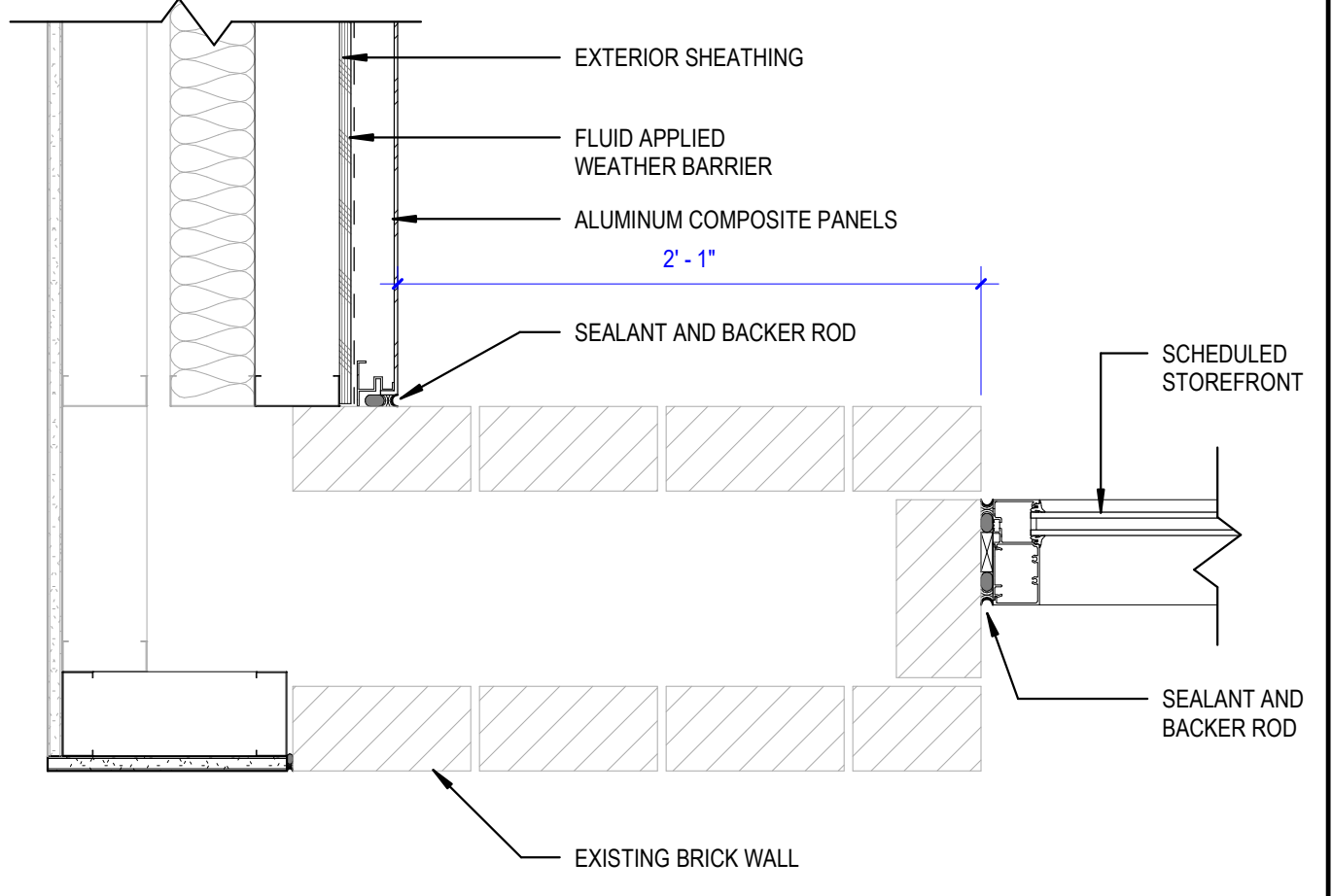
**C3 ACM PANEL AT VERTICAL JOINT**  
1 1/2" = 1'-0"



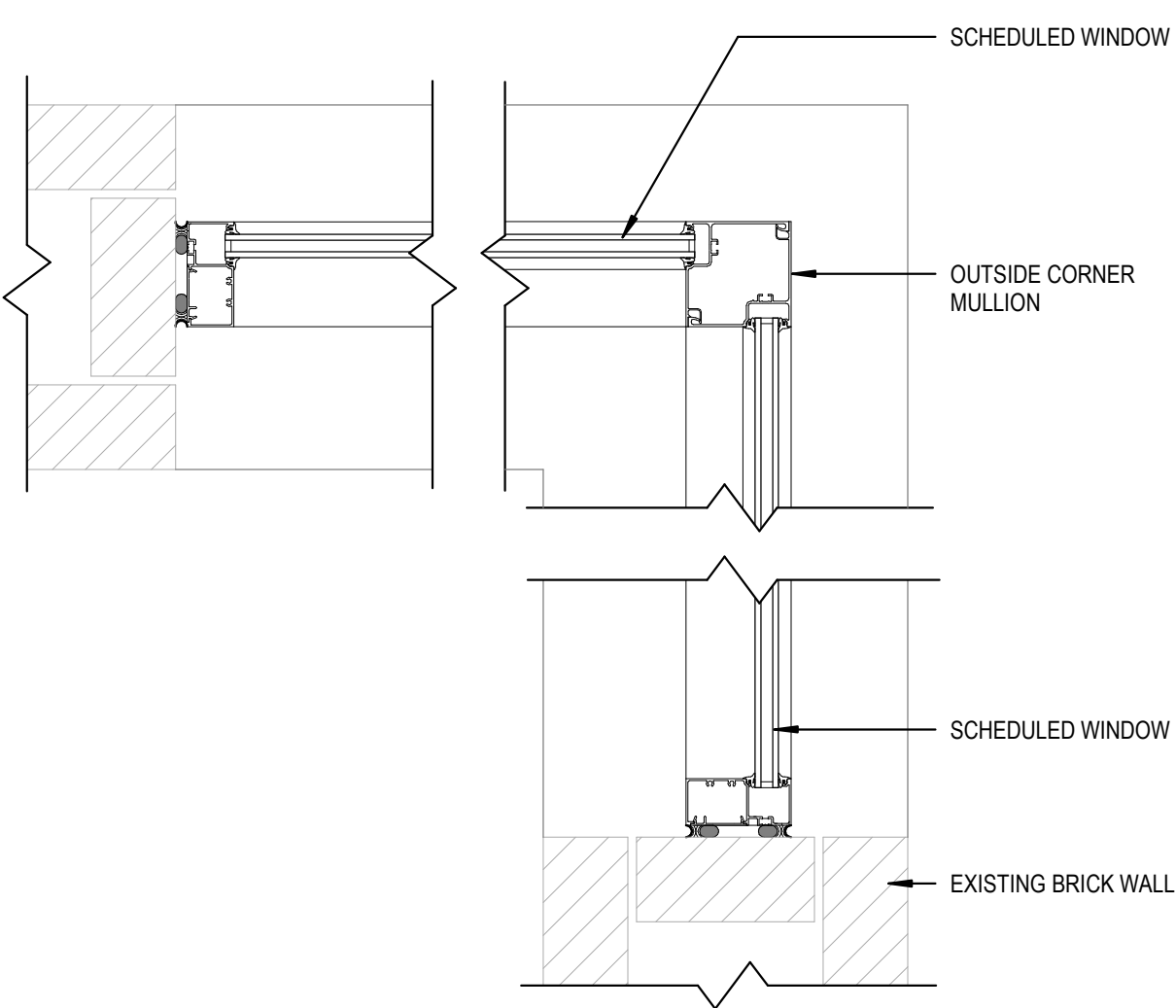
**C4 ACM PANEL AT CORNER**  
1 1/2" = 1'-0"



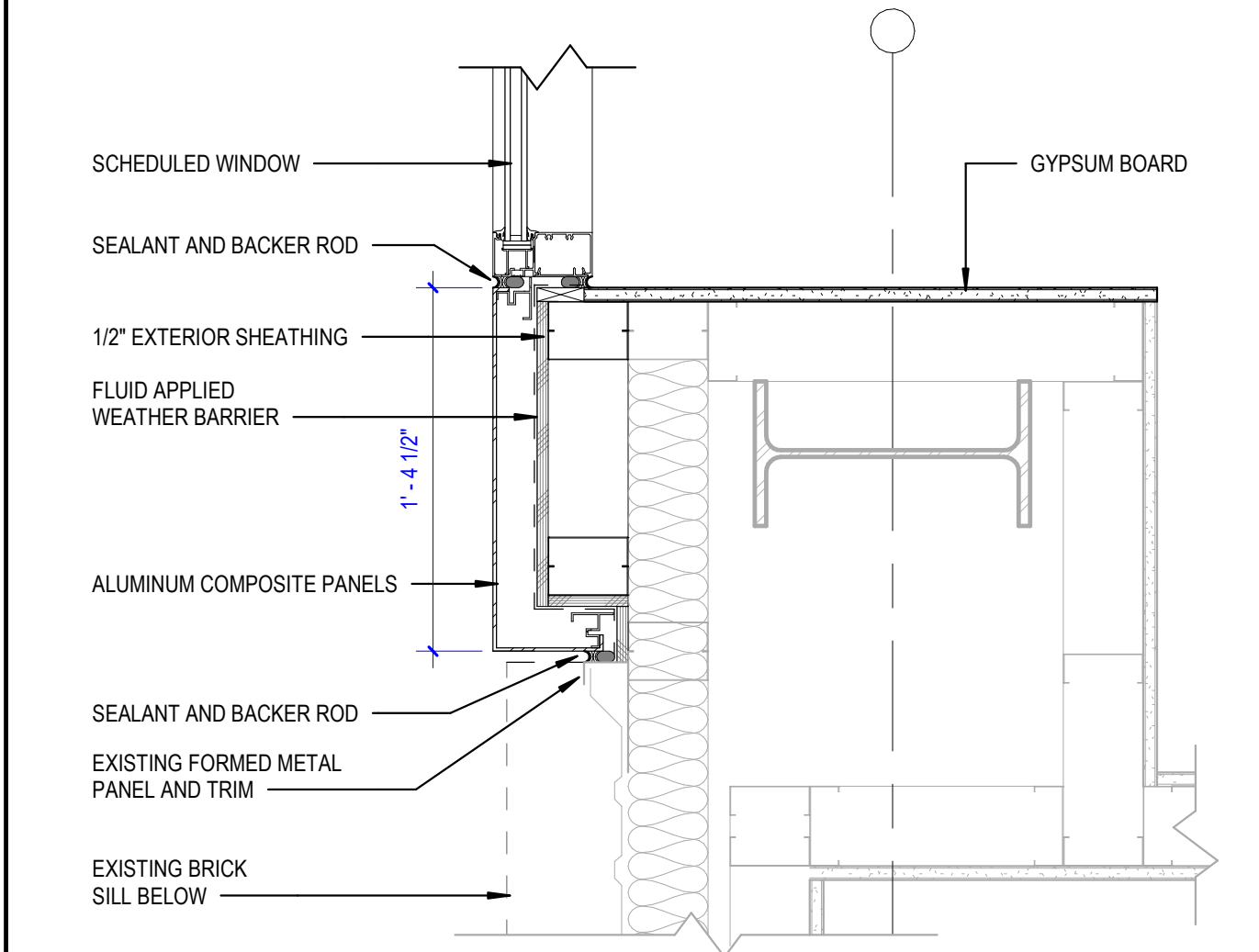
**C5 ACM PANEL AT WINDOW HEAD**  
1 1/2" = 1'-0"



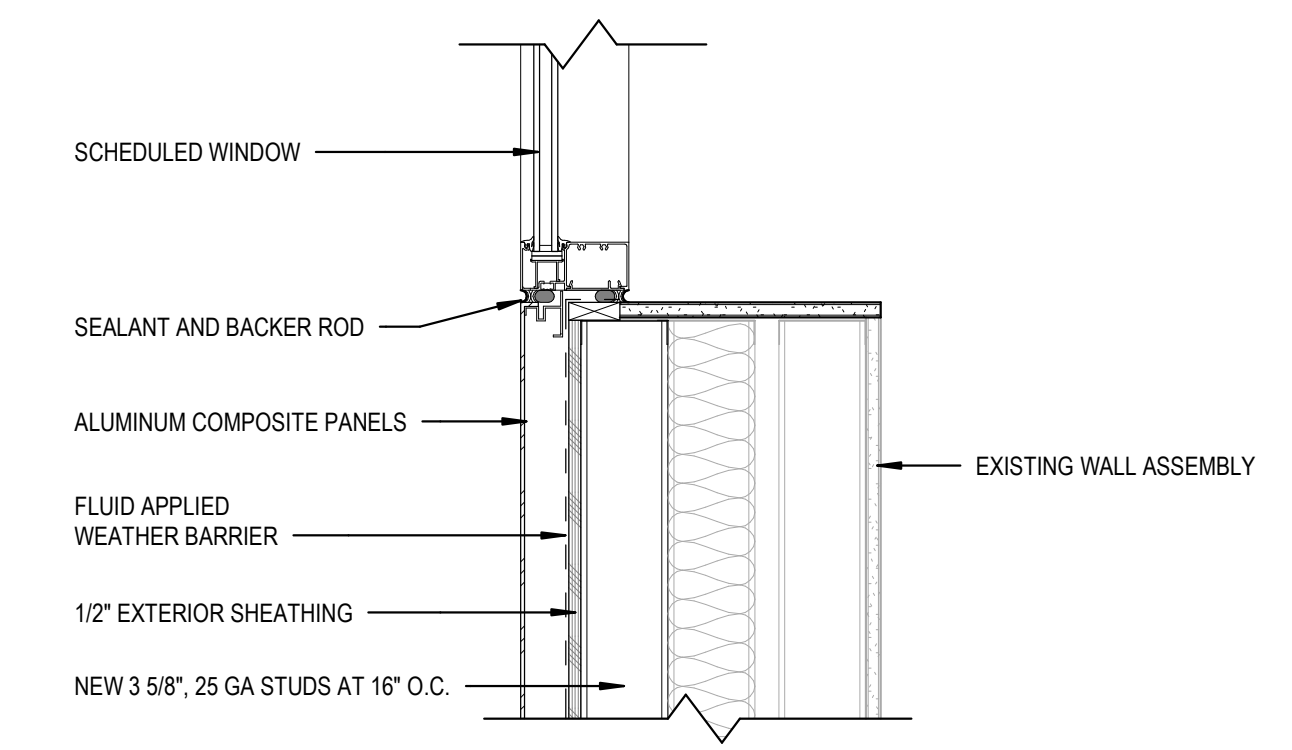
**B2 ACM PANEL AT EXT. BRICK**  
1 1/2" = 1'-0"



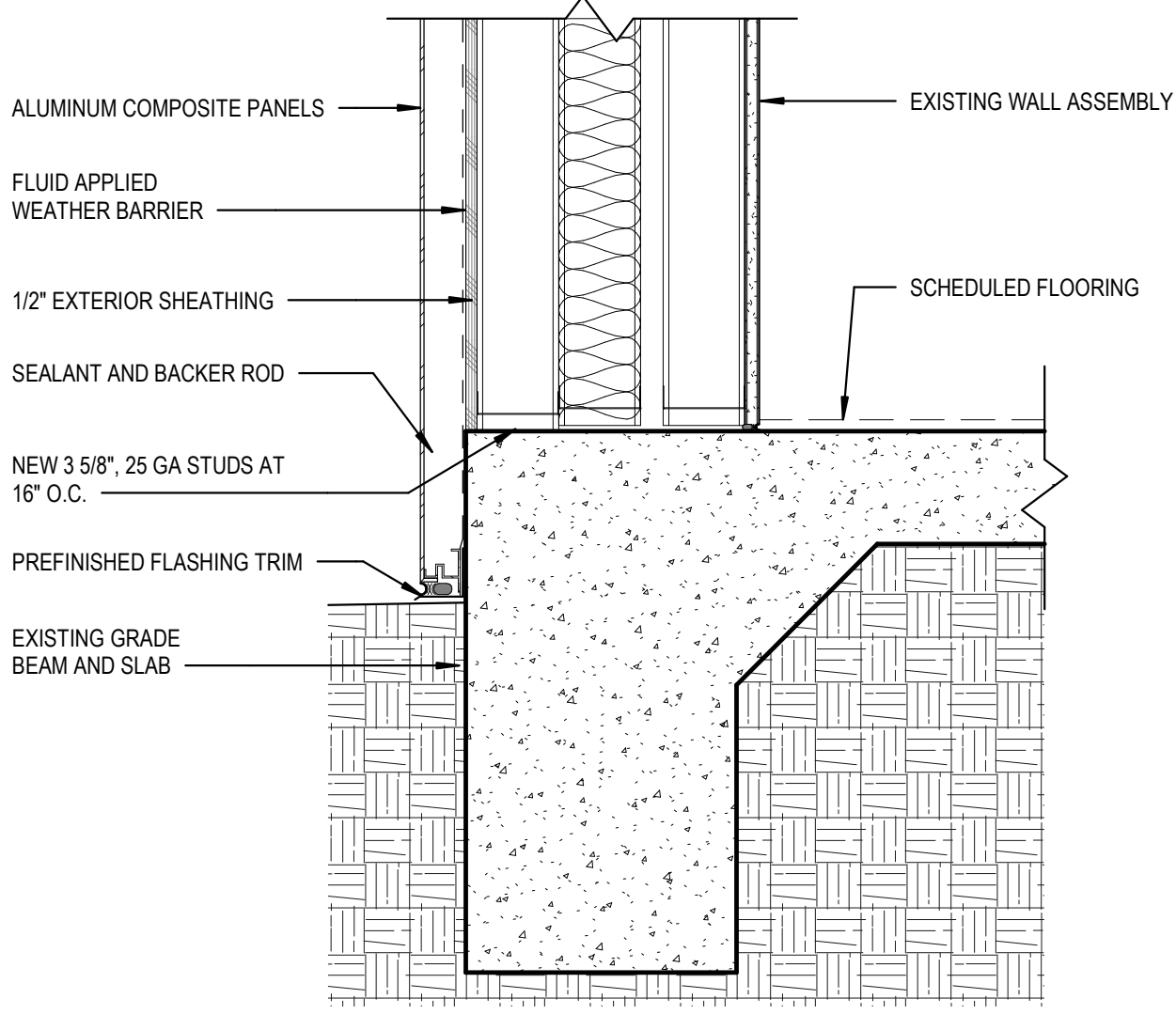
**B3 WINDOW JAMB AT EXT. BRICK**  
1 1/2" = 1'-0"



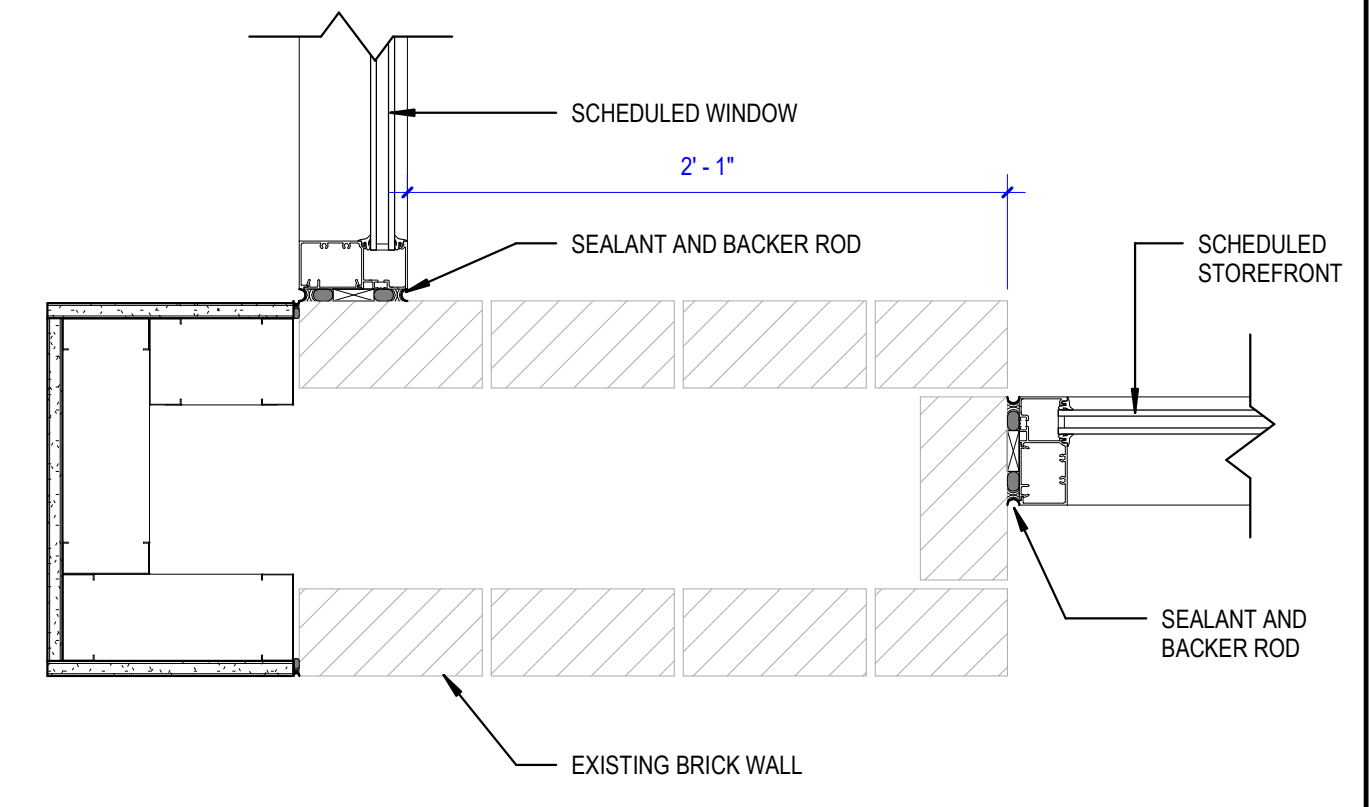
**B4 ACM PANEL AT EXT. METAL PANEL**  
1 1/2" = 1'-0"



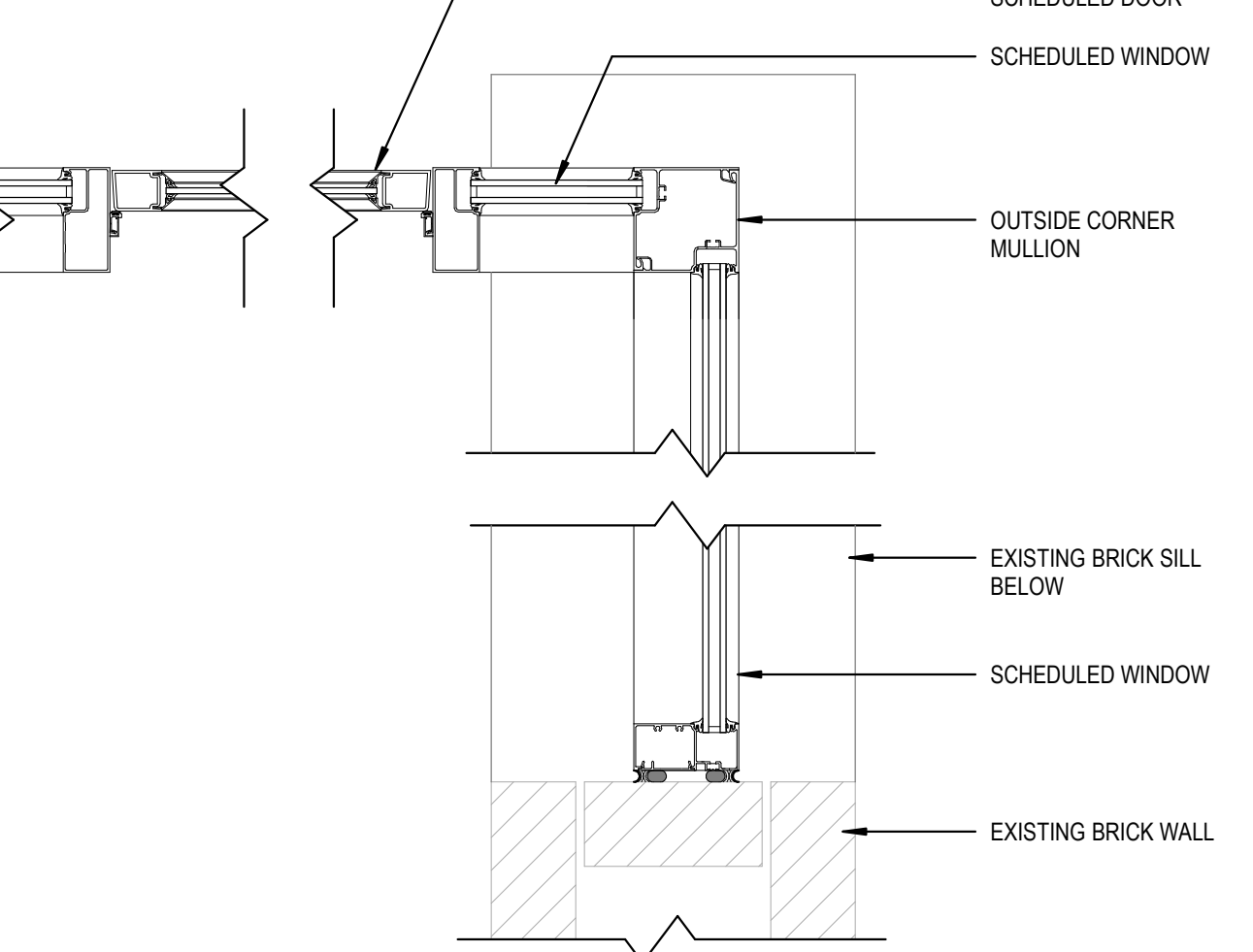
**B5 ACM PANEL AT WINDOW SILL**  
1 1/2" = 1'-0"



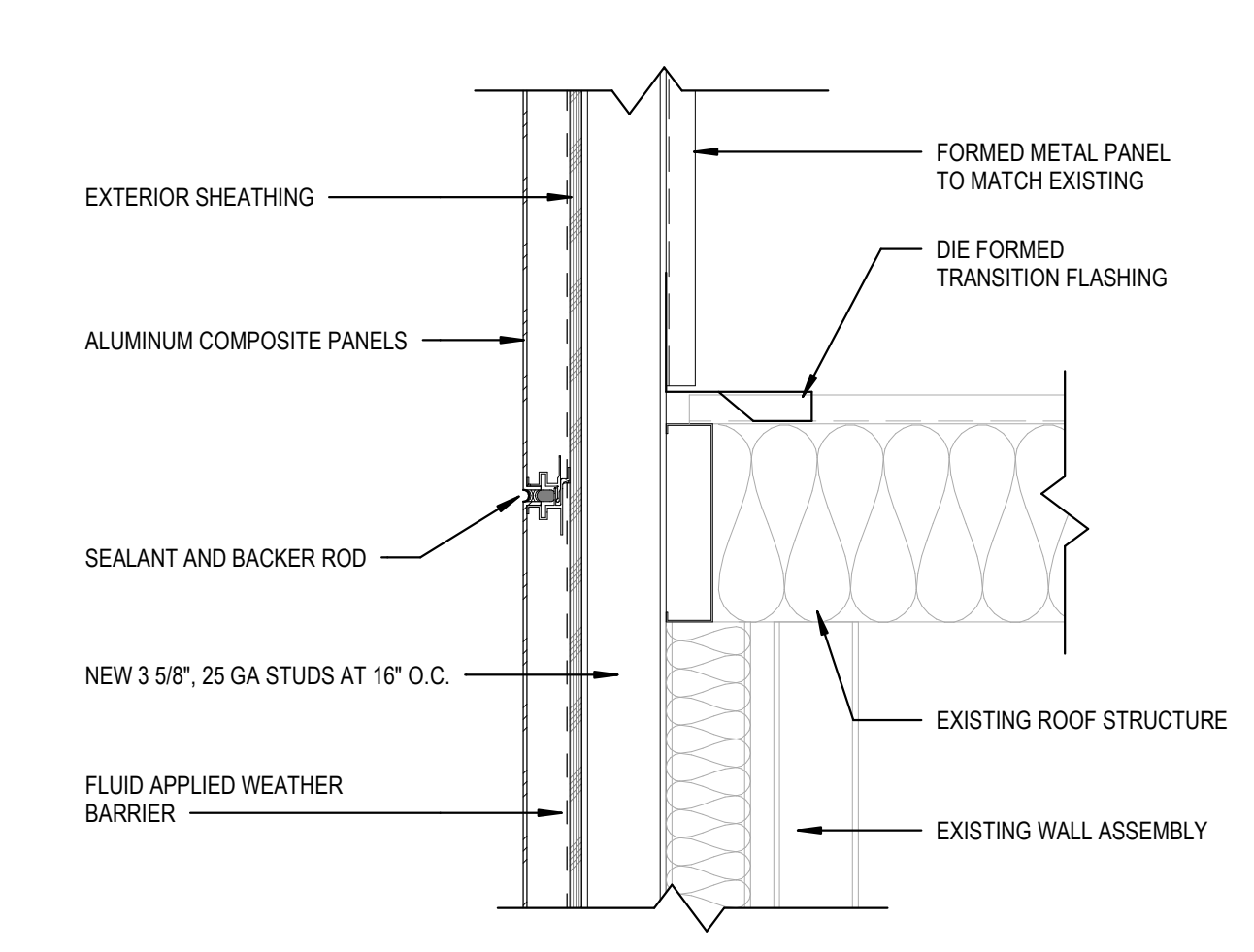
**A1 ACM PANEL AT SILL Copy 1**  
1 1/2" = 1'-0"



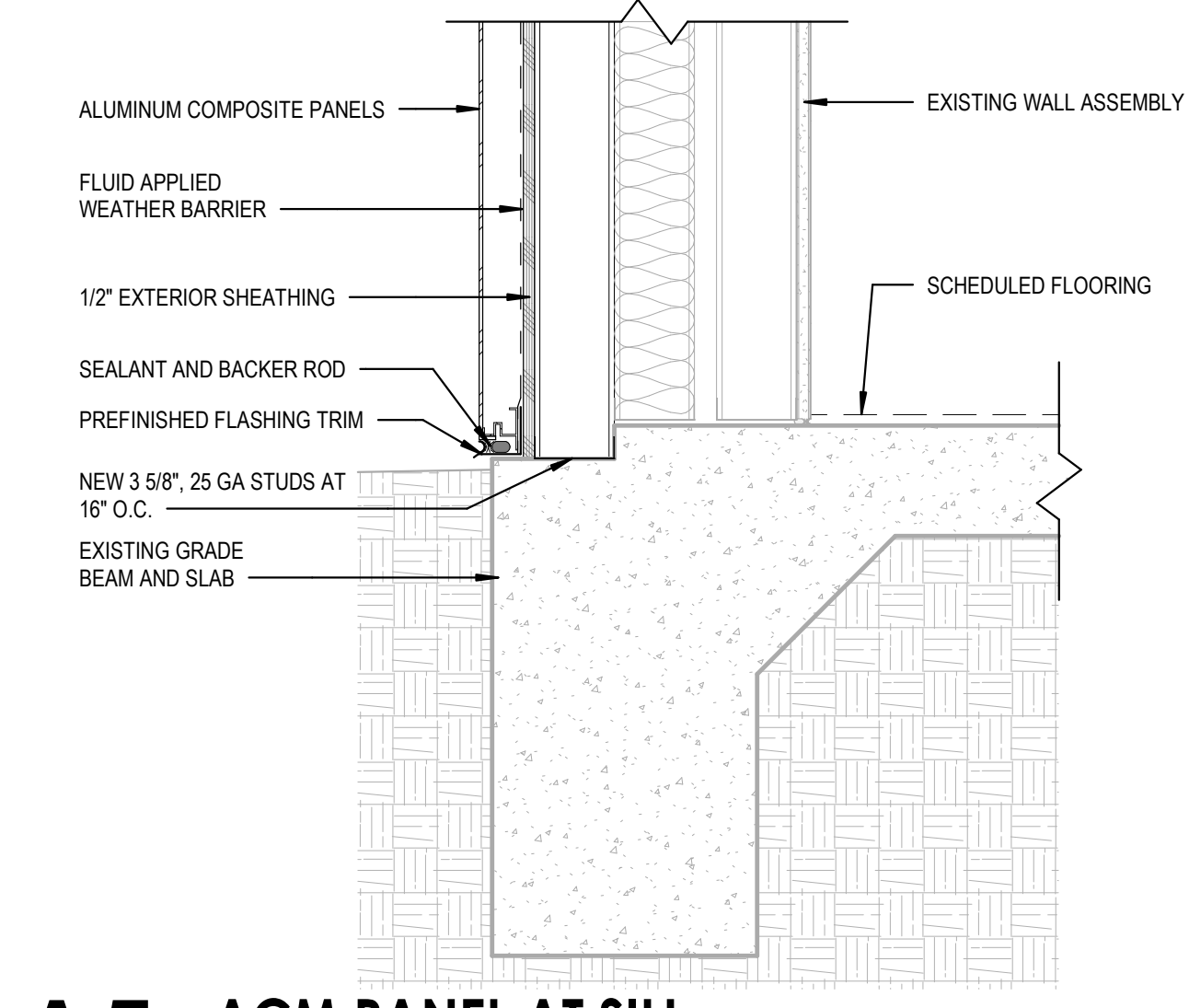
**A2 WINDOW JAMB AT EXT. BRICK**  
1 1/2" = 1'-0"



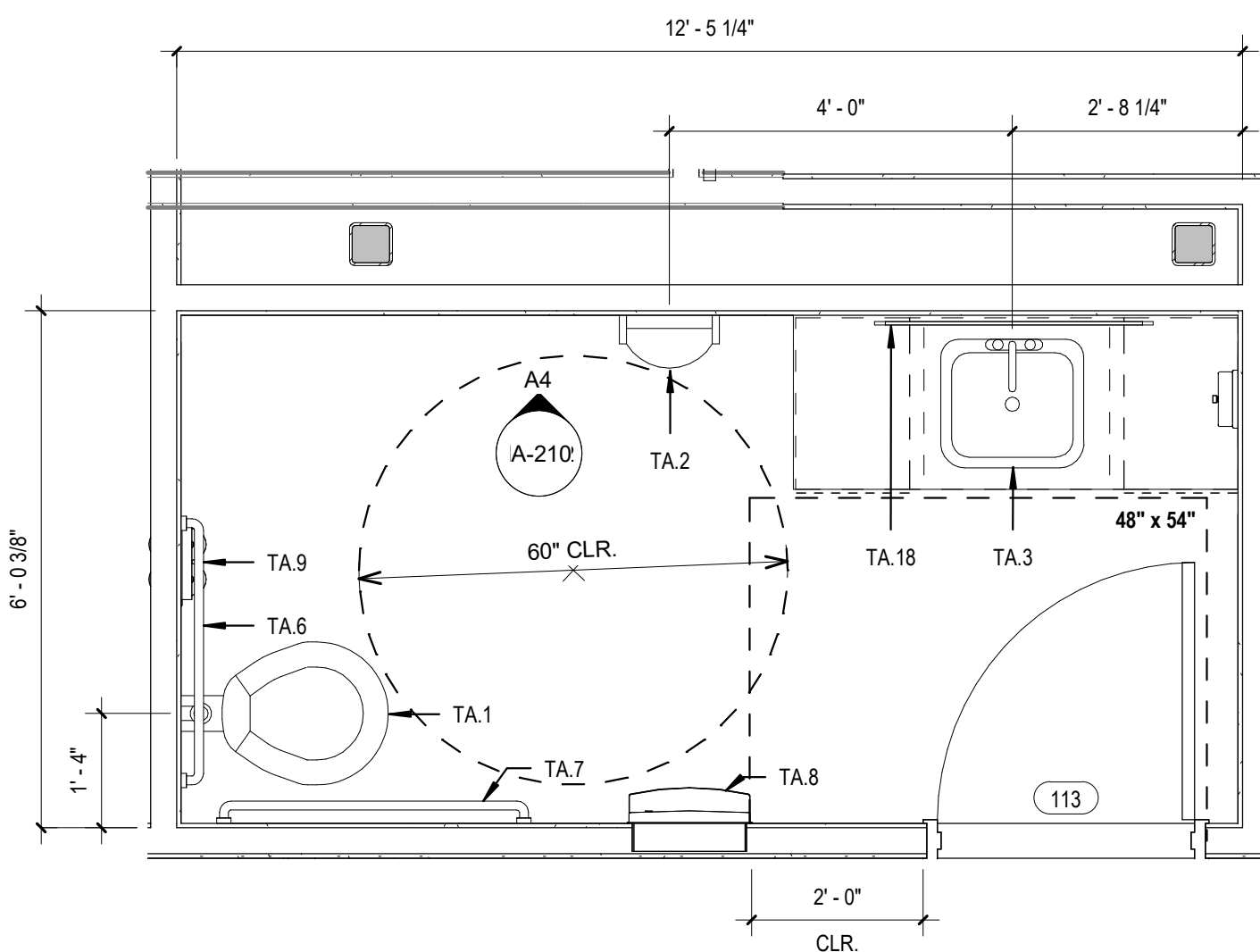
**A3 WINDOW JAMB AT EXT. BRICK**  
1 1/2" = 1'-0"



**A4 ACM PANEL AT EXT. ROOF STRUCTURE**  
1 1/2" = 1'-0"



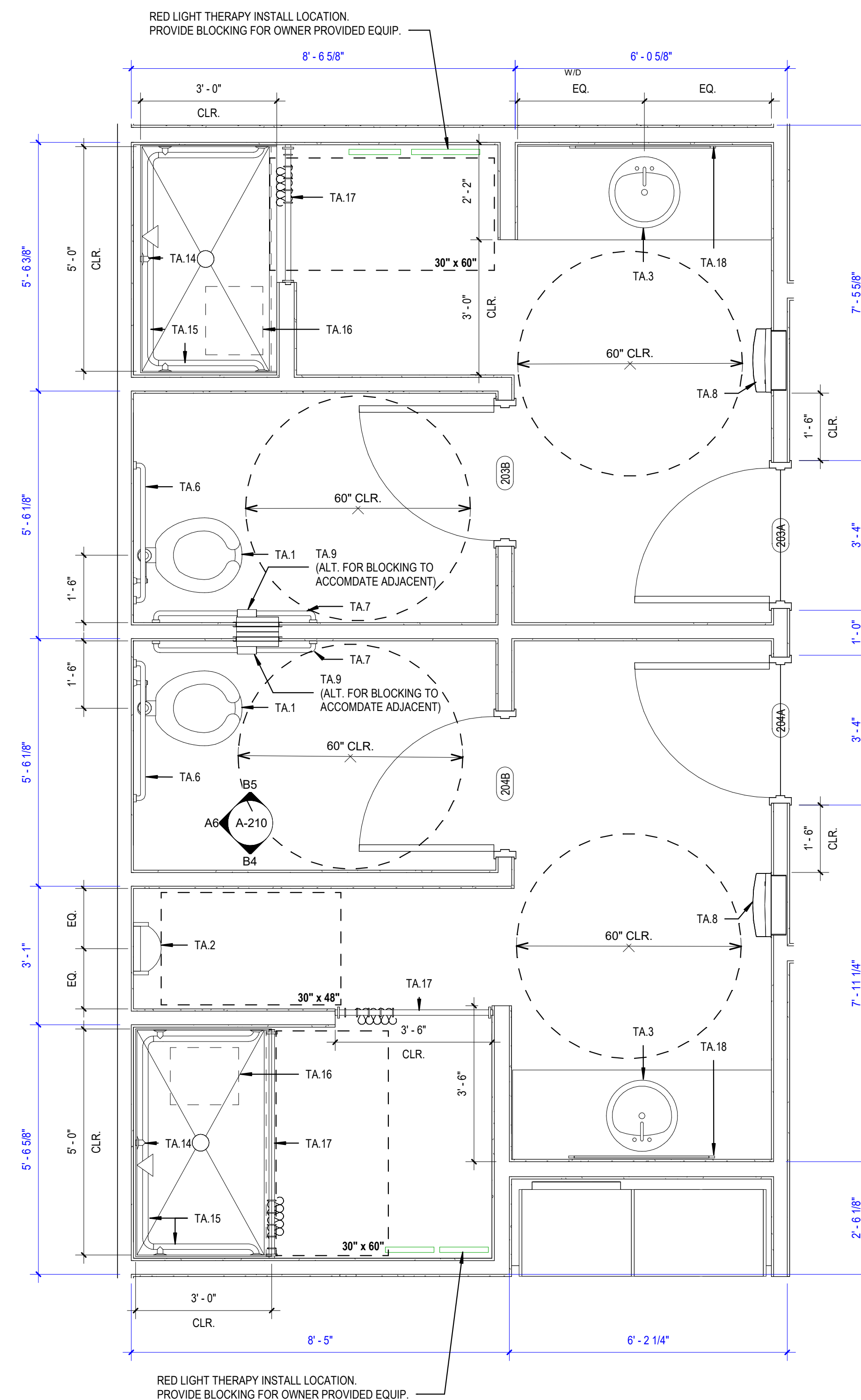
**A5 ACM PANEL AT SILL**  
1 1/2" = 1'-0"



**C3 FLOOR PLAN - LV 01 - Callout 1**  
1/2" = 1'-0"

**RESTROOM ACCESSORY SCHEDULE:**

RESTROOM ACCESSORIES TO MATCH BUILDING STANDARD RESTROOMS/SHOWERS	
TA.1	TOILET W/ FLUSH VALVE, FLOOR MOUNTED REFER TO ENGINEERING DRAWINGS
TA.2	URINAL W/ FLUSH VALVE REFER TO ENGINEERING DRAWINGS
TA.3	LAVATORY W/ FAUCET REFER TO ENGINEERING DRAWINGS
TA.6	GRAB BAR - 36" BOBRICK, MODEL #B-580X36 OR APPROVED EQUAL INSTALL PER MANUFACTURER AND SECTION 1607.8.2 2012 IBC REQUIREMENTS
TA.7	GRAB BAR - 42" BOBRICK, MODEL #B-580X42 OR APPROVED EQUAL INSTALL PER MANUFACTURER AND SECTION 1607.8.2 2012 IBC REQUIREMENTS
TA.8	RECESSED PAPER TOWEL DISPENSER; WASTE RECEPTACLE BOBRICK, CONTURA SERIES; MODEL #B-4594 OR APPROVED EQUAL C.C. TO COORDINATE WALL THICKNESS REQUIREMENTS
TA.9	SURFACE MOUNTED TOILET PAPER DISPENSER BOBRICK, CONTURA SERIES; MULTI-ROLL TOILET TISSUE DISPENSER; MODEL #B-4288 OR APPROVED EQUAL
TA.10	SURFACE MOUNTED SEAT-COVER DISPENSER BOBRICK, CONTURA SERIES; MODEL #B-4221 OR APPROVED EQUAL TOP OF UNIT MOUNTED 40" MAX. AT HANDICAP STALL
TA.11	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL BOBRICK, CONTURA SERIES; MODEL #B-270 OR APPROVED EQUAL
TA.12	SURFACE MOUNTED ROBE HOOK BOBRICK, MODEL #B-7617 TOP OF UNIT MOUNTED 46" A.F.F.
TA.13	COUNTERTOP-MOUNTED SOAP DISPENSER BOBRICK, MODEL #B-82216
TA.14	ADA SHOWER HEAD REFER TO ENGINEERING DRAWINGS
TA.15	ADA SHOWER GRAB BAR BOBRICK, MODEL #B-6861 OR APPROVED EQUAL INSTALL PER MANUFACTURER AND SECTION 1607.8.2 2012 IBC REQUIREMENTS
TA.16	REVERSIBLE SOLID PHENOLIC FOLDING SHOWER SEAT BOBRICK, MODEL #B-5181 OR APPROVED EQUAL
TA.17	SHOWER CURTAIN ROD BOBRICK, MODEL #B-207 WITH CURTAIN, BOBRICK #B204-2, AND 8 HOOKS, BOBRICK B-204-1, OR APPROVED EQUAL
TA.18	CHANNELED MIRROR MATCH BUILDING STANDARD SIZE AND MOUNTING DETAIL



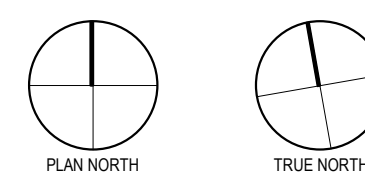
**A3 FLOOR PLAN - LV 02 - Callout 1**  
1/2" = 1'-0"

**GRAB BAR CUTSHEET:**



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



1 ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Issues

Project Number 23-01-014

Drawn By JO

Checked By OS

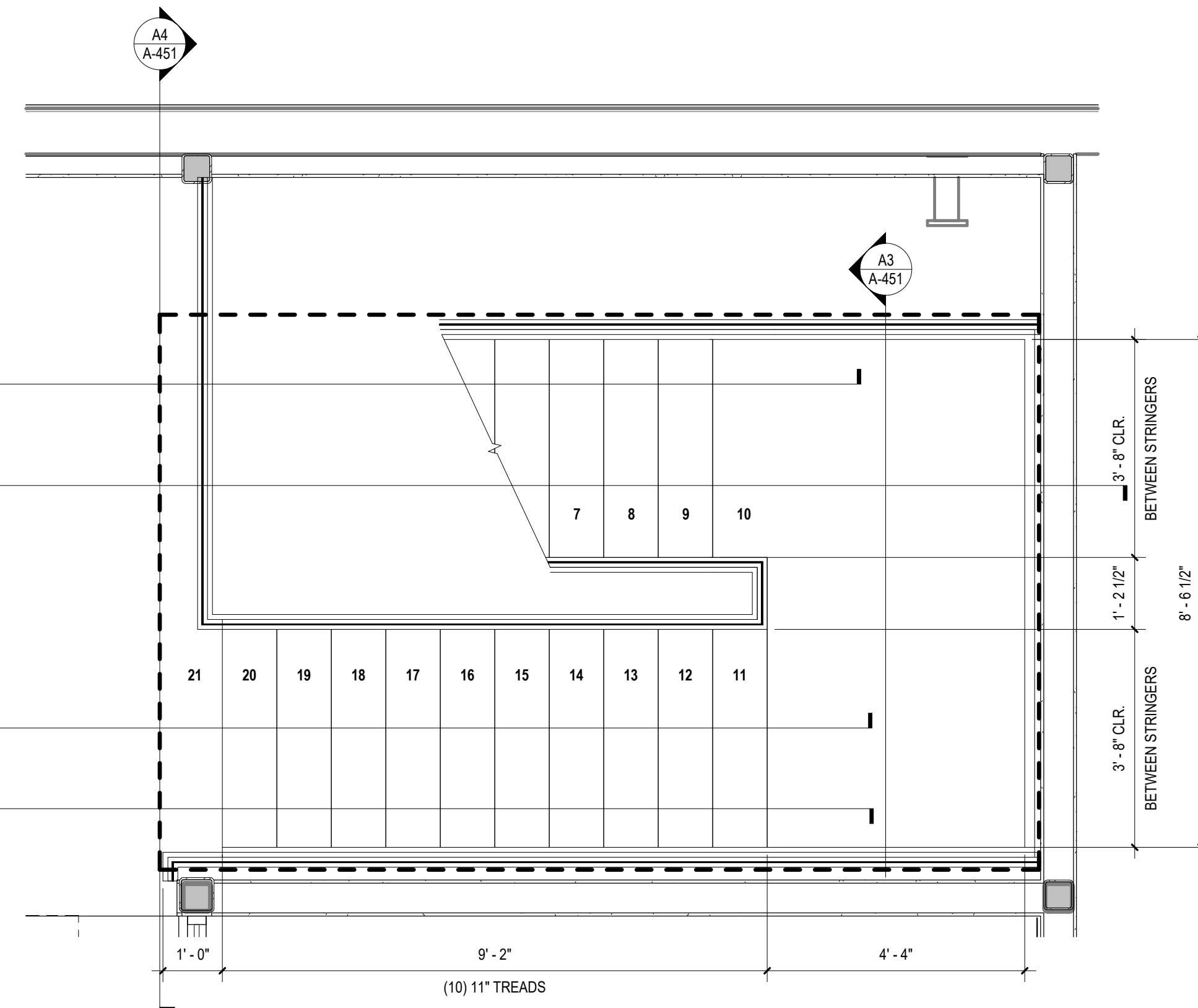
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-401**

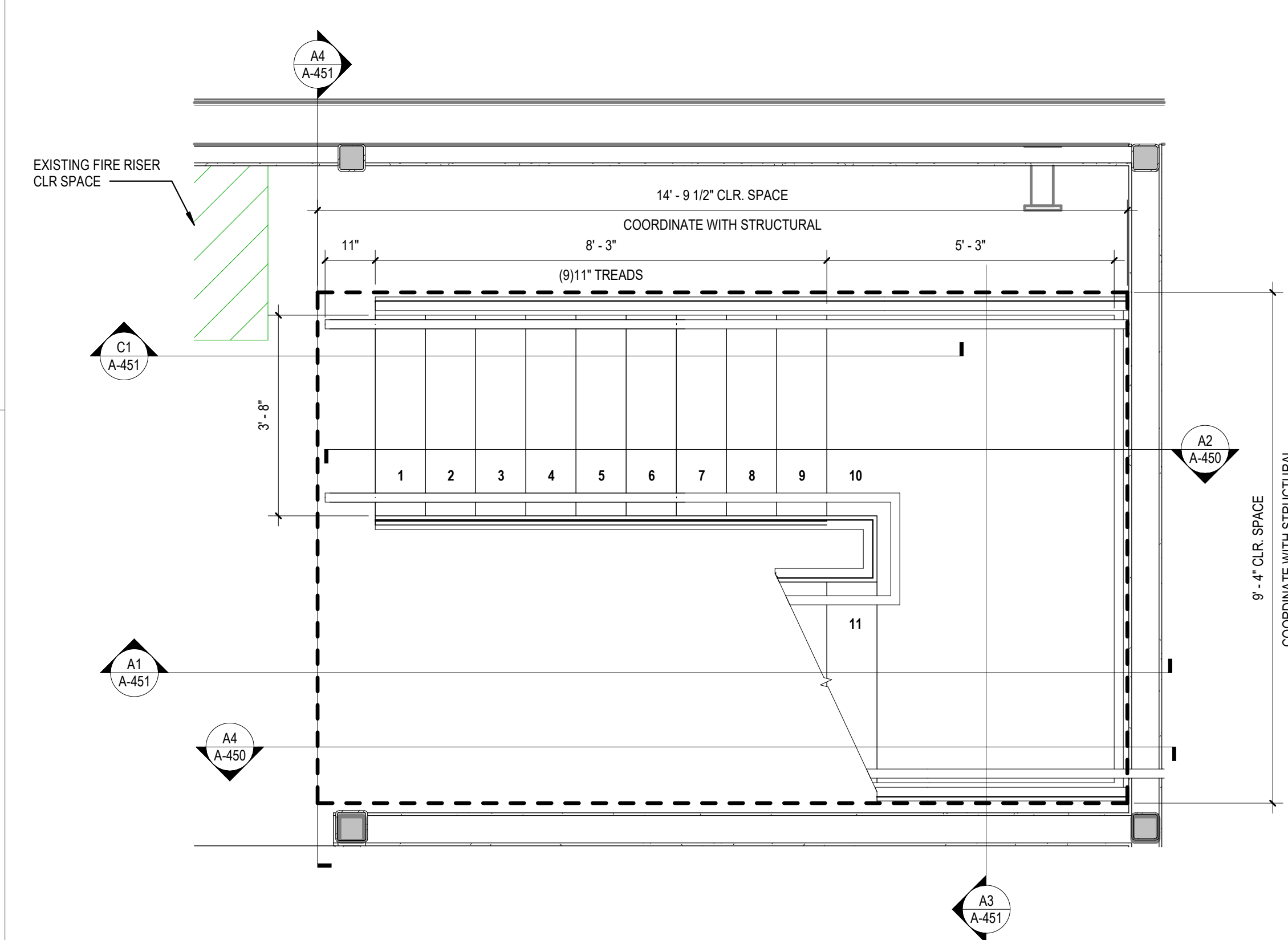
ENLARGED PLANS

### GENERAL NOTES: STAIRS

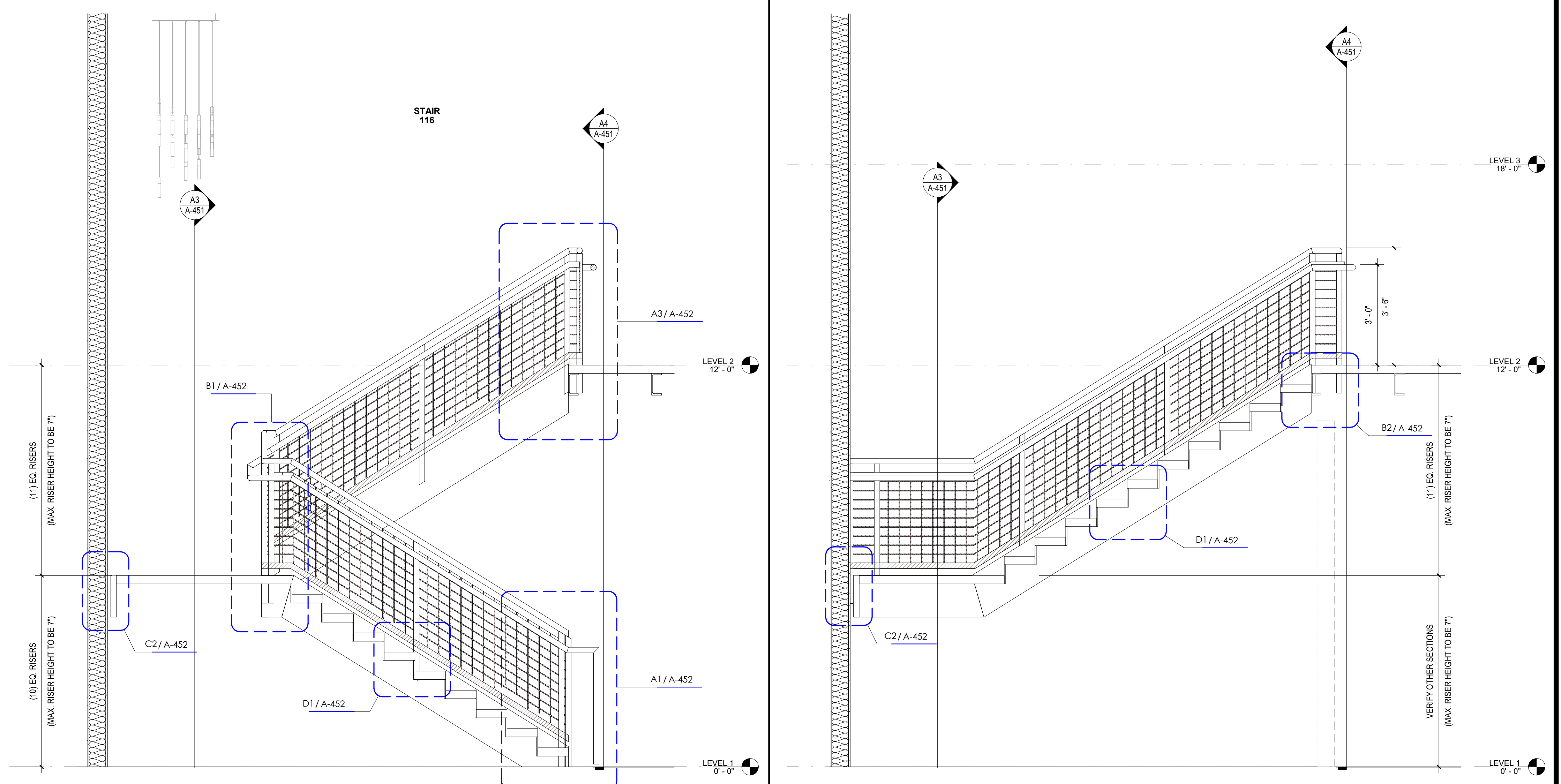
- A. METAL PAN STAIRS AND RAILINGS ARE DESIGN BUILD BY FABRICATOR, TYP. - SEE STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION.
- B. STAIR FABRICATOR TO SUBMIT SHOP DRAWINGS AND CALCULATIONS SEALED BY A LICENSED TEXAS ENGINEER TO THE ARCHITECT AND BUILDING STRUCTURAL ENGINEER FOR REVIEW AND COMMENT PRIOR TO FABRICATION.
- C. SIZES OF ALL STAIR, HANDRAIL, AND GUARDRAIL MEMBERS SHOWN ARE MINIMUM AND SHOWN FOR DESIGN INTENT ONLY. FABRICATOR SHALL BE RESPONSIBLE FOR DETERMINING MEMBER SIZES TO COMPLY WITH CODE REQUIRED LOADING CRITERIA.
- D. STAIR FABRICATOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO FABRICATION OF STAIRS.
- E. COORDINATE SUPPORT MEMBERS WITH STRUCTURAL DRAWINGS.
- F. COORDINATE STAIR OPENINGS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION.
- G. INTERIOR AND EXTERIOR STAIRS TO COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS ESTABLISHED BY THE 2006 INTERNATIONAL BUILDING CODE (IBC) WITH CITY OF HOUSTON AMENDMENTS REQUIREMENTS AND THE 2012 TEXAS ACCESSIBILITY STANDARDS (TAS), WHERE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS EXCEED THESE MINIMUM REQUIREMENTS, THE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS GOVERN.
  - STAIR WIDTH (IBC SEC. 1009.3 / OR AS REQUIRED BY IBC SEC. 1009.1): 44" MINIMUM CLEAR.
  - HEADROOM (IBC SEC. 1009.2): 80" MINIMUM CLEAR HEADROOM MEASURED VERTICALLY FROM A LINE CONNECTING THE EDGE OF THE NOSINGS.
  - STAIR RISE (IBC SEC. 1009.3 / TAS SEC. 504.2): 7" MAXIMUM AND 4" MINIMUM.
  - STAIR RUN (IBC SEC. 1009.3 / TAS SEC. 504.2): 11" MINIMUM.
  - STAIR DIM. UNIFORMITY (IBC SEC. 1009.2): 0.375" MAXIMUM RISER OR TREAD DIMENSIONAL DIFFERENCE.
  - STAIR PROFILE (IBC SEC. 1009.3 / TAS SEC. 504.5): 1/2" MAXIMUM RADIUS OR BEVEL OF STAIR NOSING, CLOSED RISERS, VERTICAL OR SLOPED (30 DEGREE MAXIMUM).
  - STAIR LANDINGS (IBC SEC. 1009.4): REQUIRED AT TOP AND BOTTOM OF EACH STAIR RUN, MINIMUM LANDING WIDTH NOT TO BE LESS THAN WIDTH OF STAIR.
  - STAIR CONSTRUCTION (IBC SEC. 1009.5): STAIRWAYS SHALL BE BUILT OF MATERIALS CONSISTENT WITH THE TYPES PERMITTED FOR THE TYPE OF CONSTRUCTION OF THE BUILDING.
  - STAIR WALKING SURFACE (IBC SEC. 1009.5.1 / TAS SEC. 302 & 504.4): INTERIOR STAIRS SHALL HAVE LEVEL TREADS. EXTERIOR STAIRS SHALL HAVE SLOPED TREADS TO PREVENT WATER ACCUMULATION (2% MAX.).
  - STAIR VERTICAL RISE (IBC SEC. 1009.6): MAXIMUM VERTICAL RISE SHALL BE LIMITED TO 12' BETWEEN LANDINGS.
  - CURVED STAIRWAYS (IBC SEC. 1009.7): NOT APPLICABLE TO THIS PROJECT.
  - SPIRAL STAIRWAYS (IBC SEC. 1009.8): NOT APPLICABLE TO THIS PROJECT.
  - ALTERNATING TREAD DEVICES (IBC SEC. 1009.9): NOT APPLICABLE TO THIS PROJECT.
  - STAIR HANDRAILS (IBC SEC. 1009.10): UNLESS EXCEPTIONS ALLOW, STAIRS SHALL BE PROVIDED WITH HANDRAILS ON EACH SIDE.
- H. ADDITIONAL EXTERIOR STAIR NOTES. NOT APPLICABLE TO THIS PROJECT.
  - PROVIDE CONCRETE PAD AT BASE OF EXTERIOR STAIRS. - SEE CIVIL/LANDSCAPE SHEETS FOR ADDITIONAL INFORMATION.
  - EXPOSED CONCRETE TREAD COLOR TO MATCH ADJACENT HARDSCAPE COLOR. - SEE LANDSCAPE/CIVIL DRAWINGS.
- I. INTERIOR AND EXTERIOR RAMPS TO COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS ESTABLISHED BY THE 2006 INTERNATIONAL BUILDING CODE (IBC) WITH CITY OF HOUSTON AMENDMENTS REQUIREMENTS AND THE 2012 TEXAS ACCESSIBILITY STANDARDS (TAS), WHERE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS EXCEED THESE MINIMUM REQUIREMENTS, THE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS GOVERN.
  - RAMP SLOPE (IBC SEC. 1010.2 / TAS 406.1): RUNNING SLOPE SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN 12 UNITS HORIZONTAL (8-PERCENT SLOPE).
  - RAMP CROSS SLOPE (IBC SEC. 1010.3 / TAS 406.3): CROSS SLOPE SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE).
  - RAMP VERTICAL RISE (IBC SEC. 1010.4 / TAS 406.6): THE RISE FOR ANY RAMP RUN SHALL NOT EXCEED 30 INCHES.
  - RAMP CLEAR WIDTH (IBC SEC. 1010.5.1 / TAS 406.5): CLEAR WIDTH BETWEEN HANDRAILS TO BE NO LESS THAN 36" OR AS NEEDED FOR EGRESS WIDTH, WHICHEVER IS LARGER.
  - RAMP HEADROOM (IBC SEC. 1010.5.2 / TAS 407.4): MINIMUM CLEAR HEADROOM SHALL NOT BE LESS THAN 80".
  - RAMP WIDTH RESTRICTIONS (IBC SEC. 1010.5.3): RAMPS USED AS MEANS OF EGRESS SHALL NOT REDUCE IN WIDTH IN THE DIRECTION OF EGRESS TRAVEL. DOORS OPENING INTO LANDINGS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 42".
  - RAMP LANDINGS SLOPE (IBC SEC. 1010.6.1 / TAS 407.1): LANDINGS SHALL NOT HAVE A SLOPE STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE). CHANGES IN LEVEL ARE NOT PERMITTED.
  - RAMP LANDING WIDTH (IBC SEC. 1010.6.2 / TAS 407.2): LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN ADJOINING THE LANDING.
  - RAMP LANDING LENGTH (IBC SEC. 1010.6.3 / TAS 407.3): LANDINGS SHALL HAVE A CLEAR LENGTH NOT LESS THAN 60".
  - RAMP LANDINGS WITH CHANGE IN DIRECTION (IBC SEC. 1010.6.4 / TAS 407.4): WHERE CHANGES IN DIRECTION OCCUR AT LANDINGS, LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF 60" X 80".
  - DOORWAYS AT RAMP LANDINGS (IBC SEC. 1010.6.5 / TAS 407.5): WHERE DOORWAYS ARE LOCATED ADJACENT TO RAMP LANDINGS, REQUIRED DOOR CLEARANCES MAY OVERLAP WITH THE REQUIRED LANDING AREA.
  - RAMP CONSTRUCTION (IBC SEC. 1010.7): RAMPS SHALL BE BUILT OF MATERIALS CONSISTENT WITH THE BUILDING CONSTRUCTION TYPE.
  - RAMP SURFACE (IBC SEC. 1010.7.1): RAMP SURFACES SHALL BE SLIP-RESISTANT.
  - OUTDOOR RAMPS (IBC SEC. 1010.7.2 / TAS 406.10): OUTDOOR RAMPS AND OUTDOOR APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER DOES NOT ACCUMULATE ON WALKING SURFACES.
  - RAMP HANDRAILS (IBC SEC. 1010.8 / TAS 406.9): RAMPS RUNS WITH A RISE GREATER THAN 8" SHALL HAVE HANDRAILS.
  - RAMP EDGE PROTECTION (IBC SEC. 1010.9 / TAS 406.9): RAMP EDGE PROTECTION REQUIRED UNLESS RAMP IS NOT REQUIRED TO HAVE HANDRAILS AND SIDES ARE FLARED. RAMP LANDINGS EDGE PROTECTION REQUIRED UNLESS 1) SIDE OF LANDING SERVES AN ADJOINING RAMP OR STAIRWAY OR 2) RAMP LANDINGS HAVE A VERTICAL DROP OF NO MORE THAN 0.5' WITHIN 10' OF THE REQUIRED LANDING AREA. EDGE PROTECTION SHALL CONSIST OF 1) A CURB, RAIL, WALL OR BARRIER THAT PREVENTS THE PASSAGE OF A 4" SPHERE WHERE ANY PORTION OF THE SPHERE IS WITHIN 4" OF THE FLOOR OR GROUND SURFACE OR 2) THE ADJACENT GROUND SURFACE OF THE RAMP RUN OR LANDINGS EXTENDS A MINIMUM OF 12" BEYOND THE INSIDE FACE OF THE REQUIRED HANDRAIL.
  - RAMP GUARDS (IBC SEC. 1010.10): WHERE GUARDRAILS ARE REQUIRED BY OTHER CODE PROVISIONS, GUARDS SHALL COMPLY WITH GUARDRAIL REQUIREMENTS.
  - HANDRAILS TO COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS ESTABLISHED BY THE 2006 INTERNATIONAL BUILDING CODE (IBC) WITH CITY OF HOUSTON AMENDMENTS REQUIREMENTS AND THE 2012 TEXAS ACCESSIBILITY STANDARDS (TAS), WHERE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS EXCEED THESE MINIMUM REQUIREMENTS, THE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS GOVERN.
    - HANDRAIL STRENGTH (IBC SEC. 1012.1 & 1607.7): HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED TO RESIST A LOAD OF 50 plf (0.73 kN/m) APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE. GLASS HANDRAILS SHALL COMPLY WITH SEC. 2407.
    - WHERE REQUIRED (IBC SEC. 1012.1): HANDRAILS SHALL BE REQUIRED AT ALL STAIRS AND RAMPS WITH A RISE GREATER THAN 6".
    - HANDRAIL HEIGHT (IBC SEC. 1012.2 / TAS 505.4): TOP OF HANDRAIL SHALL BE 34" TO 38" ABOVE NOSING OF TREADS, LANDINGS AND RAMP SURFACE.
    - HANDRAIL GRASPABILITY (IBC SEC. 1012.3 / TAS 505.7): HANDRAILS TO HAVE A CIRCULAR CROSS SECTIONAL OUTSIDE DIAMETER OF 1-1/4" TO 2" NONE CIRCULAR CROSS SECTION HANDRAILS SHALL HAVE A PERIMETER OF AT LEAST 4" BUT NOT GREATER THAN 6.25" AND SHALL HAVE A MAXIMUM CROSS-SECTION DIMENSION OF 2.25". EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01".
    - HANDRAIL CONTINUITY (IBC SEC. 1012.4): UNLESS EXCEPTIONS ALLOW, HANDRAIL GRIPPING SURFACE SHALL BE CONTINUOUS, WITHOUT INTERRUPTION.
    - HANDRAIL EXTENSIONS (IBC SEC. 1012.5 / TAS 505.10): HANDRAILS SHALL RETURN TO A WALL, GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT OR RAMP RUN. WHERE STAIR HANDRAILS TERMINATE, THE HANDRAIL SHALL EXTEND HORIZONTALLY AT LEAST 12" BEYOND THE TOP RISER AND SHALL CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER. WHERE RAMP HANDRAILS TERMINATE, THE HANDRAIL SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12" MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS.
    - HANDRAIL CLEARANCE (IBC SEC. 1012.6 / TAS 505.5 & 505.6): CLEAR SPACE BETWEEN HANDRAIL AND ADJACENT SURFACES SHALL BE A MINIMUM OF 1.5".
    - HANDRAIL PROJECTIONS (IBC SEC. 1012.7 / TAS 405.5): ON RAMPS, THE CLEAR WIDTH BETWEEN HANDRAILS SHALL BE 36" MINIMUM. PROJECTIONS INTO THE REQUIRED WIDTH OF STAIRWAYS AND RAMPS AT EACH HANDRAIL SHALL NOT EXCEED 4.5" AT OR BELOW THE HANDRAIL HEIGHT. PROJECTIONS INTO THE REQUIRED WIDTH SHALL NOT BE LIMITED ABOVE THE MINIMUM HEADROOM HEIGHT REQUIREMENT.
    - INTERMEDIATE HANDRAILS (IBC SEC. 1012.8): INTERMEDIATE HANDRAILS REQUIRED WHERE STAIR WIDTH EXCEEDS 60".
    - SURFACES (TAS 505.8): HANDRAIL GRIPPING SURFACE AND ANY SURFACE ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
    - FITTINGS (TAS 505.9): HANDRAILS SHALL NOT ROTATE WITH THEIR FITTINGS.
  - GUARDRAILS TO COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS ESTABLISHED BY THE 2006 INTERNATIONAL BUILDING CODE (IBC) WITH CITY OF HOUSTON AMENDMENTS REQUIREMENTS. WHERE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS EXCEED THESE MINIMUM REQUIREMENTS, THE DIMENSIONS GIVEN IN THE STAIR PLANS, SECTIONS AND DETAILS GOVERN.
    - GUARDRAIL STRENGTH (IBC SEC. 1013.1 & 1607.7): HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED TO RESIST A LOAD OF 50 plf (0.73 kN/m) APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE. GLASS HANDRAILS SHALL COMPLY WITH SEC. 2407.
    - WHERE REQUIRED (IBC SEC. 1013.1): UNLESS EXCEPTIONS ALLOW, GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, MEZZANINES, INDUSTRIAL EQUIPMENT PLATFORMS, STAIRWAYS, RAMPS AND LANDINGS LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW.
    - GUARDRAILS HEIGHT (IBC SEC. 1013.2): TOP OF GUARDRAIL TO BE NOT LESS THAN 42" HIGH, MEASURED VERTICALLY ABOVE THE LEADING EDGE OF THE TREAD, ADJACENT WALKING SURFACE OR ADJACENT SEATBOARD.
    - OPENING LIMITATIONS (IBC SEC. 1013.3): UNLESS EXCEPTIONS ALLOW, FROM FLOOR LEVEL TO A HEIGHT OF 34", GUARDS SHALL NOT ALLOW A 4" SPHERE TO PASS THROUGH. FROM A HEIGHT OF 34" TO 42" ABOVE THE FLOOR LEVEL, GUARDS SHALL NOT ALLOW A 6" SPHERE TO PASS THROUGH. THE TRIANGULAR OPENING FORMED BY THE RISER, TREAD AND BOTTOM RAIL AT THE OPEN SIDE OF A STAIRWAY SHALL BE OF MAXIMUM SIZE SUCH THAT A SPHERE 6" IN DIAMETER CANNOT PASS THROUGH.
- L. STAIR FINISHES
  - ALL EXPOSED METAL STAIR MEMBERS SHALL RECEIVE PRIMER AND FINISH PAINT, UNLESS NOTED OTHERWISE.
  - INTERIOR STAIR FINISHES TO BE PER INTERIOR DESIGNER.



**C1 ENLARGED STAIR PLAN - LV 02**  
1/2" = 1'-0"



**A1 ENLARGED STAIR PLAN - LV 01**  
1/2" = 1'-0"



**A2 LANDING SECTION**  
1/2" = 1'-0"

**A4 UPPER RUN SECTION**  
1/2" = 1'-0"



12/01/23

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

Project Number 23-01-014  
Drawn By Author  
Checked By Checker

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-450**  
ENLARGED STAIR PLAN & ELEVATIONS



12/01/2023

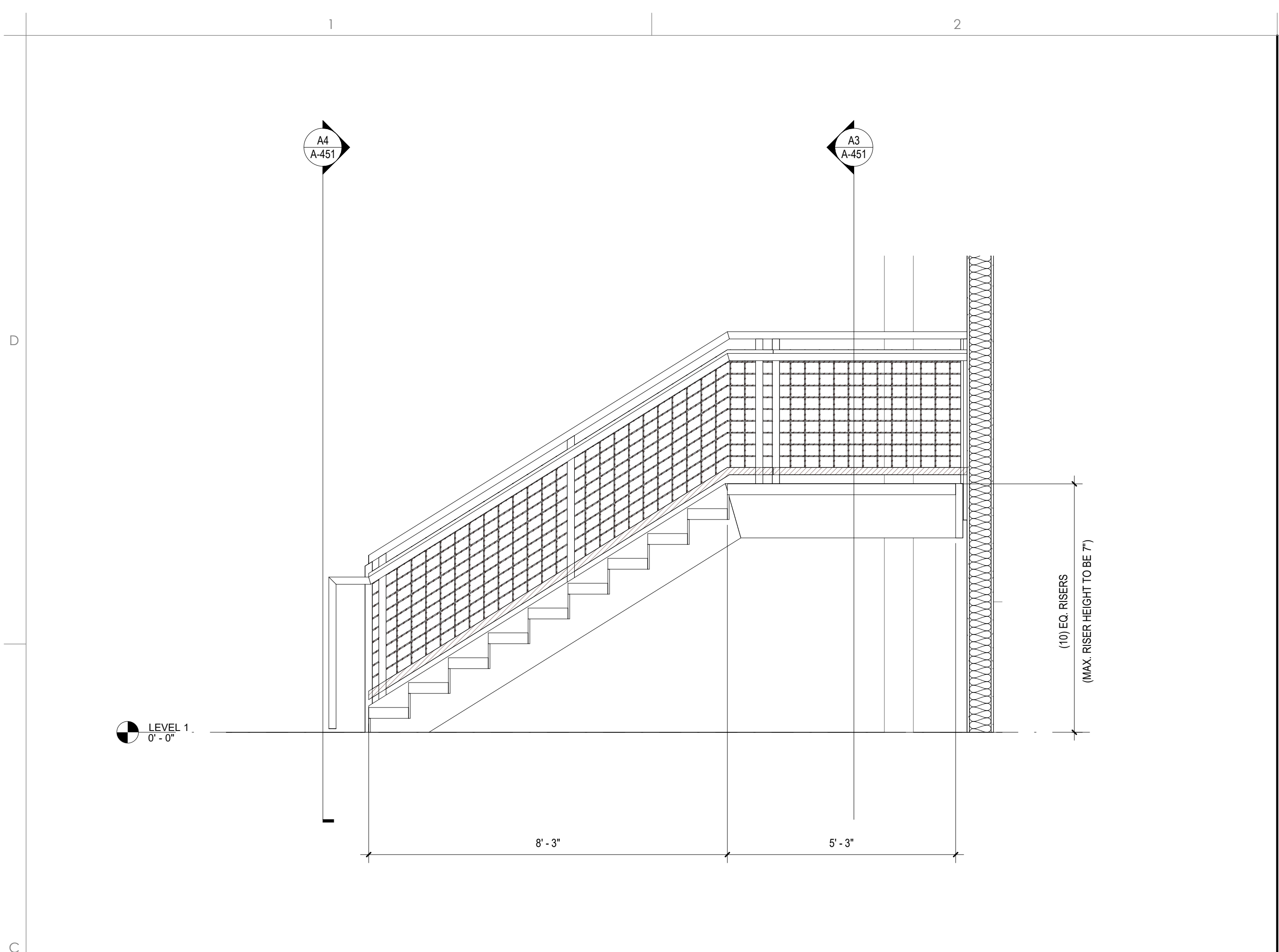
**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

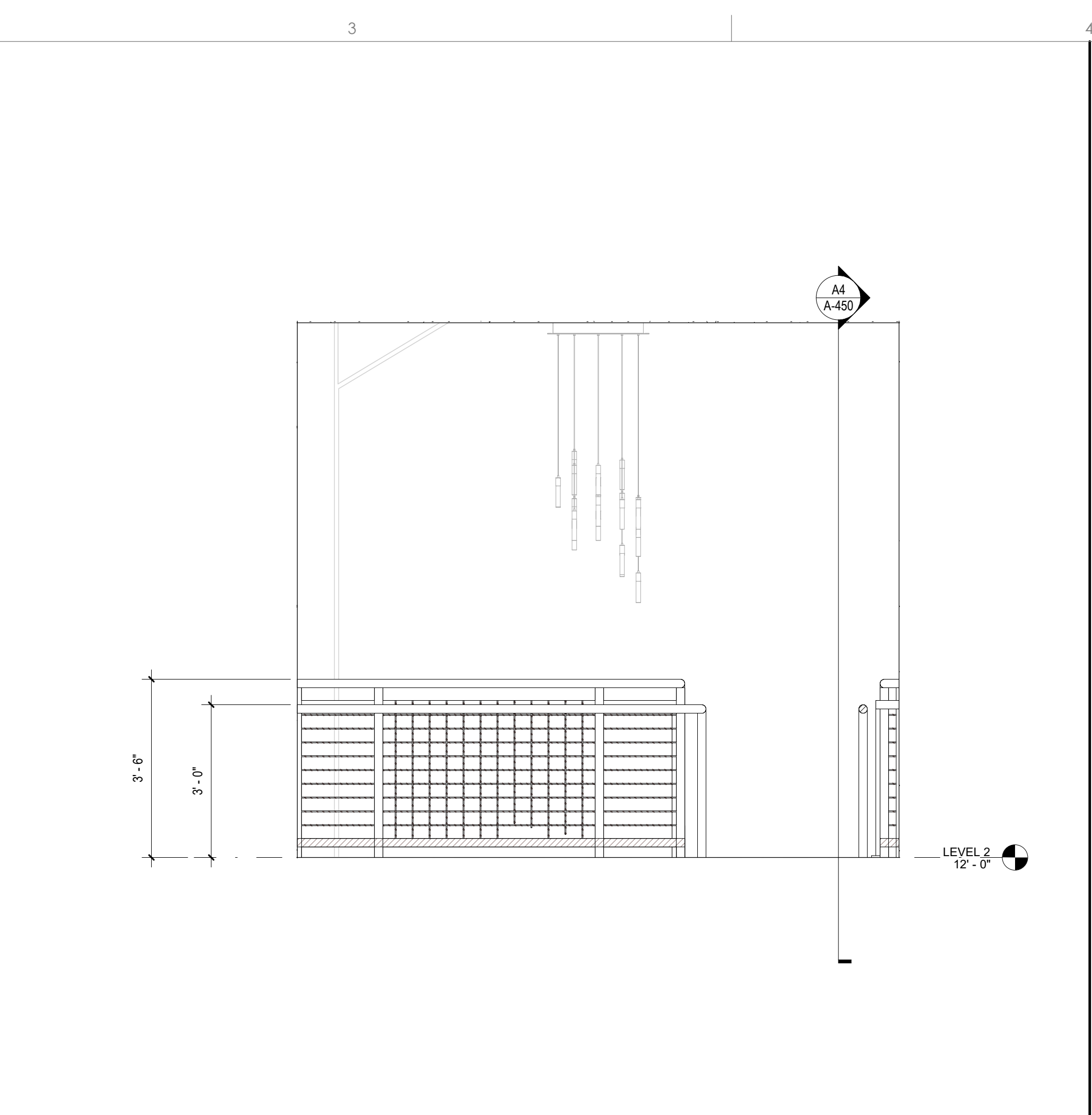
Project Number	23-01-014
Drawn By	Author
Checked By	Checker

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

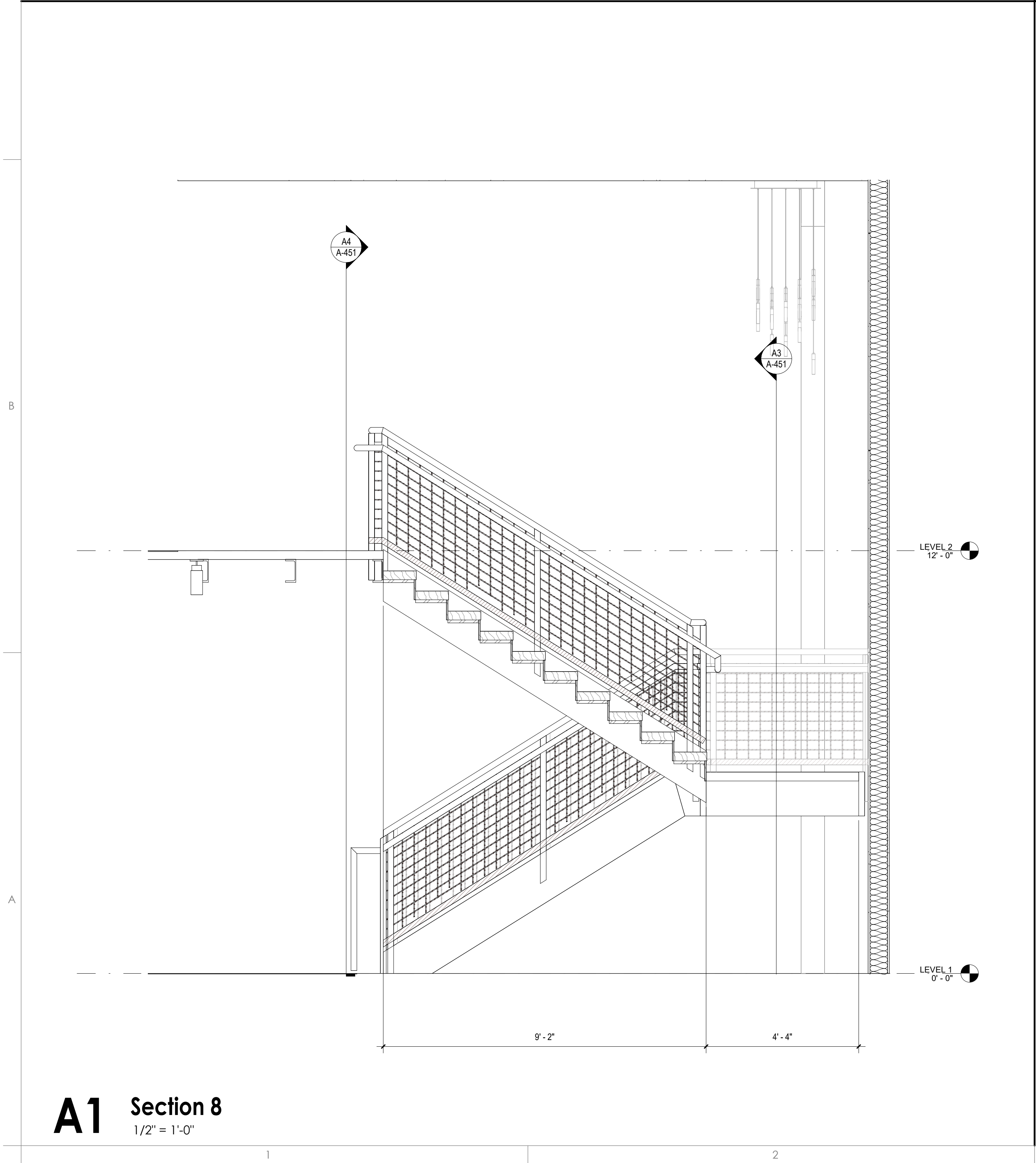
**A-451**  
ENLARGED STAIR  
PLAN & ELEVATIONS



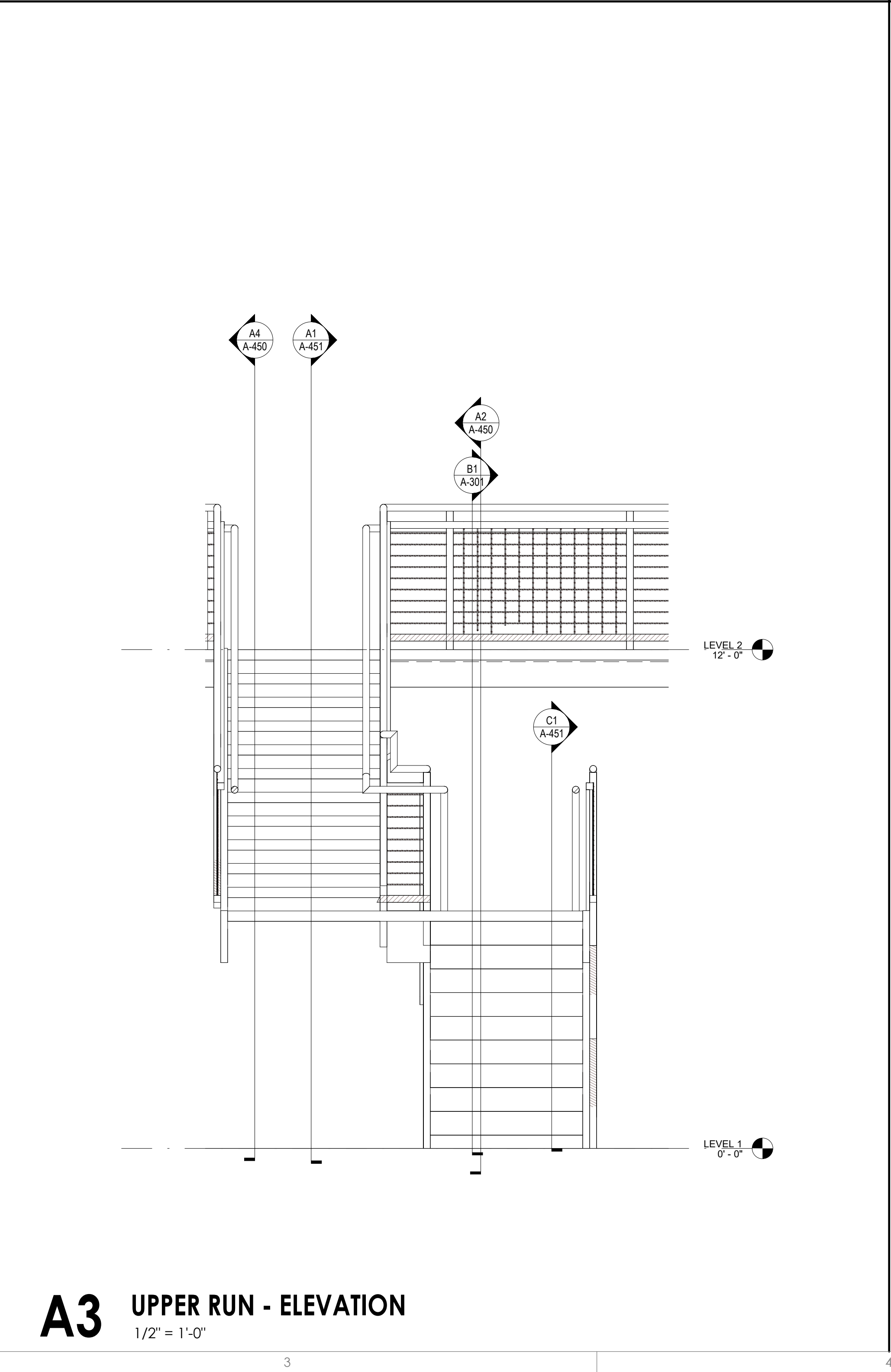
**C1 LOWER RUN - SECTION**  
1/2" = 1'-0"



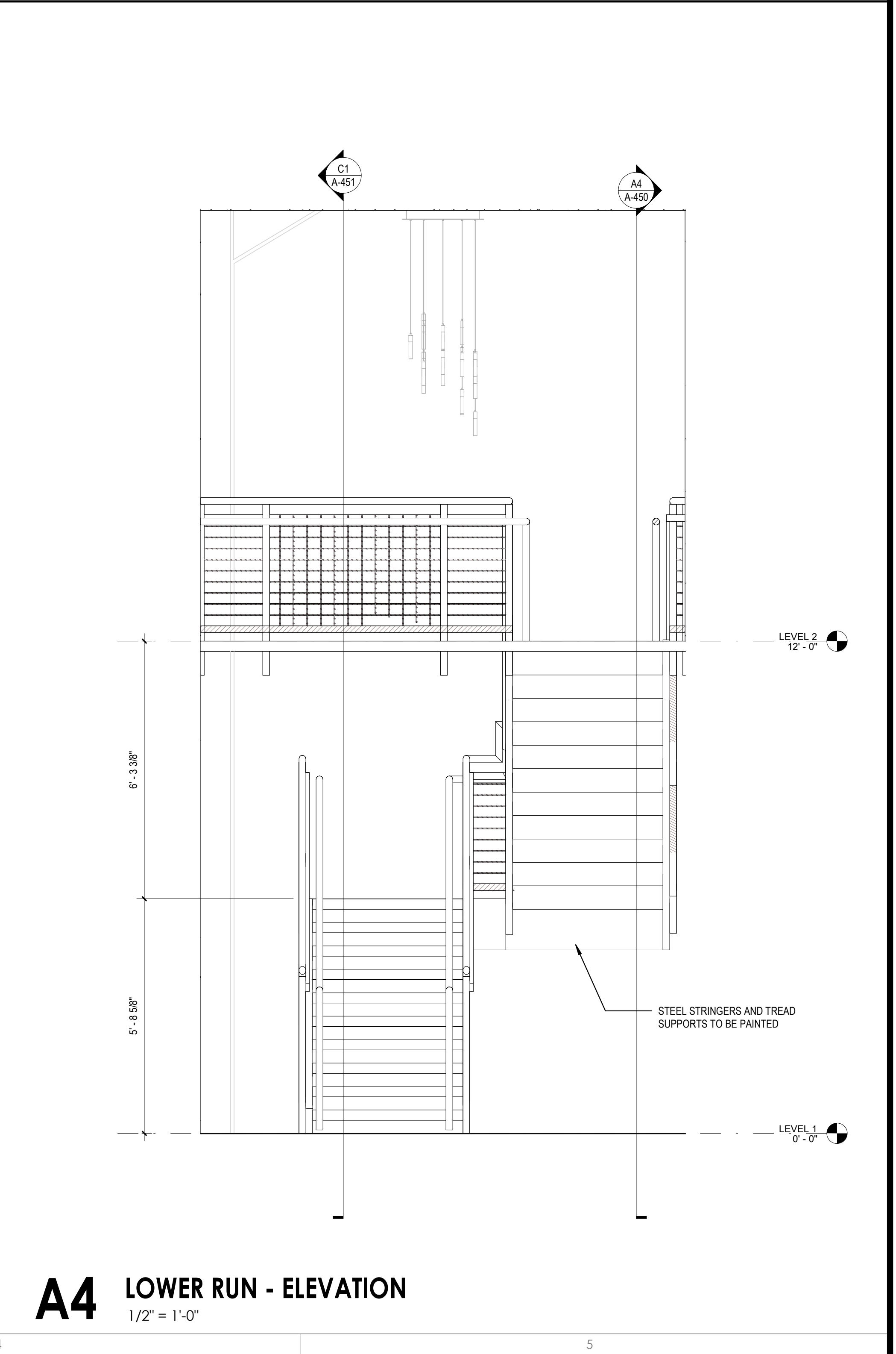
**C3 TOP LANDING GUARD & HANDRAIL**  
1/2" = 1'-0"



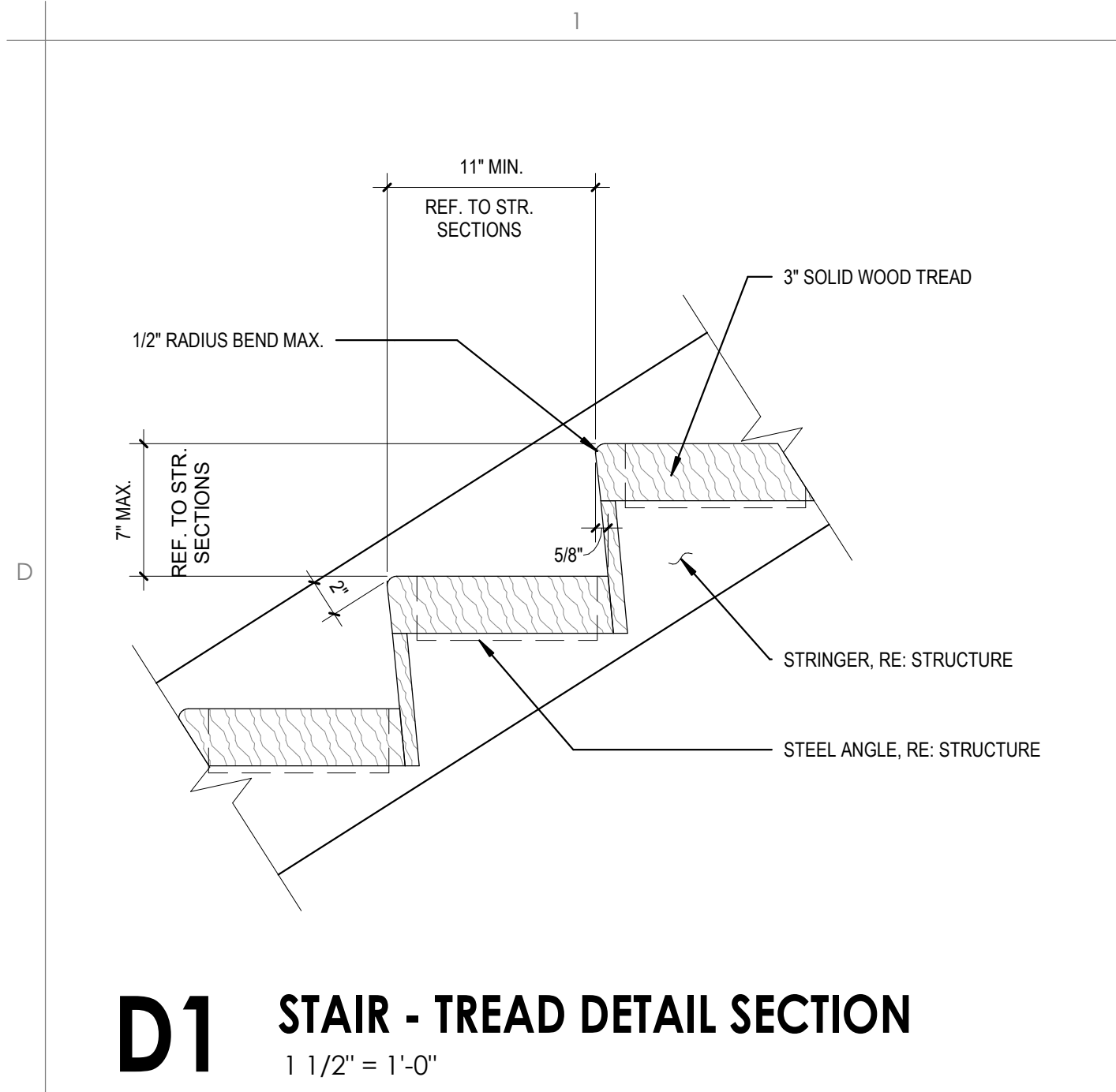
**A1 Section 8**  
1/2" = 1'-0"



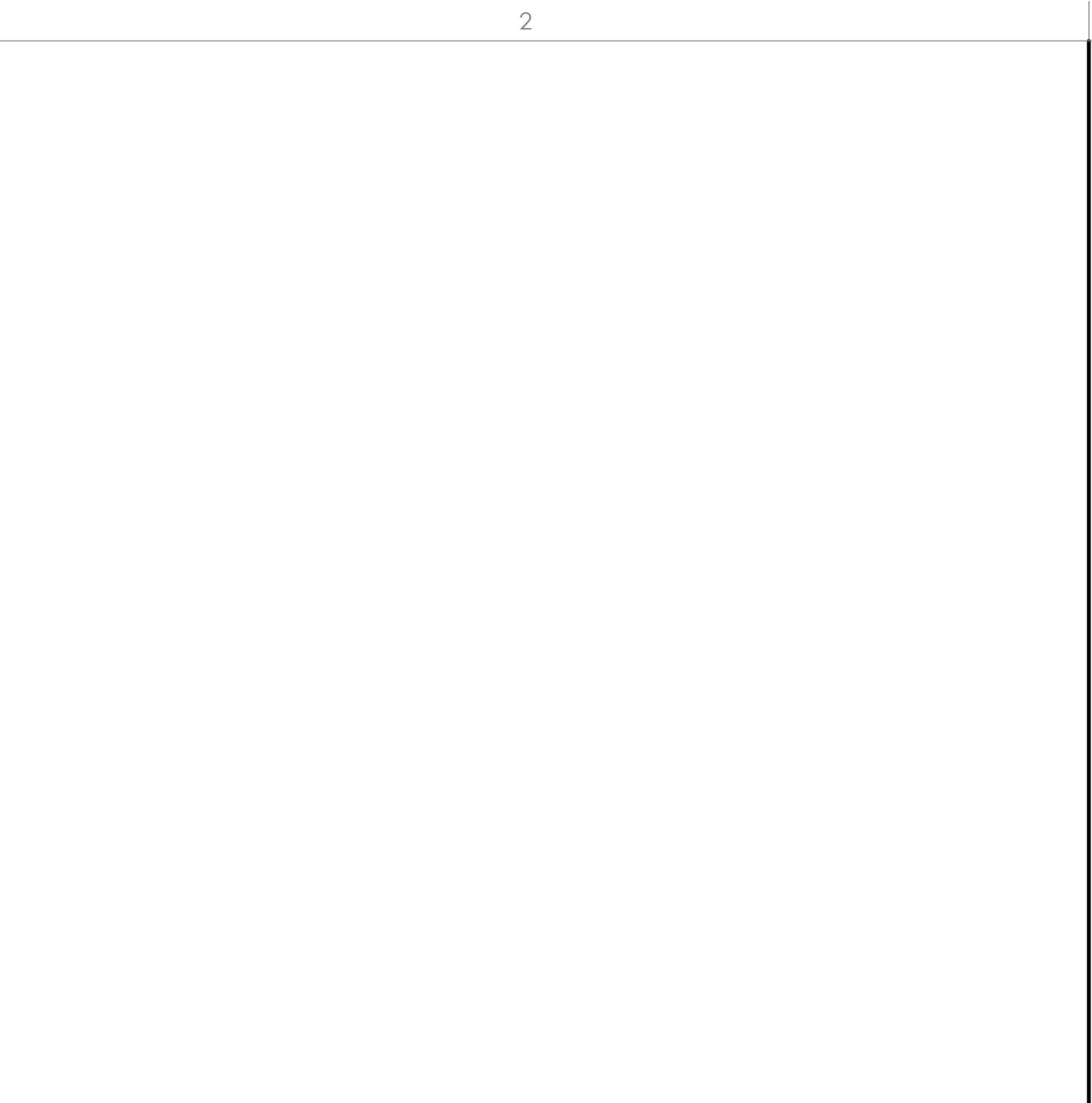
**A3 UPPER RUN - ELEVATION**  
1/2" = 1'-0"



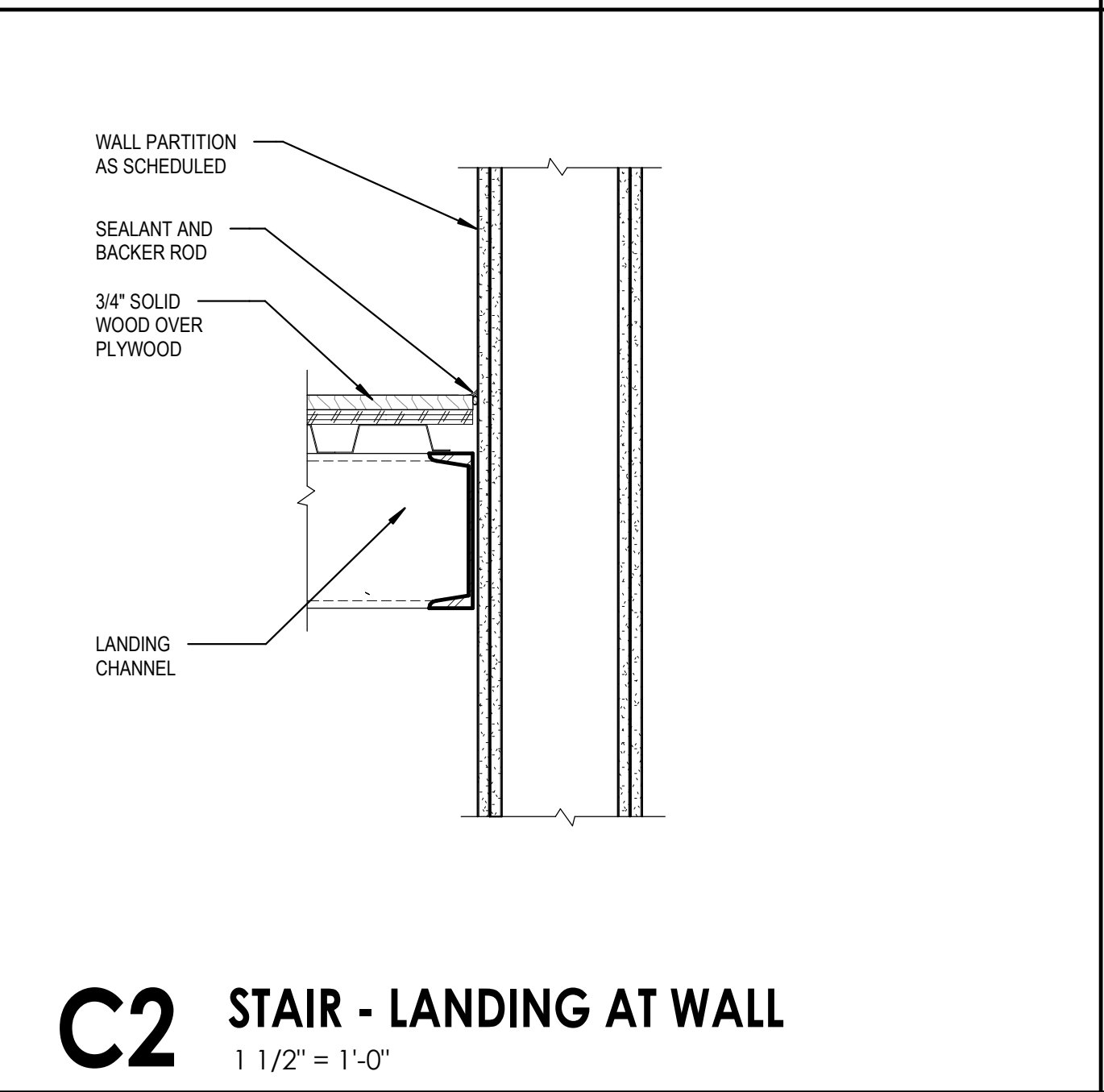
**A4 LOWER RUN - ELEVATION**  
1/2" = 1'-0"



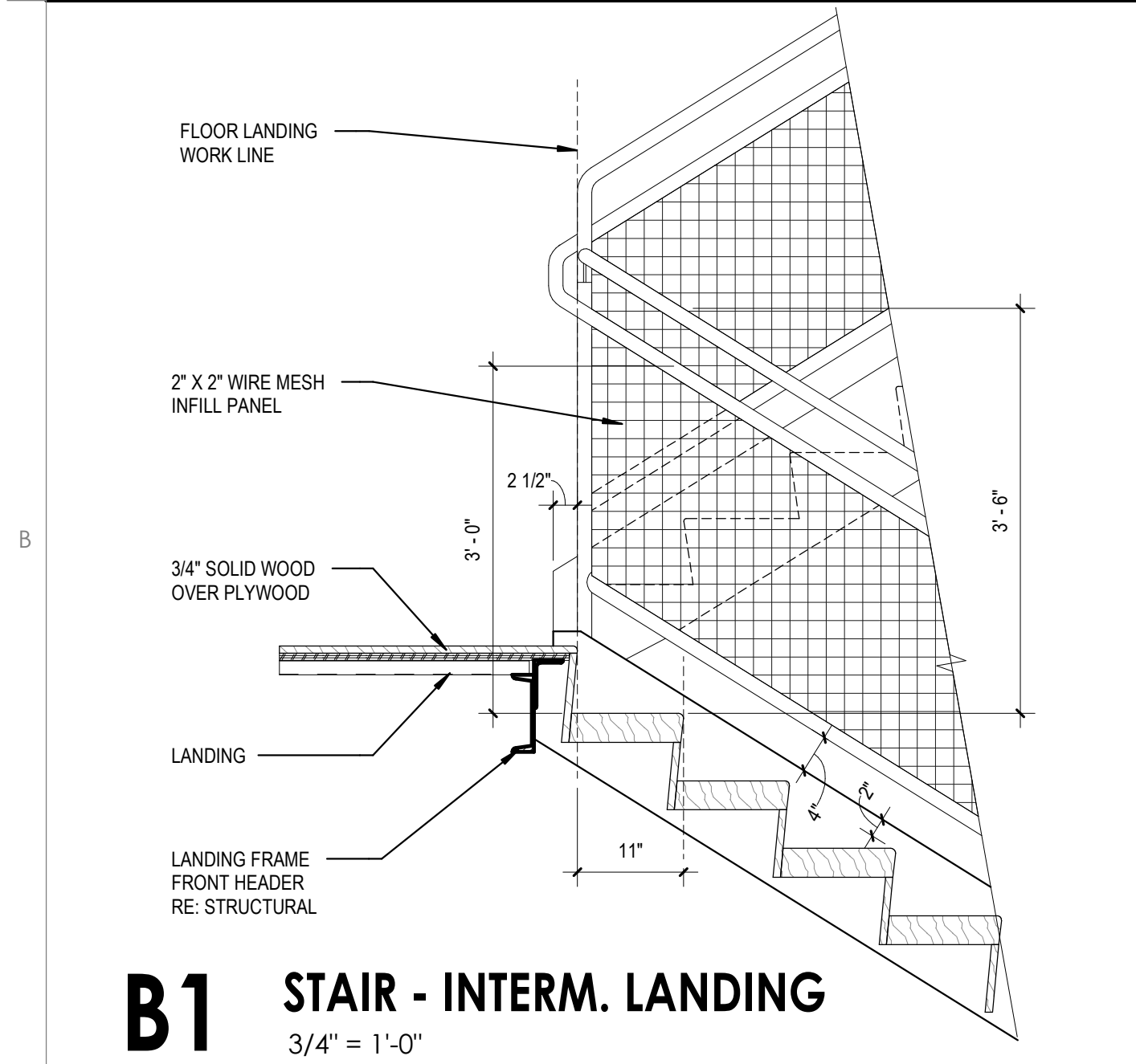
**D1 STAIR - TREAD DETAIL SECTION**  
1 1/2" = 1'-0"



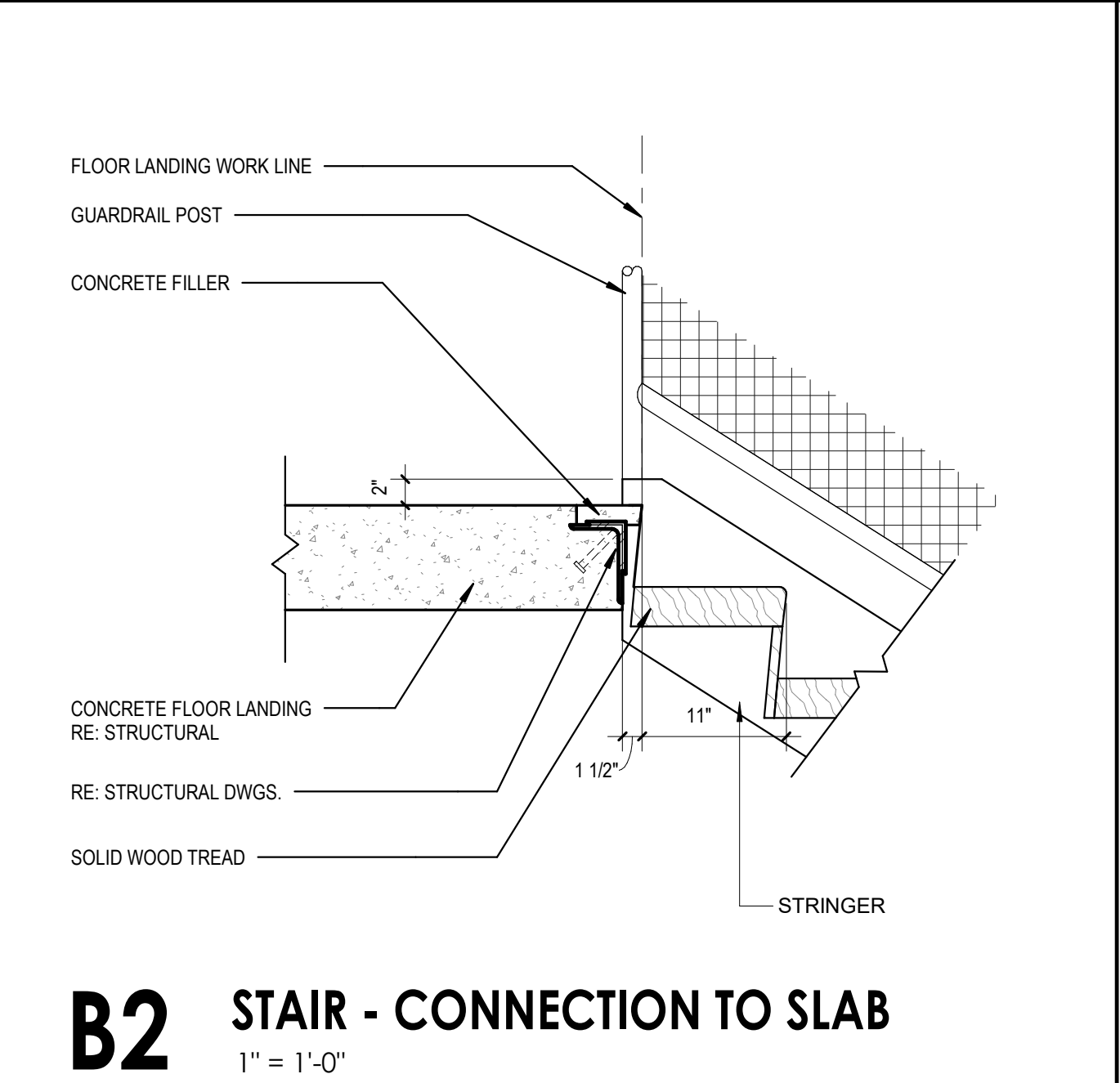
**C1 STAIR - BOTTOM DETAIL**  
1 1/2" = 1'-0"



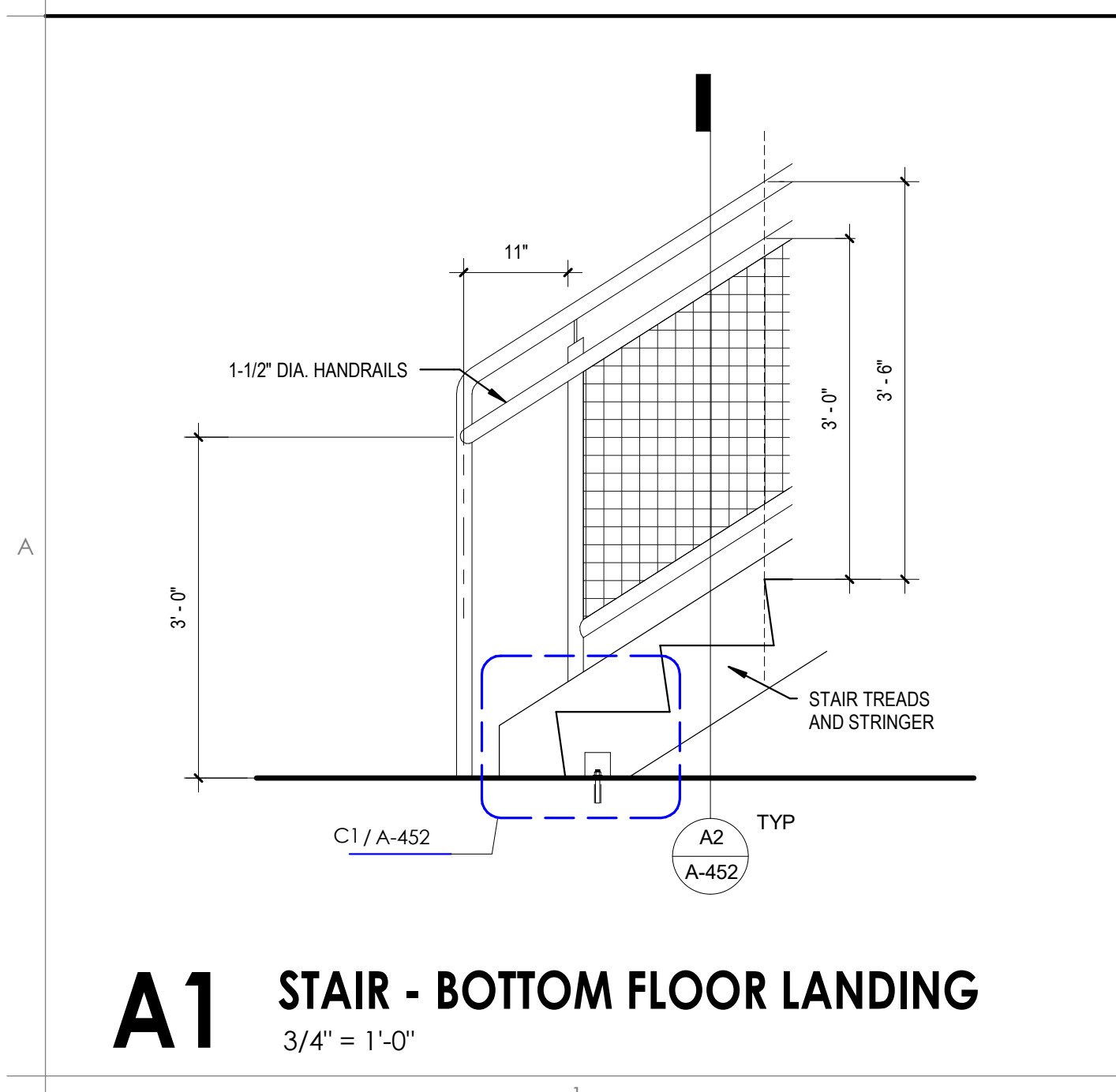
**C2 STAIR - LANDING AT WALL**  
1 1/2" = 1'-0"



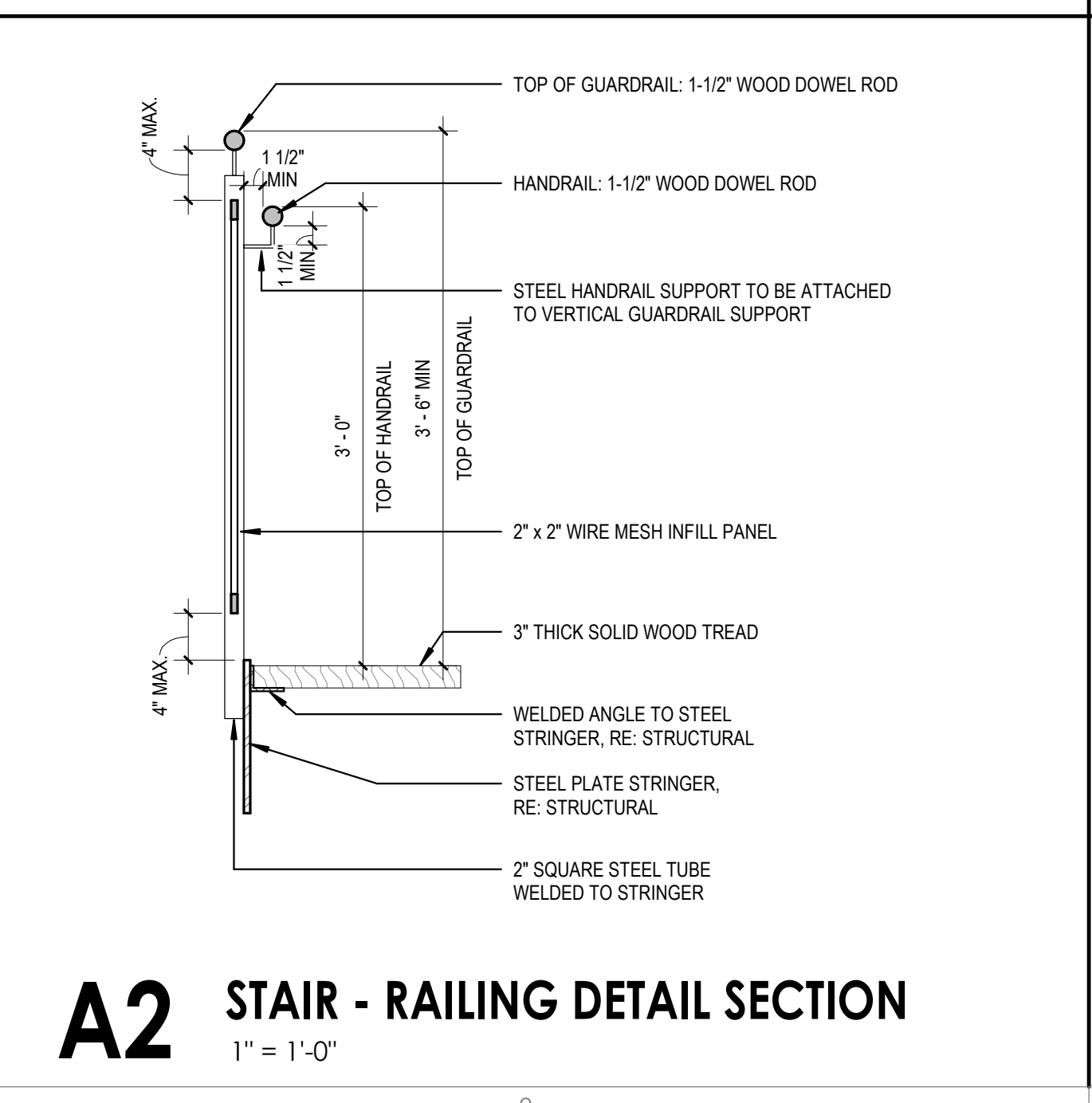
**B1 STAIR - INTERM. LANDING**  
3/4" = 1'-0"



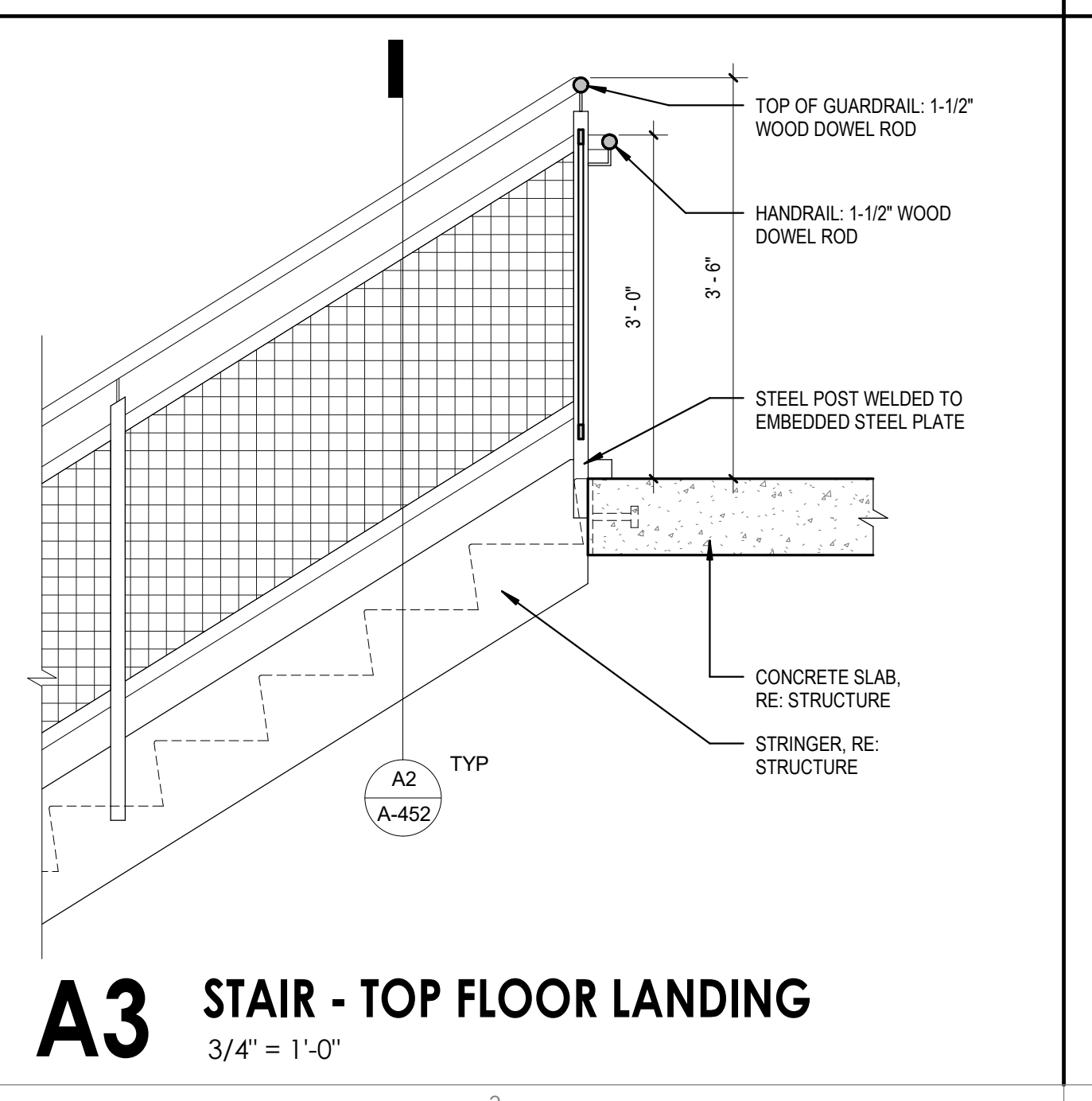
**B2 STAIR - CONNECTION TO SLAB**  
1" = 1'-0"



**A1 STAIR - BOTTOM FLOOR LANDING**  
3/4" = 1'-0"



**A2 STAIR - RAILING DETAIL SECTION**  
1" = 1'-0"



**A3 STAIR - TOP FLOOR LANDING**  
3/4" = 1'-0"

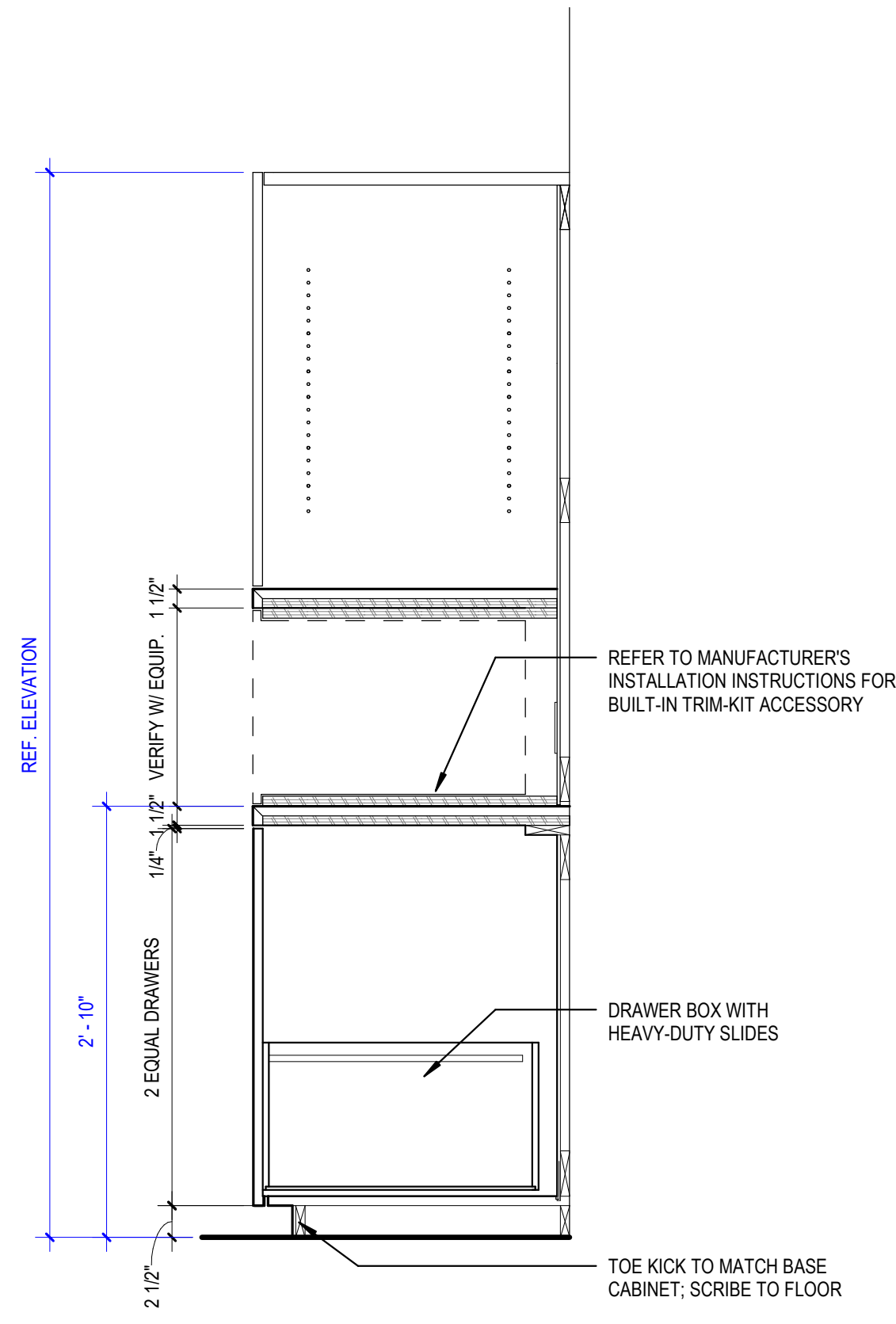


12/01/2023

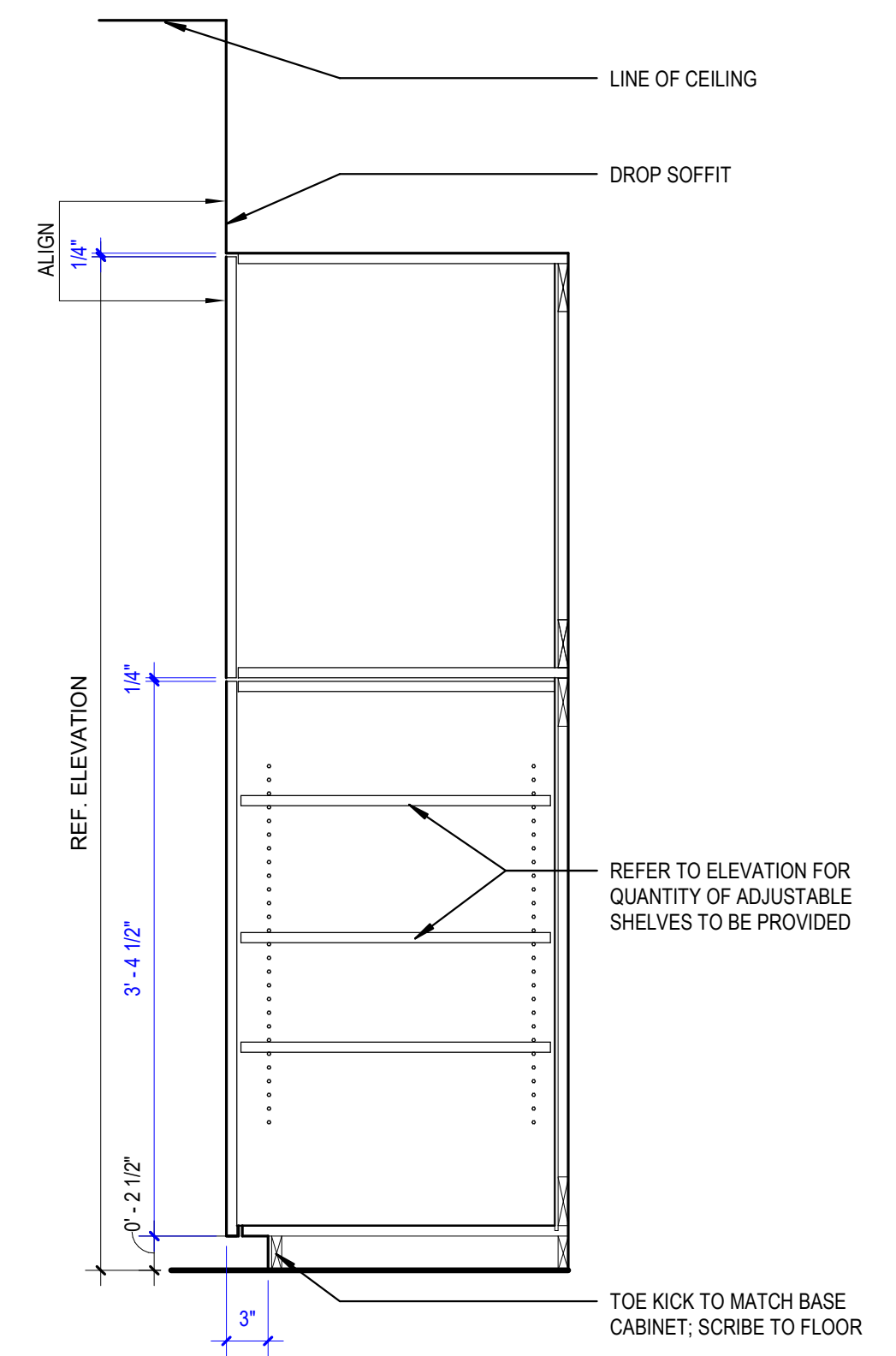
**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

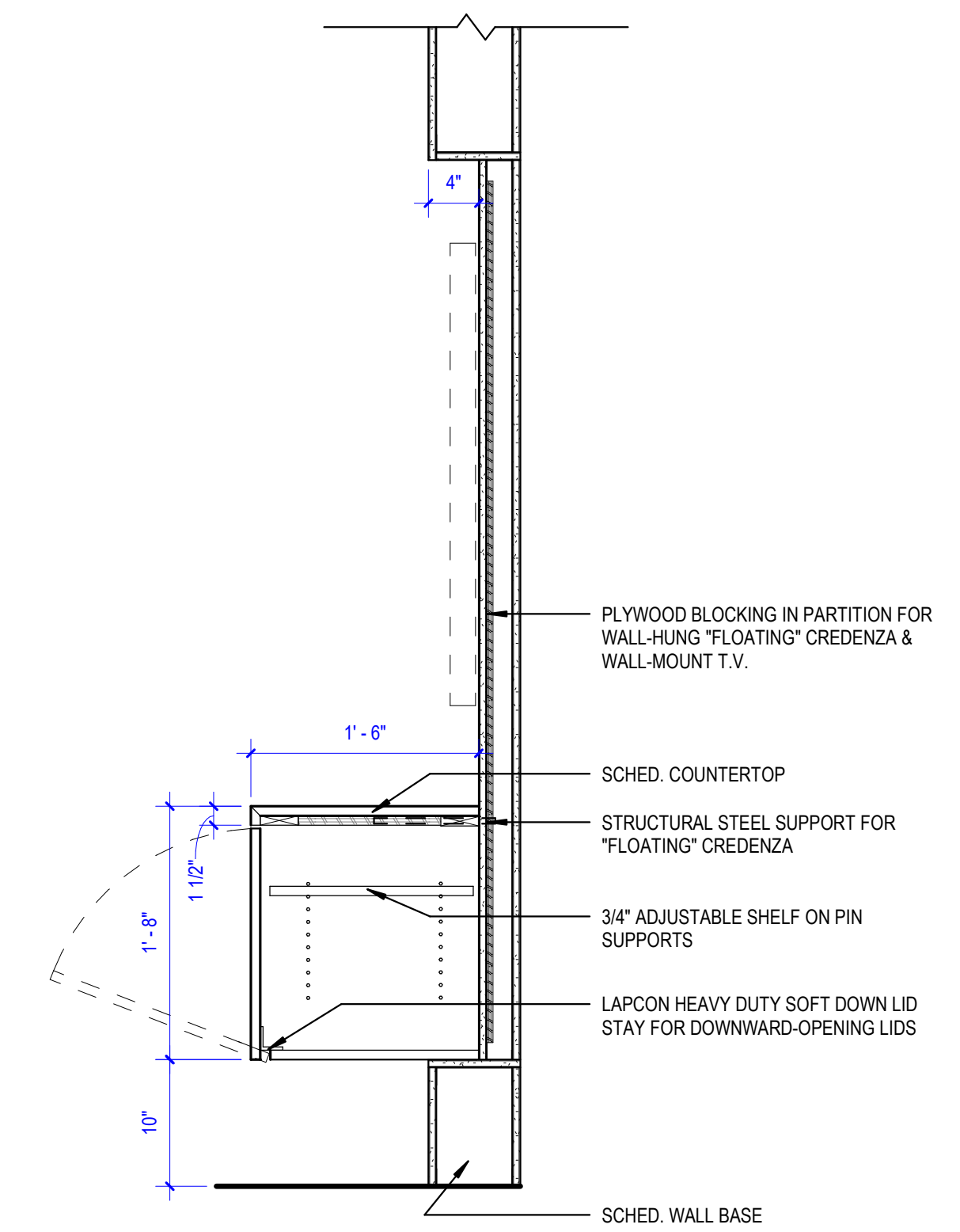
Project Number	23-01-014
Drawn By	Author
Checked By	Checker



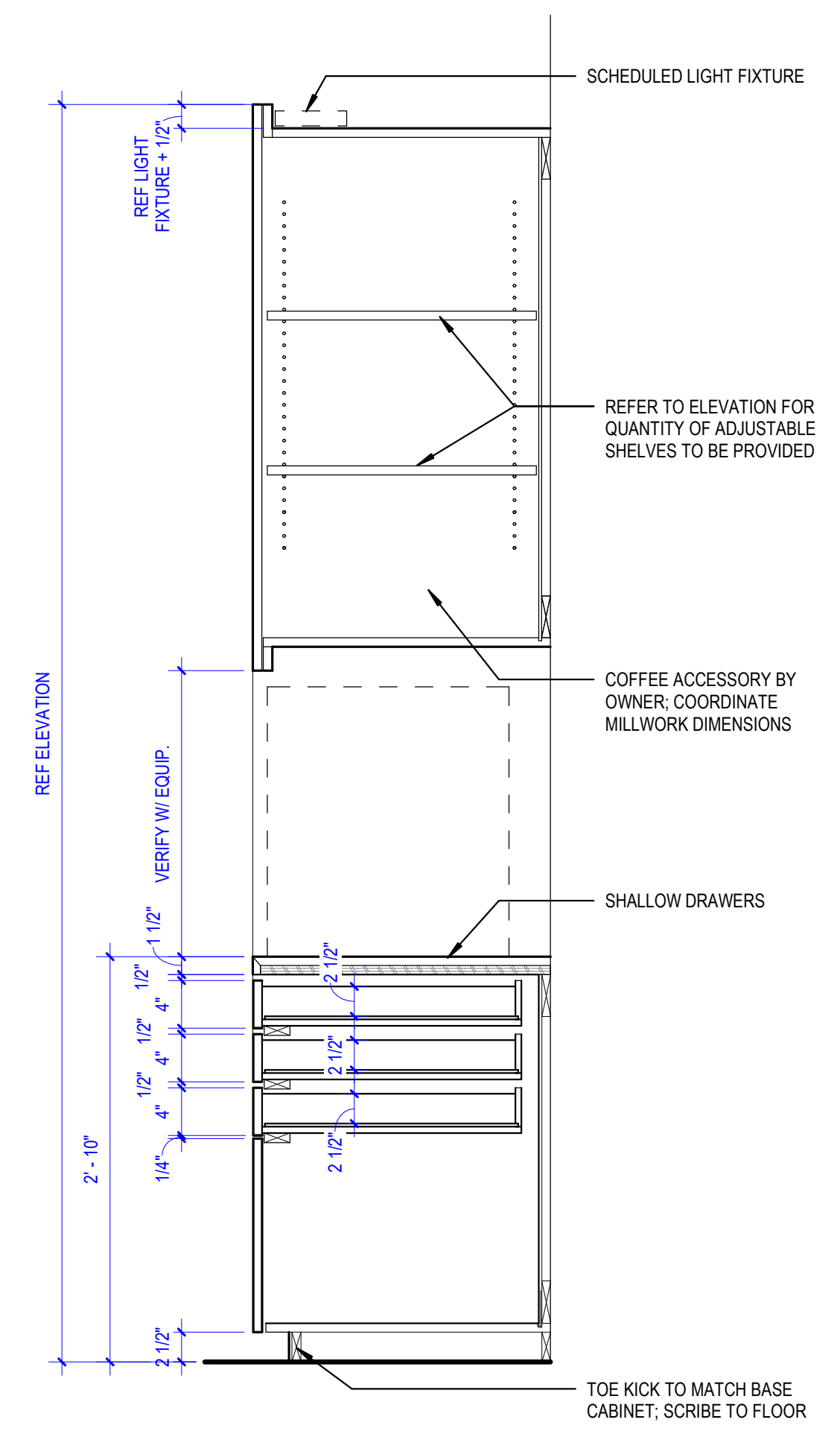
**C4 TALL CABINET- SINGLE - MICROWAVE**  
1" = 1'-0"



**C5 TALL CABINET- TWO DOORS**  
1" = 1'-0"



**A4 FLOATING CRENZNA @ TV NICHE**  
1" = 1'-0"



**A5 TALL CABINET - COFFEE SERVICE**  
1" = 1'-0"



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

Project Number	23-01-014
Drawn By	JO
Checked By	OS

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-502**

MILLWORK DETAILS





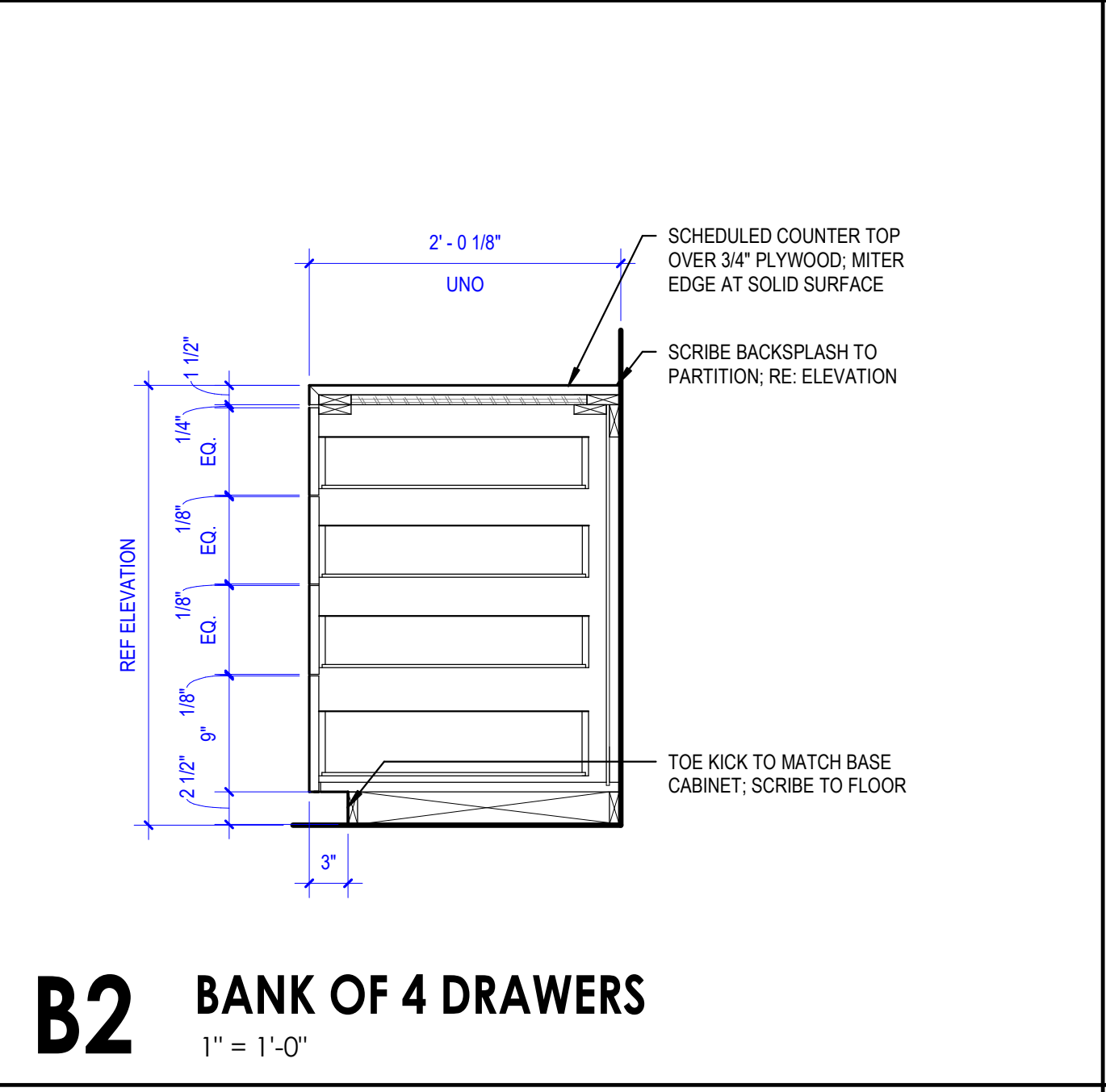
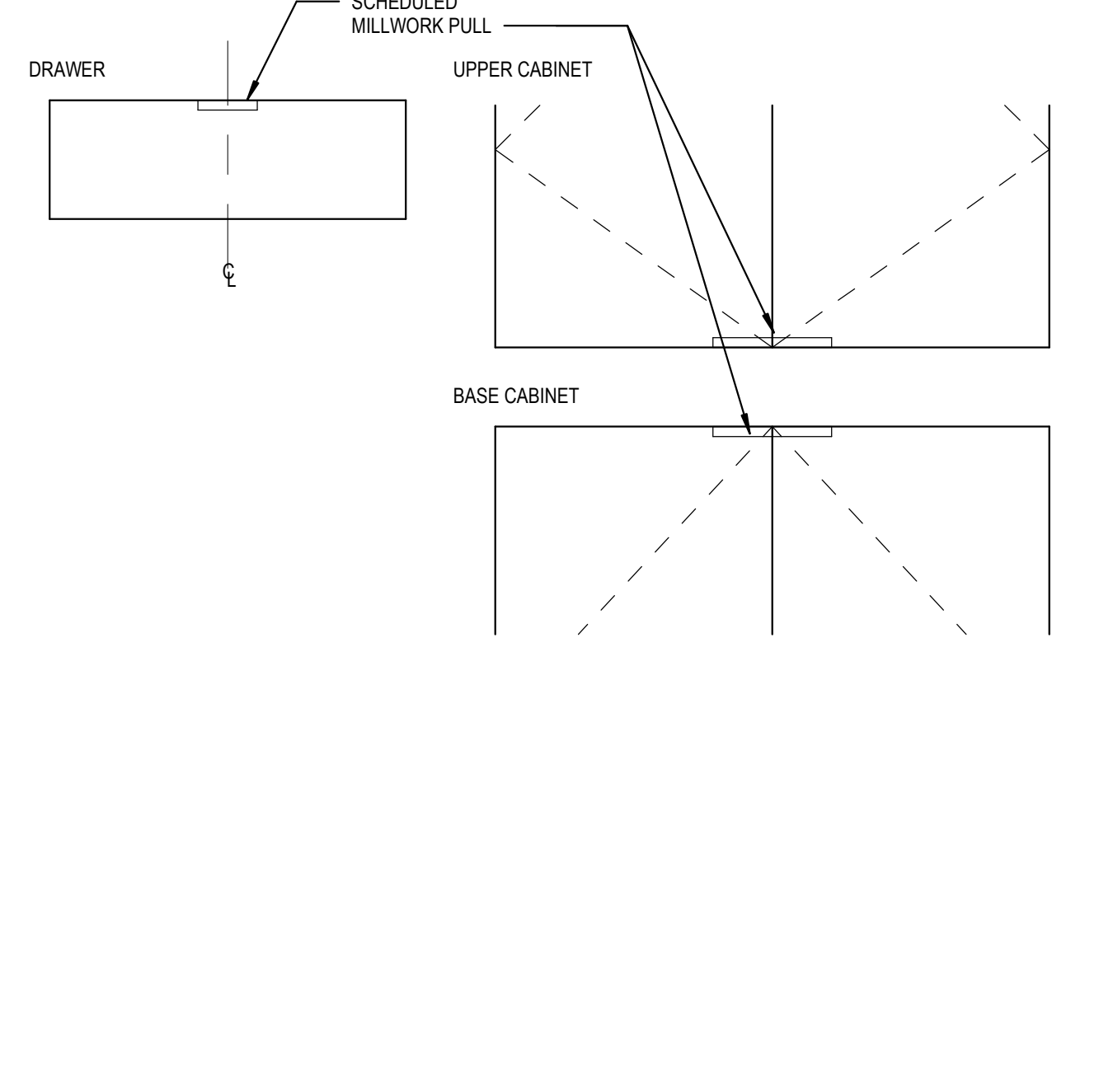
**C3 TALL CABINET - SINGLE MICROWAVE**  
1" = 1'-0"



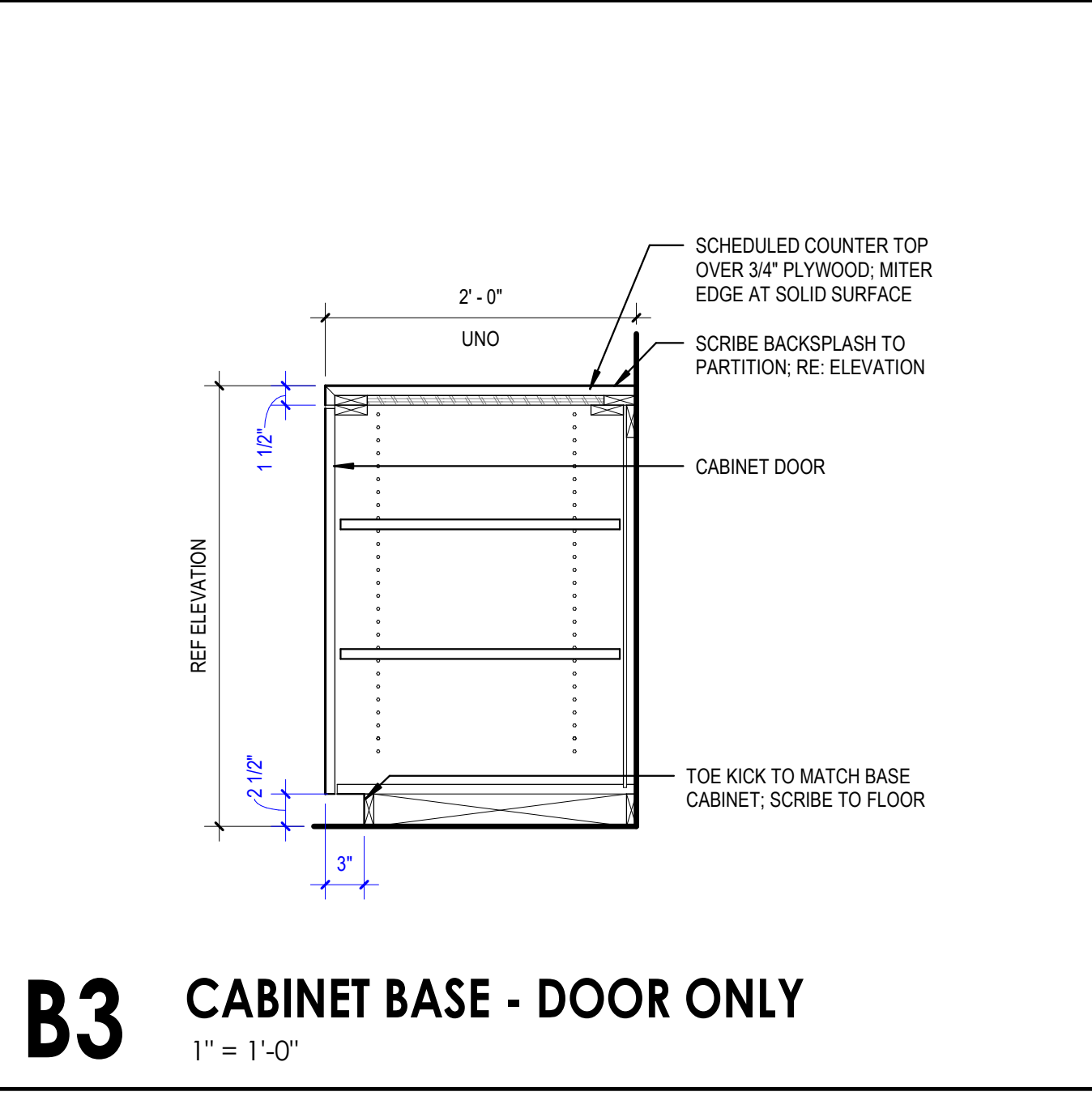
**C4 UPPER CAB. W/ TWO LIGHTS**  
1" = 1'-0"

**GENERAL NOTES: MILLWORK**

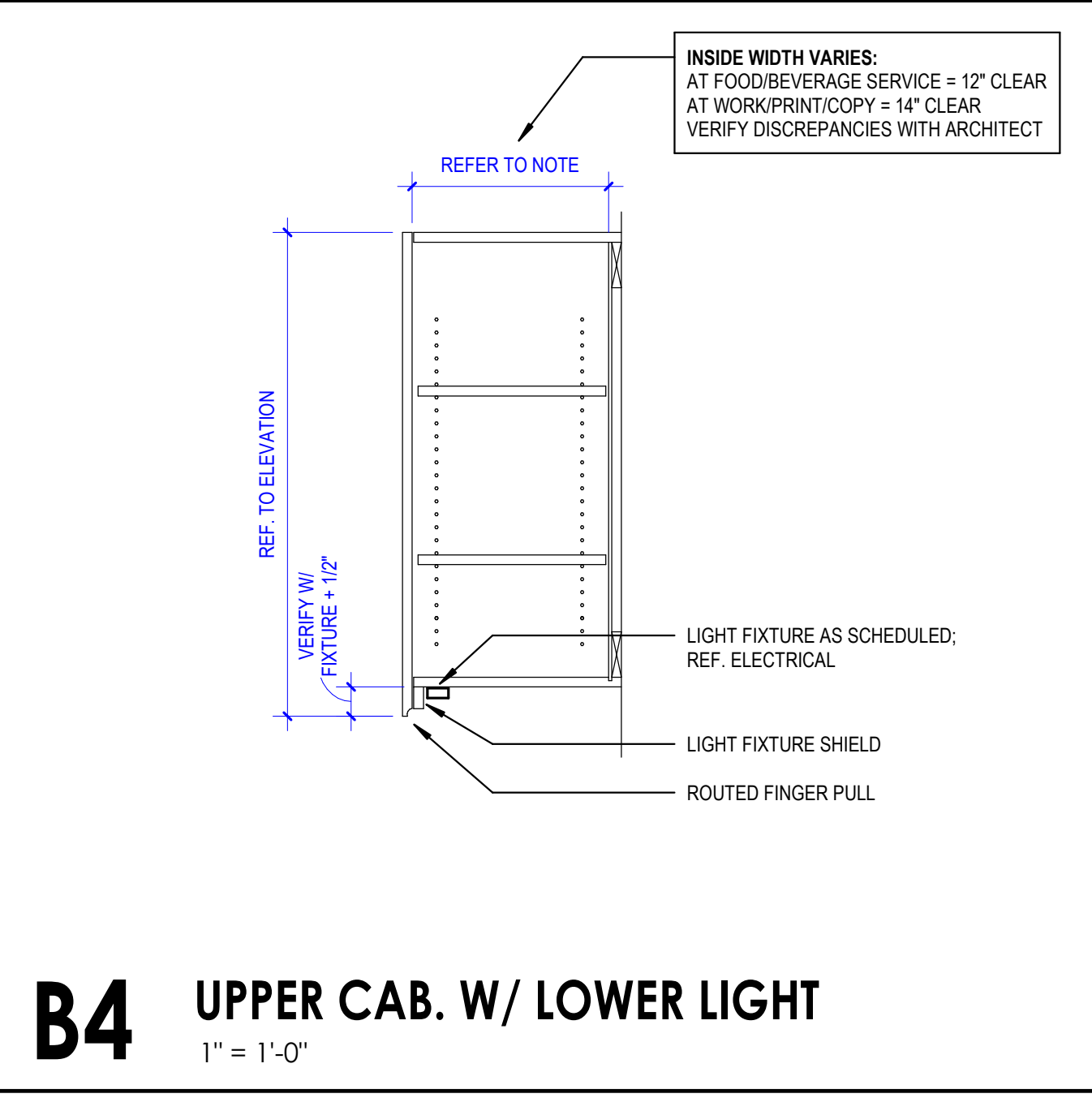
- UNLESS NOTED OTHERWISE, ALL CABINET CONSTRUCTION SHALL BE PLASTIC LAMINATE CLAD, AND SHALL MEET THE REQUIREMENTS OF AIA SECTION 400, CUSTOM GRADE, FLUSH OVERLAY CONSTRUCTION. ALL WOOD VENEER CLAD CABINET CONSTRUCTION SHALL MEET THE REQUIREMENTS OF AIA SECTION 400, PREMIUM GRADE, FLUSH OVERLAY CONSTRUCTION. COUNTERTOPS SHALL MEET THE REQUIREMENTS OF AIA SECTION 400 WITH EDGE DETAILS AS INDICATED ON THE DRAWINGS.
- FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS FOR ARCHITECTS REVIEW.
- ALL OPEN SHELVING SHALL CONFORM TO AIA SECTION 400B, CUSTOM GRADE. UNLESS NOTED OTHERWISE, ALL SHELVES SHALL BE PAINTED. SHELVING STANDARDS SHALL BE EQUAL TO KV NO. 82 AND BRACKETS SHALL BE EQUAL TO KV NO. 182. UNLESS MORE STRINGENT REQUIREMENTS ARE NOTED, PROVIDE PROPER FIRE-RETARDANT BLOCKING WITH PARTITIONS ON WHICH SHELVING IS INSTALLED.
- PROVIDE EXTERIOR-GRADE OR WATER-RESISTANT SUBSTRATE TOE KICKS AT SINKS, LAVATORIES, AND FLOOR TILE LOCATIONS.
- CABINET BODY CONSTRUCTION TO BE VENEER-CORE PLYWOOD OR MDF, EXCEPT AT WET AREAS, USE WATER-RESISTANT SUBSTRATE.
- INTERIOR CONSTRUCTION TO BE WHITE MELAMINE @ NON-WOOD GRAIN PLAM CABINETS, W/ BLACK MELAMINE @ WOOD GRAIN PLAM & WOOD VENEER CABINETS.
- ALL EXPOSED SURFACES TO BE CLAD IN PLAM, UNLESS OTHERWISE NOTED.
- PROVIDE SHOP DRAWINGS FOR ALL MILLWORK FOR REVIEW PRIOR TO BEGINNING FABRICATION OF ANY MILLWORK ITEMS.
- UNDERSIDE OF OVERHEAD CABINETS TO MATCH CABINET FINISH.
- ALL FINISHES SHALL BE AS INDICATED IN THE FINISH SCHEDULE AND FINISH KEY, UNLESS NOTED OTHERWISE.
- UNLESS INDICATED OTHERWISE, BASE CABINETS ARE TO BE FLUSH WITH COUNTERTOP, UPPER CABINETS ARE 1'-3" INSIDE CLEAR.
- MILLWORKER TO COORDINATE ALL MILLWORK INSTALLATIONS WITH OTHER SUBCONTRACTORS AND APPLIANCES AND SHALL BEAR ANY COST ASSOCIATED WITH THE RECONFIGURATION OF MILLWORK IN CONFLICT WITH OTHER TRADES.
- ALL INSTALLED CABINETS SHALL BE SCRIBED TO WALL OR CEILING WITHOUT ADDITIONAL OVERLAYS. GAUKE ALL JOINTS TO WALLS.
- UNLESS NOTED OTHERWISE, HARDWARE MINIMUM REQUIREMENTS ARE AS FOLLOWS. CONFIRM FINISH WITH ARCHITECT PRIOR TO ORDERING:
  - PULLS: 3" TAB PULL, DOUG MOCKETT DP3A OR EQUAL
  - HINGES: CONCEALED, SOFT-CLOSING, BLUM CLIP 125 OR EQUAL
  - DRAWER GUIDES: ACCURIDE, CS-3832-20", BLACK ZINC, FULL EXTENSION SLIDE, 100 LBS CAPACITY
  - SHELF SUPPORT: HAFELE, 282.04.711, NICKEL
  - BUMPERS: BLUM #TP1950 CLEAR PLASTIC RESILIENT. PROVIDE AT ALL DOORS & DRAWERS
  - ELBOW CATCHES: 1/8" X 1/2" CHROME
  - LOCKS: HAFELE, 235.08.054
  - TOUCH LATCH: FERUM, FE44BN ROLLER TOUCH LATCH
  - GROMMET: DOUG MOCKETT, EDP SERIES 2.5" HOLE



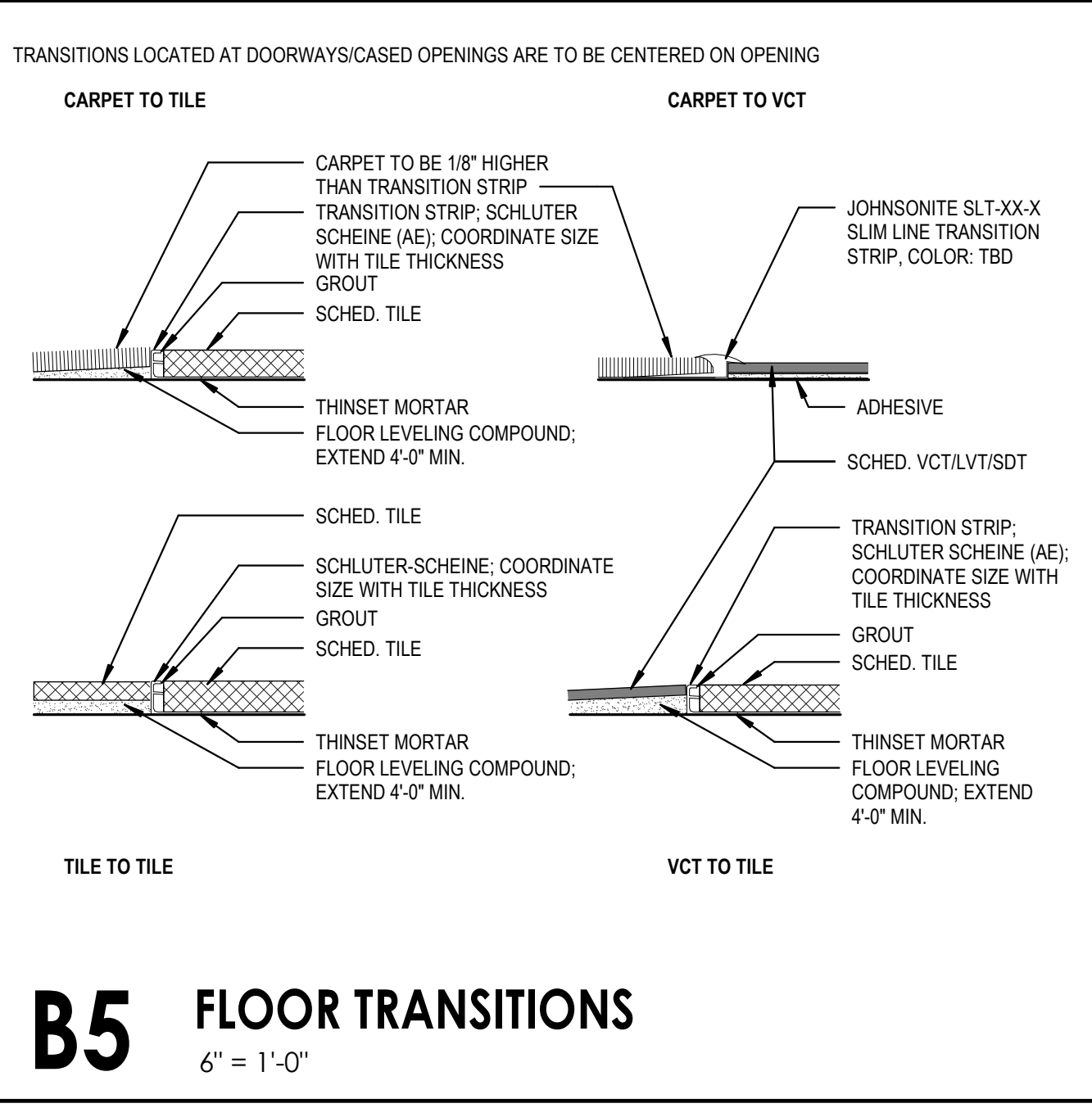
**B2 BANK OF 4 DRAWERS**  
1" = 1'-0"



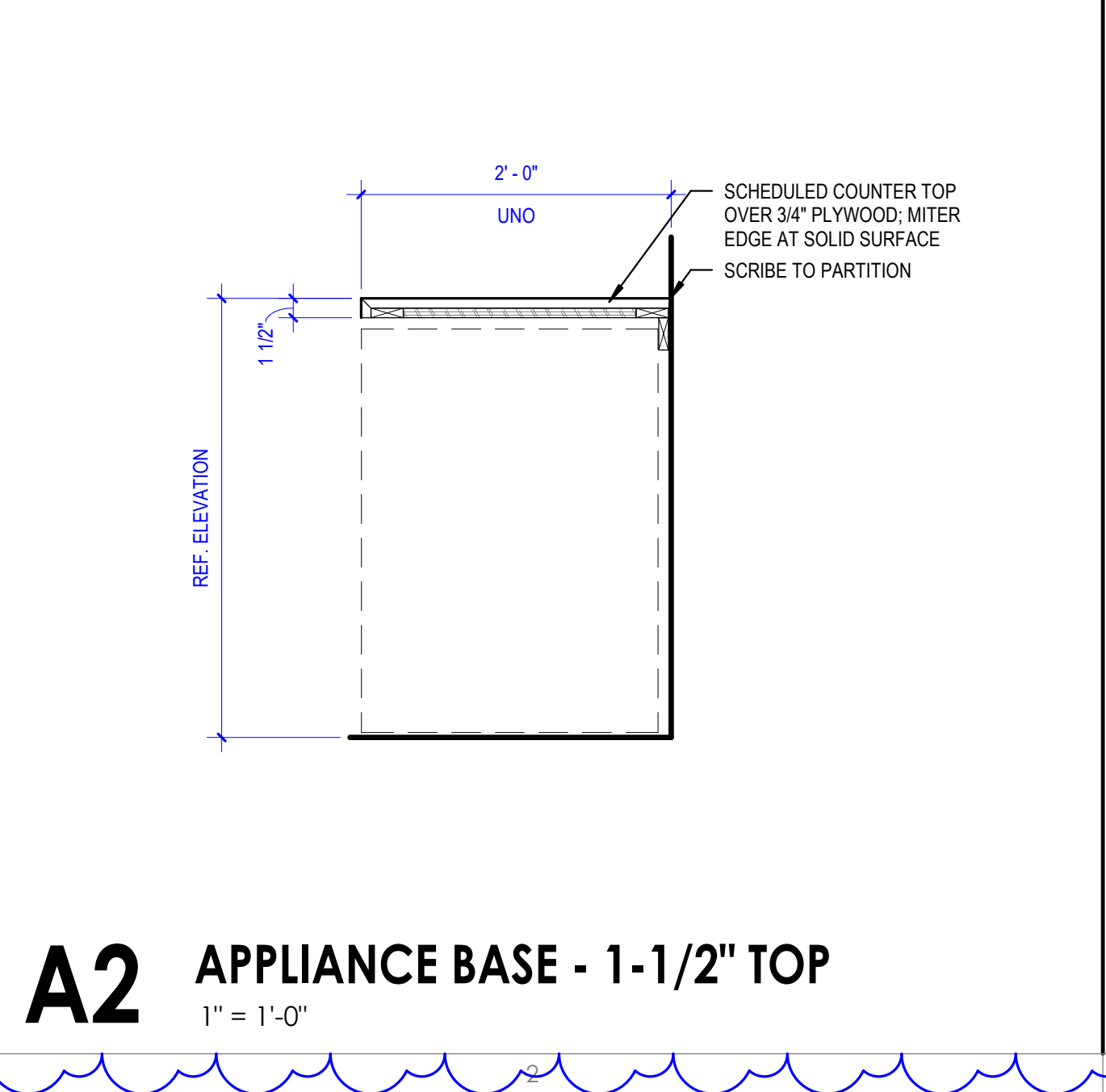
**B3 CABINET BASE - DOOR ONLY**  
1" = 1'-0"



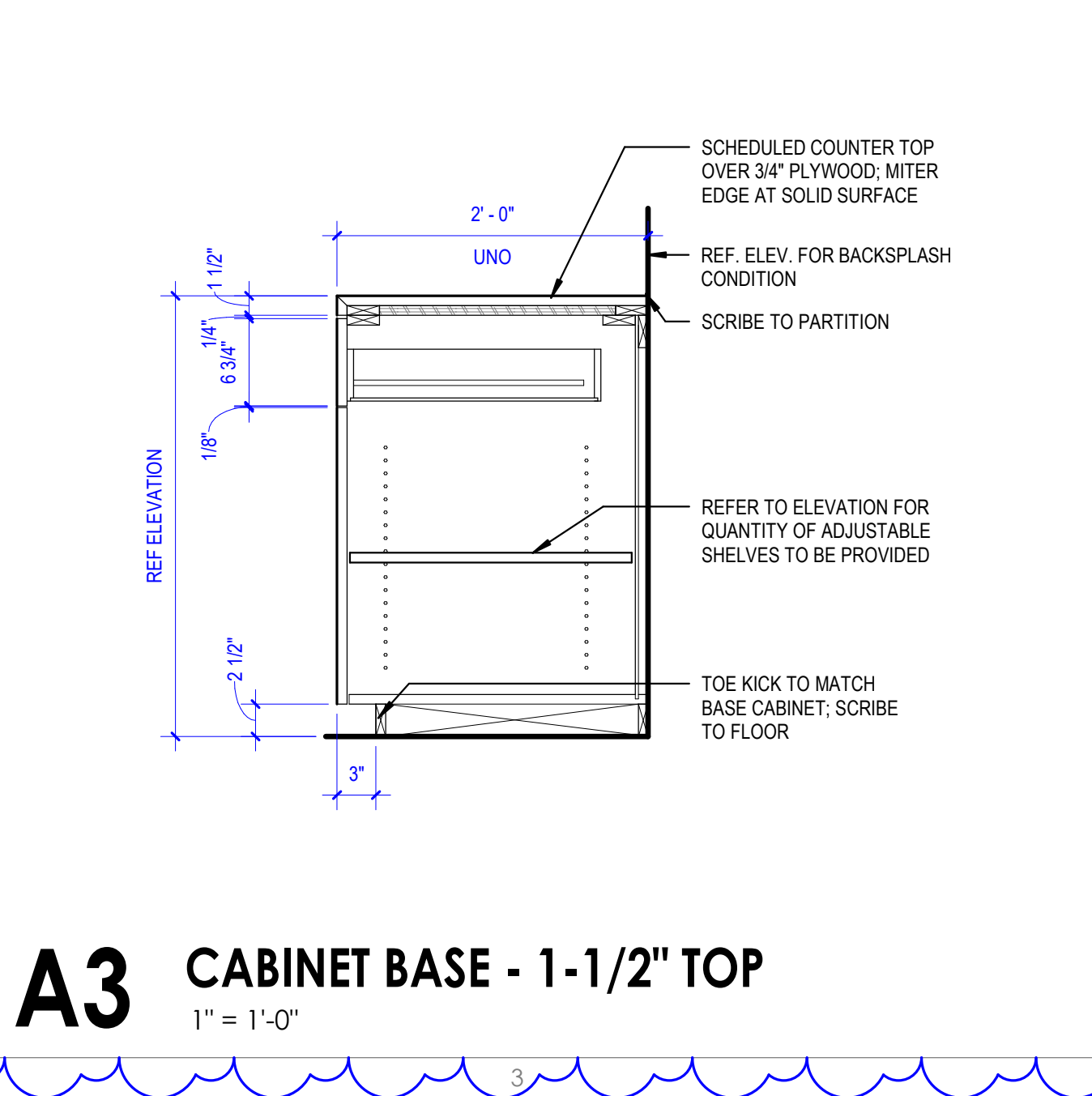
**B4 UPPER CAB. W/ LOWER LIGHT**  
1" = 1'-0"



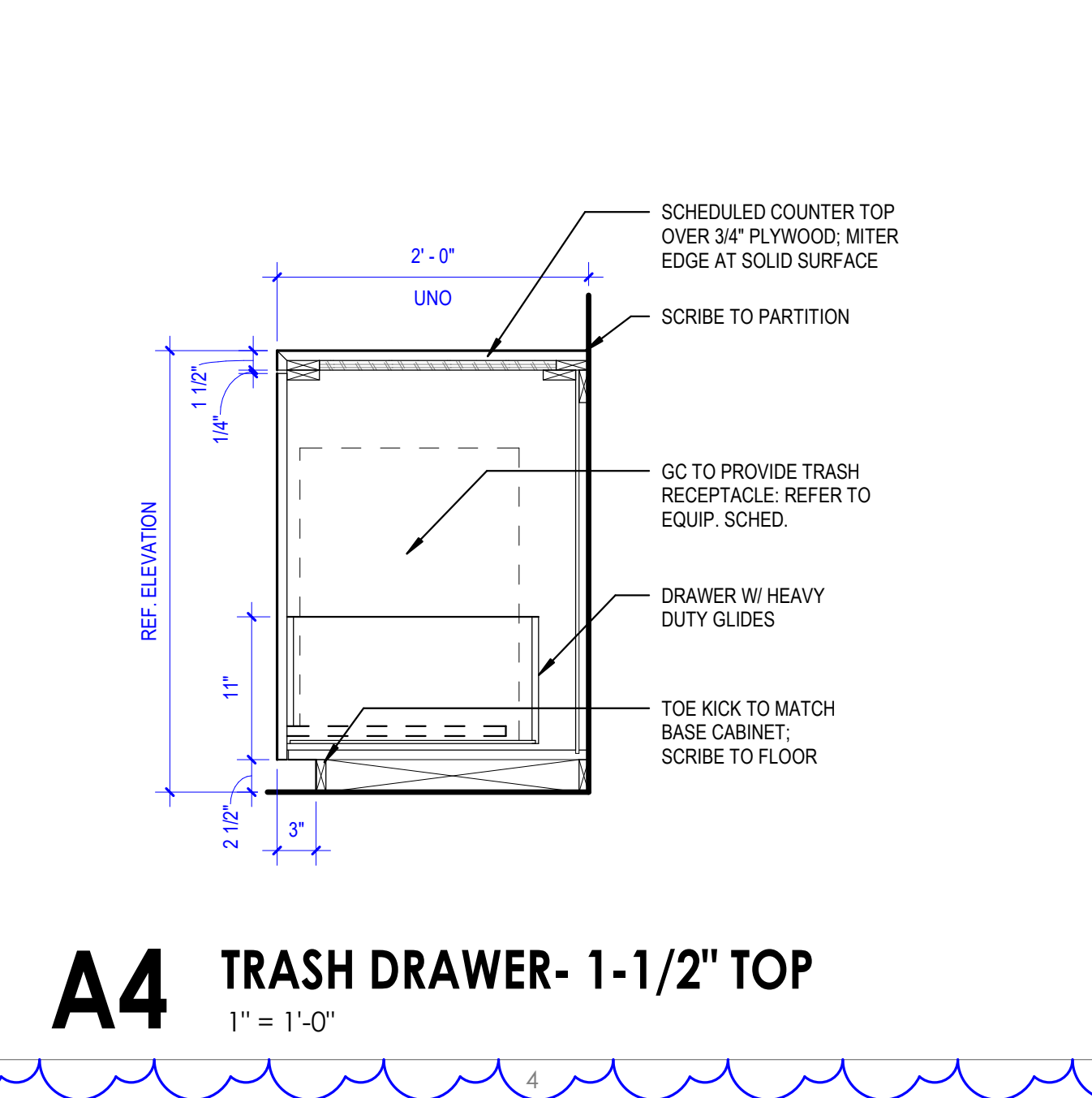
**B5 FLOOR TRANSITIONS**  
6" = 1'-0"



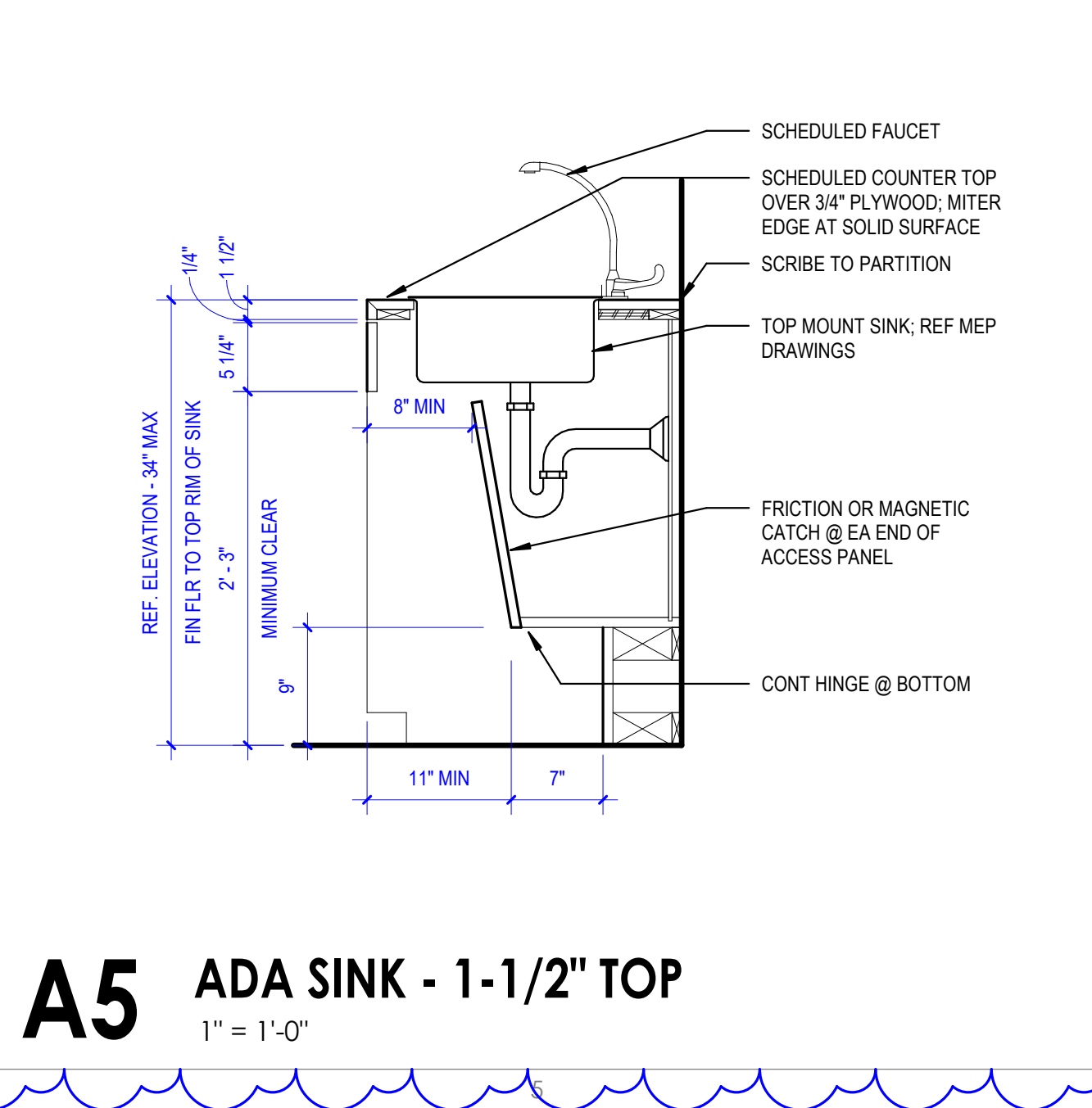
**A2 APPLIANCE BASE - 1-1/2" TOP**  
1" = 1'-0"



**A3 CABINET BASE - 1-1/2" TOP**  
1" = 1'-0"



**A4 TRASH DRAWER- 1-1/2" TOP**  
1" = 1'-0"



**A5 ADA SINK - 1-1/2" TOP**  
1" = 1'-0"

tramonte design | studio  
4203 Youkum Blvd, Suite 450 Houston, TX 77006

**MIRA SAFETY**

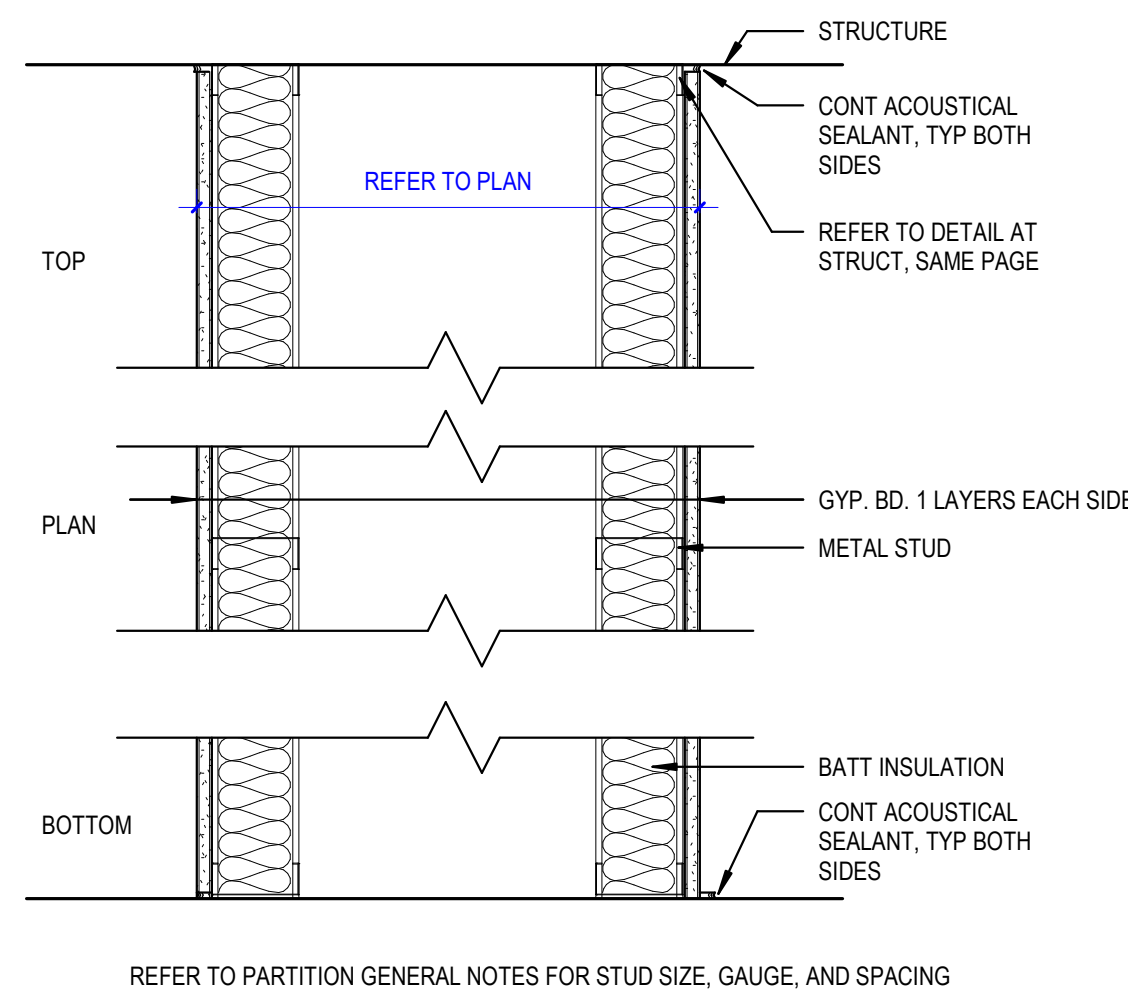
REGISTERED ARCHITECT  
STATE OF TEXAS  
12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

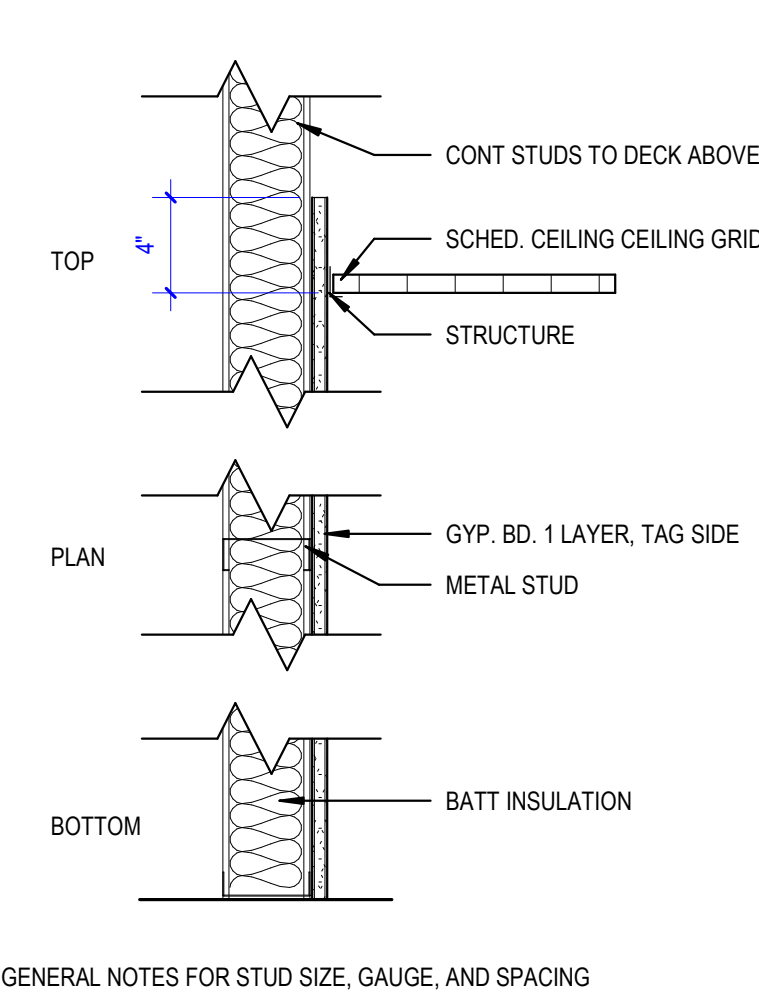
ADDENDUM 01 01/10/2024  
ISSUE FOR PERMIT 12/01/23

Project Number 23-01-014  
Drawn By JO  
Checked By OS

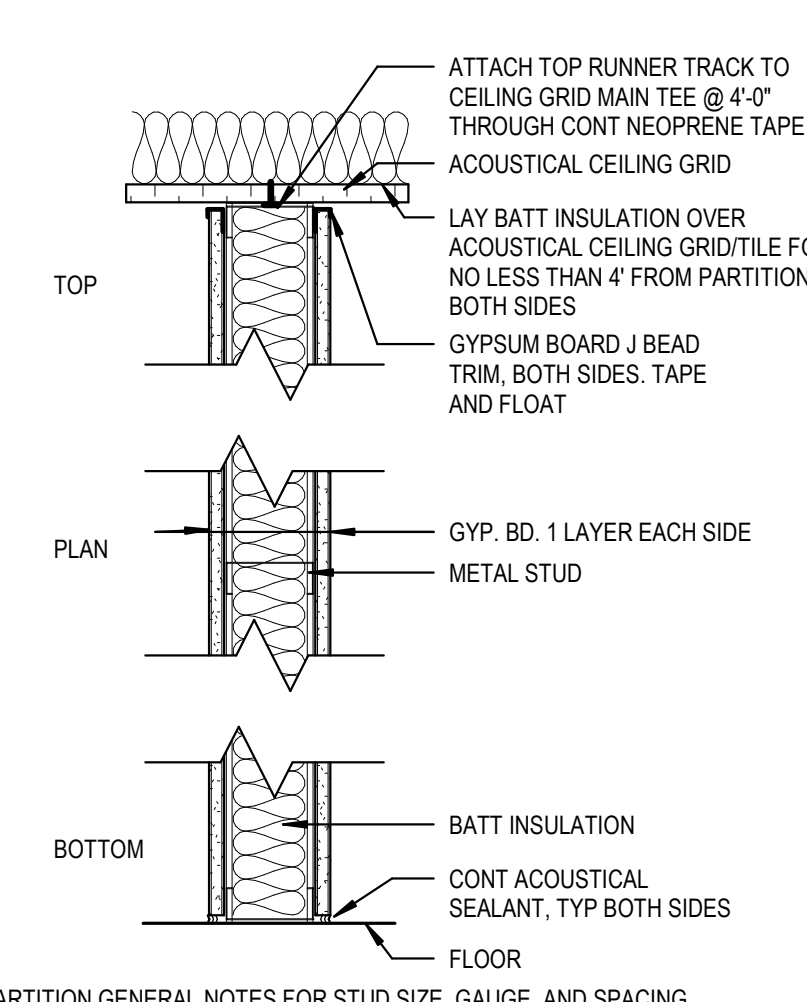
**A-503**  
MILLWORK DETAILS



**D2 PARTITION TYPE J**  
1 1/2" = 1'-0"



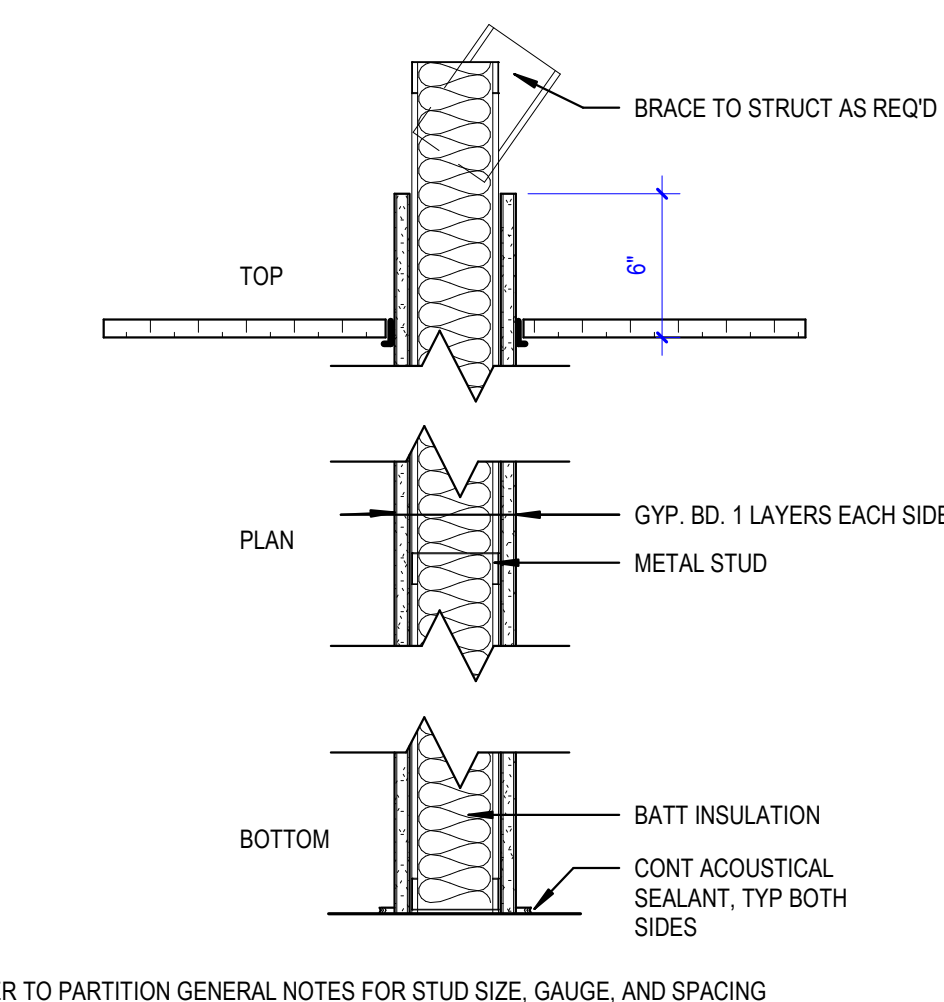
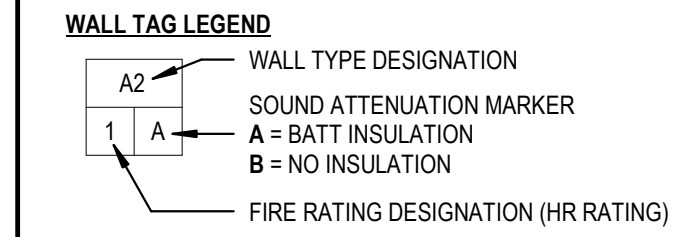
**D3 PARTITION TYPE E**  
1 1/2" = 1'-0"



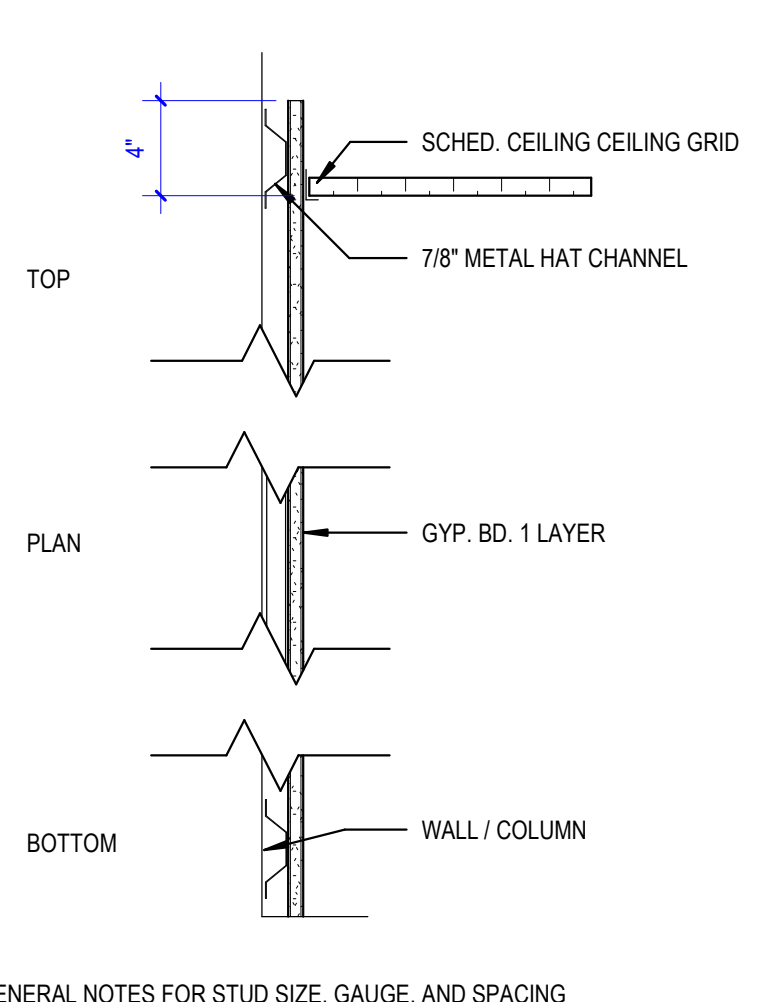
**D4 PARTITION TYPE A**  
1 1/2" = 1'-0"

**GENERAL NOTES: PARTITIONS**

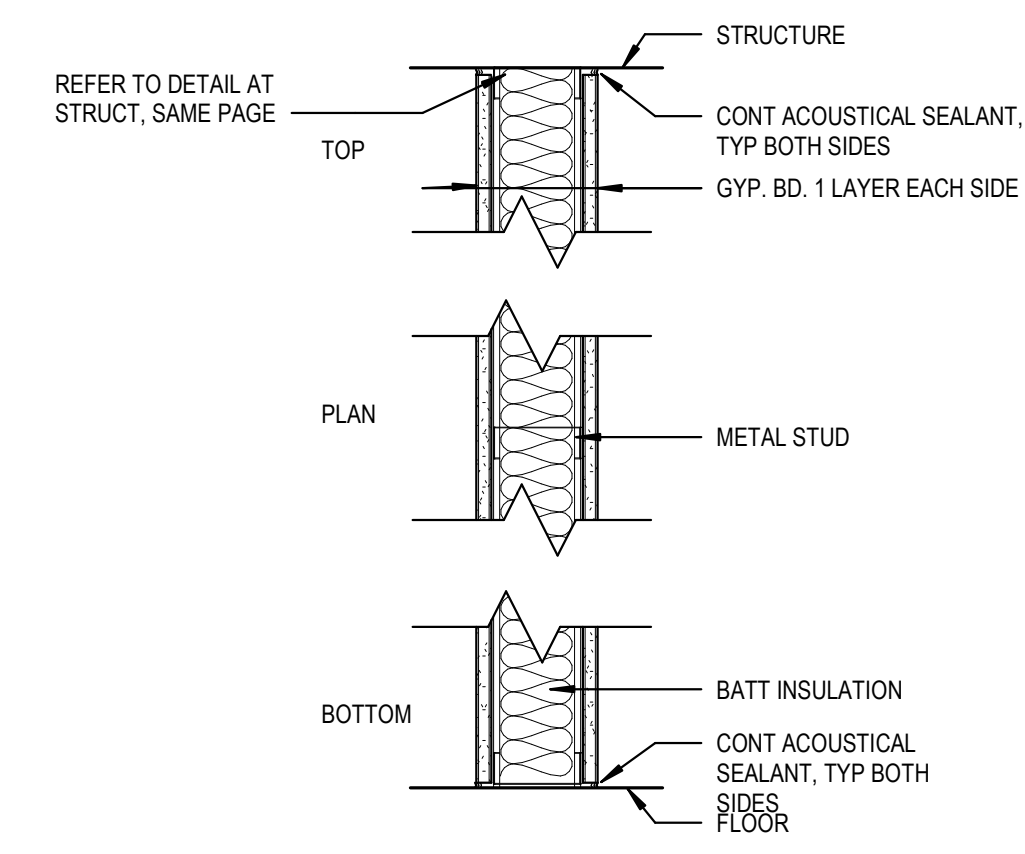
- A. UNLESS NOTED OTHERWISE, ALL METAL STUDS ARE 3/8" DEEP. STUD SIZES OTHER THAN 3 5/8" ARE NOTED WITH A NUMERICAL SUFFIX: 1-1 1/8", 2-2 1/2", 4-4", 6-6", 8-8"
- B. UNLESS NOTED OTHERWISE, ALL METAL STUDS ARE 26 GAUGE, UNLESS CONDITIONS REQUIRE HEAVIER GAUGE MATERIAL DUE TO VERTICAL UNBRACED SPAN OR IMPOSED LOADS FROM WALL CABINETS AND SHELVING.
- C. UNLESS NOTED OTHERWISE, ALL METAL STUDS ARE 16" O.C.
- D. PROVIDE CONTINUOUS METAL STUDS FULL HEIGHT OF PARTITION. NO SPLICING IS PERMITTED.
- E. THE MAXIMUM ALLOWABLE DEFLECTION DESIGN CRITERIA RATIO IS L/240, AND L/360 FOR CONDITIONS THAT INCLUDE TILE OR STONE. IF THE PROJECT CONDITIONS NEED TO EXCEED THIS LIMIT, IT IS THE CONTRACTOR'S OPTION TO PROVIDE HEAVIER GAUGE STUDS, LESS SPACE BETWEEN STUDS, OR PROVIDE SUPPLEMENTAL BRACING ABOVE PLENUM AS TO NOT IMPED THE ORIGINAL DESIGN INTENT.
- F. UNLESS NOTED OTHERWISE, ALL GYPSUM BOARD IS 5/8" TYPE X, PROVIDE 5/8" CEMENT FIBER BACKER BOARD AT ALL SHOWER WALLS AND ALL ADJACENT PARTITIONS. PROVIDE 5/8" WATER RESISTANT TYPE X GYPSUM BOARD AT ALL WET WALLS PER SPECIFICATIONS.
- G. TAPE AND FLOAT ALL JOINTS FOR ENTIRE HEIGHT OF PARTITIONS.
- H. PROVIDE AND INSTALL CONTROL JOINTS IN ACCORDANCE WITH GA-216 IN ALL PARTITIONS AND CEILINGS. CONTROL JOINTS LOCATED IN FIRE RATED PARTITIONS SHALL BE CONSTRUCTED TO MAINTAIN THE INTEGRITY OF THE RATING CLASSIFICATION.
- I. FIRE-RESISTANCE-RATED PARTITIONS SHALL BE IN ACCORDANCE WITH THE LISTED ASSEMBLY. ALL ELEMENTS OF THE COMPLETE ASSEMBLY MUST BE IN STRICT COMPLIANCE WITH THE UNDERWRITERS LABORATORY AND OTHER TESTING AGENCY REQUIREMENTS.
- J. PARTITION TYPE DESIGNATIONS ARE SHOWN ON THE FLOOR PLANS, AND WHERE APPLIES, THE ENLARGED FLOOR PLANS.
- K. ANY PENETRATION IN TENANT DEMISING PARTITIONS, BELOW OR ABOVE THE FINISHED CEILING, MUST BE FULLY SEALED TO PREVENT SOUND LEAKAGE.
- L. PROVIDE OPENINGS FOR RETURN AIR MOVEMENT AS REQUIRED IN PARTITIONS TO DECK. REFER TO MEP DRAWINGS.
- M. SOUND INSULATION TO BE EITHER MINERAL WOOL OR GLASS FIBER INSULATION. CERTAINTED "THERMAFIBER" SOUND ATTENUATION BLANKETS OR EQUAL APPROVED BY ARCHITECT.
- N. BACKING BOARD FOR WET AREAS (SINK & TOILET WALLS, SHOWERS, AND PLUMBED APPLIANCE WALLS): WATER-RESISTANT GYPSUM BACKING BOARD AS DEFINED IN ASTM C1396/C1398M, SIZED TO MIN JOINTS IN PLACE.
- O. BACKING BOARD FOR WET AREAS PRODUCTS: CERTAINTED CORP: PROTECK BRAND MOISTURE & MOLD RESISTANT GYPSUM BOARD, GEORGIA-PACIFIC GYPSUM: TOUGHROCK MOLD-GUARD GYPSUM BOARD "GREENBOARD" & DENSHELD TILE BACKER, NATIONAL GYPSUM CO: GOLD BOND BRAND XP GYPSUM BOARD, USG CORP: SHEETROCK BRAND MOLD TOUGH GYPSUM PANELS.



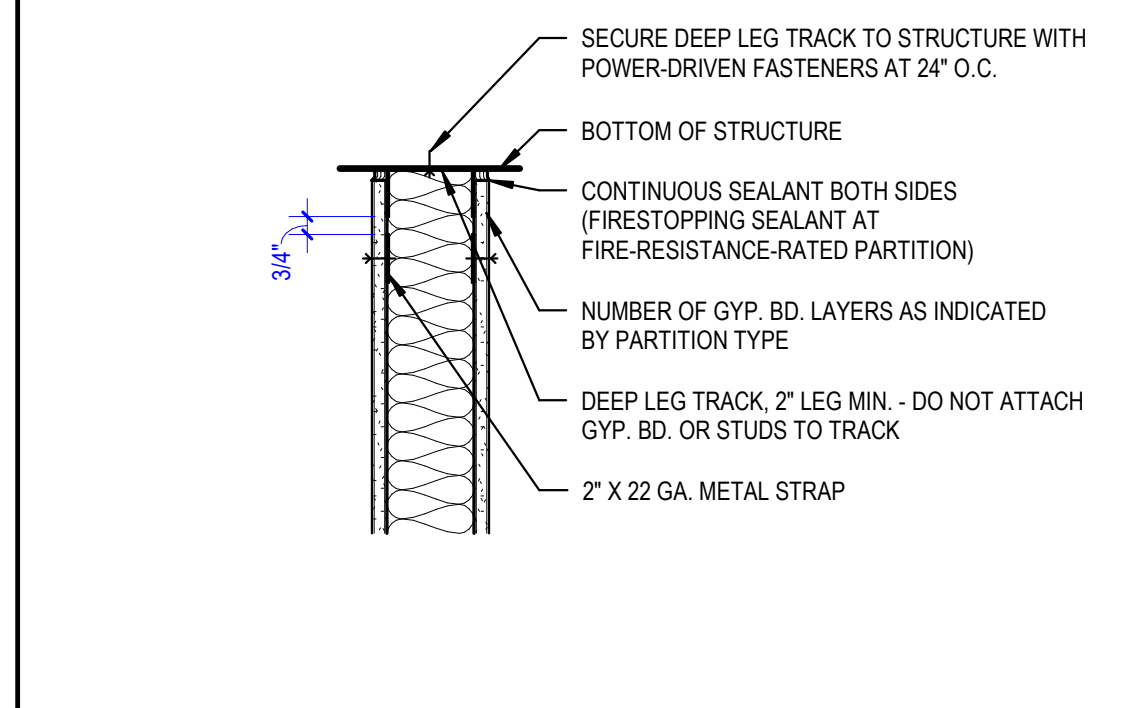
**C2 PARTITION TYPE K**  
1 1/2" = 1'-0"



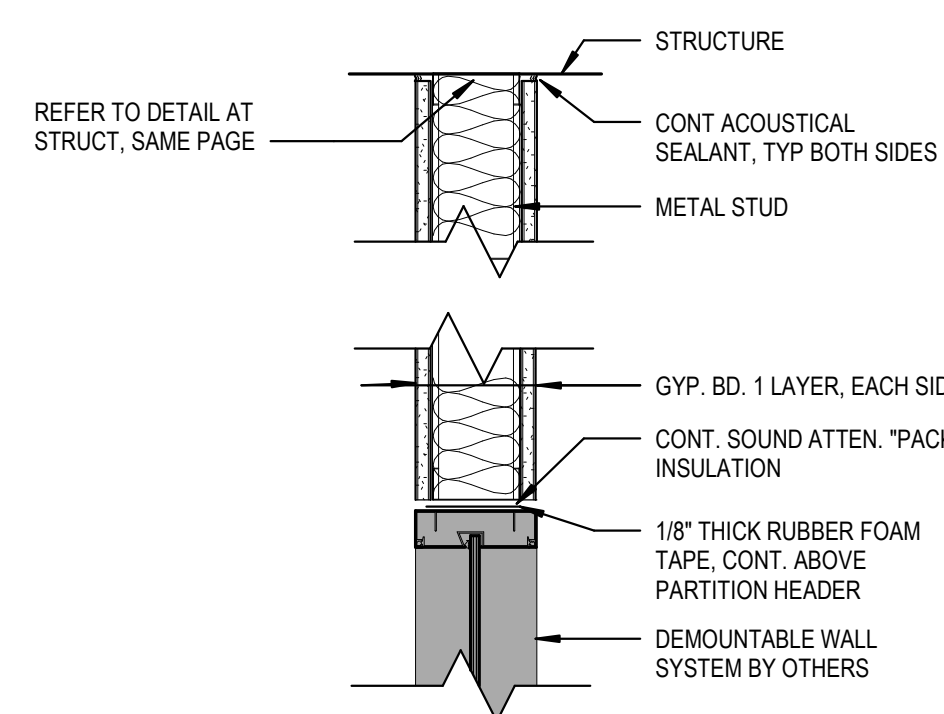
**C3 PARTITION TYPE F**  
1 1/2" = 1'-0"



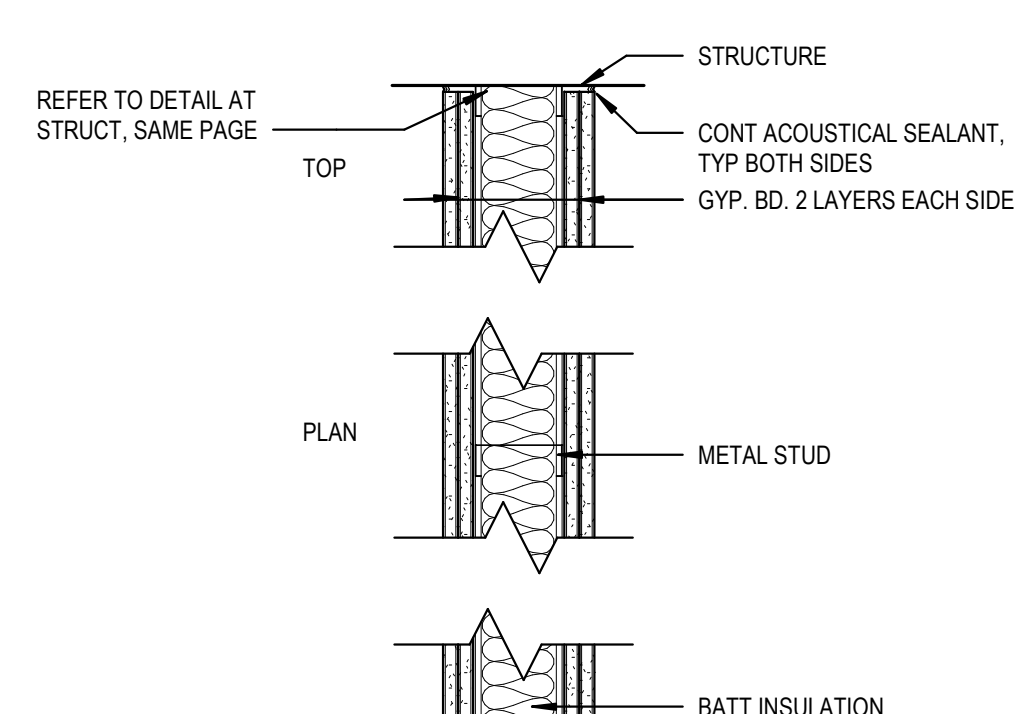
**C4 PARTITION TYPE B**  
1 1/2" = 1'-0"



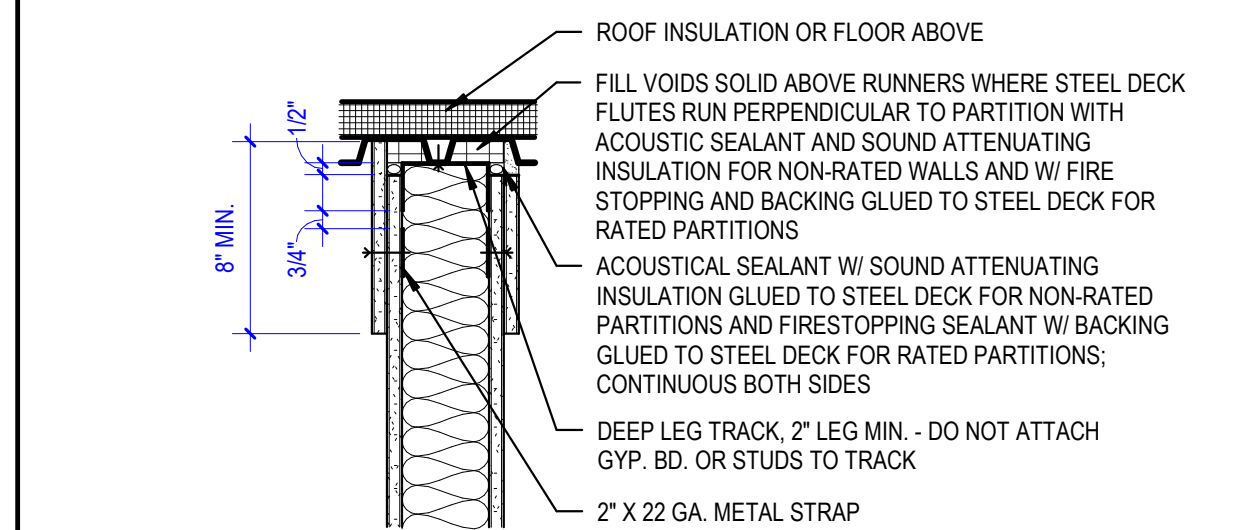
**C5 DETAIL AT STRUCT - CONCRETE**  
1 1/2" = 1'-0"



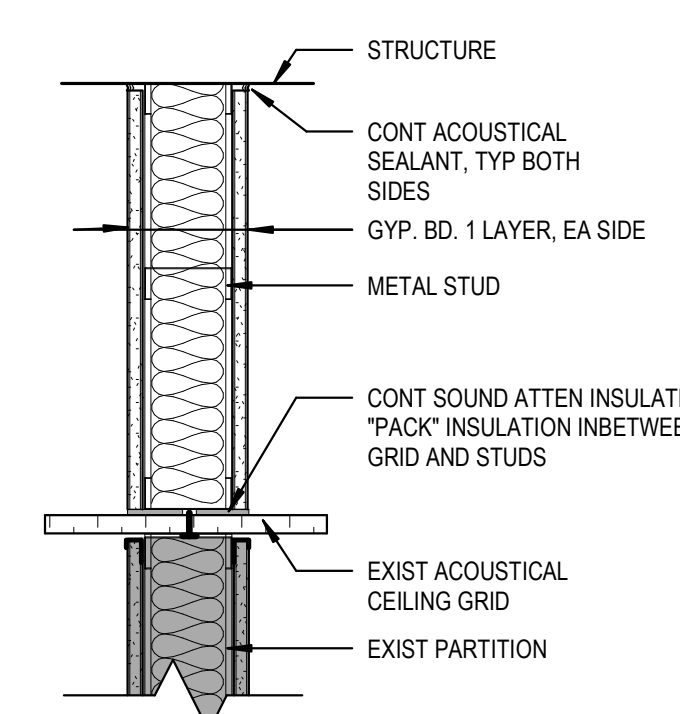
**B3 PARTITION TYPE G**  
1 1/2" = 1'-0"



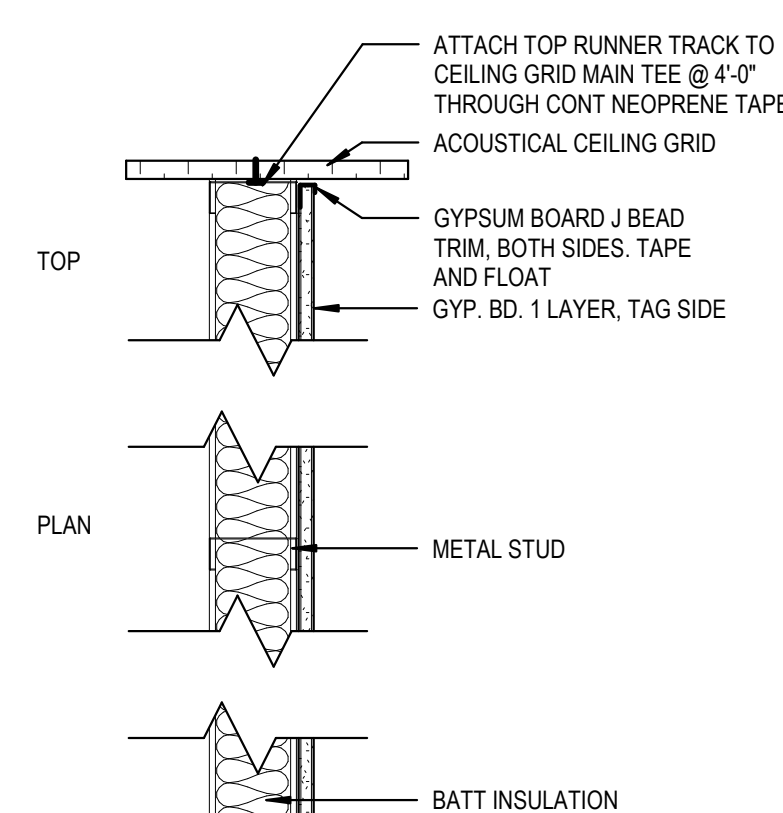
**B4 PARTITION TYPE C**  
1 1/2" = 1'-0"



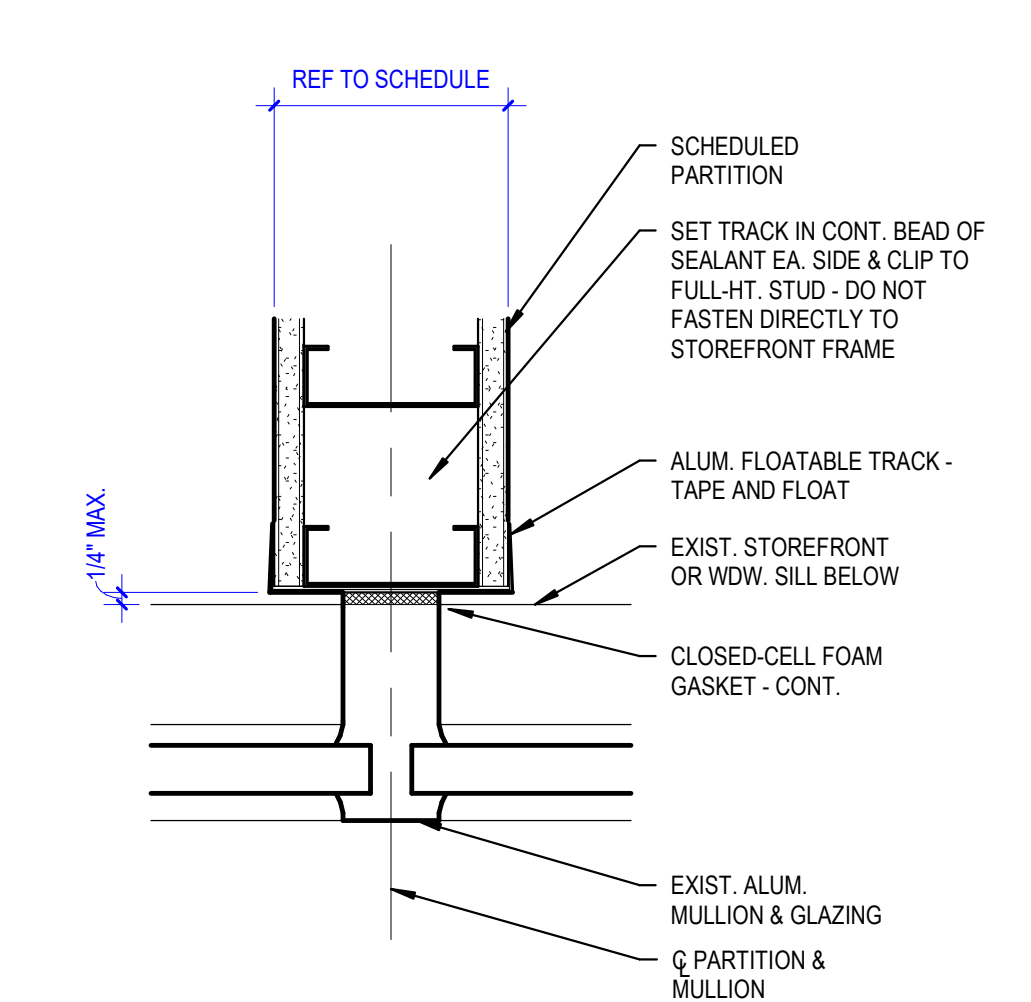
**B5 DETAIL AT STRUCT - MTL DECK**  
1 1/2" = 1'-0"



**A3 PARTITION TYPE H**  
1 1/2" = 1'-0"



**A4 PARTITION TYPE D**  
1 1/2" = 1'-0"



**A5 PARTITION TO MULLION**  
3" = 1'-0"



12/01/2023  
**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

ISSUE FOR PERMIT 12/01/23

Project Number	23-01-014
Drawn By	JO
Checked By	OS

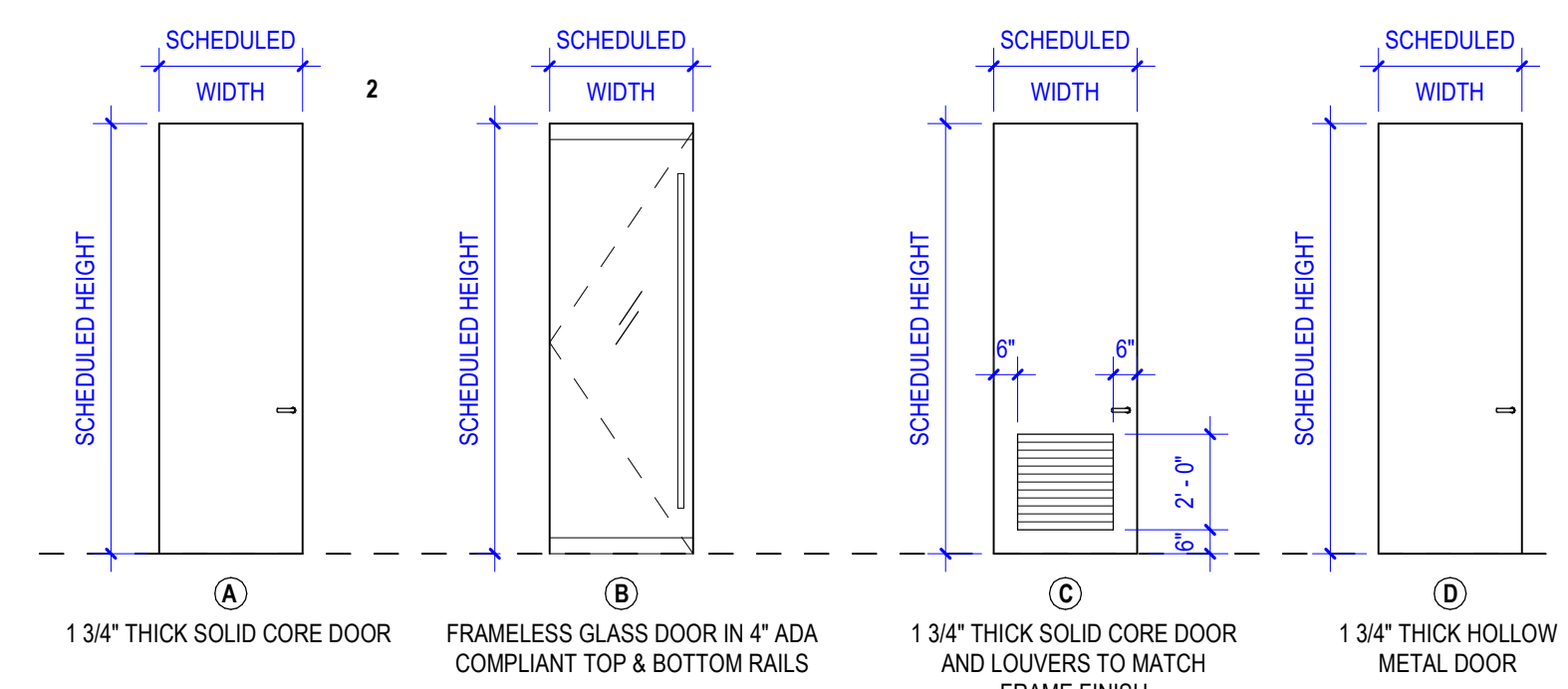
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**A-504**  
PARTITION TYPES

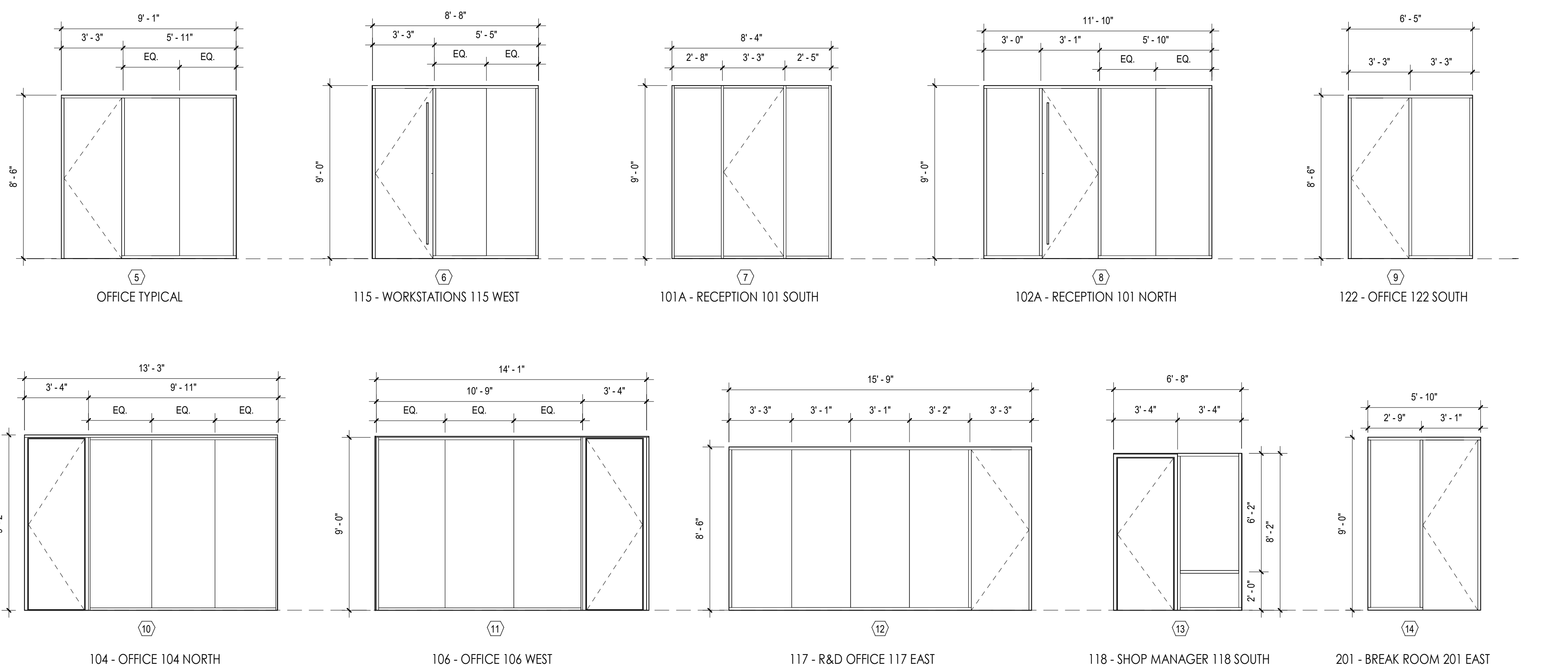
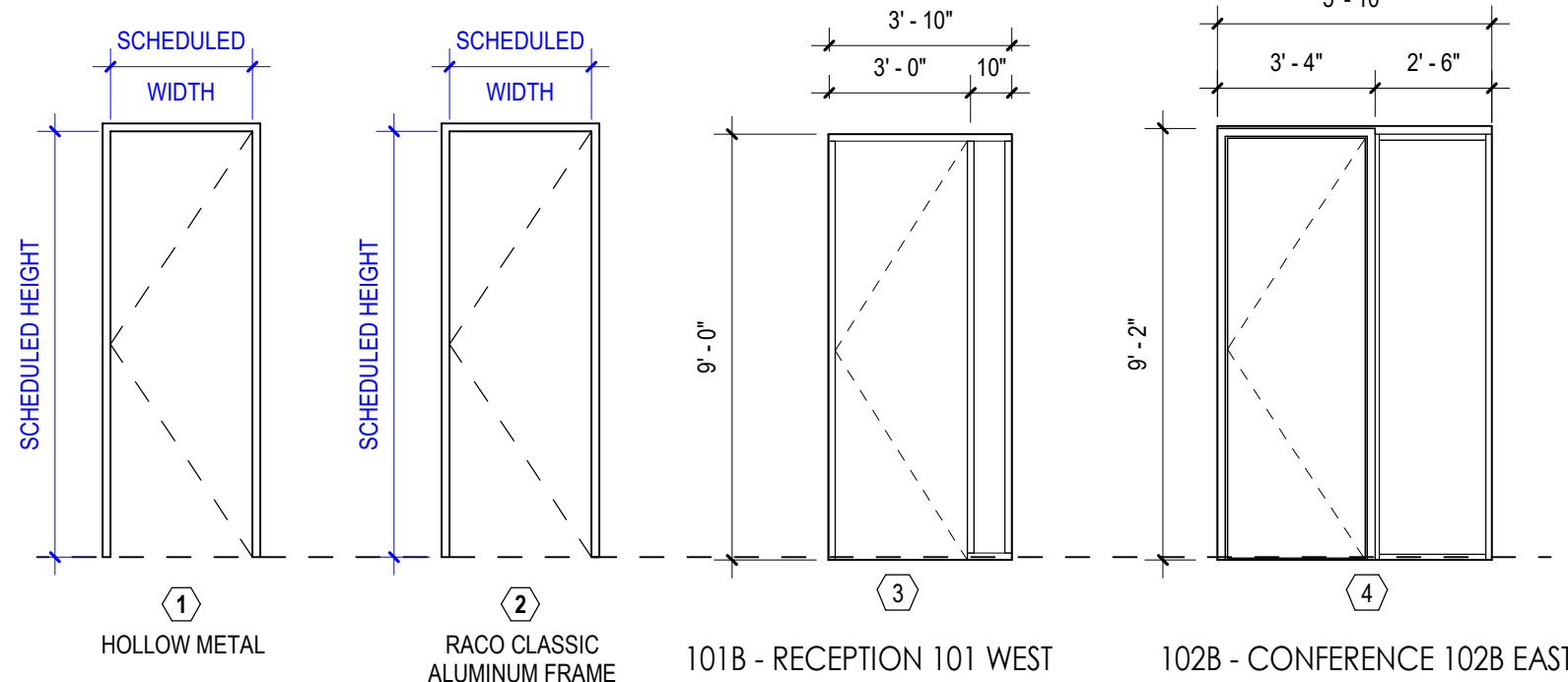
# DOOR + FRAME SCHEDULE

DOOR NUMBER	ROOM NAME	DOOR		DOOR		DOOR		FRAME		HARDWARE	COMMENTS
		#	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL		
100	ENTRY		3'-13 3/8"	7'-0"	B					1 OR 2.5	RE: D1A-610 WINDOW WALL TYPE
101A	RECEPTION		3'-1 1/2"	8'-9"	B					1 OR 2.5	
101B	RECEPTION		2'-9 1/2"	8'-10 1/4"	B					2	
102A	CONFERENCE		2'-11"	8'-10 1/4"	B					2	
102B	CONFERENCE		3'-0"	9'-0"	A					2	
104	OFFICE		3'-0"	9'-0"	A					10	
105	OFFICE		3'-0"	9'-0"	A					2	
106	OFFICE		3'-0"	9'-0"	A					11	
113	UNSEXR		3'-0"	9'-0"	A					2	
114	ELEC		3'-0"	9'-0"	C					5	
115	OPEN WORKSTATIONS		3'-0"	8'-10 1/4"	B					6	
116A	OPEN WORKSTATIONS		3'-0"	9'-0"	D					7	
117	R&D OFFICE		3'-0"	8'-4 1/4"	B					12	
118	SHOP MGR		3'-0"	8'-4 1/4"	B					5	OPH
118B	SHOP MGR		3'-0"	8'-0"	A					13	
119	OFFICE		3'-0"	8'-4 1/4"	B					5	
120	OFFICE		3'-0"	8'-4 1/4"	B					5	
121	OFFICE		3'-0"	8'-4 1/4"	B					2	OPH
122	OFFICE		3'-0"	8'-4 1/4"	B					9	
123	CORRIDOR		3'-0"	9'-0"	A					2	
124			3'-0"	9'-0"							CASED OPENING
200A	GYM		2'-0"	9'-0"							CASED OPENING
201	GYM		2'-10 3/8"	8'-10 1/4"	B					14	
202	JANSTO.		3'-0"	9'-0"	C					2	
203A	WOMEN		3'-0"	9'-0"	A					2	
203B	WOMEN		3'-0"	9'-0"	A					2	
204A	MEN		3'-0"	9'-0"	A					2	
204B	MEN		3'-0"	9'-0"	A					2	
205A	GYM		3'-0"	9'-0"	A					2	
205B	SAUNACOLD PLUNGE		3'-0"	9'-0"	A					3	

**DOOR NOTES:**  
 1. UNDERCUT AT DOORS NOT TO EXCEED 1/2"  
 2. FRAMELESS GLASS TO BE 1/2" CLEAR TEMPERED, UNO  
 3. FRAMED GLASS TO BE 3/8" CLEAR TEMPERED, UNO



**FRAME NOTES:**  
 1. ALL FRAMES TO BE CLEAR ANODIZED ALUMINUM WITH GRAY FELT AND GLAZING VINYL UNO  
 2. SIDELIGHTS TO ALIGN WITH TOP OF DOOR FRAMES  
 3. SIDELIGHT GLASS TO BE 3/8\"/>



**HARDWARE NOTES:**  
 1. PROVIDE STANDARD WEIGHT HINGES AT ALUMINUM FRAMES, U.N.O.  
 2. PROVIDE 4 EACH HINGES AT OPENINGS OVER 90 INCHES IN HEIGHT.  
 3. MOUNT CLOSERS ON ROOM SIDE WITH ALL NECESSARY BRACKETS.  
 4. COORDINATE KEYING REQUIREMENTS WITH OWNER/TENANT  
 5. FINISH: BRUSHED CHROME US260 AND SATIN STAINLESS STEEL US320, U.N.O.  
 6. MANUFACTURER DEVIATIONS ARE NOT ALLOWED UNLESS WRITTEN APPROVAL BY ARCHITECT AND BUILDING OWNER IS GRANTED PRIOR TO BIDDING.  
 7. WHERE SPECIFICATIONS DIFFERS FROM BUILDING STANDARD, PROVIDE BUILDING STANDARD.  
 8. LEVERS AND PULLS TO MEET TAS COMPLIANCE.

**NOTE:** THE HARDWARE SPECIFIED IN THE HARDWARE SETS IS TO BE CONSIDERING THE INTENT OF APPLICABLE FUNCTIONS FOR A COMPLETE OPENING SOLUTION AS REQUIRED BY THE USE AND FUNCTIONS OF THE OPENING. THE HARDWARE SETS SPECIFIED ARE TO BE CONSIDERED THE BASE BID.

### HARDWARE TYPES:

<p><b>HW.1 DOUBLE - GLASS</b>                  4 EA. P1 PULLS                  2 SETS C1 CONCEALED CLOSER &amp; PIVOT SET                  2 EA. S1 FLOOR STOP                  2 EA. S2 ANGLE STOP                  SECURITY SYSTEM BY OTHERS - PERMITTED SEPARATELY</p>	<p><b>HW.4 SINGLE - LOCK</b>                  4 EA. H1 BUTT HINGES                  1 SET L2 LOCK SET                  1 EA. S1 FLOOR STOP</p>	<p><b>HW.8 DOUBLE - GLASS</b>                  4 EA. P1 PULLS                  2 SETS C1 CONCEALED CLOSER &amp; PIVOT SET                  2 EA. S1 FLOOR STOP                  2 EA. S2 ANGLE STOP</p>	<p><b>HW.11 PRIVACY</b>                  4 EA. H1 BUTT HINGES                  1 SET L4 PRIVACY SET                  1 SET L3 STOREROOM SET                  1 EA. C2 SURFACE MOUNTED CLOSER</p>
<p><b>HW.2 SINGLE - GLASS</b>                  2 EA. P1 PULLS                  1 SET C1 CONCEALED CLOSER &amp; PIVOT SET                  1 EA. S1 FLOOR STOP                  1 EA. S2 ANGLE STOP                  SECURITY SYSTEM BY OTHERS - PERMITTED SEPARATELY</p>	<p><b>HW.5 SINGLE - STORAGE</b>                  4 EA. H1 BUTT HINGES                  1 SET L3 STOREROOM SET                  1 EA. S1 FLOOR STOP                  1 EA. C2 SURFACE MOUNTED CLOSER</p>	<p><b>HW.9 PAIR - STORAGE</b>                  4 EA. H1 BUTT HINGES                  1 SET L3 STOREROOM SET                  1 SET L1 DUMMY LEVER                  1 SET L1 FLUSH BOLT @ INACTIVE LEAF                  2 EA. S1 FLOOR STOP</p>	<p><b>HW.12 SINGLE - SECURE (@ FM200 SYSTEM)</b>                  4 EA. H1 BUTT HINGES                  1 EA. H2 ELEC HINGE                  1 SET L3 STOREROOM SET                  1 EA. S1 FLOOR STOP                  1 EA. C2 SURFACE MOUNTED CLOSER                  M2 DROP SEAL                  1 EA. M3 SEALS                  COMPLETELY SEAL TO PREVENT AIR LEAKAGE                  SECURITY SYSTEM BY OTHERS - PERMITTED SEPARATELY</p>
<p><b>HW.3 SINGLE - PASSAGE</b>                  4 EA. H1 BUTT HINGES                  1 SET L1 PASSAGE SET                  1 EA. S1 FLOOR STOP</p>	<p><b>HW.6 SINGLE - CONFERENCE</b>                  4 EA. H1 BUTT HINGES                  1 SET L1 PASSAGE SET                  1 EA. S1 FLOOR STOP</p>	<p><b>HW.10 RESTROOM</b>                  4 EA. H1 BUTT HINGES                  1 EA. P2 PUSH PLATE                  1 EA. S1 FLOOR STOP                  1 EA. C2 SURFACE MOUNTED CLOSER</p>	

**HARDWARE SPECS:**

C1 - CONCEALED OVERHEAD CLOSER & CENTER HUNG PIVOT W/ EXTENDED SPINDLE  
 DORMA R238  
 TOP PIVOT - PT22  
 BOTTOM PIVOT - PT10  
 PROVIDE COVER ON HEADER

C2 - SURFACE MOUNTED CLOSER  
 LOW 14111 - STANDARD COVER  
 US320

H1 - BUTT HINGE (TO MATCH BUILDING STANDARD)  
 MCKINNEY - TA 2714 4.5X4.5  
 US320

H2 - ELEC HINGE (TO MATCH BUILDING STANDARD)  
 MCKINNEY - TA 2714 QCB 4.5X4.5  
 US320

L1 - PASSAGE SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - CL330 - ARMSTRONG  
 BHMA 630

L2 - LOCK SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - CL351 - ARMSTRONG  
 BHMA 630

L3 - STOREROOM SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - CL357 - ARMSTRONG  
 BHMA 630

L4 - PRIVACY SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - ML2900 EGL SERIES  
 BHMA 630

L5 - DUMMY LEVER SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - CL370 - ARMSTRONG  
 BHMA 630

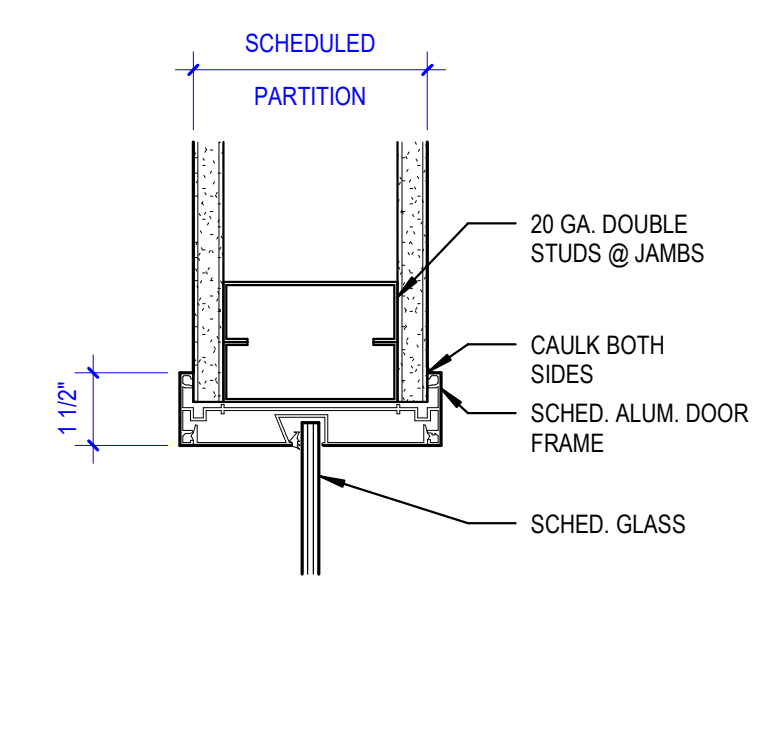
L6 - ELEC LEVER SET (TO MATCH BUILDING STANDARD)  
 CORBIN RUSSWIN - ML2900 EGL SERIES  
 BHMA 630

L7 - EXIT LOCK SET (RE-ENTER WITH KEY ONLY)  
 CORBIN RUSSWIN - CL372 - ARMSTRONG  
 BHMA 630

P1 - PULL  
 ROCKWOOD - RM300 48\"/>

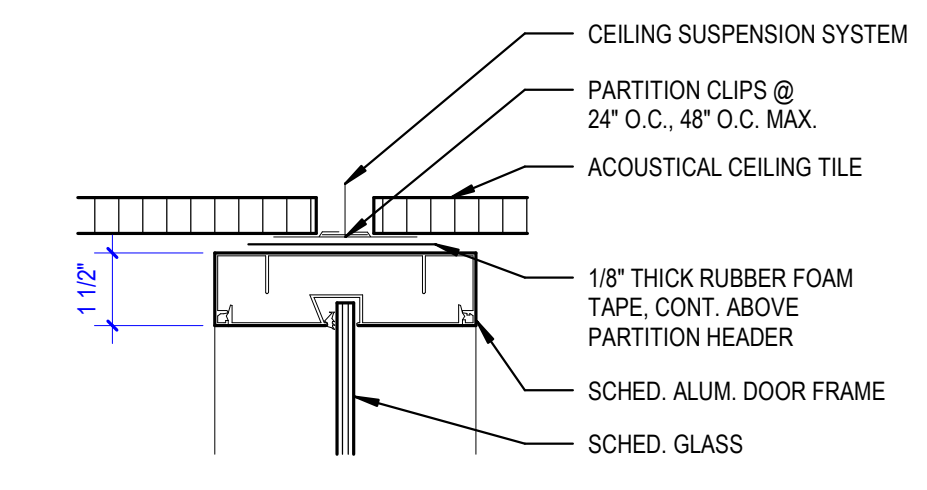
## D4 ALUM FRAME - GLASS JAMB

3\"/>



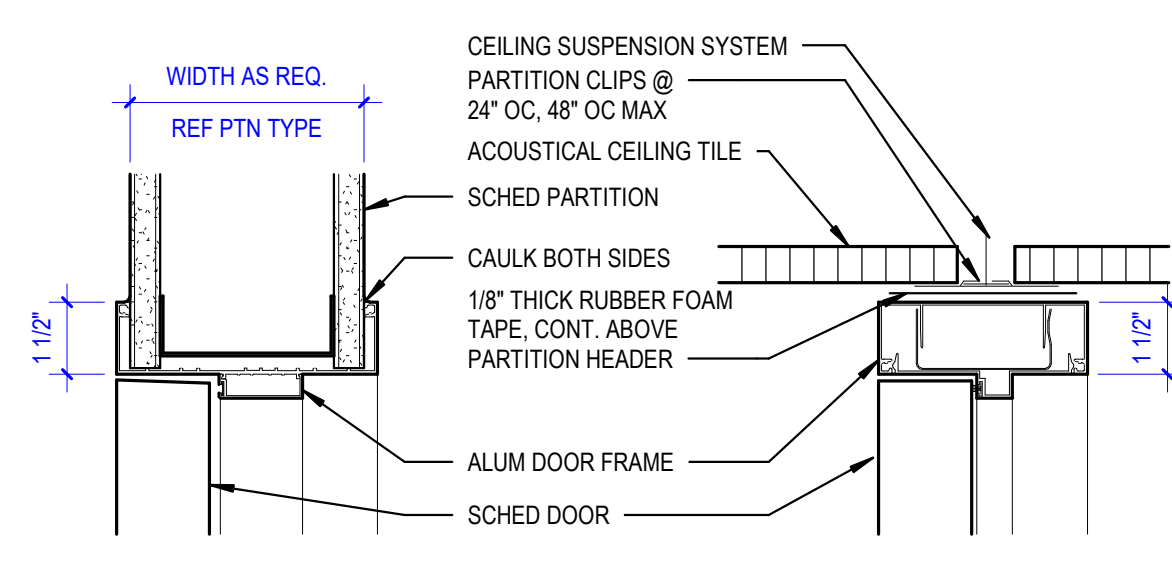
## C4 ALUM FRAME - GLASS HEAD

3\"/>



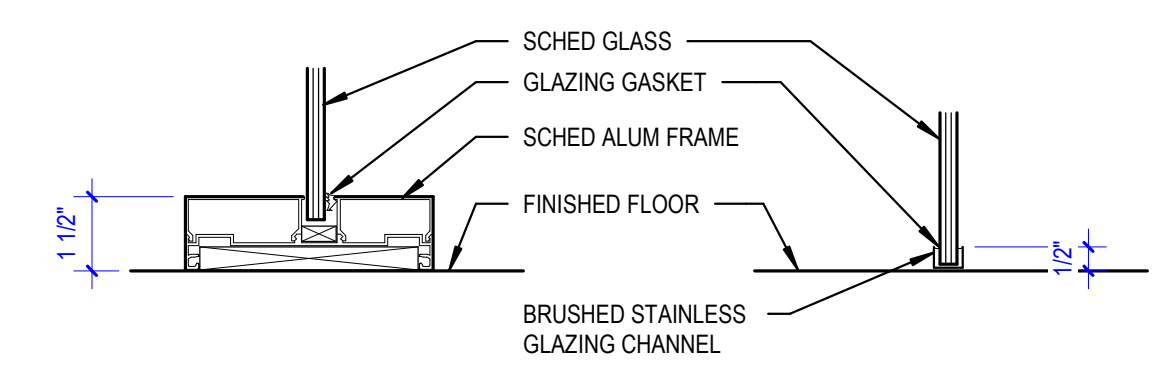
## B4 ALUM FRAME - DOOR HEAD

3\"/>



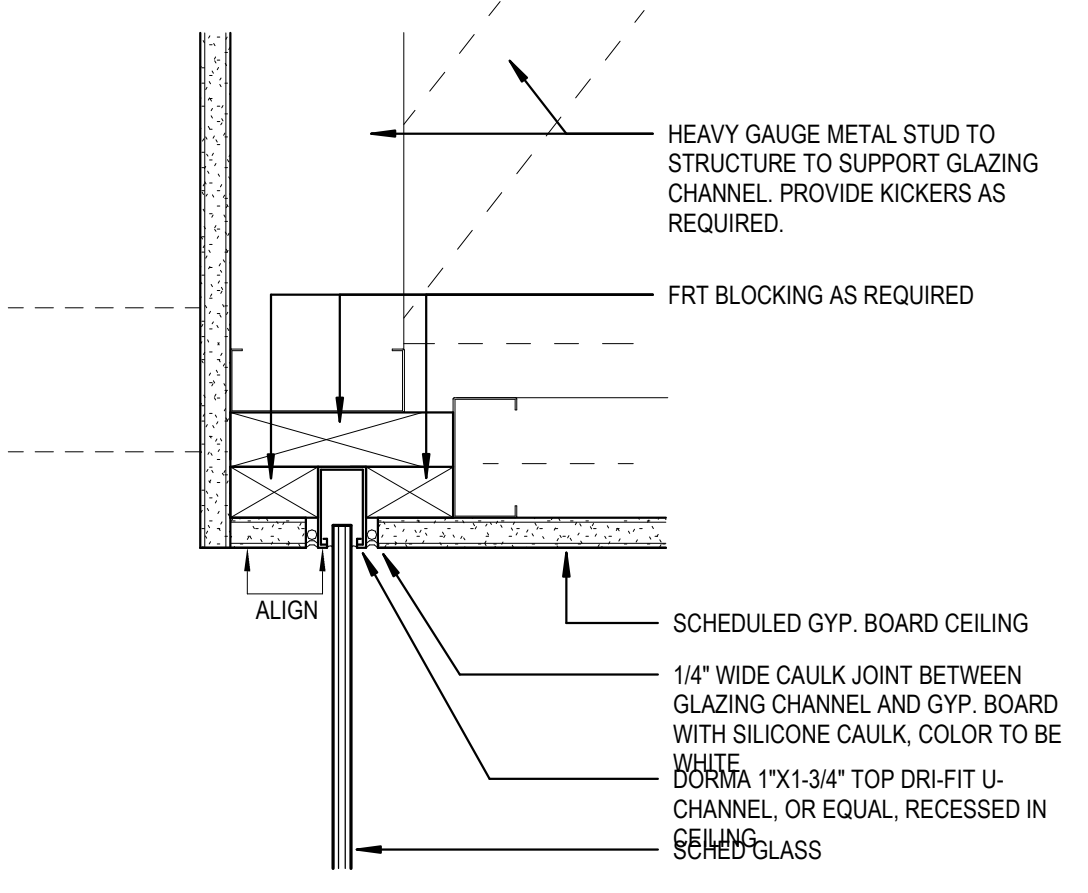
## A4 ALUM FRAME - GLASS SILL

3\"/>



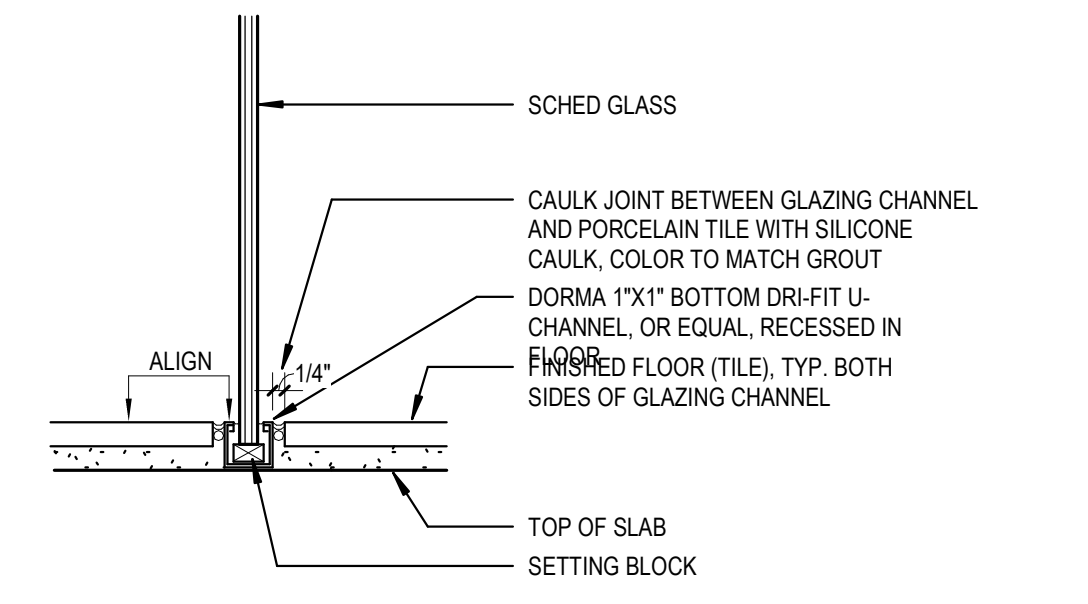
## D5 FRAMELESS GLASS SIDELITE @ HEAD

3\"/>



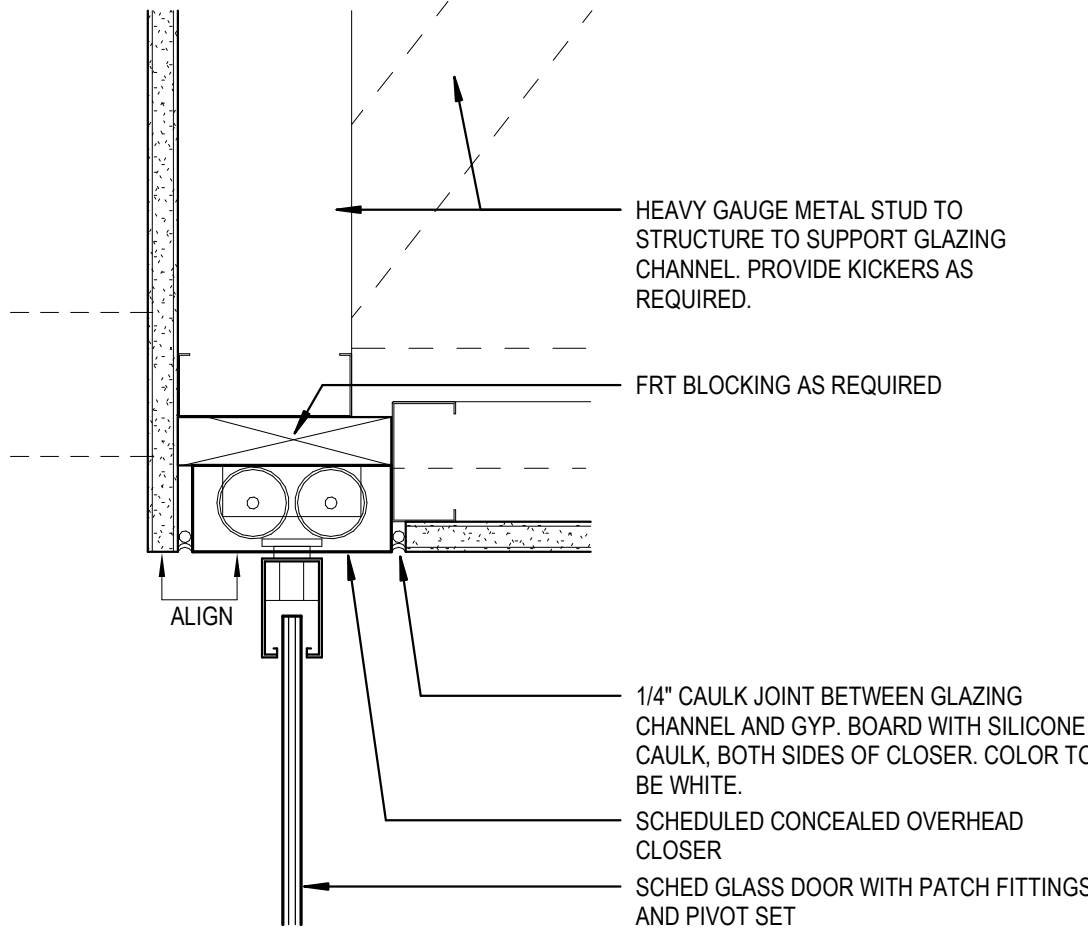
## C5 FRAMELESS GLASS SIDELITE @ SILL

3\"/>



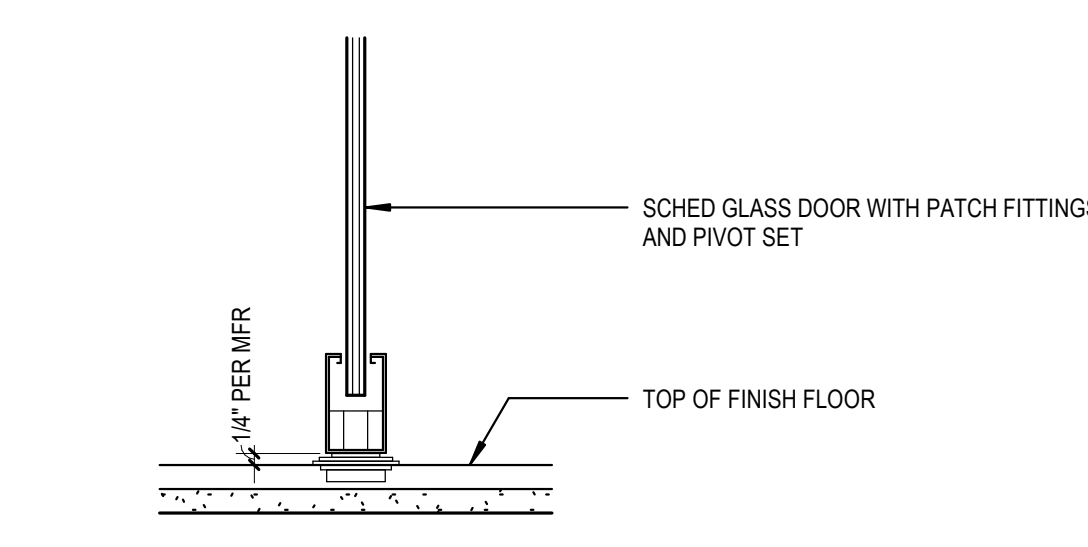
## B5 FRAMELESS GLASS DOOR @ HEAD

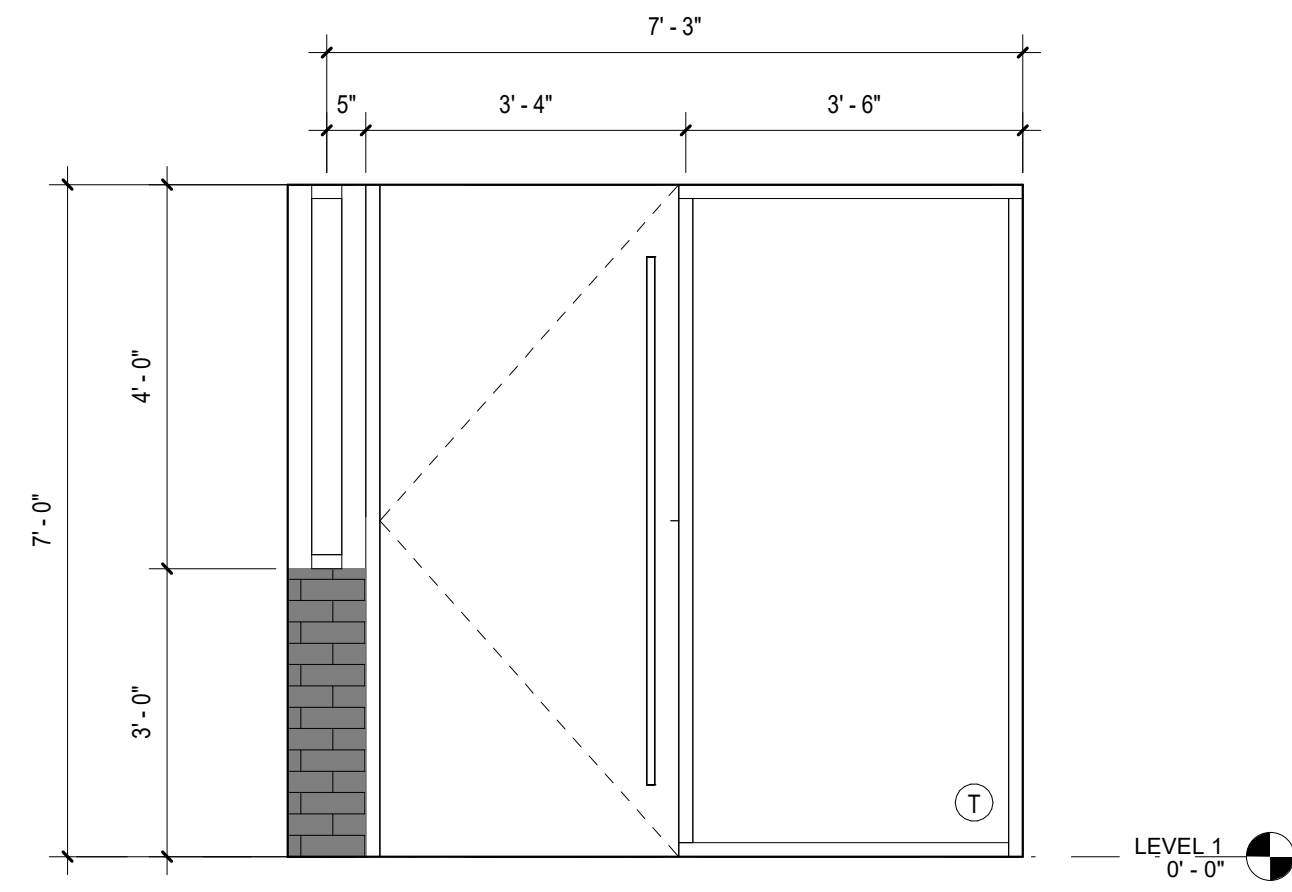
3\"/>



## A5 FRAMELESS GLASS DOOR @ SILL

3\"/>





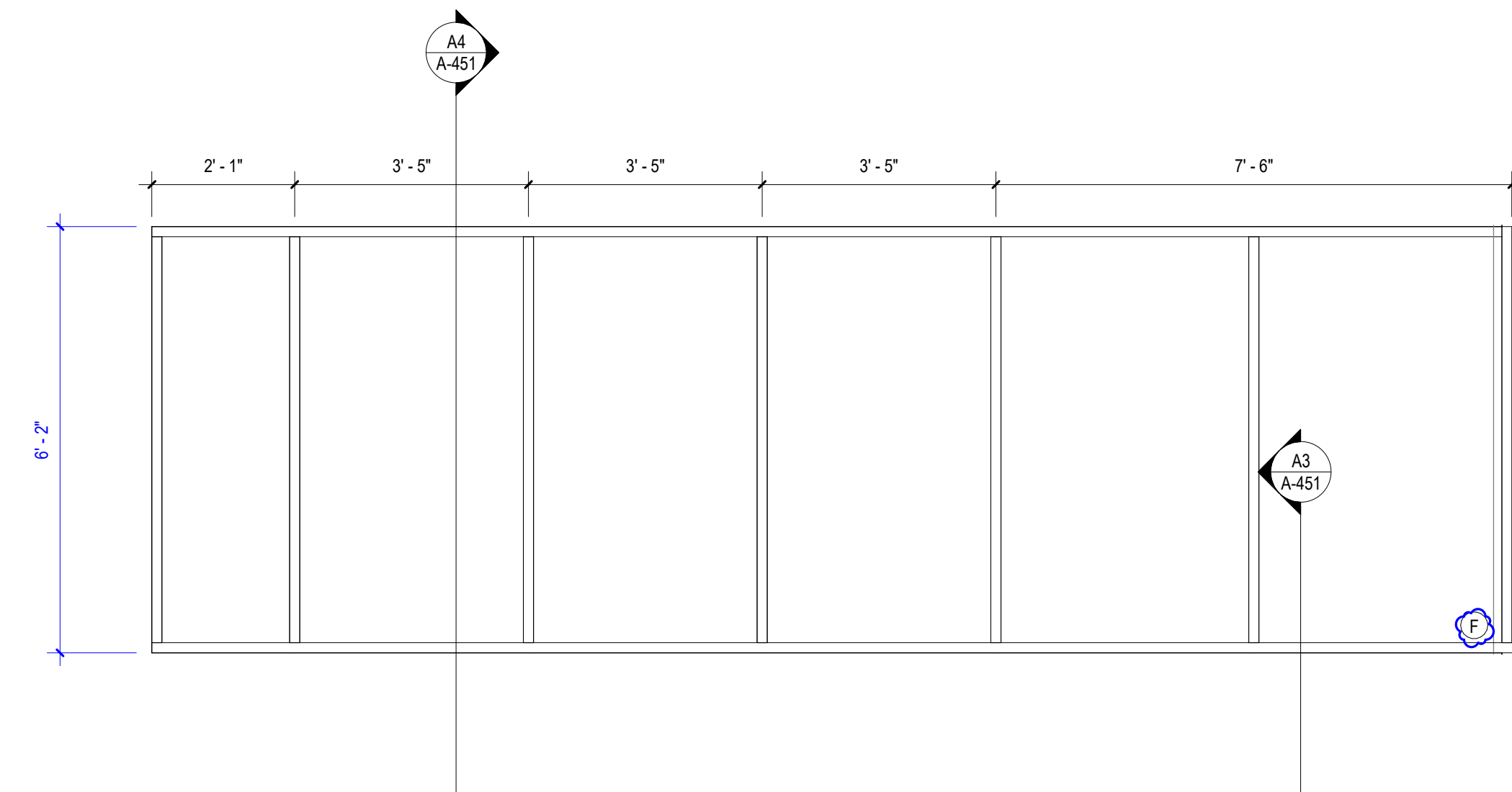
**GLASS LEGEND**

- (T) TEMPERED GLASS
- (F) 1-HOUR FIRE RATED GLAZING

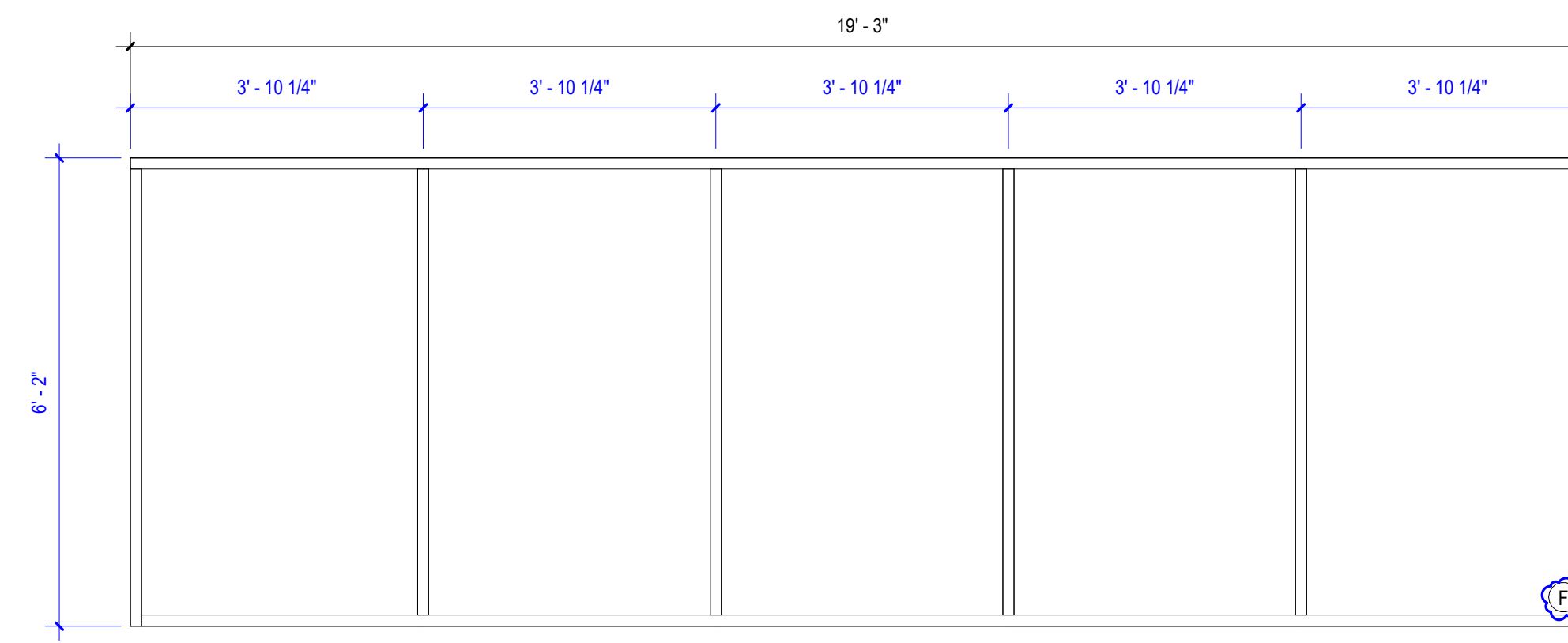
EXTERIOR GLASS PERFORMANCE:  
SOLARGRAY + SOLARBAN 60 (3) CLEAR

VLT - 35  
SHGC - 0.29

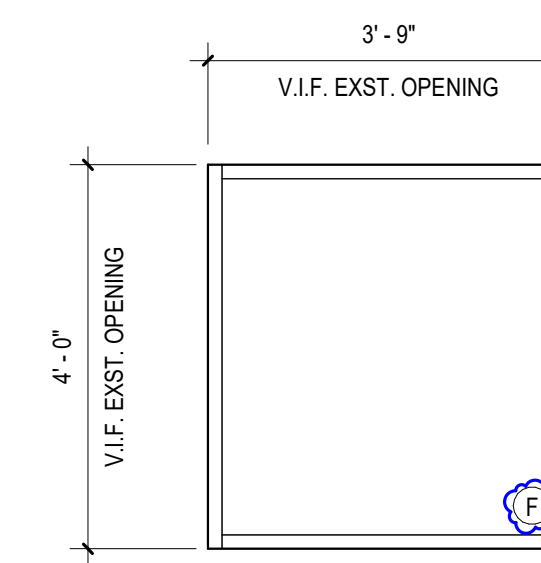
**D1 WINDOW WALL TYPE - WW13**  
1/2" = 1'-0"



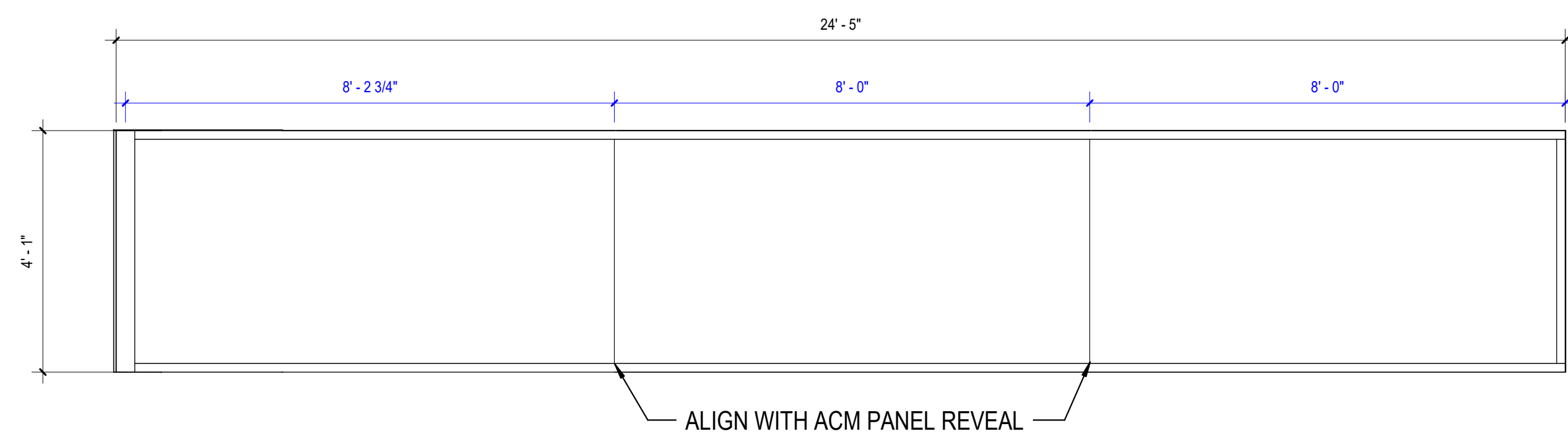
**C1 WINDOW WALL TYPE - WW12**  
1/2" = 1'-0"



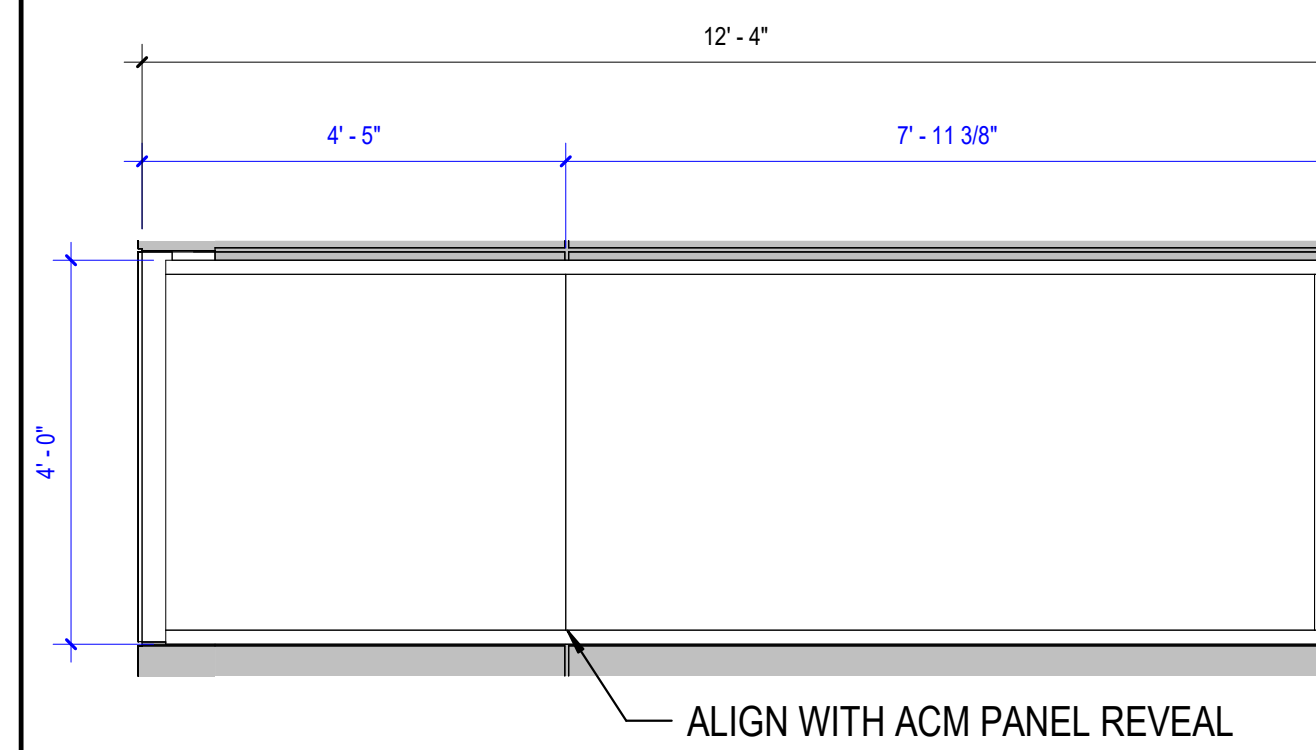
**C3 WINDOW WALL TYPE - WW11**  
1/2" = 1'-0"



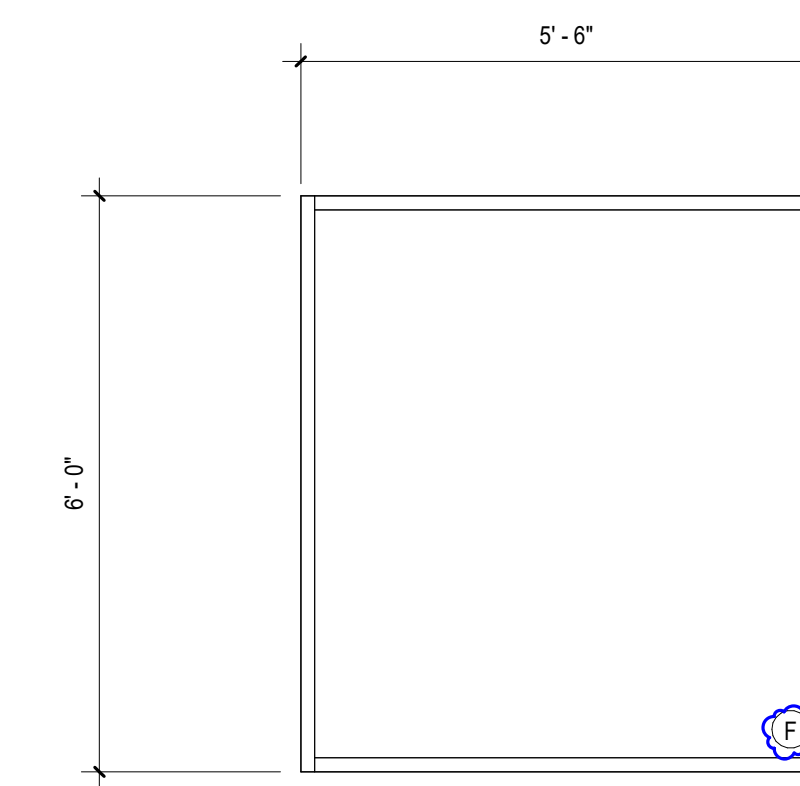
**C5 WINDOW WALL TYPE - WW10**  
1/2" = 1'-0"



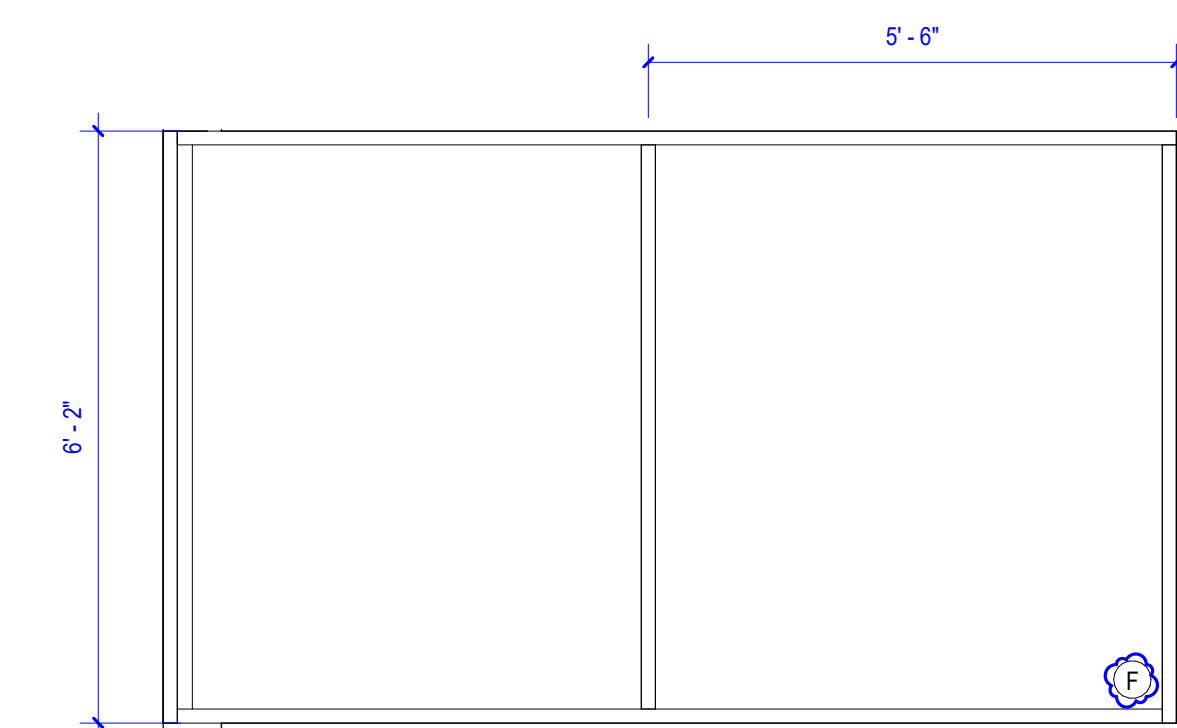
**B1 WINDOW WALL TYPE - WW6**  
1/2" = 1'-0"



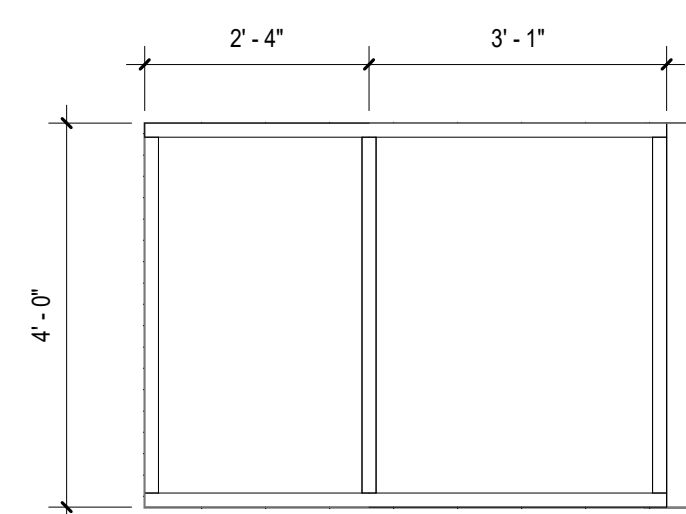
**B3 WINDOW WALL TYPE - WW7**  
1/2" = 1'-0"



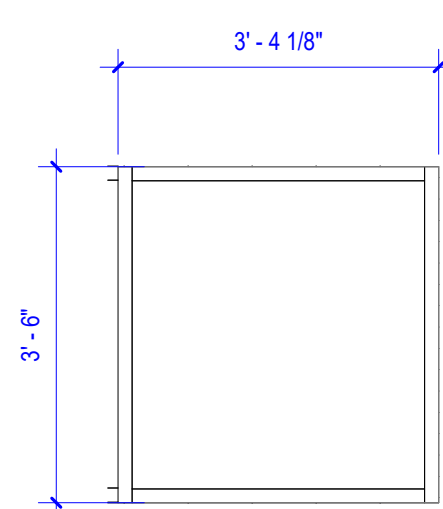
**B4 WINDOW WALL TYPE - WW8**  
1/2" = 1'-0"



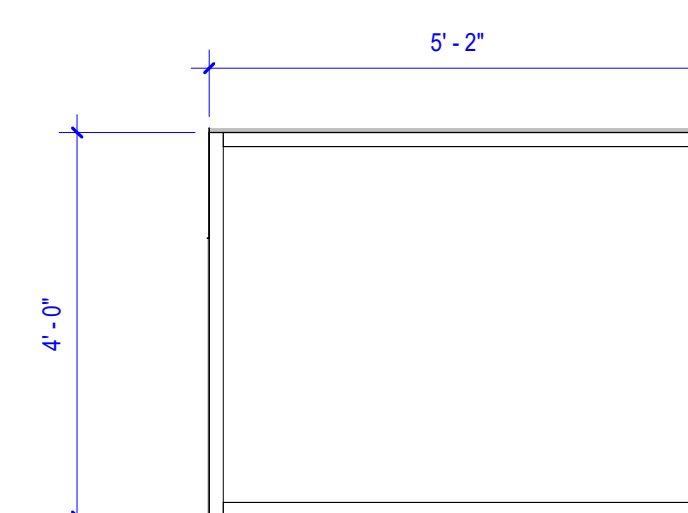
**B5 WINDOW WALL TYPE - WW9**  
1/2" = 1'-0"



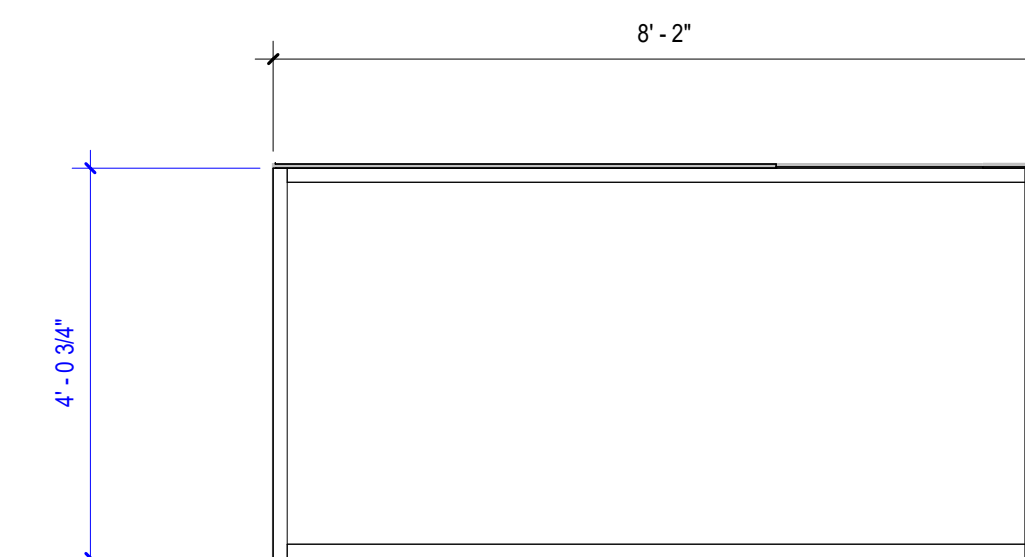
**A1 WINDOW WALL TYPE - WW1**  
1/2" = 1'-0"



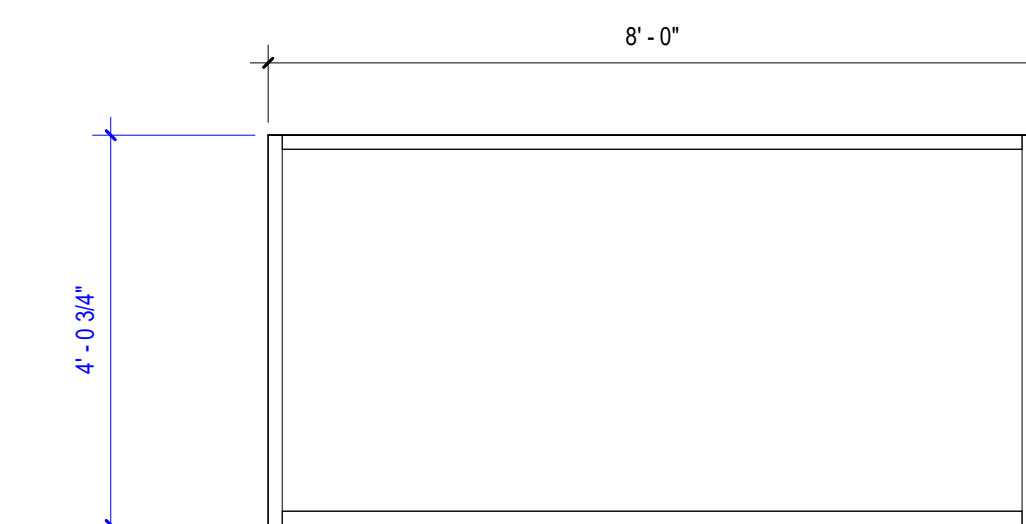
**A2 WINDOW WALL TYPE - WW2**  
1/2" = 1'-0"



**A3 WINDOW WALL TYPE - WW3**  
1/2" = 1'-0"



**A4 WINDOW WALL TYPE - WW4**  
1/2" = 1'-0"



**A5 WINDOW WALL TYPE - WW5**  
1/2" = 1'-0"

STRUCTURAL NOTES

A. GENERAL

- 1. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL DETERMINE THE SCOPE OF THE STRUCTURAL WORK FOR BIDDING AND CONSTRUCTION FROM THE CONTRACT DOCUMENTS TAKEN AS A WHOLE...
2. THE STRUCTURE HAS BEEN DESIGNED FOR THE IN-SERVICE LOADS ONLY...
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK...
4. WHERE CONFLICTS EXIST AMONG VARIOUS PARTS OF THE STRUCTURAL AND ARCHITECTURAL DRAWINGS...
5. CONDITIONS DESCRIBED BY DETAILS, SECTIONS, NOTES AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS SHALL ALSO APPLY TO SIMILAR CONDITIONS NOT SPECIFICALLY INCLUDED...
6. THE REPRODUCTIVE USE OF THE STRUCTURAL CONTRACT DOCUMENTS OR ELECTRONIC FILES AS STRUCTURAL SHOP DRAWING DOCUMENTS BY THE CONTRACTOR OR SUB-CONTRACTORS IS AT THEIR OWN RISK...
7. SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY...
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTURAL SYSTEM OR OTHER PARTS OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR SUBSTITUTIONS...
9. PRINCIPAL OPENINGS IN THE STRUCTURE ARE INDICATED ON THE CONTRACT DOCUMENTS...
10. ARCHITECTURAL ITEMS OR PREFABRICATED ITEMS SHOWN ON THE STRUCTURAL DRAWINGS ARE REFERENCED FOR GENERAL COORDINATION PURPOSES ONLY.

B. DESIGN CRITERIA

- 1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS.
2. THE DESIGN GRAVITY LOADS ARE AS FOLLOWS:
SUPERIMPOSED DEAD LOADS (INCLUDED BUT NOT LIMITED TO THE FOLLOWING):
MECHANICAL AND CEILING 6 PSF
BUILT UP ROOF 4 PSF
FINISHES AS REQUIRED
MECHANICAL AND PIPING LOADS AS NOTED ON PLANS
(THE CONTRACTOR SHALL DISTRIBUTE THE CONCENTRATED LOADS FROM PIPES, DUCTS AND CEILING TO THE STRUCTURAL MEMBERS IN SUCH A FASHION TO AVOID EXCEEDING SPECIFIED PERMISSIBLE VALUES...
LIVE LOADS:
ROOF 20 PSF
GYM 100 PSF
LOUNGE 100 PSF
LOBBIES, STAIRS & ASSEMBLY AREAS 100 PSF
MECHANICAL EQUIPMENT AND PADS ACTUAL WEIGHTS
3. CONTRACTOR SHALL PROVIDE COMPLETE STRUCTURAL DESIGN OF STEEL FRAMED STAIRS, LANDING PLATFORMS, TREADS, HANDRAILS, GUARDS, BRACING, BRIDGING AND CONNECTIONS TO BUILDING STRUCTURE...
4. HANDRAILS AND GUARDS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION 1607.7 AND TABLE 1607.1 OF THE INTERNATIONAL BUILDING CODE AS FOLLOWS...
5. STAIR TREADS AND STRINGERS SHALL BE DESIGNED FOR A UNIFORM LOAD OF 100 PSF...
6. FLOOR LIVE LOADS ARE REDUCED FOR SLAB SYSTEMS, BEAMS, GIRDERS, COLUMNS, PIERS, WALLS, AND FOUNDATIONS...
7. THE STRUCTURE HAS BEEN DESIGNED TO WITHSTAND THE WIND PRESSURES SPECIFIED IN CHAPTER 16, SECTION 1609, OF THE INTERNATIONAL BUILDING CODE...

C. EXISTING BUILDING

- 1. INSTALL TEMPORARY SUPPORTS AND OTHER MEASURES AS REQUIRED TO PREVENT DAMAGE TO THE EXISTING BUILDING DURING CONSTRUCTION...
2. FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS WHICH AFFECT THE NEW CONSTRUCTION...
3. FIELD VERIFY THAT THE EXISTING FRAMING AFFECTED BY THE NEW WORK IS IN SOUND CONDITION...
4. IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS...

D. FOUNDATION AND SLAB ON GRADE

- 1. THE CONTRACTOR SHALL PERFORM EXCAVATIONS, FOOTING CONSTRUCTION, AND PREPARATION OF THE SUB-GRADE UNDER THE SLAB ON GRADE...
2. THE FOUNDATION (SHALLOW SPREAD FOOTINGS) FOR THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING ALLOWABLE SOIL BEARING PRESSURES...
VERTICAL FOUNDATION PRESSURE 1,500 PSF
LATERAL BEARING PRESSURE 100 PSF/FT BELOW NATURAL GRADE
LATERAL SLIDING RESISTANCE 130 PSF COHESION\*
DRILLED PIERS SHALL BE EXCAVATED, CLEANED, REINFORCED AND THE CONCRETE SHALL BE PLACED ON THE SAME DAY...
4. EXCAVATIONS FOR FOOTINGS SHALL BE CLEANED AND HOTTED TAMPED TO A UNIFORM SURFACE...
5. FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION...
6. REINFORCEMENT PLACEMENT SEQUENCE FOR FOOTINGS IS NOTED ONLY FOR MAJOR REINFORCEMENT BAR LAYERS...
7. GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND FRACRAL LLC, 48 HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOOTINGS...
8. SUBGRADE UNDER SLABS ON FILL SHALL HAVE A PLASTICITY INDEX BETWEEN 7 AND 15 PERCENT...
9. THE FOUNDATION EXCAVATIONS AND FLOOR SUBGRADE SHALL BE PROPERLY COMPACTED...
10. A VAPOR BARRIER WITH A PERFORMANCE EQUIVALENT TO A 15 MIL STEGOWRAP SHALL BE PLACED BENEATH THE SLAB ON GRADE...
11. WHERE THE SLAB IS TO RECEIVE SENSITIVE ARCHITECTURAL FLOOR FINISHES...
12. THE SLAB ON GRADE SHALL HAVE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS AT EACH COLUMN LINE...

E. CONCRETE DECK ON STEEL FORMS

- 1. ELEVATED FLOOR SLABS SHALL BE NORMAL WEIGHT CONCRETE...
2. PROPERTIES AND ALLOWABLE STRESSES OF STEEL FLOOR DECK SHALL BE BASED ON THE AMERICAN IRON AND STEEL INSTITUTE (AISI) 'NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS'.
3. THE COMPOSITE STEEL DECK SHALL BE PLACED TO HAVE A THREE SPAN CONFIGURATION...
4. ATTACHMENT OF COMPOSITE STEEL DECK...
5. DECK FLUTES SHALL BE ALIGNED AND DECK ENDS SHALL BE BUTTED OVER SUPPORTS...
6. IN ADDITION TO THE SPECIFICATIONS NOTED ELSEWHERE...
7. STEEL DECK SHALL BE FREE FROM OIL, DIRT, AND ANY OTHER DELETERIOUS MATERIALS...
8. PROVIDE SUFFICIENT CHAIRS, BOLSTER BARS, ETC. TO MAINTAIN THE WELDED WIRE FABRIC AND REINFORCEMENT BARS AT THE DEPTH SPECIFIED.

F. STEEL ROOF DECK

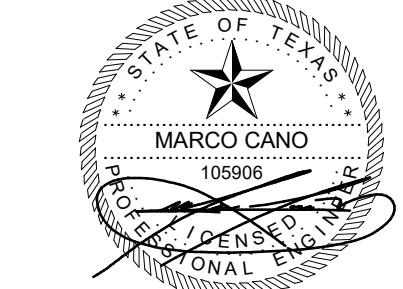
- 1. ROOF DECK SHALL BE RIGID INSULATION BOARD ON GALVANIZED TYPE B STEEL ROOF DECK...
2. PROPERTIES AND ALLOWABLE STRESSES OF STEEL ROOF DECKS SHALL BE BASED ON THE AMERICAN IRON AND STEEL INSTITUTE (AISI) 'NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS'.
3. STEEL ROOF DECK SHALL BE PLACED TO HAVE A THREE SPAN CONFIGURATION...
4. PLUG WELD ROOF DECK TO SUPPORTING STEEL AND ADJOINING DECK SHEETS...

G. CONCRETE

- 1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' AND ACI 301 'SPECIFICATION FOR STRUCTURAL CONCRETE'.
2. CONCRETE SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES...
3. FLY ASH MAY BE USED AS A POZZOLAN TO REPLACE A PORTION OF THE PORTLAND CEMENT...
4. GROUT FOR BASE PLATES SHALL BE NONSHRINKABLE, NONMETALLIC...
5. SLUMP TESTS SHALL BE MADE PRIOR TO THE ADDITION OF PLASTICIZERS...
6. WATER SHALL NOT BE ADDED TO THE CONCRETE...
7. PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION...
8. PROVIDE CURING OF DECK IMMEDIATELY AFTER FINISHING...
9. THE CONTRACTOR SHALL SUBMIT FOR REVIEW A MIX DESIGN FOR THE PROPOSED CONCRETE...
10. DETAILING AND PLACING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES...
11. MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS...
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3 INCHES
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 BARS AND SMALLER 1-1/2 INCHES
ALL OTHER BARS 2 INCHES
CONCRETE NOT EXPOSED WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS, JOISTS (#11 BARS AND SMALLER) 3/4 INCHES
SLABS, WALLS, JOISTS (ALL OTHER BARS) 1-1/2 INCHES
BEAMS AND COLUMNS 1-1/2 INCHES
PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED.
12. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
13. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
14. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, HEATED, OR CUT UNLESS INDICATED...
15. WELDING OF REINFORCEMENT BARS, WHEN ACCEPTED BY THE STRUCTURAL ENGINEER...
16. REINFORCEMENT DESIGNATED AS 'CONTINUOUS' MAY BE SPLICED USING TYPE 'B' SPLICES...
17. HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS...
18. HORIZONTAL JOINTS WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION...
19. CONSTRUCTION JOINTS BETWEEN FOOTINGS AND THE FLOOR SYSTEM...
20. PROVIDE 1-#4 REINFORCEMENT BAR X 4'-0" AT RE-ENTRANT CORNERS...
21. CONDUIT, PIPES, AND SLEEVES EMBEDDED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318, CHAPTER 6.3.

H. STRUCTURAL STEEL

- 1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC 305 'MANUAL OF STRUCTURAL STEEL BUILDINGS' AND THE AISC 303 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES'.
2. CONTRACTOR SHALL FABRICATE AND ERECT STEEL IN ACCORDANCE WITH LATEST OSHA SAFETY REQUIREMENTS...
3. STRUCTURAL STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS...
WIDE FLANGE SHAPES (W) ASTM A992 GRADE 50 (50 KSI)
CHANNELS, AND ANGLES ASTM A36 (36 KSI)
SQUARE AND RECTANGULAR TUBES (HSS) ASTM A600 GRADE B (48 KSI)
ROUND TUBES (HSS) ASTM A500 GRADE B (42 KSI)
STEEL PIPE ASTM A63 GRADE B (36 KSI)
M, S AND MC SHAPES ASTM A36 (36 KSI)
PLATES AND BARS ASTM A36 (36 KSI)
ANCHOR BOLTS (ANCHOR RODS) ASTM F1554 OR ASTM A307 (36 KSI)
4. THE DETAILS ON THESE DRAWINGS INDICATE GENERAL CRITERIA...
5. DESIGN ALL CONNECTIONS FOR FORCES INDICATED ON THE DRAWINGS...
6. CONNECTION BOLTS FOR STRUCTURAL STEEL MEMBERS SHALL BE HIGH STRENGTH BOLTS...
7. NO CONNECTION SHALL CONSIST OF LESS THAN (2) 3/4" DIA. A325-N BOLTS...
8. DO NOT USE OVERSIZED OR SLOTTED HOLES...
9. PRIOR TO DETAILING CONNECTIONS FOR STRUCTURAL STEEL...
10. WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD D11...
11. SPlicing OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS...
12. BEAMS SHALL BE CAMBERED UPWARD...
13. NO MISFABRICATED STRUCTURAL STEEL...
14. PENETRATIONS SHALL NOT BE CUT IN STRUCTURAL STEEL MEMBERS...
15. HEADED CONCRETE ANCHORS SHALL BE NELSON OR KSM HEADED CONCRETE ANCHORS...
16. DEFORMED BAR ANCHORS (D & B) SHALL BE NELSON OR KSM DEFORMED BAR ANCHORS...
17. WHERE INDICATED ON THE DRAWINGS...
18. ARCHITECTUALLY EXPOSED STRUCTURAL STEEL MEMBERS...
19. STRUCTURAL STEEL MEMBERS TO RECEIVE FIREPROOFING SHALL NOT BE PRIMED NOR PAINTED...



12/01/2023

MIRA SAFETY 1713 Hur Industrial Blvd Cedar Park, TX 78613

ISSUE FOR PERMIT 12.01.2023

Issues

Project Number 23-01-014

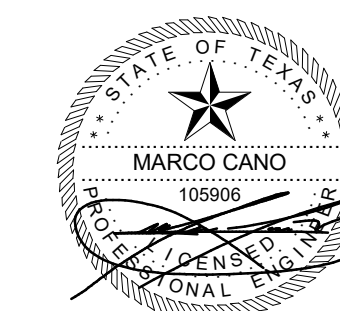
Drawn By JA

Checked By OV

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

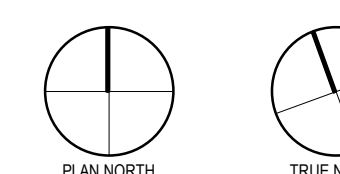
FRACRAL Texas Firm Registration No. F-16958 FRACRAL Project No. 23-065-00 9722 Gaston Road Suite 150-241 Katy, TX 77494 Office +1-832-404-2280

\$1.00



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

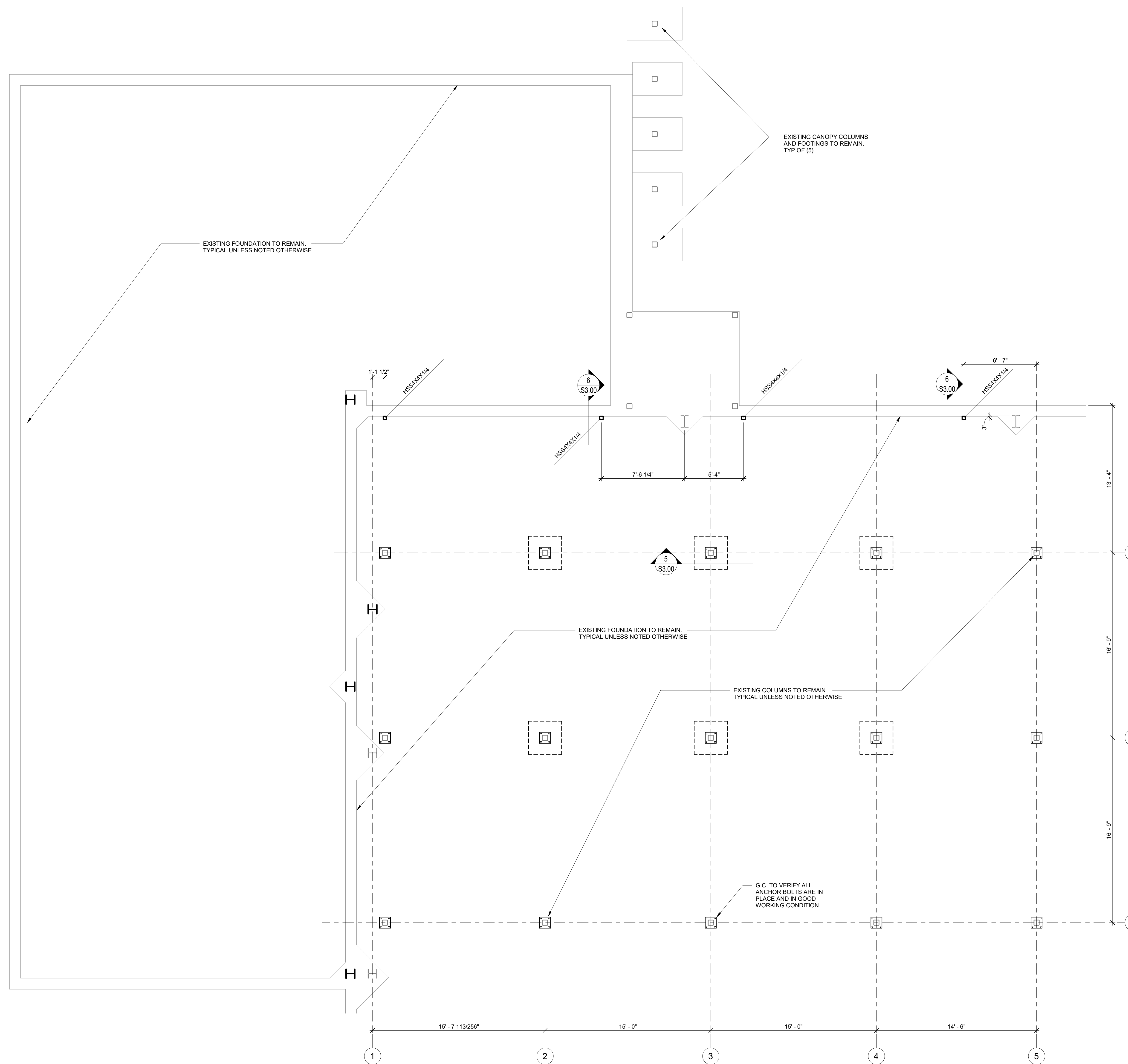


ISSUE FOR PERMIT 12.01.2023

Project Number	23-01-014
Drawn By	JA
Checked By	OV
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.	

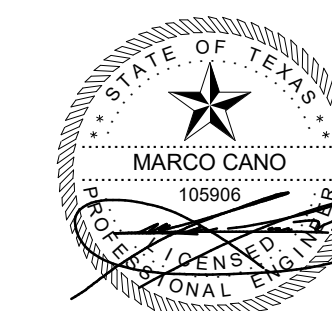
**S2.01**

FOUNDATION PLAN



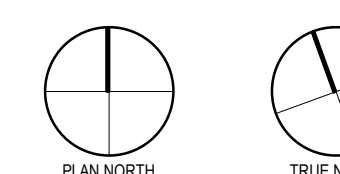
**1** PARTIAL FOUNDATION PLAN  
SCALE: 1/4" = 1'-0"

**FRACTAL**  
Texas Firm Registration No. F-16958  
FRACTAL Project No. 23-065-00  
9722 Gaston Road Suite 150-241  
Katy, TX 77494  
Office +1-832-404-2280



12/01/2023

**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



ISSUE FOR PERMIT 12.01.2023

Issues

Project Number 23-01-014

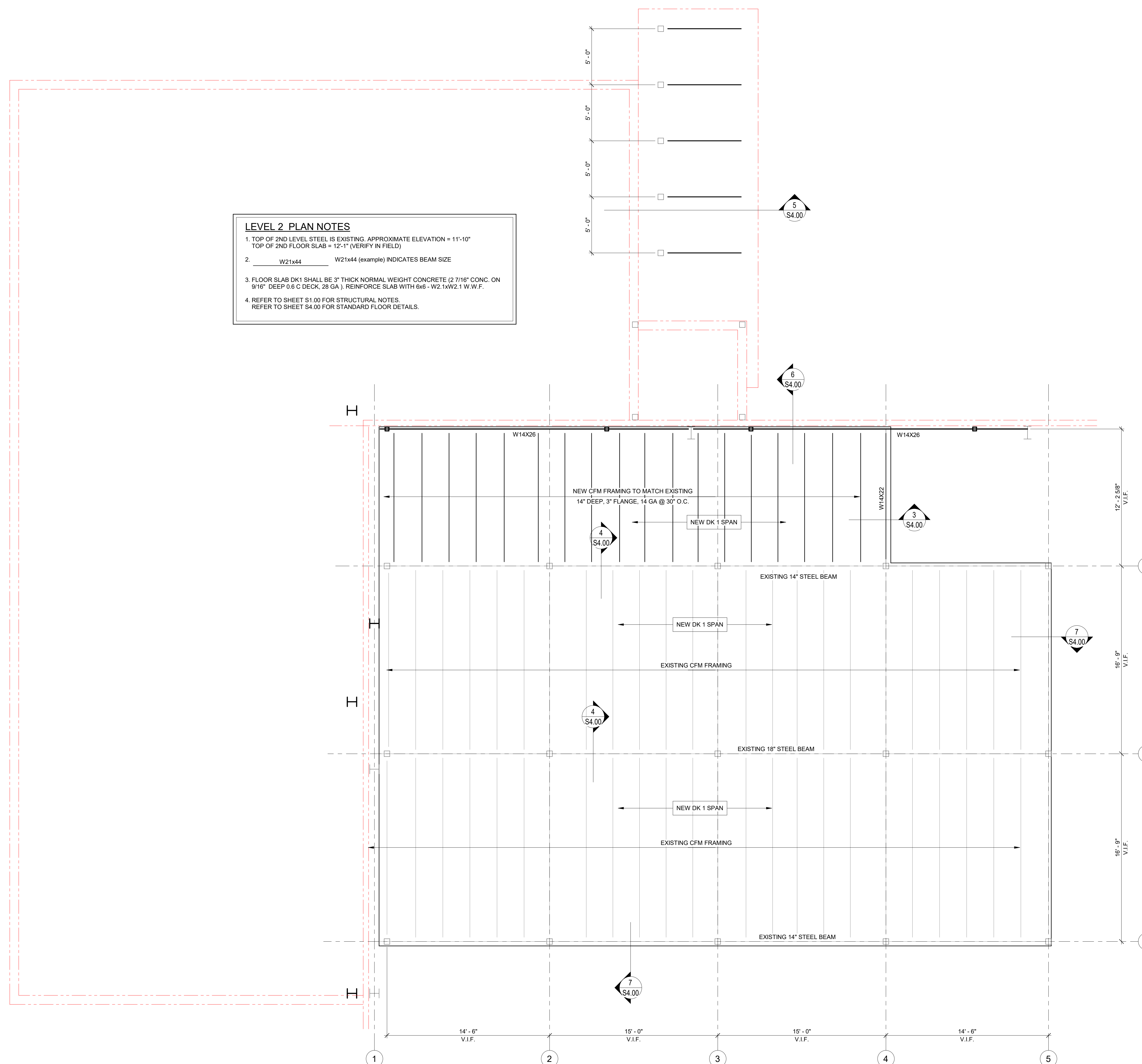
Drawn By JA

Checked By OV

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**S2.02**

FRAMING PLANS



**LEVEL 2 PLAN NOTES**

- TOP OF 2ND LEVEL STEEL IS EXISTING. APPROXIMATE ELEVATION = 11'-10"  
TOP OF 2ND FLOOR SLAB = 12'-1" (VERIFY IN FIELD)
- W21x44 W21x44 (example) INDICATES BEAM SIZE
- FLOOR SLAB DK1 SHALL BE 3" THICK NORMAL WEIGHT CONCRETE (2 7/16" CONC. ON 9/16" DEEP 0.6 C DECK, 28 GA.), REINFORCE SLAB WITH 6x6 - W2.1xW2.1 W.W.F.
- REFER TO SHEET S1.00 FOR STRUCTURAL NOTES.  
REFER TO SHEET S4.00 FOR STANDARD FLOOR DETAILS.

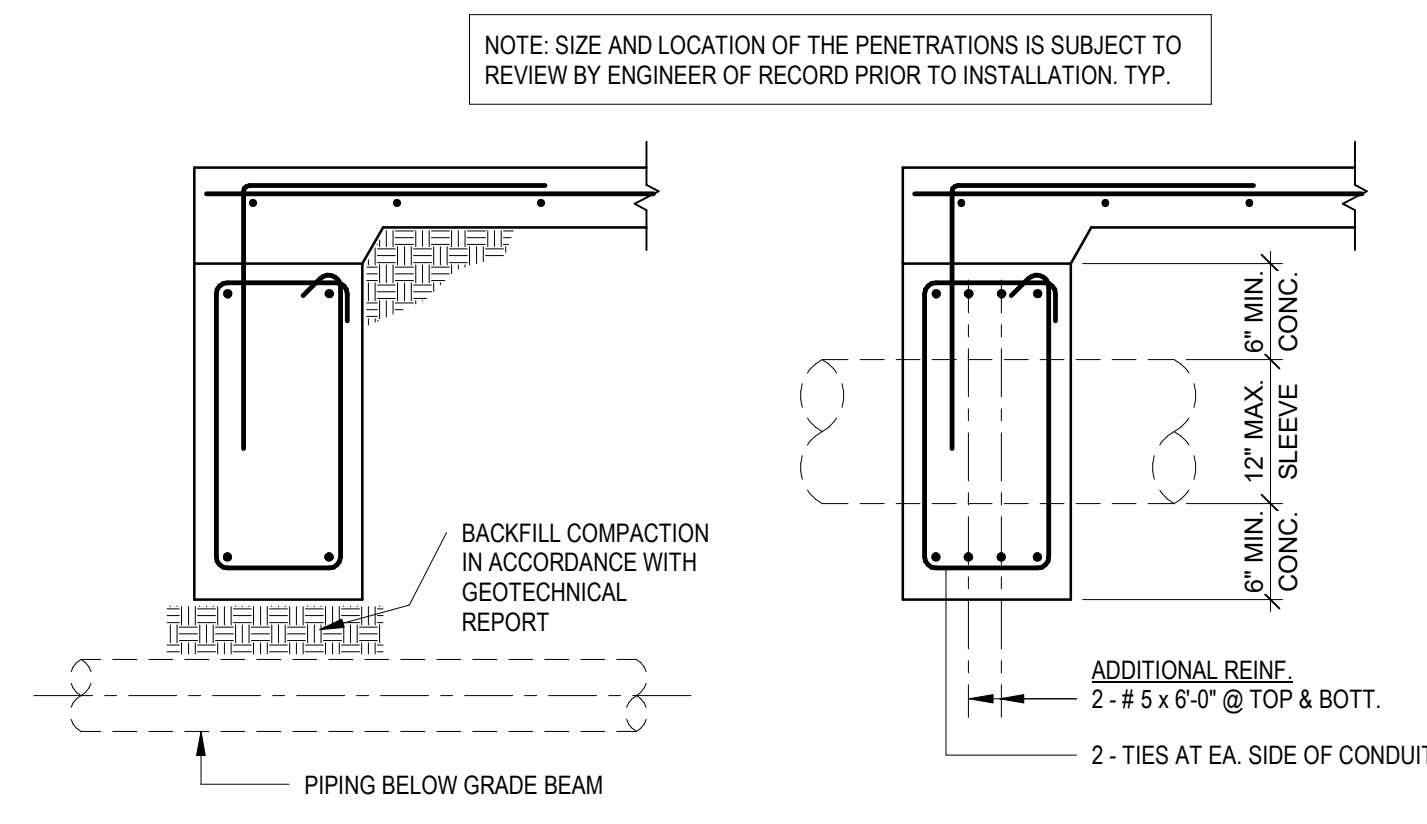
**ROOF FRAMING PLAN NOTES**

- SEE PLAN FOR B.O.D. ELEVATIONS, WITH RESPECT ELEVATION (+)0'-0"  
EXAMPLE ( B.O.D. = 31'-7 1/2" )
- ROOF DECK SHALL BE 1 1/2" DEEP GALV., 22 GA. TYPE "B" ROOF DECK (U.N.O.).  
SEE STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
- REFER TO SHEET S1.00 FOR STRUCTURAL NOTES.  
REFER TO SHEET S4.00 FOR ROOF FRAMING DETAILS.

**2 PARTIAL ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

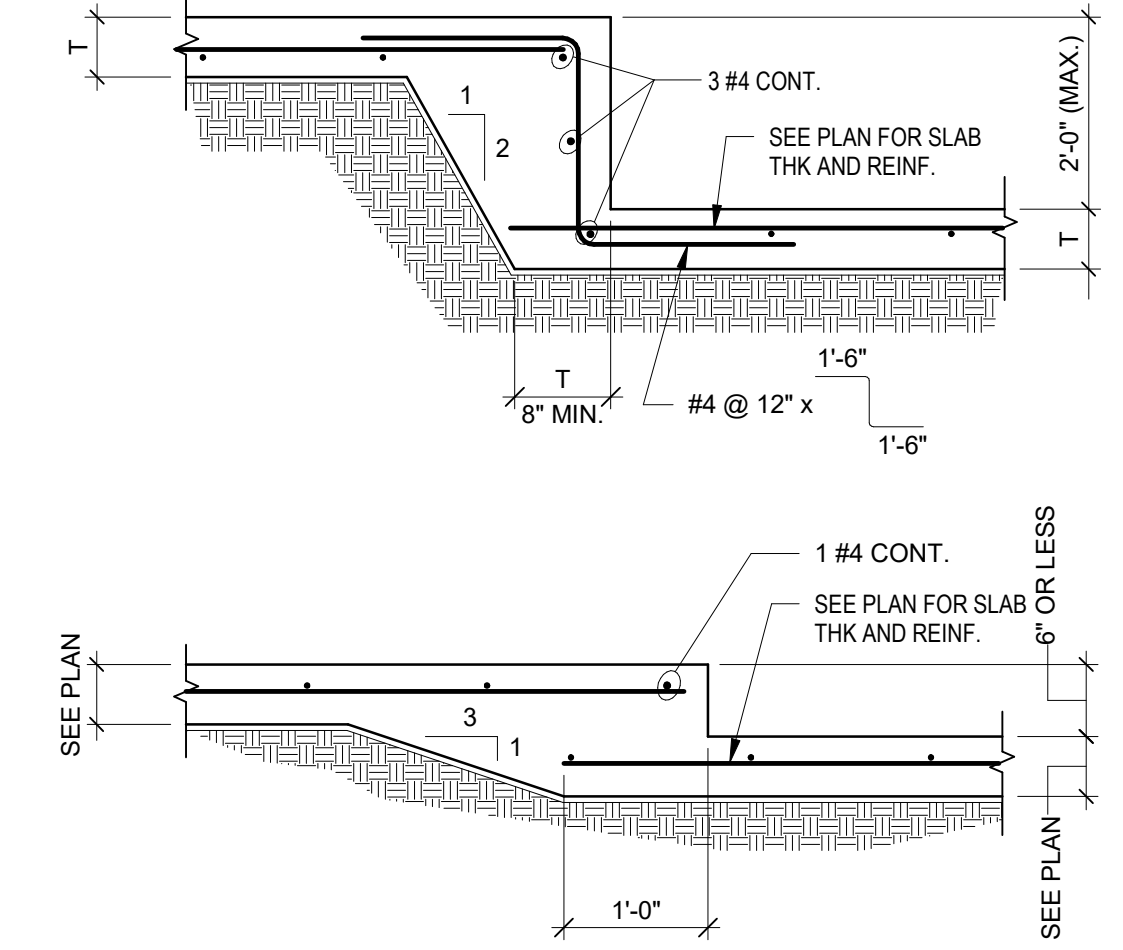
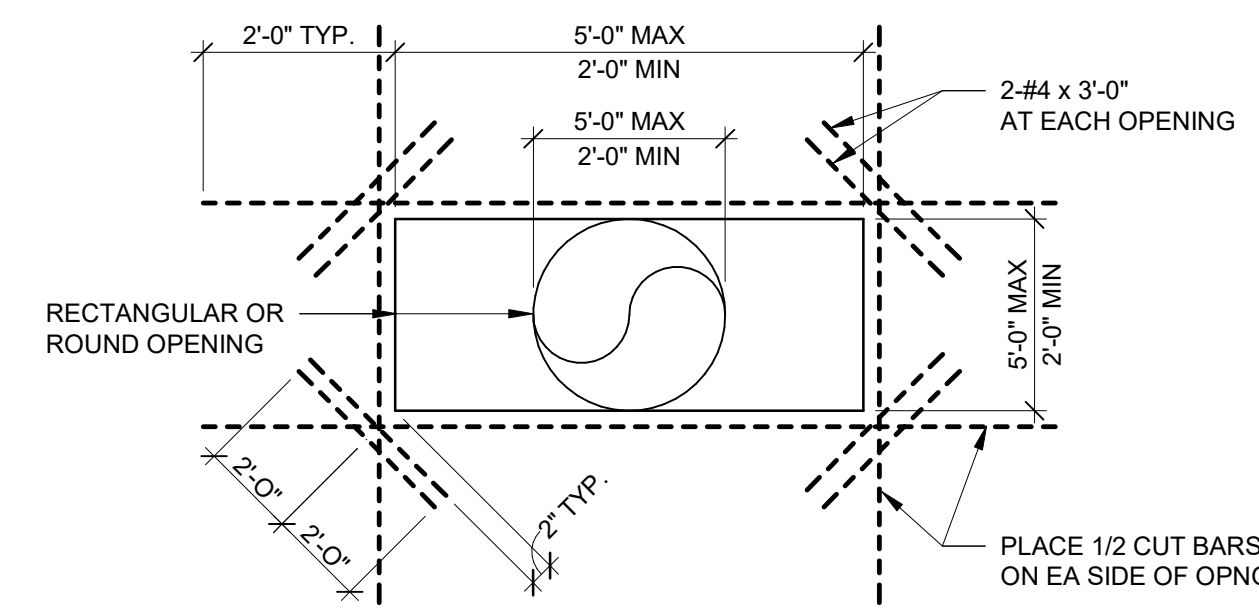
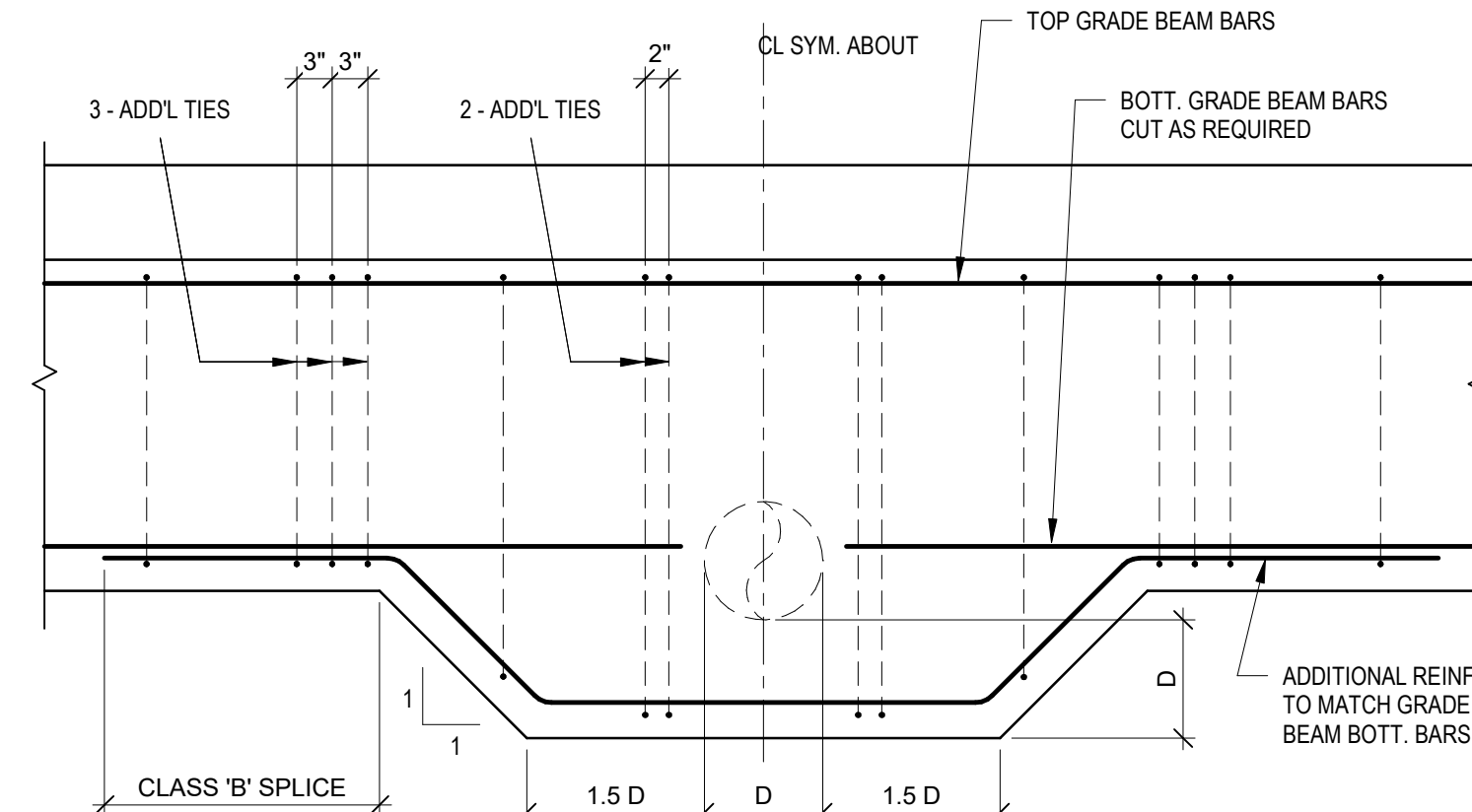
**1 LOW ROOF AND MEZZANINE FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

**FRACTAL**  
Texas Firm Registration No. F-16958  
FRACTAL Project No. 23-065-00  
9722 Gaston Road Suite 150-241  
Katy, TX 77494  
Office +1-832-404-2280

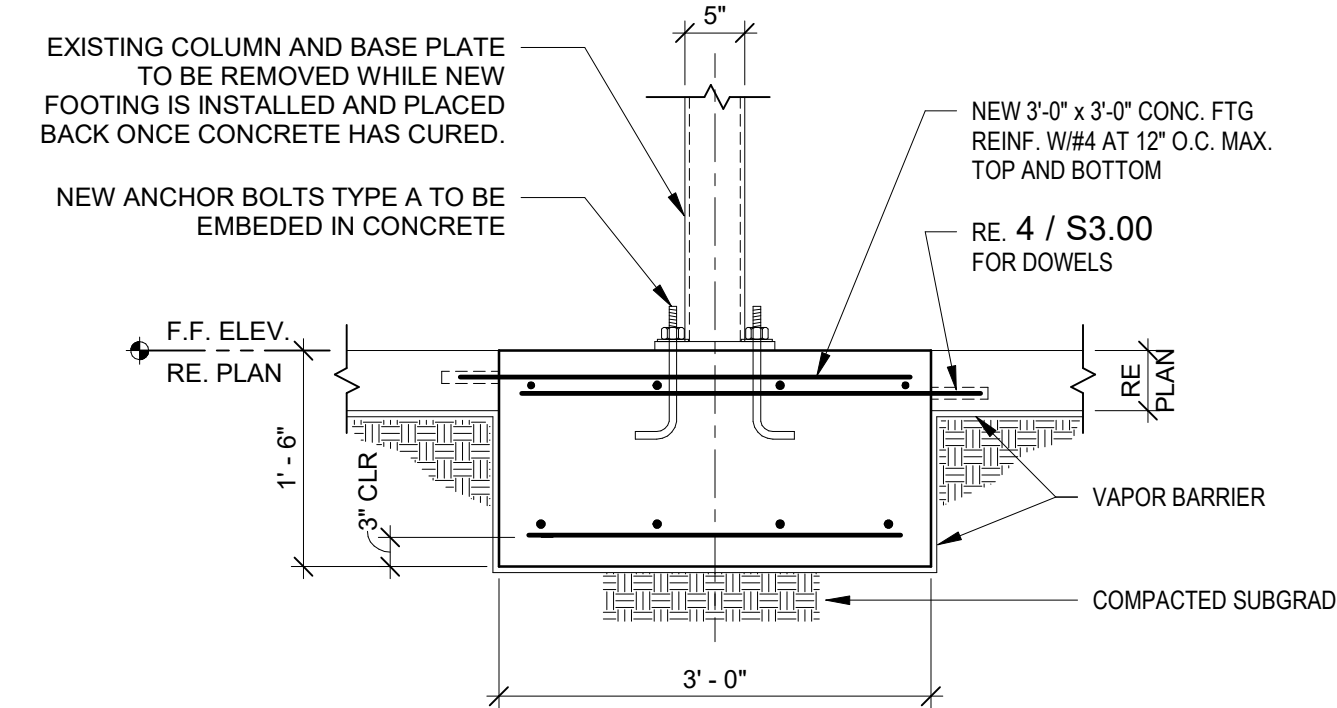


A - CONDUIT BELOW GRADE BEAM C - CONDUIT THRU GRADE BEAM

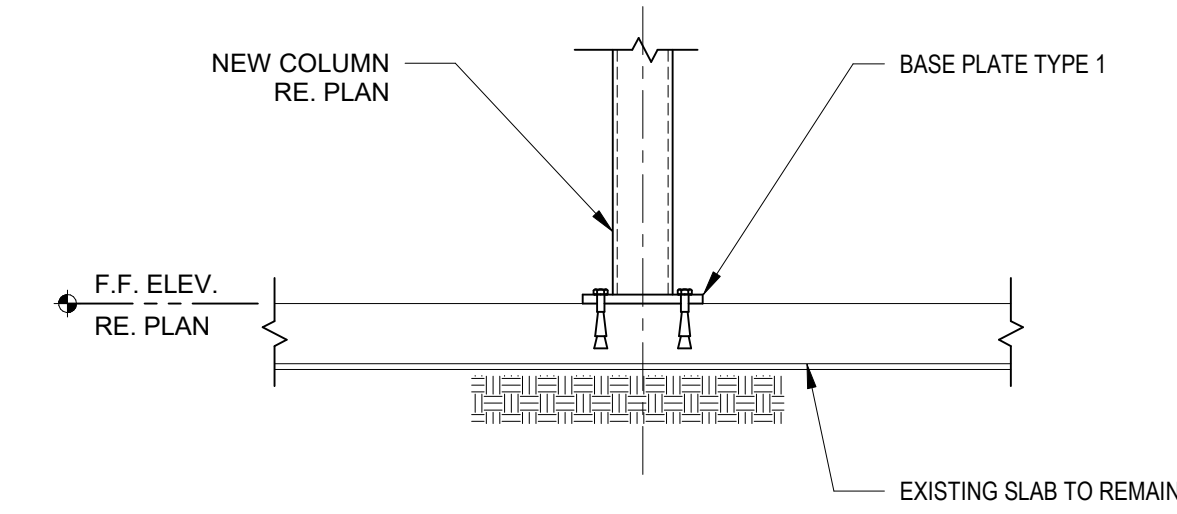
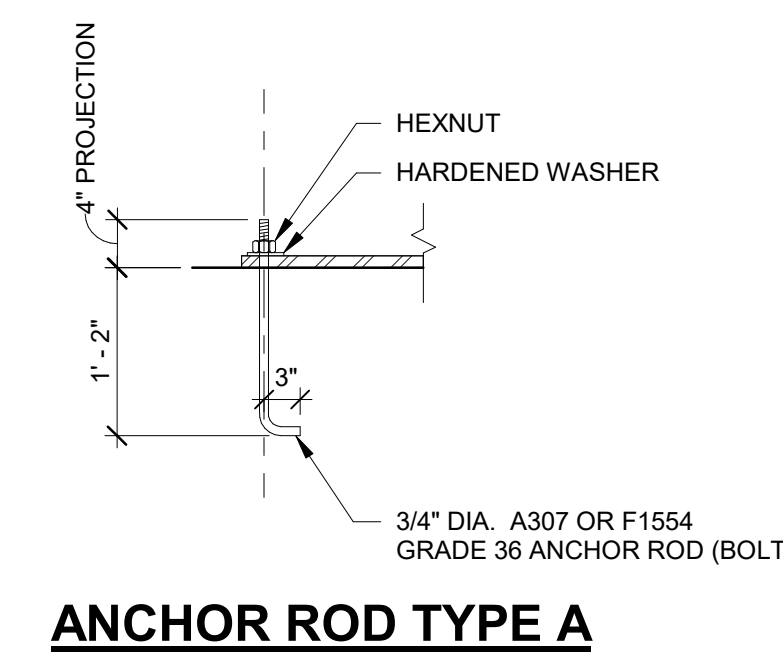
1 PIPE AND CONDUIT PENETRATION THRU GRADE BEAM  
SCALE: 3/4" = 1'-0"



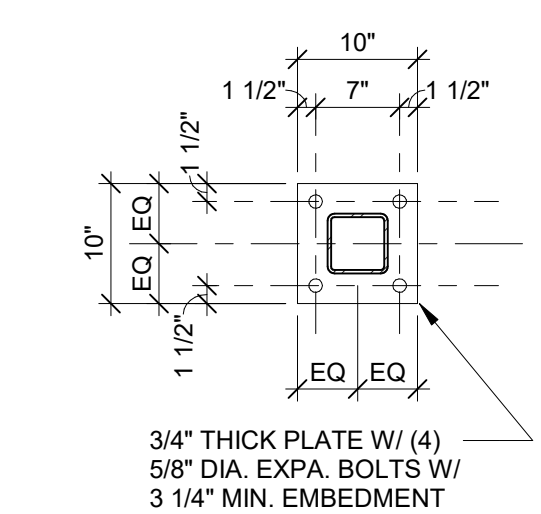
4 SLAB CUT OUT  
SCALE: 1" = 1'-0"



5 NEW FOOTING AT EXISTING COLUMN  
SCALE: 3/4" = 1'-0"



6 NEW COLUMN BASE PLATE  
SCALE: 3/4" = 1'-0"



8 TYP. LIGHT AND FLAG POLE FOUNDATION  
SCALE: 3/4" = 1'-0"

SEE POLE MANUFACTURER AND/OR MEP DWGS FOR ELECTRICAL CONDUIT AND GROUNDING WIRES (IF REQ'D) NOT SHOWN.

DIM 'H'

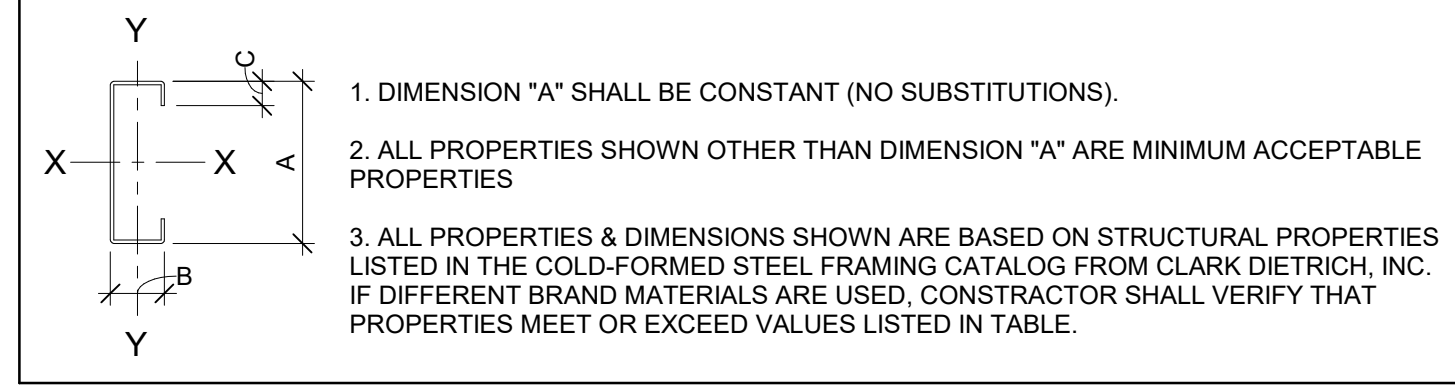
COORDINATE DIM 'H' WITH ARCH/CIVIL. IF NOT AVAILABLE USE THE FOLLOWING:

- "H"=24" WHEN LOCATED IN PARKING AREAS.
- "H"=44" WHEN LOCATED IN GRASSY AREAS OR WHERE PROTECTED FROM CARS.

POLE HEIGHT 'L'	DEPTH
L' ≤ 12'-0"	6'-0"
12'-0" < L' ≤ 20'-0"	8'-0"
20'-0" < L' ≤ 30'-0"	10'-0"
30'-0" < L' ≤ 50'-0"	14'-0"

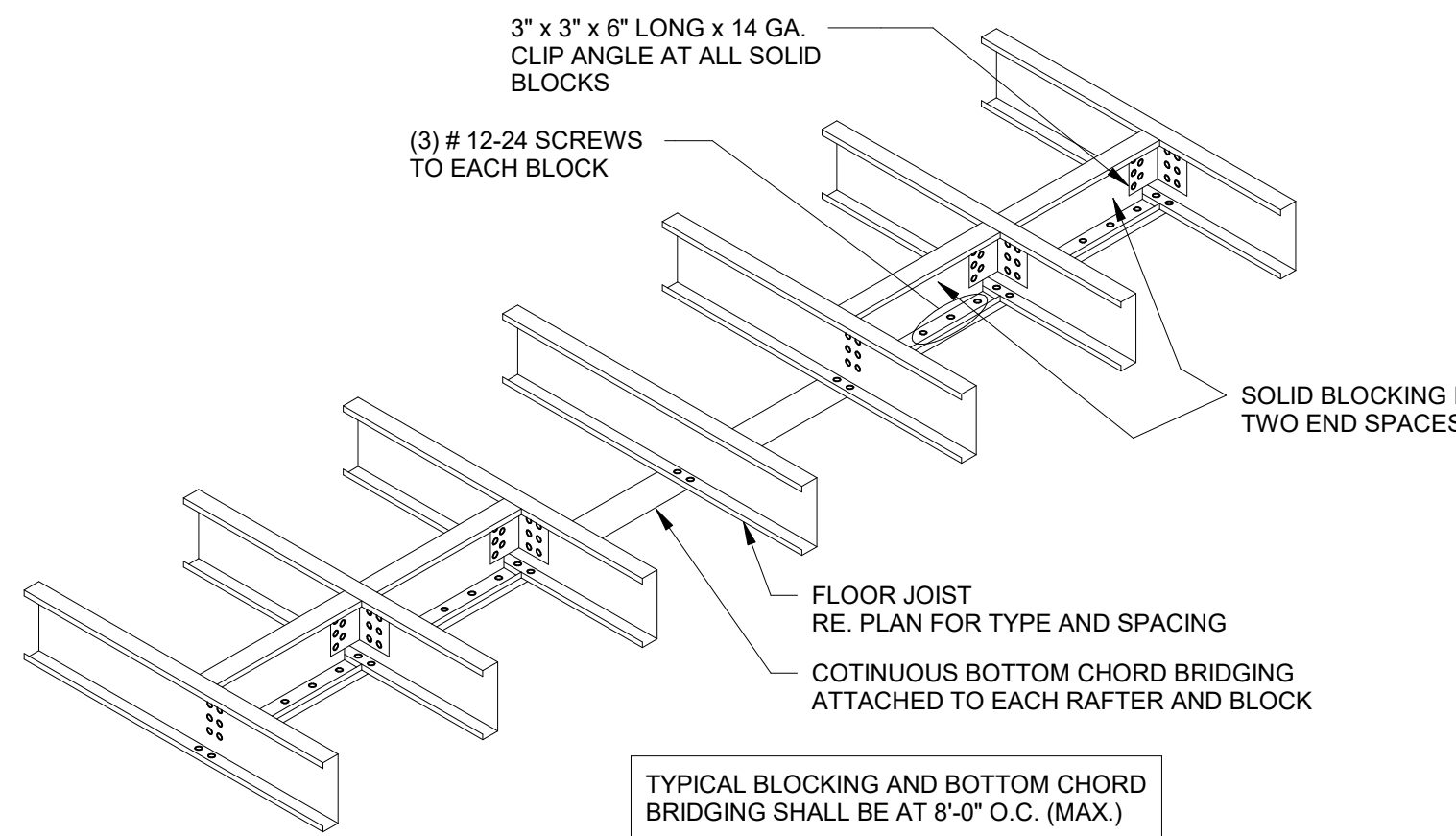


MEMBER PROPERTIES - LIGHT GAUGE STEEL FRAMING MEMBERS								
MEMBER SIZE	DIM. 'A' IN.	DIM. 'B' IN.	DIM. 'C' IN.	AREA IN <sup>2</sup>	I-X IN <sup>4</sup>	S-X IN <sup>3</sup>	I-Y IN <sup>4</sup>	S-Y IN <sup>3</sup>
3625162 - 33 (20 GA.) x 33 KSI	3.625	1.625	0.500	0.262	0.551	0.304	0.099	
3625162 - 43 (18 GA.) x 33 KSI	3.625	1.625	0.500	0.340	0.710	0.392	0.127	
3625162 - 54 (16 GA.) x 50 KSI	3.625	1.625	0.500	0.422	0.873	0.482	0.154	
3625162 - 68 (14 GA.) x 50 KSI	3.625	1.625	0.500	0.524	1.069	0.590	0.241	
6005162 - 33 (20 GA.) x 33 KSI	6.000	1.625	0.500	0.344	1.793	0.598	0.116	
6005162 - 43 (18 GA.) x 33 KSI	6.000	1.625	0.500	0.447	2.316	0.772	0.148	
6005162 - 54 (16 GA.) x 50 KSI	6.000	1.625	0.500	0.556	2.860	0.954	0.180	
6005162 - 68 (14 GA.) x 50 KSI	6.000	1.625	0.500	0.693	3.525	1.180	0.218	

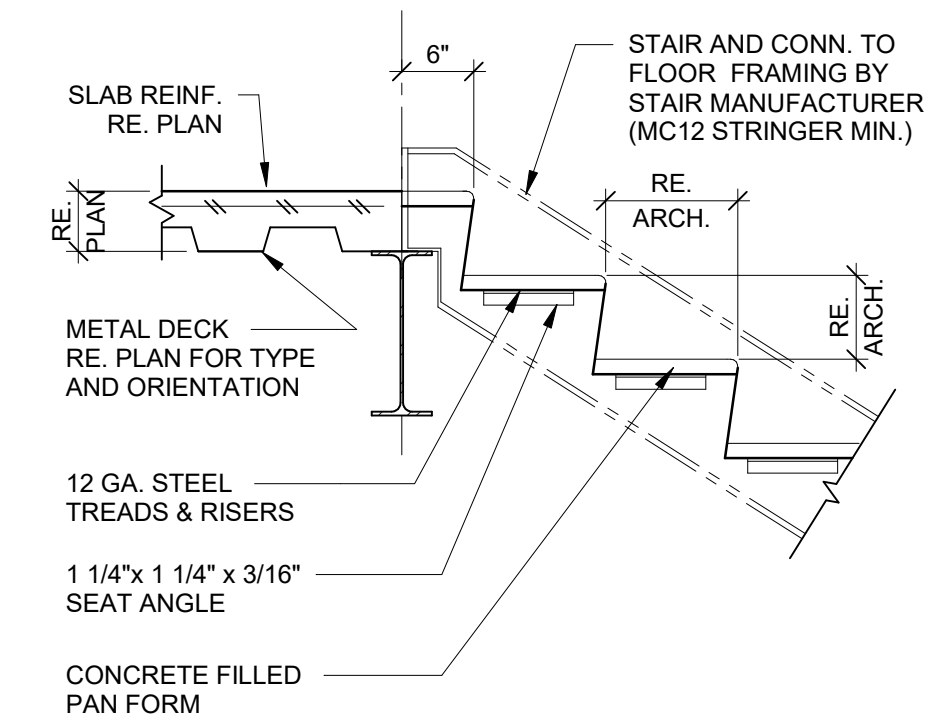


- NOTES:  
 1. TYPICAL MEMBER SIZES ARE SHOWN.  
 2. ALL MEMBER SIZES AND CONNECTIONS NOT FULLY DETAILED SHALL BE DESIGNED BY THE COLD-FORMED STEEL SUBCONTRACTOR.  
 3. REFERENCE CLARK DIETRICH, INC.'S COLD FORMED STEEL FRAMING SYSTEMS TECHNICAL INFORMATION CATALOG FOR ADDITIONAL INFORMATION.

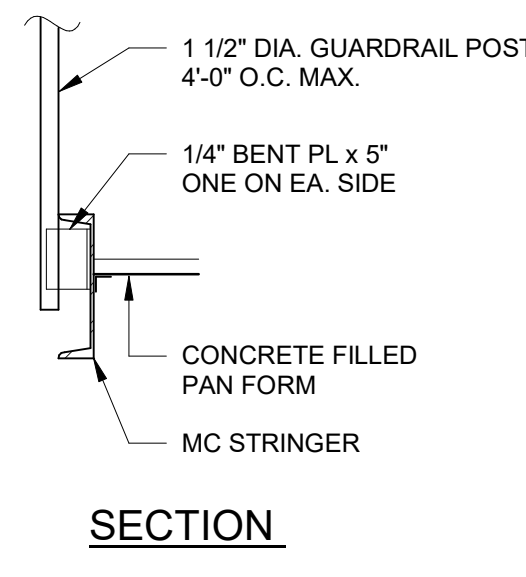
**1 COLD FORMED STEEL MEMBER PROPERTY SCHEDULE**  
 SCALE: 3/4" = 1'-0"



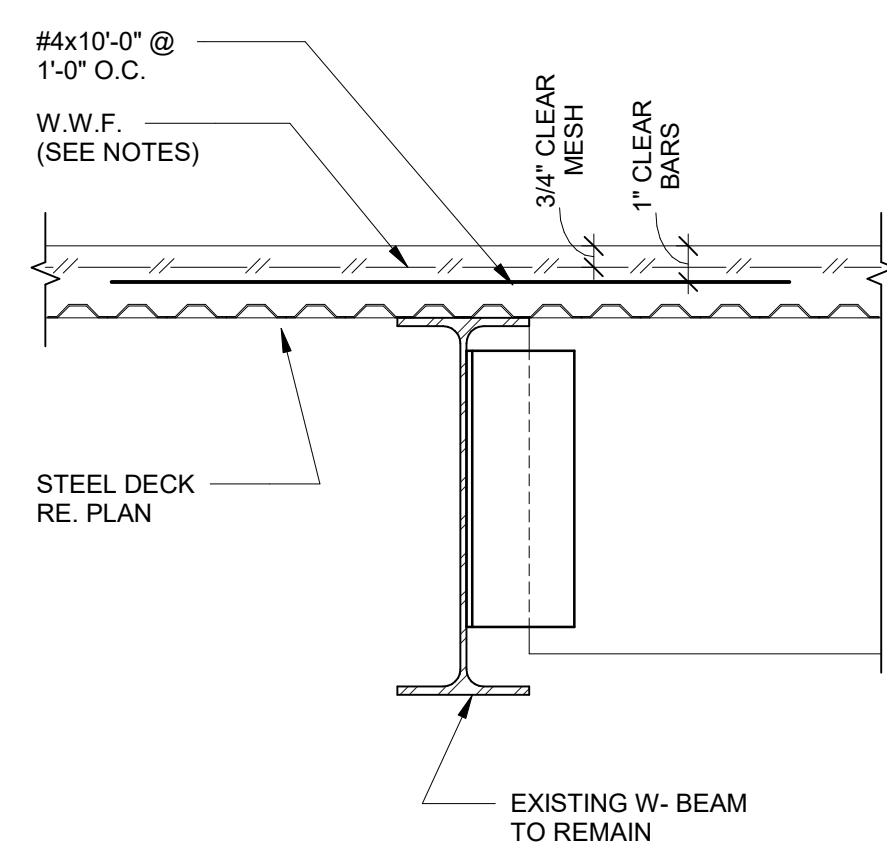
**2 FLOOR JOIST BLOCKING AND BOTTOM CHORD BRIDGING**  
 SCALE: 3/4" = 1'-0"



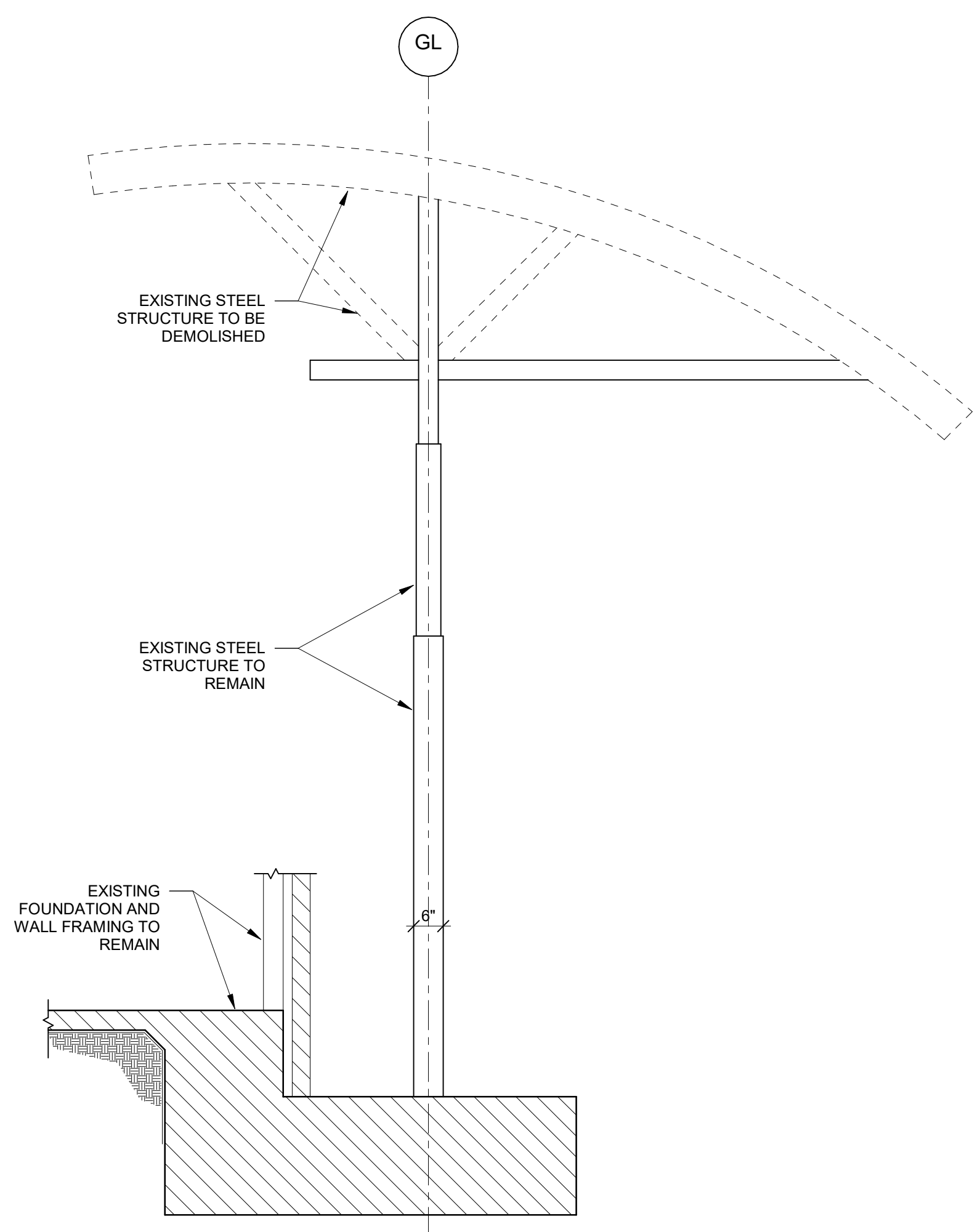
**3 TYPICAL STAIR DETAIL**  
 SCALE: 3/4" = 1'-0"



SECTION

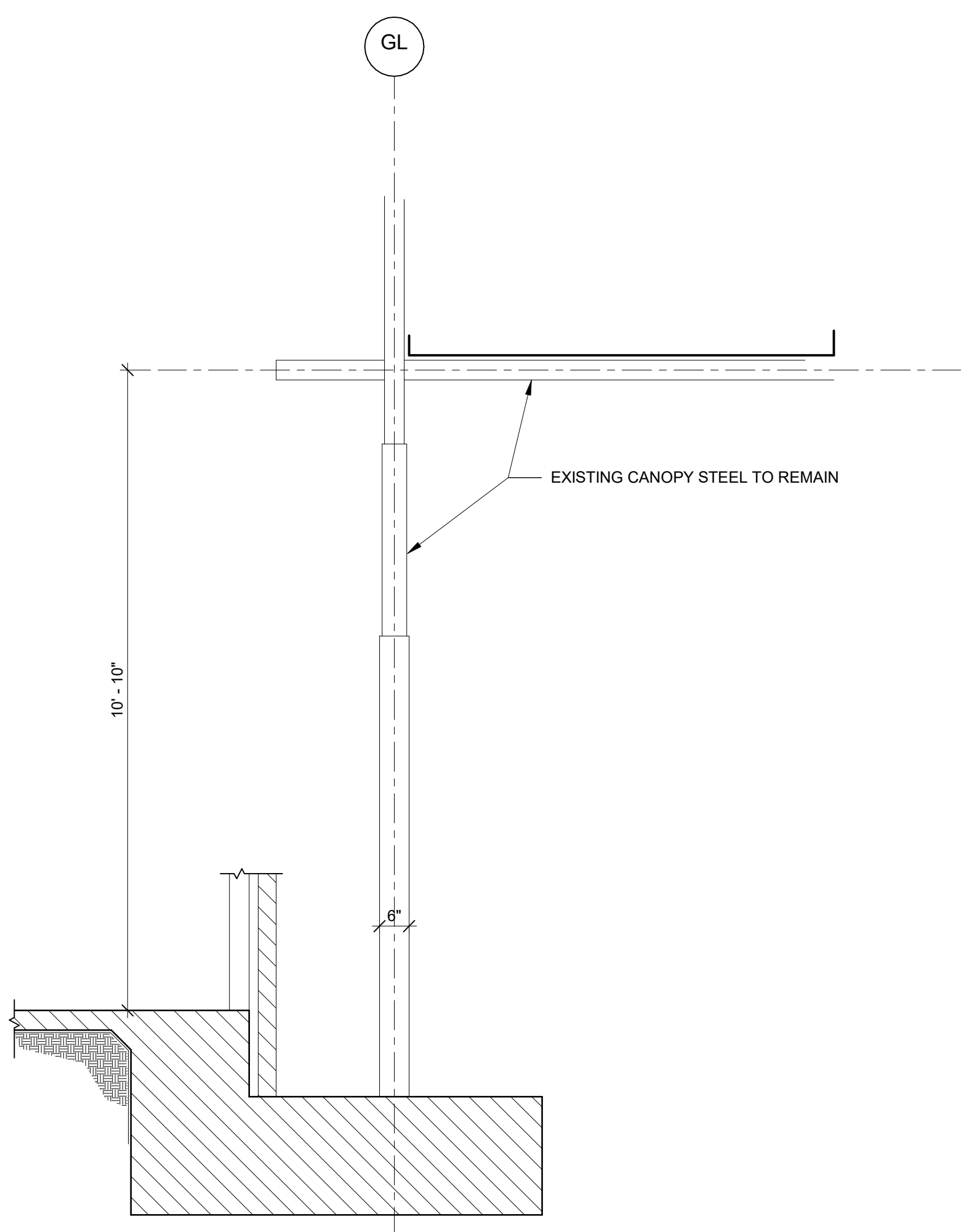


**4 COMPOSITE GIRDER**  
 SCALE: 1 1/2" = 1'-0"

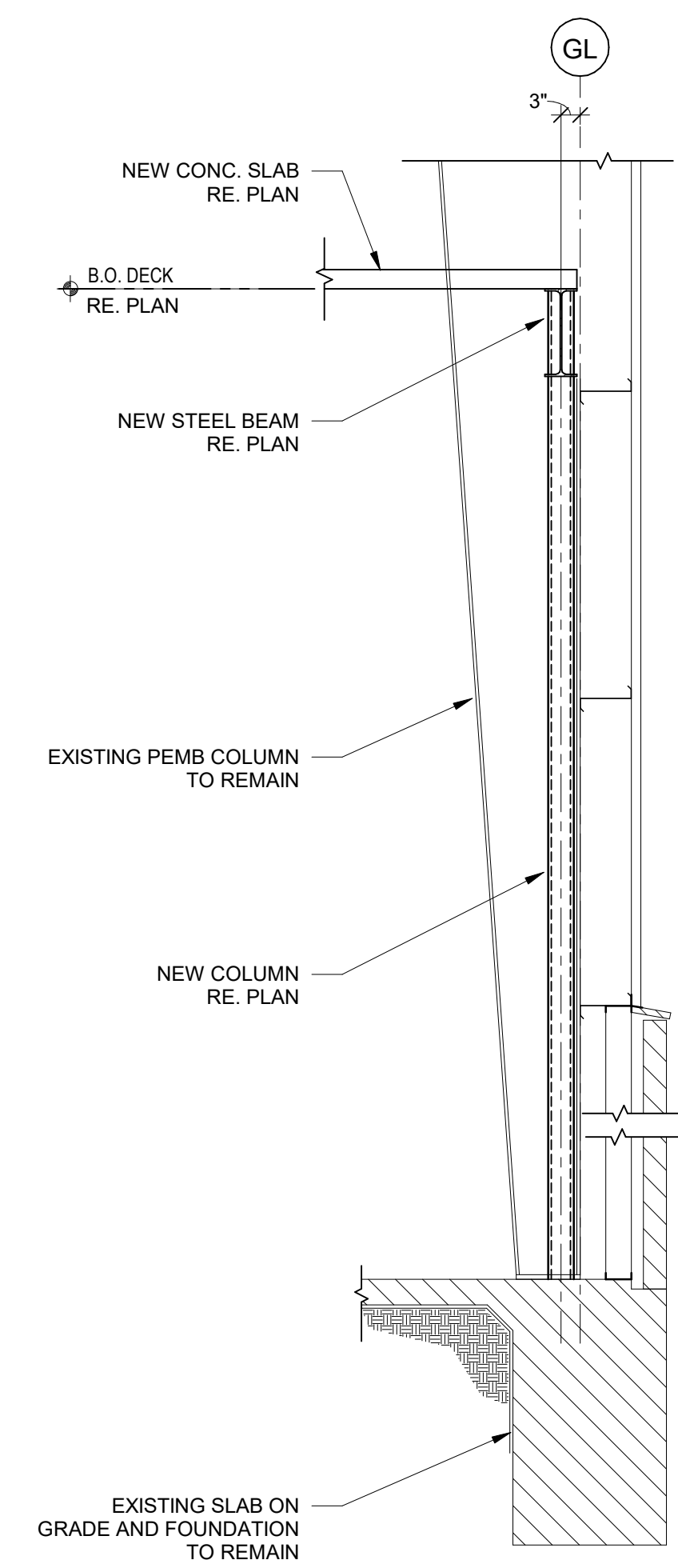


EXISTING STEEL CANOPY

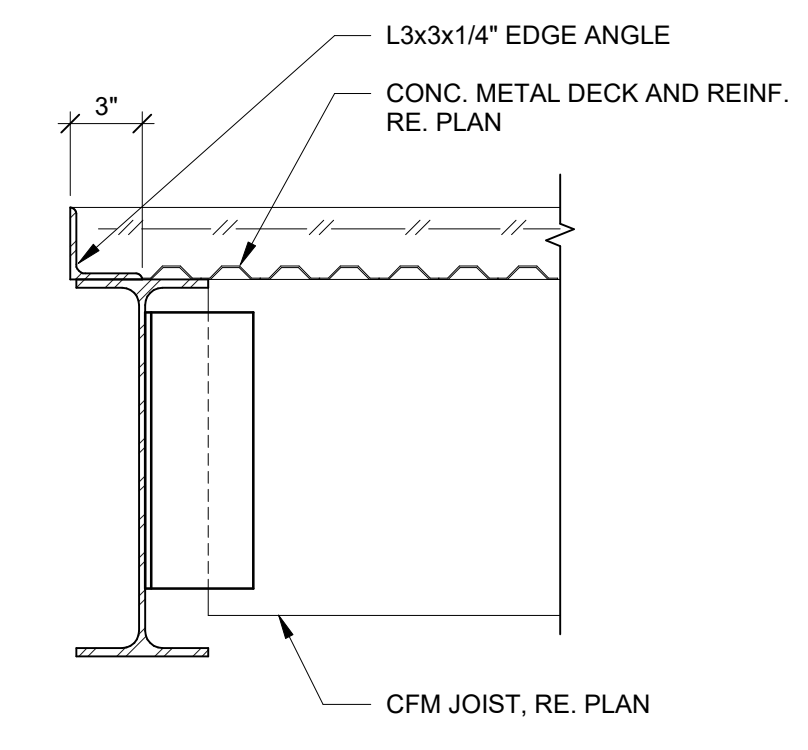
**5 CANOPY DETAIL**  
 SCALE: 1/2" = 1'-0"



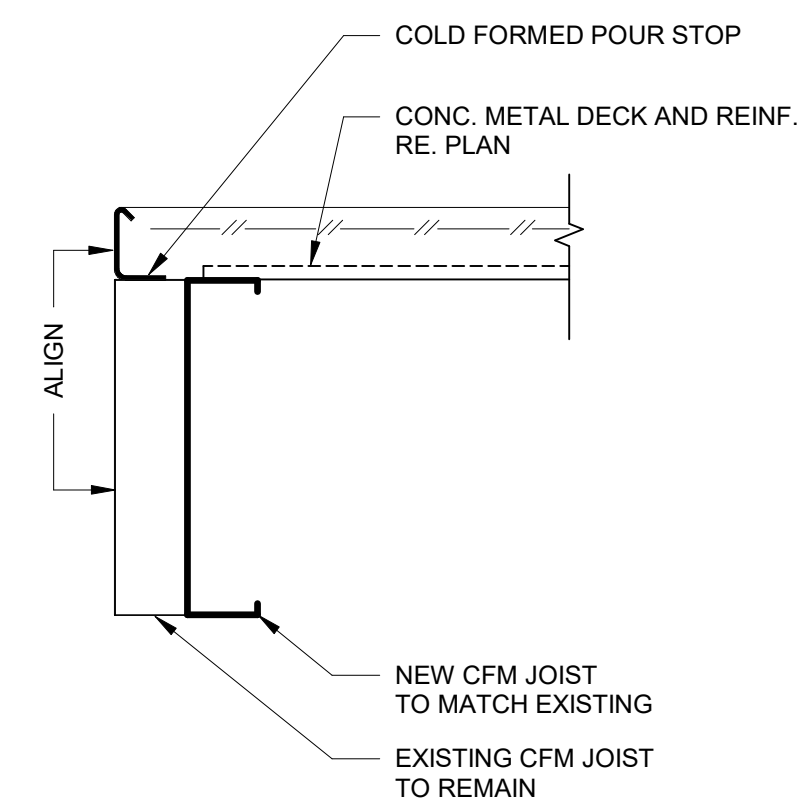
NEW STEEL CANOPY



**6 NEW COLUMN ALONG BUILDING WALL**  
 SCALE: 1/2" = 1'-0"



AT STEEL BEAM



AT CFMF JOIST

**7 SLAB EDGE DETAILS**  
 SCALE: 1 1/2" = 1'-0"



12/01/2023

**MIRA SAFETY**  
 1713 Hur Industrial Blvd  
 Cedar Park, TX 78613

ISSUE FOR PERMIT 12.01.2023

Project Number	23-01-014
Drawn By	JA
Checked By	OY

**FRACTAL**  
 Texas Firm Registration No. F-16958  
 FRACTAL Project No. 23-065-00  
 9722 Gaston Road Suite 150-241  
 Katy, TX 77494  
 Office +1-832-404-2280

**\$4.00**  
 FRAMING DETAILS

## MECHANICAL SYMBOLS AND ABBREVIATIONS

### GRILLES/DIFFUSERS:

	SUPPLY DIFFUSER
	SUPPLY DIFFUSER WITH 3-WAY THROW
	SUPPLY DIFFUSER WITH 2-WAY THROW
	SUPPLY DIFFUSER WITH 1-WAY THROW
	SLOT DIFFUSER
	ROUND SUPPLY DIFFUSER
	SIDEWALL MOUNTED SUPPLY REGISTER
	RETURN GRILLE
	EXHAUST GRILLE

### DUCT SYMBOLS:

	NEW SHEET METAL DUCTWORK
	EXISTING DUCT/PIPE TO BE REMOVED
	EXISTING DUCT/PIPE TO REMAIN
	SUPPLY OR OUTSIDE AIR DUCT
	RETURN AIR DUCT
	EXHAUST AIR DUCT
	DUCTWORK TRANSITION
	DUCTWORK TRANSITION - RECTANGULAR TO ROUND
	INCLINED RISE IN DUCTWORK
	INCLINED DROP IN DUCTWORK
	SUPPLY DUCT ELBOW UP OR DOWN
	RETURN DUCT ELBOW UP OR DOWN
	EXHAUST DUCT ELBOW UP OR DOWN
	DUCT ELBOW WITH FIXED TURNING VANES
	DUCT BRANCH TAKE-OFF
	ROUND SPIN-IN WITH DAMPER
	SQUARE TO ROUND TAP WITH DAMPER
	FLEXIBLE DUCT CONNECTION
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE/SMOKE DAMPER
	ELECTRIC OPERATED DAMPER
	BACKDRAFT DAMPER
	VOLUME DAMPER
	FLEXIBLE DUCTWORK

### SYMBOLS LEGEND NOTES:

- REFER TO PLANS AND SPECIFICATIONS FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN, PROVIDED BY THIS CONTRACTOR. PROJECT MAY NOT USE ALL SYMBOLS OR DEVICES INDICATED ON THIS LEGEND.

### EQUIPMENT:

	IN-LINE CABINET FAN
	FURNACE
	UNIT HEATER
	THERMOSTAT
	TEMPERATURE SENSOR
	SPACE CARBON DIOXIDE SENSOR
	HUMIDITY SENSOR
	PRESSURE SENSOR
	DUCT SMOKE DETECTOR

### GENERAL REFERENCES/NOTATIONS:

	CONNECT TO EXISTING
	NOTE DESIGNATION
	REVISION DESIGNATION
	MECHANICAL EQUIPMENT DESIGNATION
	DIFFUSER DESIGNATION AND CFM

### LINE TYPES:

	HEATING HOT WATER SUPPLY
	HEATING HOT WATER RETURN
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN

### PIPE SYMBOLS:

	PIPE TURNING UP/DOWN
--	----------------------

## MECHANICAL GENERAL NOTES

- CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW CONSTRUCTION DOCUMENTS. INFORMATION REGARDING COMPLETE WORK IS DISPERSED THROUGHOUT DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO COMPLETE DOCUMENT SET.
- COORDINATE WITH WORK OF OTHER SECTIONS. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE. PROVIDE DUCT AND PIPE RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF DISCREPANCIES BEFORE STARTING WORK.
- DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING AUTHORITY. PURCHASE ALL PERMITS ASSOCIATED WITH WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE.
- INSTALL EXHAUST FANS DISCHARGE MINIMUM OF 10 FT FROM INTAKE AIR OPENINGS.

## HVAC SEQUENCE OF OPERATIONS

PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING IN CONDUIT, AND ALL MISCELLANEOUS ITEMS TO ACCOMPLISH THE FOLLOWING SEQUENCE OF OPERATION:

### AIR HANDLING UNIT:

THE UNIT CONTROLLER SHALL BE SET TO DETERMINE OCCUPIED AND UNOCCUPIED HOURS OF OPERATION. HOURS SHALL BE COORDINATED WITH OWNER.

### OCCUPIED MODE:

SUPPLY FAN SHALL RUN CONTINUOUSLY AND OUTSIDE AIR DAMPER SHALL OPEN TO MINIMUM POSITION TO DELIVER SCHEDULED QUANTITY OF VENTILATION AIR.

### COOLING:

UPON SIGNAL FROM UNIT CONTROLLER, IF SPACE TEMPERATURE RISES 2 DEGREES OR MORE ABOVE SET POINT, COOLING SHALL BE ENERGIZED. WHEN TEMPERATURE FALLS 2 DEGREES BELOW SET POINT, COMPRESSOR SHALL BE DE-ENERGIZED.

### HEATING:

UPON SIGNAL FROM UNIT CONTROLLER, WHEN SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW SET POINT, GAS HEAT SHALL BE ENERGIZED AND OPERATE UNTIL SPACE TEMPERATURE IS SATISFIED. WHEN TEMPERATURE RISES 2 DEGREES ABOVE SET POINT, GAS HEAT SHALL BE DE-ENERGIZED.

### UNOCCUPIED MODE:

### COOLING:

UPON SIGNAL FROM UNIT CONTROLLER, SUPPLY FAN SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPER SHALL CLOSE. IF SPACE TEMPERATURE RISES 2 DEGREES OR MORE ABOVE UNOCCUPIED SET POINT, OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. SUPPLY FAN SHALL BE ACTIVATED AND COOLING SHALL BE ENERGIZED. WHEN TEMPERATURE FALLS 2 DEGREES BELOW SET POINT, COMPRESSOR SHALL BE DE-ENERGIZED AND FAN SHALL SHUT OFF.

### HEATING:

UPON SIGNAL FROM UNIT CONTROLLER, WHEN SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW SET POINT, OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. SUPPLY FAN SHALL BE ACTIVATED AND GAS HEAT SHALL BE ENERGIZED UNTIL SPACE TEMPERATURE IS SATISFIED. WHEN TEMPERATURE RISES 2 DEGREES ABOVE SET POINT, GAS HEAT AND SUPPLY FAN SHALL BE DE-ENERGIZED.

### SET POINTS:

OCCUPIED COOLING:	72°F
OCCUPIED HEATING:	70°F
UNOCCUPIED COOLING:	80°F
UNOCCUPIED HEATING:	65°F

### SMOKE DETECTOR SHUT DOWN:

SMOKE DETECTOR SHALL DE-ENERGIZE SUPPLY FAN AND CLOSE OUTSIDE AIR DAMPER IN BOTH OCCUPIED AND UNOCCUPIED MODES WHENEVER SMOKE IS SENSED BY SMOKE DETECTOR.

## REFRIGERANT PIPING NOTE

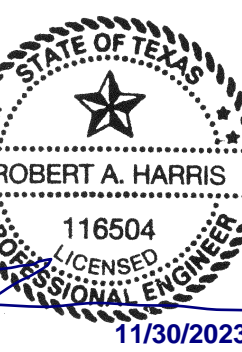
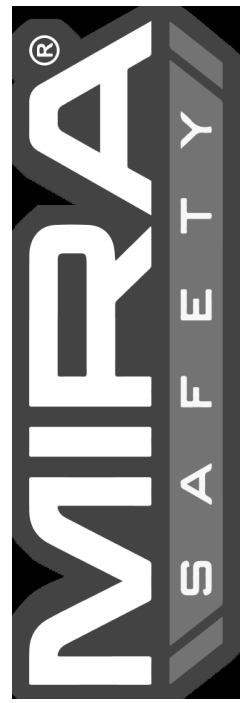
REFRIGERANT PIPE(S) SIZES SHALL BE DETERMINED BY THE COMPRESSORIZED EQUIPMENT MANUFACTURER OR THEIR REPRESENTATIVE, WHO SHALL ALSO DETERMINE THE NEED FOR DOUBLE SUCTION PIPE RISERS, ACCUMULATORS AND OTHER APPURTENANCES REQUIRED FOR PROPER LONG TERM OPERATION OF THE EQUIPMENT. REFRIGERANT PIPE(S) SIZING AND ROUTING SHALL MEET ALL SYSTEM OPERATING CONDITIONS. THE CONTRACTOR SHALL PROVIDE TO THE OWNER AND ENGINEER LETTERS AND DRAWINGS THAT ADEQUATELY DEPICT THE REFRIGERANT PIPING AND COMPONENTS, AND INDICATE THE RECOMMENDATIONS PROVIDED TO THEM BY THE MANUFACTURER OR THEIR REPRESENTATIVE.

## MECHANICAL REMODEL NOTES

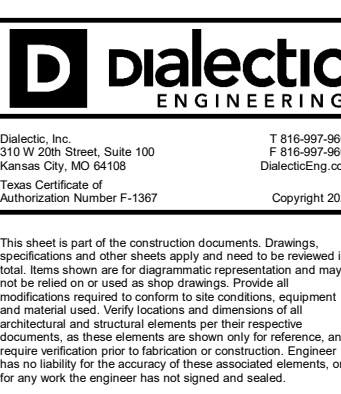
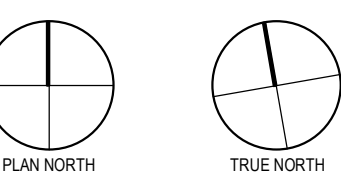
THIS DRAWING IS BASED ON BEST AVAILABLE INFORMATION AT TIME OF DESIGN AND MAY NOT REFLECT AS-BUILT CONDITIONS. ALL MECHANICAL INSTALLATIONS INDICATED ON THIS SHEET SHALL BE FIELD VERIFIED PRIOR TO BID AND DEMOLITION.

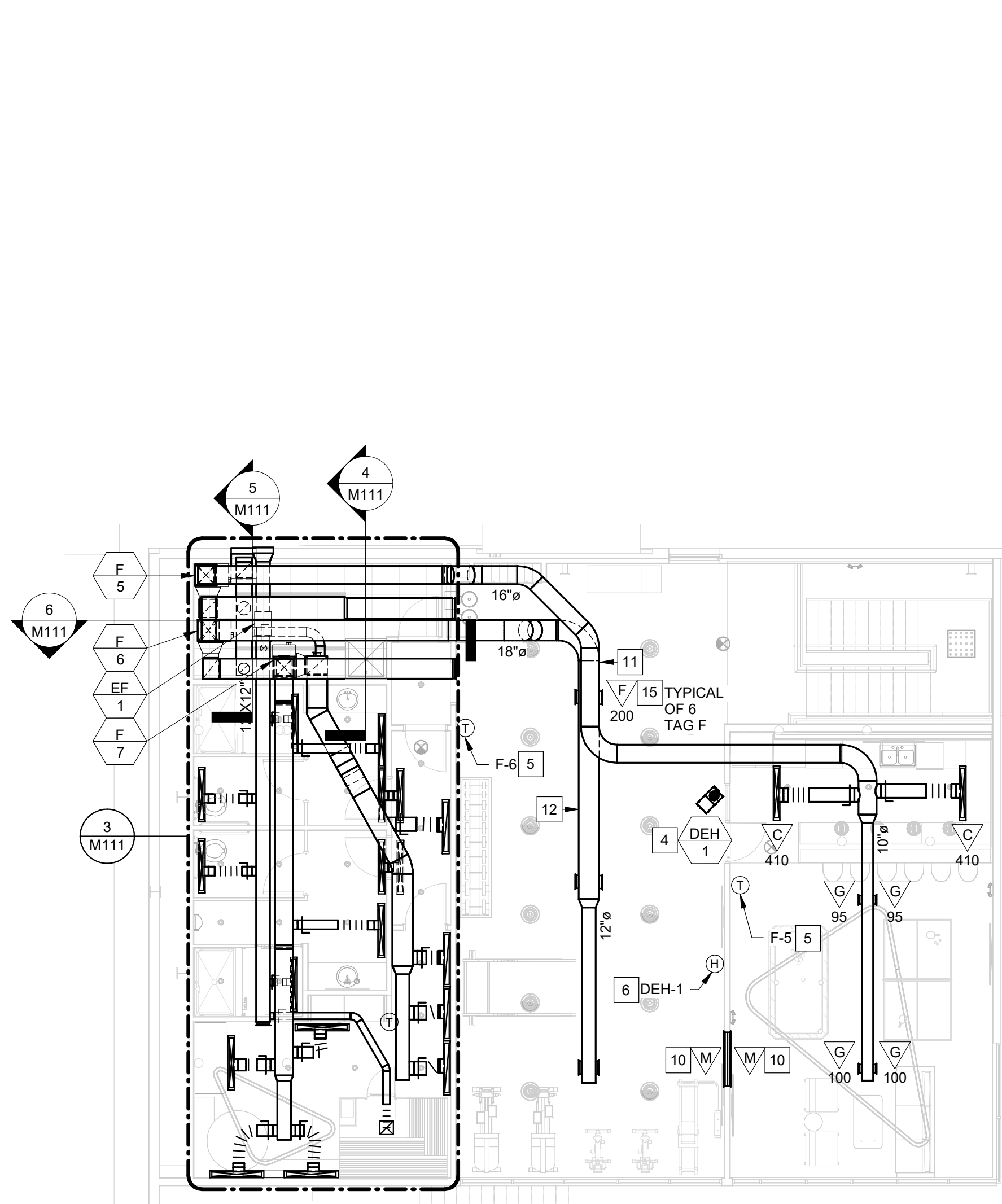
## EXISTING DUCTWORK NOTES

REUSE AS MUCH OF THE EXISTING DUCTWORK AS POSSIBLE. DUCTWORK SIZES LISTED ON DUCTWORK SHOWN AS EXISTING ON DRAWING ARE MINIMUM REQUIRED DUCT SIZES FOR AIR FLOWS LISTED. FIELD VERIFY SIZES OF EXISTING DUCTWORK PRIOR TO BID. IF EXISTING DUCT SIZE DOES NOT MEET MINIMUM REQUIRED SIZE LISTED ON DRAWING, PROVIDE NEW.

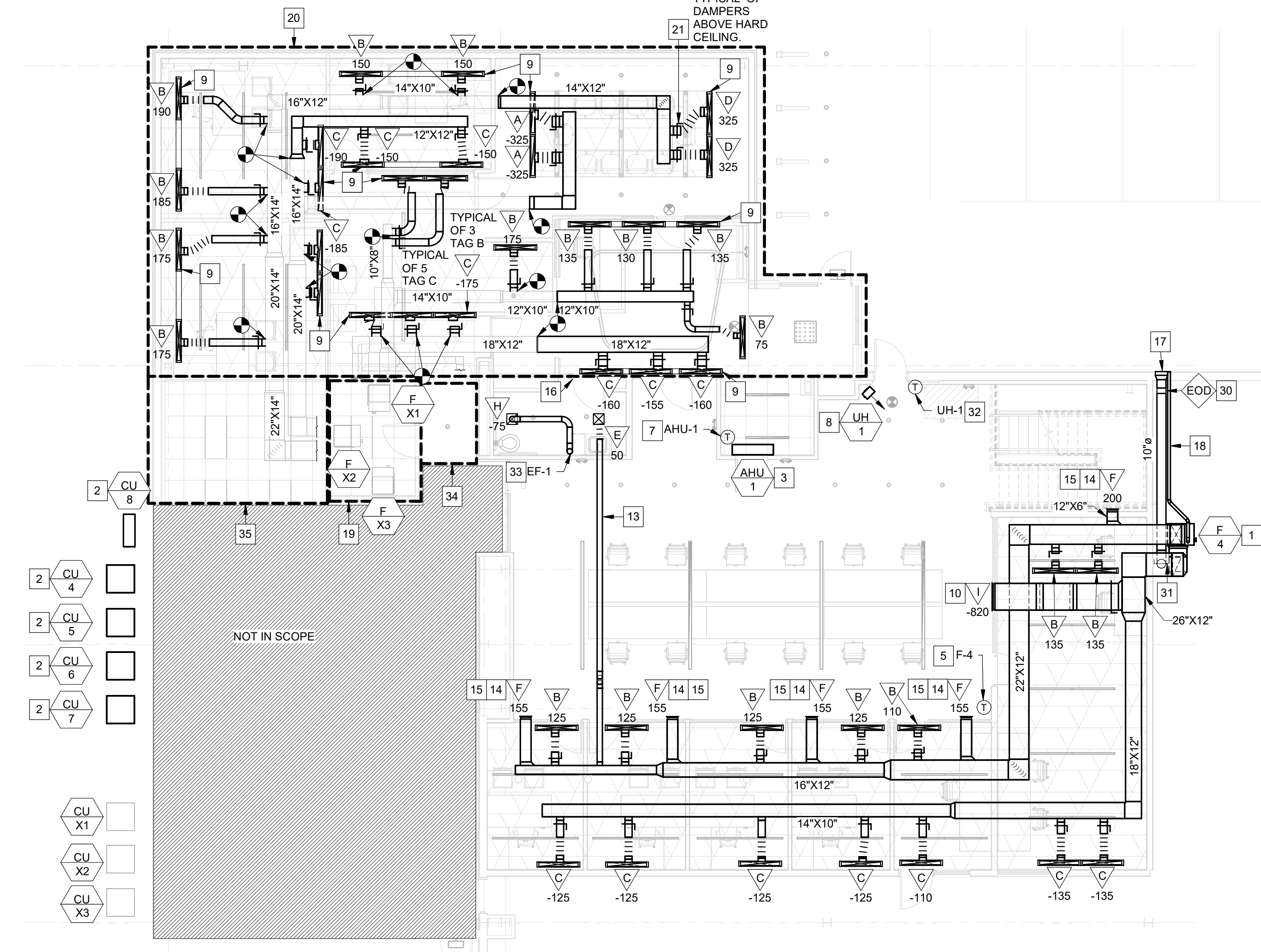


**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

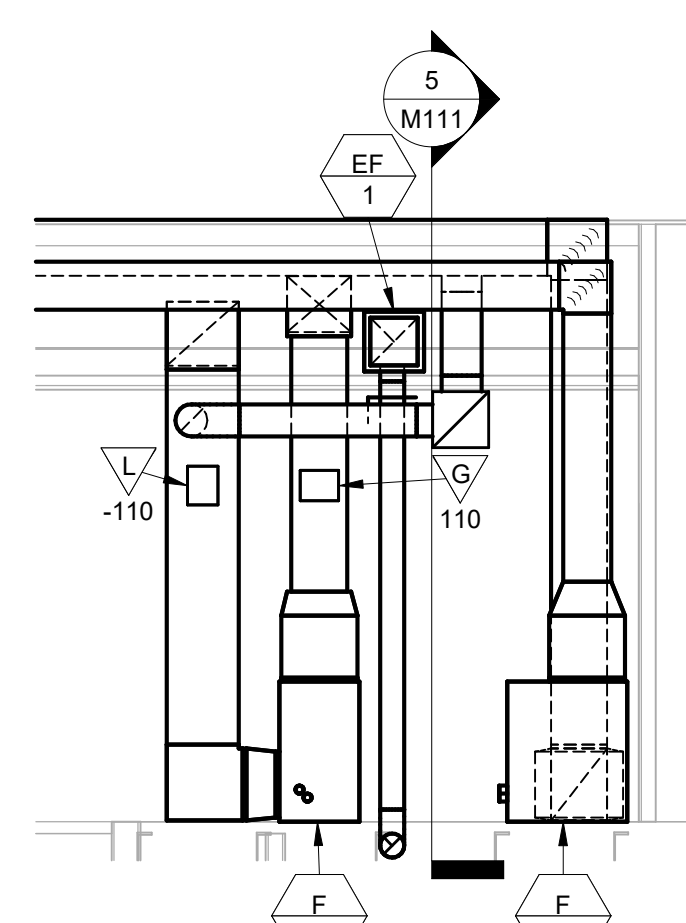




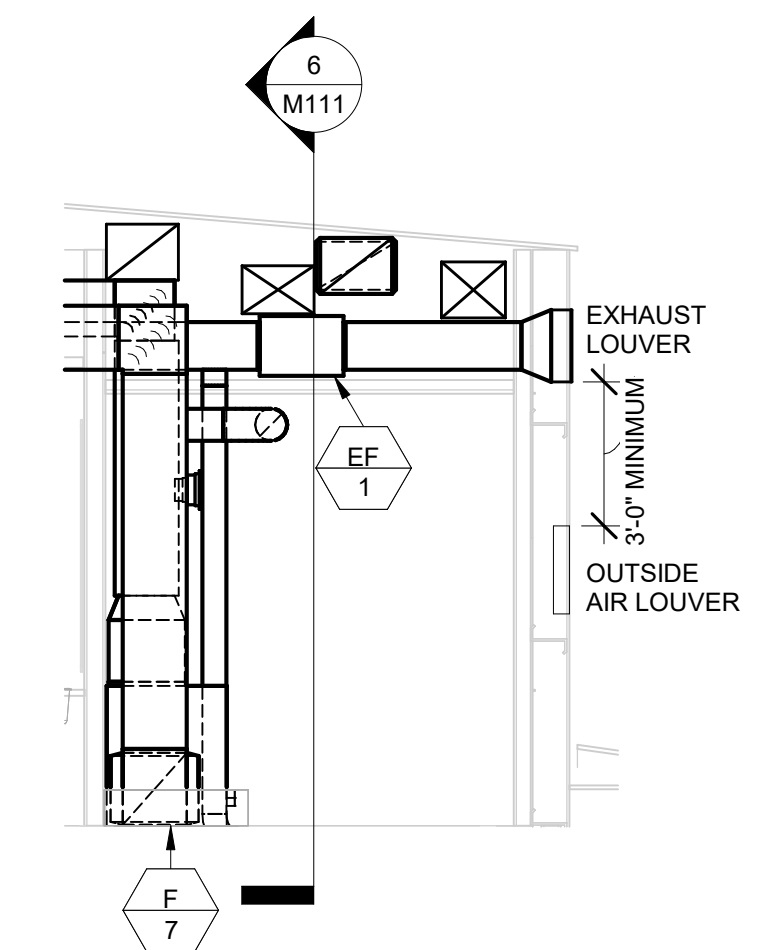
**2 OVERALL MECHANICAL PLAN - LV 2**  
1/8" = 1'-0"



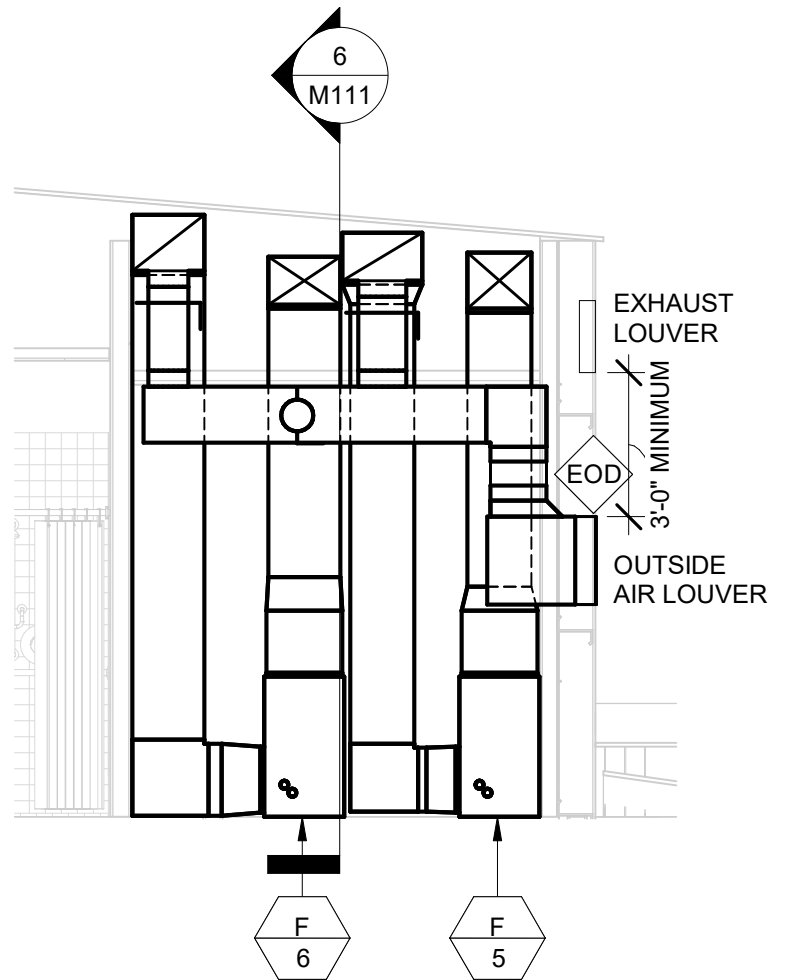
**1 OVERALL MECHANICAL PLAN - LV 1**  
1/8" = 1'-0"



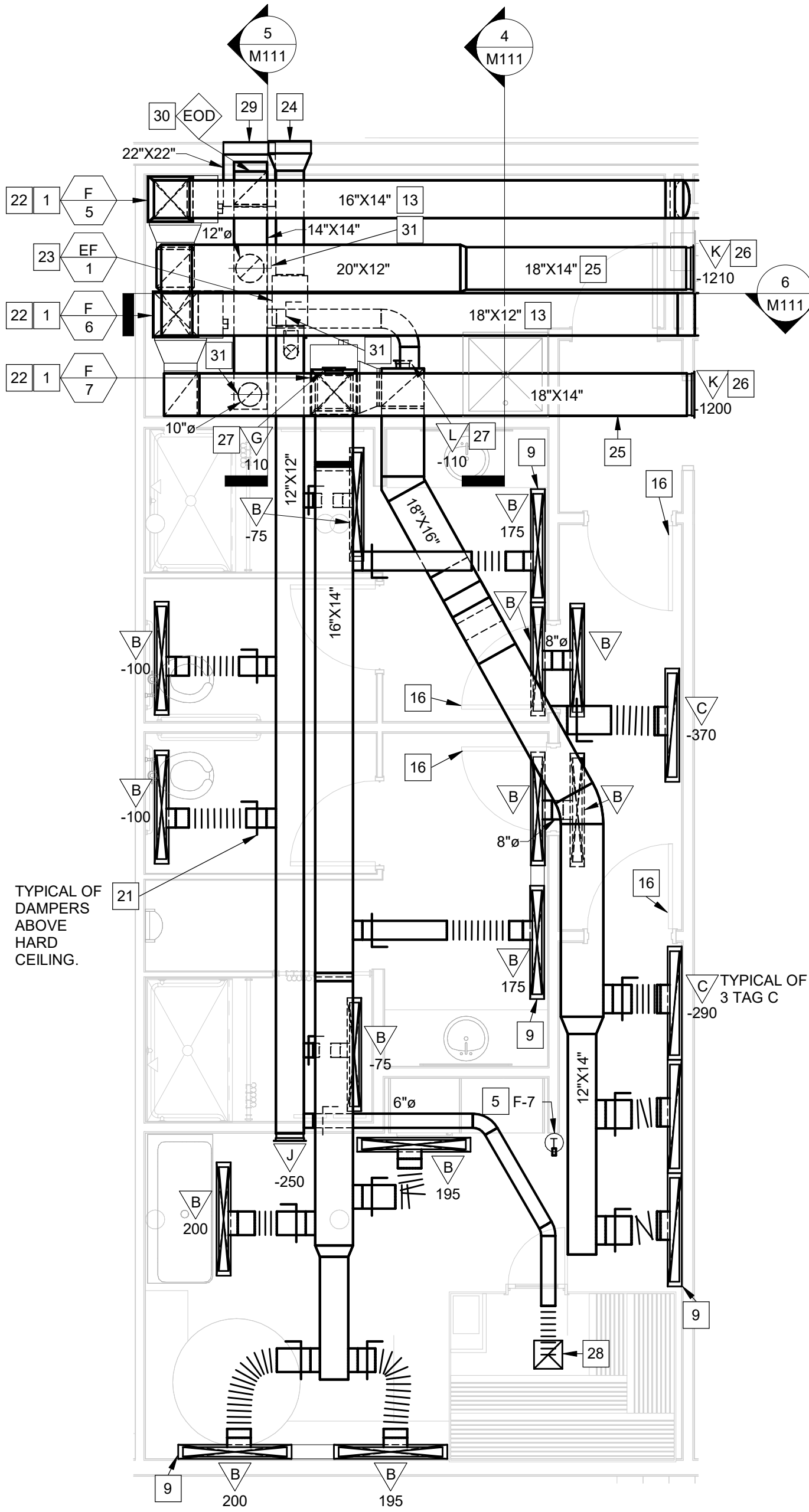
**6 MECHANICAL JANITOR ROOM - SECTION 3**  
1/4" = 1'-0"



**4 MECHANICAL JANITOR ROOM - SECTION 1**  
1/4" = 1'-0"



**5 MECHANICAL JANITOR ROOM - SECTION 2**  
1/4" = 1'-0"



**3 ENLARGED MECHANICAL PLAN - LV 2**  
1/4" = 1'-0"

- MECHANICAL KEY NOTES**
- PROVIDE FURNACE AND DIRECT EXPANSION COOLING COIL AND HOUSE KEEPING PAD. INSTALL UNIT LEVEL FOR PROPER CONDENSATE DRAINAGE. PROVIDE FLEXIBLE CONNECTORS ON THE SUPPLY AND RETURN AIR DUCT CONNECTIONS.
  - PROVIDE CONDENSING UNIT AND CONCRETE PAD. COORDINATE INSTALLATION LOCATION WITH OWNER REPRESENTATIVE. PROVIDE MANUFACTURER'S RECOMMENDED TYPE AND SIZE OF REFRIGERANT PIPING FROM AIR HANDLING UNIT TO CONDENSING UNIT. INSULATE SUCTION LINE WITH 1" THICK ARMAFLEX AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH. TRAP AND SLOPE LINES PER MANUFACTURER'S RECOMMENDATIONS.
  - PROVIDE WALL MOUNTED DUCTLESS SPLIT SYSTEM AIR HANDLING UNIT. INSTALL UNIT LEVEL FOR PROPER CONDENSATE DRAINAGE. PROVIDE WITH CONDENSATE PAN AND OVERFLOW SWITCH. MOUNT UNIT 2" ABOVE DOOR HEIGHT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  - PROVIDE DEHUMIDIFICATION UNIT. MOUNT BOTTOM OF DEHUMIDIFICATION UNIT 12'-0" ABOVE FINISHED FLOOR. INSTALL UNIT LEVEL FOR PROPER CONDENSATE DRAINAGE SUPPORT UNIT FROM STRUCTURE ABOVE WITH CHANNEL AND ALL-THREAD ROD WITH SPRING VIBRATION ISOLATORS.
  - PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTO-CHANGEOVER AND AUTOMATIC START CAPABILITY. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR.
  - PROVIDE WALL MOUNTED DEH-3000 REMOTE MOUNTED DIGITAL CONTROLLER. MOUNT SENSOR AT 48" ABOVE FINISHED FLOOR.
  - PROVIDE WIRED REMOTE CONTROLLER FOR DUCTLESS SPLIT SYSTEM. MOUNT 48" ABOVE FINISHED FLOOR.
  - PROVIDE UNIT HEATER. MOUNT HEATER 10'-0" ABOVE FINISHED FLOOR FROM STRUCTURE ABOVE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUSPEND FROM STRUCTURE WITH STEEL CHANNEL AND THREADED ROD.
  - PROVIDE CONTINUOUS SLOT DIFFUSER. PROVIDE BLANK OFF SECTIONS AS REQUIRED TO PROVIDE CONTINUOUS LOOK.
  - MOUNT GRILLE AS HIGH AS POSSIBLE.
  - MOUNT DUCTWORK APPROXIMATELY 10'-1" ABOVE FINISHED FLOOR.
  - MOUNT DUCTWORK APPROXIMATELY 9'-5" ABOVE FINISHED FLOOR.
  - MOUNT DUCTWORK TIGHT TO STRUCTURE ABOVE.
  - MOUNT BOTTOM OF GRILLE/REGISTER ABOVE ADJACENT CEILING.
  - DIRECT SUPPLY GRILLE VANES 22.5° DOWNWARD WITH A 22.5° SPREAD.
  - UNDERCUT DOOR 1" FOR TRANSFER AIR.
  - PROVIDE 14"x14" WITH LOUVER IN WALL. LOUVER SHALL BE GREENHECK MODEL EVH-501 OR APPROVED EQUAL. LOUVER SHALL HAVE A MINIMUM 0.4 SF OF FREE AREA. MOUNT LOUVER APPROXIMATELY 8'-11" ABOVE GRADE. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS. PROVIDE WITH KYNAR FINISH, EXTENDED SILL AND BIRD SCREEN. ARCHITECT TO SPECIFY COLOR OF KYNAR.
  - PROVIDE CONCENTRIC VENT KIT THROUGH EXTERIOR WALL FOR GAS FURNACE COMBUSTION AIR INTAKE AND FLUE IN ACCORDANCE WITH FURNACE MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL CONCENTRIC VENT KIT PER MANUFACTURER'S INSTALLATION MANUAL. RUN FURNACE COMBUSTION AIR INTAKE AND FLUE FROM FURNACE TO TERMINATION LOCATION SHOWN AS EFFICIENTLY AS POSSIBLE TO STAY WITHIN FURNACE MANUFACTURER'S LENGTH LIMITATIONS. SIZE FURNACE COMBUSTION AIR INTAKE AND FLUE PER MANUFACTURER'S INSTRUCTIONS.

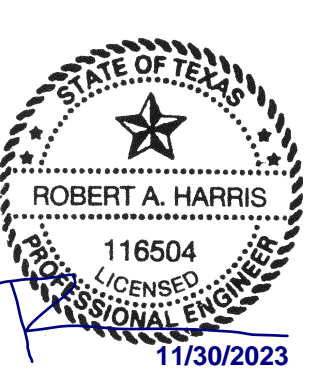
- MECHANICAL KEY NOTES**
- ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, ACCESSORIES, ETC. IN AREA TO REMAIN. CLEAN AND REPAIR EQUIPMENT TO GOOD WORKING CONDITION.
  - DEMOLISH ALL EXISTING DIFFUSERS/GRILLE AND ASSOCIATED BRANCH DUCTWORK IN SHOWN AREA. PATCH, SEAL, AND CAP MAIN TRUNK DUCTWORK AS REQUIRED.
  - PROVIDE YOUNG REGULATOR MODEL 5022CC ROUND CABLE CONTROLLED OPPOSED BLADE BALANCING DAMPER, MODEL 270-301EZ BOWDEN CABLE CONTROL KIT, AND BCW CONTROL WIRE AND CASINGS. COORDINATE INSTALLATION LOCATION WITH ARCHITECT AND MOUNT CABLE CONTROLLER IN DIFFUSER PLENUM IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE FOR ALL DAMPERS ABOVE HARD CEILING.
  - PROVIDE CONCENTRIC VENT KIT THROUGH EXTERIOR WALL FOR GAS FURNACE COMBUSTION AIR INTAKE AND FLUE IN ACCORDANCE WITH FURNACE MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL CONCENTRIC VENT KIT PER MANUFACTURER'S INSTALLATION MANUAL. RUN FURNACE COMBUSTION AIR INTAKE AND FLUE FROM FURNACE TO EXTERIOR WALL. PLAN WEST BEHIND UNIT AS EFFICIENTLY AS POSSIBLE TO STAY WITHIN FURNACE MANUFACTURER'S LENGTH LIMITATIONS. SIZE FURNACE COMBUSTION AIR INTAKE AND FLUE PER MANUFACTURER'S INSTRUCTIONS.
  - PROVIDE INLINE RESTROOM EXHAUST FAN. MOUNT BOTTOM OF INLINE FAN 9'-5" ABOVE FINISHED FLOOR. SUPPORT UNIT FROM STRUCTURE ABOVE WITH CHANNEL AND ALL-THREAD ROD WITH SPRINGS AND VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTIONS IN THE INLET AND OUTLET CONNECTIONS.
  - PROVIDE 18"x18" WITH LOUVER IN WALL. LOUVER SHALL BE GREENHECK MODEL EVH-501 OR APPROVED EQUAL. LOUVER SHALL HAVE A MINIMUM 0.8 SF OF FREE AREA. MOUNT LOUVER APPROXIMATELY 22'-3" ABOVE GRADE. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS. PROVIDE WITH KYNAR FINISH, EXTENDED SILL AND BIRD SCREEN. ARCHITECT TO SPECIFY COLOR OF KYNAR.
  - MOUNT DUCTWORK APPROXIMATELY 11'-1" ABOVE FINISHED FLOOR.
  - MOUNT BOTTOM OF GRILLE APPROXIMATELY 11'-1" ABOVE FINISHED FLOOR.
  - MOUNT BOTTOM OF GRILLE/REGISTER 7'-0" ABOVE FINISHED FLOOR.
  - CONNECT EXHAUST DUCTWORK TO SAUNA EXHAUST CONNECTION PER MANUFACTURER'S REQUIREMENTS. SIZE EXHAUST DUCTWORK AND BALANCE TO AIRFLOW RECOMMENDED BY MANUFACTURER. NOTIFY ENGINEER IMMEDIATELY IF AIRFLOW REQUIREMENT IS 100 CFM OR GREATER.
  - PROVIDE 22"x22" WITH LOUVER IN WALL. LOUVER SHALL BE GREENHECK MODEL EVH-501 OR APPROVED EQUAL. LOUVER SHALL HAVE A MINIMUM 1.4 SF OF FREE AREA. MOUNT LOUVER APPROXIMATELY 17'-5" ABOVE GRADE. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS. PROVIDE WITH KYNAR FINISH, EXTENDED SILL AND BIRD SCREEN. ARCHITECT TO SPECIFY COLOR OF KYNAR.
  - PROVIDE (1) 120 VOLT ELECTRICALLY OPERATED DAMPER (EOD) IN OUTSIDE AIR DUCT AS INDICATED. EOD SHALL FULLY OPEN DURING OCCUPIED HOURS AND FULLY CLOSE DURING UNOCCUPIED PERIODS.
  - PROVIDE (1) MANUAL DAMPER IN OUTSIDE AIR DUCT AS INDICATED. SET MANUAL DAMPER TO INDICATED SCHEDULED OUTSIDE AIR FLOW.
  - PROVIDE THERMOSTAT FOR UNIT HEATER. INSULATE EXTERIOR WALL BEHIND THERMOSTAT AND CAULK WIRE PENETRATION THROUGH WALL. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR.
  - CONTINUE EXHAUST DUCTWORK UP THROUGH FLOOR. CONNECT TO EXHAUST DUCTWORK MAIN SHOWN ON FLOOR 2.
  - BALANCE DIFFUSER/GRILLE AIRFLOW TO 150 CFM IN SHOWN AREA. FIELD VERIFY EXACT CONDITIONS PRIOR TO BID.
  - BALANCE AIRFLOW IN AREA TO 225 CFM. FIELD VERIFY EXACT CONDITIONS PRIOR TO BID.

**ROUND DUCT SIZING**

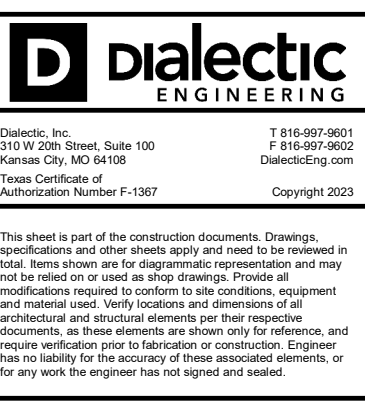
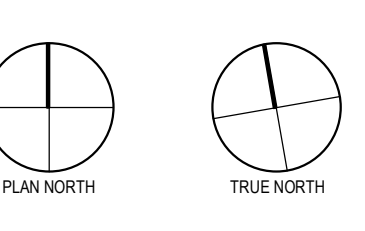
UNLESS NOTED OTHERWISE ON PLANS, THE FOLLOWING CHART SHALL APPLY TO ROUND DUCT SIZES FOR SUPPLY AIR\*, RETURN AIR AND OUTSIDE AIR.

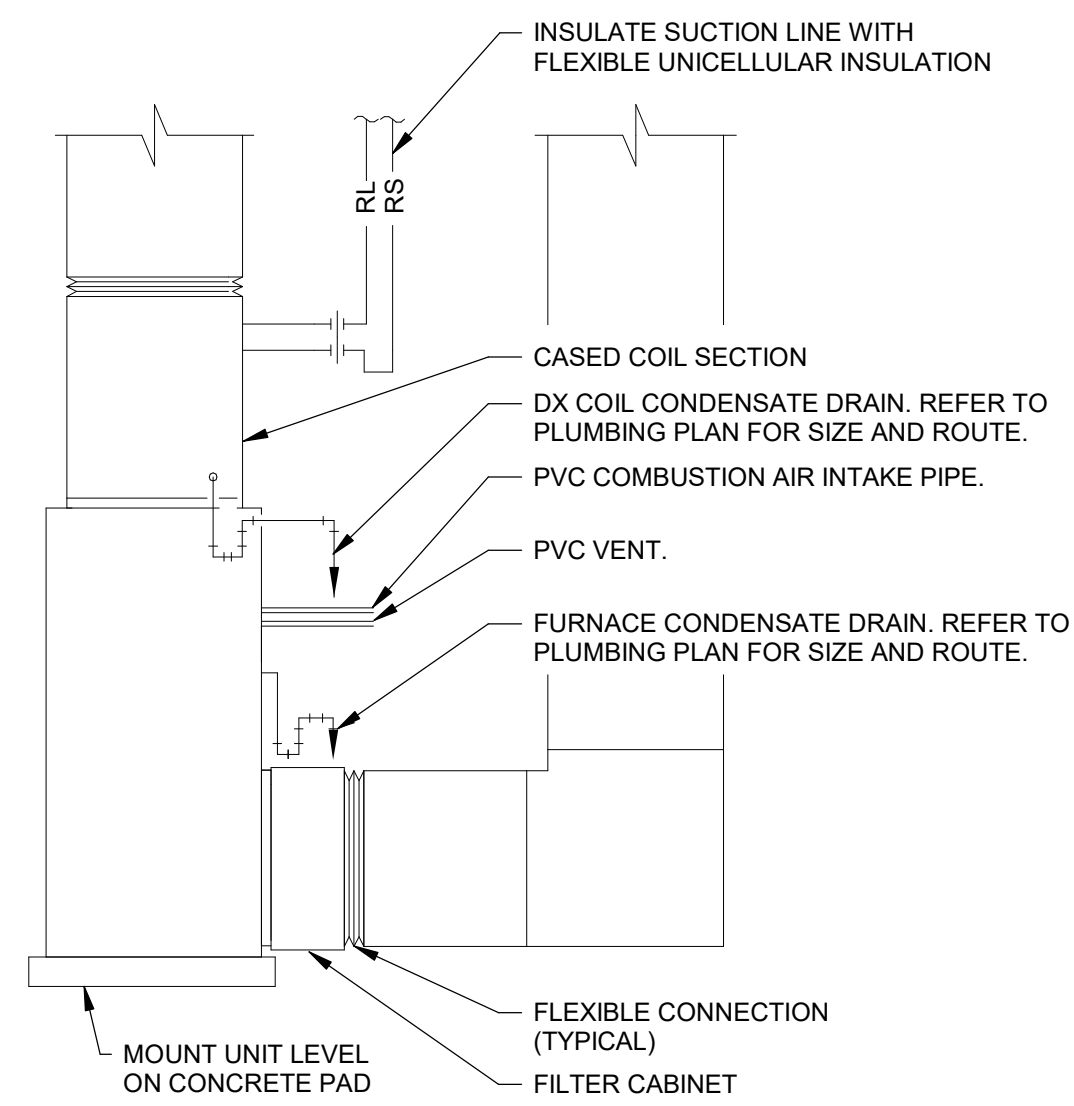
SUPPLY AND EXHAUST AIR CFM RANGE	DUCT SIZE	RETURN AIR CFM RANGE
0-100	6"	0-70
105-200	8"	75-155
205-395	10"	160-285
400-605	12"	290-465
610-920	14"	470-710
925-1200	16"	715-1015

\* DIFFUSER NECK SIZES SHALL MATCH SUPPLY AIR DUCT SIZING.

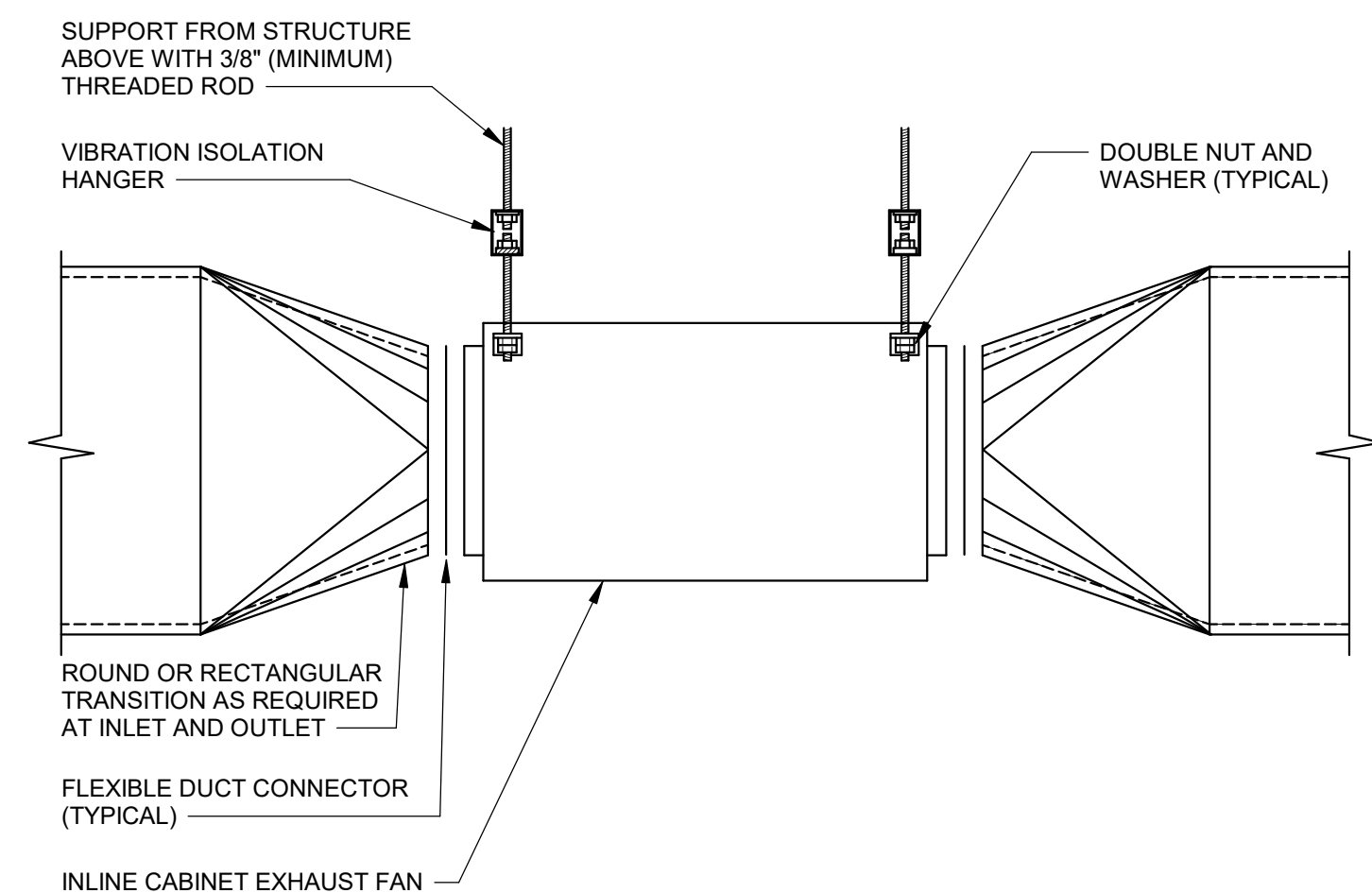


**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

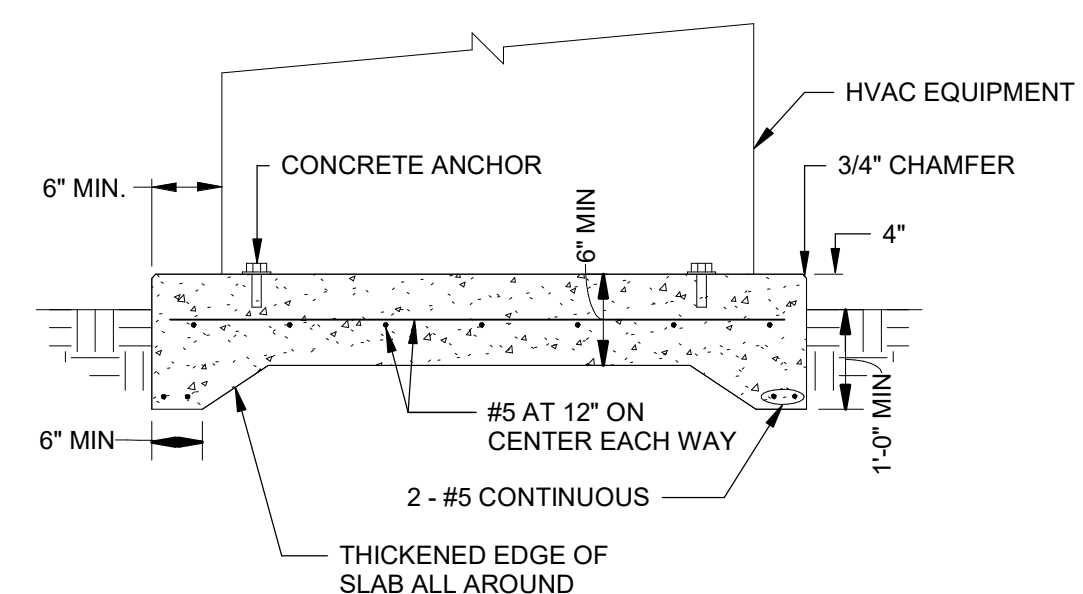




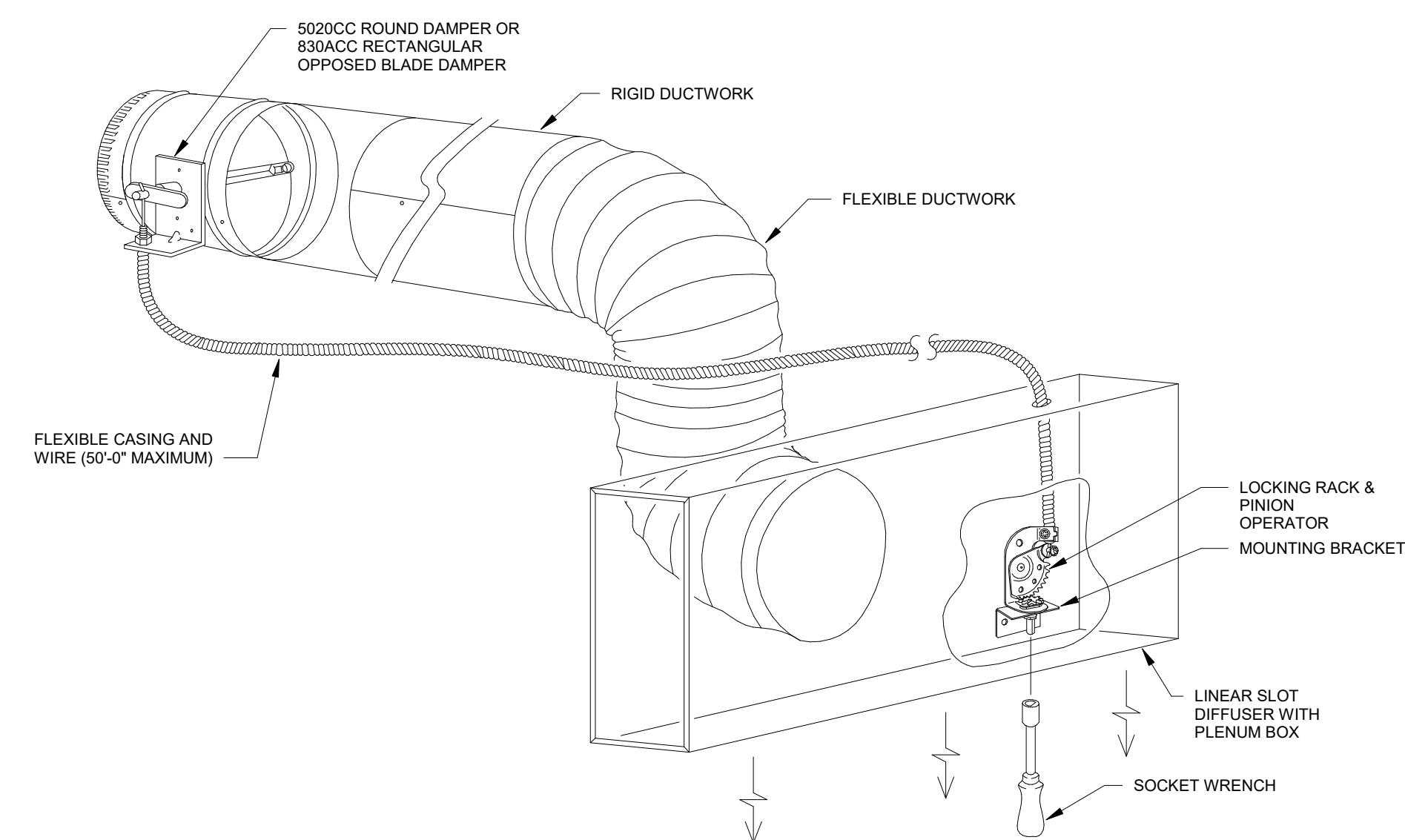
**7 VERTICAL FURNACE INSTALLATION DETAIL**  
NOT TO SCALE



**4 INLINE CABINET FAN DETAIL**  
NOT TO SCALE

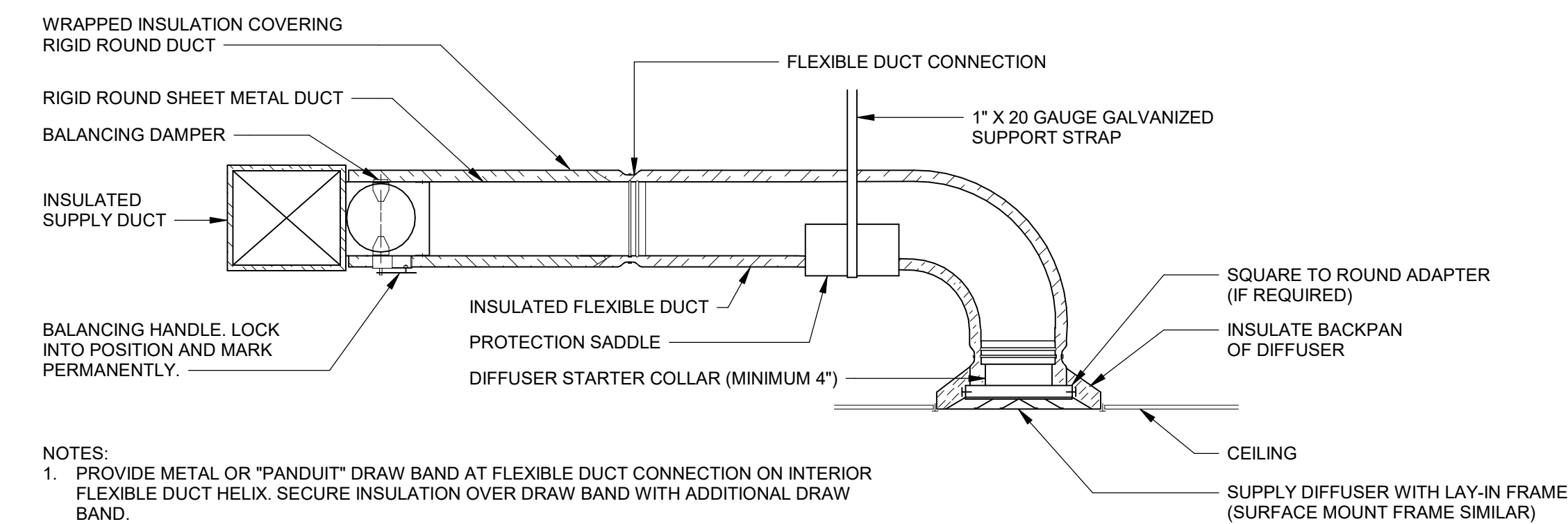


NOTE: INSTALL PAD LEVEL.  
**5 CU CONCRETE EQUIPMENT PAD**  
NOT TO SCALE



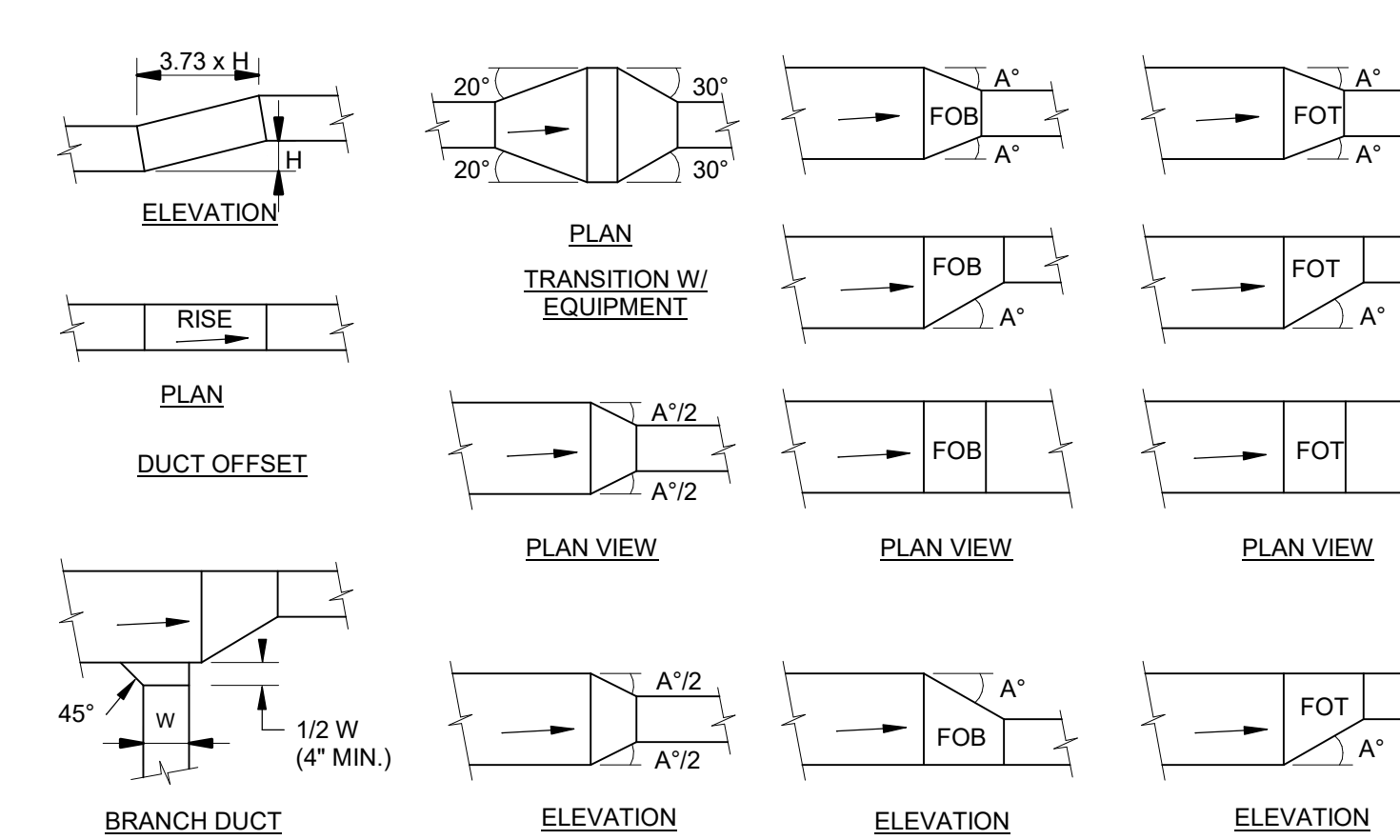
NOTES:  
1. THE 270-275 BOWDEN CABLE CONTROL SYSTEM IS DESIGNED FOR USE WITH EXTERNALLY CONTROLLED ROUND OR RECTANGULAR DAMPERS, AND CAN BE MOUNTED IN A WIDE VARIETY OF LOCATIONS INCLUDING CEILING JOISTS, LAY-IN CEILINGS, BEHIND GRILLES, ON OR INSIDE OTHER VARIOUS TYPES OF DIFFUSERS, ETC.  
2. CABLE SHALL CONSIST OF BOWDEN CABLE 0.054" STAINLESS STEEL CONTROL WIRE ENCAPSULATED IN 1/16" FLEXIBLE GALVANIZED SPIRAL WIRE SHEATH.  
3. LOCKING RACK AND PINION GEAR DRIVE SHALL BE CONSTRUCTED OF 14 GAUGE STEEL AND SHALL BE USED TO CONVERT ROTARY MOTION INTO PUSH-PULL MOTION.  
4. CONTROL SHAFT SHALL BE 'D'-STYLE FLATTENED 1/4" DIAMETE WITH 265° ROTATION PROVIDING 1-1/2" LINEAR TRAVEL CAPABILITY.

**6 VERTICAL FURNACE INSTALLATION DETAIL**  
NOT TO SCALE



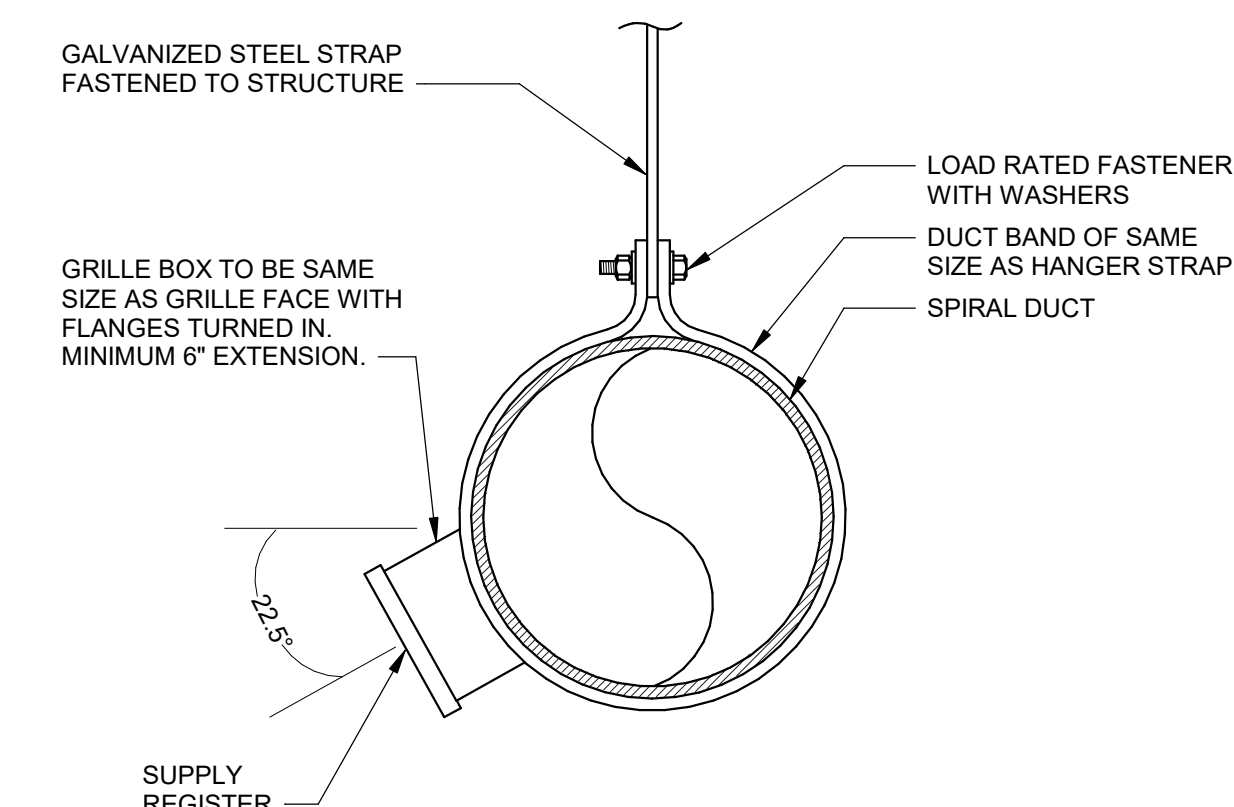
NOTES:  
1. PROVIDE METAL OR "PANDUIT" DRAW BAND AT FLEXIBLE DUCT CONNECTION ON INTERIOR FLEXIBLE DUCT HELIX. SECURE INSULATION OVER DRAW BAND WITH ADDITIONAL DRAW BAND.  
2. PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.  
3. PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF FLEXIBLE DUCT TO ROUND DUCT, DAMPERS, AND DIFFUSERS.  
4. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

**1 DIFFUSER CONNECTION DETAIL - FLEX DUCT**  
NOT TO SCALE



NOTES: 1) ANGLE A = 30° WHEN AIR FLOWS IN DIRECTION OF ARROW (SUPPLY AIR).  
2) ANGLE A = 20° WHEN AIR FLOWS IN OPPOSITE DIRECTION OF ARROW (RETURN OR EXHAUST).

**2 LOW VELOCITY DUCT FITTINGS DETAIL**  
NOT TO SCALE



**3 SPIRAL DUCT WITH REGISTER**  
NOT TO SCALE



## MECHANICAL SPECIFICATIONS

PROVIDE EQUIPMENT INDICATED ON DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM.

DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF COMPLETED PROJECT. PROVIDE SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT OWNER'S OPTION.

COORDINATION: COORDINATE WITH WORK OF OTHER TRADES. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

SHEET METAL DUCTWORK: PROVIDE SHEET METAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A", SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH G90 ZINC COATING. SHEET STEEL SHALL COMPLY WITH ASTM A663 STANDARD SPECIFICATION FOR STEEL SHEET METAL, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY HOT DIP PROCESS, AND A664 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR SHEET, METALLIC-COATED BY HOT DIP PROCESS. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL 90° ELBOWS.

REFRIGERANT PIPING: TYPE ACR HARD DRAWN COPPER TUBING MEETING THE REQUIREMENTS OF ASTM B280, WITH WROUGHT COPPER FITTINGS MEETING REQUIREMENTS OF ANSI B16.22, WITH BRAZED JOINTS MEETING REQUIREMENTS OF AWS A 5.8, USING BAG-1 (SILVER) FILLER MATERIAL. INSULATE SUCTION LINE PIPING WITH 1" THICK ARMAFLEX TYPE AP, PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH.

ROUND SHEET METAL DUCT: PROVIDE SPIRAL SEAM (ALL SIZES) OR SNAP LOCK (CONCEALED DUCT SIZES UP TO 10") GALVANIZED STEEL, COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.

FLEXIBLE DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH 1" THICK 1 PCF FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEXIBLE DUCT SHALL MEET NFPA 914 WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR MINIMUM 2" W.G. PRESSURE AND 0 TO 250°F TEMPERATURE. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST LOCK TAP COLLARS AT CONNECTIONS IN SHEET METAL DUCTWORK. MAXIMUM EXTENDED LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 6 FEET.

EXPOSED DUCTWORK: EXPOSED DUCTWORK SHALL BE CLEANED OF DEBRIS AND OIL, THEN WIPED DOWN WITH VINEGAR OR OTHER SURFACE PREPARING CHEMICAL TO PREPARE DUCT FOR PAINT.

DUCT SEALANT FOR DUCTWORK LOCATED INDOORS: PROVIDE WATER BASED SYNTHETIC LATEX EMULSION PERMANENTLY FLEXIBLE HIGH VELOCITY DUCT SEALANT, DUCTMATE INDUSTRIES INC., PRO SEAL OR EQUAL. SEALANT TO BE LOW VOC LEED COMPLIANT CAPABLE OF 15" W.G., NFPA 90A AND 90B APPROVED, UL 181R-M LISTED AND UL 723 CLASSIFIED. INSTALL PER MANUFACTURER INSTRUCTIONS. SEALANT SHALL BE APPROVED FOR FLENUM INSTALLATIONS AND MEET FLAME SPREAD AND SMOKE DEVELOPED RATINGS FOR FLENUM APPLICATIONS.

DUCT INSULATION (ALL ROUND SUPPLY DUCT AND ROUND RETURN DUCT ABOVE CEILING): PROVIDE MINIMUM 1-1/2" THICK BLANKET TYPE FIBERGLASS INSULATION COMPLYING WITH ASTM C-553, TYPE II, WITH FACTORY APPLIED KRAFT BONDED TO ALUMINUM FOIL, REINFORCED WITH FIBERGLASS VAPOR BARRIER/JACKET. JACKET SHALL CONFORM TO ASTM C-1158, TYPE II. INSTALLED R VALUE SHALL BE 4.2 OR HIGHER WITH 0.75 PCF DENSITY.

DUCT INSULATION (EXTERIOR DUCT): 2" THICK RIGID FIBERGLASS BOARD INSULATION PINNED TO DUCT SURFACE. THERMAL CONDUCTIVITY SHALL BE EQUAL TO OR LESS THAN 0.24 AT 75°F (MINIMUM R VALUE OF 8.0). FINISH EDGES OF INSULATION WITH REINFORCED INSULATING CEMENT OR REINFORCED MASTIC. INSULATION SHALL HAVE FOIL REINFORCED KRAFT OUTER JACKET. PROVIDE WEATHERPROOF OUTER JACKET EQUAL TO POLYGUARD ALUMAGUARD OR EQUAL FLEXIBLE WEATHERPROOFING JACKET, SELF SEALING.

DUCT LINER (ALL RECTANGULAR SUPPLY AND RETURN DUCT, ALL EXPOSED ROUND DUCTWORK): PROVIDE MINIMUM 1" THICK, LONG TEXTILE FIBER TYPE DUCT LINER, WITH COATING ON AIR STREAM SIDE CONFORMING TO NFPA 914. DUCT LINER SHALL BE SECURED TO DUCT WITH BOTH ADHESIVE AND MECHANICAL FASTENERS. ADHESIVE SHALL BE LEED COMPLIANT LOW VOC AS RECOMMENDED BY DUCT LINER MANUFACTURER, AND SHALL COMPLY WITH ASTM C-916. DUCT LINER FASTENERS SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", LATEST EDITION, THERMAL CONDUCTIVITY SHALL BE EQUAL TO OR LESS THAN 0.24 AT 75°F (MINIMUM R-VALUE OF 4.2).

ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEET METAL STAND-OFF BRACKET BEYOND DUCT COVERING, WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE. PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION, AS REQUIRED.

RECTANGULAR VOLUME DAMPERS: PROVIDE MINIMUM 16 GAUGE GALVANIZED STEEL CHANNEL FRAME, 16 GAUGE GALVANIZED STEEL BLADES, MINIMUM 1/2" HEXAGONAL AXLE, MOLDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE PLATED STEEL CONTROL SHAFT. LINKAGES SHALL BE CONCEALED IN FRAME. OPERATING SHAFT SHALL EXTEND BEYOND FRAME AND DUCT TO A LOCKING QUADRANT WITH ADJUSTABLE LEVER. MAXIMUM BLADE WIDTH SHALL NOT EXCEED 6".

DUCT TURNING VANES: PROVIDE FABRICATED TURNING VANES AND VANE RUNNERS CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". PROVIDE TURNING VANES CONSTRUCTED OF CURVED BLADES, SUPPORTED WITH BARS PERPENDICULAR TO BLADES, AND SET INTO SIDE STRIPS SUITABLE FOR MOUNTING IN DUCTWORK. FOLLOW SMACNA GUIDELINES FOR SPACING SUPPORT, AND CONSTRUCTION. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

FLEXIBLE DUCT CONNECTORS: PROVIDE UL LABELED 30 OUNCE NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS AT DUCT CONNECTIONS TO VIBRATING EQUIPMENT.

DUCT ACCESS DOORS: PROVIDE HINGED ACCESS DOORS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS FOR INSULATED DUCTWORK. CONSTRUCT OF SAME OR THICKER GAUGE SHEET METAL AS DUCT IN WHICH IT IS INSTALLED. PROVIDE FLUSH FRAMES FOR UNINSULATED DUCTS, AND EXTENDED FRAMES FOR EXTERNALLY INSULATED DUCTS. PROVIDE CONTINUOUS HINGE ON ONE SIDE, WITH ONE HANDLE-TYPE LATCH FOR ACCESS DOORS 12" HIGH AND SMALLER, AND TWO HANDLE-TYPE LATCHES FOR LARGER ACCESS DOORS.

MECHANICAL PIPING IDENTIFICATION: PROVIDE PIPE MARKERS, FLOW ARROWS AND ENGRAVED PLASTIC-LAMINATE SIGNS FOR MECHANICAL PIPING AND VALVES TO COMPLY WITH ANSI A13.1. PROVIDE ONLY ONE TYPE OF PIPE MARKERS AND FLOW ARROWS FOR ALL SYSTEMS.

PRESSURE/TEMPERATURE TEST PLUGS (PETE'S PLUG): 1/4" NPT FITTINGS TO RECEIVE EITHER TEMPERATURE OR PRESSURE PROBE, 1/8" O.D. FITTING AND CAPS SHALL BE BRASS WITH VALVE CORE OF NORDLE, RATED AT 150 PSIG AT 0°F TO 200°F.

COMBINATION BALANCING AND SHUT-OFF VALVES: BELL & GOSSETT CIRCUIT SETTER WITH LOCKING SET POINT. PROVIDE CIRCUIT SETTER BALANCE WHEEL WITH O&M MANUAL. TACO OR HOMESTEAD ARE CONSIDERED AS EQUAL.

MECHANICAL EQUIPMENT IDENTIFICATION: PROVIDE ENGRAVED PLASTIC LAMINATE LABEL FOR EACH MAJOR ITEM OF MECHANICAL EQUIPMENT AND EACH OPERATIONAL DEVICE. LETTERS SHALL BE MINIMUM OF 1/2" HIGH. PROVIDE SIGNS TO INFORM OPERATOR OF OPERATIONAL REQUIREMENTS, TO INDICATE SAFETY AND EMERGENCY PRECAUTIONS, AND TO WARN OF HAZARDS AND IMPROPER OPERATION.

TESTING AND BALANCING: TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION. PERFORM TESTS IN ACCORDANCE WITH THE MOST CURRENT NEBB OR AABC, AND ASHRAE STANDARDS. ELIMINATE OBJECTIONABLE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF CONTROLS. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCE CONTRACTOR, WITH NEBB OR AABC CERTIFICATION. SUBMIT COMPLETED AND CERTIFIED TEST AND BALANCE REPORT TO OWNER'S REPRESENTATIVE. BALANCE ALL SYSTEMS TO WITHIN 5% OF AIR FLOWS INDICATED ON THE DRAWINGS, AND REPORT DISCREPANCIES TO HVAC INSTALLER FOR CORRECTION. MARK FINAL BALANCE POSITIONS ON DAMPERS WITH PERMANENT MARKER.

OPERATIONS AND MAINTENANCE MANUALS (O&M): AT COMPLETION OF PROJECT PROVIDE A MINIMUM OF TWO O&M MANUALS IN THREE RING BINDERS TO OWNER/TENANT. MANUALS SHALL HAVE TABS LABELED WITH ALL SECTIONS SEPARATED WITH A CLEAR INDEX AT FRONT. PROVIDE WARRANTY LETTER AT FRONT OF MANUAL STATING DATES OF WARRANTY (START DATE AND END DATE) AND CONTACTS WITH PHONE NUMBERS FOR WARRANTY WORK. PROVIDE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE INCLUDING RECOMMENDED SETPOINTS. MANUALS SHALL INCLUDE SUBMITTALS OF ALL EQUIPMENT, SIZE AND OPTIONS SELECTED. PROVIDE ALL BALANCING REPORTS. PROVIDE MANUFACTURER LITERATURE FOR OPERATIONS AND MAINTENANCE FOR ALL EQUIPMENT ON PROJECT. ALL PERIODIC AND ROUTINE MAINTENANCE SHALL BE CLEARLY IDENTIFIED. PROVIDE CONTROLS SECTION LISTING SYSTEM OPERATING AND CONTROL INSTRUCTIONS, MAINTENANCE, CALIBRATION, WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS.

SHOP DRAWINGS/SUBMITTALS: SUBMIT ELECTRONIC SUBMITTALS AND SHOP DRAWINGS VIA EMAIL AS PDF ELECTRONIC FILES. PROVIDE SEPARATE PDF SUBMITTALS ON ALL MECHANICAL EQUIPMENT (INCLUDING CONTROLS PACKAGES), AIR DISTRIBUTION DEVICES, DUCTWORK, DAMPERS, AND INSULATION. SUBMITTALS AND SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:

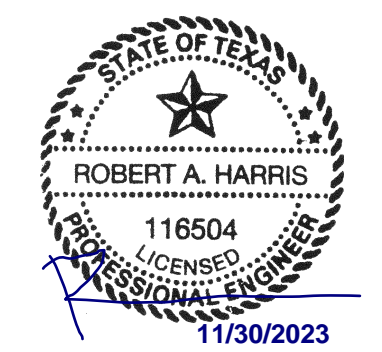
- PROJECT NAME
- DATE
- NAME AND ADDRESS OF ARCHITECT AND MEP ENGINEER
- NAME OF CONSTRUCTION MANAGER
- NAME OF CONTRACTOR
- NAME OF FIRM OR ENTITY THAT PREPARED SUBMITTAL
- NAMES OF SUBCONTRACTOR, MANUFACTURER, AND SUPPLIER
- CATEGORY AND TYPE OF SUBMITTAL
- SUBMITTAL PURPOSE AND DESCRIPTION
- MANUFACTURER NAME
- PRODUCT NAME
- DRAWING NUMBER AND DETAIL REFERENCES, AS APPROPRIATE
- INDICATION OF FULL OR PARTIAL SUBMITTAL
- TRANSMITTAL NUMBER
- REMARKS

IDENTIFY DEVIATIONS FROM THE CONTRACT DOCUMENTS ON SHOP DRAWINGS AND SUBMITTALS. FURNISH COPIES OF FINAL SUBMITTALS TO MANUFACTURERS, SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHERS AS NECESSARY FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. SHOW DISTRIBUTION ON TRANSMITTAL FORMS.

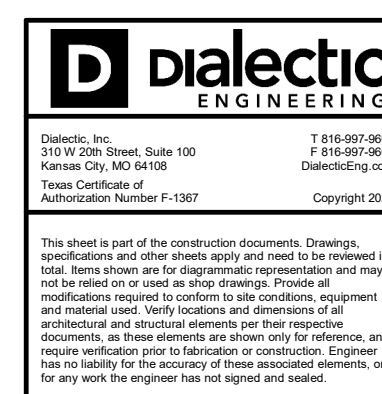
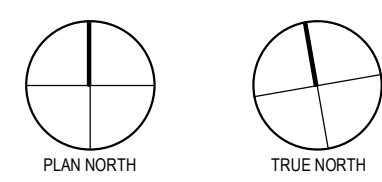
- SUBMITTALS SHALL INCLUDE (AS APPLICABLE):
- MANUFACTURER'S CATALOG CUTS
  - MANUFACTURER'S PRODUCT SPECIFICATIONS
  - STATEMENT OF COMPLIANCE WITH SPECIFIED REFERENCED STANDARDS
  - TESTING BY RECOGNIZED TESTING AGENCY
  - APPLICATION OF TESTING AGENCY LABELS AND SEALS
  - WIRING DIAGRAMS SHOWING FACTORY-INSTALLED WIRING
  - PERFORMANCE CURVES
  - OPERATIONAL RANGE DIAGRAMS
  - CLEARANCES REQUIRED TO OTHER CONSTRUCTION, IF NOT INDICATED ON SHOP DRAWINGS.

- FULL SIZE SHOP DRAWINGS SHALL INCLUDE (AS APPLICABLE):
- IDENTIFICATION OF PRODUCTS
  - SCHEDULES
  - COMPLIANCE WITH SPECIFIED STANDARDS
  - NOTATION OF COORDINATION REQUIREMENTS
  - NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT
  - RELATIONSHIP AND ATTACHMENT TO ADJOINING CONSTRUCTION CLEARLY INDICATED.

MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUCT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION.



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



IFP 12/01/23

Issues

Project Number 23-01-014

Drawn By XH

Checked By EML

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

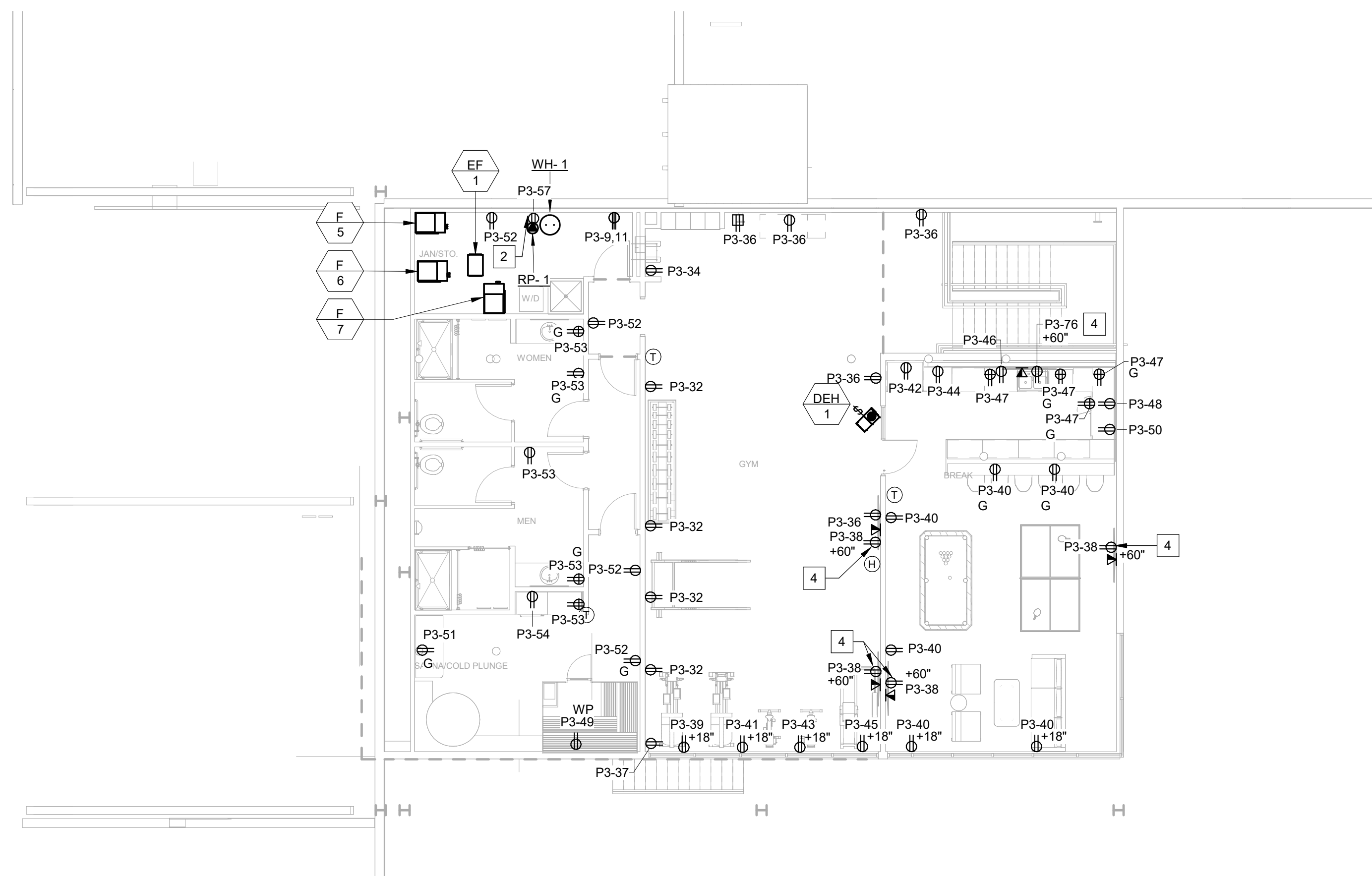
# M701

MECHANICAL  
SPECIFICATIONS

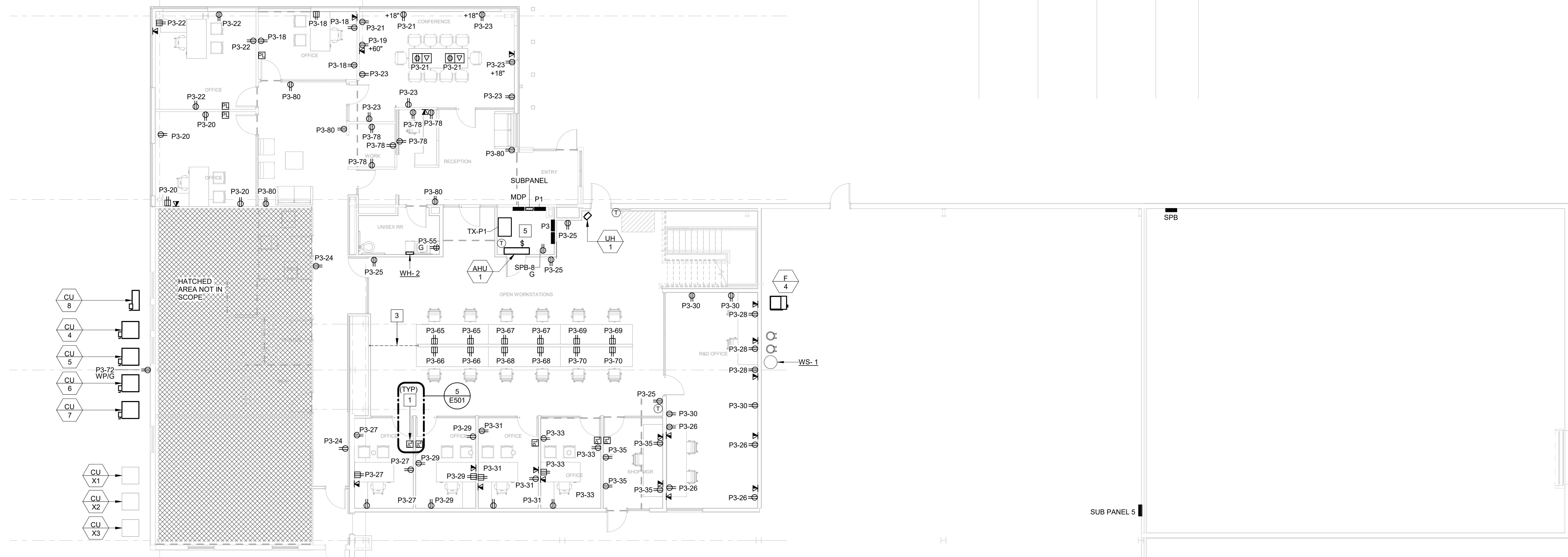


**ELECTRICAL KEY NOTES**

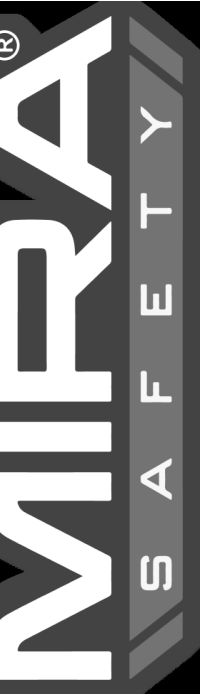
- 1 ROUTE CIRCUIT THROUGH PLUGLOAD (PL) FOR CONTROLLED RECEPTACLE CIRCUIT. SEE DETAIL 9 ON SHEET E501 FOR WIRING DETAILS.
- 2 PROVIDE RECEPTACLE FOR RECIRCULATION PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- 3 PROVIDE CONDUIT IN SLAB FOR POWER TO GYP WALL AS REQUIRED. PROVIDE ALL SAW CUTTING AS REQUIRED.
- 4 COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
- 5 MAINTAIN ALL NEC CLEARANCES FOR NEW AND EXISTING EQUIPMENT WITHIN ELECTRICAL ROOM.



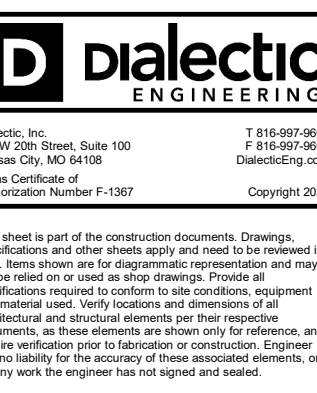
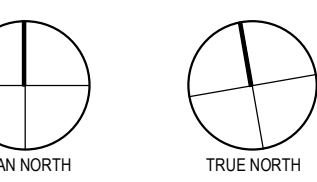
**2 OVERALL POWER PLAN - LV 2**  
1/8" = 1'-0"



**1 OVERALL POWER PLAN - LV 1**  
1/8" = 1'-0"



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



IPF 12/01/23

Issues	
Project Number	23-01-014
Drawn By	TH
Checked By	JGW

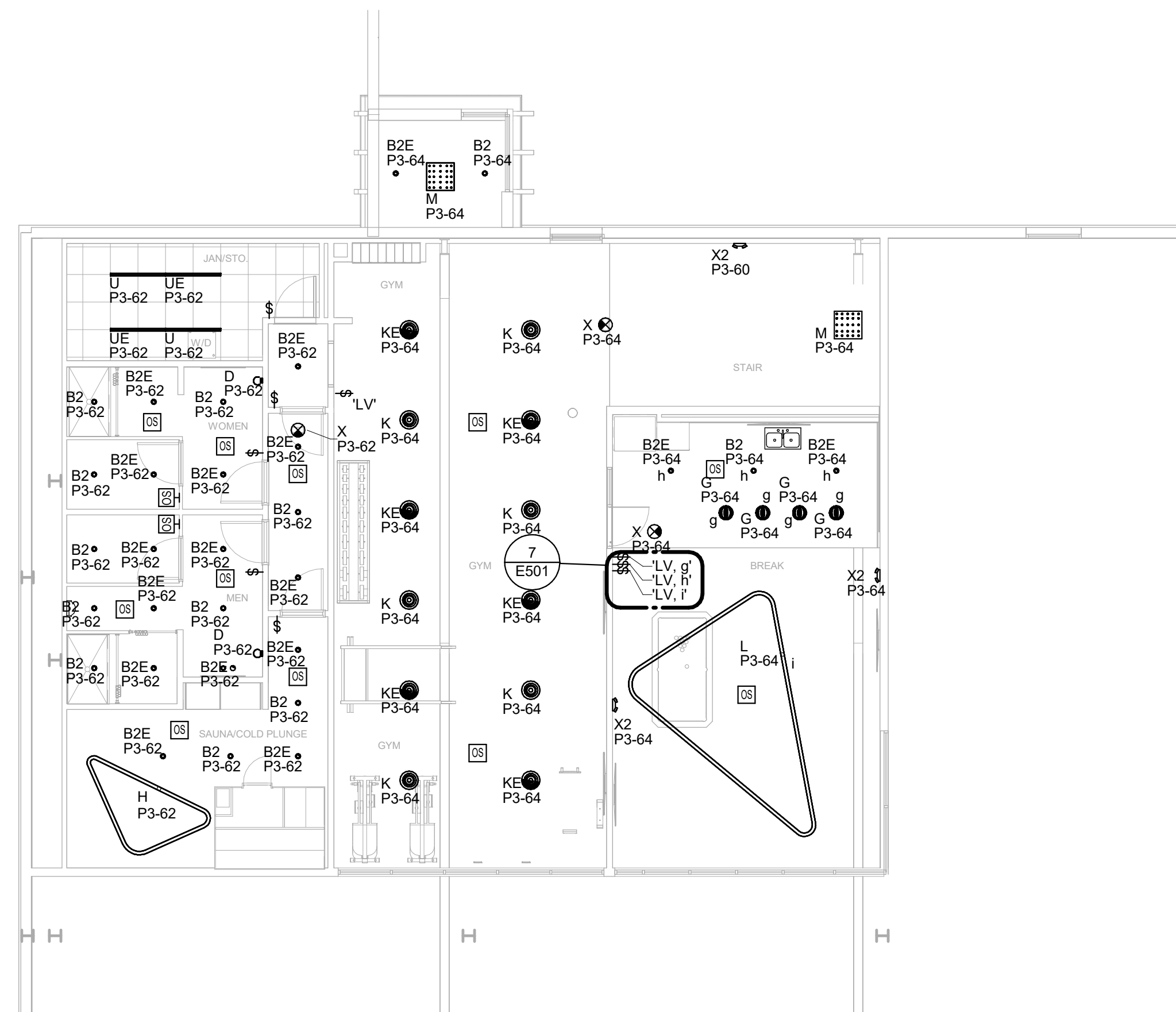
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**E111**

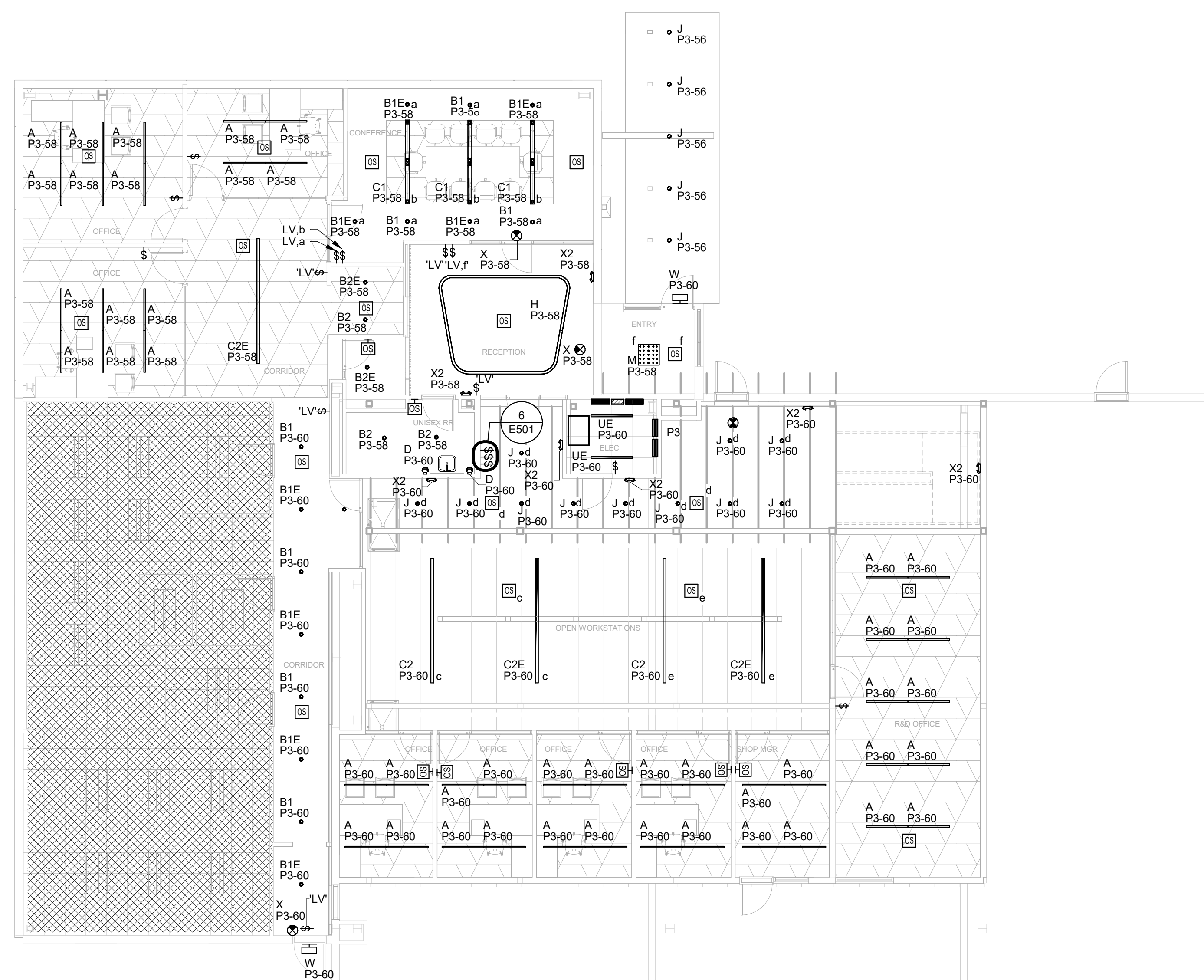
POWER PLANS



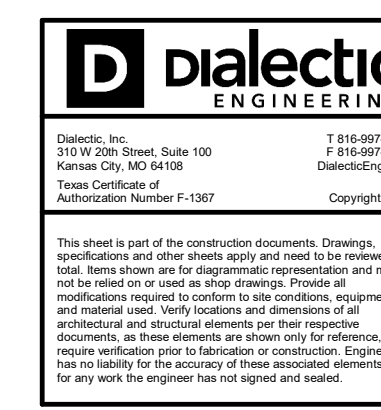
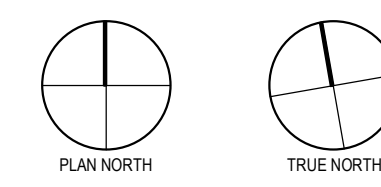
**2 OVERALL LIGHTING PLAN - LV 2**  
1/8" = 1'-0"



**1 OVERALL LIGHTING PLAN - LV 1**  
1/8" = 1'-0"



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

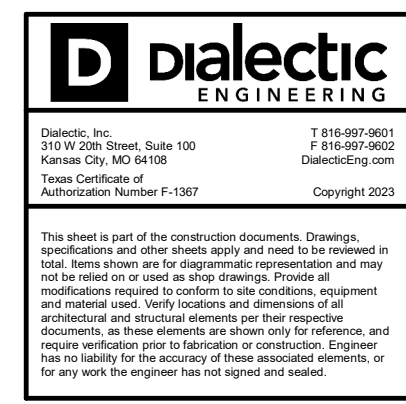
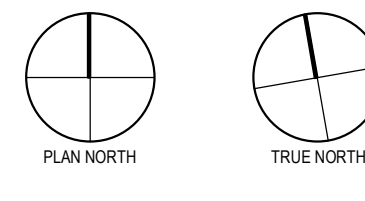


IFP 12/01/23

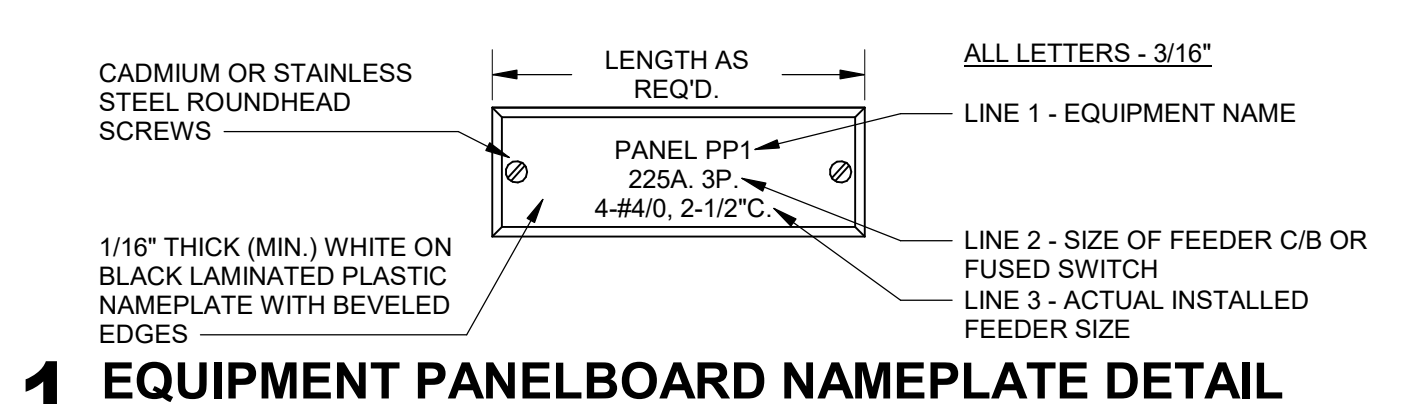
Project Number	23-01-014
Drawn By	TH
Checked By	JGW



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

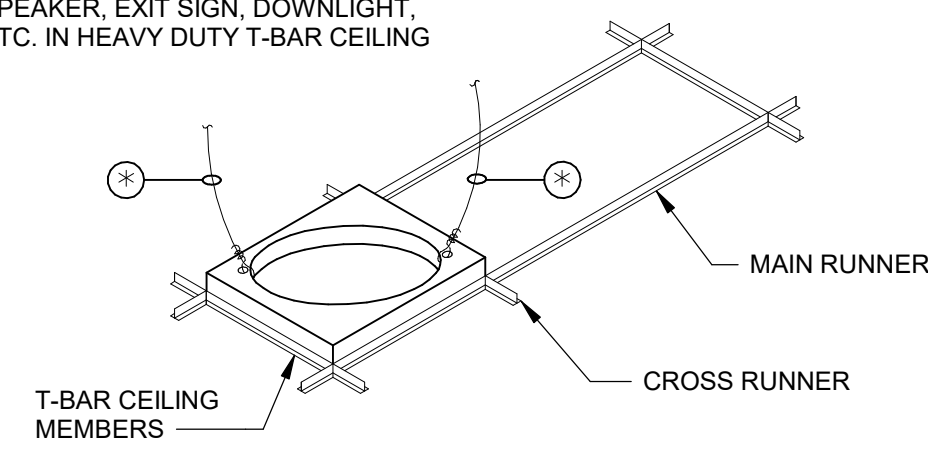


Project Number	23-01-014
Drawn By	TH
Checked By	JGW



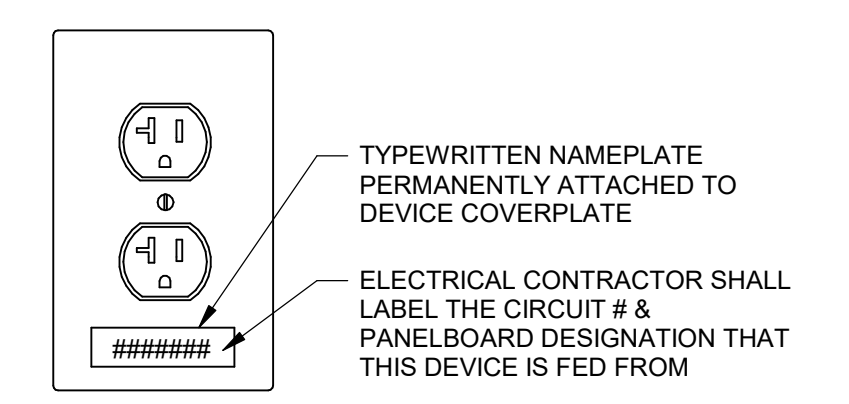
**1 EQUIPMENT PANELBOARD NAMEPLATE DETAIL**  
1/4" = 1'-0"

TYPICAL CEILING MTD. EQUIPMENT: SPEAKER, EXIT SIGN, DOWNLIGHT, ETC. IN HEAVY DUTY T-BAR CEILING



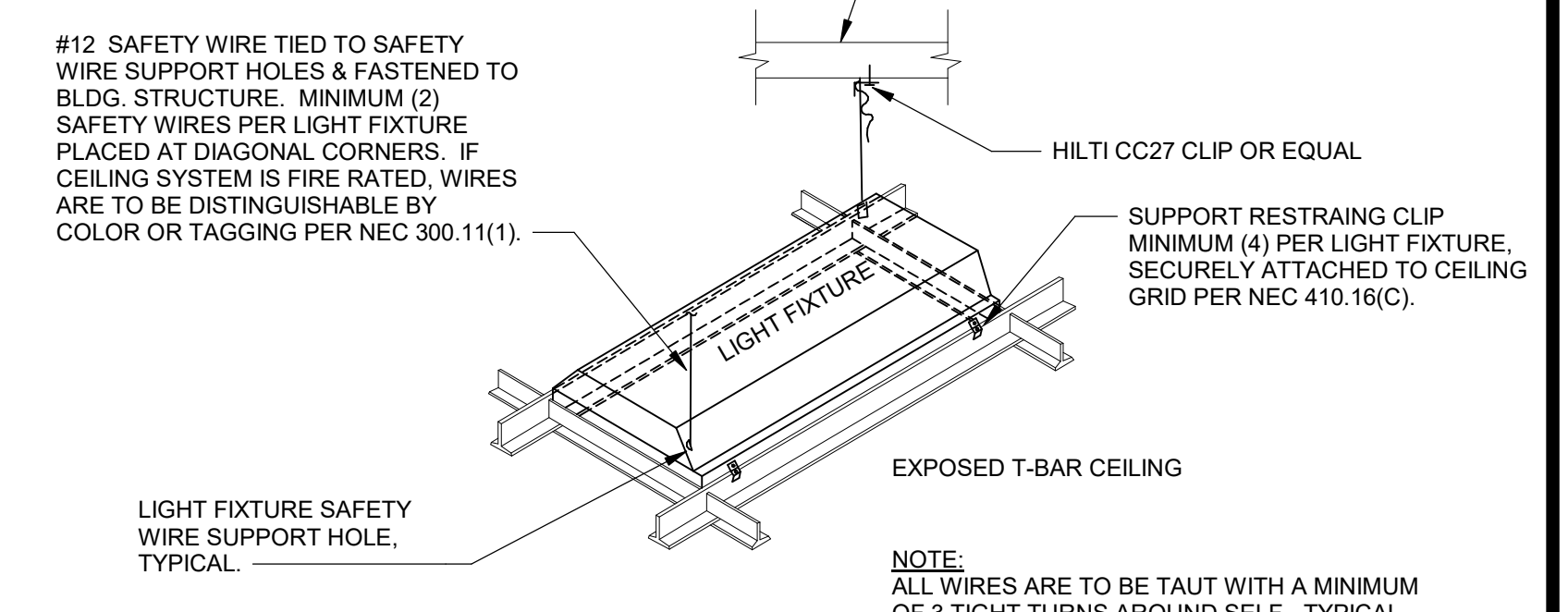
MINIMUM 12 GAUGE SLACK WIRE AT 45 DEGREES FROM OPPOSITE EQUIPMENT HOUSING CORNERS TO STRUCTURE ABOVE. ATTACH DIRECTLY TO FIXTURE WITH MINIMUM (3) WRAPPED TURNS. ATTACH TO STRUCTURE PER ACOUSTICAL CEILING ATTACHMENT DETAILS. SET WIRE SLIGHTLY SLACK TO ALLOW FULL SEATING INTO T-BAR.

**2 EQUIPMENT/FIXTURE MOUNTING**  
1/4" = 1'-0"

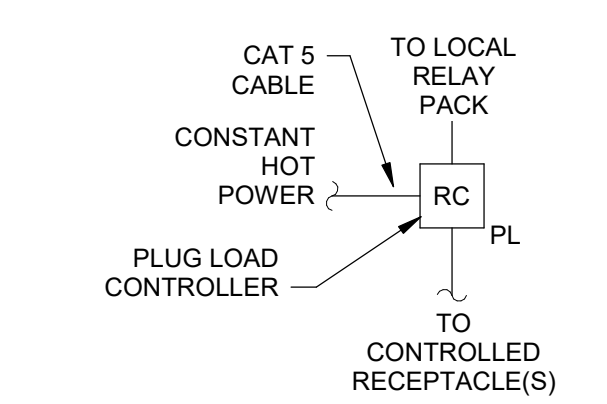


**3 RECEPTACLE LABELING DETAIL**  
1/4" = 1'-0"

NOTE: THIS DETAIL SHALL APPLY TO ALL RECEPTACLES.

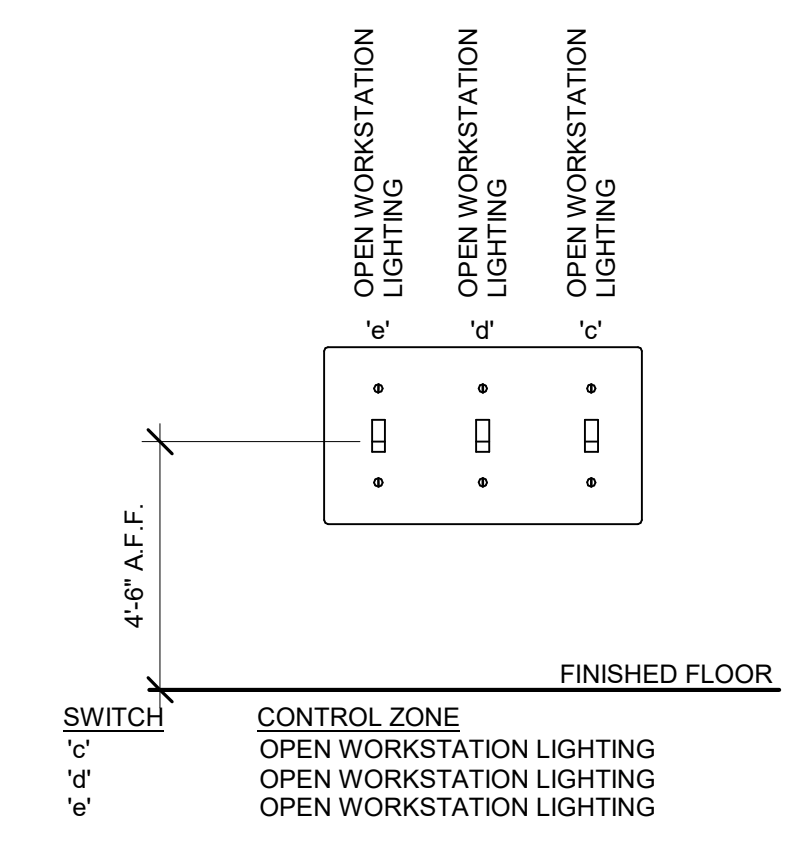


**4 RECESSED LIGHTING FIXTURE SUPPORT DETAIL**  
1/4" = 1'-0"

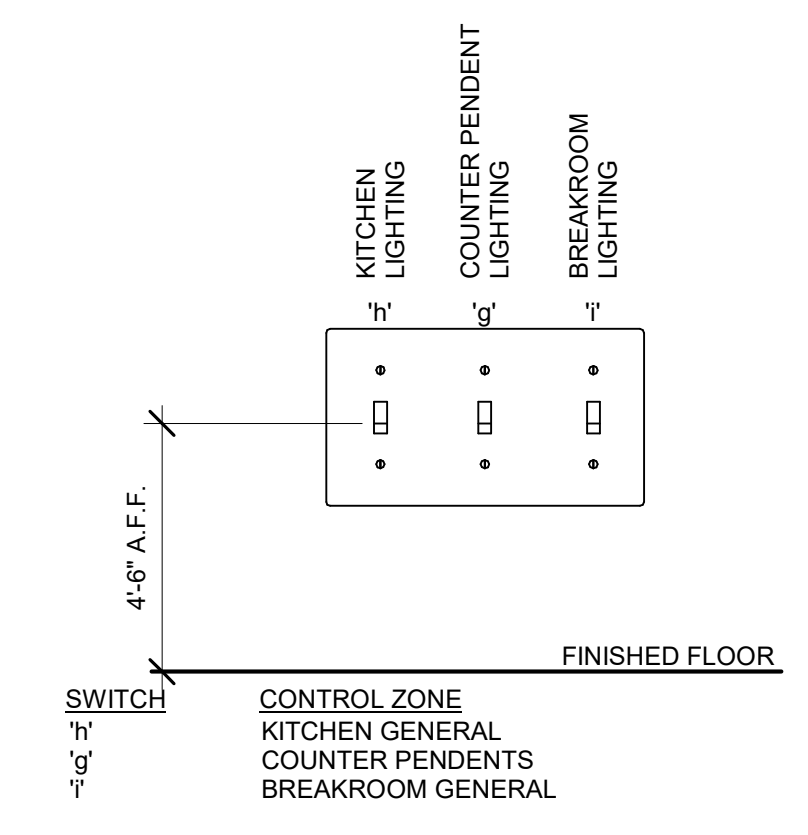


NOTES:  
- NETWORKED LIGHTING CONTROLS SHALL BE EQUAL TO ACUITY BRANDS 'NIGHT' CONTROLS  
- REFER TO PLAN FOR DEVICE TYPE  
- NOT ALL CONTROLS ARE SHOWN. THIS DIAGRAM IS INTENDED TO PROVIDE GENERAL WIRING AND CONTROL INTENT ONLY.  
- PROVIDE ALL CONTROL WIRING FOR EACH DIMMING TYPE  
- PROVIDE SUFFICIENT SPACING BETWEEN DIMMING SWITCHES PER MANUFACTURER'S INSTRUCTIONS.

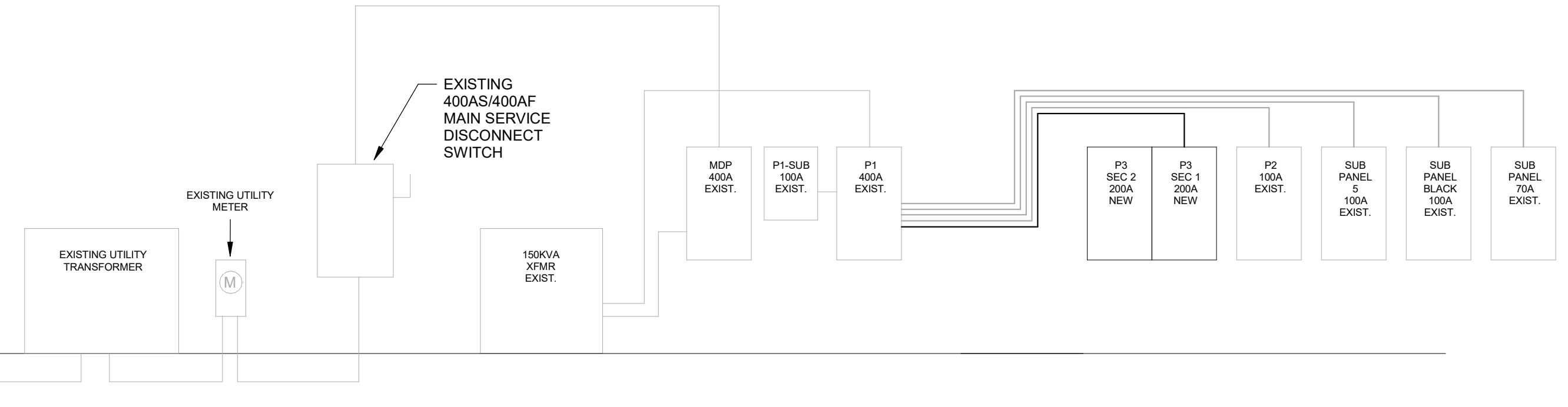
**5 PLUG LOAD CONTROLLER**  
1/2" = 1'-0"



**6 LIGHTING CONTROL SWITCHBANK DETAIL - OPEN OFFICE**  
1/4" = 1'-0"



**7 LIGHTING CONTROL SWITCHBANK DETAIL - BREAKROOM**  
1/4" = 1'-0"



1 One-Line NOT TO SCALE

EQUIPMENT FEEDER SCHEDULE

Table with columns: MARK, EQUIPMENT TYPE, #, VOLTAGE PHASE, PANEL, CIRCUIT, MOCP, FEEDER, PROVIDER, SIZE-POLES, FUSES, NEMA, REMARKS. Lists various equipment like AHU, CU, DEH, EF, F, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F30, F31, F32, F33, F34, F35, F36, F37, F38, F39, F40, F41, F42, F43, F44, F45, F46, F47, F48, F49, F50, F51, F52, F53, F54, F55, F56, F57, F58, F59, F60, F61, F62, F63, F64, F65, F66, F67, F68, F69, F70, F71, F72, F73, F74, F75, F76, F77, F78, F79, F80, F81, F82, F83, F84, F85, F86, F87, F88, F89, F90, F91, F92, F93, F94, F95, F96, F97, F98, F99, F100.

FEEDER SCHEDULE

Table with columns: EQUIPMENT MARK, RATING, PHASE, FEEDER, WIRE-CONDUIT SIZE, NOTES. Lists feeders for MDP, P1, P2, P3, P4, P5, SPB, SUB PANEL 5, TX-P1.

VOLTAGE DROP

Table with columns: EQUIPMENT MARK, VOLTAGE - PHASE, FAULT CURRENT, VOLTAGE DROP, 3PH, L-L, L-N, MTR. Shows voltage drop calculations for various equipment.

LIGHTING FIXTURE SCHEDULE

Table with columns: Type, MANUFACTURER, CATALOG NUMBER, DESCRIPTION, LAMPS, VOLTS, FIXTURE WATTS, REMARKS. Lists various lighting fixtures like recessed linear, downlight, pendant, and highbay.

Panel schedule for MDP (277480V-3P) showing load descriptions, BKR size, BKR PO., NOTE, CKT NO., A, B, C, CT NO., NEMA ENCL, LUGS, and options.

Panel schedule for P1 (120208V-3P) showing load descriptions, BKR size, BKR PO., NOTE, CKT NO., A, B, C, CT NO., NEMA ENCL, LUGS, and options.

EXISTING PEAK DEMAND OVER THE LAST 12 MONTHS IS 37.15 KW. NEW LOAD ADDED IS 95.39 KW. TOTAL LOAD ON EXISTING SYSTEM IS 132.54 KW.

Panel schedule for P3 (120208V-3P) showing load descriptions, BKR size, BKR PO., NOTE, CKT NO., A, B, C, CT NO., NEMA ENCL, LUGS, and options.

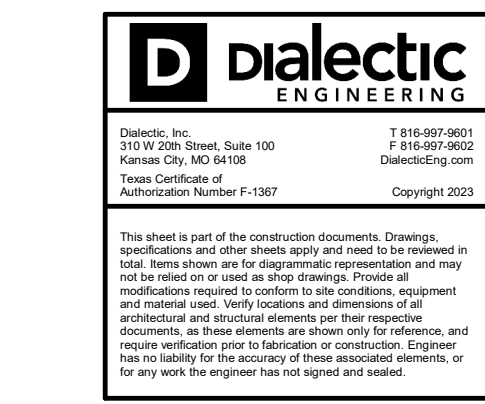
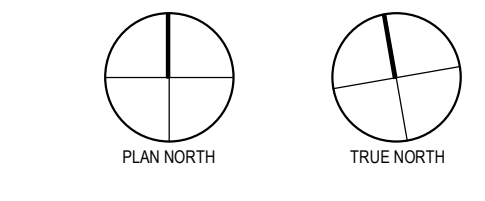
Panel schedule for SPB (120208V-3P) showing load descriptions, BKR size, BKR PO., NOTE, CKT NO., A, B, C, CT NO., NEMA ENCL, LUGS, and options.

PANEL SCHEDULE NOTES

Table with columns: GENERAL NOTES, CIRCUIT KEY NOTES, G, X. Contains notes about contractor verification, balance panels, and existing circuits.

LIGHTING CONTROL INTENT

Table with columns: ROOM TYPE, TYPE OF CONTROLS, OPERATION. Details lighting control intent for various rooms like open workstations, electrical room, small offices, large offices, entry, restrooms, corridors, gym, stairs, sauna, storage, and break room.



SECTION 20 00 00 - BASIC ELECTRICAL

- 1. THE WORK CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, SUPPLIES, AND MATERIALS...
2. COORDINATE WORK WITH OTHER TRADES AND EXISTING CONDITIONS TO PREVENT CONFLICTS...
3. ALL WORK SHALL COMPLY WITH THE LOCALLY ADOPTED ELECTRICAL CODE...
4. DRAWINGS INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT...
5. ELECTRICAL DESIGN IS BASED ON FIELD INSPECTIONS AND PREVIOUS DESIGN DRAWINGS...
6. FIELD VERIFY EXISTING UTILITIES. ITEMS DAMAGED BY THIS CONTRACTOR SHALL BE REPAIRED IMMEDIATELY...
7. ROOF PENETRATIONS SHALL COMPLY WITH 'SMACNA' AND 'NRC' STANDARDS...
8. ALL EQUIPMENT AND COMPONENTS FURNISHED AND/OR INSTALLED SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL)...
10. TEMPORARY ELECTRICAL SERVICE:
A. PROVIDE TEMPORARY ELECTRICAL SERVICE FOR POWER AND LIGHTING DURING CONSTRUCTION...
B. PROVIDE SUFFICIENT NUMBER OF TEMPORARY LIGHT FIXTURES FOR A SAFE INSTALLATION...
11. WARRANTIES:
A. CONTRACTOR SHALL WARRANT ALL WORK PERFORMED AND MATERIAL AND LABOR PROVIDED UNDER THE CONTRACT...
B. ALL LAMPS SHALL BE WARRANTED ACCORDING TO LAMP MANUFACTURER...
C. ALL EQUIPMENT, APPARATUS AND APPLIANCES WHICH ARE SPECIFIED AND/OR COME WITH WARRANTIES LONGER THAN ONE YEAR...
12. CUTTING AND PATCHING:
A. NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED, OR PENETRATED WITHOUT PRIOR APPROVAL...
B. PROVIDE CUTTING, PATCHING, AND PATCH PAINTING IN EXISTING STRUCTURES...
C. ALL PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED AND REPLACED BY THIS CONTRACTOR...

SECTION 26 05 26 - GROUNDING

- 1. EXTENT OF ELECTRICAL GROUNDING AND BONDING WORK IS INDICATED BY DRAWINGS AND AS SPECIFIED HEREIN...
2. EXCEPT AS OTHERWISE INDICATED, PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED WITHIN THE SCOPE OF MATERIALS...
3. INSTALL ELECTRICAL GROUNDING AND BONDING SYSTEMS AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS...
4. RACEWAY SYSTEMS SHALL NOT BE USED AS GROUNDING METHOD...
5. INSTALLATION OF ELECTRICAL GROUNDING AND BONDING SYSTEMS:
A. GROUNDING ELECTRODE CONDUCTORS, WHERE NOT INSTALLED AS PART OF A BRANCH CIRCUIT OR FEEDER...
B. CONNECT GROUNDING ELECTRODE CONDUCTORS TO METAL, COLD WATER PIPE AND ALL OTHER TYPES OF METAL PIPING...
C. CONNECT TOGETHER SYSTEM NEUTRAL, SERVICE EQUIPMENT ENCLOSURES, EXPOSED NON-CURRENT CARRYING METAL PARTS...
D. THE UTILITY COMPANY METER SOCKET SHALL BE GROUNDING TO A 1/2" X 10' COPPER CLAD STEEL GROUND ROD...
E. THE NEUTRAL CONDUCTOR OF ALL SEPARATELY DERIVED SYSTEMS, INCLUDING TRANSFORMERS, GENERATORS, ETC...
F. RAISED FLOOR GROUNDING: PROVIDE (1) PEDESTAL GROUNDING CONNECTION POINT EVERY 1200 SQUARE FEET...

SECTION 26 05 19 - WIRES AND CABLES

- 1. CONDUCTORS: PROVIDE SOLID CONDUCTORS FOR POWER AND LIGHTING CIRCUITS NO. 10 AWG AND SMALLER...
2. CONDUCTOR MATERIAL: COPPER FOR ALL WIRES AND CABLES.
3. INSULATION: PROVIDE THIN/THIN INSULATION FOR ALL CONDUCTORS NO. 14 AWG THRU NO. 10 AWG...
4. ALUMINUM CONDUCTORS:
A. AT THE CONTRACTOR'S OPTION, ALUMINUM CONDUCTORS WILL BE ALLOWED FOR COPPER SIZES RATED FOR 100 AMPERES AND LARGER...
B. IF ALUMINUM CABLE IS TO BE INSTALLED ON THIS PROJECT...
5. VARIABLE FREQUENCY DRIVE CABLES: WHERE A VFD IS INSTALLED...
6. INSTALLATION OF WIRES AND CABLES:
A. ALL BRANCH CIRCUIT WIRES, FEEDER CABLES, ETC...
B. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS...
C. TERMINALS ON SWITCHES AND CONVENIENCE OUTLETS SHALL NOT BE USED TO 'FEED THROUGH'...
D. CONDUIT SHALL BE INSTALLED AS A COMPLETE SYSTEM...
E. USE RACEWAY FITTINGS THAT ARE OF TYPES COMPATIBLE WITH ASSOCIATED RACEWAY AND SUITABLE FOR USE AND LOCATION...
7. INSTALL PULL WIRES IN EMPTY RACEWAYS...
8. TELEPHONE AND SIGNAL SYSTEM RACEWAYS...
9. CONDUITS ABOVE LAY-IN CEILING SYSTEM SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES...
10. PROVIDE 36" MINIMUM RADIUS RIGID STEEL CONDUIT ELBOWS...
11. CONDUITS CAPPED OUTSIDE OF BUILDING...
12. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLES:
A. HOMERUNS TO PANELBOARDS SHALL REMAIN IN EMT CONDUIT...
B. MC AND AC CABLES SHALL NOT BE USED IN EXPOSED AREAS...
C. FITTINGS SHALL BE LISTED FOR USE WITH MC AND AC CABLE USED...
D. CONDUCTORS IN MC AND AC CABLE SHALL COMPLY WITH SECTION 'WIRES & CABLES'.

Table with 3 columns: 208Y/120V NORMAL, PHASE, 480Y/277V NORMAL. Rows include BLACK (A), RED (B), BLUE (C), WHITE (NEUTRAL), GREEN (GROUND), GREEN W/ YELLOW STRIP (ISOLATED GROUND).

Table with 3 columns: 208Y/120V - UPS, PHASE. Rows include BLACK W/ ORANGE STRIP (A), RED W/ ORANGE STRIP (B), BLUE W/ ORANGE STRIP (C), WHITE W/ ORANGE STRIP (NEUTRAL), GREEN W/ ORANGE STRIP (GROUND), GREEN W/ YELLOW STRIP (ISOLATED GROUND).

SECTION 26 08 00 - TESTING

- 1. ALL ELECTRICAL EQUIPMENT ON THIS PROJECT PROVIDED UNDER THIS DIVISION AND ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHERS SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE ELECTRICAL CONTRACTOR.
2. MECHANISMS OF ALL ELECTRICAL EQUIPMENT SHALL BE CHECKED, ADJUSTED AND TESTED FOR PROPER OPERATION...
3. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPERATION, SERVICE AND MAINTENANCE OF ALL NEW ELECTRICAL EQUIPMENT...
4. THIS CONTRACTOR SHALL MAINTAIN SERVICE AND EQUIPMENT FOR THE TESTING OF ELECTRICAL EQUIPMENT AND APPARATUS...
5. THE ELECTRICAL DISTRIBUTION DESIGN HAS BEEN PROVIDED WITH A LOAD-BALANCED ELECTRICAL SYSTEM... IF MODIFICATIONS, DUE TO CONTRACTORS CONSTRUCTION OR CHANGE-ORDERS HAVE BEEN MADE TO THE DESIGN...

SECTION 26 05 33 - RACEWAYS

- 1. THIS SECTION INCLUDES RACEWAYS FOR ELECTRICAL WIRING...
A. ELECTRICAL METALLIC TUBING (EMT)
B. INTERMEDIATE METAL CONDUIT (IMC)
C. FLEXIBLE METAL CONDUIT
D. LIQUID-TIGHT FLEXIBLE CONDUIT
E. RIGID METAL CONDUIT
F. RIGID NONMETALLIC CONDUIT (PVC)
G. SURFACE RACEWAYS
H. WIREWAY
I. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE
2. WIREWAYS:
A. ELECTRICAL WIREWAYS SHALL BE OF TYPES, SIZES, AND NUMBER OF CHANNELS AS INDICATED...
3. SURFACE RACEWAYS:
A. SIZES AND CHANNELS AS INDICATED, MINIMUM SIZE TO BE EQUAL TO WIREMOLD # 500 SERIES...
4. WIRING METHOD:
A. OUTDOORS: USE THE FOLLOWING WIRING METHODS:
1. EXPOSED: INTERMEDIATE METAL CONDUIT
2. CONCEALED: INTERMEDIATE METAL CONDUIT
3. UNDERGROUND, RIGID NONMETAL CONDUIT
4. CONNECTION TO VIBRATING EQUIPMENT...
5. INDOORS OR OUTDOORS CONNECTION TO VIBRATING EQUIPMENT...
B. INDOORS: USE THE FOLLOWING WIRING METHODS:
1. CONNECTION TO VIBRATING EQUIPMENT...
2. EXPOSED: ELECTRICAL METALLIC TUBING
3. CONCEALED: ELECTRICAL METALLIC TUBING
4. CONCRETE OR IN CONCRETE EMBEDDED...
5. UNDER CONCRETE FLOOR (SLAB ON GRADE)...
C. PVC CONDUIT CAN BE INSTALLED BELOW FLOOR SLAB INDOORS...
D. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE
1. MC AND AC CABLE MAY BE USED IN LIEU OF EMT CONDUIT...
2. MC AND AC CABLE SHALL BE SUPPORTED AND SECURED BY STAPLES...
3. MC AND AC CABLE WITH FOUR OR FEWER CONDUCTORS...
4. MC AND AC CABLE SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 6 FT...
5. MC AND AC CABLE SHALL NOT BE USED IN EXTERIOR APPLICATIONS
5. CONDUIT SHALL BE INSTALLED AS A COMPLETE SYSTEM...
6. USE RACEWAY FITTINGS THAT ARE OF TYPES COMPATIBLE WITH ASSOCIATED RACEWAY AND SUITABLE FOR USE AND LOCATION...
7. INSTALL PULL WIRES IN EMPTY RACEWAYS...
8. TELEPHONE AND SIGNAL SYSTEM RACEWAYS...
9. CONDUITS ABOVE LAY-IN CEILING SYSTEM SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES...
10. PROVIDE 36" MINIMUM RADIUS RIGID STEEL CONDUIT ELBOWS...
11. CONDUITS CAPPED OUTSIDE OF BUILDING...
12. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLES:
A. HOMERUNS TO PANELBOARDS SHALL REMAIN IN EMT CONDUIT...
B. MC AND AC CABLES SHALL NOT BE USED IN EXPOSED AREAS...
C. FITTINGS SHALL BE LISTED FOR USE WITH MC AND AC CABLE USED...
D. CONDUCTORS IN MC AND AC CABLE SHALL COMPLY WITH SECTION 'WIRES & CABLES'.

SECTION 26 05 33 - CABINETS, BOXES, AND FITTINGS

- 1. THIS SECTION INCLUDES CABINETS, BOXES, AND FITTINGS FOR ELECTRICAL INSTALLATIONS...
2. METAL OUTLET, DEVICE, AND SMALL WIRING BOXES:
A. GENERAL: CONFORM TO UL 514A...
B. STEEL BOXES: CONFORM TO NEMA OS 1...
C. CAST-IRON FLOOR BOXES: FULLY ADJUSTABLE, WATERPROOF...
3. PULL AND JUNCTION BOXES:
A. COMPLY WITH UL 50...
B. STEEL BOXES: SHEET STEEL WITH WELDED SEAMS...
C. LOCKS: COMBINATION SPRING CATCH AND KEY LOCK...
4. CABINETS:
A. COMPLY WITH UL 50...
B. DOORS: DOUBLE DOORS FOR CABINETS WIDER THAN 24-INCHES...
C. LOCKS: COMBINATION SPRING CATCH AND KEY LOCK...
5. STEEL ENCLOSURES WITH HINGED DOORS:
A. COMPLY WITH UL 50...
B. DOORS: HINGED DIRECTLY TO CABINET...
6. WEATHERPROOF PULL AND SPLICE BOXES:
A. BOXES SHALL BE NEMA 12 AND 13 RATED...
7. FIRESTOP FOR RECESSED WALL BOXES:
A. INSTALLATIONS OF MULTIPLE BOXES...
8. FLOOR BOXES IN SLABS ON GRADE...
9. WHEN TWO OR MORE PHASES OF 277/480 VOLTS SYSTEM...
10. PULL AND SPLICE BOXES LOCATED OUTDOORS...
11. ELECTRICALLY GROUND METALLIC CABINETS, BOXES, AND ENCLOSURES...



MIRA SAFETY 1713 Hur Industrial Blvd Cedar Park, TX 78613

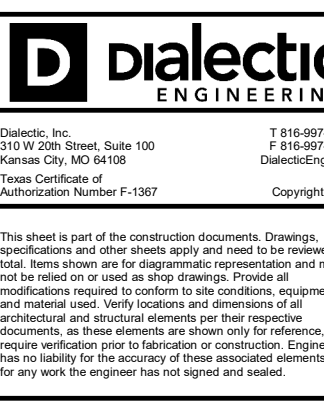
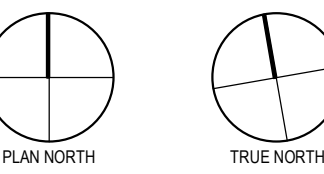


Table with 2 columns: Item, Date. Rows include Project Number (23-01-014), Drawn By (TH), Checked By (JGW)

E701



PLUMBING FIXTURE SCHEDULE table with columns: ID, FIXTURE TYPE, MANUFACTURER, MODEL NO., CONNECTION SIZES (CW, HW, WASTE, VENT), DESCRIPTION, TRIM AND REMARKS.

PLUMBING EQUIPMENT SCHEDULE table with columns: TYPE, MARK, FIXTURE TYPE, MANUFACTURER, MODEL, ELECTRICAL DATA (VOLT, PHASE, WATT, MOCP), DESCRIPTION, TRIM AND REMARKS.

GAS SCHEDULE table with columns: MARK, DESCRIPTION, CFH.

PLUMBING SPECIFICATION

THE WORK INCLUDES MODIFICATION TO THE EXISTING PLUMBING SYSTEM AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM...

GENERAL PLUMBING NOTES

- A. REFER TO PLUMBING SPECIFICATION ELSEWHERE IN DRAWINGS FOR FURTHER INFORMATION AND REQUIREMENTS FOR PLUMBING CONTRACTOR.

PLUMBING SYMBOLS LEGEND

ABBREVIATIONS: AFF/AFG ABOVE FINISHED FLOOR/GRADE, BFP BACKFLOW PREVENTER, CO CLEANOUT, FFOCO/FGCO FLUSH FLOOR/GRADE CLEANOUT, FSEC FOOD SERVICE EQUIPMENT CONTRACTOR...

tramonte design | studio logo, MIRA SAFETY logo with 'SAFETY' text, and a professional seal for Robert A. Harris, State of Texas, License No. 116504.

MIRA SAFETY 1713 Hur Industrial Blvd Cedar Park, TX 78613

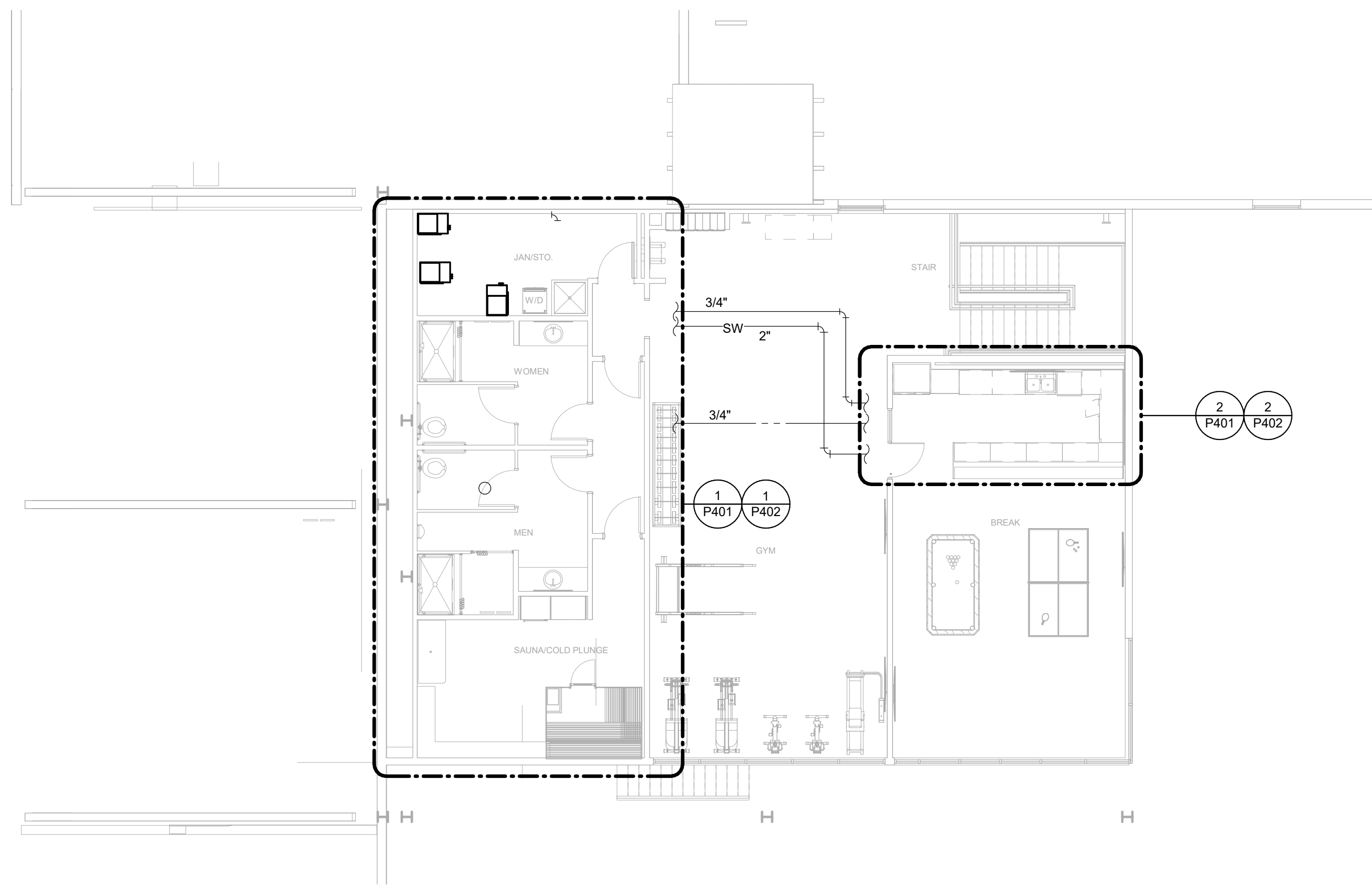
dialectc ENGINEERING logo and contact information: 214.267.8000, 714.267.8002, 214.267.8003.

IPF 12/01/23

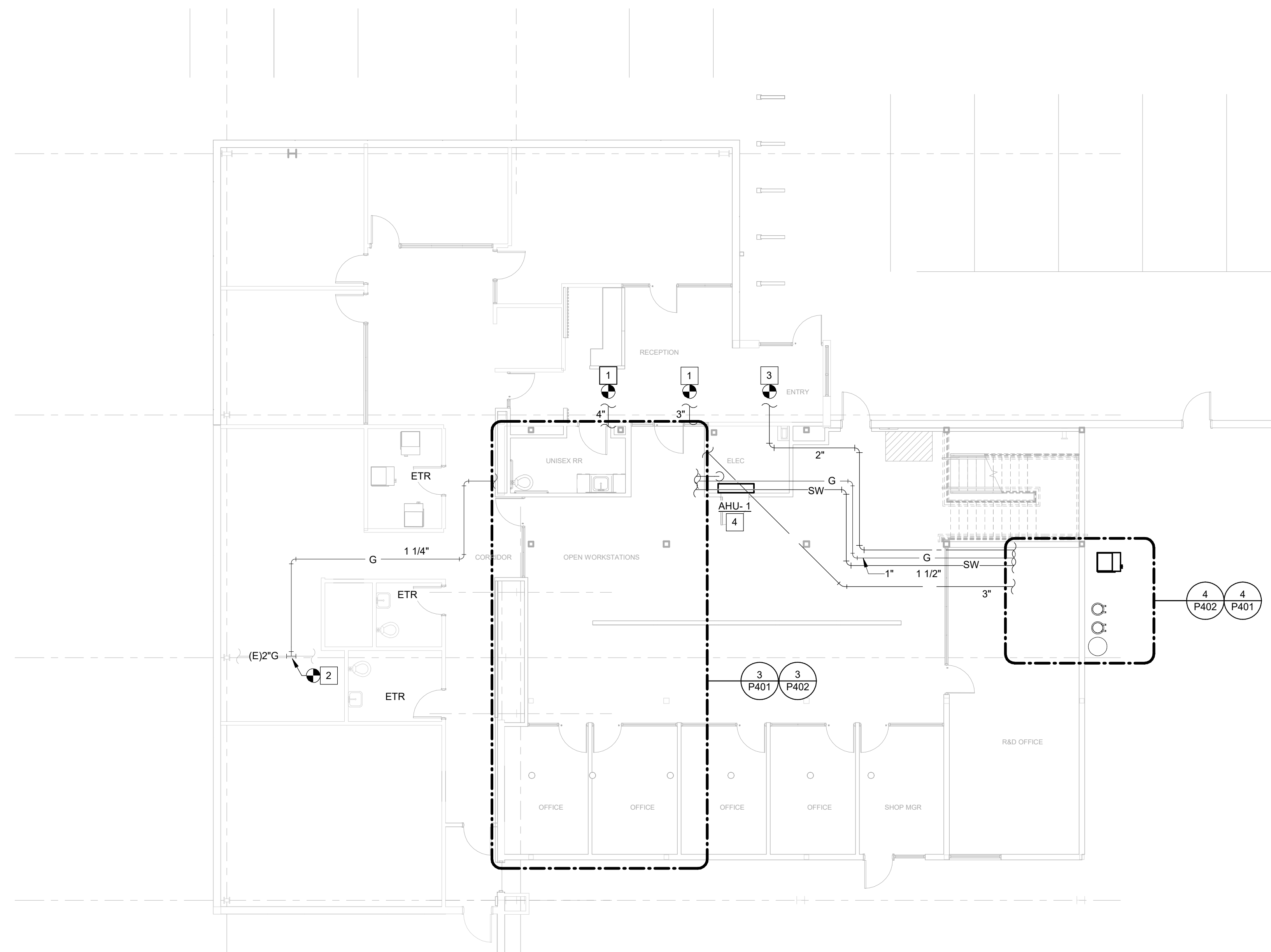
Project Number 23-01-014 Drawn By WRD Checked By JMB

P001 PLUMBING NOTES, LEGENDS AND SPECIFICATIONS

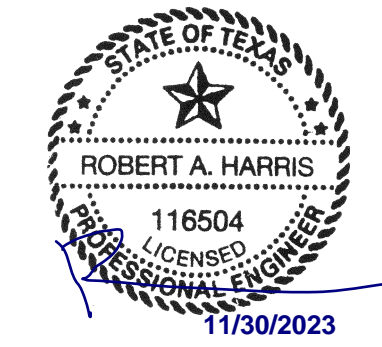
#	PLUMBING KEY NOTES
1	CONNECT NEW SANITARY PIPING TO EXISTING SANITARY PIPING. FIELD VERIFY EXACT LOCATION OF CONNECTION AND ROUTING REQUIREMENTS.
2	CONNECT NEW GAS PIPING TO EXISTING GAS PIPING. FIELD VERIFY EXACT LOCATION OF CONNECTION AND ROUTING REQUIREMENTS. GAS SYSTEM DESIGNED BASED ON A SERVICE PRESSURE OF 7" WC WITH A PRESSURE DROP OF 0.5" WC AND A TOTAL DEVELOPED LENGTH OF 150 FEET. PIPE SIZING BASED ON THE 2021 IFGC TABLE 402.2.
3	CONNECT NEW WATER PIPING TO EXISTING WATER PIPING. FIELD VERIFY EXACT LOCATION OF CONNECTION AND ROUTING REQUIREMENTS.
4	CONNECT TO AHU-1 PER "AIR HANDLING UNIT CONDENSATE" DETAIL.



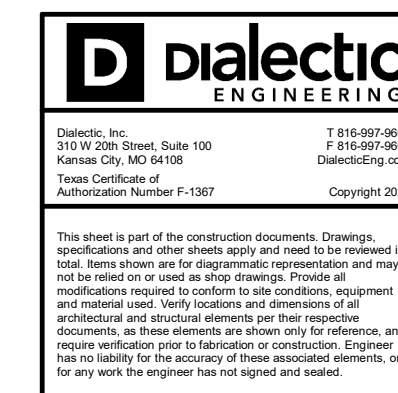
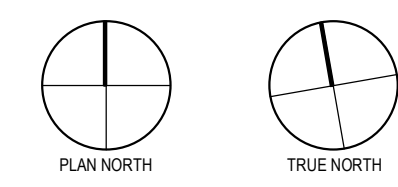
**2 OVERALL PLUMBING PLAN - LV 2**  
1/8" = 1'-0"



**1 OVERALL PLUMBING PLAN - LV 1**  
1/8" = 1'-0"



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



IFP 12/01/23

Issues

Project Number	23-01-014
Drawn By	WRD
Checked By	JMB

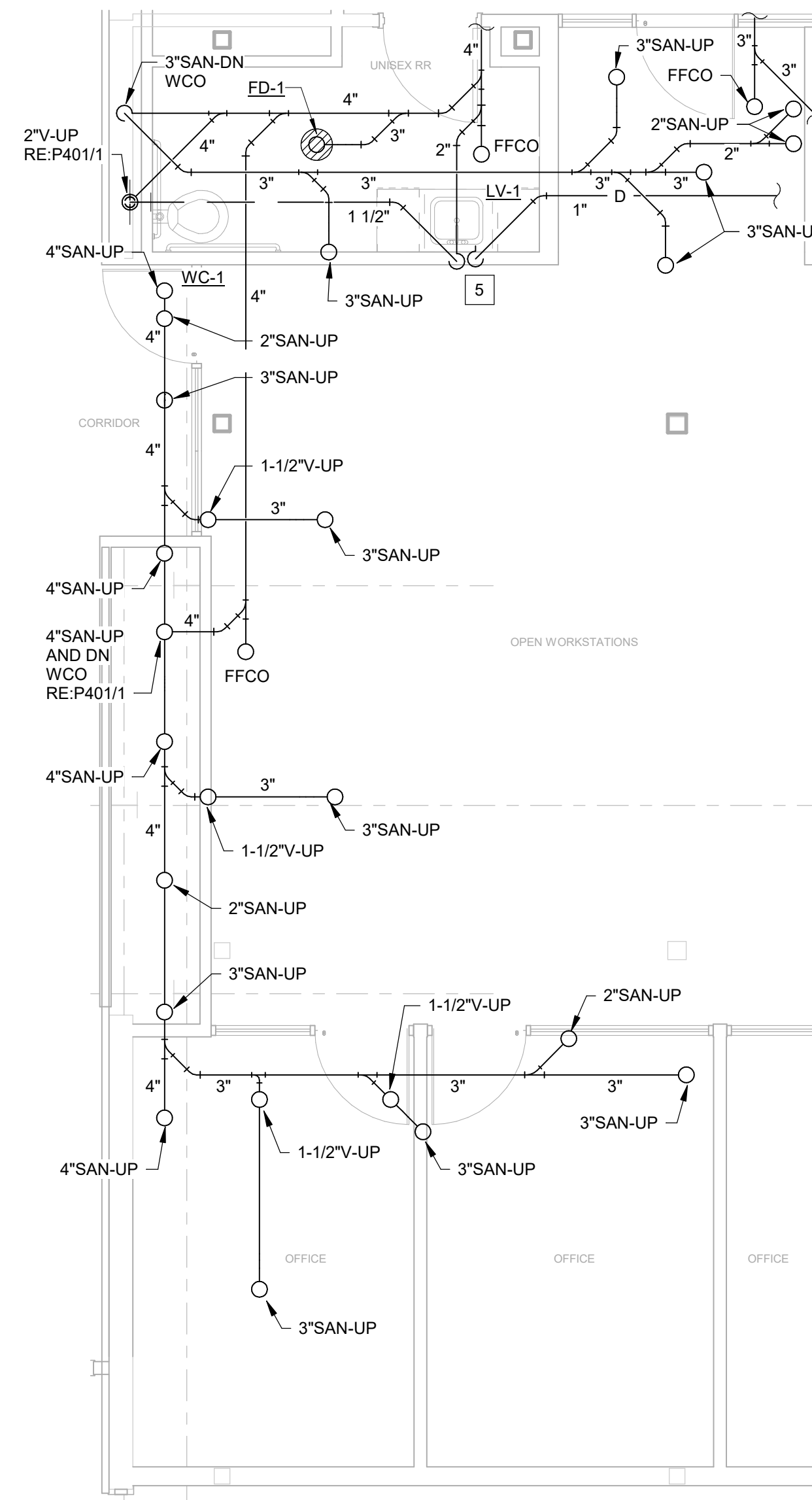
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**P111**

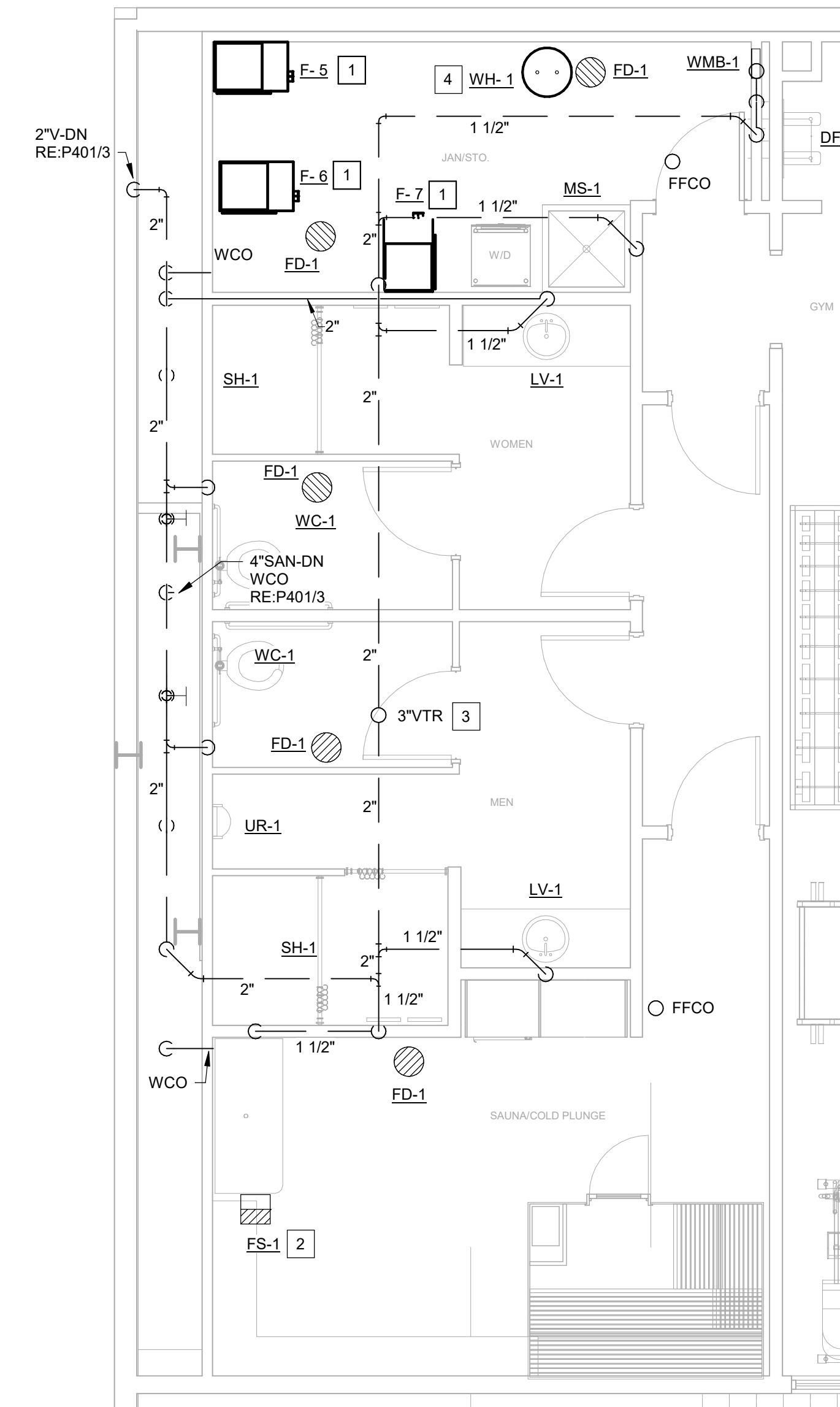
PLUMBING PLANS

**PLUMBING KEY NOTES**

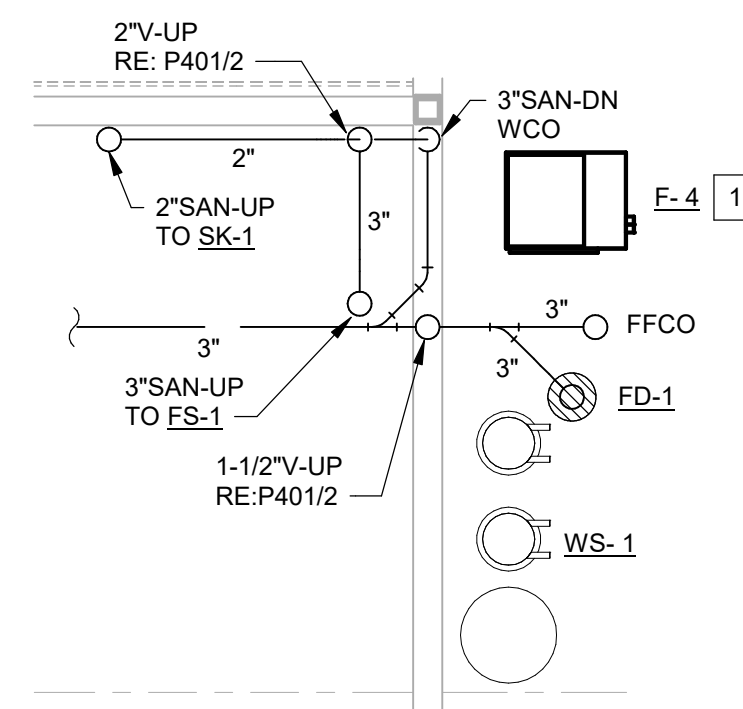
- 1 CONNECT CONDENSATE DRAIN TO FURNACE PER "GAS FURNACE CONNECTION" DETAIL. ROUTE CONDENSATE TO DRAIN TO NEAREST FLOOR DRAIN PER "INDIRECT DRAIN" DETAIL.
- 2 PROVIDE FLOOR SINK IN ACCESSIBLE LOCATION FOR COLD PLUNGE DRAIN.
- 3 PROVIDE SANITARY VENT THROUGH ROOF PER "VENT THRU ROOF VTRV" DETAIL. LOCATE VENT MINIMUM OF 30'-0" AWAY FROM AIR INTAKES ON ROOF, UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION.
- 4 ROUTE WATER HEATER DRAINS TO DRAIN TO NEAREST FLOOR DRAIN PER "ELECTRIC WATER HEATER WITH PUMP" DETAIL.
- 5 ROUTE CONDENSATE TO SINK TAILPIECE PER "DISCHARGE TO TAILPIECE" DETAIL.
- 6 CONNECT TO DEH-1 PER "CONDENSATE DRAIN" DETAIL. FIELD VERIFY POINT OF CONNECTION TO UNIT AND ROUTING REQUIREMENTS. ROUTE CONDENSATE PIPING PER "INDIRECT DRAIN" DETAIL.



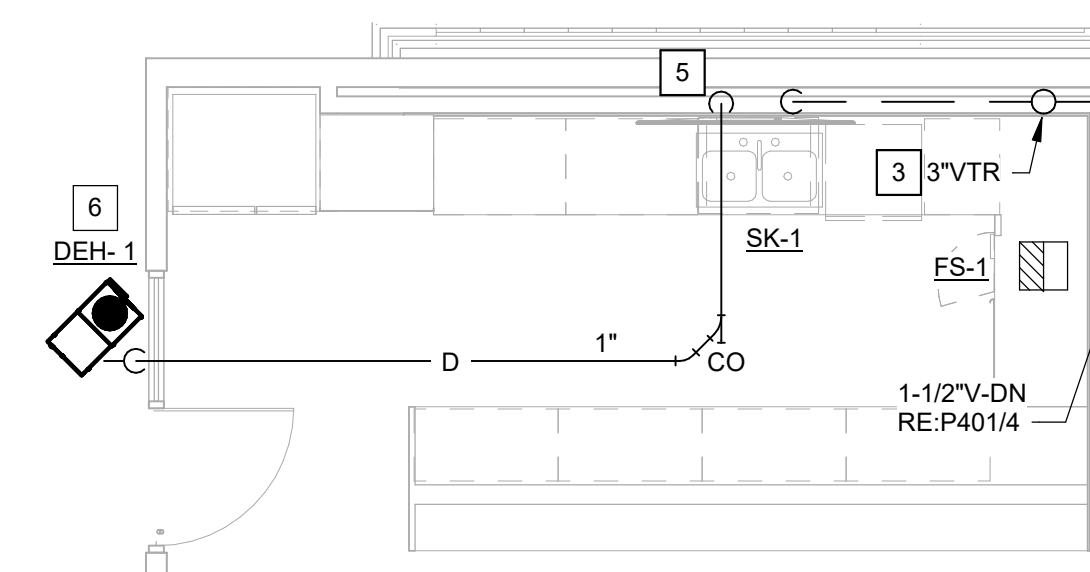
**3 ENLARGED WASTE AND VENT PLAN - LV 1 - RESTROOMS**  
1/4\" = 1'-0"



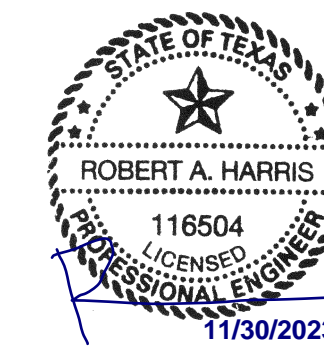
**1 ENLARGED WASTE AND VENT PLAN - LV 2 - RESTROOMS**  
1/4\" = 1'-0"



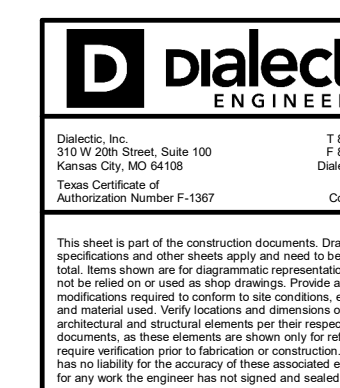
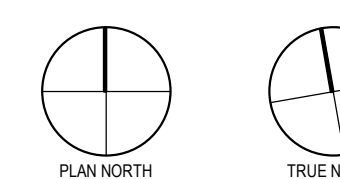
**4 ENLARGED WASTE AND VENT PLAN - LV 1 - MECHANICAL ROOM**  
1/4\" = 1'-0"



**2 ENLARGED WASTE AND VENT PLAN - LV 2 - LOUNGE**  
1/4\" = 1'-0"



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



This sheet is part of the construction documents. Drawings, specifications and other documents are subject to the contract documents. No part of this sheet shall be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the engineer. The engineer shall not be responsible for any errors or omissions in this sheet or any other sheets of the construction documents. The engineer shall not be responsible for any delays or interruptions in the construction of the project. The engineer shall not be responsible for any damage to property or persons caused by the construction of the project. The engineer shall not be responsible for any other matters not specifically mentioned in the contract documents.

IFP 12/01/23

Issues

Project Number 23-01-014

Drawn By WRD

Checked By JMB

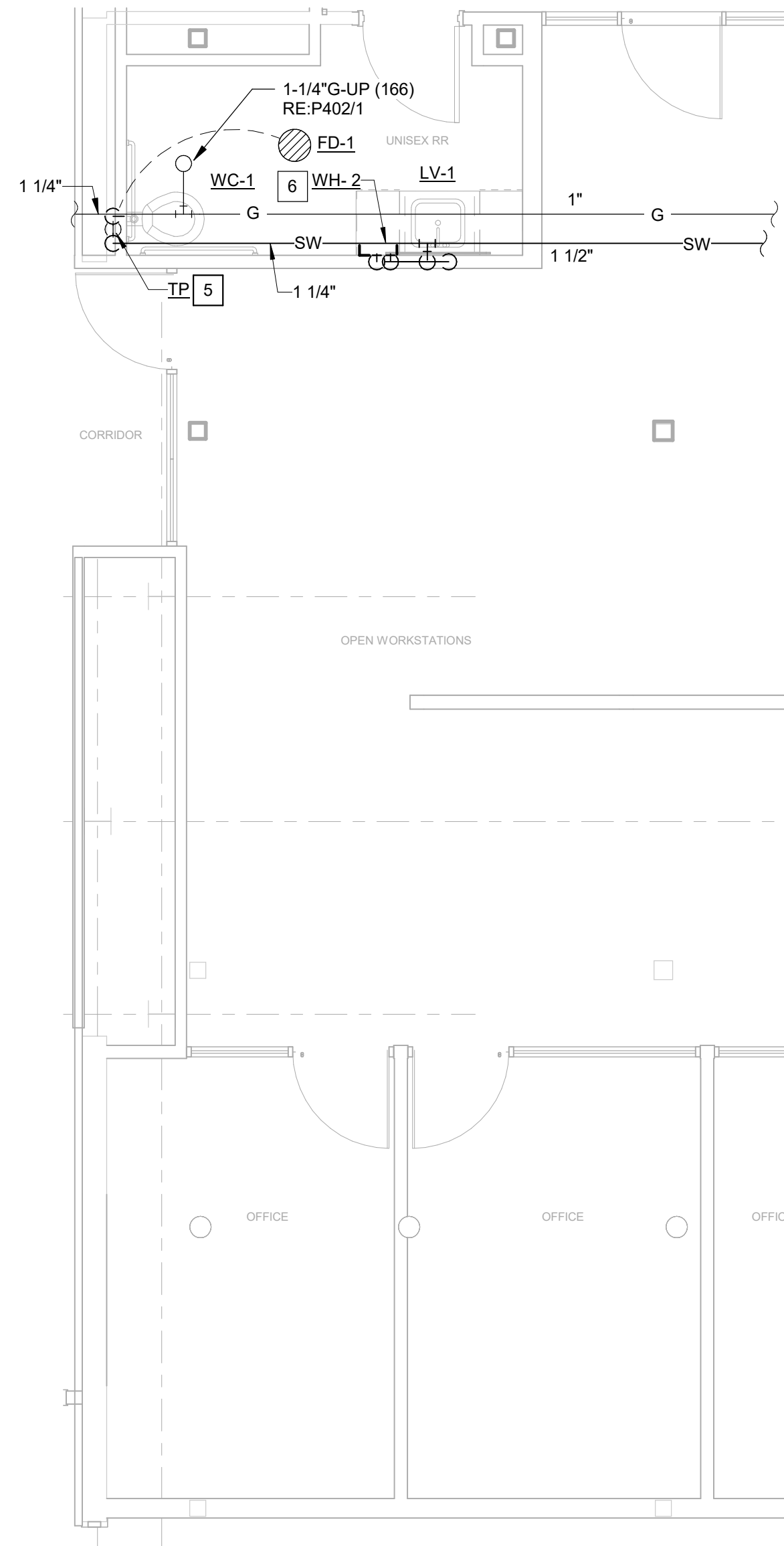
© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

**P401**

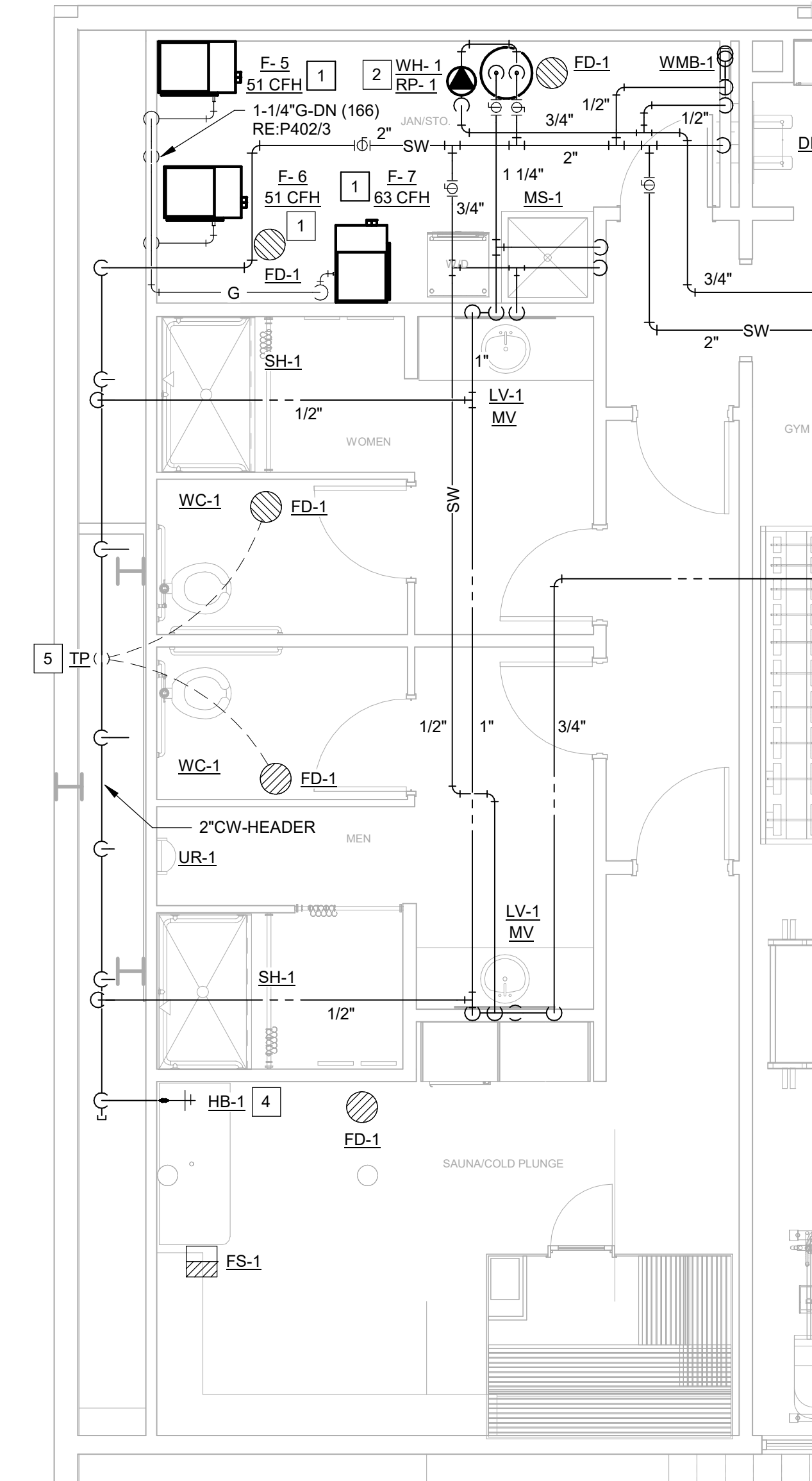
**PLUMBING  
ENLARGED WASTE  
AND VENT PLANS**



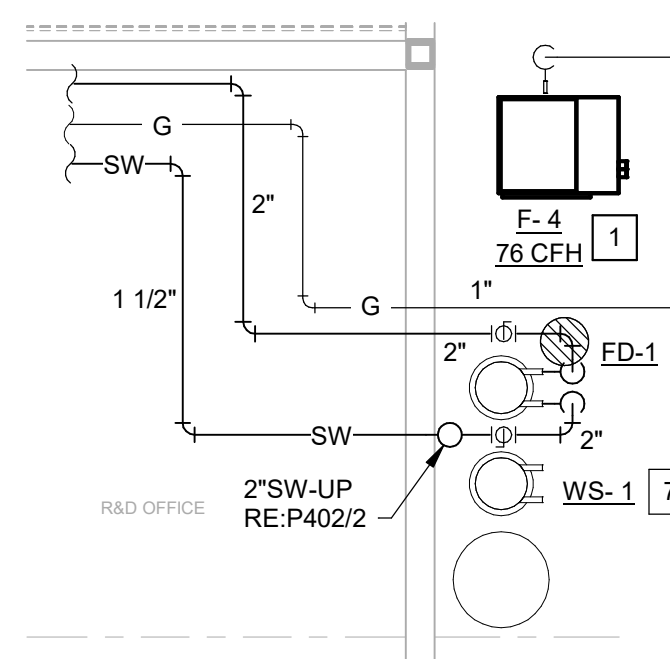
#	PLUMBING KEY NOTES
1	CONNECT GAS TO FURNACE PER "GAS FURNACE CONNECTIONS DETAIL. FIELD VERIFY CONNECTION REQUIREMENTS.
2	CONNECT TO WATER HEATER AND PUMP PER "ELECTRIC WATER HEATER WITH PUMP" DETAIL. ROUTE T&P RELIEF VALVE TO DRAIN TO NEAREST FLOOR DRAIN.
3	PROVIDE 1/2" HOT WATER LINE TO OWNER PROVIDED DISHWASHER.
4	MOUNT HOSE BIBB AT 30" AFF FOR FILLING THE COLD PLUNGE. VERIFY FINAL MOUNTING HEIGHT WITH OWNER PRIOR TO INSTALLATION.
5	CONNECT TO TRAP PRIMER PER "TRAP PRIMER" DETAIL.
6	CONNECT TO INSTANTANEOUS WATER HEATER PER "INSTANTANEOUS WATER HEATER" DETAIL.
7	CONNECT TO WATER SOFTENER PER "DUPLEX WATER SOFTENER" DETAIL.



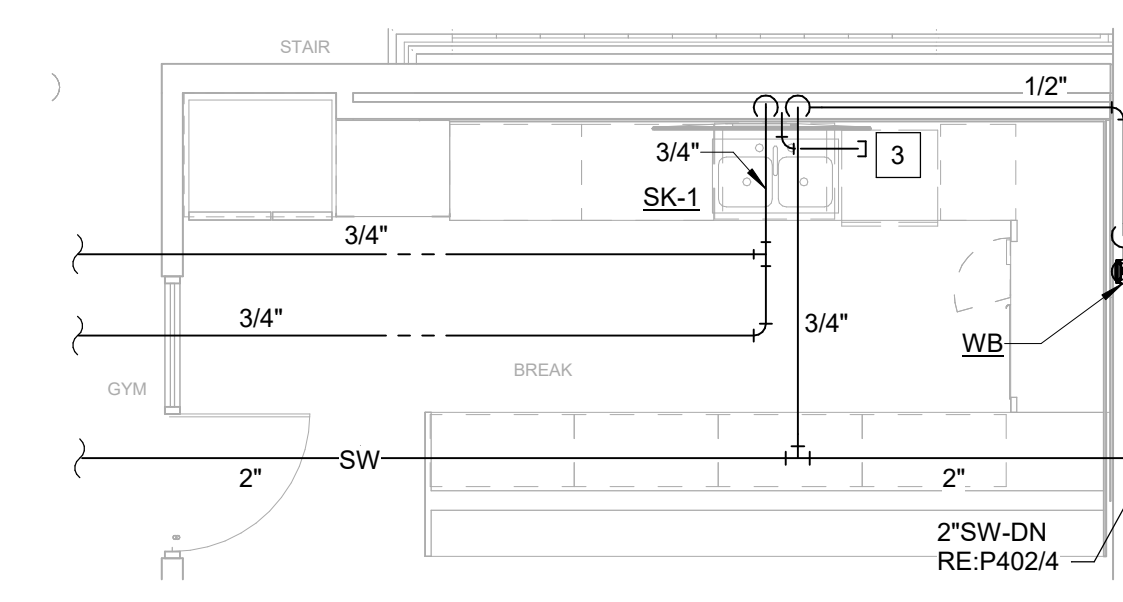
**3 ENLARGED WATER AND GAS PLAN - LV 1 - RESTROOMS**  
1/4" = 1'-0"



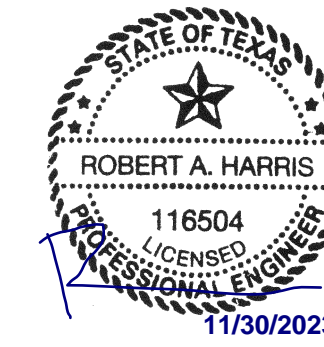
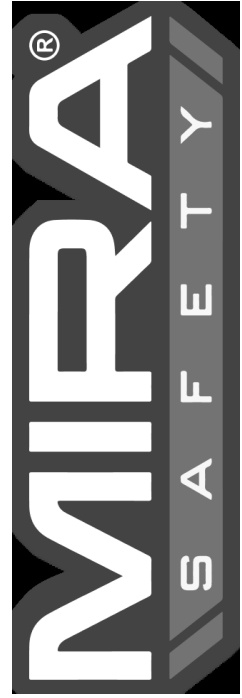
**1 ENLARGED WATER AND GAS PLAN - LV 2 - RESTROOMS**  
1/4" = 1'-0"



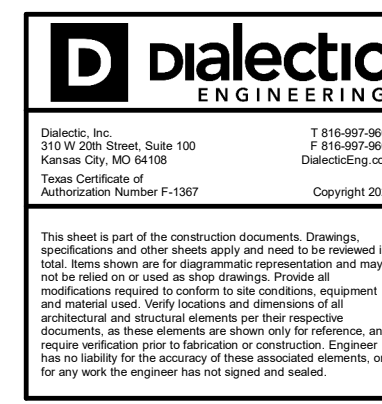
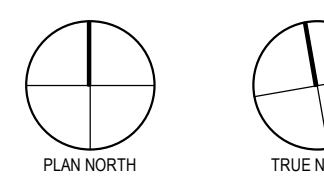
**4 ENLARGED WATER AND GAS PLAN - LV 1 - MECHANICAL ROOM**  
1/4" = 1'-0"



**2 ENLARGED WATER AND GAS PLAN - LV 2 - LOUNGE**  
1/4" = 1'-0"



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



This sheet is part of the construction documents. Drawings, specifications and other documents are made to be read in conjunction with the project manual. The contractor shall be responsible for verifying all information and for obtaining all necessary permits. The contractor shall be responsible for obtaining all necessary permits and for obtaining all necessary information from the project manual and for obtaining all necessary information from the project manual. The contractor shall be responsible for obtaining all necessary information from the project manual and for obtaining all necessary information from the project manual. The contractor shall be responsible for obtaining all necessary information from the project manual and for obtaining all necessary information from the project manual.

IFP 12/01/23

Issues

Project Number 23-01-014

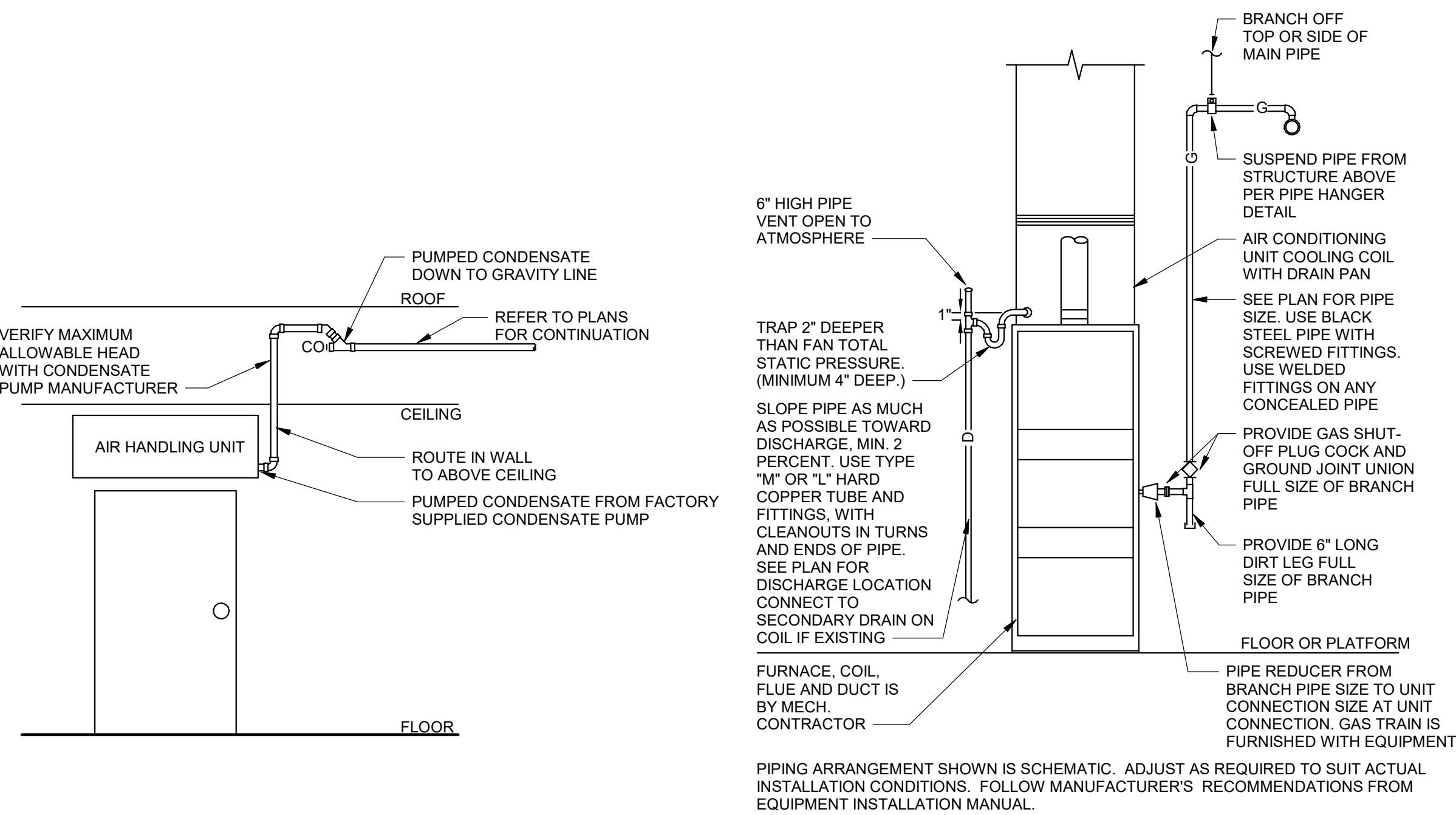
Drawn By WRD

Checked By JMB

© TRAMONTE DESIGN STUDIO, 2023. ALL RIGHTS RESERVED.

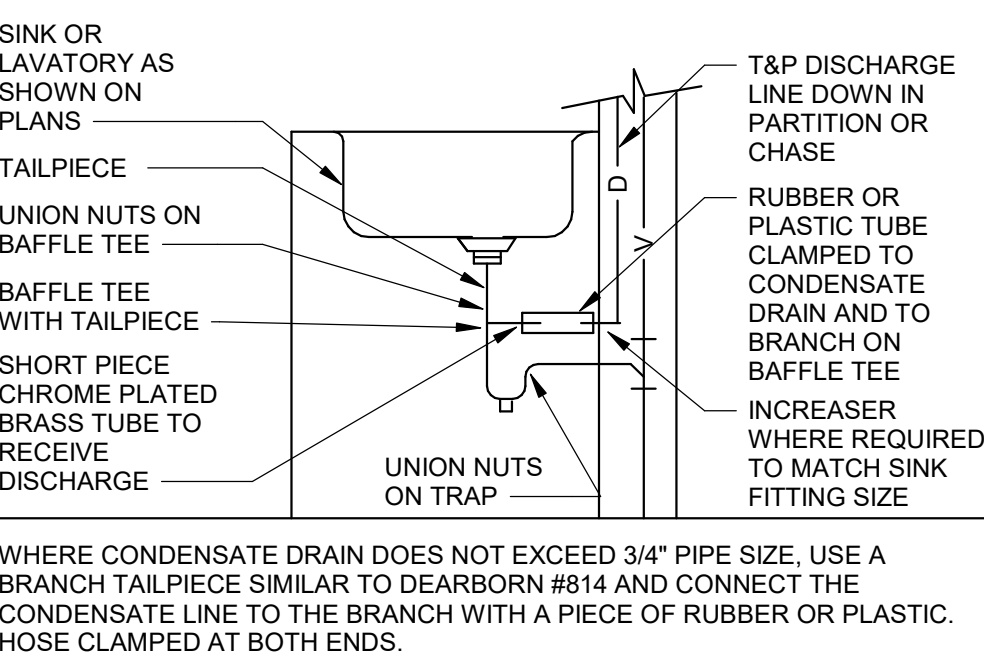
**P402**

**PLUMBING  
ENLARGED WATER  
AND GAS PLANS**



### 13 AIR HANDLING UNIT CONDENSATE

NOT TO SCALE

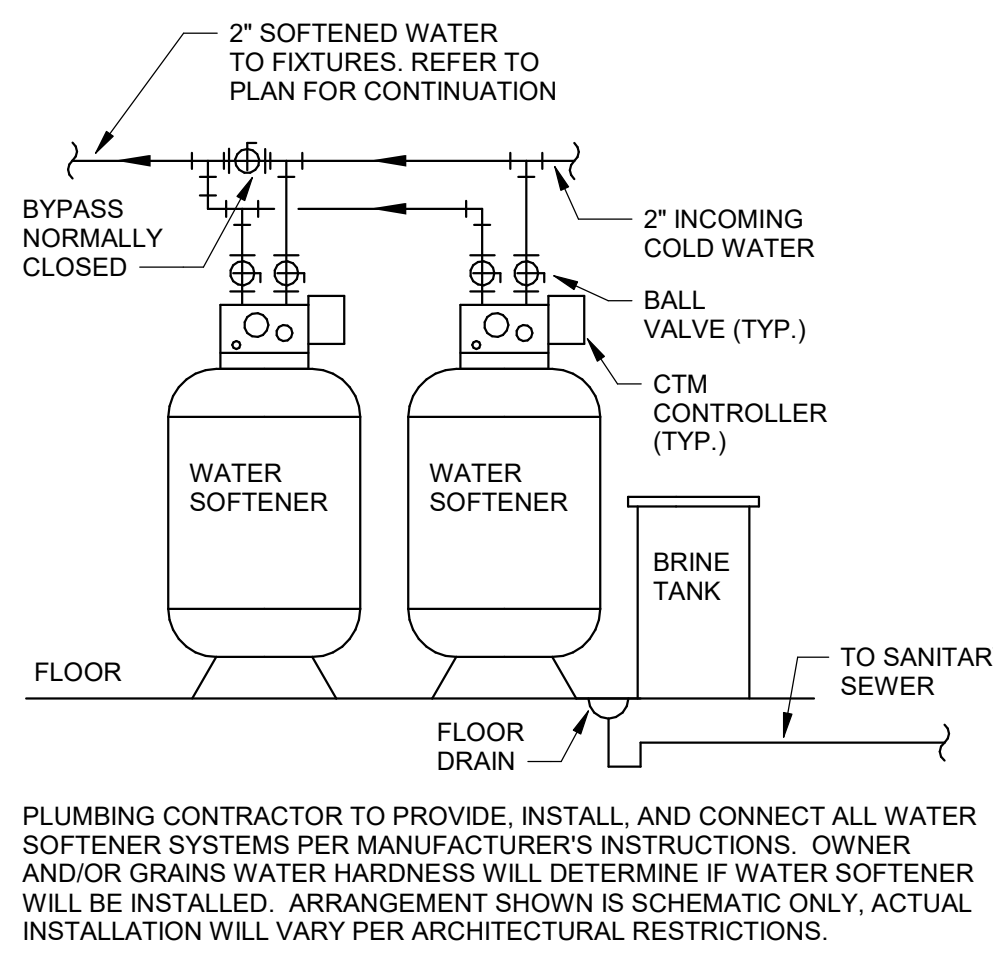


### 14 COND. DISCHARGE TO TAILPIECE

NOT TO SCALE

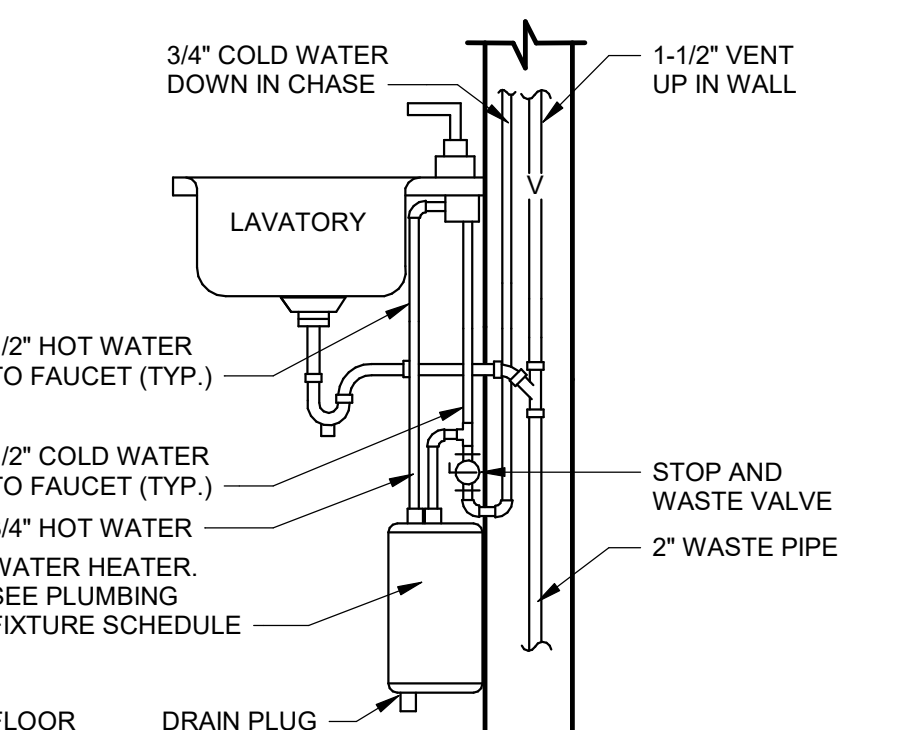
### 9 GAS FURNACE CONNECTIONS

NOT TO SCALE



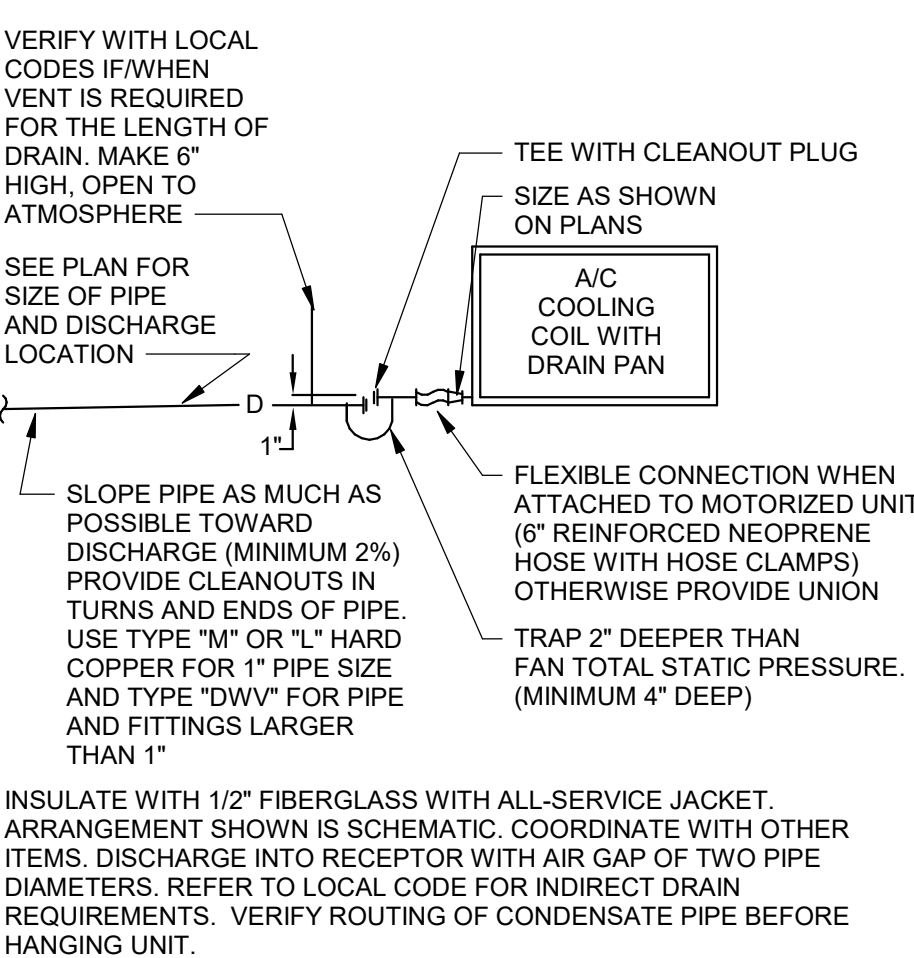
### 10 DUPLEX WATER SOFTENER

NOT TO SCALE



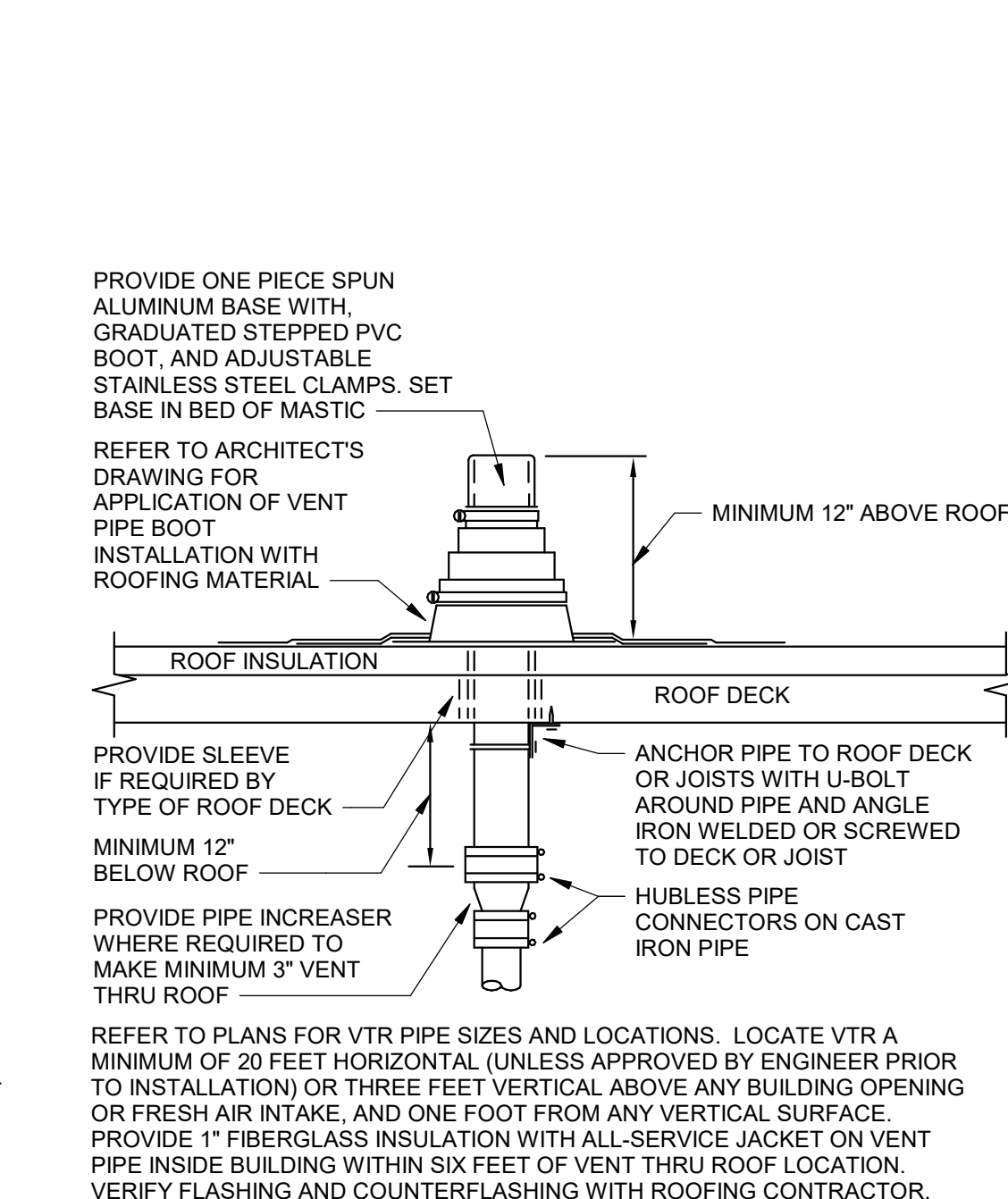
### 11 INSTANTANEOUS WATER HEATER

NOT TO SCALE



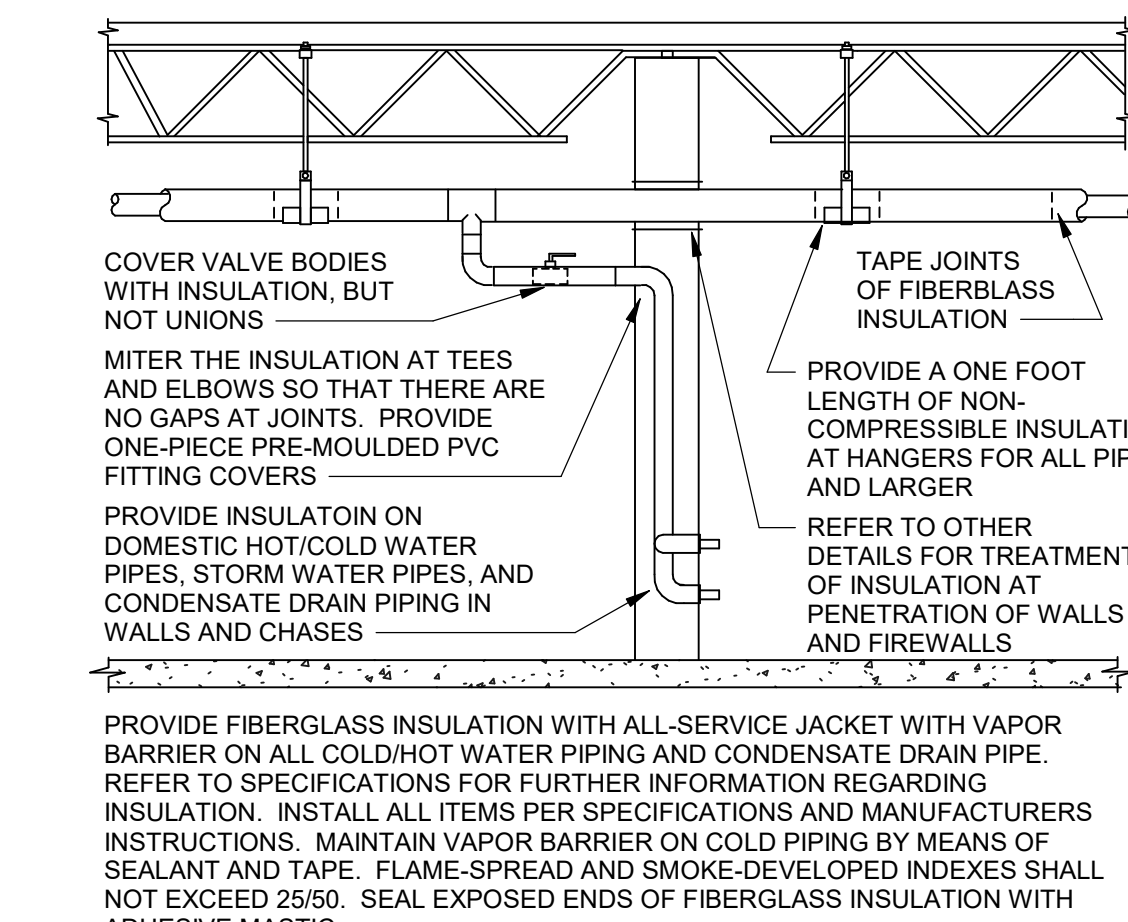
### 12 CONDENSATE DRAIN

NOT TO SCALE



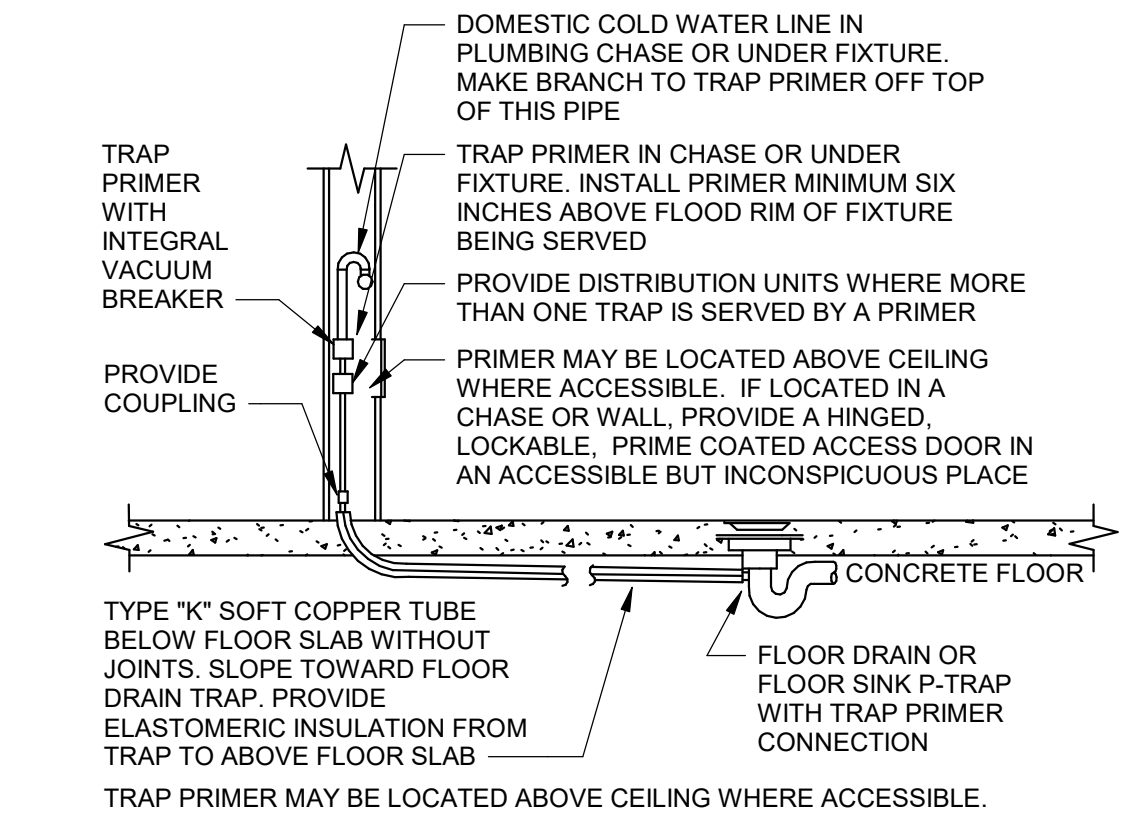
### 5 VENT THROUGH ROOF (VTR)

NOT TO SCALE



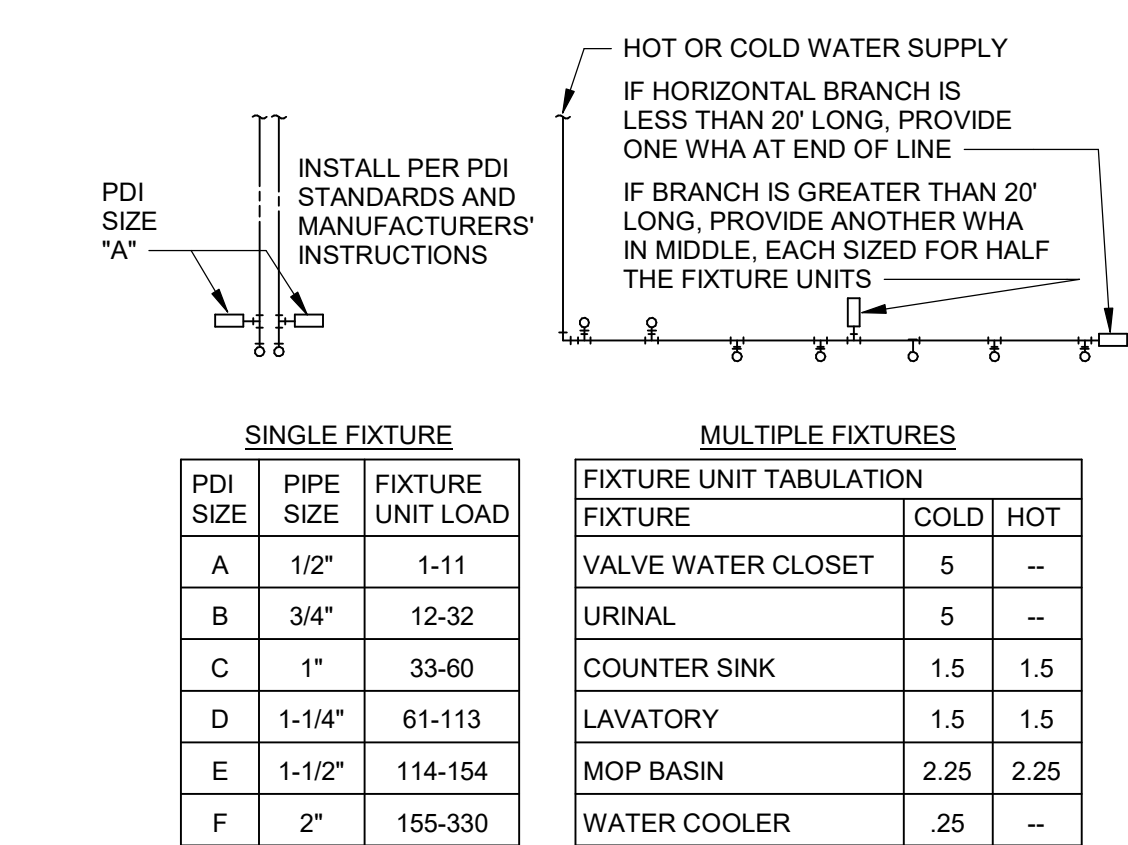
### 6 PIPE INSULATION DETAIL

NOT TO SCALE



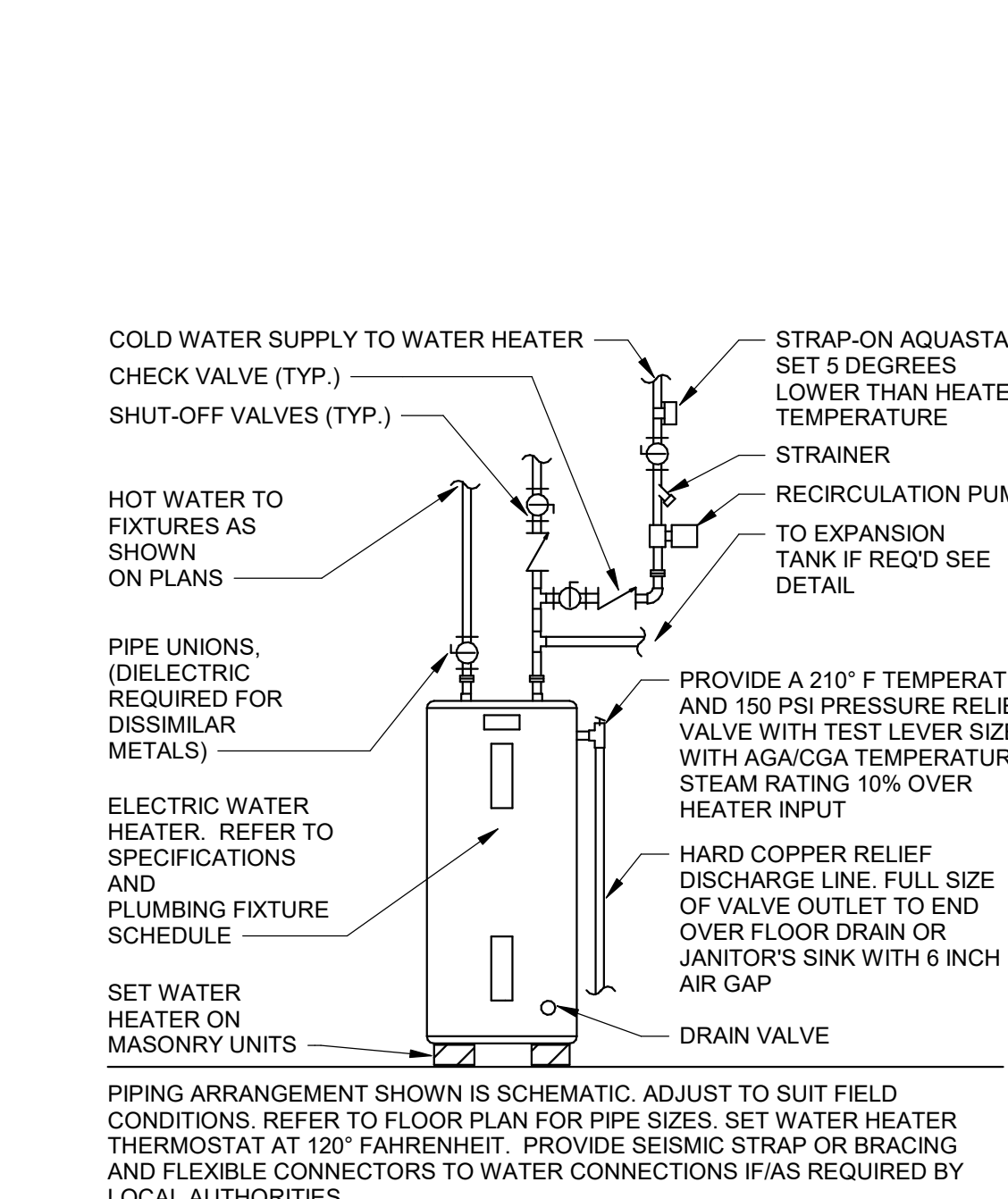
### 7 TRAP PRIMER

NOT TO SCALE



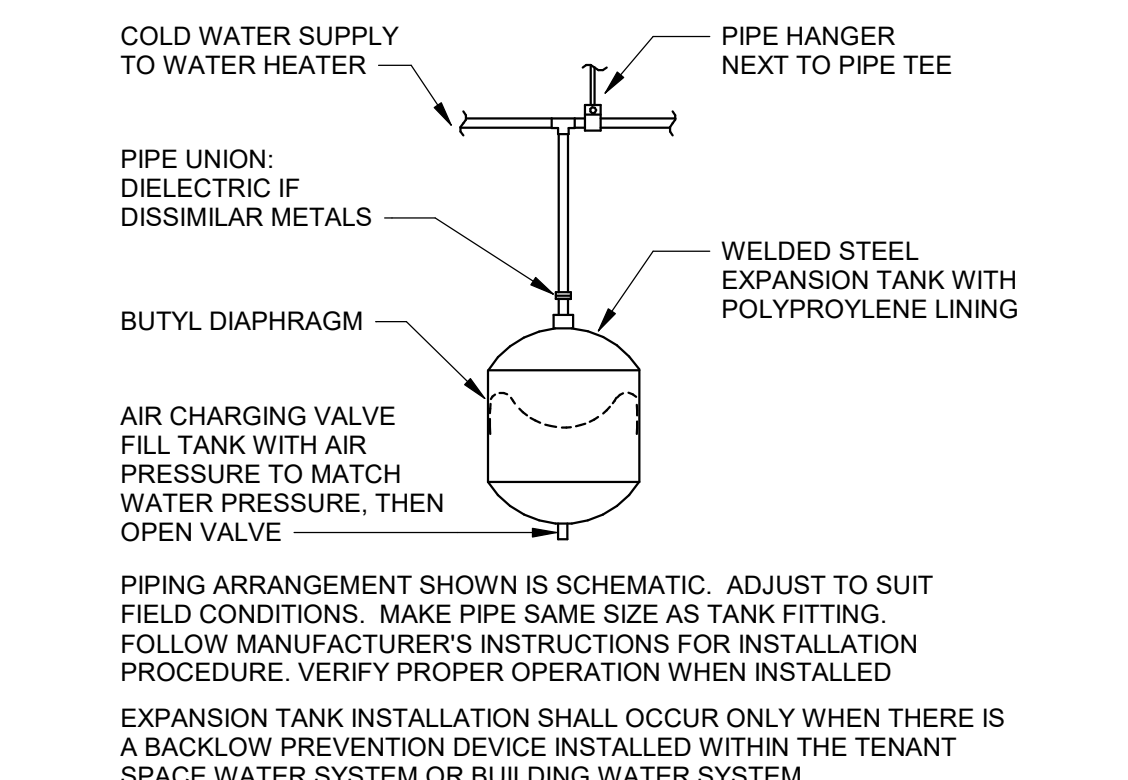
### 8 WATER HAMMER ARRESTORS

NOT TO SCALE



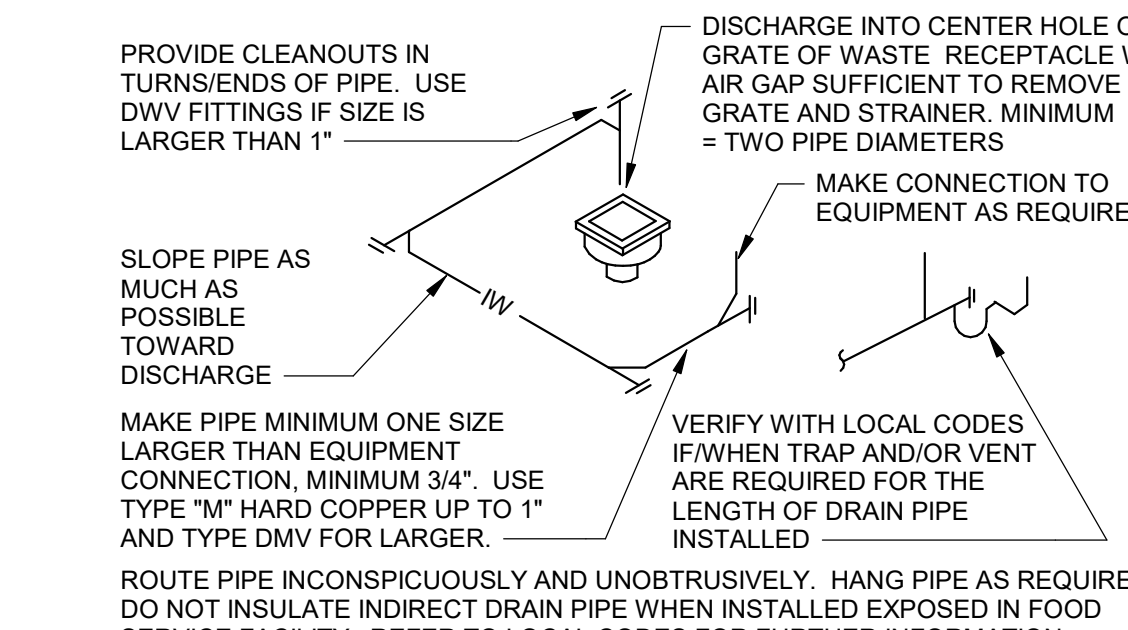
### 1 ELECTRIC WATER HEATER WITH PUMP

NOT TO SCALE



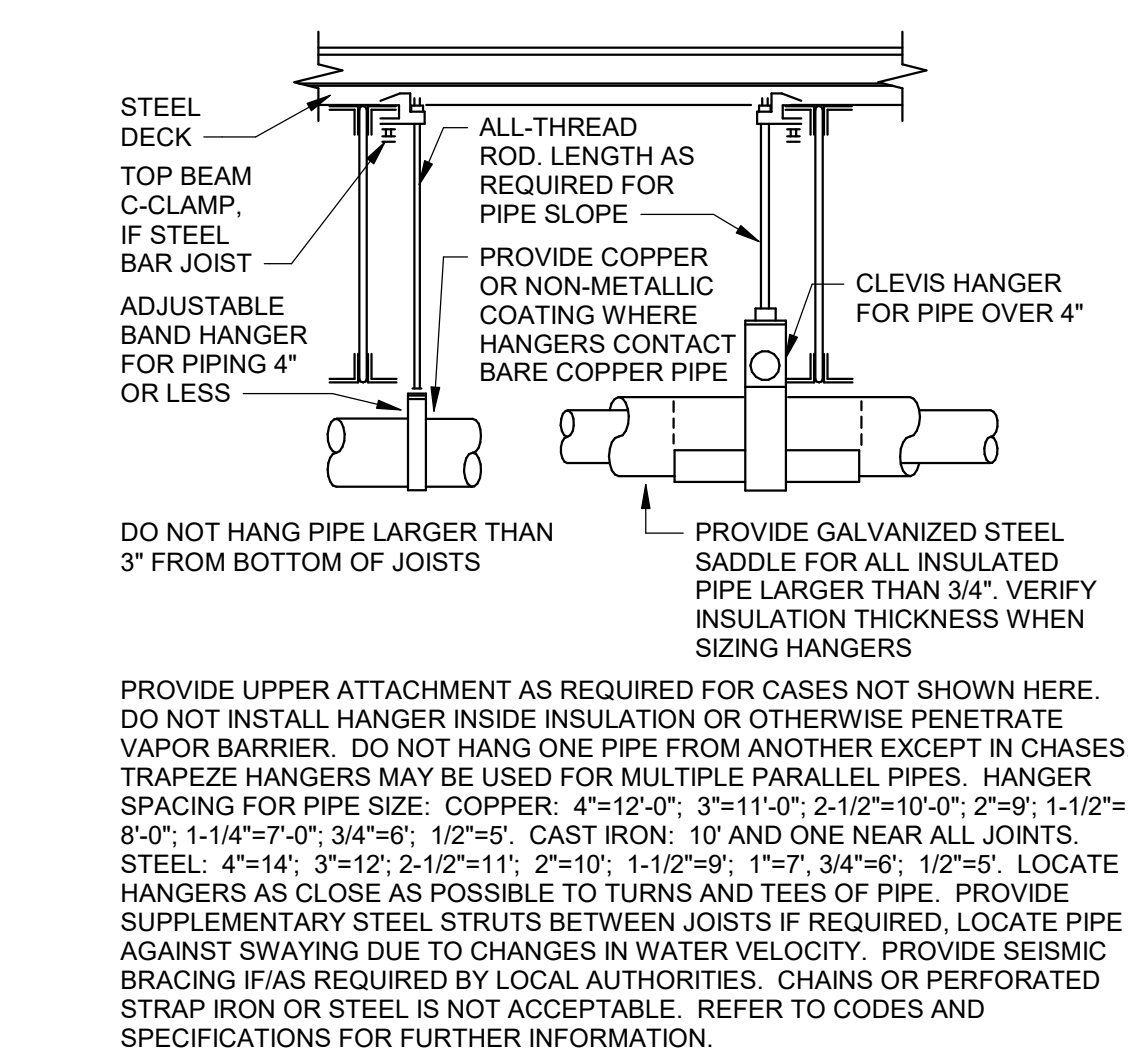
### 2 EXPANSION TANK

NOT TO SCALE



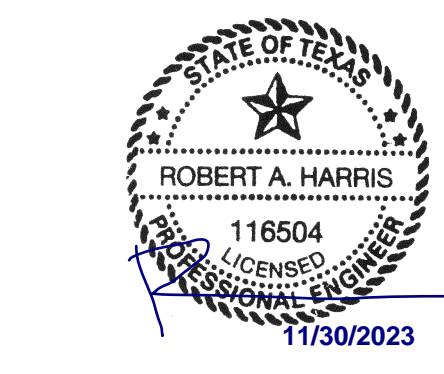
### 3 INDIRECT DRAIN

NOT TO SCALE

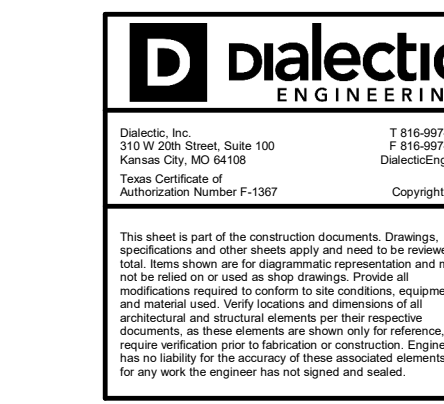
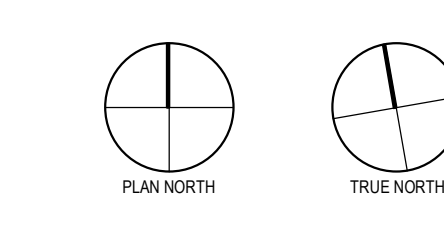


### 4 PIPE HANGERS

NOT TO SCALE



MIRA SAFETY  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613

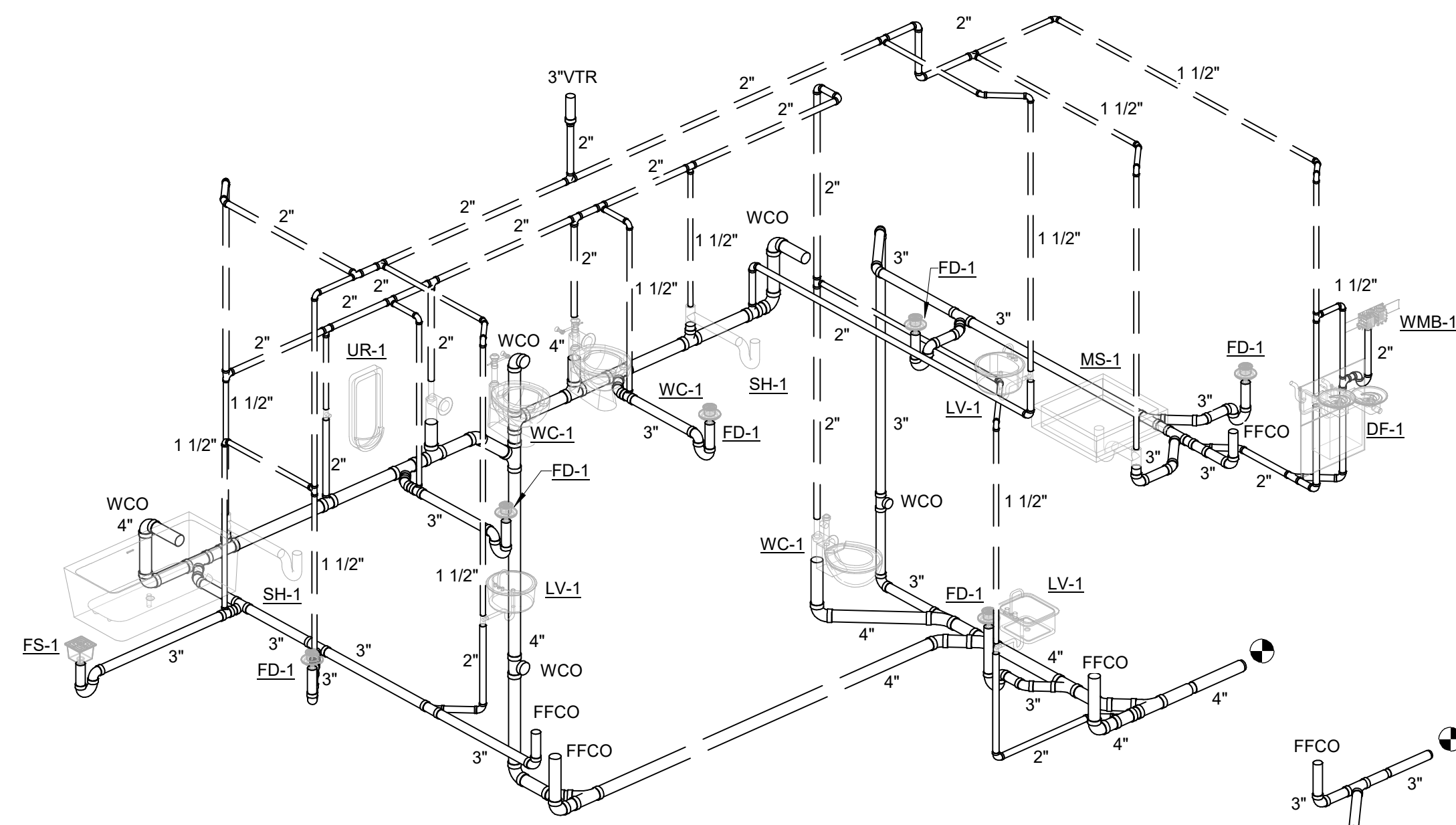


### 3 INDIRECT DRAIN

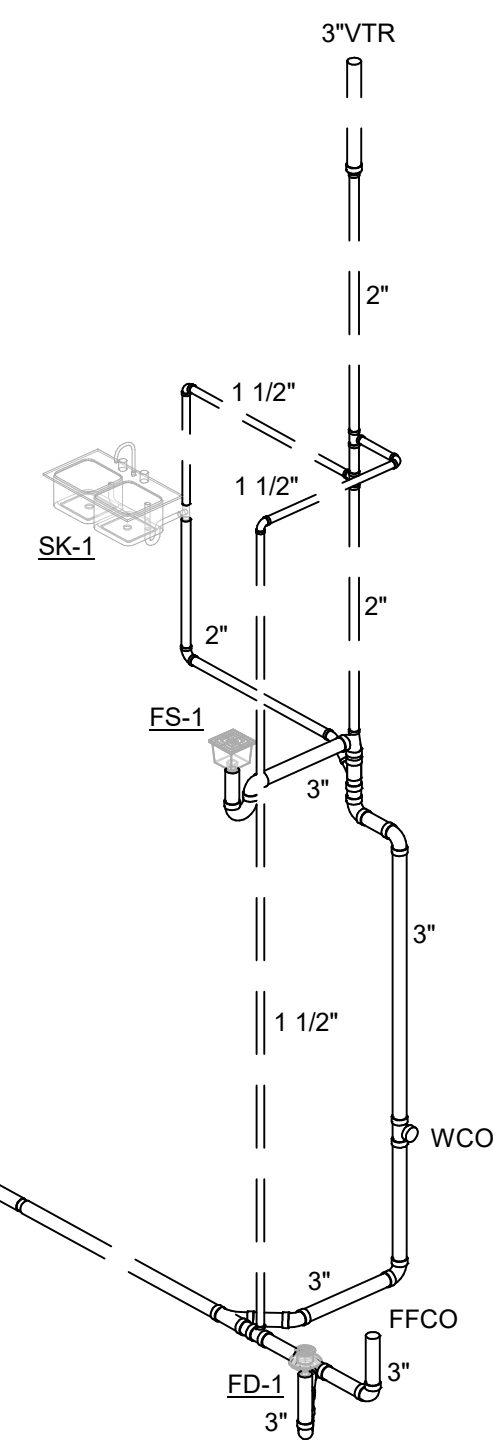


IFP 12/01/23

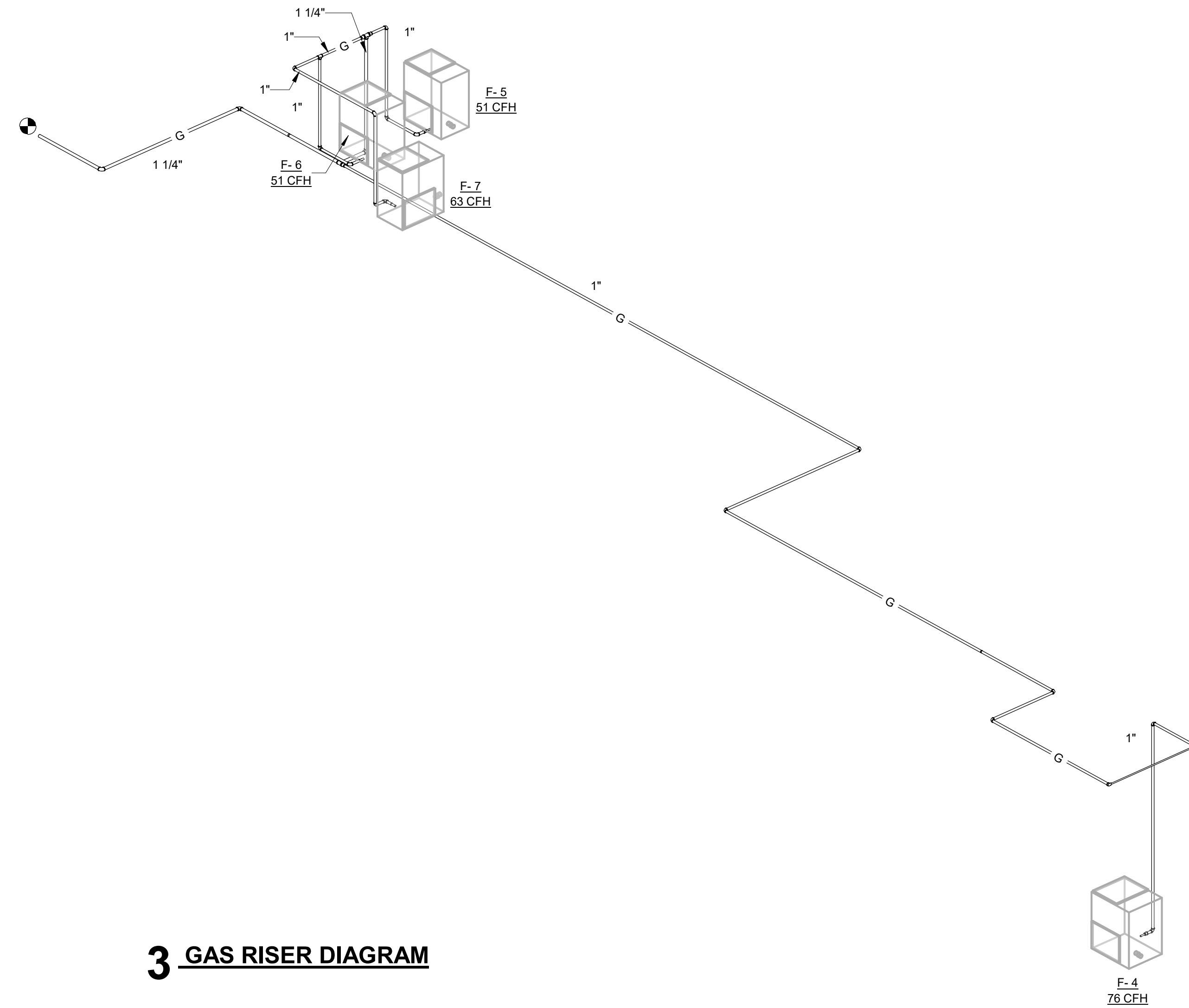
Project Number	23-01-014
Drawn By	WRD
Checked By	JMB



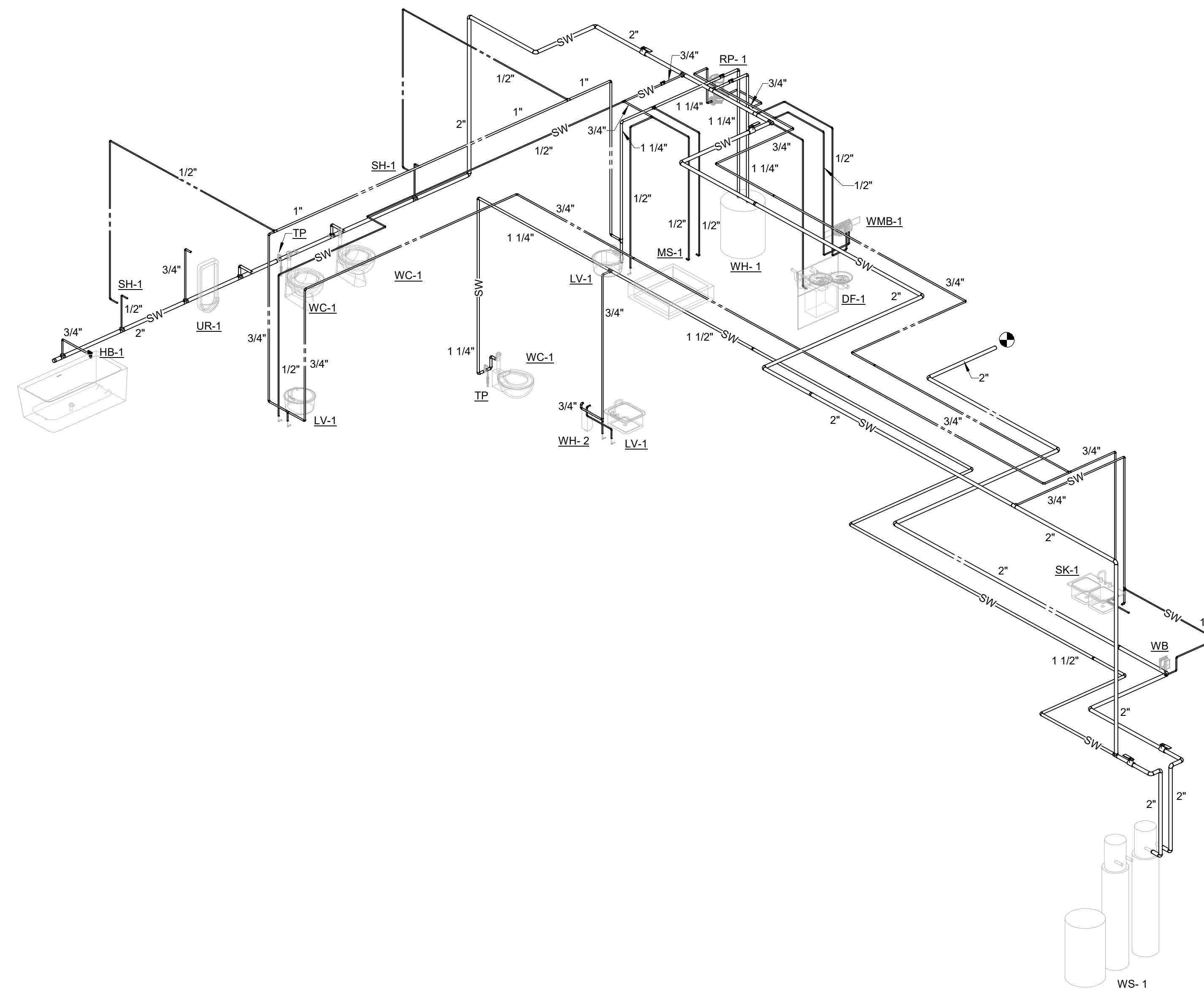
**1 WASTE AND VENT RISER DIAGRAM**



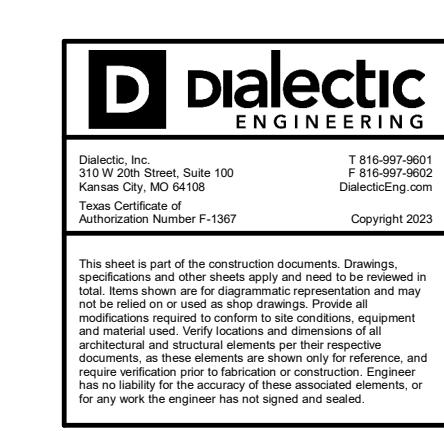
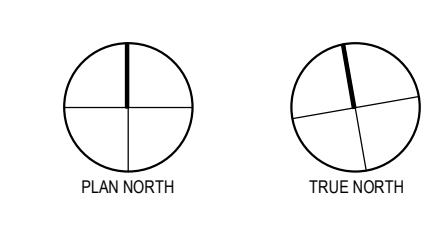
**2 DOMESTIC WATER RISER DIAGRAM**



**3 GAS RISER DIAGRAM**



**MIRA SAFETY**  
1713 Hur Industrial Blvd  
Cedar Park, TX 78613



IFP 12/01/23

Project Number	23-01-014
Drawn By	WRD
Checked By	JMB

**P801**  
PLUMBING RISER  
DIAGRAMS