

VICINITY MAP

COLORADO BUREAU OF INVESTIGATION
OFFICE RENOVATION

2797 JUSTICE DRIVE GRAND JUNCTION, COLORADO 81506

BG+co PROJECT # 22070

01/06/2023
02/01/2023100% DESIGN DEVELOPMENT
FOR CONSTRUCTION

PROJECT DESIGN TEAM

ARCHITECTURE / INTERIOR DESIGN

Architecture
Interior Design
Project Management
BLYTHE GROUP + co.

MECHANICAL, PLUMBING AND ELECTRICAL ENGINEERING

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BUILDING CODE ANALYSIS

CODE JURISDICTION:
2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2020 NATIONAL ELECTRICAL CODE (NEC)
2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2021 INTERNATIONAL FIRE CODE (IFC)

BUILDING CODE NOTES:
1. PROJECT IS A LIMITED REMODEL OF EXISTING SPACE
2. BUILDING AREA : UNCHANGED.
3. OCCUPANT LOAD : UNCHANGED.
4. MEANS OF EGRESS : UNCHANGED.
5. EXISTING PARTITIONS IN AREA OF RENOVATION ARE RATED. NEW WORK DOES NOT ADD RATING REQUIREMENTS
6. RESTROOM FIXTURE COUNTS UNCHANGED [IEBC 809.1]

CLASSIFICATION OF NEW WORK
WORK AREA COMPLIANCE METHOD : ALTERATION - LEVEL 2 [IEBC 602]

OCCUPANCY:
BUILDING OCCUPANCY CLASSIFICATION: BUSINESS GROUP B [IBC 304]-UNCHANGED
CONFERENCE ROOMS ARE ACCESSORY TO BUILDING OCCUPANCY CLASSIFICATION - UNCHANGED [IBC 509.2]

BUILDING OCCUPANT LOADS:
NOT CALCULATED: UNCHANGED

CONSTRUCTION TYPE:
CONSTRUCTION TYPICAL OF TYPE: II-B, UNCHANGED

AUTOMATIC SPRINKLER SYSTEM:
EXISTING THROUGHOUT BUILDING, ADAPTED TO NEW LAYOUT[IEBC 703]

FIRE ALARM SYSTEM
EXISTING ADAPTED TO NEW LAYOUT

BUILDING AREA:
NOT CALCULATED: UNCHANGED

BUILDING HEIGHT:
NOT MEASURED: UNCHANGED

FIRE RESISTANCE RATING REQUIREMENTS:
(FOR TYPE II B CONSTRUCTION) [IBC TABLE 601]
STRUCTURAL FRAME: 0 HRS
BEARING WALLS, EXTERIOR: 0 HRS
BEARING WALLS, INTERIOR: 0 HRS
NON-BEARING WALLS, EXTERIOR: 0 HRS
*1 HR IF < 10 FT FIRE SEPARATION DISTANCE [IBC TABLE 602]
NON-BEARING WALLS, INTERIOR: 0 HRS
FLOOR CONSTRUCTION: 0 HRS
ROOF CONSTRUCTION: 0 HRS

EXIT TRAVEL DISTANCE:
FOR 'B' OCCUPANCY:
COMMON PATH OF EGRESS TRAVEL: 100 FT WITH SPRINKLER SYSTEM, IBC TABLE 1014.3
EXIT ACCESS TRAVEL DISTANCE: 300 FT WITH SPRINKLER SYSTEM, IBC TABLE 1016.2

PARTIAL HEIGHT WALLS
ALL PARTIAL HEIGHT WALLS ARE REQUIRED BY THE SPECIFICATIONS AND DESIGNED TO LIMIT DEFLECTION OF THE WALL TO L/120
AT 5 PSF AND ARE BRACED TO ADJACENT, EXISTING WALLS AT 48" o.c. MAX. [IBC 1604.3 AND 1607.16]

MATERIALS LEGEND

	EXISTING CONSTRUCTION
	ASPHALT PAVING (SECTION)
	EARTH (PLAN & SECTION)
	GRANULAR FILL (SECTION)
	STRUCTURAL FILL (SECTION)
	SAND (SECTION)
	CONCRETE (PLAN & SECTION)
	BRICK VENEER (SECTION)
	CONCRETE MASONRY UNITS (CMU) (PLAN & SECTION)
	PRECAST CONCRETE (SECTION)
	MORTAR NET (SECTION)
	STEEL (SECTION)
	WOOD BLOCKING (CONTINUOUS) (SECTION)
	WOOD BLOCKING (INTERMITTENT) (SECTION)
	WOOD SHEATHING
	WOOD (FINISH) (SECTION & ELEVATION)
	INSULATION (FIBROUS) (PLAN & SECTION)
	INSULATION (RIGID) (PLAN & SECTION)
	STUCCO (SECTION)
	STUCCO (ELEVATION)
	GYPSUM WALL BOARD (GWB) (REFLECTED CEILING PLAN)

NOTE: SOME MATERIALS SHOWN MAY NOT BE USED ON THIS PROJECT.

SYMBOLS LEGEND

ROOM NUMBER (PLAN AND SECTION)	ROOM NAME [A202A]
DOOR NUMBER (MATCHES ROOM NO., WITH LETTER SUFFIX FOR MULTIPLE DOORS)	D202A
(R) AND WALL TYPE (PLAN)	27
NEW COLUMN GRID LINE (PLAN, SECTION, DETAIL OR ELEVATION)	0
EXISTING COLUMN GRIDLINE (PLAN, SECTION, DETAIL OR ELEVATION)	0
KEY NOTE	?
WINDOW / FRAME TYPE	#
SECTION PAGE REFERENCE (PLAN, SECTION, DETAIL OR ELEVATION)	1 A-1 1/8" = 1'-0"
BUILDING SECTION INDICATOR REFERENCE (PLAN, SECTION, OR ELEVATION)	ELEVATION OR DETAIL NUMBER SHEET THAT DETAIL IS ON PORTAL DIRECTION OF DETAIL
WALL SECTION INDICATOR REFERENCE (PLAN, SECTION, OR ELEVATION)	ELEVATION OR DETAIL NUMBER SHEET THAT DETAIL IS ON PORTAL DIRECTION OF DETAIL
SIGN TAG	1234-A
ELEVATION INDICATOR REFERENCE (SECTION, & ELEVATION)	
DIMENSION LINES	1"
NEW CONTOUR	####
EXISTING CONTOUR	####
HIDDEN LINE (PLAN, SECTION, DETAIL OR ELEVATION)	
OVERHEAD OBJECT (PLAN)	
CENTER LINE (PLAN, SECTION, DETAIL OR ELEVATION)	
MATCH LINE (PLAN, SECTION, DETAIL OR ELEVATION)	
LIMITS OF CONSTRUCTION (PLAN, SECTION, DETAIL OR ELEVATION)	
DEMOLISHED ITEMS (PLAN OR DETAIL)	

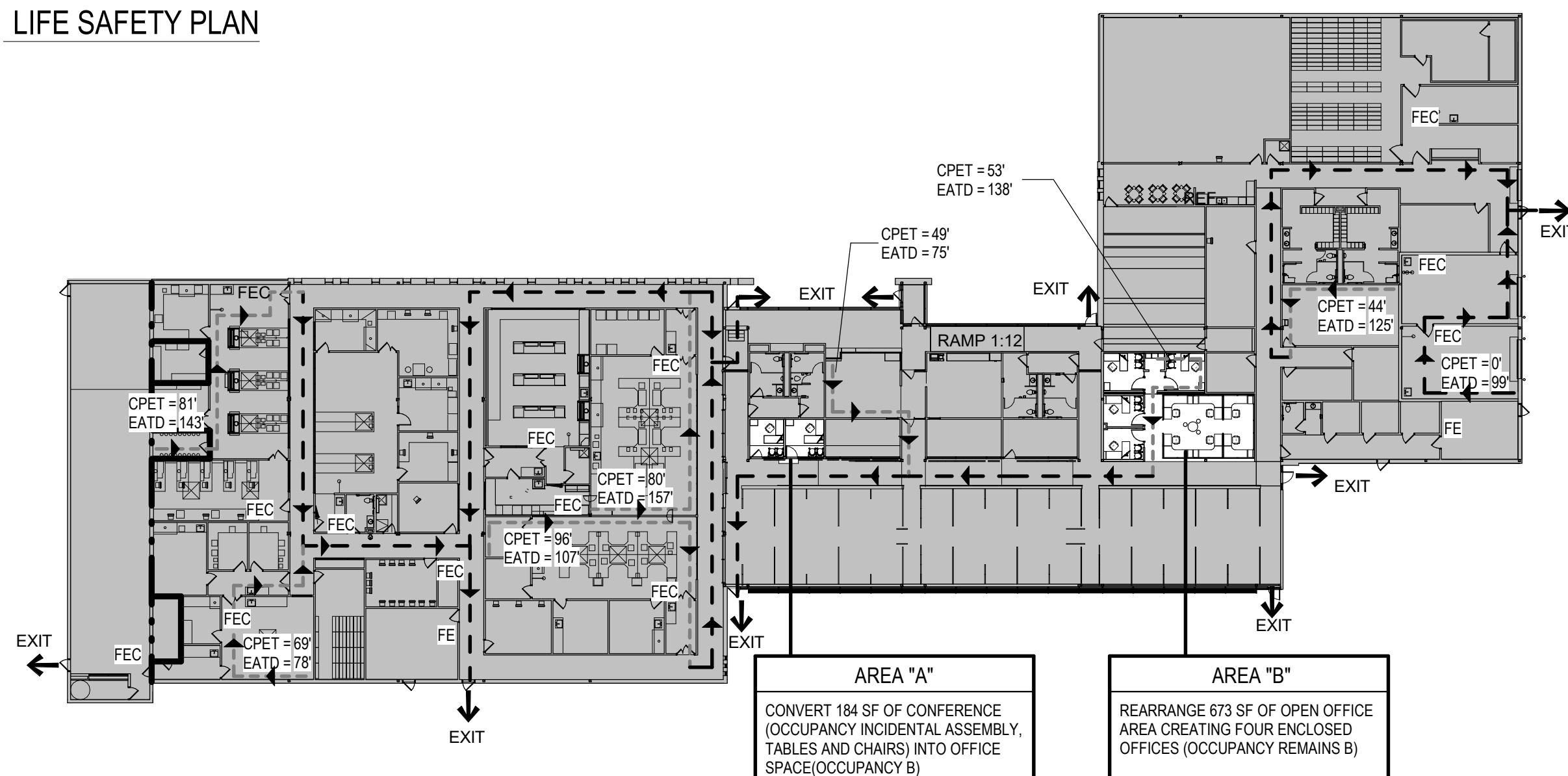
ABBREVIATIONS

ADD-X	ADDENDUM NO. X	INT	INTERIOR
AFF	ABOVE FINISH FLOOR	JT	JOINT
AHU	AIR HANDLING UNIT	L	LONG / LENGTH
AL	ALUMINUM	LAV	LAVATORY
ALT	ALTERNATE	LLH	LONG LEG HORIZONTAL
ALT-X	ALTERNATE NO. X	LLV	LONG LEG VERTICAL
AM	ACOUSTIC MATERIAL	MAS	MASONRY
AM-X	ACOUSTIC MATERIAL TYPE X	MATL	MATERIAL
ARCH	ARCHITECT / ARCHITECTURAL	MAX	MAXIMUM
ATTEN	ATTENUATION	MECH	MECHANICAL
ATTEN	ATTENUATION	MFR	MANUFACTURER
AVE	AVENUE	MIN	MINIMUM
AVG	AVERAGE	MISC	MISCELLANEOUS
B.O.	BOTTOM OF	MO	MASONRY OPENING
BIT	BITUMINOUS	MTD	MOUNTED
BLDG	BUILDING	MTL	METAL
BLKG	BLOCKING	NA	NOT APPLICABLE
CIL	CENTER LINE	NIC	NOT IN CONTRACT
CEM	CEMENT / CEMENTITIOUS	NO.	NUMBER
CJ	CONTROL JOINT	NRC	NOISE REDUCTION COEFFICIENT
CLG	CEILING	NTS	NOT TO SCALE
CLR	CLEAR	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT(S)	OD	OUTSIDE DIAMETER
CONC	CONCRETE	OPNG	OPENING
CONT	CONTINUOUS	OPP	OPPOSITE
CPT	CARPET	PERF	PERFORATED
CT	CERAMIC TILE	PLAM	PLASTIC LAMINATE
CTR	CENTER	PLBG	PLUMBING
D	DEEP / DEPTH	PLYWD	PLYWOOD
DBL	DOUBLE	PNT	PAINT
DEMO	DEMOLISH / DEMOLITION	PREFAB	PREFABRICATED
DEPT	DEPARTMENT	PREFIN	PREFINISHED
DF	DRINKING FOUNTAIN	PT	PORCELAIN TILE
DIA / Ø	DIAMETER	QT	QUARRY TILE
DIM(S)	DIMENSION(S)	QTY	QUANTITY
DN	DOWN	R	RADIUS
DTL	DETAIL	RB	RUBBER BASE
DWG	DRAWING	RCP	REFLECTED CEILING PLAN
EA	EACH	REF	REFERENCE / REFER TO
EJ	EXPANSION JOINT	REFR	REFRIGERATOR
EL	ELEVATION	REINF	REINFORCE (D) (ING)
ELEC	ELECTRICAL	REQD	REQUIRED
EQ	EQUAL	RES	RESILIENT
EQUIP	EQUIPMENT	RFS	ROOM FINISH SCHEDULE
EW	ELECTRIC WATER COOLER	RO	ROUGH OPENING
EXIST	EXISTING	ROW	RIGHT OF WAY
EXT	EXTERIOR	RTU	ROOF TOP UNIT
F.O.	FACE OF	SC	SEALED CONCRETE
FACP	FIRE ALARM ANNUNCIATOR PANEL	SCHED	SCHEDULE (D)
FACP	FIRE ALARM CONTROL PANEL	SECT	SECTION
FBO	FURNISHED BY OWNER	SF	SQUARE FEET
FD	FLOOR DRAIN	SIM	SIMILAR
FDN	FOUNDATION	SPEC	SPECIFICATION
FE	FIRE EXTINGUISHER	SQ	SQUARE
FEC	FIRE EXTINGUISHER CABINET	SS	STAINLESS STEEL
FF	FINISHED FLOOR	SSM	SOLID SURFACE MATERIAL
FTG	FOOTING	STL	STEEL
FURN	FURNISHING / FURNITURE	STN	STAIN
GAGE	GAGE	STRUCT	STRUCTURAL
GALV	GALVANIZED	T&G	TONGUE & GROOVE
GL	GLAZING	T.O.	TOP OF
GL-X	GLAZING TYPE X	TEMP	TEMPORARY
GWB	GYPSUM WALL BOARD	TV	TELEVISION
H	HIGH / HEIGHT	TYP	TYPICAL
HC	HANDICAPPED	UNO	UNLESS NOTED OTHERWISE
HDW	HARDWARE	VCT	VINYL COMPOSITION TILE
HDWD	HARDWOOD	VERT	VERTICAL
HM	HOLLOW METAL	VIF	VERIFY IN FIELD
HORIZ	HORIZONTAL	VWC	VINYL WALL COVERING
HVAC	HEATING VENTILATING & AIR CONDITIONING	W	WIDE / WIDTH
ID	INSIDE DIAMETER	WI	WITH
ILLUM	ILLUMINATED	W/O	WITHOUT
INCL	INCLUDED	WD	WOOD
INSUL	INSULATION	WOM	WALK OFF MAT

LIFE SAFETY PLAN LEGEND

1 HR FIRE SEPARATION	
2 HR FIRE SEPARATION	
CONTINUATION OF EGRESS PATH	
EGRESS ROUTE	
COMMON PATH OF EGRESS	
AREA OF WORK	
NO WORK IN THIS AREA	
EXIT DISCHARGE	
COMMON PATH OF EGRESS TRAVEL	CPET = 30' EATD = 132'
EXIT ACCESS TRAVEL DISTANCE	

LIFE SAFETY PLAN

COLORADO BUREAU OF
INVESTIGATION
OFFICE RENOVATION2797 JUSTICE DRIVE
GRAND JUNCTION, CO 81506

TITLE SHEET

FOR CONSTRUCTION

REV. DESC. DATE:

DATE: 02/01/2023

PROJECT #: 22070

SHEET #:

G1

STATEMENT OF SPECIAL INSPECTION

Seismic Design Category: B Risk Category: III Wind Exposure Category: C

GENERAL
The International Building Code requires that special inspections be performed to verify that the materials and construction methods used comply with the construction documents and applicable standards.

MINIMUM REQUIRED SPECIAL INSPECTIONS
The owner or owner's agent shall be responsible for employing registered special inspectors from approved testing agencies to conduct inspections for each building material as described below. All special inspectors shall prepare an inspection report indicating compliance or noncompliance with appropriate requirements. Special inspection reports and reports of potentially necessary field repairs shall be provided to the architect, engineer, contractor and building official.

FABRICATORS (2021 IBC 1704.2.5)

NO WORK ON THIS PROJECT

STEEL CONSTRUCTION (2021 IBC 1705.2)

NO WORK ON THIS PROJECT

CONCRETE CONSTRUCTION (2021 IBC 1705.3)

NO WORK ON THIS PROJECT

MASONRY CONSTRUCTION (2021 IBC 1705.4)

NO WORK ON THIS PROJECT

WOOD CONSTRUCTION (2021 IBC 1705.5)

NO WORK ON THIS PROJECT

SOILS (2021 IBC 1705.6)

NO WORK ON THIS PROJECT

DRIVEN DEEP FOUNDATIONS (2021 IBC 1705.7)

NO WORK ON THIS PROJECT

CAST-IN-PLACE DEEP FOUNDATIONS (2021 IBC 1705.8)

NO WORK ON THIS PROJECT

HELICAL PILE FOUNDATIONS (2021 IBC 1705.9)

NO WORK ON THIS PROJECT

WIND RESISTANCE (2021 IBC 1705.12)

NO WORK ON THIS PROJECT

STRUCTURAL WOOD (2021 IBC 1705.12.1)		
Item	Requirement	Description
Gluing operations	continuous	Elements of the main windforce-resisting system.
Nailing, bolting, anchoring and other fastening.	periodic	Elements of the main windforce-resisting system.
COLD FORMED STEEL LIGHT-FRAME CONSTRUCTION (2021 IBC 1705.12.2)		
Item	Requirement	Description
Welding operations	periodic	Elements of the main windforce-resisting system.
Screw attachment, bolting anchoring and other fastening within the main windforce resisting system	periodic	Includes wood shear walls, wood diaphragms, drag struts, braces and hold-downs.
WIND RESISTING COMPONENTS (2021 IBC 1705.12.3)		
Item	Requirement	Description
Roof covering, roof deck, roof framing connections	periodic	Fastening
Exterior wall covering and wall connections to roof and floor diaphragms and framing	periodic	Fastening

SEISMIC RESISTANCE (2021 IBC 1705.12)

STRUCTURAL STEEL (2021 IBC 1705.13.1)		
Item	Requirement	Description
Structural steel elements	AISC 341	Struts, collectors, chords and foundation elements.
STRUCTURAL WOOD (2021 IBC 1705.13.2)		
Item	Requirement	Description
Gluing operations	continuous	Elements of the seismic force-resisting system.
Nailing, bolting, anchoring and other fastening of elements of the seismic force-resisting system.	periodic	Includes wood shear walls, diaphragms, drag struts, braces, shear panels and hold-downs.
COLD FORMED STEEL LIGHT-FRAME CONSTRUCTION (2021 IBC 1705.13.3)		
Item	Requirement	Description
Welding	periodic	Elements of the seismic force-resisting system.
Screw attachment, bolting, anchoring and other fastening.	periodic	Attachment of elements of the seismic force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.
DESIGNATED SEISMIC SYSTEMS (2021 IBC 1705.13.4)		
Item	Requirement	Description
Designated seismic systems	ASCE 17	Label, anchorage and mounting
ARCHITECTURAL COMPONENTS (2021 IBC 1705.13.5)		
Item	Requirement	Description
Exterior cladding	periodic	Erection and fastening
Interior or exterior non-bearing walls	periodic	Erection and fastening
Interior or exterior veneer	periodic	Erection and fastening
Access floor anchorage	periodic	Anchorage
PLUMBING, MECHANICAL AND ELECTRICAL COMPONENTS (2021 IBC 1705.13.6)		
Item	Requirement	Description
Electrical equipment for emergency or standby power systems	periodic	Anchorage
Other electrical equipment	periodic	Anchorage
Piping systems designed to carry hazardous materials and their associated mechanical units	periodic	Installation and anchorage
Ductwork designed to carry hazardous materials	periodic	Installation and anchorage
Vibration isolation systems	periodic	Installation and anchorage where the construction documents require a nominal clearance of 1/4 inch (6.4 mm) or less between the equipment support frame and restraint.
Duct work, piping and supports where fire suppression systems are installed	periodic	Minimum clearances are provided.
STORAGE RACKS (2021 IBC 1705.13.7)		
Item	Requirement	Description
Storage racks 8' or greater in height	periodic	Anchorage
SEISMIC ISOLATION SYSTEMS (2021 IBC 1705.13.8)		
Item	Requirement	Description
Isolator units and energy dissipation devices	periodic	Fabrication and installation.
COLD-FORMED STEEL SPECIAL BOLTED MOMENT FRAMES (2021 IBC 1705.13.9)		
Item	Requirement	Description
Cold-formed steel special bolted moment frames	periodic	Installation.

TESTING SEISMIC RESISTANCE (2021 IBC 1705.14)

Item	Requirement	Description
Structural steel	AISC 341	Nondestructive
Nonstructural components, supports or attachments	ASCE 7 Section 13.2.1	Qualification by analysis, testing or experience
Designated seismic systems	ASCE 7 Section 13.2.2	Qualification by analysis, testing or experience
Seismic isolation systems	ASCE 7 Section 17.8	Qualification by analysis, testing or experience

SPRAYED FIRE RESISTANT MATERIALS (2021 IBC 1705.15)

Special inspections for sprayed fire resistant materials shall be in accordance with manufacturers written instructions and the assemblies listing. Special inspections shall be based on the fire-resistance design as designated in the approved construction documents. Inspections shall be performed to show compliance with:

- Condition of substrates
- Thickness of application.
- Density in pounds per cubic foot (kg/m3).
- Bond strength adhesion/cohesion.
- Condition of finished application

MASTIC AND INTUMESCENT FIRE RESISTANT COATINGS. (2021 IBC 1705.16)

Special inspections for mastic and intumescent fire-resistant coatings applied to structural elements and decks shall be in accordance with AWCI 12-B. Special inspections shall be based on the fire-resistance design as designated in the approved construction documents.

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (2021 IBC 1705.17)

Item	Requirement	Description
Water-resistive barrier coating	ASTM E 2570	When coating is installed over a sheathing substrate

FIRE-RESISTANT PENETRATIONS AND JOINTS (2021 IBC 1705.18)

Item	Requirement	Description
penetration fire stops	ASTM E 2174	Through penetrations and membrane penetrations
fire resistant joint systems	ASTM E 2393	Joints and perimeter fire barrier systems

TESTING FOR SMOKE CONTROL (2021 IBC 1705.19)

Requirement	Description
During erection of ductwork prior to concealment	Leakage test and recording of device location
Prior to occupancy	Pressure difference testing, flow measurements, detection and control



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GRAND JUNCTION, CO 81506

SPECIAL INSPECTION

FOR CONSTRUCTION

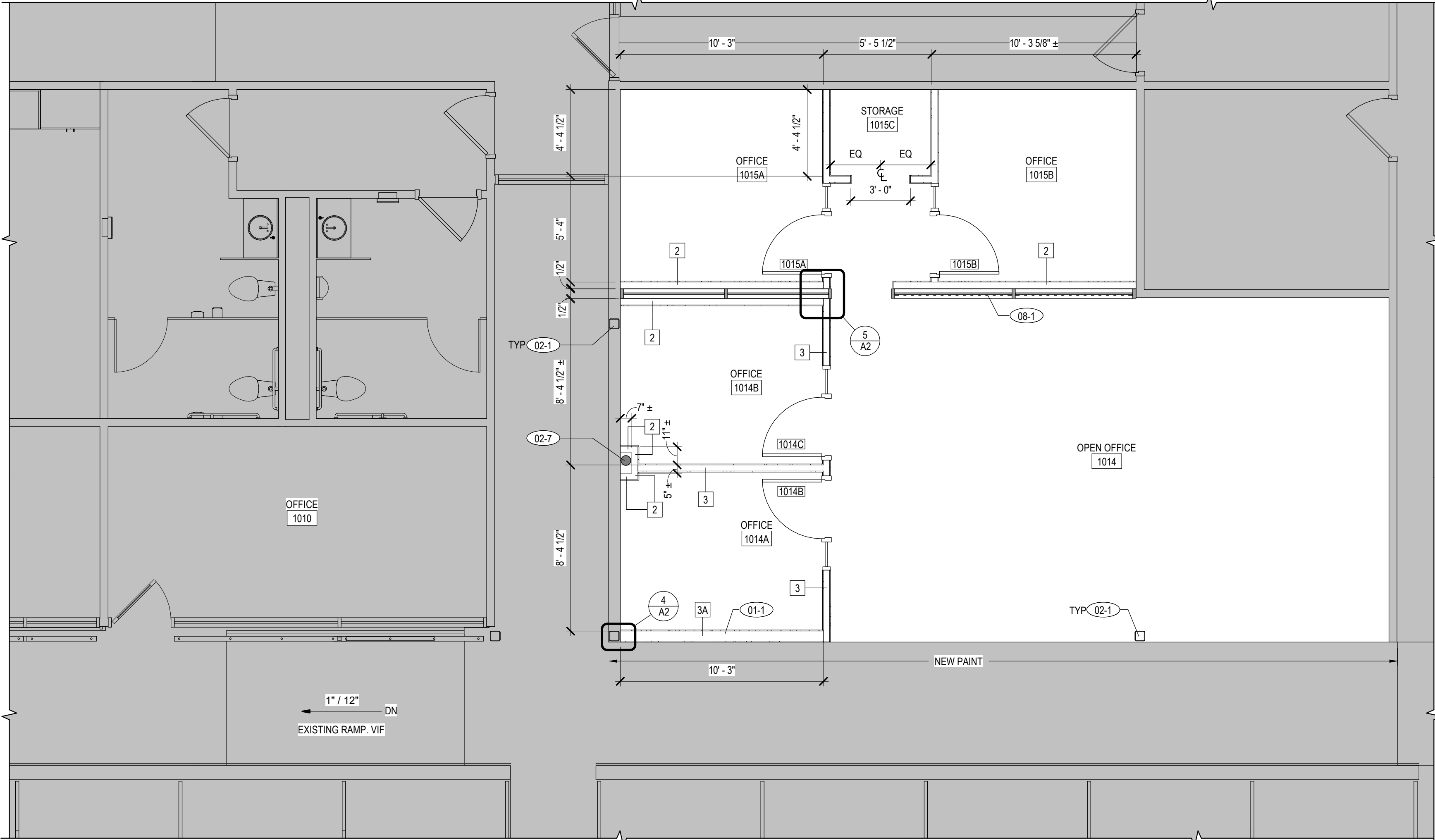
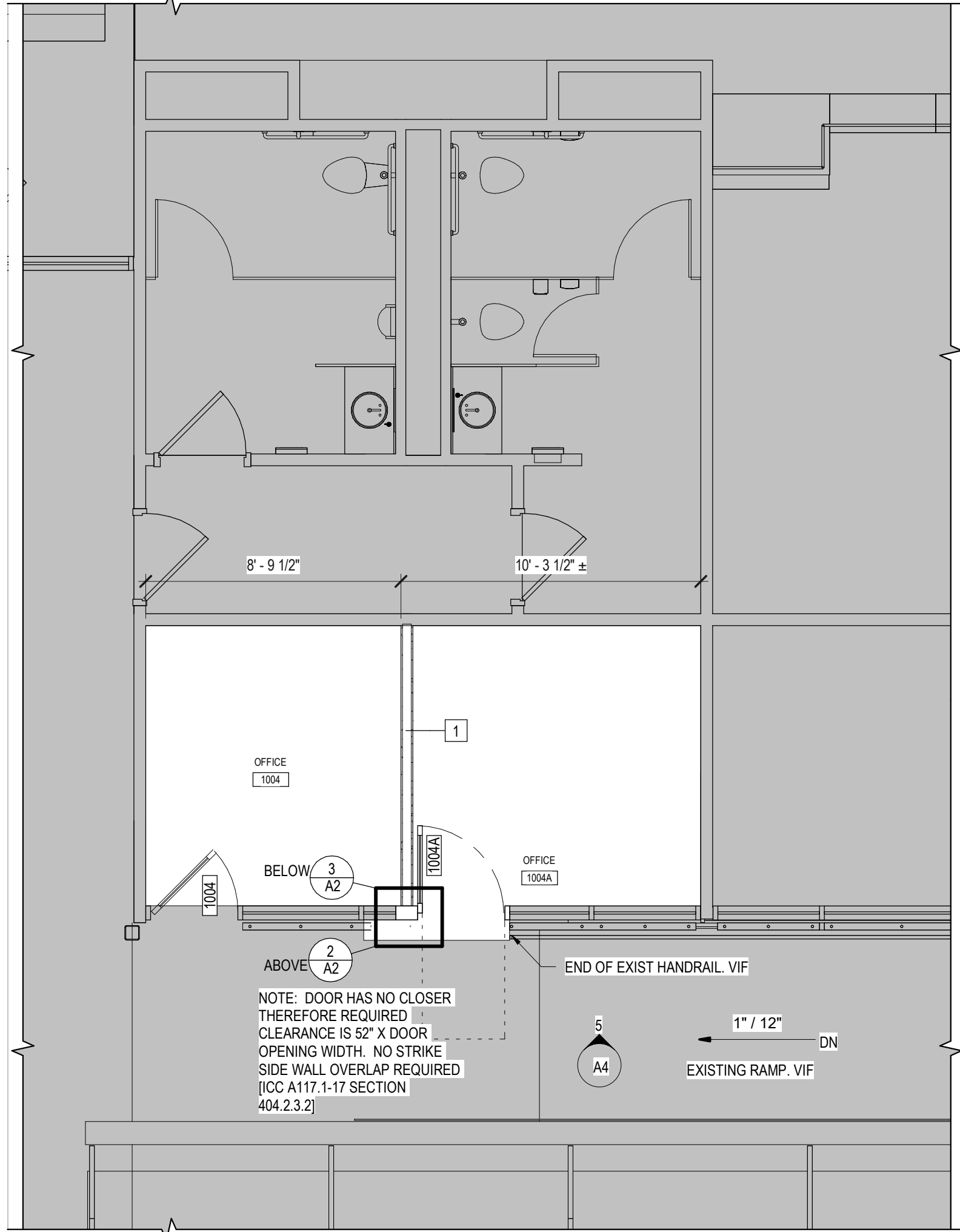
REV. DESC. DATE:

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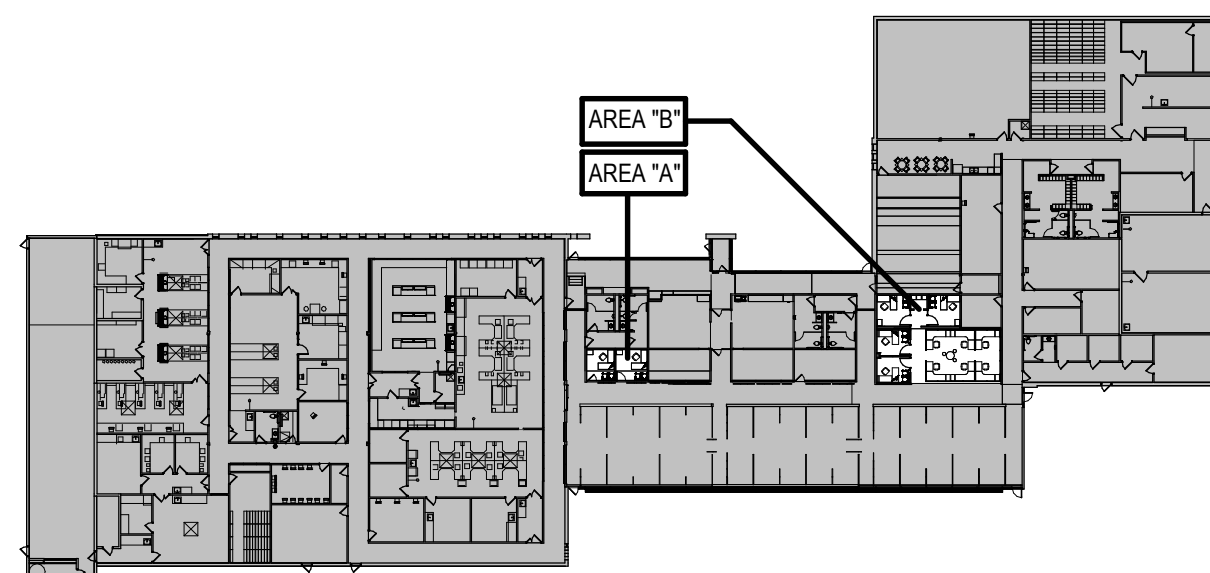
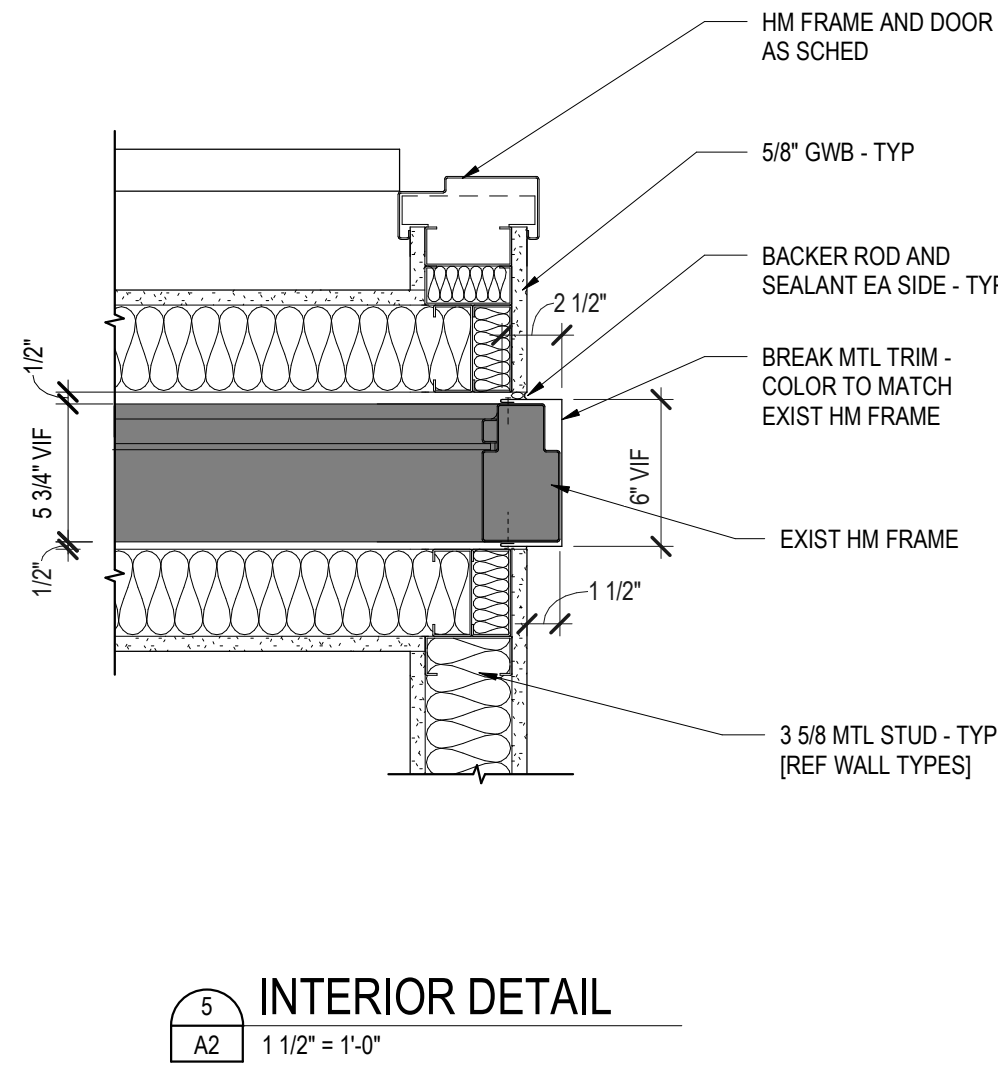
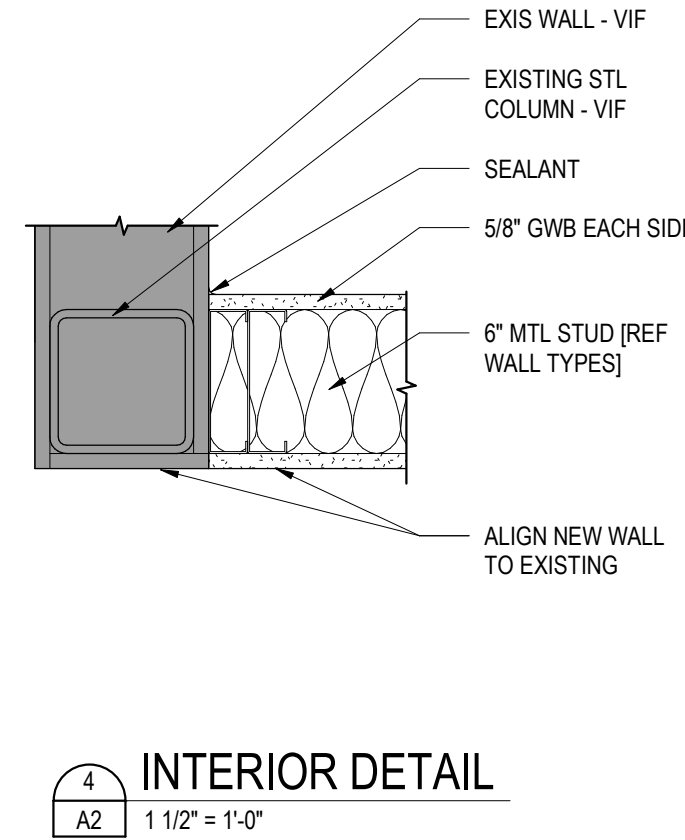
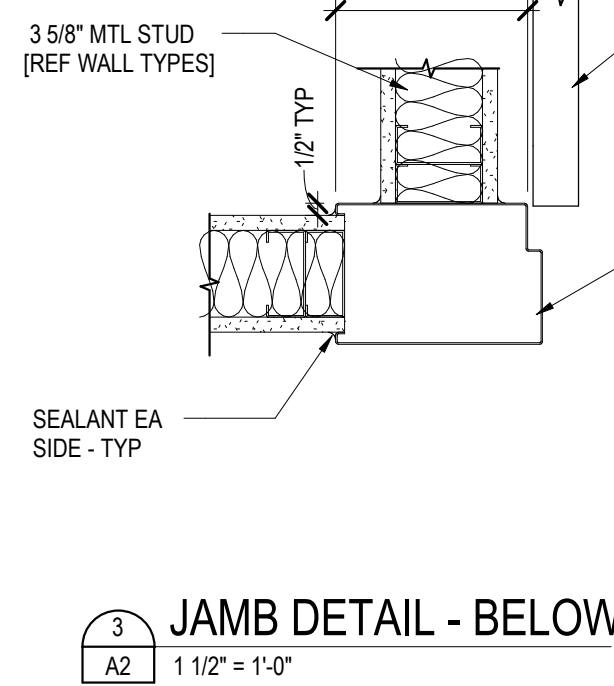
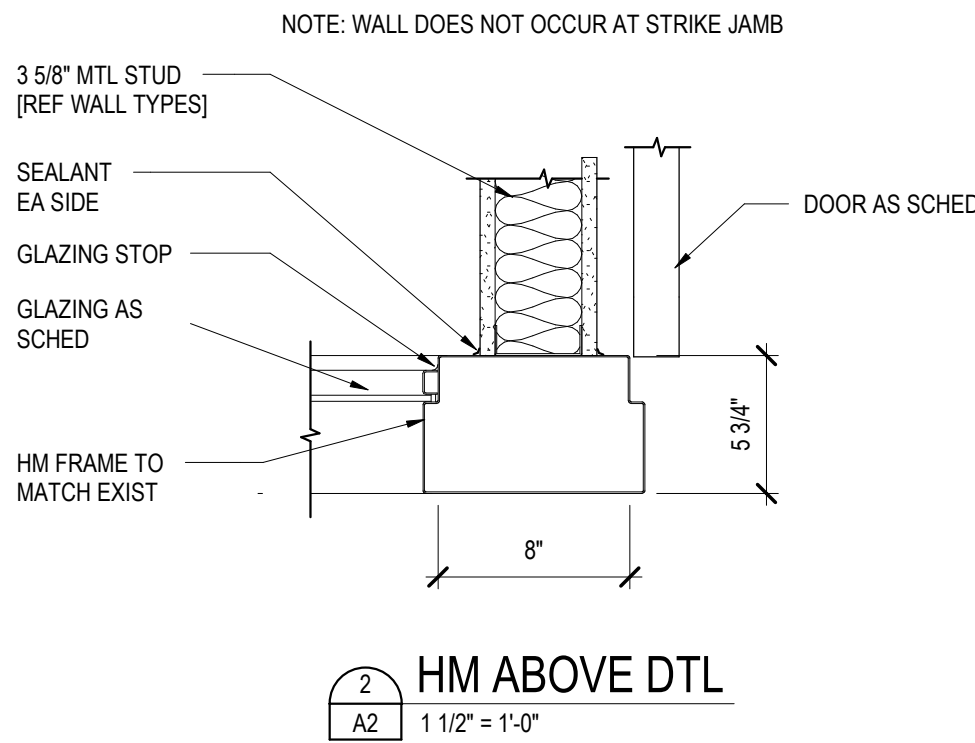
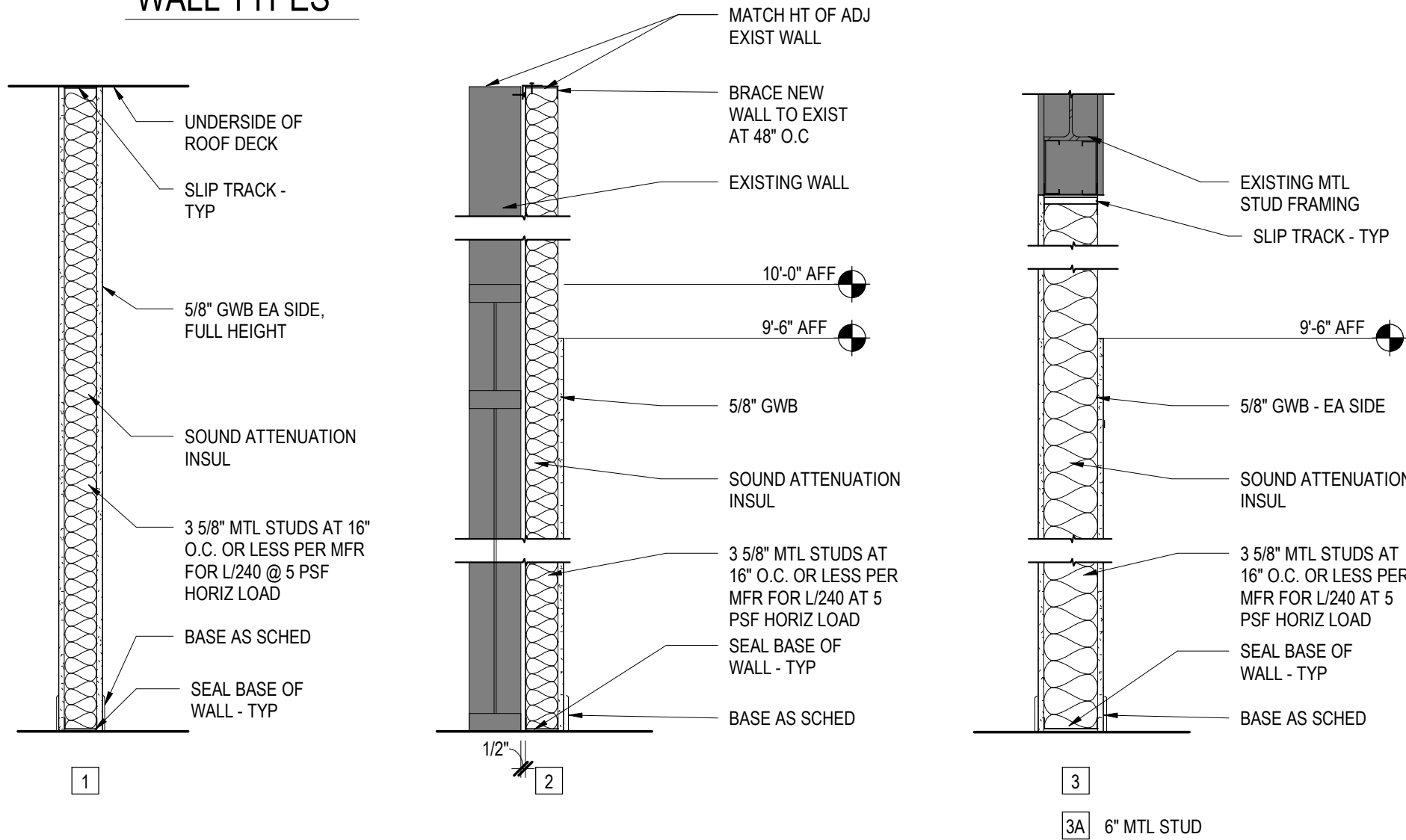
SHEET #:

A0



FIRST FLOOR RENOVATION PLAN
1
A2
1/4" = 1'-0"

WALL TYPES



OVERALL/KEY PLAN

KEYNOTE LEGEND	
01-1	TERMINATE NEW WALL AT SOFFIT ABOVE
02-1	EXISTING STEEL COLUMN TO REMAIN
02-7	EXISTING HVAC DUCT TO REMAIN - VFY SIZE AND LOCATION
08-1	EXISTING GLASS WALL TO REMAIN. INSTALL FROSTED FILM ON ROOM 1015 SIDE OF ALL GLAZING

- GENERAL NOTES**
- ALL INTERIOR PARTITIONS ARE TYPE 1, UNO.
 - INTERIOR DIMENSIONS ARE TO F.O. STUD, UNO.
 - DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO.
 - REF MECH AND ELECT DRAWINGS FOR MORE DEMO AND RENOVATION NOTES
 - FER FURNITURE PLAN AND SPECS FOR LAYOUT



**COLORADO BUREAU OF INVESTIGATION
OFFICE RENOVATION**

**2797 JUSTICE DRIVE
GRAND JUNCTION, CO 81506**

FLOOR PLAN

FOR CONSTRUCTION

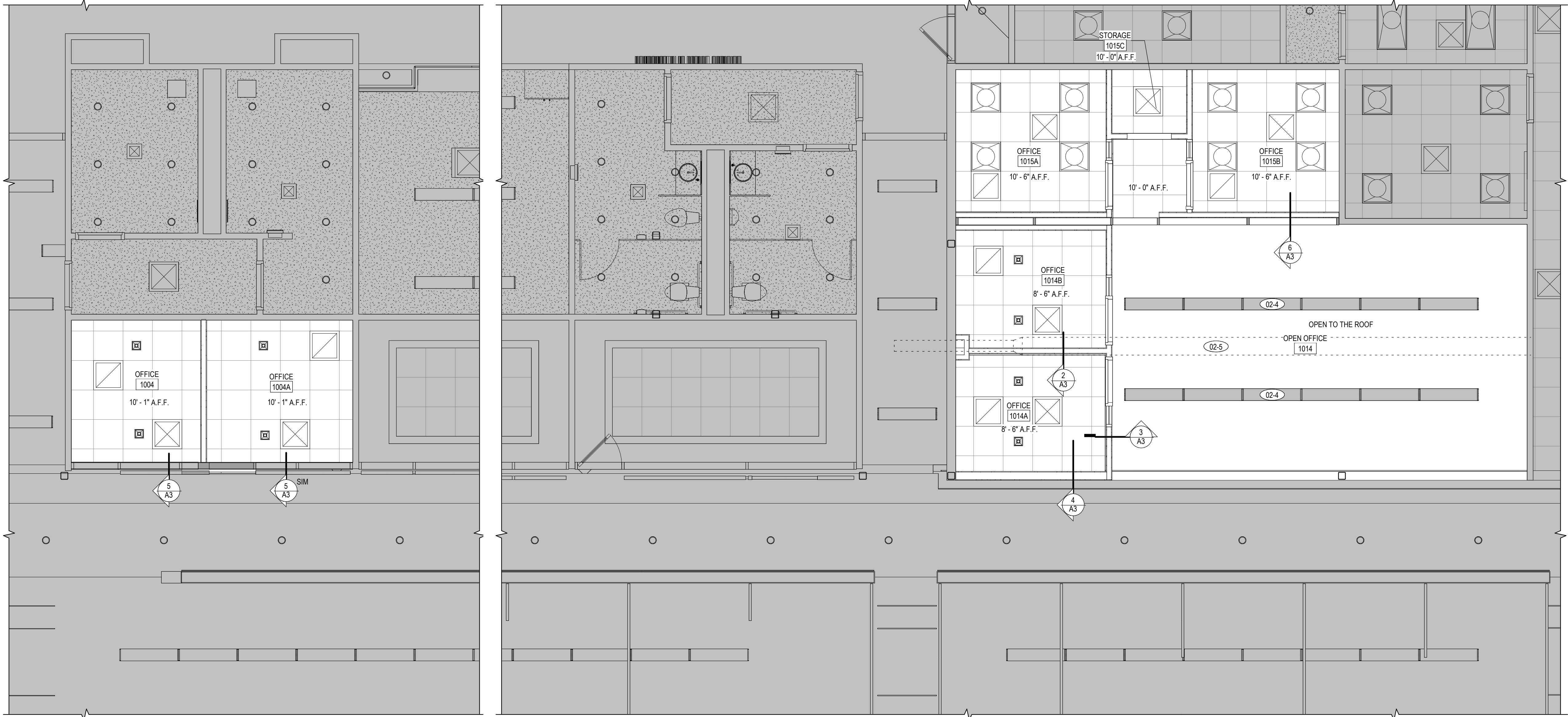
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SHEET #:

A2



1
A3
1/4" = 1'-0"

REFLECTED CEILING PLAN

2
A3
1 1/2" = 1'-0"

CEILING DETAIL

3
A3
1 1/2" = 1'-0"

CEILING DETAIL

4
A3
1 1/2" = 1'-0"

CEILING DETAIL

5
A3
1 1/2" = 1'-0"

CEILING DETAIL

6
A3
1 1/2" = 1'-0"

CEILING DETAIL

KEYNOTE LEGEND

02-4 EXISTING LIGHT FIXTURE. COORDINATE WITH ELECTRICAL RECONSTRUCTION DRAWING [REF ELEC]

02-5 DASHED LINE IS EXISTING AIR DUCT. COORDINATE WITH MECHANICAL RECONSTRUCTION DRAWING. [REF MECH]

LEGEND

- NO ARCHITECTURAL RENOVATION WORK
- NEW ACOUSTICAL CEILING TILE AM-1
- EXISTING ACOUSTICAL CEILING TILE
- NEW GWB CEILING
- EXISTING GWB CEILING
- EXISTING LIGHTING FIXTURE [REF ELEC]
- EXISTING LIGHT FIXTURE [REF ELEC]
- EXISTING LIGHT FIXTURE [REF ELEC]
- EXISTING MECHANICAL AIR RETURN [REF MECH]
- EXISTING MECHANICAL AIR DIFFUSER [REF MECH]
- NEW LIGHT FIXTURE [REF ELEC]
- NEW SQUARE RECESSED FIXTURE [REF ELEC]
- NEW MECHANICAL AIR RETURN [REF MECH]
- NEW MECHANICAL AIR DIFFUSER [REF MECH]

GENERAL NOTES

- INTERIOR DIMENSIONS ARE TO F.O. STUD. UNO.
- DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO.
- ALL ITEMS ARE NEW UNLESS NOTED AS EXISTING.
- PATCH AND REPAIR ALL DAMAGED EXISTING GWB AND ACOUSTIC MATERIAL AS REQ'D TO MATCH ADJACENT SURFACES.

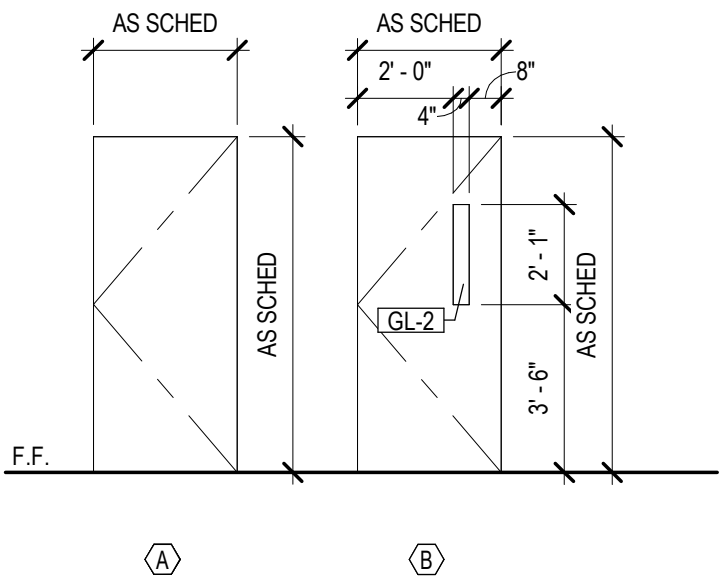
DOOR SCHEDULE															
DOOR NUMBER	DOOR SIZE		DOOR TYPE				RATING	HDW GROUP	FRAME TYPE						COMMENTS
	WIDTH	HEIGHT	TYPE	MATL	GLAZING	FINISH			TYPE	MATL	FINISH	JAMB DETAIL	HEAD DETAIL	SILL / THRESHOLD	
1004	3' - 0"	8' - 0"	EXIST	EXIST	--	EXIST	--	01	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXISTING DOOR AND FRAME WITH NEW LOCK AND CORE EXISTING HM FRAME MODIFIED TO CREATE NEW DOOR OPENING
1004A	3' - 0"	8' - 0"	A	WD	--	FF	--	03	2	HM	PNT	2/A2, 6/A2, 1/A4	4/A4	--	
1014B	3' - 0"	7' - 0"	B	WD	GL-1	FF	--	02	1	HM	PNT	2/A4	3/A4	--	NEW
1014C	3' - 0"	7' - 0"	B	WD	GL-1	FF	--	02	1	HM	PNT	2/A4	3/A4	--	NEW
1015A	3' - 0"	7' - 0"	B	WD	GL-1	FF	--	02	1	HM	PNT	2/A4	3/A4	--	NEW
1015B	3' - 0"	7' - 0"	B	WD	GL-1	FF	--	02	1	HM	PNT	2/A4	3/A4	--	NEW

DOOR SCHEDULE ABBREVIATIONS

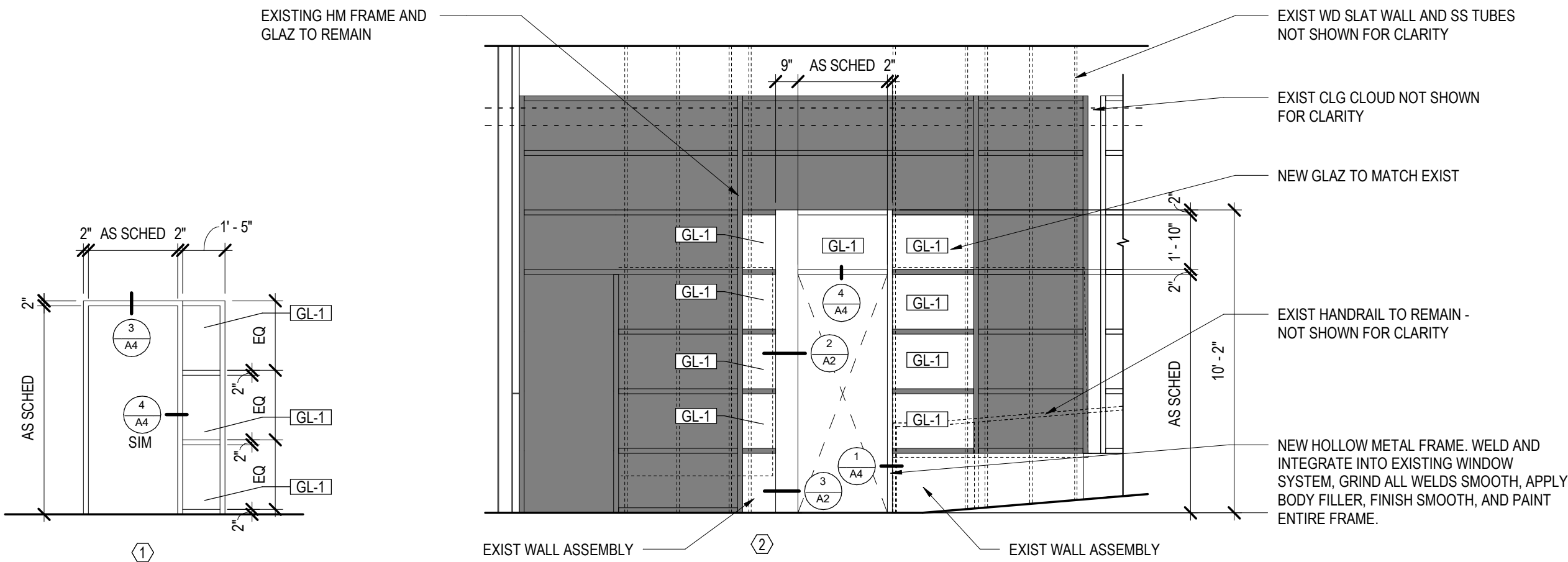
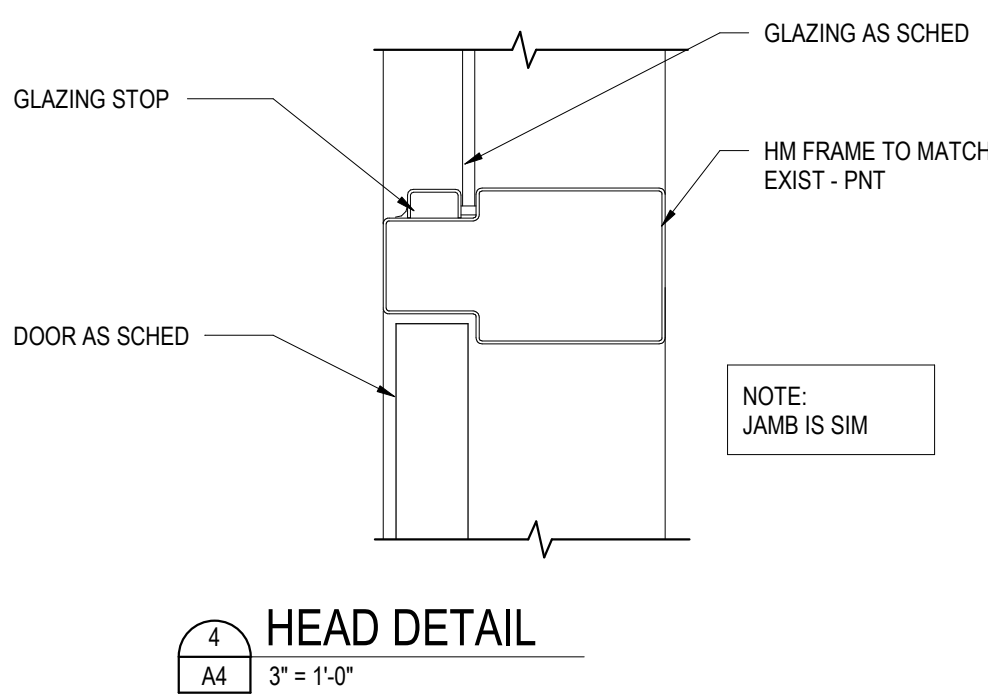
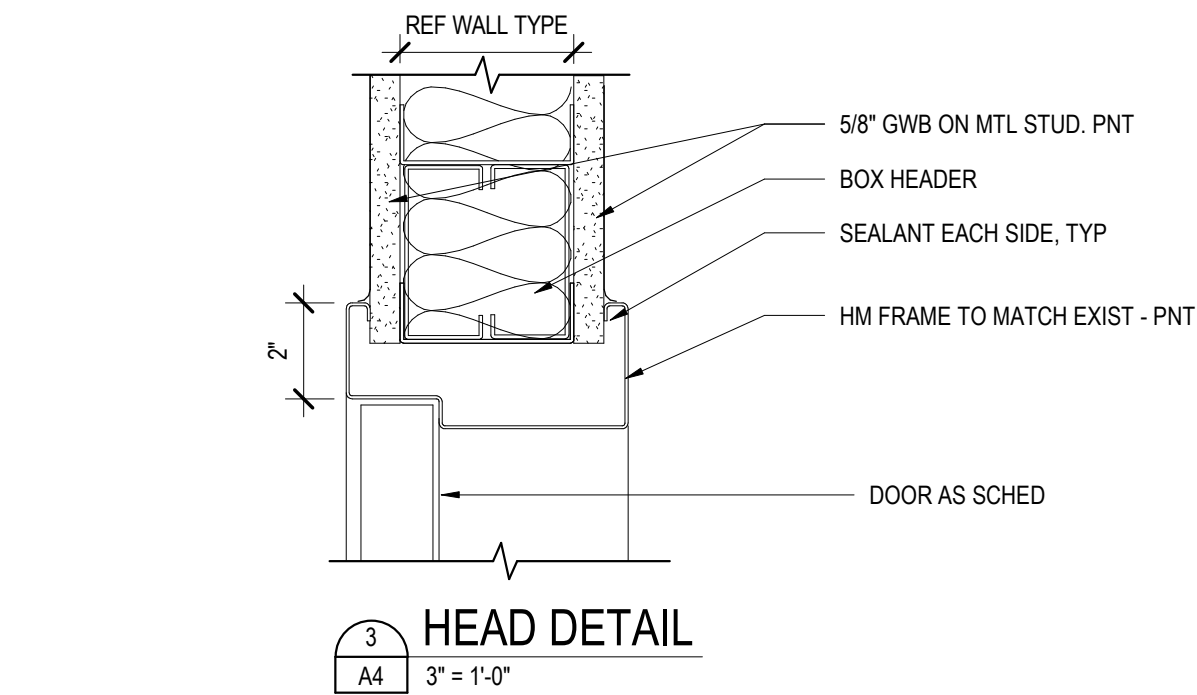
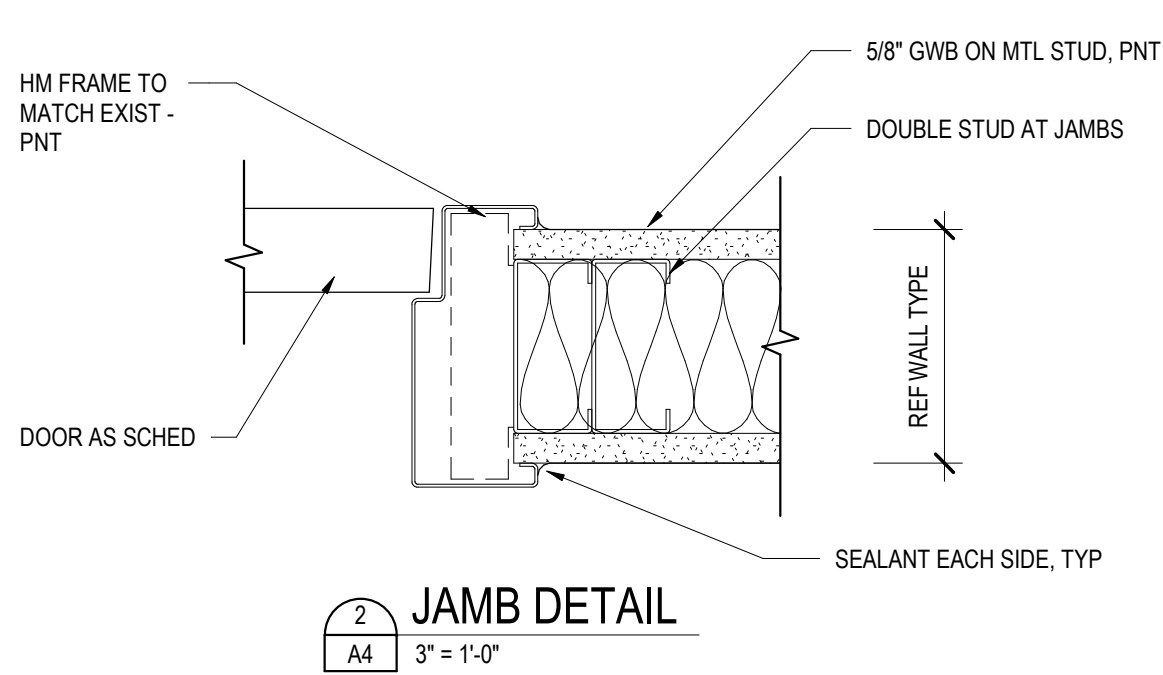
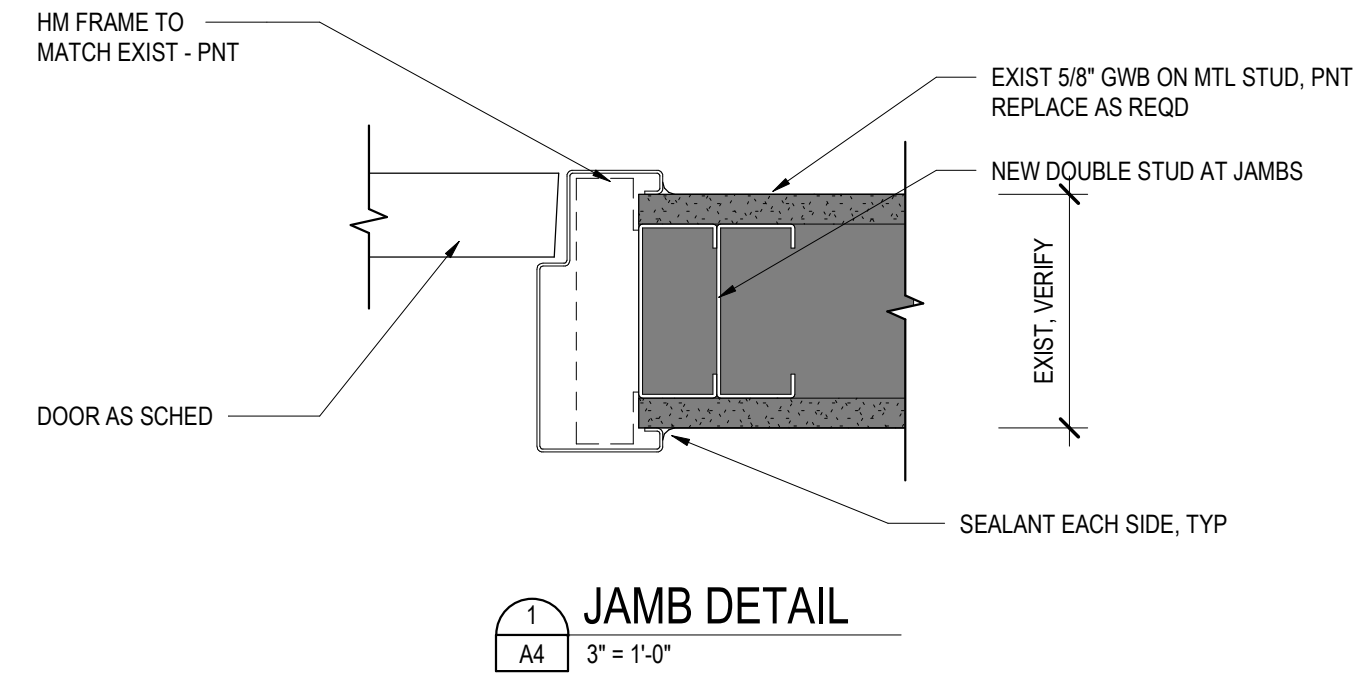
AL ALUMINUM
FF FACTORY FINISH
HM HOLLOW METAL
PNT PAINT
WD WOOD

DOOR SCHEDULE GENERAL NOTES

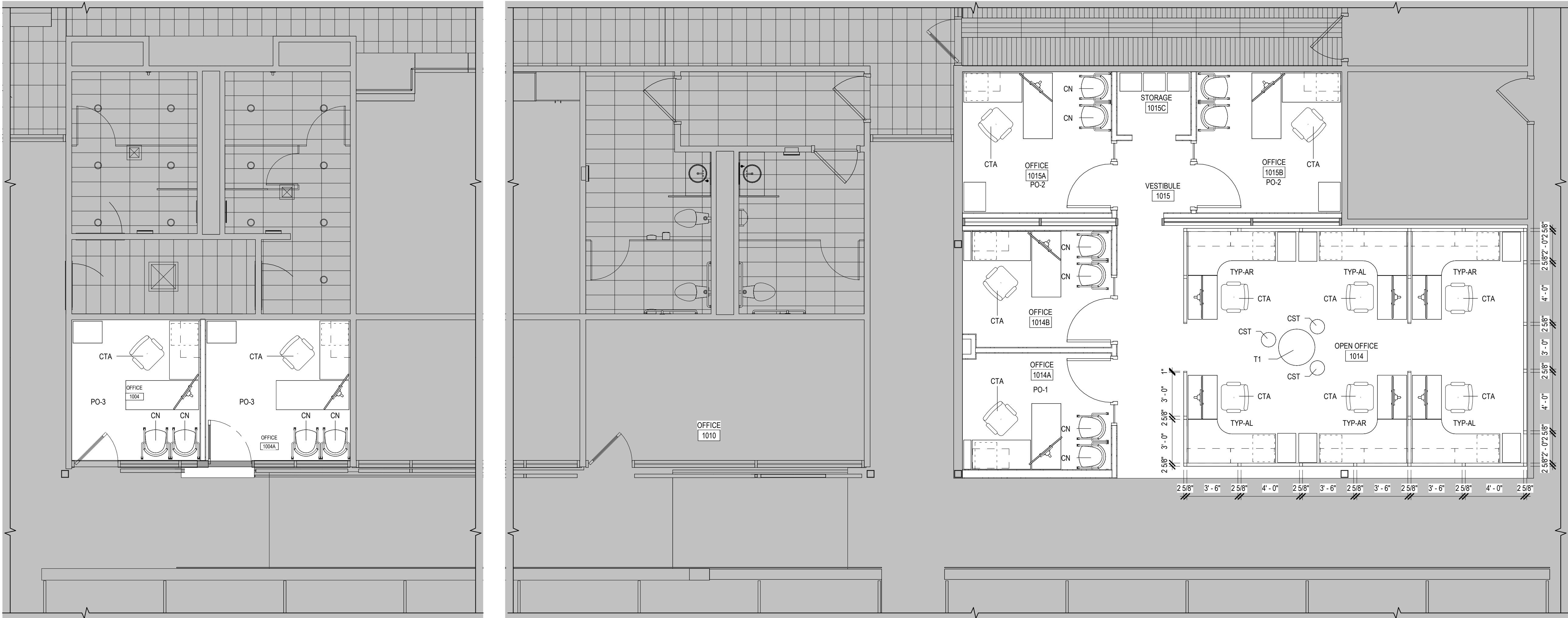
1. FRAME ELEVATIONS INDICATED ARE BASED UPON NOMINAL DIMENSIONS. FIELD VERIFY DIMENSIONS OF ACTUAL ROUGH OPENINGS.
2. ALL NEW INTERIOR HOLLOW METAL FRAMES ARE TO BE PAINTED TO MATCH EXISTING.
3. ALL NEW DOORS ARE TO BE FINISHED TO MATCH EXISTING.



DOOR TYPES



HM FRAME TYPES



GENERAL FURNITURE NOTES

1. ALTERNATE ITEM: IF ACCEPTED, ALTERNATE 01 WILL INCLUDE PROVIDING AND INSTALLING NEW FURNITURE FROM A MANUFACTURER THAT REDUCES COSTS OF THE BASE BID FURNITURE. ALTERNATE FURNITURE NEEDS TO CLOSELY MATCH THE BASE BID FURNITURE IN PERFORMANCE, DURABILITY, AND AESTHETICS. ALTERNATE FURNITURE NEEDS TO MEET THE BASE BID FURNITURE LAYOUT.
2. FURNITURE ITEMS FOR PRIVATE OFFICES (PO-1, PO-2, PO-3) ARE IDENTIFIED IN THE DATA SPECIFICATION SHEETS. REFER TO SPECIFICATIONS FOR MORE INFORMATION.



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FURNITURE PLAN

FOR CONSTRUCTION

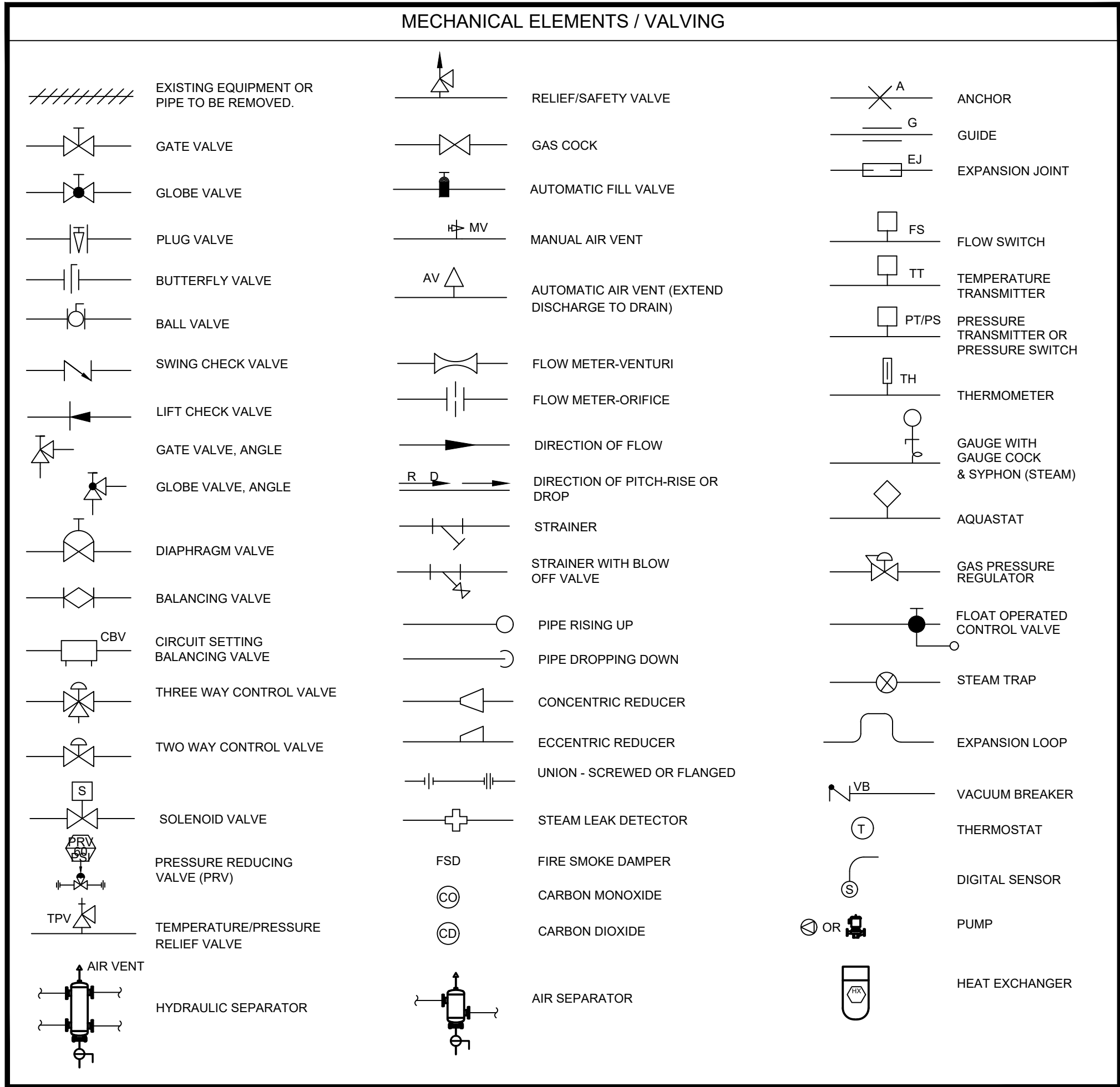
REV. DESC. DATE:

DATE: 02/01/2023

PROJECT #: 22070

SHEET #:

A5



MECHANICAL PROVISIONS

1. SCOPE OF WORK

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

2. PERMITS

- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.

3. SHOP DRAWINGS

- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

4. FLEXIBLE DUCT WORK

- A. FLEXIBLE TYPE DUCT SHALL BE OF TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTANT METAL SUPPORTING SPIRAL AND COATED FABRIC WITH A MINERAL BASE. FLEXIBLE DUCT CONNECTORS SHALL BE LISTED BY U.L. CLASS 1 DUCTS, AND SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50.
- B. USE OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 6 LINEAR FEET PER RUN.
- C. CONTRACTOR SHALL BE CAREFUL SO AS NOT TO KINK OR COLLAPSE FLEXIBLE DUCT.

5. REFRIGERANT

- A. PIPING CONTRACTOR SHALL PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICUOUS AND FREE FROM ANY POSSIBLE CONDENSATION.
- B. INSULATE REFRIGERANT LINES WITH ARMOUR-FLEX TYPE INSULATION. SHALL BE TYPE "K" COPPER TUBING, WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.

6. DUCTWORK

- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "SMACNA" APPLICABLE MANUALS.
- B. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED OTHERWISE.
- C. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- D. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS, SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
- E. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" STANDARDS AND ACCEPTED GOOD PRACTICE.
- F. ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES. DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
- G. ALL CONCEALED DUCTWORK SHALL BE INSULATED WITH 1-1/2" FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING.
- H. ALL SUPPLY AND RETURN DUCTWORK 15 FEET DOWNSTREAM OF THE HVAC UNIT SHALL BE INTERNALLY LINED WITH A 1/2" ACOUSTICAL DUCT LINER UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. DRAINAGE PIPING

- A. (CONDENSATE) SHALL BE SCHEDULE 40 PVC PIPE WITH SOLVENT JOINTS. PITCH HORIZONTAL LINES 1" IN 10'-0". CONDENSATE DRAINS SHALL BE ROUTED TO FLOOR DRAIN, ROOF DRAIN OR INDIRECT WASTE DRAIN.

8. HVAC CONTROLS

- A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND THERMOSTATS AS REQUIRED.

9. ELECTRICAL

- A. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION OF WIRING FOR EACH HVAC UNIT.

10. PIPE SUPPORTS

- A. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAP TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL NOT EXCEED 8 FEET FOR ALL PIPING. PLASTIC PIPING TO BE SUPPORTED EVERY 4 FEET.

11. GAS PIPING

- A. PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON FITTINGS.
- WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT. A 100% SHUT-OFF VALVE AND A UNION. GAS PIPING CONTAINING PRESSURE GREATER THAN 9" W.G. SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS.

12. MISCELLANEOUS

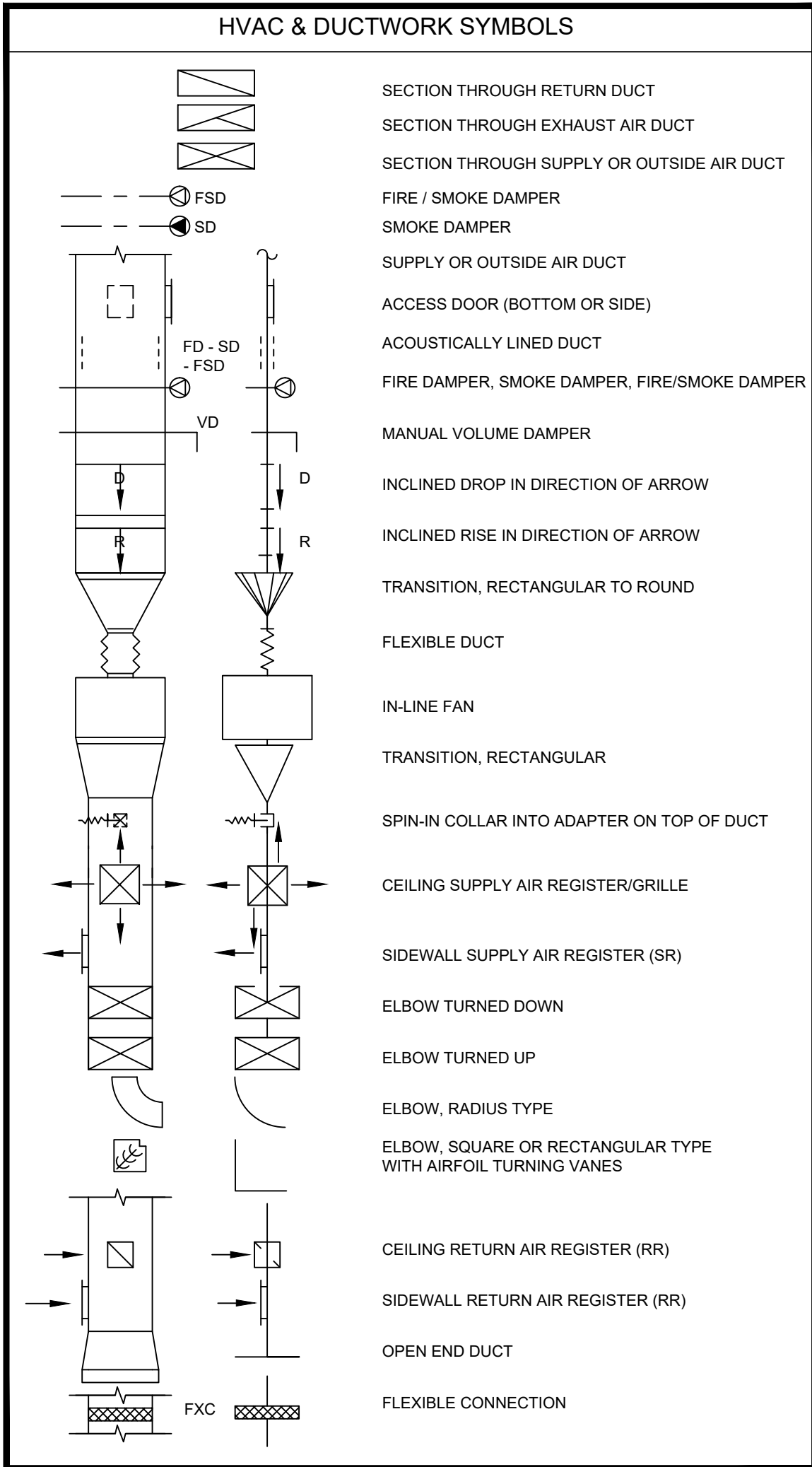
- A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE.
- COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS.
- C. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE.
- D. THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT.
- E. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
- D. PEX TUBING, IF PEX TUBING IS USED AS AN APPROVED ALTERNATE FOR APPLICATIONS WHERE METALLIC PIPING IS THE BASIS OF DESIGN, THE PEX MANUFACTURER SHALL SUBMIT SHOP DRAWINGS CLEARLY INDICATING THAT THE DESIGN HAS BEEN ANALYZED AND MODIFIED, AS REQUIRED TO MAINTAIN SCHEDULED HYDRONIC SYSTEM PARAMETERS. ANY DESIGN RESULTING IN INCREASED SYSTEM PRESSURE DROP AS A RESULT OF IMPROPER PEX SIZING OR DESIGN SHALL NOT BE PERMITTED.

13. TESTING AND BALANCING

- A. THE HVAC SYSTEM SHALL BE TESTED AND AND BALANCED BY AN INDEPENDENT AGENCY, UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

14. GUARANTEE

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.
- B. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.



LINE DESIGNATION SYMBOLS

CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CA	COMPRESSED AIR
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
D	DRAIN
HPR	HEAT PUMP RETURN
HPS	HEAT PUMP SUPPLY
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
G	NATURAL GAS
RH	REFRIGERANT HIGH PRESSURE VAPOR
R	REFRIGERANT LIQUID AND VAPOR LINE
RS	REFRIGERANT SUCTION / VAPOR
SMR	SNOWMELT RETURN
SMS	SNOWMELT SUPPLY
V	VENT PIPING

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

ITEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT	23	23	26	--
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	--
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

SUBSCRIPT FOOTNOTES:

1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.
2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

44"	MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER OF DEVICE	DIFF	DIFFERENTIAL	HR	HOUR	PT	PRESSURE TRANSMITTER
A	AMPS	DISCH	DISCHARGE	HT	HEIGHT	PTAC	PACKAGED TERMINAL AIR CONDITIONER
A.D.	ACCESS DOOR	DIV	DIVISION	HTR	HEATER	PV	PLUG VALVE
AAV	AIR ADMITTANCE VALVE	DN	DOWN	HWR	HEATING WATER RETURN	PVC	POLYVINYL CHLORIDE
ABV	ABOVE	DS	DUCT SILENCER	HWS	HEATING WATER SUPPLY	QTY	QUANTITY
AC	AIR CONDITIONING UNIT	DWG	DRAWING	HX	HEAT EXCHANGER	RA	RETURN AIR GRILLE / REGISTER
AC	ABOVE COUNTER	DX	DIRECT EXPANSION	HZ	HERTZ	RCP	REFLECTED CEILING PLAN
AD	AREA DRAIN (SEE SYMBOLS)	(A)	EXISTING	ID	INSIDE DIAMETER	RD	ROOF DRAIN
A.F.C.	ABOVE FINISHED CEILING	EA	EXHAUST AIR GRILLE/REGISTER	IG	ISOLATED GROUND	REL	RELIEF
A.F.G.	ABOVE FINISHED GRADE	EAT	ENTERING AIR TEMPERATURE	INV	INVERT	REQD	REQUIRED
AIC	AMPERE INTERRUPTING CAPACITY	EC	ELECTRICAL CONTRACTOR	JBOX	JUNCTION BOX	RF	RETURN FAN
A.F.F.	ABOVE FINISHED FLOOR	ECC	ECCENTRIC	K	KELVIN	RH	RELATIVE HUMIDITY
AHU	AIR HANDLING UNIT	EF	EXHAUST FAN	KW	KILOWATT	RHC	REHEAT COIL
ALUM	ALUMINUM	EFF	EFFICIENCY	KVA	KILO VOLT - AMPS	RLA	RATED LOAD AMPS
AP	ACCESS PANEL OR DOOR	ELEV	ELEVATION	L	LENGTH	RM	ROOM
ATS	AUTOMATIC TRANSFER SWITCH	ELEC	ELECTRIC	LAT	LEAVING AIR TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
AV	AUDIO / VIDEO	ELEV	ELEVATOR	LV	LAVATORY	SA	SUPPLY AIR GRILLE / REGISTER
AVG	AVERAGE	EM	EMERGENCY FUNCTION	LB	POUND	SC	SHORT CIRCUIT
AWG	AMERICAN WIRE GAGE	ENT	ENTERING	LD	LINEAR DIFFUSER	SCA	SHORT CIRCUIT AVAILABLE
BAS	BUILDING AUTOMATION SYSTEM	EMT	ELECTRIC METALLIC TUBE	LF	LINEAR FEET	SCCR	SHORT CIRCUIT CURRENT RATING
BB	BASEBOARD	EQ	EQUAL	LIN	LINEAR	SCH	SCHEDULE
BD	BACK DRAFT DAMPER	EQUIP	EQUIPMENT	LQ	LIQUID	SD	SMOKE DAMPER
BFP	BACK FLOW PREVENTOR	EQUIV	EQUIVALENT	LI	LUMEN	SEF	SMOKE EXHAUST FAN
BL	BOILER	ES	END SWITCH	LRA	LOCKED ROTOR AMPS	SF	SUPPLY FAN
BLDG	BUILDING	ESP	EXTERNAL STATIC PRESSURE	LV	LOUVER	SH	SENSIBLE HEAT
BLW	BELOW	EW	ELECTRIC WATER COOLER	LVG	LEAVING	SH	SHOWER
BOB	BOTTOM OF BEAM	EWT	ENTERING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE	SP	STATIC PRESSURE
BOD	BOTTOM OF DUCT	EX	EXHAUST	MBH	THOUSANDS OF BTU PER HOUR	SPD	SURGE PROTECTION DEVICE
BOP	BOTTOM OF PIPE	EXPAN	EXPANSION	MC	MECHANICAL CONTRACTOR	SPEC	SPECIFICATION
BSMT	BASEMENT	EXT	EXTERNAL	MCA	MINIMUM CIRCUIT AMPACITY	SQ	SQUARE
BTU	BRITISH THERMAL UNIT	F	DEGREES FAHRENHEIT	MCB	MAIN CIRCUIT BREAKER	SS	STAINLESS STEEL
C	CHILLER	FA	FREE AREA	MD	MOTORIZED DAMPER	SS	SAFETY SHOWER
CAP	CAPACITY	FC	FAN COIL UNIT	MOP	MAIN DISTRIBUTION PANEL	STD	STANDARD
CB	CIRCUIT BREAKER	FD	FOOTCANDLE	MED	MEDIUM	STL	STEEL
CBV	CIRCUIT BALANCING VALVE	FCV	FLOW CONTROL VALVE	MFR	MANUFACTURER	SYS	SYSTEM
CCT	CORRELATED COLOR TEMPERATURE	FD	FIRE DAMPER	MIN	MINIMUM	TEMP	TEMPERATURE
CKT	CIRCUIT	FIN	FLOOR DRAIN	MISC	MISCELLANEOUS	TR	TRANSFER GRILLE / REGISTER
CFH	CUBIC FEET PER HOUR	FIN	FINISHED	MLO	MAIN LUG ONLY	TR	TAMPER RESISTANT
CFM	CUBIC FEET PER MINUTE	FLA	FULL LOAD AMPS	MOCP	MAXIMUM OVERCURRENT PROTECTION	TT	TEMPERATURE TRANSMITTER
CHWR	CHILLED WATER RETURN	FLEX	FLEXIBLE	MTD	MOUNTED	TB	TELECOMMUNICATIONS TERMINAL BACKBOARD
CHWS	CHILLED WATER SUPPLY	FLR	FLOOR	MUA	MAKE-UP AIR UNIT	TYP	TYPICAL
CI	CAST IRON	FOB	FLAT ON BOTTOM	N	NEUTRAL	TX	TRANSFORMER
CL	CENTER LINE	FOT	FLAT ON TOP	NC	NORMALLY CLOSED	UC	UNDERCUT DOOR
CLG	CEILING	FP	FIRE PROTECTION	NEG	NEGATIVE	UH	UNIT HEATER
CMU	CONCRETE MASONRY UNIT	FP	FIRE PUMP	NIC	NOT IN CONTRACT	UNO	UNLESS NOTED OTHERWISE
CO	CLEAN OUT	FPM	FEET PER MINUTE	NL	NIGHT / SECURITY LIGHT - DO NOT SWITCH	UNOCC	UNOCCUPIED
COL	COLUMN	FPS	FEET PER SECOND	NO	NORMALLY OPEN	UR	URINAL
COMP	COMPRESSOR	FSD	FIRE/SMOKE DAMPER	NOM	NOMINAL	V	VOLTS
CONC	CONCRETE	FT	FEET	NTS	NOT TO SCALE	VA	VOLT AMPERE
COND	CONDENSATE	FXC	FLEXIBLE CONNECTION	OA	OUTSIDE AIR	VA	VALVE
CONN	CONNECTION	GND	GROUND	OBD	OPPOSED BLADE DAMPER	VAV	VARIABLE AIR VOLUME UNIT
CONT	CONTINUATION	GA	GAUGE	OC	ON CENTER	VFD	VARIABLE FREQUENCY DRIVE
CONTR	CONTRACTOR	GAL	GALLON	OCC	OCCUPIED	VRF	VARIABLE REFRIGERANT FLOW
CRI	COLOR RENDERING INDEX	GALV	GALVANIZED	OC	OVER CURRENT PROTECTION	VOLT	VOLTAGE
CT	COOLING TOWER	GC	GENERAL CONTRACTOR	OD	OUTSIDE DIAMETER	VTR	VENT THROUGH ROOF
CT	CURRENT TRANSFORMER	GEC	GROUND ELECTRODE CONDUCTOR	OL	OVERLOAD	W	WIDTH
CU	CONDENSING UNIT	GFCI / GFI	GROUND FAULT CIRCUIT INTERRUPTER	ORD	OVERFLOW ROOF DRAIN	W	WATTS
CU	COPPER	H2O	WATER	OZ	OUNCE	W/	WITH
CUH	CABINET UNIT HEATER	HP	HORSEPOWER	PBD	PARALLEL BLADE DAMPER	W/O	WITHOUT
CVB	CONSTANT VOLUME BOX	GPH	GALLONS PER HOUR	PD	PRESSURE DROP	WB	WET BULB
CWR	CONDENSER WATER RETURN	GPM	GALLONS PER MINUTE	PH	PHASE	WC	WATER COLUMN
CWS	CONDENSER WATER SUPPLY	GRS/LB	GRAINS PER POUND	POS	POSITIVE PRESSURE	WC	WATER CLOSET
DB	DRY BULB	H2O	WATER	POS	POINT OF SALES	WG	WATER GAUGE
DEPT	DEPARTMENT	HB	HOSE BIBB	PRV	PRESSURE REDUCING VALVE	WP	WEATHERPROOF
DF	DRINKING FOUNTAIN	HD	HEAD (SEE SCHEDULES)	PS	PRESSURE SWITCH	WPIU	WEATHERPROOF IN-USE
DIA	DIAMETER	HP	HEAT PUMP	PSI	POUNDS PER SQUARE INCH	WSR	WITHSTAND RATING
DIAG	DIAGRAM					XFMR	TRANSFORMER

SUBSTITUTIONS:

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

- A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.
- B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES AND CONFLICTS TO THE ENGINEER TO BE REMEDIED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE CODES THAT WILL BE ADHERED TO ARE THE 2021 INTERNATIONAL MECHANICAL, 2018 INTERNATIONAL PLUMBING, AND 2021 INTERNATIONAL ENERGY CONSERVATION CODE, AS WELL AS THE 2020 NATIONAL ELECTRICAL CODE. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS. (REFERENCE ARCHITECTURAL DRAWINGS FOR CODE PLANS FOR GOVERNING CODES AND REGULATIONS.)

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.



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GRAND JUNCTION, CO 81506

MECHANICAL COVER SHEET

FOR CONSTRUCTION

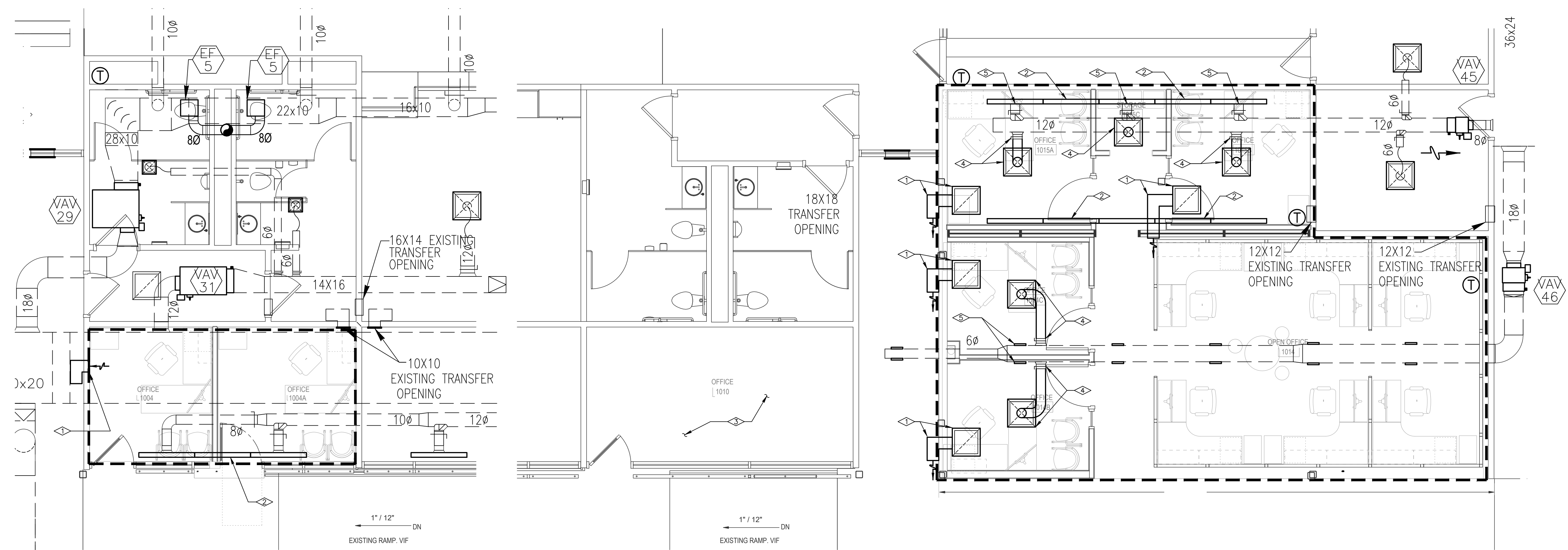
REV. DESC. DATE:

DATE: 2/1/2023

PROJECT #: 22070

SHEET #:

MO-1



GENERAL NOTES:















1. EXISTING DUCTWORK AND GRD'S ARE SHOWN FOR REFERENCE IN DASHED LINETYPE. LOCATIONS HAVE NOT BEEN FIELD VERIFIED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR COMPLETE SCOPE OF WORK IN REMODELED AREAS.
3. SOME EQUIPMENT TAGS ARE SHOWN FROM THE ORIGINAL CONSTRUCTION DRAWINGS AND ARE TO BE USED FOR REFERENCE ONLY.















FLAG NOTES:





1. NEW RETURN GRILLE (KRUEGER EG05) AND 12X8 TRANSFER DUCT. GRILLE TO MATCH EXISTING GRILLE STYLE IN ADJACENT OFFICE.
2. THIS SECTION OF THE LINEAR DIFFUSER SHOULD BE A BLANK SECTION. REMOVE THIS SECTION TO ACCOMMODATE THE NEW WALL IF POSSIBLE.
3. NO MECHANICAL WORK IN THIS AREA.
4. NEW 8"Ø SUPPLY DUCT TAP INTO EXISTING SUPPLY DUCT ROUTED TO NEW DIFFUSER AS SHOWN WITH 8" Ø DUCT. NEW CEILING DIFFUSER TO BE KRUEGER PLQ.
5. CLOSE OFF EXISTING DUCT MOUNTED SUPPLY GRILLE OR LINEAR GRILLE AIRTIGHT WITH EITHER THE INTEGRAL DAMPER OR A BLANK OFF PLATE.























MECHANICAL FLOOR PLAN
SCALE: 1/4"=1'-0"













FIRE ALARM EQUIPMENT LEGEND	
	FIRE ALARM CONTROL PANEL
	FIRE ALARM PULL STATION
	FIRE ALARM HORN
	FIRE ALARM STROBE
	FIRE ALARM HORN/STROBE
	CEILING MOUNTED SPEAKER
	DUCT DETECTOR
	REMOTE LAMP
	SMOKE DETECTOR - PHOTOELECTRIC
	135° STANDARD HEAT DETECTOR
	PIR DETECTOR
	DOOR HOLD - MAGNETIC HOLD
	FLOW SWITCH
	TAMPER SWITCH

COMMUNICATION LEGEND	
	CLOCK ONLY
	CLOCK / PA SPEAKER WALL MOUNTED
	ROUND CEILING MOUNTED SPEAKER
	SQUARE SPEAKER
	INTERCOM PUSH TO CALL SWITCH
	WIRELESS ACCESS POINT ABOVE THE CEILING
	ABOVE THE CEILING PROJECTOR CONNECTION
	WALL MOUNTED HDMI
	PLAIN DATA OUTLET
	PLAIN DATA OUTLET WITH MOUNTING HEIGHT
	COMBINATION DATA/TELEPHONE
	FLOOR MOUNTED COMBINATION DATA/TELEPHONE
	CEILING MOUNTED COMBINATION DATA/TELEPHONE
	TELEVISION OUTLET

SECURITY SYSTEM LEGEND	
	SECURITY CAMERA
	ADA DOOR OPERATOR PUSH BUTTON
	ELECTRIC DOOR STRIKE
	CARD READER FOR DOOR OPERATOR

LIGHTING LEGEND	
NOTES:	
SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATIONS MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL ON THE PROJECT DRAWINGS OCCUR, THE ITEM SHALL BE PROVIDED AND INSTALLED.	
VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS.	
A NUMBER NEXT TO A RECEPTACLE OR DEVICE INDICATES A CIRCUIT NUMBER.	
AN UPPER CASE LETTER NEXT TO A SWITCH INDICATES THE FUNCTION OF THE SWITCH. A LOWER CASE LETTER INDICATES THE SWITCH CIRCUIT.	
AN UPPER CASE LETTER NEXT TO A LIGHT FIXTURE INDICATES THE TYPE OF FIXTURE. REFER TO THE LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATIONS. A LOWER CASE LETTER NEXT TO A LIGHT CORRESPONDS TO THE SWITCH DESIGNATION.	

SWITCHES	
	SINGLE POLE SWITCH
	TWO POLE SWITCH
	THREE-WAY SWITCH
	FOUR-WAY SWITCH
	DIMMER SWITCH
	3 WAY DIMMER SWITCH - (4D INDICATES A 4WAY DIMMER)
	DOOR ACTIVATED SWITCH
	WALL MOUNTED DUAL TECHNOLOGY MANUAL ON / AUTO OFF VACANCY SENSOR SWITCH
	LOW VOLTAGE LIGHT SWITCH
	MANUAL MOTOR STARTER
	PILOT LIGHT SWITCH
	AUTO ON / AUTO OFF LIGHT SWITCH
	DUAL TECHNOLOGY MOTION / OCCUPANCY SENSOR LIGHT SWITCH
	MANUAL ON / AUTO OFF DIMMING LIGHT SWITCH
	KEY OPERATED LIGHT SWITCH
	MANUAL ON - TIMED OFF LIGHT SWITCH
	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH
	CEILING MOUNTED DUAL TECHNOLOGY MANUAL ON / AUTO OFF VACANCY SENSOR
	SCENE CONTROL STATION
	UNIT LIGHTING MANAGEMENT CONTROL STATION,










LIGHT FIXTURES	
	1'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED
	2'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED
	2'x2' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED
	OPEN STRIP FIXTURE
	WALL BRACKET LINEAR FIXTURE
	WALL MOUNTED SCONCE LIGHT FIXTURE
	RECESSED DOWNLIGHT CAN FIXTURE
	SURFACE CEILING OR PENDANT MOUNTED FIXTURE
	DOUBLE FACE EXIT SIGN, WALL AND CEILING MOUNTED
	SINGLE FACE EXIT SIGN, WALL AND CEILING MOUNTED
	WALL MOUNTED EMERGENCY LIGHT
	EMERGENCY EXTERIOR EGRESS FIXTURE








GENERAL ELECTRICAL NOTES:





















- ALL ELECTRICAL WORK TO COMPLY WITH LATEST EDITION OF NEC, IECC AND ALL APPLICABLE GOVERNING CODES.
- FIELD COORDINATION DURING CONSTRUCTION IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES.
- ELECTRIC UTILITY TO ADVISE OWNER AND/OR THE ELECTRICAL ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.

WIRING:

- ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWING. FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
- ALL CONDUITS AND CONVEYANCES SHALL BE CONCEALED. IN THE EVENT THAT A NEW DEVICE IS BEING INSTALLED IN AN EXISTING DRYWALL PARTITION, PROVIDE A CUT IN TYPE BOX AND FISH FLEXIBLE CONDUIT DOWN INSIDE THE WALL FROM ABOVE THE CEILING AND REPAIR THE DRYWALL AROUND THE CONDUIT. TRANSITION TO EMT ONCE ABOVE THE CEILING.
- SIZES OF WIRE AND CABLES ARE BASED UPON COPPER CONDUCTORS, UNLESS OTHERWISE INDICATED. ALL CIRCUITS SHALL CONTAIN (2) #12 AWG WITH (1) #12 GND IN 1/2" CONDUIT UNLESS NOTED OTHERWISE.
- ALL BRANCH CIRCUITS WITH HOME RUNS OVER 50 FEET, WILL BE SIZED ONE SIZE LARGER.
- ALL PENETRATIONS IN OR THROUGH FIRE RATED PARTITIONS SHALL BE FIRE STOPPED IN SUCH A WAY THAT THE PENETRATION MATCHES THE FIRE RATING OF THE WALL.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN THE APPROPRIATE DISCIPLINES AND CONTRACTORS.
- COORDINATE ALL DEVICE, FIXTURE AND HARDWARE COLOR SELECTIONS WITH THE ARCHITECT PRIOR TO MAKING SHOP DRAWING SUBMITTALS.
- COORDINATE THE MOUNTING HEIGHTS OF ALL RECEPTACLES MOUNTED ABOVE COUNTERS, CASEWORK AND APPLIANCE RECEPTACLES WITH ARCHITECTURAL ELEVATIONS.
- BRANCH CIRCUIT AND SPECIAL SYSTEMS WIRING FOR DEVICES ON WALLS IN FINISHED AREAS WHICH CANNOT BE CONCEALED SHALL BE INSTALLED IN SURFACE MOUNTED RACEWAY.
- ALL EXPOSED CONDUITS, BOXES, ETC. IN ROOMS TO BE PAINTED SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE. EXPOSED CONDUITS, BOXES, ETC. IN ROOMS WHICH ARE NOT PAINTED MAY BE LEFT UN-PAINTED. EXPOSED CONDUIT, BOXES, ETC. ON THE EXTERIOR OF BUILDINGS SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE AS CLOSELY AS POSSIBLE.
- THE CONTRACTOR IS RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF ALL WALLS, CEILING OR OTHER BUILDING ELEMENTS WHICH ARE DISTURBED AS PART OF THE DEMOLITION AND/OR INSTALLATION OF ELECTRICAL WORK.
- PROVIDE ELECTRICAL CONNECTION TO ALL FIRE, SMOKE, AND FIRE / SMOKE DAMPERS INCLUDING POWER AND FIRE ALARM. VERIFY EXACT SIZE AND FINAL LOCATION OF ALL DAMPERS WITH THE MECHANICAL CONTRACTOR. ALL ROOFTOP UNITS RATED AT MORE THAN 2000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN THE RETURN DUCT. ALL ROOFTOP UNITS RATED AT MORE THAN 15000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN BOTH THE SUPPLY AND RETURN DUCT AT ROOFTOP LEVEL AND IN THE RETUR DUCT AT EVERY LEVEL THAT IS SERVED. ELECTRICAL CONTRACTOR WILL PROVIDE A REMOTE TEST STATION AND ALL WIRING NECESSARY TO COMPLETE INSTALLATION.
- REFER TO THE MECHANICAL EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS ASSOCIATED WITH PLUMBING AND HVAC EQUIPMENT AND OWNER/GENERAL CONTRACTOR FURNISHED EQUIPMENT.

ELECTRICAL EQUIPMENT LEGEND	
	BRANCH CIRCUIT PANELBOARD
	TELEPHONE TERMINAL BOARD
	ELECTRIC MOTOR
	FUSED SAFETY SWITCH / DISCONNECT COMBINATION
	MOTOR STARTER
	CONTACTOR
	CIRCUITRY HOMERUN: PANEL LA - CIR. #7
	CONDUIT OR WIRE CONCEALED IN WALL/CLG. (SOLID LINE TYPE)
	CONDUIT OR WIRE UNDERFLOOR/UNDERGND. (CENTER LINE TYPE)

MAIN DISTRIBUTION GEAR	
	CIRCUIT BREAKER IN A PANEL BOARD
	PAD MOUNTED UTILITY TRANSFORMER
	FUSED DISCONNECT 100A AMP RATING 2P = NUMBER OF POLES
	100A 2 POLE FUSED DISCONNECT
	ELECTRICAL METER SHOWN ON ONE-LINE DIAGRAMS
	PP1 225A MCB 120/208V 3PH, 4W
	PP1 225A MLO 120/208V 3PH, 4W

ELECTRICAL DEVICE LEGEND	
	CEILING JUNCTION BOX - SURFACE/FLUSH
	WALL JUNCTION BOX - SURFACE/FLUSH
	DUPLEX RECEPTACLE
	FLOOR MOUNTED RECEPTACLE
	SPLIT WIRED DUPLEX RECEPTACLE
	CEILING MOUNTED DUPLEX RECEPTACLE
	FOURPLEX RECEPTACLE
	FLOOR MOUNTED FOURPLEX RECEPTACLE
	APPLIANCE RECEPTACLE - 3 WIRE
	GROUND FAULT CIRCUIT INTERRUPTER
	RECEPTACLE WITH USB CHARGING CAPABILITIES
	RECEPTACLE MOUNTED ABOVE COUNTER
	RECEPTACLE MOUNTED IN CASEWORK
	ELECTRIC HAND DRYER
	THERMOSTAT
	OPEN/CLOSE/STOP PUSH BUTTON
	DRAWING KEY NOTES
	ROOM DESIGNATION
	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE WITH A WEATHER PROOF COVER
	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE MOUNTED AT 44" ABOVE FINISHED FLOOR

LUMINAIRES:

- COORDINATE THE LOCATION OF ALL LIGHTING EQUIPMENT INCLUDING BUT NOT LIMITED TO THE LUMINAIRES, SWITCHES WITH THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND ALL OTHER TRADES AS REQUIRED. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR DIMENSIONAL LOCATION OF LIGHT FIXTURES.
- LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE AND SHALL NOT BE SUPPORTED FROM THE T-BAR CEILING GRID.
- THE ELECTRICAL CONTRACTOR IS TO CONFIRM THE LIGHT FIXTURES ORDERED WILL BE COMPATIBLE WITH THE CEILING TYPES AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING THE FIXTURES.
- VERIFY LUMINAIRE MOUNTING REQUIREMENTS AND OVERALL HEIGHT OF ALL PENDANT MOUNTED FIXTURES PRIOR TO ORDERING.
- ALL LIGHT FIXTURES NEED TO BE COMPATIBLE WITH THE SWITCHES AND CONTROLS BEING PROVIDED.
- THE LIGHTING PACKAGE SHALL BE APPROVED BY BOTH THE ARCHITECT AND ENGINEER AS APPROVED EQUAL BEFORE BID. NO LIGHT FIXTURE SHALL BE ORDERED UNTIL THE LIGHT FIXTURE SUBMITTAL PACKAGE HAS BEEN APPROVED IN WRITING BY THE ARCHITECT, GENERAL CONTRACTOR AND ELECTRICAL ENGINEER.
- COORDINATE LUMINAIRE MOUNTING REQUIREMENTS PRIOR TO PLACING ORDER.

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

EQUIPMENT	FURNISHED	SET	POWER WIRED	CONTROL WIRED
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23	23	26	--
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	23(1)	26	26(2)	23
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	26	26	26	--
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

SUBSCRIPT FOOTNOTES:

- MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.
- IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23. CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

44" MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER OF DEVICE	DIFF DIFFERENTIAL	HR HOUR	PT PRESSURE TRANSMITTER
A AMPS	DISCH DISCHARGE	HT HEIGHT	PTAC PACKAGED TERMINAL AIR CONDITIONER
A.D. ACCESS DOOR	DIV DIVISION	HTR HEATER	PV PLUG VALVE
AAV AIR ADMITTANCE VALVE	DN DOWN	HWR HEATING WATER RETURN	PVC POLYVINYL CHLORIDE
ABV ABOVE	DWG DRAWING	HWS HEATING WATER SUPPLY	QTY QUANTITY
AC AIR CONDITIONING UNIT	DS DUCT SILENCER	HX HEAT EXCHANGER	RA RETURN AIR GRILLE / REGISTER
AC ABOVE COUNTER	DX DIRECT EXPANSION	ID INSIDE DIAMETER	RCP REFLECTED CEILING PLAN
AD AREA DRAIN (SEE SYMBOLS)	(A) EXISTING	IG ISOLATED GROUND	RD ROOF DRAIN
A.F.C. ABOVE FINISHED CEILING	EAT EXHAUST AIR GRILLE/REGISTER	IN INCHES	REL RELIEF
A.F.G. ABOVE FINISHED GRADE	EA ENTERING AIR TEMPERATURE	INV INVERT	REOD REQUIRED
AIC AMPERE INTERRUPTING CAPACITY	EC ELECTRICAL CONTRACTOR	JBOX JUNCTION BOX	RF RETURN FAN
A.F.F. ABOVE FINISHED FLOOR	ECC ECCENTRIC	K KELVIN	RH RELATIVE HUMIDITY
AHU AIR HANDLING UNIT	EFF EFFICIENCY	KW KILOWATT	RHC REHEAT COIL
ALUM ALUMINUM	EL ELEVATION	KVA KILO VOLT - AMPS	RLA RATED LOAD AMPS
AP ACCESS PANEL OR DOOR	ELEC ELECTRIC	L LENGTH	RM ROOM
ATS AUTOMATIC TRANSFER SWITCH	ELEV ELEVATOR	LAT LEAVING AIR TEMPERATURE	RPM REVOLUTIONS PER MINUTE
AV AUDIO / VIDEO	EMV EMERGENCY FUNCTION	LV LAVATORY	SA SUPPLY AIR GRILLE / REGISTER
AVG AVERAGE	ENT ENTERING	LB POUND	SC SHORT CIRCUIT
AWG AMERICAN WIRE GAGE	EMT ELECTRIC METALLIC TUBE	LD LINEAR DIFFUSER	SCA SHORT CIRCUIT AVAILABLE
BAS BUILDING AUTOMATION SYSTEM	EQ EQUAL	LF LINEAR FEET	SCCR SHORT CIRCUIT CURRENT RATING
BB BASEBOARD	EQUIP EQUIPMENT	LIN LINEAR	SCH SCHEDULE
BD BACK DRAFT DAMPER	EQUIV EQUIVALENT	LIQ LIQUID	SD SMOKE DAMPER
BFP BACK FLOW PREVENTOR	ES END SWITCH	LM LUMEN	SEF SMOKE EXHAUST FAN
BL BOILER	ESP EXTERNAL STATIC PRESSURE	LRA LOCKED ROTOR AMPS	SF SUPPLY FAN
BLDG BUILDING	ET EXPANSION TANK	LV LOUVER	SH SENSIBLE HEAT
BLW BELOW	EWC ELECTRIC WATER COOLER	LVG LEAVING	SH SHOWER
BOB BOTTOM OF BEAM	EWT ENTERING WATER TEMPERATURE	LWT LEAVING WATER TEMPERATURE	SP STATIC PRESSURE
BOD BOTTOM OF DUCT	EX EXHAUST	MBH THOUSANDS OF BTU PER HOUR	SPD SURGE PROTECTION DEVICE
BOP BOTTOM OF PIPE	EXPAN EXPANSION	MC MECHANICAL CONTRACTOR	SPEC SPECIFICATION
BSMT BASEMENT	EXT EXTERNAL	MCA MINIMUM CIRCUIT AMPACITY	SQ SQUARE
BTU BRITISH THERMAL UNIT	F DEGREES FAHRENHEIT	MCB MAIN CIRCUIT BREAKER	SS STAINLESS STEEL
C CHILLER	FA FREE AREA	MD MOTORIZED DAMPER	SS SAFETY SHOWER
CAP CAPACITY	FC FAN COIL UNIT	MDP MAIN DISTRIBUTION PANEL	STD STANDARD
CB CIRCUIT BREAKER	FC FOOTCANDLE	MED MEDIUM	STL STEEL
CBV CIRCUIT BALANCING VALVE	FCV FLOW CONTROL VALVE	MFR MANUFACTURER	SYS SYSTEM
CCT CORRELATED COLOR TEMPERATURE	FD FIRE DAMPER	MIN MINIMUM	TEMP TEMPERATURE
CKT CIRCUIT	FLR FLOOR	MISC MISCELLANEOUS	TR TRANSFER GRILLE / REGISTER
CFH CUBIC FEET PER HOUR	FIN FINISHED	MOCP MAXIMUM OVERCURRENT PROTECTION	TR TAMPER RESISTANT
CFM CUBIC FEET PER MINUTE	FLA FULL LOAD AMPS	MTD MOUNTED	TT TEMPERATURE TRANSMITTER
CHWR CHILLED WATER RETURN	FLEX FLEXIBLE	MUA MAKE-UP AIR UNIT	TTB TELECOMMUNICATIONS TERMINAL BACKBOARD
CHWS CHILLED WATER SUPPLY	FMB FLAT ON BOTTOM	N NEUTRAL	TYP TYPICAL
CI CAST IRON	FOT FLAT ON TOP	NC NORMALLY CLOSED	TX TRANSFORMER
CL CENTER LINE	FP FIRE PROTECTION	NEG NEGATIVE	UC UNDERCUT DOOR
CLG CEILING	FP FIRE PUMP	NIC NOT IN CONTRACT	UH UNIT HEATER
CMU CONCRETE MASONRY UNIT	FPM FEET PER MINUTE	NL NIGHT / SECURITY LIGHT - DO NOT SWITCH	UNO UNLESS NOTED OTHERWISE
CO CLEAN OUT	FPS FEET PER SECOND	NO NORMALLY OPEN	UNOCC UNOCCUPIED
COL COLUMN	FS FLOW SWITCH	NOM NOMINAL	UR URINAL
COMP COMPRESSOR	FSD FIRE/SMOKE DAMPER	NTS NOT TO SCALE	V VOLTS
CONC CONCRETE	FT FEET	OA OUTSIDE AIR	VA VOLT AMPERE
COND CONDENSATE	FXC FLEXIBLE CONNECTION	OBD OPPOSED BLADE DAMPER	VA VALVE
CONN CONNECTION	GA GROUND	OC ON CENTER	VAV VARIABLE AIR VOLUME UNIT
CONT CONTINUATION	GND GROUND	OCC OCCUPIED	VFD VARIABLE FREQUENCY DRIVE
CONTR CONTRACTOR	GAL GALLON	OCV OVER CURRENT PROTECTION	VRF VARIABLE REFRIGERANT FLOW
CRI COLOR RENDERING INDEX	GALV GALVANIZED	OD OUTSIDE DIAMETER	VOLT VOLTAGE
CT COOLING TOWER	GEC GROUND ELECTRODE CONDUCTOR	OL OVERLOAD	VTR VENT THROUGH ROOF
CT CURRENT TRANSFORMER	GFCI / GFI GROUND FAULT CIRCUIT INTERRUPTER	ORD OVERFLOW ROOF DRAIN	W WIDTH
CU CONDENSING UNIT	GC GENERAL CONTRACTOR	OZ OUNCE	W WATTS
CU COPPER	GPH GALLONS PER HOUR	PBD PARALLEL BLADE DAMPER	W WITH
CUH CABINET UNIT HEATER	GPM GALLONS PER MINUTE	PD PRESSURE DROP	W/O WITHOUT
CVB CONSTANT VOLUME BOX	GRS/LB GRAINS PER POUND	PH PHASE	WB WET BULB
CWR CONDENSER WATER RETURN	H 2O WATER	POS POSITIVE PRESSURE	WC WATER COLUMN
CWS CONDENSER WATER SUPPLY	HB HOSE BIBB	POS POINT OF SALES	WC WATER CLOSET
DB DRY BULB	HD HEAD (SEE SCHEDULES)	PRV PRESSURE REDUCING VALVE	WG WATER GAUGE
DEPT DEPARTMENT	HP HEAT PUMP	PS PRESSURE SWITCH	WP WEATHERPROOF
DF DRINKING FOUNTAIN	HP HORSEPOWER	PSI POUNDS PER SQUARE INCH	WPIU WEATHERPROOF IN-USE
DIA DIAMETER			WSR WITHSTAND RATING
DIAG DIAGRAM			XFMR TRANSFORMER

SUBSTITUTIONS:

A. SUBSTITUTIONS. SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

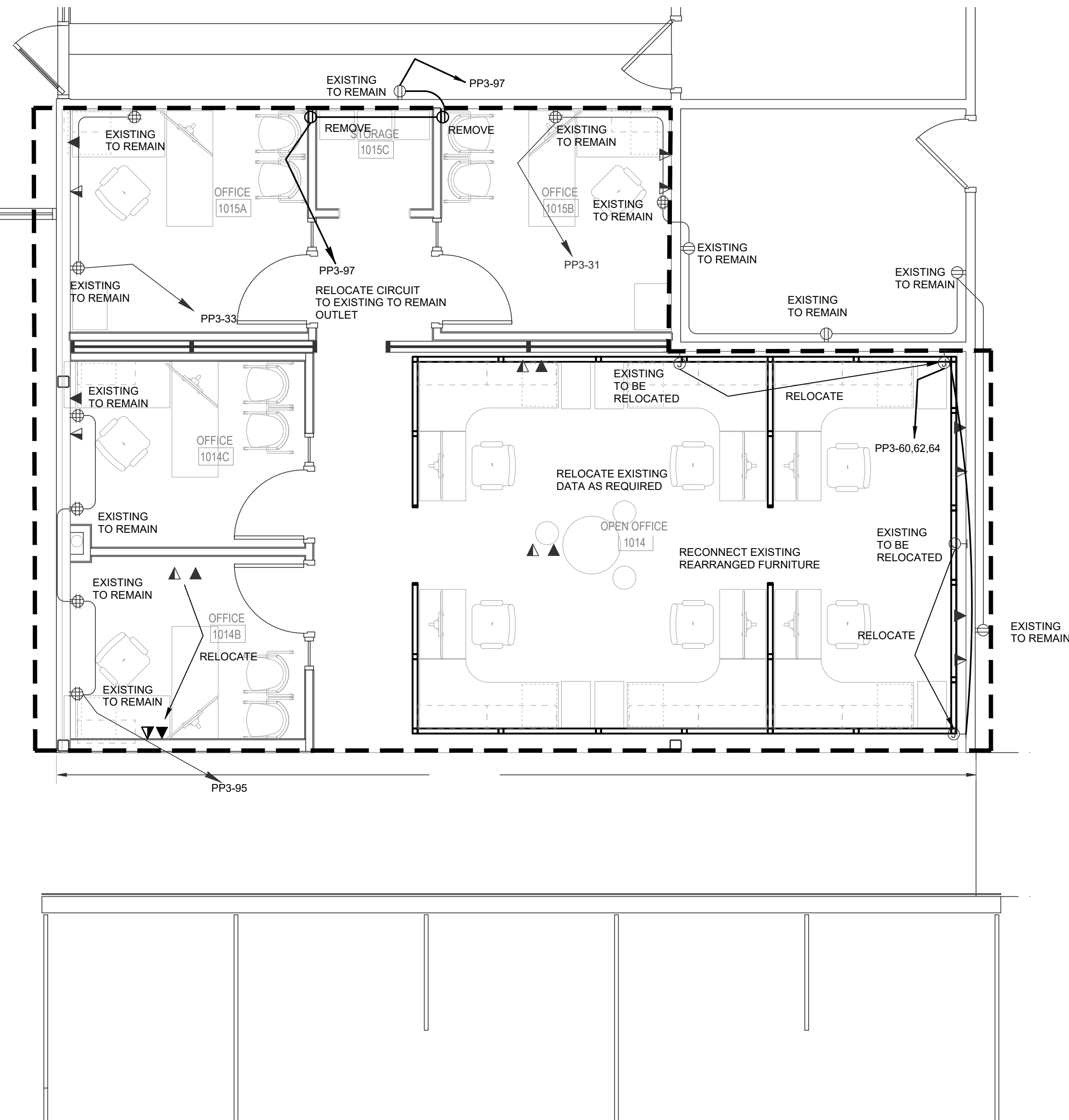
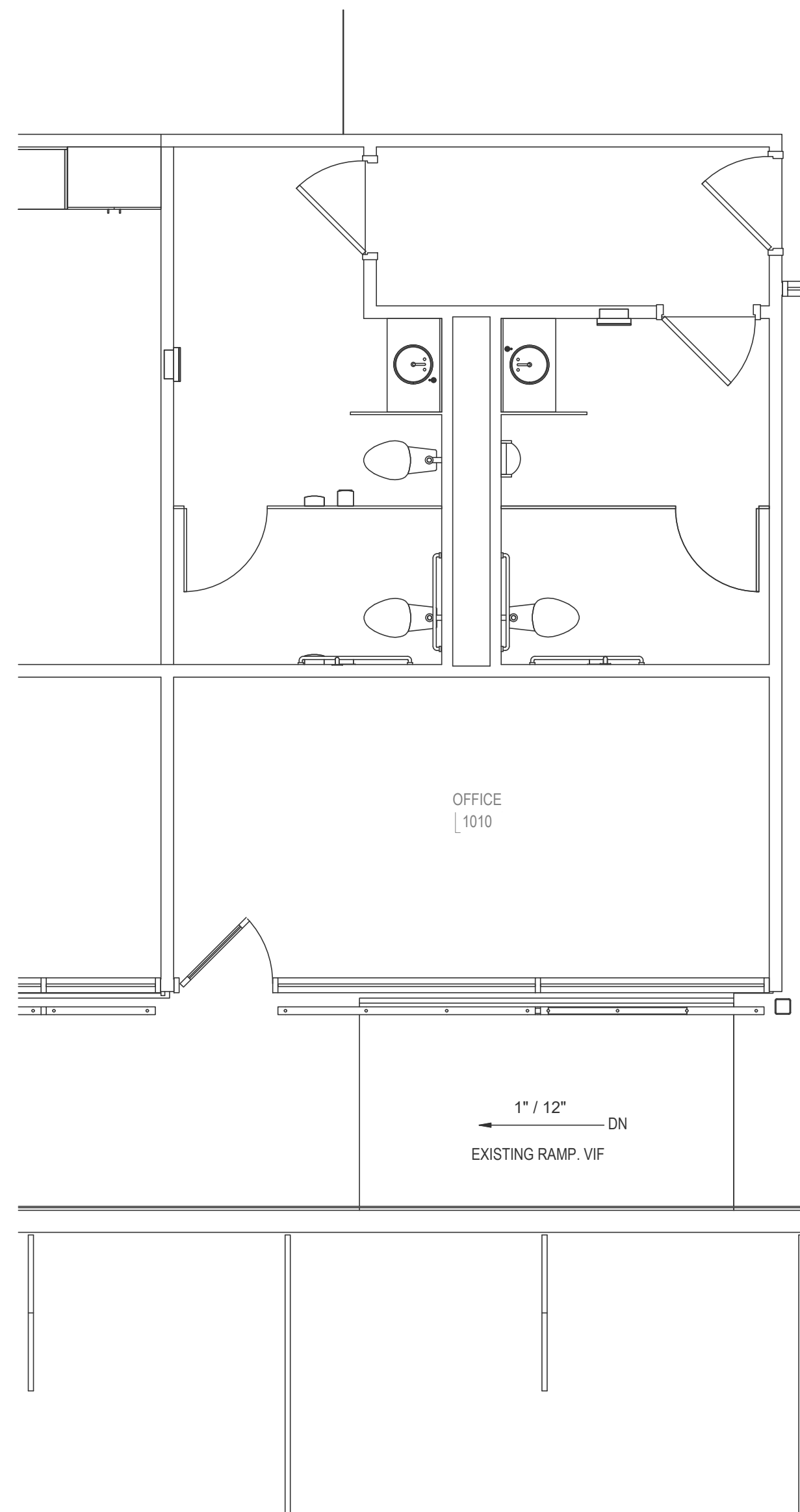
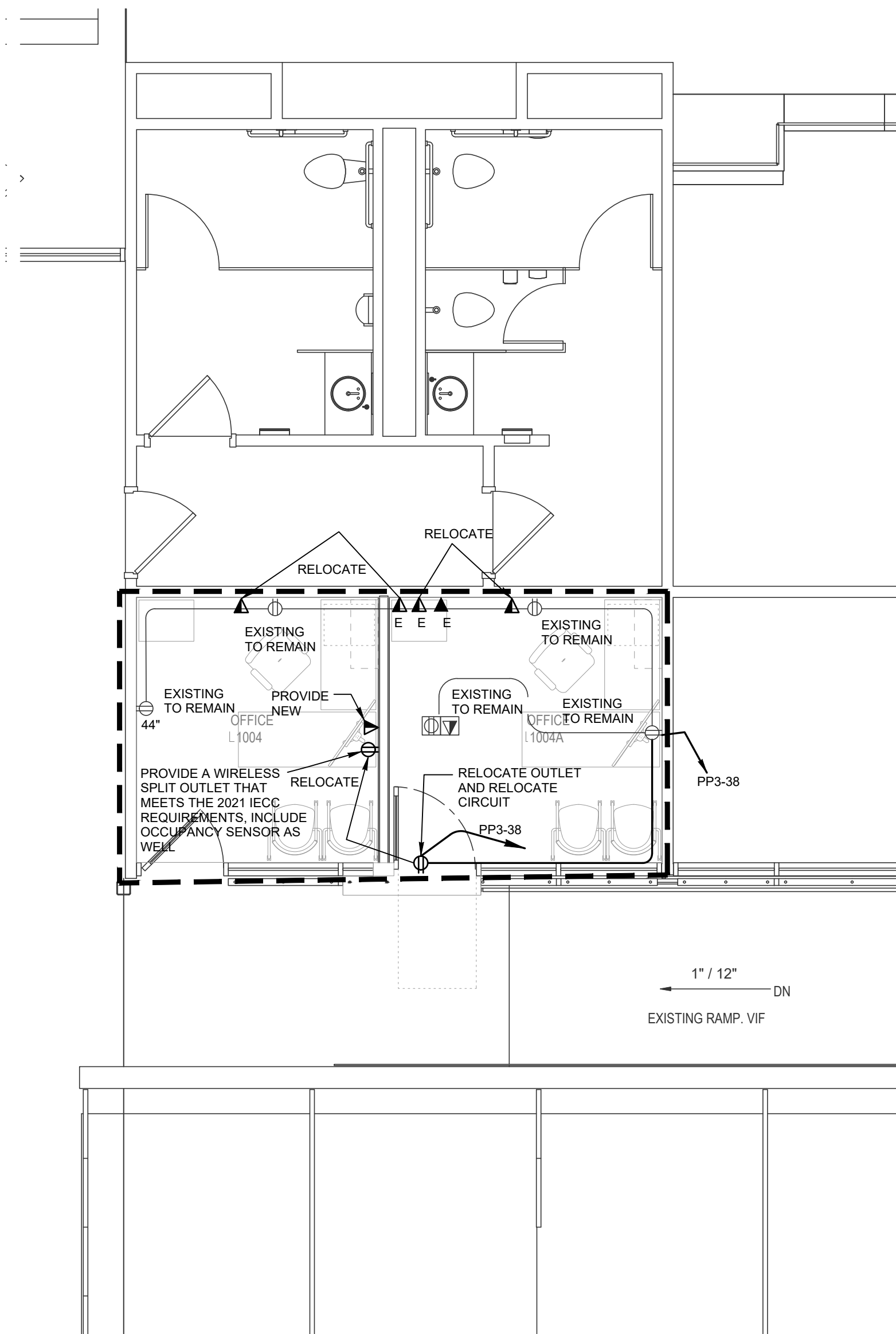
B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE CODES THAT WILL BE ADHERED TO ARE THE 2021 INTERNATIONAL MECHANICAL, 2018 INTERNATIONAL PLUMBING, AND 2021 NATIONAL ELECTRICAL CODE. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS. (REFERENCE ARCHITECTURAL DRAWINGS FOR CODE PLANS FOR GOVERNING CODES AND REGULATIONS.)

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.



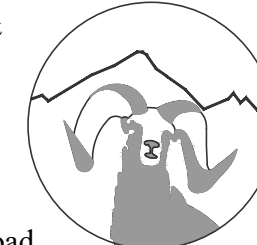


ELECTRICAL FIRST FLOOR PLAN

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

Bighorn Consulting Engineers, Inc.

Mechanical & Electrical Engineers



386 Indian Road
Grand Junction, CO 81501
Phone (970) 241-8709

COLORADO BUREAU OF INVESTIGATION

2797 JUSTICE DRIVE
GRAND JUNCTION, CO 81506

ELECTRICAL FIRST FLOOR PLAN

FOR CONSTRUCTION

REV. DESC. DATE:

DATE: 2/1/2023

PROJECT #: 22070

SHEET #:

E2-1