



Engineering & Design

7050 West Saginaw Hwy.  
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Infrastructure  
Planning and Facilities

MICHIGAN STATE  
UNIVERSITY

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Infrastructure  
Planning and Facilities

# BERKEY HALL - ROOM 10 - RENOVATION

Berkey Hall -  
Room 10 - Renovation

## PROJECT CONTACTS

**OWNER'S PROJECT MANAGER:**  
MICHIGAN STATE UNIVERSITY  
INFRASTRUCTURE, PLANNING &  
FACILITIES  
PHIL KAUK  
1147 CHESTNUT ROAD, RM. 101  
EAST LANSING, MI 48824

**ELECTRICAL:**  
CED  
ANGELA ROBINSON  
7050 W. SAGINAW HWY,  
SUITE 200  
LANSING, MI 48917  
O: 517.827.8726

**ARCHITECT:**  
CED  
DAVID MOSS, AIA, LEED, AP  
7050 W. SAGINAW HWY,  
SUITE 200  
LANSING, MI 48917  
O: 517.827.8697

**MECHANICAL:**  
CED  
MATT HOLLENBECK  
3410 BRIARFIELD BLVD  
MAUMEE, OH 43537  
O: 567.804.5118

**CONSTRUCTION MANAGER:**  
TBD  
O: TBD

## DRAWING INDEX

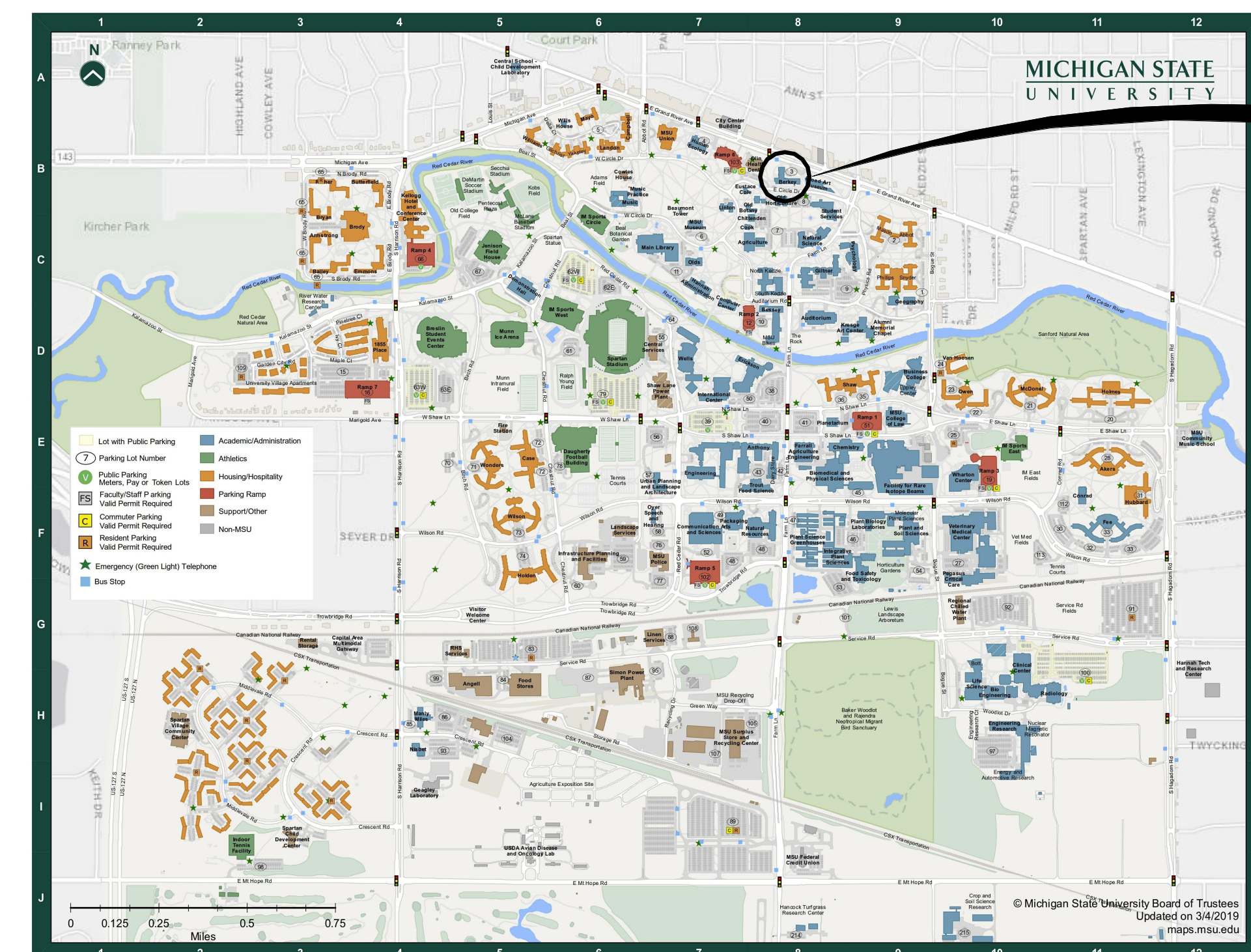
### DRAWING INDEX - WITH SCHEDULED RELEASES

		XXXXXX - ISSUED FOR DESIGN DEVELOPMENT	XXXXXX - ISSUED FOR BID / PERMIT	XXXXXX - ISSUED FOR CONSTRUCTION
00 - GENERAL				
G100	COVER SHEET		x	
G101	BASEMENT LIFE SAFETY PLAN		x	
04 - ARCHITECTURAL				
A001	GENERAL NOTES AND LEGENDS		x	
A003	WALL TYPES		x	
AD101	BASEMENT DEMOLITION FLOOR PLAN		x	
AD121	BASEMENT DEMOLITION REFLECTED CEILING PLAN		x	
A101	BASEMENT FLOOR PLAN		x	
A121	BASEMENT REFLECTED CEILING PLAN		x	
A141	BASEMENT FINISH FLOOR PLAN		x	
A421	INTERIOR ELEVATIONS, SECTIONS, AND DETAILS		x	
05 - MECHANICAL				
M001	MECHANICAL LEGEND SHEET		x	
M101	BASEMENT HVAC PLAN		x	
06 - PLUMBING				
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ED101	ELECTRICAL DEMOLITION PLAN		x	

### DRAWING INDEX - WITH SCHEDULED RELEASES

		XXXXXX - ISSUED FOR DESIGN DEVELOPMENT	XXXXXX - ISSUED FOR BID / PERMIT	XXXXXX - ISSUED FOR CONSTRUCTION
E101	POWER PLAN		x	
E201	LIGHTING PLAN		x	
E202	LIGHTING CALCS		x	
E301	FIRE ALARM CONDUIT PLAN - BASMENT		x	
E302	FIRE ALARM CONDUIT PLAN - FIRST FLOOR		x	
E701	DETAILS		x	
E702	DETAILS		x	
E703	DETAILS		x	
E704	DETAILS		x	
E801	SCHEDULES		x	
E802	SCHEDULES		x	

## PROJECT MAP



PROJECT LOCATION

CAPITAL PROJ. NO.  
CP19031

PR. MGR.	P. KAUK
ARCH.	B. CHARLAND
MECH.	R. WINKLER
ELEC.	G. HALSEY
CIVIL	--
L.A.	--
INT. DES.	C. LOCKWOOD
CONST. REP.	--
APPR.	P. KAUK
DATE	04/03/2026
SCALE	AS INDICATED

### REVISIONS

NO.	DATE	DESCRIPTION
01	04/03/2026	PERMIT SET
01	04/14/2026	ADDENDUM 01

COVER SHEET

# G100

1 of 20

**CODE SUMMARY**

**DESIGN CODES:**  
2021 MICHIGAN BUILDING CODE  
2021 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS  
2017 ICC ANS1 A117.1 ADA STANDARDS  
2023 NATIONAL ELECTRICAL CODE  
2021 MICHIGAN MECHANICAL CODE  
2021 MICHIGAN PLUMBING CODE  
2015 INTERNATIONAL FIRE CODE  
2021 MICHIGAN UNIFORM ENERGY CODE  
2012 NFPA 101 LIFE SAFETY CODE

**BUILDING DATA SUMMARY:**

OCCUPANCY TYPE: BUSINESS - GROUP B  
CONSTRUCTION TYPE: 2A  
SPRINKLER: NO  
AREA OF BASEMENT: 22,611 (+/-) SF  
AREA OF WORK: 1,946 SF  
CLASSIFICATION OF WORK (MRCEB): ALTERATIONS, LEVEL 2  
OCCUPANCY LOAD (RENOVATION AREA): 19 PERSONS  
NUMBER OF REQUIRED EXITS (MBC 1006): (2) REQUIRED  
(2) PROVIDED  
EGRESS WIDTH: 19 X 2' = 3.8' REQUIRED  
68' PROVIDED

COMMON PATH OF TRAVEL (MBC 1006.2.1): < 75'  
TRAVEL DISTANCE (MBC 1017.2): < 200'  
DEAD END CORRIDOR (MBC 1020.4): < 20'-0"

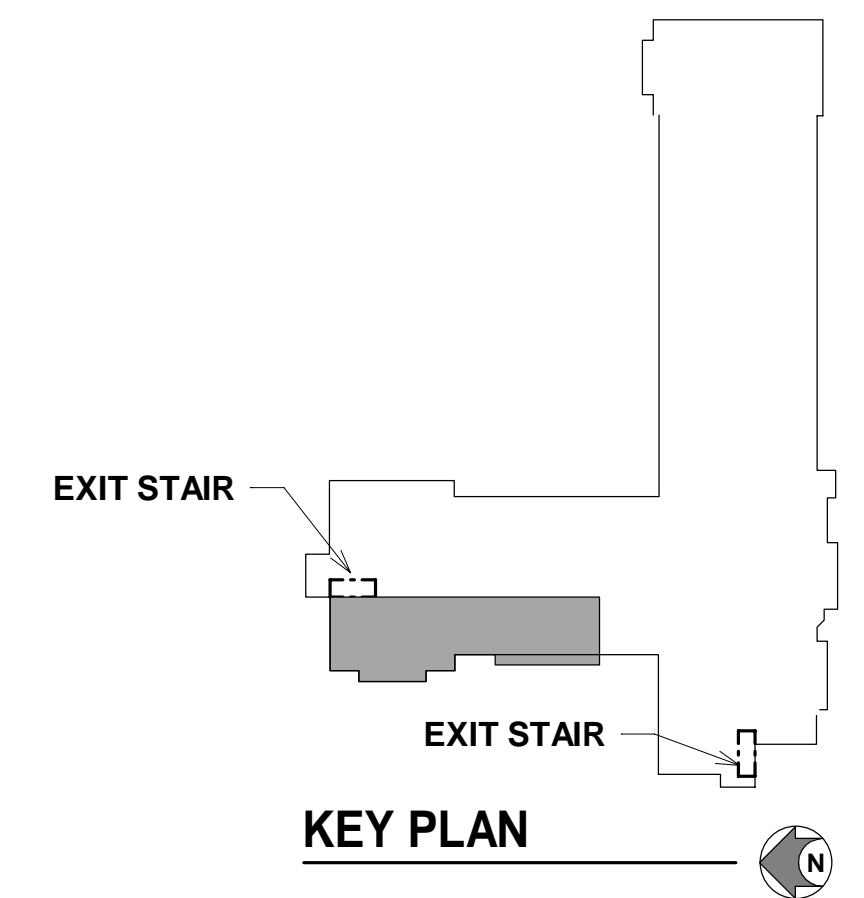
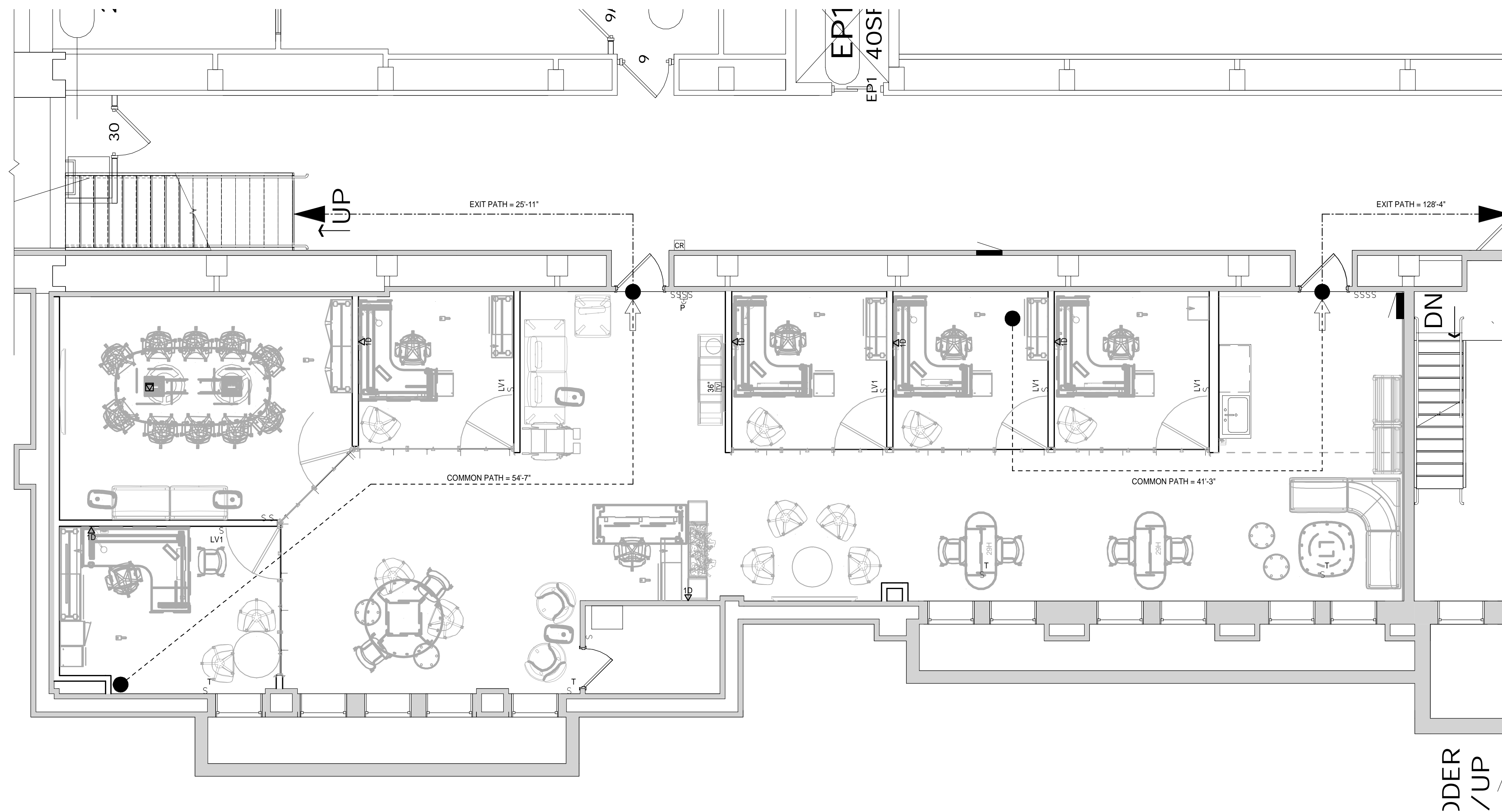
NOTE: UPDATED ENTRANCE DOOR (10) TO BE ADA COMPLIANT IN A 1 HR FIRE RATED WALL BY ADDING ADA PUSH BUTTONS, FIRE SMOKES, AND A CLOSER. (PER SECTIONS IBC 716.2.6.6, IBC 1105.1)

**FIRE RATED WALLS (EXISTING)**

1 HOUR PRIMARY STRUCTURAL FRAME  
1 HOUR EXTERIOR BEARING WALLS  
1 HOUR INTERIOR BEARING WALLS  
0 HOUR EXTERIOR NON-BEARING WALLS  
0 HOUR INTERIOR NON-BEARING WALLS  
1 HOUR FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS  
1 HOUR ROOF CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS

**LEGEND**

- SIGN DIRECTION →
- FACE OF SIGN →
- EXIT SIGN (SEE ELECTRICAL)
- EXIT
- CPET → COMMON PATH OF EGRESS DISTANCE
- EATD → EXIT ACCESS TRAVEL DISTANCE (ALONG STAIRWAY NOSING AT OPEN STAIRWAYS)
- 1-HR RATED WALL



**1 BASEMENT LIFE SAFETY PLAN**  
SCALE : 1/4" = 1'-0"

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**BASEMENT LIFE SAFETY PLAN**

**G101**



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GENERAL ARCHITECTURAL SYMBOLS

VIEW TITLE, DETAIL CALLOUT, SECTION MARKER, ELEVATION MARKER, DETAIL SECTION, ACCESSORY MARKER, DOOR MARKER, WINDOW TYPE MARKER, ROOM TAG, SCHEDULED DOOR, EXISTING DOOR, BREAK MARKER, NORTH ARROW, NEW COLUMN ID, EXISTING COLUMN ID, KEYNOTE, KEYNOTE (REMOVALS), EQUIPMENT TAG, ELEVATION NOTATION, CEILING HEIGHT

MATERIAL INDICATORS

UNDISTURBED EARTH, GRAVEL OR CRUSHED STONE, CAST STONE, CONCRETE, CONCRETE MASONRY UNIT, EXISTING, WOOD FRAMING, WOOD BLOCKING, STEEL, RIGID INSULATION, BRICK, PLYWOOD, SAND OR GYPSUM BOARD, FINISH WOOD, BATT INSULATION

WALL STYLES

EXISTING BRICK WALL, EXISTING CMU WALL, EXISTING STUD WALL, BRICK WALL, CMU WALL, STUD WALL, EXISTING WALL REMOVAL

ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes symbols for inches, pounds, feet, and various construction materials and components.

GENERAL NOTE WITH A PROJECT MANUAL

ALL GENERAL NOTES PERTAIN TO ALL ARCHITECTURAL (A-SERIES) DRAWINGS IN THIS SET GENERAL. 1. DEFINITIONS: 'PROVIDE' MEANS FURNISH AND INSTALL... 2. CONTRACTOR RESPONSIBILITIES... 3. CONTRACT DOCUMENTS...

CAPITAL PROJ. NO. CP19031. PR. MGR. P. KALK. ARCH. B. CHARLAND, R. WINKLER. MECH. G. HALSEY. ELEC. CIVIL. L.A. INT. DES. C. LOCKWOOD. CONST. REP. APPR. P. KALK. DATE SCALE AS INDICATED.

REVISIONS table with columns: NO., DATE, DESCRIPTION. Row 1: A1, 04/14/2026, ADDENDUM 01.

GENERAL NOTES AND LEGENDS A001





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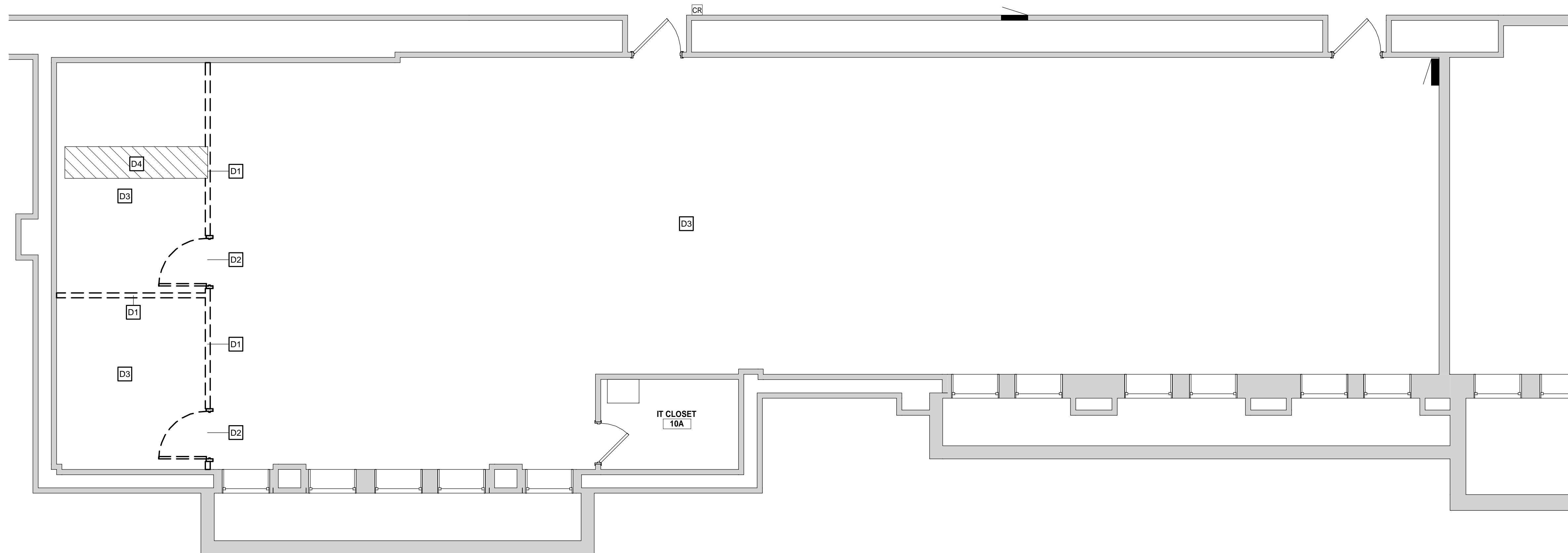
Berkey Hall -  
Room 10 - Renovation

**GENERAL DEMOLITION NOTES:**

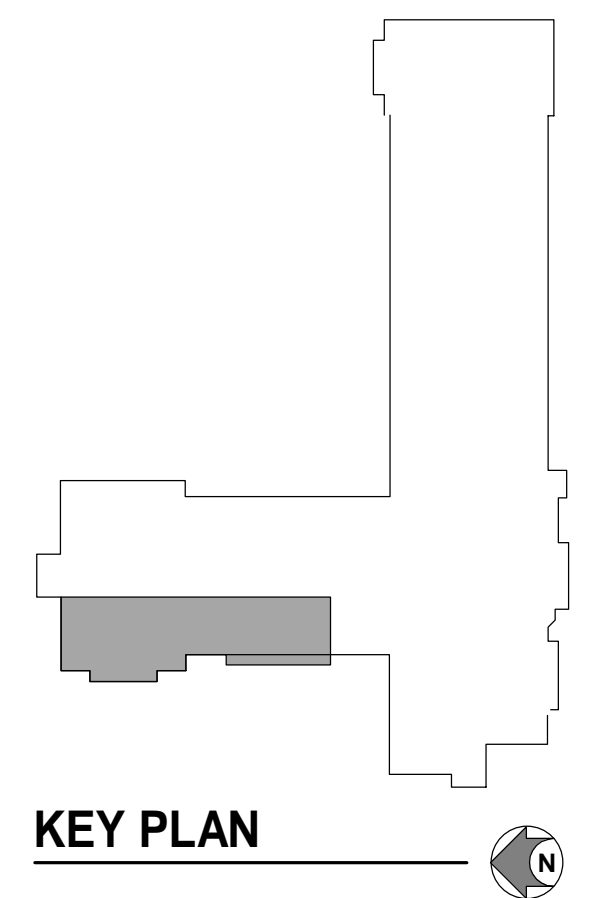
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL ITEMS REMOVED.
2. CONTRACTOR SHALL NOT ALTER THE STRUCTURAL INTEGRITY OF THE BUILDING WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
3. CONTRACTOR SHALL MAINTAIN ALL EXITS CLEAR OF OBSTRUCTIONS.
4. THE BUILDING WILL BE OCCUPIED DURING DEMOLITION AND RENOVATION OPERATIONS. THE CONTRACTOR SHALL CLEAN ALL CONSTRUCTION AREAS AND REMOVE ALL DEBRIS DAILY.
5. REMOVE ALL ITEMS SHOWN FOR DEMOLITION, INCLUDING ALL ASSOCIATED COMPONENTS, EQUIPMENT AND PARTS WHETHER IT HAS BEEN SPECIFICALLY CALLED OUT OR NOT.
6. FILL OPENINGS IN SURFACES THAT REMAIN. ALL SURFACES THAT REMAIN, THAT ARE ADJACENT TO REMOVED WORK, SHALL BE PATCHED TO MATCH EXISTING CONDITION.
7. CONTRACTOR SHALL DISCONNECT MECHANICAL AND ELECTRICAL COMPONENTS IN WALLS, CEILINGS AND FLOORS REQUIRED TO BE DEMOLISHED. REMOVE UTILITIES CONNECTED TO SUCH COMPONENTS BACK TO THE SOURCE, I.E. REMOVE ELECTRICAL BOXES BACK TO PANEL OR TO FIRST SHARED ELECTRICAL BOX. CAP AND SUPPORT AS NECESSARY PORTIONS OF WORK REMAINING.
8. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS NOT SHOWN HERE.

**DEMOLITION KEYNOTES #**

- D1 REMOVE EXISTING METAL STUD AND GYPSUM BOARD WALL.
- D2 REMOVE EXISTING DOOR, FRAME, AND ASSOCIATED HARDWARE.
- D3 REMOVE EXISTING FLOORING MATERIAL AND WALL BASE. PREP SUBFLOOR FOR NEW FLOORING MATERIAL. PREP WALLS FOR NEW PAINT AND BASE.
- D4 REMOVE PORTION OF EXISTING CONCRETE FLOOR TO RUN NEW BELOW SLAB ELECTRICAL.



**1 BASEMENT DEMOLITION FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



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BASEMENT DEMOLITION  
FLOOR PLAN

**AD101**



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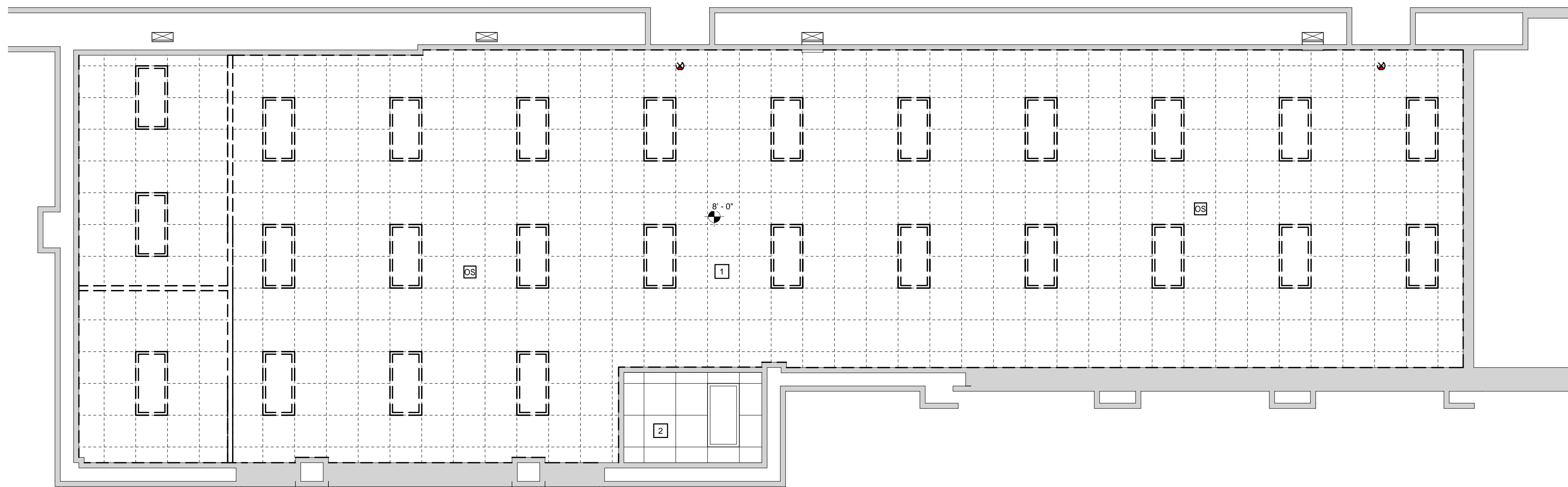
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GENERAL DEMOLITION NOTES:

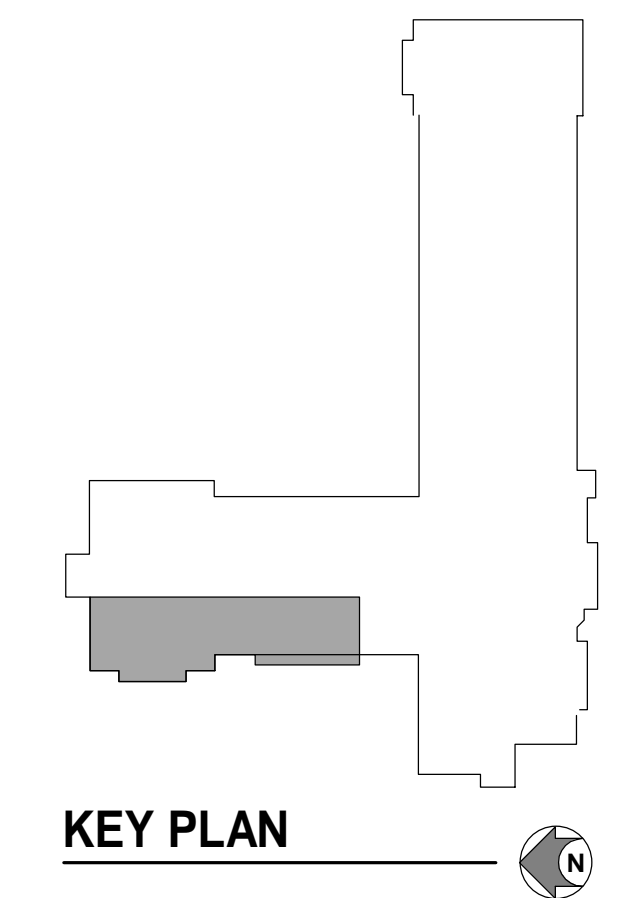
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5. REMOVE ALL ITEMS SHOWN FOR DEMOLITION, INCLUDING ALL ASSOCIATED COMPONENTS, EQUIPMENT AND PARTS WHETHER IT HAS BEEN SPECIFICALLY CALLED OUT OR NOT.
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7. CONTRACTOR SHALL DISCONNECT MECHANICAL AND ELECTRICAL COMPONENTS IN WALLS, CEILINGS AND FLOORS REQUIRED TO BE DEMOLISHED. REMOVE UTILITIES CONNECTED TO SUCH COMPONENTS BACK TO THE SOURCE, I.E. REMOVE ELECTRICAL BOXES BACK TO PANEL OR TO FIRST SHARED ELECTRICAL BOX. CAP AND SUPPORT AS NECESSARY PORTIONS OF WORK REMAINING.
8. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS NOT SHOWN HERE.

DEMOLITION KEYNOTES #

- 1 REMOVE EXISTING CEILING GRID AND TILES IN ITS ENTIRETY. SEE ELECTRICAL AND MECHANICAL FOR REMOVAL OF FIXTURES.
- 2 EXISTING CEILING GRID AND TILES TO REMAIN. NO WORK IN SCOPE.



1 BASEMENT DEMOLITION REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0"



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BASEMENT DEMOLITION  
REFLECTED CEILING PLAN

AD121

**DOOR HARDWARE SETS:**  
Hardware Schedule:

**Set One (1)**

(3) Hinges	McKinney Hager B81279	Finish: US26D
(1) Lock & Latch	Sargent 8271-RX	Finish: US26D
*Includes Electric Strike		
(1) Closer	Corbin Russwin DC8200	Finish: US26D
Gasketing	Pemko extruded aluminum	Finish: US26D
Both Jambs and Heads retainer with vinyl bulb, 306A or equal by Reese		
(1) Kickplate	Rockwood K1050 - 10' x 2' LDW x 4BE x 409	Finish: US26D
(2) ADA Actuator	Banner OTBVR81L	Finish: Black
* Requires separate power supply.		
* Requires a Message Plate. See specifications.		
(1) Lock Down Button	See Electrical	

\*All other hardware is Existing to Remain. Verify in field operation of existing card reader will function correctly with new ADA Actuator and Lockdown Button.

**Set Two (2)**

(3) Hinges	McKinney Hager B81279	Finish: US26D
(1) Lock & Latch	Corbin Russwin ML2055	Finish: US26D
(1) Closer	Corbin Russwin DC8200	Finish: US26D
Gasketing	Pemko extruded aluminum	Finish: US26D
Both Jambs and Heads retainer with vinyl bulb, 306A or equal by Reese		
(1) Kickplate	Rockwood K1050 - 10' x 2' LDW x 4BE x 409	Finish: US26D

\*All other hardware is Existing to Remain.

**Set Three (3)**  
Existing Hardware to Remain.

**Set Four (4)**

(1) SFIC Core	Corbin Russwin ML2051	Finish: US26D
(1) Door Stop	Glynn-Johnson projected Wall-mounted Doorstop WB33	Finish: US 26D

\*All other hardware is provided by Other through Enclose Wall System

DOOR #	DOOR					FRAME		GENERAL			DOOR #	
	WIDTH	HEIGHT	THK.	TYPE	MAT-FIN	TYPE	MAT-FIN	DETAIL	HWDR	RATING		REMARKS
10	3'-0"	7'-0"	0'-1 3/4"	ETR	ETR	ETR	SEE A141	-	01	ETR	1	10
10A	2'-6"	7'-0"	0'-1 3/4"	ETR	ETR	ETR	SEE A141	-	03	ETR	1	10A
10B	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10B
10C	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10C
10D	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10D
10E	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10E
10F	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10F
10G	3'-0"	7'-0"	0'-1 3/4"	OTHER	OTHER	OTHER	OTHER	OTHER	04	-	2,3	10G
10H	3'-0"	7'-0"	0'-1 3/4"	ETR	ETR	ETR	SEE A141	-	02	ETR	1	10H

**ABBREVIATIONS:**  
F - FLUSH  
HG - HALF GLASS  
HM - HOLLOW METAL  
NG - NARROW GLASS  
PT - PAINT  
PRE - PREFINISHED  
WD - WOOD

**GENERAL DOOR SCHEDULE NOTES:**  
1. PAINT ALL HOLLOW METAL FRAMES TO MATCH ADJACENT WALL COLOR. SEE MATERIAL INDEX AND FINISH PLAN FOR COLOR SELECTION.  
2. ALL DOORS NOT SCHEDULED ARE EXISTING TO REMAIN. PROTECT THROUGHOUT DURATION OF CONSTRUCTION.

**DOOR SCHEDULE REMARKS:**  
1. EXISTING DOOR & FRAME TO REMAIN. PROTECT AS REQUIRED.  
2. DOOR & FRAME TO BE PART OF ENCLOSE WALL SYSTEM PROVIDED BY OTHER.  
3. DOOR TO HAVE 1" UNDERCUT.

**GENERAL NOTES**

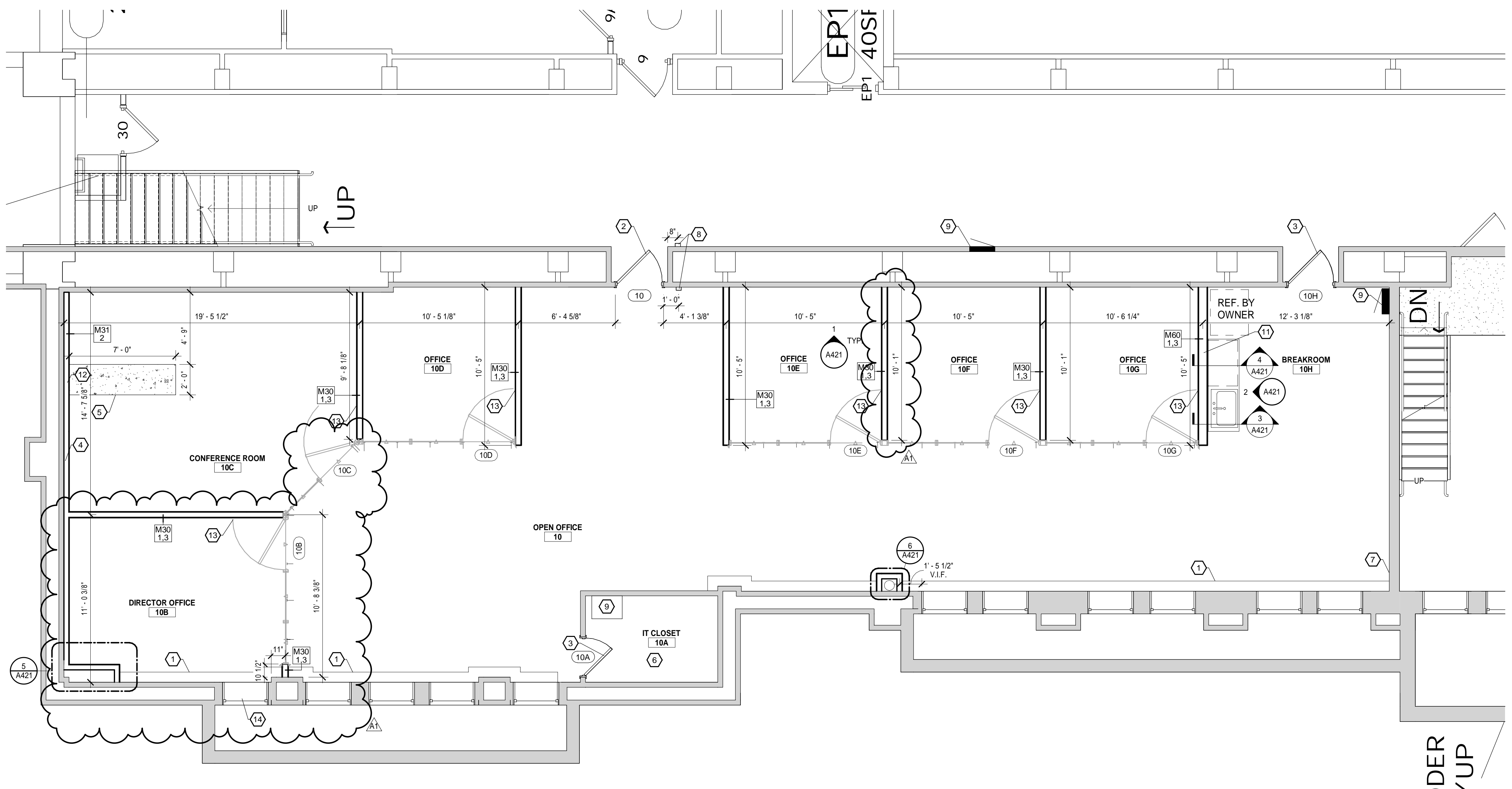
- REFER TO A003 FOR WALL TYPES, DETAILS, AND ADDITIONAL INFORMATION.
- REFER TO A120 SERIES DRAWINGS FOR REFLECTED CEILING PLANS AND DETAILS.
- REFER TO A140 SERIES DRAWINGS FOR FINISH PLANS, SCHEDULES, AND DETAILS.
- REFER TO A160 SERIES DRAWINGS FOR FURNITURE AND EQUIPMENT PLANS AND SCHEDULES.
- REFER TO A600 SERIES DRAWINGS FOR DOOR SCHEDULE, WINDOW SCHEDULE, DETAILS, AND BASIS OF DESIGN.
- ALL DOORS TO BE LOCATED 4" FROM DRYWALL ADJACENT WALL UNLESS OTHERWISE NOTED.
- ALIGN FACES OF MASONRY AND STUD WALLS INDICATED IN THE SAME PLANE ON PLANS, U.O.N.

**GENERAL FLOOR PLAN NOTES:**

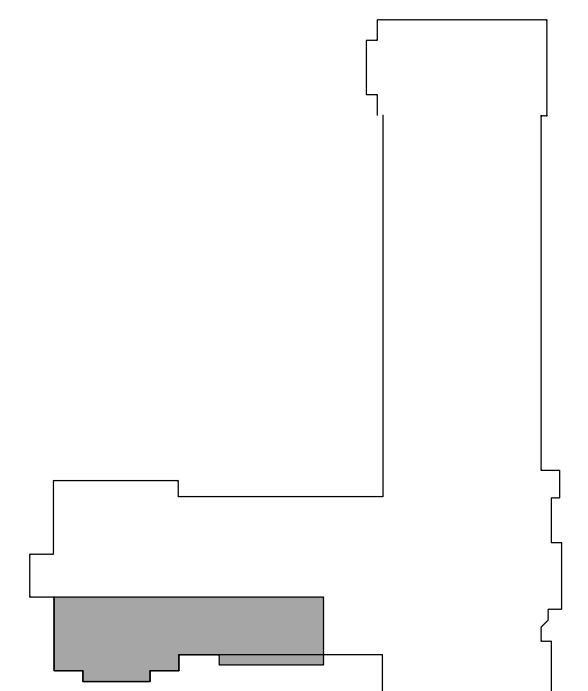
- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND PROMPTLY NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- ALL DIMENSIONS ARE TO CENTER OF COLUMN, FACE OF EXISTING WALL, CENTER OF INTERIOR STUD WALL, FACE OF MASONRY WALL OR FACE OF EXTERIOR WALL UNLESS NOTED OTHERWISE.
- ALL WALLS SHALL EXTEND TO ROOF OR FLOOR DECKING ABOVE UNLESS NOTED OR DETAILED OTHERWISE.
- SEE SHEET A500 FOR INTERIOR PARTITION TYPES & DETAILS.
- CONTRACTOR SHALL INSTALL ALL WOOD BLOCKING IN STUD AND GYPSUM BOARD WALLS REQUIRED FOR ANCHORAGE OF WALL ATTACHED ITEMS INCLUDING, BUT NOT LIMITED TO RAILINGS, WALL MOUNTED ACCESSORIES, SHELVING, CABINETS, SYSTEMS FURNITURE, DOOR BUMPERS AND I.T. ITEMS.
- ALL FURNITURE AND EQUIPMENT IS NOT IN CONTRACT (N.I.C.) AND SHOWN FOR REFERENCE ONLY UNLESS NOTED OTHERWISE. COORDINATE EXACT REQUIREMENTS WITH OWNER.
- THOROUGHLY CLEAN EXISTING ANODIZED ALUMINUM WINDOW FRAMES & SILLS IN AREAS RECEIVING NEW FINISHES.

**PLAN KEYNOTES #**

- NEW BASEBOARD COVER. SEE MECHANICAL.
- EXISTING DOOR TO REMAIN. HARDWARE SET 01 TO REPLACE EXISTING HARDWARE. SEE ELECTRICAL FOR UPDATED ACCESS CONTROL LOCK DOWN BUTTON.
- EXISTING DOOR TO REMAIN. SEE DOOR SCHEDULE FOR HARDWARE.
- EXISTING PIPING TO REMAIN. BUILD WALLS OUT AROUND EXISTING PIPING. VERIFY DIMENSIONS IN FIELD.
- INFILL WITH NEW CONCRETE FLOOR.
- NO WORK IN SCOPE.
- REMOVE EXISTING RETURN AIR GRILLE AND CLEAN. PATCH WALL AND LEVEL FINISH AROUND EXISTING RETURN AIR GRILLE. REINSTALL EXISTING RETURN AIR GRILLE.
- SURFACE MOUNTED ADA ACTUATOR SEE ELECTRICAL FOR MORE INFORMATION.
- EXISTING ELECTRICAL EQUIPMENT. SEE ELECTRICAL.
- INSTALL BLOCKING IN WALL FOR SHELVING. COORDINATE LOCATION WITH FURNITURE VENDOR.
- INSTALL BLOCKING IN WALL FOR TV. COORDINATE LOCATION WITH ELECTRICAL DRAWINGS.
- INSTALL BLOCKING IN WALL FOR DOOR STOP. COORDINATE LOCATION WITH HARDWARE SET AND SPECIFICATIONS.
- MODIFY EXISTING WINDOW AS NEEDED FOR NEW WAC-4 UNIT. SEE MECHANICAL.



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



**KEY PLAN**

**CAPITAL PROJ. NO.**  
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BASEMENT FLOOR PLAN

**A101**

**GENERAL NOTES**

- A. REFER TO A003 FOR WALL TYPES, DETAILS, AND ADDITIONAL INFORMATION.
- B. REFER TO A120 SERIES DRAWINGS FOR REFLECTED CEILING PLANS AND DETAILS.
- C. REFER TO A140 SERIES DRAWINGS FOR FINISH PLANS, SCHEDULES, AND DETAILS.
- D. REFER TO A160 SERIES DRAWINGS FOR FURNITURE AND EQUIPMENT PLANS AND SCHEDULES.
- E. REFER TO A600 SERIES DRAWINGS FOR DOOR SCHEDULE, WINDOW SCHEDULE, DETAILS, AND BASIS OF DESIGN.
- F. ALL DOORS TO BE LOCATED 4" FROM DRYWALL ADJACENT WALL UNLESS OTHERWISE NOTED.
- G. ALIGN FACES OF MASONRY AND STUD WALLS INDICATED IN THE SAME PLANE ON PLANS, U.O.N.

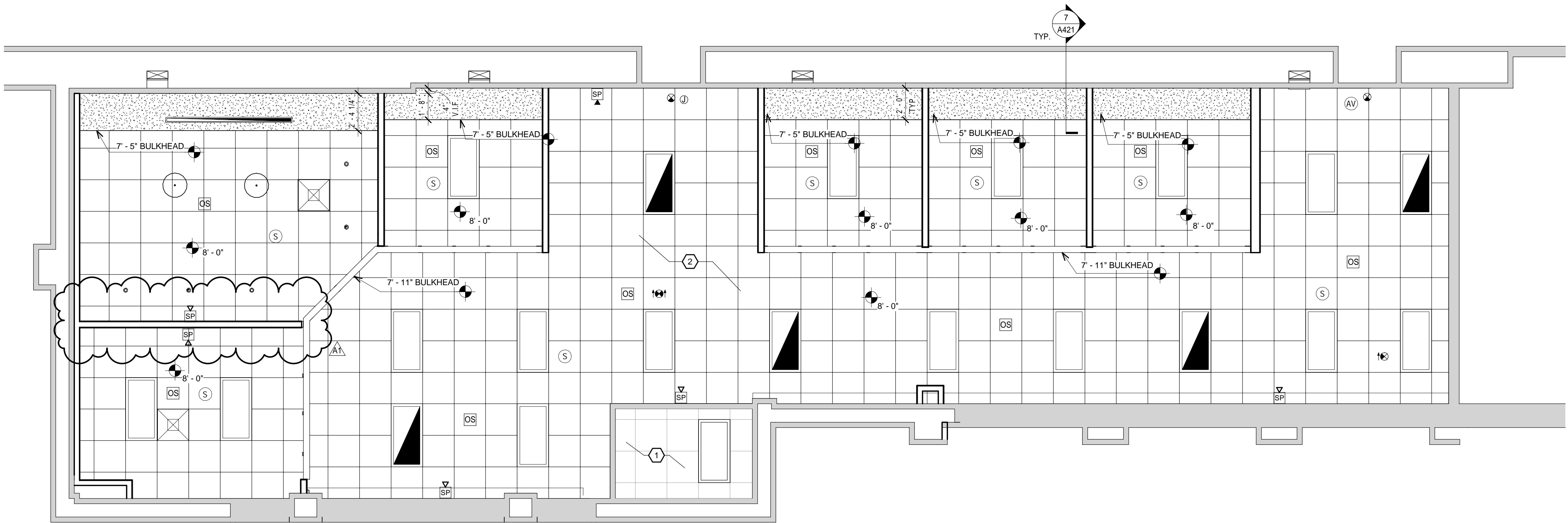
**KEYNOTES**

- 1 EXISTING CEILING TO REMAIN.
- 2 USG 2' X 2' ACOUSTIC PANEL CEILING. SEE SPECIFICATIONS.

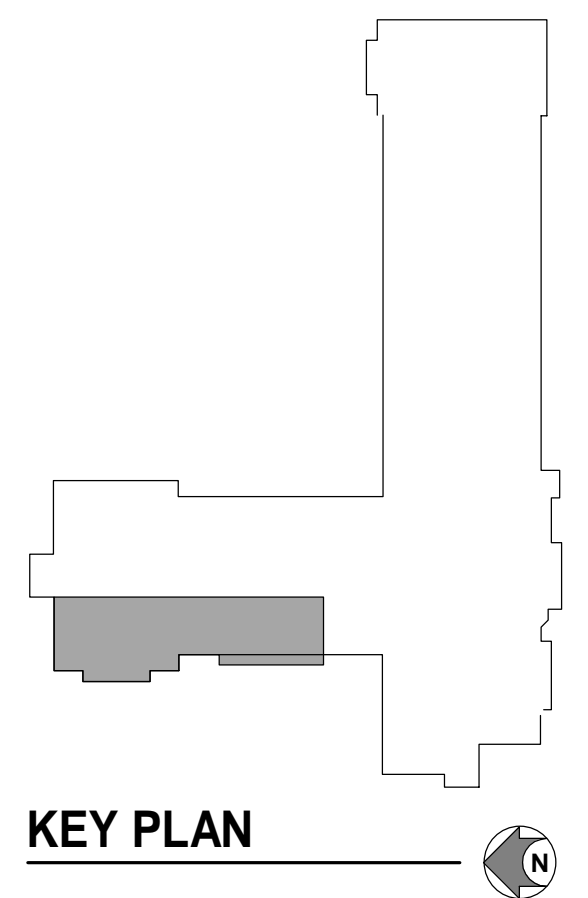
**CEILING LEGEND**

NOTE: SEE OTHER DISCIPLINE DRAWINGS (E.G. MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS) FOR ASSOCIATED SYSTEMS AND INFORMATION ABOUT SYMBOLS NOT INDICATED IN THIS LEGEND.

- 2' x 2' SUSPENDED CEILING TILE
- 2' x 4' SUSPENDED CEILING TILE
- GYPSUM BOARD CEILING/SOFFIT
- OPEN TO DECK



**1 REFLECTED CEILING PLAN**  
SCALE: 1/4" = 1'-0"



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CP19031

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ELEC.	G. HALSEY
CIVIL	--
L.A.	--
INT. DES.	C. LOCKWOOD
CONST. REP.	--
APPR.	P. KALK
DATE	02/10/2026
SCALE	AS INDICATED

REVISIONS

NO.	DATE	DESCRIPTION
A1	04/03/2026	PERMIT SET
A1	04/14/2026	ADDENDUM 01

BASIS OF DESIGN		
064116 PLASTIC LAMINATE	096519 RESILIENT TILE FLOORING	097200 WALL COVERINGS
PL1: PLASTIC LAMINATE MANUFACTURER: WILSONART STYLE: 7991-38 FINISH: NEO WALNUT NOTE: PATTERN TO RUN VERTICALLY	LVT: HIGH PERFORMANCE LUXURY VINYL TILE FLOORING; 25CM X 1M MANUFACTURER: INTERFACE LEVEL SET COLLECTION: TEXTURED WOODGRAINS STYLE: WOOD COLOR: RUSTIC CASHEW NOTE: INSTALL: RANDOM	WC: WALL COVERING, LEVEL 5 FINISH; FULL HEIGHT MANUFACTURER: SURFACE MATERIALS COLLECTION: BITS & PIECES STYLE: N/A COLOR: PEACOCK NOTE: SCALABLE
081416 FLUSH WOOD DOORS	098433 INTERIOR PAINT	122413 ROLLER WINDOW SHADES
WD1: WOOD DOOR MANUFACTURER: N/A SPECIES: N/A COLOR: N/A NOTE: MATCH EXISTING CORRIDOR DOOR	P1: FIELD - INTERIOR PAINT MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7551 GREEK VILLA FINISH: EGG SHELL NOTE: N/A  P2: ACCENT - INTERIOR PAINT MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 6915 CITRONELLA FINISH: EGG SHELL NOTE: N/A  P3: ACCENT - INTERIOR PAINT MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 6473 SURF GREEN FINISH: EGG SHELL NOTE: N/A  P4: ACCENT - INTERIOR PAINT MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 6453 CILANTRO FINISH: EGG SHELL NOTE: N/A  P5: DOOR AND WINDOW FRAMES - INTERIOR PAINT MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7551 GREEK VILLA FINISH: SEMI-GLOSS NOTE: N/A	W1: SINGLE ROLLER WINDOW SHADE MANUFACTURER: VENETIAN BLINDS STYLE: LAFAYETTE SPARTAN DUAL SHADE OPERATION: MANUAL FRONT FABRIC: SHEERWEAVE PW4400, 3% OPEN, COLOR: BEIGE/PEARL BACK FABRIC: GRAY FASCIA: N/A NOTE: TBD TO BE WIDTH OF SINGLE WINDOWS, APPROXIMATELY 48"
095000 CEILINGS SYSTEMS		123661 SOLID SURFACE
ACT1: ACOUSTICAL CEILING TILE; 2' x 2' MANUFACTURER: USG STYLE: RADAR COLOR: WHITE EDGE: N/A GRID: 15/16" NOTE: MATCH MSU STANDARD, USG DOWN DX GRID, USG RADAR TEGULAR CEILING PANELS - #2120.		SS1: SOLID SURFACE; 1 1/2" TH. MANUFACTURER: WILSONART, 9202CS COLLECTION: N/A STYLE: SEA STONE FINISH: N/A NOTE: COUNTERTOP WITH SINK
096513 RESILIENT BASE AND ACCESSORIES		T1: SLIM LINE TRIM; CONTRACTOR TO COORDINATE SIZE MANUFACTURER: JOHNSONITE COLLECTION: N/A STYLE: SLT-63-B FINISH: BURNT UMBER NOTE: SEE TRANSITION DETAILS

ROOM FINISH SCHEDULE NOTES	
NO.	COMMENTS
1	BULKHEAD WALL TO BE PAINTED SAME COLOR AS WALL BELOW, U.N.O.
2	NO WORK IN SCOPE.
3	FURNITURE WALL FINISH TO BE COMPLETED BY MANUFACTURER.
4	EXISTING CORRIDOR WALLS TO RECEIVE NEW PAINT. CLEAN AND PREP WALLS AS NEEDED PRIOR TO PAINTING.
5	EXISTING FINISH TO REMAIN ON DOORS.
6	LVT TO RUN PARALLEL TO CORRIDOR.

ROOM FINISH SCHEDULE									
ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING FINISH	REMARKS
				NORTH	EAST	SOUTH	WEST		
FIRST FLOOR									
-	CORRIDOR	ETR	ETR	ETR	ETR	ETR	P2/P3	ETR	4.5
10	OPEN OFFICE	LVT	VB	P1/WC	P1	P1/WC	P1/P2	ACT	5.6
10A	IT CLOSET	ETR	ETR	ETR	ETR	ETR	ETR	ETR	2
10B	DIRECTOR OFFICE	LVT	VB	P1/P4	P1	P1	P1	ACT	1.6
10C	CONFERENCE ROOM	LVT	VB	P4	P4	P1	P1	ACT	1.6
10D	OFFICE	LVT	VB	P1	P3	P1	-	ACT	1.3,6
10E	OFFICE	LVT	VB	P1	P3	P1	-	ACT	1.3,6
10F	OFFICE	LVT	VB	P1	P3	P1	-	ACT	1.3,6
10G	OFFICE	LVT	VB	P1	P3	P1	-	ACT	1.3,6
10H	BREAKROOM	LVT	VB	P1	P1	P1	-	ACT	6

- GENERAL NOTES**
- COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR PREPARING AND INSTALLING FINISHES.
  - PROTECT ADJACENT WORK BY SUITABLY COVERING DURING WORK.
  - REMOVE ADHESIVE OR PAINT SPOTS FROM FINISHED FLOORS, WALLS, GLASS OR OTHER SURFACES. FINISHES TO MEET OR EXCEED CODE REQUIREMENTS.
  - INSTALL MATERIALS USING MANUFACTURER'S APPROVED ADHESIVES AND METHODS, U.O.N.
  - FILL MINOR DRYWALL IRREGULARITIES WITH SPACKLING COMPOUND AND SAND TO A SMOOTH LEVEL SURFACE. EXERCISE CARE TO AVOID RAISING THE NAP OF PAPER.
  - DO NOT PERFORM PAINTING AND OTHER FINISHING WORK UNDER CONDITIONS UNSUITABLE FOR EXECUTION OF PAINTING WORK. AIR SHALL BE FREE FROM DUST AND DIRT TO PREVENT LODGING OF FOREIGN MATTER IN FRESH PAINT. FLOORS MUST BE BROOM CLEAN BEFORE PAINTING IS STARTED.
  - PAINT DESIGNATIONS INDICATE COLOR ONLY. REFER TO SPECIFICATION FOR FINISH TYPE.
  - EDGES OF PAINT ADJOINING OTHER COLORS OR MATERIALS TO BE SHARP AND CLEAN WITHOUT OVERLAP.
  - EXAMINE SURFACES TO RECEIVE PAINT CAREFULLY FOR DEFECTS. DO NOT PROCEED WITH WORK UNTIL DEFECTS ARE CORRECTED.
  - WHENEVER NECESSARY TO OBTAIN REQUIRED RESULTS, REFINISH AN ENTIRE WALL RATHER THAN SPOT FINISHING WHERE A PORTION OF THE FINISH HAS BEEN DAMAGED OR IS UNSATISFACTORY.
  - PREPARE FLOOR SURFACES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
    - PREPARE/PROPERLY REPAIR AND PATCH SUBFLOORS TO A SMOOTH AND LEVEL FINISH.
    - FLASH PATCH AS REQUIRED, READY TO RECEIVE NEW FINISH.
  - PROVIDE SELF LEVELING TROWELABLE UNDERLAYMENT WHERE REQUIRED TO OBTAIN FINISH MANUFACTURER'S REQUIRED SUBFLOOR CONDITION.
  - FOLLOW THE CARPET AND RUG INSTITUTE METHODS OF INSTALLATION.
  - INSTALL TILE PER THE TILE COUNCIL OF NORTH AMERICA'S INSTALLATION SPECIFICATIONS.
  - PROVIDE THE REQUIRED TRANSITIONS BASED ON TYPES IDENTIFIED ON DRAWINGS AT EACH FINISH TRANSITION LOCATION
  - CENTER FLOOR MATERIAL TRANSITIONS ON DOOR ABOVE.
  - FINISHED FLOORS EXTEND INTO TOE SPACES, CLOSETS, DOOR REVEALS AND SIMILAR OPENINGS.
  - REFER TO REFLECTED CEILING PLANS FOR CEILING FINISHES.
  - REFER TO ELEVATIONS FOR MILLWORK FINISHES.

- KEYNOTES**
- PAINT PANEL TO MATCH ADJACENT WALL.
  - EXISTING DOOR FINISH TO REMAIN. REMOVE TAPE AND DEBRI FROM DOOR.

**FINISH SYMBOL LEGEND**

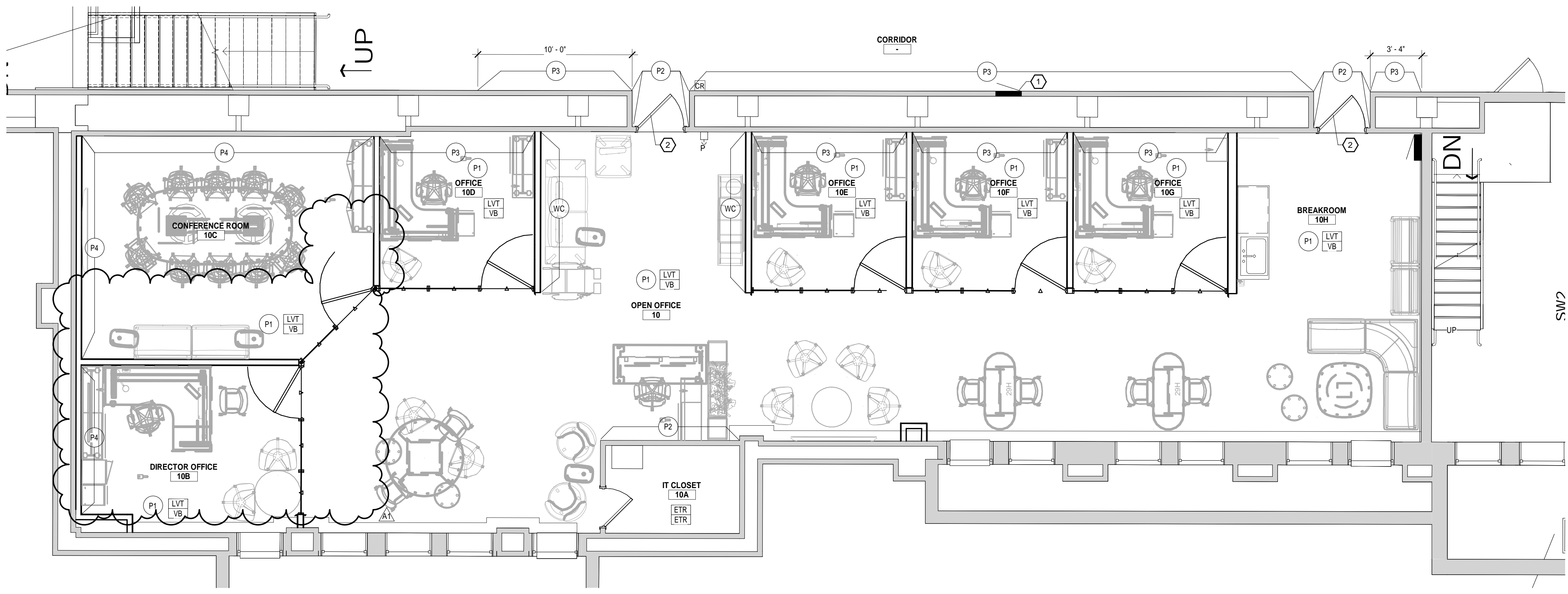
XXF	FLOOR FINISH
XXF	WALL BASE FINISH
XXF	FLOOR FINISH ONLY
XF	GENERAL WALL FINISH
XF	ACCENT WALL FINISH - TO EXTENTS

**CAPITAL PROJ. NO.**  
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DATE	03/05/2026
SCALE	AS INDICATED

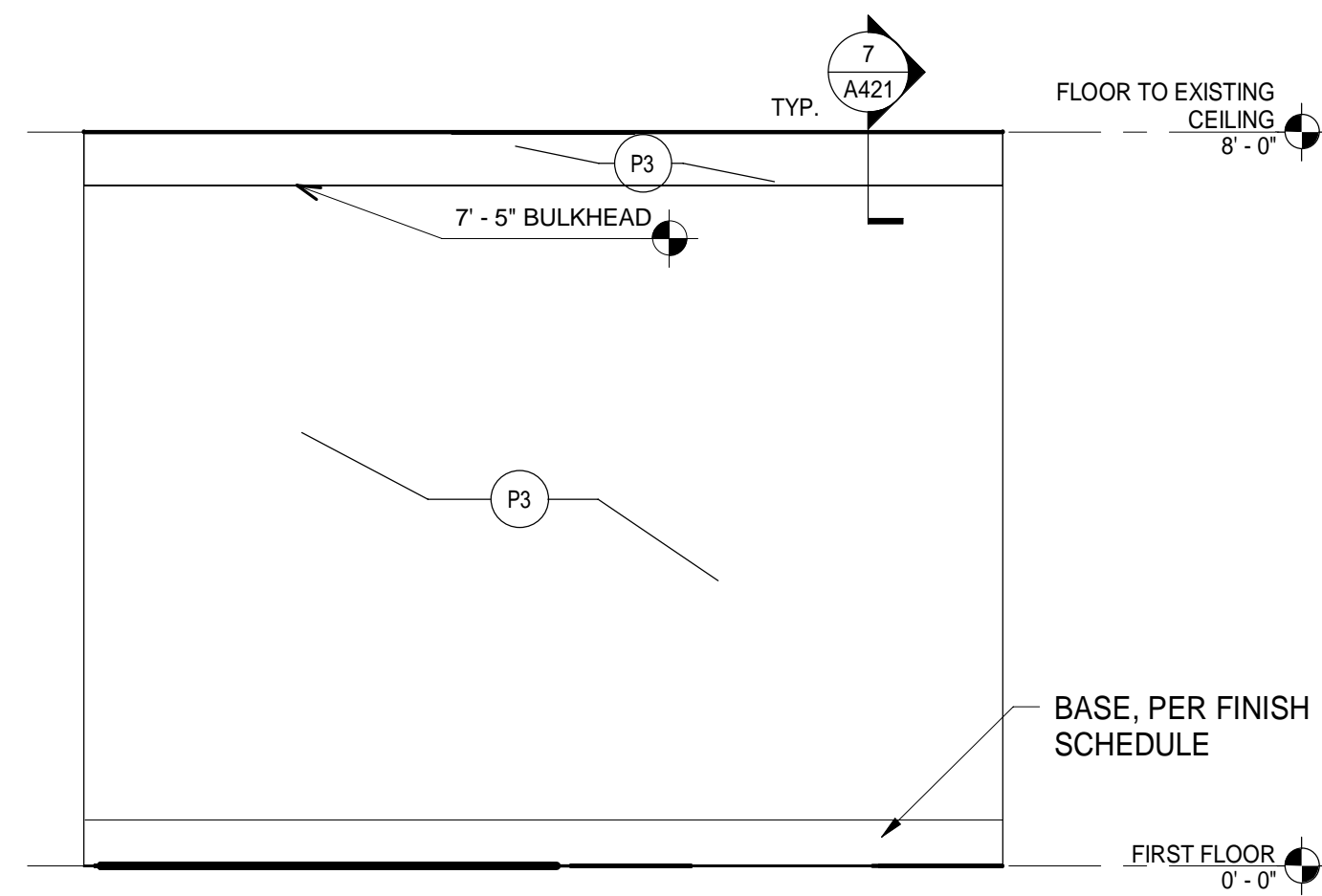
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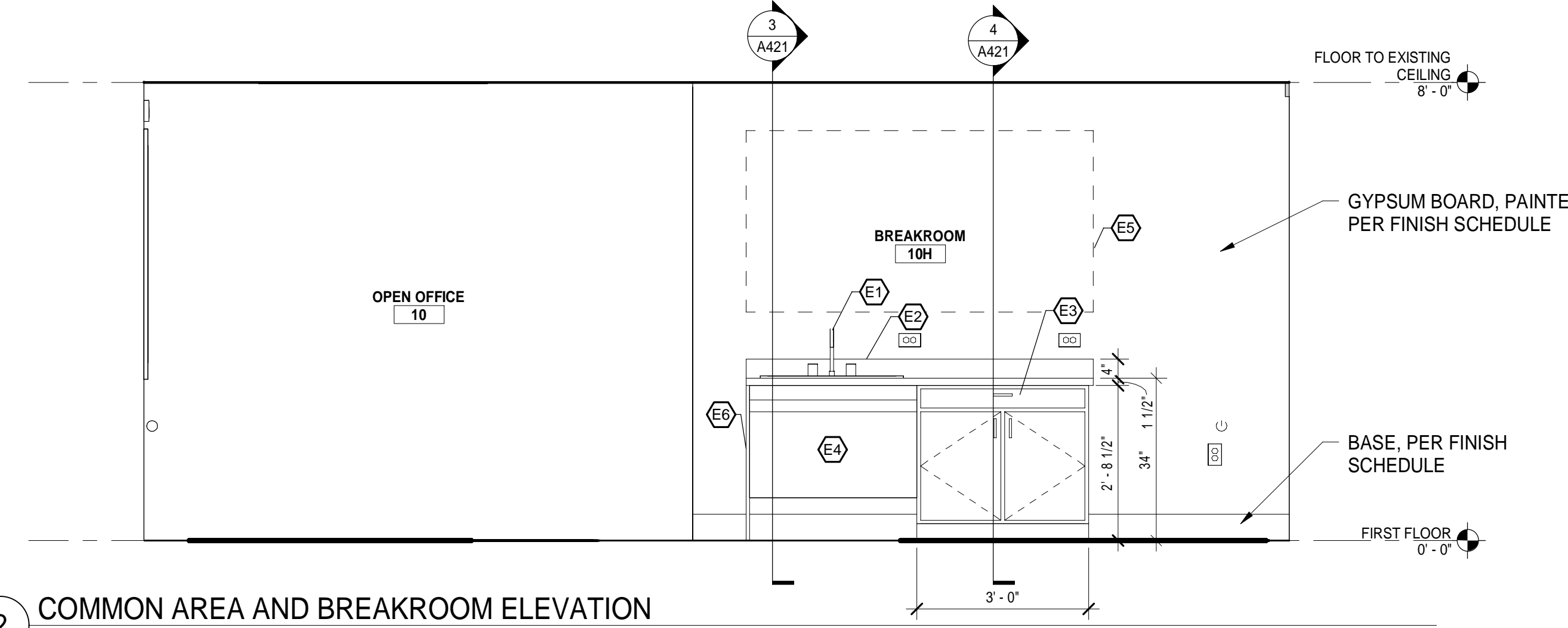


**1 FINISH FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**KEY PLAN**



**1 OFFICE ELEVATION - TYPICAL**  
SCALE : 1/2" = 1'-0"



**2 COMMON AREA AND BREAKROOM ELEVATION**  
SCALE : 1/2" = 1'-0"

**ELEVATION KEYNOTES**

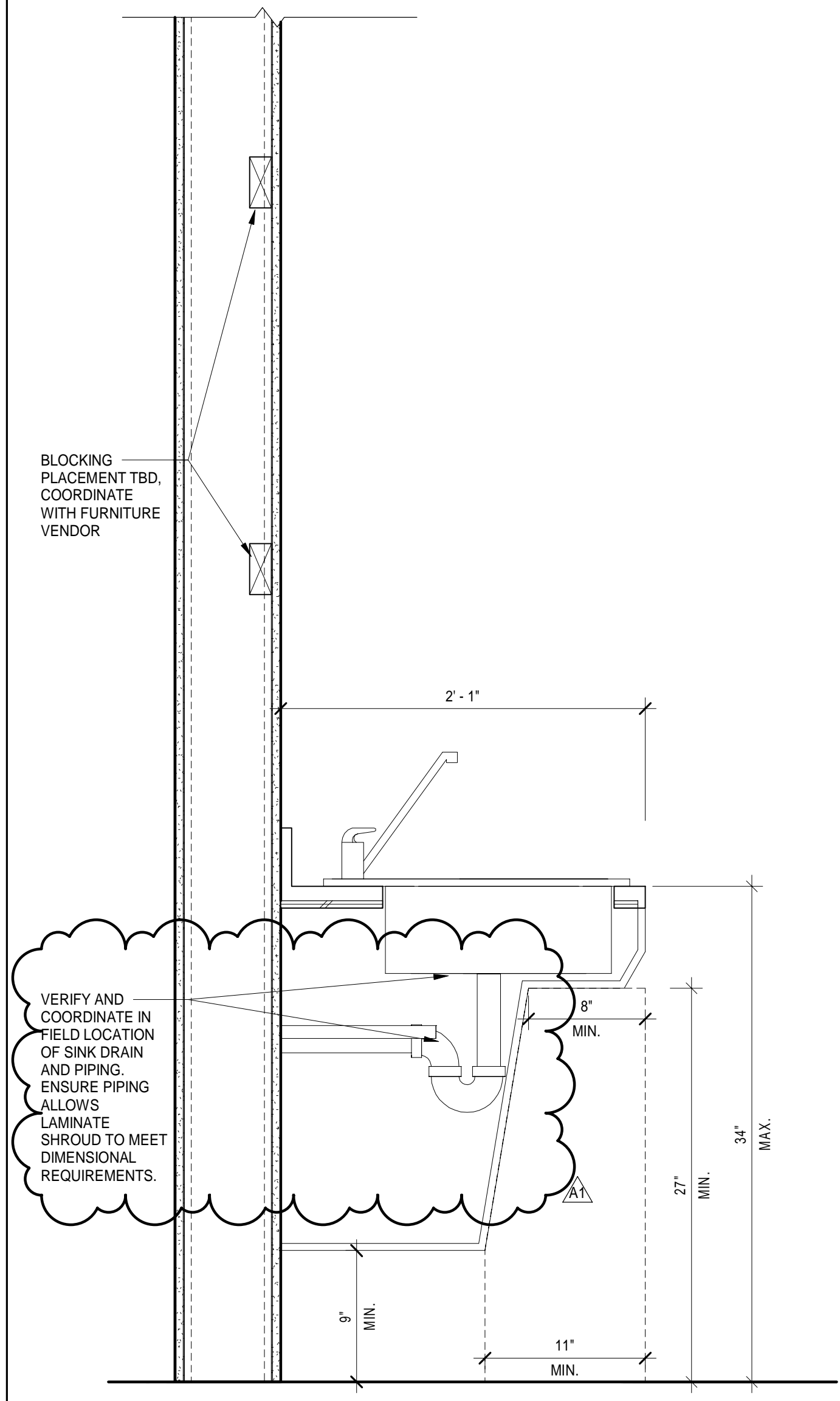
- E1 SINK, SEE PLUMBING.
- E2 SOLID SURFACE COUNTER. (SS1)
- E3 PLASTIC LAMINATE MILLWORK. (PL1)
- E4 PLASTIC LAMINATE CUSTOM BUILD-OUT TO COVER SINK. SEE 3/A421 (PL1)
- E5 BLOCKING FOR FURNITURE SUPPLIED SHELVING TBD.
- E6 PLASTIC LAMINATE CUSTOM BUILD-OUT TO COVER SINK. END CAP TO EXTEND TO FLOOR.

**PLAN KEYNOTES**

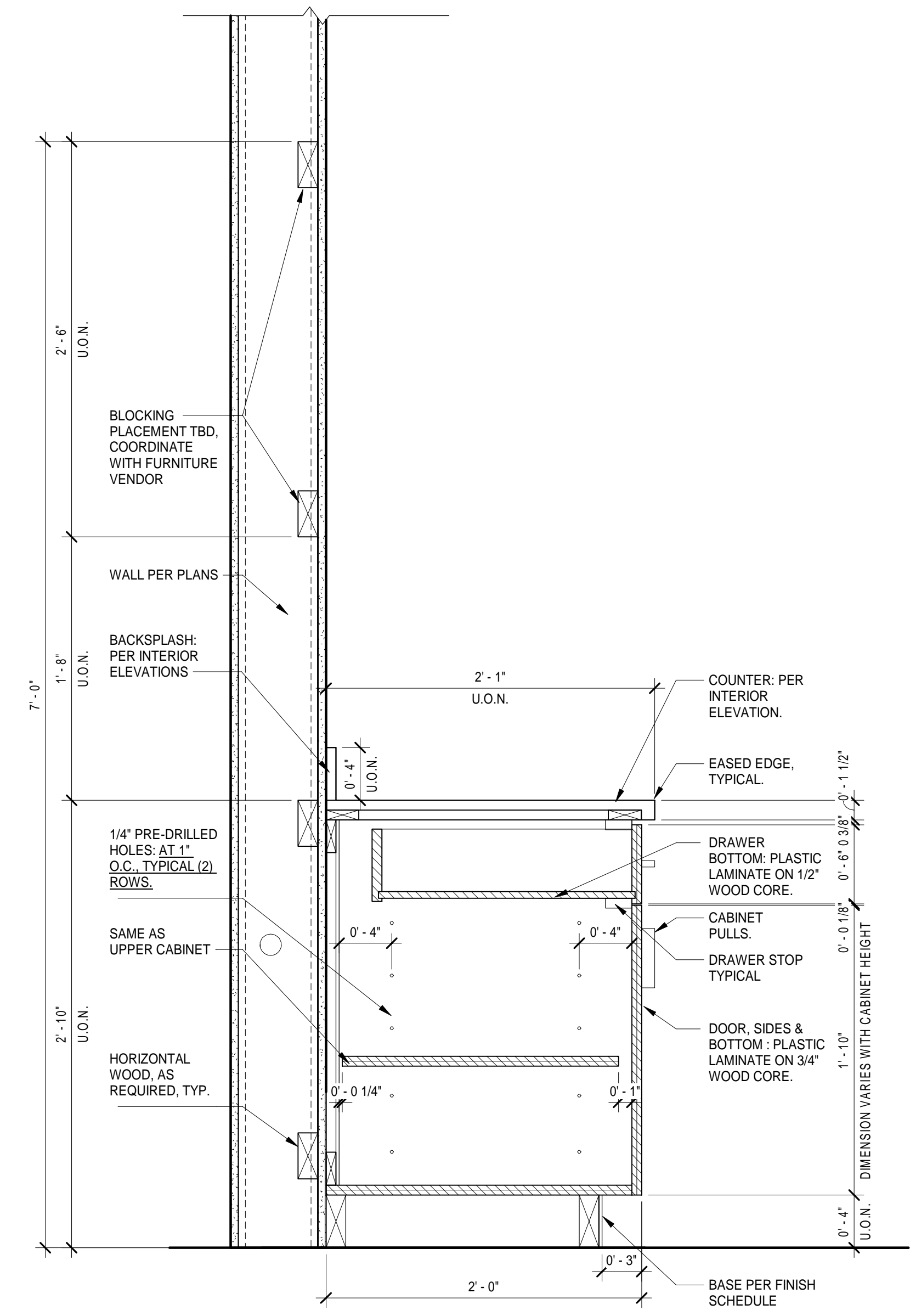
- 1 NEW BASEBOARD COVER, SEE MECHANICAL.
- 4 EXISTING PIPING TO REMAIN. BUILD WALLS OUT AROUND EXISTING PIPING. VERIFY DIMENSIONS IN FIELD.
- 10 NEW ACCESS PANEL FOR ACCESS TO DRAIN CLEANOUT. TO BE INSTALLED FLUSH TO FINISHED WALL FACE.

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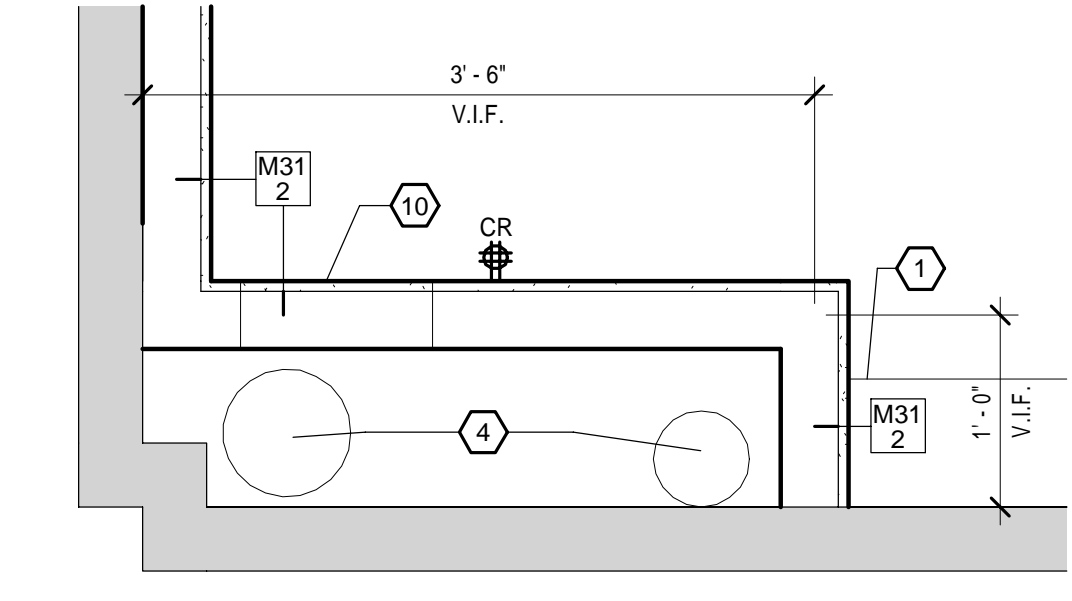
Infrastructure Planning and Facilities  
**MICHIGAN STATE UNIVERSITY**



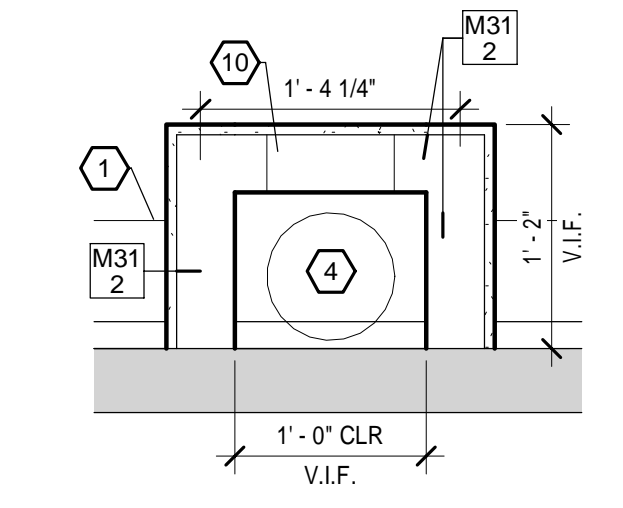
**3 BREAKROOM SINK SECTION**  
SCALE : 1 1/2" = 1'-0"



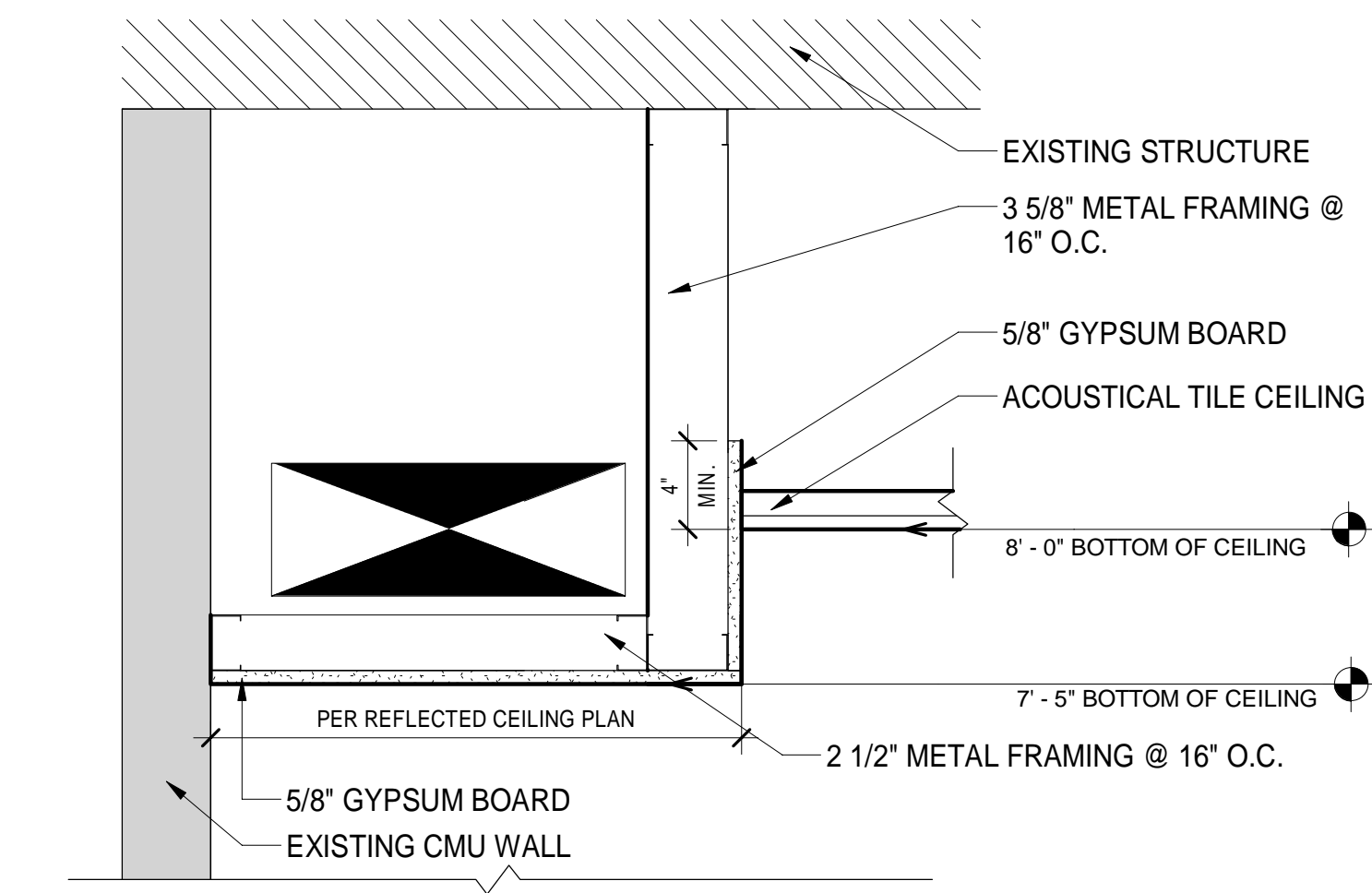
**4 BREAKROOM WALL/BASE CABINET SECTION**  
SCALE : 1 1/2" = 1'-0"



**5 DIRECTORS OFFICE PLAN DETAIL**  
SCALE : 1" = 1'-0"



**6 OPEN OFFICE PLAN DETAIL**  
SCALE : 1" = 1'-0"



**7 TYPICAL BULKHEAD DETAIL**  
SCALE : 1 1/2" = 1'-0"

**Berkey Hall - Room 10 - Renovation**

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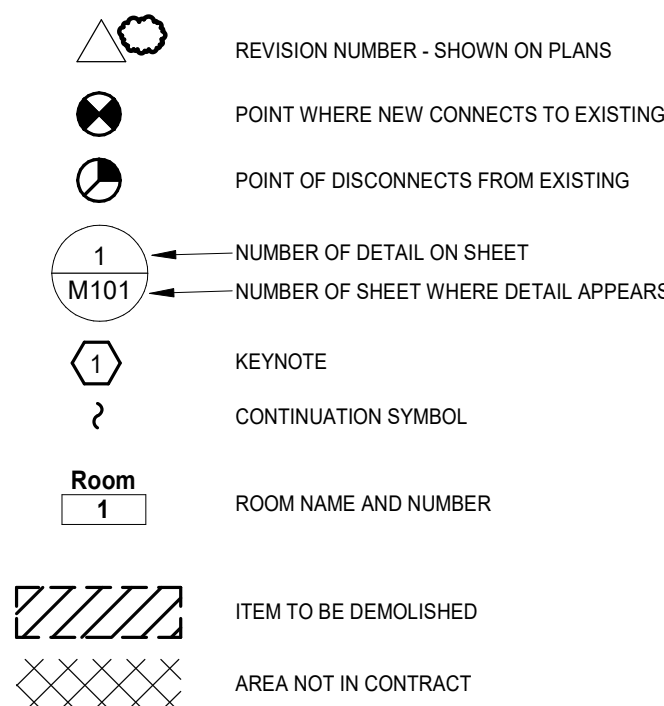
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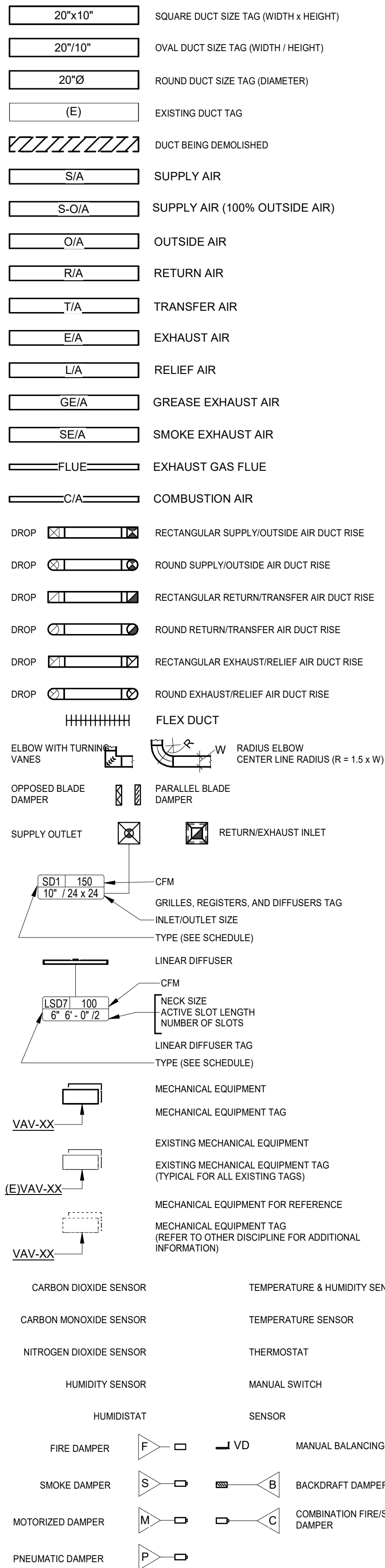
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INTERIOR ELEVATIONS, SECTIONS, AND DETAILS

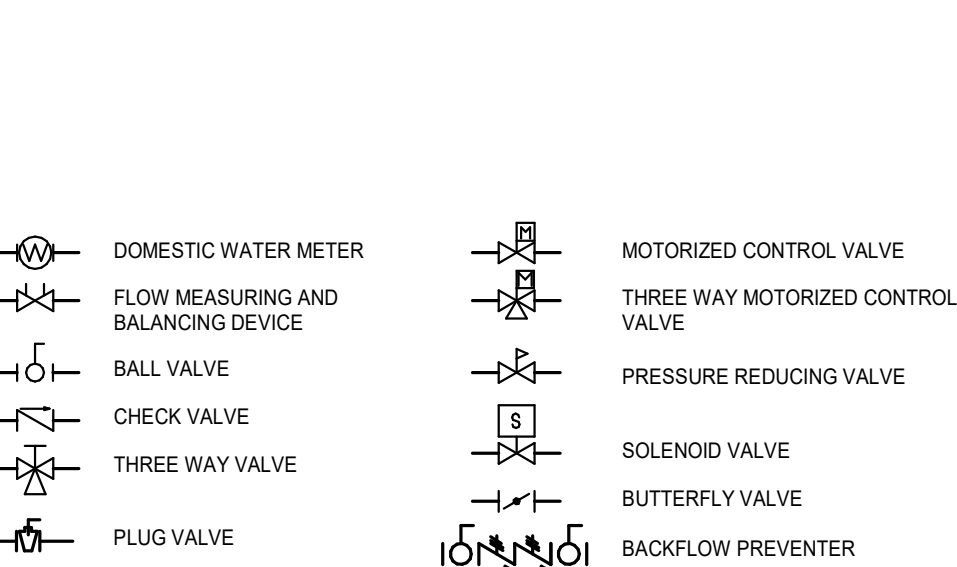
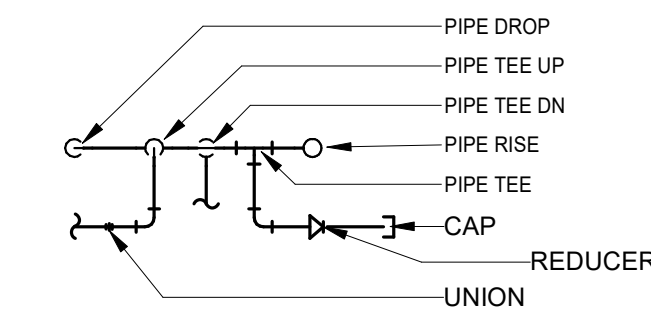
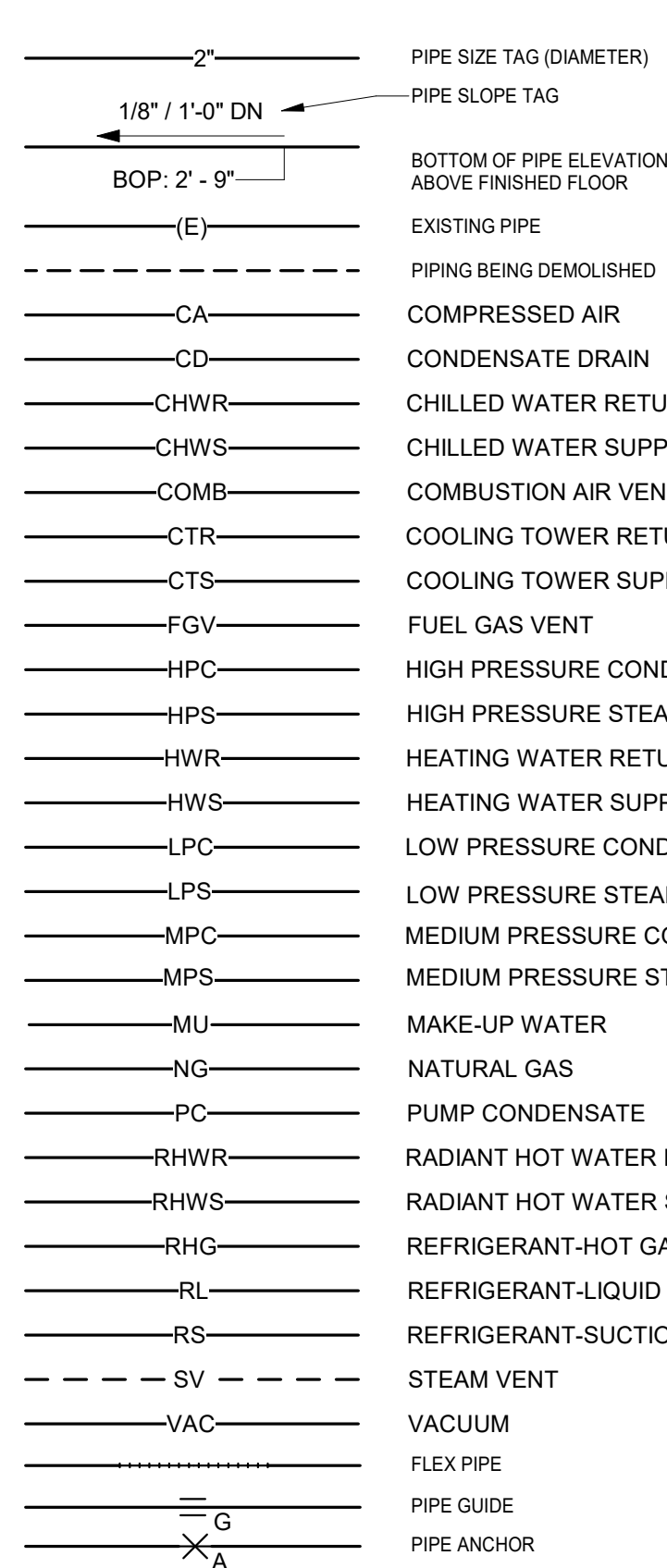
GENERAL MECHANICAL SYMBOLS



HVAC SYMBOLS



PIPING SYMBOLS



EQUIPMENT ABBREVIATIONS

AC	AIR CURTAIN	HWP	HOT WATER PUMP
ACL	AIR CLEANER	HX	HEAT EXCHANGER
ACU	AIR CONDITIONING UNIT	KEX	KITCHEN EXHAUST
AD	ACCESS DOOR	L	LOUVER
AHU	AIR HANDLING UNIT	LQ	LIQUID COOLER
AS	AIR SEPARATOR	M	METER
B	BOILER	MAU	MAKE UP AIR UNIT
BDD	BACK DRAFT DAMPER	MD	MOTORIZED DAMPER
BP	BOOSTER PUMP	OSD	OPPOSED BLADE DAMPER
C	CONVECTOR	P	PUMP
CA	AIR COMPRESSOR	PF	PRE-FILTER
CAC	COMPRESSES AIR AFTED COOLER	PHC	PREHEAT COIL
CAD	COMPRESSED AIR DRYER	PPU	PUMPING PACKAGED UNIT
CAV	CONSTANT AIR VOLUME BOX	PRV	PRESSURE REDUCING VALVE
CB	CHILLED BEAM	R	REGISTER
CC	COOLING COIL	RC	REHEAT COIL
CFP	CHEMICAL FEED PUMP	RF	RETURN FAN
CH	CHILLER	RP	RADIANT PANEL
CHP	CHILLED WATER PUMP	RTU	ROOF TOP UNIT
CP	CONDENSATE PUMP	SA	SHOCK ABSORBER
CRAC	COMPUTER ROOM UNIT	SCB	SCRUBBER
CRU	CONDENSATE RETURN UNIT	SEP	SEPARATOR
CT	COOLING TOWER	SF	SUPPLY FAN
CU	CONDENSING UNIT	SRV	SAFETY RELIEF VALVE
CUH	CABINET UNIT HEATER	TK	WATER TANK
CV	CONTROL VALVE	TR	STEAM TRAP
D	DAMPER	UH	UNIT HEATER
DA	DEAERATOR	UV	UNIT VENTILATOR
DEK	DISHWASHER EXHAUST	VAV	VARIABLE AIR VOLUME BOX
DHW	DOMESTIC WATER HEATER	VD	VOLUME DAMPER
DU	DEHUMIDIFIER UNIT	VFD	VARIABLE SPEED DRIVE
EDU	EVAPORATIVE CONDENSER UNIT	WS	WATER SOFTENER
EF	EXHAUST FAN		
EJ	EXPANSION JOINT		
ERV	ENERGY RECOVERY VENTILATOR		
ERW	ENERGY RECOVERY WHEEL		
ET	EXPANSION TANK		
FCU	FAN COIL UNIT		
FE	FILTER, EXHAUST AIR		
FI	FINAL FILTER		
FR	FURNACE		
FT	FINNED TUBE		
FTP	FUEL OIL TRANSFER PUMP		
G	GRILLE		
GPR	GAS PRESSURE REGULATOR		
HC	HEATING COIL		
HP	HEAT PUMP		
HTR	HEATER		
HU	HUMIDIFIER		

ABBREVIATIONS

&	AND	LWT	LEAVING WATER TEMPERATURE
@	AT	MAX	MAXIMUM
ABV	ABOVE	MBH	ONE THOUSAND BTU PER HOUR
ACOUS	ACOUSTICAL	MCF	ONE THOUSAND CUBIC FEET
ACT	ACOUSTIC CEILING TILE	MECH	MECHANICAL
AD	ACCESS DOOR	MFR	MANUFACTURER
ADD	ADDENDUM	MIN	MINIMUM
ADJ	ADJACENT	MISC	MISCELLANEOUS
AFF	ABOVE FINISHED FLOOR	MO	MASONRY OPENING
AFG	ABOVE FINISHED GRADE	MR	MOISTURE RESISTANT
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MTD	MOUNTED
AG	ABOVE GROUND	MTG	MOUNTING
AHU	AUTHORITY HAVING JURISDICTION	MTL	METAL
ALT	ALTERNATE	MTR	MOTOR
ALUM	ALUMINUM	N	NECK
ANOD	ANODIZED	NA	NOT APPLICABLE
AP	ACCESS PANEL	NC	NORMALLY CLOSED
APPROX	APPROXIMATE	NC	NOISE CRITERIA
ARCH	ARCHITECTURAL	NO	NOT IN CONTRACT
ATTN	ATTENTION	NO	NORMALLY OPEN
AUTO	AUTOMATIC	NO	NUMBER
BFD	BELOW FINISHED FLOOR	NOM	NOMINAL
BLDG	BUILDING	NON COMB	NON COMBUSTIBLE
BLKG	BLOCKING	NTS	NOT TO SCALE
BLW	BELOW	OA	OUTSIDE AIR
BM	BEAM	OC	ON CENTER
BO	BY OTHER	OD	OUTSIDE DIAMETER
BOT	BOTTOM	PD	PRESSURE DROP
BSMT	BASEMENT	PH	PHASE
BTU	BRITISH THERMAL UNITS	PI	PRESSURE INDEPENDENT
BTUH	BRITISH THERMAL UNITS PER HOUR	PLBG	PLUMBING
BTWN	BETWEEN	PSF	POUNDS PER SQUARE FOOT
CAP	CAPACITY	PSI	POUNDS PER SQUARE INCH
CAT	CATEGORY	PSIG	POUNDS PER SQUARE INCH GAUGE
CB	CATCH BASIN	PVC	POLYVINYL CHLORIDE
CC	CENTER TO CENTER	PW	POTABLE WATER
CD	CONDENSATE DRAIN	PWR	POWER
CFM	CUBIC FEET PER MINUTE	R	RISER
CI	CAST IRON	RA	RETURN AIR
CL	CENTERLINE	RAD	RADIUS
CLG	CEILING	RCP	REFLECTED CEILING PLAN
CLG	COOLING	RD	ROOF DRAIN
CO	CLEAN	REC	RECESSED
COL	COLUMN	RED	REDUCER
COMB	COMBINATION	REFR	REFRIGERATION
CONC	CONCRETE	REG	REGISTER
COND	CONDENSATE	REINF	REINFORCED
COND	CONDITION	REL	RELUCATE
CONN	CONNECTION	REM	REMOVE
CONST	CONSTRUCTION	REQ	REQUIRE/REQUIRED
CONT	CONTINUOUS	REQD	REQUIRED
CONTR	CONTRACTOR	RH	RELATIVE HUMIDITY
COORD	COORDINATE	RLA	RELIEF AIR
CORR	CORRIDOR	ROOM	ROOM
CTR	CENTER	RO	ROUGH OPENING
CUFT	CUBIC FEET	RPM	REVOLUTIONS PER MINUTE
D	DEEP	RPZ	REDUCED PRESSURE ZONE
DB	DEGREE	RTD	RATED
DEG	DEGREE	RATNG	RATING
DEMO	DEMOLISH OR DEMOLITION	SA	SUPPLY AIR
DEPT	DEPARTMENT	SCHED	SCHEDULE
DET	DETAIL	SD	SMOKE DAMPER
DIA	DIAMETER	SECT	SECTION
DIM	DIMENSION	SIM	SIMILAR
DIMS	DIMENSIONS	SM	SURFACE MOUNTED
DIV	DIVISION	SP	STATIC PRESSURE
DN	DOWN	SPEC	SPECIFIED OR SPECIFICATION
DRN	DRAIN	SQ	SQUARE
DTL	DETAIL	SS	STAINLESS STEEL
DV	DISPLACEMENT VENTILATION	STD	STANDARD
DWG	DRAWING	STRUCT	STRUCTURE OR STRUCTURAL
EACH	EACH	SYSTEM	SYSTEM
EAT	ENTERING AIR TEMPERATURE	T	THERMOSTAT
EDB	ENTERING DRY BULB TEMPERATURE	TCP	TEMPERATURE CONTROL PANEL
EL	ELBOW	TD	TEMPERATURE DROP
ELEC	ELECTRICAL	TEMP	TEMPERATURE
ELEV	ELEVATION	THRU	THROUGH
EMER	EMERGENCY	TMPD	TEMPERED
ENCL	ENCLOSURE	TO	TRANSFER OPENING
ENG	ENGINEER	TOB	TOP OF BEAM
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS	TP	TOTAL PRESSURE
EQ	EQUAL	TYP	TYPICAL
EQUIP	EQUIPMENT	UNO	UNLESS NOTED OTHERWISE
EWB	ENTERING WET BULB TEMPERATURE	UNON	UNLESS OTHERWISE NOTED
EWT	ENTERING WATER TEMPERATURE	URNL	URNAL
EX	EXISTING	VERT	VERTICAL
EXH	EXHAUST	VF	VERIFY IN FIELD
EXH-1	EXHAUST AIR - TYPE 1	W	WITH
EXH-2	EXHAUST AIR - TYPE 2	W/O	WITHOUT
EXP	EXPANSION	WC	WATER CLOSET
EXPJT	EXPANSION JOINT	WM	WIRE MESH
EXT	EXTERIOR	WT	WEIGHT
F	DEGREES FAHRENHEIT	WWM	WELED WIRE MESH
FC	FAIL CLOSED		
FD	FLOOR DRAIN		
FLEX	FLEXIBLE		
FLG	FLANGE		
FLR	FLOOR		
FND	FOUNDATION		
FO	FAIL OPEN		
FOB	FLAT ON BOTTOM		
FOT	FLAT TOP		
FFI	FINS PER INCH		
FFM	FEET PER MINUTE		
FPS	FEET PER SECOND		
FS	FLOOR SINK		
FT	FEET/FOOT		
FTG	FOOTING		
FUT	FUTURE		
GA	GAUGE		
GALV	GALVANIZED		
GC	GENERAL CONTRACT		
GEN	GENERATOR		
GPH	GALLONS PER HOUR		
GPM	GALLONS PER MINUTE		
H	HIGH/HEIGHT		
HB	HOSE BIB		
HC	HANDICAPPED		
HD	HEAD		
HOA	HAND-OFF-AUTO		
HORIZ	HORIZONTAL		
HP	HORSE POWER		
HTG	HEATING		
HTR	HEATER		
HVAC	HEATING VENTILATION AND AIR CONDITIONING		
HW	HOT WATER		
HZ	HERTZ		
ID	INSIDE DIAMETER		
IN	INCHES		
IN W.G.	INCHES OF WATER GAUGE		
INL	INLET		
INSUL	INSULATION		
INT	INTERIOR		
INV	INVERT		
IPS	IRON PIPE SIZE		
JST	JOIST		
JT	JOINT		
KW	KILOWATTS		
KWH	KILOWATTS PER HOUR		
L	LENGTH		
LAT	LEAVING AIR TEMPERATURE		
LB	POUNDS		
LF	LINEAL FOOT		
LOC	LOCATION		

NOTES

BY EXECUTING THE CONSTRUCTION AGREEMENT, THE CONTRACTOR REPRESENTS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, CORRELATED HIS OBSERVATIONS WITH ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND IS AWARE OF THE OWNER'S INTENDED USE OF THE PROJECT AREA. ANY AREAS WHERE ADDITIONAL INFORMATION IS REQUIRED ARE TO BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER, IN WRITING.

**CONTRACTOR:**  
INSTALL WORK SUBSTANTIALLY AS INDICATED ON THE DRAWINGS. VERIFY EXACT LOCATION AND ELEVATIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. MAKE NECESSARY CHANGES IN ELEVATION, FITTINGS OR OFFSETS TO ACCOMMODATE OBSTACLES OR INTERFERENCES. ALL DIMENSIONS ARE TO BE FIELD VERIFIED BEFORE START OF WORK.

THE CONTRACTOR IS TO PROTECT FURNISHINGS, EQUIPMENT, ETC., AND PROPERLY STORE MATERIAL AS REQUIRED UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR TO VERIFY ALL MEASUREMENTS BEFORE ORDERING MATERIALS OR DOING ANY WORK. NO EXTRA COMPENSATION OR CHANGE ORDERS WILL BE ISSUED DUE TO DIFFERENCES BETWEEN THE ACTUAL MEASUREMENT AND THE DIMENSIONS ON THE DRAWINGS. CONTRACTOR SHALL LAY OUT ALL EQUIPMENT PRIOR TO FABRICATION OR INSTALLATION TO ASSURE PROPER FIT AND AVOIDANCE OF OBSTRUCTIONS, AND SHALL THOROUGHLY COORDINATE WORK WITH ALL TRADES AND DETERMINE EXACT ROUTE AND LOCATION OF EACH ELEMENT AND PIECE OF EQUIPMENT BEFORE FABRICATION AND INSTALLATION.

CONTRACTOR TO BE RESPONSIBLE FOR KEEPING THE GENERAL WORK AREA CLEAN AND FREE FROM DIRT AND CONSTRUCTION MATERIALS, AND FOR CLEANING THE AREA AT THE END OF EACH DAY. ANY AND ALL DAMAGE TO THE EXISTING WALLS, CEILINGS, FLOOR, ETC., THAT OCCURS DURING THE WORK, SHALL BE REPAIRED AND PATCHED. IF THE SPECIFIC METHOD OF REPAIR IS IN QUESTION, THE CONTRACTOR IS TO CONFER WITH THE OWNER'S REPRESENTATIVE BEFORE COMMENCING THE REPAIR.

THE CONTRACTOR SHALL MAINTAIN ON THE SITE FOR THE OWNER A COMPLETE SET OF CONTRACT DOCUMENTS AND ALL COPIES OF APPROVED SHOP DRAWINGS, ALL CHANGE ORDERS, FIELD ORDERS, AND BULLETINS, PROGRESSIVELY FILED AND UPDATED TO REFLECT THE LATEST CHANGES.

THE CONTRACTOR IS TO PROVIDE AS-BUILT DRAWINGS AT THE COMPLETION OF THE PROJECT.

CONTRACTOR ACKNOWLEDGES HE HAS VERIFIED WITH THE OWNER'S REPRESENTATIVE ALL OF THE DETAILS OF THE WORK TO BE PERFORMED INCLUDING THE ACCURACY OF ALL CONTRACT DRAWINGS AND SPECIFICATIONS. ALL MATERIALS AND EQUIPMENT ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE.

ALL DEFECTS IN EQUIPMENT OR MATERIALS, OR ERRORS IN THE DRAWINGS DISCOVERED DURING THE PERFORMANCE OF THE WORK SHALL BE REPORTED PROMPTLY TO THE OWNER'S REPRESENTATIVE. IN NO EVENT SHALL THE WORK PROCEED UNTIL DEFECTS AND/OR ERRORS HAVE BEEN RESOLVED.

THE PLANS ARE DIAGRAMMATIC AND INDICATE ONLY THE SIZE AND GENERAL ARRANGEMENT OF PIPING AND EQUIPMENT. EXACT LOCATION OF ALL ELEMENTS SHALL BE DETERMINED AS WORK PROGRESSES. IN COOPERATION AND COORDINATION WITH THE WORK OF ALL OTHER TRADES, IT IS NOT INTENDED TO SHOW EVERY ITEM OF WORK OR MINOR PIECE OF EQUIPMENT, BUT THE CONTRACTOR SHALL FURNISH AND INSTALL WITHOUT ADDITIONAL REMUNERATION ANY COMPONENT NECESSARY TO COMPLETE THE SYSTEM IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADE.

PIPING AND/OR DUCT PENETRATION FIRE WALLS AND FLOORS SHALL BE FIRESTOPPED OR HAVE A FIRE DAMPER. REFER TO THE ARCHITECTURAL DRAWINGS FOR FIRE WALL AND FLOOR LOCATION.

ALL PHYSICAL ATTRIBUTES OF EQUIPMENT AND DEVICES ARE BASED ON THOSE MANUFACTURERS LISTED IN THE SPECIFICATIONS AND/OR THE EQUIPMENT SCHEDULES. THE RESPECTIVE CONTRACTORS ARE RESPONSIBLE FOR ALL CHANGES BROUGHT ABOUT BY USE OF ITEMS BY OTHER MANUFACTURERS. THE ARCHITECT/ENGINEER HAS RESERVED THE RIGHT TO REJECT ITEMS BY OTHER MANUFACTURERS IF THOSE ITEMS DO NOT MATCH THE PHYSICAL ATTRIBUTES OF THE MANUFACTURERS LISTED.

**CODES AND REGULATIONS:**  
THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK, BOTH ON AND OFF SITE. IF ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE THEREWITH IN ANY RESPECT, CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING.

CONTRACTOR REPRESENTS AND WARRANTS COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND REGULATIONS APPLICABLE TO THIS ORDER, INCLUDING THE BUILDING CODE, AND THE LOCAL GOVERNING BODY.

**FINAL COMPLETION:**  
PERFORM ALL OF THE WORK REQUIRED TO COMPLETE THE PROJECT, INCLUDING THE SATISFACTORY OPERATION OF ALL EQUIPMENT AND THE CORRECTION OF ALL UNACCEPTABLE OR INCOMPLETE PORTIONS OF THE PROJECT TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. SETTLE ALL CLAIMS AND SECURE THE RELEASE OF ALL MECHANICS LIEN OR LIENS OF A LIKE NATURE, AND SECURE THE ISSUANCE OF AN APPROPRIATE GOVERNMENT AUTHORITY OF A CERTIFICATE OF OCCUPANCY. REMOVE ALL RUBBISH, SURPLUS MATERIALS, SCAFFOLDING, AND EQUIPMENT FROM THE SITE WHETHER OR NOT LEFT BY OR BELONGING TO THE CONTRACTOR.

**HVAC GENERAL NOTES**

- SUPPLY AND RETURN PIPING TO COILS ARE THE SAME SIZE.
- CONTRACTOR SHALL LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 5'-0" AFF, A MINIMUM OF 8" FROM LIGHT SWITCH.
- REFER TO PIPING DRAWINGS FOR THERMOSTAT AND TEMPERATURE SENSOR LOCATIONS.
- CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPING SHALL BE TYPE "L" COPPER.
- PROVIDE A 5" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.
- ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLASS OF 2" W.G. UNLESS NOTED OTHERWISE.
- THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH.

**NOTE:**  
GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

MECHANICAL SHEET INDEX

M001	MECHANICAL LEGEND SHEET
M101	BASEMENT HVAC PLAN



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Berkey Hall - Room 10 - Renovation

CAPITAL PROJ. NO.  
CP19031

PR. MGR.	P. KALK
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CIVIL	-
L.A.	-
INT. DES.	C. LOCKWOOD
CONST. REP.	-
APPR.	P. KALK
DATE SCALE	AS INDICATED

REVISIONS

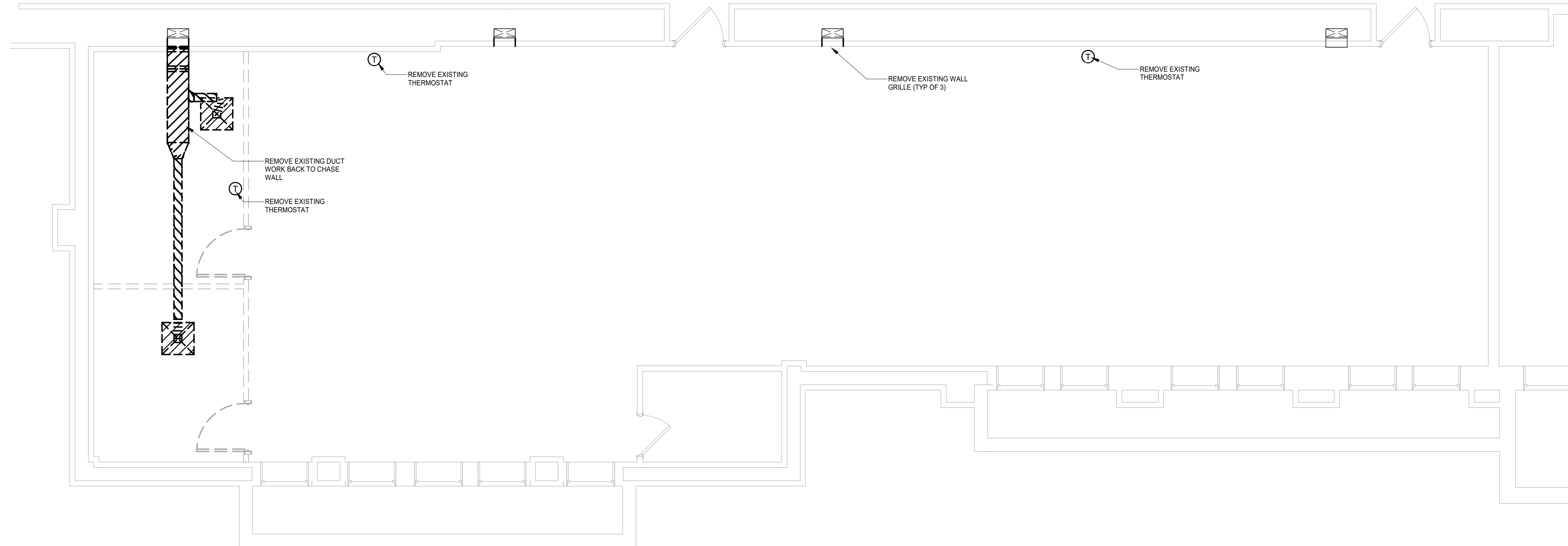
NO.	DATE	DESCRIPTION
04	03/20/20	BID PERMIT SET
A1	04/14/2026	ADDENDUM 01

MECHANICAL LEGEND SHEET

M001

WINDOW AIR CONDITIONING UNIT SCHEDULE

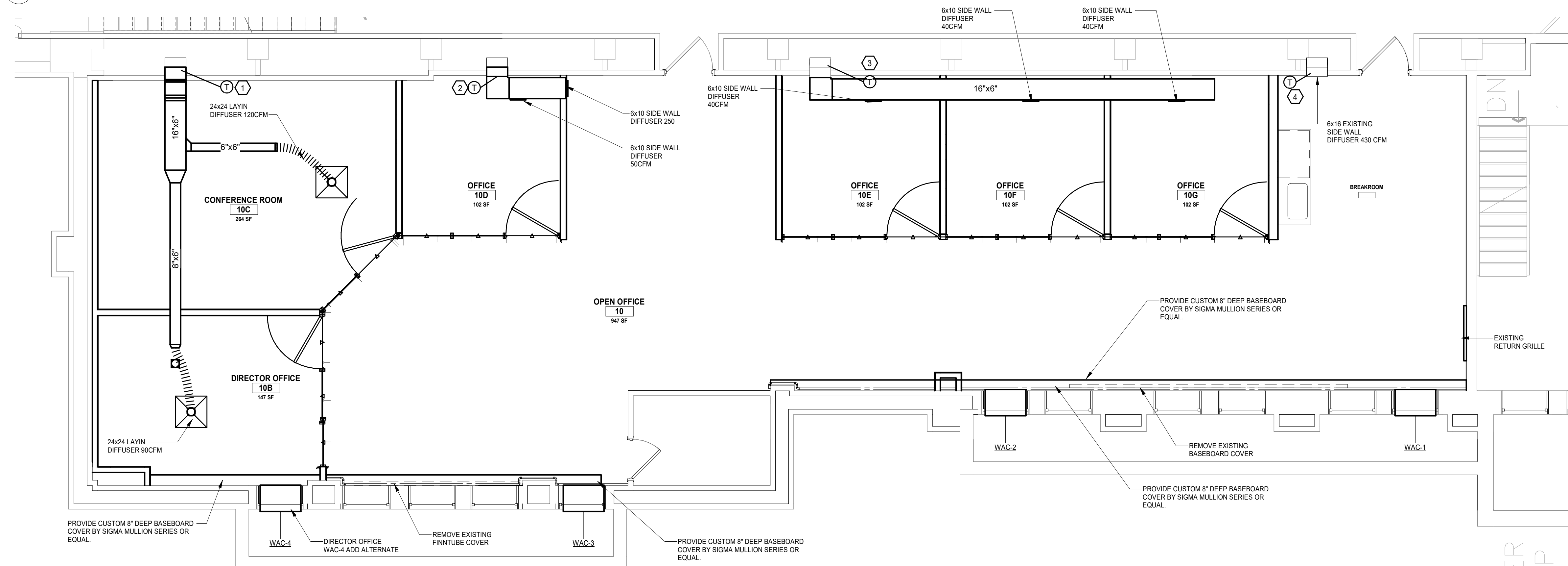
TAG	LOCATION	TYPE	BASIS OF DESIGN MANUFACTURER	MODEL	CFM	EVAPORATOR		COMPRESSOR			EER	CEER	NOTES	ACCESSORIES
						CAPACITY (BTU/HR)		POWER						
						FULL COOLING (BTU)	LOW COOLING (BTU)	VOLTS	COOLING AMPS	COOLING WATTS				
WAC-1	OPEN OFFICE	WINDOW	KJHL	KCVS12B10A	300	12500	6000	115	11.8	624	11.1	15		WALL SLEVE
WAC-2	OPEN OFFICE	WINDOW	KJHL	KCVS12B10A	300	12500	6000	115	11.8	624	11.1	15		WALL SLEVE
WAC-3	OPEN OFFICE	WINDOW	KJHL	KCVS12B10A	300	12500	6000	115	11.8	624	11.1	15		WALL SLEVE
WAC-4	DIRECTORS OFFICE	WINDOW	KJHL	KCV008B10A	200	9700	4000	115	9.9	502	10.8	13.9	ADD ALTERNATE M-1	WALL SLEVE



KEYED NOTES

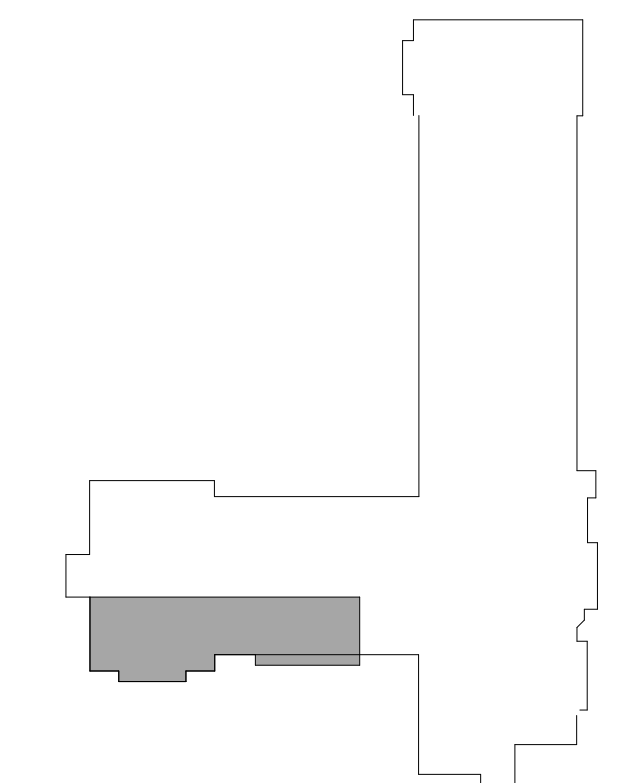
1. PROVIDE NEW DDC THERMOSTAT, REMOVE ASSOCIATED PNEUMATIC CONTROL VALVE SERVING REHEAT COIL, TAGGED 151C. REPLACE CONTROL VALVE WITH ELECTRIC CONTROL VALVE AND TIE INTO DDC SYSTEM.
2. PROVIDE NEW DDC THERMOSTAT, REMOVE ASSOCIATED PNEUMATIC CONTROL VALVE SERVING REHEAT COIL, TAGGED 195. REPLACE CONTROL VALVE WITH ELECTRIC CONTROL VALVE AND TIE INTO DDC SYSTEM.
3. PROVIDE NEW DDC THERMOSTAT, REMOVE ASSOCIATED PNEUMATIC CONTROL VALVE SERVING REHEAT COIL, TAGGED 201. REPLACE CONTROL VALVE WITH ELECTRIC CONTROL VALVE AND TIE INTO DDC SYSTEM.
4. PROVIDE NEW DDC THERMOSTAT, REMOVE ASSOCIATED PNEUMATIC CONTROL VALVE SERVING REHEAT COIL, TAGGED 213. REPLACE CONTROL VALVE WITH ELECTRIC CONTROL VALVE AND TIE INTO DDC SYSTEM.

2 BASEMENT DEMOLITION PLAN  
1/4" = 1'-0"



1 BASEMENT FLOOR HVAC PLAN  
1/4" = 1'-0"

KEY PLAN



CAPITAL PROJ. NO.  
CP19031

PR. MGR.	P. KALK
ARCH.	B. CHARLAND
MECH.	R. WINKLER
ELEC.	G. HALSEY
CIVIL	-
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DATE	-
SCALE	AS INDICATED

REVISIONS

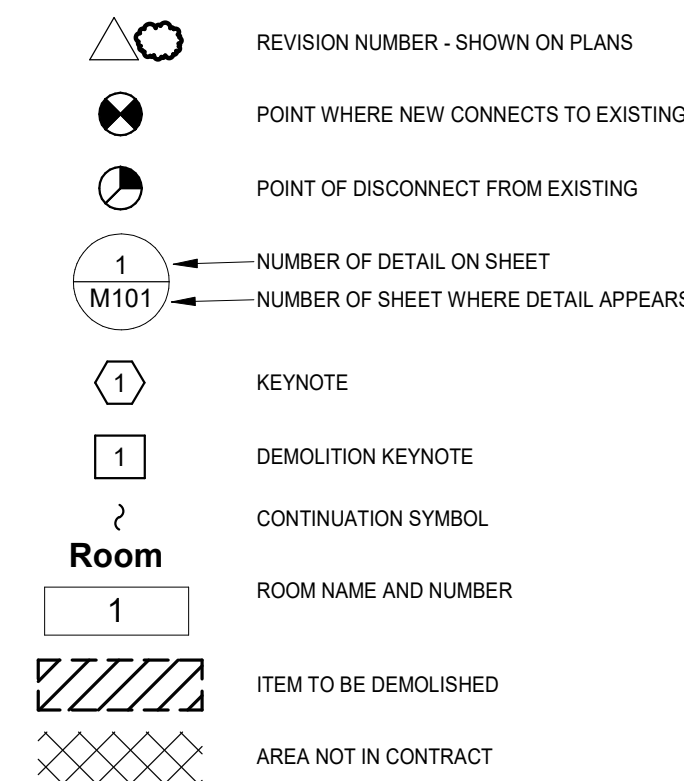
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04/03/2028		BID PERMIT SET

BASEMENT HVAC PLAN

M101

12.09.2024

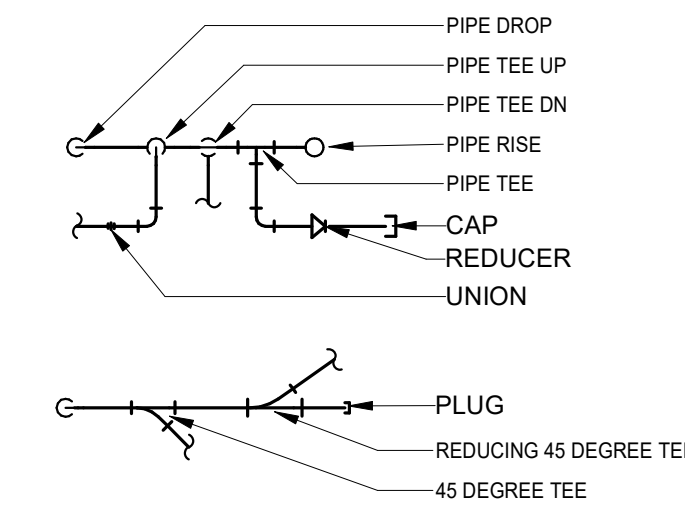
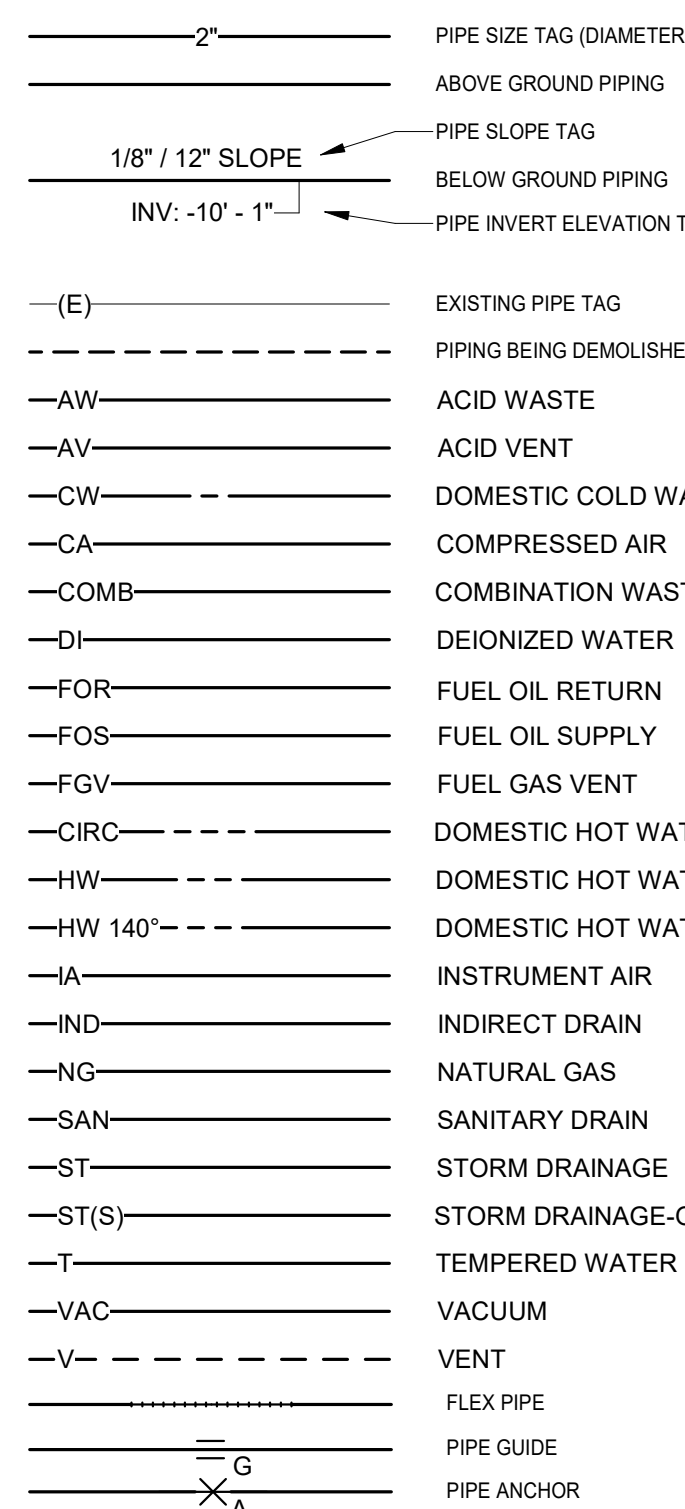
**GENERAL PLUMBING SYMBOLS**



**EQUIPMENT DESIGNATIONS**

BT	BATH TUB
CO	CLEANOUT
CS	CUP SINK
CV	CONTROL VALVE
DF	DRINKING FOUNTAIN
DPCO	DECK PLATE CLEANOUT
DWH	DOMESTIC WATER HEATER
DWP	DOMESTIC WATER PUMP
EJ	EXPANSION JOINT
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EWS	EMERGENCY EYEWASH/SHOWER
FI	FILTER
FB	FLOOR BIBB
KS	KITCHEN SINK
LAV	LAVATORY
M	METER
MS	MOP SINK
NF	NON-FREEZE HOSE BIB
OS	OIL SEPARATOR
P	PUMP
S	SINK
SA	SHOCK ABSORBER (WATER HAMMER ARRESTOR)
SH	SHOWER
SP	SUMP PUMP
SRV	SAFETY RELIEF VALVE
SS	SERVICE SINK
SWP	SEWAGE PUMP
TK	WATER TANK
UR	URINAL
WC	WATER CLOSET
WCO	WALL CLEANOUT
WS	WATER SOFTENER

**PLUMBING AND PIPING SYMBOLS**



**ABBREVIATIONS**

&	AND	LWT	LEAVING WATER TEMPERATURE
@	AT	MAX	MAXIMUM
Ø	ROUND	MBH	ONE THOUSAND BTU PER HOUR
ABV	ABOVE	MBF	ONE THOUSAND CUBIC FEET
ACOUS	ACOUSTICAL	MECH	MECHANICAL
ACT	ACOUSTIC CEILING TILE	MFR	MANUFACTURER
AD	ACCESS DOOR	MIN	MINIMUM
ADD	ADDENDUM	MISC	MISCELLANEOUS
ADJ	ADJACENT	MO	MASONRY OPENING
AFF	ABOVE FINISHED FLOOR	MR	MOISTURE RESISTANT
AFG	ABOVE FINISHED GRADE	MTD	MOUNTED
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MTG	MOUNTING
AG	ABOVE GROUND	MTL	METAL
AHJ	AUTHORITY HAVING JURISDICTION	MTR	MOTOR
ALT	ALTERNATE	N	NECK
ALUM	ALUMINUM	NA	NOT APPLICABLE
ANOD	ANODIZED	NC	NORMALLY CLOSED
AP	ACCESS PANEL	NC	NOISE CRITERIA
APPROX	APPROXIMATE	NO	NOT IN CONTRACT
ARCH	ARCHITECTURAL	NO	NORMALLY OPEN
ATTN	ATTENTION	NO	NUMBER
AUTO	AUTOMATIC	NOM	NOMINAL
BFF	BELOW FINISHED FLOOR	NON COMB	NON COMBUSTIBLE
BLDG	BUILDING	NTS	NOT TO SCALE
BLKG	BLOCKING	OA	OUTSIDE AIR
BLW	BELOW	OC	ON CENTER
BM	BEAM	OD	OUTSIDE DIAMETER
BO	BY OTHER	PD	PRESSURE DROP
BOT	BOTTOM	PH	PHASE
BSMT	BASEMENT	PI	PRESSURE INDEPENDENT
BTU	BRITISH THERMAL UNITS	PLBG	PLUMBING
BTUH	BRITISH THERMAL UNITS PER HOUR	PSF	POUNDS PER SQUARE FOOT
BTWN	BETWEEN	PSI	POUNDS PER SQUARE INCH
CAP	CAPACITY	PSIG	POUNDS PER SQUARE INCH GAUGE
CAT	CATEGORY	PVC	POLYVINYL CHLORIDE
CB	CATCH BASIN	PW	POTABLE WATER
CC	CENTER TO CENTER	PWR	POWER
CD	CONDENSATE DRAIN	R	RISER
CFM	CUBIC FEET PER MINUTE	RA	RETURN AIR
CI	CAST IRON	RAD	RADIUS
CL	CENTERLINE	RCP	REFLECTED CEILING PLAN
CLG	CEILING	RD	ROOF DRAIN
CLG	COOLING	REC	RECESSED
CO	CLEANOUT	REDUC	REDUCER
COL	COLUMN	REFR	REFRIGERATION
COMB	COMBINATION	REG	REGISTER
CONC	CONCRETE	REINF	REINFORCED
COND	CONDENSATE	REL	RELIEF
COND	CONDITION	RELOC	RELOCATE
CONN	CONNECTION	REMO	REMOVABLE
CONST	CONSTRUCTION	REQ	REQUIRED
CONT	CONTINUOUS	REQD	REQUIRED
CONTR	CONTRACTOR	RH	RELATIVE HUMIDITY
COORD	COORDINATE	RLA	RELIEF AIR
CORR	CORRIDOR	RM	ROOM
CTR	CENTER	RO	ROUGH OPENING
CUFT	CUBIC FEET	RPM	REVOLUTIONS PER MINUTE
D	DEEP, DEPTH	RPZ	REDUCED PRESSURE ZONE
DB	DRY BULB	RTD	RATED
DEG	DEGREE	RTG	RATING
DEMO	DEMOLISH OR DEMOLITION	SA	SUPPLY AIR
DEPT	DEPARTMENT	SCHED	SCHEDULE
DET	DETAIL	SD	SMOKE DAMPER
DI	DIAMETER	SECT	SECTION
DM	DIMENSION	SF	SQUARE FEET/FOOT
DMS	DIMENSIONS	SIM	SIMILAR
DV	DIVISION	SM	SURFACE MOUNTED
DN	DOWN	SP	STATIC PRESSURE
DRN	DRAIN	SPEC	SPECIFIED OR SPECIFICATION
DTL	DETAIL	SQ	SQUARE
DV	DISPLACEMENT VENTILATION	SS	STAINLESS STEEL
DWG	DRAWING	STD	STANDARD
EACH	EACH	STRUCT	STRUCTURE OR STRUCTURAL
EAT	ENTERING AIR TEMPERATURE	SVS	SYSTEM
EBB	ENTERING DRY BULB TEMPERATURE	T	THERMOSTAT
EL	ELBOW	TCP	TEMPERATURE CONTROL PANEL
ELEC	ELECTRICAL	TD	TEMPERATURE DROP
ELEV	ELEVATION	TEMP	TEMPERATURE
EMER	EMERGENCY	THRU	THROUGH
ENCL	ENCLOSURE	TMPO	TEMPERED
ENG	ENGINEER	TO	TRANSFER OPENING
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS	TOB	TOP OF BEAM
EQ	EQUAL	TP	TOTAL PRESSURE
EQUIP	EQUIPMENT	TYP	TYPICAL
EWB	ENTERING WET BULB TEMPERATURE	UNO	UNLESS NOTED OTHERWISE
EWT	ENTERING WATER TEMPERATURE	UON	UNLESS OTHERWISE NOTED
EX	EXISTING	URNL	URINAL
EXH	EXHAUST	VERT	VERTICAL
EXH-1	EXHAUST AIR - TYPE 1	VIF	VERIFY IN FIELD
EXH-2	EXHAUST AIR - TYPE 2	WI	WITH
EXP	EXPANSION	W/O	WITHOUT
EXPJT	EXPANSION JOINT	WC	WATER CLOSET
EXT	EXTERIOR	WM	WIRE MESH
F	DEGREES FAHRENHEIT	WT	WEIGHT
FC	FAIL CLOSED	WWM	WELDED WIRE MESH
FD	FLOOR DRAIN		
FLEX	FLEXIBLE		
FLG	FLANGE		
FLR	FLOOR		
FND	FOUNDATION		
FO	FAIL OPEN		
FOB	FLAT ON BOTTOM		
FOT	FLAT ON TOP		
FPI	FINS PER INCH		
PPM	FEET PER MINUTE		
FPS	FEET PER SECOND		
FS	FLOOR SINK		
FT	FEET/FOOT		
FTG	FOOTING		
FUT	FUTURE		
GA	GAUGE		
GALV	GALVANIZED		
GC	GENERAL CONTRACT		
GEN	GENERATOR		
GPH	GALLONS PER HOUR		
GPM	GALLONS PER MINUTE		
H	HIGH/HEIGHT		
HB	HOSE BIB		
HC	HANDICAPPED		
HD	HEAD		
HOA	HAND-OFF-AUTO		
HORIZ	HORIZONTAL		
HP	HORSE POWER		
HTG	HEATING		
HTR	HEATER		
HVAC	HEATING VENTILATION AND AIR CONDITIONING		
HW	HOT WATER		
HZ	HERTZ		
ID	INSIDE DIAMETER		
IN	INCH/INCHES		
IN W.G.	INCHES OF WATER GAUGE		
INL	INLET		
INSUL	INSULATION		
INT	INTERIOR		
INVT	INVERT		
IPS	IRON PIPE SIZE		
JST	JOIST		
JT	JOINT		
KW	KILOWATTS		
KWH	KILOWATTS PER HOUR		
L	LENGTH		
LAT	LEAVING AIR TEMPERATURE		
LB	POUNDS		
LF	LINEAL FOOT		
LOC	LOCATION		

**GENERAL NOTES**

BY EXECUTING THE CONSTRUCTION AGREEMENT, THE CONTRACTOR REPRESENTS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, CORRELATED HIS OBSERVATIONS WITH ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND IS AWARE OF THE OWNER'S INTENDED USE OF THE PROJECT AREA. ANY AREAS WHERE ADDITIONAL INFORMATION IS REQUIRED ARE TO BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER, IN WRITING.

**CONTRACTOR:**  
INSTALL WORK SUBSTANTIALLY AS INDICATED ON THE DRAWINGS. VERIFY EXACT LOCATION AND ELEVATIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. MAKE NECESSARY CHANGES IN ELEVATION, FITTINGS OR OFFSETS TO ACCOMMODATE OBSTACLES OR INTERFERENCES. ALL DIMENSIONS ARE TO BE FIELD VERIFIED BEFORE START OF WORK.

THE CONTRACTOR IS TO PROTECT FURNISHINGS, EQUIPMENT, ETC., AND PROPERLY STORE MATERIAL AS REQUIRED UNTIL COMPLETION OF THE PROJECT.  
CONTRACTOR TO VERIFY ALL MEASUREMENTS BEFORE ORDERING MATERIALS OR DOING ANY WORK. NO EXTRA COMPENSATION OR CHANGE ORDERS WILL BE ISSUED DUE TO DIFFERENCES BETWEEN THE ACTUAL MEASUREMENT AND THE DIMENSIONS ON THE DRAWINGS. CONTRACTOR SHALL LAY OUT ALL EQUIPMENT PRIOR TO FABRICATION OR INSTALLATION TO ASSURE PROPER FIT AND AVOIDANCE OF OBSTRUCTIONS, AND SHALL THOROUGHLY COORDINATE WORK WITH ALL TRADES AND DETERMINE EXACT ROUTE AND LOCATION OF EACH ELEMENT AND PIECE OF EQUIPMENT BEFORE FABRICATION AND INSTALLATION.

CONTRACTOR TO BE RESPONSIBLE FOR KEEPING THE GENERAL WORK AREA CLEAN AND FREE FROM DIRT AND CONSTRUCTION MATERIALS, AND FOR CLEANING THE AREA AT THE END OF EACH DAY. ANY AND ALL DAMAGE TO THE EXISTING WALLS, CEILINGS, FLOOR, ETC., THAT OCCURS DURING THE WORK, SHALL BE REPAIRED AND PATCHED. IF THE SPECIFIC METHOD OF REPAIR IS IN QUESTION, THE CONTRACTOR IS TO CONFER WITH THE OWNER'S REPRESENTATIVE BEFORE COMMENCING THE REPAIR.

THE CONTRACTOR SHALL MAINTAIN ON THE SITE FOR THE OWNER A COMPLETE SET OF CONTRACT DOCUMENTS AND ALL COPIES OF APPROVED SHOP DRAWINGS, ALL CHANGE ORDERS, FIELD ORDERS, AND BULLETINS, PROGRESSIVELY FILED AND UPDATED TO REFLECT THE LATEST CHANGES. THE CONTRACTOR IS TO PROVIDE AS-BUILT DRAWINGS AT THE COMPLETION OF THE PROJECT.

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ARCHITECTURAL PENETRATION FIRE WALLS AND FLOORS SHALL BE FIRESTOPPED. REFER TO THE ARCHITECTURAL DRAWINGS FOR FIRE WALL AND FLOOR LOCATION.

ALL PHYSICAL ATTRIBUTES OF EQUIPMENT AND DEVICES ARE BASED ON THOSE MANUFACTURERS LISTED IN THE SPECIFICATIONS AND/OR THE EQUIPMENT SCHEDULES. THE RESPECTIVE CONTRACTORS ARE RESPONSIBLE FOR ALL CHANGES BROUGHT ABOUT BY USE OF ITEMS BY OTHER MANUFACTURERS. THE ARCHITECT ENGINEER HAS RESERVED THE RIGHT TO REJECT ITEMS BY OTHER MANUFACTURERS IF THOSE ITEMS DO NOT MATCH THE PHYSICAL ATTRIBUTES OF THE MANUFACTURERS LISTED.

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**PLUMBING GENERAL NOTES**

- FIELD VERIFY ALL NEW WATER, WASTE, AND VENT PIPING CONNECTIONS AND PROVIDE NEW CONNECTIONS AS REQUIRED FOR PROPERLY OPERATING SYSTEMS.
- PITCH UNDERFLOOR SANITARY WASTE AND STORM PIPING 2" AND GREATER AT 1/8" PER FOOT, UNLESS NOTED OTHERWISE. PITCH ALL OTHER WASTE PIPING AT 1/4" PER FOOT UNLESS OTHERWISE NOTED.
- FIELD VERIFY LOCATION AND INVERTS OF SITE UTILITIES PRIOR TO INSTALLATION.
- ROUTE DOMESTIC WATER, FIRE PROTECTION, SANITARY SEWER, AND STORM SEWER SERVICES TO SITE UTILITIES FROM BUILDING UNLESS NOTED OTHERWISE. REFER TO CIVIL PLANS.
- WASTE AND VENT PIPING BELOW FLOOR AND THROUGH FLOOR SHALL BE 2" MINIMUM.
- PROVIDE CLEANOUT IN ACCESSIBLE LOCATION AT THE BASE OF ALL PLUMBING RISERS.

**\*NOTE\***

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

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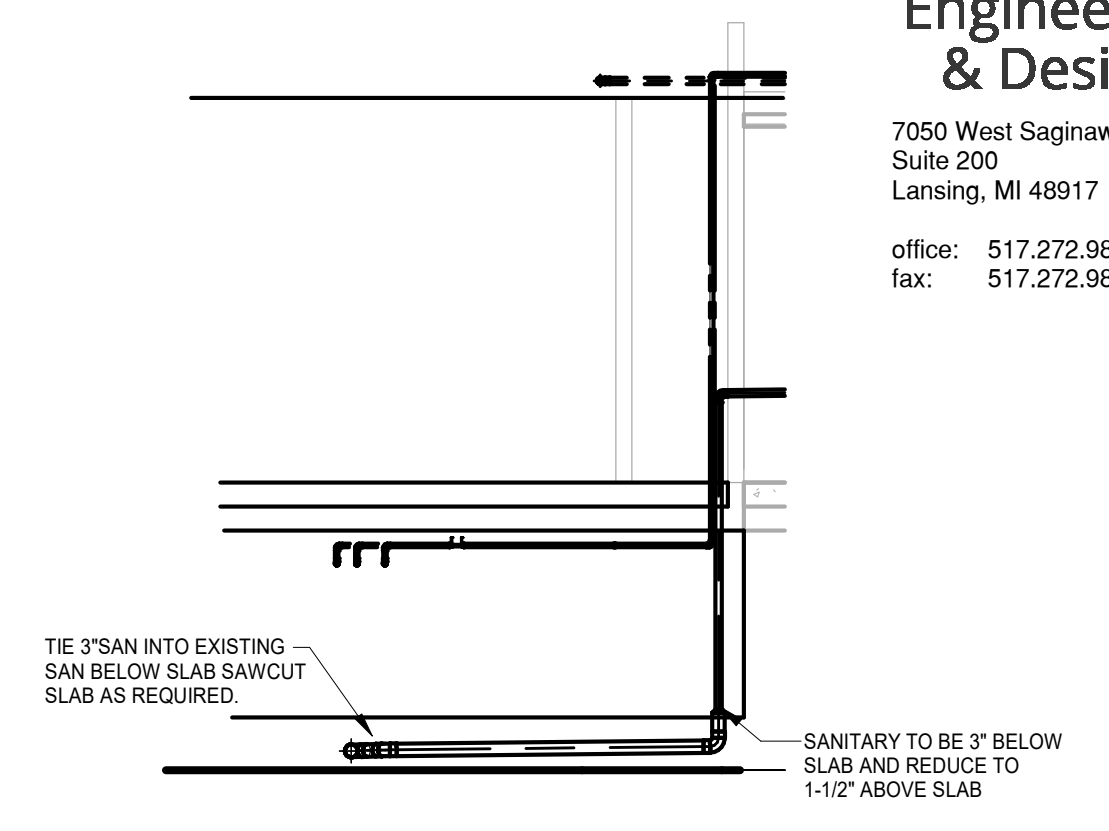
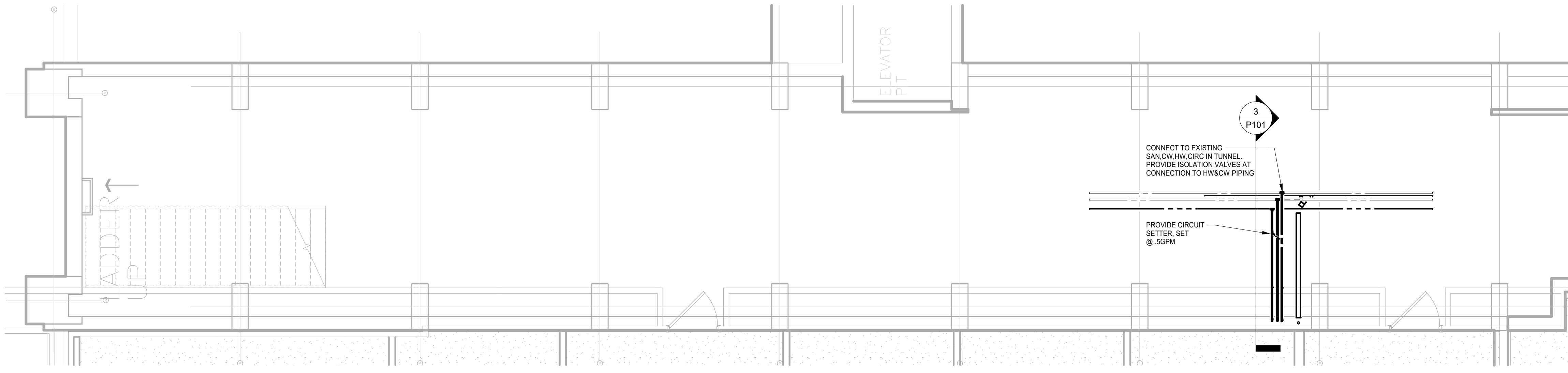
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DATE	-
SCALE	AS INDICATED

**REVISIONS**

NO.	DATE	DESCRIPTION
04/03/2026		BID PERMIT SET

PLUMBING LEGEND SHEET

**P001**

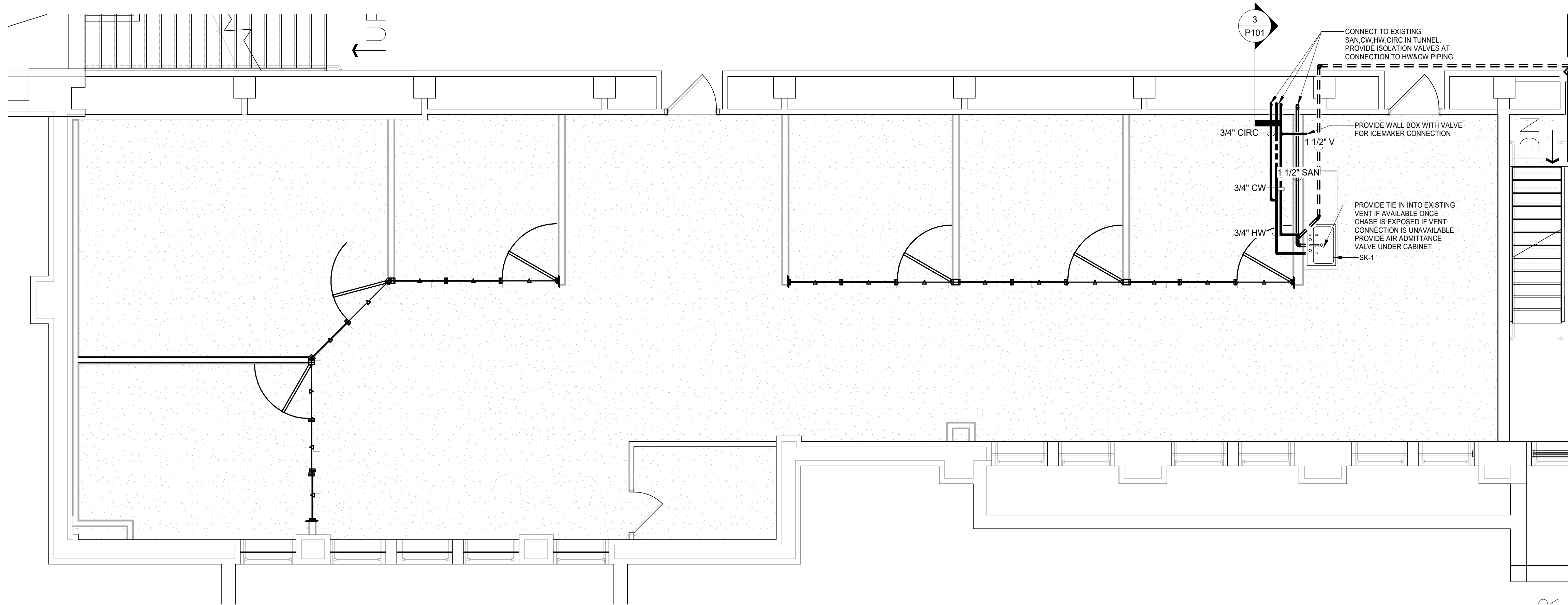
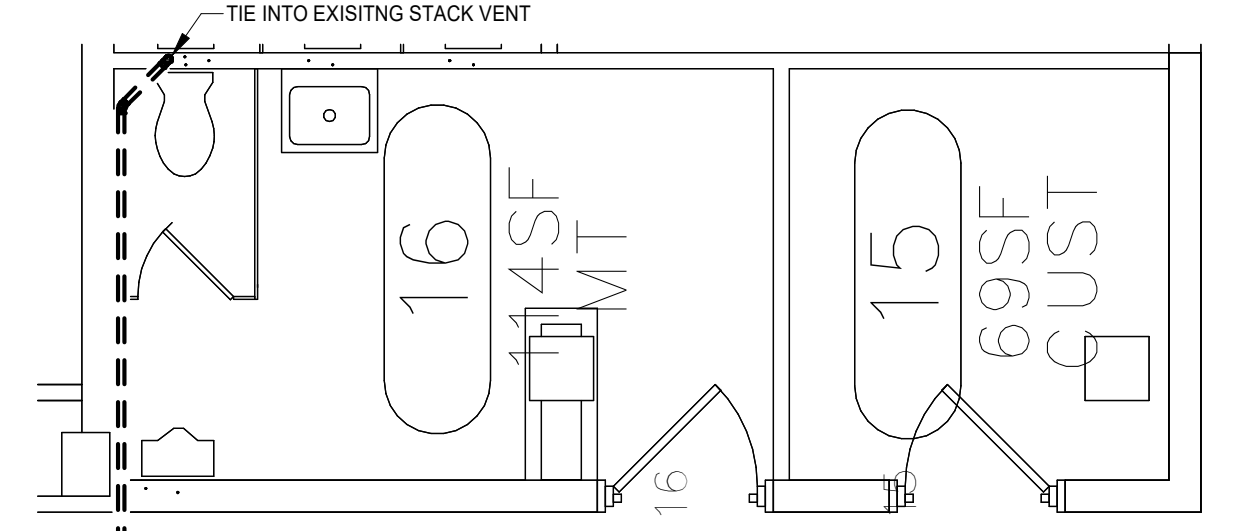


**2 BASEMENT/TUNNEL**  
1/4" = 1'-0"

**3 PLUMBING SECTION**  
1/4" = 1'-0"

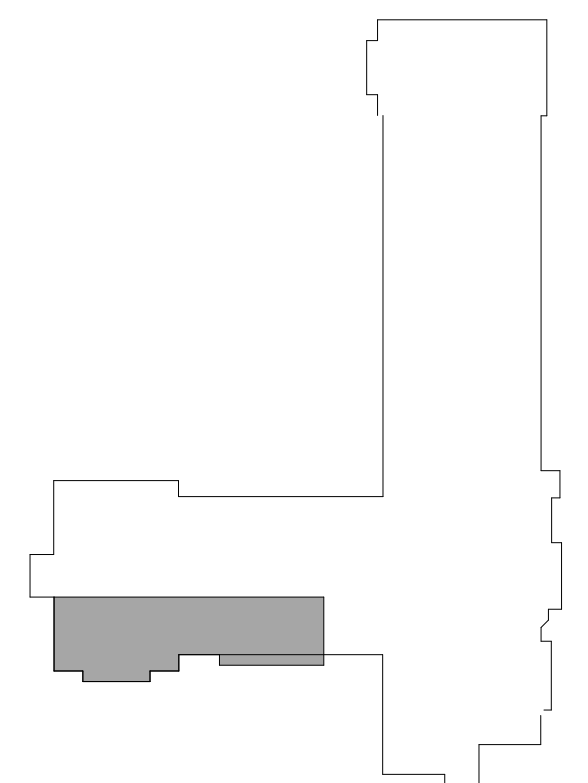
TAG	BASIS OF DESIGN			DESCRIPTION	TRIM/SPECS	ROUGH-IN			
	MFG.	MODEL	NUMBER			WASTE	VENT	HW	CW
SK-A	ELKAY	LRAD	2219-55-3	TOP-MOUNT SINGLE BOWL STAINLESS STEEL SINK.	T&S BRASS 8" CENTER SET DECK MOUNT SINGLE LEVER POLISHED CHROME FAUCET MODEL B-2731-W5 WITH 9" SWING SPOUT AND 1.5 GPM VANDAL RESISTANT AERATOR. ELKAY LK99 STRAINERS WITH TAILPIECES, MCGUIRE 8902 17GACHROME P-TRAPS WITH CLEANOUTS MCGUIRE LFBVCHROME LEAD-FREE 1/4-TURN STOPS, FLEXIBLE STAINLESS STEEL HOSE SUPPLIES.	2"	1-1/2"	1/2"	1/2"

NOTES:  
 1. Not used  
 2. Exposed, uninsulated sink/lav P-traps shall be polished chrome.  
 3. All fixtures shall be installed per mfr's installation instructions, applicable codes, and AHJ  
 4. Where required, fixtures shall be installed in full compliance with ADA/TAS. Refer to architectural drawings and specifications for installation dimensions and further information.



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

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



KEY PLAN

Berkeley Hall -  
Room 10 - Renovation

CAPITAL PROJ. NO.  
CP19031

PR. MGR.	P. KALK
ARCH.	B. CHARLAND
MECH.	R. WINKLER
ELEC.	G. HALSEY
CIVIL	-
L.A.	-
INT. DES.	C. LOCKWOOD
CONST. REP.	-
APPR.	P. KALK
DATE	-
SCALE	AS INDICATED

REVISIONS

NO.	DATE	DESCRIPTION
1	04/03/2028	BID PERMIT SET

BASEMENT PLUMBING  
PLAN

**P101**

DRAWING SYMBOLS

**VIEW TITLES**

1 VIEW NAME  
SCALE: 1/8" = 1'-0"

VIEW TITLE: SCALED

1 VIEW NAME  
VIEW TITLE: NO SCALE

VIEW NAME

VIEW TITLE: TITLE ONLY

1 VIEW NAME  
SCALE: NTS

VIEW TITLE: NOT TO SCALE

**SECTION MARK**

VIEWING DIRECTION

SECTION #

DRAWING #

BUILDING SECTION

VIEWING DIRECTION

DETAIL #

DRAWING #

DETAIL SECTION

VIEWING DIRECTION

wkg view

WORKING SECTION

EQUIPMENT IDENTITY (SEE MECH EQUIPMENT ABBREVIATION LIST)

EQUIPMENT NUMBER

SYSTEM NUMBER (IF APPLICABLE)

**DETAIL CALLOUT**

DETAIL #

DRAWING #

**ELEVATION MARKER**

ELEVATION #

DRAWING #

**NEW COLUMN ID**

XXX

**EXISTING COLUMN ID**

XXX

SEE SHEET AD101A

SEE SHEET AD101A

SEE SHEET AD101A

**MATCHLINE SYMBOLS**

NORTH ARROW (SHOWN IN KEYPLAN)

NORTH ARROW PLAN SIZE

REVISION TAG

CENTERLINE

ELEVATION NOTATION

LEVEL HEAD FAMILY

**BREAK MARKS**

BREAK RECTANGLE

BREAK ROUND

BREAK PIPE

**MOUNTING HEIGHTS**

CARD READER	42" AFF
CLOCK HANGER OUTLETS	42" AFF
EXIT LIGHTS - FLOOR	8" AFF TO BOTTOM OF SIGN, 4" FROM FRONT EDGE OF SIGN TO DOOR FRAME
EXIT LIGHTS - WALL MOUNTED	ABOVE DOORS (MAX. 96" AFF)
FIRE ALARM HORN/STROBE	84" AFF
FIRE ALARM PULL STATION	44" AFF
LIGHT SWITCHES	42" AFF
MOTOR STARTERS	72" AFF MAX TO OPERATING HANDLE
PANEL BOARDS (LIGHTING AND RECEPTACLE)	72" AFF MAX TO TOP OF CIRCUIT BREAKER
RECEPTACLE - TYPICAL	18" AFF (U.O.N.)
SAFETY SWITCHES	72" MAX TO OPERATING HANDLE
TELEPHONE - DATA OUTLET	18" AFF
TELEPHONE - PAY STATION	48" AFF
TELEPHONE - WALL TYPE	48" AFF

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ADA LOCATIONS. ALL DEVICES TO BE MOUNTED WITHIN A RANGE OF 34" TO BOTTOM OF DEVICE BACKBOX TO 48" AFF TO TOP OF DEVICE BACKBOX. PREFERRED MOUNTING HEIGHT IS 48" AFF TO TOP OF DEVICE BACKBOX. CONTRACTOR TO MOUNT AT LOWER HEIGHT WITHIN THE LISTED RANGE TO OVERCOME ANY INTERFERENCES WHERE REQUIRED.

**NOTE**

NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED APPEAR ON THESE CONTRACT DRAWINGS. INDIVIDUAL DRAWINGS MAY HAVE SHEET LEGENDS FOR UNIQUE SYMBOLS AND FOR CONVENIENCE.

**ELECTRICAL SYMBOL LIST**

**GENERAL**

LIGHT LINE WEIGHT INDICATES EXISTING ITEMS TO REMAIN OR PROVIDED BY OTHERS.

HEAVY LINE WEIGHT INDICATES ITEMS TO BE PROVIDED BY E.C.

HEAVY DASHED LINE INDICATES ITEMS TO BE REMOVED OR RELOCATED BY E.C.

LIGHT FIXTURE UPPER CASE LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS. LOWER CASE LETTERS INDICATE SWITCHING ARRANGEMENT. NUMBER INDICATES BRANCH CIRCUIT. "EM" OR SHADING INDICATES EMERGENCY LIGHTING.

EXIT SIGN LIGHT - WALL, CEILING OR PENDANT MOUNTED. LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS. ARROWS INDICATE DIRECTION. SHADING INDICATES NUMBER OF FACES.

EXIT SIGN LIGHT WITH EMERGENCY LIGHT HEADS. LETTERS INDICATE FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE FOR DETAILS. SHADING INDICATES NUMBER OF FACES.

DOCK LIGHT

TRACK AND TRACK LIGHT

EMERGENCY LIGHT HEADS - SINGLE HEAD AND DOUBLE HEADS

EMERGENCY BATTERY LIGHTING UNIT. WIRE AHEAD OF LOCAL SWITCHING

LIGHT ON CORD REEL

LIGHT SWITCH 20A, 120/277V SINGLE POLE

"K" KEY OPERATION

"3" 3-WAY OPERATION

"LV3" LOW VOLTAGE

"WP" WEATHER PROOF

"4" 4-WAY OPERATION

"a" SWITCHING ARRANGEMENT

"T" TIMER

"P" PILOT LIGHT

"OS" DUAL TECHNOLOGY WALL SWITCH TYPE OCCUPANCY SENSOR

"DOS" DUAL TECHNOLOGY WALL SWITCH TYPE OCCUPANCY SENSOR WITH 0-10V DIMMING

"OS1" DUAL RELAY WALL SWITCH TYPE OCCUPANCY SENSOR

"OS2" INFRARED WALL SWITCH TYPE OCCUPANCY SENSOR

"D" 0-10V WALL SWITCH DIMMER

"VS" WALL SWITCH TYPE VACANCY SENSOR

"DVS" WALL SWITCH TYPE VACANCY SENSOR WITH 0-10V DIMMING

"DS" WALL POD WITH PRESET SCENES AND 0-10V DIMMING

OCCUPANCY SENSOR - CEILING MOUNTED

"A" - 1000 SQ. FT. COVERAGE

"B" - 2000 SQ. FT. COVERAGE

"C" - HALLWAY TYPE

"W" - WALL MOUNTED

VACANCY SENSOR - CEILING MOUNTED

"A" - 1000 SQ. FT. COVERAGE

"B" - 2000 SQ. FT. COVERAGE

"W" - WALL MOUNTED

"PP" - POWER PACK

"PC" - PHOTOCELL FOR LIGHTING CONTROL

"RC" - ROOM CONTROLLER

"TC" - TIME CLOCK

"PL" - PLUG LOAD CONTROLLER

"LS" - LIGHT LEVEL SENSOR - TYPE DENOTED

**POWER**

POWER POLE

LIGHTING ARRESTOR

LIGHTNING PROTECTION AIR TERMINAL

LIGHTNING PROTECTION CONDUCTOR SPLICE

GROUND ROD

GROUND ROD (PLAN VIEW)

GROUND CONNECTION - EXOTHERMIC WELD

GROUND TEST WELL

GROUND CONNECTION TO STEEL OR STRUCTURE

JUNCTION BOX CEILING/WALL MOUNTED

"FA" - FURNITURE POWER

"FD" - FURNITURE DATA

"DA" - DOOR ACTUATOR

"HD" - HAND DRYER

PULL BOX

BUILDING GROUND BAR

TELECOM GROUND BAR

PANELBOARD / DISTRIBUTION PANEL / SWITCHBOARD, SURFACE MOUNTED, FLUSH MOUNTED

MEDIUM VOLTAGE DRAWOUT CIRCUIT BREAKER

DRAWOUT CIRCUIT BREAKER

DRAWOUT CIRCUIT BREAKER SPACE

MOLDED CASE CIRCUIT BREAKER

ENCLOSED CIRCUIT BREAKER

TRANSFORMER

GENERATOR

MOTOR

MANUAL MOTOR STARTER WITH THERMAL OVERLOAD

**POWER**

MAG. MOTOR STARTER OR CONTACTOR

COMB. MOTOR STARTER (NON-FUSED)

COMB. MOTOR STARTER (FUSED)

COMBINATION STARTER WITH RESET BUTTON, HAND OPERATED ACTUATOR, AND INDICATOR LIGHT

FUSE

SAFETY DISC. SW. (NON-FUSED)

SAFETY DISC. SW. (FUSED)

VARIABLE FREQUENCY CONTROLLER

BUS DUCT WITH PLUG UN DISCONNECT (FUSED)

CONDUIT CONCEALED IN WALL OR OVERHEAD. CONDUIT SHOWN WITHOUT SLASH MARKS. SHALL CONTAIN 2 #12 & 1#12G CONDUCTORS IN 3/4" CONDUIT UNLESS SPECIFIC EQUIPMENT REQUIRES A DIFFERENT SIZE.

CONDUIT SHOWN WITH SLASH MARKS SHALL CONTAIN #12 CONDUCTOR PER SLASH MARK IN 3/4" CONDUIT UNLESS THE CONDUCTOR SIZE AND CONDUIT SIZE ARE SHOWN ADJACENT TO THE SLASH MARKS. SLASH MARK INDICATORS ARE: SHORT STRAIGHT=PHASE CONDUCTOR, LONG STRAIGHT=NEUTRAL CONDUCTOR, SHORT BENT ENDED=SWITCH LEGS, LONG STRAIGHT WITH A DOT=GROUND CONDUCTOR.

CONDUIT CONCEALED

CONDUIT EXPOSED

SURFACE RACEWAY

CONDUIT TRANSITION UP

CONDUIT TRANSITION DOWN

CONDUIT STUBBED OUT

HEAT TRACE WIRING

HOMERUN TO PANEL BOARD. LETTERS INDICATE PANEL NAME. ARROWS INDICATE NUMBER OF CIRCUITS. NUMBERS INDICATE CIRCUIT DESIGNATIONS IN PANEL.

SINGLE RECEPT. 120V, 20A, NEMA 5-20R UNLESS NOTED OTHERWISE

DUPLEX RECEPT. 120V, 20A, NEMA 5-20R UNLESS NOTED OTHERWISE

"WP" - WEATHERPROOF TYPE WITH WEATHER-PROOF WHILE IN USE COVER

"GFI" - GROUND FAULT INTERRUPTER, 4-6mA TYPE

"AC" - ABOVE COUNTER, 6" ABOVE COUNTER TO BOTTOM OF DEVICE

"UC" - UNDER COUNTER

"IC" - IN CABINETS, RECESSED RECEPTACLE

"DF" - MOUNTED WITHIN DRINKING FOUNTAIN CABINETS. COORDINATE MOUNTING HEIGHT IN FIELD USING APPROVED MANUFACTURER CUT SHEETS

"C" - CEILING MOUNTED

"USB" - WITH USB

"USB-C" - WITH USB TYPE C

"TR" - TAMPER RESISTANT

"CR" - CONTROLLED RECEPTACLE

SPLIT DUPLEX RECEPT.

ISOLATED GROUND RECEPT (DUPLEX)

RECEPT ON EMERGENCY CKT (DUPLEX)

QUADRUPLEX RECEPT. 120V, 20A, NEMA 5-20R UNLESS NOTED OTHERWISE

QUADRUPLEX RECEPTACLE ON EMERGENCY CIRCUIT

240 VOLT RECEPT.

FLOOR RECEPT. (DUPLEX SHOWN)

RECEPT ON DROP CORD (DUPLEX SHOWN)

RECEPT ON CORD REEL (DUPLEX SHOWN)

SPECIAL RECEPTACLE. NEMA CONFIGURATION AND RATING AS INDICATED

PIN & SLEEVE CONNECTOR / RECEPTACLE

CONNECTION TO EQUIPMENT REFER TO EQUIPMENT SCHEDULE FOR DETAILS

EQUIPMENT PLUG

MULTIPLE SERVICE OUTLET

MULTIPLE SERVICE FLR OUTLET

MULTIOUTLET ASSEMBLY

LOCKDOWN ALARM PUSHBUTTON

DOOR INTERLOCK

ELECTRIC DOOR OPERATOR

ELECTRIC HINGE

ELECTRIC LATCH

ELECTRIC STRIKE

"MS" MOTION SENSOR FOR ACCESS CONTROL

"PS" POWER SUPPLY FOR ACCESS CONTROL

"RE" RELAY

"S" DOOR STATUS CONTACTS

"ML" MAGNETIC LOCK

"DC" DOOR CONTACTS

"CR" CARD READER

"KP" KEYPAD

"WAP" WIRELESS ACCESS POINT

CCTV CAMERA F=FIXED, P=PAN, T=TILT, Z= ZOOM

SPEAKER (WALL OR CEILING MT.)

**POWER**

MAG. MOTOR STARTER OR CONTACTOR

COMB. MOTOR STARTER (NON-FUSED)

COMB. MOTOR STARTER (FUSED)

COMBINATION STARTER WITH RESET BUTTON, HAND OPERATED ACTUATOR, AND INDICATOR LIGHT

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CONDUIT EXPOSED

SURFACE RACEWAY

CONDUIT TRANSITION UP

CONDUIT TRANSITION DOWN

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EQUIPMENT PLUG

MULTIPLE SERVICE OUTLET

MULTIPLE SERVICE FLR OUTLET

MULTIOUTLET ASSEMBLY

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DOOR INTERLOCK

ELECTRIC DOOR OPERATOR

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"RE" RELAY

"S" DOOR STATUS CONTACTS

"ML" MAGNETIC LOCK

"DC" DOOR CONTACTS

"CR" CARD READER

"KP" KEYPAD

"WAP" WIRELESS ACCESS POINT

CCTV CAMERA F=FIXED, P=PAN, T=TILT, Z= ZOOM

SPEAKER (WALL OR CEILING MT.)

**GENERAL NOTES:**

- MINIMUM CIRCUIT BREAKER SIZE FOR CONDUITS SHOWN ON PLANS IS 20A, 1 P.O.C. FOR 120VAC UNLESS OTHERWISE NOTED. SHOWN ON PLANS
- MINIMUM BRANCH CIRCUIT WIRING SHALL BE #12 AWG. DERATE CONDUCTORS PER NEC FOR VOLTAGE DROP AND CONDUIT FILL.
- PROVIDE GROUNDING PER NEC (ARTICLE 250).
- PROVIDE A SEPARATE NEUTRAL CONDUCTOR FROM PANELBOARD FOR EACH BRANCH CIRCUIT.
- CONTRACTOR SHALL COORDINATE WORK WITH ASSOCIATED TRADES.
- CONTRACTOR SHALL SEAL WITH AN APPROVED METHOD ALL ELECTRICAL PENETRATIONS THRU FIRE FLOOR/PROOF RATED WALLS, FLOORS, CEILINGS OR OTHER AREAS.
- CONTRACTOR SHALL PROVIDE FUSES SIZED PER MANUFACTURER'S RECOMMENDATIONS FOR ALL EQUIPMENT INSTALLED WITH FUSED STARTERS OR DISCONNECTS.
- ALL EXTERIOR PVC CONDUIT SHALL TRANSITION TO RGS CONDUIT WITHIN 18" OF FOUNDATION WALL PRIOR TO PASSING THRU THAT WALL.
- CONTRACTOR SHALL PROVIDE RACEWAY, WIRE, CABLE AND ASSOCIATED FITTINGS ALONG WITH COMPLETE CONNECTIONS REQUIRED FOR BRANCH CIRCUITS FROM DEVICES TO FINAL OVERCURRENT DEVICE AND LOCAL CONTROL DEVICE(S) PER PROJECT SPECIFICATIONS.
- VERIFY EXACT LOCATION OF ELECTRICAL CONNECTION POINTS IN THE FIELD.
- CONDUIT SHALL BE CONCEALED WITHIN WALLS AND CEILINGS WHERE POSSIBLE. SOME CONDUIT SYSTEMS SHALL BE EXPOSED DUE TO THE CONSTRUCTION OF THE BUILDING. CONTRACTOR SHALL STRIVE TO CONSOLIDATE CONDUITS AND ARRANGE IN A GEOMETRICALLY ALIGNED FASHION TO HAVE A LOW IMPACT ON THE AESTHETICS OF THE SPACE. CONDUIT SHALL BE ROUTED FROM THE CORRIDOR DIRECTLY INTO EACH ROOM, NOT ROUTED FROM ROOM TO ROOM. CONTRACTOR SHALL PROVIDE AND NOTIFY CONSULTANT FOR REVIEW OF THE INSTALLED CONDUIT LAYOUT EARLY IN THE PROJECT. CONDUIT INSTALLATION SHALL CONTINUE UPON CONSULTANT APPROVAL AND IS SUBJECT TO MODIFICATIONS AS THE CONSULTANT SEES FIT. EXPOSED CONDUITS SHALL BE PAINTED TO MATCH SURROUNDING CONDITIONS. REFER TO CONSTRUCTION COORDINATION REQUIREMENTS IN THE PROJECT SPECIFICATIONS.
- REFER TO LIFE SAFETY AND ARCHITECTURAL PLANS FOR FIRE RATING REQUIREMENTS. BACKBOXES IN THESE AREAS SHALL HAVE A 1 HR MINIMUM UL LISTED FIRE RATING.
- PROVIDE LIGHTING CONTROLS INCLUDING DEVICE ITSELF, CONDUIT, CONDUCTORS, 0-10V WIRING, POWER PACKS, SLAVE PACKS, CONNECTORS, AND OTHER ACCESSORIES FOR A COMPLETE AND OPERATIONAL SYSTEM.
- RECEPTACLES AND TELECOMMUNICATION BOXES SHALL NOT BE LOCATED BACK-TO-BACK ON WALL. PROVIDE A MINIMUM OF 6" OF SEPARATION BETWEEN BOXES.
- ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ELECTRICIAN SHALL BE RESPONSIBLE FOR COMPLIANCE WITH MICHIGAN STATE UNIVERSITY TECHNICAL STANDARDS.

**ABBREVIATIONS**

& AND

(E), EXST EXISTING TO REMAIN

(N) NEW WORK

(R) REMOVE

(RE) RELOCATED EXISTING

@ AT

1P 1 POLE (2P, 3P, 4P ETC.)

' FEET

" INCHES

# NUMBER, POUNDS

Ø PHASE

Ø, DIA DIAMETER

Y WYE

Δ DELTA

A, AMP AMPERE

AFG ABOVE FINISHED GRADE

AFI ARC FAULT CIRCUIT BREAKER

AFR ARC FLASH REDUCTION CIRCUIT BREAKER

AHJ AUTHORITY HAVING JURISDICTION

AHU AIR HANDLING UNIT

ALUM ALUMINUM

ALT ALTERNATE

AFF ABOVE FINISHED FLOOR

AMPL AMPLIFIER

ANNUN ANNUNCIATOR

APPROX APPROXIMATE, APPROXIMATELY

ARCH ARCHITECT, ARCHITECTURAL

AT AMP TRIP RATING

ATS AUTOMATIC TRANSFER SWITCH

ATTN ATTENTION

AUTO AUTOMATIC

AUX AUXILIARY

AV AUDIO VISUAL

AWG AMERICAN WIRE GAUGE

B, BO BOTTOM OF

BAS BUILDING AUTOMATION SYSTEM

BATT BATTERY

BD BOARD

BKR BREAKER

BMS BUILDING MANAGEMENT SYSTEM

BOC BOTTOM OF CONCRETE

CAB CABINET

CATV CABLE TELEVISION

CB CIRCUIT BREAKER

CCTV CLOSED CIRCUIT TELEVISION

CK BREAKER WITH CONTACT KIT FOR GROUND FAULT ALARM ONLY INDICATION

CKT CIRCUIT

CL CENTERLINE

CLG CURRENT LIMITING

CLG CEILING

CMPR COMPRESSOR

CND CONDUIT

COMB COMBINATION

CONN CONNECTION

CONST CONSTRUCTION

CONT CONTINUOUS

CONV CONVECTOR

CP CIRCULATION PUMP OR CONTROL PANEL

CT CURRENT TRANSFORMER

**ABBREVIATIONS**

CU COPPER

DC DIRECT CURRENT

DWP DOMESTIC WATER CIRCULATING PUMP

DSCP DIRECT DIGITAL CONTROL PANEL

DE DUAL ELEMENT

DEPT DEPARTMENT

DIA, Ø DIAMETER

DISC DISCONNECT

DIST DISTRIBUTION

DN DOWN

DP DOUBLE POLE

DPR DAMPER

DS SAFETY DISCONNECT SWITCH

DT DOUBLE THROW

DWG, DWGS DRAWING, DRAWINGS

EC ELECTRICAL CONTRACTOR

EGC EQUIPMENT GROUND CONDUCTOR

ELEC ELECTRIC, ELECTRICAL

ELEV ELEVATOR

EMER EMERGENCY

EMS ENERGY MANAGEMENT SYSTEM

EMT ELECTRICAL METALLIC TUBING

EPO EMERGENCY POWER OFF

EQUIP EQUIPMENT

ES END SWITCH

EUH ELECTRIC UNIT HEATER

EWG ELECTRIC WATER COOLER

EWH ELECTRIC WATER HEATER

EXH EXHAUST

EXH-1 EXHAUST AIR - TYPE 1

EXH-2 EXHAUST AIR - TYPE 2

EXP EXPANSION PROOF

F FUSED

FA FIRE ALARM

FACP FIRE ALARM CONTROL PANEL

FBO FURNISHED BY OTHERS

FCU FAN COIL UNIT

FLOUR FLOUORESCENT

FLR FLOOR

FVNR FULL VOLTAGE NON-REVERSING

GA GAUGE

GALL GALLON

GALV GALVANIZED

GC GENERAL CONTRACTOR

GEN GENERATOR

GFI GROUND FAULT PROTECTOR

GND GROUND

GRS GALVANIZED RIGID STEEL (CONDUIT)

GYB GYPSUM BOARD

HID HIGH INTENSITY DISCHARGE

HOA HANDS-OFF-AUTOMATIC SWITCH

HORIZ HORIZONTAL

HP HORSEPOWER

HPF HIGH POWER FACTOR

HT HEIGHT

HTG HEATING

HTR HEATER

HV HIGH VOLTAGE

HVAC HEATING VENTILATION AND AIR CONDITIONING

HWP HYDRONIC WATER PUMP

HZ HERTZ

IC INTERRUPTER CAPACITY

IG ISOLATED GROUND

IMC INTERMEDIATE METAL CONDUIT

INC INCANDESCENT

IR INFRARED

J-BX, JB JUNCTION BOX

K KIPS

kmil THOUSAND CIRCULAR MILLS (CMC)

KIP-FOOT KIP-FOOT

KK KIRK KEY INTERLOCK

KV KILOVOLT

KVA KILOVOLT-AMPERE

KVAR KILOVOLT-AMPERE REACTIVE

KW KILOWATT

KWH KILOWATT HOUR

LA LIGHTING ARRESTOR

LF LINEAR FEET

LOC LOCATION

LT LIGHT

LTG LIGHTING

LTNG LIGHTNING

LV LOW VOLTAGE

MC MOMENTARY CONTACT

mA MILLIAMPERE

MAG.S MAGNETIC STARTER

MAX MAXIMUM

MC MECHANICAL CONTRACTOR

MCB MAIN CIRCUIT BREAKER

MCC MOTOR CONTROL CENTER

MDP MAIN DISTRIBUTION PANEL

MECH MECHANICAL

MEZZ MEZZANINE

MFR MANUFACTURER

MFS MAIN FUSED DISCONNECT SWITCH

MH MANHOLE

MIC MICROPHONE

MIN MINIMUM

MISC MISCELLANEOUS

MLO MAIN LUG ONLY

MOA MULTIOUTLET ASSEMBLY

MT MOUNT

MTC EMPTY CONDUIT

MTR MOTOR, MOTORIZED

MTS MANUAL TRANSFER SWITCH

MV MEDIUM VOLTAGE

N NEUTRAL

NA NOT APPLICABLE

NC NORMALLY CLOSED

NEC NATIONAL ELECTRICAL CODE

NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION

NF NON-FUSED

NFDS NON-FUSED SAFETY DISCONNECT SWITCH

NIC NOT IN CONTRACT

NL NIGHT LIGHT - WIRE AHEAD OF SWITCH/CONTROL

N/O NORMALLY OPEN

No. NUMBER

NPF NORMAL POWER FACTOR

NRTL NATIONALLY RECOGNIZED TESTING LABORATORY

NTS NOT TO SCALE

NW NORMAL WEIGHT

OC ON CENTER

OCPD OVERCURRENT PROTECTION DEVICE

OH OVERHEAD

OL OVERLOADS

P POLE

PA PUBLIC ADDRESS

PB PULL BOX OR PUSH BUTTON

PC PLUMBING CONTRACTOR

PE PHOTO ELECTRIC CELL

PEST PEDESTAL

PF POWER FACTOR

PH PHASE

PIV POST INDICATING VALVE

PL PLATE

PNL PANEL

PROJ PROJECTION

PRV POWER ROOF VENTILATOR

PT POTENTIAL TRANSFORMER

PVC POLYVINYL CHLORIDE

PWR POWER

QTY QUANTITY

RC REMOTE CONTROL

RECP RECEPTACLE

REQD REQUIRED

RM ROOM

RMS ROOT MEAN SQUARE

RSC RIGID STEEL CONDUIT

RTU ROOF TOP UNIT

REQMTS REQUIREMENTS

SIS STOP/START PUSHBUTTONS

SCHED SCHEDULE

SEC SECONDARY

SF SOFT SQUARE FEET

SFB SUB FEED BREAKER KIT

SHT SHEET

SIM SIMILAR

SPD SURGE PROTECTION DEVICE

SPEC SPECIFICATION

SPKR SPEAKER

SS SAFETY SWITCH

ST SINGLE THROW

SST STAINLESS STEEL

STA STATION

STD STANDARD

STRUCT STRUCTURAL, STRUCTURE

SW SWITCH

SWBD SWITCHBOARD

SWGR SWITCHGEAR

SYM SYMMETRICAL

SYS SYSTEM

SSW SELECTOR SWITCH

SSL SHORT SLOTTED

SPCS SPACES

TEL TELEPHONE

TEL/DATA TELEPHONE/DATA

TERM TERMINAL

TL TWIST LOCK

TS TIME SWITCH

T-STAT THERMOSTAT

TTB HEATING VENTILATION TERMINAL BOARD

TV TELEVISION

TVTC TELEVISION TERMINAL CABINET

TYP TYPICAL

TTC TELEPHONE TERMINAL CABINET

UC UNDER COUNTER

UG UNDERGROUND

UGE UNDERGROUND ELECTRICAL

UGT UNDERGROUND TELEPHONE

UH UNIT HEATER

UNO UNLESS NOTED OTHERWISE

UTL UTILITY

UV UNIT VENTILATOR OR ULTRAVIOLET

UNK UNKNOWN

V VOLT

VVA VOLT-AMPERES

VDT VIDEO DISPLAY TERMINAL

VFC VARIABLE FREQUENCY CONTROLLER

VIF VERIFY IN FIELD

VOM VOLTMETER

VOL VOLUME

VERT VERTICAL

W WATT

W WITH

W/O WITHOUT

WSF WATTS PER SQUARE FOOT

WG WIRE GUARD

WH WATER HEATER

WP WEATHERPROOF

XFMR TRANSFORMER

XFR TRANSFER

**GENERAL NOTES:**

- MINIMUM CIRCUIT BREAKER SIZE FOR CONDUITS SHOWN ON PLANS IS 20A, 1 P.O.C. FOR 120VAC UNLESS OTHERWISE NOTED. SHOWN ON PLANS
- MINIMUM BRANCH CIRCUIT WIRING SHALL BE #12 AWG. DERATE CONDUCTORS PER NEC FOR VOLTAGE DROP AND CONDUIT FILL.
- PROVIDE GROUNDING PER NEC (ARTICLE 250).
- PROVIDE A SEPARATE NEUTRAL CONDUCTOR FROM PANELBOARD FOR EACH BRANCH CIRCUIT.
- CONTRACTOR SHALL COORDINATE WORK WITH ASSOCIATED TRADES.
- CONTRACTOR SHALL SEAL WITH AN APPROVED METHOD ALL ELECTRICAL PENETRATIONS THRU FIRE FLOOR/PROOF RATED WALLS, FLOORS, CEILINGS OR OTHER AREAS.
- CONTRACTOR SHALL PROVIDE FUSES SIZED PER MANUFACTURER'S RECOMMENDATIONS FOR ALL EQUIPMENT INSTALLED WITH FUSED STARTERS OR DISCONNECTS.
- ALL EXTERIOR PVC CONDUIT SHALL TRANSITION TO RGS CONDUIT WITHIN 18" OF FOUNDATION WALL PRIOR TO PASSING THRU THAT WALL.
- CONTRACTOR SHALL PROVIDE RACEWAY, WIRE, CABLE AND ASSOCIATED FITTINGS ALONG WITH COMPLETE CONNECTIONS REQUIRED FOR BRANCH CIRCUITS FROM DEVICES TO FINAL OVERCURRENT DEVICE AND LOCAL CONTROL DEVICE(S) PER PROJECT SPECIFICATIONS.
- VERIFY EXACT LOCATION OF ELECTRICAL CONNECTION POINTS IN THE FIELD.
- CONDUIT SHALL BE CONCEALED WITHIN WALLS AND CEILINGS WHERE POSSIBLE. SOME CONDUIT SYSTEMS SHALL BE EXPOSED DUE TO THE CONSTRUCTION OF THE BUILDING. CONTRACTOR SHALL STRIVE TO CONSOLIDATE CONDUITS AND ARRANGE IN A GEOMETRICALLY ALIGNED FASHION TO HAVE A LOW IMPACT ON THE AESTHETICS OF THE SPACE. CONDUIT SHALL BE ROUTED FROM THE CORRIDOR DIRECTLY INTO EACH ROOM, NOT ROUTED FROM ROOM TO ROOM. CONTRACTOR SHALL PROVIDE AND NOTIFY CONSULTANT FOR REVIEW OF THE INSTALLED CONDUIT LAYOUT EARLY IN THE PROJECT. CONDUIT INSTALLATION SHALL CONTINUE UPON CONSULTANT APPROVAL AND IS SUBJECT TO MODIFICATIONS AS THE CONSULTANT SEES FIT. EXPOSED CONDUITS SHALL BE PAINTED TO MATCH SURROUNDING CONDITIONS. REFER TO CONSTRUCTION COORDINATION REQUIREMENTS IN THE PROJECT SPECIFICATIONS.
- REFER TO LIFE SAFETY AND ARCHITECTURAL PLANS FOR FIRE RATING REQUIREMENTS. BACKBOXES IN THESE AREAS SHALL HAVE A 1 HR MINIMUM UL LISTED FIRE RATING.
- PROVIDE LIGHTING CONTROLS INCLUDING DEVICE ITSELF, CONDUIT, CONDUCTORS, 0-10V WIRING, POWER PACKS, SLAVE PACKS, CONNECTORS, AND OTHER ACCESSORIES FOR A COMPLETE AND OPERATIONAL SYSTEM.
- RECEPTACLES AND TELECOMMUNICATION BOXES SHALL NOT BE LOCATED BACK-TO-BACK ON WALL. PROVIDE A MINIMUM OF 6" OF SEPARATION BETWEEN BOXES.
- ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ELECTRICIAN SHALL BE RESPONSIBLE FOR COMPLIANCE WITH MICHIGAN STATE UNIVERSITY TECHNICAL STANDARDS.

**ABBREVIATIONS**

& AND

(E), EXST EXISTING TO REMAIN

(N) NEW WORK

(R) REMOVE

(RE) RELOCATED EXISTING

@ AT

1P 1 POLE (2P, 3P, 4P ETC.)

' FEET

" INCHES

# NUMBER, POUNDS

Ø PHASE

Ø, DIA DIAMETER

Y WYE

Δ DELTA

A, AMP AMPERE

AFG ABOVE FINISHED GRADE

AFI ARC FAULT CIRCUIT BREAKER

AFR ARC FLASH REDUCTION CIRCUIT BREAKER

AHJ AUTHORITY HAVING JURISDICTION

AHU AIR HANDLING UNIT

ALUM ALUMINUM

ALT ALTERNATE

AFF ABOVE FINISHED FLOOR

AMPL AMPLIFIER

ANNUN ANNUNCIATOR

APPROX APPROXIMATE, APPROXIMATELY

ARCH ARCHITECT, ARCHITECTURAL

AT AMP TRIP RATING

ATS AUTOMATIC TRANSFER SWITCH

ATTN ATTENTION

AUTO AUTOMATIC

AUX AUXILIARY

AV AUDIO VISUAL

AWG AMERICAN WIRE GAUGE

B, BO BOTTOM OF

BAS BUILDING AUTOMATION SYSTEM

BATT BATTERY

BD BOARD

BKR BREAKER

BMS BUILDING MANAGEMENT SYSTEM

BOC BOTTOM OF CONCRETE

CAB CABINET

CATV CABLE TELEVISION

CB CIRCUIT BREAKER

CCTV CLOSED CIRCUIT TELEVISION

CK BREAKER WITH CONTACT KIT FOR GROUND FAULT ALARM ONLY INDICATION

CKT CIRCUIT

CL CENTERLINE

CLG CURRENT LIMITING

CLG CEILING

CMPR COMPRESSOR

CND CONDUIT

COMB COMBINATION

CONN CONNECTION

CONST CONSTRUCTION

CONT CONTINUOUS

CONV CONVECTOR

CP CIRCULATION PUMP OR CONTROL PANEL

CT CURRENT TRANSFORMER

**ABBREVIATIONS**

CU COPPER

DC DIRECT CURRENT

DWP DOMESTIC WATER CIRCULATING PUMP

DSCP DIRECT DIGITAL CONTROL PANEL

DE DUAL ELEMENT

DEPT DEPARTMENT

DIA, Ø DIAMETER

DISC DISCONNECT

DIST DISTRIBUTION

DN DOWN

DP DOUBLE POLE

DPR DAMPER

DS SAFETY DISCONNECT SWITCH

DT DOUBLE THROW

DWG, DWGS DRAWING, DRAWINGS

EC ELECTRICAL CONTRACTOR

EGC EQUIPMENT GROUND CONDUCTOR

ELEC ELECTRIC, ELECTRICAL

ELEV ELEVATOR

EMER EMERGENCY

EMS ENERGY MANAGEMENT SYSTEM

EMT ELECTRICAL METALLIC TUBING

EPO EMERGENCY POWER OFF

EQUIP EQUIPMENT

ES END SWITCH

EUH ELECTRIC UNIT HEATER

EWG ELECTRIC WATER COOLER

EWH ELECTRIC WATER HEATER

EXH EXHAUST

EXH-1 EXHAUST AIR - TYPE 1

EXH-2 EXHAUST AIR - TYPE 2

EXP EXPANSION PROOF

F FUSED

FA FIRE ALARM

FACP FIRE ALARM CONTROL PANEL

FBO FURNISHED BY OTHERS

FCU FAN COIL UNIT

FLOUR FLOUORESCENT

FLR FLOOR

FVNR FULL VOLTAGE NON-REVERSING

GA GAUGE

GALL GALLON

GALV GALVANIZED

GC GENERAL CONTRACTOR

GEN GENERATOR

GFI GROUND FAULT PROTECTOR

GND GROUND

GRS GALVANIZED RIGID STEEL (CONDUIT)

GYB GYPSUM BOARD

HID HIGH INTENSITY DISCHARGE

HOA HANDS-OFF-AUTOMATIC SWITCH

HORIZ HORIZONTAL

HP HORSEPOWER

HPF HIGH POWER FACTOR

HT HEIGHT

HTG HEATING

HTR HEATER

HV HIGH VOLTAGE

HVAC HEATING VENTILATION AND AIR CONDITIONING

HWP HYDRONIC WATER PUMP

HZ HERTZ

IC INTERRUPTER CAPACITY

IG ISOLATED GROUND

IMC INTERMEDIATE METAL CONDUIT

INC INCANDESCENT

IR INFRARED

J-BX, JB JUNCTION BOX

K KIPS

kmil THOUSAND CIRCULAR MILLS (CMC)

KIP-FOOT KIP-FOOT

KK KIRK KEY INTERLOCK

KV KILOVOLT

KVA KILOVOLT-AMPERE

KVAR KILOVOLT-AMPERE REACTIVE

KW KILOWATT

KWH KILOWATT HOUR

LA LIGHTING ARRESTOR

LF LINEAR FEET

LOC LOCATION

LT LIGHT

LTG LIGHTING

LTNG LIGHTNING

LV LOW VOLTAGE

MC MOMENTARY CONTACT

mA MILLIAMPERE

MAG.S MAGNETIC STARTER

MAX MAXIMUM

MC MECHANICAL CONTRACTOR

MCB MAIN CIRCUIT BREAKER

MCC MOTOR CONTROL CENTER

MDP MAIN DISTRIBUTION PANEL

MECH MECHANICAL

MEZZ MEZZANINE

MFR MANUFACTURER

MFS MAIN FUSED DISCONNECT SWITCH

MH MANHOLE

MIC MICROPHONE

MIN MINIMUM

MISC MISCELLANEOUS

MLO MAIN LUG ONLY

MOA MULTIOUTLET ASSEMBLY

MT MOUNT

MTC EMPTY CONDUIT

MTR MOTOR, MOTORIZED

MTS MANUAL TRANSFER SWITCH

MV MEDIUM VOLTAGE

N NEUTRAL

NA NOT APPLICABLE

NC NORMALLY CLOSED

NEC NATIONAL ELECTRICAL CODE

NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION

NF NON-FUSED

NFDS NON-FUSED SAFETY DISCONNECT SWITCH

NIC NOT IN CONTRACT

NL NIGHT LIGHT - WIRE AHEAD OF SWITCH/CONTROL

N/O NORMALLY OPEN

No. NUMBER

NPF NORMAL POWER FACTOR

NRTL NATIONALLY RECOGNIZED TESTING LABORATORY

NTS NOT TO SCALE

NW NORMAL WEIGHT

OC ON CENTER

OCPD OVERCURRENT PROTECTION DEVICE

OH OVERHEAD

OL OVERLOADS

P POLE

PA PUBLIC ADDRESS

PB PULL BOX OR PUSH BUTTON

PC PLUMBING CONTRACTOR

PE PHOTO ELECTRIC CELL

PEST PEDESTAL

PF POWER FACTOR

PH PHASE

PIV POST INDICATING VALVE

PL PLATE

PNL PANEL

PROJ PROJECTION

PRV POWER ROOF VENTILATOR

PT POTENTIAL TRANSFORMER

PVC POLYVINYL CHLORIDE

PWR POWER

QTY QUANTITY

RC REMOTE CONTROL

RECP RECEPTACLE

REQD REQUIRED

RM ROOM

RMS ROOT MEAN SQUARE

RSC RIGID STEEL CONDUIT

RTU ROOF TOP UNIT

REQMTS REQUIREMENTS

SIS STOP/START PUSHBUTTONS

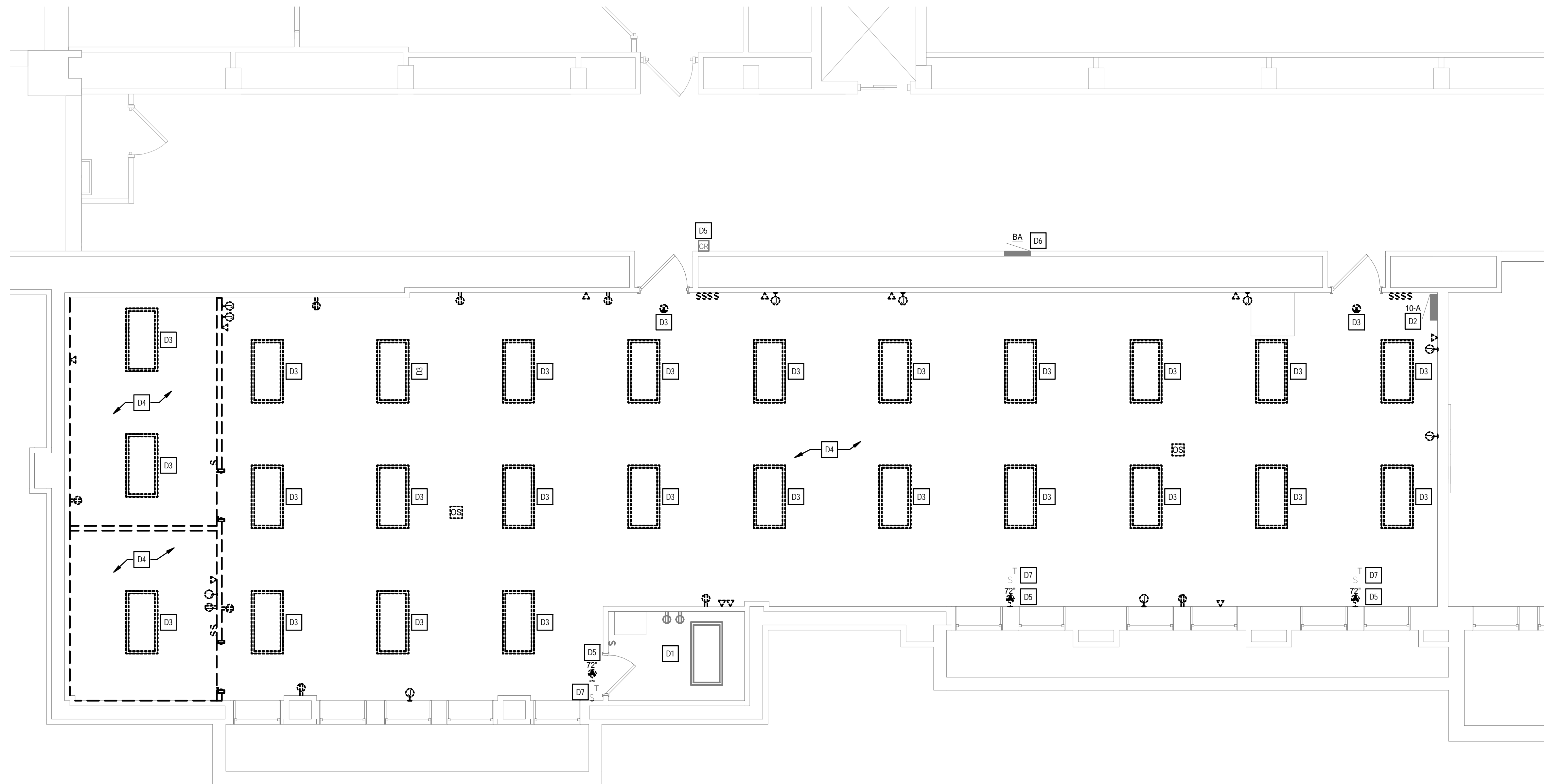
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DEMOLITION KEYNOTES: #

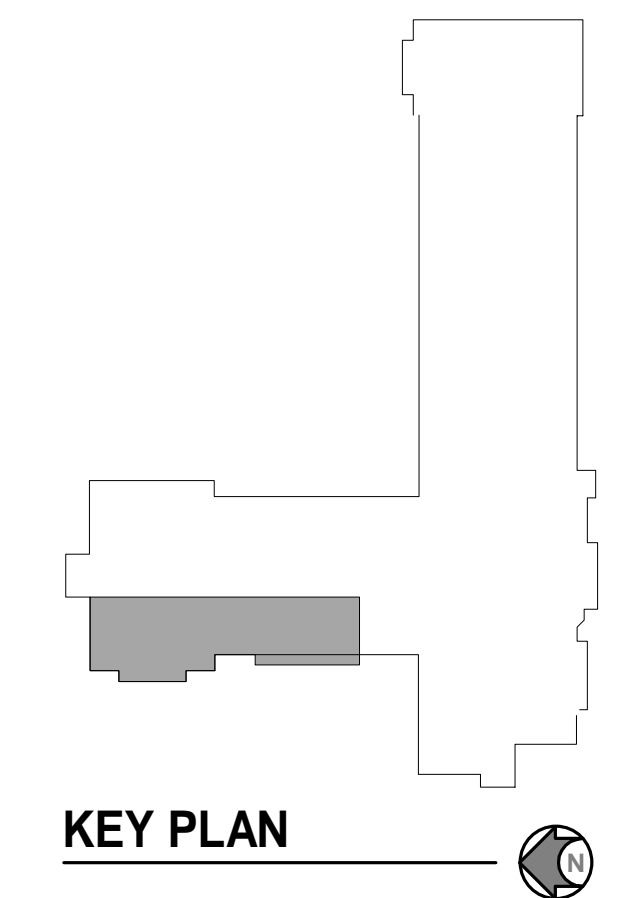
- D1 NO WORK IN SPACE UNLESS NOTED OTHERWISE.
- D2 PANEL TO REMAIN. DISCONNECT AND REMOVE ALL BRANCH CIRCUITS AND WIRES. BREAKERS TO REMAIN FOR REUSE.
- D3 LIGHT FIXTURE TO BE DISCONNECTED, REMOVED, AND TURNED OVER TO OWNER.
- D4 DISCONNECT AND REMOVE ALL DEVICES IN SPACE UNLESS OTHERWISE NOTED. REMOVE ALL SURFACE MOUNT CONDUIT, WIRE, AND SURFACE MOUNT RACEWAY TO SOURCE. ALL JUNCTION BOXES AND CONDUIT IN EXISTING WALLS SHALL REMAIN AND BE CAPPED.
- D5 DISCONNECT AC WINDOW UNIT FOR REMOVAL BY OTHERS. CONTRACTOR SHALL REMOVE DEVICE, SURFACE MOUNT RACEWAY, JUNCTION BOX, AND WIRE ARE TO REMAIN FOR NEW WORK. SEE POWER PLAN FOR MORE INFORMATION.
- D6 PANEL TO REMAIN.
- D7 TIMER SWITCH TO REMAIN.

GENERAL DEMOLITION NOTES:

- A. ANY EXISTING CONDITIONS INDICATED ARE BASED ON INFORMATION PROVIDED BY OTHERS AND POSSIBLE LIMITED FIELD VERIFICATION. THE CONTRACTOR SHALL ADJUST FOR THE ACTUAL FIELD CONDITIONS AT NO EXPENSE TO THE OWNER.
- B. THE CONTRACTOR SHALL VISIT THE PROJECT SITE, REVIEW EXISTING CONDITIONS AGAINST THE PLANS, AND FAMILIARIZE THEMSELVES WITH THE WORK PRIOR TO BIDDING AND START OF THE WORK.
- C. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING EQUIPMENT, DEVICES, AND LUMINAIRES AS INDICATED AND/OR AS REQUIRED TO ALLOW FOR INSTALLATION AND CONSTRUCTION OF THE NEW WORK. REMOVE ALL EQUIPMENT, DEVICES, LUMINAIRES, CONDUITS, SUPPORTS, HANGERS, ECT. THAT ARE NOT SHOWN AND ARE REQUIRED TO BE REMOVED IN ORDER TO COMPLETE THE NEW WORK.
- D. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL DEVICES IN WALLS BEING REMOVED. REMOVE BOXES, CONDUITS, AND WIRE TO SOURCE OR FIRST JUNCTION BOX TO MAINTAIN EXISTING DEVICES ON SAME CIRCUIT.
- E. MAINTAIN CONTINUITY OF EXISTING CIRCUITS AS REQUIRED TO PROVIDE POWER TO REMAINING EQUIPMENT, DEVICES, AND LUMINAIRES THAT ARE NOT BEING REMOVED.



1 BASMENT DEMOLITION PLAN  
SCALE: 1/4" = 1'-0"



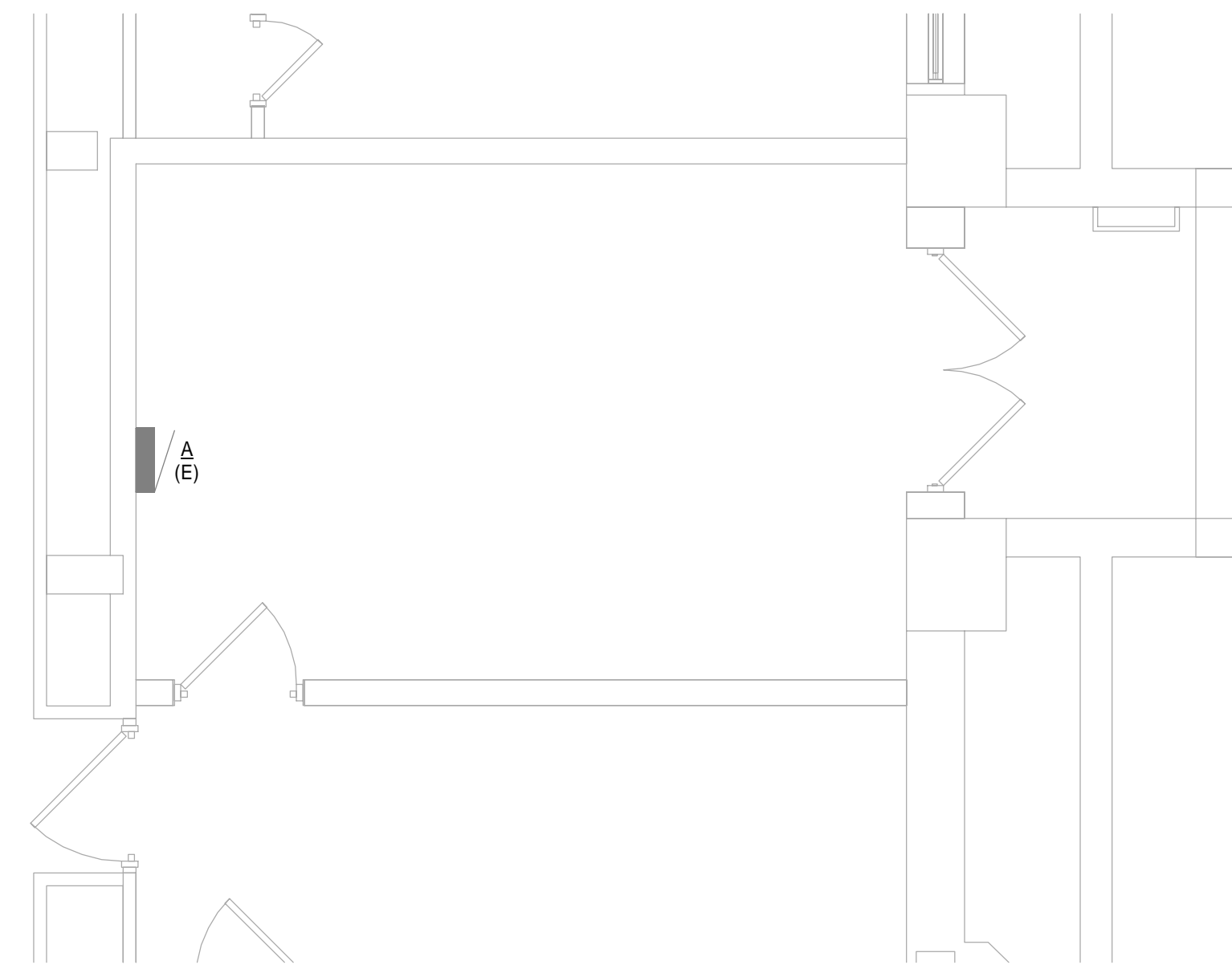
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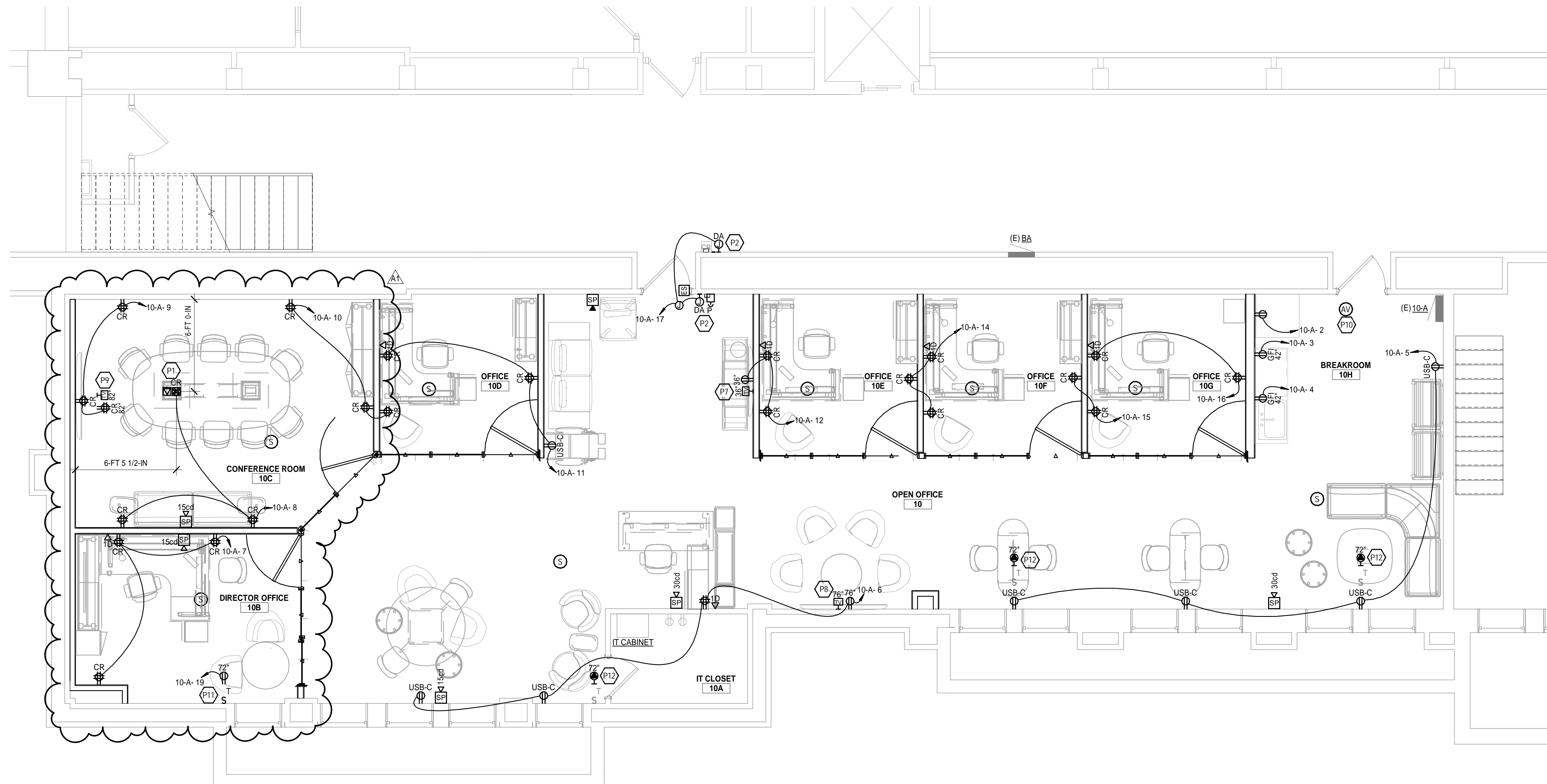
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DATE	-
SCALE	AS INDICATED

REVISIONS

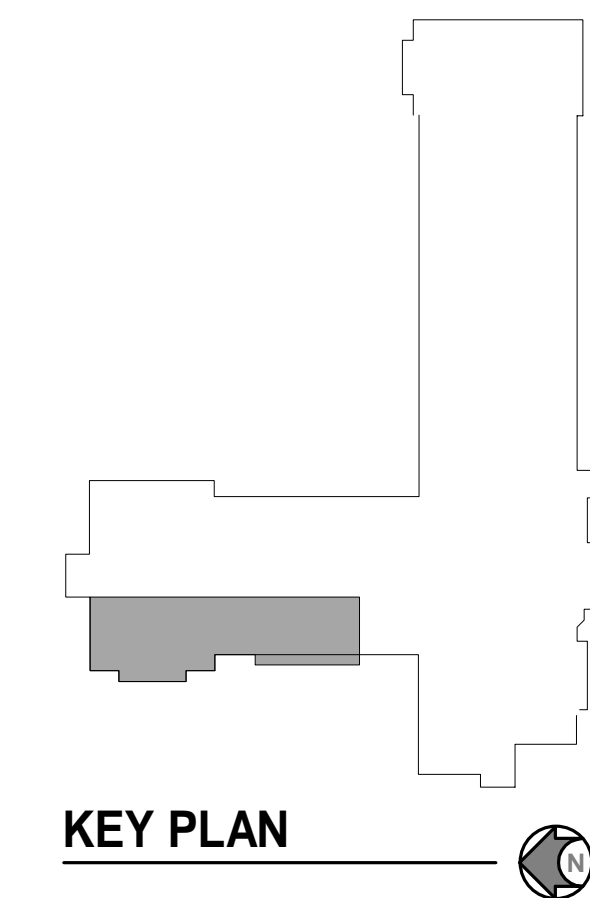
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2 BASMENT MAIN ELECTRICAL ROOM ENLARGMENT  
SCALE : 1/4" = 1'-0"



1 BASMENT POWER PLAN  
SCALE : 1/4" = 1'-0"



**POWER KEYNOTES:** (P)

- P1 PROVIDE RECESSED CONCRETE ON GRADE FLOORBOX HUBBELL SYSTEM ONE 4-GANG FLOOR BOX CFB4G30CR. PROVIDE (2) DUPLEX POWER OUTLETS, (1) DUPLEX DATA OUTLETS, (1) USB OUTLET, BARRIER KIT, BUSHINGS, AND 24GCCVRLU ALUMINUM POWDER COATED COVER PLATE ASSEMBLY. PROVIDE 3/4-INCH CONDUIT FOR POWER AND 1-INCH CONDUIT FOR LOW VOLTAGE. ROUTE POWER AND LOW VOLTAGE CONDUIT BELOW GRADE AND UP NEAREST WALL. PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND NEAT INSTALLATION. CORRDINATE EXACT LOCATION OF FLOOR BOX WITH ARCHITECT AND FURNITURE VENDOR PRIOR TO INSTALLATION.
- P2 PROVIDE JUNCTION BOX AND CONDUIT FOR AUTOMATIC DOOR OPERATOR AND LOCKDOWN DOWN ALARM PUSHBUTTON, NEW DOOR LOCKDOWN EQUIPMENT SHALL BE TIED INTO EXISTING SYSTEM. COORDINATE ALL REQUIREMENTS WITH ARCHITECTURAL DOOR HARDWARE SET AND CLIENT PRIOR TO INSTALLATION.
- P7 PROVIDE SINGLE GANG JUNCTION BOX FOR AV TELEVISION LOW VOLTAGE REQUIREMENTS. ROUTE 1 1/4-INCH CONDUIT FROM JUNCTION BOX TO ABOVE CEILING.
- P8 PROVIDE TWO GANG JUNCTION BOX FOR AV TELEVISION LOW VOLTAGE REQUIREMENTS. ROUTE 1 1/4-INCH CONDUIT FROM JUNCTION BOX TO ABOVE CEILING.
- P9 PROVIDE SINGLE GANG JUNCTION BOX FOR AV TELEVISION LOW VOLTAGE REQUIREMENTS. ROUTE 1 1/4-INCH CONDUIT FROM JUNCTION BOX TO ABOVE CEILING AND 1-INCH CONDUIT FROM JUNCTION BOX TO RECESSED FLOOR BOX.
- P10 PROVIDE AUDIOVISUAL CONTROL MODULE FOR CONNECTION WITH NEW FIRE ALARM DEVICES. SEE FIRE ALARM RISER DIAGRAM FOR MORE INFORMATION.
- P11 CONTRACTOR SHALL PROVIDE NEMA 5-15P RECEPTACLE AND INTERMATIC 6-HOUR TIMER SWITCH FOR CONTROL OF WINDOW AC UNIT. CONTRACTOR SHALL UTILIZE SMALL BOX AND SMALL SURFACE MOUNT RACEWAY SURFACE MOUNTING DEVICE.
- P12 CONTRACTOR SHALL INSTALL NEW NEMA 6-15P PLUG IN EXISTING JUNCTION BOX. CONTRACTOR SHALL UTILIZE EXISTING WIRE/CIRCUIT AND RACEWAY FOR WIRING NEW PLUG.

**GENERAL POWER NOTES:**

- A. PROVIDE 2-INCH CONDUIT SLEEVE AND SEAL AS REQUIRED PER ARCHITECTURAL CODE PLANS INTO ALL SPACES WITH LOW VOLTAGE DEVICES. OPEN OFFICES SHALL BE PROVIDED WITH A MINIMUM OF (4) SLEEVES AND TRAINING ROOMS WITH A MINIMUM OF (3) SLEEVES.
- B. NEW FIRE ALARM DEVICES SHALL BE CONNECTED TO EXISTING BUILDING FIRE ALARM SYSTEM. ALL FIRE ALARM CONDUITS SHALL BE RED IN COLOR.
- C. ALL OUTLETS DENOTED WITH "CR" SHALL BE CONTROLLED QUAD RECEPTACLES. LEFT SIDE OF QUAD SHALL BE CONTROLLED AND HAVE A GREEN COLOR FINISH. RIGHT SIDE OF QUAD SHALL BE UNCONTROLLED AND HAVE STANDARD COLOR FINISH.
- D. CONTRACTOR TO UTILIZE EXISTING RECESSED JUNCTION BOXES WHERE POSSIBLE. ALL OTHER NEW DEVICES ON EXISTING WALLS SHALL UTILIZE SMALL BOX AND SMALL SURFACE MOUNT RACE WAY.

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**LIGHTING KEYNOTES:**

- L1 WIRE EMERGENCY BATTERY SENSE AHEAD OF LOCAL LIGHTING CONTROLS.
- L2 CONTRACTOR SHALL MOUNT (4) LIGHTING CONTROL STATIONS WITHIN A SINGLE 4-GANG BOX.

**GENERAL LIGHTING NOTES:**

- A. CONTRACTOR TO UTILIZE EXISTING RECESSED JUNCTION BOXES WHERE POSSIBLE. ALL OTHER NEW DEVICES ON EXISTING WALLS SHALL UTILIZE SURFACE MOUNT RACE WAY.



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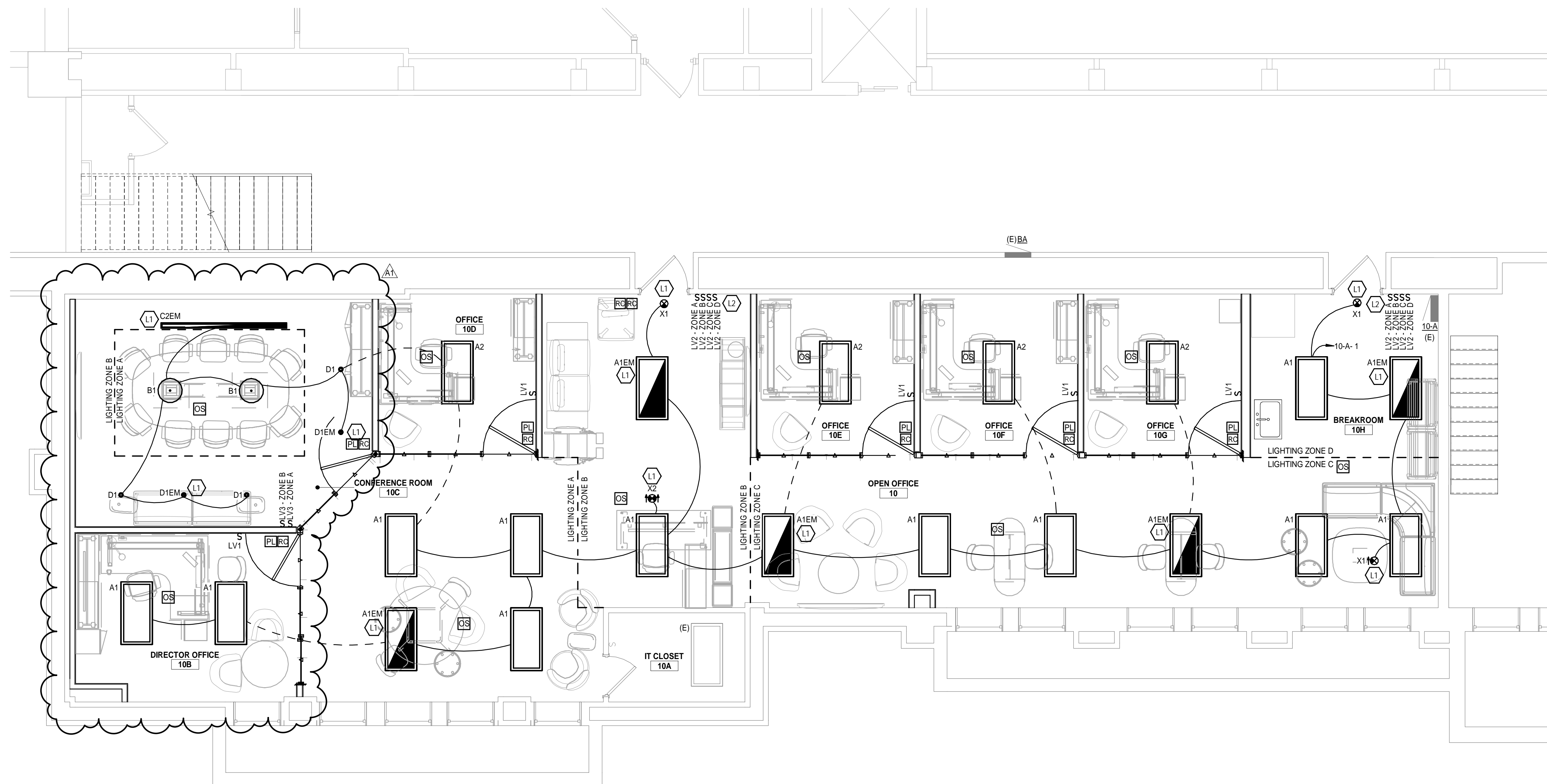
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**1 FIRST FLOOR LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"

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LIGHTING PLAN

**E201**

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KEY PLAN



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SCALE AS INDICATED

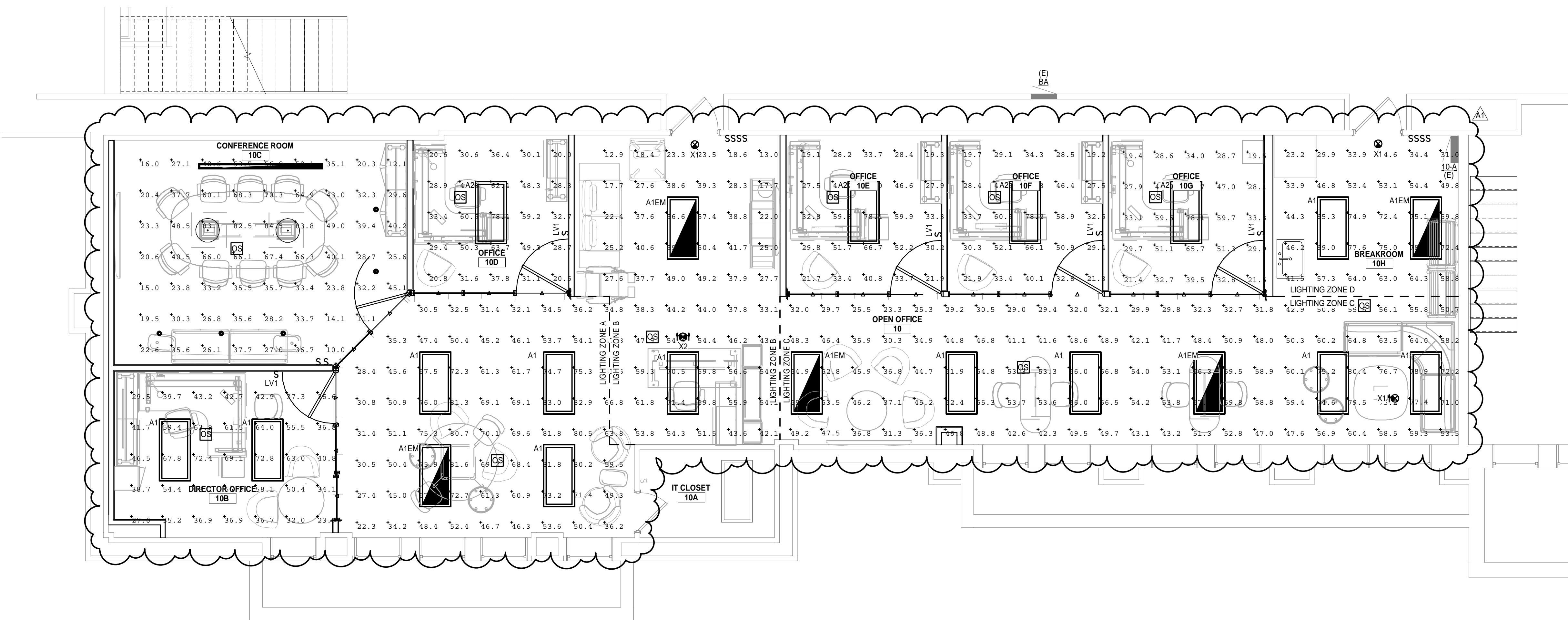
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LIGHTING CALCS

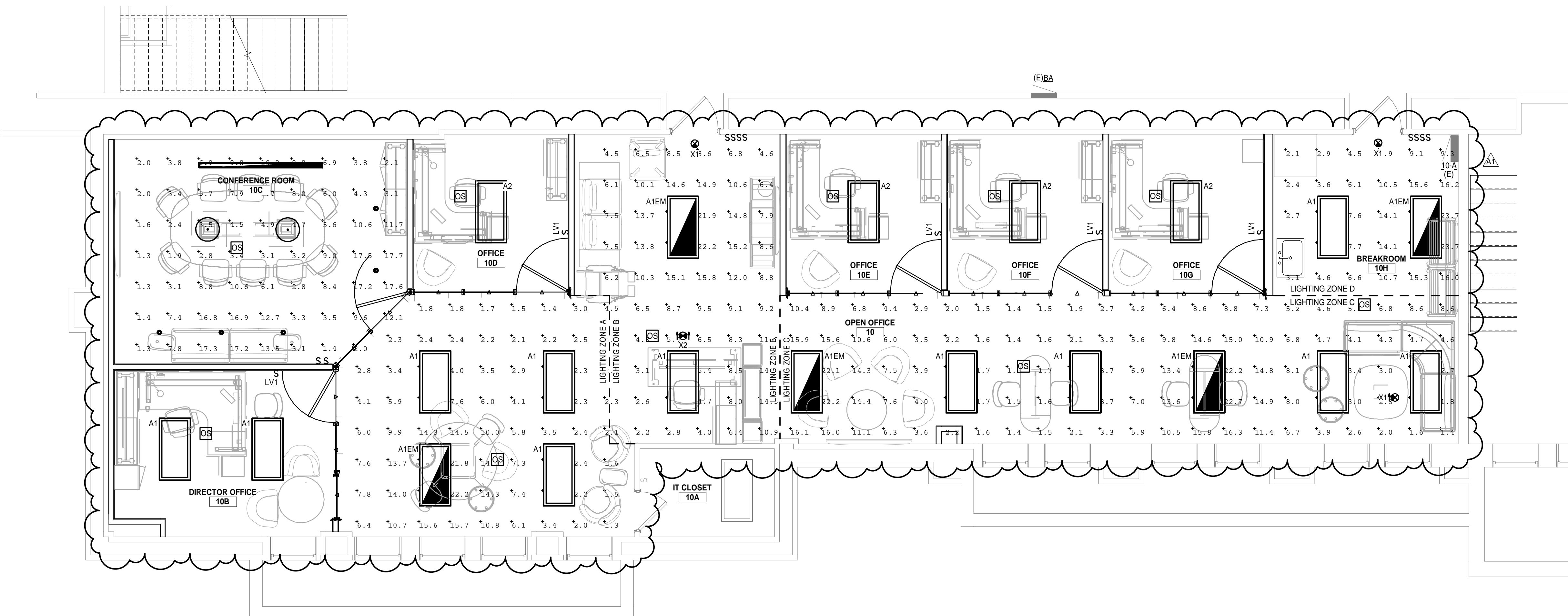
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1 NORMAL LIGHTING PHOTOMETRICS

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



2 EMERGENCY LIGHTING PHOTOMETRICS

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

KEY PLAN

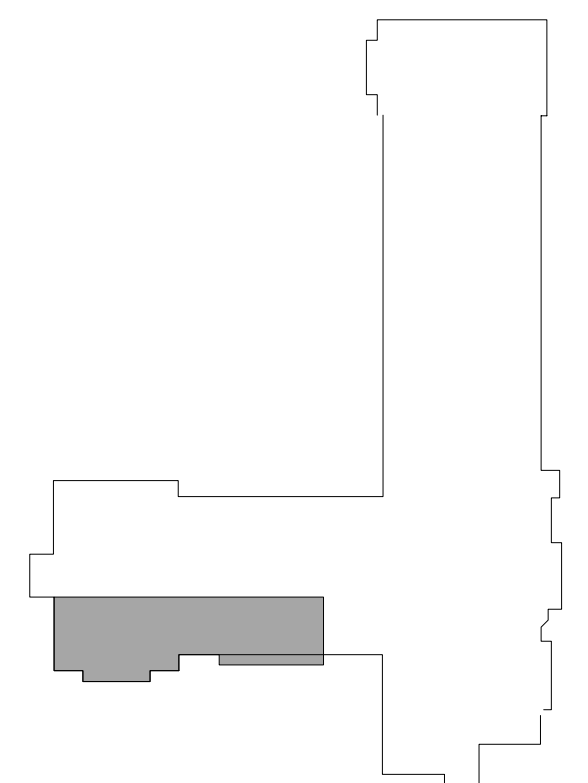
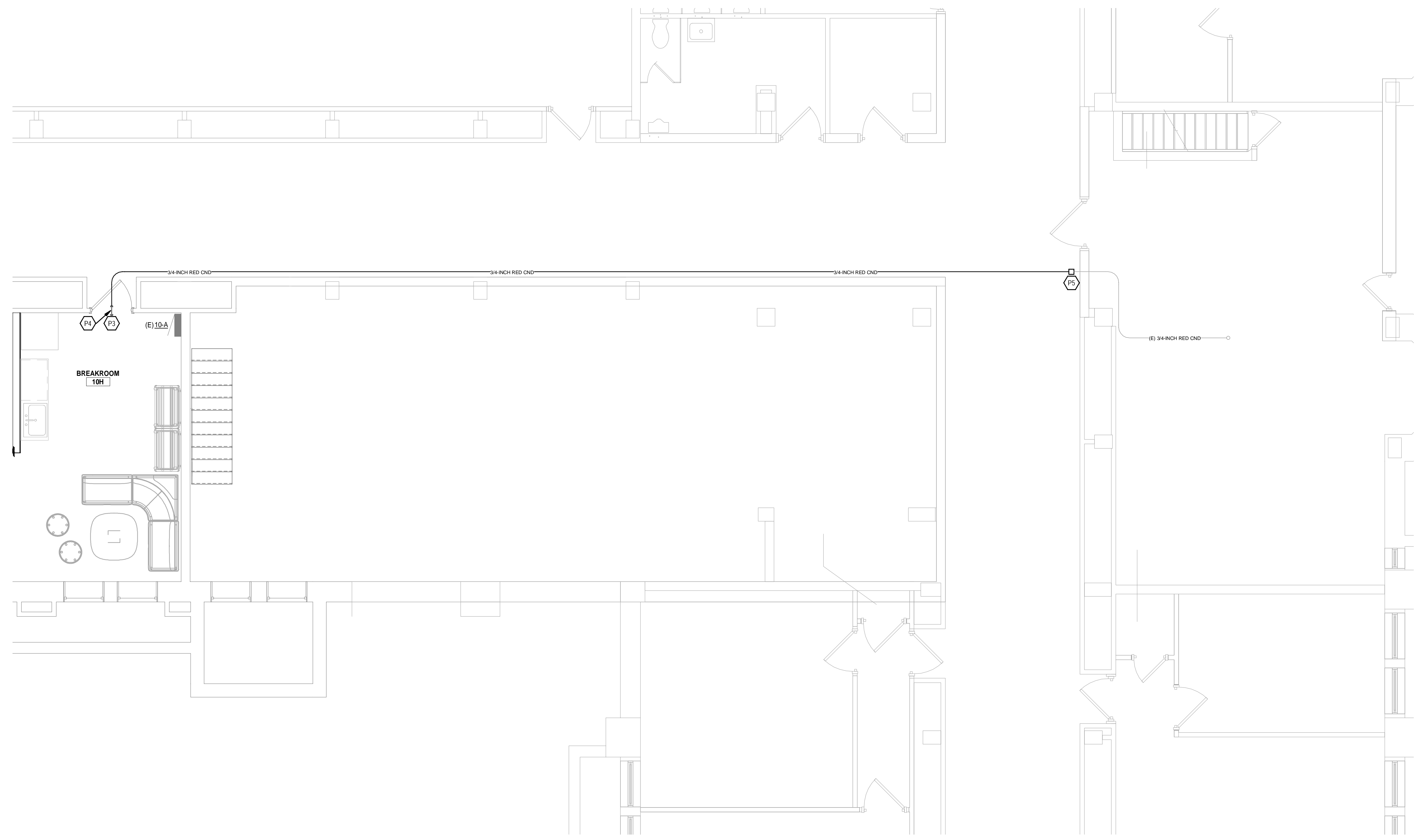


POWER KEYNOTES: (P)

- P3 CONTRACTOR SHALL CONTINUE CONDUIT ABOVE CEILING AS REQUIRED PER FLOOR PLANS.
- P4 PROVIDE 3/4-INCH CONDUIT SLEEVE WITH FIRE STOPPING.
- P5 APPROXIMATE LOCATION OF EXISTING SPARE FIRE ALARM CONDUIT IN BASMENT COORDIOR. CONTRACTOR SHALL UTILIZE EXISTING SPARE CONDUIT TO ROUTE WIRING FOR NEW FIRE ALARM DEVICES FROM EXISTING FIRE ALARM CONTROL PANEL ON FIRST FLOOR. CONTRACTOR SHALL EXTEND CONDUIT RUN TO ROOM 10.

GENERAL POWER NOTES:

- A. PROVIDE 2-INCH CONDUIT SLEEVE AND SEAL AS REQUIRED PER ARCHITECTURAL CODE PLANS INTO ALL SPACES WITH LOW VOLTAGE DEVICES. OPEN OFFICES SHALL BE PROVIDED WITH A MINIMUM OF (4) SLEEVES AND TRAINING ROOMS WITH A MINIMUM OF (3) SLEEVES.
- B. NEW FIRE ALARM DEVICES SHALL BE CONNECTED TO EXISTING BUILDING FIRE ALARM SYSTEM. ALL FIRE ALARM CONDUITS SHALL BE RED IN COLOR.
- C. ALL OUTLETS DENOTED WITH "CR" SHALL BE CONTROLLED QUAD RECEPTACLES. LEFT SIDE OF QUAD SHALL BE CONTROLLED AND HAVE A GREEN COLOR FINISH. RIGHT SIDE OF QUAD SHALL BE UNCONTROLLED AND HAVE STANDARD COLOR FINISH.
- D. CONTRACTOR TO UTILIZE EXISTING RECESSED JUNCTION BOXES WHERE POSSIBLE. ALL OTHER NEW DEVICES ON EXISTING WALLS SHALL UTILIZE SMALL BOX AND SMALL SURFACE MOUNT RACE WAY.



1 BASMENT FIRE ALARM CONDUIT PLAN  
SCALE : 1/4" = 1'-0"

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03/05/2026

FIRE ALARM CONDUIT  
PLAN - BASMENT

E301

**POWER KEYNOTES:** (P)

P6 CONTRACTOR SHALL INSTALL NEW 3/4-INCH RED FIRE ALARM CND FROM EXISTING SURFACE MOUNTED RACEWAY INTO EXISTING FIRE ALARM CONTROL PANEL FOR ROUTING OF WIRING FOR CONNECTION OF NEW FIRE ALARM DEVICES TO EXISTING SYSTEM.

**GENERAL POWER NOTES:**

- A. PROVIDE 2-INCH CONDUIT SLEEVE AND SEAL AS REQUIRED PER ARCHITECTURAL CODE PLANS INTO ALL SPACES WITH LOW VOLTAGE DEVICES. OPEN OFFICES SHALL BE PROVIDED WITH A MINIMUM OF (4) SLEEVES AND TRAINING ROOMS WITH A MINIMUM OF (3) SLEEVES.
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- C. ALL OUTLETS DENOTED WITH "CR" SHALL BE CONTROLLED QUAD RECEPTACLES. LEFT SIDE OF QUAD SHALL BE CONTROLLED AND HAVE A GREEN COLOR FINISH. RIGHT SIDE OF QUAD SHALL BE UNCONTROLLED AND HAVE STANDARD COLOR FINISH.
- D. CONTRACTOR TO UTILIZE EXISTING RECESSED JUNCTION BOXES WHERE POSSIBLE. ALL OTHER NEW DEVICES ON EXISTING WALLS SHALL UTILIZE SMALL BOX AND SMALL SURFACE MOUNT RACE WAY.



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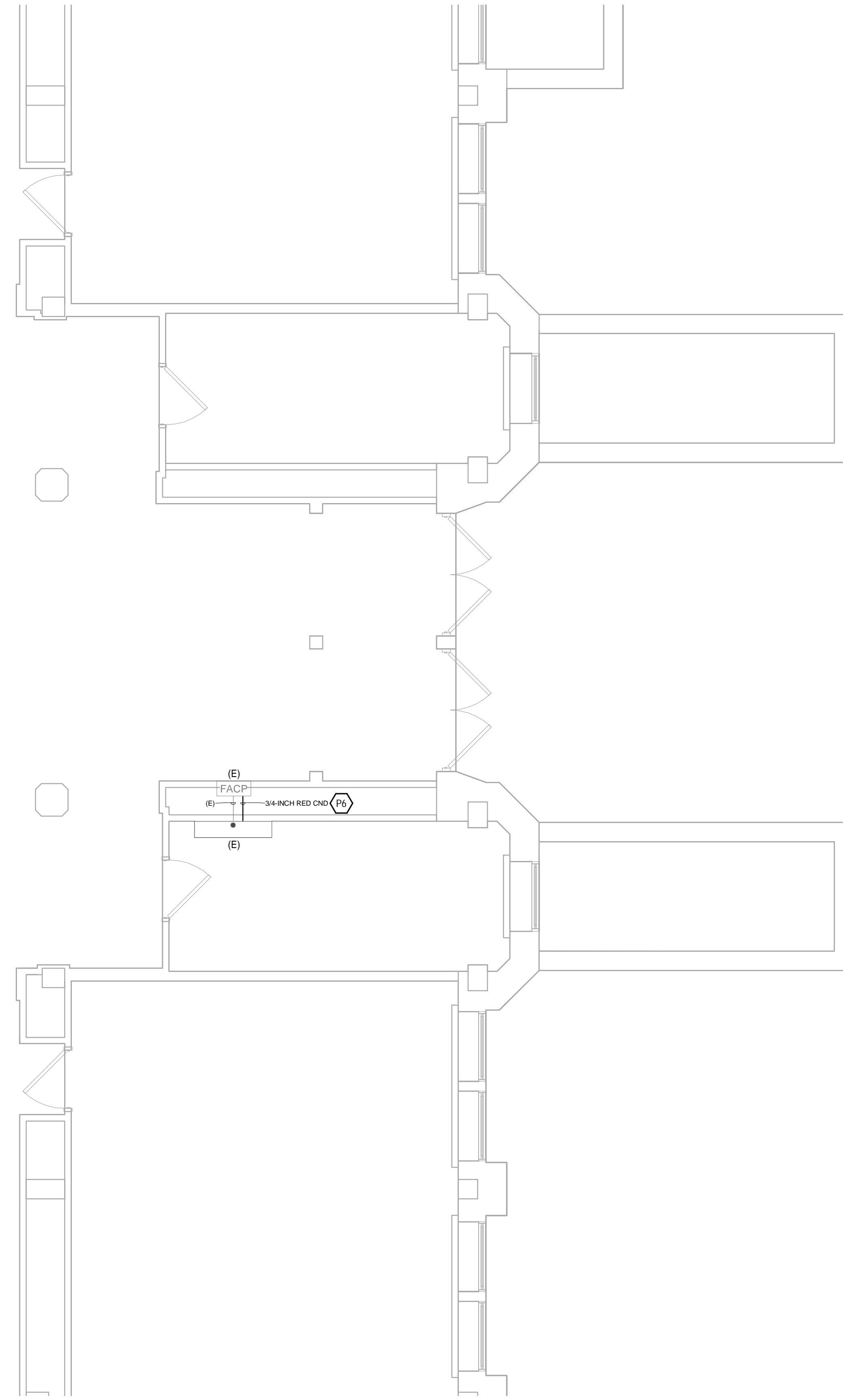
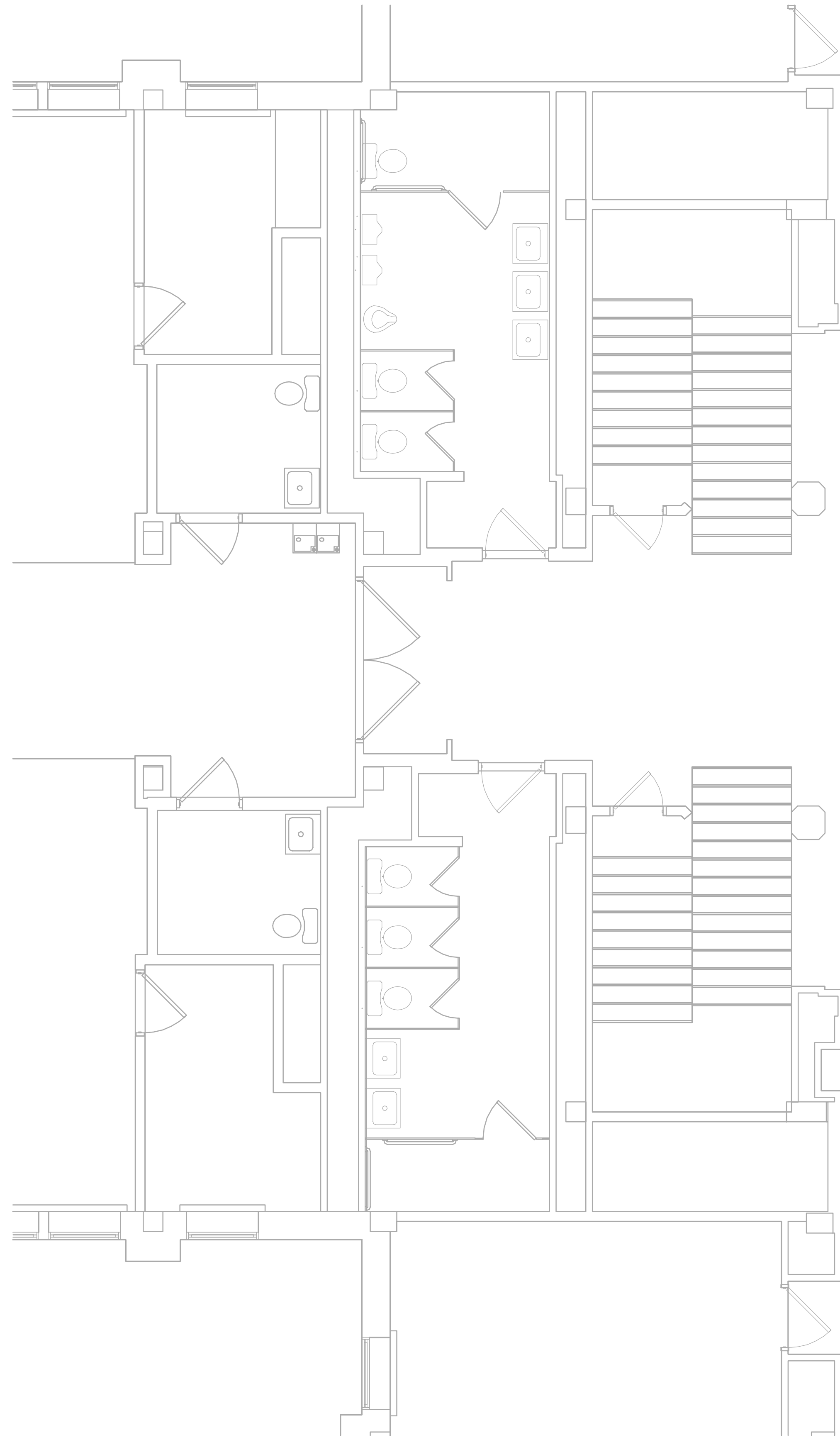
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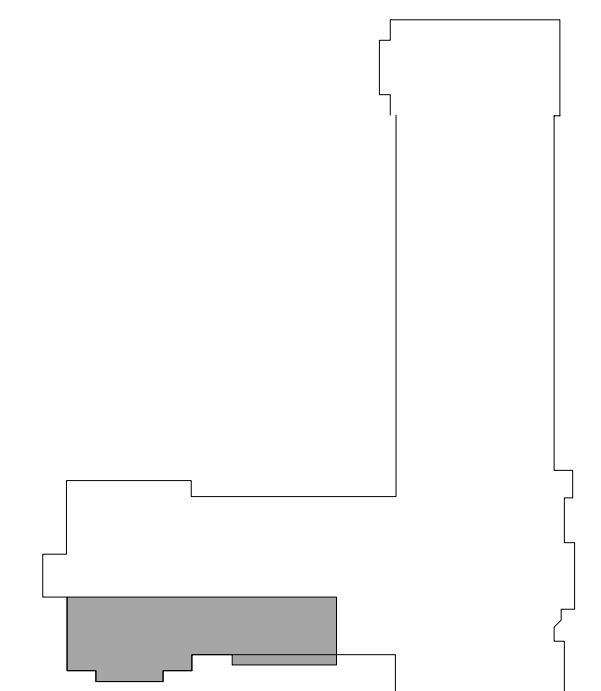
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**1** FIRST FLOOR FIRE ALARM CONDUIT PLAN  
SCALE: 1/4" = 1'-0"



**KEY PLAN**

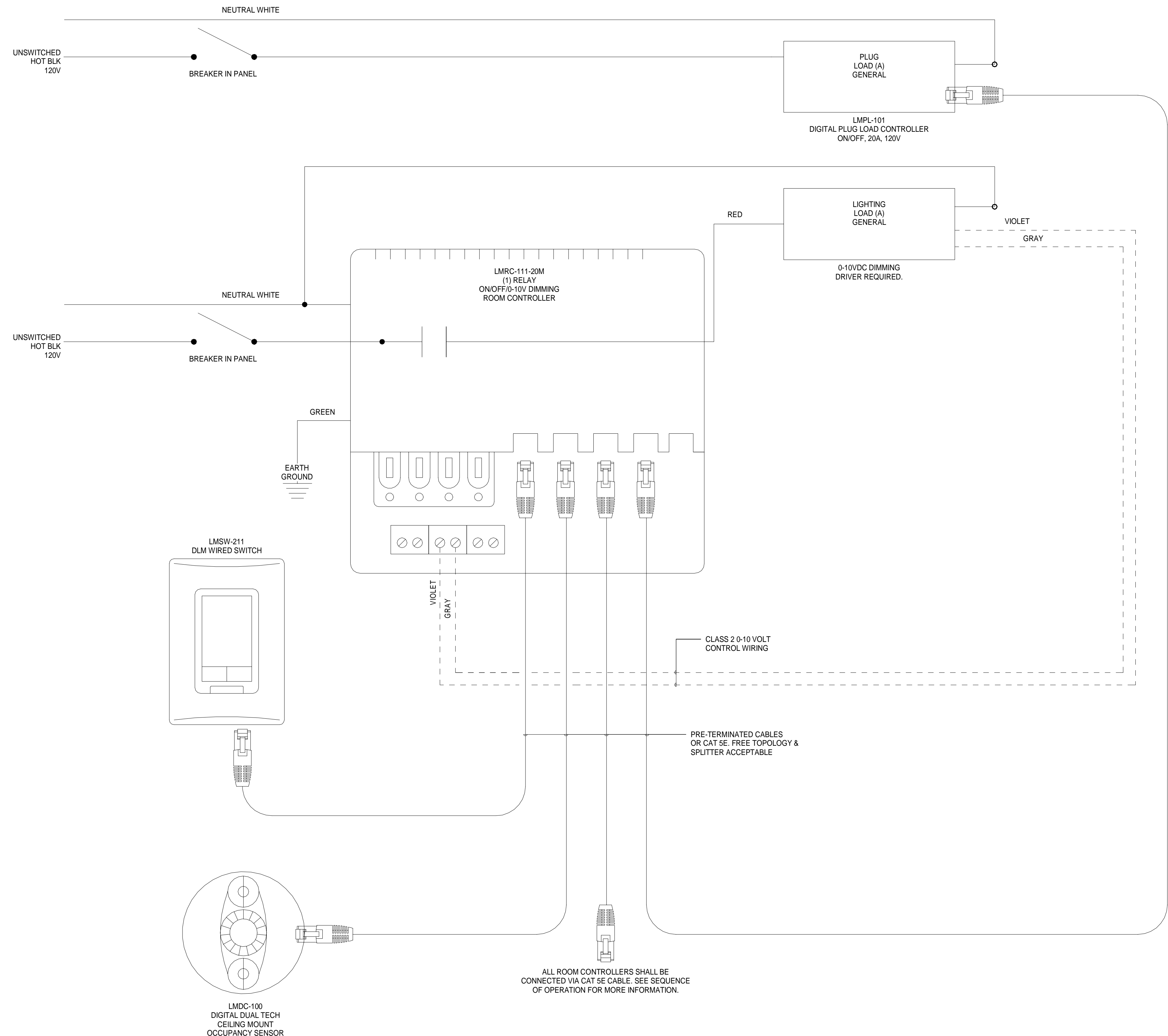
CAPITAL PROJ. NO.  
CP19031

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ARCH.	B. CHARLAND
MECH.	R. WINKLER
ELEC.	G. HALSEY
CIVIL	-
L.A.	-
INT. DES.	C. LOCKWOOD
CONST. REP.	-
APPR.	P. KALK
DATE	-
SCALE	AS INDICATED

REVISIONS		
NO.	DATE	DESCRIPTION
04	03/20/26	BID PERMIT SET
A1	04/14/2026	ADDENDUM 01

FIRE ALARM CONDUIT  
PLAN - FIRST FLOOR

**E302**



1 LV1 ROOM CONTROLLER DETAIL  
SCALE : NTS

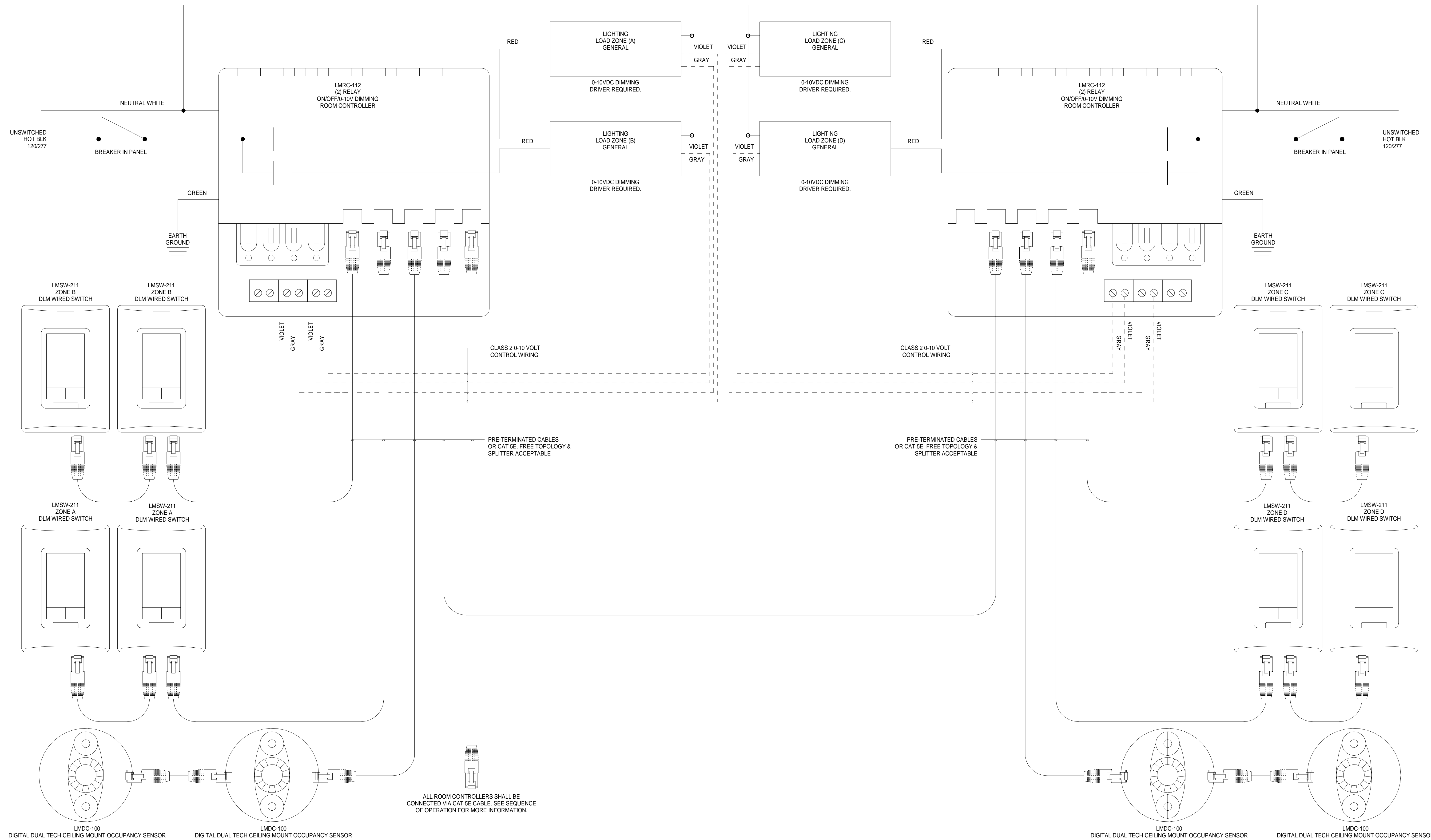
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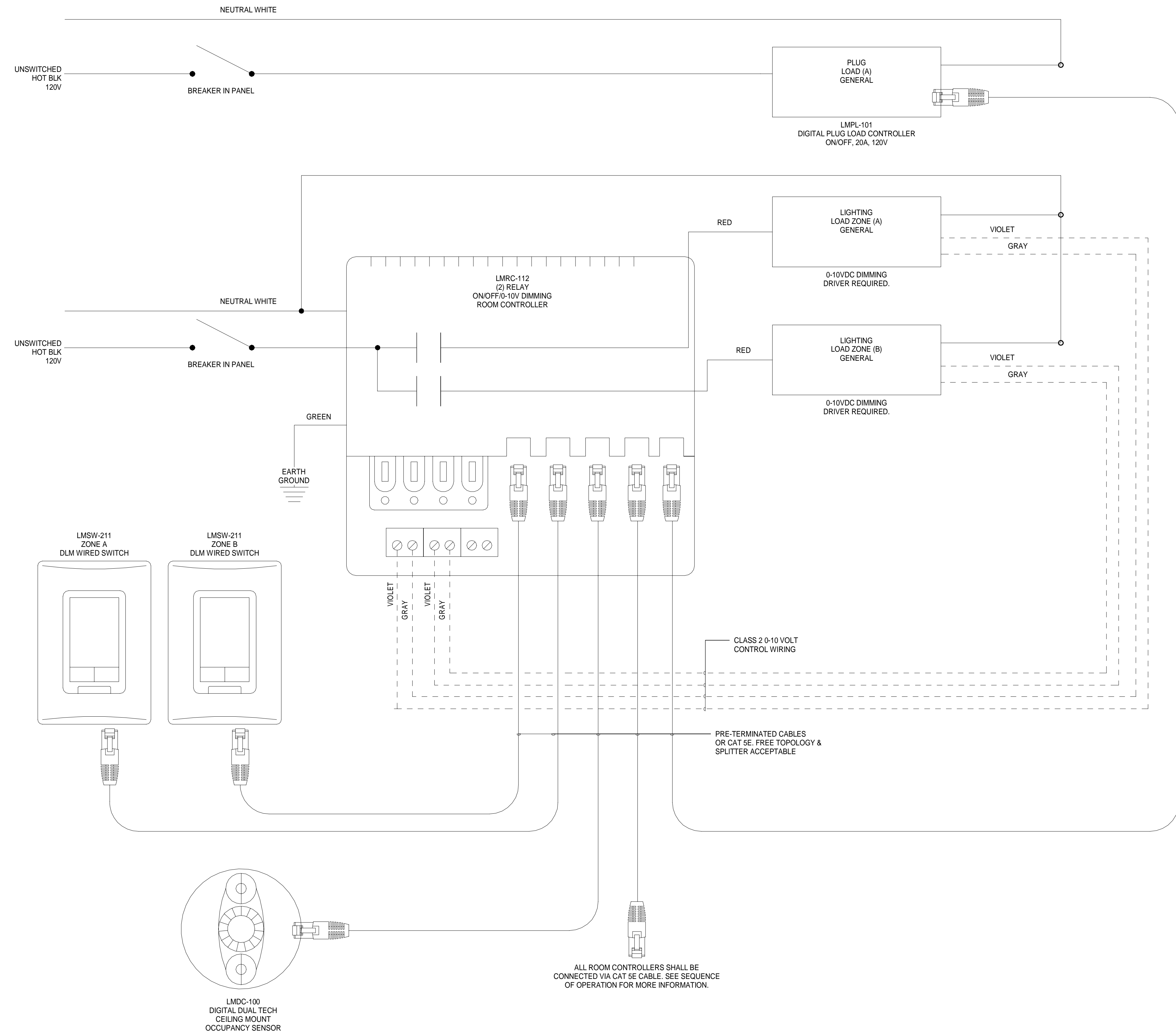
DETAILS

E701



ALL ROOM CONTROLLERS SHALL BE CONNECTED VIA CAT 5E CABLE. SEE SEQUENCE OF OPERATION FOR MORE INFORMATION.

1 LV2 ROOM CONTROLLER DETAIL  
SCALE: NTS



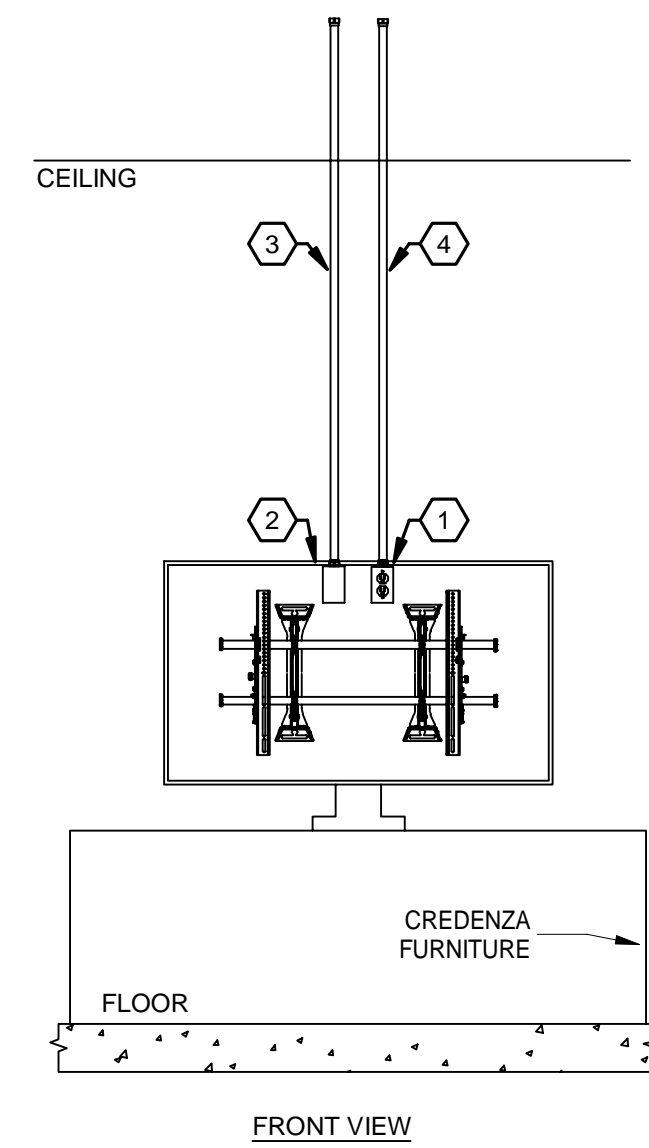
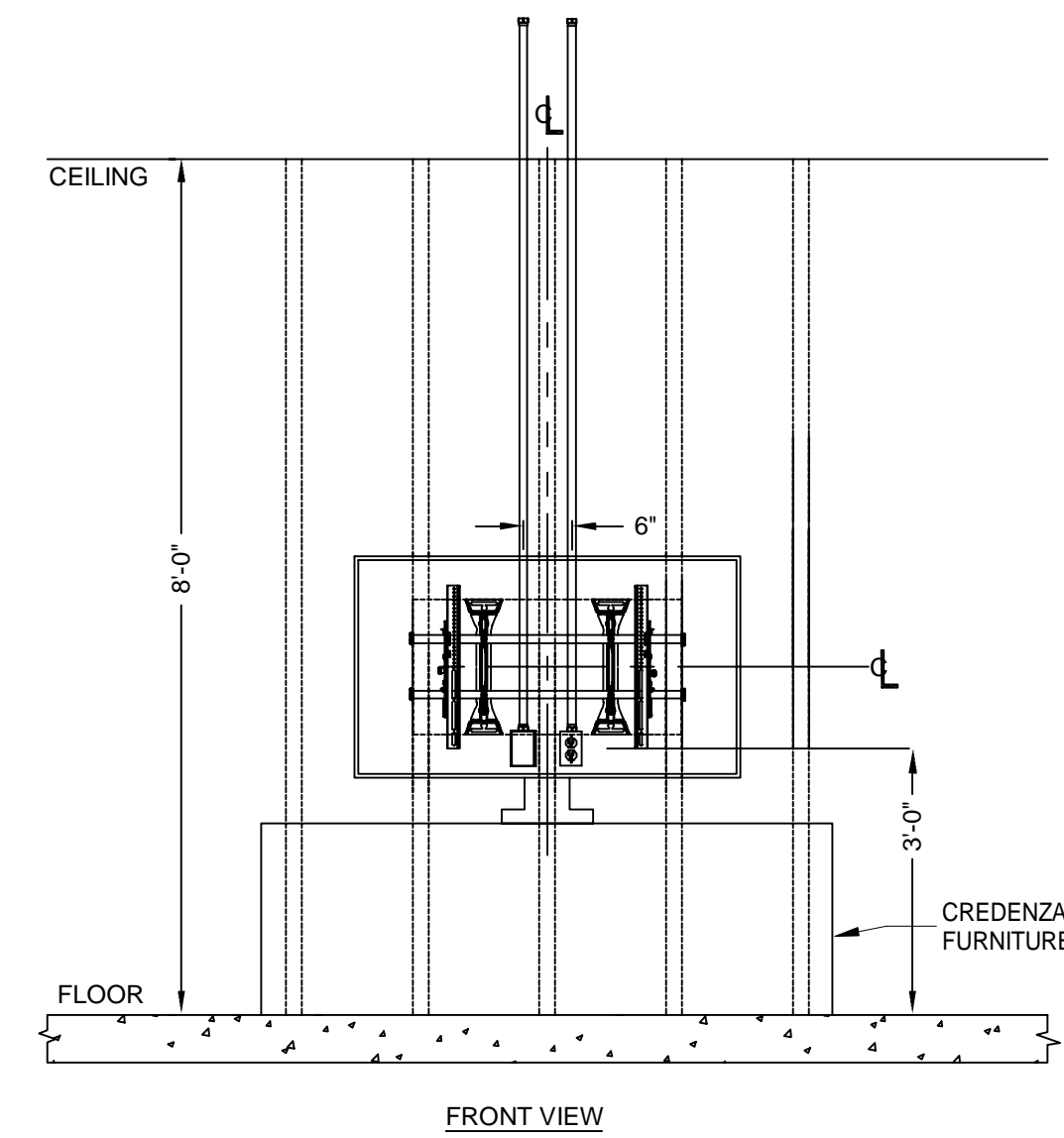
1 LV3 ROOM CONTROLLER DETAIL  
SCALE: NTS

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CONST. REP.	-
APPR.	P. KALK
DATE	-
SCALE	AS INDICATED

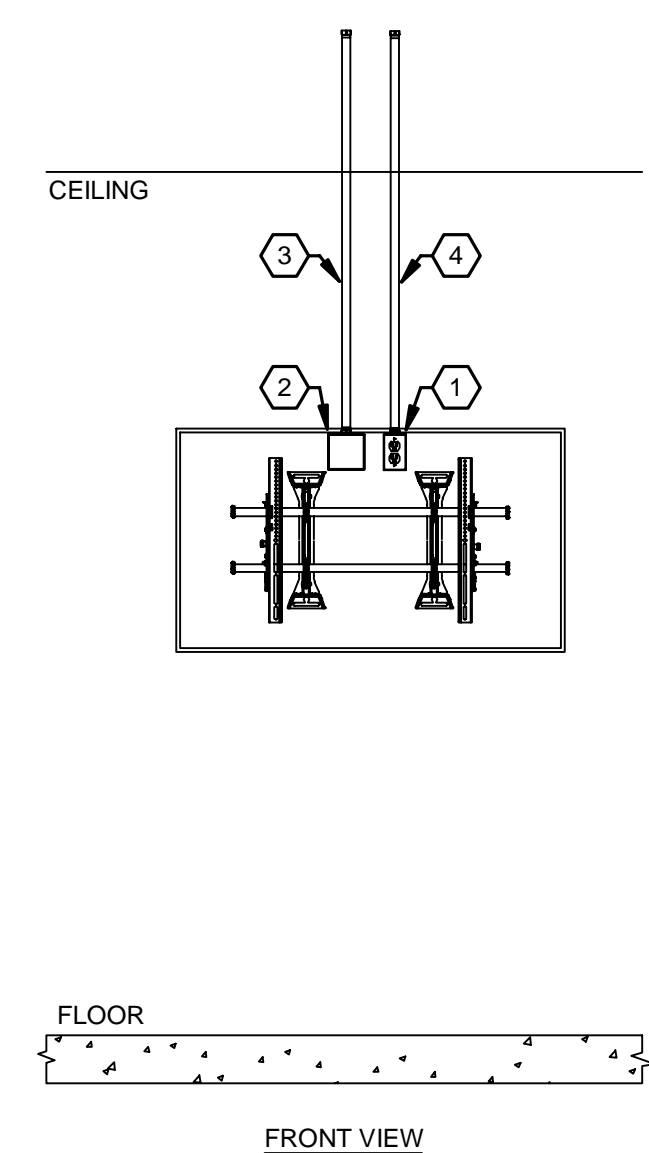
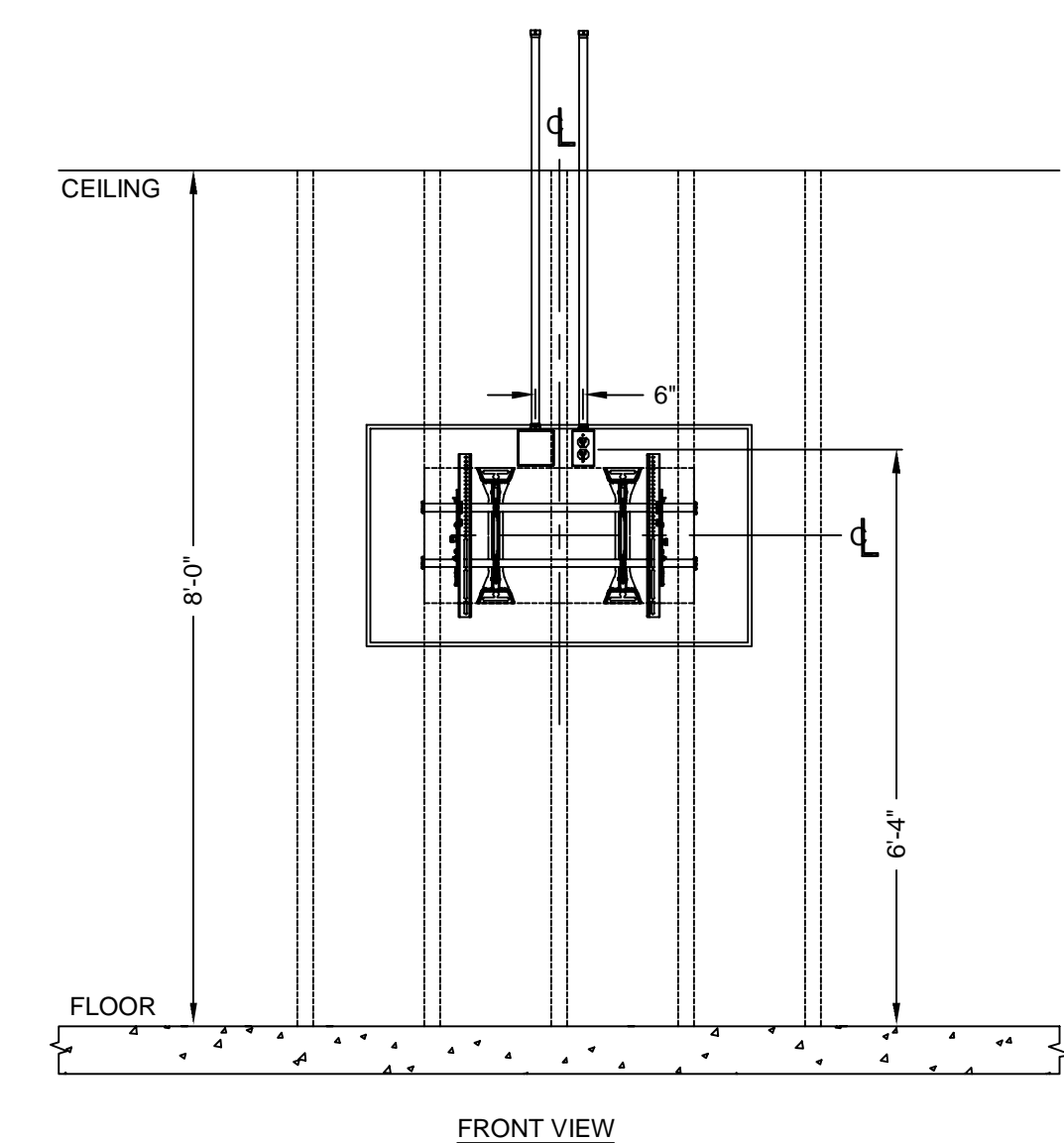
REVISIONS

NO.	DATE	DESCRIPTION
04	03/20/26	BID PERMIT SET
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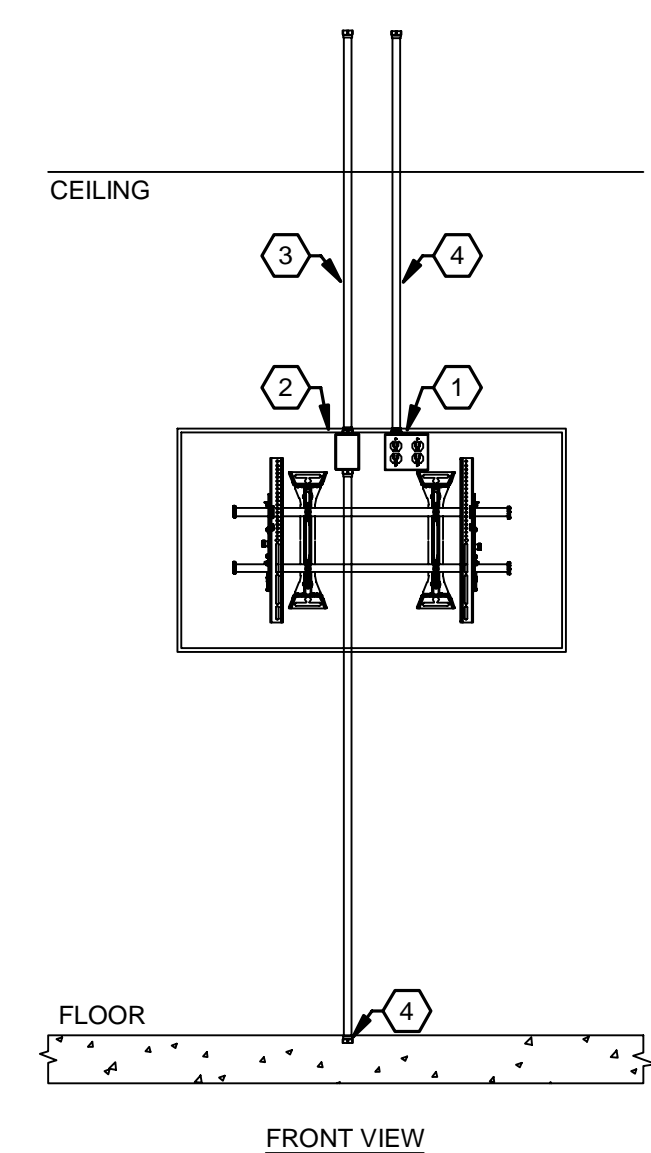
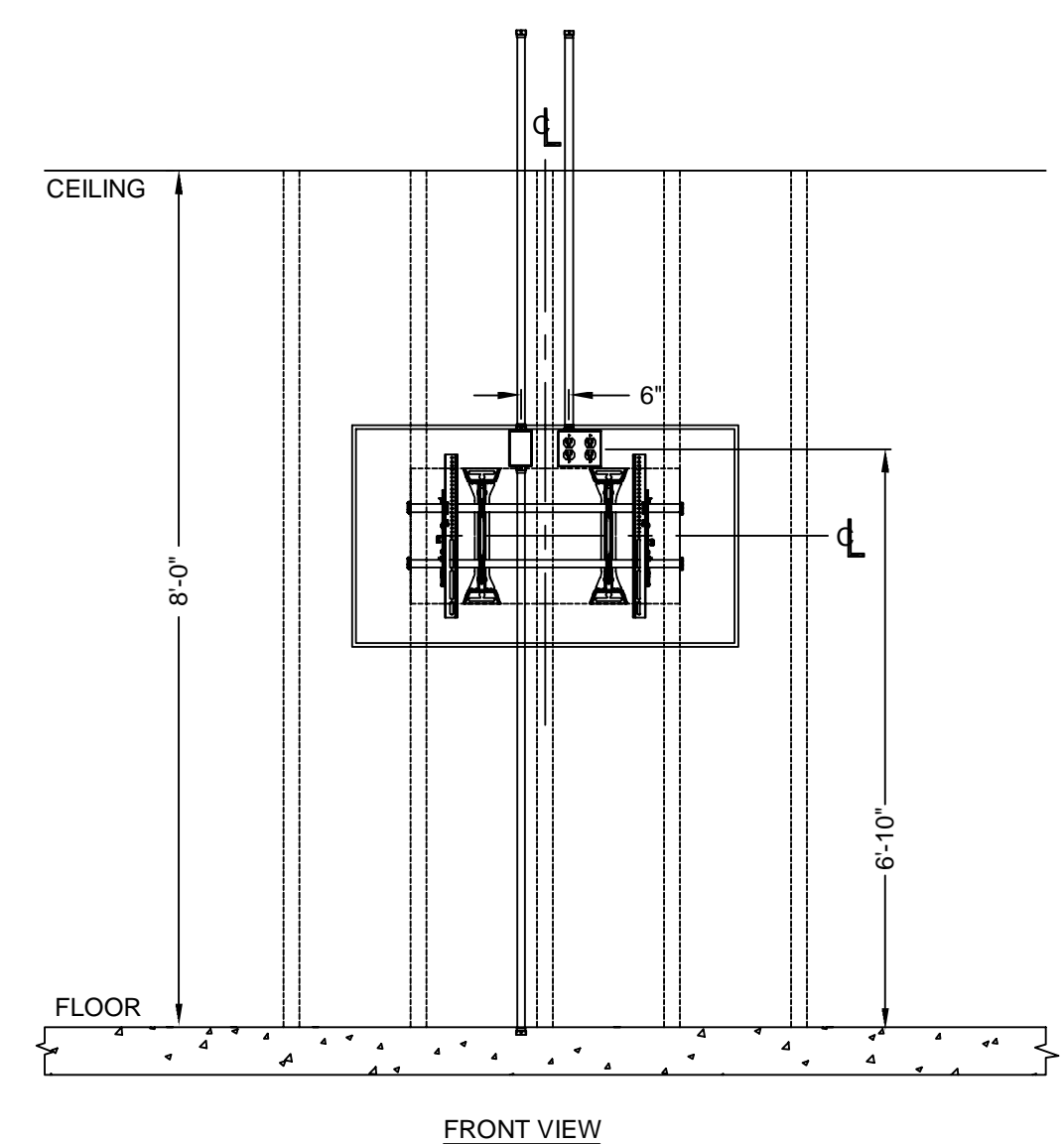
- KEYNOTES: #
- |   |                               |
|---|-------------------------------|
| 1. 120V/20A DUPLEX RECEPTACLE.                            | 3. 1-1/4" CONDUIT, BY OTHERS. |
| 2. 1-GANG FACE PLATE AND SINGLE GANG JUNCTION BOX FOR AV. | 4. 3/4" CONDUIT, BY OTHERS.   |

1 OPEN OFFICE TV ELEVATION DETAIL - CRAZDENZA MOUNTED  
SCALE: NTS



- KEYNOTES: #
- |  |                               |
|--|-------------------------------|
| 1. 120V/20A DUPLEX RECEPTACLE.                       | 3. 1-1/4" CONDUIT, BY OTHERS. |
| 2. 2-GANG FACE PLATE AND 2-GANG JUNCTION BOX FOR AV. | 4. 3/4" CONDUIT, BY OTHERS.   |

2 OPEN OFFICE TV ELEVATION DETAIL - WALL MOUNTED  
SCALE: NTS



- KEYNOTES: #
- |   |                               |
|---|-------------------------------|
| 1. 120V/20A QUAD RECEPTACLE.                              | 3. 1-1/4" CONDUIT, BY OTHERS. |
| 2. 1-GANG FACE PLATE WITH AND 1-GANG JUNCTION BOX FOR AV. | 4. 3/4" CONDUIT, BY OTHERS.   |
|   | 5. TO FLOOR BOX IN ROOM.      |

3 CONFERENCE ROOM TV ELEVATION DETAIL  
SCALE: NTS

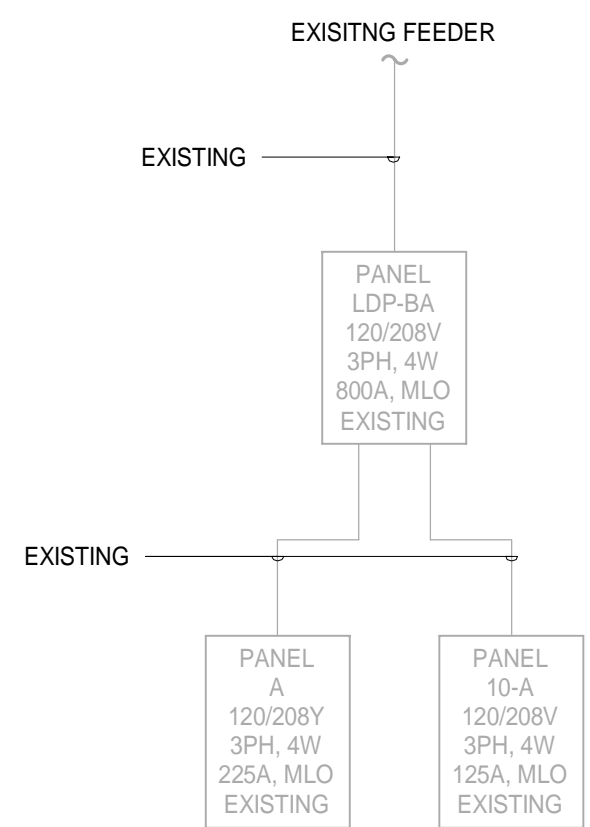
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DATE	--
SCALE	AS INDICATED

REVISIONS		
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DETAILS

E704



1 EXISTING ONE LINE DIAGRAM  
 SCALE : N.T.S.

**LIGHTING CONTROLS SEQUENCE OF OPERATIONS**

- LIGHTING CONTROL INTENTION IS TO USE LIGHT FIXTURES AND ROOM CONTROLLERS WITH WIRED CONTROLS AND ASSOCIATED POWERED LOW VOLTAGE SWITCHES UNLESS NOTICED OTHERWISE. DEVIATION FROM THIS SOLUTION SHALL MEET CONTROL INTENTIONS AND COORDINATION WITH ELECTRICAL CONTRACTOR FOR ADDITIONAL WIRING AND INSTALLATION.
- ALL SWITCHES WITH "LVF" ARE LOW VOLTAGE CONTROL STATIONS. PROVIDE ON/OFF BUTTONS, PRE-PROGRAMMED SCENES, INTEGRAL OCCUPANCY SENSING, AND/OR DIMMING CONTROL AS DESCRIBED BELOW PER SPACE.
- THE USE OF ROOM CONTROLLERS ARE SYMBOLIC AND ARE REPRESENTATIVE OF POWER PACKS OR RELAYS DEPENDING ON THE MAUFACTURER. ROOM CONTROLLERS ARE DIAGRAMIC IN SHOWING THE QUANTITY OF ZONES/RELAYS PER SPACE. MANUFACTURER SHALL PROVIDE OVERALL QUANTITY AS SHOWN AS REQUIRED PER THEIR EQUIPMENT OFFERING.
- ALL EMERGENCY FIXTURES SHALL BE PROGRAMMED TO FUNCTION WITH AREA NORMAL LIGHTS. UPON LOSS OF POWER, EMERGENCY FIXTURES SHALL ILLUMINATE TO 100% OF RATED BATTERY POWER.
- COORDINATE COMMISSIONING OF SYSTEM PER LIGHTING, LIGHTING CONTROL, AND COMMISSIONING SPECIFICATIONS WITH OWNER'S AGENT AS REQUIRED PER STATE OF MICHIGAN ENERGY CODE AND MICHIGAN STATE UNIVERSITY STANDARDS. PROVIDE LINE VOLTAGE WIRING FOR POWER AS REQUIRED PER MANUFACTURER. BATTERIES ARE NOT ACCEPTABLE.
- ALL ROOM CONTROLLERS SHALL BE CONNECTED AND PROGRAMMED SO THAT LIGHTING IN OPEN OFFICE REMAINS ON IF AN OFFICE OR CONFERENCE ROOM IS OCCUPIED.
- ALL ENCLOSED OFFICES:**
  - LIGHTING SHALL TURN ON MANUALLY AT 100% VIA LV WALL SWITCH.
  - LIGHTING SHALL REMAIN ON UNTIL 20 MINUTES AFTER NO DETECTED ACTIVITY AND THEN TURN OFF.
  - LIGHTING SHALL BE PROGRAMMED TO REMAIN ON WHEN ACTIVITY IS DETECTED IN AN ENCLOSED OFFICE OR CONFERENCE ROOM.
  - EMERGENCY LIGHTING FIXTURES SHALL HAVE INTEGRAL BATTERIES. BATTERY SENSE SHALL BE WIRED AHEAD OF LOCAL CONTROLS.
  - LV1 STATIONS SHALL INCLUDE BUTTONS:
    - ON / OFF
    - DIM / BRIGHTEN
- OPEN OFFICE / BREAKROOM:**
  - LIGHTING SHALL TURN ON MANUALLY AT 100% VIA LV WALL SWITCH.
  - LIGHTING SHALL REMAIN ON UNTIL 20 MINUTES AFTER NO DETECTED ACTIVITY AND THEN TURN OFF.
  - LIGHTING SHALL BE PROGRAMMED TO REMAIN ON WHEN ACTIVITY IS DETECTED IN AN ENCLOSED OFFICE OR CONFERENCE ROOM.
  - EMERGENCY LIGHTING FIXTURES SHALL HAVE INTEGRAL BATTERIES. BATTERY SENSE SHALL BE WIRED AHEAD OF LOCAL CONTROLS.
  - LV2 STATIONS SHALL INCLUDE BUTTONS:
    - ON / OFF
    - DIM / BRIGHTEN
- CONFERENCE ROOM:**
  - LIGHTING SHALL TURN ON MANUALLY AT 100% VIA LV WALL SWITCH.
  - LIGHTING SHALL REMAIN ON UNTIL 20 MINUTES AFTER NO DETECTED ACTIVITY AND THEN TURN OFF.
  - EMERGENCY LIGHTING FIXTURES SHALL HAVE INTEGRAL BATTERIES. BATTERY SENSE SHALL BE WIRED AHEAD OF LOCAL CONTROLS.
  - LV3 STATIONS SHALL INCLUDE BUTTONS:
    - ON / OFF
    - DIM / BRIGHTEN

**LUMINAIRE SCHEDULE**

TYPE	LAMP	MANUFACTURER	MODEL NUMBER	BALLAST/DRIVER	MOUNTING	LUMENS	INPUT WATTAGE	DESCRIPTION	NOTE
A1	LED	METALUX	24RLN-LD5-42-120V-L840-CD1-U	0-10V	RECESSED - GRID CEILING	4200	27 W	2-FOOT BY 4-FOOT TYPE LED TROFFER.	
A1EM	LED	METALUX	24RLN-LD5-42-120V-EL14W-L840-CD1-U	0-10V	RECESSED - GRID CEILING	4200	27 W	2-FOOT BY 4-FOOT TYPE LED TROFFER. PROVIDE WITH 14W EMERGENCY BATTERY BACKUP.	1
A2	LED	METALUX	24RLN-LD5-50-120V-L840-CD1-U	0-10V	RECESSED - GRID CEILING	5000	38 W	2-FOOT BY 4-FOOT TYPE LED TROFFER.	
B1	LED	BUZZIDISK	120V-4000K-22-1 10V-WHITE-STRAIGHT 3 CABLES-TREVIRA CS HAZY GREEN-OPAQUE LENS	0-10V	SUSPENDED - GRID	3400	35 W	18-INCH PENDANT DRUM. PROVIDE WITH OPAQUE LENS. PROVIDE WITH TREVIRA CS HAZY GREEN FINISH	
C2EM	LED	FINELITE	HP-2-R-WWD-8FT-S-840-DAOR-SW-120-SC-FC10-C1-FE-SW	0-10V	RECESSED - GYP CEILING	500 LMS/FT	62 W	8-FOOT BY 2-INCH TYPE LED LINEAR.	1
D1	LED	COOPER	LD2B-10-D010-EU2B-10SP15-80-40-2LBD-MW	0-10V	RECESSED - GRID CEILING	1000	11 W	2-INCH LED DOWNLIGHT.	
D1EM	LED	COOPER	LD2B-10-D010-EU2B-10SP15-80-40-2LBD-MW-EM14	0-10V	RECESSED - GRID CEILING	1000	11 W	2-INCH LED DOWNLIGHT. PROVIDE WITH 14W EMERGENCY BATTERY BACKUP.	1
X1	LED	SURE-LITES	CX61G	N/A	CEILING	N/A	2 W	CEILING MOUNTED EXIT WITH GREEN LED ILLUMINATION. SINGLE SIDED.	1
X2	LED	SURE-LITES	CX62G	N/A	CEILING	N/A	2 W	CEILING MOUNTED EXIT WITH GREEN LED ILLUMINATION. DOUBLE SIDED.	1

- NOTES:**  
 1. EMERGENCY BATTERY SENSE PACK SHALL BE WIRED AHEAD OF LIGHTING CONTROLS.

**Branch Panel: 10-A**

Location: BREAKROOM 10-H  
 Supply From: LDP-BA  
 Mounting: SURFACE  
 Enclosure: NEMA1  
 Volts: 208Y/120  
 Phases: 3  
 Wires: 4  
 A.I.C. Rating: EXISTING  
 Mains Type: MLO  
 Mains Rating: 125 A

**Notes:**  
 EXISTING GE INDUSTRIAL SYSTEMS A SERIES PANELBOARD. FED FROM EXISTING 100A BREAKER IN PANEL LDP-BA.

CKT	Circuit Description	Trip	Poles	PHASE A	PHASE B	PHASE C	Poles	Trip	Circuit Description	CKT
1	ROOM 10 LIGHTS	20 A	1	795	1200			1	20 A	*RM 10H REFRIGERATOR RCPT
3	RM 10H COUNTER RCPT	20 A	1		180	180		1	20 A	RM 10H COUNTER RCPT
5	RM 10 RCPTS	20 A	1			720	900	1	20 A	RM 10 RCPTS
7	RM 10B RCPTS	20 A	1	1080	1080			1	20 A	RM 10C RCPTS
9	RM 10C RCPTS	20 A	1		1080	1080		1	20 A	RM 10C, 10D RCPTS
11	RM 10, 10D RCPTS	20 A	1			900	900	1	20 A	RM 10, 10E RCPTS
13	(E) STORAGE ROOM RCPTS	20 A	1	1200	1080			1	20 A	RM 10E, 10F RCPTS
15	RM 10F, 10 G RCPTS	20 A	1		720	720		1	20 A	RM 10G RCPTS
17	RM 10 DOOR POWER	20 A	1			600	0	1	20 A	(E) SPARE
19	DIRECTORS OFFICE WINDOW AC	20 A	1	1188	0			1	20 A	SPARE
21	SPARE	20 A	1		0	0		1	20 A	SPARE
23	SPARE	20 A	1			0	0	1	20 A	SPARE
<b>Total Load:</b>				7623 VA	3960 VA	4020 VA				
<b>Total Amps:</b>				64 A	33 A	34 A				

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals
Lighting	795 VA	125.00%	994 VA	
Other	600 VA	100.00%	600 VA	<b>Total Conn. Load:</b> 15603 VA
MTR	1188 VA	125.00%	1485 VA	<b>Total Est. Demand:</b> 14589 VA
RCPT	13020 VA	88.40%	11510 VA	<b>Total Conn.:</b> 43 A
				<b>Total Est. Demand:</b> 40 A

**Notes:**  
 CIRCUITS DENOTED AS BOLD TEXT ARE NEW CIGUITS ON EXISTING BREAKERS. ANY BREAKERS NOT BEING USED SHALL REMAIN IN PANEL AS A "SPARE" AND BE SET TO THE OFF POSITION. (E) DENOTES EXISTING CIRCUIT/BREAKER TO REMAIN. CIRCUITS DENOTED WITH "" REQUIRE NEW BREAKER.

**PANEL SCHEDULE KEYNOTES:**

- PROVIDE GFI BREAKER.

**Branch Panel: A**

Location: BASMENT ELEC RM  
 Supply From: LDP-BA  
 Mounting: SURFACE  
 Enclosure: NEMA1  
 Volts: 208Y/120  
 Phases: 3  
 Wires: 4  
 A.I.C. Rating: EXISTING  
 Mains Type: MLO  
 Mains Rating: 225 A

**Notes:**  
 EXISTING WESTINGHOUSE POW-R-LINE C PRL1 PANELBOARD. FED FROM EXISTING 200A BREAKER IN LDP-BA.

CKT	Circuit Description	Trip	Poles	PHASE A	PHASE B	PHASE C	Poles	Trip	Circuit Description	CKT
1	(E) FIBER OPTIC POWER POLE	20 A	1	600	960			1	20 A	(E) PHONE ROOM RCPTS
3	(E) QUAD RCPT PHONE RM N...	20 A	1		360	960		1	20 A	(E) FIBER ROOM RCPTS
5	(E) EXISTING LOAD	20 A	1			600	960	1	20 A	(E) STORAGE ROOM RCPTS
7	(E) COMM RACK RCPT	20 A	1	600	1800			1	20 A	(E) SURVEY RESEARCH AC...
9	(E) RM 3B RACK RCPT	20 A	1		600	1800		1	20 A	(E) ROOM 9A WINDOW AC
11	(E) RM 3B RACK RCPT	30 A	1			600	960	1	20 A	(E) EXTERIOR BUILDING LTG...
13	(E) SECURITY PANEL	20 A	1	600	1560					
15	(E) GREEN PHONE RCPT	20 A	1		240	1560		2	20 A	(E) ROOM 9 WINDOW AC
17	(E) SPARE	60 A	2			0	1040	2	20 A	*ROOM 10 WINDOW AC
19	(E) SPARE	50 A	2	0	1040			2	20 A	*ROOM 10 WINDOW AC
21	(E) SPARE	50 A	2		0	1040		2	20 A	*ROOM 10 WINDOW AC
25	(E) FIBER RM WINDOW AC	40 A	2	3328	1040			2	20 A	*ROOM 10 WINDOW AC
27	(E) MKH RM GFI RCPT	20 A	1		3328	1040				
29	(E) MKH RM GFI RCPT	20 A	1			180	0	2	40 A	(E) SPARE
31	(E) #1 CONTROL AIR COMPRESSOR WEST	30 A	3	2879	0			2	50 A	(E) SPARE
33	(E) #1 CONTROL AIR COMPRESSOR WEST	30 A	3	2879	0			2	30 A	(E) SPARE
35	(E) #2 CONTROL AIR COMPRESSOR EAST	30 A	3	2879	0			1	20 A	(E) CHILLER GFI
37	(E) #2 CONTROL AIR COMPRESSOR EAST	30 A	3	2879	0					
39	(E) #2 CONTROL AIR COMPRESSOR EAST	30 A	3	2879	0					
<b>Total Load:</b>				17285 VA	16685 VA	12097 VA				
<b>Total Amps:</b>				150 A	145 A	101 A				

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals
Lighting	960 VA	125.00%	1200 VA	
Other	1800 VA	100.00%	1800 VA	<b>Total Conn. Load:</b> 46068 VA
MTR	33768 VA	106.39%	35927 VA	<b>Total Est. Demand:</b> 48467 VA
RCPT	9540 VA	100.00%	9540 VA	<b>Total Conn.:</b> 128 A
				<b>Total Est. Demand:</b> 135 A

**Notes:**  
 CIRCUITS DENOTED AS BOLD TEXT ARE NEW CIGUITS ON EXISTING BREAKERS. ANY BREAKERS NOT BEING USED SHALL REMAIN IN PANEL AS A "SPARE" AND BE SET TO THE OFF POSITION. (E) DENOTES EXISTING CIRCUIT/BREAKER TO REMAIN. CIRCUITS DENOTED WITH "" REQUIRE NEW BREAKER.

**PANEL SCHEDULE KEYNOTES:**

- CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING 30A-2P BREAKER AND INSTALL NEW 20A-2P BREAKER. CONTRACTOR SHALL RECONNECT EXISTING WIRE/CIRCUIT TO NEW BREAKER.

DEVICE LEGEND				
SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
NACP	1	NATSCO	A901-NACP-4A	DUAL NACP IN 900 BOX WITH CTRL AV'S
☒	4	NATSCO	SG-C3NSZ	WALL STROBE - RED
AV ID	3	NATSCO	A901-CTRL-AV-2	AUDIBLE/VISUAL CONTROL MODULE DUAL IN PANEL
M	1	NATSCO	DS900-MONITOR	MONITOR MODULE (SUPERVISED INPUT)
JB	12	NATSCO	JUNCTION BOX (BY OTHERS)	JUNCTION BOX (BY OTHERS)
☒	19	NATSCO	SG-CXLPSSZ-A	WALL SPEAKER/STROBE - RED
☒	32	NATSCO	DX900-PHOTO AND DS900-BASE6	PHOTOELECTRIC SMOKE DETECTOR W/ 6" BASE
AMP 100W	1	NATSCO	A900-AMP-100	100WATT DMR AMPLIFIER AND 12VAC TRANSFORMER
☒	5	NATSCO	DX900-TEMP AND DS900-BASE6	HEAT DETECTOR W/ 6" BASE
CI	1	NATSCO	A901-CTRL IO	CONTROL MODULE (SUPERVISED INPUT AND FORM C OUTPUT) IN PANEL
FACP	1	NATSCO	A901-FACP-SG	901 SERIES FIRE ALARM CONTROL PANEL
CHA	1	NATSCO	DS900-CTRL IO	CONTROL MODULE (SUPERVISED INPUT AND 4A FORM C OUTPUT)
SL	1	NATSCO	D900-A8S	8 SWITCH CONTROL MODULE
CI-D	1	NATSCO	A901-CTRL IO-2	CONTROL MODULE (2 SUPERVISED INPUTS AND 2 FORM C OUTPUT)
AV	3	NATSCO	DS900-CTRL AV	AUDIBLE/VISUAL CONTROL MODULE
IGD 42"	1	NATSCO	IGD-1042	42" INTERACTIVE GRAPHIC DISPLAY
CHA	3	NATSCO	DS900-CTRL RELAY	CONTROL RELAY (4A FORM C OUTPUT ONLY)
☒	2	NATSCO	SG-CXLPSSZ-A	WALL SPEAKER - RED
☒	2	NATSCO	D900-DD-SL-PHOTO W/ 5" TUBE	ADDRESSABLE PHOTOELECTRIC DUCT SMOKE DETECTOR WITH 5" AIR SAMPLING TUBE
F	5	NATSCO	541S AND DS900-MINI	ADDRESSABLE SINGLE ACTION PULL STATION

CABLE AND WIRE LEGEND	
LABEL	DESCRIPTION
A	14 AWG TWISTED STRANDED 2 CONDUCTOR FOR SIGNAL CIRCUITS: FPLP
B	18 AWG TWISTED STRANDED SHIELDED 2 CONDUCTOR FOR SLC: FPLP
C	18 AWG TWISTED STRANDED 2 CONDUCTOR: FPLP
D	16 AWG TWISTED STRANDED 2 CONDUCTOR FOR SPEAKER CIRCUITS: FPLP
E	12 AWG TWISTED STRANDED 2 CONDUCTOR FOR SIGNAL CIRCUITS: FPLP
G	18 AWG TWISTED STRANDED SHIELDED 6 CONDUCTOR FOR REMOTE MIC: FPLP
K	18 AWG TWISTED STRANDED SHIELDED 2 CONDUCTOR FOR RS485: FPLP
L	14 AWG TWISTED STRANDED 2 CONDUCTOR FOR AUX POWER: FPLP
M	16 AWG TWISTED STRANDED 2 CONDUCTOR FOR AMPLIFIER RISER: FPLP

ALL LABELS IN TABLE MAY NOT BE PRESENT ON PLAN SET

**FIRE ALARM DEVICE INFORMATION**

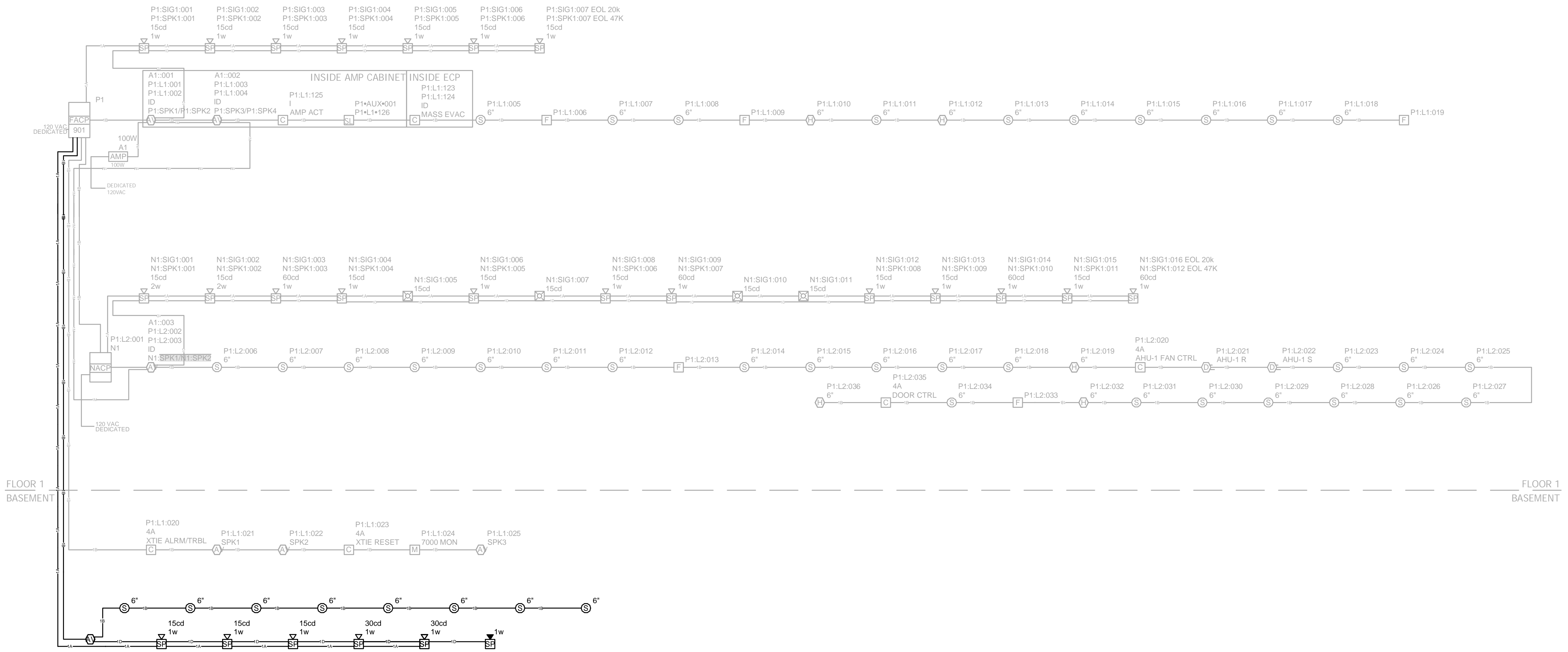
☒ CABLE TYPE SEE CABLE LEGEND  
CONDUCTOR QUANTITY (PAIRS)  
(E.G. 2B IS 2 PAIRS OF TWISTED STRANDED SHIELDED 2 CONDUCTOR)

☒ CABLE TYPE SEE CABLE LEGEND  
CONDUCTOR QUANTITY (PAIRS)  
(E.G. 2B IS 2 PAIRS OF TWISTED STRANDED SHIELDED 2 CONDUCTOR)

**FIRE ALARM NOTES**

NOTIFICATION SOURCE PANEL  
P1:SIG1:003 DEVICE NUMBER  
15cd CIRCUIT NUMBER  
1W WATTAGE SETTING (SPEAKER ONLY)  
☒ INDICATES WHITE DEVICE

ADDRESSABLE DEVICE P1:L2:003 DEVICE ADDRESS  
6 SLC LOOP NUMBER  
6 SOURCE PANEL  
6 BASE SIZE (IN INCHES)



1 FIRE ALARM RISER DIAGRAM  
SCALE: NTS

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