

# PROJECT INFORMATION

## LEGAL DESCRIPTION:

VILLAGE AT DISCOVERY PARK - LOTS 1, 2, 1 ACRES  
SECTION 30, TOWNSHIP 48, RANGE 31

## PROPERTY ZONING: PMIX - PLANNED MIXED USE

## PROJECT DESCRIPTION:

BUILD-OUT UNFINISHED TENANT SHELL SPACE ON 2ND FLOOR OF SPECULATIVE OFFICE BUILDING. WORK TO INCLUDE HALL LOBBY SPACE FOR TENANTS THIS FLOOR. NO CHANGE TO THE EXISTING ACCESSIBLE ROUTE

## OWNER:

DISCOVERY PARK - LEE'S SUMMIT P1 LLC  
4220 PHILIPS FARM RD  
COLUMBIA, MO 65201

## TENANT:

INTRINSIC DEVELOPMENT

# CODE NOTES

## 2018 INTERNATIONAL CODE COUNCIL FAMILY OF CODES

2009 ICC A117.1 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS & FACILITIES  
2017 NATIONAL ELECTRIC CODE

## USE GROUPS: B

(B) BUSINESS

## CONSTRUCTION TYPE: 2B

NON-COMBUSTIBLE / NON-PROTECTED

## AUTOMATIC FIRE PROTECTION:

EXISTING BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM. SPRINKLER SYSTEM DESIGN AND MODIFICATIONS TO THE EXISTING SYSTEM SHALL BE PREPARED WITH DRAWINGS STAMPED BY AN ENGINEER LICENSED IN THE STATE OF MISSOURI.

## BUILDING HEIGHT AND AREA:

EXISTING BUILDING: 14,014 S.F. PER FLOOR / 2 STORY / 42'-0"

NO CHANGE TO EXISTING BUILDING HEIGHT OR AREA

PROPOSED TENANT AREA: 6,407 S.F. / 1 STORY

## OCCUPANT LOAD:

PROPOSED TENANT	AREA	REQD OCC AREA	OCCUPANTS
BUSINESS	6,407 S.F.	1 OCC. / 150 S.F.	43
TOTAL:			43

## EGRESS:

2 EXITS REQUIRED AT LEVEL OF EXIT DISCHARGE PER TABLE 1006.3.2  
EGRESS WIDTH (IBC 1005.3.1) = 43 OCCUPANTS x .3 = 12.9  
-MINIMUM REQUIRED WIDTH PER IBC 1010.1.1 (SIZE OF DOORS) = 32"  
2 EXITS TO EXIT HALL - 2 EXITS TO EGRESS STAIRS PROVIDED AT 36" EACH

## PLUMBING FIXTURE REQUIREMENTS:

SPACE	USE	LOAD	WATER CLOSETS		LAVATORIES			DRINKING FOUNTAIN RATIO	DRINKING FOUNTAINS
			RATIO	MALE	FEMALE	RATIO	MALE		
B	43	1725 FOR 1ST 50 AND 1150 FOR REMAINDER	0.86	0.86	1740 FOR 1ST 80 AND 1180 FOR REMAINDER	0.54	0.54	1 / 100	0.43
SUBTOTALS			86	86	54	54			43
REQUIRED			1	1	1	1			2
TOTAL PROVIDED			2	2	1	1			SEE NOTE 2

## NOTES:

- SERVICE SINK TO BE PROVIDED IN JANITOR CLOSET
- DRINKING FOUNTAINS WILL BE SUBSTITUTED FOR THIS PROJECT. PER ADOPTED CITY OF LEE'S SUMMIT ORDINANCE SEC. 7-403. WATER COOLERS OR BOTTLED WATER DISPENSERS SHALL BE PERMITTED TO BE SUBSTITUTED FOR DRINKING FOUNTAIN REQUIREMENT.
- ADDITIONAL SINGLE USER RESTROOM PROVIDED IN PRIVATE OFFICE

## SIGNAGE:

PRIOR TO FABRICATION AND INSTALLATION OF ANY EXTERIOR SIGNS, SIGN PERMIT APPLICATION WILL BE GENERATED AND APPROVED BY THE REGULATING AUTHORITY.

## DEFERRED SUBMITTALS:

THE FOLLOWING APPROVED DEFERRED SUBMITTAL ITEMS AND/OR DESIGN DRAWINGS SHALL BE SUBMITTED BY THE RESPONSIBLE DESIGN PROFESSIONAL TO BUILDING SAFETY FOR REVIEW NOT MORE THAN SIXTY (60) DAYS AFTER THE DATE THAT THE BUILDING PERMIT IS ISSUED AND PRIOR TO THE WORK BEING PERFORMED:

- AUTOMATIC SPRINKLER SYSTEM
- FIRE ALARM SYSTEMS

## SUBMITTALS:

BY SUBMITTING SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR SUBMITTALS, THE CONTRACTOR REPRESENTS TO THE OWNER AND ARCHITECT THAT THE CONTRACTOR HAS:

- REVIEWED AND APPROVED THEM
- DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS, AND FIELD CONSTRUCTION CRITERIA RELATED THERETO, OR WILL DO SO
- CHECKED AND COORDINATED THE INFORMATION WITH THE REQUIREMENTS OF THE WORK AND OF THE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK FOR WHICH THE CONTRACT DOCUMENTS REQUIRE SUBMITTALS UNTIL THE SUBMITTAL HAS BEEN APPROVED BY THE ARCHITECT.

THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS BY THE ARCHITECT'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES, OR SIMILAR SUBMITTALS UNLESS THE CONTRACTOR HAS INFORMED THE ARCHITECT IN WRITING OF SUCH DEVIATION AT THE TIME OF THE SUBMITTAL AND:

- THE ARCHITECT HAS GIVEN WRITTEN APPROVAL FOR THE DEVIATION AS A MINOR CHANGE IN THE WORK, OR
- A CHANGE ORDER OR CONSTRUCTION CHANGE DIRECTIVE HAS BEEN ISSUED AUTHORIZING THE DEVIATION.

# NOTES

## SAFEGUARDS DURING CONSTRUCTION:

GENERAL:  
- CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED AND PLACED SO AS NOT TO ENDANGER THE PUBLIC, THE WORKERS OR ADJOINING PROPERTY FOR THE DURATION OF THE CONSTRUCTION PROJECT.

CONSTRUCTION SAFEGUARDS:  
- REQUIRED EXITS, EXISTING STRUCTURAL ELEMENTS, FIRE PROTECTION DEVICES, AND SANITARY SAFEGUARDS SHALL BE MAINTAINED AT ALL TIMES DURING REMODELING, ALTERATIONS, REPAIRS OR ADDITIONS TO ANY BUILDING OR STRUCTURE.  
- EXCEPTION: WHEN SUCH REQUIRED ELEMENTS OR DEVICES ARE BEING REMODELED, ALTERED OR REPAIRED, ADEQUATE SUBSTITUTE PROVISIONS SHALL BE MADE.  
- EXCEPTION: WHEN EXISTING BUILDING IS NOT OCCUPIED.  
- WASTE MATERIALS SHALL BE REMOVED IN A MANNER WHICH PREVENTS INJURY OR DAMAGE TO PERSONS, ADJOINING PROPERTIES AND PUBLIC RIGHTS-OF-WAY.

SANITARY:  
- SANITARY FACILITIES SHALL BE PROVIDED DURING CONSTRUCTION, REMODELING, OR DEMOLITION ACTIVITIES IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE.

PROTECTION OF PEDESTRIANS:  
- PEDESTRIANS SHALL BE PROTECTED DURING CONSTRUCTION, REMODELING, AND DEMOLITION ACTIVITIES AS REQUIRED BY CHAPTER 33. SIGNS SHALL BE PROVIDED TO DIRECT PEDESTRIAN TRAFFIC.  
- CONSTRUCTION RAILINGS SHALL BE AT LEAST 42 INCHES IN HEIGHT AND SHALL BE SUFFICIENT TO DIRECT PEDESTRIANS AROUND CONSTRUCTION AREAS.

- PEDESTRIAN PROTECTION REQUIRED BY THIS SECTION SHALL BE MAINTAINED IN PLACE AND KEPT IN GOOD ORDER FOR THE ENTIRE LENGTH OF TIME PEDESTRIANS MAY BE ENDANGERED.  
- UPON COMPLETION OF THE CONSTRUCTION ACTIVITY, SHALL IMMEDIATELY REMOVE WALKWAYS, DEBRIS AND OTHER OBSTRUCTIONS AND LEAVE SUCH PUBLIC PROPERTY IN AS GOOD A CONDITION AS IT WAS BEFORE WORK COMMENCED.

- ALL COVERED WALKWAYS, BARRIERS AND BARRICADES SHALL BE IN ACCORDANCE WITH SECTION 3308 OF THE INTERNATIONAL BUILDING CODE.

PROTECTION OF ADJOINING PROPERTY:  
- ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING, AND DEMOLITION WORK. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES.

TEMPORARY USE OF STREETS, ALLEYS, AND PUBLIC PROPERTY:  
- THE TEMPORARY USE OF STREETS OR PUBLIC PROPERTY FOR THE STORAGE OR HANDLING OF MATERIALS OR OF EQUIPMENT REQUIRED FOR CONSTRUCTION OR DEMOLITION, AND THE PROTECTIONS PROVIDED TO THE PUBLIC SHALL COMPLY WITH THE PROVISIONS OF THE AUTHORITY HAVING JURISDICTION AND SECTION 3308 OF THE INTERNATIONAL BUILDING CODE.

- CONSTRUCTION MATERIALS AND EQUIPMENT SHALL NOT BE PLACED OR STORED SO AS TO OBSTRUCT ACCESS TO FIRE HYDRANTS, STANDPIPES, FIRE OR POLICE ALARM BOXES, CATCH BASINS OR MANHOLES, NOR SHALL SUCH MATERIAL OR EQUIPMENT BE LOCATED WITHIN 20 FEET OF A STREET INTERSECTION, OR PLACED SO AS TO OBSTRUCT NORMAL OBSERVATIONS OF TRAFFIC SIGNALS OR TO HINDER THE USE OF PUBLIC TRANSIT LOADING PLATFORMS.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY CONSTRUCTION DEBRIS FROM PUBLIC ROADWAYS OR SIDEWALKS.

AUTOMATIC SPRINKLER SYSTEM  
- IN BUILDINGS WHERE AN AUTOMATIC SPRINKLER SYSTEM IS REQUIRED BY THE INTERNATIONAL BUILDING CODE IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE AUTOMATIC SPRINKLER SYSTEM INSTALLATION HAS BEEN TESTED AND APPROVED.

- OPERATION OF SPRINKLER CONTROL VALVES SHALL BE PERMITTED ONLY BY PROPERLY AUTHORIZED PERSONAL AND SHALL BE ACCOMPANIED BY NOTIFICATION OF DULY DESIGNATED PARTIES.  
- WHEN THE SPRINKLER PROTECTION IS BEING REGULARLY TURNED OFF AND ON TO FACILITATE CONNECTION OF NEWLY COMPLETED SEGMENTS, THE SPRINKLER CONTROL VALVES SHALL BE CHECKED AT THE END OF EACH WORK PERIOD TO ASCERTAIN THAT THE PROTECTION IS IN SERVICE.

FIRE EXTINGUISHERS

- ALL STRUCTURES UNDER CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER IN ACCORDANCE WITH SECTION 906 AND SIZED FOR NOT LESS THAN ORDINARY HAZARD AS FOLLOWS:

- @ EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.
- IN EVERY STORAGE AND CONSTRUCTION SHED.
- ADDITIONAL PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED WHERE SPECIAL HAZARDS EXIST, SUCH AS THE STORAGE AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.

EXITS  
- REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING, OR ALTERATIONS AND ADDITIONS TO ANY BUILDING.

## DOCUMENT DISTRIBUTION AND BIDDING:

BY SUBMITTING A PROPOSAL FOR THE PROPOSED SCOPE OF WORK THE CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING:

- REVIEW THE EXISTING CONDITIONS AT THE SITE.
- REVIEW THE ENTIRE SET OF CONSTRUCTION DOCUMENTS
- NOTIFY THE ARCHITECT OF ANY DEVIATION FROM THE REPRESENTED SCOPE OF WORK AND SUBMITTED BID PROPOSAL.
- PROVIDE SUBMITTALS FOR REVIEW OF PRIMARY PROJECT COMPONENTS
- COORDINATE THE PROPOSED SCOPES OF WORK TO PROVIDE A COMPREHENSIVE BID CONTRACT DOCUMENTS MAY ONLY BE MODIFIED BY OFFICIAL ADDENDUM, ASI, RFP, ETC. ISSUED BY THE ARCHITECT.
- PERFORM REQUIRED SPECIAL INSPECTIONS AND PROVIDE ARCHITECT WITH A COPY OF REPORTS AS THEY ARE PERFORMED.

## ALTERNATE BIDS:

- 

# INTRINSIC DEVELOPMENT - CORPORATE OFFICE



221 NE ALURA WAY - STE. # ### , LEES SUMMIT, JACKSON COUNTY, MO 64064

ARCHITECT: SAI ARCHITECTURE  
210 PARK AVENUE  
COLUMBIA, MO 65203  
573-874-1818

MEP: J-SQUARED ENGINEERING  
2400 BLUFF CREEK DR., SUITE 101  
COLUMBIA, MO 65201  
573-234-4492

## DRAWING INDEX

### SHEET # | DESCRIPTION

#### PROJECT INFORMATION (SIMON ASSOCIATES)

G100 COVER SHEET / CODE REVIEW

G110 ADA REQUIREMENTS

ARCHITECTURAL (SIMON ASSOCIATES)

A100 FLOOR PLAN / WALL TYPES / SCHEDULES

A400 INTERIOR ELEVATIONS

A600 SCHEDULES

MECHANICAL (J-SQUARED)

MEP1 MEP COVER SHEET

M111 HVAC PLAN - AREA A

M121 HVAC PLAN - AREA B

M501 HVAC DETAILS

M601 HVAC SCHEDULES

ELECTRICAL (J-SQUARED)

EP111 POWER PLAN - AREA A

EP121 POWER PLAN - AREA B

EL101 LIGHTING PLAN

E501 ELECTRICAL DETAILS

E601 ELECTRICAL SCHEDULES

PLUMBING (J-SQUARED)

PS101 SANITARY SEWER PLAN

PW101 WATER AND GAS PLAN

PS01 PLUMBING DETAILS

ORIGINAL # - DATE	REVISION #1 - DATE	REVISION #2 - DATE	REVISION #3 - DATE	REVISION #4 - DATE
11/17/2025				



11/17/2025  
JASON K. TEGERDINE  
ARCHITECT MO# A-2019003788

Missouri Certificate of Authority  
# 000644

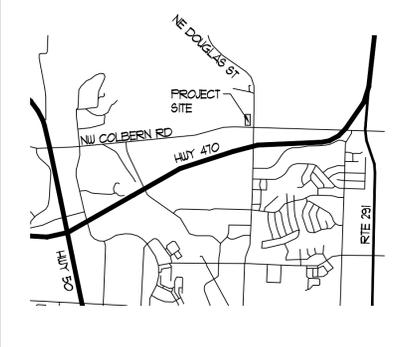
THE ARCHITECT TAKES  
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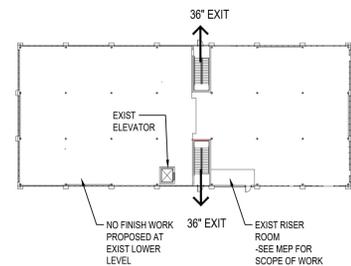
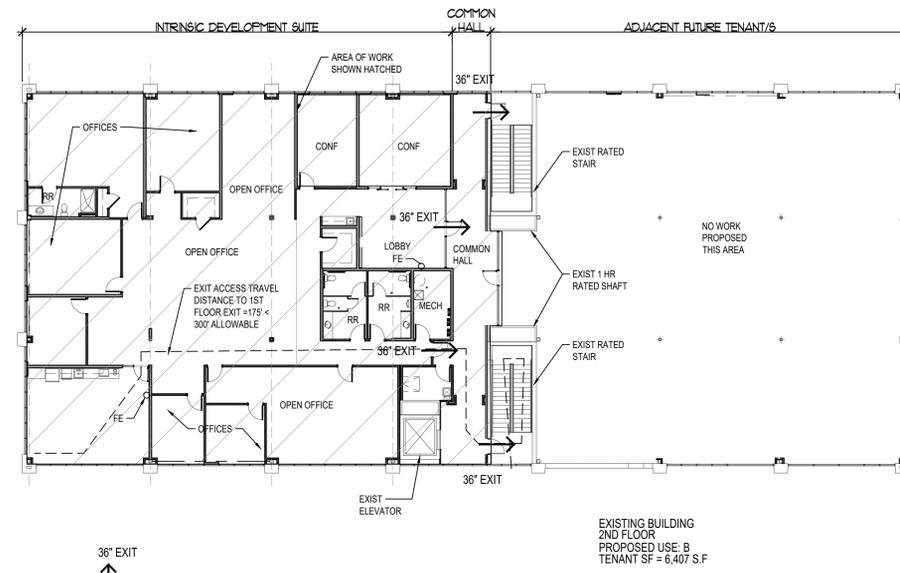
# LOCATION PLAN



# SPECIAL INSPECTIONS

NO SPECIAL INSPECTIONS ARE ANTICIPATED FOR THE SCOPE OF THIS PROJECT

# KEY PLAN (N.T.S)



INTRINSIC DEVELOPMENT  
CORPORATE OFFICE - STE# ###  
PROJECT #25062  
221 NE ALURA WAY, LEES SUMMIT, JACKSON COUNTY, MO, 64064

## REVISIONS:

NO. DATE & DESCRIPTION:

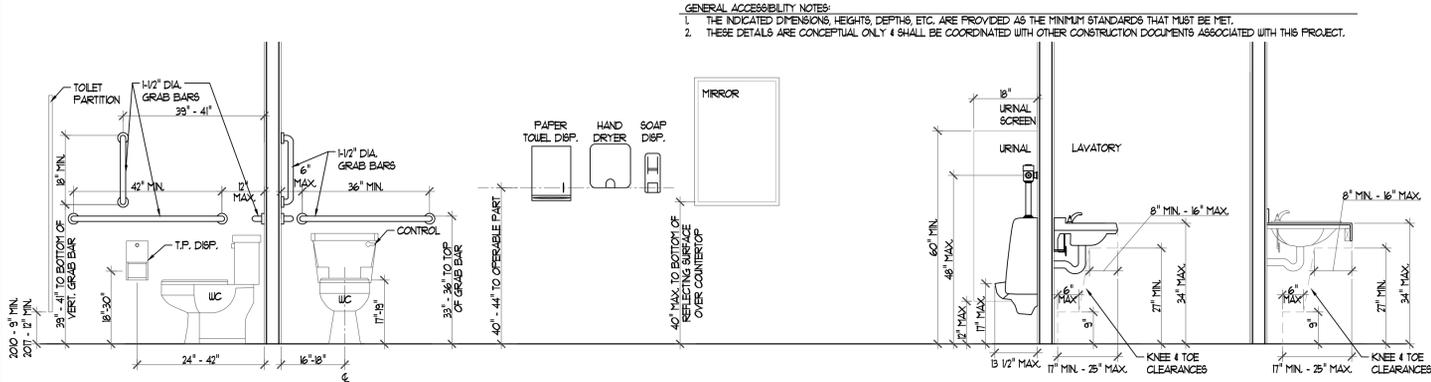
G100

COVER SHEET & CODE NOTES

CONSTRUCTION DOCUMENTS

DATE ISSUED: 11/17/2025

# ACCESSIBILITY REQUIREMENTS

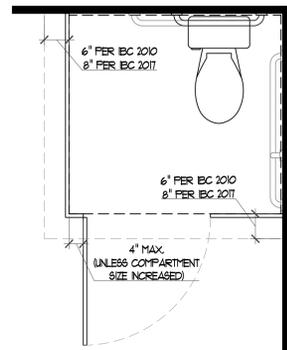


**TYP. RESTROOM MOUNTING HEIGHTS & CLEARANCES**

SCALE: 1/2"=1'-0"

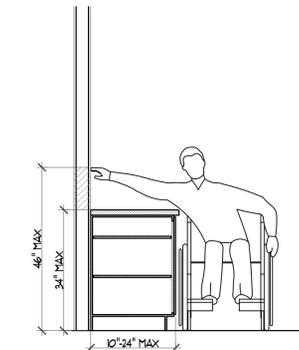
**RESTROOM NOTES:**

1. A MINIMUM OF ONE (1) WATER CLOSET IS REQUIRED TO BE ACCESSIBLE. SEE PLANS FOR LOCATION OF ACCESSIBLE FIXTURES.



**COMPARTMENT TOE CLEAR**

SCALE: 1/2"=1'-0"



**TYP. OBSTRUCTED SIDE REACH CLEAR.**

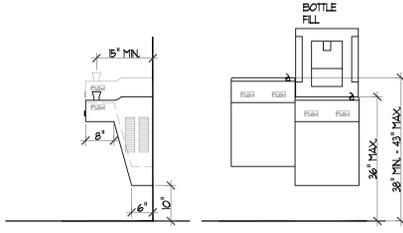
SCALE: 1/2"=1'-0"



**TYP. CHANGES IN FLR. LEVEL**

SCALE: 3"=1'-0"

NOTE: CHANGES IN LEVEL GREATER THAN 1/4" SHALL CONFORM TO OPTION 'A' OR 'B' ABOVE

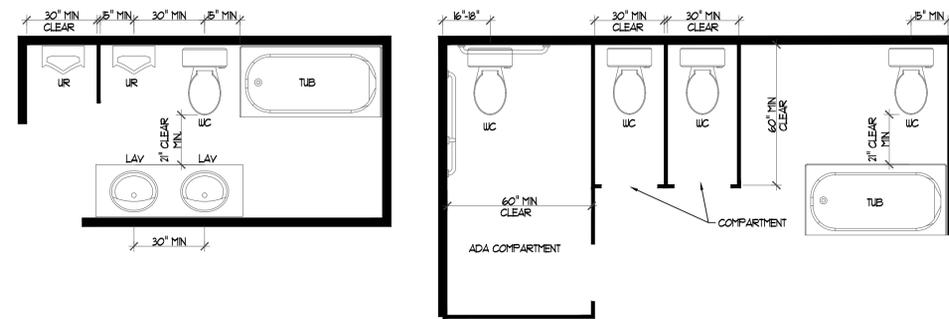


**TYP. HIGH/LOW DRINKING FOUNTAIN**

SCALE: 1/2"=1'-0"

NOTE: BOTTLE FILL STATION OPTIONAL. MOUNT HT. OF BOTTLE FILL PER MFR RECOMMENDATIONS. REFERENCE MEP PLANS FOR BOTTLE FILL LOCATIONS

# PLUMBING FIXTURE CLEARANCES



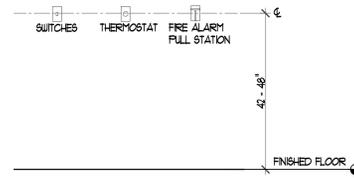
**TYP. PLUMBING FIXTURE CLEARANCE**

SCALE: NTS

**GENERAL CLEARANCE NOTES:**

1. BASIS OF INFORMATION OF DIMENSIONS PER IFC SEC. 405  
 2. THE INDICATED DIMENSIONS ARE PROVIDED AS THE MINIMUM STANDARDS THAT MUST BE MET.  
 3. THESE DETAILS ARE CONCEPTUAL ONLY & SHALL BE COORDINATED WITH OTHER CONSTRUCTION DOCUMENTS ASSOCIATED WITH THIS PROJECT.

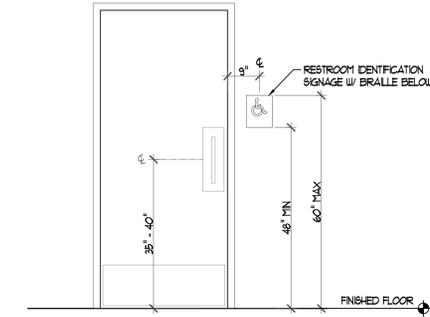
# TYPICAL MOUNTING HEIGHTS



**DEVICES AND SWITCHES**

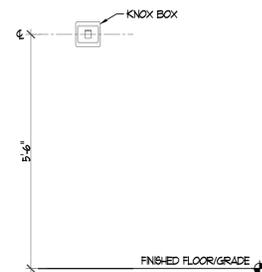
SCALE: 1/2"=1'-0"

NOTE: DIMENSION SHALL BE MEASURED TO THE HIGHEST OPERABLE PART OF THE DEVICE OR SWITCH.



**TYP. ACCESSIBLE RESTROOM SIGNAGE**

SCALE: 1/2"=1'-0"

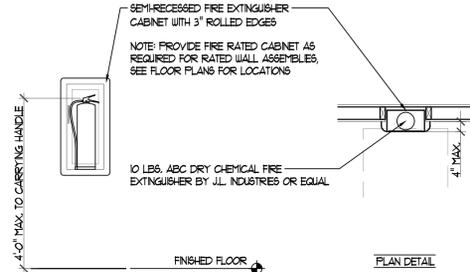


**KNOX BOX MOUNT HEIGHT**

SCALE: 1/2"=1'-0"

**KNOX BOX NOTES:**

1. CONTRACTOR TO INSTALL NEW IF NONE EXISTS  
 2. KNOX BOX BRAND SECURED KEY BOX REQUIRED.  
 3. COORD. LOCATION WITH FIRE DEPT.



**FIRE EXT. INSTALLATION DET.**

SCALE: 1/2"=1'-0"

**FIRE EXTINGUISHER NOTES:**

1. FIRE EXTINGUISHERS WEIGHING MORE THAN 40 POUNDS SHALL BE INSTALLED SO THAT THE CARRYING HANDLE IS NOT MORE THAN 42" ABOVE THE FLOOR.  
 2. CLEARANCE BETWEEN THE FLOOR AND THE BOTTOM OF INSTALLED FIRE EXTINGUISHERS SHALL NOT BE LESS THAN 4"

# COMMON ABBRV'S

A.F.F.	ABOVE FINISHED FLOOR
A.H.U.	AIR HANDLING UNIT
B.O.	BOARD
B.L.D.G.	BUILDING
B.R.G.	BEARING
C.A.B.I.N.E.T.	CABINET
C.E.L.I.N.G.	CELING
C.F.L.	CLEAR FLOOR
C.L.	CENTER LINE
C.L.R.	CLEAR
C.L.O.	CLOSET
C.O.L.	COLUMN
C.O.N.C.	CONCRETE
C.O.N.T.	CONTINUOUS
C.P.T.	CARPET
D.E.M.O.	DEMOLITION
D.I.A.	DIAPHRAGM
D.S.P.	DISPENSER
D.N.D.	DO NOT DISTURB
D.S.	DOORSTOP
D.T.L.	DETAIL
D.U.	DRY-WASHER
D.U.G.	DRAWING
E.A.	BACK
E.E.C.	ELECTRICAL
E.L.V.	ELEVATION
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
F.N.	FINISH
F.L.R.	FLOOR
F.N.D.	FOUNDATION
F.S.	FLOOR SINK
F.T.E.	FOOTING
F.U.R.N.	FURNITURE
G.Y.P.S.	GYP-SUM
H.B.	HOSE BIBB
H.Y.	HOLLOW METAL
H.T.	HEIGHT
I.B.C.	INTERNATIONAL BUILDING CODE
I.N.S.U.L.	INSULATION
L.A.V.	LAVATORY
M.A.X.	MAXIMUM
M.E.C.H.	MECHANICAL
M.F.R.	MANUFACTURER
M.I.C.R.O.	MICROWAVE
M.I.N.	MINIMUM
M.R.	MOISTURE-RESISTANT
M.T.L.	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.H.	OVERHANG
O.H.D.	OVERHEAD DOOR
O.P.P.	OPPOSITE
P.B.	FIRE BOLLARD
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
P.N.L.	PANEL
P.O.R.	PORCELAIN
R.C.P.	REFLECTED CEILING PLAN
R.E.F.R.I.G.	REFRIGERATOR
R.E.Q'D.	REQUIRED
R.E.Q'TS.	REQUIREMENTS
S.T.L.	STEEL
S.U.S.P.	SUSPENDED
T.B.D.	TO BE DETERMINED
T.Y.P.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W.	WITH
W.B.	WASHER BOX
W.C.	WATER CLOSET
W.H.	WATER HEATER
W.P.	WATER PROOF



11/17/2025  
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THE ARCHITECT TAKES RESPONSIBILITY FOR THE DRAWINGS BEARING THIS SEAL AND DISCLAIMS RESPONSIBILITY FOR ALL OTHER DRAWINGS IN THE SET



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**INTRINSIC DEVELOPMENT**  
**CORPORATE OFFICE - STE# ###**  
 PROJECT #25062  
 221 NE ALURA WAY, LEE'S SUMMIT, JACKSON COUNTY, MO, 64064

**REVISIONS:**

NO. DATE & DESCRIPTION:


**G110**  
 TYPICAL DETAILS

CONSTRUCTION DOCUMENTS  
 DATE ISSUED: 11/17/2025





11/17/2025  
 JASON K. TEGEDINE  
 ARCHITECT MO# A-2019003788

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**INTRINSIC DEVELOPMENT**  
**CORPORATE OFFICE - STE # 400**  
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 221 NE ALURA WAY, LEE'S SUMMIT, JACKSON COUNTY, MO, 64064

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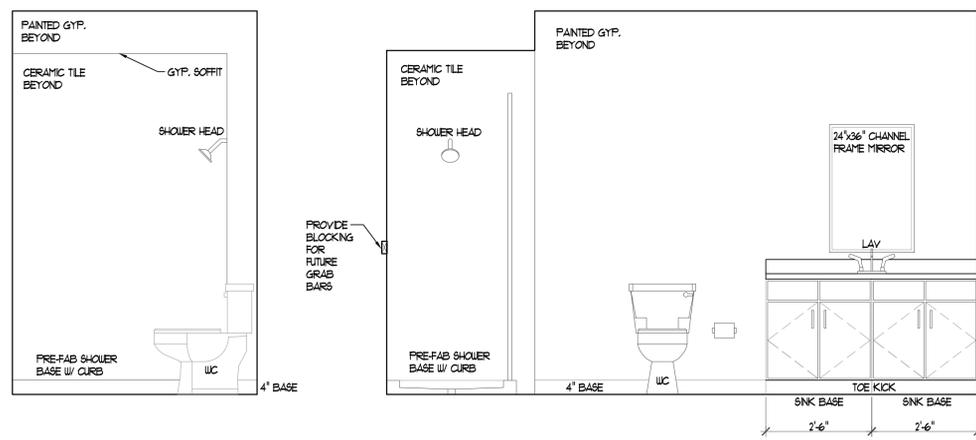
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**A400**

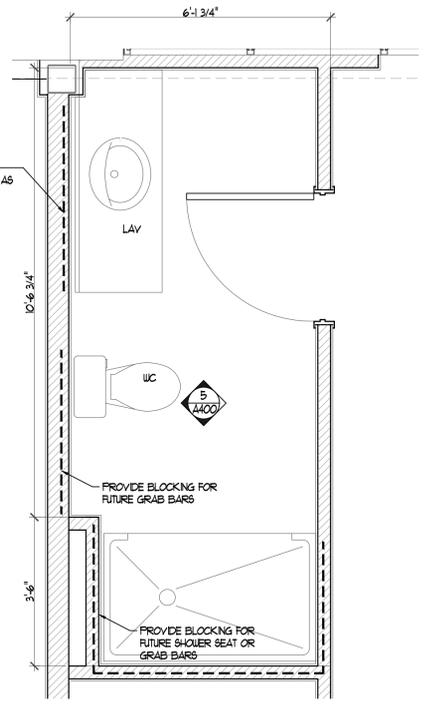
INTERIOR DETAILS PLAN

CONSTRUCTION DOCUMENTS

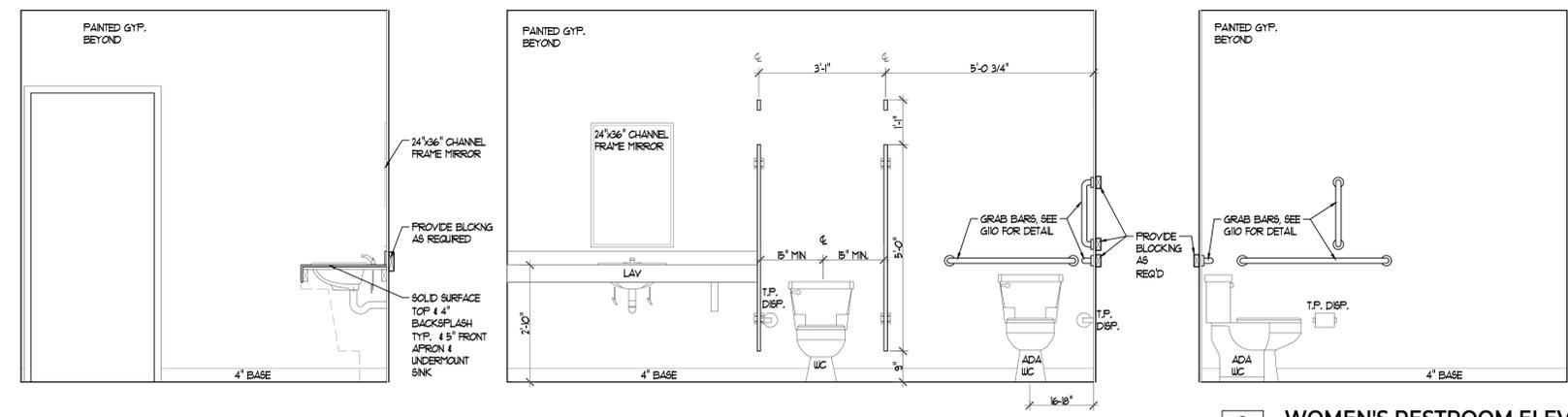
DATE ISSUED: 11/17/2025



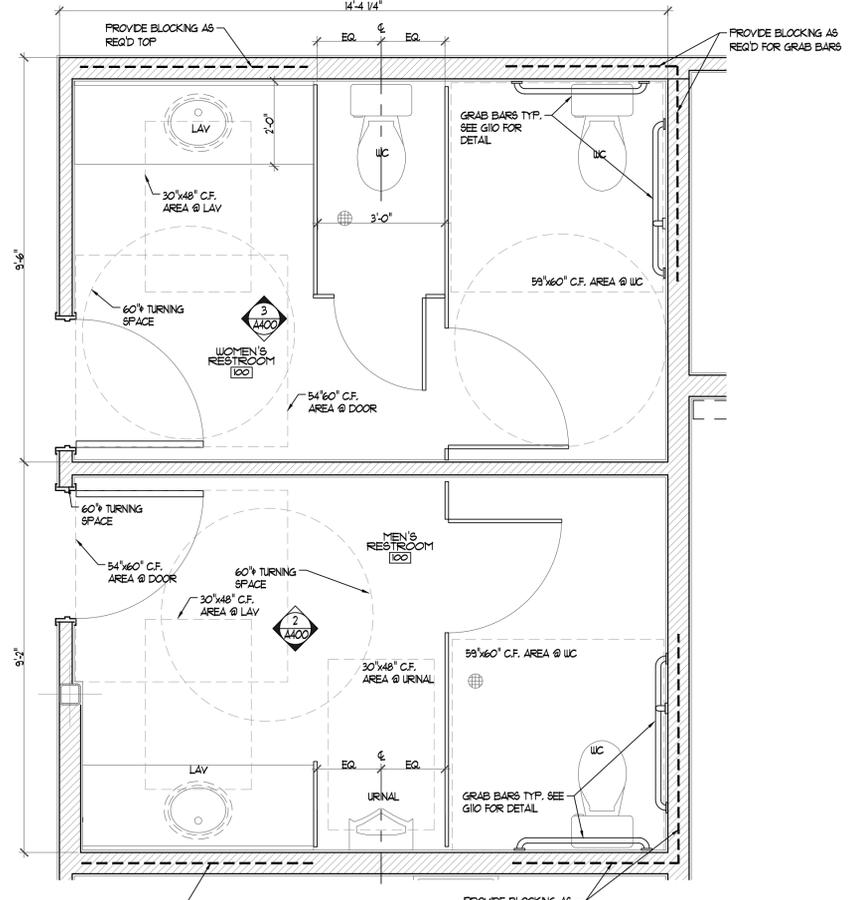
**5 EXEC. RESTROOM ELEV.**  
 A400 SCALE: 1/2"=1'-0"



**4 SINGLE USER RR DTL PLAN**  
 NORTH A400 SCALE: 1/2"=1'-0"

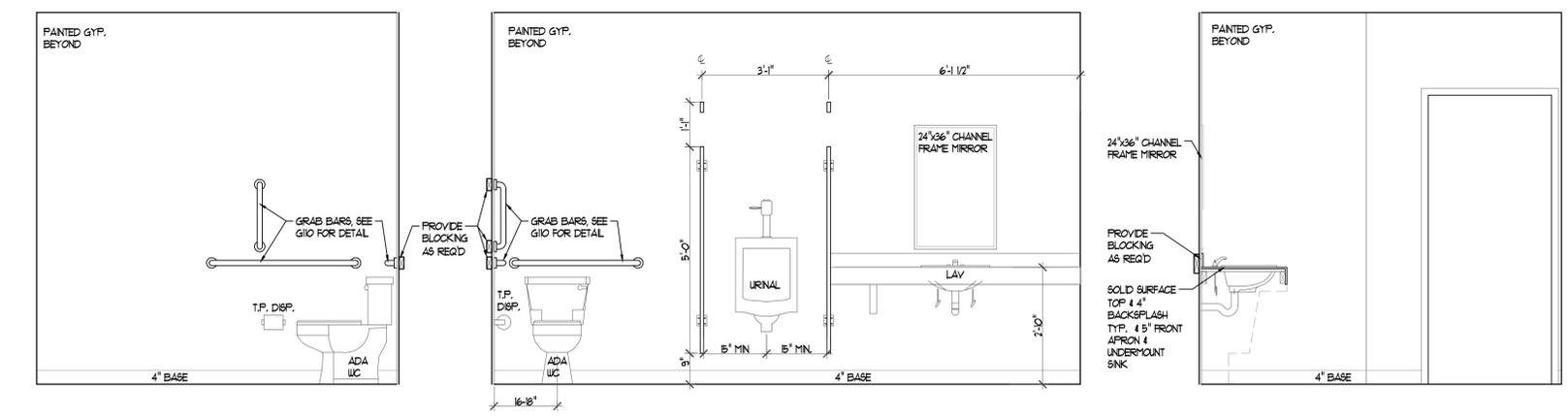


**3 WOMEN'S RESTROOM ELEV.**  
 A400 SCALE: 1/2"=1'-0"



**1 RESTROOM DETAIL PLAN**  
 NORTH A400 SCALE: 1/2"=1'-0"

TYPICAL RESTROOM NOTES:  
 1. PROVIDE INSULATING COVERS @ SUPPLY 4 DRAINS



**2 MEN'S RESTROOM ELEV.**  
 A400 SCALE: 1/2"=1'-0"

ROOM FINISH SCHEDULE

REV NO.	RM NO.	ROOM NAME	FLOORS			WALLS						CEILING			REMARKS		
			FINISH	CLASS	BASE	NORTH	CLASS	SOUTH	CLASS	EAST	CLASS	WEST	CLASS	FINISH		CLASS	HEIGHT
	100	LOBBY	LVT	-	WOOD	GYP / WOOD	C	GLASS	-	GYP / PAINT	C	GYP / PAINT	C	VARES	-	VARES	WOOD SLAT ACCENT WALL SEE PLAN. COORD. W/ TENANT
	101	HALL	LVT	-	WOOD	GYP / PAINT	C	SUSP	C	12'-0"							
	102	CONFERENCE	LVT	II	WOOD	GYP / PAINT	C	EXIST GLASS	-	GYP / PAINT	C	GYP / PAINT	C	VARES	-	VARES	
	103	CONFERENCE	LVT	-	WOOD	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	GYP / PAINT	C	VARES	-	VARES	
	104	OPEN OFFICE	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	GYP / PAINT	C	SUSP	C	12'-0"	
	105	STORAGE	CFT	II	WOOD	GYP / PAINT	C	SUSP	C	9'-0"	COORD. W/ TENANT FOR STORAGE SHELVING						
	106	OPEN OFFICE	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	GYP / PAINT	C	VARES	-	VARES	
	107	STORAGE	CFT	II	WOOD	GYP / PAINT	C	SUSP	C	9'-0"	COORD. W/ TENANT FOR STORAGE SHELVING						
	108	OFFICE	CFT	II	WOOD	GYP / PAINT	C	EXIST GLASS	-	GYP / PAINT	C	EXIST GLASS	-	SUSP	C	12'-0"	
	109	OFFICE	CFT	II	WOOD	EXIST GLASS	-	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	SUSP	C	12'-0"	
	110	STORAGE	CFT	II	WOOD	GYP / PAINT	C	SUSP	C	9'-0"	COORD. W/ TENANT FOR STORAGE SHELVING						
	111	RESTROOM	CER TILE	-	CER TILE	GYP / PAINT	C	9'-0"	COORD. W/ TENANT FOR FINISH SELECTION								
	112	OFFICE	CFT	II	WOOD	EXIST GLASS	-	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	SUSP	C	12'-0"	
	113	OFFICE	CFT	II	WOOD	EXIST GLASS	-	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	SUSP	C	12'-0"	
	114	BREAK ROOM	LVT	-	WOOD	EXIST GLASS	-	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	SUSP	C	12'-0"	
	115	OFFICE	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	SUSP	C	12'-0"	
	116	OFFICE	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	SUSP	C	12'-0"	
	117	ACCT OFFICE	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	SUSP	C	12'-0"	
	118	HALL	LVT	-	WOOD	-	-	GYP / PAINT	C	GYP / PAINT	C	GYP / PAINT	C	SUSP	C	12'-0"	
	119	WOMEN RESTROOM	CER TILE	-	CER TILE	CER TILE	-	GYP / PAINT	C	9'-0"							
	120	MEN RESTROOM	CER TILE	-	CER TILE	CER TILE	-	GYP / PAINT	C	9'-0"							
	121	MECH	CONC	-	-	GYP / PAINT	C	GYP	C	V.I.F.							
	200	SHARED HALL	CFT	II	WOOD	GYP / PAINT	C	GYP / PAINT	C	EXIST GLASS	-	EXIST GLASS	-	SUSP	C	12'-0"	
	201	ROOF ACCESS	CONC	-	-	GYP / PAINT	C	GYP	C	V.I.F.							

- FINISH NOTES:
- ALL DRYWALL TO BE LEVEL 4 FINISH.
  - ALL DRYWALL TO BE SMOOTH FINISH UNLESS NOTED OTHERWISE.
  - ONE PRIME COAT AND TWO FINISH COATS OF PAINT TYPICAL AT ALL NEW SURFACES.
  - CEILING HEIGHTS ARE NOMINAL DIMENSIONS. ACTUAL MAY VARY 1/2" +/-.
  - CONTRACTOR TO COORDINATE CONCRETE SEAL WITH OWNER'S SELECTED FLOOR COVERING PER MANUFACTURER'S WARRANTY AND INSTALLATION REQUIREMENTS.
  - OWNER TO APPROVE ALL FINAL FINISH SELECTIONS PRIOR TO INSTALLATION.
  - PROVIDE GYP. BD. EXPANSION JOINTS AT WALLS THAT EXCEED 25'-0" IN LENGTH.



11/17/2025  
 JASON K. TEGERDINE  
 ARCHITECT MO# A-2019003788

Missouri Certificate of Authority  
 # 000644

THE ARCHITECT TAKES  
 RESPONSIBILITY FOR THE DRAWINGS  
 BEARING THIS SEAL AND DISCLAIMS  
 RESPONSIBILITY FOR ALL OTHER  
 DRAWINGS IN THE SET



210 Park Avenue  
 Columbia, Missouri 65203  
 Phone: 573-874-1818

WWW.SAIARCHITECTURE.COM

INTRINSIC DEVELOPMENT  
 CORPORATE OFFICE - STE# ###  
 PROJECT #25062  
 221 NE ALURA WAY, LEE'S SUMMIT, JACKSON COUNTY, MO. 64064

REVISIONS:

NO.	DATE & DESCRIPTION:

**A600**  
 SCHEDULES

CONSTRUCTION DOCUMENTS  
 DATE ISSUED: 11/17/2025

DOOR SCHEDULE

REV NO.	NO.	SIZE			DOOR				FRAME		HARDWARE GROUP	REMARKS
		W	H	TH.	TYPE	MAT.	FIN.	ACTION	MAT.	FIN.		
	100	3'-0"	7'-0"	1 3/4"	B	ALUM	BLACK	RHR	ALUM	BLACK	3, PA, E	PANIC HARDWARE & ACCESS CONTROLS
	102	FR 2'-6"	7'-0"	1 3/4"	C	ALUM	BLACK	SLDING	ALUM	BLACK	3	
	103	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	OFFICE LOCKSET
	105	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	1	
	107	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RHR	HM	PAINT	1	
	108	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	OFFICE LOCKSET
	109	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RH	HM	PAINT	2, E	OFFICE LOCKSET & ACCESS CONTROLS
	110	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LHR	HM	PAINT	2	OFFICE LOCKSET
	111	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RH	HM	PAINT	1P	
	112	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	OFFICE LOCKSET
	113	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RH	HM	PAINT	2	OFFICE LOCKSET
	114	3'-0"	7'-0"	1 3/4"	B	ALUM	BLACK	LH	ALUM	BLACK	3, C	
	115	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	OFFICE LOCKSET
	116	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	OFFICE LOCKSET
	117A	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RH	HM	PAINT	1	
	117B	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	1	
	118	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RHR	HM	PAINT	2, PA, E	PANIC HARDWARE & ACCESS CONTROLS
	119	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	RH	HM	PAINT	4	SIGN: WOMEN ACCESSIBLE RESTROOM
	120	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	4	SIGN: MEN ACCESSIBLE RESTROOM
	121	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	SIGN: ELECTRIC ROOM / STOREROOM LOCKSET
	200	3'-0"	7'-0"	1 3/4"	B	ALUM	BLACK	LH	ALUM	BLACK	3, PA	PANIC HARDWARE
	201	3'-0"	7'-0"	1 3/4"	A	WOOD	PREFIN	LH	HM	PAINT	2	STOREROOM LOCKSET

**HARDWARE GROUPS**

NOTES:

- ALL HARDWARE TO BE ACCESSIBLE DESIGN LEVER HANDLE
- ALL HARDWARE TO BE SATIN CHROME FINISH
- ALL HARDWARE TO BE LIGHT COMMERCIAL GRADE
- KEY ALL HARDWARE TO OWNER'S MASTER KEY SYSTEM
- CARD READER SYSTEM PROVIDED BY OWNER (SEPARATE CONTRACT) COORDINATE INSTALLATION WITH OWNER'S SECURITY CONTRACTOR

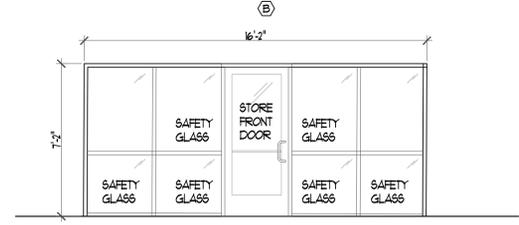
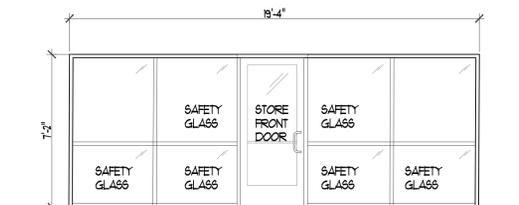
<p>GROUP 1</p> <p>PASSAGE SET                  1 1/2 PAIR BUTTS                  DOOR STOP                  (C) ADD CLOSER                  (F) ADD PRIVACY LATCH</p>	<p>GROUP 2</p> <p>LOCK SET                  1 1/2 PAIR BUTTS                  DOOR STOP                  (E) ADD ELECTRIC STRIKE</p>	<p>GROUP 3</p> <p>MANUFACTURER'S STANDARD PACKAGE                  (FA) ADD PANIC HARDWARE</p>
---	--	--

GROUP 4

PUSH PLATE  
 FULL PLATE  
 KICK PLATE  
 1 1/2 PAIR BUTTS  
 DOOR STOP  
 CLOSER

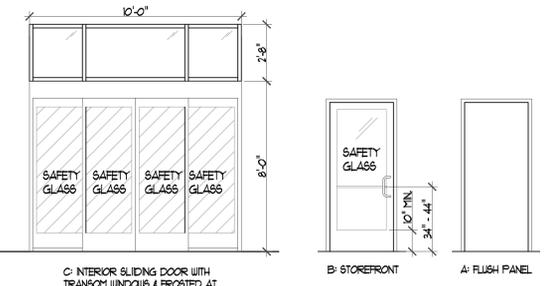
NOTE: HARDWARE ACCESSORIES THAT BEGIN WITH (H) ARE OPTIONAL ACCESSORIES THAT MAY BE ADDED AND ONLY APPLY TO SPECIFIC DOOR OPENINGS. REFERENCE THE DOOR SCHEDULE FOR LOCATIONS

- DOOR NOTES:
- FLUSH DOORS SHALL BE 1 3/4" THICK SOLID CORE WITH ROTARY CUT WHITE BIRCH VENEER, STAIN AS SELECTED FROM SUBMITTED SAMPLES.
  - ALL INTERIOR DOOR FRAMES TO BE KNOCK DOWN OR RED-FRAMES AT CONTRACTOR OPTION.
  - ALL EXTERIOR DOORS TO BE 16 GA WELDED FRAMES.

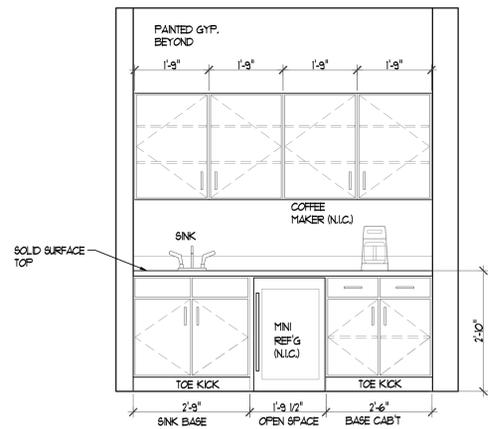


2 WINDOW TYPES  
 A600 SCALE: 1/4"=1'-0"

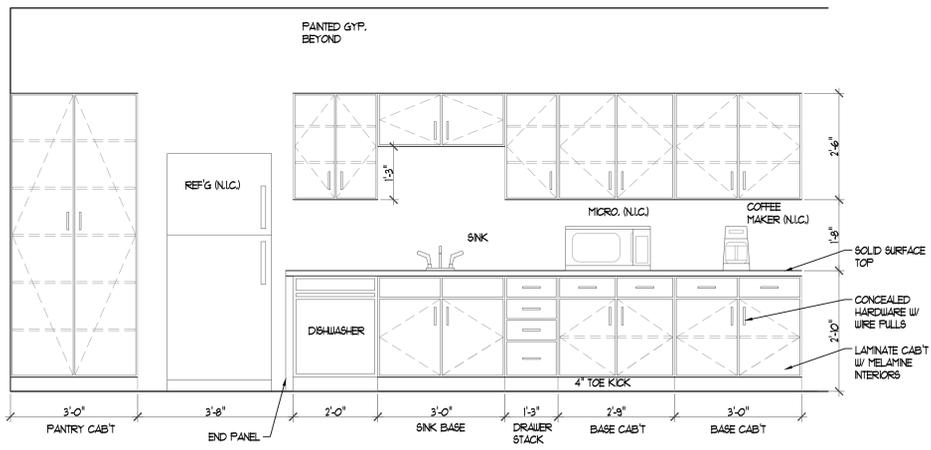
- WINDOW NOTES:
- INTERIOR FRAMES TO BE BLACK
  - SAFETY GLASS TO BE USED IN ALL DOORS, GLAZING ADJACENT TO DOORS (1/4" RADIUS FROM EDGE OF CLOSED DOOR) & WINDOWS WITH BOTTOM EDGE OF GLAZING LESS THAN 18" A.F.F.
  - INTERIOR GLASS TO BE NON-INSULATED GLAZING



1 DOOR TYPES  
 A600 SCALE: 1/4"=1'-0"



4 COUNTER ELEV.  
 A600 SCALE: 1/2"=1'-0"



3 BREAK ROOM ELEV.  
 A600 SCALE: 1/2"=1'-0"

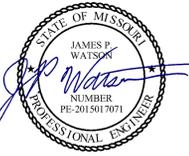


# J-SQUARED ENGINEERING

## MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:

# DPLS Lot 1 Intrinsic Office Infill

221 NE Alura Way  
Lee's Summit, Jackson County, MO 64064



James Watson, P.E. November 17, 2025  
PE-2015017071  
MO Certificate of Authority # 2018029680



**J-SQUARED  
ENGINEERING**

2400 Bluff Creek Drive, Suite 101  
Columbia, Missouri 65201  
573.234.4492  
www.j-squaredeng.com

J2 PROJECT No: J21644

J2 DESIGN: ACW

ISSUE TITLE DATE

PERMIT SET 11 - 17 - 2025

### GENERAL MEP SPECIFICATIONS

- 1. GENERAL**
  - 1.1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH LOCALLY ADOPTED CODES AND ORDINANCES.
  - 1.2. IT IS THE RESPONSIBILITY OF CONTRACTOR TO REVIEW AND UNDERSTAND ALL DRAWINGS AND SPECIFICATIONS IN CONTRACT DOCUMENTS. EACH CONTRACTOR IS RESPONSIBLE FOR ALL WORK ASSOCIATED WITH THEIR TRADE, REGARDLESS OF WHERE WORK IS DEPICTED IN PROJECT DRAWINGS OR SPECIFICATIONS.
  - 1.3. LAYOUT OF SYSTEMS SHOWN ON PLANS ARE APPROXIMATE AND SCHEMATIC IN NATURE. ALL SYSTEMS WILL NEED TO BE FIELD-COORDINATED. CONTRACTOR SHALL INCLUDE THIS COORDINATION IN THEIR SCOPE AND INCLUDE ALL COSTS OF MODIFYING LAYOUT AS REQUIRED IN THEIR BID. PLANS ARE NOT INTENDED TO BE SHOP DRAWINGS FROM WHICH MATERIALS CAN BE ORDERED, FABRICATED, OR INSTALLED WITHOUT ADDITIONAL FIELD MEASUREMENTS AND COORDINATION.
  - 1.4. NOT ALL SPECIFIC PIECES AND COMPONENTS OF EACH SYSTEM ARE DETAILED OR OUTLINED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND LABOR TO PRODUCE A COMPLETE AND FULLY OPERATIONAL SYSTEM UNLESS STATED OTHERWISE ON PLANS. CONTRACTOR IS TO PROVIDE AND INCLUDE ALL EQUIPMENT AND MATERIAL NEEDED TO COMPLETE WORK ASSOCIATED WITH THEIR BID UNLESS ANY ITEMS ARE SPECIFICALLY NOTED ON PLANS AS PROVIDED BY OTHERS. ALL MATERIALS TO BE NEW, FIRST CLASS, AND INSTALLED PER MANUFACTURER'S PUBLISHED INSTRUCTIONS.
  - 1.5. WHERE CONFLICTS EXIST BETWEEN MEP PLANS AND CIVIL, ARCHITECTURAL, OR STRUCTURAL PLANS, NOTIFY MEP ENGINEER OF DISCREPANCIES FOR CLARIFICATION PRIOR TO PERFORMING ANY WORK THAT MAY CONTRADICT INFORMATION ELSEWHERE IN THE PROJECT PLANS.
  - 1.6. THESE PLANS ARE NOT TO BE SCALED. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE THERE IS A CONFLICT BETWEEN ARCHITECTURAL DIMENSIONS AND MEP DIMENSIONS, ARCHITECTURAL SHALL GOVERN.
  - 1.7. CONTRACTOR IS TO INCLUDE IN THEIR SCOPE THE COST OF ALL PERMITS, INSPECTIONS, METERING, TAPS, ETC. ASSOCIATED WITH THEIR WORK.
  - 1.8. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, CUTTING, CORING, PATCHING, AND BACKFILL REQUIRED TO COMPLETE THEIR WORK, UNLESS NOTED OTHERWISE ON PLANS.
  - 1.9. SPECIFIC EQUIPMENT MANUFACTURERS AND/OR MODEL NUMBERS LISTED ON PLANS ARE TO ESTABLISH A BASIS-OF-DESIGN FOR QUALITY AND PERFORMANCE. VERIFY THAT SUBSTITUTIONS WILL BE ACCEPTABLE PRIOR TO PURCHASE & INSTALLATION.
  - 1.10. NOTIFY ENGINEER OF ANY MAJOR PLAN DISCREPANCIES OR CONFLICTS PRIOR TO PROVIDING BIDS OR COMPLETING ANY WORK.
  - 1.11. SEE DISCIPLINE SHEETS FOR ADDITIONAL TRADE SPECIFIC SPECIFICATIONS.
  - 1.12. WHERE SHUTDOWN OF ANY EXISTING UTILITY OR SERVICE TO BUILDING IS REQUIRED FOR COMPLETION OF WORK, COORDINATE OUTAGE WITH OWNER AS TO NOT DISRUPT TYPICAL OPERATIONS.
- 2. WORKMANSHIP**
  - 2.1. SYSTEMS SHALL BE INSTALLED IN A FIRST-CLASS MANNER USING BEST ACCEPTABLE METHODS AND PRACTICES.
  - 2.2. ALL SYSTEMS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION. COMPONENTS SHALL BE INSTALLED LEVEL AND PLUMB WITH ATTENTION GIVEN TO OVERALL AESTHETICS.
  - 2.3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EQUIPMENT LOCATIONS AND SYSTEM ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.
  - 2.4. CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE THE COMPLETED PROJECT IS RELEASED TO THE OWNER, UNLESS NOTED OTHERWISE ON PLANS.
  - 2.5. DURING INSTALLATION OF MATERIALS OR ACTIVITIES IN NEW WORK SCOPE, AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. ANY DAMAGE TO EXISTING SURFACES OR EQUIPMENT SHALL BE CORRECTED AT NO COST TO OWNER.

### DEFERRED SUBMITTAL NOTES

- 1. FIRE ALARM SYSTEM**
  - 1.1. FIRE ALARM CONTRACTOR SHALL PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE ALARM SYSTEM. SUBMITTAL SHALL INCLUDE BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, EQUIPMENT SPECIFICATIONS FOR DEVICES AND PANELS, ETC. DESIGN SHALL BE SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.
  - 1.2. FIRE ALARM SYSTEM COMPONENTS SHOWN (IF APPLICABLE) ARE GENERAL AND SCHEMATIC IN NATURE, SHOWN FOR APPROXIMATE ROUGH-IN LOCATIONS AND QUANTITIES ONLY. CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS AND REQUIREMENTS WITH FIRE ALARM SYSTEM DESIGNER OF RECORD PRIOR TO ROUGH-IN.
- 2. FIRE SPRINKLER SYSTEM**
  - 1.1. FIRE SPRINKLER CONTRACTOR TO PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE SPRINKLER SYSTEM. SUBMITTAL SHALL INCLUDE HYDRAULIC CALCULATIONS AND SPRINKLER SYSTEM DRAWINGS SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.
  - 1.2. WHERE COMBINED FIRE & DOMESTIC WATER SUPPLY LINES ARE SHOWN ON PLANS, INSTALLING CONTRACTOR SHALL VERIFY WITH FIRE SPRINKLER CONTRACTOR THAT INCOMING LINE SIZE IS ADEQUATE FOR FIRE SUPPRESSION SYSTEM.

### REFERENCED CODES IN EFFECT

PROJECT HAS BEEN DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES LISTED BELOW, BUT THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS, AND LOCAL REQUIREMENTS.

- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL FIRE CODE
- 2017 NATIONAL ELECTRIC CODE

### FIRE RATED PENETRATION NOTES

- THIS BUILDING CONTAINS FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR LOCATIONS AND DETAILS.
- A UL-LISTED FIRESTOP SYSTEM SHALL BE INSTALLED AT EACH PENETRATION OF A HORIZONTAL OR VERTICAL RATED ASSEMBLY IN ACCORDANCE WITH ASTM E814 OR UL 1479.
- EACH CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROTECTION FOR THEIR PENETRATIONS THRU RATED ASSEMBLIES.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING A CATALOG OF ALL UL LISTED FIRESTOP ASSEMBLIES, AND KEEPING A PHYSICAL COPY OF DETAILS FOR EACH USED FIRESTOP ASSEMBLY ON SITE FOR REFERENCE.

### Sheet List Table

Sheet Number	Sheet Title
MEP1	MECHANICAL ELECTRICAL PLUMBING COVER SHEET
M111	HVAC PLANS - AREA A
M121	HVAC PLAN - AREA B
M501	HVAC DETAILS
M601	HVAC SCHEDULES
EP111	POWER PLAN - AREA A
EP121	POWER PLAN - AREA B
EL101	LIGHTING PLAN
E501	ELECTRICAL DETAILS
E601	ELECTRICAL SCHEDULES
PS101	SANITARY SEWER PLAN
PW101	WATER & GAS PLAN
PS01	PLUMBING DETAILS & SCHEDULES

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**

221 NE Alura Way  
Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

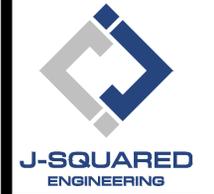
**MECHANICAL  
ELECTRICAL  
PLUMBING  
COVER SHEET**

SHEET NUMBER

**MEP1**



James Watson, P.E. November 17, 2025  
 PE-2015017071  
 MO Certificate of Authority # 2018029680



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 Columbia, Missouri 65201  
 573.234.4492  
 www.j-squaredeng.com

J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

HVAC PLANS - AREA A

SHEET NUMBER

**M111**

**HVAC PLAN SYMBOL LEGEND**

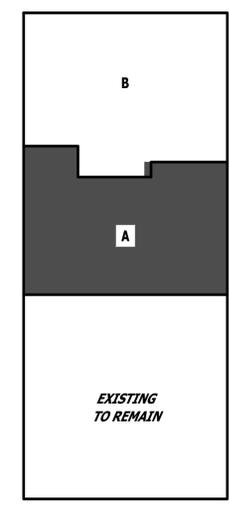
- EQUIPMENT TYPE (REFER TO EQUIPMENT SCHEDULE)
- EQUIPMENT REFERENCE NUMBER
- DIFFUSER/GRILLE TYPE (REFER TO SCHEDULE)
- CUBIC FEET PER MINUTE (CFM) / FACE SIZE
- SUPPLY DUCTWORK
- RETURN DUCTWORK
- EXHAUST DUCTWORK
- OUTSIDE AIR DUCTWORK
- FLEX DUCT
- VENT / COMBUSTION AIR
- CONDENSATION LINE
- TIE INTO EXISTING
- SUPPLY DIFFUSER (HATCH INDICATES "NO FLOW ZONE")
- RETURN DIFFUSER
- BALANCE DAMPER
- MOTORIZED DAMPER

**HVAC PLAN GENERAL NOTES:**

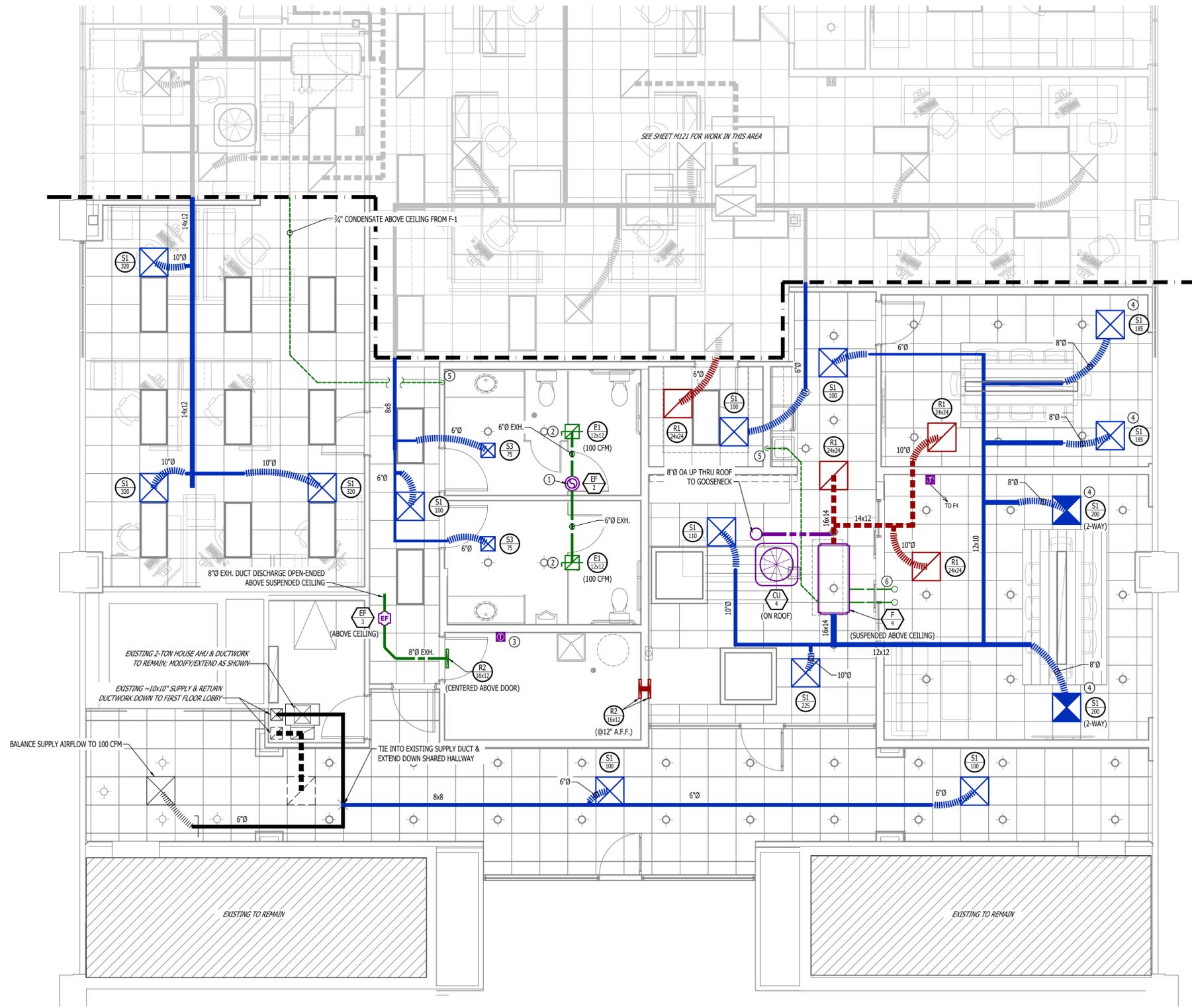
1. REFER TO M500 AND/OR M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
2. HVAC CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL EQUIPMENT, DUCTWORK, REFRIGERANT PIPING, CONDENSATE PIPING, HANGERS / SUPPORTS, ETC. WITH PLUMBING AND ELECTRICAL TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
3. ANY EXISTING HVAC EQUIPMENT OR DUCTWORK SHOWN IS FOR REFERENCE ONLY. HVAC CONTRACTOR TO FIELD VERIFY EXACT EQUIPMENT/DUCT SIZE, LOCATIONS, CONDITION, ETC. PRIOR TO INSTALLATION OF ANY MATERIAL AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

**HVAC PLAN KEY NOTES:**

- ① 8"Ø EXH UP THRU ROOF TO GOOSENECK WITH 3/8" HARDWARE CLOTH OVER OPEN END.
- ② BALANCE EXHAUST TO AMOUNT SHOWN (## CFM).
- ③ COOLING ONLY LINE-VOLTAGE THERMOSTAT TO ENERGIZE EF-3 @ 75°F.
- ④ PAINT SUPPLY DIFFUSER TO MATCH CEILING FEATURE; COORDINATE WITH G.C.
- ⑤ 3/4" FURNACE CONDENSATE PIPING TO INDIRECT DISCHARGE INTO HUB DRAIN IN THIS AREA, COORDINATE WITH PLUMBING CONTRACTOR.
- ⑥ FURNACE VENT/COMBINATION AIR PIPING UP THRU ROOF, ROUTED & TERMINATED PER MANUFACTURER'S SPECIFICATIONS. LOCATE AT LEAST 10' FROM ANY FRESH AIR INTAKE, OFFSET ABOVE CEILING AS NECESSARY.



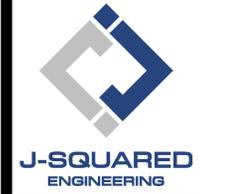
**KEY PLAN**  
 SCALE: NTS



**HVAC PLANS - AREA A**  
 SCALE: 1/4" = 1'-0"



James Watson, P.E. November 17, 2025  
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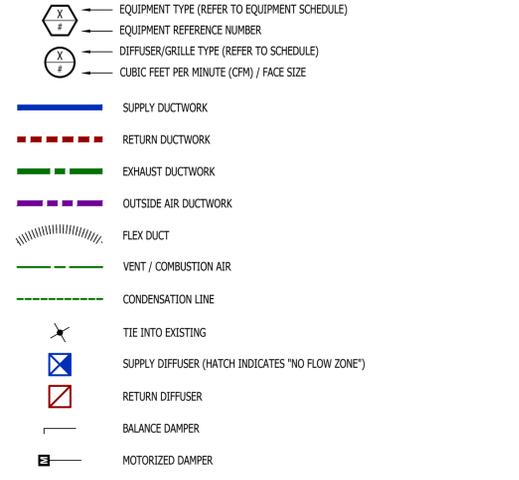
SHEET TITLE

HVAC PLAN - AREA B

SHEET NUMBER

**M121**

**HVAC PLAN SYMBOL LEGEND**

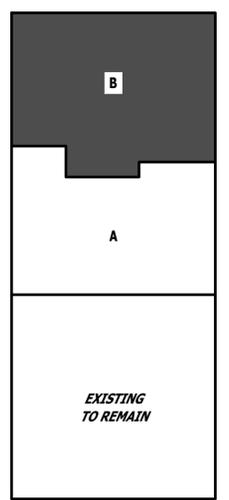
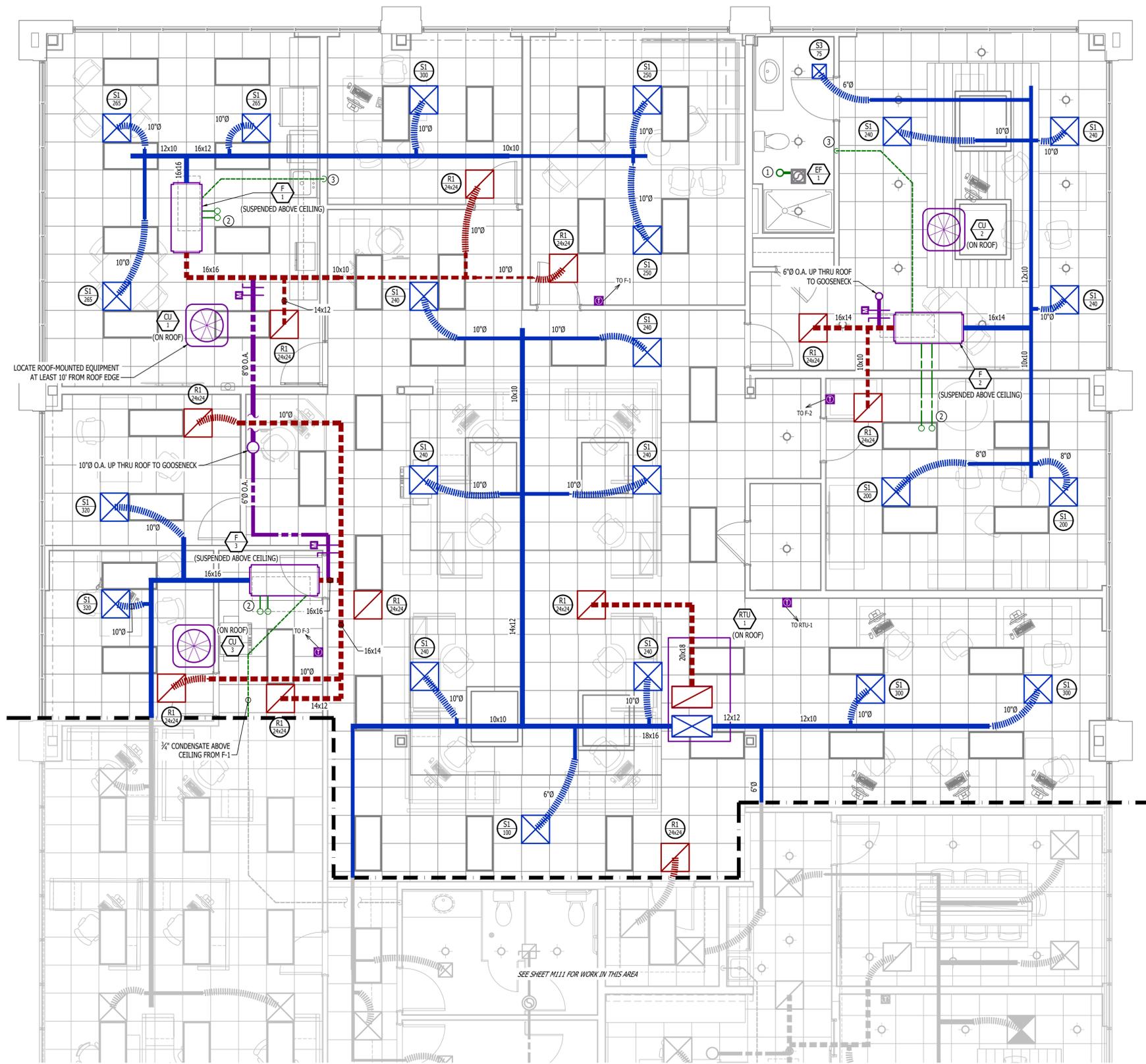


**HVAC PLAN GENERAL NOTES:**

- REFER TO M500 AND/OR M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
- HVAC CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL EQUIPMENT, DUCTWORK, REFRIGERANT PIPING, CONDENSATE PIPING, HANGERS / SUPPORTS, ETC. WITH PLUMBING AND ELECTRICAL TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
- ANY EXISTING HVAC EQUIPMENT OR DUCTWORK SHOWN IS FOR REFERENCE ONLY. HVAC CONTRACTOR TO FIELD VERIFY EXACT EQUIPMENT/DUCT SIZE, LOCATIONS, CONDITION, ETC. PRIOR TO INSTALLATION OF ANY MATERIAL AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

**HVAC PLAN KEY NOTES:**

- 4"Ø EXH UP THRU ROOF TO GOOSENECK WITH 3/8" HARDWARE CLOTH OVER OPEN END.
- FURNACE VENT/COMBINATION AIR PIPING UP THRU ROOF, ROUTED & TERMINATED PER MANUFACTURER'S SPECIFICATIONS. LOCATE AT LEAST 10' FROM ANY FRESH AIR INTAKE, OFFSET ABOVE CEILING AS NECESSARY.
- 3/4" FURNACE/AC CONDENSATE PIPING TO INDIRECT DISCHARGE INTO HUB DRAIN IN THIS AREA, COORDINATE WITH PLUMBING CONTRACTOR



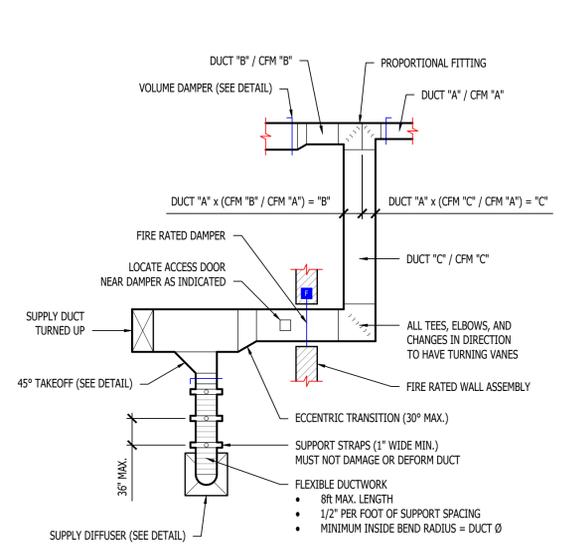
**KEY PLAN**  
 SCALE: NTS

**HVAC PLAN - AREA B**  
 SCALE: 1/4" = 1'-0"

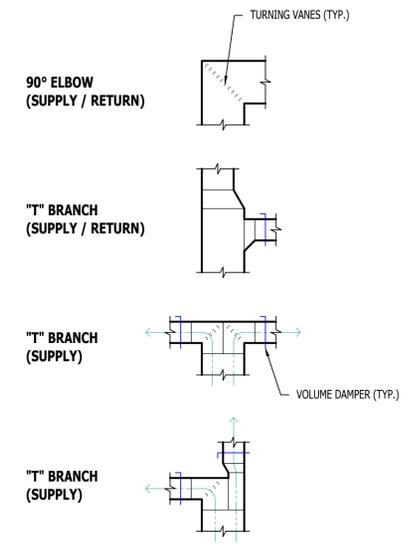
J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

**HVAC SPECIFICATIONS**

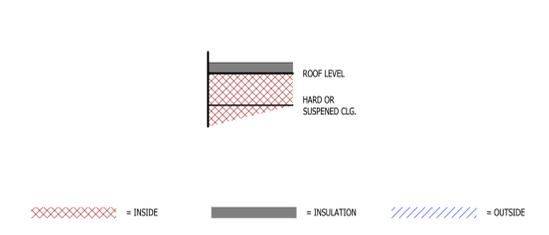
1. **GENERAL**
  - 1.1. REFER TO GENERAL MEP SPECIFICATIONS SECTION FOR ADDITIONAL REQUIREMENTS.
2. **WORKMANSHIP**
  - 2.1. COORDINATE WITH ALL OTHER TRADES SO THAT HVAC EQUIPMENT AND DUCT WORK DOES NOT BLOCK REQUIRED ACCESS OR CLEARANCE TO ANY EQUIPMENT, ACCESS PANELS, ELECTRICAL JUNCTION BOXES, ELECTRICAL PANELS, ETC.
  - 2.2. ALL HVAC EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND/OR INSTALLATION INSTRUCTIONS.
  - 2.3. ALL EQUIPMENT TO BE INSTALLED LEVEL AND PLUMB, PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
  - 2.4. ROOFTOP MOUNTED RTUS & EXHAUST FANS SHALL BE INSTALLED ON CURBS PER MANUFACTURER'S INSTRUCTIONS. CURB HEIGHT SHALL PROVIDE A MINIMUM OF 12" BETWEEN EQUIPMENT AND TOP OF ROOF IN ALL LOCATIONS.
  - 2.5. GRADE MOUNTED RTUS, CONDENSING UNITS, AND HEAT PUMPS TO BE INSTALLED ON 4" REINFORCED CONCRETE PAD EXTENDING 4" BEYOND EACH EDGE OF THE EQUIPMENT, OR A MANUFACTURER APPROVED PRE-MANUFACTURED BASE.
  - 2.6. APPROPRIATE ATTENTION SHALL BE GIVEN TO INDOOR AIR QUALITY THROUGHOUT CONSTRUCTION; PROTECT INSIDE OF NEW DUCTWORK & AIR-HANDLING EQUIPMENT FROM DUST, DIRT, DEBRIS, PAINT, MOISTURE, ETC. INSULATION SHALL BE REPLACED IF EXPOSED TO MOISTURE. AN INDEPENDENT, PROFESSIONAL DUCT CLEANING COMPANY SHALL CLEAN ALL NEW DUCTWORK IF EQUIPMENT WAS USED DURING CONSTRUCTION, AND EQUIPMENT/COILS SHALL ALSO BE THOROUGHLY CLEANED.
  - 2.7. FIELD COORDINATE LOCATIONS OF ALL DIFFUSERS, GRILLES, REGISTERS, ETC. WITH LIGHT FIXTURE LOCATIONS AND ADJUST AS NECESSARY.
3. **EQUIPMENT**
  - 3.1. ALL EQUIPMENT SHOWN ON MECHANICAL PLANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE.
  - 3.2. ALL EQUIPMENT MUST PROVIDE PERFORMANCE AS SPECIFIED ON PLANS. WHERE SPECIFIC MANUFACTURERS AND/OR MODELS ARE INDICATED ON PLANS, CONTRACTOR TO PROVIDE MODEL INDICATED OR APPROVED EQUAL. VERIFY SUBSTITUTION APPROVAL PRIOR TO PURCHASE OR INSTALLATION OF EQUIPMENT.
  - 3.3. CONTRACTOR TO SUPPLY SUBMITTALS FOR ALL EQUIPMENT FOR REVIEW BY ARCHITECT AND ENGINEER. FORMAL APPROVAL SHALL BE RECEIVED BY CONTRACTOR PRIOR TO EQUIPMENT PURCHASE.
  - 3.4. CONTRACTOR TO SHARE APPROVED EQUIPMENT SUBMITTALS WITH ANY PERTINENT ELECTRICAL OR PLUMBING REQUIREMENTS WITH RESPECTIVE CONTRACTORS WITHIN TWO WEEKS OF RECEIVING APPROVED SUBMITTALS FROM ARCHITECT/ENGINEER.
  - 3.5. ALL EQUIPMENT SHOWN ON PLANS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS WITH ADEQUATE ACCESS AND CLEARANCE FOR SERVICING OR REPLACEMENT.
  - 3.6. ALL HORIZONTAL FURNACES WITH AC COILS SHALL BE EQUIPPED WITH CORROSION RESISTANT DRAIN PAN. DRAIN PAN TO DISCHARGE TO SANITARY WASTE VIA INDIRECT CONNECTION WITH AIR GAP. DRAIN PAN TO PROVIDE SECONDARY OVERFLOW OR FLOAT SWITCH INTERLOCKED WITH UNIT TO SHUT DOWN UNIT ON HIGH WATER SIGNAL.
  - 3.7. ALL EXTERIOR REFRIGERANT COILS TO BE PROTECTED BY FACTORY EQUIPPED HAIL GUARDS.
  - 3.8. REFRIGERANT PIPING TO BE ACR COPPER OR TYPE L COPPER.
  - 3.9. ALL AIR HANDLING EQUIPMENT SHALL BE EQUIPPED WITH MERV-8 FILTRATION AT RETURN OPENING UNLESS OTHERWISE NOTED.
  - 3.10. ALL AIR FILTERS SHALL BE SIZED FOR A MAXIMUM FACE VELOCITY OF 500FPM.
  - 3.11. PROVIDE & INSTALL ALL EQUIPMENT FLUES/VENTS PER MANUFACTURER'S SPECIFICATIONS. TERMINATIONS SHALL BE AT LEAST 10' FROM ANY FRESH AIR INTAKE.
  - 3.12. PROVIDE NEW AIR FILTERS IN ALL EQUIPMENT PRIOR TO TESTING & BALANCING AND BEFORE TURNING OVER SYSTEM(S) TO OWNERSHIP.
  - 3.13. IF ANY EXISTING EQUIPMENT IS TO BE REUSED, CLEAN AND INSPECT EQUIPMENT PRIOR TO BEGINNING WORK. VERIFY THAT EQUIPMENT IS IN GOOD WORKING CONDITION, REPORT ANY DEFICIENCIES TO ENGINEER.
4. **DUCTWORK**
  - 4.1. DUCTWORK TO BE GALVANIZED STEEL, SEAL CLASS B, CONSTRUCTED PER SMACNA STANDARDS.
  - 4.2. DUCTWORK THICKNESS:
    - 4.2.1. 26 GA. MINIMUM UP TO 16" DUCT
    - 4.2.2. 24 GA. UP TO 20"
    - 4.2.3. 22 GA. UP TO 24"
    - 4.2.4. 20 GA. UP TO 28"
    - 4.2.5. 18 GA. UP TO 36"
  - 4.3. TURNING VANES SHALL BE PROVIDED AND INSTALLED AT ALL 90° BENDS AND TEES.
  - 4.4. ALL DUCT DIMENSIONS LISTED ARE TO INTERIOR OF DUCT LINER UNLESS NOTED OTHERWISE ON PLANS.
  - 4.5. BALANCE DAMPERS MUST BE PROVIDED TO ALLOW ADJUSTMENT AT EACH AIR TERMINAL.
    - 4.5.1. WHERE BRANCH TAKEOFF IS ACCESSIBLE (ABOVE LAY-IN CEILING OR EXPOSED DUCT), BALANCE DAMPER IS TO BE INSTALLED AT TAKEOFF.
    - 4.5.2. WHERE TAKEOFF IS INACCESSIBLE (IN ATTIC OR SOFFIT), BALANCE DAMPER IS TO BE LOCATED SUCH THAT IT IS ACCESSIBLE FROM FACE OF AIR DEVICE.
  - 4.6. HVAC CONTRACTOR RESPONSIBLE FOR ALL DUCTWORK TRANSITIONS AND FITTINGS AS REQUIRED FOR FINAL CONNECTIONS TO HVAC EQUIPMENT.
  - 4.7. UNLESS NOTED OTHERWISE ON PLANS, FLEXIBLE DUCT CONNECTIONS MAY BE USED FROM BRANCH DUCTS TO FINAL AIR DEVICES, BUT SHALL NOT EXCEED 8'-0" IN LENGTH. FLEXIBLE DUCT CONNECTORS MUST BE SUPPORTED PER PLAN DETAILS.
5. **INSULATION**
  - 5.1. DUCTWORK
    - 5.1.1. SEE "TYPICAL DUCT INSULATION DIAGRAM" FOR INSTALLATION SPECIFIC REQUIREMENTS.
    - 5.1.2. INTERNAL DUCT LINER TO BE EQUAL TO JOHNS MANVILLE LINACOUSTIC R-300.
    - 5.1.3. EXTERNAL DUCT WRAP TO INCLUDE VAPOR BARRIER. EQUAL TO JOHNS MANVILLE MICROLITE WITH FSK JACKET.
    - 5.1.4. WHERE INSULATION IS REQUIRED IN "TYPICAL DUCT INSULATION DIAGRAM", INCLUDE INSULATION ON ALL FITTINGS, INCLUDING CANVAS FLEX CONNECTION FITTINGS.
  - 5.2. REFRIGERANT PIPING
    - 5.2.1. SPLIT SYSTEM (SUCTION LINE ONLY) - 1" CLOSED CELL ELASTOMERIC FOAM (EQUAL TO WRANFLEX AP7).
  - 5.3. VRV/VRF SYSTEMS (BOTH SUCTION AND HOT GAS LINES) 1 1/2" EPDM (EQUAL TO AEROFLEX AEROCEL AC) WITHIN CONDITIONED SPACES & 2" EPDM (EQUAL TO AEROFLEX AEROCEL AC) IN UNCONDITIONED SPACES, AND WITH BANDED ALUMINUM SHIELDING IN EXTERIOR SPACES.
  - 5.4. CONDENSATE PIPING
    - 5.4.1. SPLIT SYSTEMS - WHERE CONDENSATE PIPING IS LOCATED IN UNCONDITIONED SPACE, INSULATE WITH 1/2" ELASTOMERIC. NO INSULATION REQUIRED WITHIN CONDITIONED SPACE.
    - 5.4.2. VRV/VRF - INSULATE WITH 1/2" ELASTOMERIC.
6. **TESTING AND BALANCING**
  - 6.1. ALL SYSTEMS MUST BE BALANCED TO WITHIN 10% OF VALUES INDICATED ON PLAN.
  - 6.2. HVAC CONTRACTOR TO PROVIDE WRITTEN BALANCE REPORT INCLUDING FLOW VALUES INDICATED ON PLANS, INITIAL MEASURED FLOW VALUES, AND FINAL MEASURED VALUES.
  - 6.3. THIRD PARTY CERTIFIED TEST AND BALANCE NOT REQUIRED UNLESS OTHERWISE NOTED ON PLANS OR WITHIN PROJECT MANUAL.



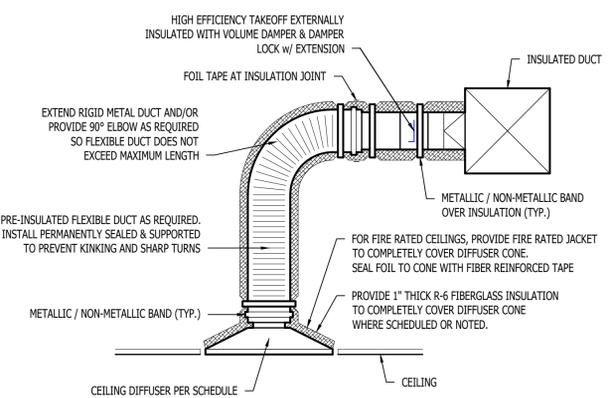
**TYPICAL DUCTWORK DETAIL**



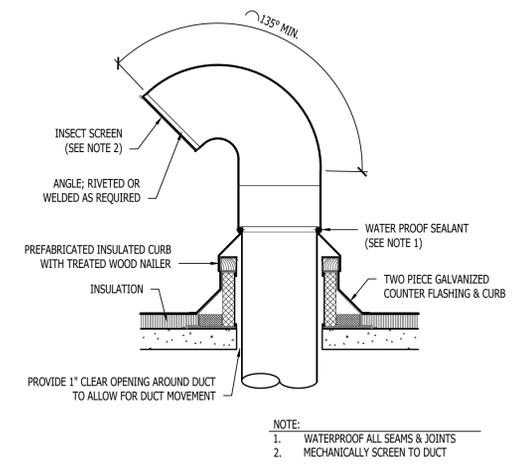
**TYPICAL DUCTWORK FITTINGS DETAIL**



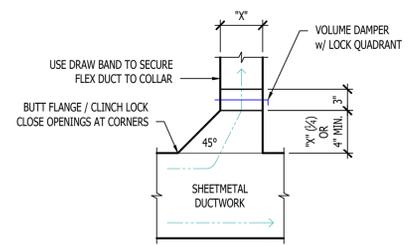
**TYPICAL BUILDING INTERIOR DUCT INSULATION DIAGRAM**



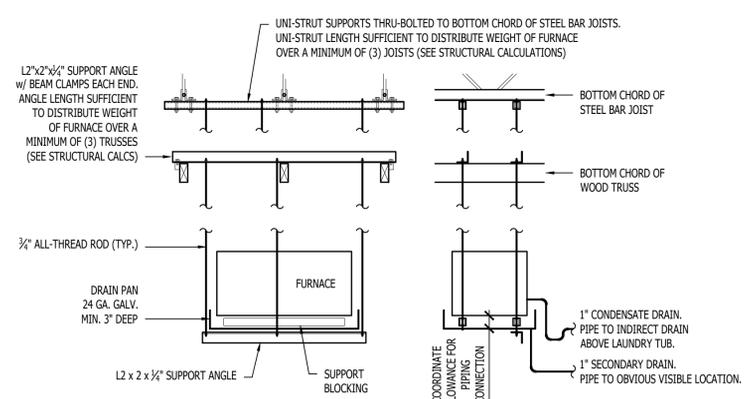
**TYPICAL LAY-IN DIFFUSER DETAIL**



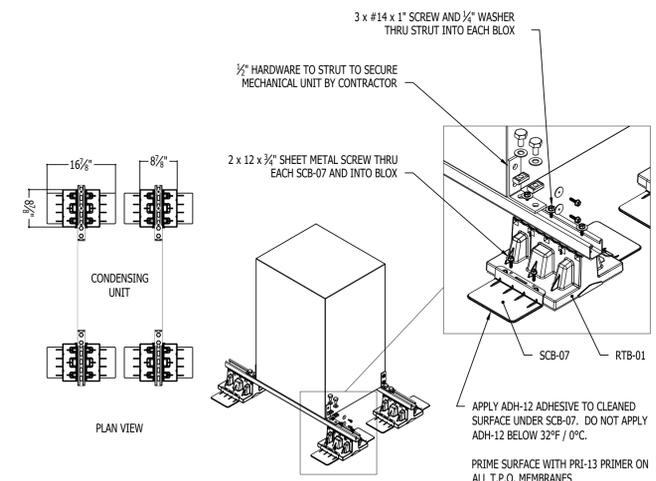
**GOOSENECK DETAIL**



**TYPICAL 45° TAKEOFF DETAIL**



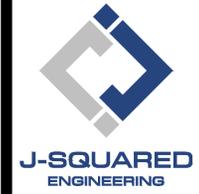
**SUSPENDED FURNACE INSTALLATION DETAIL**



**CONDENSING UNIT ROOFTOP MOUNTING DETAIL**



James Watson, P.E. November 17, 2025  
 PE-2015017071  
 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101  
 Columbia, Missouri 65201  
 573.234.4492  
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J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

RTU SCHEDULE																
TAG	EQUIPMENT DESCRIPTION	SIZE (TONS)	ORIENTATION	TOTAL AIRFLOW (CFM)	E.S.P. (in. H2O)	OA AIRFLOW MAX / MIN (CFM)	GAS HEATING			COOLING (IA: 80 DB/67 WB, OA: 95 DB)			ELECTRICAL			NOTES
							INPUT (KBTU)	OUTPUT (KBTU)	EFFICIENCY	SENSIBLE (KBTU)	TOTAL (KBTU)	EFFICIENCY	VOLTS / PHASE	MCA	OCP	
RTU-1	ROOF TOP UNIT	6.0	DOWN FLOW	2400	1.0	200 / 200	120	97	62.5	83.1	14.6 IEER	208/3	38	50-3	1, 2, 3, 4, 5, 6, 7	

**NOTES:**

- PROVIDE AND INSTALL 7 DAY PROGRAMABLE HONEYWELL THERMOSTAT. COORDINATE EXACT MOUNTING LOCATION WITH OWNER.
- WITH FACTORY HAIL GUARD.
- WITH FACTORY INSTALLED DISCONNECT.
- ECONOMIZER (WITH EITHER BAROMETRIC RELIEF SIZED AT 100% OF FLOW AT 1/10" RETURN DUCT STATIC PRESSURE, OR POWERED EXHAUST); CONTROL TO BE ADJUSTABLE FIXED POINT SET AT 65°F. ECONOMIZER TO BE IECC COMPLIANT WITH FAULT DETECTION AND NOTIFICATION.
- WITH POWERED WEATHERPROOF GFCI RECEPTACLE.
- WITH HOT GAS REHEAT/DEHUMIDIFICATION OPTION.
- WITH SMOKE DETECTOR IN RETURN AIR DUCT TO SHUT DOWN UNIT AND SEND SIGNAL TO BUILDING FIRE ALARM SYSTEM UPON DETECTION OF SMOKE.

SPLIT SYSTEM SCHEDULE															
TAG	EQUIPMENT DESCRIPTION	SIZE (TONS)	ORIENTATION	TOTAL AIRFLOW (CFM)	E.S.P. (in. H2O)	OA AIRFLOW MAX / MIN (CFM)	HEATING		COOLING (IA: 80 DB/67 WB, OA: 95 DB)			ELECTRICAL			NOTES
							GAS INPUT (KBTU)	MIN. AFUE EFF. (%)	SENSIBLE (KBTU)	TOTAL (KBTU)	EFF. (SEER2)	VOLTS/PH	MCA	OCP	
F-1	FURNACE	4.0	HORIZONTAL	1600	0.5	130 / 0	100	90	-	-	-	120	12	20	1, 2, 3
F-2	FURNACE	3.0	HORIZONTAL	1200	0.5	75 / 0	60	90	-	-	-	120	10	20	1, 2, 3
F-3	FURNACE	4.0	HORIZONTAL	1600	0.5	100 / 0	100	90	-	-	-	120	12	20	1, 2, 3
F-4	FURNACE	3.0	HORIZONTAL	1200	0.5	130 / 0	60	90	-	-	-	120	10	20	1, 2, 3
CU-1	CONDENSING UNIT	4.0	-	-	-	-	-	-	35.1	46.9	13.4	208/1	23	35-2	4, 5
CU-2	CONDENSING UNIT	3.0	-	-	-	-	-	-	25.0	33.7	13.4	208/1	21	30-2	4, 5
CU-3	CONDENSING UNIT	4.0	-	-	-	-	-	-	35.1	46.9	13.4	208/1	23	35-2	4, 5
CU-4	CONDENSING UNIT	3.0	-	-	-	-	-	-	25.0	33.7	13.4	208/1	21	30-2	4, 5

**NOTES:**

- PROVIDE AND INSTALL 7 DAY PROGRAMABLE HONEYWELL THERMOSTAT. COORDINATE EXACT MOUNTING LOCATION WITH OWNER.
- INCLUDE CORROSION RESISTANT DRAIN PAN WITH OVERFLOW SWITCH WIRED TO SHUT DOWN UNIT.
- WITH LOW LEAKAGE MOTORIZED OUTSIDE AIR DAMPER, DAMPER TO OPEN DURING OCCUPIED HOURS AND CLOSE DURING UNOCCUPIED HOURS THRU THERMOSTAT SCHEDULE.
- WITH FACTORY HAIL GUARD.
- LOW AMBIENT PACKAGE FOR OPERATION TO 0° F.

EXHAUST FAN SCHEDULE											
TAG	EQUIPMENT TYPE	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	FLOW		ELECTRICAL			PHYSICAL		NOTES
				CFM	S.P.	VOLT/PH	MCA	OCP	DIM.	WEIGHT	
EF-1	IN-CEILING EXHAUST FAN	SOLER & PALAU	PCV-80	80	1/10"	120/1	1	20-1	12x12	5 lbs.	1
EF-2	IN-LINE EXHAUST FAN	SOLER & PALAU	TD-SILENT	200	1/4"	120/1	1	20-1	19x11x9	14 lbs.	1, 2, 3
EF-3	IN-LINE EXHAUST FAN	SOLER & PALAU	TD-SILENT	200	1/4"	120/1	1	20-1	19x11x9	14 lbs.	1, 2, 3

**NOTES:**

- WITH BACKDRAFT DAMPER
- WITH SPEED CONTROLLER
- WITH SUSPENSION PLATFORM AND INLET FLEX CONNECTION

BUILDING AIR BALANCE SUMMARY			
EQUIPMENT	OA (CFM)	EXHAUST (CFM)	NET (CFM)
F-1	130	0	130
F-2	75	0	75
F-3	100	0	100
F-4	130	0	130
RTU-1	200	0	200
EF-1	0	80	-80
EF-2	0	200	-200
<b>TOTAL</b>	<b>635</b>	<b>280</b>	<b>355</b>

**NOTES:**

- FLows SHOWN ARE DURING OCCUPIED HOURS

AIR DEVICE SCHEDULE						
TAG	SERVICE	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	SIZE	COLOR / FINISH	NOTES
E1	RETURN	PRICE	80	AS INDICATED	WHITE	WITH DRYWALL KIT
R1	RETURN	PRICE	80	AS INDICATED	WHITE	
R2	RETURN	PRICE	530	AS INDICATED	WHITE	
S1	SUPPLY	PRICE	SPD	24x24	WHITE	
S3	SUPPLY	PRICE	SPD	12x12	WHITE	WITH DRYWALL KIT

**NOTES:**

- VERIFY AIR DEVICE FINISHES WITH OWNER/ARCHITECT PRIOR TO INSTALLATION

DIFFUSER NECK SIZING SCHEDULE	
AIRFLOW (CFM)	NECK SIZE (in)
0 - 120	6"
120 - 210	8"
210 - 325	10"
325 - 470	12"
470 - 640	14"

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

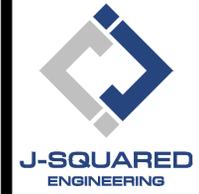
HVAC SCHEDULES

SHEET NUMBER

**M601**



James Watson, P.E. November 17, 2025  
 PE-2015017071  
 MO Certificate of Authority # 2018029680



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J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
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AHJ APPROVAL STAMP

SHEET TITLE

POWER PLAN - AREA A

SHEET NUMBER

**EP111**

**POWER PLAN SYMBOL LEGEND**

- CIRCUIT WIRING
- CIRCUIT TAG
- JUNCTION BOX
- RECEPTACLE
- INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)
- "WP" = WEATHERPROOF OUTDOOR RECEPTACLE
- "AW" = ABOVE WINDOW RECEPTACLE
- "AC" = ABOVE CEILING RECEPTACLE
- "EX" = EXISTING RECEPTACLE TO REMAIN
- GFCI PROTECTED DUPLEX CONVENIENCE RECEPTACLE
- 208V RECEPTACLE
- QUADPLEX CONVENIENCE RECEPTACLE
- DATA / PHONE JACK
- BOX WITH 1" CONDUIT & PULL STRING UP TO CEILING SPACE (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)
- WIRELESS ACCESS POINT, CEILING MOUNTED
- FLOOR RECEPTACLE
- FLOOR DATA
- DISCONNECT
- FUSED DISCONNECT

**SECURITY SYMBOL LEGEND**

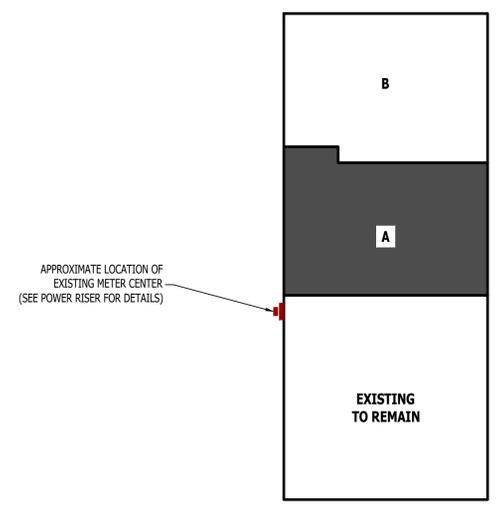
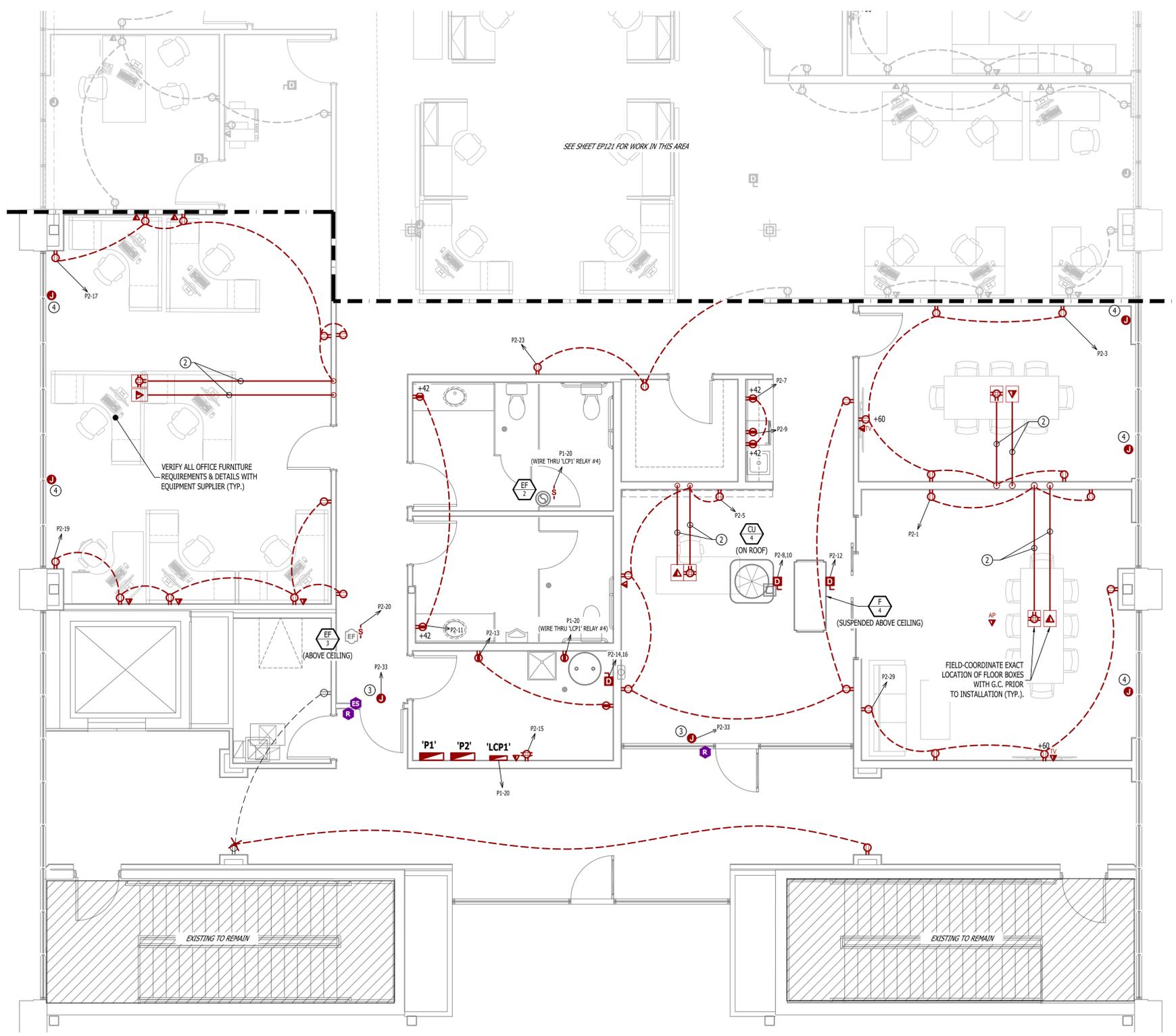
- READER
- ELECTRIC STRIKE

**POWER PLAN GENERAL NOTES:**

- REFER TO E500 AND/OR E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
- ELECTRICAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL ELECTRICAL EQUIPMENT, WIRING, HANGERS / SUPPORTS, ETC. WITH HVAC AND PLUMBING TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
- ANY EXISTING ELECTRICAL EQUIPMENT, CIRCUITS, ETC. SHOWN IS FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT EQUIPMENT LOCATIONS, CONDITIONS, ETC. PRIOR TO BEGINNING WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

**POWER PLAN KEY NOTES:**

- POWER/DATA FOR OFFICE FURNITURE; COORDINATE EXACT LOCATION & REQUIREMENTS WITH G.C.
- 1" CONDUIT BELOW FLOOR FOR POWER/DATA.
- POWER ABOVE SECURE SIDE OF DOOR FOR ACCESS CONTROLS. COORDINATE EXACT LOCATION AND REQUIREMENTS DOOR HARDWARE SUPPLIER/INSTALLER.
- ROUGH-IN POWER FOR FUTURE FLOOR HEATER, PROVIDE CONDUIT & J-BOX ON UNDERSIDE OF FLOOR FOR FUTURE USE; COORDINATE WITH G.C.

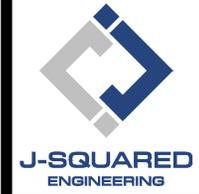


**KEY PLAN**  
 SCALE: NTS

**POWER PLAN - AREA A**  
 SCALE: 1/4" = 1'-0"



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 PE-2015017071  
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J2 PROJECT No:	J21644
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MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

POWER PLAN - AREA B

SHEET NUMBER

**EP121**

**POWER PLAN SYMBOL LEGEND**

- CIRCUIT WIRING
- CIRCUIT TAG
- JUNCTION BOX
- RECEPTACLE
- INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)
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- DISCONNECT
- FUSED DISCONNECT

**SECURITY SYMBOL LEGEND**

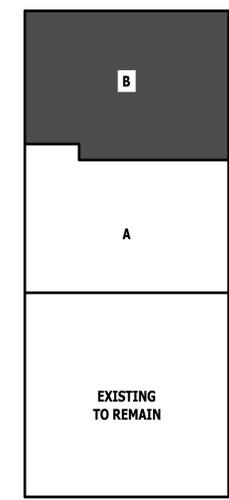
- READER
- ELECTRIC STRIKE

**POWER PLAN GENERAL NOTES:**

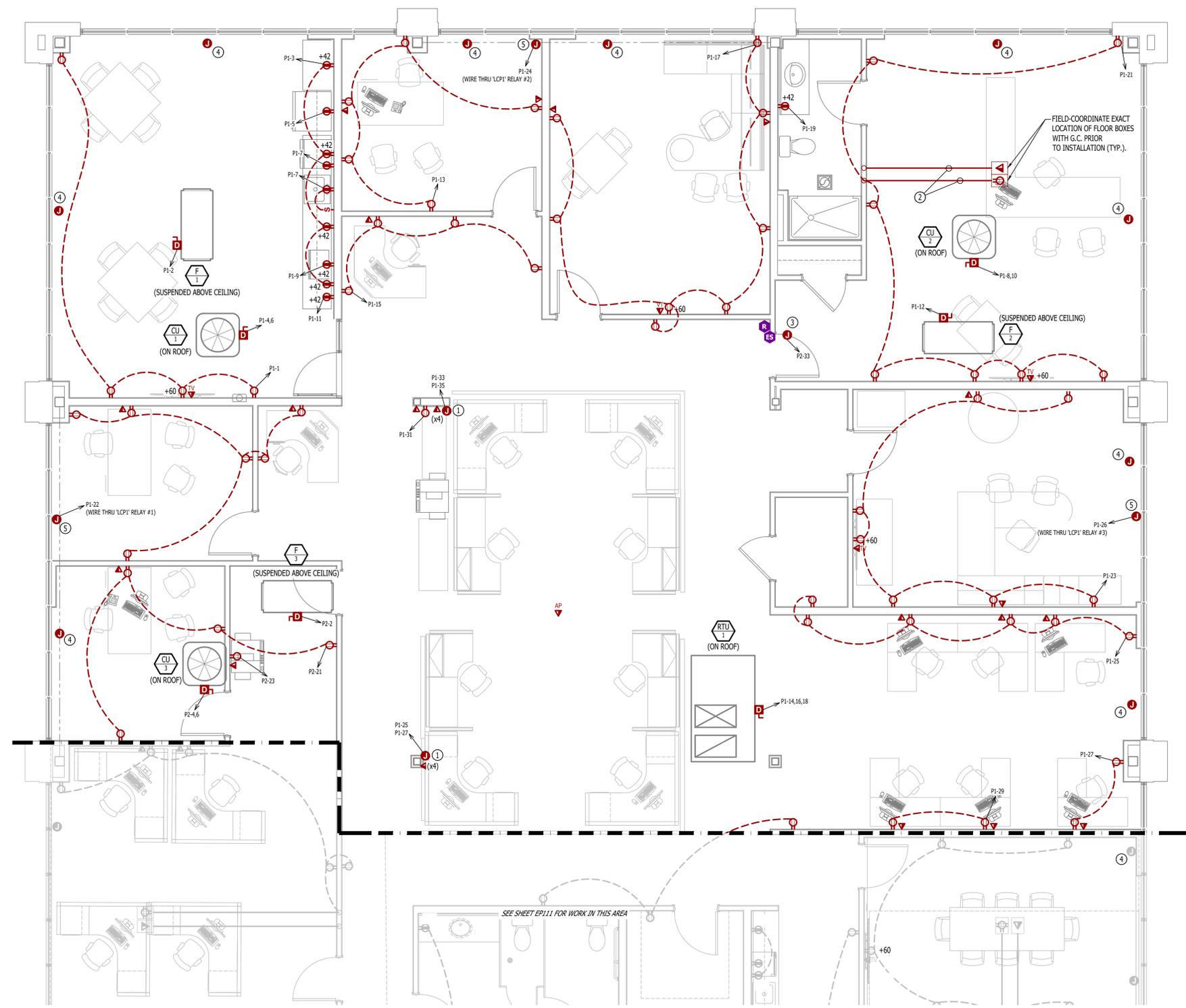
- REFER TO ES00 AND/OR E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
- ELECTRICAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL ELECTRICAL EQUIPMENT, WIRING, HANGERS / SUPPORTS, ETC. WITH HVAC AND PLUMBING TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
- ANY EXISTING ELECTRICAL EQUIPMENT, CIRCUITS, ETC. SHOWN IS FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT EQUIPMENT LOCATIONS, CONDITIONS, ETC. PRIOR TO BEGINNING WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

**POWER PLAN KEY NOTES:**

- POWER/DATA FOR OFFICE FURNITURE; COORDINATE EXACT LOCATION & REQUIREMENTS WITH G.C.
- 1" CONDUIT BELOW FLOOR FOR POWER/DATA.
- POWER ABOVE SECURE SIDE OF DOOR FOR ACCESS CONTROLS. COORDINATE EXACT LOCATION & REQUIREMENTS WITH DOOR HARDWARE SUPPLIER/INSTALLER.
- ROUGH-IN POWER FOR FUTURE FLOOR HEATER, PROVIDE CONDUIT & J-BOX ON UNDERSIDE OF FLOOR FOR FUTURE USE; COORDINATE WITH G.C.
- POWER FOR EXTERIOR SIGNAGE; COORDINATE EXACT LOCATION & REQUIREMENTS WITH G.C.



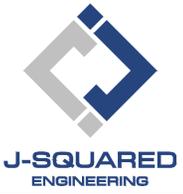
**KEY PLAN**  
 SCALE: NTS



**POWER PLAN - AREA B**  
 SCALE: 1/4" = 1'-0"



James Watson, P.E. November 17, 2025  
 PE-2015017071  
 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101  
 Columbia, Missouri 65201  
 573.234.4492  
 www.j-squaredeng.com

J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

LIGHTING PLAN

SHEET NUMBER

**EL101**

**LIGHTING PLAN SYMBOL LEGEND**

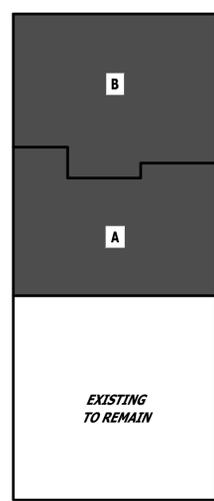
- XI — "XI" INDICATES FIXTURE TYPE (REFER TO SCHEDULE)
- LIGHTING FIXTURE
- EM — "EM" INDICATES EMERGENCY BATTERY BACKUP
- NL — "NL" INDICATES UN-SWITCHED NIGHT LIGHT
- EXIT LIGHT
- INDICATES REQUIRED REMOTE HEAD
- EMERGENCY EGRESS LIGHT
- S<sub>w</sub> SWITCH (WALL MOUNTED)
- SWITCH TYPE:
  - 3 = 3-WAY
  - 4 = 4-WAY
  - OP = PASSIVE INFRARED OCCUPANCY SENSOR
  - OU = ULTRASONIC OCCUPANCY SENSOR
  - OT = DUAL-TECHNOLOGY OCCUPANCY SENSOR
  - VP = PASSIVE INFRARED VACANCY SENSOR
  - VU = ULTRASONIC VACANCY SENSOR
  - VT = DUAL-TECHNOLOGY VACANCY SENSOR
  - M = MOMENTARY SWITCH
  - SS = SCENE SWITCH
- D<sub>w</sub> DIMMER SWITCH (WALL MOUNTED)
- SWITCH TYPE:
  - SEE "SWITCH (WALL MOUNTED)" FOR TYPE DESIGNATIONS
- S<sub>c</sub> SWITCH (CEILING MOUNTED)
- SWITCH TYPE:
  - SEE "SWITCH (WALL MOUNTED)" FOR TYPE DESIGNATIONS

- OCCUPANCY SENSOR**
- AUTO FULL-ON (IF NOTED)
  - AUTOMATICALLY TURN OFF LIGHTING AFTER 20 MINUTES WITHOUT OCCUPANT DETECTION
  - WITH MANUAL OVERRIDE CONTROL (IF NOTED)

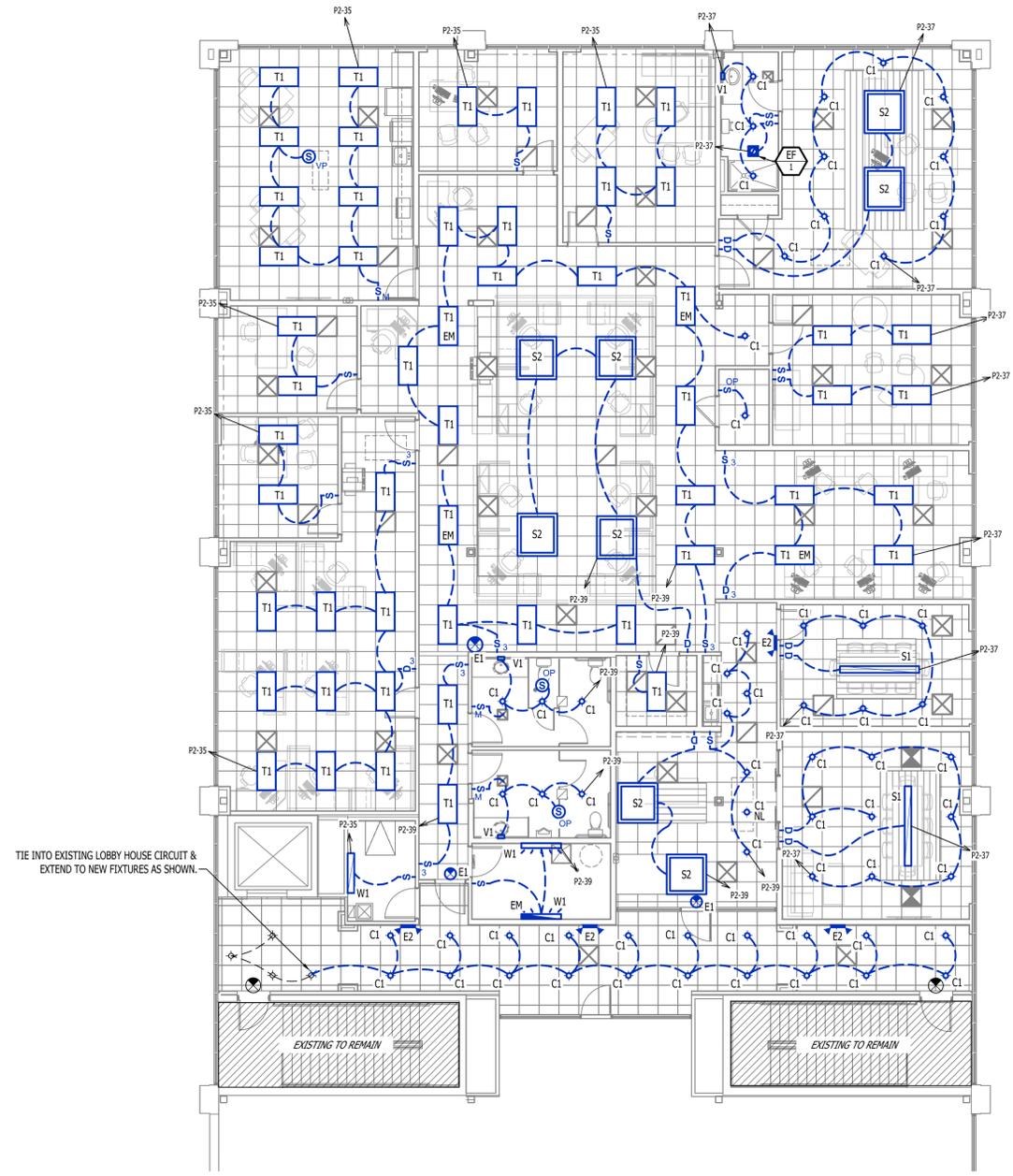
- VACANCY SENSOR**
- MANUAL FULL-ON
  - AUTOMATICALLY TURN OFF LIGHTING AFTER 20 MINUTES WITHOUT OCCUPANT DETECTION
  - WITH MANUAL OVERRIDE CONTROL (IF NOTED)

**LIGHTING PLAN GENERAL NOTES:**

1. REFER TO E500 AND/OR E600 SERIES SHEETS FOR ADDITIONAL LIGHTING NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
2. OCCUPANCY/VACANCY SENSOR QUANTITIES AND GENERAL LOCATIONS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO PROVIDE & INSTALL SENSOR WITH SPACING PER MANUFACTURER'S SPECIFICATIONS AND INCLUDE ADDITIONAL SENSORS IF NECESSARY. CEILING-MOUNTED SENSORS SHALL BE INSTALLED WITHIN MANUFACTURER'S ACCEPTABLE MOUNTING HEIGHT RANGE.
3. ELECTRICAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL FIXTURES, WIRING, HANGERS / SUPPORTS, ETC. WITH HVAC AND PLUMBING TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
4. ANY EXISTING LIGHT FIXTURES, CIRCUITS, OR CONTROLS SHOWN ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LIGHT FIXTURE AND CIRCUIT/CONTROL LOCATIONS, CONDITIONS, ETC. PRIOR TO BEGINNING WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES.



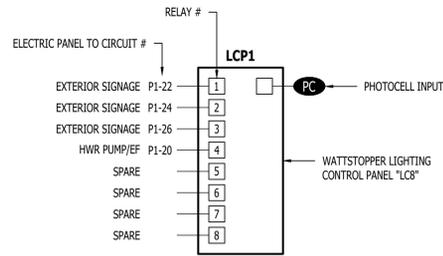
**KEY PLAN**  
 SCALE: NTS



**LIGHTING PLAN**  
 SCALE: 1/8" = 1'-0"

**ELECTRICAL SPECIFICATIONS**

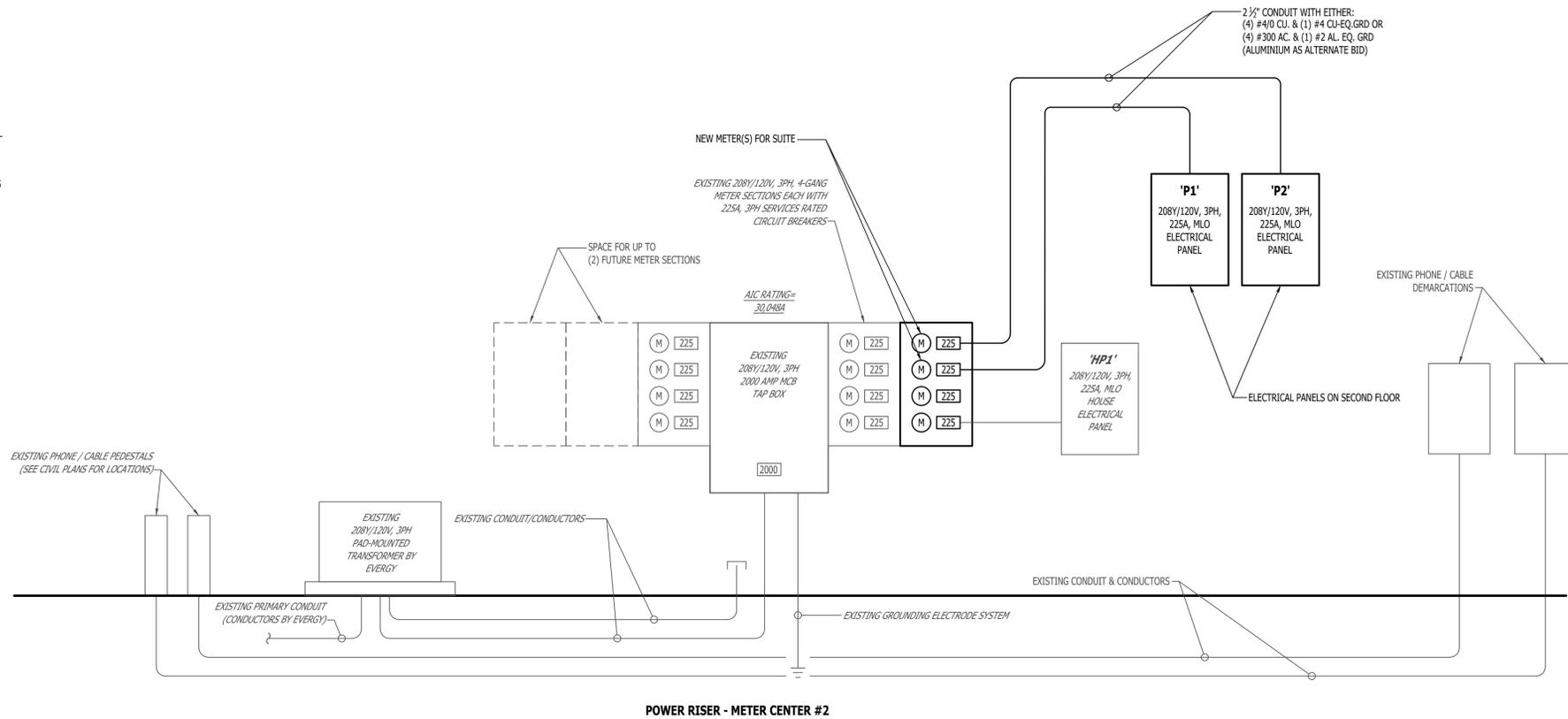
- 1. GENERAL**
  - 1.1. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY PIECES AND COMPONENTS TO PROVIDE A COMPLETE AND COMPLIANT ELECTRICAL SYSTEM UNLESS OTHERWISE NOTED ON PLANS.
  - 1.2. THE ENTIRE ELECTRICAL SYSTEM SHALL BE CONTINUOUSLY GROUNDED. EVERY BRANCH CONDUIT SHALL INCLUDE A GREEN GROUND CONDUCTOR SIZED PER NEC.
  - 1.3. ARC-FAULT CIRCUITS SHALL BE RUN WITH A DEDICATED NEUTRAL AS REQUIRED BY MANUFACTURER.
  - 1.4. PROVIDE PERMANENT ARC-FLASH LABEL AFFIXED TO EVERY DISCONNECT AND PANEL.
  - 1.5. PROVIDE TYPE WRITTEN PANEL SCHEDULE FOR EACH PANEL.
- 2. WORKMANSHIP**
  - 2.1. ALL ELECTRICAL SYSTEM COMPONENTS SHALL BE INSTALLED LEVEL, PLUMB, AND PARALLEL/PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
  - 2.2. ALL ELECTRICAL DEVICES AND LIGHT FIXTURES SHALL BE INSTALLED IN A SAFE, FIRST-CLASS MANNER WITH ATTENTION GIVEN TO OVERALL AESTHETICS. CARE SHOULD BE TAKEN TO ALLOW FOR FUTURE REPLACEMENT AND ACCESS FOR SERVICE.
- 3. MATERIALS**
  - 3.1. CONDUIT & CONDUCTORS
    - 3.1.1. ALL CONDUCTORS SIZES INDICATED ARE COPPER UNLESS NOTED OTHERWISE ON PLANS.
    - 3.1.2. ABOVE GRADE CONDUCTORS SHALL BE TYPE THHN. BELOW GRADE CONDUCTORS SHALL BE TYPE XHHW-2.
    - 3.1.3. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE. 120-VOLT, 20-AMP CIRCUITS WITH CONDUCTOR LENGTHS GREATER THAN 100' SHALL BE #10 AWG MINIMUM. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MEASURING ACTUAL CONDUCTOR LENGTH AND INCREASING CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP AS REQUIRED BY NEC.
    - 3.1.4. RIGID GALVANIZED OR SCHEDULE 40 PVC CONDUIT SHALL BE USED FOR SERVICE WIRING, BELOW GRADE INSTALLATIONS, OR WHERE EXPOSED TO WEATHER.
    - 3.1.5. IN APPLICATIONS OTHER THAN THOSE LISTED IN 3.1.4, EMT OR MC CABLE IS ACCEPTABLE. WHERE CONDUCTORS ARE PROTECTED FROM DAMAGE, ENCLOSED IN BUILDING MATERIALS, AND CONSTRUCTION IS OF A PERMITTED TYPE, NM CABLE MAY BE USED.
    - 3.1.6. FOR CAST-IN-PLACE CONCRETE, TILT-UP WALL CONSTRUCTION, OR PRE-MANUFACTURED WALL SYSTEMS, COORDINATE EXACT LOCATIONS OF ALL DEVICES WITHIN WALLS WITH WALL SUPPLIER. CONDUIT EMBEDDED IN WALLS SHALL BE SCHEDULE 80 PVC OR LFMC, OR OTHER SYSTEM APPROVED BY WALL MANUFACTURER.
    - 3.1.7. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES, VERIFY COLOR WITH ARCHITECT/OWNER.
  - 3.2. DEVICES
    - 3.2.1. CONTRACTOR TO PROVIDE J-BOXES, COVER PLATES, AND ANY ACCESSORIES REQUIRED TO PROVIDE A COMPLETE SYSTEM. SEE ARCHITECTURAL PLANS FOR DEVICE COLORS.
    - 3.2.1. DUPLEX RECEPTACLES SHALL BE TAMPER RESISTANT, 20-AMP, EQUAL TO LEVITON #TBR-20.
    - 3.2.2. SINGLE POLE TOGGLE WALL SWITCHES SHALL BE EQUAL TO LEVITON CS120-2.
    - 3.2.3. THREE-WAY TOGGLE WALL SWITCHES SHALL BE EQUAL TO LEVITON CS320-2.
    - 3.2.3. DIMMER SWITCHES SHALL BE TESTED WITH FIXTURES AND LAMPS FOR COMPATIBILITY. SEE LIGHTING PLANS FOR DETAILS.
    - 3.2.4. WHERE GFCI PROTECTION IS SHOWN ON PLANS AND UNLESS OTHERWISE NOTED, PROVIDE A LISTED GFCI-PROTECTED RECEPTACLE WHERE THE RECEPTACLE IS ACCESSIBLE ON PLANS. IF THE RECEPTACLE LOCATION IS NOT ACCESSIBLE AS DEFINED BY NEC, PROVIDE GFCI PROTECTION AT CIRCUIT BREAKER.
    - 3.2.5. DO NOT INSTALL OCCUPANCY/VACANCY SENSORS WITHIN 48" OF HVAC DIFFUSERS/GRILLES OR SIMILAR OBSTRUCTION THAT MAY AFFECT SENSOR FUNCTIONALITY. ALL SENSORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
    - 3.2.6. ALL APPLICABLE SWITCHES, RECEPTACLES, CONTROLS, ETC. SHALL BE MOUNTED AT ADA-ACCESSIBLE HEIGHTS.
    - 3.2.7. WIRING DEVICES SHOWN ON PLANS NEXT TO ONE ANOTHER SHALL UTILIZE A SINGLE COVER PLATE UNLESS NOTED OTHERWISE.
    - 3.2.8. WIRING DEVICES SHOWN BACK-TO-BACK ON EACH SIDE OF A WALL SHALL BE OFFSET TO REDUCE SOUND TRANSMISSION.
    - 3.2.9. EACH RECEPTACLE COVER SHALL BE NEATLY AND LEGIBLY LABELED WITH CORRESPONDING PANEL AND CIRCUIT NUMBER FOR CIRCUIT IDENTIFICATION.
- 4. EMERGENCY LIGHTING**
  - 4.1. BRANCH CIRCUIT FEEDING EMERGENCY FIXTURE(S) SHALL BE SAME BRANCH CIRCUIT AS THAT SERVING NORMAL LIGHTING IN SAME AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES.
  - 4.2. EMERGENCY LIGHTING SYSTEM SHALL PROVIDE 1FC AVERAGE AND 0.1FC MINIMUM ALONG EGRESS PATHS. ADJUST ANY EMERGENCY FIXTURES AS NECESSARY TO PROVIDE PROPER ILLUMINATION WITHOUT OBSTRUCTION FROM FURNITURE OR OBSTACLES.



**LIGHTING CONTROL PANEL SCHEDULE**

RELAY #	VERRIDE SWITCH	OPERATIONAL SCHEDULE
1	NO	ON DURING NIGHT HOURS(PHOTOCELL)
2	NO	ON DURING NIGHT HOURS(PHOTOCELL)
3	NO	ON DURING NIGHT HOURS(PHOTOCELL)
4	NO	ON DURING OCCUPIED HOURS
5	-	-
6	-	-
7	-	-
8	-	-

**LIGHTING CONTROL PANEL**



James Watson, P.E. November 17, 2025  
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 MO Certificate of Authority # 2018029680



**J-SQUARED ENGINEERING**

2400 Bluff Creek Drive, Suite 101  
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 www.j-squaredeng.com

J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:

**DPLS Lot 1 Intrinsic Office Infill**

221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

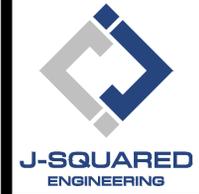
**ELECTRICAL DETAILS**

SHEET NUMBER

**E501**



James Watson, P.E. November 17, 2025  
 PE-2015017071  
 MO Certificate of Authority # 2018029680



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J2 PROJECT No:	J21644
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PANEL 'P1' SCHEDULE										
PANEL SPECIFICATIONS					TOTAL CONNECTED LOAD					
VOLTAGE: 120/208V 3-PH		NEMA RATING: 1			PHASE "A" LOAD: 119 AMPS		PHASE "B" LOAD: 132.5 AMPS			
AMPACITY: 225A MLO		PANEL MOUNTING: SURFACE			PHASE "C" LOAD: 120 AMPS					
AIC-RATING: 22KA										
CIRCUIT NUMBER	DESCRIPTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER		
1	BREAK ROOM RECEP.TS.	20-1	6	A	12	20-1	F-1	2		
3	BREAK ROOM COUNTERTOP RECEP.TS.	20-1	6	B	23	35-2	CU-1	4		
5	BREAK ROOM REFRIGERATOR	20-1	6	C	23	-	-	6		
7	BREAK ROOM DISPOSAL / DISHWASHER	20-1	10	A	21	30-2	CU-2	8		
9	BREAK ROOM MICROWAVE	20-1	8	B	21	-	-	10		
11	BREAK ROOM COUNTERTOP RECEP.TS.	20-1	1.5	C	10	20-1	F-2	12		
13	HR OFFICE RECEP.TS.	20-1	7.5	A	38	50-3	RTU-1	14		
15	HR ASSISTANT RECEP.TS.	20-1	7.5	B	38	-	-	16		
17	MANAGER OFFICE RECEP.TS.	20-1	12	C	38	-	-	18		
19	EXECUTIVE OFFICE RESTROOM RECEP.T.	20-1	1.5	A	1	20-1	HWR PUMP / EF-2	20		
21	EXECUTIVE OFFICE RECEP.TS.	20-1	12	B	5	20-1	EXTERIOR SIGNAGE	22		
23	MANAGER OFFICE RECEP.TS.	20-1	10.5	C	5	20-1	EXTERIOR SIGNAGE	24		
25	OPEN OFFICE RECEP.TS.	20-1	9	A	5	20-1	EXTERIOR SIGNAGE	26		
27	OPEN OFFICE RECEP.TS.	20-1	6	B		20-1	SPARE	28		
29	PRINTER / SCANNER / COPIER	20-1	8	C		20-1	SPARE	30		
31	PRINTER / SCANNER / COPIER	20-1	8	A			OPEN	32		
33	OPEN OFFICE FURNITURE	20-1	6	B			OPEN	34		
35	OPEN OFFICE FURNITURE	20-1	6	C			OPEN	36		
37	SPARE	20-1		A			OPEN	38		
39	SPARE	20-1		B			OPEN	40		
41	SPARE	20-1		C			OPEN	42		

**NOTES:**  
 A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"  
 B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.  
 C: AFTER COMPLETION OF WORK, ELECTRICIAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

PANEL 'P2' SCHEDULE										
PANEL SPECIFICATIONS					TOTAL CONNECTED LOAD					
VOLTAGE: 120/208V 3-PH		NEMA RATING: 1			PHASE "A" LOAD: 84.5 AMPS		PHASE "B" LOAD: 96 AMPS			
AMPACITY: 225A MLO		PANEL MOUNTING: SURFACE			PHASE "C" LOAD: 68 AMPS					
AIC-RATING: 22KA										
CIRCUIT NUMBER	DESCRIPTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER		
1	CONFERENCE RECEP.TS.	20-1	6	A	12	20-1	F-3	2		
3	CONFERENCE RECEP.TS.	20-1	6	B	23	35-2	CU-3	4		
5	LOBBY RECEP.TS.	20-1	9	C	23	-	-	6		
7	LOBBY COUNTERTOP RECEP.TS.	20-1	3	A	21	30-2	CU-4	8		
9	LOBBY UNDERCOUNTER REFRIGERATOR	20-1	6	B	21	-	-	10		
11	RESTROOM RECEP.TS.	20-1	3	C	10	20-1	F-4	12		
13	MECHANICAL ROOM RECEP.TS.	20-1	3	A	22	30-2	WH-1	14		
15	SERVER QUAD	20-1	3	B	22	-	-	16		
17	ACCT. OPEN OFFICE RECEP.TS.	20-1	9	C		20-1	SPARE	18		
19	ACCT. OPEN OFFICE RECEP.TS.	20-1	10.5	A	1	20-1	EF-3	20		
21	ACCT. OFFICE RECEP.TS.	20-1	6	B		20-1	SPARE	22		
23	ACCT. OFFICE PRINTER / SCANNER / COPIER	20-1	8	C		20-1	SPARE	24		
25	OPEN OFFICE FURNITURE	20-1	6	A		20-1	SPARE	26		
27	OPEN OFFICE FURNITURE	20-1	6	B		20-1	SPARE	28		
29	OFFICE 101 RECEP.TS.	20-1	6	C		20-1	SPARE	30		
31	SPARE	20-1		A			OPEN	32		
33	ACCESS CONTROLS	20-1	3	B			OPEN	34		
35	INTERIOR LIGHTING	20-1		C			OPEN	36		
37	INTERIOR LIGHTING	20-1		A			OPEN	38		
39	SPARE	20-1		B			OPEN	40		
41	SPARE	20-1		C			OPEN	42		

**NOTES:**  
 A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"  
 B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.  
 C: AFTER COMPLETION OF WORK, ELECTRICIAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

BRANCH CIRCUIT CONDUCTOR SCHEDULE						
AMPACITY	COPPER A WG SIZE	MAXIMUM DISTANCE (FEET)				MINIMUM CONDUIT SIZE
		1Ø		3Ø		
		120V	277V	208V	480V	
20	12	55'	130'	115'	260'	1/2"
	10	90'	205'	180'	415'	3/4"
30	10	60'	135'	120'	275'	3/4"
	8	95'	220'	190'	445'	1"
35	8	80'	190'	165'	380'	1"
	6	130'	300'	260'	605'	1"
40	8	70'	165'	145'	330'	1"
	6	110'	260'	225'	525'	1"
45	6	100'	235'	200'	470'	1"
	4	160'	370'	325'	750'	1-1/4"
50	6	90'	210'	180'	420'	1-1/4"
	4	145'	335'	290'	675'	1-1/4"
60	6	75'	175'	150'	350'	1-1/4"
	4	120'	280'	240'	560'	1-1/4"
70	4	105'	240'	205'	480'	1-1/4"
	3	130'	300'	260'	605'	1-1/4"
80	4	55'	210'	180'	420'	1-1/4"
	3	90'	260'	230'	530'	1-1/4"
90	3	105'	245'	210'	490'	1-1/4"
	2	130'	300'	260'	600'	1-1/4"
100	2	115'	270'	235'	540'	1-1/4"
	1	140'	330'	285'	660'	1-1/4"

**NOTES:**  
 1. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER. ALL WIRE SIZES SHOWN ARE BASED ON CONDUCTOR TEMPERATURE RATING OF 60°C & AMBIENT TEMPERATURE OF 30°C PER NEC.  
 2. DISTANCE SHOWN ABOVE IS LENGTH FROM OVERCURRENT PROTECTION TO DEVICE/EQUIPMENT.  
 3. REFER TO PLAN SHEETS FOR BRANCH CONDUCTOR SIZING LENGTHS GREATER THAN SHOWN ABOVE.  
 4. VOLTAGE DROP CALCULATIONS BASED ON 3% DROP, 80% CIRCUIT LOAD, THHN/THWN INSULATION, 100% POWER FACTOR, BALANCED LOAD, NEGLIGIBLE REACTANCE, & SIX OR LESS CURRENT-CARRYING CONDUCTORS IN RACEWAY.

LIGHT FIXTURE SCHEDULE												
TAG	MANUFACTURER (OR EQUAL)	MODEL NUMBER (OR EQUAL)	DESCRIPTION	MOUNTING	LUMEN OUTPUT	CCT (°K)	CRI	VOLTAGE	WATTS	DIMMING	NOTES	
C1	HALO	SLD61295E010MW	6" LED SURFACE CAN	CEILING / SURFACE	1200	3500	90	120	15	0-10V		
E1	SURE LITES	APCH7RG	INTERIOR EXIT LIGHT WITH HEADS	WALL / CEILING	-	-	-	120	1	-	WITH RED LETTERS	
E2	SURE LITES	APEL	EMERGENCY EGRESS LIGHT	WALL	-	-	-	UNV	1	-	MOUNT AT 8' A.F.F.	
S1	H.E. WILLIAMS	MX4D-8'00-L8/835-F-DIM-UNV	4" SUSPENDED LED STRIP	CEILING / SUSPENDED	6400	3500	80	120	58	0-10V		
S2	H.E. WILLIAMS	MX4D-16'00-L8/835-F-DIM-UNV	4" SUSPENDED LED STRIP	CEILING / SUSPENDED	12800	3500	80	120	117	0-10V	RECTANGULAR PATTERN	
T1	METALLUX	24ZSCT3-UNV	2x4 LED TROFFER	CEILING / A.C.T. GRID	5166	3500	80	120	34	0-10V	WITH #ELL14W BATTERY BACKUP WHERE INDICATED	
V1	BROWNLEE	5165-24-H16-35K	24" LED VANITY SCONCE	SURFACE / WALL	1874	3500	80	120	16	0-10V		
W1	METALLUX	4SLSTP5LC-UNV	4' LED STRIP	SURFACE / WALL	5802	3500	80	120	48	0-10V	WITH #EBPLED14W BATTERY BACKUP WHERE INDICATED	

**NOTES:**  
 1. VERIFY ALL LIGHT FIXTURE SELECTIONS AND FINISHES WITH OWNER PRIOR TO INSTALLATION.  
 2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES THROUGHOUT. COORDINATE EXACT MOUNTING DETAILS WITH GENERAL CONTRACTOR.  
 3. CONTACT JUSTIN HATFIELD (573) 289-0880 (JHATFIELD@LAWWEB.NET) AT LIGHTING ASSOCIATES FOR NATIONAL ACCOUNT DETAILS.  
 4. CONTACT TRAVIS VOGT (471) 621-5210 (TVOGT@CED1135.COM) AT CED-PHILLIPS & COMPANY FOR NATIONAL ACCOUNT DETAILS.

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

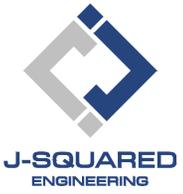
ELECTRICAL SCHEDULES

SHEET NUMBER

**E601**



James Watson, P.E. November 17, 2025  
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J2 PROJECT No:	J21644
J2 DESIGN:	ACW
ISSUE TITLE	DATE
PERMIT SET	11 - 17 - 2025

**SANITARY SEWER PLAN SYMBOL LEGEND**

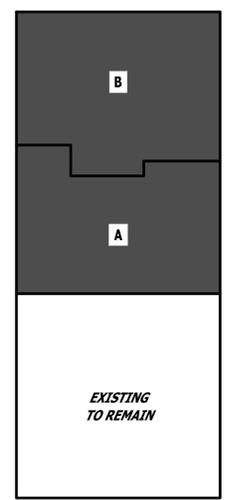
- SANITARY SEWER PIPING
- VENT PIPING
- PIPING TURNED DOWN / TURNED UP
- TIE INTO EXISTING

**SANITARY SEWER PLAN GENERAL NOTES:**

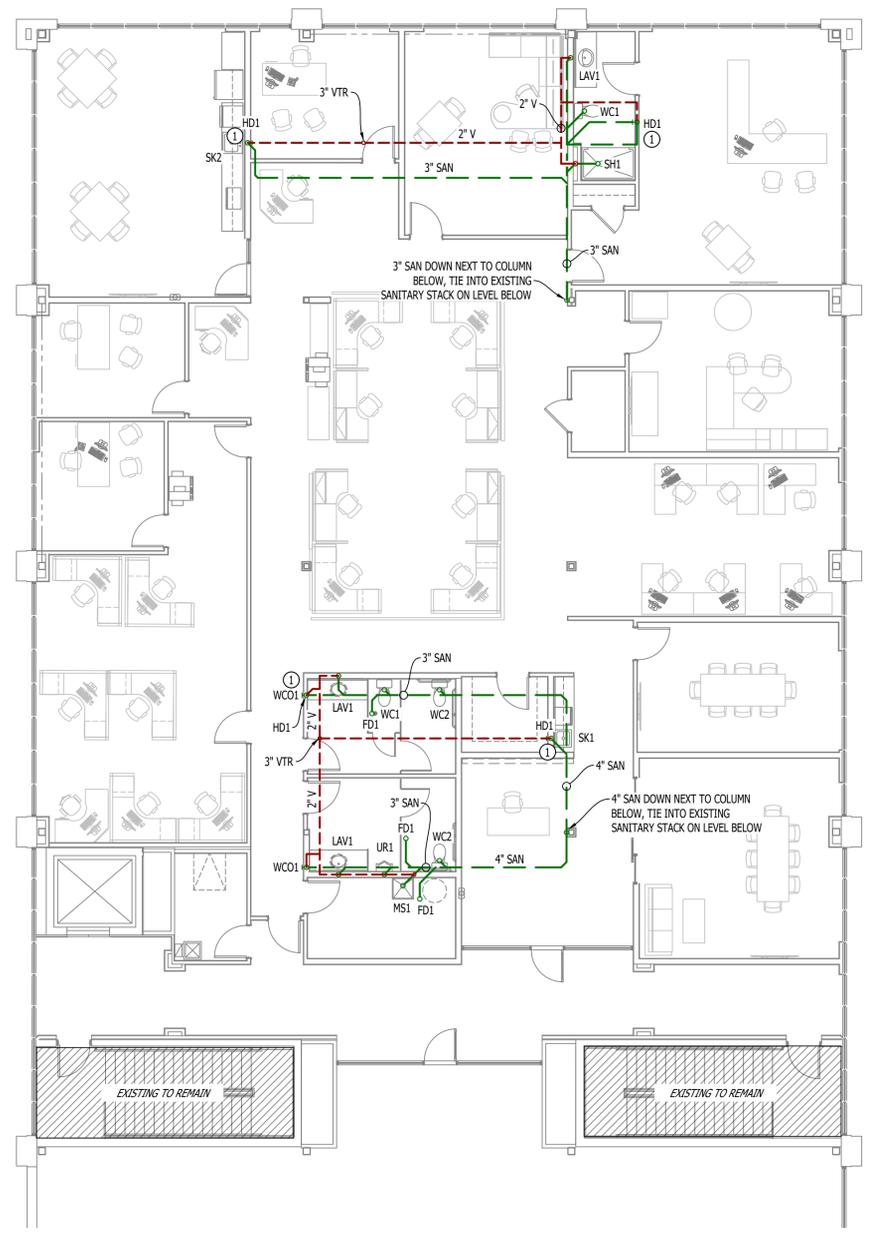
1. REFER TO P500 AND/OR P600 SERIES SHEETS FOR ADDITIONAL PLUMBING NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
2. PLUMBING CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL EQUIPMENT, PIPING, HANGERS / SUPPORTS, ETC. WITH HVAC AND ELECTRICAL TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
3. ANY EXISTING SANITARY/VENT PIPING SHOWN IS FOR REFERENCE ONLY. PLUMBING CONTRACTOR TO FIELD VERIFY EXACT PIPING SIZE, LOCATIONS, DEPTH, DIRECTION, CONDITION, ETC. PRIOR TO INSTALLATION OF ANY MATERIAL AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

**SANITARY SEWER PLAN KEY NOTES:**

- ① HUB DRAIN IN WALL WITH ACCESS PANEL FOR CONDENSATE DISCHARGE, COORDINATE WITH HVAC CONTRACTOR.



**KEY PLAN**  
 SCALE: NTS



**SANITARY SEWER PLAN**  
 SCALE: 1/8" = 1'-0"

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:  
**DPLS Lot 1 Intrinsic Office Infill**  
 221 NE Alura Way  
 Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

**SANITARY SEWER PLAN**

SHEET NUMBER

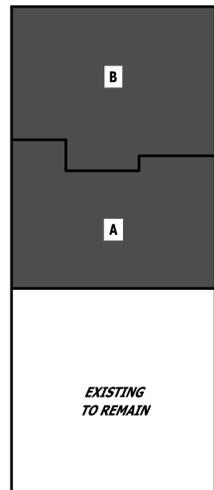
**PS101**

**WATER & GAS PLAN SYMBOL LEGEND**

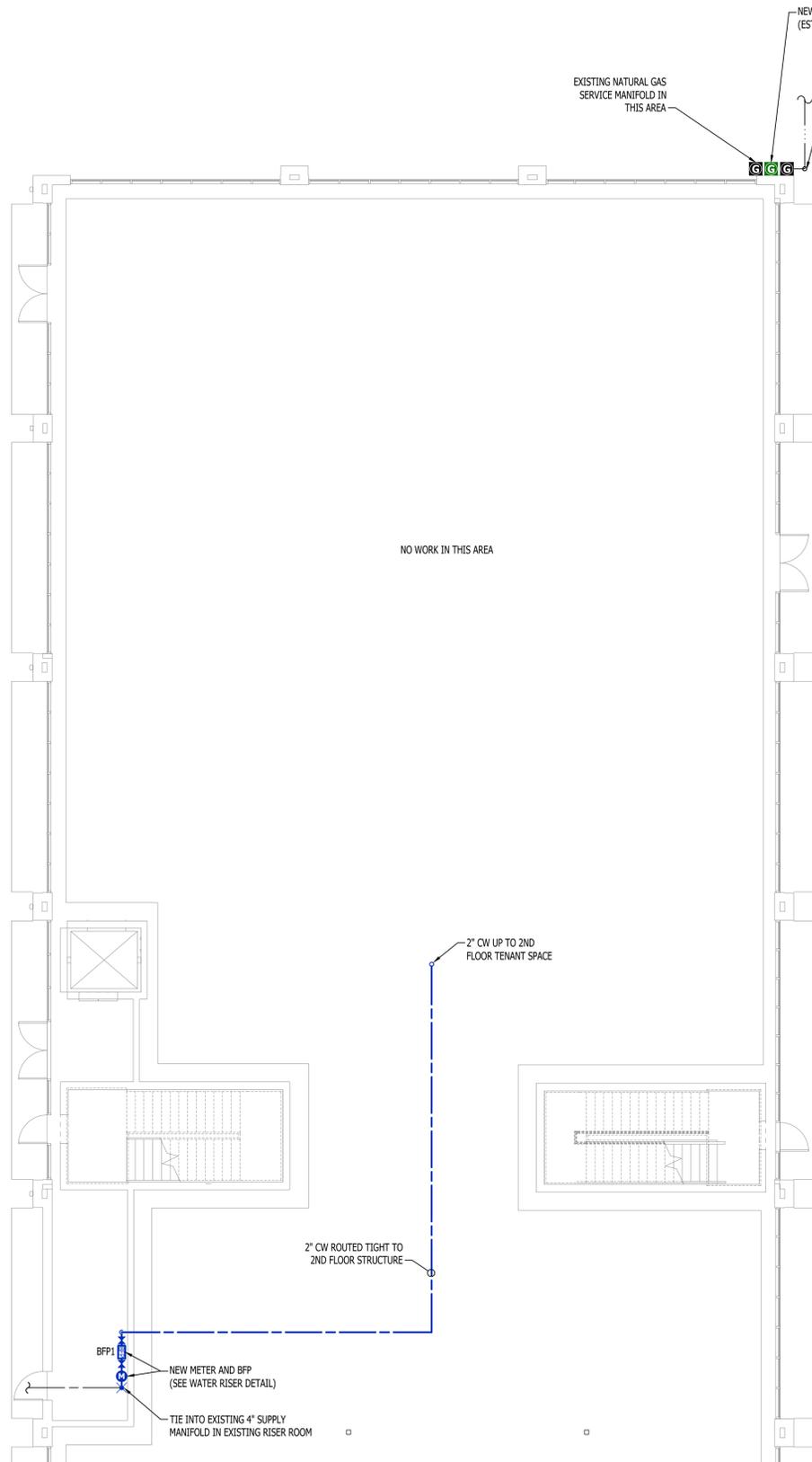
- COLD WATER LINE
- HOT WATER LINE
- HOT WATER RECIRCULATION LINE
- M WATER METER
- VALVE
- P PUMP
- GAS LINE
- G GAS METER
- PIPING TURNED DOWN / TURNED UP
- TIE INTO EXISTING

**WATER & GAS PLAN GENERAL NOTES:**

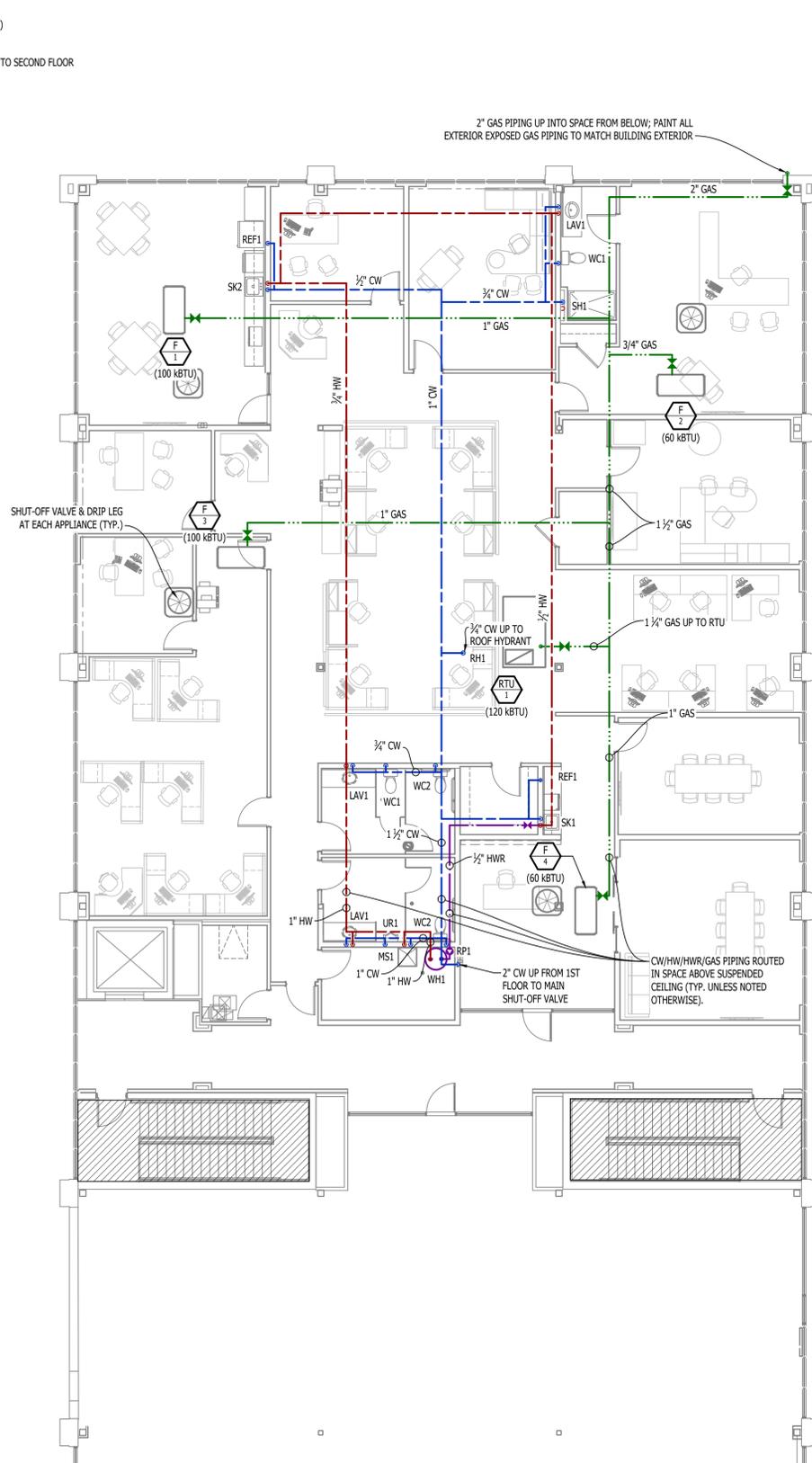
1. REFER TO P500 AND/OR P600 SERIES SHEETS FOR ADDITIONAL PLUMBING NOTES, DETAILS, REQUIREMENTS, AND SCHEDULES.
2. PLUMBING CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL EQUIPMENT, PIPING, HANGERS / SUPPORTS, ETC. WITH HVAC AND ELECTRICAL TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.
3. ANY EXISTING WATER OR GAS PIPING SHOWN IS FOR REFERENCE ONLY. PLUMBING CONTRACTOR TO FIELD VERIFY EXACT PIPING SIZE, LOCATIONS, DEPTH, CONDITION, ETC. PRIOR TO INSTALLATION OF ANY MATERIAL AND NOTIFY ENGINEER OF ANY DISCREPANCIES.



**KEY PLAN**  
SCALE: NTS



**WATER & GAS PLAN - 1ST FLOOR**  
SCALE: 1/8" = 1'-0"



**WATER & GAS PLAN - 2ND FLOOR**  
SCALE: 1/8" = 1'-0"



James Watson, P.E. November 17, 2025  
PE-2015017071  
MO Certificate of Authority # 2018029680



**J-SQUARED ENGINEERING**

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**DPLS Lot 1 Intrinsic Office Infill**

MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:

221 NE Alura Way  
Lee's Summit, Jackson County, MO 64064

AHJ APPROVAL STAMP

SHEET TITLE

**WATER & GAS PLAN**

SHEET NUMBER

**PW101**

**PLUMBING SPECIFICATIONS**

- 1. GENERAL**
  - 1.1. PLUMBING CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL ESCUTCHEONS, ¼ TURN STOPS, P-TRAPS, AND SUPPLY LINES TO PROVIDE A COMPLETE SYSTEM AT EACH FIXTURE INDICATED ON PLANS UNLESS NOTED OTHERWISE.
  - 1.2. ALL PLUMBING SYSTEMS SHALL BE INSTALLED LEVEL, PLUMB, AND PARALLEL/PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
  - 1.3. COORDINATE ALL PIPING INSTALLATIONS WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THRU STRUCTURAL ELEMENTS AS NECESSARY, VERIFY WITH STRUCTURAL ENGINEER.
  - 1.4. VERIFY ALL UTILITY CONNECTION POINTS WITH PROPOSED PLUMBING LAYOUTS PRIOR TO BEGINNING WORK.
  - 1.5. CLEAN ALL PLUMBING FIXTURES AND CHANGE FAUCET AERATORS AND SINK STRAINERS AT PROJECT COMPLETION PRIOR TO TURNING OVER TO OWNERSHIP.
- 2. EQUIPMENT / FIXTURES**
  - 2.1. ALL EQUIPMENT AND/OR FIXTURES MUST MEET OR EXCEED THE PERFORMANCE, FUNCTIONAL INTENT, AND AESTHETICS AS MODELS SPECIFIED ON PLANS. WHERE SPECIFIC MANUFACTURERS AND/OR MODELS ARE INDICATED ON PLANS OR WITHIN SCHEDULES, CONTRACTOR TO PROVIDE MODEL INDICATED OR APPROVED EQUAL. VERIFY SUBSTITUTION APPROVAL PRIOR TO PURCHASE OR INSTALLATION OF EQUIPMENT.
  - 2.2. CONTRACTOR TO SUPPLY SUBMITTALS FOR ALL EQUIPMENT FOR REVIEW BY ARCHITECT AND ENGINEER. FORMAL APPROVAL SHALL BE RECEIVED BY CONTRACTOR PRIOR TO EQUIPMENT PURCHASE.
  - 2.3. CONTRACTOR TO SHARE APPROVED EQUIPMENT SUBMITTALS WITH ANY PERTINENT ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTORS WITHIN TWO WEEKS OF RECEIVING APPROVED SUBMITTALS FROM ARCHITECT/ENGINEER.
- 3. SANITARY**
  - 3.1. BELOW AND ABOVE GRADE WASTE AND VENT PIPING IN BUILDING TO BE SOLID CORE SCHEDULE 40 PVC LISTED FOR DWV APPLICATIONS.
  - 3.2. NO WASTE OR VENT PIPING INSTALLED BELOW GRADE SHALL BE SMALLER THAN 2".
  - 3.3. MINIMUM SLOPES FOR WASTE PIPING (UNLESS NOTED OTHERWISE ON PLANS):
    - 3.3.1. 2 ½" OR LESS DIAMETER: ¼" PER FOOT
    - 3.3.2. 3" TO 6" DIAMETER: ½" PER FOOT
    - 3.3.3. 8" OR LARGER DIAMETER: ¾" PER FOOT
  - 3.4. ACCESSIBLE FULL PIPE SIZE CLEANOUTS SHALL BE PROVIDED & INSTALLED ON BUILDING SANITARY LINES AT LOCATIONS SHOWN ON PLANS, AT INTERVALS OF NO MORE THAN 100', AT EVERY CHANGE IN DIRECTION GREATER THAN 45°, AND AT THE BASE OF EACH WASTE STACK. WASTE AND VENT PIPING IN PLENUMS SHALL BE CAST IRON, PLENUM-RATED CPVC, OR PVC WITH AN INSULATION WRAP LISTED FOR USE AS SUCH AN ASSEMBLY.
  - 3.6. ALL VENT PIPE TERMINATIONS SHALL BE LOCATED EITHER 10' HORIZONTALLY OR 3' ABOVE MECHANICAL AIR INTAKE LOCATIONS. TERMINATIONS SHALL NOT BE INSTALLED UNDER ANY OPERABLE BUILDING OPENING OR OPERABLE ADJACENT BUILDING OPENING. CONTRACTOR TO OFFSET VENT PIPING AS NECESSARY TO MEET THESE REQUIREMENTS.
- 4. DOMESTIC WATER**
  - 4.1. ALL DOMESTIC WATER PIPING TO BE EITHER COPPER OR PEX, SHALL CONFORM TO NSF 61 AND BE LISTED FOR USE IN POTABLE WATER SYSTEMS.
    - 4.1.1. WHERE PEX PIPING IS USED, IT SHALL BE INCREASED ONE PIPE SIZE FROM WHAT IS INDICATED ON PLANS FOR ALL PORTIONS OF DISTRIBUTION SYSTEM.
    - 4.1.2. PEX-A MAY BE INSTALLED AT SIZES INDICATED ON PLANS ONLY IF AN ENGINEERED PLAN IS SUBMITTED SHOWING ACCEPTABLE PRESSURE DROPS AND FLUID VELOCITIES, APPROVAL MUST BE GRANTED PRIOR TO PURCHASE AND INSTALLATION.
  - 4.1.3. COPPER WATER PIPING BELOW GRADE SHALL BE TYPE "K". BELOW GRADE JOINTS SHALL BE SILVER SOLDERED. THERE SHALL BE NO JOINTS IN WATER PIPING LOCATED BENEATH BUILDING SLAB.
  - 4.1.4. COPPER WATER PIPING ABOVE GRADE SHALL BE TYPE "L".
  - 4.2. PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK-CLOSE VALVES. FIXTURES REQUIRING WATER HAMMER ARRESTORS INCLUDE BUT ARE NOT LIMITED TO FLUSH VALVES, SENSOR FAUCETS, AND WASHING MACHINE BOXES. AIR CHAMBERS SHALL NOT BE PERMITTED.
  - 4.3. ALL DOMESTIC WATER PIPING SHALL BE ROUTED WITHIN BUILDING THERMAL ENVELOPE AND WITHIN WALL CAVITIES, ABOVE FINISHED CEILINGS, OR BELOW SLAB TO REMAIN CONCEALED UNLESS OTHERWISE NOTED. NOTIFY ENGINEER OF ANY NECESSARY ADJUSTMENTS THAT REQUIRE PIPING TO BE EXPOSED.
  - 4.4. DOMESTIC WATER PIPING INSULATION
    - 4.4.1. ALL HW & HWR PIPING, WHETHER COPPER OR PEX, SHALL BE INSULATED WITH PLENUM RATED CLOSED CELL ELASTOMERIC INSULATION.
      - 4.4.1.1. FOR PIPING LESS THAN 1½", INSULATION THICKNESS TO BE 1".
      - 4.4.1.2. FOR PIPING 1½" OR GREATER, INSULATION THICKNESS SHALL BE 1½".
    - 4.4.2. CW COPPER PIPING TO INSULATED WITH ½" PLENUM RATED CLOSED CELL ELASTOMERIC INSULATION. CW PEX NEED NOT BE INSULATED UNLESS NOTED OTHERWISE ON PLANS.
- 5. GAS PIPING**
  - 5.1. GAS PIPING SHALL BE INSTALLED LEVEL, PLUMB, AND PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
  - 5.2. QUARTER-TURN FULL-PORT SHUTOFF VALVES SHALL BE INCLUDED AT EACH APPLIANCE CONNECTION, AS WELL AS AN IN-LINE REGULATOR FROM DELIVERY PRESSURE TO APPLIANCE OPERATING PRESSURE IF REQUIRED. INCLUDE SEDIMENT TRAPS PER IFGC REQUIREMENTS.
  - 5.3. NATURAL GAS AND LIQUID PROPANE (LP) PIPING TO SHALL BE SCHEDULE 40 BLACK STEEL.
  - 5.4. PIPE JOINTS SHALL BE TREADED WITH CLASS 150 FITTINGS, OR WELDED. NOTIFY OWNER/GC OF ANY NECESSARY HOT-WORK ASSOCIATED WITH WELDED CONNECTIONS.
  - 5.5. WHERE PIPING IS EXPOSED ON EXTERIOR FACE OF BUILDING, PAINT TO MATCH BUILDING. PAINT YELLOW IN ALL OTHER LOCATIONS.
  - 5.6. ON ROOFTOPS, INSTALL GAS PIPE WITH "ROOFTOP BLOX" PER MANUFACTURER'S INSTRUCTION.
- 6. STORM DRAIN PIPING**
  - 6.1. ABOVE AND BELOW GRADE STORM PIPING SHALL BE SOLID CORE SCHEDULE 40 PVC.
  - 6.2. ALL PRIMARY & SECONDARY STORM DRAIN PIPING & FITTINGS SHALL BE INSULATED WITH ½" FIBERGLASS INSULATION WITH ASJ JACKET.
  - 6.3. STORM DRAIN PIPING IN PLENUMS SHALL BE CAST IRON, PLENUM-RATED CPVC, OR PVC WITH AN INSULATION WRAP LISTED FOR USE AS SUCH AN ASSEMBLY.

PLUMBING FIXTURE SCHEDULE				
TAG	DESCRIPTION	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	NOTES
BFP1	BACKFLOW PREVENTER	WILKINS	975XL2	RPZ; 1-1/2"
EXP1	EXPANSION TANK	WATTS	PLT-5	
FD1	FLOOR DRAIN	ZURN	Z415-BZ	WITH Z1072 TRAP SEAL
HD1	HUB DRAIN	-	-	WITH Z1072 TRAP SEAL
LAV1	LAVATORY (INTEGRAL BOWL) WITH FAUCET	PISTER	PARISA	4" CENTERSET FAUCET, 1/4 TURN STOPS, BRAIDED STAINLESS STEEL SUPPLIES, & 'TMV1'
MS1	MOP SINK	FIAT	MSB2424	WITH ZURN Z843M1 FAUCET WITH WALL HOOK
REF1	REFRIGERATOR BOX	SIOUX CHIEF	696-G1000	
RH1	ROOF HYDRANT	WOODFORD	SRH-MS	
RP1	RECIRCULATION PUMP	GRUNDFOS	UP10-16 AUTO	ALSO PROVIDE TIMECLOCK FUNCTION
SH1	SHOWER TRIM & DRAIN	-	-	WITH PFIESTER SHOWER HEAD #L616-300K & ZURN #415-BZ DRAIN
SK1	SINGLE COMPARTMENT SINK (22x19x7)	ELKAY	LR2219	WITH TWO HANDLED ZURN Z871C4-XL FAUCET
SK2	DOUBLE COMPARTMENT SINK W/DISPOSAL (33x22x7)	ELKAY	CR3322	WITH TWO HANDLED ZURN Z871C4-XL FAUCET AND INSINKERATOR BADGER 1 DISPOSAL WITH POWER CORD
TMV1	THERMOSTATIC MIXING VALVE - POINT OF USE	WATTS	LFUSG	
UR1	URINAL - MANUAL FLUSH	AMERICAN STANDARD	6550.001	WITH ZURN Z6003AV-WS1 MANUAL FLUSH VALVE (1.0 GPM/FLUSH)
WC1	WATER CLOSET - STANDARD HEIGHT - TANK	AMERICAN STANDARD	Z15CA.004	WITH CHURCH 9500SSCT SELF SUSTAINING SEAT, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WC2	WATER CLOSET - ADA HEIGHT - TANK	AMERICAN STANDARD	Z15AA.004	WITH CHURCH 9500SSCT SELF SUSTAINING SEAT, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WC01	WALL CLEAN OUT	-	-	
WH1	WATER HEATER - 50 GALLON - ELECTRIC	AO SMITH	DEN-52	208V, 1-PH, 4500W, WITH 'EXP1'

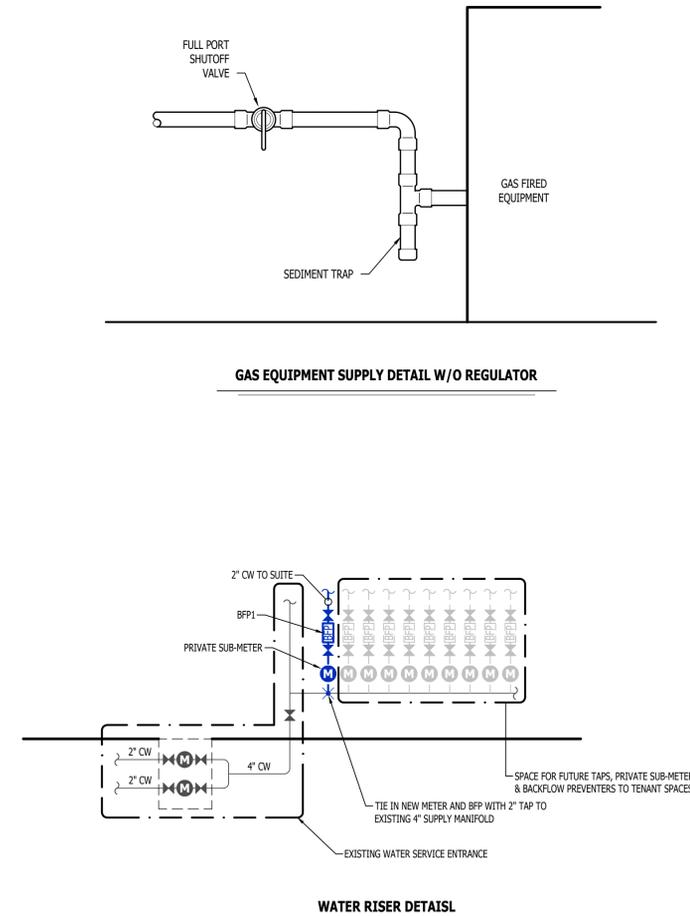
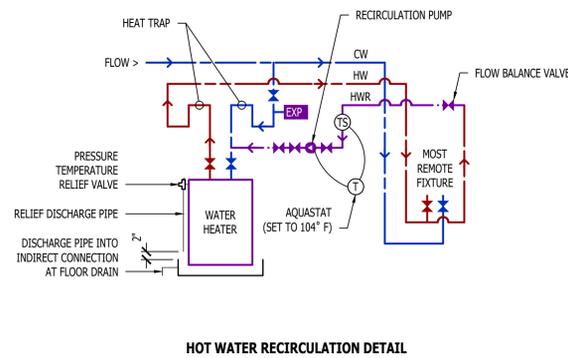
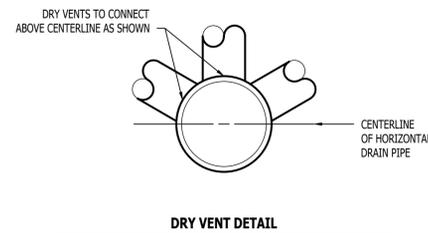
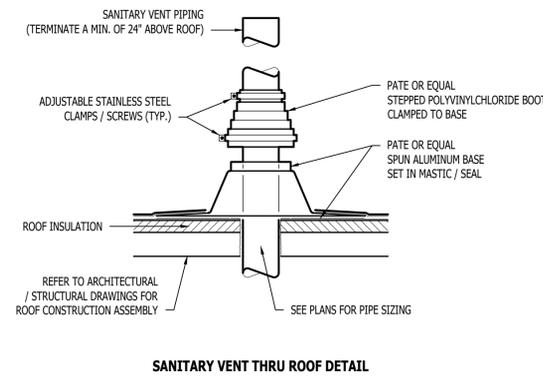
**NOTES:**

1. VERIFY NECESSARY FIXTURES MEET ADA REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
2. VERIFY FIXTURE FINISHES WITH OWNER / ARCHITECT.

PLUMBING CONNECTION SIZING SCHEDULE						
FIXTURE	TYPE	TYPICAL ABBREVIATION	SANITARY PIPING		SUPPLY PIPING	
			WASTE CONNECTION	VENT CONNECTION	COLD WATER CONNECTION	HOT WATER CONNECTION
DRINKING FOUNTAIN	DF	DF	1-1/2"	1-1/4"	1/2"	-
FLOOR DRAIN	FD	FD	3"	2"	-	-
HAND / HAIR SINK	HS / SK	HS / SK	2"	1-1/4"	1/2"	1/2"
HOSE BIBB	HB	HB	-	-	3/4"	-
LAVATORY	LAV	LAV	1-1/2"	1-1/4"	1/2"	1/2"
MOP SINK	MS	MS	3"	1-1/2"	1/2"	1/2"
ICE MAKER OUTLET BOX	REF	REF	-	-	1/2"	-
SHOWER	SH	SH	3"	1-1/2"	1/2"	1/2"
URINAL	UR	UR	2"	1-1/4"	3/4"	-
WATER CLOSET (FLUSH TANK)	WC	WC	3"	2"	1/2"	-
WATER CLOSET (FLUSH VALVE)	WC	WC	3"	2"	1"	-

**NOTES:**

1. SIZES SHOWN ABOVE ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS



James Watson, P.E. November 17, 2025  
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**PLUMBING DETAILS & SCHEDULES**

SHEET NUMBER

**P501**