

POLICE DEPARTMENT RENOVATIONS

CITY OF MUSKEGON

933 TERRACE STREET - MUSKEGON, MI 49440

ARCHITECT'S PROJECT # 1531-24

BIDDING & PERMITS

01.23.2025

ABBREVIATIONS

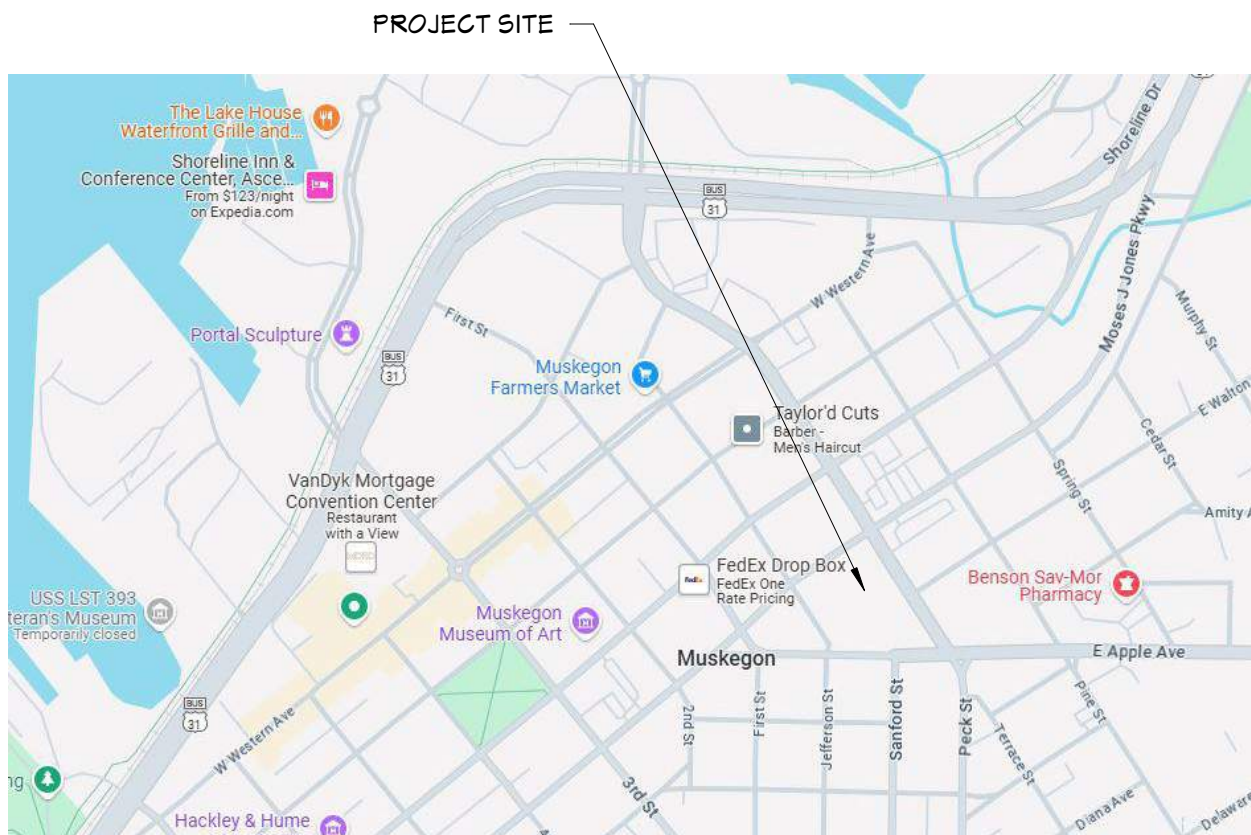
ABOVE FINISH FLOOR	AFF	GALVANIZED	GALV	QUARRY TILE	QT
ACOUSTICAL TILE	ACT	GAUGE	GA	RADIUS	R
ADJACENT	ADJ	GLASS	GL	REFRIGERATOR	REFRIG
AIR ADMITTANCE VALVE	AAV	GRADE	GR	REINFORCEMENT	REINF
ALUMINUM	AL	GYPSUM BOARD	GYP BD	REQUIRED	REQD
AMERICAN DISABILITIES ACT	ADA	GLAZED MASONRY UNIT	GMU	ROOF DRAIN	RD
AND	AND	HAND DRYER	HD	ROOF VENT	RV
APPROXIMATELY	APPROX	HANDICAP	HDGP	ROOM	RM
AREA DRAIN	AD	HARDWOOD	HDWD	ROUGH OPENING	RO
AT	@	HEATING	HTG	RUBBER FLOOR TILE	RFT
BASEMENT	BSMT	HVAC	HYAC	SANITARY	SAN
BEARING	BRG	HEIGHT	HT	SECTION	SECT
BENCH MARK	BM	HIGH POINT	HP	SHEET	SHT
BETWEEN	BTWN	HIGHWAY	HQY	SHEET METAL	SHT MTL
BARRIER FREE	B.F.	HOLLOW METAL	HM	SIMILAR	SIM
BLOCK	BLK	HORIZONTAL	HORIZ	SIMILAR TOO	SIM TO
BOARD	BD	INCLUDE	INCL	SMART BOARD	SB
BOTTOM OF	BO	INFORMATION	INFO	SPECIFICATION	SPEC
BOTTOM OF STEEL	BOS	INSIDE DIMENSION	ID	SQUARE	SQ
BUILDING	BLDG	INSULATION	INSUL	STAINLESS STEEL	SS
CABINET	CAB	JANITOR	JAN	STANDARD	STD
CARPET	CFT	JANITOR CLOSET	JC	START POINT	SP
CATCH BASIN	CB	JOIST	JT	STEEL	STL
CEILING	CLG	JOIST	JST	STORAGE	STOR
CENTER LINE	CL	LAMINATE	LAM	STRUCTURAL	STRUCT
CLEAN OUT	CO	LINEAR	LIN	SUSPENDED	SUSP
COLUMN	COL	LONG LEG VERTICAL	LLV	TACK BOARD	TB
CONCRETE	CONC	LOW POINT	LP	TEMPERED	TEMP
CONCRETE MASONRY UNIT	CMU	LOWER LEVEL	LL	TONGUE & GROOVE	T & G
CONTINUOUS	CONT	MAN HOLE	MH	TOP OF FOOTING	T O F T G
CONTROL JOINT	CJ	MANUFACTURER	MFR	TOP OF FOUNDATION	T O F T G
CUBIC	CU	MARKER BOARD	MB	TOP OF STRUCTURAL	T O S
DEMOLITION	DEMO	MASONRY OPENING	MO	TOP OF WALL	T O W
DETAIL	DET	MECHANICAL	MECH	THICK	THK
DIAMETER	DIA	METAL	MTL	THROUGH	THRU
DIMENSION	DIM	MINIMUM	MIN	TYPICAL	TYP.
DOWN	DN	MISCELLANEOUS	MISC	UNDERWRITER'S LABORATORY	UL
DOWNSPOUT	DS	MOUNTED	MTD	UNLESS NOTED OTHERWISE	UNO
DRAWING	DWG	NORMAL	NOM	VENT THROUGH ROOF	VTR
EACH	EA	NOT IN CONTRACT	NIC	VENTILATION	VENT
ELECTRIC	ELEC	NUMBER	NUM	VERIFY IN FIELD	V I F
ELECTRIC WATER COOLER	EWAC	ON CENTER	OC	VERTICAL	VERT
ELEVATION	EL	OPENING	OPNG	VINYL COMPOSITE TILE	VCT
ELEVATOR	ELEV	OPPOSITE	OPP	VINYL WALL COVERING	VWC
EQUAL	EQ	OPPOSITE HAND	OH	VOLUME	VOL
EQUIPMENT	EQUIP	OUTSIDE DIAMETER	OD	WALL CLEAN OUT	W C O
EXISTING	EXIST	FAIR	FR	WELDED WIRE FABRIC	WWF
EXPANSION	EXP	PLASTER CEMENT	PLSC	WELDED WIRE MESH	WWM
EXPANSION JOINT	EJ	PLASTER GYPSUM	PLSG	WITH	W
FEET	FT	PLATE	PLT	WITHOUT	W/O
FINISHED FLOOR	FIN	PLYWOOD	PLYND	WOOD	WD
FIRE EXTINGUISHER	FE	PORCELAIN CERAMIC TILE	PCT	WORK POINT	WOLM
FIRE EXTINGUISHER	FEC	PRESSURE TREATED	PT	YARD CLEAN OUT	Y C O
CABINET	FL				
FLOOR	FD				
FLOOR DRAIN	FTG				
FOOTING	FND				
FOUNDATION	FFF				
FROM FINISHED FLOOR					

CODE REVIEW NOTES

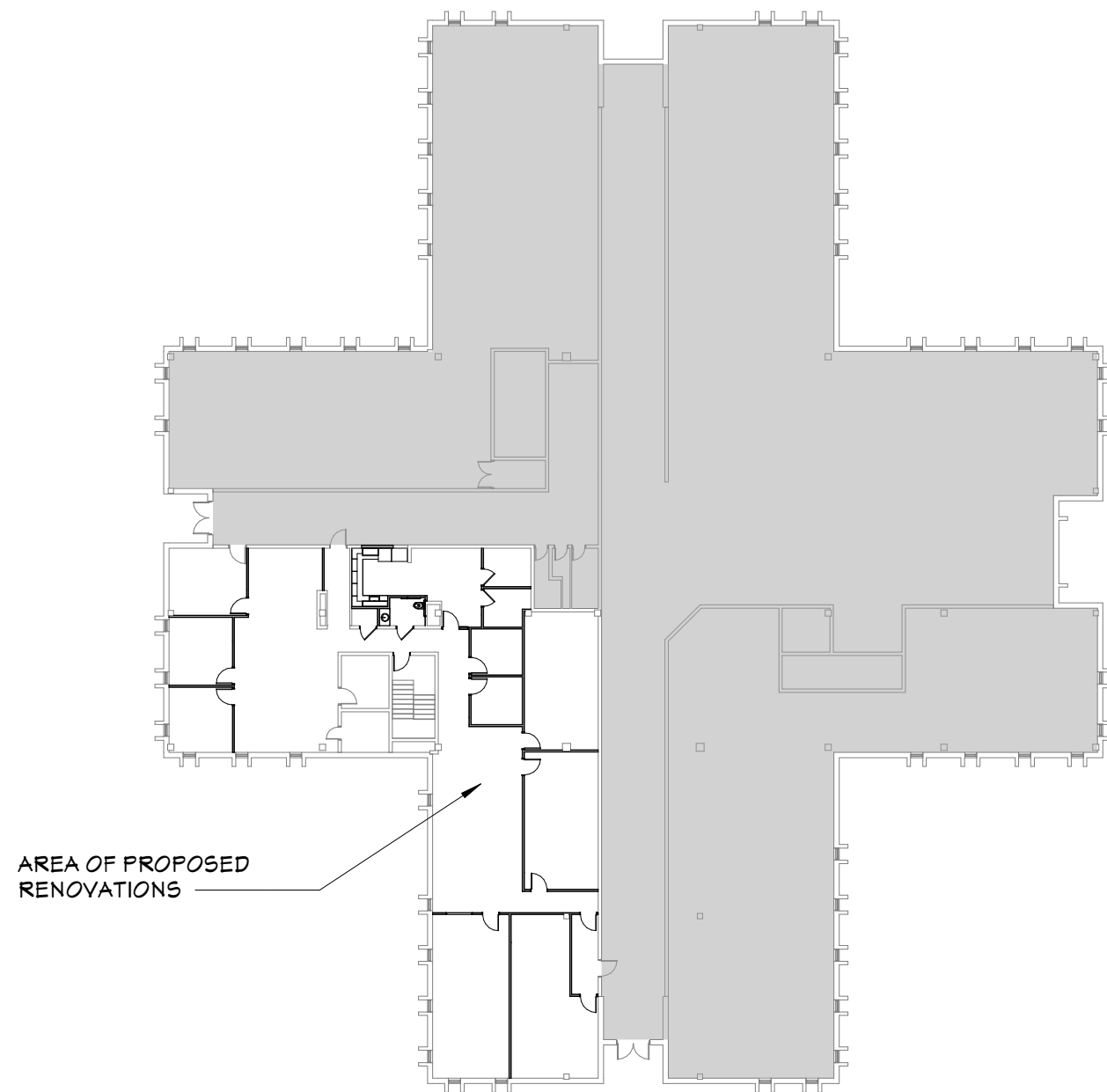
BUILDING: 2015 MICHIGAN REHABILITATION CODE  
MECHANICAL: 2021 MICHIGAN MECHANICAL CODE  
PLUMBING: 2021 MICHIGAN PLUMBING CODE  
ELECTRICAL: 2023 NATIONAL ELECTRICAL CODE  
BARRIER FREE: ICC/ANSI A117.1-2009  
FIRE CODE: INTERNATIONAL FIRE CODE 2018  
ENERGY CODE: ASHRAE 90.1-2013 IW AMENDMENTS

BUILDING DATA

BUILDING USE GROUP = 'B' BUSINESS & 'S-1' STORAGE  
CONSTRUCTION TYPE = 1B  
ALLOWABLE AREA = UNLIMITED, 11 STORY  
ACTUAL AREA = 22,295 S.F. (5,040 RENOVATED) 2 STORY  
OCCUPANT LOAD MAX. = 230 (50 IN RENOVATED AREA)  
NUMBER OF EXITS = 2 REQUIRED - WITHIN RENOVATED SPACE  
EXIT TRAVEL DISTANCE = 200 FEET  
FIRE SUPPRESSION = NONE EXISTING



SITE LOCATION MAP



OVERALL PLAN

1/32" = 1'-0"

INDEX OF DRAWINGS

T1.01 COVER

ARCHITECTURAL

A1.00 DEMOLITION PLANS  
A1.01 PARTIAL FIRST FLOOR PLAN & SCHEDULES  
A7.01 INTERIOR ELEVATIONS  
A8.01 REFLECTED CEILING PLAN

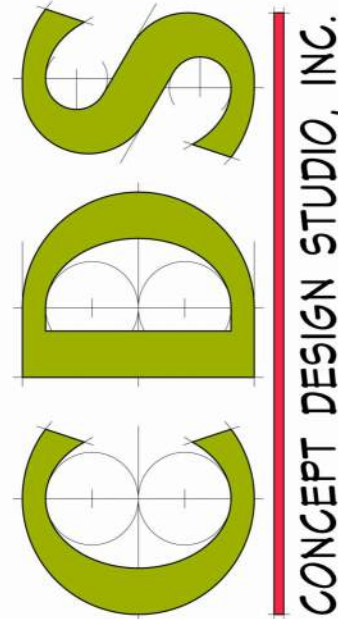
MECHANICAL & PLUMBING

M1.01 MECHANICAL & PLUMBING PLANS & NOTES

ELECTRICAL

E1.00 ELECTRICAL DEMOLITION PLANS  
E1.01 ELECTRICAL POWER PLANS  
E1.02 ELECTRICAL LIGHTING PLAN, LEGEND & NOTES  
E1.03 ELECTRICAL SPECIFICATIONS, LEGEND, PANEL SCHEDULES AND ONE-LINE DIAGRAM

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SHEET TITLE

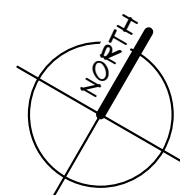
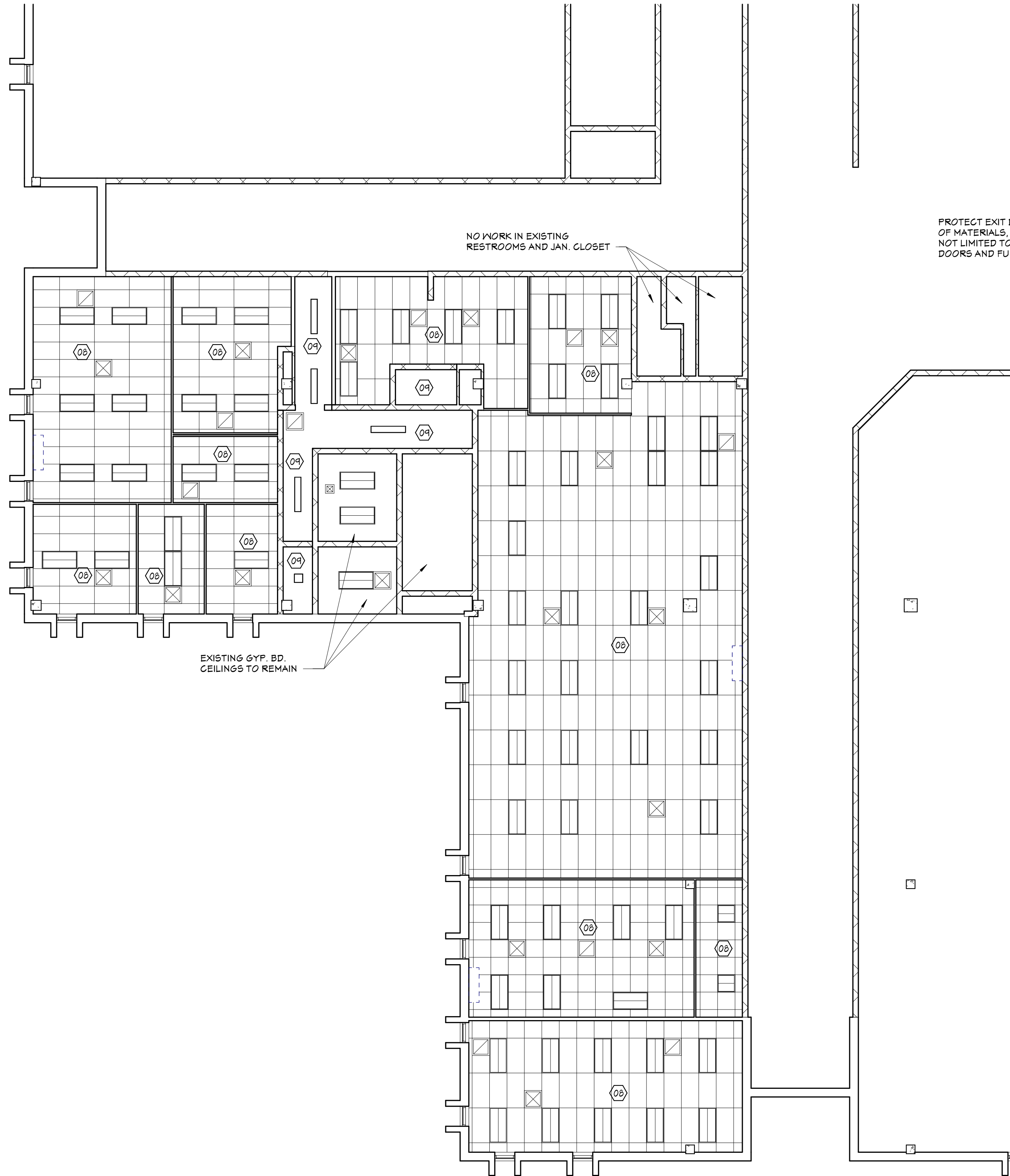
TITLE SHEET

SHEET NO.

T1.01

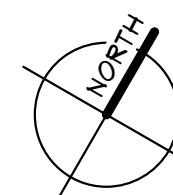


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## REFLECTED CEILING DEMOLITION PLAN

1/8" = 1'-0"



## FIRST FLOOR DEMOLITION PLAN

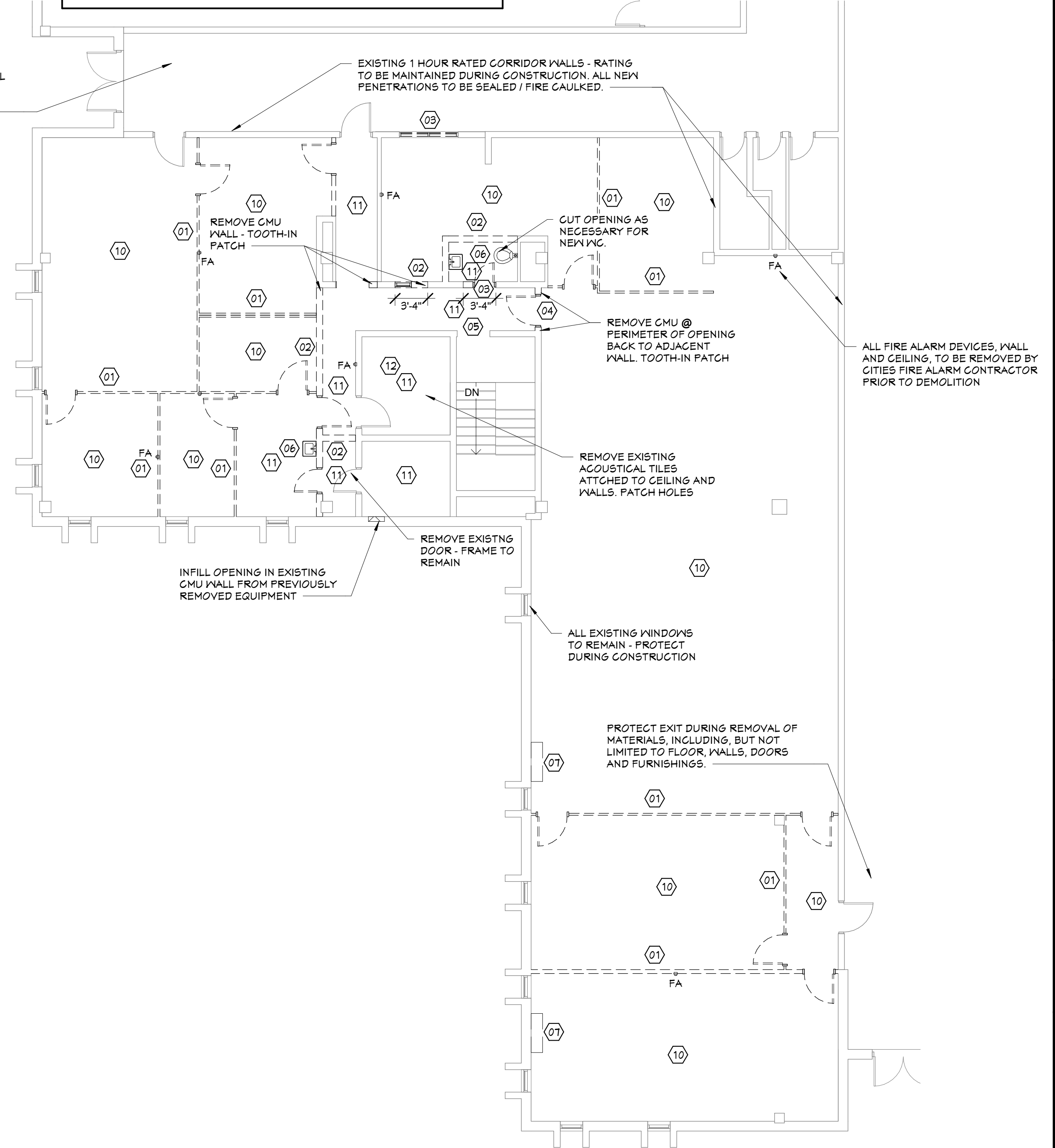
1/8" = 1'-0"

### DEMOLITION KEY NOTES

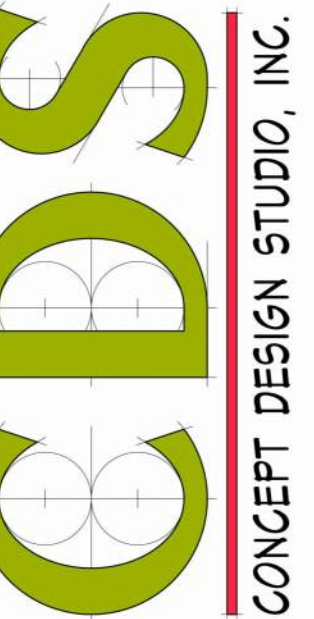
- 01 REMOVE EXISTING MODULAR WALL PANEL SYSTEM COMPLETE, INCLUDING DOORS, WINDOWS, POWER, ETC.
- 02 REMOVE EXISTING MASONRY WALLS INCLUDING ANY DOORS OR WINDOWS. PATCH & REPAIR ADJACENT WALLS & FLOOR AS REQUIRED FOR NEW WORK. ALL CUT CMU TO BE TOOTHED IN.  
- NOTE WALL IS APPROX. 14" TALL TO BOTTOM OF FLOOR ABOVE.
- 03 REMOVE EXISTING WINDOW & FRAME. PREP OPENING FOR INFILL WITH SIMILAR MATERIALS TO ADJACENT WALL.
- 04 REMOVE EXISTING DOOR (FRAME TO REMAIN). PREP EXISTING FRAME FOR PAINT.
- 05 REMOVE EXISTING WOOD TRIM FROM MASONRY OPENING. PREP OPENING FOR NEW HOLLOW METAL FRAME.
- 06 REMOVE EXISTING PLUMBING FIXTURES & ACCESSORIES INCLUDING ALL ASSOCIATED PLUMBING BELOW FLOOR OR IN PLUMBING CHASE. CAP AS REQUIRED OR PREP. FOR NEW OR RELOCATED FIXTURES. CUT-OUT / OPEN CMU WALL AS NECESSARY TO ACCESS CHASE.
- 07 REMOVE EXISTING MINI-SPLIT A/C UNIT AND SAVE FOR RELOCATION WITHIN PROJECT. SEE MECHANICAL DRAWINGS.
- 08 REMOVE EXISTING LAY-IN CEILING SYSTEM, INCLUDING ALL LIGHTING. PATCH ADJACENT WALLS AS REQUIRED.
- 09 REMOVE EXISTING PLASTER CEILING SYSTEM, INCLUDING ALL LIGHTING. PATCH ADJACENT WALLS AS REQUIRED.
- 10 REMOVE EXISTING CARPET FLOORING. PREP FLOOR AS REQUIRED FOR NEW FINISH. REFER TO ROOM FINISH SCHEDULE.
- 11 REMOVE EXISTING VCT FLOORING. PREP FLOOR AS REQUIRED FOR NEW FINISH. REFER TO ROOM FINISH SCHEDULE.
- 12 REMOVE EXISTING ACOUSTICAL TILES FROM WALLS AND CEILING. PATCH EXISTING FINISHES / PREP FOR PAINT.

### GENERAL DEMOLITION NOTES

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS BEFORE DEMOLITION. DIMENSIONS SHOWN ARE GUIDELINES. COORDINATE DEMOLITION WITH NEW CONSTRUCTION DRAWINGS.
2. PROVIDE TEMPORARY SHORING OF EXISTING FRAMING AS REQUIRED UNTIL NEW CONSTRUCTION IS IN PLACE.
3. DEMOLITION CONTRACTOR TO TAKE CARE IN REMOVING OF EXISTING WALLS WITHOUT CAUSING DAMAGE TO THE EXISTING STRUCTURE.
4. WHERE NEW OPENING IS BEING MADE IN EXISTING CMU, TOOTH-IN NEW WALL OR WALL PATCH TO MATCH EXISTING.
5. DASHED LINES INDICATE MATERIALS TO BE REMOVED. COORDINATE WITH NEW CONSTRUCTION.
6. SCRAPE AND REMOVE ALL LOOSE PAINT & PLASTER.
7. DISCONNECT & REMOVE ALL ELECTRICAL DEVICES. COORDINATE WITH ELECTRICAL DRAWINGS. PATCH HOLES IN WALL/CEILING.
8. PROVIDE FIRE EXTINGUISHERS AT EACH FLOOR DURING DEMOLITION.
9. PATCH & REPAIR EXISTING FLOOR TO REMAIN.
10. REMOVE ALL PIPING & ASSOCIATED PLUMBING FIXTURES. CAP LINES AS REQUIRED. COORDINATE WITH MECHANICAL DRAWINGS. PATCH / FILL ALL OPENINGS IN RATED WALLS.
11. REMOVE ALL EXISTING CARPET, TILE, VCT OR OTHER FLOOR MATERIAL DOWN TO EXISTING CONCRETE SURFACES. PREP FLOOR AREAS FOR NEW FINISHES PER ROOM FINISH SCHEDULE.
12. REFERENCE ENVIRONMENTAL ASSESSMENT REPORT FOR HAZARDOUS MATERIAL ABATEMENT.



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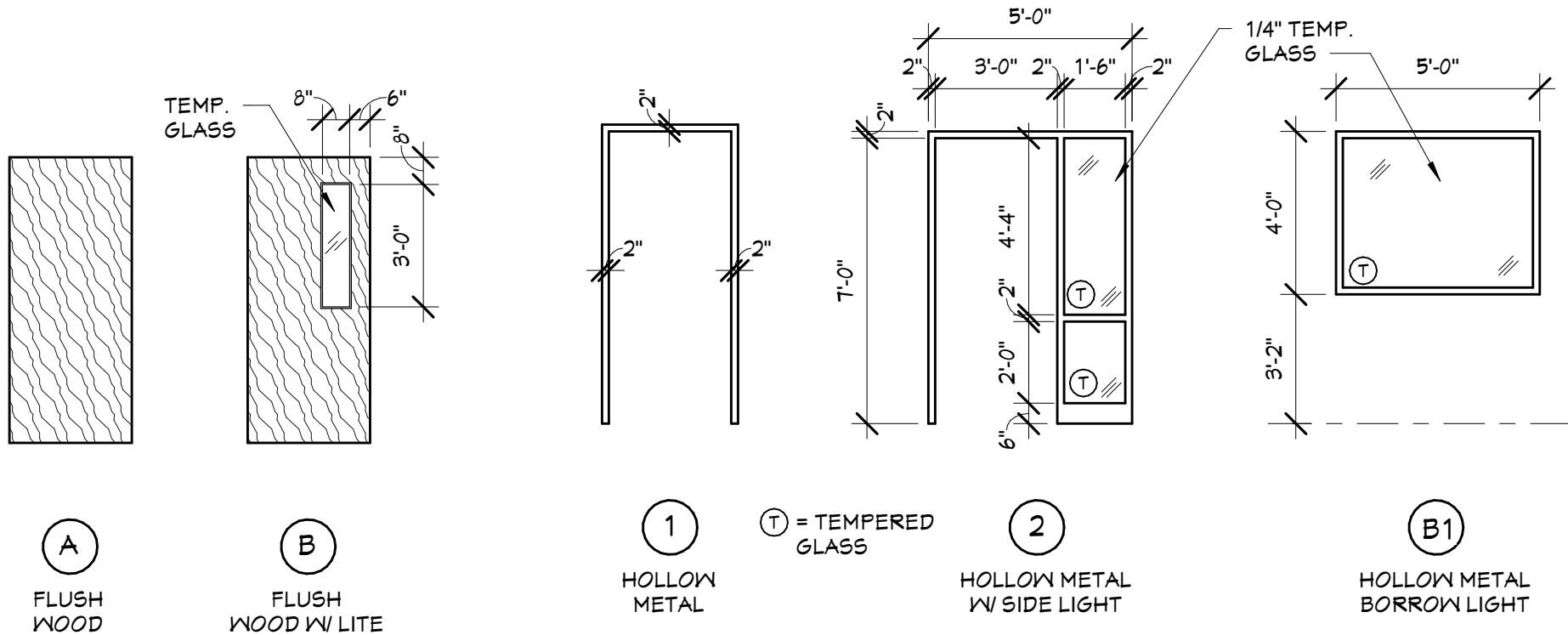
SHEET TITLE  
**DEMOLITION PLANS**

SHEET NO.

**A1.00**



Door Schedule								
No.	Width	Door Height	Thickness	Door Type	Frame Type	Fire Rating	Hdur.	Comments
101	3'-0"	7'-0"	1 3/4"	A	1	---	02	KEYED / LOCKED FROM INSIDE ROOM
102	3'-0"	7'-0"	1 3/4"	A	1	---	02	KEYED LOCK
103	3'-0"	7'-0"	1 3/4"	A	1	---	04	KEYED LOCK
108	3'-0"	7'-0"	1 3/4"	A	1	---	08	NO LOCK
110	3'-0"	7'-0"	1 3/4"	A	2	---	10	NO LOCK
111	3'-0"	7'-0"	1 3/4"	A	1	---	07	PRIVACY w/ INDICATOR
112	3'-0"	7'-0"	1 3/4"	A	1	---	06	PRIVACY w/ INDICATOR
113	3'-0"	7'-0"	1 3/4"	A	1	---	06	PRIVACY w/ INDICATOR
114	3'-0"	7'-0"	1 3/4"	A	1	---	04	NO LOCK
116	3'-0"	7'-0"	1 3/4"	A	1	---	02	KEYED LOCK
117A	3'-0"	7'-0"	1 3/4"	B	1	---	03	NO LOCK
117B	3'-0"	7'-0"	1 3/4"	B	1	---	03	NO LOCK
118	3'-0"	7'-0"	1 3/4"	B	1	---	03	KEYED LOCK
119	3'-0"	7'-0"	1 3/4"	A	1	---	11	PUNCH PAD LOCK @ EXTERIOR
120	3'-0"	7'-0"	1 3/4"	A	1	---	05	KEYED LOCK
121	3'-0"	7'-0"	1 3/4"	B	1	---	02	KEYED LOCK
S01	3'-0"	7'-0"	1 3/4"	A	2	45	12	EGRESS w/ KEY PAD / STAIR SIDE
X01	3'-0"	7'-0"	1 3/4"			45	01	EXISTING TO REMAIN
X02	3'-0"	7'-0"	1 3/4"			45	01	EXISTING TO REMAIN
X07	3'-0"	7'-0"	1 3/4"			---	01	EXISTING TO REMAIN - NO LOCK
X11	2'-4"	7'-0"	1 3/4"			---	01	EXISTING H.M. FRAME TO REMAIN - REPLACE DOOR
X14	3'-0"	7'-0"	1 3/4"			45	01	EXISTING TO REMAIN

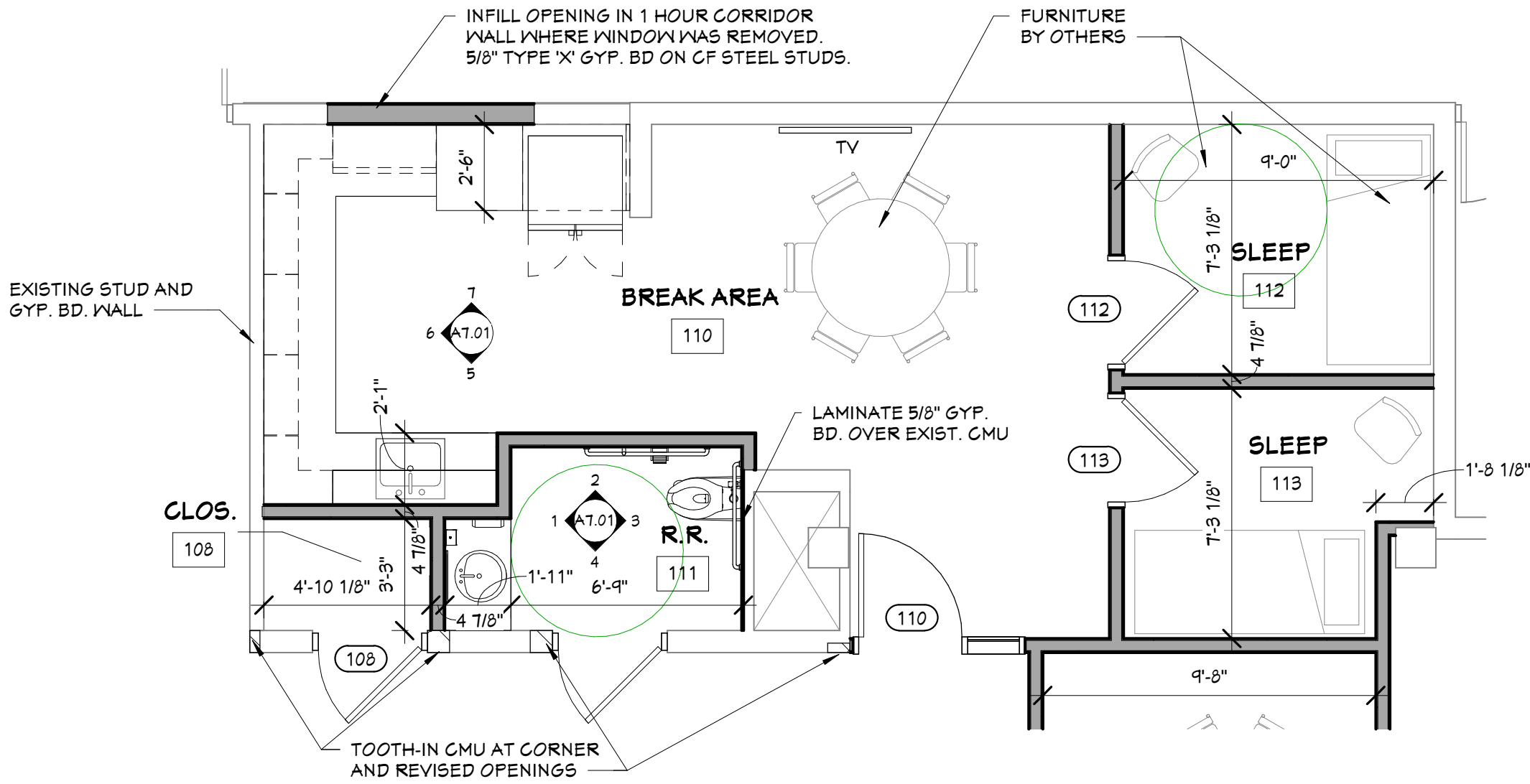


DOOR AND FRAME TYPES

1/4" = 1'-0"

GENERAL NOTES

- ALL TRADES TO COORDINATE TO AVOID INTERFERENCES.
- CONTRACTOR TO FIELD VERIFY FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH WORK. REPORT SIGNIFICANT DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS.
- PATCH & REPAIR, & PREP ALL EXISTING WALLS, FLOORS & CEILINGS FOR NEW FINISHES.
- PROPER FIRE ASSEMBLIES REQUIRED FOR ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOOR AND CEILINGS. INCLUDE FIRE CAULKING, FIRE COLLARS AND FIRE SLEEVES.
- INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS.
- INSTALL 1/2" PREMOLDED EXPANSION MATERIAL AT JOINTS BETWEEN FLOOR SLAB & FOUNDATION WALL UNLESS NOTED OTHERWISE.



1 ENLARGED PLAN - BREAK ROOM AND R.R.  
1/4" = 1'-0"

FINISH KEY

FLOORING:  
F-1 L.V.T.  
F-2 SEALED CONCRETE

WALL FINISH:  
WF-1 PAINT - GYP. BD.  
WF-2 PAINT - CMU  
WF-3 CERAMIC TILE WAINSCOT

BASE:  
B-1 6" VINYL  
B-2 CERAMIC TILE

CEILING MATERIAL:  
C-1 2'x2' SUSPENDED CEILING TILE  
C-2 EXIST. GYP. BD. - PAINT

MATERIALS

LVT TO BE EQUAL TO:  
MANNINGTON - 'SPACIA - STONE', 12 X 18, COLOR: JULEP #S5552606

RUBBER BASE TO BE EQUAL TO:  
JOHNSONITE - 6", COLOR: 'DARK GREY'

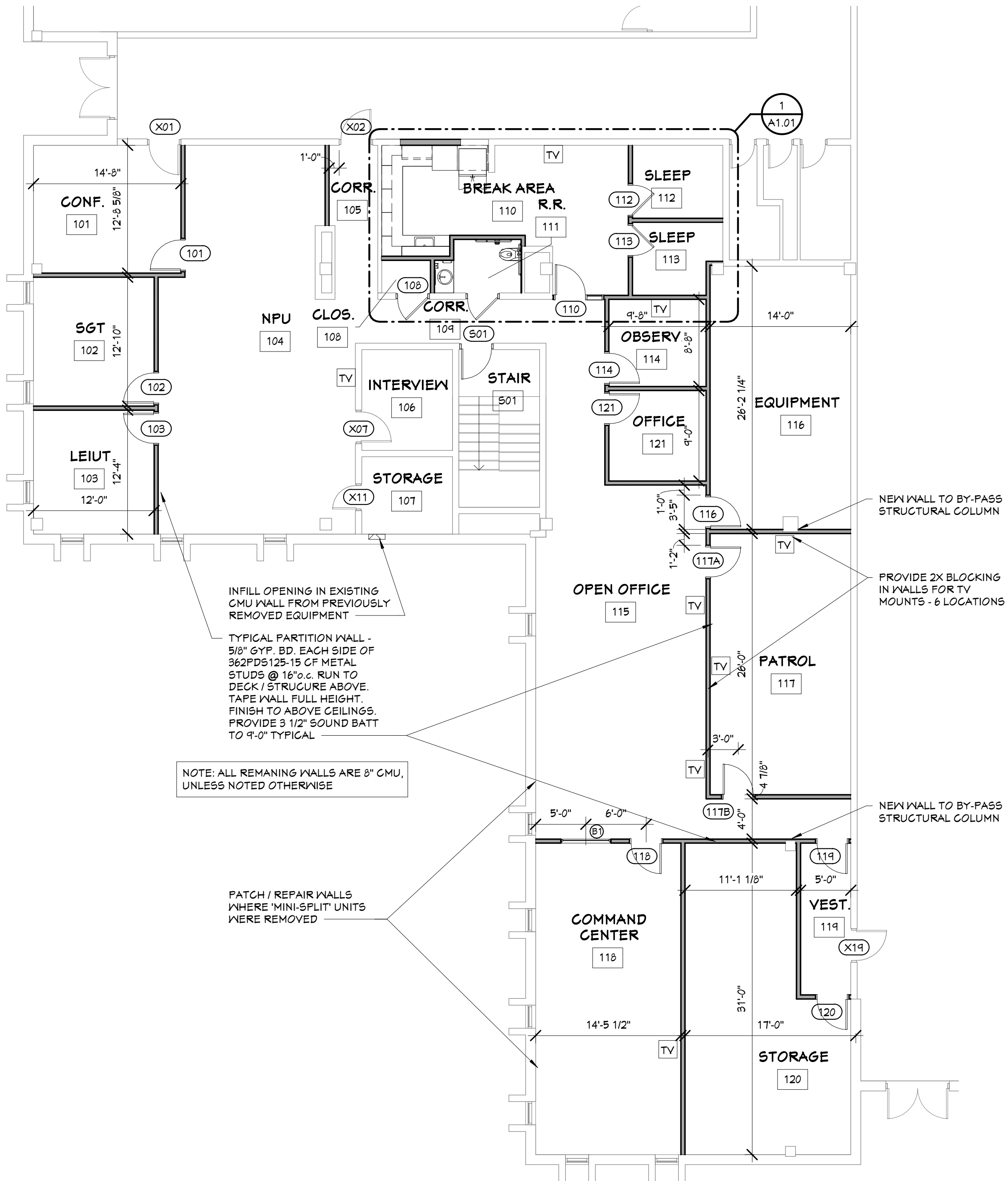
CEILING TILE - USG 'ECLIPSE' # T6715 (24X24)

PAINT:  
WALLS - REPCOLITE HALLMARK PREMIUM EGGSHELL ENAMEL / MATCH BENJAMIN MOORE 'SILVERY MOON' #1604(B-Y 12, D-2, L-Y 12)  
DOOR FRAMES: SHERWIN WILLIAMS EMERALD URETHANE TRIM ENAMEL COMP (B011) 'TEMPTATION' # 1604

NOTE: PROVIDE 24" X 10" CELLULAR SHADES AT ALL EXTERIOR WINDOWS. (13) TOTAL REQUIRED

Room Finish Schedule

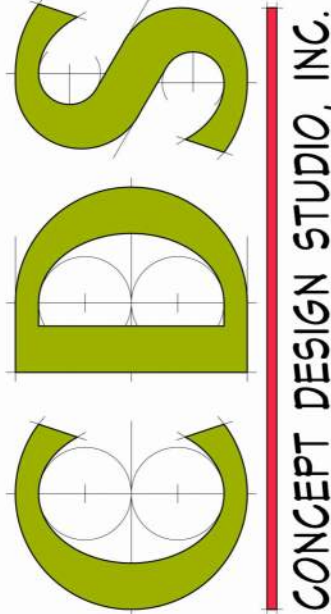
No.	Name	Floor	Base	Wall Fin.	Ceiling	Clg. Ht.	Comments
101	CONF.	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
102	SGT	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
103	LEIUT	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
104	NPU	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
105	CORR.	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
106	INTERVIEW	F-1	B-1	WF-2	C-2	8'-0"	
107	STORAGE	F-1	B-1	WF-2	C-2	8'-0"	
108	CLOS.	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
109	CORR.	F-1	B-1	WF-2	C-1	8'-0"	
110	BREAK AREA	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
111	R.R.	F-1	B-1/B-2	WF-1/WF-2	C-1	8'-0"	4'-0" CERAMIC TILE WAINSCOT - SEE INTERIOR ELEVATIONS
112	SLEEP	F-1	B-1	WF-1	C-1	8'-0"	
113	SLEEP	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
114	OBSERV.	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
115	OPEN OFFICE	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
116	EQUIPMENT	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
117	PATROL	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
118	COMMAND CENTER	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
119	VEST.	F-1	B-1	WF-1/WF-2	C-1	8'-0"	
120	STORAGE	F-1	B-1	WF-1	C-1	8'-0"	
121	OFFICE	F-1	B-1	WF-1	C-1	8'-0"	
S01	STAIR	F-2	EXIST.	WF-2	C-2	8'-0"	EXISTING STAIR - TOUCH UP PAINT AT UPPER LANDING



FIRST FLOOR

1/8" = 1'-0"

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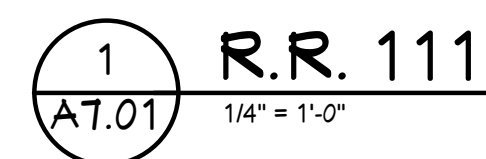
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SHEET TITLE  
FLOOR PLAN

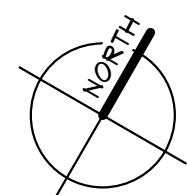
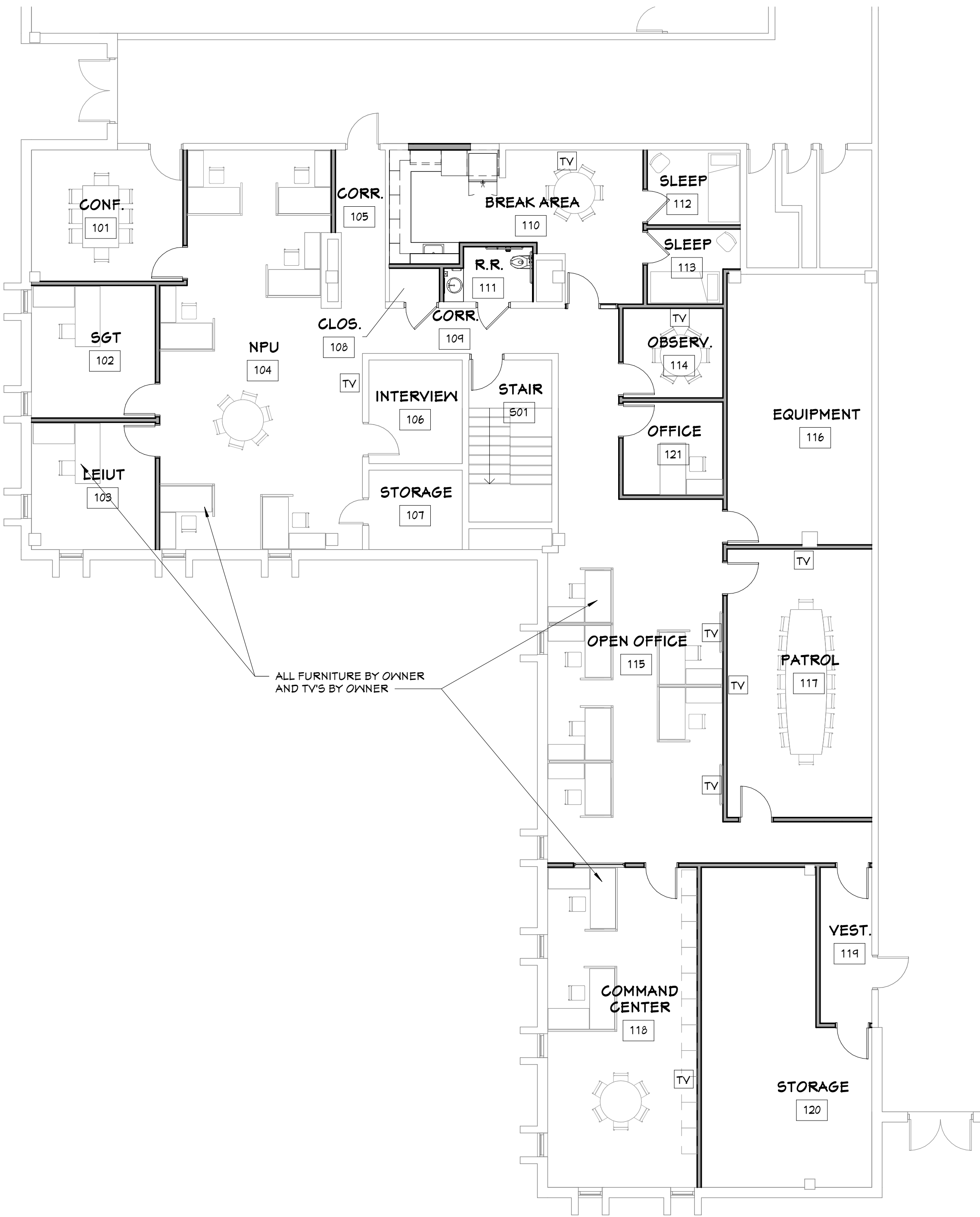
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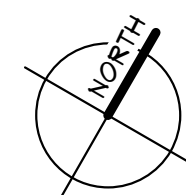
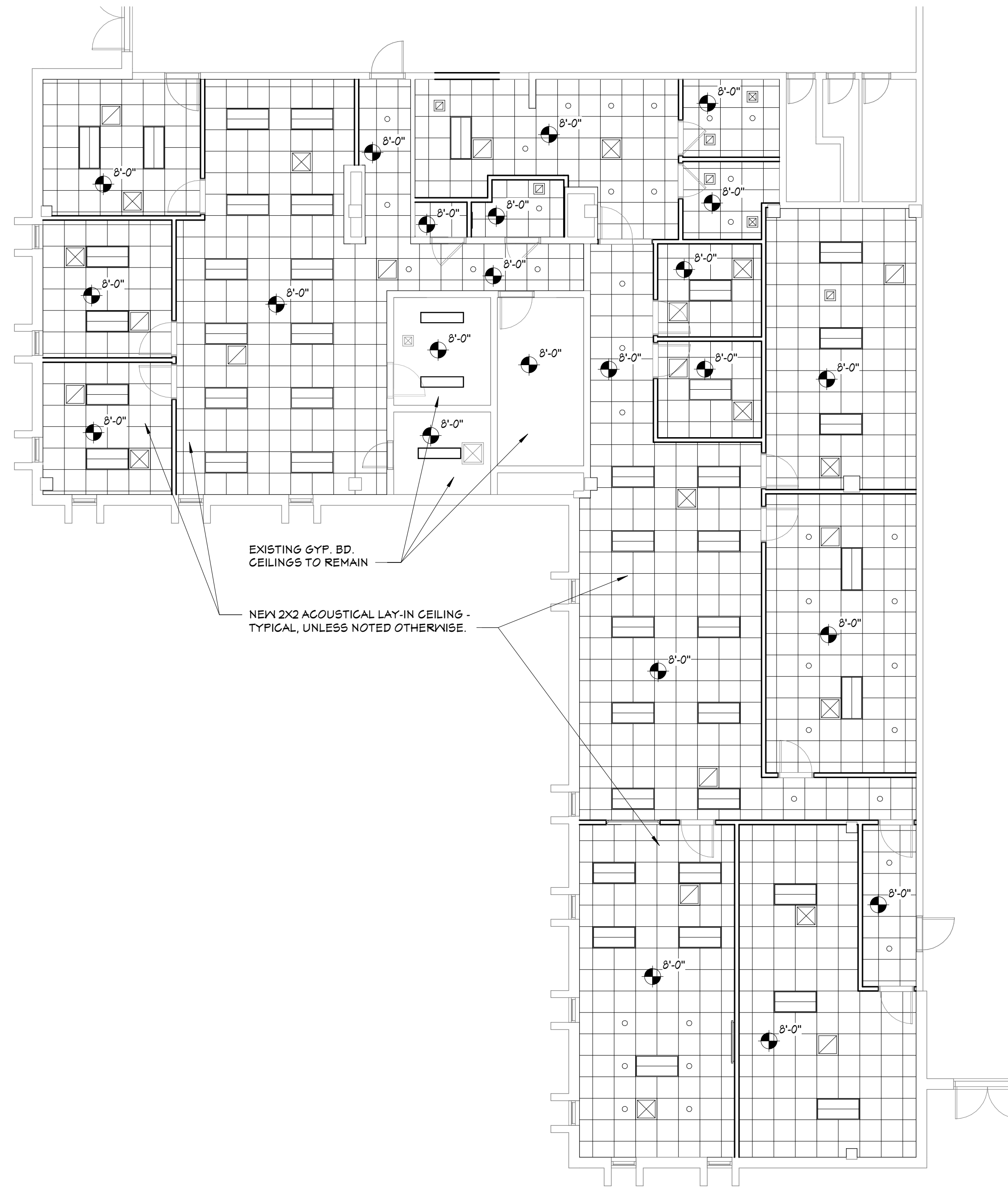




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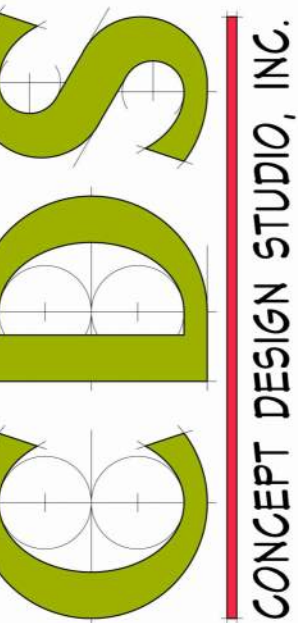
FIRST FLOOR - FURNITURE PLAN  
1/8" = 1'-0"



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

CEILING LEGEND	
	LINEAR STRIP LIGHT FIXTURE - REFER TO ELEC. DRAWINGS
	2x4' RECESSED LIGHT FIXTURE - REFER TO ELEC. DRAWINGS
	2x2' RECESSED LIGHT FIXTURE - REFER TO ELEC. DRAWINGS
	RECESSED CAN LIGHT FIXTURE - REFER TO ELEC. DRAWINGS
	SUPPLY GRILLE - REFER TO MECHANICAL DRAWINGS
	RETURN GRILLE - REFER TO MECHANICAL DRAWINGS

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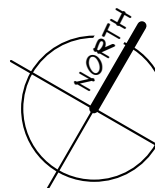
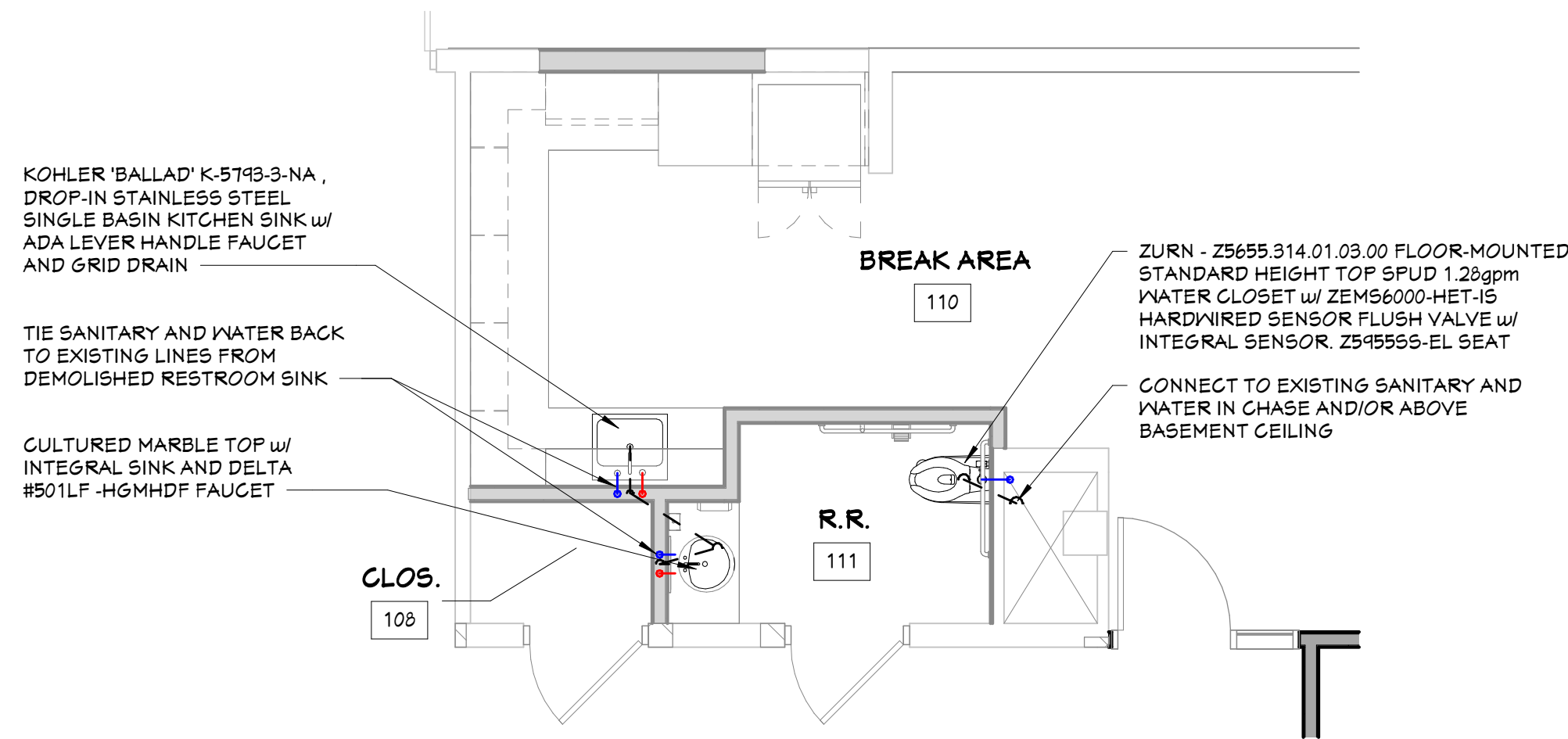
REFLECTED  
CEILING PLAN &  
FURNITURE  
PLAN

SHEET NO.

A8.01

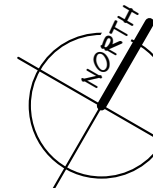
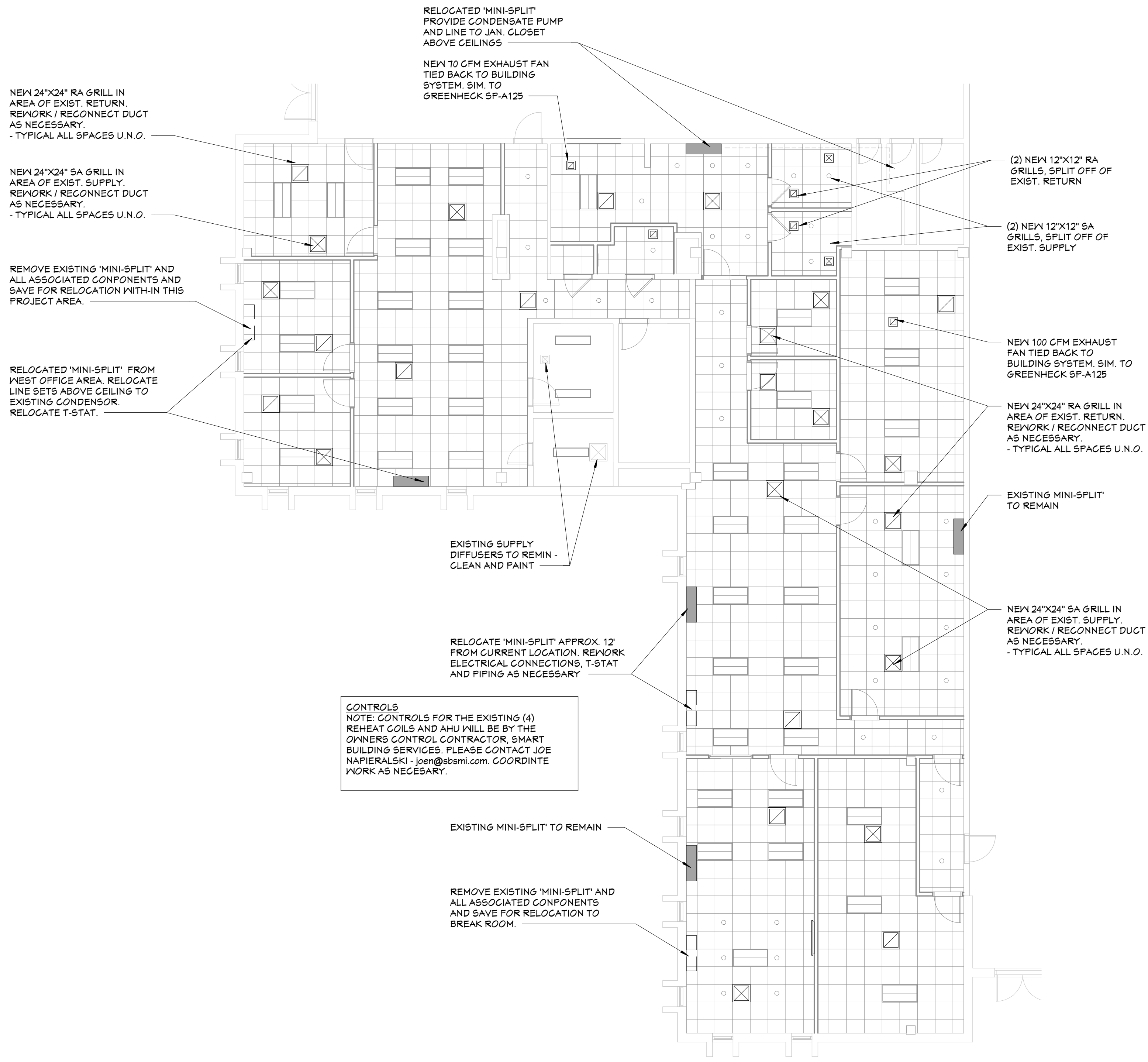


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### ENLARGED PLUMBING PLAN

1/4" = 1'-0"



### MECHANICAL PLAN

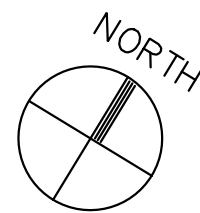
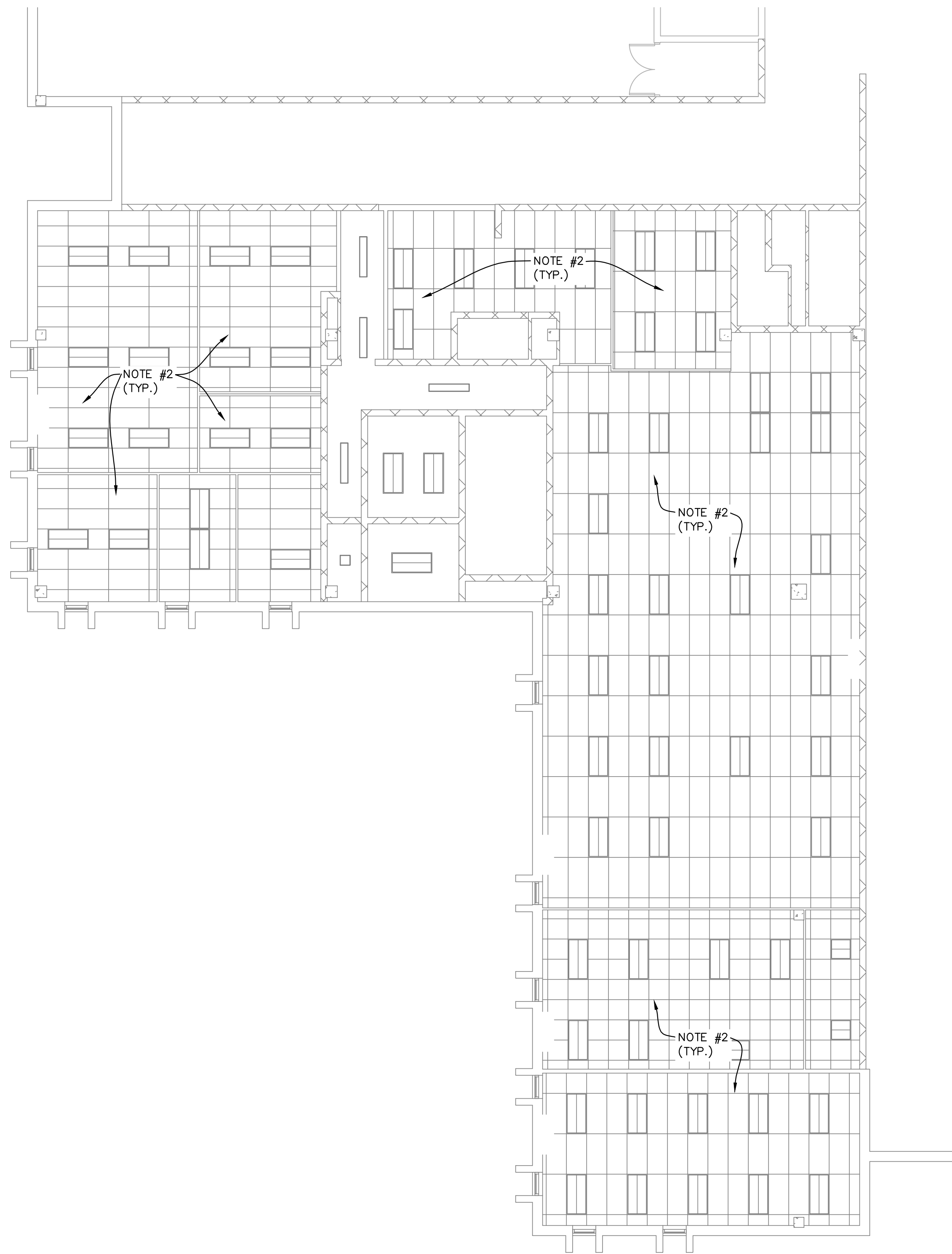
1/8" = 1'-0"

GRILL AND DIFFUSER SCHEDULE	
TYPE	DESCRIPTION
'A'	CEILING MOUNTED SUPPLY AIR DIFFUSER FOR T-BAR GRID SYSTEM. ALL STEEL CONSTRUCTION. 24" X 24" FACE, OR AS NOTED ON DRAWINGS. OPPOSED BLADE DAMPER AND ADJUSTABLE VANES. FINISH SHALL BE OFF-WHITE ENAMEL. EQUAL TO PRICE MODEL SCDA.
'B'	CEILING MOUNTED RETURN AIR GRILLE FOR T-BAR GRID SYSTEM. ALL STEEL CONSTRUCTION WITH PERFORATED 24" X 24" FACE, OR AS NOTED ON DRAWINGS. AND OPPOSED BLADE DAMPER. FINISH SHALL BE OFF-WHITE ENAMEL. EQUAL TO PRICE MODEL PDDR.

NOTE: FIELD VERIFY EXISTING DUCTWORK AND NECK SIZES FOR CONNECTIONS TO EXISTING SYSTEM

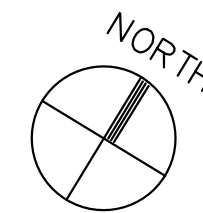
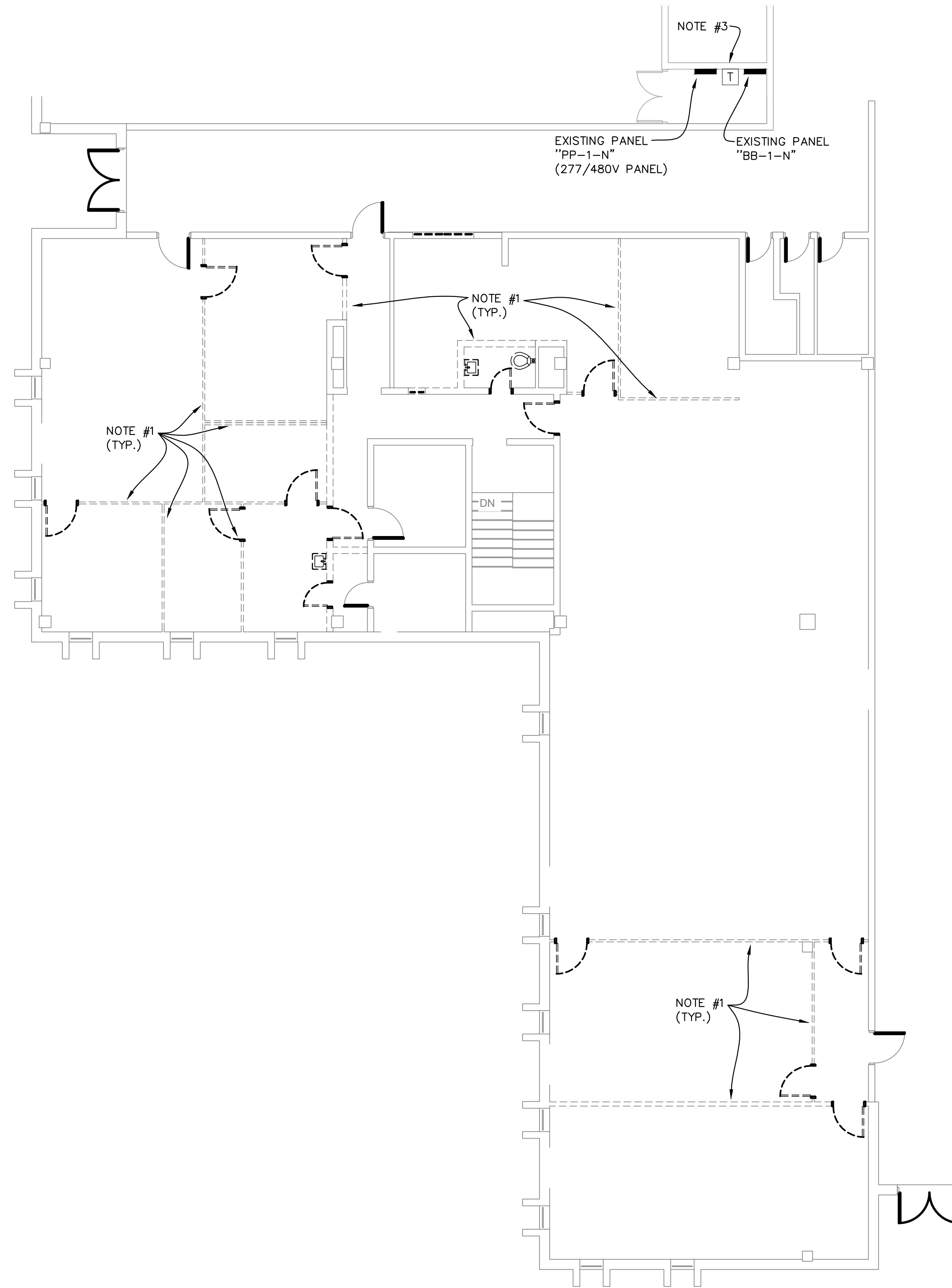
### MECHANICAL / PLUMBING NOTES

- COORDINATE WITH OTHER TRADES TO AVOID INTERFERENCE.
- INSTALL ALL EQUIPMENT AND PIPING AS HIGH AS POSSIBLE TO MAXIMIZE CLEARANCES. FOLLOW BUILDING LINES WHEREVER POSSIBLE.
- WHERE MATERIALS ARE TO BE EXPOSED, ARRANGE AND INSTALL NEATLY TO MINIMIZE VISUAL IMPACT.
- VERIFY FIELD CONDITIONS PRIOR TO PROCEEDING WITH WORK. REPORT SIGNIFICANT DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS.
- INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES & REGULATIONS.
- OFFSET VENTS TO ROOF (VTR) AS REQUIRED, NEAR EDGES OF ROOF.
- INSTALL BALL VALVE ON HOT AND COLD WATER SUPPLY TO EACH FIXTURE.
- FURNISH AND INSTALL APPROVED FIRE ASSEMBLIES (FIRE CAULKING, FIRE COLLARS, AND FIRE SLEEVES) AS REQUIRED AT ALL PENETRATIONS THROUGH FIRE SEPARATIONS.



### ELECTRICAL CEILING DEMOLITION PLAN

SCALE: 1/8" = 1'-0"  
0 8' 16'



### ELECTRICAL WALL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"  
0 8' 16'

#### ELECTRICAL DEMOLITION NOTES:

1. E.C. TO REMOVE EXISTING RECEPTACLES, DEVICES AND WIRING FROM WALLS TO BE REMOVED. TAG WIRING AS SPARES IN EXISTING PANELS OR REUSE AS NEEDED.
2. E.C. TO REMOVE EXISTING LUMINAIRES FROM CEILINGS BEING DEMO'D. EXISTING LUMINAIRES TO BE REMOVED AND DISPOSED OF BY E.C..
3. EXISTING ELECTRICAL EQUIPMENT IN ELECTRICAL ROOM TO STAY IN PLACE AND BE REUSED TO SUPPLY CIRCUITS TO THE REMODELED SPACE.

DATE	DESCRIPTION	DATE	DESCRIPTION
1/10/2025	OWNER REVIEW		
1/23/2025	BIDDING AND PERMITS		

DATE: 10/27/24

FILE NO: 24016

DRAWN BY: JLS

CHECKED BY: DBB

DRAWING NUMBER:

**E1.00**  
1 OF 4

LUMINAIRE LEGEND				
QTY.	TYPE	DESCRIPTION	MANUFACTURER & CAT. NO.	LAMPS
44	A	2'x4' LED FLAT PANEL	SYLVANIA #PANELFIA-040-UNVD835-24G-WH	40W LED
35	B	LED DOWNLIGHT	ACUITY #WF6-LL-LED-27K 30K 35K-MVOLT-90CRI-XX	15W LED
1	C	2' WALL MOUNTED LED	LITHONIA #FMVC3LS-24"-MVOLT-30K-35K-40K-90CRI-BN	18W LED
3	D	4' LED STRIP	ACUITY #CLX-L48-3000LM-SEF-WDL-MVOLT-GZ10-35K-90CRI	21W LED
6		EXIT SIGN	ACUITY #LQM-S-W-3-R-MVOLT	<1W LED

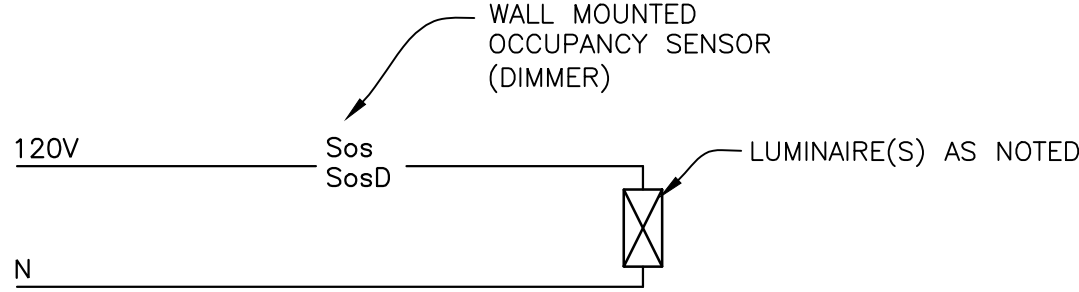
- ① EQUAL MANUFACTURERS: COOPER, HUBBELL

② MOUNT ON EXISTING DRYWALL CEILING.

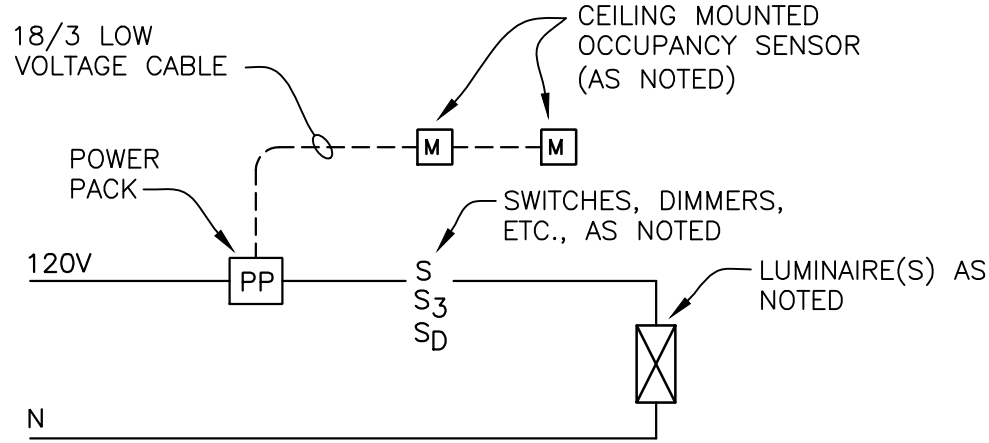
③ COLOR SELECTED BY ARCHITECT.
- ④ VERIFY EXACT QUANTITY WITH PLANS.

⑤ MOUNT OVER DOOR ON WALL AT 8'-0"A.F.F. OR ON CEILING.

⑥ ENTIRE BUILDING IS ON GENERATOR STAND-BY POWER FOR THE EMERGENCY LIGHTING.



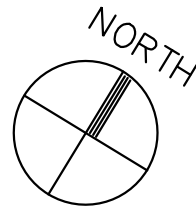
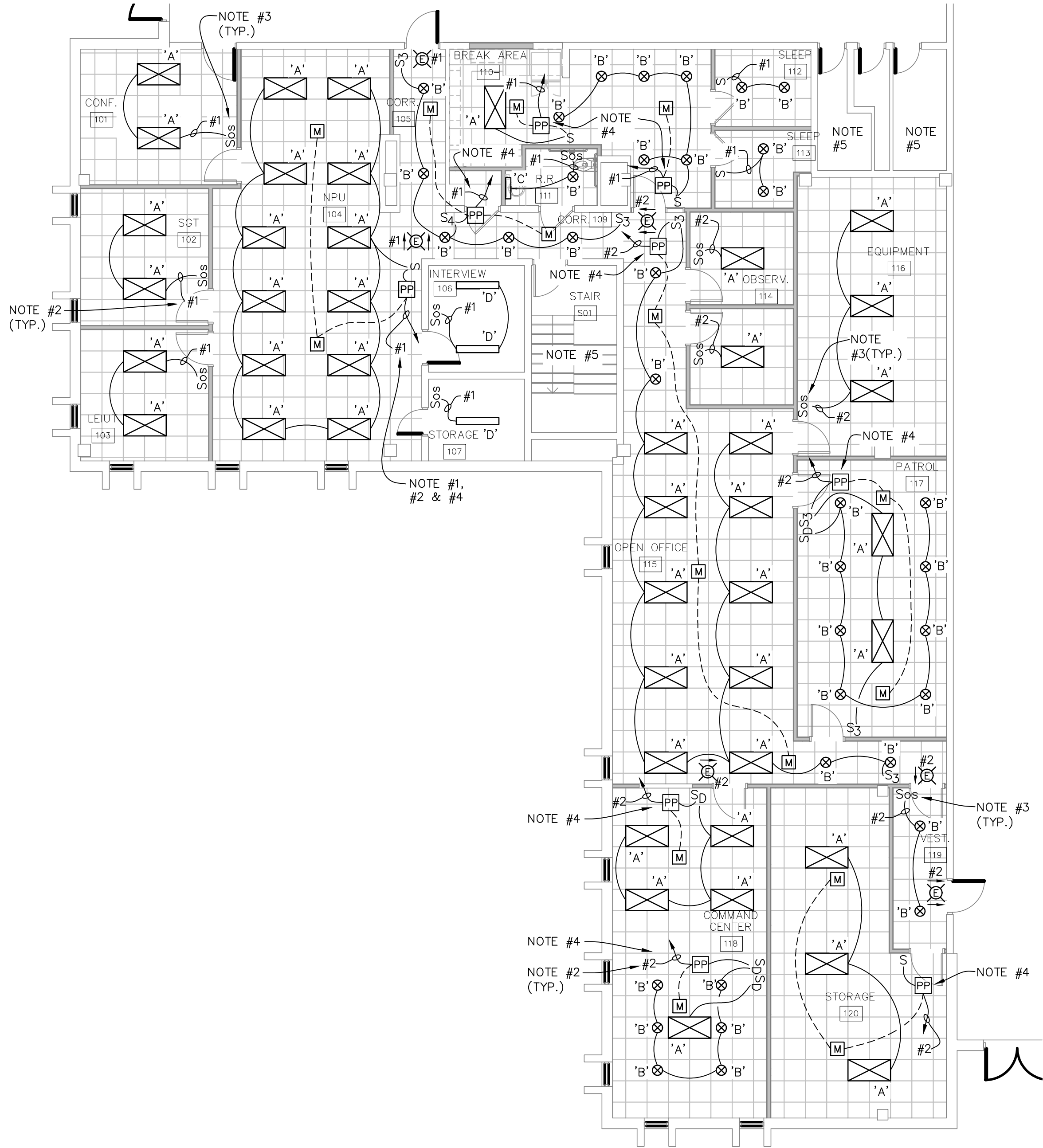
LIGHTING CONTROL DIAGRAM #1  
NOT TO SCALE



LIGHTING CONTROL DIAGRAM #2  
NOT TO SCALE

ELECTRICAL LIGHTING NOTES:

1. VERIFY LOCATION OF PORTABLE WALL PARTITIONS BEFORE INSTALLING NEW LIGHTING. ADJUSTING MAY NEED TO BE DONE TO LIGHT THE INDIVIDUAL OFFICES.
2. CIRCUIT LIGHTING IN REMODELED SPACE TO SPARE CIRCUITS IN EXISTING PANEL. PP-1-N. CIRCUIT NUMBERS ARE NOTED TO DESIGNATE CIRCUITS AND NOT THE ACTUAL CIRCUIT IN EXISTING PANEL.
3. SEE LIGHTING CONTROL DIAGRAM #1.
4. SEE LIGHTING CONTROL DIAGRAM #2.
5. EXISTING STAIR AND RESTROOM LIGHTING TO REMAIN AS IS.



ELECTRICAL LIGHTING PLAN

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



POLICE DEPARTMENT RENOVATION FOR:

CITY OF MUSKEGON

933 TERRACE STREET, MUSKEGON, MICHIGAN 49445

DESCRIPTION

DATE

DESCRIPTION

DATE

DATE: 10/27/24

FILE NO: 24016

DRAWN BY: JLS

CHECKED BY: DBB



DRAWING NUMBER:

E1.02

3 OF 4

8246 BELMONT AVENUE N.E.  
BELMONT, MICHIGAN 49306  
TELEPHONE: (616) 318-9124

ELECTRICAL  
DESIGN AND  
MANAGEMENT



ELECTRICAL LIGHTING PLAN &  
LUMINAIRE LEGEND

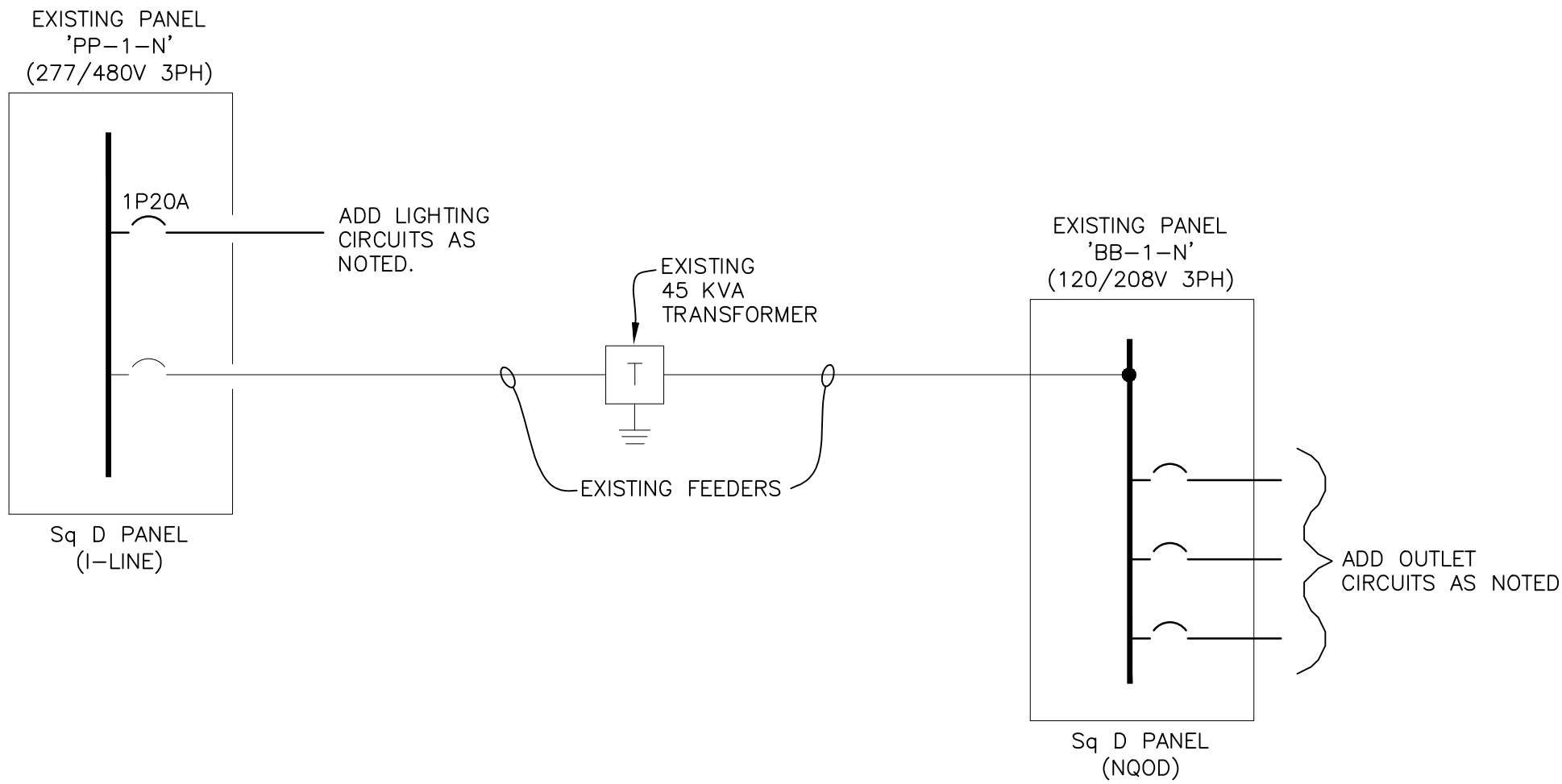


PROJECT NAME: MUSKEGON POLICE DEPARTMENT										PROJECT #: 24016					PANEL ID: EX. BB-1-N			
PANELBOARD SCHEDULE																		
BRKR		LOAD - VOLT AMPERES				DESCRIPTION		CKT	PH	CKT	DESCRIPTION		LOAD - VOLT AMPERES				BRKR	
P	T	LTG	MTR	RCPT	OTHER			#		#			LTG	MTR	RCPT	OTHER	P	T
1	20			540		CONF. 101, NPU		1	A	2	OBSERV., OPEN OFF.				1080		1	20
1	20			900		SGT 102, NPU		3	B	4	PATROL 117, EF		50		1080		1	20
1	20			1080		LEIUT 103, NPU(FLOOR)		5	C	6	OPEN OFF.				900		1	20
1	20			1080		SLEEP 113, SLEEP 112, BREAK		7	A	8	PATROL 117, (FLOOR)				540		1	20
1	20		50			BREAK AREA 110, EF		9	B	10	STOR. VEST, OPEN OFF.				1080		1	20
1	20			1500		BREAK AREA 110		11	C	12	COMMAND				900		1	20
1	20			1500		BREAK AREA 110		13	A	14	COMMAND (FLOOR)				360		1	20
1	20		1200			BREAK AREA REFRIG.		15	B	16	EQUIPMENT				500		1	20
1	20			1000		BREAK, RESTROOM		17	C	18	POWER STRIP				1000		1	20
								19	A	20	POWER STRIP				1000		1	20
								21	B	22	POWER STRIP				1000		1	20
								23	C	24	POWER STRIP				1000		1	20
								25	A	26	STORAGE.				900		1	20
								27	B	28	SPARE						1	20
								29	C	30	EXISTING ESTIMATED LOAD		500	5000	1500	X	X	
								31	A	32	"		700	6500	1500	X	X	
								33	B	34	"		400	7000		X	X	
								35	C	36								
								37	A	38								
								39	B	40								
								41	C	42								
		LTG	LMTR	MTR	RCPT	OTHER	TOTAL	NOTES:				VOLTAGE:						208
AØ		0	700	0	13500	1500	15700	22K AIC				MIN. AMPACITY:						85
BØ		0	1200	500	13060	0	14760					MAIN LUG:						150A
CØ		0	500	0	12380	1500	14380					MAIN CKT BRKR:						
TOTAL		0	2400	500	38940	3000	44840					NO. OF CKTS:						42
DEMAND		1	1.25	1	**	1						PNL TYPE:						EX. NQOD
												MOUNTING:						SURFACE
DIVERS. VA		0	1500	1700	24470	3000	30670					FED FROM:						MDP

PROJECT NAME: MUSKEGON POLICE DEPARTMENT										PROJECT #: 24016					PANEL ID: EX. PP-1-N			
PANELBOARD SCHEDULE																		
BRKR		LOAD - VOLT AMPERES				DESCRIPTION		CKT	PH	CKT	DESCRIPTION		LOAD - VOLT AMPERES				BRKR	
P	T	LTG	MTR	RCPT	OTHER			#		#			LTG	MTR	RCPT	OTHER	P	T
1	20	1500				LIGHTING		1	A	2	LIGHTING		1800				1	20
								3	B	4								
								5	C	6								
								7	A	8								
								9	B	10								
								11	C	12								
								13	A	14								
								15	B	16								
								17	C	18								
								19	A	20								
								21	B	22								
								23	C	24								
								25	A	26								
								27	B	28								
								29	C	30	EXISTING ELECTRICAL LOAD		12000	500	5000	1500	X	X
								31	A	32	EXISTING 48 KVA		14500	700	6500	1500	X	X
								33	B	34	TRANSFORMER		1350	400	7000		X	X
								35	C	36								
								37	A	38								
								39	B	40								
								41	C	42								
		LTG	LMTR	MTR	RCPT	OTHER	TOTAL	NOTES:				VOLTAGE:						480
AØ		17800	700	0	6500	1500	26500	22K AIC				MIN. AMPACITY:						60
BØ		1350	400	0	7000	0	8750					MAIN LUG:						225A
CØ		12000	500	0	5000	1500	19000					MAIN CKT BRKR:						
TOTAL		31150	1600	0	18500	3000	54250					NO. OF CKTS:						42
DEMAND		1	1.25	1	**	1						PNL TYPE:						EX. I-LINE
												MOUNTING:						SURFACE
DIVERS. VA		31150	875	900	14250	3000	50175					FED FROM:						MDP

ELECTRICAL SYMBOL LEGEND				
SYMBOL	DESCRIPTION	CAT NO.	MTG. HT. TO CENTERLINE	REMARKS
S	SINGLE POLE SWITCH – SPEC. GRADE	LEVITON #CSB1–20–W	48" A.F.F.	NOTE #6
S <sub>3</sub>	THREE WAY SWITCH – SPEC. GRADE	LEVITON # CSB3–20–W	48" A.F.F.	NOTE #6
S <sub>4</sub>	FOUR WAY SWITCH – SPEC. GRADE	LEVITON # CSB4–20–W	48" A.F.F.	NOTE #6
S <sub>D</sub>	DIMMER SWITCH FOR LED	LEVITON #DDM06–1LZ	48" A.F.F.	NOTE #6
S <sub>L</sub>	LOW VOLTAGE SWITCH	LEVITON (AS NOTED)	48" A.F.F. U.N.O.	NOTE #6
S <sub>P</sub>	PILOT LIGHT SWITCH	LEVITON #1221–PLR–W	48" A.F.F.	NOTE #6
S <sub>K</sub>	KEYED SWITCH	LEVITON #1221–2L–W	48" A.F.F. U.N.O.	NOTE #6
⊕	DUPLEX OUTLET – SPEC. GRADE – NEMA 5 – 15R	LEVITON # 5262–B	18"A.F.F., U.N.O.	NOTE #6
⊕	QUADRADUPLEX OUTLET	LEVITON #(2)S362–W	18"A.F.F.	NOTE #6
⊕WP	GROUND FAULT CKT. INTERRUPTER (WP) – DENOTES WEATHERPF. CVR.	LEVITON #6598 W/ 6196–DCL W.P. COVERPLATE	24" A.F.G., U.N.O.	NOTE #6
⊕U	OUTLET WITH USB OUTLET	LEVITON #15632–W	18" A.F.F., U.N.O.	NOTE #6
⊕	GROUND FAULT CKT INTERRUPTER OUTLET ABOVE COUNTERTOP	LEVITON #6598–W	42" A.F.F., U.N.O.	NOTE #6
▽	TELE. AND DATA OUTLET–4" SQ. BOX W/2 GANG RAISED COVER. 3/4"C. UP WALL TO ABOVE CLG	SFAC	18" A.F.F., U.N.O.	
⊕	SPECIAL CONNECTION – CHARACTERISTICS AS NOTED ON PLANS	----		
⊕	JUNCTION BOX–4" SQ. BOX W/2 GANG RAISED COVER. 3/4"C. UP WALL TO ABOVE CLG.		18" A.F.F., U.N.O.	
TV	TV OUTLET–4" SQ. BOX W/2 GANG RAISED COVER. 3/4"C. UP WALL TO ABOVE CLG.		18" A.F.F., U.N.O.	
⊕	FUSED DISCONNECT SWITCH– FDS – HEAVY DUTY	SQ D	48" A.F.F.	
S <sub>F</sub>	SWAND PLUGFUSE HOLDER– BUSSMANN "SSU" & FUSESTAT FUSE	BUSSMANN	AT EQUIPT.	
⊕	COMBINATION MAG. STARTER/FUSED DISC. SWITCH – CS/FDS	SQ D	48" A.F.F.	
⊕	SINGLE PHASE ELECTRIC MOTOR	SUPPLIED WITH EQUIPMENT	----	
⊕	THREE PHASE ELECTRIC MOTOR	SUPPLIED WITH EQUIPMENT	----	
⊕	CIRCUIT BREAKER	SQ D	----	
⊕	THERMOSTAT/TEMPERATURE SENSOR	BY MECH. CONTR	60" A.F.F.,U.N.O.	
⊕	TRANSFORMER	SQ D	AS REQ'D	
⊕	PANELBOARD (277/480V)	SQ D	----	
⊕	PANELBOARD (120/240V)	SQ D	----	
⊕	SURFACE MOUNTED LUMINAIRE	SEE LUMINAIRE LEGEND	NOTED ON DRAWINGS	
⊕	RECESSED DOWNLIGHT	SEE LUMINAIRE LEGEND	----	
⊕	RECESSED WALL ACCENT	SEE LUMINAIRE LEGEND	----	
⊕	WALL MOUNTED LUMINAIRE	SEE LUMINAIRE LEGEND	NOTED ON DRAWINGS	
⊕	LINEAR SURFACE MOUNTED LUMINAIRE	SEE LUMINAIRE LEGEND	----	
⊕	RECESSED FLUORESCENT LUMINAIRE	SEE LUMINAIRE LEGEND	----	
⊕	INDUS. OR STRIP LUMINAIRE	SEE LUMINAIRE LEGEND		
⊕	CEILING MOUNTED EXIT SIGN	SEE LUMINAIRE LEGEND	----	
⊕	WALL MOUNTED EXIT SIGN	SEE LUMINAIRE LEGEND	----	
⊕	PHOTOCONTROL	TORK #2102	----	UNIT TO FACE THE NORTH
Sos	WALL MOUNTED OCCUPANCY SENSOR – 120V	SENSORSWITCH #WSX–WH	48" A.F.F.	DUAL SWITCH #DDSD0–ID
SosD	WALL MOUNTED OCCUPANCY SENSOR WITH DIMMER– 120V	SENSORSWITCH #WSX–D–WH	48" A.F.F.	

- SYMBOL LEGEND NOTES:
- A.F.F. = ABOVE FINISHED FLOOR TO CENTER OF BOX
  - A.F.G. = ABOVE FINISHED GRADE TO CENTER OF BOX
  - U.N.O. = UNLESS NOTED OTHERWISE
  - NOT ALL SYMBOLS WILL BE USED. (SEE PLANS)
  - W.G. = WIRE GUARD
  - COLOR OF DEVICES SELECTED BY OWNER/ARCHITECT.



## PARTIAL ELECTRICAL ONE-LINE DIAGRAM

SCALE: NONE 277/480V 3 PHASE 4 WIRE / 120/208V 3 PHASE 4 WIRE

## ELECTRICAL SPECIFICATIONS

- All materials shall be new and conform with the standards of Underwriters laboratories or an approved independent testing laboratory.
- The installation shall comply with all the laws in effect, applying to the electrical installation and with the latest N.E.C., OSHA and all local codes.
- The electrical contractor shall obtain all permits and pay all necessary fees.
- All work shall be done by licensed electrician/apprentice and approved by owner requirements.
- Electrical contractor shall visit site to examine the existing working conditions and provide demolition of existing power and lighting as noted. He shall provide the necessary equipment required for the new electrical work.
- The electrical service and equipment is existing. Coordinate the new electrical work with the Contractor/Owner. Any temporary power and lighting will be the responsibility of the E.C.
- All the existing electrical equipment to be by Sq D. Provide all the electrical equipment as noted in the panelboard schedules and on the one-line diagram.
- IMC/RGC conduit to be used where subject to mechanical damage, exterior or over 3" size. EMT conduit to be used for all inside circuit wiring. Steel type fittings to be used with the EMT.
- All wiring shall be copper #12 AWG minimum, type THHN/THWN stranded. For runs over 100 feet, use #10 AWG in lieu of #12.  
  
Color coding for the electrical wiring shall be as follows :  
For 120/208V System For 277/480V System  
Phase A – Black Phase A – Brown  
Phase B – Red Phase B – Orange  
Phase C – Blue Phase C – Yellow  
Neutral – White Neutral – Gray  
Ground – Green Ground – Green
- The circuiting for the outlets to be a maximum of six(6) duplex receptacles on a 120 volt, 20 amp circuit. Lighting on 120 volt, 20 amp circuit (U.N.O.) shall not exceed 1800 watts. Lighting on 277 volt, 20 amp circuit (U.N.O.) shall not exceed 4400 Watts. Circuiting shall be as noted on plans.
- All conduits, electrical equipment and motor frames to be grounded per N.E.C. Article 250.
- Provide new typewritten directories for all existing panels. All new electrical equipment shall be labeled with 1/4 " high black letters on white lamacoid plastic. Also label electrical equipment for arc-flash protection as per NEC 110.16.
- All equipment connections to be as recommended by the equipment manufacturer.
- The Luminaires to be specification grade with electronic drivers. The luminaires shall be per the Luminaire Legend. All LEDS shall be provided by the electrical contractor.
- E.C. to install wiring devices where shown on plan. Color of devices to be white (u.n.o.) with white nylon plates. Approval by Architect/Owner.
- Lighting control equipment shall be furnished by E.C. Lighting controls to be as shown on drawings.
- All low voltage wiring for telephone, Data, fire alarm, security systems to be by owner.
- Six (6) sets of shop drawings shall be submitted in a booklet or on Electronic copy for approval. Shop drawings required for all luminaires, wiring devices, lighting controls, electrical equipment, etc.
- E.C. to provide as-built drawings at the completion of the project.
- The electrical contractor shall leave the entire electrical system in proper working order. He shall also extend to the owner any guarantee extended by the manufacturer of equipment and devices installed and furnished by him. The electrical contractor shall guarantee his work for minimum of one (1) year. The guarantee period shall be extended as of the date of substantial completion of his work.

POLICE DEPARTMENT RENOVATION FOR:

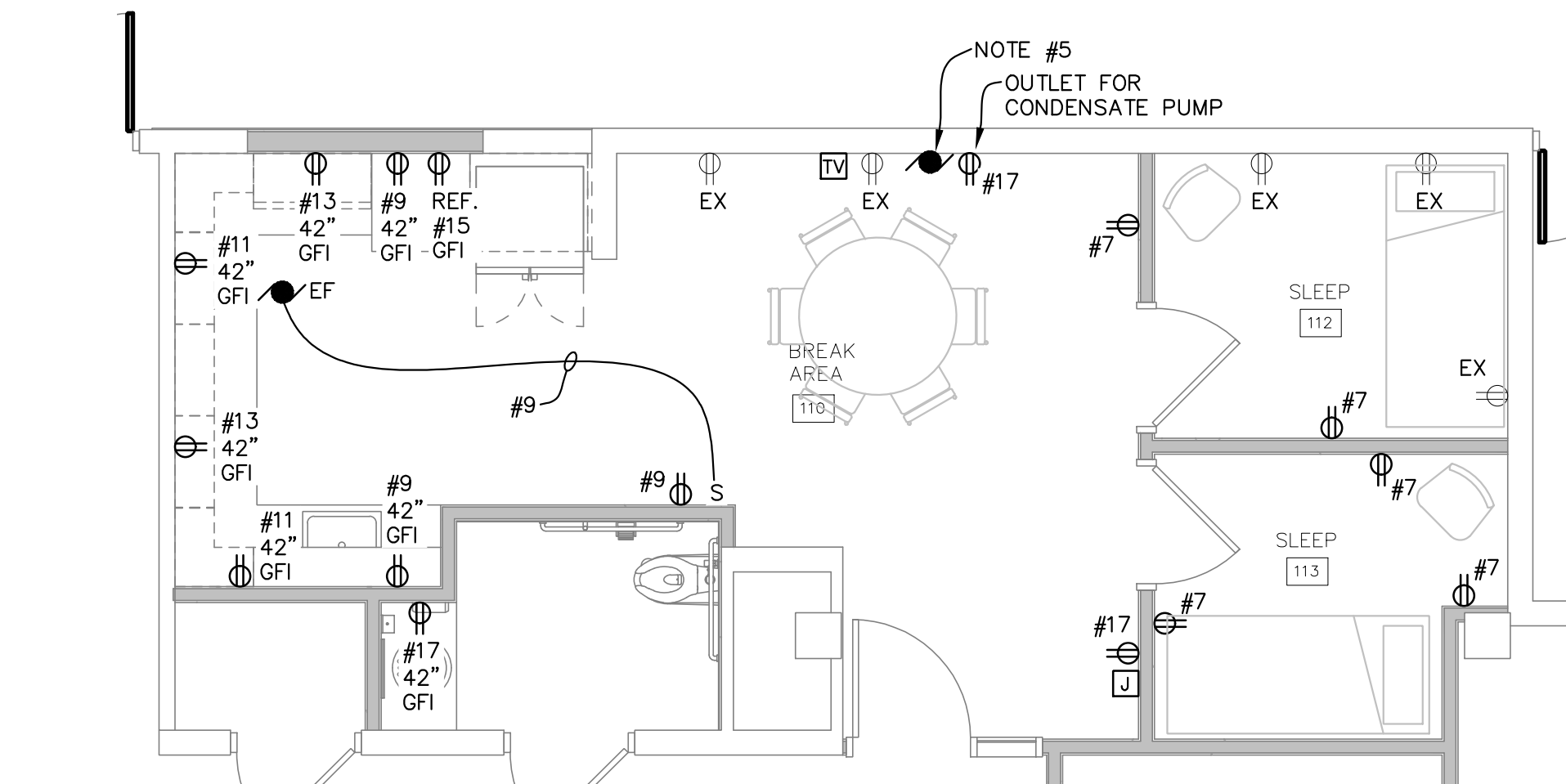
CITY OF MUSKEGON

933 TERRACE STREET, MUSKEGON, MICHIGAN 49445

DATE	DESCRIPTION	DATE	DESCRIPTION
1/10/2025	OWNER REVIEW		
1/23/2025	BIDDING AND PERMITS		

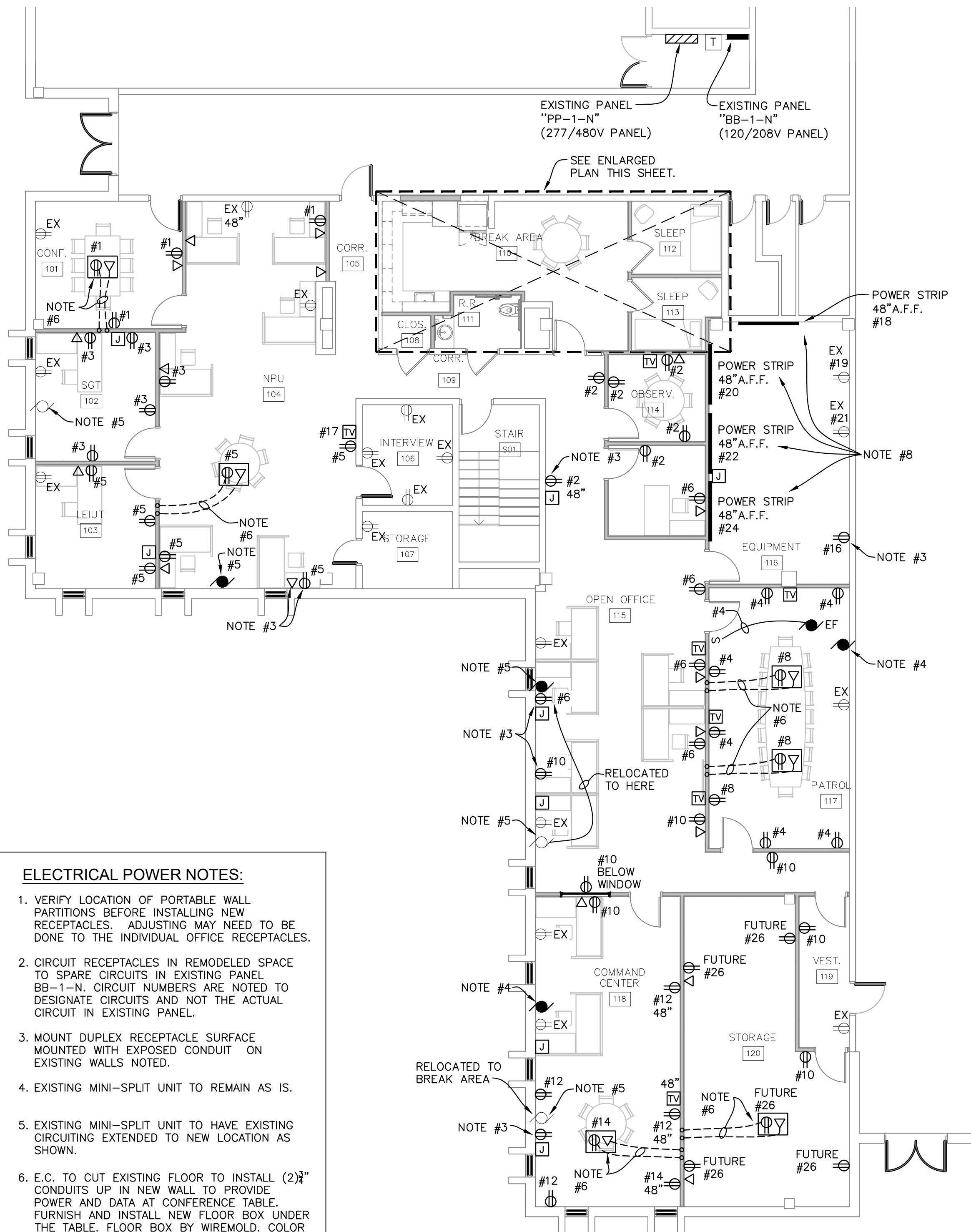
DATE: 10/27/24





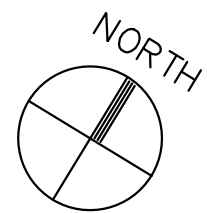
ENLARGED ELECTRICAL POWER PLAN - BREAK RM & R.R.

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



**ELECTRICAL POWER NOTES:**

1. VERIFY LOCATION OF PORTABLE WALL PARTITIONS BEFORE INSTALLING NEW RECEPTACLES. ADJUSTING MAY NEED TO BE DONE TO THE INDIVIDUAL OFFICE RECEPTACLES.
2. CIRCUIT RECEPTACLES IN REMODELED SPACE TO SPARE CIRCUITS IN EXISTING PANEL BB-1-N. CIRCUIT NUMBERS ARE NOTED TO DESIGNATE CIRCUITS AND NOT THE ACTUAL CIRCUIT IN EXISTING PANEL.
3. MOUNT DUPLEX RECEPTACLE SURFACE MOUNTED WITH EXPOSED CONDUIT ON EXISTING WALLS NOTED.
4. EXISTING MINI-SPLIT UNIT TO REMAIN AS IS.
5. EXISTING MINI-SPLIT UNIT TO HAVE EXISTING CIRCUITING EXTENDED TO NEW LOCATION AS SHOWN.
6. E.C. TO CUT EXISTING FLOOR TO INSTALL (2) 2" CONDUITS UP IN NEW WALL TO PROVIDE POWER AND DATA AT CONFERENCE TABLE. FURNISH AND INSTALL NEW FLOOR BOX UNDER THE TABLE. FLOOR BOX BY WIREMOLD. COLOR SELECTED BY ARCHITECT.
7. PROVIDE J-BOX WITH CONDUIT STUBBED OUT ABOVE CEILING FOR WIRING BY OWNER.
8. E.C. TO FURNISH AND INSTALL WIREMOLD #20GB606TR POWER STRIP. STRIP ON WALLS AS SHOWN. COLOR TO BE SELECTED BY ARCHITECT.



ELECTRICAL POWER PLAN

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

POLICE DEPARTMENT RENOVATION FOR:

**CITY OF MUSKEGON**

933 TERRACE STREET, MUSKEGON, MICHIGAN 49445

DESCRIPTION

DATE

DESCRIPTION

DATE

DATE: 10/27/24

FILE NO: 24016

DRAWN BY: JLS

CHECKED BY: DBB

DRAWING NUMBER:

**E1.01**

2 OF 4

EDM ELECTRICAL DESIGN AND MANAGEMENT

8246 BELMONT AVENUE N.E.  
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ELECTRICAL POWER PLAN