

# MPD 2ND DISTRICT HEADQUARTERS CELL BLOCK RENOVATION

3320 Idaho Ave NW Washington, DC 20016

## ARCHITECTS/MEP/FP ENGINEERS

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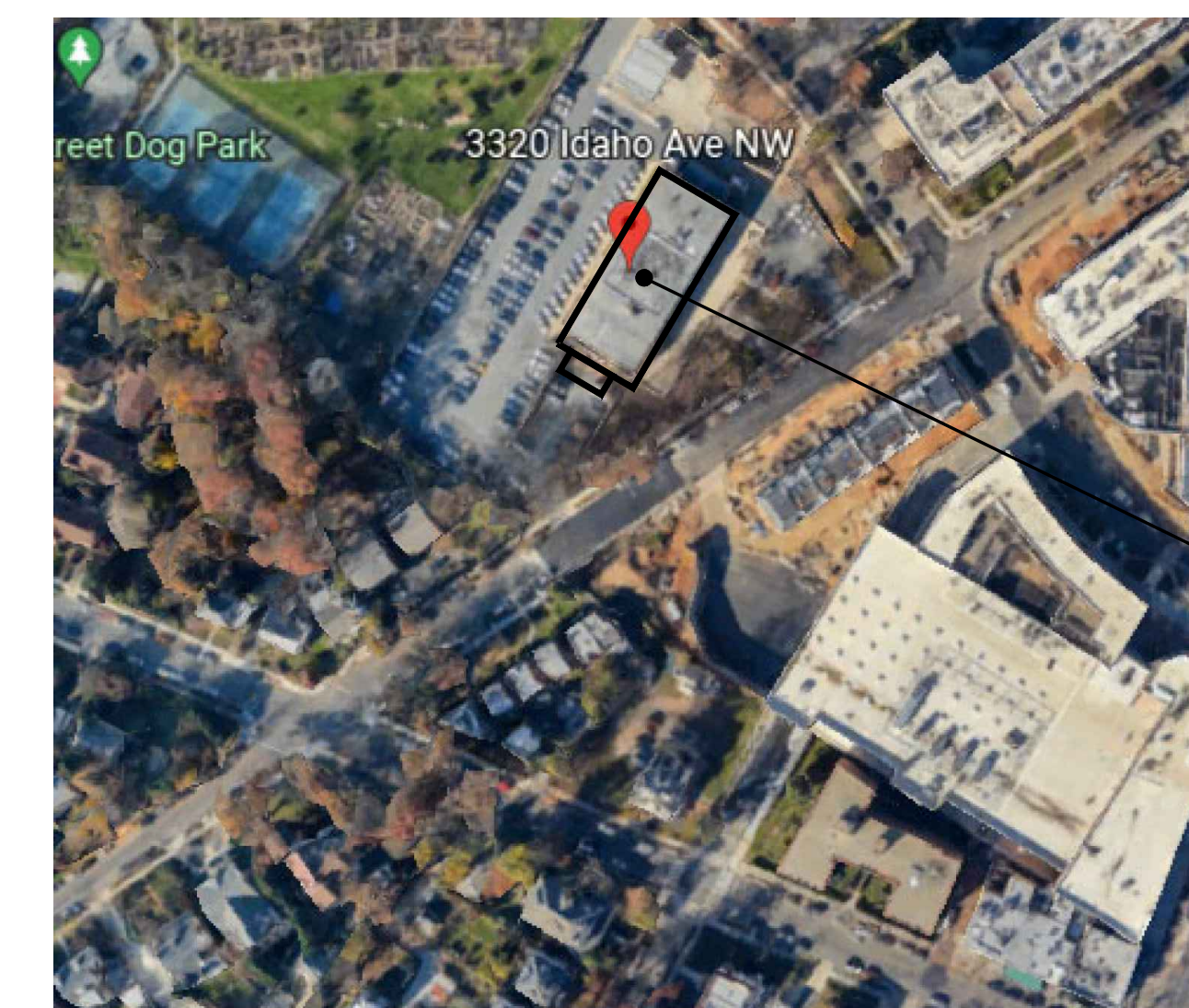
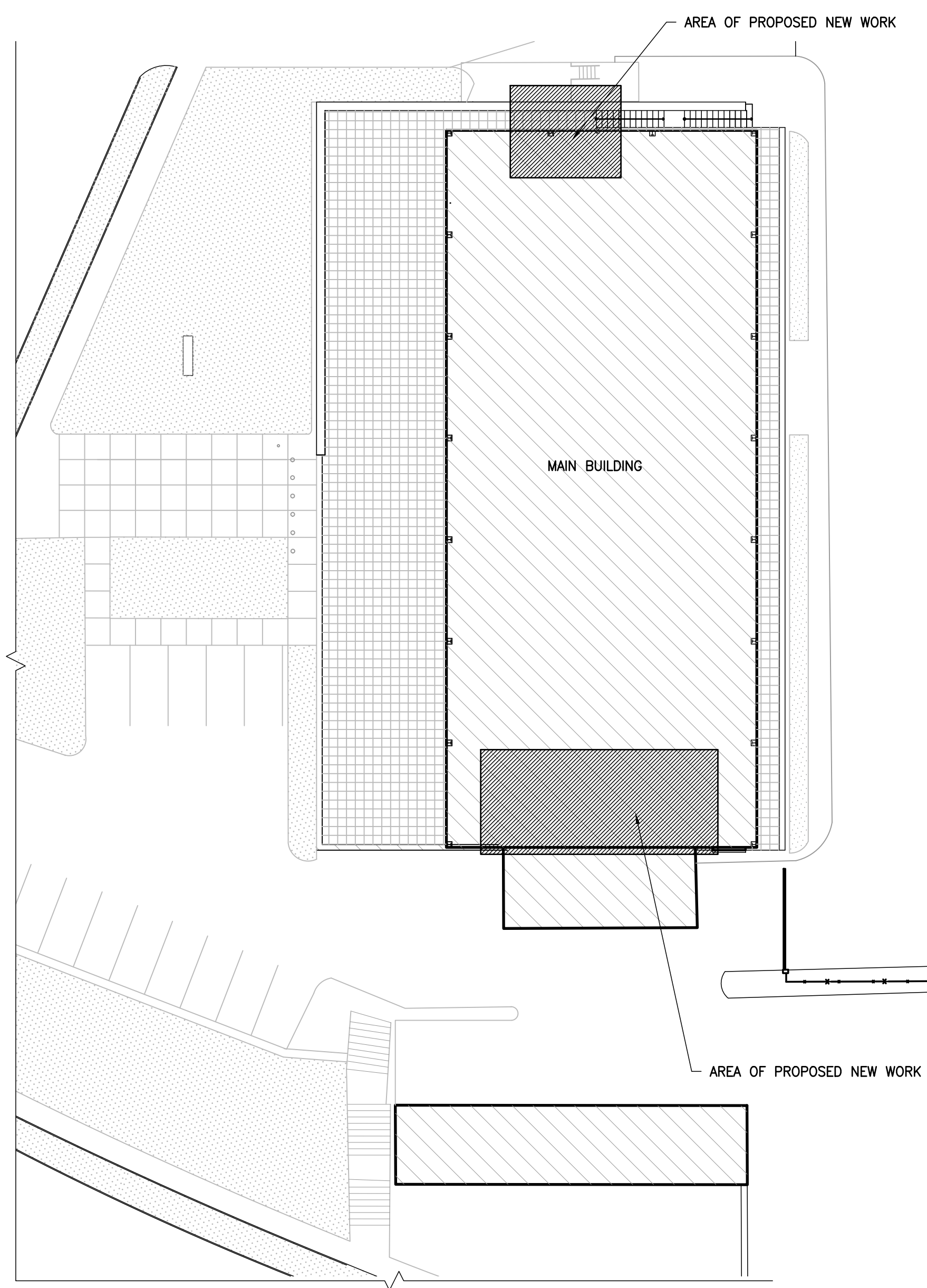
**DWG NO. TITLE:**  
G-001 COVER SHEET  
G-002 GENERAL NOTES, ABBREVIATIONS, SYMBOLS, MATERIALS, LEGENDS

**MECHANICAL:**  
M-001 LEGEND, ABBREVIATIONS, GENERAL NOTES, AND DRAWING LIST  
M-101 BASEMENT FLOOR PLAN - DEMOLITION AND NEW WORK  
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**PLUMBING:**  
P-001 LEGEND, ABBREVIATIONS, GENERAL NOTES, SCHEDULES, AND DRAWING LIST  
P-101 BASEMENT FLOOR PLAN - DEMOLITION AND NEW WORK

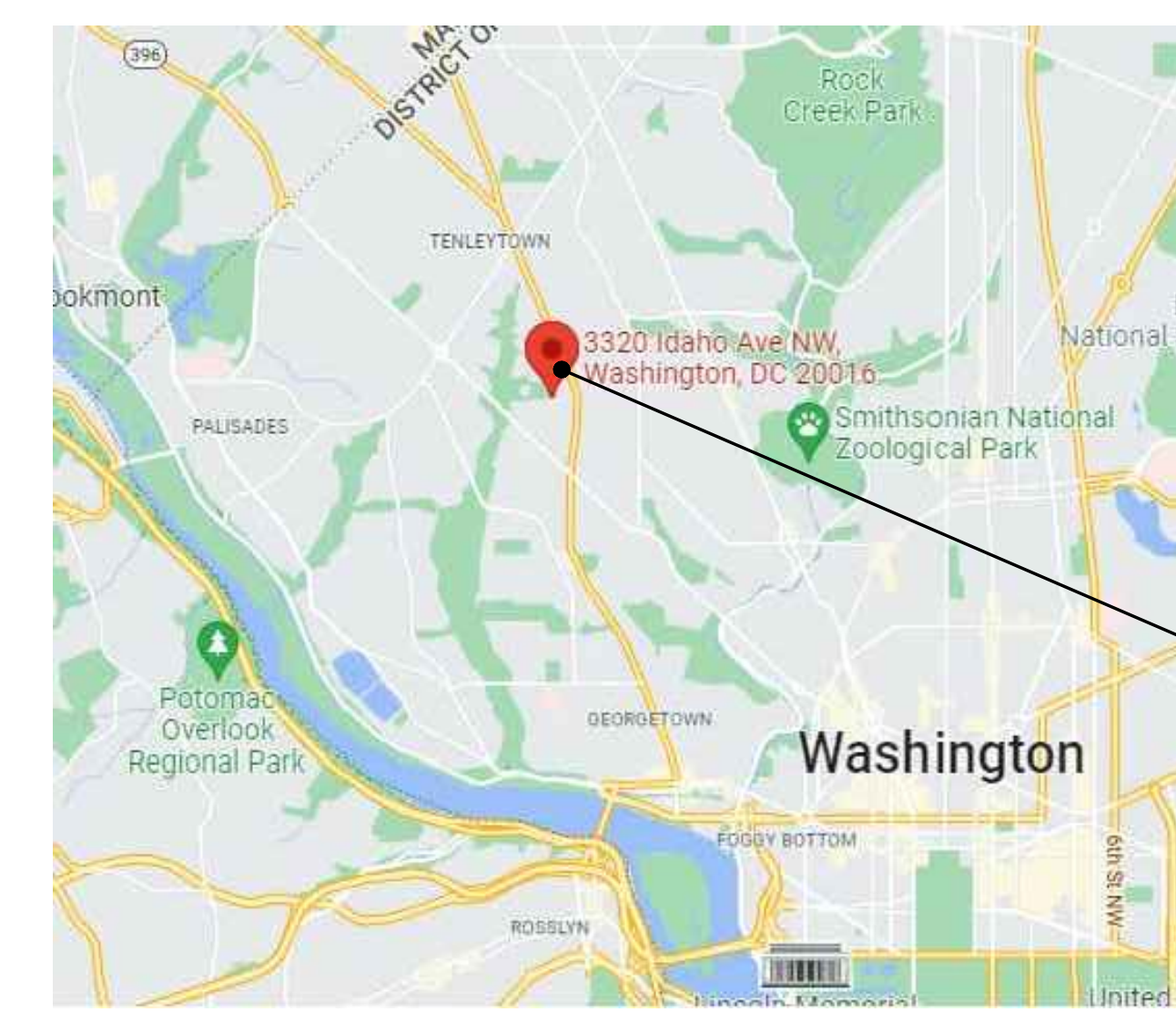
**FIRE ALARM:**  
FA-001 DRAWING LIST, ABBREVIATIONS, SYMBOL LIST, AND NOTES  
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**ELECTRICAL:**  
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COURTESY OF GOOGLE

2  
G-001 VICINITY MAP



COURTESY OF GOOGLE

09/14/2022  
100% SUBMISSION

1  
G-001 LOCATION MAP

4  
G-001 DRAWING LIST

3  
G-001 KEY PLAN

#	Date	Change Description

**DGS BUILD MAINTAIN SUSTAIN**  
MPD 2ND DISTRICT HEADQUARTERS RENOVATION  
3320 IDAHO AVENUE, NW, WASHINGTON D.C. 20016  
FOR GOVERNMENT OF THE DISTRICT OF COLUMBIA

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SUB-CONSULTANT:	SEAL:

Dwg. Coord.: RB Tech. Coord.: JK Project No.: SEE PLOT STAMP

COVER SHEET **G-001**

100% SUBMISSION 09/14/2022

AA	ADHESIVE APPLIED	CG	CORNER GUARD	EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	LTG	LIGHTING	OH	OVERHEAD	RFPD	REFER FIRE PROTECTION DRAWINGS	TEL	TELEPHONE
AB	ANCHOR BOLT	CH	CEILING HEIGHT	EJ	EXPANSION JOINT	OPG	OPENING	OPG	OPENING	RL	RAIN LEADER	TEMP	TEMPERED
A/C	AIR CONDITION	CI	CAST IRON	EL	ELEVATION	OPNC	OPENING	OPNC	OPENING	RM	ROOM	THR	THRESHOLD
ACC	ACCESS	CJ	CONTROL JOINT	ELAS	ELASTOMERIC	OPP	OPPOSITE	OPP	OPPOSITE	RMD	REFER MECHANICAL DRAWINGS	TK	THICK
ACP	ACOUSTICAL CEILING PANEL	CL	CENTER LINE	ELEC	ELECTRIC (AL)	ORIG	ORIGINAL	ORIG	ORIGINAL	RO	ROUGH OPENING	TP	TOP OF PAVEMENT
ACST	ACOUSTICAL	CLG	CEILING	ELEV	ELEVATOR	OWSU	OPEN WEB STEEL JOISTS	OWSU	OPEN WEB STEEL JOISTS	R.P.S.	RECESSED PROJECTION SCREEN	TRT	TREATED
ACT	ACOUSTICAL CEILING TILE	CLKG	CAULKING	EMT	ELECTRICAL METAL TUBING	MAINT	MAINTENANCE	MAINT	MAINTENANCE	RROT	RAPID RESPONSE OUTREACH TEAM	TST	TOP OF STEEL
AD	AREA DRAIN	CLO	CLOSET	ENCL	ENCLOSURE	MAS	MASONRY	MAS	MASONRY	RUB	RUBBER	TW	TOP OF WALL
ADA	AMERICANS WITH DISABILITIES ACT	CMU	CONCRETE MASONRY UNIT	ENT	ENTRANCE	MATL	MATERIAL	MATL	MATERIAL	RPD	REFER PLUMBING DRAWINGS	TYP	TYPICAL
ADH	ADHESIVE	CNR	CORNER	EQ	EQUAL	MCR	MARKETING COMMUNITY RELATIONS	MCR	MARKETING COMMUNITY RELATIONS	RSO	REFER STRUCTURAL DRAWINGS		
ADJ	ADJUSTABLE	CO	CLEAN OUT	EQIP	EQUIPMENT	MECH	MECHANICAL	MECH	MECHANICAL			UC	UNDERCUT
AESS	ARCHITECTURAL EXPOSED STRUCTURAL	COL	COLUMN	EST	ESTIMATE (D)	M/P/E/FP	MECHANICAL/PLUMBING/ELECTRICAL	M/P/E/FP	MECHANICAL/PLUMBING/ELECTRICAL	PC	PRECAST	UL	UNDERWRITER'S LABORATORIES INC.
	STEEL	CONC	CONCRETE	EW	EACH WAY	PER	/FIRE PROTECTION	PER	PERIMETER	PCP	PRECAST CONCRETE FLANK	SCH	SCHEDULE(D)
AFF	ABOVE FINISH FLOOR SLAB	CONF	CONFERENCE	HDWR	HARDWARE	PL	PLATE	PL	PLATE	PC.C.	PRECAST CONCRETE	SJT	SCORED JOINT
AGG	AGGREGATE	CONST	CONSTRUCTION	HJR	HORIZONTAL JOINT REINFORCEMENT	MEB	MEMBRANE	MEB	MEMBRANE	PLAM	PLASTIC LAMINATE	SECT	SECTION
AHU	AIR HANDLING UNIT	CONT	CONTINUOUS	PNL	PANEL	MEP	MECHANICAL/ELECTRICAL/PLUMBING	MEP	MECHANICAL/ELECTRICAL/PLUMBING	PNL	PANEL	SF	SQUARE FEET (FOOT)
AL	ALUMINUM	COR	CORRIDOR	HM	HOLLOW METAL	MEZ	MEZZANINE	MEZ	MEZZANINE	PNO	PROVIDER NETWORK OPERATIONS	SHL	SHELF
ALT	ALTERNATE	COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE	HORIZ	HORIZONTAL	MFR	MANUFACTURER	MFR	MANUFACTURER	PNO	PROVIDER NETWORK OPERATIONS	SHT	SHEET
A.P.	ACCESS PANEL	CP	CENTER POINT	HP	HIGH POINT	MISC	MISCELLANEOUS	MISC	MISCELLANEOUS	POLY	POLYETHYLENE	SIM	SIMILAR
APC	ACOUSTIC PANEL CEILING	CPT	CARPET	HR	HOURLY	MLDG	MOLDING	MLDG	MOLDING	PR	PAIR	SL	SLIDING
APPROX	APPROXIMATELY	CT	CERAMIC TILE	HT	HEIGHT	MMB	MAGNETIC MARKER BOARD	MMB	MAGNETIC MARKER BOARD	PREFAB	PREFABRICATED	SLT	SEALANT
AQT	ABRASIVE QUARRY TILE	CTK	CENTER	HYAC	HEAT-VENTILATING-AIR-CONDITIONING	MO	MASONRY OPENING	MO	MASONRY OPENING	PROJ (N)	PROJECT (ED) (ION)	SND	SANITARY NAPKIN DISPOSAL
ARCH.	ARCHITECT (URAL)	CTSK	COUNTERSINK	FE	FIRE EXTINGUISHER	MOD	MODIFIED	MOD	MODIFIED	PSF	POUNDS PER SQUARE FOOT	SNV	SANITARY NAPKIN VENDOR
AUTO	AUTOMATIC	CUH	CABINET UNIT HEATER RMD	FEC	FIRE EXTINGUISHER & CABINET	MOV	MOVABLE	MOV	MOVABLE	PS. WM.	PROJECTION SCREEN WALL MOUNTED	SPEC (S)	SPECIFICATION (SPECIFIED)
AVG	AVERAGE	D.B.	DIRECTORY BOARD	FF	FINISHED FLOOR	PTD	PAINT (ED)	PTD	PAINT (ED)	SPF	SPRAYED FIREPROOFING	VIF / V.I.F.	VERIFY IN FIELD
BA	BLAST ANCHOR	DCRA	DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS	FFE	FURNITURE FIXTURE & EQUIPMENT	PTH	PASS THROUGH	PTH	PASS THROUGH	SQ / SQFT	SQUARE (FEET)	VOC	VOLATILE ORGANIC COMPOUND
BC	BRICK COURSE (S)	DELV	DELIVERY	FIG	FIGURE	PTR	PAPER TOWEL RECEPTACLE	PTR	PAPER TOWEL RECEPTACLE	SSK	SERVICE SINK	VT	VINYL TILE
BD	BOARD	DEPT	DEPARTMENT	FIN	FINISH	SS	STAINLESS STEEL	SS	STAINLESS STEEL	SSK	SERVICE SINK	VWC	VINYL WALL COVERING
BET	BETWEEN	DET	DETAIL	FL	FLOOR	STAG	STAGGERED	STAG	STAGGERED	SS	STAINLESS STEEL	W	WITH
BIT	BITUMINOUS	DF	DRINKING FOUNTAIN	FLAM	FLAMMABLE	STD	STANDARD	STD	STANDARD	STC	SOUND TRANSMISSION CLASS	W/	WITH
BL	BORROWED LIGHT	DI	DIAMETER	FLSH	FLASHING	STR	STRUCTURAL	STR	STRUCTURAL	STD	STANDARD	WAIN	WAINSCOT
BLDG	BUILDING	DIA	DIAMETER	FLEX	FLEXIBLE	ST	STEEL	ST	STEEL	STOR	STORAGE	WC	WATER CLOSET
BLKD	BULKHEAD	DF	DRINKING FOUNTAIN	FLUOR	FLUORESCENT	STOR	STORAGE	STOR	STORAGE	STR	STRUCTURAL	WD	WOOD
B.M.	BENCH MARK	DI	DIAMETER	FO	FINISH OPENING	STR	STRUCTURAL	STR	STRUCTURAL	ST	STEEL	W	WINDOW
BM	BEAM	DIAG	DIAGONAL	FP	FILLER PANEL	ST.	STEEL	ST.	STEEL	STR	STRUCTURAL	WDP	WOOD PANELING
BOT	BOTTOM	DIFF	DIFFUSER	FR	FRAME (ED) (ING)	ST.	STEEL	ST.	STEEL	SUB	SUBSTITUTE	WD	WIDTH
BRG	BEARING	DISP	DISPENSER	FR	FRAME (ED) (ING)	RD	ROUND	RD	ROUND	SUP	SUPPLY	W/O	WITHOUT
B.S.	BRICK SHELF	DIST	DISTANCE	FRFF	FIREPROOFING	R.A.	ROOF DRAIN	R.A.	ROOF DRAIN	SUSP	SUSPENDED	WP	WATERPROOF
C	CHANNEL	DIV	DIVISION (DIVIDED)	FS	FULL SIZE	REB	REBAR	REB	REBAR	SW	SWITCH	WS	WEATHERSTRIPPING
CAB	CABINET	DN	DOWN	FT	FOOT/FEET	REC	RECESSED	REC	RECESSED	SWD	STORM WATER DRAIN	WT	WEIGHT
CB	CATCH BASIN	DR	DOOR	FTG	FOOTING	RECP	RECEPTACLE	RECP	RECEPTACLE	SYM	SYMMETRICAL	WWF	WELDED WIRE FABRIC
CES	CARPET EDGE STRIP	DS	DOWN SPOUT	FUR	FURRING	REF	REFER (ENCE)	REF	REFER (ENCE)	SYS	SYSTEM	WWM	WELDED WIRE MESH
CF	CUBIC FEET (FOOT)	DW	DISHWASHER	GA	GAUGE	REFR	REFRIGERATOR	REFR	REFRIGERATOR	T	TREAD		
CFCI	CONTRACTOR FURNISHED - CONTRACTOR INSTALLED	DWG(S)	DRAWING(S)	GALV	GALVANIZED	REIN (C)	REINFORC (E) (ED) (ING)	REIN (C)	REINFORC (E) (ED) (ING)	T&B	TOP AND BOTTOM		
CFM	CUBIC FEET PER MINUTE	EA	EACH	GEN	GENERAL	REQ'D	REQUIRED	REQ'D	REQUIRED	TB	TACKBOARD		
CFMF	COLD FORMED METAL FRAMING	EG	EXHAUST GRILLE	OFI	OWNER FURNISHED - CONTRACTOR INSTALLED	RES	RESILIENT EDGE STRIP	RES	RESILIENT EDGE STRIP	T.BOLT	TOGGLE BOLT		
				OFI	OWNER FURNISHED - CONTRACTOR INSTALLED	REV	REVIS (ED) (ION)	REV	REVIS (ED) (ION)	TC	TOP OF CURB		
				OFI	OWNER FURNISHED - CONTRACTOR INSTALLED	RFP	REQUEST FOR PROPOSAL	RFP	REQUEST FOR PROPOSAL	TD	TOP OF DECK		

2017 DISTRICT OF COLUMBIA CONSTRUCTION CODE (MAY 2020)	
-2017 DISTRICT OF COLUMBIA BUILDING CODE	
-2017 DISTRICT OF COLUMBIA ENERGY CONSERVATION CODE	
-2017 DISTRICT OF COLUMBIA GREEN CONSTRUCTION CODE	
-2017 DISTRICT OF COLUMBIA EXISTING BUILDING CODE	
<b>APPLICABLE CODES</b>	
DESCRIPTION:	
THE PROJECT IS A LIMITED RENOVATION TO THE METROPOLITAN 2ND DISTRICT POLICE DEPARTMENT FACILITY. THE PROJECT INCLUDES REPLACEMENT OF EXISTING GENERATOR AND UPGRADE OF MECHANICAL SYSTEM IN THE EXISTING DETENTION AREA.	

5	<b>ABBREVIATIONS</b>	4	<b>PROJECT DESCRIPTION</b>
G-002		G-002	

3	<b>NOT USED</b>	2	<b>NOT USED</b>
G-002		G-002	



1	<b>GENERAL NOTES</b>	1	<b>GENERAL NOTES</b>
G-002		G-002	

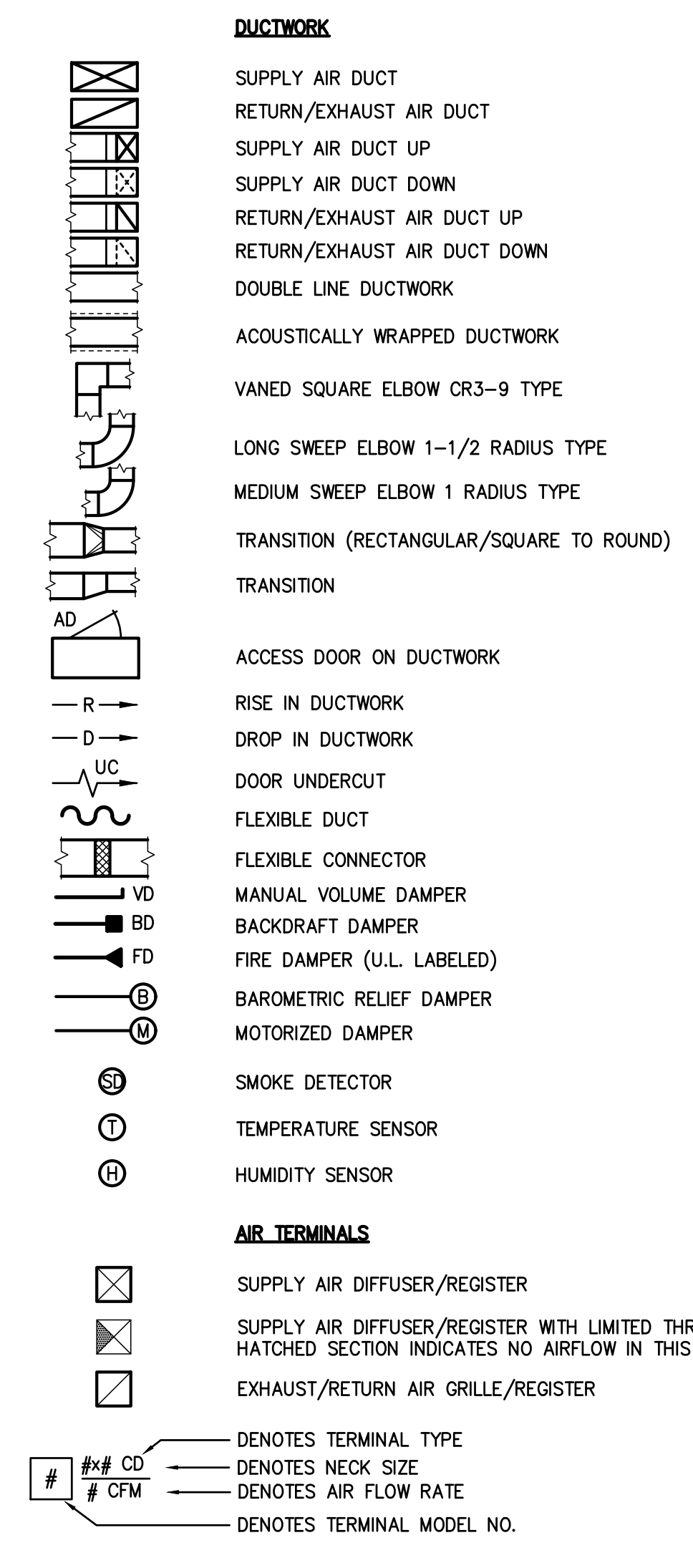
1. PROVIDE ALL NECESSARY LABOR AND MATERIAL TO RENOVATE THE MPD 2ND DISTRICT FACILITY AS SHOWN ON THE DOCUMENTS HEREIN AND WITHIN THE SPECIFICATIONS.
2. SPECIFICATIONS: ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR THIS PROJECT OR BUILDING STANDARDS WHICHEVER IS MORE STRINGENT.
3. HAZARDOUS MATERIALS: HAZARDOUS MATERIALS MAY BE ENCOUNTERED. A HAZARDOUS MATERIALS ASSESSMENT IS REQUIRED TO BE CONDUCTED BY THE GENERAL CONTRACTOR PRIOR TO COMMENCING WORK. POSSIBLE HAZARDOUS MATERIALS IN THE SCOPE OF WORK INCLUDE BUT NOT LIMITED TO:
  - a. PIPING INSULATION & MASTIC.
  - b. ALL PRE-1972 FLUORESCENT LIGHT FIXTURE BALLASTS (PCBs)
  - c. PAINTED SURFACES.

ALL HAZMATS THAT REQUIRE DISTURBANCE BY THE SCOPE OF WORK SHALL BE ABATED PRIOR TO ANY OTHER CONSTRUCTION OR DEMOLITION.

THESE HAZMATS SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH ALL DC AND FEDERAL REGULATORY GUIDELINES FOR HAZMAT REMOVAL PER SPECIFICATION SECTION 020850 & 020900.
4. VISIT TO SITE: THE CONTRACTOR SHALL VISIT THE SITE AND SHALL OBSERVE ALL THE EXISTING CONDITIONS, EQUIPMENT, FIXTURES, FINISHES, ETC., PRIOR TO BEGINNING HIS WORK.
5. COOPERATION WITH OTHER TRADES: EACH CONTRACTOR SHALL FULLY COOPERATE WITH OTHER TRADES. WHERE THE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO, OR WILL INTERFERE WITH WORK OF OTHER TRADES, EACH CONTRACTOR SHALL ASSIST IN WORKING OUT SPACE CONDITIONS TO MAKE A SATISFACTORY ADJUSTMENT. FURNISH TO OTHER TRADES, AS REQUIRED, ALL NECESSARY TEMPLATES, PATTERNS, SETTING PLANS, AND SHOP DETAILS FOR THE PROPER INSTALLATION OF WORK AND FOR THE PURPOSE OF COORDINATING ADJACENT WORK.
6. SEE CONTRACT DOCUMENTS FOR DETAIL WORK ASSOCIATED WITH EACH TRADE.
7. ALL WORK SHALL BE PERFORMED SO THAT INCONVENIENCE AND ADVERSE IMPACT TO THE EXISTING MPD 2ND DISTRICT OPERATION DURING CONSTRUCTION IS MINIMAL.
  - a. CONTRACTOR SHALL NOT STORE CONSTRUCTION MATERIALS, EQUIPMENT, TOOLS, ETC., IN ADJACENT AREAS, PUBLIC SPACE OR ANY OTHER AREAS NOT DESIGNATED BY THE CONTRACTING OFFICER'S REPRESENTATIVE AS A STORAGE AREA. CONTRACTOR SHALL CLEAN THE SITE DAILY AND ENSURE NO CONSTRUCTION DEBRIS DRIFT AWAY FROM THE SITE (LIMIT OF DISTURBANCE) ONTO/INTO SURROUNDING SPACE OR INTERFERE WITH ONGOING OPERATIONS WITHIN THE SITE.
  - b. UPON COMPLETION OF WORK AND AT THE END OF EACH WORK PERIOD, ENSURE SITE ACCESS IS FREE AND CLEAR.
  - c. THE USE OF NOISE PRODUCING EQUIPMENT DURING CONSTRUCTION, SHALL OCCUR DURING NORMAL WORKING HOURS 6:00AM TO 6:00PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE NOTED.
  - d. ERECT TEMPORARY PROTECTION AS REQUIRED TO MAINTAIN SAFETY OF PUBLIC AREAS AND DUST BARRIERS FOR AREAS AFFECTED BY THE WORK.
  - e. CLEANING: AT THE END OF EACH WORK PERIOD, ALL MATERIALS WHICH ARE NOT TO BE USED SHALL BE REMOVED FROM THE SITE AND ALL DEBRIS SHALL BE REMOVED AND THE AREA OF WORK SHALL BE LEFT IN CLEAN CONDITION.
8. DO NOT SCALE THE DRAWINGS. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE AND SHOULD BE FIELD VERIFIED AND COORDINATED WITH WORK OF ALL TRADES. DIMENSIONS ARE SHOWN TO THE FINISHED FACE, U.O.N.
9. DETAILS ARE MEANT TO SHOW METHOD AND MANNER OF ACCOMPLISHING WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT FIELD DIMENSIONS OR CONDITIONS, CONTRACTOR MAY SUBMIT RFI WITH PROPOSED SOLUTION IF FIELD CONDITIONS DIFFER FROM DRAWINGS FOR AE REVIEW.
10. CONTRACTOR SHALL PROVIDE ALL INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH APPLICABLE CODES AND GOVERNING REGULATIONS, WITH NO ADDED COST TO THE GOVERNMENT.
11. PROTECTION OF MPD PROPERTY: TAKE SPECIAL CARE TO PROTECT MPD PROPERTY. RETURN AREAS DAMAGED AS A RESULT OF CONSTRUCTION UNDER THIS CONTRACT TO THEIR ORIGINAL CONDITION. IN ADDITION TO FAR 52.236-9, PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, & IMPROVEMENTS, PERFORM THE FOLLOWING:
  - a. REMOVE OR ALTER EXISTING WORK OR FACILITIES IN SUCH A MANNER AS TO PREVENT INJURY OR DAMAGE TO ANY PORTION OF THE EXISTING WORK OR FACILITIES THAT REMAIN. PATCH, REPAIR, AND FINISH ANY AREAS DISTURBED OUTSIDE THE SCOPE OF WORK TO MATCH EXISTING CONDITIONS IF DISTURBED DURING CONSTRUCTION.
  - b. REPAIR OR REPLACE PORTIONS OF EXISTING WORK ALTERED DURING CONSTRUCTION OPERATIONS TO MATCH EXISTING OR ADJOINING WORK, AS APPROVED BY THE CONTRACTING OFFICER. AT THE COMPLETION OF OPERATIONS, EXISTING WORK MUST BE IN A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE NEW WORK STARTED.
  - c. PATCH & SMOOTH EXISTING WALL SURFACES THAT ARE DIRECTLY IMPACTED BY NEW WORK. PAINT WITH A MINIMUM OF TWO COATINGS IN COLOR AND SHEEN TO MATCH ADJACENT, OR AS DIRECTED BY CONTRACTING OFFICER. PAINT FROM CORNER TO CORNER AT WALLS THAT ARE PATCHED.
12. THE CONTRACTOR SHALL SCHEDULE WORK DURING REGULAR HOURS, MONDAY THROUGH FRIDAY AND, UNLESS OTHERWISE DIRECTED BY THE COTR.
13. ALL UTILITY OUTAGES SHALL BE SCHEDULED 14 DAYS PRIOR TO COMMENCING WORK AFTER APPROVAL FROM COTR.
14. PRIOR TO THE START OF DEMOLITION, THE BUILDER SHALL ERECT AND INSTALL DUST BARRIERS AT ALL WALL, MECHANICAL, DOORS, AND DUCTWORK OPENINGS. THE BUILDER SHALL MAKE PROVISIONS TO PREVENT THE TRACKING OF CONSTRUCTION DEBRIS AND DUST THROUGH PUBLIC CORRIDORS AND OCCUPIED SPACES.
15. DO NOT DISTURB EXISTING INFRASTRUCTURE WITHIN THE EXISTING CEILING PLENUM THAT IS NOT NOTED TO BE IN THE SCOPE OF WORK. EXISTING INFRASTRUCTURE IS EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
16. FIRESTOP ALL PENETRATIONS.
17. DO NOT SCALE DRAWINGS. DIMENSIONS SHALL SUPERCEDE ANY SCALE DISCREPANCIES. EXISTING MEASUREMENTS ARE TO BE VERIFIED IN FIELD.
18. EXISTING TO REMAIN EQUIPMENT IS BASED ON FIELD SURVEY OBSERVATIONS. CONTRACTOR SHALL VERIFY AND COORDINATE WITH MPD INVENTORY ON THE STORAGE AND REUSE OF EQUIPMENT AS DIRECTED BY MPD 2ND DISTRICT.

**100% SUBMISSION**

#	Date	Change Description
		
MPD 2ND DISTRICT HEADQUARTERS RENOVATION 3320 IDAHO AVENUE, NW, WASHINGTON D.C. 20016 FOR THE GOVERNMENT OF THE DISTRICT OF COLUMBIA		
		
ENGINEERS ARCHITECTS PLANNERS <small>1525 18TH STREET N.W. WASHINGTON, D.C. 20036 TEL: 202/797-5000 FAX: 202/797-5003</small>		
SUB-CONSULTANT	SEAL	
Dwg. Coord.: RB		Tech. Coord.: JKJK
Project No.: SEE PLOT STAMP		
<b>GENERAL NOTES, ABBREVIATIONS, SYMBOLS, MATERIALS, LEGENDS</b>		
<b>G-002</b>		
100% SUBMISSION		09/14/2022



**HVAC LEGEND**

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M-001

- GENERAL NOTES:**
- ALL WORK TO BE COMPLIANCE WITH THE FOLLOWING CODES AND STANDARDS:
    - 2015 INTERNATIONAL MECHANICAL CODE (IMC)
    - 2017 DOMRIZE MECHANICAL CODE SUPPLEMENT (DMC)
    - 2015 INTERNATIONAL PLUMBING CODE (IPC)
    - 2017 DOMRIZE PLUMBING CODE SUPPLEMENT (DPC)
    - 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
    - 2017 DOMRIZE ENERGY CONSERVATION CODE SUPPLEMENT (DECC)
    - 2013 ASHRAE 90.1
    - 2013 ASHRAE 62.1
    - NFPA 110, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
  - MAJOR DEMOLITION ITEMS ARE SHOWN IN HATCH LINES. CONTRACTOR SHALL REMOVE ALL AFFILIATED MECHANICAL SYSTEMS, EQUIPMENT, PIPES, VALVES, DUCTWORK, HANGERS, CONTROL AND SUPPORT UNLESS SPECIFICALLY DIRECTED OTHERWISE.
  - EXISTING EQUIPMENT AND DUCTWORK TO BE REMOVED SHALL BE DISMANTLED IN PLACE AND REMOVED THROUGH THE EXISTING BUILDING LIMITED PASSAGEWAYS.
  - KEEP DUCTWORK AND PIPES AS HIGH AS POSSIBLE, PROVIDE DROPS AND RISE FITTING AS REQUIRED TO CROSS UNDER EXISTING BEAM AND NEW PIPES, CONDUITS, ETC. COORDINATE IN FIELD WITH OTHER TRADES INVOLVED BEFORE DUCT FABRICATION.
  - VERIFY ALL DIMENSIONS AT THE PROJECT SITE BEFORE STARTING CONSTRUCTION, ORDERING OR FABRICATING DUCTWORKS, PIPING AND EQUIPMENT.
  - INSTALL ALL MANUFACTURED ITEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
  - CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING OF EXISTING WALL, FLOOR, OR CEILING AS REQUIRED.
  - CONTRACTOR SHALL COORDINATE LOCATION OF EQUIPMENT AS REQUIRED TO PROVIDE FOR PROPER CLEARANCES FOR SERVICE AND OPERATION OF EQUIPMENT.
  - PROVIDE COORDINATED SHOP DRAWINGS FOR ALL CONGESTED AREAS. DRAWING SHALL COORDINATE DUCTS, PIPES, PLUMBING PIPES, FIRE PROTECTION PIPES AND ELECTRICAL WORK.

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M-001

**GENERAL NOTES**

AC	AIR CONDITIONER	GWR	GLYCOL WATER RETURN
ABV.	ABOVE	HC	HEATING COIL
AFF	ABOVE FINISHED FLOOR	HP	HEAT PUMP, HORSEPOWER
AHU	AIR HANDLING UNIT	HWB	HOT WATER BASEBOARD
AD	ACCESS DOOR	KW	KILOWATT
ATC	AUTOMATIC TEMPERATURE CONTROL	LD	LINEAR DIFFUSER
BAS	BUILDING AUTOMATION SYSTEM	LDB	LEAVING DRY BULB TEMPERATURE
BD	BACKDRAFT DAMPER	LG	LINEAR GRILLE
BOD	BASIS OF DESIGN	LPS	LOW PRESSURE STEAM SUPPLY
CAV	CONSTANT AIR VOLUME	LPR	LOW PRESSURE STEAM RETURN
CG	CEILING GRILLE	LWT	LEAVING WATER TEMPERATURE
CD	CEILING DIFFUSER	LWB	LEAVING WET BULB TEMPERATURE
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	MER	MECHANICAL EQUIPMENT ROOM
CR	CEILING REGISTER	MHP	MOTOR HORSEPOWER
CLG.	CEILING	MS	MOTOR STARTER
CC	COOLING COIL	N.I.C.	NOT IN CONTRACT
CV	CONTROL VALVE	NC	NORMALLY CLOSED
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CR	CURRENT RELAY	OA	OUTSIDE AIR
D	DRAIN (CONDENSATE)	OAI	OUTSIDE AIR INTAKE
DB	DRY BULB	PTAC	PACKAGED TERMINAL AIR CONDITIONER
DDC	DIRECT DIGITAL CONTROL	RA	RETURN AIR
DN	DOWN	RAF	RETURN AIR FAN
ELEC	ELECTRICAL	REFR	REFRIGERATION
EA	EXHAUST AIR	RHC	REHEATING COIL
EA.	EACH	RG	RETURN GRILLE
EL	ELEVATION	SA	SUPPLY AIR
EDB	ENTERING DRY BULB TEMPERATURE	SP	STATIC PRESSURE
ER	EXHAUST REGISTER	SPT	STATIC PRESSURE SENSOR/TRANSMITTER
EWB	ENTERING WET BULB TEMPERATURE	SR	SUPPLY REGISTER
EWT	ENTERING WATER TEMPERATURE	TAD	TRANSFER AIR DUCT
ESP	EXTERNAL TO AHU STATIC PRESSURE (IN. W.G.)	TAO	TRANSFER AIR OPENING
EXIST.	EXISTING	TRG	TRANSFER GRILLE
F	FILTER	TSP	TOTAL STATIC PRESSURE (IN. W.G.)
FC	FLEXIBLE CONNECTION	TYP.	TYPICAL
FA	FREE AREA	VAV	VARIABLE AIR VOLUME UNIT
FD	FLOOR DRAIN, FIRE DAMPER	VD	VOLUME DAMPER, MANUAL
FLR	FLOOR	W	WATT(S)
FTR	FIN-TUBE RADIATION	WAC	WINDOW AIR CONDITIONER
FPV	FAN POWERED VAV UNIT	WG	WALL GRILLE
GFCI	GOVT FURNISHED, CONTRACTOR INSTALLED	WMS	WIRE MESH SCREEN
GFI	GOVT FURNISHED, GOVT INSTALLED		
GPM	GALLONS PER MINUTE		
GWS	GLYCOL WATER SUPPLY		

2  
M-001

**MECHANICAL ABBREVIATIONS**

DWG. NO.	TITLE
M-001	LEGEND, ABBREVIATIONS, GENERAL NOTES, AND DRAWING LIST
M-101	BASEMENT FLOOR PLAN - DEMOLITION AND NEW WORK
M-102	FIRST FLOOR PLAN - DEMOLITION AND NEW WORK
M-601	CONTROL DIAGRAMS
M-701	SCHEDULES AND DETAILS
M-702	DETAILS

1  
M-001

**DRAWING LIST**

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#	Date	Change Description

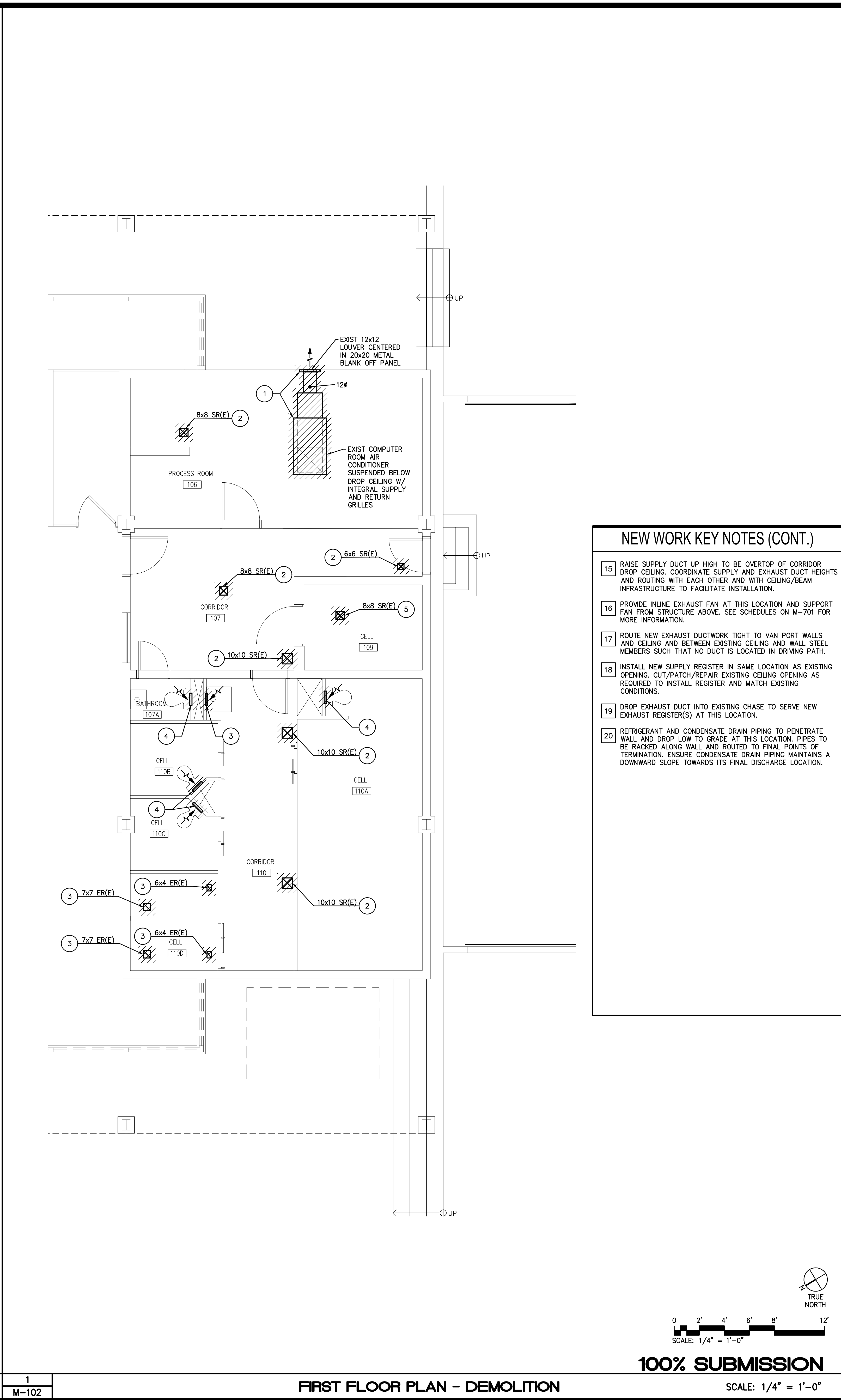
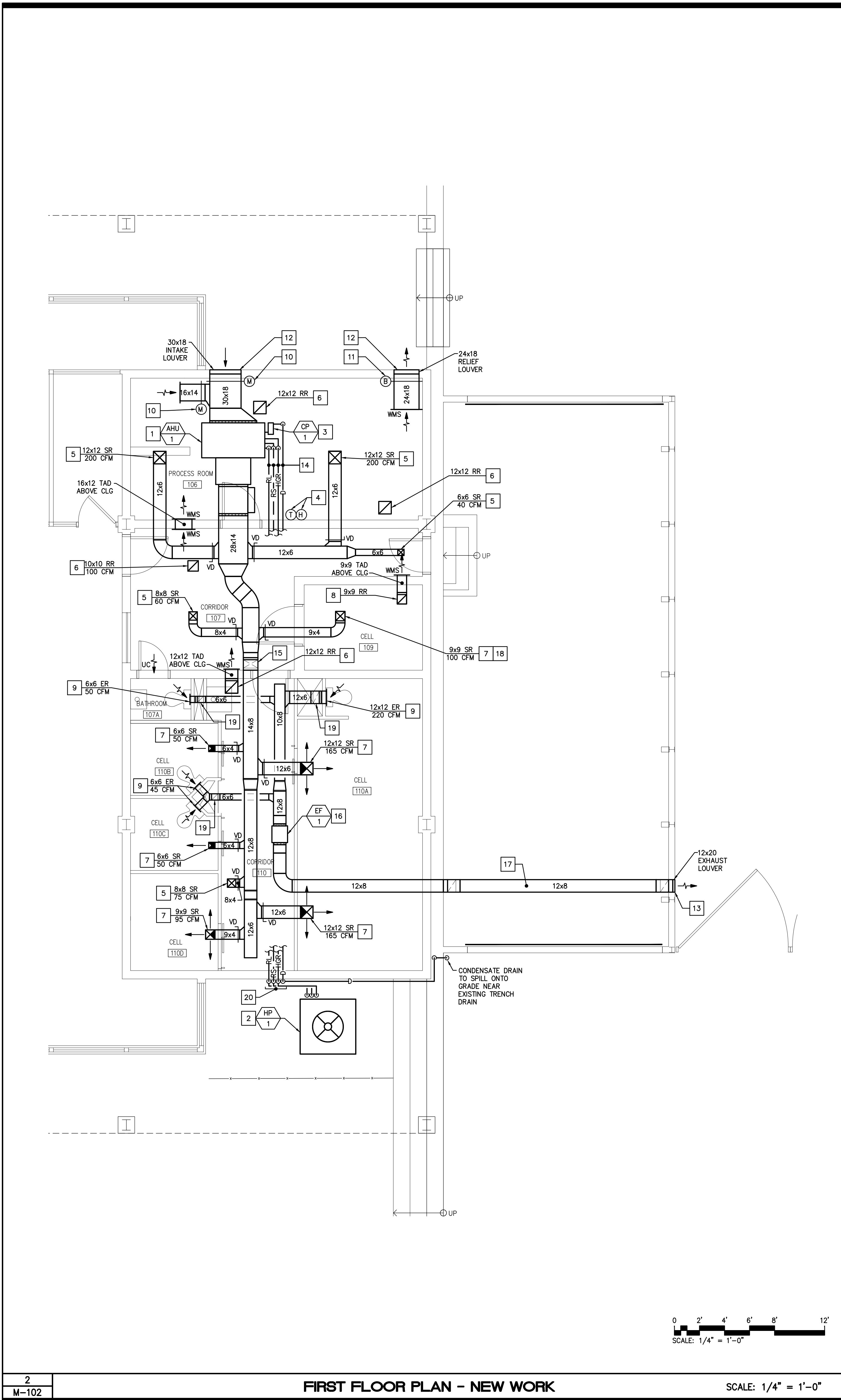
MPD 2ND DISTRICT HEADQUARTERS RENOVATION  
 3320 IDAHO AVENUE, NW, WASHINGTON D.C. 20018  
 FOR GOVERNMENT OF THE DISTRICT OF COLUMBIA

**ALPHATEC PC**  
 ENGINEERS ARCHITECTS PLANNERS  
 1525 18TH STREET N.W. WASHINGTON, D.C. 20036  
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SUB-CONSULTANT: \_\_\_\_\_ SEAL: \_\_\_\_\_

Dwg. Coord.: JMB Tech. Coord.: DFA Project NO.: SEE PLOT STAMP  
**LEGEND, ABBREVIATIONS, GENERAL NOTES, AND DRAWING LIST**  
**M-001**  
 100% SUBMISSION 09/14/2022





**GENERAL NOTES**

- SEE M-001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- REMOVE, SALVAGE, AND STORE EXISTING CEILING TILES AND GRID SYSTEM TO ACCOMMODATE WORK WITHIN CEILING PLENUMS.
- REINSTALL EXISTING SUSPENDED ACOUSTICAL CEILING TILE AND METAL PANEL CEILING SYSTEMS TO MATCH EXISTING CONDITIONS FOLLOWING COMPLETION OF WORK WITHIN CEILING PLENUMS.
- WHERE AIR DEVICE IS TO BE INSTALLED IN ACT CEILING, IT SHALL BE CENTERED WITHIN THE CEILING TILE.

**DEMOLITION KEY NOTES**

- REMOVE EXISTING CEILING MOUNTED CRAC UNIT AND ASSOCIATED WALL LOUVER, DUCTWORK, CONTROLS, AND SUPPORTS IN THEIR ENTIRETY.
- REMOVE EXISTING SUPPLY REGISTER AND ALL ASSOCIATED DUCTWORK WITHIN THE DETENTION BLOCK SCOPE OF WORK AREA IN ITS ENTIRETY. CAP AND SEAL DUCTWORK AT POINT OF PENETRATION INTO SCOPE OF WORK AREA.
- EXISTING EXHAUST AIR OPENING IN CELL ENCLOSURE TO BE SEALED AND PATCHED/REPAIRED TO MATCH EXISTING CONDITIONS. ALL ASSOCIATED DUCTWORK WITHIN THE DETENTION BLOCK SCOPE OF WORK AREA TO BE REMOVED IN ITS ENTIRETY. CAP AND SEAL DUCTWORK AT POINT OF PENETRATION INTO SCOPE OF WORK AREA.
- EXISTING EXHAUST AIR OPENING IN CELL ENCLOSURE CHASE TO BE CUT/MODIFIED AS REQUIRED TO INSTALL NEW WALL-MOUNTED EXHAUST REGISTER AT THIS LOCATION DURING NEW WORK PHASE. ALL ASSOCIATED DUCTWORK WITHIN THE DETENTION BLOCK SCOPE OF WORK AREA TO BE REMOVED IN ITS ENTIRETY. CAP AND SEAL DUCTWORK AT POINT OF PENETRATION INTO SCOPE OF WORK AREA.
- REMOVE EXISTING SUPPLY REGISTER AND MODIFY REMAINING OPENING TO ACCOMMODATE NEW SUPPLY REGISTER AT THIS LOCATION DURING NEW WORK PHASE.

**NEW WORK KEY NOTES (CONT.)**

- RAISE SUPPLY DUCT UP HIGH TO BE OVERTOP OF CORRIDOR DROP CEILING. COORDINATE SUPPLY AND EXHAUST DUCT HEIGHTS AND ROUTING WITH EACH OTHER AND WITH CEILING/BEAM INFRASTRUCTURE TO FACILITATE INSTALLATION.
- PROVIDE INLINE EXHAUST FAN AT THIS LOCATION AND SUPPORT FAN FROM STRUCTURE ABOVE. SEE SCHEDULES ON M-701 FOR MORE INFORMATION.
- ROUTE NEW EXHAUST DUCTWORK TIGHT TO VAN PORT WALLS AND CEILING AND BETWEEN EXISTING CEILING AND WALL STEEL MEMBERS SUCH THAT NO DUCT IS LOCATED IN DRIVING PATH.
- INSTALL NEW SUPPLY REGISTER IN SAME LOCATION AS EXISTING OPENING. CUT/PATCH/REPAIR EXISTING CEILING OPENING AS REQUIRED TO INSTALL REGISTER AND MATCH EXISTING CONDITIONS.
- DROP EXHAUST DUCT INTO EXISTING CHASE TO SERVE NEW EXHAUST REGISTER(S) AT THIS LOCATION.
- REFRIGERANT AND CONDENSATE DRAIN PIPING TO PENETRATE WALL AND DROP LOW TO GRADE AT THIS LOCATION. PIPES TO BE RACKED ALONG WALL AND ROUTED TO FINAL POINTS OF TERMINATION. ENSURE CONDENSATE DRAIN PIPING MAINTAINS A DOWNWARD SLOPE TOWARDS ITS FINAL DISCHARGE LOCATION.

**NEW WORK KEY NOTES**

- PROVIDE NEW AIR HANDLING UNIT SUSPENDED FROM STRUCTURE ABOVE AT THIS LOCATION. MOUNT UNIT AS HIGH AS POSSIBLE. SEE SCHEDULES ON M-701 FOR MORE INFORMATION.
- PROVIDE NEW HEAT PUMP UNIT ON NEW CONCRETE PAD ON GRADE. SEE SCHEDULES ON M-701 FOR MORE INFORMATION.
- PROVIDE CONDENSATE PUMP FOR AHU-1 AT THIS LOCATION. BOD: LITTLE GANT VCMX-20ULS, HARD-WIRED CONFIGURATION.
- PROVIDE ROOM TEMPERATURE/HUMIDITY SENSOR FOR AHU-1 ON WALL AT THIS LOCATION. SEE CONTROLS SEQUENCE 1/M-601.
- BOD: PRICE LOUVERED SUPPLY REGISTER 3/4" BLADE SPACING WITH OPTIONAL STEEL DAMPER, MODEL NO. 5200. REGISTER SIZE AS INDICATED ON PLANS.
- BOD: PRICE LOUVERED RETURN REGISTER 1/2" BLADE SPACING WITH OPTIONAL STEEL DAMPER, MODEL NO. 5350. REGISTER SIZE AS INDICATED ON PLANS.
- BOD: PRICE SECURITY RISK RESISTANT SUPPLY REGISTER 1/2" BLADE SPACING, MODEL NO. MSRRCD. DIRECTIONAL THROW AND REGISTER SIZE AS INDICATED ON PLANS.
- BOD: PRICE SECURITY RISK RESISTANT RETURN REGISTER, PERFORATED FACE WITH OPTIONAL STEEL DAMPER, MODEL NO. MSRRP. REGISTER SIZE AS INDICATED ON PLANS.
- BOD: PRICE SECURITY RISK RESISTANT EXHAUST REGISTER, PERFORATED FACE WITH OPTIONAL STEEL DAMPER, MODEL NO. MSRRP. REGISTER SIZE AS INDICATED ON PLANS. INSTALL IN SAME LOCATION AS EXISTING OPENING. CUT/PATCH/REPAIR EXISTING CHASE WALL OPENING AS REQUIRED TO INSTALL REGISTER AND MATCH EXISTING CONDITIONS.
- PROVIDE MOTORIZED CONTROL DAMPER IN DUCT AT THIS LOCATION. BOD: GREENHECK MODEL VCD-23. DAMPER ACTUATOR AND LOW VOLTAGE POWER FOR ACTUATOR TO BE PROVIDED BY CONTROLS CONTRACTOR. SEE CONTROL DIAGRAMS ON M-601 FOR MORE INFORMATION.
- PROVIDE BAROMETRIC RELIEF DAMPER IN DUCT AT THIS LOCATION. BOD: GREENHECK MODEL BR-30. START-TO-OPEN PRESSURE SHALL BE SET AT 0.05 IN.WG.
- PROVIDE NEW LOUVER WITH BIRDSCREEN IN EXISTING EXTERIOR BRICK WALL. BOD: GREENHECK MODEL ESJ-401. SEE DETAIL 1/M-701 FOR MORE INFORMATION.
- PROVIDE NEW LOUVER WITH BIRDSCREEN IN EXISTING EXTERIOR METAL WALL. BOD: GREENHECK MODEL ESJ-202. SEE DETAIL 1/M-701 FOR MORE INFORMATION.
- ROUTE NEW REFRIGERANT PIPING AND CONDENSATE DRAIN PIPING TIGHT TO CEILING ABOVE NEW DUCTWORK AND EQUIPMENT.

#	Date	Change Description

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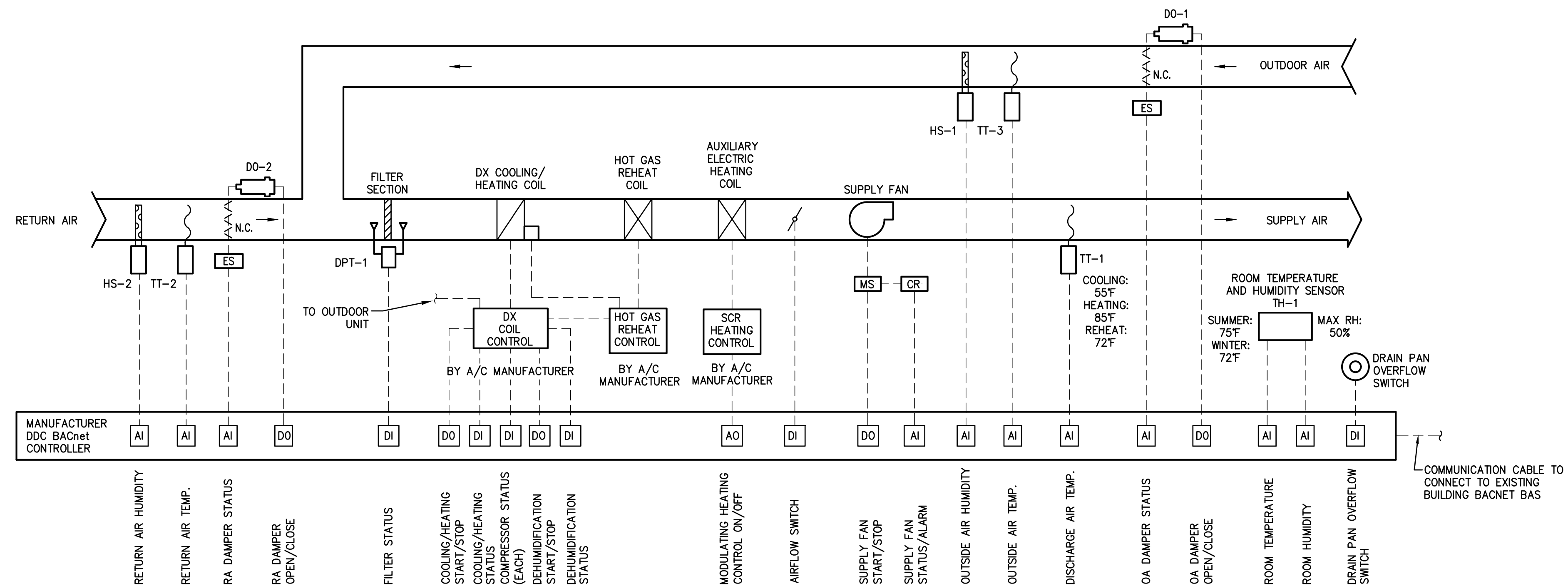
**ALPHATEC PC**  
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 1525 18TH STREET N.W. WASHINGTON, D.C. 20036  
 TEL: 202/797-5000 FAX: 202/797-5003

SUB-CONSULTANT: \_\_\_\_\_ SEAL: \_\_\_\_\_  
 Dwg. Coord.: \_\_\_\_\_ Tech. Coord.: \_\_\_\_\_ Project NO.: SEE PLOT STAMP  
**FIRST FLOOR PLAN DEMOLITION AND NEW WORK**  
**M-102**  
 100% SUBMISSION 09/14/2022

2  
M-102 **FIRST FLOOR PLAN - NEW WORK** SCALE: 1/4" = 1'-0"

1  
M-102 **FIRST FLOOR PLAN - DEMOLITION** SCALE: 1/4" = 1'-0"

**100% SUBMISSION**



**NOTES:**

1. MANUFACTURER TO PROVIDE DDC CONTROLLER AND ALL EQUIPMENT/APURTENANCES NECESSARY TO OPERATE THE UNIT AS INDICATED.
2. PROVIDE ALL SENSORS, UNIT AND FIELD MOUNTED, FOR A COMPLETE AND FUNCTIONING SYSTEM.
3. CONFIGURE DDC CONTROLLER AND CONNECT DESIGNATED CONTROL POINTS TO EXISTING BUILDING BAS. THE CONTRACTOR SHALL INTEGRATE THE CONTROL POINTS TO THE EXISTING BACnet BAS AND SHALL ASSIGN OBJECT NAMES, GRAPHICS, AND DESCRIPTIONS IN ACCORDANCE TO THE POINTS LISTED.

**SEQUENCE OF OPERATION:**

**GENERAL:**

UPON RECEIPT OF A "START" COMMAND, THE OUTDOOR AIR DAMPER DO-1 SHALL OPEN TO ITS MINIMUM VENTILATION POSITION, AND UPON STATUS CONFIRMATION OF DAMPER OPEN POSITION FROM THE END SWITCH (ES), SUPPLY FAN SHALL START AND UNIT SHALL OPERATE PER THE FOLLOWING SEQUENCE OF OPERATIONS.

**DX COIL COOLING CONTROL:**

AS THE ROOM AIR TEMPERATURE SENSED BY TH-1 RISES ABOVE THE ACTIVE COOLING ROOM AIR TEMPERATURE SETPOINT, COOLING MODE SHALL INITIATE. THE COMPRESSOR WILL STAGE ON AND MODULATE THE REFRIGERANT CIRCUIT TO MAINTAIN THE ACTIVE SUPPLY AIR COOLING SETPOINT OF 55°F (ADJ.). SCROLL COMPRESSOR SHALL BE CONTROLLED TO ACHIEVE THE MOST EFFICIENT COOLING CONTROL.

**DX COIL HEATING CONTROL:**

AS ROOM AIR TEMPERATURE SENSED BY TH-1 FALLS BELOW THE ACTIVE HEATING ROOM AIR TEMPERATURE SETPOINT, HEATING MODE SHALL INITIATE. THE COMPRESSOR WILL STAGE ON AND MODULATE THE REFRIGERANT CIRCUIT TO MAINTAIN THE ACTIVE SUPPLY AIR HEATING SETPOINT OF 85°F (ADJ.). SCROLL COMPRESSOR SHALL BE CONTROLLED TO ACHIEVE THE MOST EFFICIENT HEATING CONTROL.

**DEHUMIDIFICATION AND REHEAT:**

DEHUMIDIFICATION MODE IS INITIATED WHEN THE INDOOR HUMIDITY SENSED BY TH-1 RISES ABOVE THE 50% RH (ADJ.) INDOOR HUMIDITY SETPOINT + 5% RH DEADBAND (ADJ.). DEHUMIDIFICATION MODE IS DEACTIVATED WHEN THE HUMIDITY FALLS BELOW THE INDOOR HUMIDITY SETPOINT + 5% DEADBAND (ADJ.).

IN DEHUMIDIFICATION MODE, THE EXPANSION VALVE AND COMPRESSOR ARE CONTROLLED TO MAINTAIN THE SUCTION (SATURATION) TEMPERATURE SETPOINT. SCROLL COMPRESSOR SHALL BE CONTROLLED TO ACHIEVE THE MOST EFFICIENT DEHUMIDIFICATION CONTROL.

DURING DEHUMIDIFICATION, REHEAT IS CONTROLLED TO THE REHEAT SUPPLY AIR TEMPERATURE SETPOINT (TT-1). THE HOT GAS REHEAT VALVE SHALL MODULATE TO MAINTAIN THE SUPPLY AIR TEMPERATURE AT THE ACTIVE REHEAT SUPPLY AIR TEMPERATURE SETPOINT OF 72°F (ADJ.).

**ECONOMIZER OPERATION:**

THE BAS SHALL DETERMINE ENTHALPY CONDITIONS THROUGH RA SENSORS TT-2 AND HS-2 AND OA SENSORS TT-3 AND HS-1. THE FOLLOWING FUNCTIONS SHALL BE PERFORMED:

1. WHEN THE ENTHALPY OF OUTDOOR AIR IS LESS THAN THE RETURN AIR ENTHALPY AND THE OA TEMPERATURE IS ABOVE THE TT-1 ECONOMIZER LOW TEMPERATURE SETPOINT OF 50°F (ADJ.), THE ECONOMIZER SHALL ACT AS THE INITIAL STAGE OF COOLING. ECONOMIZER CONTROLLER SHALL MODULATE OUTDOOR AIR DAMPER DO-1 AND RETURN AIR DAMPER DO-2 TO MAINTAIN TT-1 COOLING SET POINT. IF OUTDOOR AIR DAMPER DO-1 IS FULLY OPEN IN ECONOMIZER MODE AND TT-1 IS ABOVE COOLING SETPOINT, ECONOMIZER CONTROL SHALL MODULATE DX COOLING COIL CONTROL IN SEQUENCE TO MAINTAIN TT-1 SETPOINT.

2. IF OA ENTHALPY IS HIGHER THAN THE RA ENTHALPY, OUTDOOR AIR DAMPER DO-1 SHALL RETURN TO MINIMUM VENTILATION POSITION, RA DAMPER DO-2 SHALL FULLY OPEN, AND DX COIL COOLING CONTROL SEQUENCE SHALL THEN BE FOLLOWED.

**AUXILIARY ELECTRIC HEATING CONTROL:**

WHEN THE DX HEAT PUMP IS ENERGIZED IN HEATING MODE AT 100% AND TH-1 SENSES A DROP IN ROOM TEMPERATURE BELOW THE WINTER ROOM TEMPERATURE SETPOINT, THE AUXILIARY MODULATING SCR ELECTRIC HEATER SHALL ENERGIZE UPON CONFIRMATION OF AIRFLOW FROM AIRFLOW SWITCH. SCR HEATING CONTROL LOGIC SHALL MODULATE HEATING UNTIL HEATING SUPPLY AIR DISCHARGE TEMPERATURE (TT-1) RISES ABOVE SUPPLY AIR SETPOINT PLUS HEAT STAGING WINDOW. AT THAT POINT, THE AUXILIARY HEAT WILL STAGE OFF (AFTER A STAGE DOWN DELAY) AND THE HEAT PUMP COMPRESSOR HEATING WILL BE ALLOWED TO MODULATE PER DX COIL HEATING SEQUENCE.

**ALARMS/WARNINGS**

ON ALARM, UNIT STOPS AND OUTDOOR AIR DAMPER CLOSES - ALARM RELAY CLOSES AND SIGNAL IS SENT TO THE BAS. MANUAL RESET. ON WARNING, UNIT CONTINUES - ALARM RELAY CLOSES AND SIGNAL IS SENT TO THE BAS.

**LIST OF ALARMS:**

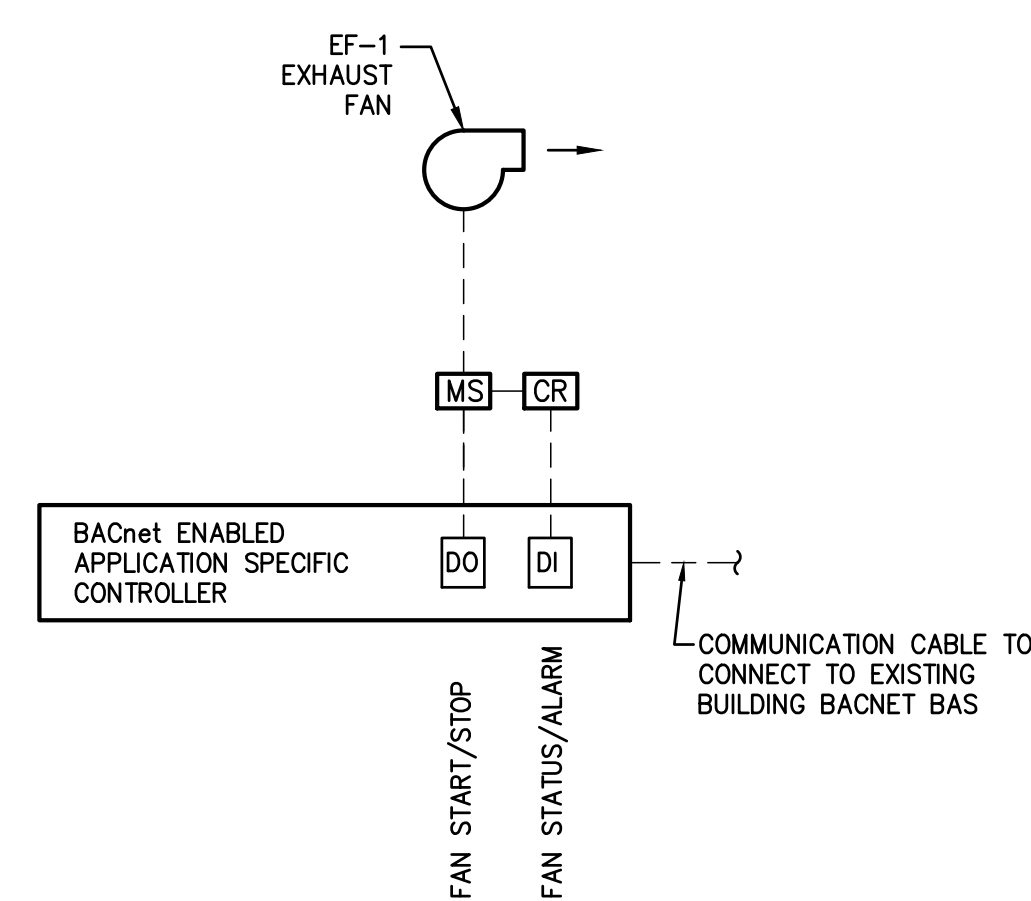
- START RELAY OFF
- FAN MOTOR OVERLOAD
- ANY TEMPERATURE PROBE MalfUNCTION
- ANY DAMPER MalfUNCTION
- SA TEMPERATURE BELOW 40°F OR ABOVE 95°F
- ROOM RH HUMIDITY BELOW 25% OR ABOVE 60%
- HEAT ON, NO PROOF OF AIRFLOW
- DRAIN PAN CONDENSATE DETECTED
- CONTROLLER HAS LOST ITS MEMORY

**LIST OF WARNINGS:**

- DIRTY FILTER SWITCH

**GENERAL NOTE**

1. REFER TO SPECIFICATION SECTION 23 09 23 FOR ADDITIONAL INFORMATION.
2. REFER TO MANUFACTURER OPERATION AND MAINTENANCE MANUALS FOR COMPLETE CONTROL SEQUENCE DESCRIPTION AND START-UP.
3. CONTROLS CONTRACTOR SHALL PROVIDE ELECTRICAL POWER TO ALL CONTROL DEVICES AND EQUIPMENT FROM THE NEAREST POWER SOURCE INDICATED FOR CONTROLS POWER AND IDENTIFIED ON ELECTRICAL DRAWINGS.
4. ALL CONTROL SEQUENCE SETPOINTS SHALL BE OPERATOR ADJUSTABLE.



**SEQUENCE OF OPERATION**

**EXHAUST FAN:**

1. EXHAUST FAN SHALL OPERATE CONTINUOUSLY.
2. UPON RECEIPT OF A "START" COMMAND, THE FAN SHALL START AND OPERATE CONTINUOUSLY.
3. THE FAN SHALL SEND AN ALARM IF STATUS INDICATES FAN IS NOT OPERATING. EQUIPMENT ALARM SHALL BE RESET MANUALLY.

#	Date	Change Description

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SUB-CONSULTANT: \_\_\_\_\_ SEAL: \_\_\_\_\_

Dwg. Coord.: JMB Tech. Coord.: DFA Project NO: SEE PLOT STAMP

CONTROL DIAGRAMS **M-601**

100% SUBMISSION 09/14/2022

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10		MIXED AIR SPLIT SYSTEM UNIT SCHEDULE																																	
UNIT NO.	SERVICE	SUPPLY AIRFLOW (CFM)	O.A. AIRFLOW (CFM)	FAN ESP (IN.WG)	EVAPORATOR ELECTRICAL				OPER. WEIGHT (LBS)	COOLING				HEATING (HEAT PUMP)			AUXILIARY HEATING (ELECTRIC)				HOT GAS REHEAT			CONDENSER ELECTRICAL					EFFICIENCY		OPER. WEIGHT (LBS)				
					VOLT	PH	HZ	MCA		MOCP	AMBIENT AIR TEMP. (°F)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	REQ. TOTAL CAPACITY (MBH)	REQ. SENS. CAPACITY (MBH)	AMBIENT AIR TEMP. (°F)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	REQUIRED CAPACITY (MBH)	AMBIENT AIR TEMP. (°F)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	TOTAL CAPACITY (KW)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	TOTAL CAPACITY (MBH)	CONDENSER NO.	VOLT	PH	HZ		MCA	MOCP	EER	COP
AHU-1	PROCESS ROOM/CELL BLOCK	1,200	410	0.50	480	3	60	28.3	30	1,035	92.0/74.7	80.8/66.7	54.6/54.3	31.0	22.5	21.6	58.0	86.7	25.4	0.0	46.0	85.5	15.0	54.6/54.3	73.8/61.7	25.7	HP-1	480	3	60	9.1	15	15.3	4.6	610

- NOTES:
- PROVIDE WITH WALL MOUNTED TEMPERATURE/HUMIDITY SENSOR.
  - PROVIDE AIR HANDLING UNIT WITH AUXILIARY CONDENSATE PUMP. BOD: LITTLE GIANT VCMX-20ULS, 115V/1PH/60HZ, HARD-WIRED CONFIGURATION.
  - EQUIPMENT EFFICIENCIES SHALL COMPLY WITH DC ENERGY CODE REQUIREMENTS.
  - PROVIDE WITH MANUFACTURER CONTROLLER WITH BACNET INTERFACE FOR CONNECTION TO EXISTING BAS.
  - PROVIDE MANUFACTURER DISCONNECT SWITCH FOR AHU-1 AND HP-1
  - INSTALL OVERFLOW SWITCH CONFORMING TO UL 508 IN AHU-1 MANUFACTURER PROVIDED DRAIN PAN PER DMC 307.2.3.4.

9		DUCTWORK CONSTRUCTION AND LEAKAGE TESTING											
SYSTEM	INCHES OF WATER COLUMN	DUCT PRESSURE CLASS				SUPPLY				RETURN/OA/EXHAUST AIR		DUCT TEST PRESSURE: INCH OF WATER COLUMN	NOTES
		SUPPLY DUCT	RETURN DUCT	OUTSIDE AIR DUCT	EXHAUST DUCT	DUCT SEAL CLASS	DUCT LEAK CLASS	DUCT SEAL CLASS	DUCT LEAK CLASS	DUCT SEAL CLASS	DUCT LEAK CLASS		
		ROUND DUCT	RECTANGULAR DUCT	DUCT SEAL CLASS	DUCT LEAK CLASS	DUCT SEAL CLASS	DUCT LEAK CLASS						
AHU-1	2	-	-	-	A	6	A	12	-	-	2.0	1	
EF-1	-	-1	-1	-	-	-	-	-	A	24	1.0	1	
EF-1	-	-	-	-1	-	-	-	-	A	24	1.0	1	

- NOTES:
- TEST IN ACCORDANCE WITH SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL.

8		FAN SCHEDULE										
UNIT No.	LOCATION	TYPE	AIR FLOW (CFM)	E.S.P. (I.W.G.)	MOTOR DATA					REMARKS		
					SPEED (RPM)	POWER (HP)	VOLTS	PHASE	Hz		CONTROL METHOD	
EF-1	CORRIDOR 110	CENTRIFUGAL DIRECT DRIVE INLINE	360	0.4	1,550	1/10	115	1	60	RUN CONTINUOUSLY	BOD: GREENHECK MODEL SQ-90	

- NOTES:
- PROVIDE WITH MANUFACTURER DISCONNECT SWITCH.
  - PROVIDE WITH BACKDRAFT DAMPER.
  - PROVIDE WITH MANUFACTURER SPEED CONTROLLER.

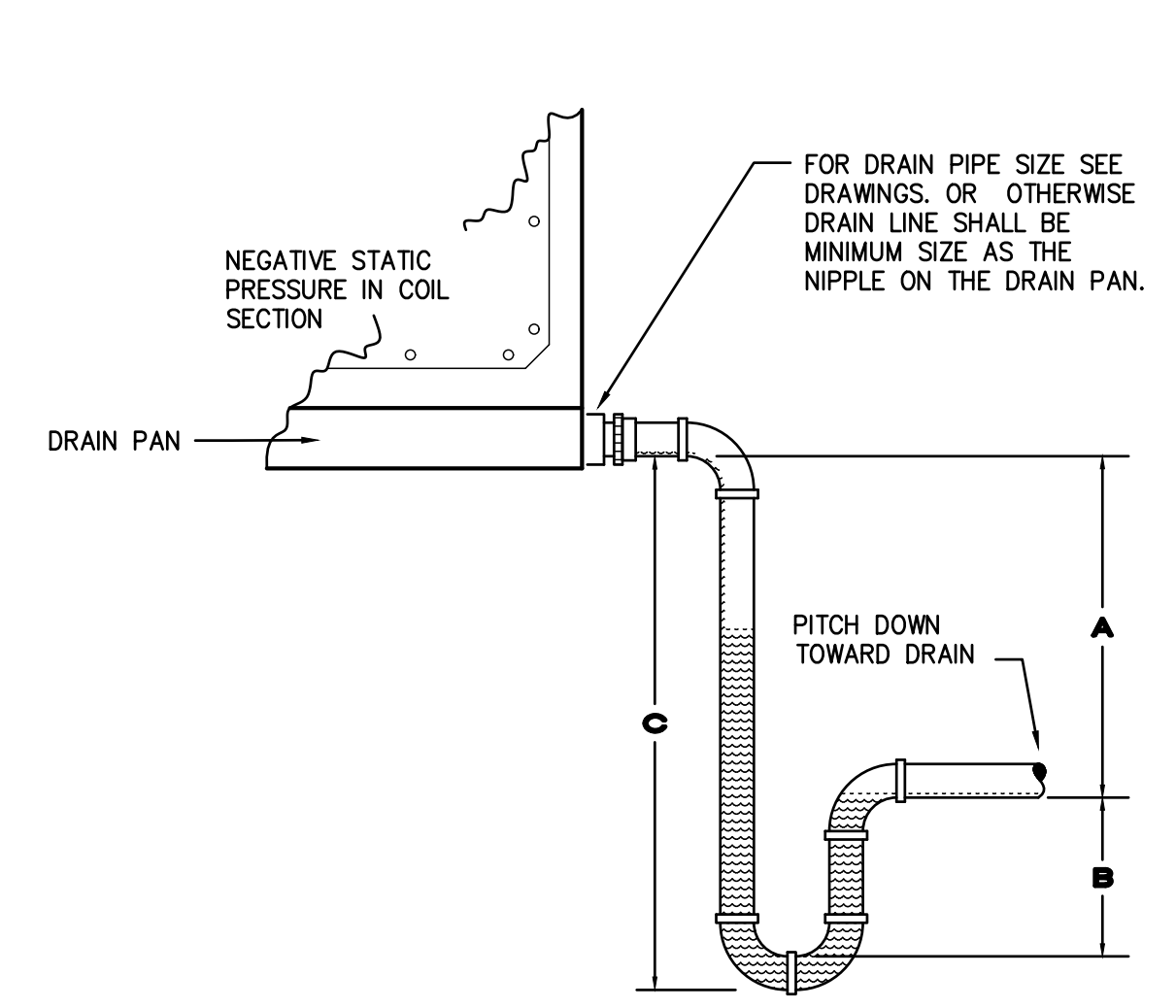
ALPHATEC PC ENGINEERS ARCHITECTS PLANNERS WASHINGTON, D.C.

MPD 2D Cell Block Renovation

Calculations Used to Determine Outdoor Air Ventilation Rates in Breathing Zone Prepared by Alphatec PC

2017 DC Mechanical Code Section 403.3 Outdoor Airflow Rate Procedure for Single Zone System

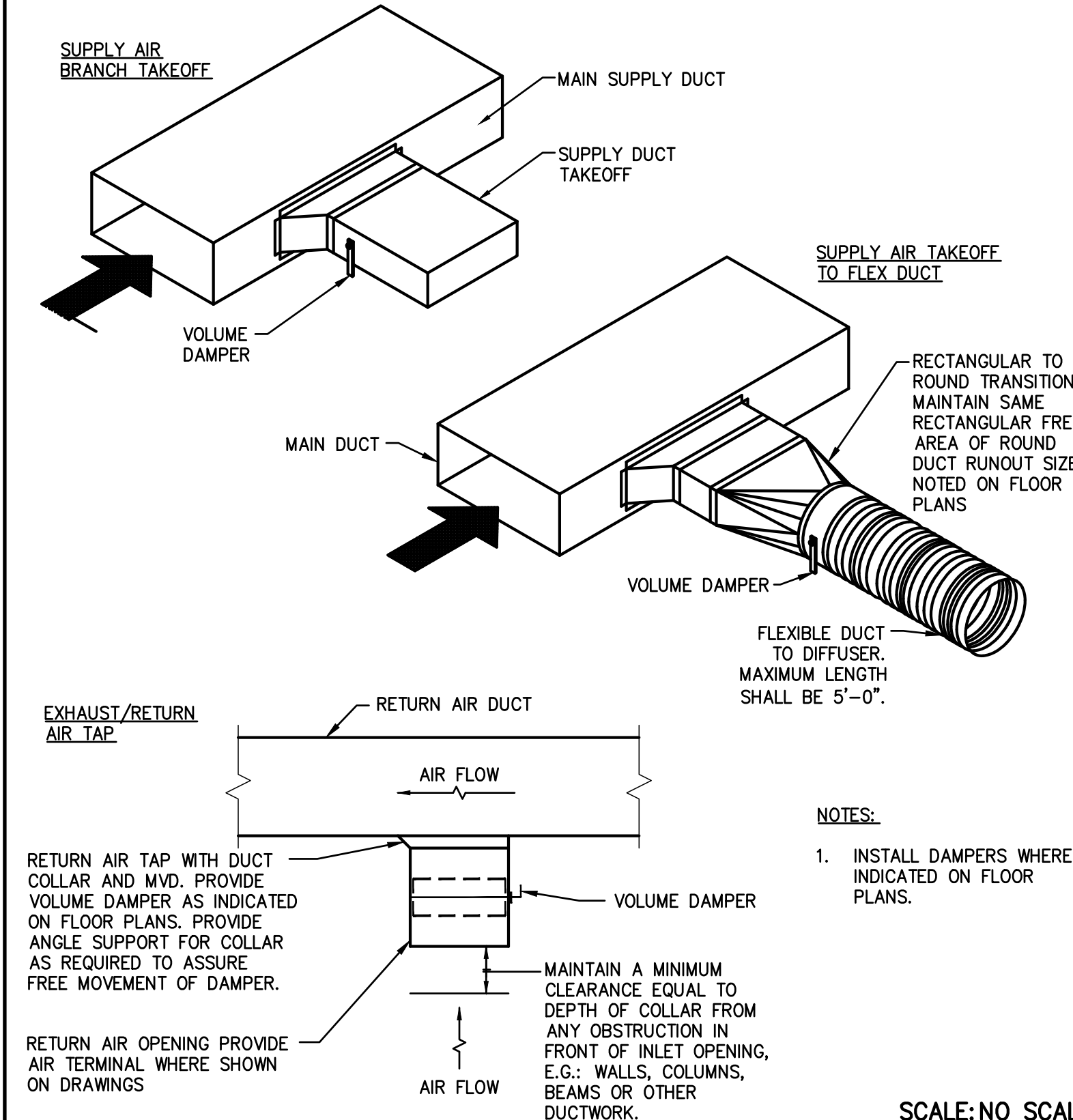
Room Name	Room Number	Occupancy Category	Area A <sub>v</sub> (sf/zone)	People Outdoor Air Rate R <sub>o</sub> (cfm/person)	Area Outdoor Air Rate R <sub>a</sub> (cfm/sf)	Occupant Density (#people/1000 sf)	Occupant Pz per Code (#people)	Design Occupant Pz (#people)	Equation 4-1 Breathing Zone Outdoor Air Flow V <sub>bz</sub> =R <sub>o</sub> Pz+R <sub>a</sub> A <sub>v</sub> (cfm)	Table 403.3.1.1.2 Zone Air Distribution Effectiveness E <sub>z</sub>	Equation 4-2 Zone Outdoor Air Flow Required V <sub>z</sub> =V <sub>bz</sub> /E <sub>z</sub> (cfm)	Design Outdoor Air Flow Provided (cfm)	Exhaust Airflow Rate Re (cfm/sf or cfm/unit)	Exhaust Air Flow Required V <sub>e</sub> =R <sub>e</sub> A <sub>e</sub> or R <sub>e</sub> *#units (cfm)	Design Exhaust Air Flow Provided (cfm)
PROCESS ROOM	106	RECEPTION	280	5	0.06	30	8	8	56	1.0	56	137	0.0	0	0
CORRIDOR	107	CORRIDOR	193	0	0.06	0	0	0	12	1.0	12	34	0.0	0	0
CELL	109	CELL	67	5	0.12	25	2	2	19	1.0	19	34	0.0	0	0
CORRIDOR	110	CORRIDOR	140	0	0.06	0	0	0	9	1.0	9	26	0.0	0	0
CELL	110A	CELL W/ PLUMBING	220	5	0.12	25	6	6	57	1.0	57	113	1.0	220	220
CELL	110B	CELL W/ PLUMBING	38	5	0.12	25	1	1	10	1.0	10	17	1.0	38	45
CELL	110C	CELL W/ PLUMBING	38	5	0.12	25	1	1	10	1.0	10	17	1.0	38	45
CELL	110D	CELL	52	5	0.12	25	2	2	17	1.0	17	32	0.0	0	0
BATHROOM	107A	RESTROOM	16	0	0	0	0	0	0	1.0	0	0	50.0	50	50
TOTAL:			1023				20	20			190	410		346	360



DRAW THRU FAN ARRANGEMENT

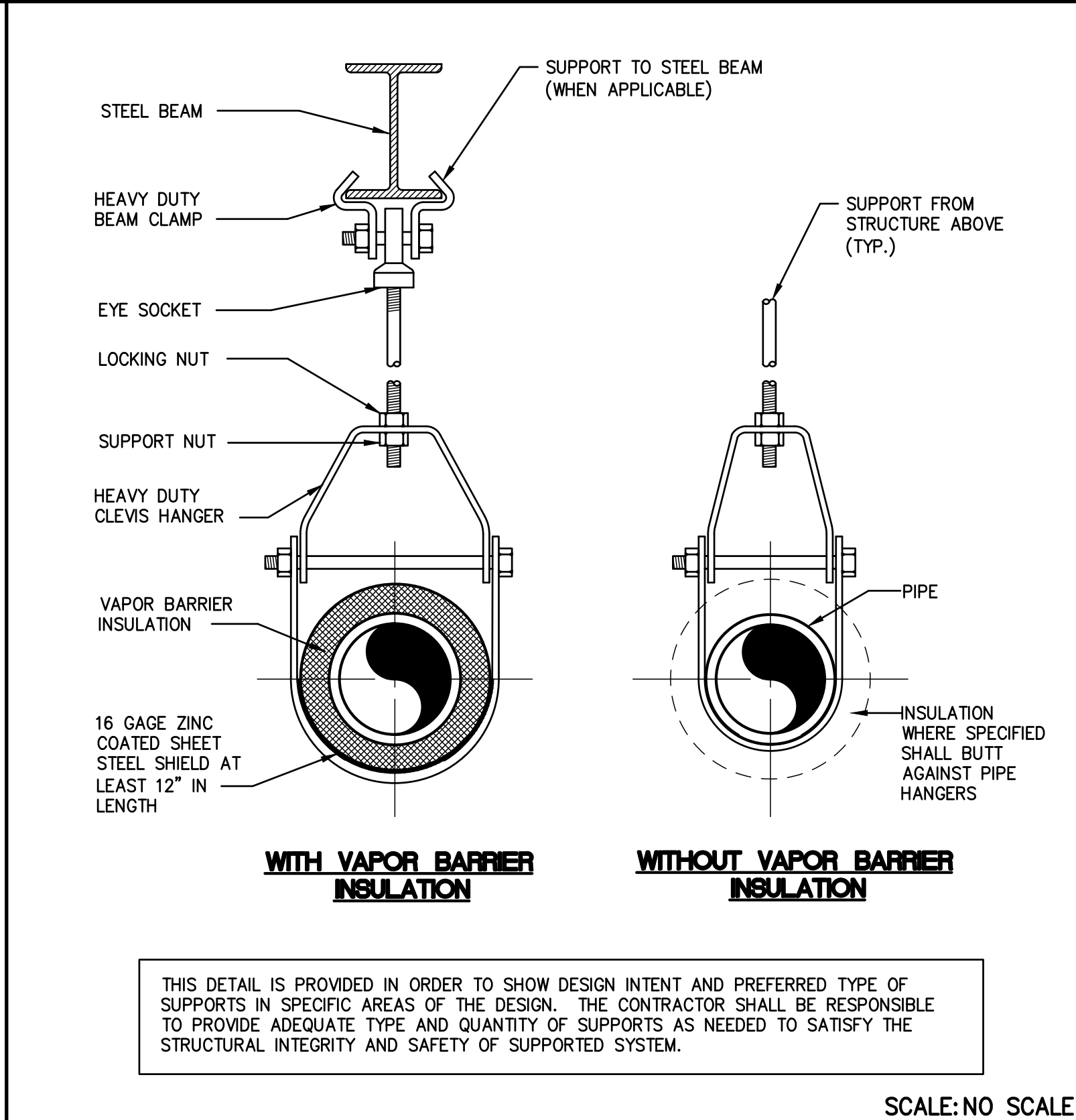
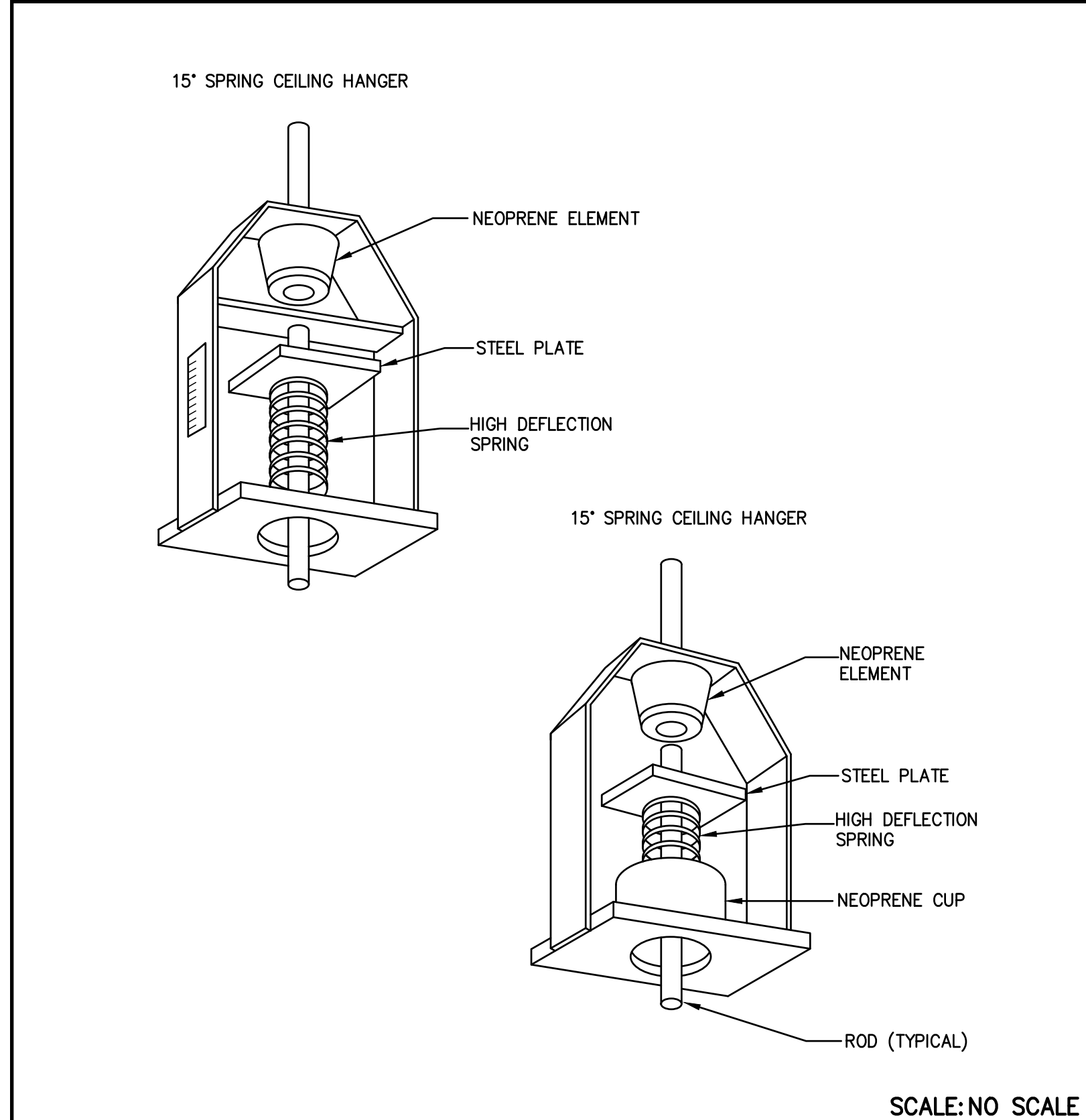
- A = TOTAL NEGATIVE STATIC PRESSURE + 1"
- B = HALF OF A
- C = B + A + PIPE DIAMETER + INSULATION

SCALE: NO SCALE

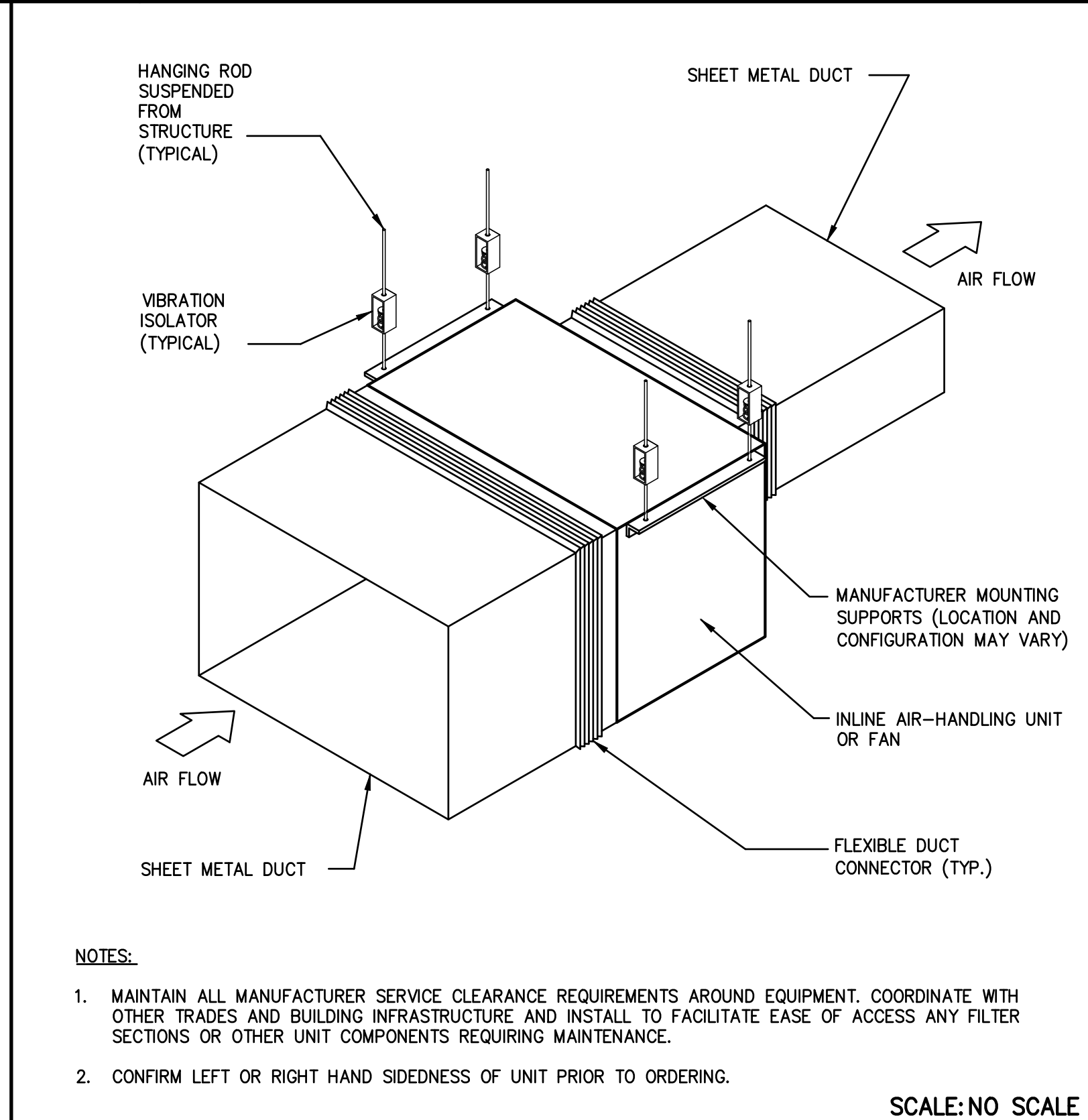


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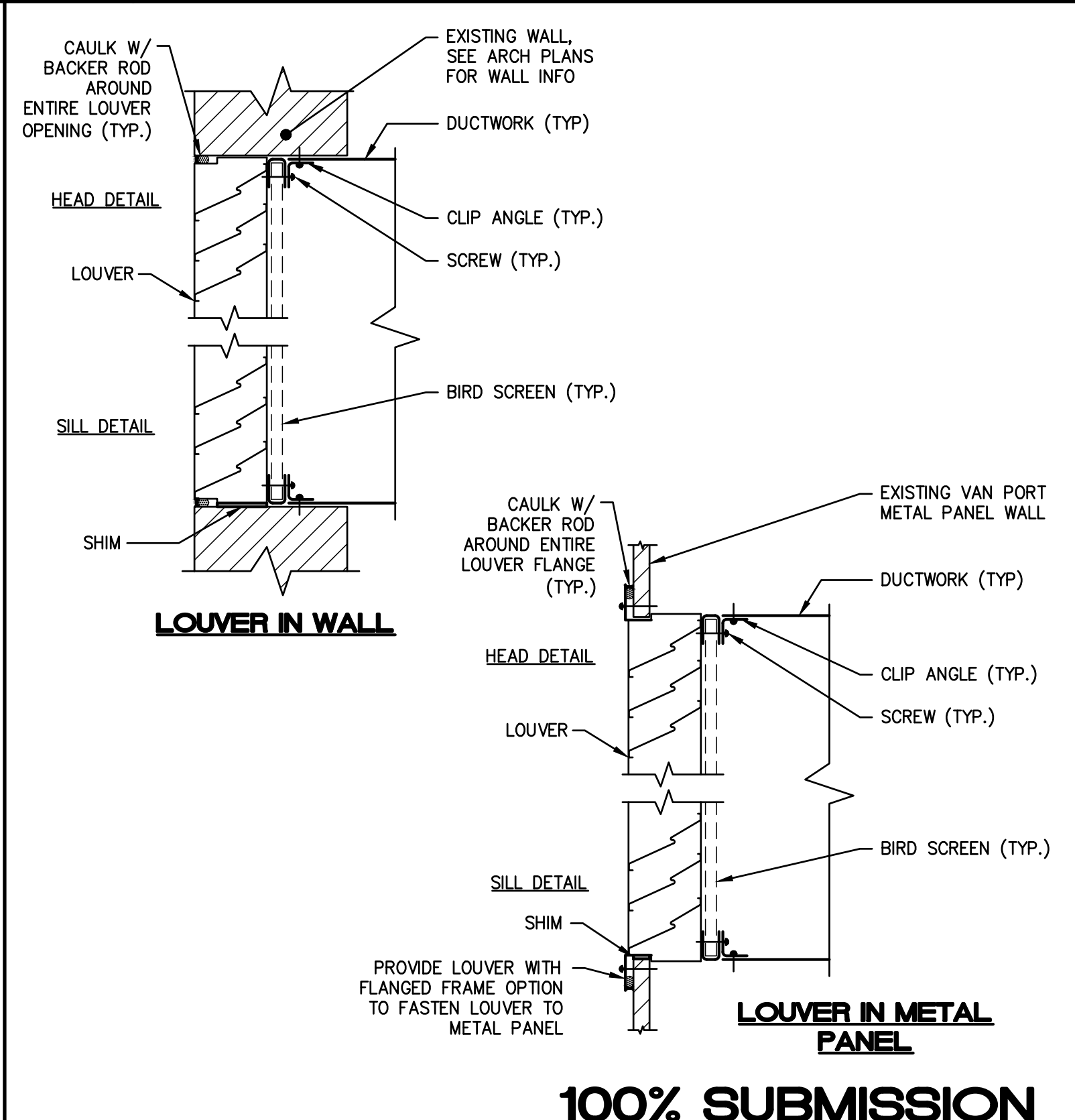
7 VENTILATION CALCULATIONS



3 NEGATIVE PRESSURE P-TRAP DETAIL



2 DUCT TAKE-OFF DETAILS



6 VIBRATION ISOLATION DETAILS

5 PIPE SUPPORT DETAILS

4 CEILING MOUNTED INLINE UNIT DETAIL

1 EXTERIOR LOUVER DETAIL

#	Date	Change Description

DGS BUILD MAINTAIN SUSTAIN

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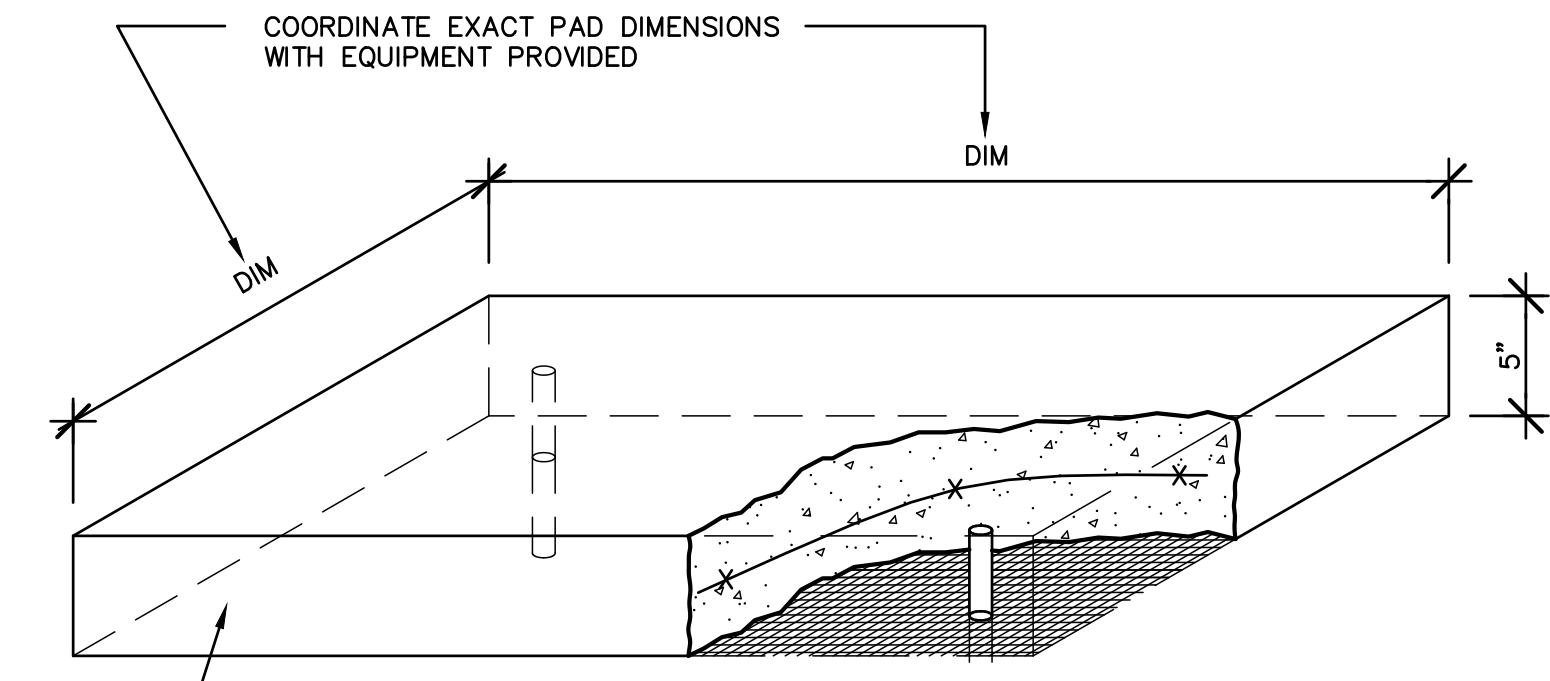
Sub-Consultant: SEAL

Dwg. Coord.: JMB Tech. Coord.: DFA Project No.: SEE PLOT STAMP

SCHEDULES AND DETAILS

M-701

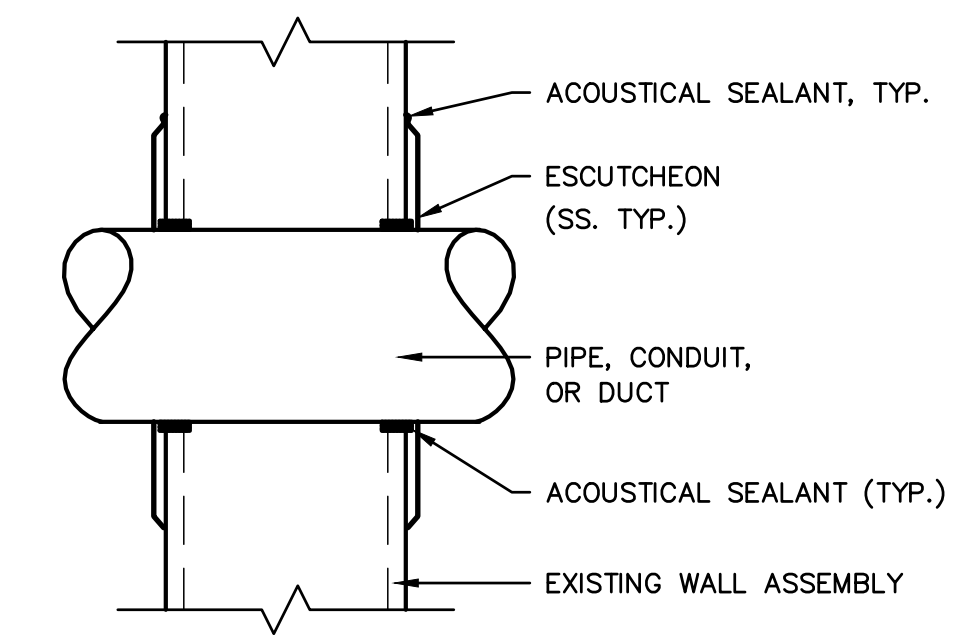
100% SUBMISSION 09/14/2022



NEW 5" CONCRETE HOUSEKEEPING PAD, CONCRETE TO HAVE 3000 PSI STRENGTH AT 28 DAYS AND 4"x4" WELDED WIRE MESH AT MIDPOINT

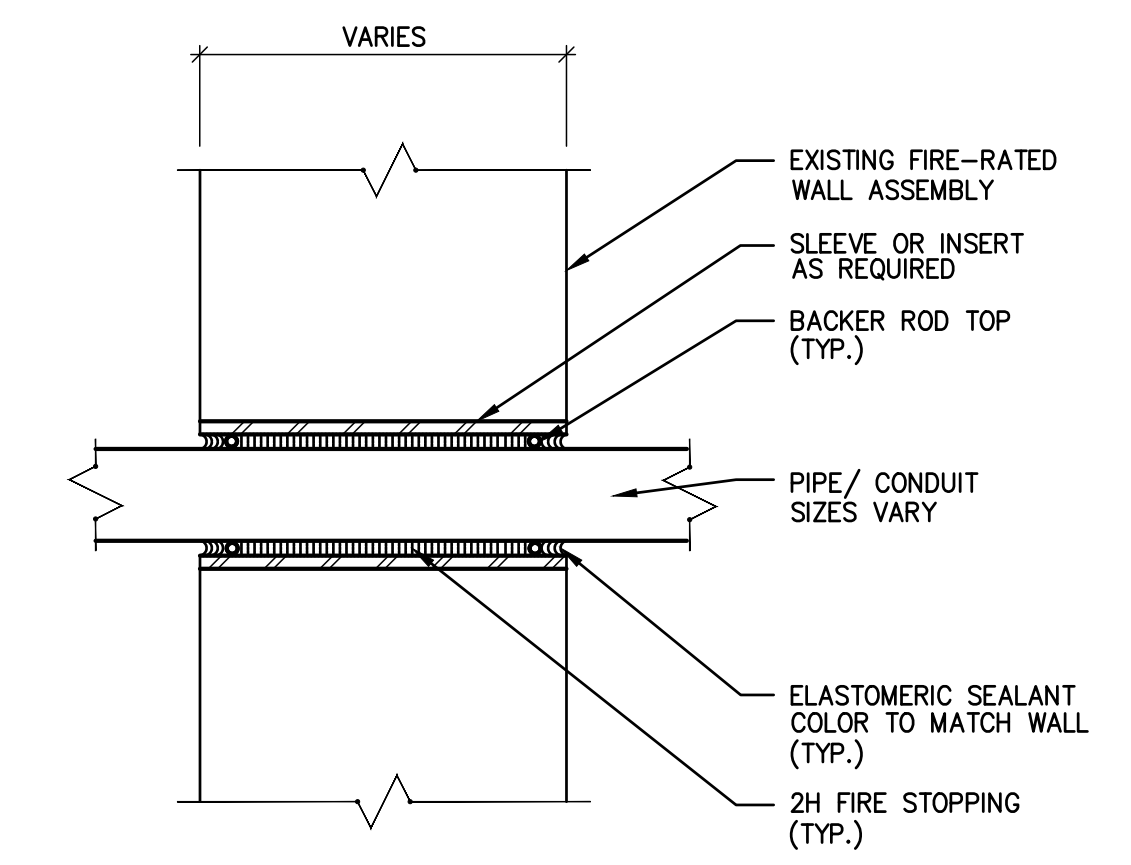
PROVIDE (2) 3/8" DOWELS IN OPPOSITE CORNERS, 4" FROM EACH EDGE, WITH 3" EMBEDMENT MINIMUM. FILL DRILLED HOLE WITH NON-SHRINK GROUT PRIOR TO INSERTING DOWEL.

3  
M-702 **CONCRETE EQUIP. PAD DETAIL** SCALE: NO SCALE



NOTES:  
SEAL AROUND PENETRATIONS (i.e. PIPES, CONDUITS, WIREMOLDS, DUCTS, ETC.).  
SEAL SHALL BE AIR TIGHT. PROVIDE COLLARS, STRAPS, ETC. AS REQUIRED. ALL PENETRATIONS IN INTERIOR WALLS/GLGS TO BE FIRE STOPPED.

2  
M-702 **TYP. WALL PENETRATION DETAIL** SCALE: NO SCALE



**100% SUBMISSION**

1  
M-702 **TYP. FIRE STOPPING DETAIL** SCALE: NO SCALE

#	Date	Change Description

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**ALPHATEC PC**  
ENGINEERS ARCHITECTS PLANNERS  
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TEL. 202/797-5000 FAX 202/797-5003

SUB-CONSULTANT	SEAL

Dwg. Coord.: JMB Tech. Coord.: DFA Project NO.: SEE PLOT STAMP

**DETAILS** **M-702**

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**PLUMBING PIPING**

-----	SANITARY PIPE
-----	VENT PIPE
-----	HOT WATER PIPE
-----	COLD WATER PIPE
-----	HOT WATER CIRCULATING PIPE
-----ST	STORM DRAINAGE PIPE
-----OST	OVERFLOW STORM DRAINAGE PIPE
-----TP	TRAP PRIMER PIPE
-----A	COMPRESSED AIR PIPE
-----FM	FORCED MAIN PIPE
-----G	GAS PIPE
-----FS	DIESEL FUEL SUPPLY PIPE
-----FR	DIESEL FUEL RETURN PIPE

**PIPING SPECIALTIES AND CONNECTIONS**

	PRESSURE REGULATOR VALVE
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	SHUT-OFF COOK (VALVE)
	PRESSURE REDUCING VALVE
	BALANCING COCK
	CHECK VALVE
	VALVE ON RISER
	WATER HAMMER ARRESTER
	TRAP PRIME VALVE
	RELIEF VALVE (ASME RATED)
	PRESSURE GAUGE
	EXPANSION TANK
	THERMOMETER
	UNION
	FLANGED END
	CAPPED END
	PITCH UP
	PITCH DOWN
	CONNECTION, BOTTOM
	CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	FLOOR DRAIN
	ROOF DRAIN
	FLOOR CLEANOUT

**REFERENCE SYMBOLS**

	CONNECT NEW TO EXISTING
	DISCONNECT FROM EXISTING/END POINT OF DEMOLITION
	EQUIPMENT TYPE
	EQUIPMENT NUMBER
	SECTION LOCATION
	SHEET NO. WHERE SECTION IS SHOWN
	SHEET NO. WHERE SECTION IS TAKEN
	SANITARY/WASTE RISER DESIGNATION
	DOMESTIC WATER RISER DESIGNATION
	GAS RISER DESIGNATION

**DEMOLITION NOTE:**

FOR GENERAL INFORMATION OF SYMBOLS, IDENTIFICATION OR EQUIPMENT AND SYSTEMS SHOWN ON THE DEMOLITION DWGS. REFER TO LEGEND SHOWN ON THIS DWG. PIPES AND EQUIPMENT DESIGNATED WITH (E) INDICATE EXISTING. HOWEVER, AS A GENERAL GUIDELINE:

	HEAVY SOLID LINE INDICATES NEW WORK.
	LIGHT SOLID LINE INDICATES EXISTING.
	HATCHING INDICATES EXISTING TO BE DEMOLISHED.

- GENERAL NOTES:**
- ALL WORK TO BE COMPLIANCE WITH THE FOLLOWING CODES AND STANDARDS:
    - 2015 INTERNATIONAL PLUMBING CODE (IPC)
    - 2017 DCMR12P PLUMBING CODE SUPPLEMENT (DCPC)
    - NFPA 110, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
  - MAJOR DEMOLITION ITEMS ARE SHOWN IN HATCH LINES. CONTRACTOR SHALL REMOVE ALL AFFILIATED PLUMBING SYSTEMS, EQUIPMENT, PIPES, VALVES, HANGERS, CONTROLS, AND SUPPORTS WHERE DEMOLITION IS INDICATED UNLESS SPECIFICALLY DIRECTED OTHERWISE.
  - THE CONTRACTOR SHALL COORDINATE INDICATED NEW WORK WITH THE EXISTING AND NEW WORK OF ALL OTHER TRADES TO ELIMINATE ANY CONFLICTS BETWEEN PIPING, DUCTWORK, ELECTRICAL, AND BUILDING COMPONENTS.
  - IN GENERAL, ALL PIPING SHALL BE RUN CONCEALED IN SUSPENDED CEILING AND PIPE SPACES PROVIDED UNLESS NOTED OR INDICATED OTHERWISE.
  - CEILING OR WALL ACCESS IS REQUIRED FOR ALL VALVES, AND EQUIPMENT REQUIRING SERVICING LOCATED ABOVE SUSPENDED CEILINGS OR CONCEALED IN WALLS. CEILING OR WALL ACCESS PANELS SHALL BE PROVIDED BY THE CONTRACTOR. COORDINATE WITH ARCH FLOOR AND REFLECTED CEILING PLANS.
  - PROVIDE SLEEVE SEALABLE OPENINGS WHERE REQUIRED TO RUN NEW PIPING THROUGH FOUNDATIONS, FLOORS, SLABS, CEILING SLABS, WALLS, BRIDGING, BEAMS, AND ROOF, EXCEPT WHERE OTHERWISE INDICATED. OPENING SIZES SHALL BE KEPT TO A MINIMUM. COORDINATE LOCATION WITH ARCHITECTURAL.
  - PROVIDE SLEEVES FOR ALL PENETRATIONS.
  - FOR WATER, VENT AND WASTE SIZES FOR SINGLE FIXTURES, REFER TO THE PLUMBING FIXTURE CONNECTION SCHEDULE.

**3**  
P-001 **GENERAL NOTES**

AFF	ABOVE FINISHED FLOOR
CA	COMPRESSED AIR
C.O.	CLEANOUT
CW	COLD WATER
D	DRAIN
DWG	DRAWING
DN	DOWN
EXISTE	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FAS	FLOW ALARM SWITCH
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FR	DIESEL FUEL RETURN
FS	DIESEL FUEL SUPPLY
GAL	GALLON
GPM	GALLONS PER MINUTE
HW	HOT WATER
HWC	HOT WATER CIRCULATING
KW	KILOWATT
LAV	LAVATORY
LPR	LOW PRESSURE RETURN
LPS	LOW PRESSURE SUPPLY
O.S.&Y.	OUTSIDE SCREW AND YOKE
PRV	PRESSURE REDUCING VALVE
RD	ROOF DRAIN
SAN	SANITARY
SP	SPRINKLER
ST	STORM
TP	TRAP PRIMER
TS	TAMPER SWITCH
TYP.	TYPICAL
V	VENT
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET

**2**  
P-001 **ABBREVIATIONS**

DWG. NO.:	TITLE:
P-001	LEGEND, ABBREVIATIONS, GENERAL NOTES, SCHEDULES, AND DRAWING LIST
P-101	BASEMENT FLOOR PLAN - DEMOLITION AND NEW WORK

**1**  
P-001 **DRAWING LIST**

**100% SUBMISSION**

#	Date	Change Description

**DGS BUILD MAINTAIN SUSTAIN**  
DEPARTMENT OF GENERAL SERVICES

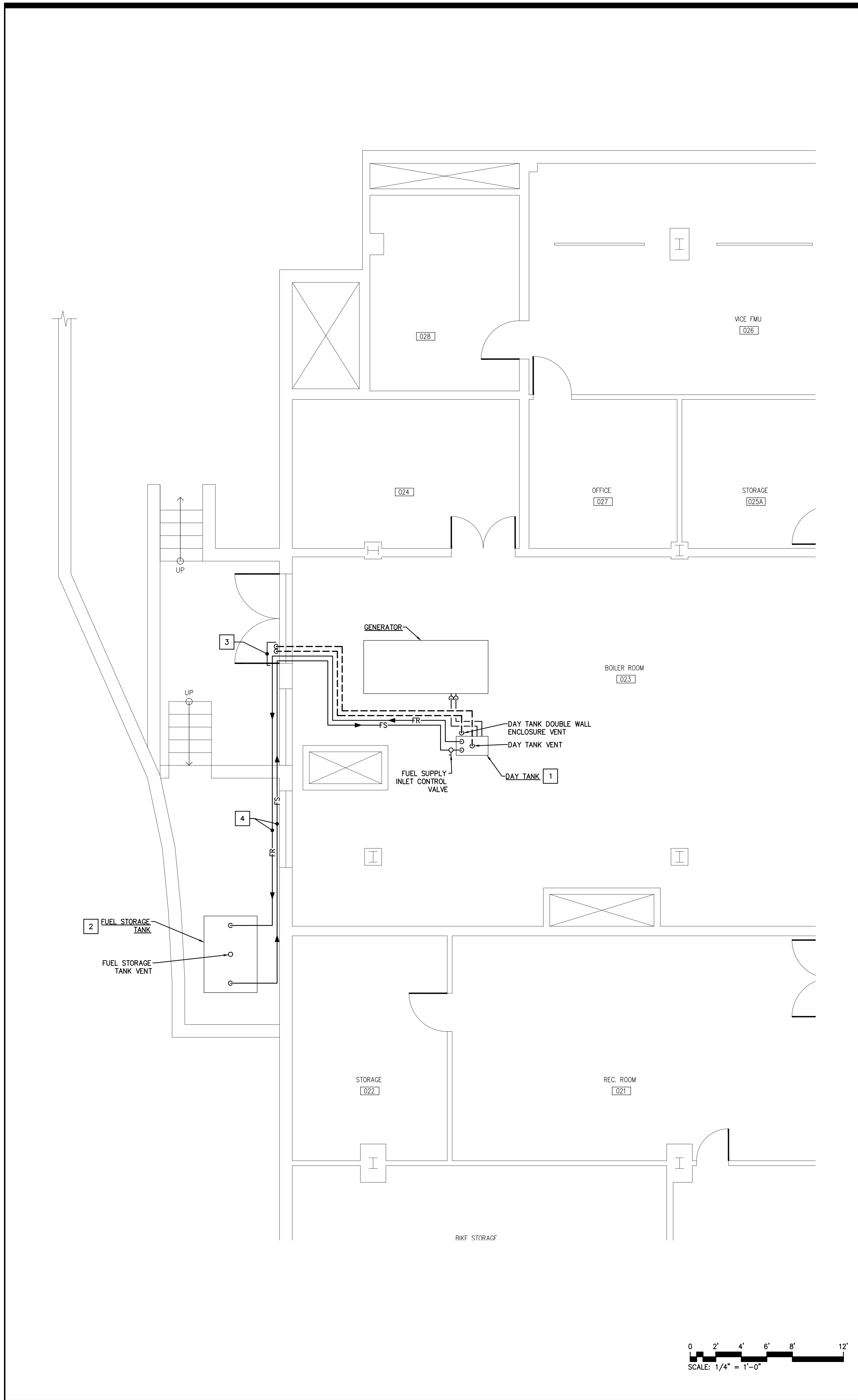
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FOR GOVERNMENT OF THE DISTRICT OF COLUMBIA

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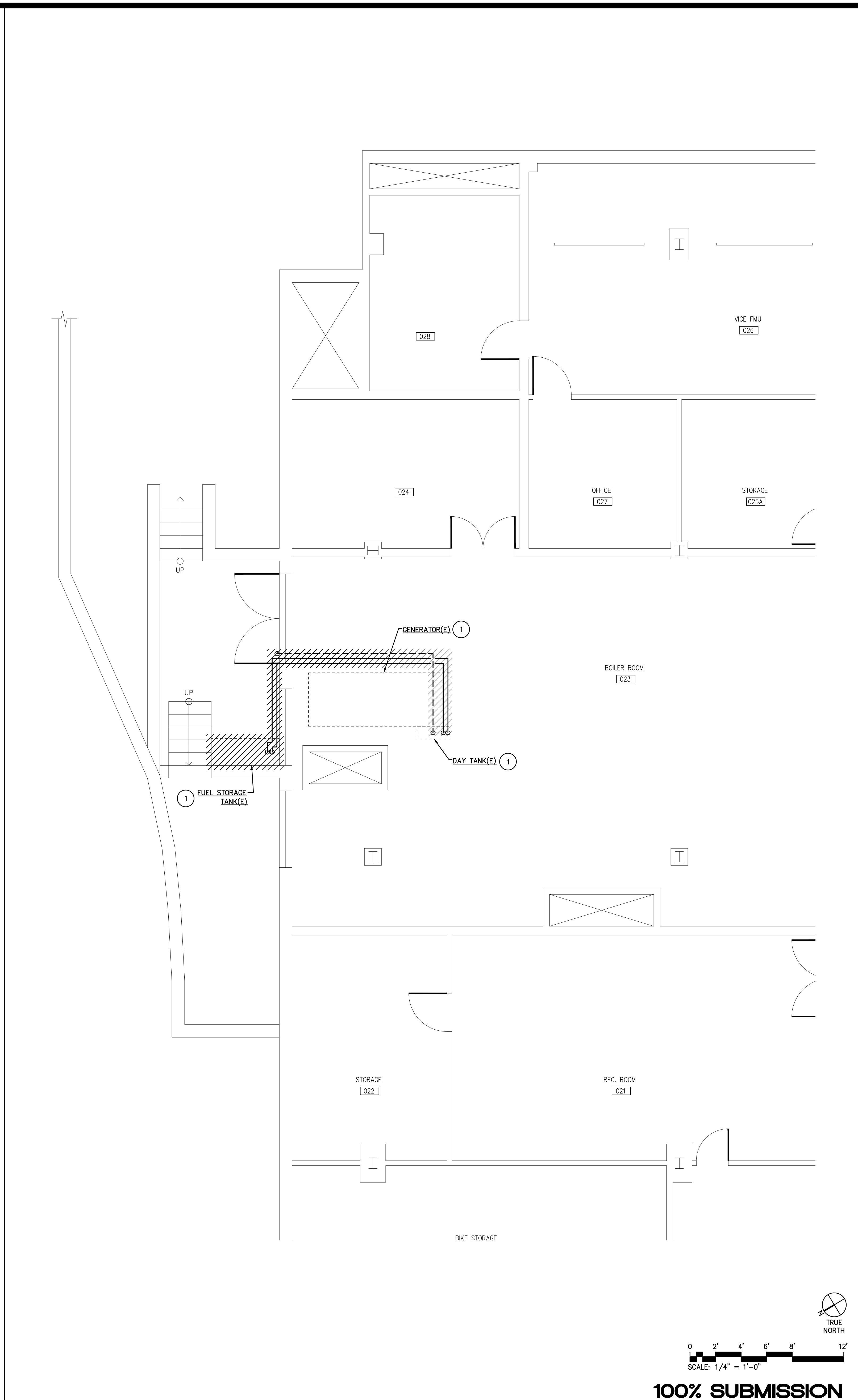
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TEL. 202/797-5000 FAX 202/797-5003

SUB-CONSULTANT	SEAL

Dwg. Coord.: JMB	Tech. Coord.: DFA	Project NO.:	SEE PLOT STAMP
LEGEND, ABBREVIATIONS, GENERAL NOTES, SCHEDULES, AND DRAWING LIST			<b>P-001</b>
100% SUBMISSION			09/14/2022



2  
P-101  
**BASEMENT FLOOR PLAN - NEW WORK**  
SCALE: 1/4" = 1'-0"



1  
P-101  
**BASEMENT FLOOR PLAN - DEMOLITION**  
SCALE: 1/4" = 1'-0"

**GENERAL NOTES**

- SEE P-001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REMOVAL, PROVISION, AND INSTALLATION OF ALL EMERGENCY GENERATOR EQUIPMENT AND ANY ASSOCIATED CONTROLS, VALVES, AND OTHER APPURTENANCES REQUIRED FOR A FULLY FUNCTIONING SYSTEM.

**DEMOLITION KEY NOTES**

- EXISTING GENERATOR, DAY TANK, FUEL STORAGE TANK, AND ALL ASSOCIATED PIPING AND VENTING TO BE REMOVED.

**NEW WORK KEY NOTES**

- NEW 25 GALLON DAY TANK WITH INTEGRAL FUEL SUPPLY AND RETURN PUMPS.
- PROVIDE 300 GALLON UL-2085 RATED DIESEL FUEL STORAGE TANK. BODY: HIGHLAND TANK 350 CYLINDRICAL TANK. FURNISH WITH MANUFACTURER FUEL LEVEL SENSORS AND CONTROLS REQUIRED FOR FULLY FUNCTIONING EMERGENCY GENERATOR AND DAY TANK OPERATION.
- ROUTE NEW VENTING AND FUEL PIPING THROUGH EXISTING OPENINGS IN LOUVER LEFT OVER FROM DEMOLISHED PIPING. INSTALL PIPING TO MAXIMIZE INTAKE LOUVER FREE AREA.
- RACK FUEL SUPPLY AND RETURN PIPING ON WALL ABOVE ALL LOUVER OPENINGS AND EQUIPMENT. SEPARATION BETWEEN PIPING SHOWN FOR CLARITY.

#	Date	Change Description

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SUB-CONSULTANT	SEAL

Dwg. Coord.:	Tech. Coord.:	Project NO.:	SEE PLOT STAMP
<b>BASEMENT FLOOR PLAN DEMOLITION AND NEW WORK</b>			<b>P-101</b>
100% SUBMISSION			09/14/2022

**100% SUBMISSION**



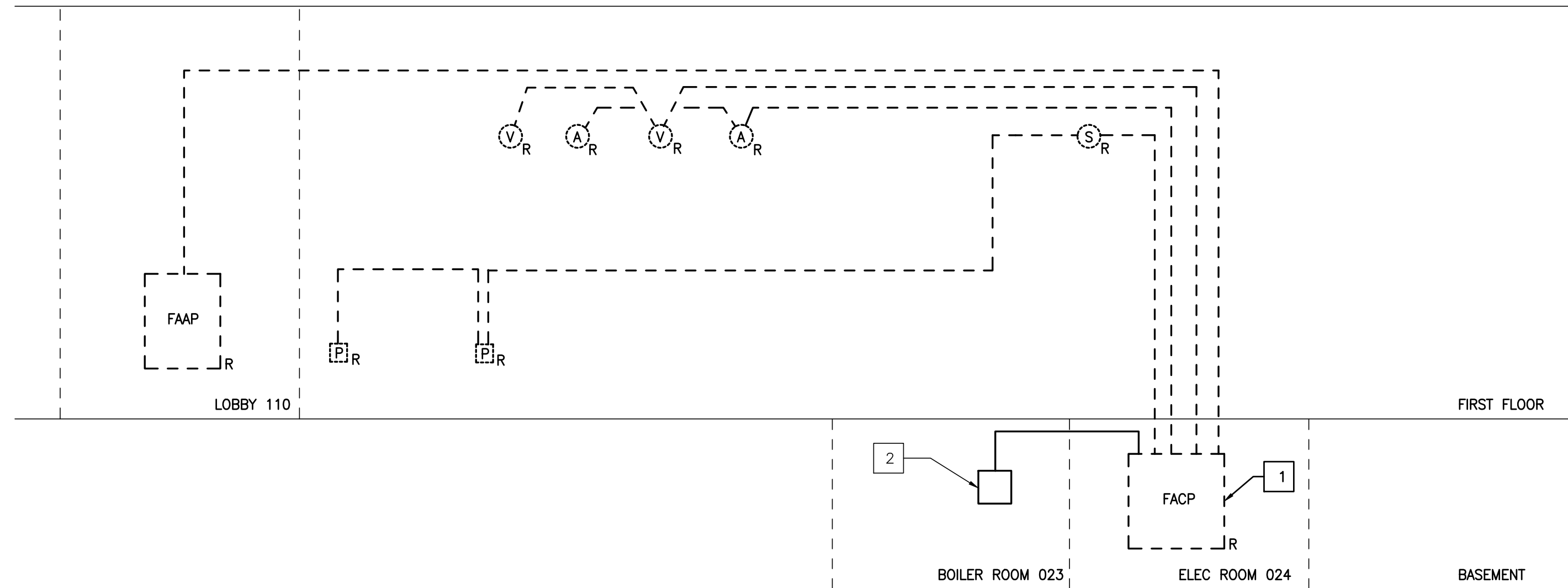
TRUE NORTH

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CODES LISTED BELOW:

1. BUILDING: 2015 ICC INTERNATIONAL BUILDING CODE (IBC)
2. DCMR12A-2017 BUILDING CODE SUPPLEMENT
3. EXISTING BUILDING: 2015 ICC INTERNATIONAL EXISTING BUILDING CODE & DCMR12J-2017 EXISTING BUILDING CODE SUPPLEMENT
4. NATIONAL FIRE ALARM AND SIGNALING CODE NFPA 72 - 2013.
5. DC FIRE CODE 2017.

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FA-001

**APPLICABLE CODES**



**KEY NOTES:**

- 1 EXISTING EST2 FIRE ALARM CONTROL PANEL.
- 2 NEW GENERATOR REMOTE INDICATION PANEL. REFER TO SHEET FA-101 FOR EXACT LOCATION.

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FA-001

**PARTIAL FIRE ALARM RISER DIAGRAM**

NOT TO SCALE

1. ALL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE USED FOR EXACT MEASURE OR FABRICATION. CONTRACTOR SHALL INSTALL ALL FIRE ALARM COMPONENTS IN ACCORDANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL COORDINATE INSTALLATION OF SYSTEM CONDUIT AND OTHER COMPONENTS WITH ALL OTHER TRADES.
2. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND OTHER OWNER REQUIREMENTS.
3. IN CASE OF DISPUTE AS TO INTENT OF DRAWING OR SPECIFICATIONS, OBTAIN ARCHITECT'S/ENGINEER'S WRITTEN APPROVAL BEFORE PROCEEDING WITH BID.
4. DESIGN AND INSTALL THE FIRE ALARM SYSTEM TO MEET THE REQUIREMENTS OF ALL CODES AND STANDARDS LISTED IN THE CONTRACT DOCUMENTS.
5. IN ADDITION TO SHOP DRAWINGS, CONTRACTOR SHALL SUBMIT CURRENT DRAW AND VOLTAGE DROP CALCULATIONS AND SAMPLES AS REQUIRED BY NFPA 72, OWNER, AND ARCHITECT REQUIREMENTS.
6. CHANGES IN THE LOCATIONS OF EQUIPMENT FROM THOSE SHOWN ON APPROVED SHOP DRAWINGS SHALL BE IDENTIFIED AND APPROVED IN WRITING PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECTIFYING UNAUTHORIZED NONCOMPLIANT CHANGES AT NO ADDITIONAL CHARGE TO THE OWNER.
7. THE CONTRACTOR IS SPECIFICALLY RESPONSIBLE FOR ALL MEANS AND METHODS OF JOB SAFETY. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
8. ALL EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED.
9. ALL DEVICES NEEDED FOR A COMPLETE AND WORKING FIRE ALARM SYSTEM ARE NOT SHOWN ON THESE CONCEPT DRAWINGS. PROVIDE EQUIPMENT AS NECESSARY FOR A FULLY OPERATIONAL SYSTEM.
10. THE INSTALLING CONTRACTOR SHALL CONTRACT WITH A SINGLE SOURCE FOR SUPPLYING JOB MATERIALS, SERVICES, AND PROGRAMMING, INCLUDING FINAL INSPECTION/TEST SERVICES AND FM AND UL LISTING FOR THE COMPLETED FIRE ALARM SYSTEM.
11. IN ALL AREAS WITH DROP CEILINGS, CEILING-MOUNT FIRE ALARM DEVICES SHALL BE LOCATED IN THE CENTER OF THE CEILING TILE.
12. ALL WALL MOUNTED EQUIPMENT SHALL BE SURFACE MOUNTED.
13. VISIBLE AND COMBINATION AUDIBLE/VISIBLE ALARM NOTIFICATION APPLIANCES SHALL BE MOUNTED AT A MINIMUM OF 80-INCHES AND MAXIMUM OF 96-INCHES ABOVE THE FINISHED FLOOR MEASURED TO THE BOTTOM OF THE LENS, OR 6-INCHES BELOW THE CEILING MEASURED TO THE TOP OF THE LENS (WHICH EVER IS LOWER).
14. ADDRESSABLE CONTROL/RELAY MODULES UTILIZED FOR ANY SHUTDOWN OR ACTIVATION FUNCTIONS SHALL BE MOUNTED WITHIN THREE (3) FEET OF THE CONTROLLED CIRCUIT OR DEVICE.
15. UL CLASSIFICATIONS AND MATERIAL PRODUCT DATA SHEETS FOR ALL FIRE STOPPING SYSTEMS SHALL BE SUBMITTED AND APPROVED BEFORE ANY FIRE STOPPING IS INSTALLED.
16. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN-UP IS COMPLETE AND FINAL INSTALLATION AND TERMINATIONS OF ALL WIRE SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS.
17. PROVIDE SYSTEM EXTENDER PANEL FOR ALL NEW CIRCUITS. NEW PANEL SHALL BE UL LISTED AND PROVIDE WITH BATTERY BACK-UP PER NFPA. CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT, WIRING AND DEVICES TO INTERFACE WITH THE BUILDING FIRE ALARM SYSTEM PANEL.
18. WHERE MULTIPLE STROBE DEVICES ARE INSTALLED IN A COMMON AREA, PROVIDE SYNCHRONIZED STROBES TO ALLOW FLASH TO OCCUR SIMULTANEOUSLY.
19. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN A MINIMUM OF 3/4" CONDUIT. THE CONTRACT MAY USE UL LISTED 'MC' METAL CLAD FIRE ALARM CABLE. 'MC CABLE MAY BE USED IN CONCEALED AREAS ONLY. WHERE FIRE ALARM CABLING NEEDS TO BE INSTALLED EXPOSED, ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. ALL FIRE ALARM WIRING AND CONDUIT SHALL BE RED.
- 19.1. ALL WIRING TO DEVICES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S REQUIREMENTS.
- 19.2. FIRE ALARM WIRING SHALL NOT BE INSTALLED IN THE SAME CONDUIT OR JUNCTION BOXES AS POWER AND LIGHTING WIRING.
- 19.3. ALL WIRE SPLICING SHALL BE PERFORMED IN JUNCTION BOXES SIZED TO ACCOMMODATE TERMINAL BLOCKS (NUMBERS AS REQUIRED). ALL CONNECTIONS SHALL BE MADE WITH APPROVED CRIMP-ON TERMINAL SPADE LUGS, PRESSURE-TYPE TERMINAL BLOCKS OR PLUG CONNECTORS. CABLE TAPS OR T-TAPS ARE NOT ALLOWED.

- [□] FIRE ALARM - KEY-OPERATED ONLY PULL STATION - MH +48" A.F.F.
- [AV] 30 FIRE ALARM - AUDIO/VISUAL NOTIFICATION DEVICE - WALL MOUNTED AT +80" A.F.F. & AT LEAST 6" BELOW FINISHED CEILING (UON) - NUMBER INDICATES EFFECTIVE INTENSITY (CANDELA).
- [V] 75 FIRE ALARM - VISUAL NOTIFICATION DEVICE - WALL MOUNTED AT +80" A.F.F. & AT LEAST 6" BELOW FINISHED CEILING (UON) - NUMBER INDICATES EFFECTIVE INTENSITY (CANDELA).
- [A] FIRE ALARM - AUDIBLE NOTIFICATION DEVICE - WALL MOUNTED AT +80" A.F.F. & AT LEAST 6" BELOW FINISHED CEILING (UON)
- [S] FIRE ALARM - PHOTO ELECTRIC TYPE SMOKE DETECTOR - CEILING MOUNTED (UON)
- [FACP] FIRE ALARM CONTROL PANEL
- [FAAP] FIRE ALARM REMOTE ANNUNCIATOR PANEL

**APPLICABLE TO ALL EXISTING/DEMOLITION/RENOVATION AND/OR NEW WORK FIRE ALARM DRAWINGS**

1. ALL EXISTING FIRE ALARM INSTALLATIONS ARE INDICATED WITH DASHED LINES.
2. SYMBOL (X) INDICATES EXISTING FIRE ALARM EQUIPMENT AND DEVICES TO BE REMOVED.
3. SYMBOL (R) INDICATES EXISTING FIRE ALARM EQUIPMENT AND DEVICES TO REMAIN AND BE COORDINATED WITH NEW FIRE ALARM WORK AS SHOWN.
4. SYMBOL (XR) INDICATES EXISTING FIRE ALARM EQUIPMENT AND DEVICES TO BE RELOCATED.
5. SYMBOL (RR) INDICATES NEW LOCATION OF EXISTING RELOCATED FIRE ALARM EQUIPMENT AND DEVICES.

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FA-001

**GENERAL NOTES**

4  
FA-001

**SYMBOL LIST**

1  
FA-001

**DRAWING LIST**

3  
FA-001

**PARTIAL FIRE ALARM SYSTEM MATRIX**

DEVICE	ACTION	
	SUPERVISORY CONDITION	TROUBLE CONDITION
AC POWER LOSS		●
ATS IN NON-AUTO POSITION	●	
GENERATOR RUNNING	●	
GENERATOR TANK LOW FUEL LEVEL	●	
GENERATOR FAILURE TO START	●	
GENERATOR LOW OIL LEVEL	●	
GENERATOR HIGH OIL TEMPERATURE	●	
GENERATOR LOW COOLANT LEVEL	●	
GENERATOR LOW BATTERY	●	

**GENERAL NOTES:**

1. ANY OF THE ALARM CONDITIONS LISTED ABOVE WILL SEND A SIGNAL TO FACP AUXILIARY ALARM. AUXILIARY ALARM WILL INDICATE GENERATOR ALARM CONDITION. ALARM CONDITION WILL BE INDICATED AT GENERATOR REMOTE INDICATION PANEL, LOCATED IN BOILER ROOM 023.

2  
FA-001

**ABBREVIATIONS**

- A.F.F. ABOVE FINISHED FLOOR
- AHU AIR HANDLING UNIT
- CD CANDELA
- FACP FIRE ALARM CONTROL PANEL
- FM FACTORY MUTUAL RESEARCH
- MH MOUNTING HEIGHT
- MC METAL CLAD
- UON UNLESS OTHERWISE NOTED
- UL UNDERWRITERS' LABORATORIES
- WP WEATHERPROOF

**DWG. NO. TITLE:**

- FA-001 DRAWING LIST, ABBREVIATIONS, SYMBOL LIST, AND NOTES
- FA-101 BASEMENT PLAN - NEW WORK - FIRE ALARM

#	Date	Change Description

**DGS BUILD MAINTAIN SUSTAIN**  
 DEPARTMENT OF GENERAL SERVICES  
 MPD 2ND DISTRICT HEADQUARTERS RENOVATION  
 3320 IDAHO AVENUE, NW, WASHINGTON D.C. 20018  
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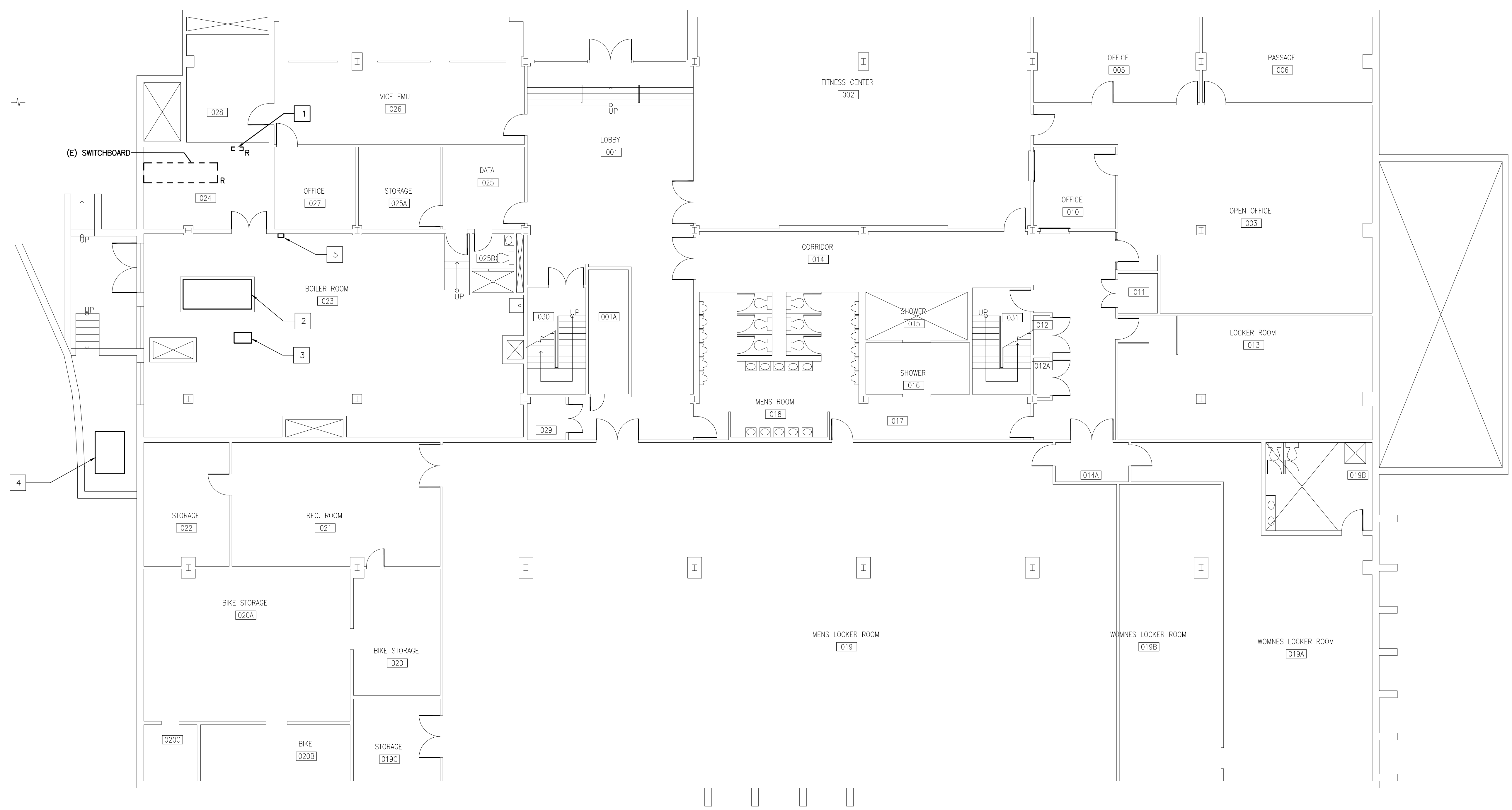
SUB-CONSULTANT	SEAL
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Dwg. Coord.: CSG Tech. Coord.: LAP Project NO: SEE PLOT STAMP

DRAWING LIST, ABBREVIATIONS, SYMBOL LIST, AND NOTES **FA-001**

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**GENERAL NOTES**

1. REFER TO SYMBOLS AND NOTES ON SHEET FA-001.
2. REFER TO DETAIL 6/FA-001 FOR PARTIAL FIRE ALARM SYSTEM RISER DIAGRAM.

**KEY NOTES**

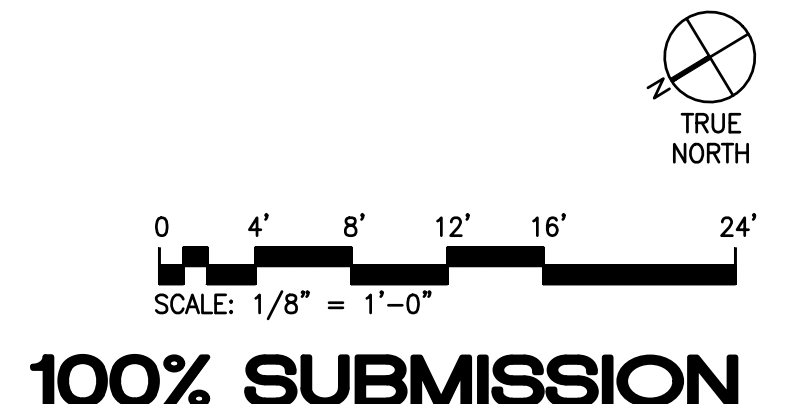
- |   |   |
|---|---|
| 1 | EXISTING EDWARDS SYSTEM TECHNOLOGIES EST2 FIRE ALARM CONTROL PANEL TO REMAIN. |
| 2 | NEW GENERATOR.  |
| 3 | NEW GENERATOR DAY TANK.   |
| 4 | NEW GENERATOR FUEL TANK.  |
| 5 | NEW GENERATOR REMOTE INDICATION PANEL.  |

#	Date	Change Description

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Dwg. Coord.: CSG	Tech. Coord.: LAP
Project NO.: SEE PLOT STAMP	
<b>BASEMENT PLAN - NEW WORK - FIRE ALARM</b>	<b>FA-101</b>
100% SUBMISSION	09/14/2022



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1. ALL WIRING SHALL BE RATED FOR 75 DEGREES CELSIUS. ALL CONDUCTORS SHALL BE COPPER. MINIMUM WIRE SIZE SHALL BE #12 AWG AND MINIMUM CONDUIT SIZE SHALL BE 3/4".

2. ELECTRICAL METALLIC TUBING (EMT) CONDUIT TO BE USED INSIDE OF BUILDING. POLYVINYL CHLORIDE CONDUIT (PVC) TO BE USED UNDERGROUND. RIGID METALLIC CONDUIT (RMC) TO BE USED ABOVE GROUND OUTSIDE BUILDING. PVC CONDUITS SHALL BE TRANSITIONED TO RMC. RMC CONDUITS SHALL EXTEND FROM MINIMUM OF 2 FT BELOW GRADE TO MINIMUM OF 1 FT ABOVE GRADE. BELOW GRADE RMC SHALL BEGIN AT POINT OF VERTICAL TRANSITION. ALL RMC CONDUITS IN CONTACT WITH EARTH TO BE CORROSION PROTECTED. CORROSION PREVENTION MAY BE MANUFACTURED OR FIELD APPLIED AS WILL BE INDICATED IN DRAWING DETAILS AND SPECIFICATIONS.

3. PROVIDE EACH 120V, 20A BRANCH CIRCUIT FROM LIGHTING AND APPLIANCE PANELBOARDS WITH A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR. NO SHARED NEUTRALS ARE PERMITTED. BRANCH CIRCUIT HOME RUN WIRING MAY BE COMBINED UP TO MAXIMUM OF (9) CURRENT CARRYING CONDUCTORS IN A CONDUIT SIZED PER NFPA 70. NEUTRALS SHALL BE INCLUDED AS CURRENT CARRYING CONDUCTORS.

4. THESE ARE STANDARD COVER SHEET ABBREVIATION LISTS AND SYMBOLS. DISREGARD UNUSED ABBREVIATIONS AND SYMBOLS.

5. FOR LOCATION OF MECHANICAL EQUIPMENT, REFER TO MECHANICAL PLANS.

6. PROVIDE NO 10 AWG PHASE, NEUTRAL, AND GROUND CONDUCTORS FOR 120 VOLT, 20 AMPERE BRANCH CIRCUITS EXCEEDING 100 FEET AND FOR 277 VOLT, 20 AMPERE CIRCUITS EXCEEDING 200 FEET.

**5**  
**E-001** **GENERAL NOTES**

1. APPLICABLE CODES ARE 2015 ICC, 2015 IBC AND 2014 NEC, WITH DCMR 12C 2017 DC ELECTRICAL CODE SUPPLEMENT.

2. ALL EXISTING ELECTRICAL INSTALLATIONS (SYSTEMS, EQUIPMENT, FEEDERS, WIRING, DEVICES ETC.) ARE INDICATED WITH DASHED LINES (UON).

3. ALL NEW ELECTRICAL INSTALLATIONS (SYSTEMS, EQUIPMENT, FEEDERS WIRING, DEVICES ETC.) ARE INDICATED WITH SOLID LINES (UON).

4. SYMBOL (X) INDICATES EXISTING ELECTRICAL EQUIPMENT AND DEVICES TO BE REMOVED, INCLUDING ALL ASSOCIATED WIRING AND CONDUITS BACK TO THE POWER SOURCE. EXISTING CONDUITS CONCEALED IN DRY WALLS SHALL BE ABANDONED IN PLACE AND EXISTING CONDUITS EMBEDDED IN CONCRETE SLABS OR BRICK WALLS SHALL BE SAW CUT FLUSH WITH THE SURFACE, CAPPED AND FILLED WITH THE EXISTING SURFACE LIKE MATERIAL. EXISTING WIRING SHALL BE REMOVED BACK TO THE POWER SOURCE.

5. SYMBOL (R) INDICATES EXISTING ELECTRICAL EQUIPMENT AND DEVICES TO REMAIN, AND BE COORDINATED WITH NEW ELECTRICAL WORK AS SHOWN ON DRAWINGS.

6. SYMBOL (XR) INDICATES EXISTING ELECTRICAL EQUIPMENT AND DEVICES TO BE DISCONNECTED, REMOVED AND BE REINSTALLED IN A NEW LOCATION - UNLESS OTHERWISE INDICATED AND/OR REQUIRED REMOVE ALL ASSOCIATED WIRING AND CONDUITS (EXISTING CONDUITS EMBEDDED IN SLABS AND CONCEALED IN WALLS SHALL BE CUT, CAPPED AND ABANDONED IN PLACE (SURFACE SHALL BE PATCHED TO MATCH SURROUNDING SURFACE)).

7. SYMBOL (RR) INDICATES EXISTING ELECTRICAL RELOCATED (REUSED) EQUIPMENT AND DEVICES; REINSTALL AND RECONNECT EQUIPMENT AND DEVICES IN THE NEW LOCATION AS INDICATED AND COORDINATE WITH NEW ELECTRICAL WORK.

8. DISCONNECTION OF ELECTRICAL SERVICES: PRIOR TO COMMENCING DEMOLITION IN ANY AREA, THE CONTRACTOR SHALL CONTACT THE PROJECT MANAGER TO OBTAIN SPECIAL SHUT-DOWN DETAILS THAT ARE REQUIRED TO BE PART OF THE DOCUMENTATION.

9. DEMOLITION: PROVIDE DISCONNECTION, DEMOLITION AND RENOVATION WORK AS SPECIFIED AND INDICATED ON DRAWINGS.

10. WHERE CONDUIT AND WIRING TO REMAIN ARE INADVERTENTLY DAMAGED OR DISTURBED, CUT OUT AND REMOVE DAMAGED PORTION AND ALL DAMAGED WIRING FROM THE SOURCE SWITCHBOARD, PANELBOARD OR PULLBOX TO THE DESTINATION CONNECTION POINT. PROVIDE NEW WIRING OF EQUAL CAPACITY.

11. ACCESSIBLE WORK: EXPOSED CONDUIT TO BE DEMOLISHED SHALL BE REMOVED.

12. WIRING TO BE DEMOLISHED SHALL BE REMOVED FROM BOTH CONCEALED AND EXPOSED CONDUIT BACK TO THE POWER SOURCE. NO WIRING WHICH BECOMES UNUSED AS A RESULT OF THE CONTRACT SHALL BE ABANDONED IN PLACE.

13. CONDUIT: REMOVE ALL EXPOSED AND CONCEALED CONDUITS BACK TO THE POWER SOURCE, CONDUIT EMBEDDED IN CONCRETE OR BRICK WALLS: SAW CUT EXPOSED PORTION OF CONDUIT FLUSH WITH ADJACENT SURFACES AND CAP CONDUIT.

14. REMOVAL: EQUIPMENT SPECIFIED OR INDICATED TO BE DEMOLISHED, SHALL BE REMOVED FROM THE PROJECT SITE AND SHALL NOT BE REUSED. PRIOR TO REMOVAL OF ALL DEMOLISHED ELECTRICAL EQUIPMENT CONTACT THE PROJECT MANAGER.

15. TEMPORARY DISCONNECTION: EQUIPMENT REQUIRED TO BE TEMPORARILY DISCONNECTED AND RELOCATED SHALL BE CAREFULLY REMOVED, STORED, CLEANED REINSTALLED, RECONNECTED AND MADE OPERATIONAL.

16. IN THE CONSTRUCTION AREA, UNUSED SLOTS, SLEEVES, AND ALL OTHER PENETRATIONS IN FLOOR / CEILING ASSEMBLIES OR FIRE RATED WALLS SHALL BE CLOSED AND SEALED WITH U.L. LISTED FIRE STOPPING MATERIALS.

**4**  
**E-001** **EXISTING - DEMOLITION / RENOVATION WORK NOTES**

**3**  
**E-001** **SYMBOL LIST**

**LBL-4**  
LIGHTING FIXTURE - RECESSED OR SURFACE MOUNTED - SUBSCRIPT OF UPPERCASE LETTER (i.e. A, B, etc.) INDICATES FIXTURE TYPE - SEE LIGHTING SCHEDULE - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER - SUBSCRIPT OF LOWERCASE LETTER (a, b, c) INDICATES SWITCHING CIRCUIT OF LIGHTS

**UNSWITCHED LIFE SAFETY LIGHTING FIXTURE WITH INTEGRAL BATTERY BACKUP - RECESSED MOUNTED - SUBSCRIPT OF UPPERCASE LETTER (i.e. A, B, etc.) INDICATES FIXTURE TYPE - SEE LIGHTING SCHEDULE - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER**

**LBL-5**  
TASK LIGHTING FIXTURE - WALL MOUNTED - SUBSCRIPT OF UPPERCASE LETTER (i.e. A, B, etc.) INDICATES FIXTURE TYPE - SEE LIGHTING SCHEDULE - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER

**EXIT SIGN LIGHTING FIXTURE - CEILING OR WALL MOUNTED - HATCHING INDICATES FACE - DIRECTIONAL ARROWS AS INDICATED - SUBSCRIPT OF LETTER (i.e. A, B, etc.) INDICATES FIXTURE TYPE - SEE LIGHTING SCHEDULE - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER**

**WALL MOUNTED EMERGENCY LIGHTING UNIT - SUBSCRIPT OF LETTER (i.e. A, B, etc.) INDICATES FIXTURE TYPE - SEE LIGHTING SCHEDULE - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER**

**S, S3**  
TOGGLE TYPE, 20A, 277V, 60 HZ SWITCH, SINGLE POLE OR 3 WAY - MH +48" A.F.F. (UON).

**S†, S†3**  
TAMPER PROOF SURFACE MOUNTED TOGGLE TYPE, 20A, 277V, 60 HZ SWITCH, SINGLE POLE OR 3 WAY - MH +48" A.F.F. (UON).

**SL**  
LOW VOLTAGE, ON/OFF SWITCH - MH +48" A.F.F. (UON) - SIMILAR TO ACUITY CONTROLS, CAT. #P00M OR EQUAL.

**SD**  
LOW VOLTAGE, ON/OFF + RAISE/LOWER SWITCH - MH +48" A.F.F. (UON) - SIMILAR TO ACUITY CONTROLS, CAT. #P00M DX OR EQUAL.

**MS**  
CEILING MOUNTED DUAL TECHNOLOGY AUTOMATIC MOTION DETECTOR OCCUPANCY SENSOR LIGHTING SWITCH LOW VOLTAGE WITH MANUAL-ON OR AUTO-ON, AUTO-OFF CONTROL, LIGHTED INDICATOR AND TIME ADJUSTMENT. WATTAGE CAPACITY AS REQUIRED BY CONTROLLING CIRCUIT LOAD. SIMILAR TO ACUITY CONTROLS, CAT. #MCM PDT OR EQUAL.

**MSD**  
CEILING MOUNTED DUAL TECHNOLOGY AUTOMATIC MOTION DETECTOR OCCUPANCY SENSOR LIGHTING SWITCH, LOW VOLTAGE WITH MANUAL-ON, AUTO-OFF CONTROL, AUTOMATIC DIMMING CONTROL, LIGHTED INDICATOR AND TIME ADJUSTMENT. WATTAGE CAPACITY AS REQUIRED BY CONTROLLING CIRCUIT LOAD. SIMILAR TO ACUITY CONTROLS, CAT. #MCM PDT A5CX OR EQUAL.

**LBL-4**  
**PP**  
POWER PACK, SIMILAR TO ACUITY CONTROLS, CAT. #APP16 EFP OR EQUAL - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-4, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**LBL-2**  
**PPD**  
POWER PACK WITH DIMMING OPTION, SIMILAR TO ACUITY CONTROLS, CAT. #APP16 D EFP SA OR EQUAL - UPPERSCRIPT OF LETTERS AND NUMBER (LBL-2, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**PS**  
REMOTELY MOUNTED PHOTOCELL.

**PG-3** **PG-6**  
**Φ**  
DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLET. MH +18" A.F.F. (UON) SLASH INDICATES MOUNTING 3" ABOVE BACKSPASH OF COUNTER TOP. UPPERSCRIPT OF LETTERS AND NUMBER (PG-6, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**PG-3** **PG-6**  
**Φ†**  
TAMPER PROOF DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLET. MH +18" A.F.F. (UON) SLASH INDICATES MOUNTING 3" ABOVE BACKSPASH OF COUNTER TOP. UPPERSCRIPT OF LETTERS AND NUMBER (PG-6, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**PG-24**  
**Φ**  
SURFACE MOUNTED TWO (2) DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE, GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLETS UNDER A SINGLE COVER PLATE - MH +18" A.F.F. (UON) - UPPERSCRIPT OF LETTERS AND NUMBER (PG-24, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**P-2-20** **P-2-35**  
**Φ** **Φ†**  
SURFACE MOUNTED GROUND FAULT DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLET. MH +18" A.F.F. (UON) SLASH INDICATES MOUNTING 3" ABOVE BACKSPASH OF COUNTER TOP. UPPERSCRIPT OF LETTERS AND NUMBER (P-2-20, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**PG-24**  
**Φ**  
SPECIAL PURPOSE RECEPTACLE OUTLET - REFER TO ELECTRICAL SHEETS FOR CHARACTERISTICS - UPPERSCRIPT OF LETTERS AND NUMBER (PG-24, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**P-2-20**  
**Φ**  
IN FLOOR MOUNTED RECESSED, FLUSH TO FINISHED FLOOR 4"(L) X 2"(W) X 2"(D) DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLET - UPPERSCRIPT OF LETTERS AND NUMBER (P-2-20, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER. CONDUIT IS 3/4" PVC SCHEDULE 40 UNLESS OTHERWISE NOTED. USE THOMAS & BETTS MODEL #SP6423 OR APPROVED EQUAL.

**PG-24**  
**Φ**  
TWO (2) DUPLX 20A, 125V, 60HZ, 2 POLE, 3 WIRE, GROUNDED NEMA 5-20R COMMERCIAL GRADE RECEPTACLE OUTLETS UNDER A SINGLE COVER PLATE - IN FLOOR MOUNTED RECESSED, FLUSH TO FINISHED FLOOR - UPPERSCRIPT OF LETTERS AND NUMBER (PG-24, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**M1-5**  
**⊙**  
JUNCTION BOX, CEILING, IN-FLOOR OR WALL MOUNTED - 4"(L) X 2"(W) X 2"(D) - UPPERSCRIPT OF LETTERS AND NUMBER (M1-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER. CONDUIT IS 3/4" PVC SCHEDULE 40 UNLESS OTHERWISE NOTED.

**M1-5**  
**⊙V**  
14, 120V JUNCTION BOX FOR HVAC CONTROLS - 4"(L) X 2"(W) X 2"(D) - UPPERSCRIPT OF LETTERS AND NUMBER (M1-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER. CONDUIT IS 3/4" PVC SCHEDULE 40 UNLESS OTHERWISE NOTED.

**PG-7**  
**⊙**  
POKE-THRU DEVICE FOR POWER AND TELECOM SERVICE - UPPERSCRIPT OF LETTERS AND NUMBER (PG-7, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**M2-9**  
**⊏**  
NON FUSED DISCONNECT SWITCH - HP RATED - UPPERSCRIPT OF LETTERS AND NUMBER (M2-9, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**M2-9**  
**⊏**  
FUSED DISCONNECT SWITCH - HP RATED - UPPERSCRIPT OF LETTERS AND NUMBER (M2-9, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**M2-5**  
**SM**  
MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION - UPPERSCRIPT OF LETTERS AND NUMBER (M2-5, etc.) INDICATES PANELBOARD AND CIRCUIT OF PANELBOARD PROVIDING POWER.

**PB**  
PUSH BUTTON FOR DOOR OPERATOR.

**▽**  
SURFACE MOUNTED TELECOM OUTLET WITH COVER PLATE IN A SINGLE GANG BACKBOX - PROVIDE 1 PORT FOR DATA, 1 PORT FOR TELEPHONE - WALL MOUNTED AT 18" A.F.F. (UON).

**▽†**  
TAMPER PROOF SURFACE MOUNTED TELECOM OUTLET WITH COVER PLATE IN A SINGLE GANG BACKBOX - PROVIDE 1 PORT FOR DATA, 1 PORT FOR TELEPHONE - WALL MOUNTED AT 18" A.F.F. (UON).

**▽**  
SURFACE MOUNTED TELEPHONE OUTLET WITH COVER PLATE IN A SINGLE GANG BACKBOX - PROVIDE 1 PORT FOR TELEPHONE AND 1 SPARE PORT - WALL MOUNTED AT 54" A.F.F. (UON).

**VI**  
IN FLOOR MOUNTED RECESSED, FLUSH TO FINISHED FLOOR COMMUNICATION OUTLET WITH COVER PLATE IN A 4"(L) X 2"(W) X 2"(D) SQUARE BACKBOX - MINIMUM CONDUIT SIZE 1-INCH PVC SCHEDULE 40 - PROVIDE PULL STRING. USE THOMAS & BETTS MODEL #SP6423 OR APPROVED EQUAL.

**SP**  
SPEAKER, CEILING MOUNTED

**CR**  
CARD READER

**IC**  
SECURITY - INTERCOM, WALL MOUNTED

**⊕**  
SECURITY CAMERA, WALL OR CEILING MOUNTED

**⊕**  
WALL MOUNTED DOME CAMERA

**⊕**  
360 DEGREE SECURITY CAMERA, CEILING MOUNTED

**⊕**  
TAMPER PROOF SECURITY CAMERA, WALL CORNER MOUNTED.

**↔**  
BRANCH CIRCUIT WIRING AND CONDUIT CONCEALED ABOVE CEILING, IN SLAB, BELOW FLOOR OR WALL - MIN. CONDUIT SIZE 3/4"

**↔**  
BRANCH CIRCUIT WIRING AND CONDUIT EXPOSED - STRAIGHT RUNS PARALLEL OR PERPENDICULAR TO BUILDING WALLS - MIN CONDUIT SIZE 3/4"

**□**  
ELECTRICAL PANELBOARD - SURFACE MOUNTED

**□**  
ELECTRICAL PANELBOARD - RECESSED MOUNTED

**→**  
HOMERUN TO PANELBOARD - NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS - NUMBER OF HASHMARKS INDICATES NUMBER OF PHASE, NEUTRAL OR SWITCHED WIRES (IF MORE THAN TWO) - LETTER AND NUMERAL INDICATE PANEL AND CIRCUIT. (INCLUDE GROUND CONDUCTOR AS PER NEC)

**1**  
**E-001** **DRAWING LIST**

**2**  
**E-001** **ABBREVIATIONS**


A	AMPERE(S)	JB	JUNCTION BOX
A.C.	ALTERNATING CURRENT	K	KEY OPERATED
ACB	AIR CIRCUIT BREAKER	KAC	THOUSAND AMPERE INTERRUPTING CAPACITY
AF	FRAME SIZE IN AMPERES	KVA	KILOVOLT AMPERE(S)
A.F.F.	ABOVE FINISHED FLOOR	KVAR	KILOVARI(S)
A.F.G.	ABOVE FINISHED GRADE	KW	KILOWATT(S)
AHU	AIR HANDLING UNIT	LTS	LIGHTING
A.I.C.	AMPERE INTERRUPTING CAPACITY	LV	LOW VOLTAGE
AL	ALUMINUM	MC	METAL CLAD
ALT	ALTERNATE	M.C.	MECHANICAL CONTRACTOR
AT	TRIP SIZE IN AMPERES	MCA	MINIMUM CIRCUIT AMPACITY
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
AUX	AUXILIARY	MCC	MOTOR CONTROL CENTER
A/V	AUDIO VISUAL	MCM	THOUSAND CIRCULAR MIL(S)
AWG	AMERICAN WIRE GAUGE	MDP	MAIN DISTRIBUTION PANEL
BAS	BUILDING AUTOMATION SYSTEM	MH	MOUNTING HEIGHT
BD	BUSDUCT	MI	MINERAL INSULATED
BLDG	BUILDING	MLO	MAIN LUGS ONLY
BKR	BREAKER	MOP	MAXIMUM OVERCURRENT PROTECTION
BMS	BUILDING MANAGEMENT SYSTEM	MP	MEGAPIXEL
C	CONDUIT	MTS	MANUAL TRANSFER SWITCH
CB	CIRCUIT BREAKER	N	NORMAL
CC	CONTROL CABINET	NU	NEUTRAL
CCV	CLOSED CIRCUIT TELEVISION	NB	NORMAL BYPASS
CLO	CEILING	NC	NORMALLY CLOSED
CKT	CIRCUIT	NEC	NATIONAL ELECTRICAL CODE
COND	CONDUCTOR	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
CONN	CONNECT	NEF	NON-FUSED
CONT	CONTROLLER	NFES	NON-FUSED SAFETY SWITCH
CP	CONTROL PANEL	N.I.C.	NOT IN CONTRACT
CS	COMPUTER STATION	NO	NORMALLY OPEN
CT	CURRENT TRANSFORMER	NTS	NOT TO SCALE
CU	COPPER	O.C.	ON CENTER
D.C.	DIRECT CURRENT	OL	OVERLOAD ELEMENT
DIM	DIMMER CONTROL	OP	NUMBER OF POLES
DISC	DISCONNECT	PB	PULLBOX
DOWN	DOWN	P/B	PUSH-BUTTON
DPP	DISTRIBUTION POWER PANEL	PDU	POWER DISTRIBUTION UNIT
DP	DOUBLE POLE	PF	POWER FACTOR
DT	DOUBLE THROW	PH	NUMBER OF PHASES
DWG	DRAWING	PLG.C	PLUMBING CONTRACTOR
(E)	EXISTING	PNL	PANEL
E.C.	ELECTRICAL CONTRACTOR	PoE	POWER OVER ETHERNET
E. HTR	ELECTRIC HEATER	PVC	POLYVINYL CHLORIDE
ELR	END LINE RESISTOR	RECEPT.	RECEPTACLE
EM	EMERGENCY	RM	ROOM
EMB	EMERGENCY BYPASS	SH	SHELL SCRIPT
EMH	ELECTRICAL MANHOLE	SMR	SURFACE METAL RACEWAY
EMT	ELECTRICAL METALLIC TUBING	SP	SINGLE POLE
EPO	EMERGENCY POWER OFF	SPD	SURGE PROTECTION DEVICE
ETR	EXISTING TO REMAIN	ST	SINGLE THROW
EWC	ELECTRIC WATER COOLER	SHT	SHUNT TRIP
EWH	ELECTRIC WATER HEATER	SW	SWITCH
F	FUSE	SWB	SWITCHBOARD
FA	FIRE ALARM	SWGR	SWITCHGEAR
FACP	FIRE ALARM CONTROL PANEL	T	TELEPHONE
FDR	FEEDER	TB	TERMINAL BOX
FE	FIRE EXTINGUISHER	TEMP	TEMPORARY
FL	FLOOR	TGB	TELECOMMUNICATIONS GROUNDING BAR
FLA	FULL LOAD AMPERES	TMGB	TELECOMMUNICATIONS MAIN GROUNDING BAR
FLUOR	FLUORESCENT	TMH	TELEPHONE MANHOLE
FP	FIRE PUMP	TU	TERMINAL UNIT
F.P.C.	FIRE PROTECTION CONTRACTOR	TV	TELEVISION
F.S.	FUSIBLE SWITCH	TYP	TYPICAL
FVNR	FULL VOLTAGE NON-REVERSING	UG	UNDERGROUND
G	GROUND	UH	UNIT HEATER
GC	GENERAL CONTRACTOR	UNG	UNGROUNDING
GEN	GENERATOR	UON	UNLESS OTHERWISE NOTED
GF	GROUND FAULT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GRD	GROUND	V	VOLTS(S)
HC	HANDICAPPED	VA	VOLTTAMP(S)
H.I.D.	HIGH INTENSITY DISCHARGE	VAR	REACTIVE VOLT AMPERES
H.O.A.	HAND-OFF-AUTOMATIC SELECTOR SWITCH	VAV	VARIABLE AIR VOLUME BOX
HP	HORSEPOWER	VFD	VARIABLE FREQUENCY DRIVE
H.P.S.	HIGH PRESSURE SODIUM	VP	VAPORPROOF
H	HOUR	W	WATT(S)
HZ	FREQUENCY IN CYCLES PER SECOND	WP	WEATHERPROOF
IC	INTERCOM	XFMR	TRANSFORMER
IMC	INTERMEDIATE METALLIC CONDUIT	XP	EXPLOSION PROOF
IN	INTELLIGENT NETWORK		
IP	INTERNET PROTOCOL		
ISO	ISOLATED NEUTRAL		

**1**  
**E-001** **DRAWING LIST**

DWG NO:	TITLE:
E-001	DRAWING LIST, ABBREVIATIONS, SYMBOL LIST AND NOTES
ED-101	BASEMENT PLAN - EXISTING / DEMOLITION
E-101	BASEMENT PLAN - NEW WORK
E-102	FIRST FLOOR PARTIAL PLAN - NEW WORK - POWER
E-601	POWER RISER DIAGRAM - EXISTING / DEMOLITION AND NEW WORK
E-701	SCHEDULES
E-801	DETAILS


**100% SUBMISSION**

#	Date	Change Description



**DGS** BUILD MAINTAIN SUSTAIN  
DEPARTMENT OF GENERAL SERVICES

MPD 2ND DISTRICT  
HEADQUARTERS  
RENOVATION  
3320 IDAHO AVENUE, NW,  
WASHINGTON D.C. 20018  
FOR  
GOVERNMENT OF THE DISTRICT  
OF COLUMBIA

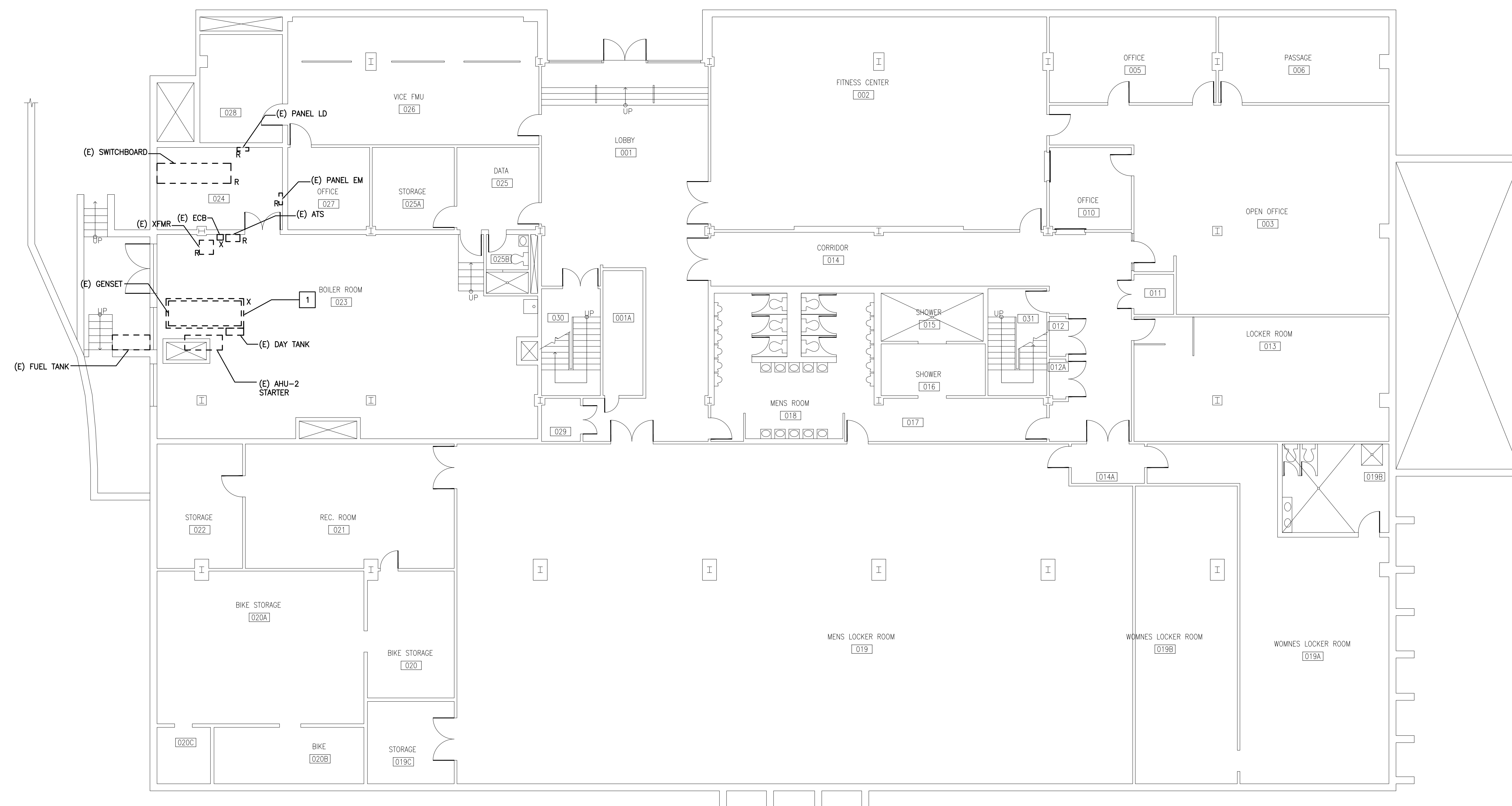


**ALPHATEC** PC  
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SUB-CONSULTANT	SEAL

Dwg. Coord: CSG	Tech. Coord.: LAP	Project NO: SEE PLOT STAMP
DRAWING LIST, ABBREVIATIONS, SYMBOL LIST AND NOTES		<b>E-001</b>
100% SUBMISSION		09/14/2022



**GENERAL NOTES**

- REFER TO SYMBOLS AND NOTES ON SHEET E-001.
- REFER TO DETAIL 1/E-601 FOR EXISTING POWER RISER DIAGRAM.

**KEY NOTES**

- DEMOLISH EXISTING GENERATOR CONCRETE PAD.

#	Date	Change Description

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 FOR GOVERNMENT OF THE DISTRICT OF COLUMBIA

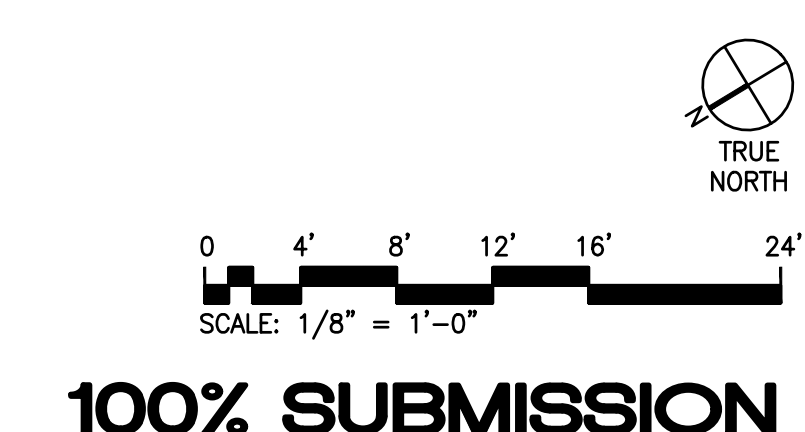
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SUB-CONSULTANT	SEAL

Dwg. Coord.: CSG Tech. Coord.: LAP Project No.: SEE PLOT STAMP

**BASEMENT PLAN - EXISTING / DEMOLITION** **ED-101**

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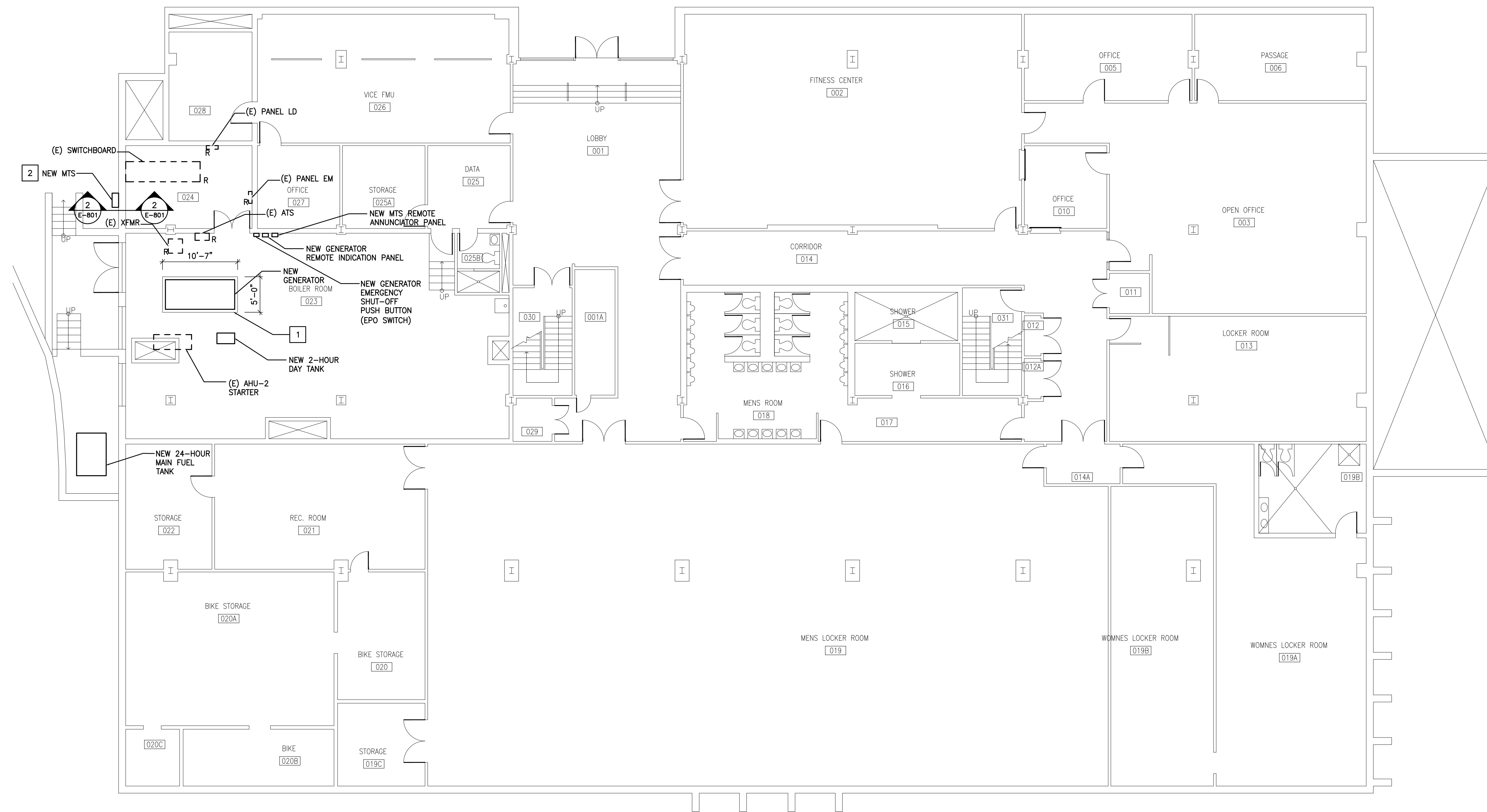


**100% SUBMISSION**

1 ED-101

**BASEMENT PLAN - EXISTING / DEMOLITION**

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



**GENERAL NOTES**

1. REFER TO SYMBOLS AND NOTES ON SHEET E-001.
2. REFER TO 2/E-601 FOR NEW WORK POWER RISER DIAGRAM.
3. REFER TO M-101 AND P-101 FOR NEW DUCTWORK AND PIPING FOR GENERATOR AIR INTAKE, HEAT DISCHARGE, AND COMBUSTION DISCHARGE.

**KEY NOTES**

1. NEW GENERATOR CONCRETE PAD. REFER TO DETAIL 1/E-801 FOR ADDITIONAL INFORMATION.
2. WALL MOUNTED. TOP OF ENCLOSURE SHALL BE 6'-0" A.F.G.

#	Date	Change Description

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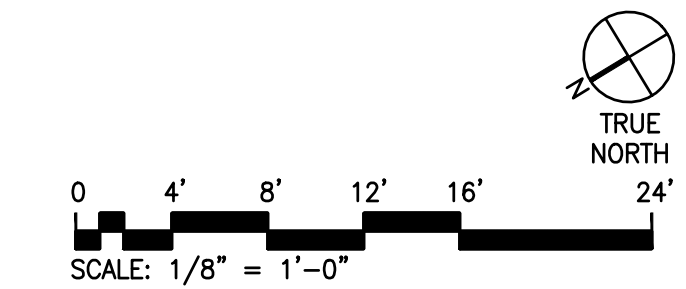
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SUB-CONSULTANT	SEAL

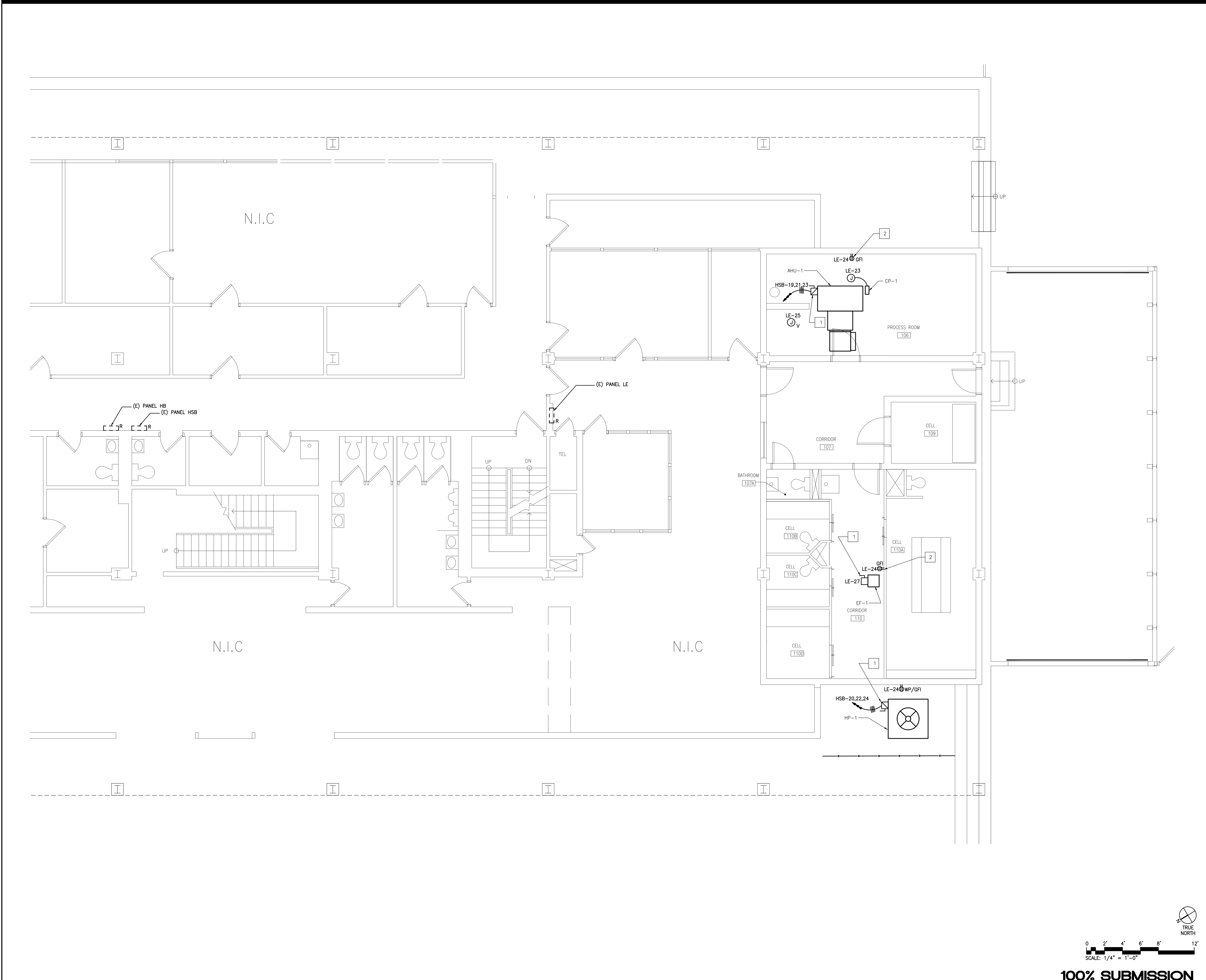
Dwg. Coord.: CSG Tech. Coord.: LAP Project No.: SEE PLOT STAMP

**BASEMENT PLAN - NEW WORK** **E-101**

100% SUBMISSION 09/14/2022



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**GENERAL NOTES**

1. REFER TO SYMBOLS AND NOTES ON SHEET E-001.
2. REFER TO MECHANICAL SHEETS FOR CHARACTERISTICS OF HVAC EQUIPMENT.
3. FOR PANEL LE AND PANEL HSB SCHEDULES REFER TO DETAIL 1/E-701.
4. REFER TO 2/E-601 FOR NEW WORK POWER RISER DIAGRAM.
5. REMOVE, SALVAGE, AND STORE EXISTING CEILING TILES AND GRID SYSTEM TO ACCOMMODATE WORK WITHIN CEILING PLENUMS.
6. REINSTALL EXISTING SUSPENDED ACOUSTICAL CEILING TILE AND METAL PANEL CEILING SYSTEMS TO MATCH EXISTING CONDITIONS FOLLOWING COMPLETION OF WORK WITHIN CEILING PLENUMS.

**KEY NOTES**

- 1 HVAC MANUFACTURER PROVIDED DISCONNECT SWITCH.
- 2 HVAC EQUIPMENT SERVICE RECEPTACLE OUTLET. MOUNTING HEIGHT 6" O.C. BELOW FINISHED CEILING.

#	Date	Change Description

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 FOR GOVERNMENT OF THE DISTRICT OF COLUMBIA

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SUB-CONSULTANT	SEAL

Dwg. Coord.: CSG Tech. Coord.: LAP Project No.: SEE PLOT STAMP

FIRST FLOOR PARTIAL PLAN - NEW WORK - POWER **E-102**

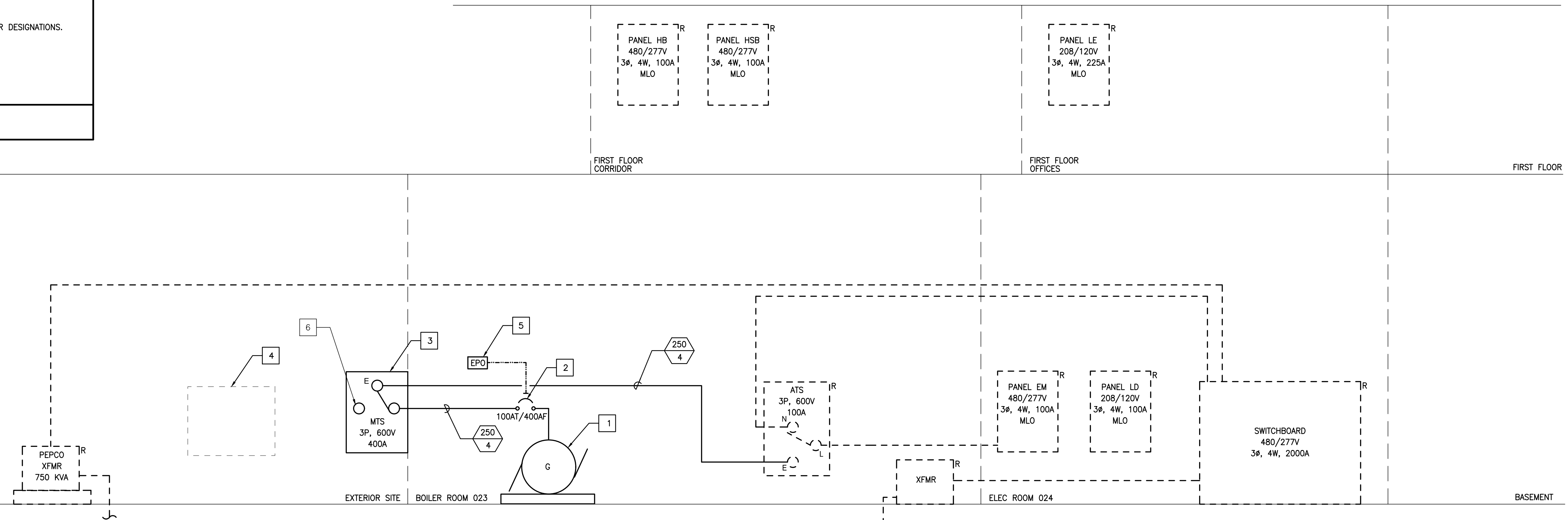
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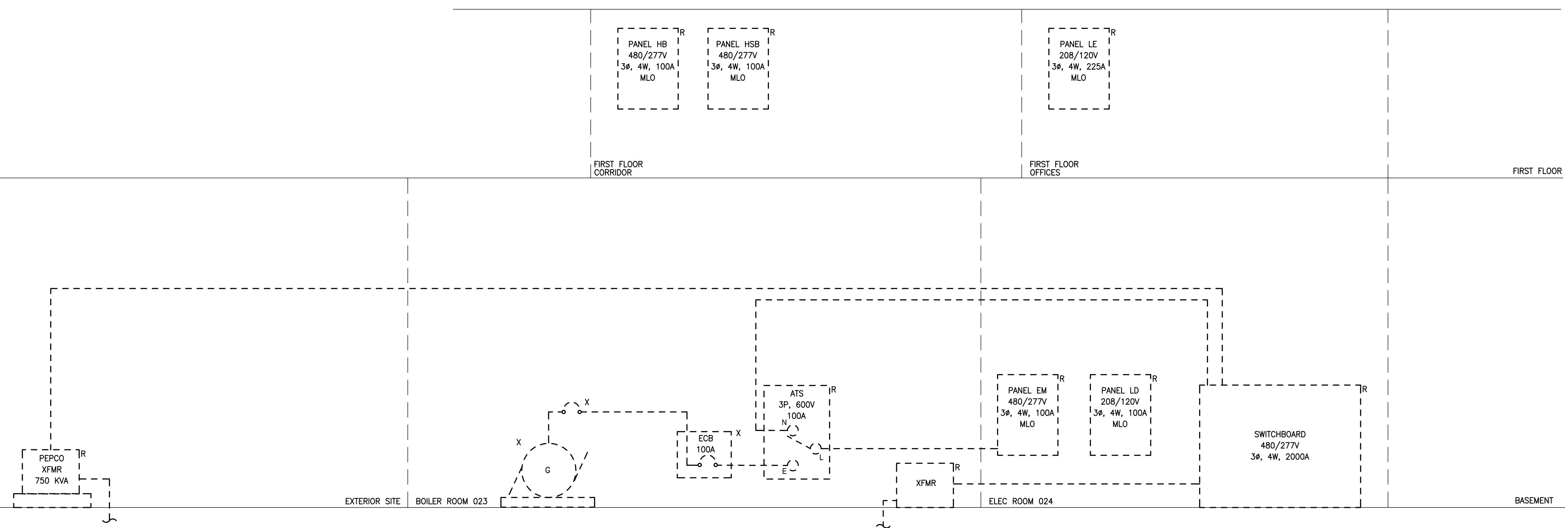
- 2-WIRE:**
- $\frac{20}{2}$  2#12+1#12G-3/4°C
  - $\frac{30}{2}$  2#10+1#10G-3/4°C
  - $\frac{30A}{2}$  2#8+1#10G-3/4°C
- 3-WIRE:**
- $\frac{30}{3}$  3#10+1#10G-3/4°C
  - $\frac{50}{3}$  3#6+1#10G-1°C
  - $\frac{60}{3}$  3#4+1#8G-1 1/4°C
  - $\frac{60A}{3}$  3#3+1#8G-1 1/4°C
  - $\frac{70}{3}$  3#4+1#8G-1 1/4°C
  - $\frac{100}{3}$  3#1+1#8G-1 1/2°C
  - $\frac{125}{3}$  3#1+1#6G-1 1/2°C
  - $\frac{250}{3}$  3#250+1#4G-2-1/2°C
- 4-WIRE:**
- $\frac{50}{4}$  4#6+1#10G-1 1/4°C
  - $\frac{50}{4}$  4#4+1#8G-1 1/4°C
  - $\frac{60A}{4}$  4#3+1#10G-1 1/4°C
  - $\frac{70}{4}$  4#4+1#8G-1 1/4°C
  - $\frac{100}{4}$  4#1+1#8G-2°C
  - $\frac{100A}{4}$  4#300Kcmil+1#3G-3 1/2°C
  - $\frac{125}{4}$  4#1+1#6G-1 1/2°C
  - $\frac{150}{4}$  4#1/0+1#6G-2°C
  - $\frac{200}{4}$  4#3/0+1#6G-2°C
  - $\frac{250}{4}$  4#250Kcmil+1#4G-2 1/2°C
  - $\frac{600}{4}$  2 SETS OF (4#350Kcmil+1#3/0G-3°C)
- 5-WIRE:**
- $\frac{50}{5}$  3#8+2#8NU+2#10G-1°C
  - $\frac{400}{5}$  3#400+2#400NU+2#1/0G-4°C

**NOTE:**  
THIS IS AN ALL-INCLUSIVE FEEDER SCHEDULE. DISREGARD ANY UNUSED FEEDER DESIGNATIONS.

3  
E-601 **FEEDER SCHEDULE**



2  
E-601 **POWER RISER DIAGRAM - NEW WORK** NO SCALE



1  
E-601 **POWER RISER DIAGRAM - EXISTING / DEMOLITION** NO SCALE

**100% SUBMISSION**

**GENERAL NOTES**

1. REFER TO SHEET E-001 FOR SYMBOLS AND NOTES.
2. PROVIDE 1" EMT CONDUIT FOR NEW GENERATOR CONTROLS.
3. EXISTING CONDITIONS BASED ON FIELD OBSERVATIONS. AS BUILT DRAWINGS NOT AVAILABLE.
4. REFER TO DETAIL 3/E-601 FOR FEEDER SCHEDULE.

**KEY NOTES**

1. NEW 175KW GENERATOR WITH REMOTE 25 GALLON DAY TANK AND 24 HR MAIN FUEL TANK RUNTIME. PROVIDE SIGNAL FROM ATS TO GENERATOR TO INITIATE START UP AND SHUT DOWN.
2. GENERATOR ENCLOSED CIRCUIT BREAKER, RATED AT 480V, 3P-400A. SET TRIP AT 100A.
3. 400A, NEMA 3R RATED, EXTERIOR WALL MOUNTED MANUAL TRANSFER SWITCH. ASCO 300 SERIES OR APPROVED EQUAL.
4. TEMPORARY GENERATOR.
5. GENERATOR EMERGENCY SHUT-OFF PUSH BUTTON.
6. CAM-LOCKS FOR TEMPORARY GENERATOR CONNECTION.

#	Date	Change Description

**DGS BUILD MAINTAIN SUSTAIN**  
MPD 2ND DISTRICT HEADQUARTERS RENOVATION  
3320 IDAHO AVENUE, NW, WASHINGTON D.C. 20018  
FOR THE GOVERNMENT OF THE DISTRICT OF COLUMBIA

**ALPHATEC PC**  
ENGINEERS ARCHITECTS PLANNERS  
1525 18TH STREET N.W. WASHINGTON, D.C. 20036  
TEL: 202/797-5000 FAX: 202/797-5003

SUB-CONSULTANT	SEAL

Dwg. Coord.: CSG	Tech. Coord.: LAP	Project NO.: SEE PLOT STAMP
<b>POWER RISER DIAGRAM - EXISTING / DEMOLITION &amp; NEW WORK</b>		<b>E-601</b>
100% SUBMISSION		09/14/2022

(E) PANEL LE										LOCATION: ROOM 101			MOUNTING: RECESSED			CB TYPE: BOLT-ON		AIC RATING: -		
RATING: 208 / 120V,3PH,4W		MAINS: 225 A		MANUFACTURER: EATON		MCB: MLO A		FEEDER NEUTRAL: 100%		BRANCH NEUTRAL:		NEUTRAL & LINE WIRES SHALL BE SAME SIZE PER BRANCH CIRCUIT (UON)								
REMARKS: (*) INDICATES NEW CIRCUIT BREAKER																				
USE	LOAD DESCRIPTION / AREA SERVED	POLE	TRIP	GND WIRE	LINE WIRE	CON-DUIT	LOAD KVA	CKT #	kVA			CKT #	LOAD KVA	CON-DUIT	LINE WIRE	GND WIRE	TRIP	POLE	LOAD DESCRIPTION / AREA SERVED	USE
-	SALLY PORT ROLL UP DOOR	1	20	#12	#12	3/4"	1.2	1	1.2	0	0	2	-	-	-	20	1	BOSS	-	
-	LTG INTERVIEW ROOM	1	20	-	-	-	3	3			4	-	-	-	20	1	AC UNIT	-		
-	REC. CORRIDOR AND OUTSIDE	1	20	-	-	-	5	5			6	-	-	-	20	1	LIVSCAN CAMERA	-		
-	REC. WATER COOLER	1	20	-	-	-	7	7	0	0	8	-	-	-	20	1	REC. AND FLOOR REC. RM 114A, 114B	-		
-	REC. RM 118, 115	1	20	-	-	-	9	9	0	0	10	-	-	-	20	1	FLOOR REC. 115	-		
-	FLOOR REC. RM 115	1	20	-	-	-	11	11	0	0	12	-	-	-	20	1	FLOOR REC. 115	-		
-	LTG LOBBY	1	20	-	-	-	13	13	0	0	14	-	-	-	20	1	REC. AND FLOOR RM 103	-		
-	LTG LOBBY	1	20	-	-	-	15	15	0	0	16	-	-	-	20	1	REC. CORRIDOR	-		
-	LTG, REC. ROOM 123, 127	1	20	-	-	-	17	17	0	0	18	-	-	-	20	1	REC. RM 103, 104	-		
-	LTG LOBBY	1	20	-	-	-	19	19	0	0	20	-	-	-	20	1	SPARE	-		
-	LTG LOBBY	1	20	-	-	-	21	21	0	0	22	-	-	-	20	1	FRIDGE ROOM 101	-		
-	CP-1	1	20	#12	#12	3/4"	0.1	23		0.64	24	0.54	3/4"	#12	#12	20	1	HVAC, REC. DETENTION AREA	-	
-	HVAC CONTROLS	1	20	#12	#12	3/4"	0.5	25	0.5		26	-	-	-	20	1	DATA CELL BLOCK	-		
-	EF-1	1	20	#12	#12	3/4"	0.4	27		0.4	28	-	-	-	20	1	REC. ROOM 115	-		
-	BATTERY CHARGER	1	20	-	-	-	29	29	0	0	30	-	-	-	20	1	SPARE	-		
-	BATTERY CHARGER	1	20	-	-	-	31	31	0	0	32	-	-	-	20	1	COMPUTER	-		
TOTAL CONNECTED LOAD PER PHASE									1.7	0.4	0.64	TOTAL						2.74 kVA	8 AMP	

(E) PANEL HSB										LOCATION: FIRST FLOOR CORRIDOR			MOUNTING: RECESSED			CB TYPE: BOLT-ON		AIC RATING: -		
RATING: 480 / 277V,3PH,4W		MAINS: 100 A		MANUFACTURER: EATON		MCB: MLO A		FEEDER NEUTRAL: 100%		BRANCH NEUTRAL:		NEUTRAL & LINE WIRES SHALL BE SAME SIZE PER BRANCH CIRCUIT (UON)								
REMARKS: (*) INDICATES NEW CIRCUIT BREAKER																				
USE	LOAD DESCRIPTION / AREA SERVED	POLE	TRIP	GND WIRE	LINE WIRE	CON-DUIT	LOAD KVA	CKT #	kVA			CKT #	LOAD KVA	CON-DUIT	LINE WIRE	GND WIRE	TRIP	POLE	LOAD DESCRIPTION / AREA SERVED	USE
-	SPARE	3	20	-	-	-		1	0	0	2	-	-	-	20	3	XFMR LSM	-		
-		-	-	-	-	-		3	0	0	4	-	-	-	20	-	-	-	-	
-		-	-	-	-	-		5	0	0	6	-	-	-	20	-	-	-	-	
-	LTG BASEMENT WEST	1	20	-	-	-		7	0	0	8	-	-	-	20	1	LTG 2ND FLOOR S	-		
-	LTG BASEMENT EAST	1	20	-	-	-		9	0	0	10	-	-	-	20	1	SPARE	-		
-	LTG 2ND FLOOR NW AND NE	1	20	-	-	-		11	0	0	12	-	-	-	20	1	LTG 2ND FLOOR S	-		
-	LTG 1ST FLOOR NE	1	20	-	-	-		13	0	0	14	-	-	-	20	1	LTG 1ST FLOOR SE	-		
-	CELL BLOCK, VANPORT	1	20	-	-	-		15	0	0	16	-	-	-	20	1	SPARE	-		
-	LTG 1ST FLOOR NW	1	20	-	-	-		17	0	0	18	-	-	-	20	1	LTG 2ND FLOOR NE	-		
-	AHU-1	3	30 (*)	#10	#10	3/4"	7.9	19	10.4		20	2.5	3/4"	#12	#12	15 (*)	3	HP-1	-	
-		-	-	-	#10	-	7.9	21		10.4	22	2.5	-	#12	-	-	-	-		
-		-	-	-	#10	-	7.9	23		10.4	24	2.5	-	#12	-	-	-	-		
-	SPARE	1	20	-	-	-		25	0	0	26	-	-	-	20	1	SPARE	-		
-	SPARE	1	20	-	-	-		27	0	0	28	-	-	-	20	1	SPARE	-		
TOTAL CONNECTED LOAD PER PHASE									10.4	10.4	10.4	TOTAL						31.20 kVA	38 AMP	

GENERAL NOTES

- REFER TO SHEET E-001 FOR SYMBOLS AND NOTES.
- NEW CIRCUIT BREAKERS SHALL MATCH WITH THE EXISTING CIRCUIT BREAKERS IN RESPECT TO MODEL NUMBER, TYPE, AND AIC RATING IN THE PANELBOARDS WHERE INSTALLED.
- UPON COMPLETION OF WORK, PROVIDED UPDATED, COMPUTER GENERATED DIRECTORY FOR ALL AFFECTED BY NEW WORK EXISTING PANELBOARDS.

KEY NOTES

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 TEL: 202/797-5000 FAX: 202/797-5003

SUB-CONSULTANT	SEAL
Dwg. Coord.: CSG	Tech. Coord.: LAP
Project NO.: SEE PLOT STAMP	
SCHEDULES	E-701
100% SUBMISSION	09/14/2022

100% SUBMISSION

SCHEDULES

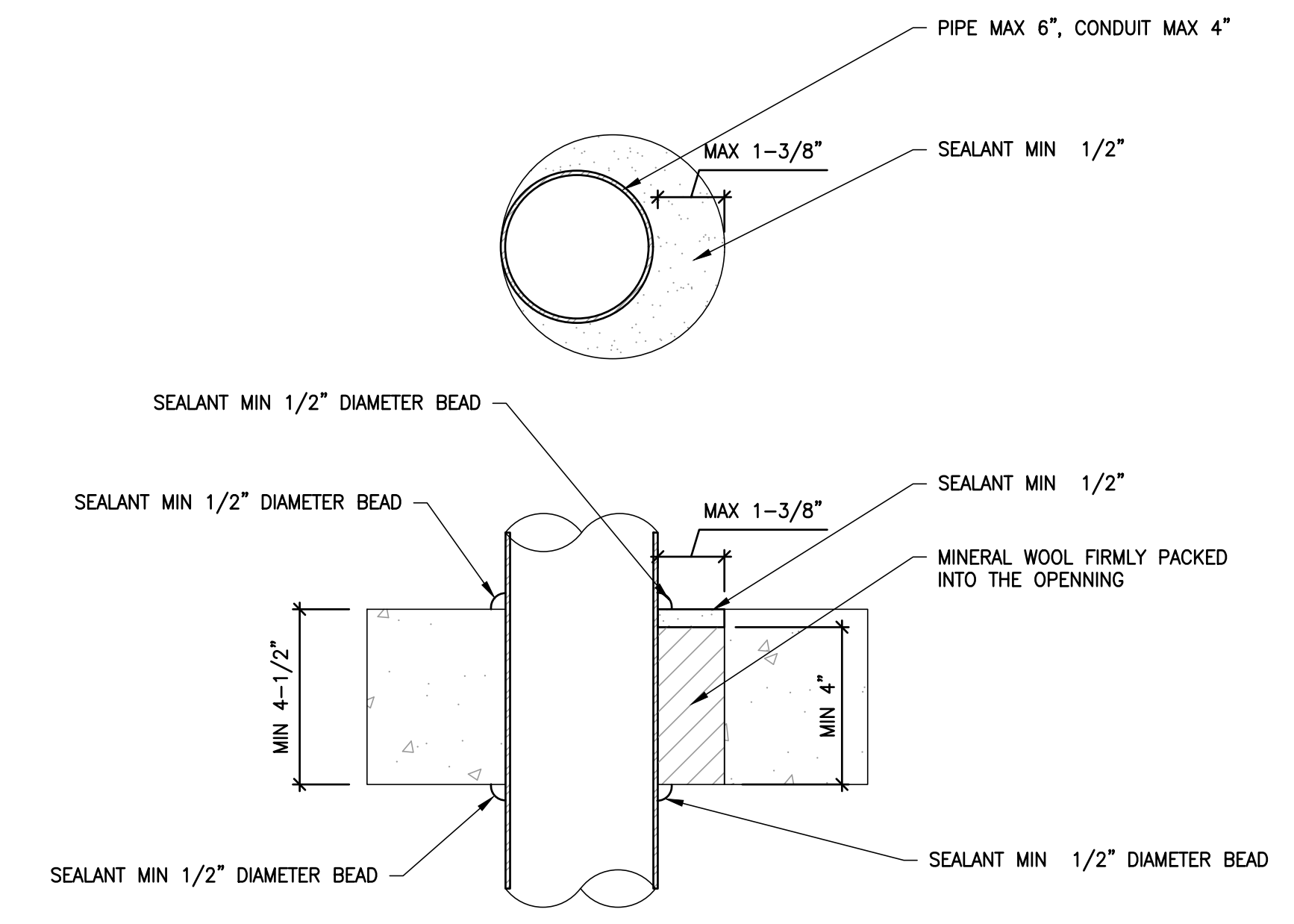
NO SCALE

**GENERAL NOTES**

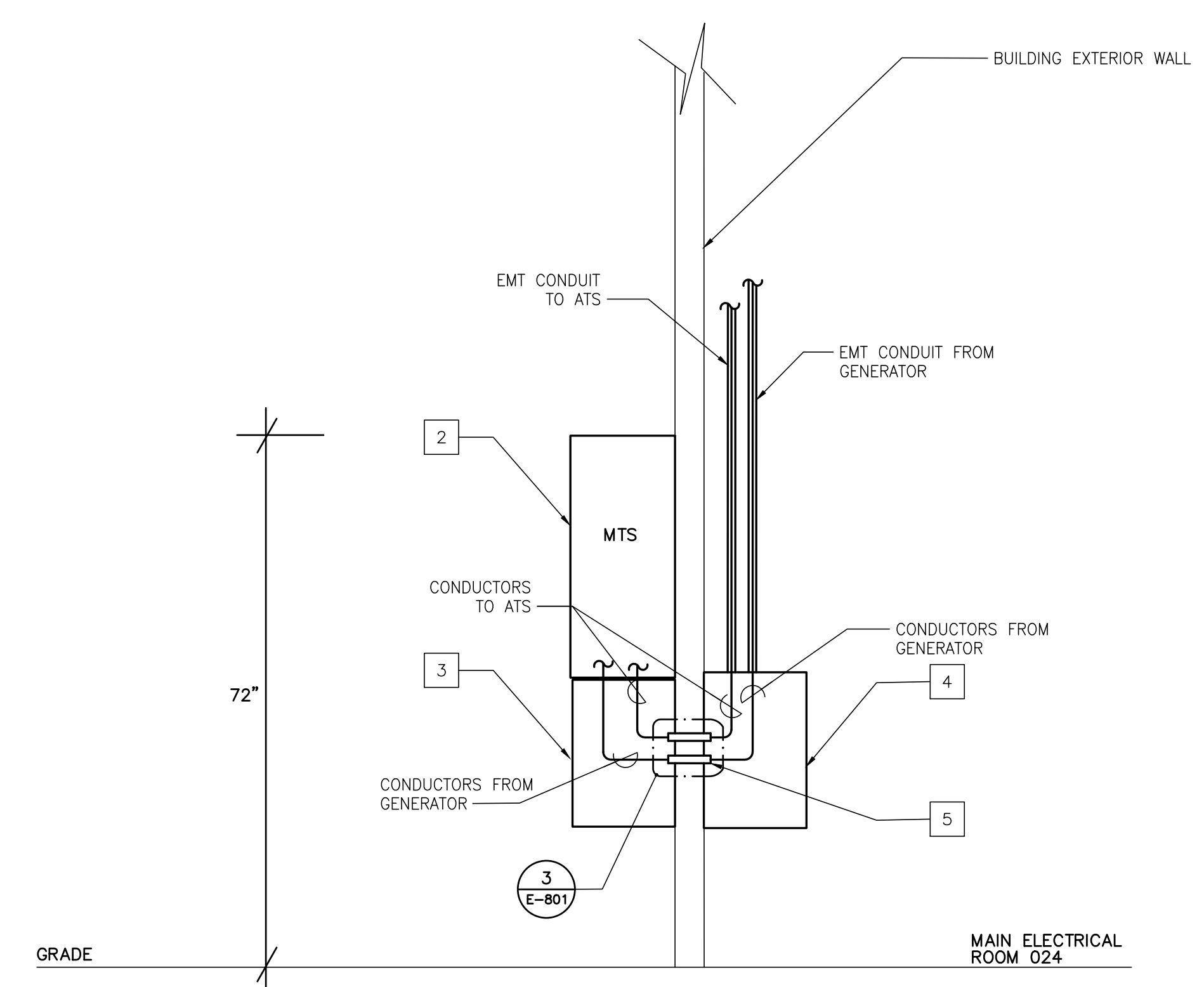
1. REFER TO SHEET E-001 FOR ABBREVIATIONS.
2. REFER TO SHEET E-101 FOR PLAN VIEW.

**KEY NOTES**

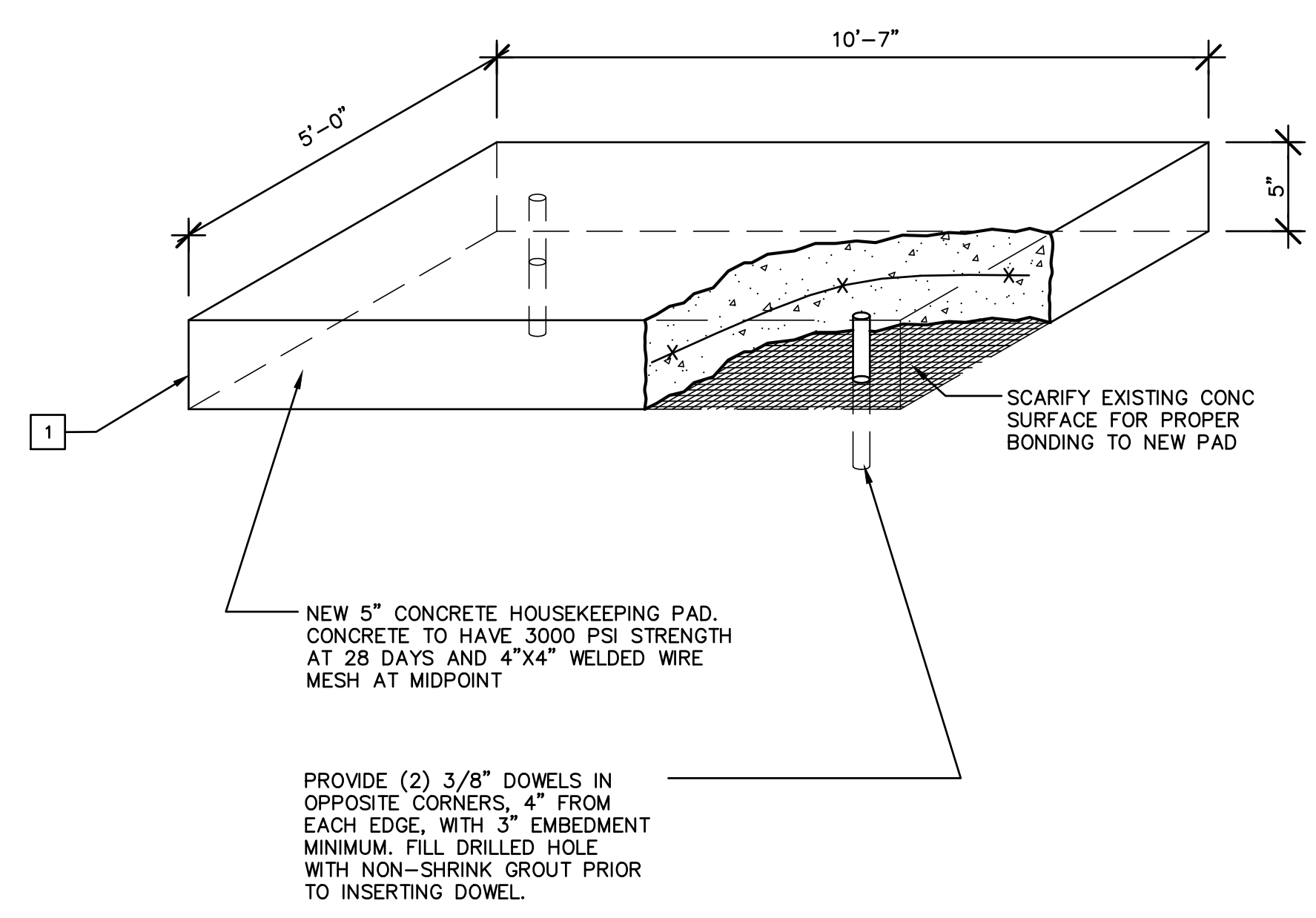
1. PAD TO HAVE 5" BEYOND GENERATOR MOUNTING FRAME.
2. BASIS OF DESIGN ASCO 300 SERIES, 24"(W) X 32"(H) X 11"(D).
3. NEMA 3R PULLBOX, 24"(W) X 24"(H) X 12"(D).
4. NEMA 1 PULLBOX, 24"(W) X 24"(H) X 12"(D).
5. CONDUIT SLEEVE (TYP.)



**3 CONDUIT PENETRATION DETAIL** SCALE: NTS



**2 MTS CABLE ROUTING DETAIL** SCALE: NTS



**1 CONCRETE PAD DETAIL** SCALE: NTS

**100% SUBMISSION**

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SUB-CONSULTANT	SEAL

Dwg. Coord.: CSG	Tech. Coord.: LAP	Project NO.: SEE PLOT STAMP
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<b>DETAILS</b>	<b>E-801</b>
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