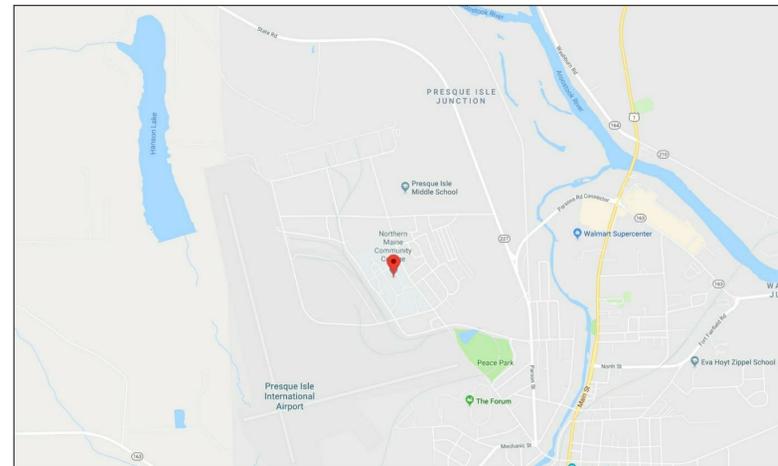


NORTHERN MAINE COMMUNITY COLLEGE

MAILMAN TRADES IAQ - DIESEL

PRESQUE ISLE, MAINE

ALLIED PROJECT No.19035

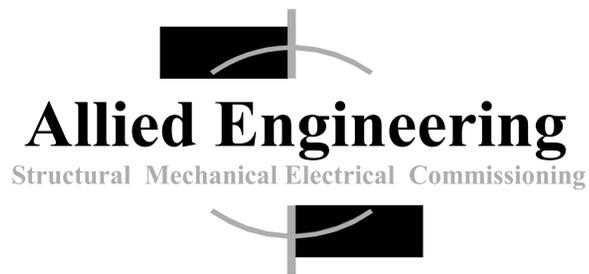


LOCATION MAP

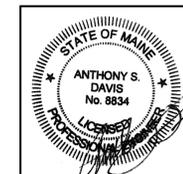
ISSUED FOR
CONSTRUCTION
10 MAY, 2019

DRAWING STATUS LIST

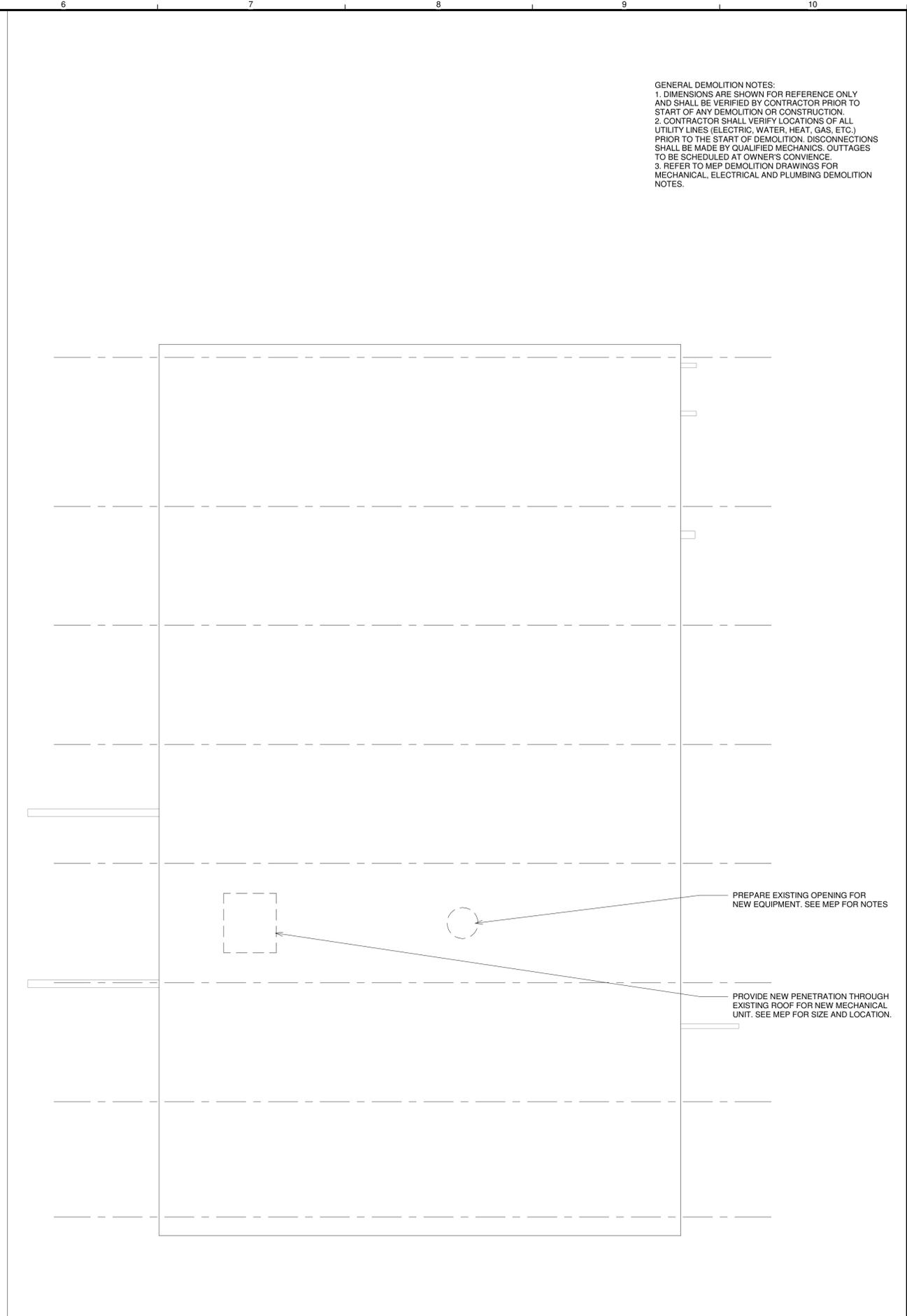
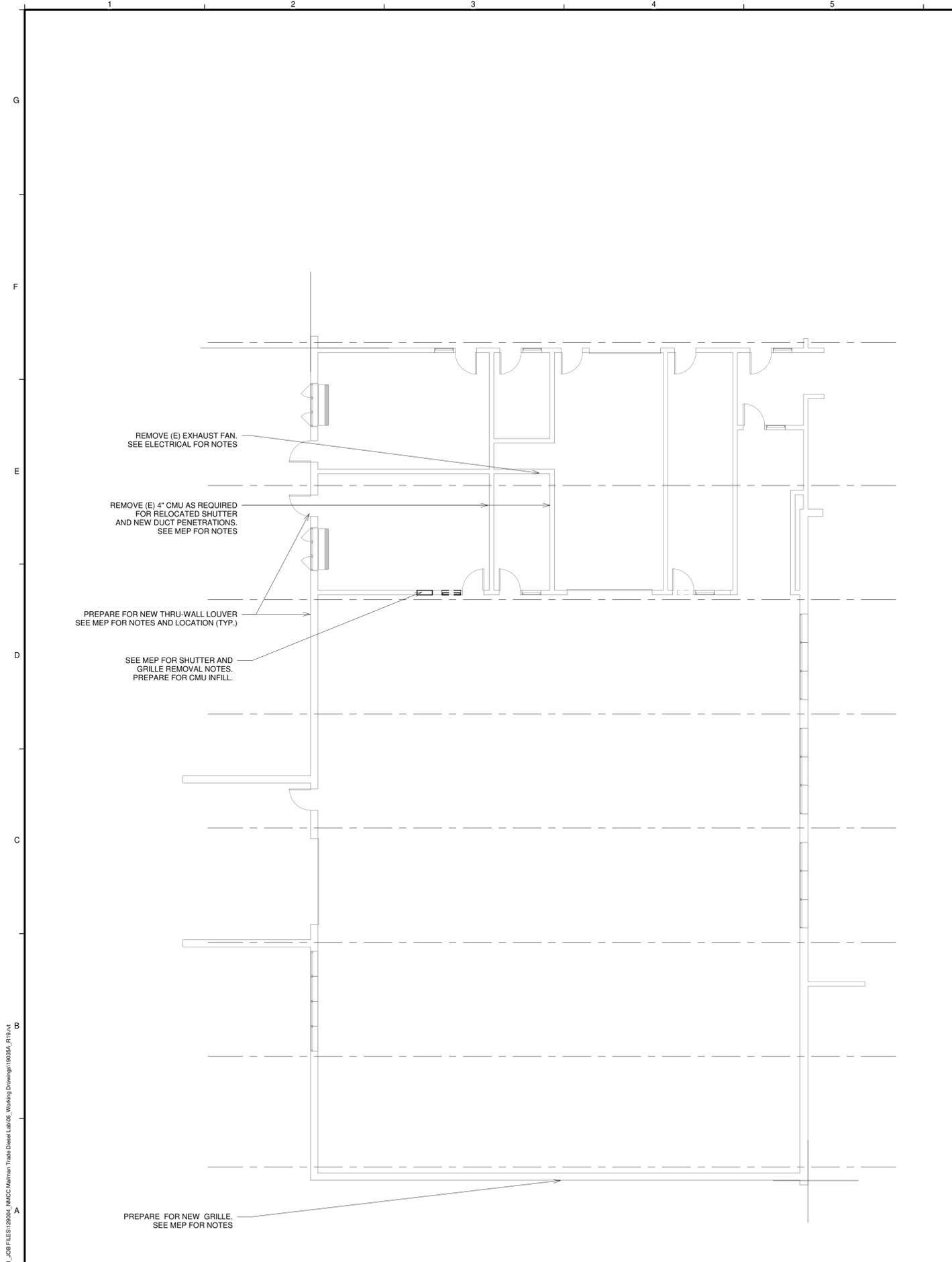
SHEET No.	SHEET TITLE	ISSUE		DATE	
		DESCRIPTION	FOR CONSTRUCTION	DESIGN DEVELOPMENT	FOR CONSTRUCTION
G-000	COVER SHEET	•	•	04-19-2019	05-10-2019
AD100	DEMO FLOOR PLAN/DEMO ROOF PLAN	•	•		
A100	FLOOR PLAN/DETAILS	•	•		
A101	ROOF PLAN/DETAILS	•	•		
M-000	PLUMBING AND HVAC NOTES, LEGEND AND ABBREVIATIONS	•	•		
MD-100	MECHANICAL DEMOLITION PART PLANS - LOWER AND UPPER LEVELS	•	•		
MH-100	MECHANICAL PART PLANS - LOWER AND UPPER LEVELS	•	•		
MH-500	MECHANICAL DETAILS AND SCHEDULES	•	•		
E-000	LEGEND AND NOTES	•	•		
E-100	ELECTRICAL PLANS	•	•		



160 Veranda Street
Portland, Maine 04103
T:207.221.2260
F:207.221.2266
Web:www.allied-eng.com



Z:\Documents\1_JOB FILES\19004_NMCC Mailman Trade Diesel Lab\08_Working Drawings\19004A_R11.rvt



GENERAL DEMOLITION NOTES:
 1. DIMENSIONS ARE SHOWN FOR REFERENCE ONLY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF ANY DEMOLITION OR CONSTRUCTION.
 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITY LINES (ELECTRIC, WATER, HEAT, GAS, ETC.) PRIOR TO THE START OF DEMOLITION. DISCONNECTIONS SHALL BE MADE BY QUALIFIED MECHANICS. OUTTAGES TO BE SCHEDULED AT OWNER'S CONVENIENCE.
 3. REFER TO MEP DEMOLITION DRAWINGS FOR MECHANICAL, ELECTRICAL AND PLUMBING DEMOLITION NOTES.



REVISIONS			
No.	DATE	BY	DESCRIPTION

Date: 05/10/2019
 Drawn By: Author
 Checked By: Checker
 Project Mgr: Designer
 Project No: 19004
 Cad File: 19004_MEP.rvt
 Graphic Scale: 0" to 1"

DEMOLITION FLOOR PLANS
 DIESEL LAB VENTILATION UPGRADES
 MAILMAN TRADES BUILDING - NMCC
 PRESQUE ISLE, MAINE
(C) COPYRIGHT 2019 ALLIED ENGINEERING, INC.

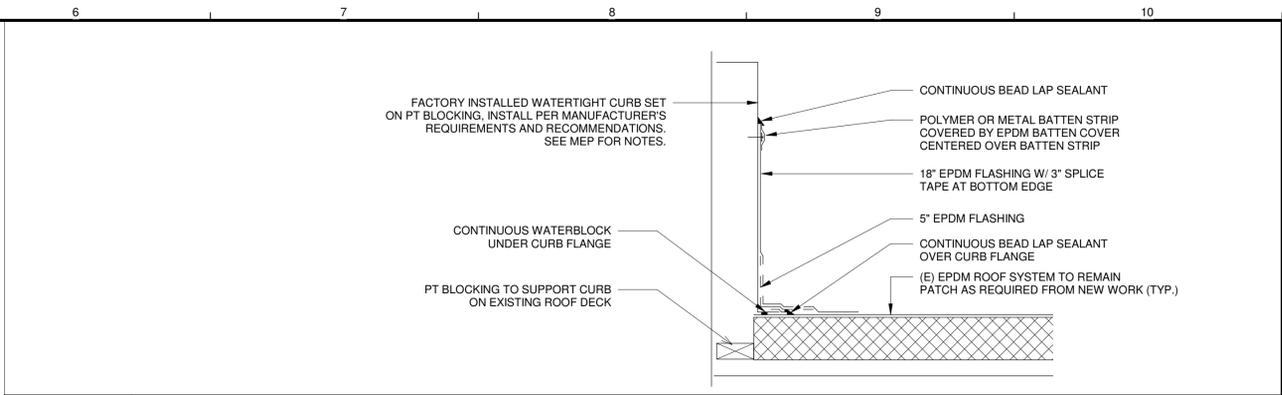
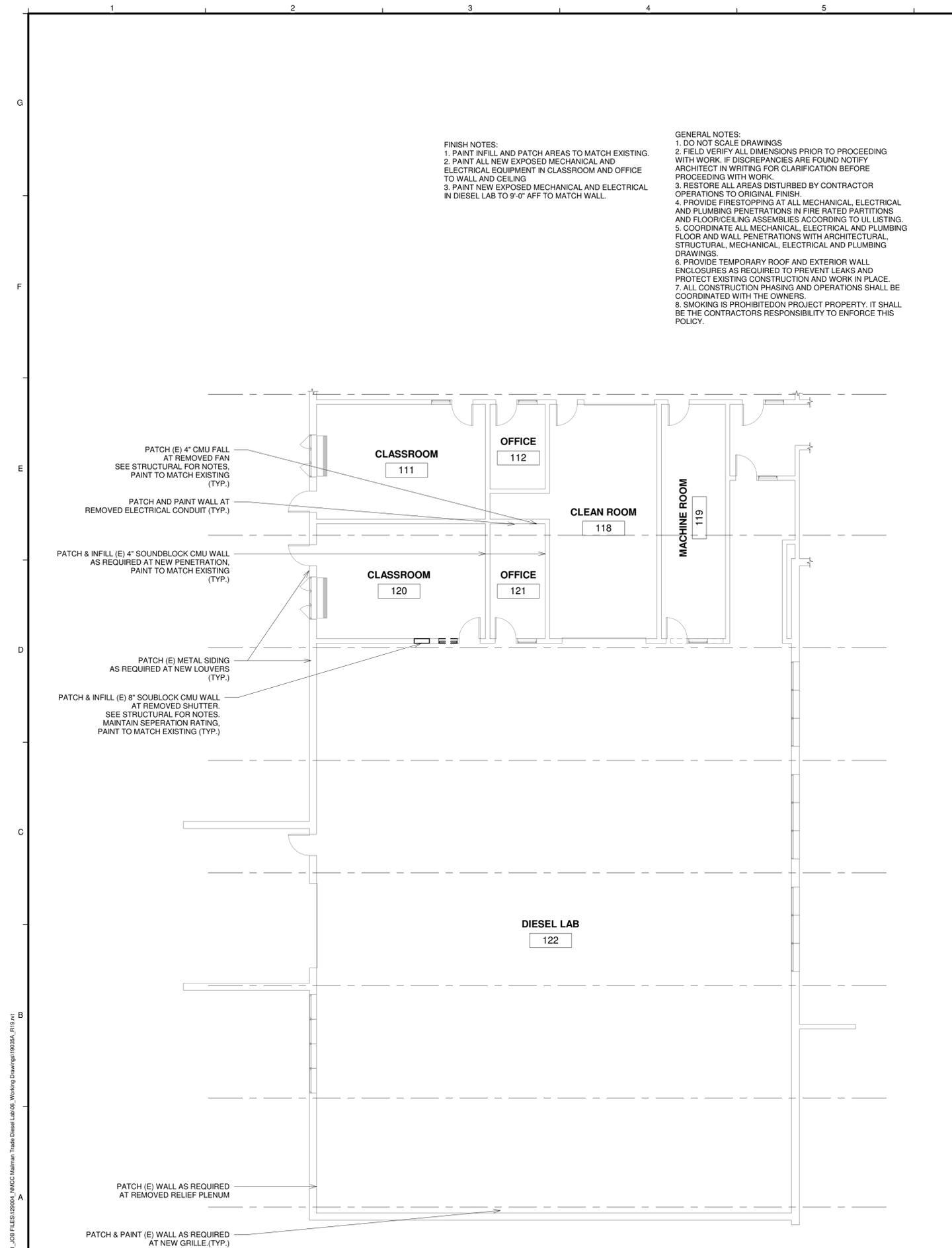
160 Veranda Street
 Portland, Maine 04103
 T: 207.221.2260
 F: 207.221.2266
 Web: www.allied-eng.com

Allied Engineering
 Structural Mechanical Electrical Commissioning

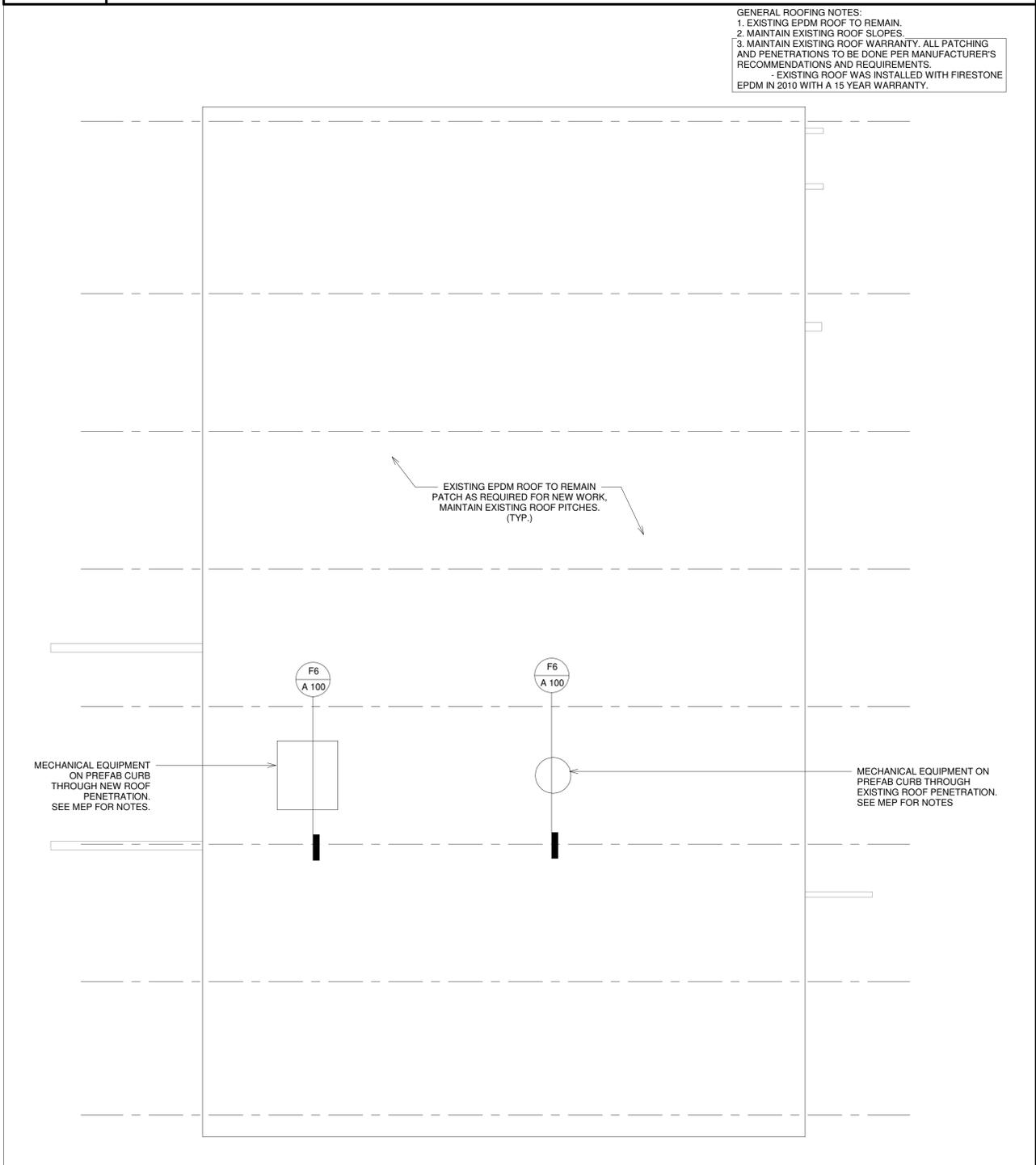
A1 PARTIAL LOWER LEVEL PLAN - DEMOLITION
 1/8" = 1'-0"

2 PARTIAL ROOF PLAN - DEMOLITION
 1/8" = 1'-0"

Z:\Documents1\JOB FILES\19004_NMCC Mailman Trade Diesel Lab\08_Working Drawings\19004A_R11.rvt



F6 TYPICAL ROOF PENETRATION
 1 1/2" = 1'-0"



A6 PARTIAL ROOF PLAN
 1/8" = 1'-0"

160 Veranda Street
 Portland, Maine 04103
 T: 207.221.2260
 F: 207.221.2266
 Web: www.allied-eng.com

Allied Engineering
 Structural Mechanical Electrical Commissioning

LENS & ARCHITECT
 CARLA W. WASHBURN
 No. 2748
 STATE OF MAINE

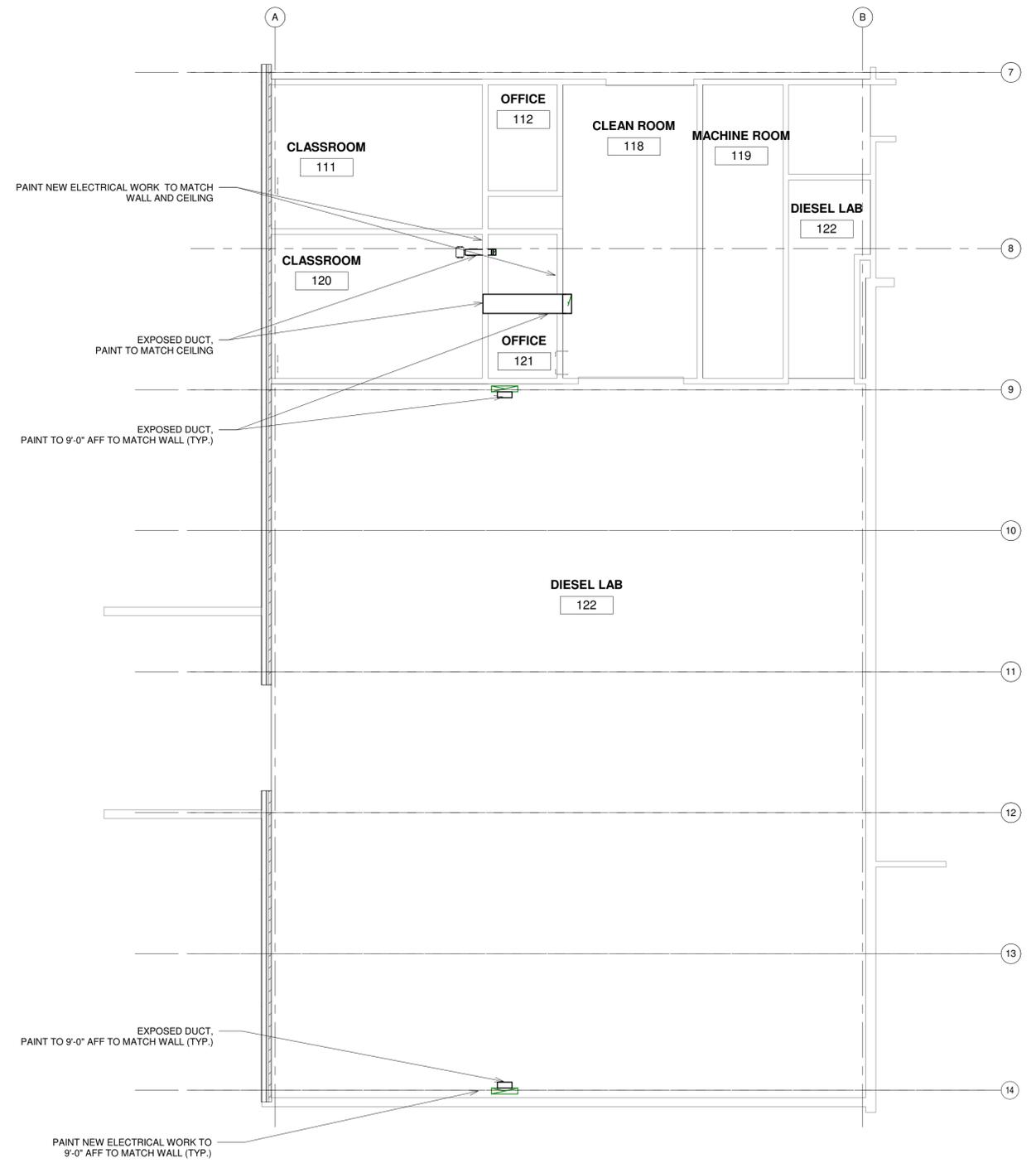
REVISIONS		DATE	BY	DESCRIPTION

Date: 05/10/2019
 Drawn By: Author
 Checked By: Checker
 Project Mgr: Designer
 Project No: 19004
 Cad File: 19004_MEP.rvt
 Graphic Scale: 1" = 0'

FLOOR AND ROOF PLANS
 DIESEL LAB VENTILATION UPGRADES
 MAILMAN TRADES BUILDING - NMCC
 PRESQUE ISLE, MAINE
(C) COPYRIGHT 2019 ALLIED ENGINEERING, INC.

A 100

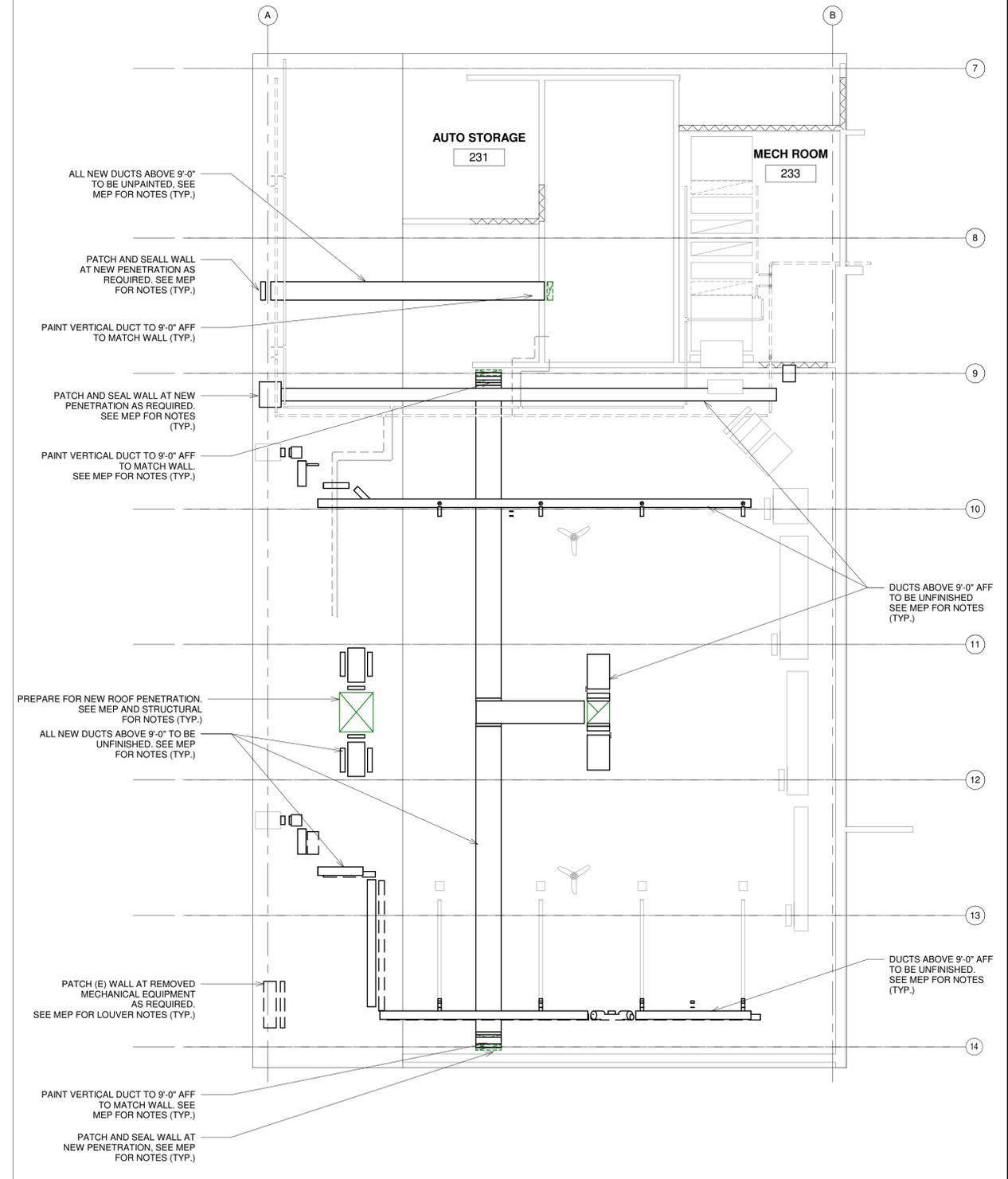
Z:\Document1\JOB FILES\19035\NMCC Mallman Trade Diesel Lab\08_Working Drawings\19035A_R11.rvt



A1 PARTIAL LOWER LEVEL PLAN

1/8" = 1'-0"

NOTE:
1. SEE MEP FOR MECHANICAL AND ELECTRICAL NOTES



A6 PARTIAL UPPER LEVEL PLAN

1/8" = 1'-0"



REVISIONS			
No.	DATE	BY	DESCRIPTION

REFLECTED CEILING PLANS

DIESEL LAB VENTILATION UPGRADES
MALLMAN TRADES BUILDING - NMCC
PRESQUE ISLE, MAINE

	PIPE ELBOW TURNED DN		GLOBE VALVE		STEAM TRAP (FLOAT & THERMOSTATIC INDICATED T.T.= THERMOSTATIC TRAP, B.T.= BUCKET TRAP)		EXPANSION LOOP		CHANGE IN ELEVATION (UP, DOWN, RISE OR DROP)		MOTORIZED DAMPER		REGISTER, GRILLE & DIFFUSER TAG DIFFUSER, REGISTER OR GRILLE No. QUANTITY CFM AIR FLOW
	PIPE ELBOW TURNED UP		LOCKABLE BALL VALVE		PLUG VALVE		FLOOR DRAIN		SUPPLY DUCT TURNED UP/DN		FLEXIBLE CONNECTION		FINTUBE TAG TEMPERATURE SENSOR OR THERMOSTAT (AS SPECIFIED) FINTUBE No. LENGTH GPM
	PIPING TEE DOWN		PLUG VALVE		PUMP - POINT OF TRIANGLE INDICATES DIRECTION OF FLOW		SHOCK ABSORBER (WATER HAMMER ARRESTER)		RETURN DUCT TURNED UP/DN		HUMIDISTAT OR HUMIDITY SENSOR (AS SPECIFIED)		VAV TAG VAV No. MINIMUM CFM MAXIMUM CFM GPM
	PIPING TEE UP		2-WAY CONTROL VALVE		GAS SHUT-OFF VALVE		FIRE DEPARTMENT CONNECTION		EXHAUST DUCT TURNED UP/DN		CARBON DIOXIDE SENSOR		ACCESS PANEL
	PIPE RISER		3-WAY CONTROL VALVE		HOSE END DRAIN VALVE W/CAP		FREE STANDING FIRE DEPARTMENT CONNECTION		ROUND DUCT TURNED UP/DN		CARBON MONOXIDE SENSOR		EQUIPMENT TAG TYPE DESIGNATOR NUMBER
	45° ELBOW DOWN		LOCK & SHIELD VALVE		TEMPERATURE/PRESSURE TAP (PET'S PLUG)		WATER GONG		MITERED DUCT ELBOW W/TURNING VANES		DUCT SMOKE DETECTOR		ROOFTOP EXHAUST FAN
	PIPING TO BE REMOVED		CHECK VALVE		THERMOMETER WITH COCK		DUCTWORK TO BE REMOVED		RADIUS DUCT ELBOW		ROOFTOP SUPPLY FAN		EQUIPMENT TAG (ON FLOOR/ROOF ABOVE) TYPE DESIGNATOR NUMBER
	CAPPED PIPING		BALANCING VALVE CIRCUIT SETTER		SOLENOID VALVE		ACCOUSTICAL LINING (DUCT DIMENSION FOR NET FREE AREA)		DUCT/PIPE CAP (SINGLE/DOUBLE LINE)		CEILING DIFFUSER - 4-WAY BLOW		SECTION REFERENCE SYMBOL SECTION No. SHEET SECTION LOCATED ON
	CAPPED BELOW FINISHED FLOOR		AIR VENT - REFER TO SPECIFICATIONS		ORIFICE FLOWMETER		DUCTWORK TO BE REMOVED		VOLUME DAMPER		CEILING DIFFUSER - 3-WAY BLOW		DETAIL REFERENCE SYMBOL DETAIL No. SHEET DETAIL LOCATED ON
	CONCENTRIC REDUCER		STRAINER WITH BLOWDOWN VALVE AND CAP		DIFFERENTIAL PRESSURE TRANSMITTER		SINGLE LINE DUCTWORK TO BE REMOVED		FIRE DAMPER		CEILING DIFFUSER - 2-WAY BLOW		SECTION REFERENCE SYMBOL SECTION No. SHEET SECTION LOCATED ON
	ECCENTRIC REDUCER		EXPANSION VALVE (AUTOMATIC)		HUMIDIFIER (DUCT/AHU MOUNTED)		DUCT TRANSITION		SMOKE DAMPER		CEILING DIFFUSER - CORNER BLOW		POINT OF CONNECTION - EXISTING TO NEW
	DIRECTION OF FLOW		RELIEF/SAFETY VALVE		FINNED TUBE BASEBOARD		SQUARE TO ROUND DUCT TRANSITION		FIRE AND SMOKE DAMPER		CEILING RETURN GRILLE		DIRECTION OF AIR FLOW
	PIPE PITCHES DOWN		PRESSURE GAUGE WITH COCK		HOSE BIB/WALL HYDRANT		FLEX DUCT - DOUBLE LINE		BACKDRAFT DAMPER		CEILING EXHAUST GRILLE		
	PIPE GUIDE		SIGHT GLASS		FLOOR CLEANOUT		FLEX DUCT - SINGLE LINE						
	EXPANSION JOINT		PRESSURE REDUCING VALVE		FUSIBLE LINK VALVE								
	PIPE ANCHOR		FLOW SWITCH		WALL CLEANOUT								
	UNION		SELF-CONTAINED TEMP. CONTROL VALVE WITH REMOTE SENSOR		AQUASTAT								
	FLANGED CONNECTION												
	BACKFLOW PREVENTER												
	FLEXIBLE CONNECTION												
	SHUT-OFF/ISOLATION VALVE REFER TO SPECIFICATIONS												
	GATE VALVE - OUTSIDE SCREW & YOKE (OS&Y)												

E1 SYMBOLS LEGEND

<p>AW ACID WASTE</p> <p>ATV AIR RELIEF</p> <p>BBD BOILER BLOWDOWN</p> <p>C CONDENSATE (HVAC DRAIN PAN)</p> <p>CA COMPRESSED AIR</p> <p>CHWR CHILLED WATER RETURN</p> <p>CHWS CHILLED WATER SUPPLY</p> <p>CTR COOLING TOWER RETURN</p> <p>CTS COOLING TOWER SUPPLY</p> <p>CWR CONDENSER WATER RETURN</p> <p>CWS CONDENSER WATER SUPPLY</p> <p>DC DOMESTIC COLD WATER</p> <p>D DOMESTIC HOT WATER</p> <p>D DOMESTIC HOT WATER RECIRC.</p> <p>D DRAIN</p> <p>FM PUMP FORCE MAIN</p> <p>FOF FUEL OIL FILL</p> <p>FOR FUEL OIL RETURN</p> <p>FOS FUEL OIL SUPPLY</p> <p>FOV FUEL OIL TANK VENT</p> <p>FW FEEDWATER</p> <p>GR GLYCOL RETURN</p> <p>GS GLYCOL SUPPLY</p> <p>GW GREASE WASTE</p> <p>GWR GEOTHERMAL WATER RETURN</p> <p>GWS GEOTHERMAL WATER SUPPLY</p> <p>H HUMIDIFICATION LINE</p> <p>H2 HYDROGEN GAS</p> <p>HCR HEAT/COOL RETURN</p> <p>HCS HEAT/COOL SUPPLY</p> <p>HPWR HEAT PUMP WATER RETURN</p> <p>HPWS HEAT PUMP WATER SUPPLY</p> <p>HPC HIGH PRESSURE CONDENSATE</p> <p>HPS HIGH PRESSURE STEAM</p> <p>HTWR HIGH-TEMP HOT WATER RETURN</p> <p>HWR HOT WATER RETURN</p> <p>HWS HOT WATER SUPPLY</p> <p>IND INDUSTRIAL WASTE</p> <p>IW INDIRECT WASTE</p> <p>LN LIQUID NITROGEN</p> <p>LOX LIQUID OXYGEN</p> <p>LP LIQUID PETROLEUM GAS</p> <p>LPR LOW PRESSURE CONDENSATE</p> <p>LPS LOW PRESSURE STEAM</p> <p>MA MEDICAL AIR</p> <p>MPR MEDIUM PRESSURE CONDENSATE</p> <p>MPS MEDIUM PRESSURE STEAM</p> <p>MUW MAKE-UP WATER</p> <p>N2 NITROGEN</p> <p>NG NATURAL GAS</p> <p>NO NITROUS OXIDE</p> <p>NPW NON-POTABLE WATER</p> <p>OX OXYGEN</p> <p>PC PUMPED CONDENSATE</p> <p>PCWR PROCESS COLD WATER RETURN</p> <p>PCWS PROCESS COLD WATER SUPPLY</p> <p>RD REFRIGERANT DISCHARGE</p> <p>RL REFRIGERANT LIQUID</p> <p>RS REFRIGERANT SUCTION</p> <p>RO REVERSE OSMOSIS WATER</p> <p>RW RAIN WATER - ABOVE FLOOR</p> <p>RWB RAIN WATER - BELOW GRADE</p> <p>RWO RAIN WATER OVERFLOW - ABOVE FLOOR</p> <p>RWOB RAIN WATER OVERFLOW - BELOW GRADE</p> <p>SP SPRINKLER MAIN PIPING</p> <p>SWR SOLAR WATER RETURN</p> <p>SWS SOLAR WATER SUPPLY</p> <p>TP TRAP PRIMER - ABOVE FLOOR</p> <p>TPB TRAP PRIMER - BELOW GRADE</p> <p>TWR TEMPERED WATER RETURN</p> <p>TWS TEMPERED WATER SUPPLY</p> <p>V SANITARY SOIL VENT - ABOVE FLOOR</p> <p>VB SANITARY SOIL VENT - BELOW GRADE</p> <p>VAC VACUUM (AIR)</p> <p>VC VACUUM CLEANING (HOUSE)</p> <p>VPD VACUUM PUMP DISCHARGE</p> <p>W SANITARY SOIL WASTE - ABOVE FLOOR</p> <p>WB SANITARY SOIL WASTE - BELOW GRADE</p> <p>WV SANITARY WET VENT - ABOVE FLOOR</p> <p>WVB SANITARY WET VENT - BELOW GRADE</p> <p>AAV AUTOMATIC AIR VENT</p> <p>AC ABOVE CEILING</p> <p>ACC AIR COOLED CONDENSER</p> <p>ACU AIR CONDITIONING UNIT</p> <p>ADA AMERICANS WITH DISABILITIES ACT</p> <p>AD ACCESS DOOR</p> <p>AE ACID EXHAUST</p> <p>AW ACID WASTE</p> <p>AFF, A.F.F. ABOVE FINISHED FLOOR</p> <p>AHU AIR HANDLING UNIT</p> <p>AP ACCESS PANEL</p> <p>APPROX. APPROXIMATE; APPROXIMATELY</p> <p>APMR AS PER MFR'S RECOMMENDATIONS</p> <p>ATC AUTOMATIC TEMPERATURE CONTROL</p> <p>AV AIR VENT</p> <p>BC BALANCING COCK</p> <p>BDD BACKDRAFT DAMPER</p> <p>BG BLAST GATE</p> <p>BF BARRIER FREE</p> <p>BFP BACKFLOW PREVENTER</p> <p>BHP BRAKE HORSEPOWER</p> <p>BLDG BUILDING</p> <p>BOD BOTTOM OF DUCT</p> <p>B.T.U.; BTU BRITISH THERMAL UNIT</p> <p>CONV. CONVECTOR</p> <p>CCW COUNTER CLOCKWISE</p> <p>CFF CAPPED FOR FUTURE</p> <p>CFM CUBIC FEET PER MINUTE</p> <p>CLG CEILING</p> <p>CO CLEANOUT</p> <p>CM CONSTRUCTION MANAGER</p> <p>CNTR COUNTER; COUNTER TOP</p> <p>CONN CONNECT; CONNECTION</p> <p>CONT. CONTINUE; CONTINUATION</p> <p>COORD. COORDINATE</p> <p>CORR CORRIDOR</p> <p>CR CHEMICAL RESISTING</p> <p>CT COOLING TOWER</p> <p>CTE CONNECT TO EXISTING</p> <p>CTR CENTER</p> <p>CTRLN CENTERLINE</p> <p>CU COPPER; CONDENSING UNIT</p> <p>CUH CABINET UNIT HEATER</p> <p>C.V. CONTROL VALVE</p> <p>CW COLD WATER; CLOCKWISE</p> <p>DB DRY BULB TEMPERATURE</p> <p>DC DOUBLE CONTAINED</p> <p>DDC DIRECT DIGITAL CONTROL</p> <p>DET DETAIL</p> <p>DIA DIAMETER</p> <p>DIC DOWN IN CHASE</p> <p>DIW DOWN IN WALL</p> <p>DN DOWN</p> <p>DS DOWNSPOUT</p> <p>DT DROP AND TRANSITION</p> <p>DV DRAIN VALVE</p> <p>DWG DRAWING</p> <p>E EXHAUST AIR</p> <p>EF EXHAUST FAN</p> <p>EG EXHAUST GRILLE</p> <p>ELEV ELEVATION</p> <p>ELONG ELONGATE</p> <p>ENC ENCLOSURE</p> <p>ER EXHAUST REGISTER</p> <p>ERU ENERGY RECOVERY UNIT</p> <p>ESP EXTERNAL STATIC PRESSURE</p> <p>ET EXPANSION TANK</p> <p>(E) EXISTING</p> <p>F&T FLOAT AND THERMOSTATIC</p> <p>FBO FURNISHED BY OTHERS</p> <p>FBP FACE AND BYPASS</p> <p>FC FLEXIBLE CONNECTION</p> <p>FCO FLOOR CLEANOUT</p> <p>FD# FLOOR DRAIN TAG</p> <p>FD FIRE DAMPER</p> <p>FDC FIRE DEPT. CONNECTION</p> <p>FIN FINISH</p> <p>FL; FLR FLOOR</p> <p>FP FROST/FREEZE PROOF</p> <p>FTG FOOTING</p> <p>FTR FINNED TUBE RADIATION</p> <p>FS FLOW SWITCH</p> <p>FM FORCE MAIN</p> <p>GC GENERAL CONTRACTOR</p> <p>GPM GALLONS PER MINUTE</p> <p>GRV GRAVITY ROOF VENTILATOR</p> <p>H HUMIDIFIER</p> <p>HB HOSE BIBB</p> <p>HC, HDC HANDICAP ACCESS</p> <p>HGT; HT HEIGHT</p> <p>HP HEAT PUMP</p> <p>HRU HEAT RECOVERY UNIT</p> <p>HTR HEATER</p> <p>H&V HEATING AND VENTILATION</p> <p>HVAC HEATING, VENTILATING AND AIR COND.</p> <p>HW HOT WATER</p> <p>HWR HOT WATER RETURN</p> <p>HWS HOT WATER SUPPLY</p> <p>HX HEAT EXCHANGER</p> <p>ID INSIDE DIAMETER</p> <p>IN WG INCHES WATER GAUGE</p> <p>INCL. INCLUDING</p> <p>INV. EL. INVERT ELEVATION</p> <p>IPS IRON PIPE SIZE</p> <p>KE# KITCHEN EQUIPMENT NUMBER</p> <p>LD LINEAR DIFFUSER</p> <p>LE# SCIENCE LAB EQUIPMENT NUMBER</p> <p>LP LIQUID PETROLEUM GAS</p> <p>LPR LOW PRESSURE STEAM RETURN</p> <p>LPS LOW PRESSURE STEAM SUPPLY</p> <p>MAX MAXIMUM</p> <p>MBH 1000 BTUH/hr.</p> <p>MFR MANUFACTURER</p> <p>MIN MINIMUM</p> <p>MOD MOTOR OPERATED DAMPER</p> <p>MPG MEDIUM PRESSURE GAS</p> <p>MPV MULTI-PURPOSE VALVE</p> <p>MTD MOUNTED</p> <p>MTG MOUNTING</p> <p>MUA MAKE UP AIR</p> <p>N.C. NORMALLY CLOSED</p> <p>N.O. NORMALLY OPEN</p> <p>NG NATURAL GAS</p> <p>NIC NOT IN CONTRACT</p> <p>NPT NATIONAL PIPE THREAD</p> <p>NTS NOT TO SCALE</p> <p>OBD OPPOSED BLADE DAMPER</p> <p>OD OUTSIDE DIAMETER</p> <p>OED OPEN ENDED DUCT</p> <p>P.# PLUMBING FIXTURE TAG</p> <p>PD PUMPED DISCHARGE</p> <p>PP PROCESS PIPING</p> <p>PRS PRESSURE REDUCING STATION</p> <p>PRV PRESSURE REDUCING VALVE</p> <p>R RETURN AIR</p> <p>RD ROOF DRAIN</p> <p>REC RECOMMENDATION</p> <p>REG REGULAR</p> <p>RF RETURN FAN</p> <p>RG RETURN GRILLE</p> <p>RHC REHEAT COIL</p> <p>RM ROOM</p> <p>RPZ REDUCED PRESSURE BFP</p> <p>RR RETURN REGISTER</p> <p>RV RELIEF VALVE</p> <p>RW RAIN WATER</p> <p>S SUPPLY AIR</p> <p>SA-# SHOCK ABSORBER OF PDI SIZE (" ") AS INDICATED</p> <p>SCV SELF-CONTAINED VALVE</p> <p>SD SMOKE DAMPER</p> <p>SF SUPPLY FAN</p> <p>SG SUPPLY GRILLE</p> <p>SGL SINGLE</p> <p>SHT SHEET</p> <p>SPLR SPRINKLER</p> <p>SQ. FT; SF SQUARE FEET</p> <p>SR SUPPLY REGISTER</p> <p>S/O SHUT-OFF</p> <p>S.S. STAINLESS STEEL</p> <p>TD TRENCH DRAIN</p> <p>TG TRANSFER GRILLE</p> <p>TOD TOP OF DUCT</p> <p>TP TRAP PRIMER</p> <p>TSP TOTAL STATIC PRESSURE</p> <p>TTS TIGHT TO STEEL</p> <p>TV TURNING VANE</p> <p>TW TEMPERED WATER</p> <p>TYP TYPICAL</p> <p>UH UNIT HEATER</p> <p>UIC UP IN CHASE</p> <p>UIW UP IN WALL</p> <p>UV UNIT VENTILATOR</p> <p>V VENT</p> <p>VAC VACUUM</p> <p>VB VACUUM BREAKER</p> <p>VCFF VALVE & CAP FOR FUTURE</p> <p>VD VOLUME DAMPER - MANUAL</p> <p>VLV VALVE</p> <p>VS VENT STACK</p> <p>VTR VENT TO ROOF</p> <p>W WASTE</p> <p>W WITH</p> <p>WB WET BULB TEMPERATURE, "F</p> <p>WCO WALL CLEANOUT</p> <p>WH WATER HEATER</p> <p>WHYD WALL HYDRANT</p> <p>Ø DIAMETER</p> <p>@ AT</p> <p>& AND</p> <p>% PERCENT</p>									
---	--	--	--	--	--	--	--	--	--

A1 PIPING LINETYPE LEGEND

NONE									
------	--	--	--	--	--	--	--	--	--

A4 ABBREVIATIONS

NONE									
------	--	--	--	--	--	--	--	--	--

160 Veranda Street
Portland, Maine 04103
T: 207.221.2260
F: 207.221.2266
Web: www.allied-eng.com

Allied Engineering
Structural Mechanical Electrical Commissioning

ANTHONY'S DAVIS
No. 8834
Professional Engineer
State of Maine

REVISIONS		DATE		BY		DESCRIPTION	
No.							

Date: 10 MAY 2019
Drawn By: REV
Checked By: ASD
Project Mgr: ASD
Project No: 19035
Cad File:
Graphic Scale: 1" = 0'

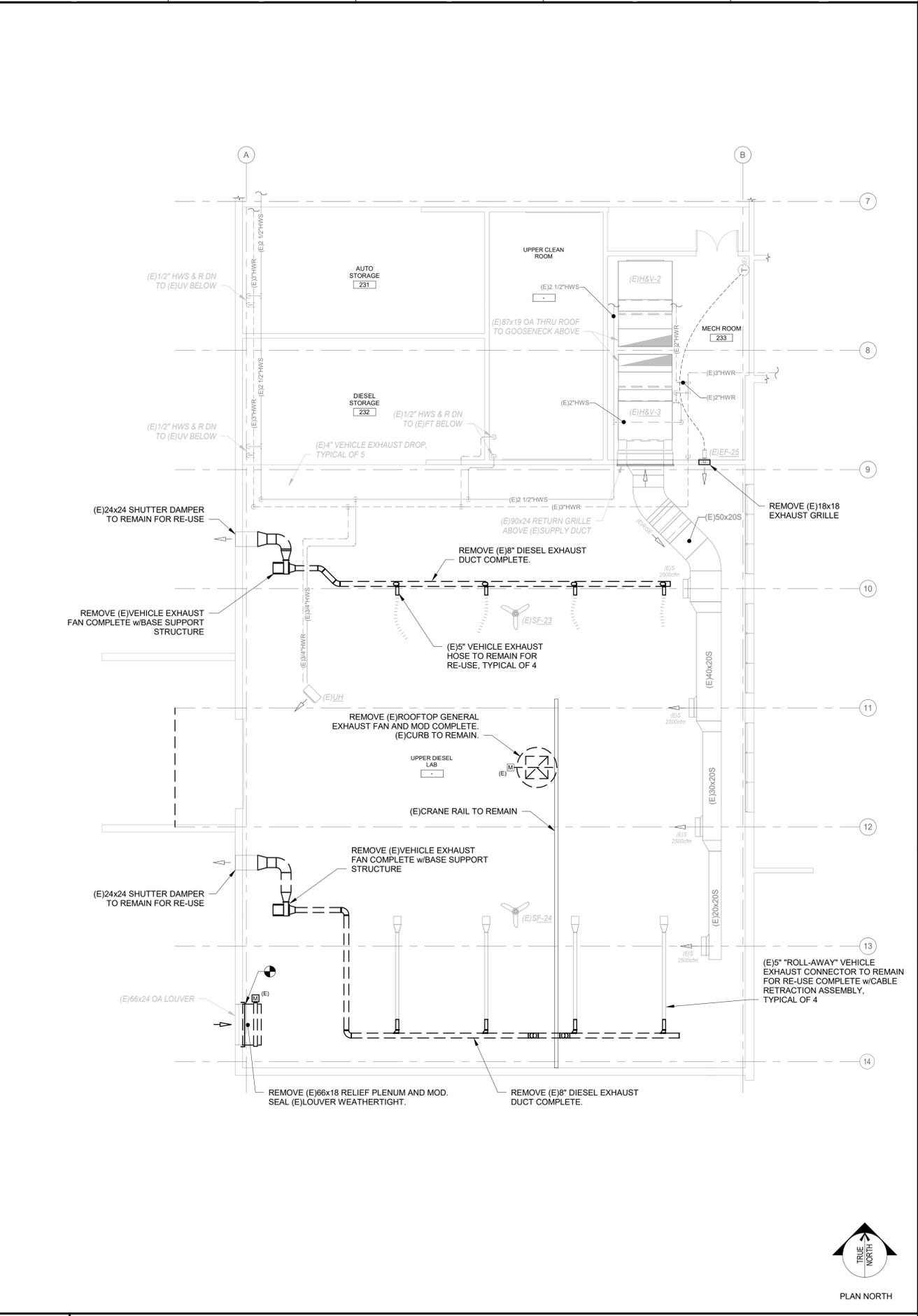
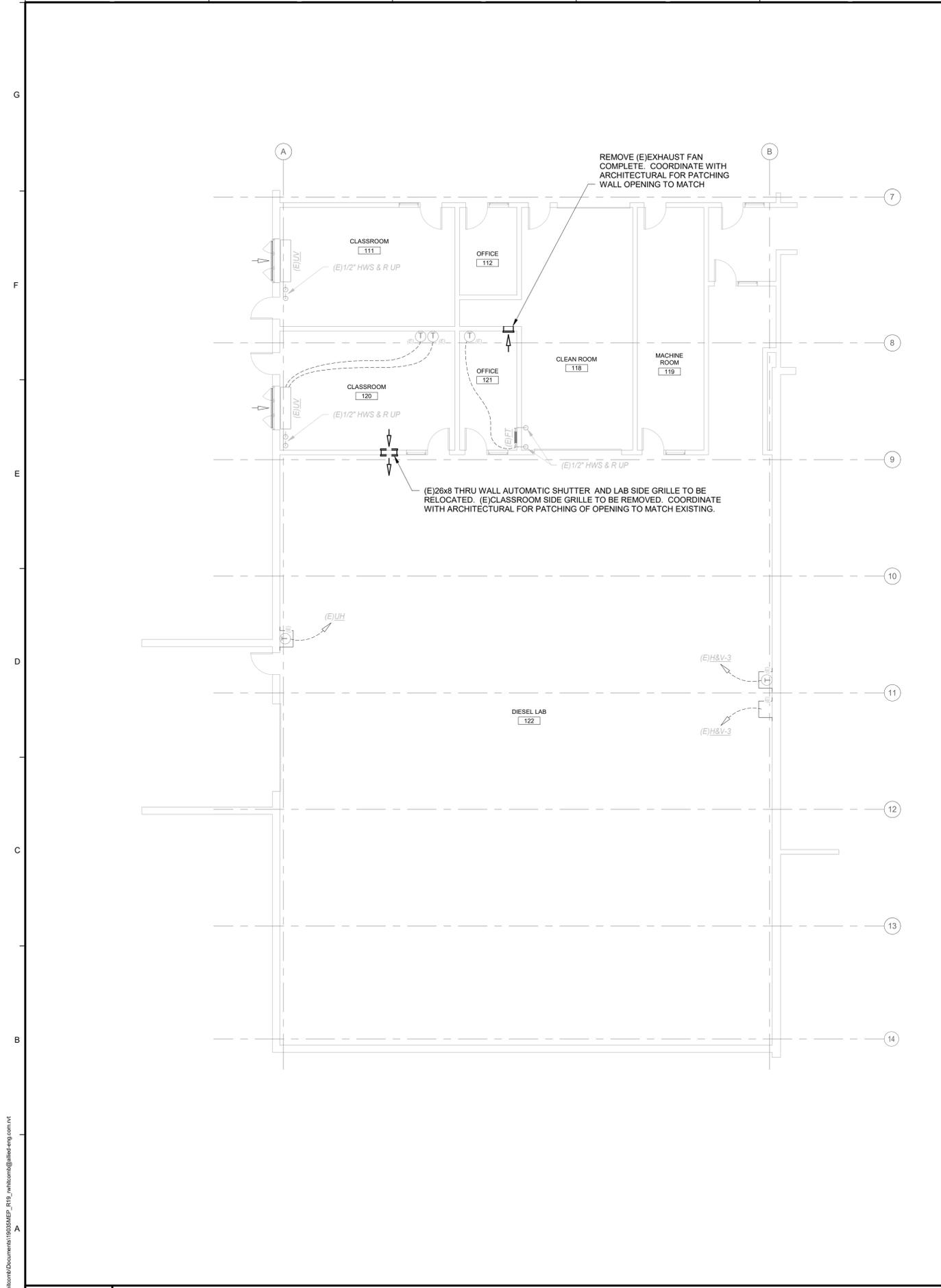
PLUMBING AND HVAC NOTES, LEGEND AND ABBREVIATIONS

DIESEL LAB VENTILATION UPGRADES MAILMAN TRADES BUILDING - NMCC
PRESQUE ISLE, MAINE
(© COPYRIGHT 2019 ALLIED ENGINEERING, INC.)

M-000

NONE									
------	--	--	--	--	--	--	--	--	--

C:\Users\wibomb\Documents\19035\MEP_R19_in\wibomb@allied-eng.com



A1 DEMOLITION PART PLAN - LOWER LEVEL
1/8" = 1'-0"

A6 DEMOLITION PART PLAN - UPPER LEVEL
1/8" = 1'-0"

160 Veranda Street
Portland, Maine 04103
T: 207.221.2260
F: 207.221.2266
Web: www.allied-eng.com

Allied Engineering
Structural Mechanical Electrical Commissioning

STATE OF MAINE
ANTHONY S. DAVIS
No. 8834
Professional Engineer License

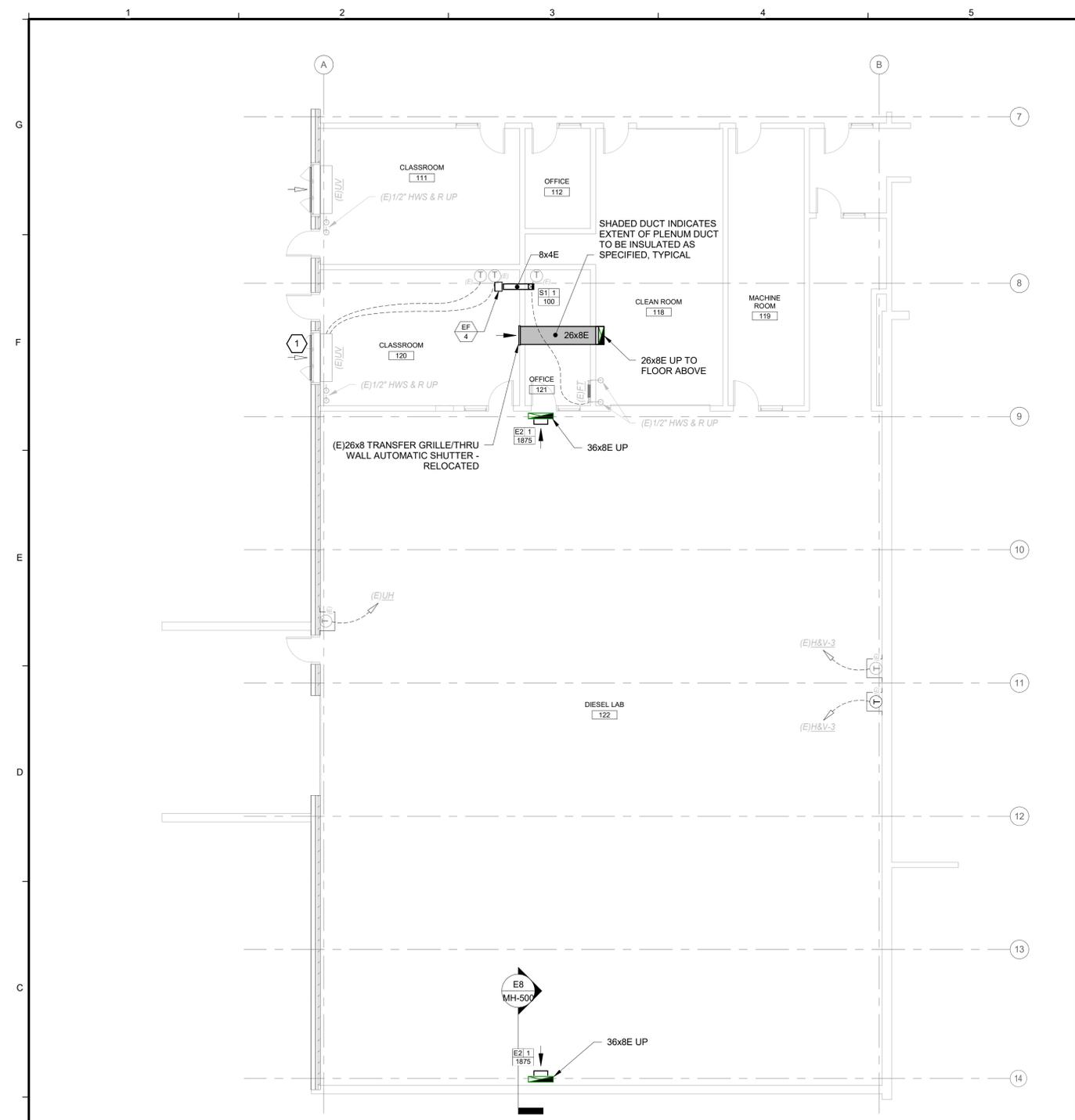
REVISIONS		DESCRIPTION
No.	DATE	BY

Date: 10 MAY 2019
Drawn By: REW
Checked By: ASD
Project Mgr: ASD
Project No: 19035
Cad File:
Graphic Scale: 1" = 0'

MECHANICAL DEMOLITION PART PLANS - LOWER AND UPPER LEVELS
DIESEL LAB VENTILATION UPGRADES
MAILMAN TRADES BUILDING - NMCC
PRESQUE ISLE, MAINE
(C) COPYRIGHT 2019 ALLIED ENGINEERING, INC.

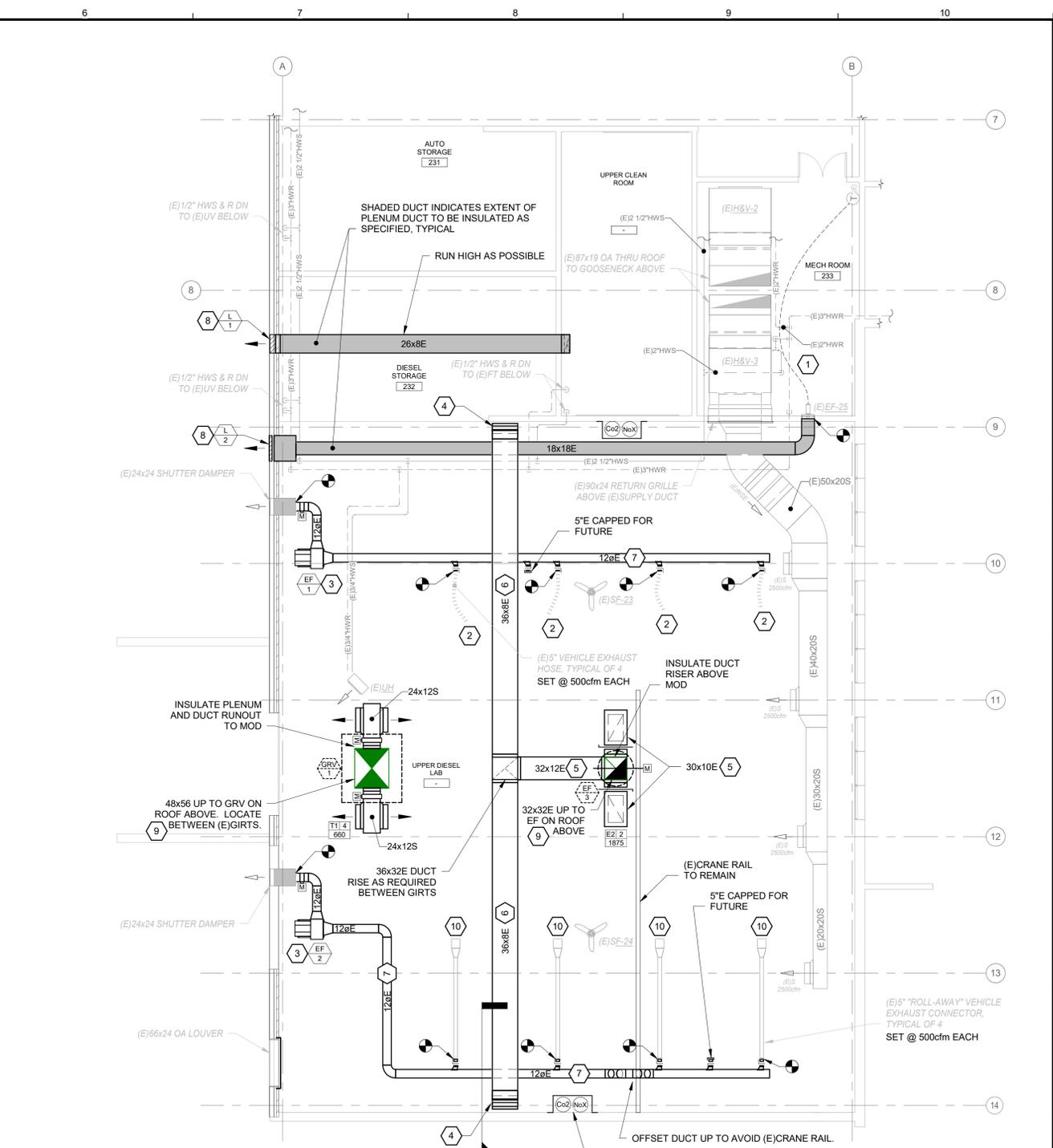
MD-100

C:\Users\whibomb\Documents\19035MEP_R19_mhwbomb@allied-eng.com.rvt



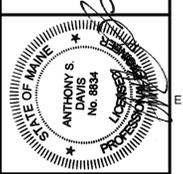
KEYED NOTES:

- 1 REFER TO SPECIFICATION SECTION 230993 FOR MODIFICATIONS TO THE CURRENT OPERATING SEQUENCE OF EXISTING EQUIPMENT.
- 2 LOCK EXISTING BLAST GATE DAMPERS OPEN.
- 3 SUSPEND FAN FROM STRUCTURE ABOVE, AS EXISTING VIA UNISTRUT BASE RAILS SUSPENDED USING 1/2" RODS AT EACH END OF EACH RAIL.
- 4 36x8E DUCT DOWN TO LOW EXHAUST GRILLE OFFSET AROUND EXISTING BEAM. MOUNT GRILLE 2'-0" ABOVE FINISHED FLOOR.
- 5 RUN DUCT HIGH AS POSSIBLE, TIGHT TO UNDERSIDE OF EXISTING GIRTS.
- 6 RUN DUCT ABOVE EXISTING STRUCTURE, TIGHT TO UNDERSIDE OF ROOF DECK.
- 7 MOUNT DUCT TO MATCH EXISTING REMOVED DUCT ELEVATION.
- 8 FRAME OPENINGS w/600S200-43 MEMBER, ALL 4 SIDES. CONNECT EACH MEMBER w/TSN AL 325 w/(3)FASTENERS EACH LEG (MINIMUM). REFER TO ARCHITECTURAL PLANS FOR MOUNTING REQUIREMENTS.
- 9 FRAME OPENINGS PER DETAIL F5 - SHEET MH500.
- 10 LOCK EXISTING GRAVITY DAMPERS OPEN.



160 Veranda Street
 Portland, Maine 04103
 T: 207.221.2260
 F: 207.221.2266
 Web: www.allied-eng.com

Allied Engineering
 Structural Mechanical Electrical Commissioning



REVISIONS	
No.	DESCRIPTION

Date: 10 MAY 2019
 Drawn By: REW
 Checked By: ASD
 Project Mgr: ASD
 Project No: 19035
 Cad File:
 Graphic Scale: 0" = 1' 1" = 1"

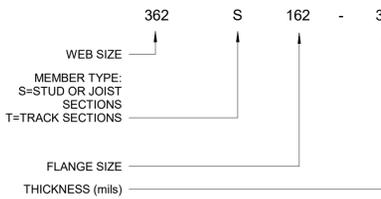
MECHANICAL PART PLANS - LOWER AND UPPER LEVELS
DIESEL LAB VENTILATION UPGRADES
MAILMAN TRADES BUILDING - NMCC
 PRESQUE ISLE, MAINE
 (C) COPYRIGHT 2019 ALLIED ENGINEERING, INC.

MH-100

CFMF FASTENERS AND CONNECTORS:

CONNECTOR	SUBSTRATE	DESCRIPTION	PRODUCT
SCREWS	METAL TRACK	#12 x 5/8" PAN HEAD	GENERIC
	STUD-TO-STUD	#12 x 5/8" HEX HEAD	GENERIC
	METAL TO STRUCT. STEEL	#12-24 x 1 1/4" HEX HEAD, #5 TIP	BUILDEX "TEKS" HILTI KWIK-PRO
P.A.F.'s	WOOD FRMG or PLWD	#12-20 x 2 3/4" PHILLIPS FLAT HEAD, #4 WINGS	BUILDEX "TEKS" HILTI KWIK-PRO
	CONCRETE or GROUTED CMU	0.157"Ø x 1 1/4"	HILTI X-U
	STRUCTURAL STEEL	0.157"Ø x 5/8"	HILTI X-U

NOTES:
1. SEE SECTIONS AND DETAILS FOR LOCATION AND NUMBER OF CONNECTORS

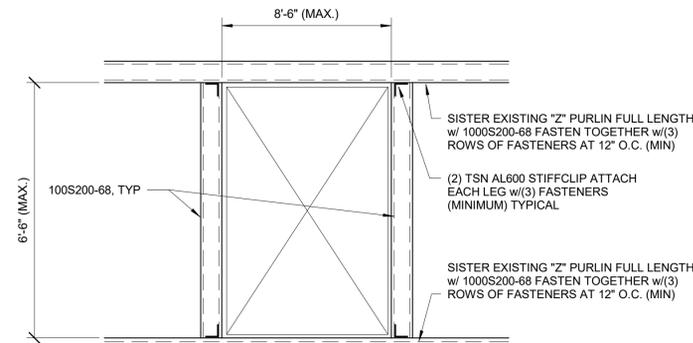


MEMBER IDENTIFICATION:

NOTES:
1. MEMBER TYPES AND SIZES SHOWN IN THIS DRAWING SET FOLLOW THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) STANDARDS. ANY MANUFACTURER WHOSE PRODUCT GEOMETRIES MEET OR EXCEED SSMA STANDARDS ARE ACCEPTABLE.

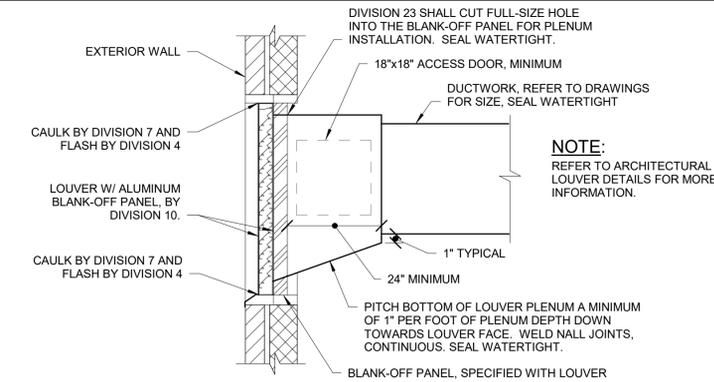
THE LAST TWO NUMBERS INDICATE THE STEEL THICKNESS

SSMA	GAUGE	DESIGN	MINIMUM	Fy
33 mils	20	0.0346"	0.0329"	33ksi
43 mils	18	0.0451"	0.0428"	33ksi
54 mils	16	0.0566"	0.0538"	50ksi
68 mils	14	0.0713"	0.0677"	50ksi
97 mils	12	0.1017"	0.0966"	50ksi



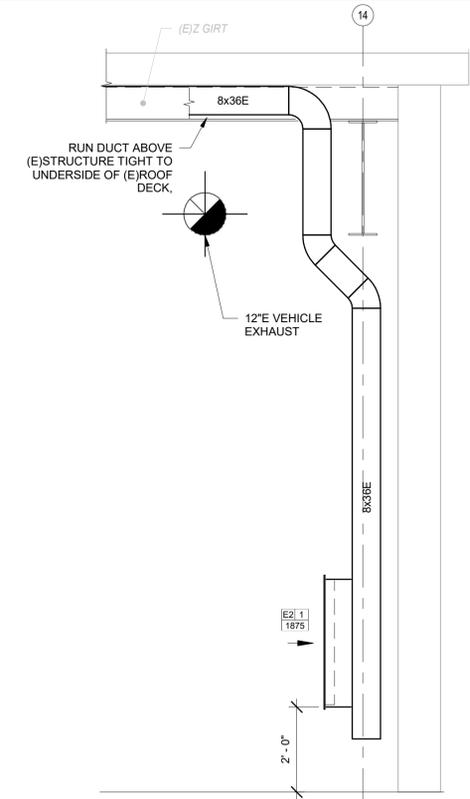
F5 TYPICAL FRAMED OPENING IN MAIN ROOF

3/4" = 1'-0"



E5 DETAIL - EXTERIOR LOUVER

NOT TO SCALE



E8 DETAIL - HIGH/LOW EXHAUST DUCT ELEVATION

1/2" = 1'-0"

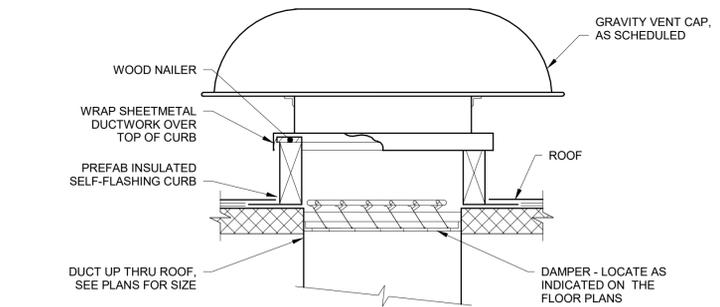
TAG	MAKE - MODEL	AIR SYSTEM	DUTY	CFM	HEIGHT (IN.)	DIMENSIONS				NET VELOCITY (FT/MIN)	% FREE AREA	BLADE DEPTH	BEGINNING POINT OF WATER PENETRATION AT 0.01 OZ./SF	MAX P.D. MAX W.C.	SCREEN	NOTES
						WIDTH (IN.)	MIN. FREE AREA (SF)	GROSS VELOCITY (FT/MIN)	MIN. FREE AREA (SF)							
L-1	RUSKIN ELF445DX	(E)JUV	RELIEF	750	24	26	1.9	173.1	394.7	43.8%	4"	873 FPM	0.06	SEE SPEC		
L-2	RUSKIN ELF445DX	(E)JEF-25	EXHAUST	1,410	24	36	2.8	235.0	503.6	46.7%	4"	873 FPM	0.06	SEE SPEC		

TAG	MAKE - MODEL	ASSOCIATED AIR SYSTEM	INTAKE OR RELIEF?	CFM	HOOD DIMENSIONS				THROAT DIMENSIONS			NUMBERS OF TIERS	MAX P.D. MAX W.C.	FILTERS	WEIGHT LBS	ROOF CURB
					LENGTH (in.)	WIDTH (in.)	HEIGHT (in.)	MIN. FREE AREA (SF)	LENGTH (in.)	WIDTH (in.)	MIN. FREE AREA (SF)					
GRV-1	GREENHECK FGI	EF-3	INTAKE	5,300	96	84	25		56.0	48	18.7	NA	0.10	YES	299	30"

TAG	MFR.	MODEL	TYPE	NECK SIZE	FACE SIZE	MAX CFM	MAX TOTAL P.D. (IN.W.C.)	MAX NC LEVEL	BORDER TYPE	BLOW	NOTES
T-1	PRICE	630	ALUM. TRANSFER, 3/4" SPACING, 45 DEG...	34" X 10"	35.25" X 11.25"	660	0.04"	NA	SURFACE MOUNT		
E-1	PRICE	630	ALUM. RETURN, 3/4" SPACING, 45 DEG VANES	8" X 8"	9.75" X 9.75"	110	0.05"	20	SURFACE MT.	6" DIA RUNOUT	
E-2	PRICE	630	ALUM. RETURN, 3/4" SPACING, 45 DEG VANES	36" X 20"	37.75" X 21.75"	1,875	0.05"	22	SURFACE MT.		

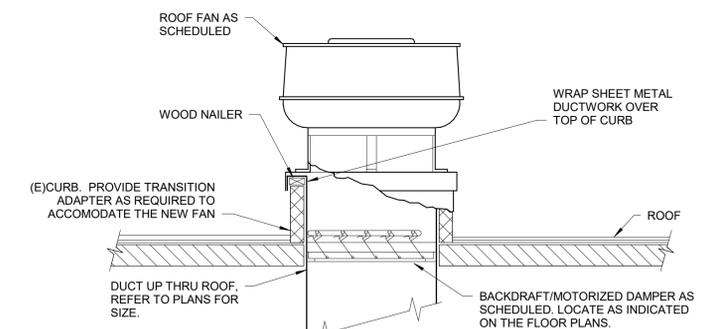
TAG	SERVES	MFR.	MODEL	TYPE	DRIVE	CFM	SP (IN. W.C.)	MOTOR		SPEED CONTROL	DISC. SWITCH FURN BY	VOLTS/PH	ARRANGEMENT	ROTATION	MAX dBA	WEIGHT (LBS.)	DAMPER	NOTES
								HP	MOTOR TYPE									
EF-1	NORTH VEHICLE EXHAUST	GREENHECK	9-IPA	UTILITY SET	BELT	2,000	2.5	5	ODP	NO	FAN MFR	460/3/60	10	CW	83.0	280	MOD	1
EF-2	SOUTH VEHICLE EXHAUST	GREENHECK	9-IPA	UTILITY SET	BELT	2,000	2.5	5	ODP	NO	FAN MFR	460/3/60	10	CW	83.0	280	MOD	
EF-3	EMERGENCY VENTILATION	GREENHECK	CUE-300HP-C-VGD	UPBLAST	DIRECT	7,500	0.75	3	ECM	YES	FAN MFR	460/3/60	NA	NA	19.7 Sones	410	MOD	
EF-4	OFFICE AIR TRANSFER	GREENHECK	SP-A700VG	CEILING	DIRECT	100	0.25"	218 W	EC	YES	FAN MFR	120/1/60	NA	NA	2.8 Sones	43	NA	

1. INCLUDES CAPACITY FOR FUTURE ADJUSTMENT TO 2500cfm. PROVIDE SHEAVE SET-UP FOR 2000cfm - CURRENT OPERATION.
2. PROVIDE ADAPTER CURB TO REDUCE THE EXISTING CURB COPENING (APPROXIMATELY 40"x40") TO MATCH THE NEW FAN REQUIREMENTS.



C8 DETAIL - ROOFTOP GRAVITY INTAKE/RELIEF

NOT TO SCALE

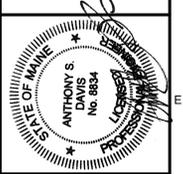


A8 DETAIL - ROOF MOUNTED EXHAUSTER

NOT TO SCALE

160 Veranda Street
Portland, Maine 04103
T: 207.221.2260
F: 207.221.2266
Web: www.allied-eng.com

Allied Engineering
Structural Mechanical Electrical Commissioning



REVISIONS	DESCRIPTION	No.	DATE	BY

Date: 10 MAY 2019
Drawn By: REW
Checked By: ASD
Project Mgr: ASD
Project No: 19035
Cad File:
Graphic Scale: 1" = 0'

MECHANICAL DETAILS AND SCHEDULES
DIESEL LAB VENTILATION UPGRADES
MAILMAN TRADES BUILDING - NMCC
PRESQUE ISLE, MAINE
(C) COPYRIGHT 2019 ALLIED ENGINEERING, INC.

MH-500

PROJECT NOTES

- THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED UNLESS OTHERWISE SPECIFICALLY INDICATED AS EXISTING OR WORK BY OTHERS, AND COORDINATION WITH ALL TRADES SCOPE OF WORK AS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING BOTH THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLIMENTARY. WORK REQUIREMENTS INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK, UNLESS SPECIFICALLY INDICATED AS EXISTING OR WORK BY OTHERS.
- IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS. WHERE DOCUMENTS CONFLICT WITHIN THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.
- WORK AT A MINIMUM SHALL BE IN ACCORDANCE WITH OSHA, NFPA STANDARDS, THE ELECTRICAL CODE AND THE LOCAL GOVERNING AUTHORITIES. THE DRAWINGS AND SPECIFICATIONS DO NOT ATTEMPT TO INDICATE ALL WORK REQUIRED BY CODE AND AUTHORITIES. DO NOT INSTALL WORK THAT DOES NOT MEET THE MINIMUM REQUIREMENTS. IF NECESSARY, REQUEST CLARIFICATION FROM ARCHITECT AND ENGINEER BEFORE PROCEEDING.
- ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND PROFESSIONAL MANNER. RECTILINEAR TO BUILDING STRUCTURE.
- ALL COMPONENTS SHOWN ON THE RISER DIAGRAMS OR DETAILS, BUT NOT ON THE PLAN OR VICE VERSA SHALL BE INCLUDED AS IF SHOWN ON BOTH.
- IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE A WORKING INSTALLATION IN EVERY DETAIL AND ALL ITEMS REQUIRED FOR SUCH AN INSTALLATION SHALL BE PROVIDED WHETHER OR NOT SPECIFICALLY INDICATED OR MENTIONED.
- VISIT THE SITE TO DETERMINE PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICE. SUBMIT ANY QUESTIONS REQUIRED TO CLARIFY SCOPE PRIOR TO BID. INCLUDE ALL REQUIRED WORK IN BID PRICE.
- INCLUDE IN BID WHATEVER IS REQUIRED TO MEET SCHEDULE INCLUDING OVERTIME, EXPRESS SHIPPING, EXPEDITING EQUIPMENT, ETC. PLAN FOR PROJECT AND SUBMIT SHOP DRAWING AND ORDER EQUIPMENT IN A TIMELY MANNER; EQUIPMENT SHALL BE BASED ON THE SPECIFIED EQUIPMENT.
- ANY EQUIPMENT TO BE SUBSTITUTED SHALL BE IDENTIFIED AT THE TIME OF BID. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBSTITUTIONS.
- ALL ELECTRICAL DEVICES, WHEN INSTALLED, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. COVER PLATES SHALL BE INSTALLED AFTER FINISH MATERIALS HAVE BEEN APPLIED.
- TEST ALL EQUIPMENT AND SYSTEMS INSTALLED TO CERTIFY COMPLIANCE WITH DRAWINGS, SPECIFICATIONS, CODES, LOCAL AUTHORITIES AND REGULATIONS, INCLUDE LABOR AND COSTS FOR TESTING, REVIEWS, COMMISSIONING, APPROVALS AND CERTIFICATIONS.
- PROVIDE TRAINING TO OWNER ON ALL EQUIPMENT AND SYSTEMS INSTALLED.
- TEMPORARY LIGHTING AND POWER SHALL BE PROVIDED AS REQUIRED BY OSHA, CODES AND LOCAL AUTHORITIES. REMOVE ALL TEMPORARY FACILITIES PROVIDED AT PROJECT COMPLETION.

INSTALLATION COORDINATION NOTES

- PRIOR TO ROUGH-IN OF ELECTRICAL PROVISIONS FOR OWNER FURNISHED EQUIPMENT AND EQUIPMENT PROVIDED BY OTHER TRADES, COORDINATE WITH THE GENERAL CONTRACTOR, EQUIPMENT SHOP DRAWINGS AND APPLICABLE EQUIPMENT INSTALLERS FOR EXACT LOCATION AND WIRING REQUIREMENTS. PROVIDE ALL NECESSARY EQUIPMENT, WIRING AND ACCESSORIES FOR A COMPLETE INSTALLATION. MAKE ALL FINAL CONNECTIONS AS REQUIRED, I.E. POWER, CONTROL, INTERLOCK, ETC.
- DISCONNECT, REMOVE, RELOCATE, AND RECONNECT ELECTRICAL CONDUIT, WIRING, DEVICES, BOXES, FIXTURES, EQUIPMENT, ETC. AS INDICATED AND AS REQUIRED TO FACILITATE THE WORK OF DIVISION 26 AND OTHER DIVISIONS. THESE DRAWINGS ARE NOT INTENDED TO INDICATE ALL ITEMS TO BE REMOVED.
- ELECTRICAL EQUIPMENT, RACEWAYS AND OUTLETS MOUNTED TO AND OR INSTALLED IN OWNER FURNISHED FURNITURE SHALL BE COORDINATED WITH THE EQUIPMENT AND FURNITURE INSTALLERS AND THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN. EXCEPT WHERE INDICATED OR REQUIRED OTHERWISE.
- THE LOCATION OF EQUIPMENT, OUTLETS, ETC. AS GIVEN ON THE DRAWINGS IS APPROXIMATE. IT SHALL BE UNDERSTOOD THAT THESE LOCATIONS ARE SUBJECT TO MODIFICATION AS MAY BE FOUND NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION IN ORDER TO MEET PROJECT REQUIREMENTS. SUCH CHANGES SHALL BE MADE WITHOUT EXTRA CHARGE.
- IF EXACT LOCATION, MOUNTING OR RACEWAY ROUTING ARE NOT INDICATED OR ARE NOT CLEAR OR CONFLICT (LOCATION OR HEIGHT) COORDINATE WITH OTHER TRADES AND REQUEST CLARIFICATION PRIOR TO ROUGH-IN OR INSTALLATION. DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATION, MOUNTING HEIGHTS OR EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
- WHERE LOADS ARE ADDED TO EXISTING BRANCH CIRCUITS, VERIFY THAT THE EXISTING CIRCUITS HAVE ADEQUATE CAPACITY TO SUPPORT THE ADDITIONAL LOAD WITHOUT EXCEEDING SPECIFIED MAXIMUM LOAD.
- UNLESS OTHERWISE DIRECTED, PROVIDE ALL NEW POWER DISTRIBUTION EQUIPMENT WITH AIC RATINGS THAT MATCH OR EXCEED THE AIC RATING OF THE NEXT ACTIVE EXISTING UPSTREAM OVER-CURRENT PROTECTIVE DEVICE SERVING THE PANEL WHEN SERVED DIRECTLY BY ITS SOURCE (E.G. NO TRANSFORMER) OR PROVIDE AIC RATING THAT EXCEEDS BY 10% THE MAXIMUM LET THROUGH FAULT CURRENT (UNDER INFINITE PRIMARY BUSS) OF THE NEXT ACTIVE UPSTREAM TRANSFORMER (EXISTING OR NEW) SERVING THE RESPECTIVE PANEL.
- ALL NEW PANELS SHALL BE FULLY RATED FOR THE DESIGNATED AIC VALUE; PANELS UTILIZING SERIES RATINGS WILL NOT BE ACCEPTABLE. NEW CIRCUIT BREAKERS PROVIDED IN EXISTING PANELS SHALL BE PROVIDED WITH AIC RATINGS THAT MATCH OR EXCEED THE HIGHEST RATED OVER-CURRENT PROTECTIVE DEVICE WITHIN THE RESPECTIVE EXISTING PANEL.
- SUBMIT SHORT CIRCUIT STUDY WITH POWER DISTRIBUTION EQUIPMENT SUBMITTALS FOR REVIEW AND APPROVAL. IN THE STUDY DEMONSTRATE THAT THE AIC RATING SELECTIONS ARE PROPERLY INTEGRATED AND COORDINATED WITH THE EXISTING AND NEW POWER DISTRIBUTION EQUIPMENT. CONFIRM THAT THE AIC RATING SELECTIONS HAVE INCORPORATED THE AVAILABLE FAULT DUTY VALUES OBTAINED FROM THE UTILITY COMPANY FOR THE PROJECTS ELECTRICAL SERVICE POINT OF COMMON COUPLING.
- SUBMIT OVER-CURRENT PROTECTIVE DEVICE COORDINATION STUDY, FOR ALL NEW POWER DISTRIBUTION EQUIPMENT, WITH THE POWER DISTRIBUTION EQUIPMENT SUBMITTALS FOR REVIEW AND APPROVAL. INCLUDE THE NEXT ACTIVE EXISTING UPSTREAM OVER-CURRENT PROTECTIVE DEVICES, IN THE STUDY ANALYSIS, WHEN PROJECT IS WITHIN AN EXISTING FACILITY.
- SUBMIT ARC FLASH REPORT, FOR ALL NEW POWER DISTRIBUTION EQUIPMENT, WITH POWER DISTRIBUTION EQUIPMENT SUBMITTALS FOR REVIEW AND APPROVAL.

WIRING NOTES

- UNLESS OTHERWISE INDICATED ON PLANS OR IN SPECIFICATIONS; ALL CONDUCTORS, POWER DISTRIBUTION EQUIPMENT BUSSING AND TRANSFORMER WINDINGS SHALL BE FABRICATED OF 98% CONDUCTIVE COPPER MATERIAL.
- WIRING IS INDICATED ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
- BRANCH CIRCUIT WIRING NOT SHOWN. CIRCUITING SHALL IN ACCORDANCE WITH APPLICABLE CODES AND STANDARD PRACTICE. PROVIDE A 20A, 1P CIRCUIT BREAKER FOR EACH LIGHTING AND RECEPTACLE CIRCUIT UNLESS OTHERWISE INDICATED OR NOTED. CONNECT NO MORE THAN SIX DUPLEX CONVENIENCE RECEPTACLES PER BRANCH CIRCUIT. CONNECTED LOAD ON LIGHTING CIRCUITS SHALL NOT EXCEED 12 AMPS.
- ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE. ALL EXPOSED WIRING INCLUDING THAT WHICH IS INSTALLED ABOVE BUT IS VISIBLE FROM BELOW, PARTIALLY OR FULLY OPEN CEILING, SHALL BE INSTALLED IN CONDUIT OR RACEWAYS. REFER TO SPECIFICATIONS FOR ACCEPTABLE WIRING METHODS.
- WIRING AND CONDUIT SHALL BE REQUIRED FOR ALL SWITCHES, AND OUTLETS INDICATED WITH CIRCUIT NUMBERS. PROVIDE 3/4" CONDUIT, 3#12 UNLESS OTHERWISE INDICATED (1 PHASE, 1 NEUTRAL AND 1 GROUND). WIRE AND CONDUIT SIZES ON HOME RUNS SHALL BE CONTINUOUS THROUGHOUT CIRCUIT. REFER TO VOLTAGE DROP CHART ON SCHEDULE SHEET. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
- RACEWAYS SHALL BE LIMITED TO SIX CURRENT CARRYING CONDUCTORS (PHASE AND NEUTRALS) AND GROUNDING CONDUCTOR. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH SINGLE-PHASE RECEPTACLE OR LIGHTING CIRCUIT, UNLESS OTHERWISE INDICATED OR IF AN OVERSIZED NEUTRAL IS SPECIFIED. CIRCUITS WITH SHARED NEUTRALS SHALL BE PROVIDED WITH CIRCUIT BREAKERS THAT HAVE A COMMON TRIP (E.G. FURNITURE WHIPS)
- MARK ALL CONDUITS AND JUNCTION BOXES WITH PERMANENT MARKER INDICATING PANEL AND CIRCUIT NUMBER OF CONDUCTORS CONTAINED WITHIN. LABEL WHERE CONDUITS ENTER PANELS, WIRE WAYS, PULL BOXES, ETC. LABEL EMPTY CONDUITS WITH SYSTEM (VOICE, DATA, SECURITY, ETC.) AND SOURCE OF CONDUIT.
- COORDINATE WITH OWNER TO DETERMINE WHICH RECEPTACLES AND ITEMS OF EQUIPMENT REQUIRE STANDBY GENERATOR POWER.
- ELECTRICAL WORK NOT SERVING STAIRWELLS SHALL NOT PASS THROUGH A STAIR ENCLOSURE UNLESS AN APPROVED RATED SOFFIT IS PROVIDED TO MAINTAIN FIRE AND SMOKE RATING.
- ALL RACEWAYS CROSSING EXPANSION JOINTS SHALL BE EQUIPPED WITH EXPANSION FITTINGS.
- PROVIDE WATERTIGHT AND GAS TIGHT SEALS INSIDE AND OUTSIDE OF CONDUITS THAT PENETRATE THE BUILDING BELOW GRADE, O.Z. GEDNEY OR APPROVED EQUAL. PROVIDE WEATHER TIGHT SEAL AT PENETRATIONS ABOVE GRADE.
- PROVIDE NRTL LISTED SMOKE AND FIRE SEALS AT ALL PENETRATIONS THROUGH FLOORS OR FULL HEIGHT (FLOOR TO FLOOR) WALLS.

MOUNTING NOTES

- DO NOT SCALE THE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS FOR EXACT DIMENSIONS.
- INSTALL ALL ELECTRICAL DEVICES (FIRE ALARM, SWITCHES, RECEPTACLES, WORK BOXES, JUNCTION BOXES, EXIT SIGNS, LUMINAIRES, ETC.) IN THE LOCATIONS IDENTIFIED OR DIMENSIONS ON THE ARCHITECTURAL PLANS, DETAILS, OR ELEVATIONS.
- IF THE DEVICE LOCATION IS NOT SPECIFICALLY SHOWN ON ARCHITECTURAL DRAWINGS, FOLLOW THE GUIDELINES LISTED BELOW:
- INSTALL NEARBY DEVICES ON ONE COMMON VERTICAL CENTERLINE
- INSTALL ADJACENT TO DEVICES LINED UP WITH A COMMON BOTTOM LINE.
- INSTALL DEVICES AT INDICATED HEIGHT AS APPLICABLE UNLESS OTHERWISE NOTED. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT AS INDICATED BY NOTE 7.
- ON MASONRY WALLS LINE UP THE BOTTOM OF THE DEVICE WITH A MASONRY JOINT AS CLOSE TO THE INDICATED HEIGHT AS PRACTICAL.
- INSTALL DEVICES IN SAME AREA AT THE SAME HEIGHT.
- MOUNT PANELS SIX FEET TO THE TOP OF THE PANEL OR ANNUNCIATOR/ FA GRAPHIC.
- MOUNT AT 8 FOOT TO BOTTOM FOR SIGNAGE, EMERGENCY LIGHTING, CLOCKS, SECURITY SENSORS, WALL MOUNTED OCCUPANCY SENSORS MODIFIED AS FOLLOWS: 4" FROM TOP OF DEVICE TO CEILING AND 4" ABOVE DOOR FRAMES.
- LOCATE CONTROL DEVICE AT LEAST 18" FROM AN INSIDE CORNER.
- SUPPORT WORK FROM THE BUILDING STRUCTURE.
- IN FINISHED AREAS ELECTRICAL WORK SHALL BE INSTALLED CONCEALED, RECESSED INTO WALLS OR INSTALLED ABOVE HUNG CEILINGS UNLESS OTHERWISE INDICATED.
- DO NOT INSTALL OUTLETS BACK TO BACK. PROVIDE 24" SPACING IN FIRE RATED WALLS.
- PROVIDE ELECTRICAL OUTLET PLATE GASKETS SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.

D2 GENERAL NOTES

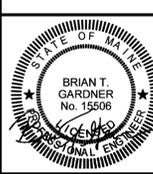
AC	ALTERNATING CURRENT	MW	MICROWAVE
AFF	ABOVE FINISHED FLOOR	MLO	MAIN LUG ONLY
AFG	ABOVE FINISHED GRADE	MT	MOUNT
AHU	AIR HANDLING UNIT	MTS	MANUAL TRANSFER SWITCH
AIC	AMPERES INTERRUPTING CAPACITY	MCP	MOTOR CONTROL PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MH	METAL HALIDE
AWG	AMERICAN WIRE GAUGE	MDP	MAIN DISTRIBUTION PANEL
BAS	BUILDING AUTOMATION SYSTEM	MIN	MINIMUM
BKBD	BACKBOARD	N	NEUTRAL
C	CONDUIT	NC	NORMALLY CLOSED
CAT	CATALOG, CATEGORY	NEC	NATIONAL ELECTRICAL CODE
CATV	CABLE TV	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CB	CIRCUIT BREAKER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CCTV	CLOSED CIRCUIT TELEVISION	NIC	NOT IN CONTRACT
CM	CIRCULAR MILS	NF	NON-FUSED
COMM	COMMUNICATIONS	NO	NORMALLY OPEN
CU	MECH CONDENSING UNIT	NO, #	NUMBER
CUH	CABINET UNIT HEATER	NTS	NOT TO SCALE
DC	DIRECT CURRENT	OC	ON CENTER
DDC	DIGITAL DIRECT CONTROL	OCC	OCCUPANCY
DN	DOWN	OH	OVERHEAD
DW	DISHWASHER	P	POLE
DWG	DRAWING	PA	PUBLIC ADDRESS
EF	EXHAUST FAN	PB	PULLBOX
ELEV	ELEVATOR	PH	PHASE
EMT	ELECTRICAL METALLIC TUBING	PIR	PASSIVE INFRARED
EP	EXPLOSION PROOF	PNL	PANELBOARD
ERU	ENERGY RECOVERY UNIT	PIO	PART OF
EWC	ELECTRIC WATER COOLER	PV	PHOTOVOLTAIC
FACP	FIRE ALARM CONTROL PANEL	PVC	POLY-VINYL CHLORIDE
FB	FLOOR BOX	REC	RECEPTACLE RECEIPT
FLA	FULL LOAD AMPS	REF	REFRIGERATOR
FWE	FURNISHED WITH EQUIPMENT	RF	RETURN FAN
G, GND	GROUND	RGS	RIGID GALVANIZED STEEL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	RM	ROOM
GFP	GROUND FAULT PROTECTION	RMC	RIGID METAL CONDUIT
HID	HIGH INTENSITY DISCHARGE	RTU	ROOFTOP UNIT
HOA	HAND-OFF-AUTO SELECTOR SWITCH	REF	REFRIGERATOR
HP	HORSEPOWER	SF	SUPPLY FAN
HVAC	HEATING, VENTILATION AND COOLING UNIT	SPDT	SINGLE POLE, DOUBLE THROW
IDS	INTRUSION DETECTION SYSTEM	SQ	SQUARE
IG	ISOLATED GROUND	TEL	TELEPHONE
IG	ISOLATED GROUND	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
IMC	INTERMEDIATE METAL CONDUIT	TYP	TYPICAL
IR	INFRARED	UF	UNDER FLOOR
K	KILO	UG	UNDERGROUND
KCMIL	KILO CIRCULAR MILS	UH	UNIT HEATER
KW	KILOWATT	UL	UNDERWRITER'S LABORATORY
KVA	KILO VOLT-AMPS	UNO	UNLESS NOTED OTHERWISE
LAN	LOCAL AREA NETWORK	UPS	UNINTERRUPTIBLE POWER SUPPLY
LC	LIGHTING CONTACTOR	V	VOLTS
LF	LINEAR FEET	VFD	VARIABLE FREQUENCY DRIVE
LC	LOADCENTER	VIF	VERIFY IN FIELD
LCP	LIGHTING CONTROL PANEL	W	WATT
LED	LIGHT EMITTING DIODE	WP	WEATHERPROOF
LTG	LIGHTING	WG	WIREGUARD
LTS	LIGHTS	XFMR	TRANSFORMER
MAX	MAXIMUM		
MCB	MAIN CIRCUIT BREAKER		
MECH	MECHANICAL		
MH	MOUNTING HEIGHT		

TAG	DESCRIPTION	VOLTS	PH	LOAD	FLA	MCA	MOPD	DISCONNECT SWITCH				STARTER (NEMA)		CBD	WIRING IN CONDUIT	NOTES		
								FRAME	POLES	FUSE	NEMA ENCL	FBD	SIZE/ VFD				FBD	
EF-1	NORTH VEHICLE EXHAUST	480	3	3HP	4.8		15	30	3	20	1	26	-	-	23	(3)#12, (1)#12G; 3/4" C		
EF-2	SOUTH VEHICLE EXHAUST	480	3	3HP	4.8		15	30	3	20	1	26	-	-	23	(3)#12, (1)#12G; 3/4" C		
EF-3	EMERGENCY VENTILATION	480	3	5HP	7.6		15	30	3	20	3	26	-	-	23	(3)#12, (1)#12G; 3/4" C		
EF-4	OFFICE AIR TRANSFER	120	1	19W					20	1	NF	1	26	-	-	23	(2)#12, (1)#12G; 3/4" C	

NOTES:	ABBREVIATIONS:
1 LEAD/LAG	FWE FURNISHED WITH EQUIPMENT
2 DUCT SMOKE DETECTORS FURNISHED BY DIVISION 26, INSTALLED BY DIVISION 23, WIRED TO FIRE ALARM BY DIVISION 26.	NF NOT FUSED
3 POWER TO CU BY DIVISION 26, WIRING BETWEEN AC AND CU PROVIDED BY DIVISION 23.	SWBD SWITCHBOARD
4 WIRE AND CONNECT MOTORIZED DAMPER AT EXHAUST FAN. CONNECT DAMPER TO SAME BRANCH CIRCUIT THAT SUPPLIES FAN.	FBD FURNISHED BY DIVISION
5 UNIT IS CONSISTS OF MULTIPLE MOTORS FACTORY WIRED FOR SINGLE-POINT POWER CONNECTION.	CBD CONTROL WIRING BY DIVISION
6 CORD AND PLUG FURNISHED WITH EQUIPMENT, PROVIDE NEMA 5-20 RECEPTACLE.	

C:\Users\gcharner\OneDrive\Local Files\190330MEP_R18_gcharner@allied-eng.com.rvt

160 Veranda Street
Portland, Maine 04103
T: 207.221.2260
F: 207.221.2266
Web: www.allied-eng.com



REVISIONS		DESCRIPTION	
No.	DATE	BY	DESCRIPTION

Date: 10 MAY 2019	Drawn By: GMC
Checked By: BTG	Project Mgr: GMC
Project No: 19035	Card File:
Graphic Scale: 0" = 1"	

LEGEND AND NOTES

DIESEL LAB VENTILATION UPGRADES
MAILMAN TRADES BUILDING - NMCC
PRESQUE ISLE, MAINE

(C) COPYRIGHT 2011 ALLIED ENGINEERING, INC.

E-000

