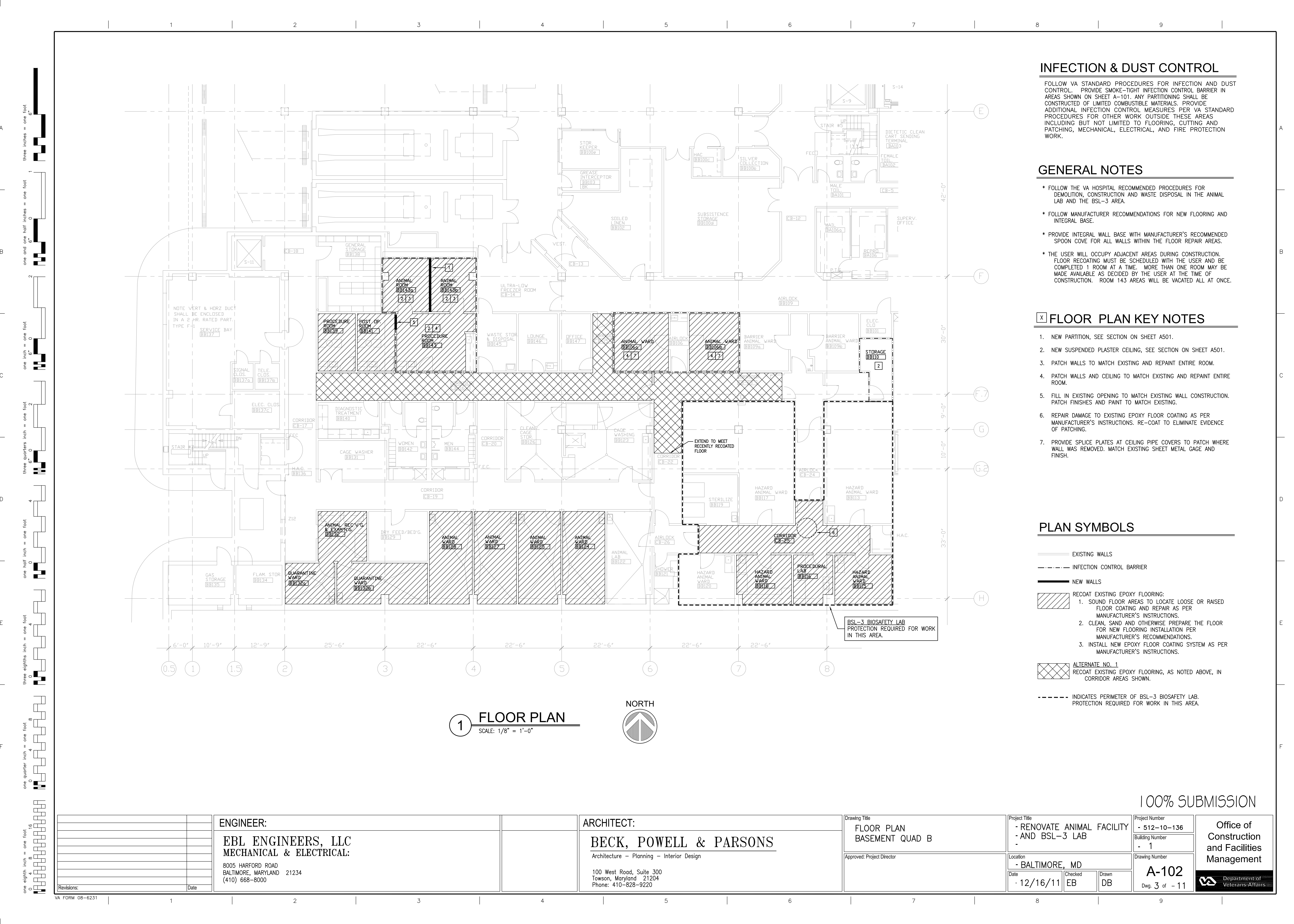


DECEMBER 16, 2011



<u>DRAWING LIST</u>		
<u>DRAWING NO.</u>	<u>SHEET NO.</u>	<u>DESCRIPTION</u>
G1001	1 OF 11	COVER SHEET
A101	2 OF 11	DEMOLITION PLAN--BASEMENT QUAD B
A102	3 OF 11	FLOOR PLAN--BASEMENT QUAD B
A501	4 OF 11	SCHEDULES AND DETAILS
M101	5 OF 11	MECHANICAL LEGENDS, SCHEDULES, AND DETAILS
MD101	6 OF 11	PARTIAL FLOOR PLAN--BASEMENT QUAD B--MECHANICAL DEMOLITION
MH101	7 OF 11	PARTIAL FLOOR PLAN--BASEMENT QUAD B--MECHANICAL
MH102	8 OF 11	PARTIAL FLOOR PLAN--PENTHOUSE, 7B100--MECHANICAL, FAN CF--56A INSTALLATION SCHEMATIC AND CONTROL DIAGRAM
E101	9 OF 11	ELECTRICAL LEGEND, SCHEDULES, AND DETAILS
ED101	10 OF 11	PARTIAL FLOOR PLAN--BASEMENT QUAD B--ELECTRICAL DEMOLITION
EP101	11 OF 11	PARTIAL FLOOR PLAN--BASEMENT QUAD B--ELECTRICAL

[illegible]



INFECTION & DUST CONTROL

FOLLOW VA STANDARD PROCEDURES FOR INFECTION AND DUST CONTROL. PROVIDE SMOKE-TIGHT INFECTION CONTROL BARRIER IN AREAS SHOWN ON SHEET A-101. ANY PARTITIONING SHALL BE CONSTRUCTED OF LIMITED COMBUSTIBLE MATERIALS. PROVIDE ADDITIONAL INFECTION CONTROL MEASURES PER VA STANDARD PROCEDURES FOR OTHER WORK OUTSIDE THESE AREAS INCLUDING BUT NOT LIMITED TO FLOORING, CUTTING AND PATCHING, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION WORK.

GENERAL NOTES

- FOLLOW THE VA HOSPITAL RECOMMENDED PROCEDURES FOR DEMOLITION, CONSTRUCTION AND WASTE DISPOSAL IN THE ANIMAL LAB AND THE BSL-3 AREA.
- FOLLOW MANUFACTURER RECOMMENDATIONS FOR NEW FLOORING AND INTEGRAL BASE.
- PROVIDE INTEGRAL WALL BASE WITH MANUFACTURER'S RECOMMENDED SPOON COVE FOR ALL WALLS WITHIN THE FLOOR REPAIR AREAS.
- THE USER WILL OCCUPY ADJACENT AREAS DURING CONSTRUCTION. FLOOR RECOATING MUST BE SCHEDULED WITH THE USER AND BE COMPLETED 1 ROOM AT A TIME. MORE THAN ONE ROOM MAY BE MADE AVAILABLE AS DECIDED BY THE USER AT THE TIME OF CONSTRUCTION. ROOM 143 AREAS WILL BE VACATED ALL AT ONCE.

FLOOR PLAN KEY NOTES

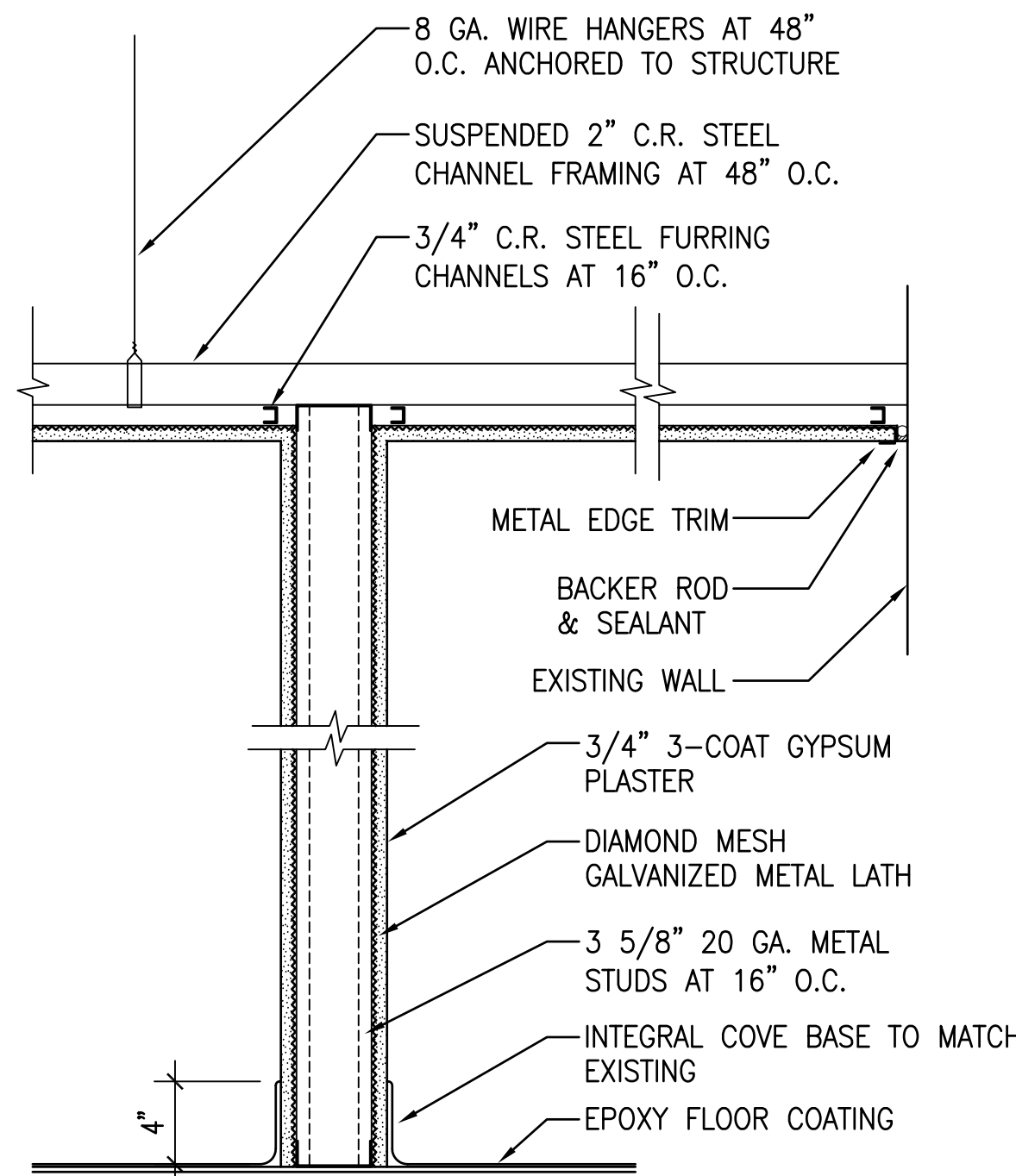
- NEW PARTITION, SEE SECTION ON SHEET A501.
- NEW SUSPENDED PLASTER CEILING, SEE SECTION ON SHEET A501.
- PATCH WALLS TO MATCH EXISTING AND REPAINT ENTIRE ROOM.
- PATCH WALLS AND CEILING TO MATCH EXISTING AND REPAINT ENTIRE ROOM.
- FILL IN EXISTING OPENING TO MATCH EXISTING WALL CONSTRUCTION. PATCH FINISHES AND PAINT TO MATCH EXISTING.
- REPAIR DAMAGE TO EXISTING EPOXY FLOOR COATING AS PER MANUFACTURER'S INSTRUCTIONS. RE-COAT TO ELIMINATE EVIDENCE OF PATCHING.
- PROVIDE SPLICE PLATES AT CEILING PIPE COVERS TO PATCH WHERE WALL WAS REMOVED. MATCH EXISTING SHEET METAL GAGE AND FINISH.

PLAN SYMBOLS

- EXISTING WALLS
- INFECTION CONTROL BARRIER
- NEW WALLS
- RECOAT EXISTING EPOXY FLOORING:
 - SOUND FLOOR AREAS TO LOCATE LOOSE OR RAISED FLOOR COATING AND REPAIR AS PER MANUFACTURER'S INSTRUCTIONS.
 - CLEAN, SAND AND OTHERWISE PREPARE THE FLOOR FOR NEW FLOORING INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
 - INSTALL NEW EPOXY FLOOR COATING SYSTEM AS PER MANUFACTURER'S INSTRUCTIONS.
- ALTERNATE NO. 1
RECOAT EXISTING EPOXY FLOORING, AS NOTED ABOVE, IN CORRIDOR AREAS SHOWN.
- INDICATES PERIMETER OF BSL-3 BIOSAFETY LAB. PROTECTION REQUIRED FOR WORK IN THIS AREA.

100% SUBMISSION

ENGINEER: EBL ENGINEERS, LLC MECHANICAL & ELECTRICAL: 8005 HARFORD ROAD BALTIMORE, MARYLAND 21234 (410) 668-8000		ARCHITECT: BECK, POWELL & PARSONS Architecture - Planning - Interior Design 100 West Road, Suite 300 Towson, Maryland 21204 Phone: 410-828-9220		Drawing Title FLOOR PLAN BASEMENT QUAD B Approved: Project Director	Project Title - RENOVATE ANIMAL FACILITY - AND BSL-3 LAB - Location - BALTIMORE, MD Date - 12/16/11	Project Number - 512-10-136 Building Number - 1 Drawing Number A-102 Dwg. 3 of - 11	Office of Construction and Facilities Management Department of Veterans Affairs
Revisions:	Date			Checked EB	Drawn DB		



1 WALL/CEILING SECTION
SCALE: 1 1/2" = 1'-0"

ROOM FINISH SCHEDULE

AREA		FLOOR		BASE		WAINSCOT		WALLS		CEILING			REMARKS
ROOM NO.	ROOM NAME	MAT.	FIN.	HGT.	MAT.	HGT.	MAT.	MAT.	FIN.	MAT.	FIN.	CLG. HGT.	
BB106a	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	SC-1	X	P-2	---	
BB106b	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	SC-1	X	P-2	---	
BB110	STORAGE	ERF-1	---	4"	ERF-1			X	P-1	PLAS	P-2	M	
CB-15	CORRIDOR	ERF-1	---	4"	ERF-1			X	---	X	---	---	ALTERNATE NO. 1
CB-16	CORRIDOR	ERF-1	---	4"	ERF-1			X	---	X	---	---	ALTERNATE NO. 1
CB-23	CORRIDOR	ERF-1	---	4"	ERF-1			X	---	X	---	---	ALTERNATE NO. 1
CB-25	CORRIDOR	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB115	HAZARD ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB116	PROCEDURAL LAB	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB118	HAZARD ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB124	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB125	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB127	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB128	ANIMAL WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB132	ANIMAL RECIEIVING	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB132a	QUARANTINE WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB132b	QUARANTINE WARD	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB139	PROCEDURE ROOM	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB141	POST OP ROOM	ERF-1	---	4"	ERF-1			X	---	X	---	---	
BB143	PROCEDURE ROOM	ERF-1	---	4"	ERF-1			X	P-1	PLAS	P-2	---	
BB143a	ANIMAL ROOM	ERF-1	---	4"	ERF-1			X PLAS	SC-1 SC-1	PLAS	P-2	M	
BB143b	ANIMAL ROOM	ERF-1	---	4"	ERF-1			X PLAS	SC-1 SC-1	PLAS	P-2	M	
CB-25	CORRIDOR	ERF-1	---	4"	ERF-1			X	---	X	---	---	

COLORS

EPOXY RESINOUS FLOORING (ERF)
ERF-1: COLOR TO MATCH EXISTING

PAINT (P)
P-1: COLOR TO MATCH EXISTING
P-2: WHITE

HIGH-BUILD GLAZED COATING (SC)
SC-1: COLOR TO MATCH EXISTING

ABBREVIATIONS

ERF = EPOXY RESINOUS FLOORING
EXP = EXPOSED
PLAS = PLASTER
SC = HIGH-BUILD GLAZED COATING
X = EXISTING TO REMAIN
M = MATCH EXISTING HEIGHT

100% SUBMISSION

<div>Revisions:</div> <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																						ENGINEER: EBL ENGINEERS, LLC MECHANICAL & ELECTRICAL: 8005 HARFORD ROAD BALTIMORE, MARYLAND 21234 (410) 668-8000		ARCHITECT: BECK, POWELL & PARSONS <small>Architecture - Planning - Interior Design</small> 100 West Road, Suite 300 Towson, Maryland 21204 Phone: 410-828-9220		<div>Drawing Title</div> <div>SCHEDULES AND DETAILS</div> <div>Approved: Project Director</div>		<div>Project Title</div> <div>- RENOVATE ANIMAL FACILITY - AND BSL-3 LAB -</div> <div>Location</div> <div>- BALTIMORE, MD</div> <div>Date</div> <div>- 12/16/11</div> <div>Checked</div> <div>EB</div> <div>Drawn</div> <div>DB</div>		<div>Project Number</div> <div>- 512-10-136</div> <div>Building Number</div> <div>- 1</div> <div>Drawing Number</div> <div>A-501</div> <div>Dwg. 4 of - 11</div>	<div>Office of Construction and Facilities Management</div> <div> Department of Veterans Affairs</div>
VA FORM 08-6231																															

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Drawing TitleMECHANICAL LEGEND, SCHEDULES
AND DETAILS

Approved: Project Director

Project Title

RENOVATE ANIMAL FACILITY AND BSL-3 LAB

Location	BALTIMORE, MD
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12/16/11

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Chem

EBL

Project Number

512-10-136

Building

Drawn By _____
Drawn Number _____

A414

Dwg. 5 of - 11

Dwg. 5 of - 11

Office of
Construction
and Facilities
Management



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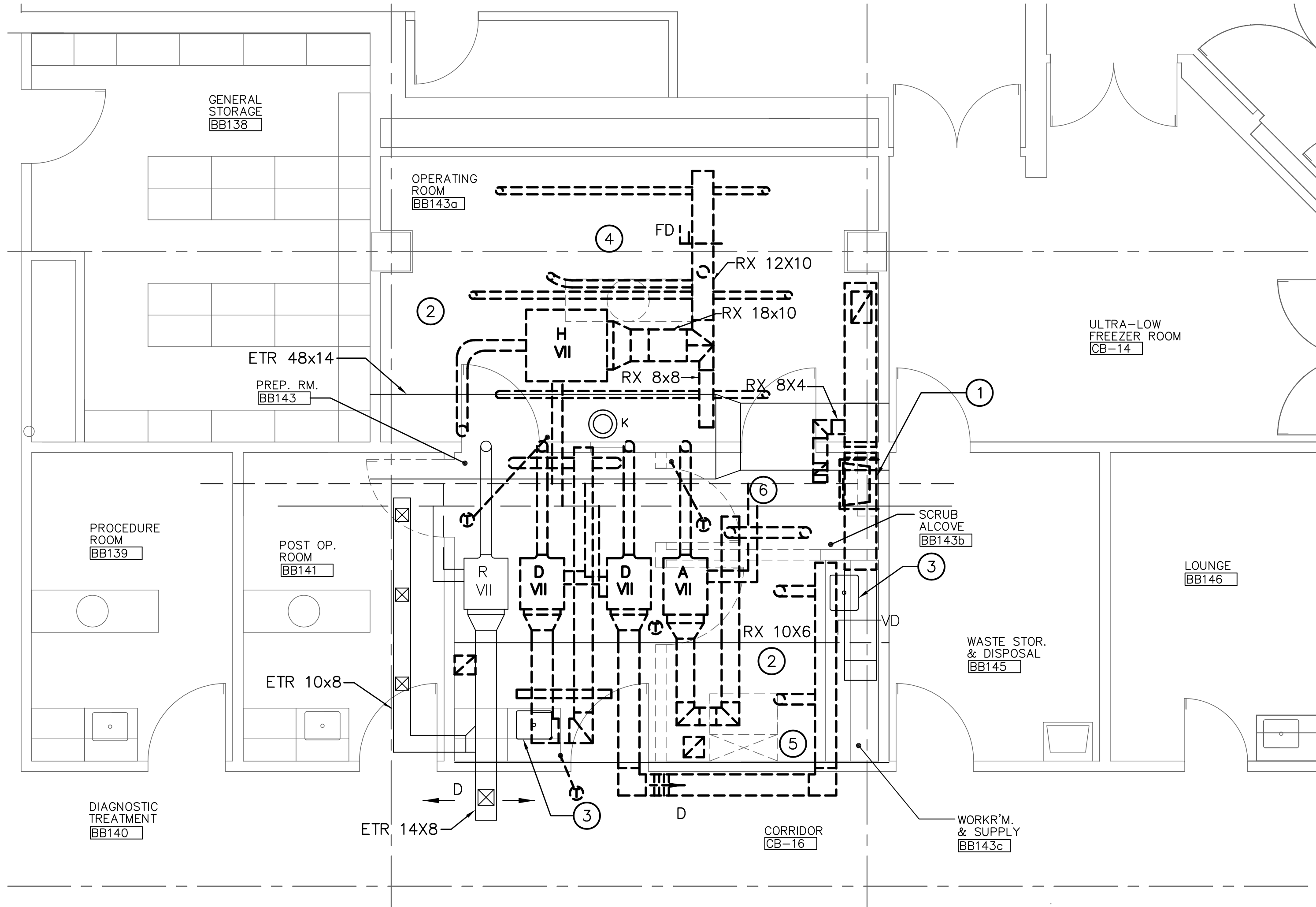
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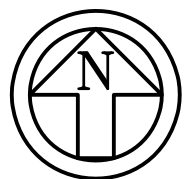
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PARTIAL FLOOR PLAN - BASEMENT QUAD B - MECHANICAL DEMOLITION

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



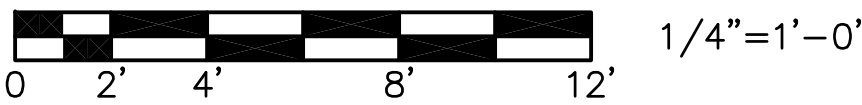
DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- 1 REMOVE EXISTING CLINICAL SINK, SANITARY, AND DOMESTIC WATER PIPING TO POINT OF CONCEALMENT AND CAP. PATCH SURFACES TO MATCH EXISTING.
- 2 REMOVE EXISTING SUPPLY AND RETURN DUCTWORK IN THIS AREA. DUCTWORK IS LOCATED IN INTERSTITIAL SPACE ABOVE BASEMENT LEVEL. PATCH ALL REMAINING ABANDONED PENETRATIONS WHEN DUCTWORK IS REMOVED. CV BOXES, COILS AND THERMOSTATS SHALL BE RELOCATED AS SHOWN ON MECHANICAL DRAWINGS.
- 3 EXISTING SINK TO REMAIN.
- 4 REMOVE ALL MEDICAL EQUIPMENT IN THIS AREA. INCLUDING X-RAY MACHINE, CONTROL PANEL, AND ALL ANCILLARY ACCESSORIES AND EQUIPMENT.
- 5 REMOVE AUTOCLAVE IN THIS AREA AND DELIVER TO GOVERNMENT. COORDINATE DELIVERY LOCATION WITH CONTRACTING OFFICER.
- 6 REMOVE MEDICAL GAS PANEL AND ASSOCIATED PIPING INTO EXISTING OPERATING ROOM. MEDICAL GASSES SHALL BE CUT AND CAPPED AT SUPPLY MAIN OR IN-LINE SHUT-OFF VALVES.

CAUTION:

IF THIS PLAN IS A REDUCTION,
GRAPHIC SCALES MUST BE USED.

GRAPHIC SCALE



<div>Revisions:</div> <div>Date</div>		<div>ENGINEER:</div> <div>EBL ENGINEERS, LLC MECHANICAL & ELECTRICAL:</div> <div>8005 HARFORD ROAD BALTIMORE, MARYLAND 21234 (410) 668-8000</div>	<div>ARCHITECT:</div> <div>BECK, POWELL & PARSONS</div> <div>Architecture - Planning - Interior Design</div> <div>100 West Road, Suite 300 Towson, Maryland 21204 Phone: 410-828-9220</div>	<div>Drawing Title</div> <div>PARTIAL FLOOR PLAN - BASEMENT QUAD B - MECHANICAL DEMOLITION</div> <div>Approved: Project Director</div>	<div>Project Title</div> <div>RENOVATE ANIMAL FACILITY AND BSL-3 LAB</div> <div>Location</div> <div>BALTIMORE, MD</div> <div>Date</div> <div>12/16/11</div>	<div>Project Number</div> <div>512-10-136</div> <div>Building Number</div> <div>1</div> <div>Drawn</div> <div>EBL</div>	<div>Drawn Number</div> <div>MD101</div> <div>Dwg. 6 of - 11</div>	<div>Office of Construction and Facilities Management</div> <div>Department of Veterans Affairs</div>
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GENERAL NOTES: (APPLY TO THIS DRAWING ONLY)

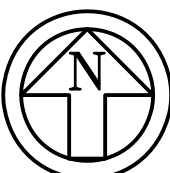
1. CONTROL SYSTEM GRAPHICS AND POINTS FOR RELOCATED CV BOXES SHALL BE ADJUSTED TO REFLECT CHANGES INCLUDED IN THIS PROJECT.

DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- ① WALL MOUNTED HEAT PUMP UNIT. EXTEND CONDENSATE DRAIN TO NEAREST FLOOR DRAIN.
- ② CONDENSING UNITS ON WALL MOUNTED STEEL PLATFORMS. UNITS SHALL BE STACKED VERTICALLY. MAINTAIN CLEARANCE TO ALLOW FOR 42" WIDE PALLETS TO ENTER AND EXIT ROLL-UP DOOR.
- ③ 1½" VENT ABOVE CEILING.
- ④ ALL SUPPLY AND RETURN AIR DUCTWORK SHOWN IS LOCATED IN INTERSTITIAL SPACE ABOVE BASEMENT LEVEL. AIR DEVICES ARE LOCATED IN CEILING OF SPACE SERVED.
- ⑤ REFRIGERANT PIPING LOCATED IN INTERSTITIAL SPACE ABOVE BASEMENT LEVEL.
- ⑥ PROVIDE IN-LINE BACKFLOW PREVENTER IN HOT AND COLD DOMESTIC WATER SUPPLIES TO SINK FIXTURE.
- ⑦ PROVIDE IN-LINE BACKFLOW PREVENTER IN HOT AND COLD DOMESTIC WATER SUPPLIES AT THIS LOCATION.
- ⑧ RELOCATED CV BOX, HEATING COIL, VALVES AND CONTROLS.
- ⑨ PROVIDE CO2 MONITORING SYSTEM IN THIS AREA. SYSTEM SHALL BE CONNECTED TO EXISTING BUILDING AUTOMATION SYSTEM (EXISTING MANUFACTURER IS JOHNSON CONTROLS). SYSTEM SHALL PROVIDE AN ALARM WHEN ROOM CO2 LEVELS ARE ELEVATED. A LOCAL ALARM AND WARNING LIGHT SHALL BE PROVIDED IN THE SPACE AND ON THE CORRIDOR WALL OUTSIDE THE SPACE. ALARMS AND LIGHTS SHALL BE LOCATED TO BE VISIBLE AND ACCESSIBLE.
- ⑩ 16x6 RETURN DUCT DOWN TO R-1 RETURN AIR GRILL WITHIN 18" OF FLOOR.
- ⑪ RX DRAIN AND CAP 3" SANITARY BELOW FLOOR. PATCH FLOOR TO MATCH EXISTING.
- ⑫ PROVIDE REFRIGERATION UNIT TEMPERATURE MONITOR.
- ⑬ PROVIDE REFRIGERATION UNIT TEMPERATURE MONITOR FOR FOUR UNITS IN THIS ROOM.
- ⑭ ATC PANEL TIED INTO EXISITNG JOHNSON CONTROLS SYSTEM.

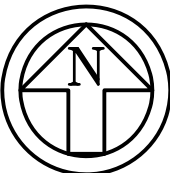
PARTIAL FLOOR PLAN - BASEMENT QUAD B - MECHANICAL

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



PARTIAL FLOOR PLAN - BASEMENT QUAD B - MECHANICAL

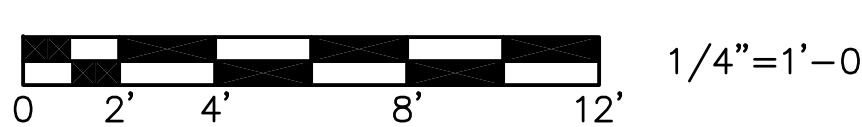
SCALE: 1/8" = 1'-0"



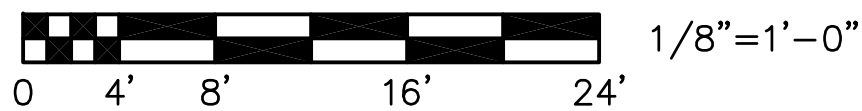
CAUTION:

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GRAPHIC SCALE



GRAPHIC SCALE



ENGINEER:

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Drawing Title

PARTIAL FLOOR PLANS -
MECHANICAL

Approved: Project Director

Project Title

RENOVATE ANIMAL FACILITY
AND BSL-3 LAB

Location

BALTIMORE, MD

Date

12/16/11

Project Number

512-10-136

Building Number

1

Drawing Number

MH101

Dwg. 7 of - 11

**Office of
Construction
and Facilities
Management**



Department of
Veterans Affairs

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A

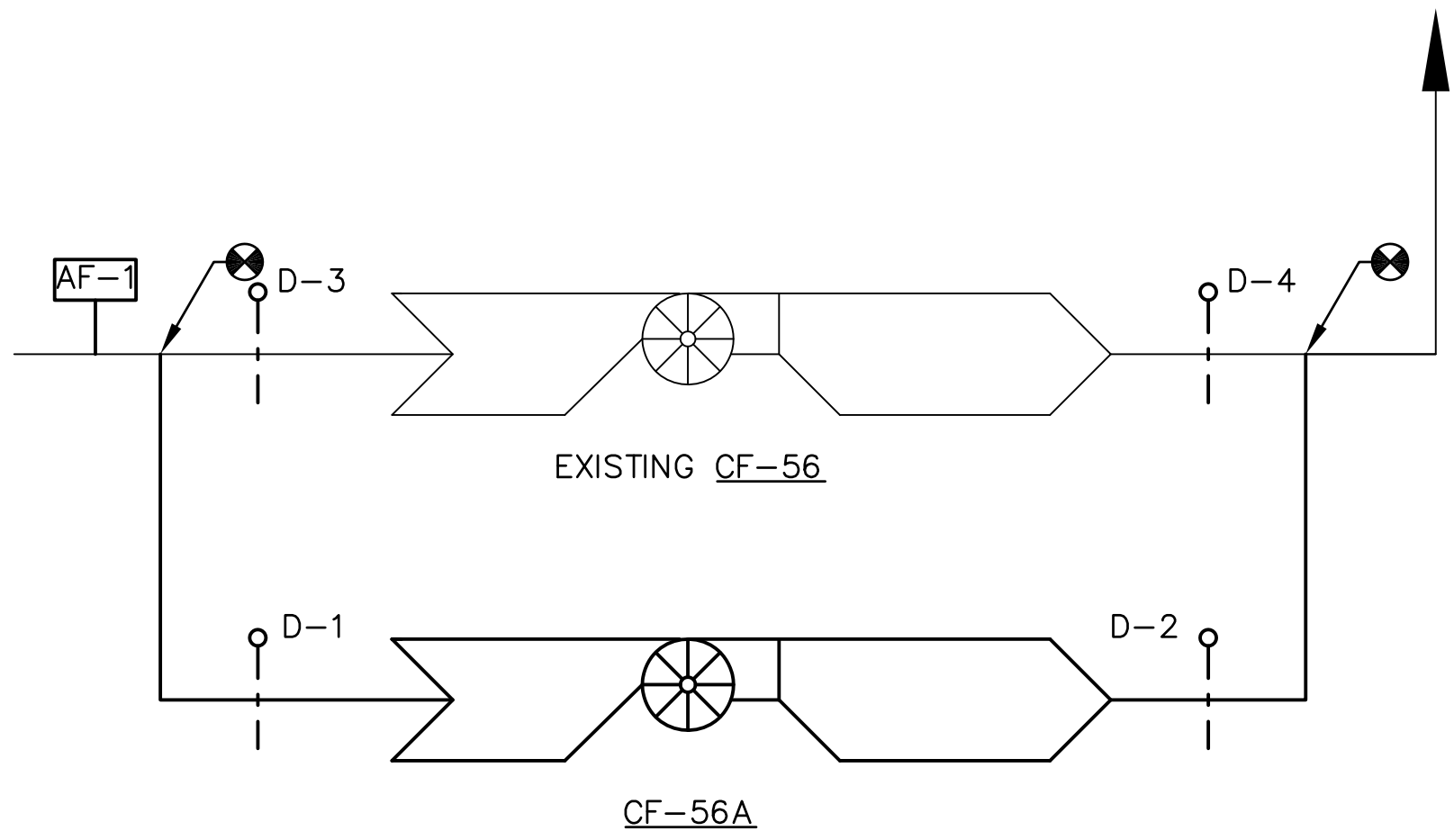
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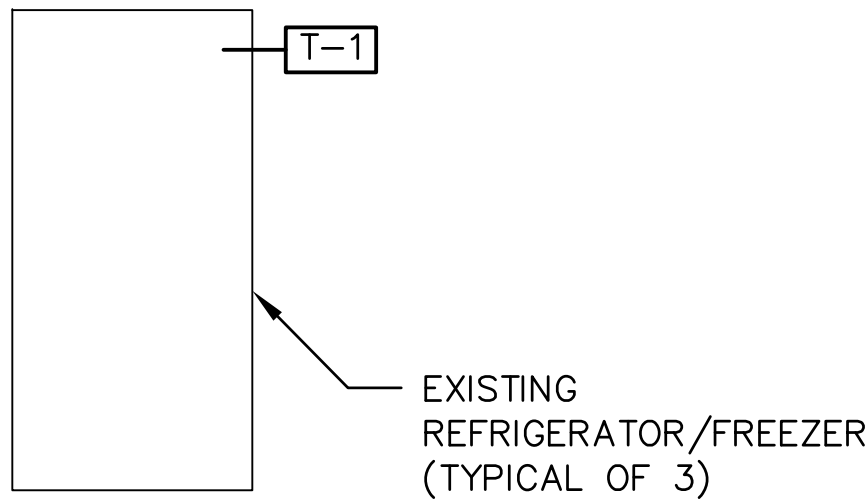
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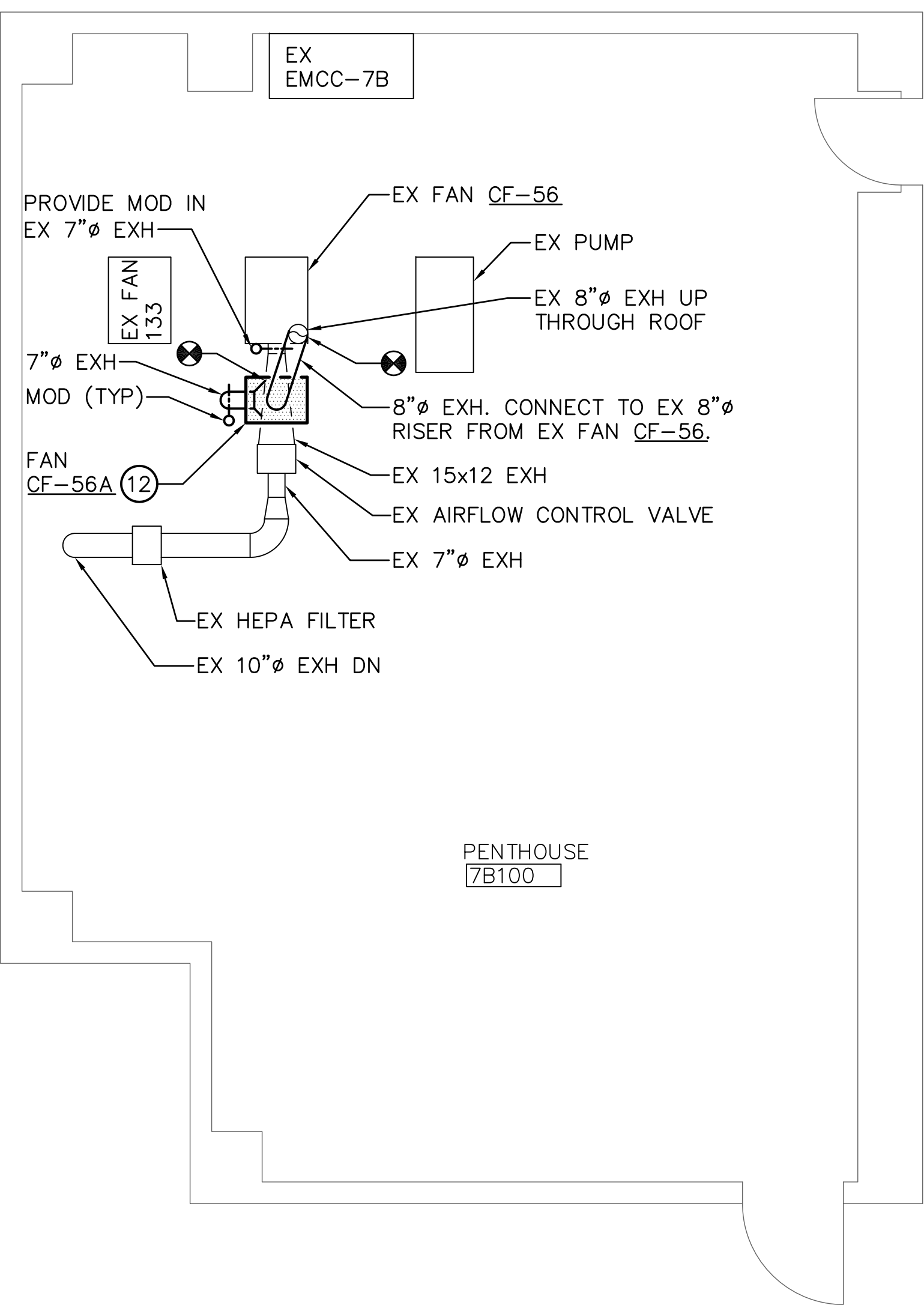
BIOSAFETY CABINET EXHAUST FAN CONTROL DIAGRAM
NO SCALE

1. FAN SHALL BE ENERGIZED/DE-ENERGIZED BY THE BUILDING DDC SYSTEM.
2. EXHAUST FAN CF-56 SHALL RUN CONTINUOUSLY. DAMPERS D-3 AND D-4 SHALL BE OPEN AND DAMPERS D-1 AND D-2 SHALL BE CLOSED. FAN CF-56A SHALL BE DE-ENERGIZED.
3. UPON A FLOW FAILURE AT AIRFLOW SWITCH AF-1, FAN CF-56 SHALL BE DE-ENERGIZED, DAMPERS D-3 AND D-4 SHALL BE CLOSED. FAN CF-56A SHALL BE ENERGIZED, DAMPERS D-1 AND D-2 SHALL BE OPENED, AND AN ALARM SHALL BE SENT TO THE ATC SYSTEM.
4. ALL CONTROL DEVICES, DAMPERS, AND INTERLOCKS FOR EXISTING FAN CF-56 SHALL BE REPLACED AS PART OF THIS PROJECT.

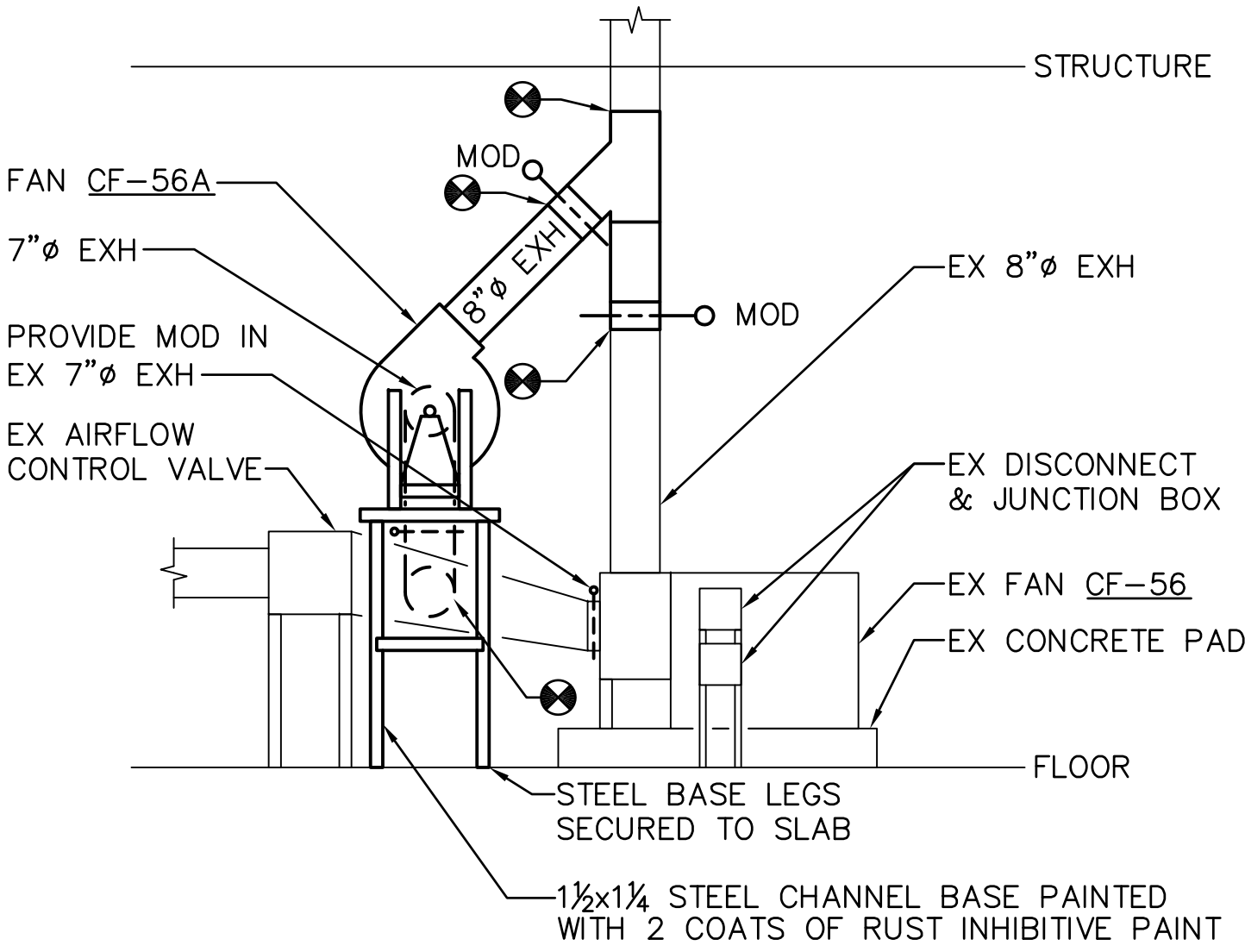


REFRIGERATER/FREEZER MONITORING
NO SCALE

1. PROVIDE LOCAL CONTROL PANEL CONNECTED INTO EXISTING JOHNSON CONTROLS DDC SYSTEM.
2. EACH REFRIGERATION DEVICE SHALL BE MONITORED INDIVIDUALLY.

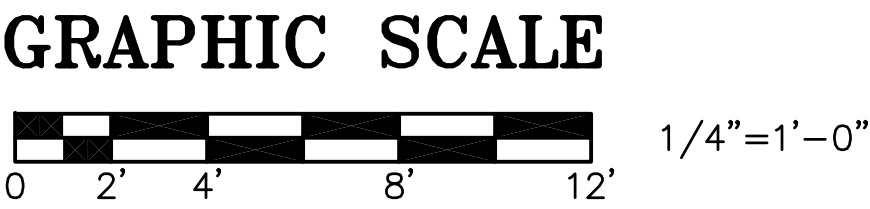


PARTIAL FLOOR PLAN – PENTHOUSE 7B100 – MECHANICAL
SCALE: 1/4" = 1'-0"



FAN CF-56A INSTALLATION SCHEMATIC
NO SCALE

CAUTION:
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ENGINEER: EBL ENGINEERS, LLC MECHANICAL & ELECTRICAL: 8005 HARFORD ROAD BALTIMORE, MARYLAND 21234 (410) 668-8000		ARCHITECT: BECK, POWELL & PARSONS Architecture – Planning – Interior Design 100 West Road., Suite 300 Towson, Maryland 21204 Phone: 410-828-9220		Drawing Title PARTIAL FLOOR PLAN-PENTHOUSE 7B100 – MECHANICAL, FAN CF-56A AND CONTROL DIAGRAM Approved: Project Director		Project Title RENOVATE ANIMAL FACILITY AND BSL-3 LAB Location BALTIMORE, MD Date 12/16/11		Project Number 512-10-136 Building Number 1 Drawing Number MH102 Dwg. 8 of - 11		Office of Construction and Facilities Management Department of Veterans Affairs	
Revisions:						Checked AJK		Drawn EBL			

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ABBREVIATIONS

A	AMPERE
A/C	AIR CONDITIONER
AC	ALTERNATING CURRENT
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
BKR	BREAKER
C	CONDUIT
CAB	CABINET
CAT	CATALOG
CB	CIRCUIT BREAKER
CLG	CEILING
CX	CONNECT TO EXISTING
DC	DIRECT CURRENT
DISC	DISCONNECT
DN	DOWN
DWG	DRAWING
EF	EXHAUST FAN
EMT	ELECTRICAL METALLIC TUBING
ETR	EXISTING TO REMAIN
EX	EXISTING
FCU	FAN COIL UNIT
FDR	FEEDER
FLA	FULL LOAD AMPERES
FLEX	FLEXIBLE
GA	GAUGE
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GRD	GROUND
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HZ	HERTZ
JB	JUNCTION BOX
KOMIL	THOUSAND CIRCULAR MILS
KV	KILO-VOLTS
KVA	KILO-VOLTS-AMPERES
KW	KILOWATTS
KWH	KILOWATT HOURS
LF	LINEAR FEET
LTG	LIGHTING
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MG	MOTOR GENERATOR
M.H.	MOUNTING HEIGHT
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO., #	NUMBER
N.O.	NORMALLY OPEN
O/C	ON CENTER
OH	OVERHEAD
PB	PUSH BUTTON
PF	POWER FACTOR
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RPM	REVOLUTION PER MINUTE
RX	REMOVE EXISTING
SEC	SECONDARY
SF	SQUARE FOOT
SPECS	SPECIFICATIONS
SQ	SQUARE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
V	VOLTS
W	WATTS
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

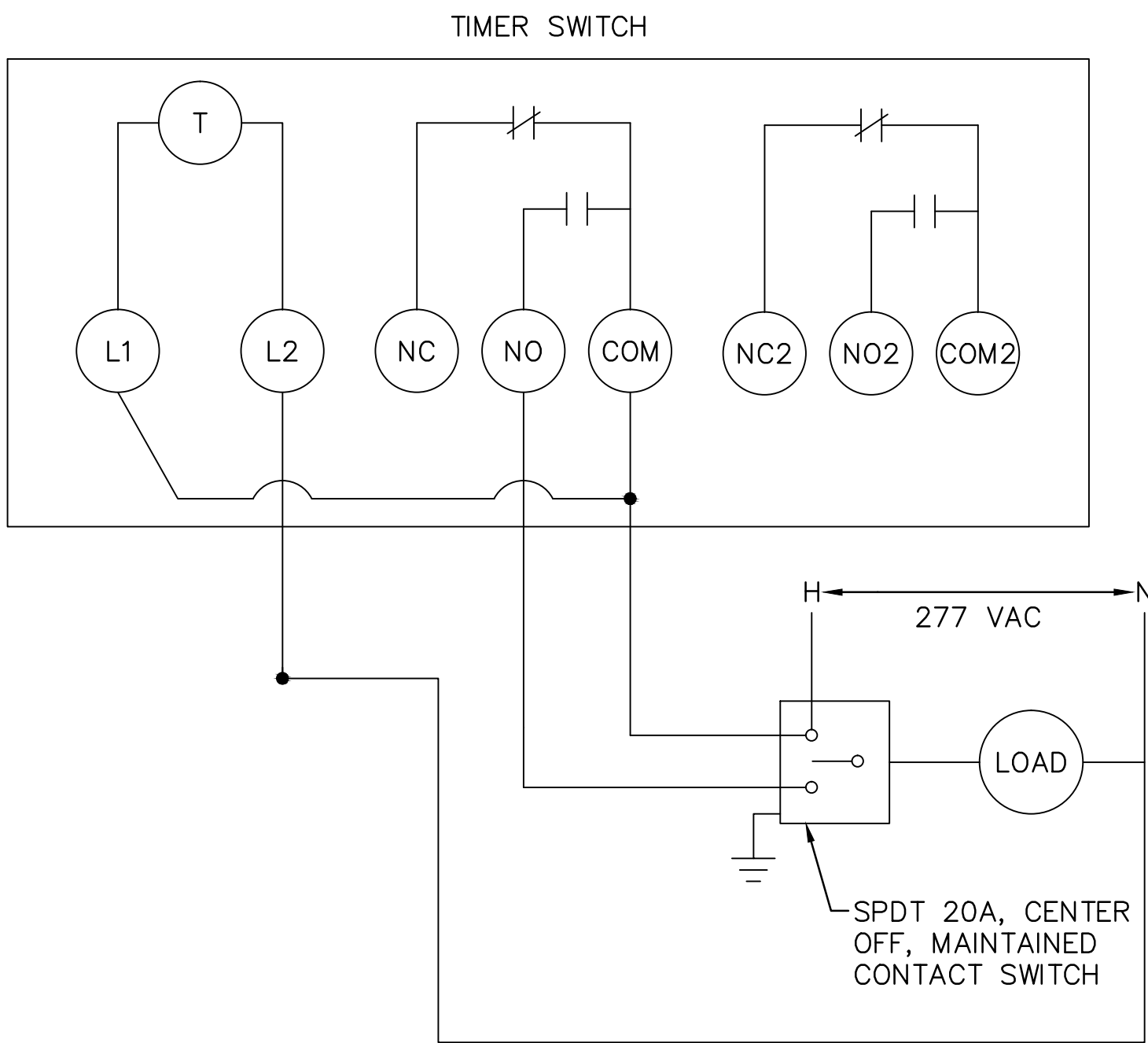
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	LIGHTING FIXTURE - FLUORESCENT - TYPE AS INDICATED
	LIGHTING FIXTURE - CEILING, WALL MOUNTED, DIRECTIONAL - TYPE AS INDICATED
	LIGHTING FIXTURE - TRACK MOUNTED - TYPE AND DIRECTION AS INDICATED
	LIGHTING FIXTURE ON EMERGENCY OR NIGHT LIGHT CIRCUIT
	EMERGENCY LIGHT - REMOTE HEADS - TYPE AS INDICATED
	BATTERY POWERED EMERGENCY UNIT WITH INTEGRAL CHARGER - NUMBER OF HEADS AS INDICATED
	LOW VOLTAGE, D.C., EMERGENCY WIRING SYSTEM - 2#10-3/4"C., UNLESS OTHERWISE NOTED
	EXIT LIGHT - CEILING, WALL MOUNTED - SHADED AREA INDICATES ILLUMINATED FACE - PROVIDE DIRECTIONAL ARROWS AS INDICATED - WALL MOUNTING HEIGHT 7'-6"
	SWITCH - SINGLE POLE, DOUBLE POLE, THREE WAY, FOUR WAY, SUBSCRIPT DENOTES OUTLETS CONTROLLED - MOUNTING HEIGHT 4'-0"
	SWITCH - KEY OPERATED, WITH PILOT LIGHT, REMOTE CONTROL, WEATHER PROOF- MOUNTING HEIGHT 4'-0"
	SWITCH - MOMENTARY CONTACT, DOOR OPERATED, EXPLOSION PROOF - MOUNTING HEIGHT 4'-0"
	DIMMING SWITCH - MOUNTING HEIGHT 4'-0"
	SWITCH/OCCUPANCY SENSOR - WALL MOUNTED MOUNTING HEIGHT 4'-0"
	OCCUPANCY SENSOR - CEILING MOUNTED
	SINGLE RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	DUPLEX RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	GFI RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	DUPLEX RECEPTACLE - 20A., 125V. - TAMPER RESISTANT MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	SPLIT CIRCUIT RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	DOUBLE DUPLEX RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	FLOOR RECEPTACLE - 20A., 125V. - DUPLEX, SINGLE - FLUSH IN FLOOR
	FLOOR RECEPTACLE - DOUBLE DUPLEX - FLUSH IN FLOOR
	SPECIAL PURPOSE RECEPTACLE - FLOOR, WALL MOUNTED - TYPE AS INDICATED OR SCHEDULED - MOUNTING HEIGHT 18"
	POWER POLE WITH DEVICES AS INDICATED OR NOTED
	RECEPTACLE AND CLOCK HANGER - 15A., 125V. - MOUNTING HEIGHT 7'-6"
	CLOCK AND OUTLET - TYPE AND MOUNTING AS NOTED OR SPECIFIED
	TELEPHONE OUTLET - FLUSH IN FLOOR, WALL MOUNTED - MOUNTING HEIGHT 18"
	DATA OUTLET - FLUSH IN FLOOR, WALL MOUNTED - MOUNTING HEIGHT 2'-0"
	TELEPHONE/DATA OUTLET - FLUSH IN FLOOR, WALL MOUNTED - MOUNTING HEIGHT 2'-0"
	TELEPHONE SYSTEM CONDUIT - WIRING AS DEFINED
	JUNCTION BOX - CEILING, WALL MOUNTED - SIZE PER NEC OR AS INDICATED
	ENCLOSED CIRCUIT BREAKER
	PUSHBUTTON STATION - WITH AUXILIARY AS INDICATED OR REQUIRED. NUMBER OF DOTS INDICATE NUMBER OF BUTTONS OR PILOT LIGHTS
	TIME SWITCH - TYPE AS INDICATED OR REQUIRED
	PANELBOARD - TYPE AS NOTED - MOUNTING HEIGHT 6'-6" TO TOP
	SPECIAL CABINET - TYPE AS NOTED
	GROUP MOUNTED EQUIPMENT - TYPE AS NOTED
	AUDIBLE DEVICE - BELL, BUZZER, HORN

SYMBOL	DESCRIPTION
	SECURITY DETECTION DEVICE
	CONDUIT - IN OR ON CEILING OR WALLS
	CONDUIT - IN OR UNDER FLOOR
	HOMERUN TO PANEL - NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS AND NUMBER OF CROSSLINES INDICATES NUMBER OF #12 CONDUCTORS - WHERE NO CROSSLINES APPEAR 2#12 CONDUCTORS ARE IMPLIED
	CONDUIT - EXISTING
	CONDUIT - TURNING UP OR DOWN AS REQUIRED
	CONDUIT SEAL
	CONDUIT TERMINATED IN BUSHING
	SURFACE METAL RACEWAY
	SURFACE METAL RACEWAY WITH OUTLETS - TYPE AS INDICATED
	UNDERFLOOR DUCT SYSTEM - NUMBER OF LINES INDICATES NUMBER OF DUCTS
	DISCONNECT SWITCH - FUSED, NON-FUSED - TYPE AND RATING AS INDICATED
	MAGNETIC STARTER, COMBINATION TYPE STARTER - TYPE AND RATING AS INDICATED
	MANUAL MOTOR STARTER, H.P. RATED SWITCH, H.P. RATED SWITCH WITH PILOT LIGHT - MOUNTING HEIGHT 4'-0" - TYPE AND RATING AS REQUIRED
	CONTACTOR, RELAY - TYPE AS INDICATED OR REQUIRED
	ELECTRIC HEAT TRACING
	CONTROL DEVICE - TYPE AS NOTED
	UNIT HEATER - TYPE AS NOTED
	MOTOR - HORSEPOWER AS NOTED
	GENERATOR - SIZE AND TYPE AS NOTED
	RESISTANCE DUCT HEATER
	BASEBOARD HEATER
	WALL HEATER

LIGHTING FIXTURE SCHEDULE

TYPE	MOUNTING	VOLTS	LAMPS NUMBER & TYPE	MANUFACTURER & CAT.# (OR APPROVED EQUAL)	DESCRIPTION	NOTES
A	RECESSED	120/277	4-T8	LITHONIA 2-WRT-G-432-A12.125 -MVOLT-GEB10IS	2'x4' - FLUORESCENT TROFFER WITH GASKET	1
B	SURFACE	120/277	2-T8	COLUMBIA LUN4-232-EU	FLUORESCENT TROFFER WITH GASKET	1
C	WALL 8'-0" AFF	120/277	2-12W HALOGEN	LITHONIA ELM627-DL-N	HIGH CAPACITY EMERGENCY LIGHTING UNIT	-
NOTES: 1.BALLASTS SHALL CLASS-A SOUND RATED WITH LESS THAN 10% TOTAL HARMONIC DISTORTION.						



TIMER SWITCH
WIRING DETAIL

NO SCALE

NOTE: LOAD IS FLUORESCENT LIGHT FIXTURES. VOLTAGE SETTING ON TIMER SHALL BE ADJUSTED TO ACCOMMODATE A 277 VAC LOAD. ONLY ONE LOAD SHALL BE CONNECTED TO EACH TIMER SWITCH. TIMING SHALL BE SET TO TURN LIGHTS ON AND OFF EVERY 12 HOURS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR SETTING OF TIME. CONTRACTOR SHALL LABEL SPDT WITH 'ON', 'OFF', AND 'TIMER' POSITIONS.

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				<div>Approved: Project Director</div>		<div>Location</div> <div>BALTIMORE, MD</div>		<div>Building Number</div> <div>1</div>			
				<div>Date</div> <div>12/16/11</div>		<div>Checked</div> <div>AJK</div>		<div>Drawn</div> <div>EBL</div>			
<div>Revisions:</div>						<div>Drawing Number</div> <div>EI101</div>		<div>Dwg. 9 of - 11</div>			

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Veterans Affairs

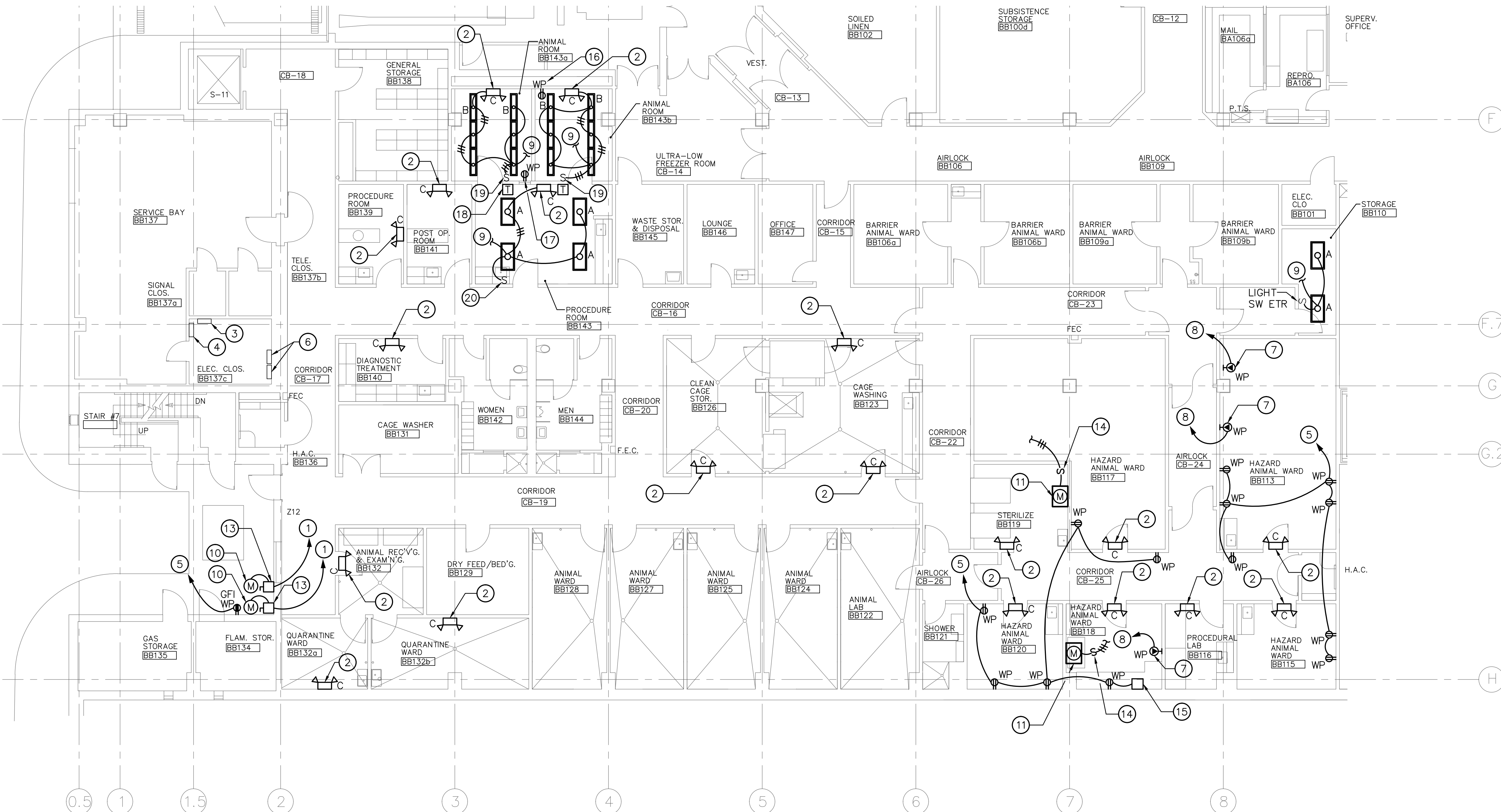
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GENERAL NOTES: (APPLY TO THIS DRAWING ONLY)

- ALL NEW BRANCH CIRCUIT BREAKER TYPES SHALL MATCH EXISTING BRANCH CIRCUIT BREAKERS IN EXISTING PANELBOARDS.
- OUTDOOR CONDENSING UNITS AND DISCONNECT SWITCHES SHALL BE WALL MOUNTED. UNITS SHALL BE MOUNTED ONE ABOVE THE OTHER. UNITS ARE SHOWN SIDE BY SIDE FOR CLARITY ON THIS SHEET.
- ALL CONDUIT AND WIRING SHALL BE RUN IN INTERSTITIAL SPACE ABOVE BASEMENT LEVEL. POWER WIRING IN BSL-3 LAB AREA MAY BE RUN EXPOSED BELOW CEILING IN ORDER TO MINIMIZE PENETRATIONS ABOVE BSL-3 LABS.
- COORDINATE LOCATIONS OF RECEPTACLES BEING PROVIDED UNDER THIS CONTRACT WITH LAB PERSONNEL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF AFFECTED OR DAMAGED WALLS DUE TO NEW INSTALLATION OR DEMOLITION OF EQUIPMENT. REPAIRED WALLS SHALL MATCH EXISTING WALL CONDITIONS.

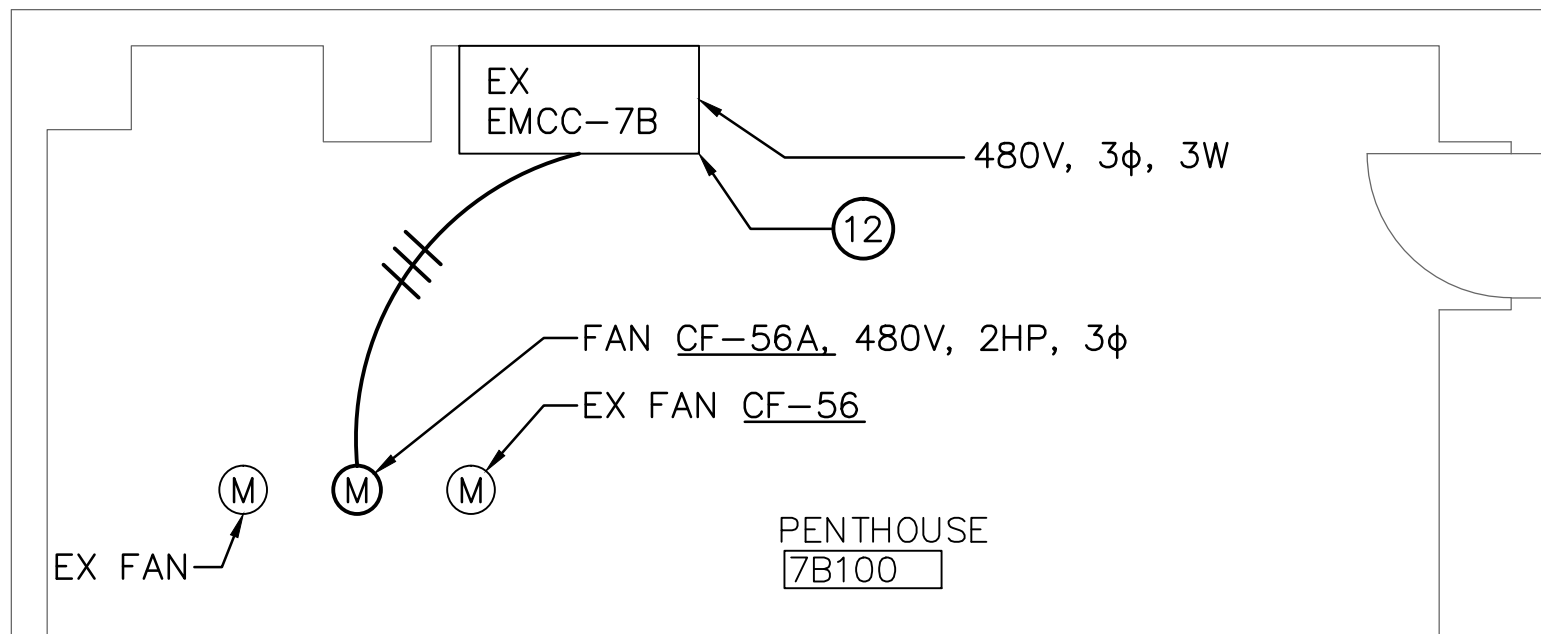
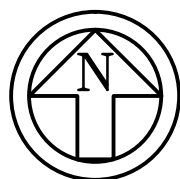
DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- 2 #10 & 1 #10 GRD-3" CONDUIT TO NEW 2P-30A CIRCUIT BREAKER IN EXISTING PANEL BBE-1A IN ROOM BB137C.
- EMERGENCY LIGHTING UNIT WITH 120/277V INPUT AND SEALED BATTERY BACKUP. EACH UNIT SHALL BE CONNECTED TO THE UNSWITCHED ROOM/AREA LIGHTING CIRCUIT. MOUNT AT 8'-0" AFF.
- EXISTING PANEL BBE-1A, 208/120V, 3 ϕ , 4W. PROVIDE TWO(2) 2P-30A CIRCUIT BREAKERS AND THREE(3) 2P-15A CIRCUIT BREAKERS IN EXISTING PANELBOARD.
- EXISTING PANEL BBE-1, 480/277V, 3 ϕ , 4W.
- TO NEW 1P-20A CIRCUIT BREAKER IN EXISTING PANEL BB-L IN CLOSET BB137C.
- EXISTING PANEL BB-L, 208/120V, 3 ϕ , 4W. PROVIDE THREE(3) 1P-20A CIRCUIT BREAKERS IN EXISTING PANELBOARD.
- NEMA 6-15P 250 VOLT RECEPTACLE. COORDINATE RECEPTACLE LOCATION WITH OWNER PROVIDED EQUIPMENT.
- TO NEW 2P-15A CIRCUIT BREAKER IN EXISTING PANEL BBE-1A IN CLOSET BB137C.
- CONNECT CIRCUIT TO EXISTING ROOM LIGHT CIRCUIT.
- OUTDOOR CONDENSING UNIT, 208V, 1 ϕ , 20 FLA.
- INDOOR AIR HANDLING UNIT. INDOOR UNIT IS FED FROM OUTDOOR CONDENSING UNIT. PROVIDE WIRING AND CONDUIT BETWEEN UNITS.
- PROVIDE A 600V, NEMA SIZE 1 STARTER WITH A 3P-15A CIRCUIT BREAKER (AHEAD OF STARTER), HOA SWITCH, RED LIGHT FOR RUNNING, GREEN LIGHT FOR OFF, AND AUXILIARY CONTACTS AS REQUIRED IN EXISTING EMCC-7B.
- 2P-30A, 250V, NEMA 3R. MOUNT DISCONNECT SWITCH ON WALL ADJACENT TO EQUIPMENT.
- 2P-250V, 30A DISCONNECT SWITCH. MOUNT ON OR ADJACENT TO UNIT.
- CO₂ MONITORING SYSTEM. PROVIDE RECEPTACLE OR JUNCTION BOX AS NECESSARY FOR INSTALLATION. COORDINATE WITH EQUIPMENT SUPPLIED UNDER THIS CONTRACT.
- RELOCATED WEATHERPROOF RECEPTACLE AS INDICATED ON DRAWING ED101. EXISTING WIRING AND CONDUIT SHALL BE REUSED AND EXTENDED AS NECESSARY FOR NEW LOCATION.
- RELOCATED STACKED WEATHERPROOF RECEPTACLES AS INDICATED ON DRAWING ED101. EXISTING WIRING AND CONDUIT SHALL BE REUSED AND EXTENDED AS NECESSARY FOR NEW LOCATION.
- ELECTROMECHANICAL TIMER SWITCH (SEE E1101 FOR DETAIL). INSTALLATION SHALL BE TO MANUFACTURER'S SPECIFICATIONS. A SEPARATE TIMER SWITCH SHALL BE USED FOR ROOMS BB143a AND BB143b.
- SPDT, 20A, CENTER OFF, MAINTAINED CONTACT LIGHT SWITCH WITH WEATHERPROOF COVER (SEE DWG E1101 FOR DETAILS). CONTRACTOR SHALL MOUNT SWITCH IN EXISTING SPACE OF ORIGINAL TOGGLE SWITCHES (SHOWN ON ED101).
- SPST LIGHT SWITCH WITH WEATHERPROOF COVER.



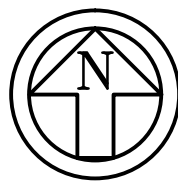
PARTIAL FLOOR PLAN - BASEMENT QUAD B - ELECTRICAL

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



PARTIAL FLOOR PLAN - PENTHOUSE 7B100 - ELECTRICAL

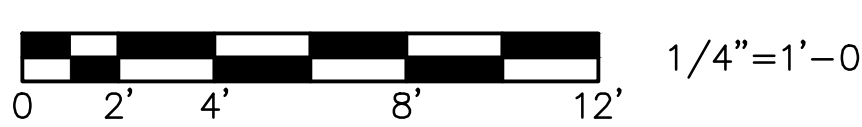
SCALE: 1/4" = 1'-0"



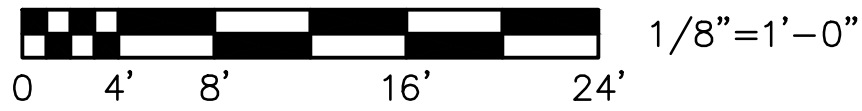
CAUTION:

IF THIS PLAN IS A REDUCTION, GRAPHIC SCALES MUST BE USED.

GRAPHIC SCALE



GRAPHIC SCALE



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