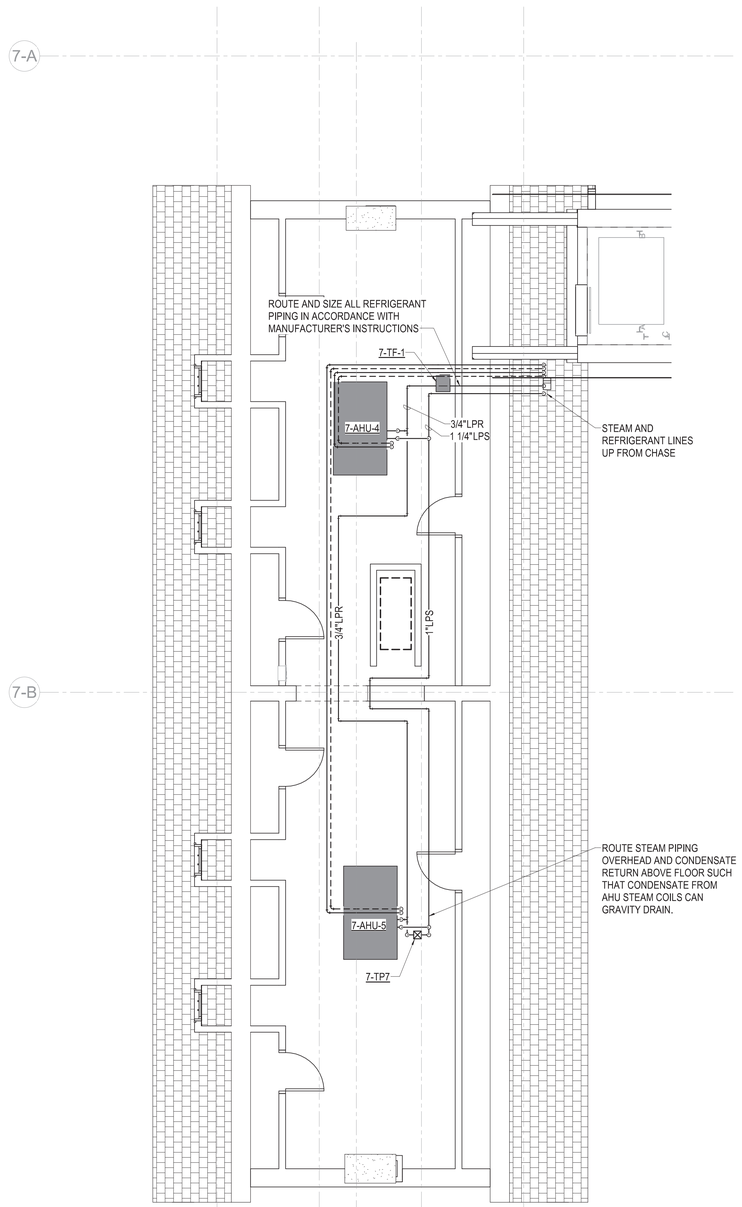
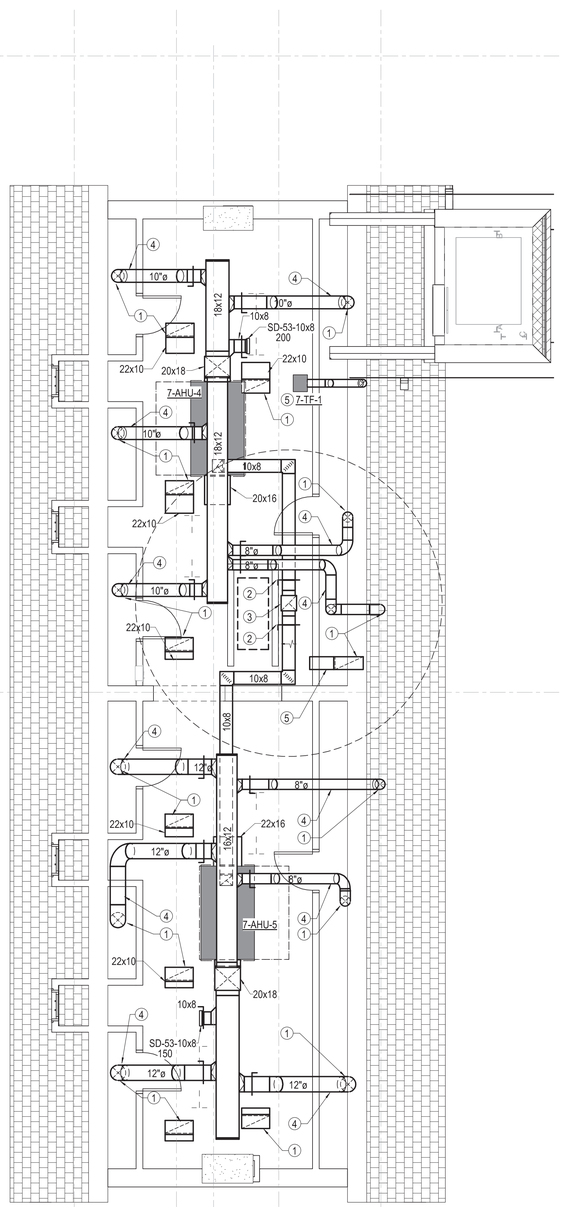


② HYDRONICS PLAN - ATTIC
1/4" = 1'-0"



① HVAC PLAN - ATTIC
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES, PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

(X) PLAN NOTES

1. DUCTWORK DOWN TO SECOND FLOOR DIFFUSER/GRILLE.
2. SET DAMPER IN OUTSIDE AIR DUCT TO TO AIRFLOW SCHEDULED.
3. OUTDOOR AIR DUCT UP TO 7-RH-1.
4. DUCTWORK INSTALLED IN NON-VENTILTED ATTIC SPACE. NON-VENTILATED ATTIC SPACE WILL REQUIRE OUTDOOR INSULATION TO BE INSTALLED ON DUCTWORK (REFERENCE SPECS).
5. FABRICATE WALL BRACKETS AND MOUNT FAN ON WALL. FAN TO DISCHARGE TO SPACE, COVER FAN OPENING WITH EXPANDED METAL MESH.
6. PROVIDE 90 DEG ELBOW AND TERMINATE RETURN IN ATTIC SPACE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **MECHANICAL PLANS - ATTIC**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

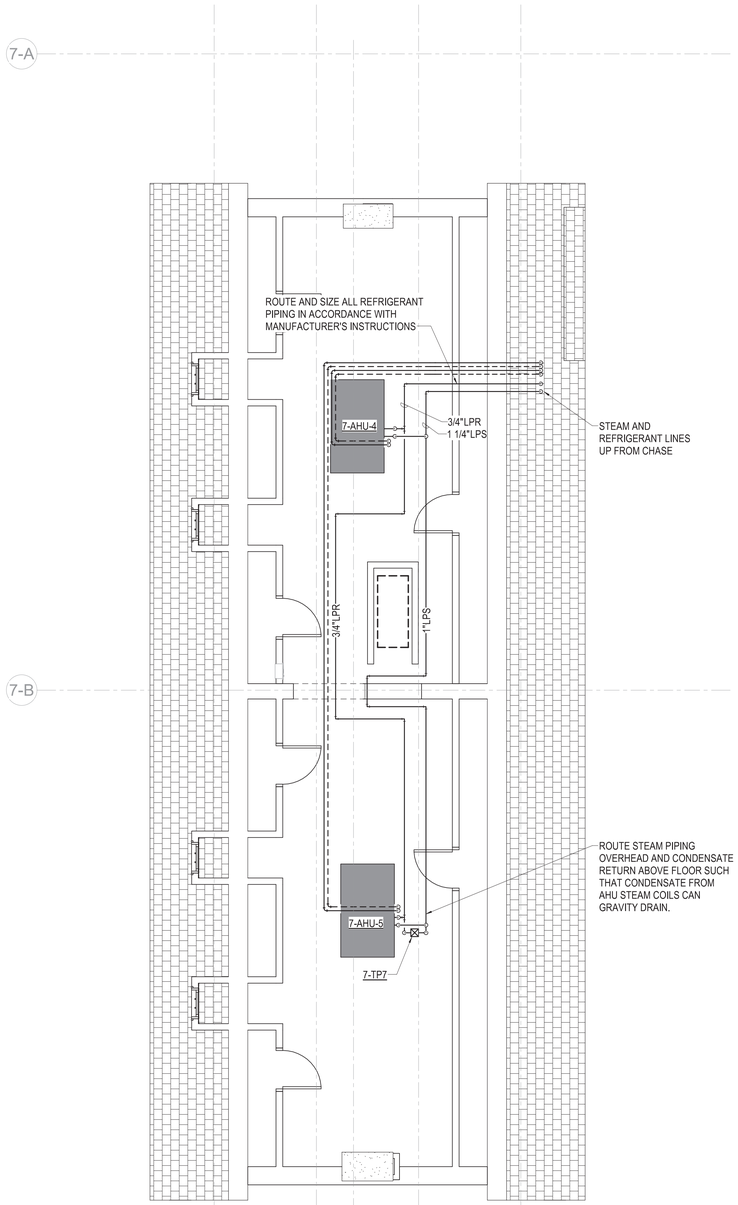
Drawing Number: **MH104**

Dwg.

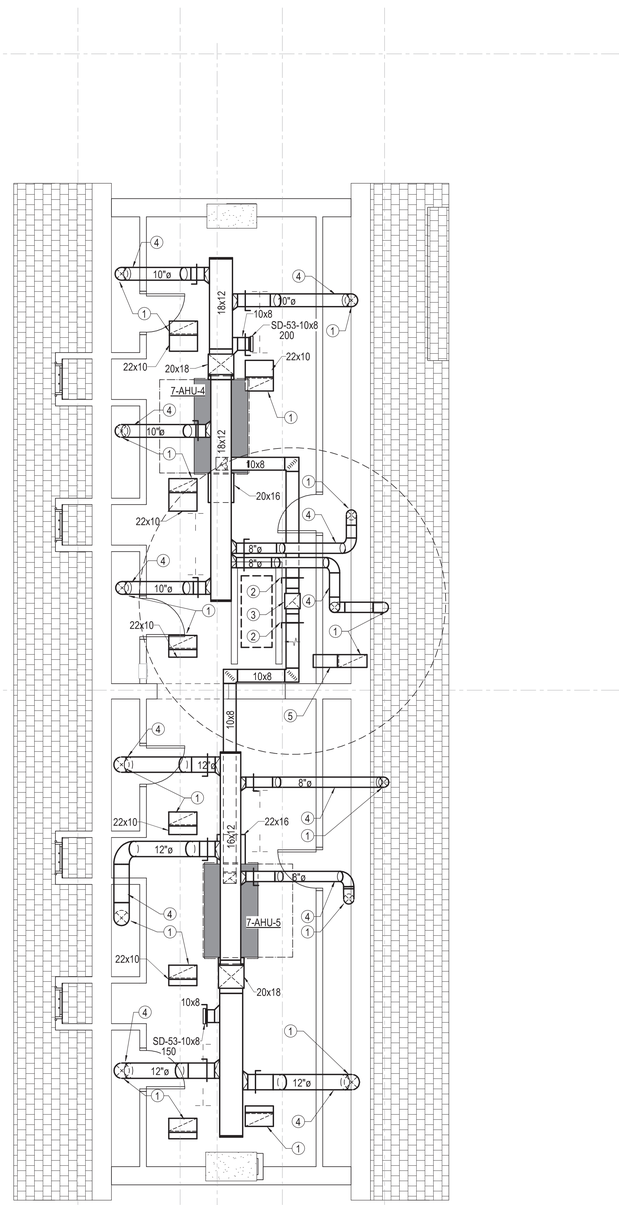
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



1 HYDRONICS PLAN - ATTIC - BID ITEM 5
1/4" = 1'-0"



2 HVAC PLAN - ATTIC - BID ITEM 5
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES, PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

(X) PLAN NOTES

1. DUCTWORK DOWN TO SECOND FLOOR DIFFUSER/GRILLE.
2. SET DAMPER IN OUTSIDE AIR DUCT TO TO AIRFLOW SCHEDULED.
3. OUTDOOR AIR DUCT UP TO 7-RH-1.
4. DUCTWORK INSTALLED IN NON-VENTILTED ATTIC SPACE. NON-VENTILATED ATTIC SPACE WILL REQUIRE OUTDOOR INSULATION TO BE INSTALLED ON DUCTWORK (REFERENCE SPECS).
5. (NOTE NOT USED)
6. PROVIDE 90 DEG ELBOW AND TERMINATE RETURN IN ATTIC SPACE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER KANSAS

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **MECHANICAL PLANS - ATTIC - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

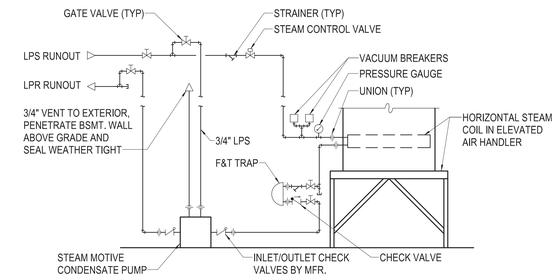
Drawing Number: **MH104.5**

Dwg.

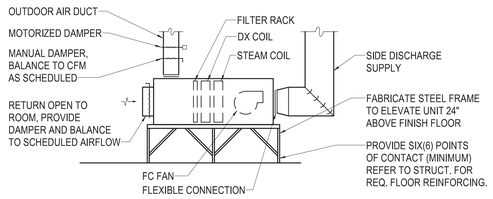
Office of Construction and Facilities Management

Department of Veterans Affairs

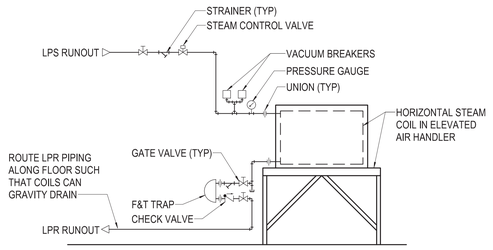
VA FORM 08-6231



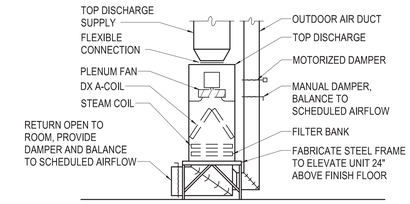
9 VERTICAL AIR HANDLING UNIT PIPING DETAIL
NO SCALE



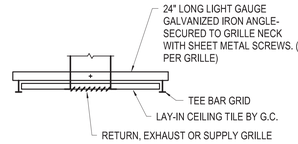
10 HORIZONTAL AIR HANDLING UNIT DETAIL
NO SCALE



11 HORIZONTAL AIR HANDLING UNIT PIPING DETAIL
NO SCALE

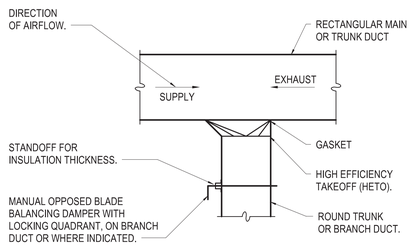


5 VERTICAL AIR HANDLING UNIT DETAIL
NO SCALE

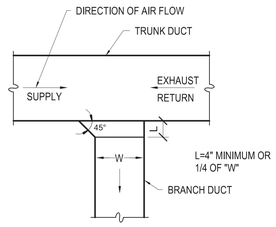


NOTES:
1. ANGLE SHALL EXTEND BETWEEN TEE-BAR GRIDS TO SUPPORT WEIGHT OF GRILLE OR REGISTER
2. THIS DETAIL TYPICAL FOR ALL RECTANGULAR GRILLES, REGISTERS AND DIFFUSERS INSTALLED AT LAY-IN CEILING, WITHOUT DUCTWORK.

6 RETURN GRILLE INSTALLATION DETAIL1
NO SCALE

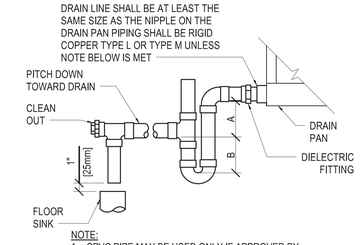


7 TAKEOFF DETAIL - ROUND DUCT1
NO SCALE



DUCT PRESSURE CLASSIFICATIONS:	SEAL CLASS:
SUPPLY AIR DUCT WORK	+3"WG B
EXHAUST & RETURN AIR DUCTWORK	-2"WG B
FRESH AIR DUCTWORK	-2"WG B
RELIEF AIR DUCTWORK	+1"WG B

8 TAKEOFF DETAIL - LOW VELOCITY BRANCH CONNECTION DETAIL1
NO SCALE

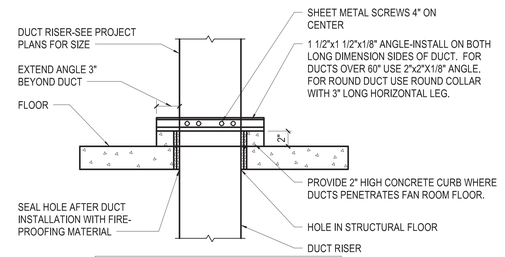


NOTE:
1. CPVC PIPE MAY BE USED ONLY IF APPROVED BY LOCAL VA AND IS INDOORS AND DOES NOT PASS THROUGH RATE BARRIERS.
2. DIELECTRIC FITTING TO BE USED WHEN TWO DISSIMILAR METALS ARE TO BE CONNECTED.

UNIT TYPE	A	B
DRAW THRU	2" [50mm] PLUS X	X
BLOW THRU	1" [25mm] MINIMUM	2X

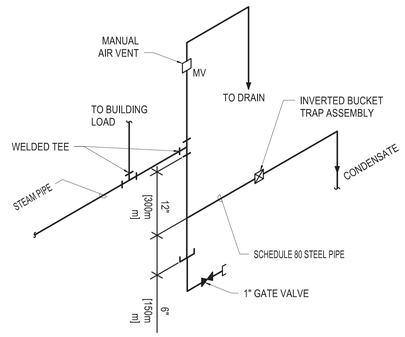
WHERE X = STATIC PRESSURE IN PAN

1 AIR HANDLING UNIT DRAIN TRAP DETAIL
1/2" = 1'-0"

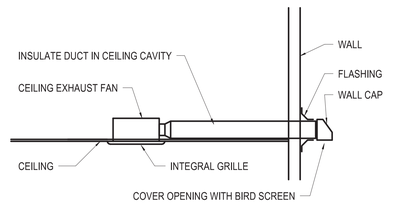


NOTES:
THIS DETAIL IS TYPICAL FOR DUCT PENETRATIONS OF SECOND FLOOR. PROVIDE FIRE DAMPERS WHERE NOTED ON PLANS.

2 DUCT RISER SUPPORT1
NO SCALE



3 END OF STEAM LINE DRIP TRAP
1/2" = 1'-0"



4 EXHAUST FAN DETAIL - CEILING
NO SCALE

Revisions:	Date

CONSULTANTS:
--

ALEC J. STALBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:
HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **MECHANICAL DETAILS**
Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081
Location: **Wichita, Kansas**
Date: **11/19/2018** Checked: CDF Drawn: AJS

Project Number: **589A7-18-301**
Building Number: **7**
Drawing Number: **M-401**
Dwg.

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

DIRECT EXPANSION COOLING COIL SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		MAX FACE VELOCITY		APD		TEMPERATURES				TOTAL CAPACITY		SENSIBLE CAPACITY		REFRIGERANT	SATURATED SUCTION TEMP		REMARKS
										EAT		LAT									
				CFM	[L/s]	FPM	[M/s]	IN WG	[Pa]	°F	[°C]	°F	[°C]	MBH	[kW]	MBH	[kW]		°F	[°C]	
7-CC1	7-AHU-1	BSMT/1ST NORTH	7-AHU-1, 7-CU-1	1125	[–]	500	[–]	0.39	[–]	78/64	[–]	55/54	[–]	43	[–]	33	[–]	R-410a	45	[–]	--
7-CC2	7-AHU-2	BSMT/1ST CENTER	7-AHU-2, 7-CU-2	1690	[–]	500	[–]	0.34	[–]	78/64	[–]	55/54	[–]	57	[–]	44	[–]	R-410a	45	[–]	--
7-CC3	7-AHU-3	BSMT/1ST SOUTH	7-AHU-3, 7-CU-3	1340	[–]	500	[–]	0.34	[–]	78/64	[–]	55/54	[–]	46	[–]	35	[–]	R-410a	45	[–]	--
7-CC4	7-AHU-4	2ND/ATTIC NORTH	7-AHU-4, 7-CU-4	1750	[–]	500	[–]	0.40	[–]	78/64	[–]	55/54	[–]	54	[–]	42	[–]	R-410a	45	[–]	--
7-CC5	7-AHU-5	2ND/ATTIC SOUTH	7-AHU-5, 7-CU-5	1750	[–]	500	[–]	0.40	[–]	78/64	[–]	55/54	[–]	54	[–]	42	[–]	R-410a	45	[–]	--

AIR COOLED CONDENSING UNIT SCHEDULE

MARK	LOCATION	SYSTEM AND/OR SERVICE	CAPACITY		SUCTION TEMP		AMBIENT AIR		MAX COND TEMP		COMPRESSOR MOTOR					CONDENSER FAN MOTOR					REMARKS
											# COMP	POWER		PHASE	VOLT	# COND FAN	POWER		PHASE	VOLT	
			MBH	[kW]	F	[C]	F	[C]	F	[C]		RLA	[kW]				HP	[kW]			
7-CU-1	NE LAWN	7-AHU-1	48.0	[–]	45	[–]	105	[–]	105	[–]	1	20.2	[–]	1	208	1	0.33	[–]	1	208	INSTALL ON CURB PER SPEC.
7-CU-2	NE LAWN	7-AHU-2	60.0	[–]	45	[–]	105	[–]	105	[–]	1	26.0	[–]	1	208	1	0.33	[–]	1	208	INSTALL ON CURB PER SPEC.
7-CU-3	NE LAWN	7-AHU-3	48.0	[–]	45	[–]	105	[–]	105	[–]	1	20.2	[–]	1	208	1	0.33	[–]	1	208	INSTALL ON CURB PER SPEC.
7-CU-4	NE LAWN	7-AHU-4	60.0	[–]	45	[–]	105	[–]	105	[–]	1	26.0	[–]	1	208	1	0.33	[–]	1	208	INSTALL ON CURB PER SPEC.
7-CU-5	NE LAWN	7-AHU-5	60.0	[–]	45	[–]	105	[–]	105	[–]	1	26.0	[–]	1	208	1	0.33	[–]	1	208	INSTALL ON CURB PER SPEC.

LOUVER SCHEDULE

MARK	TYPE	MATERIAL	APPROX. SIZE	DEPTH	FINISH	USE	DESIGN CFM	MAX APD	MIN. FREE AREA	ELEVATION	MAX. WATER PENETRATION OUNCES / SF AT 1000 FPM	REMARKS
7-L-1	STATIONARY	ALUM	18x18	4	MILL	INTAKE	210	0.15	0.68	NOTE A	0.00	FIELD PAINTABLE
7-L-2	STATIONARY	ALUM	10x20	4	MILL	INTAKE	160	0.15	0.83	8'AFF	0.00	FIELD PAINTABLE
7-L-3	STATIONARY	ALUM	10x20	4	MILL	INTAKE	160	0.15	0.83	8'AFF	0.00	FIELD PAINTABLE

1. ARCHITECT TO SELECT COLOR FOR FIELD PAINTING OF LOUVER.

NOTE A - TOP OF LOUVER SHALL BE 6" AWAY FROM TOP OF ENTRY ALCOVE CEILING.

AIR DEVICE SCHEDULE (RETURN)

MARK	TYPE	AIR FLOW				MAX APD		MOUNTING	PANEL/FRAME SIZE		NECK SIZE		NC	DAMPER	FINISH	REMARKS
		MIN		MAX												
		CFM	[L/s]	CFM	[L/s]	IN WG	[Pa]		IN x IN	[mm x mm]	IN x IN	[mm x mm]				
RG-21	PERFORATED	50	[–]	700	[–]	0.040	[–]	CEILING	24 x 12	[600 x 300]	22 x 10	[-]	13	NONE	WHITE	----
RG-22	PERFORATED	700	[–]	1500	[–]	0.040	[–]	CEILING	24 x 24	[600 x 600]	22 x 22	[–]	26	NONE	WHITE	----
RR-51	REGISTER	0	[–]	230	[–]	0.040	[–]	FLOOR	12 x 6	[–]	12 x 6	[–]	20	NONE	ALUMINUM	1
RR-52	REGISTER	0	[–]	460	[–]	0.040	[–]	FLOOR	24 x 6	[–]	24 x 6	[–]	20	NONE	ALUMINUM	1
RR-53	REGISTER	0	[–]	690	[–]	0.040	[–]	FLOOR	36 x 6	[–]	36 x 6	[–]	20	NONE	ALUMINUM	1
RR-54	REGISTER	0	[–]	100	[–]	0.040	[–]	SURFACE	8 x 8	[–]	6 x 6	[–]	13	NONE	ALUMINUM	----

NOTE

1. PROVIDE FLOOR REGISTER WITH "NO FLANGE FLUSH MOUNT" ON HARD SURFACES OR "CARPET CLAMP FLANGE" ON CARPETED SURFACES. PROVIDE WITH HEAVY DUTY CORE, 1/4" SPACING BETWEEN BARS, 15 DEG DEFLECTION.

STEAM TRAP SCHEDULE

MARK	LOCATION	SYSTEM AND/OR SERVICE	CAPACITY AT MIN DIFF PRESSURE		MIN DIFF PRESSURE		MAX INLET PRESSURE		TRAP TYPE	TRAP SIZE		REMARKS
			LBS/HR	[kg/HR]	PSI	[kPa]	PSI	[kPa]		IN	[mm]	
7-TP1	BASEMENT	7-HC1	100	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP2	BASEMENT	7-HC2	140	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP3	ATTIC	7-HC3	110	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP4	ATTIC	7-HC4	180	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP5	ATTIC	7-HC5	180	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP6	BASEMENT	END OF MAIN	150	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1
7-TP7	ATTIC	END OF MAIN	150	[–]	5	[–]	5	[–]	FLOAT AND THERMOSTATIC	1	[–]	1

REMARKS

1. STANDARD CONNECTION AND INTEGRAL VACUUM BREAKER.

AIR DEVICE SCHEDULE (SUPPLY)

MARK	TYPE	AIR FLOW				MAX APD		MOUNTING	PANEL/FRAME SIZE		NECK SIZE		NC	DAMPER	FINISH	REMARKS
		MIN		MAX												
		CFM	[L/s]	CFM	[L/s]	IN WG	[Pa]		IN x IN	[mm x mm]	IN	[mm]				
SD-11	LOUVERED FACE	100	[–]	225	[–]	0.080	[–]	CEILING	12 x 12	[300 x 300]	8" DIAM.	[– DIAM.]	22	-	WHITE	---
SD-12	LOUVERED FACE	100	[–]	225	[–]	0.080	[–]	CEILING	24 x 24	[600 x 600]	8" DIAM.	[– DIAM.]	22	-	WHITE	---
SD-13	LOUVERED FACE	250	[–]	325	[–]	0.080	[–]	CEILING	24 x 24	[600 x 600]	10" DIAM.	[– DIAM.]	22	-	WHITE	---
SD-14	LOUVERED FACE	350	[–]	500	[–]	0.080	[–]	CEILING	24 x 24	[600 x 600]	12" DIAM.	[– DIAM.]	22	-	WHITE	---
SD-51	SUPPLY REGISTER	25	[–]	75	[–]	0.050	[–]	SURFACE	6 x 6	[–]	6 x 6	[–]	18	-	WHITE	---
SD-52	SUPPLY REGISTER	100	[–]	150	[–]	0.050	[–]	SURFACE	8 x 8	[–]	8 x 8	[–]	18	-	WHITE	---
SD-53	SUPPLY REGISTER	175	[–]	250	[–]	0.050	[–]	SURFACE	10 x 8	[–]	10 x 8	[–]	18	-	WHITE	---
SD-54	SUPPLY REGISTER	175	[–]	250	[–]	0.050	[–]	SURFACE	14 x 6	[–]	14 x 6	[–]	18	-	WHITE	---
SD-61	SUPPLY REGISTER	25	[–]	100	[–]	0.040	[–]	FLOOR	12 x 4	[–]	12 x 4	[–]	20	-	ALUMINUM	A
SD-62	SUPPLY REGISTER	100	[–]	130	[–]	0.040	[–]	FLOOR	12 x 5	[–]	12 x 5	[–]	20	-	ALUMINUM	A
SD-63	SUPPLY REGISTER	150	[–]	250	[–]	0.040	[–]	FLOOR	24 x 5	[–]	24 x 5	[–]	20	-	ALUMINUM	A
SD-64	SUPPLY REGISTER	100	[–]	130	[–]	0.040	[–]	FLOOR	12 x 5	[–]	12 x 5	[–]	20	OBD	ALUMINUM	A

NOTES

1. SEE FLOOR PLAN FOR THROW PATTERN.
2. SEE DETAIL FOR DAMPER IN BRANCH DUCT SERVING EACH DIFFUSER.
3. PROVIDE SQUARE TO ROUND ADAPTER.

A. PROVIDE FLOOR REGISTER WITH "NO FLANGE FLUSH MOUNT" BORDER ON SURFACES WITHOUT CARPET OR PROVIDE WITH "CARPET CLAMP FLANGE" BORDER ON CARPETED SURFACES. PROVIDE WITH HEAVY DUTY CORE, 1/4" SPACING BETWEEN BARS, 15 DEG. DEFLECTION.

FAN SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		TSP		FAN							MOTOR ELECTRICAL							CONTROL SEQUENCE	REMARKS
								TYPE	WHEEL	CLASS	ARRANGEMENT, ROTATION, AND DISCHARGE	DIAMETER		MIN % EFF	DRIVE	FAN MAX RPM	NOMINAL POWER			VOLT	PHASE	RPM	SPEED CONTROL		
				CFM	[L/s]	IN	[Pa]					IN	[mm]				AMPS	HP	[W]						
7-EF-1	CEILING	1ST FLR RR	GEN. EXHAUST	100	[–]	0.25	[–]	CEILING	--	--	SIDEWALL WALL CAP DISCHARGE	--	[–]	--	DIRECT	--	0.20	--	8.4	120	1	--	1	INTERLOCK WITH LIGHT	1
7-EF-2	CEILING	1ST FLR RR	GEN. EXHAUST	100	[–]	0.25	[–]	CEILING	--	--	SIDEWALL WALL CAP DISCHARGE	--	[–]	--	DIRECT	--	0.20	--	8.4	120	1	--	1	INTERLOCK WITH LIGHT	1
7-EF-3	CEILING	2ND FLR RR	GEN. EXHAUST	205	[–]	0.25	[–]	CEILING	--	--	SIDEWALL WALL CAP DISCHARGE	--	[–]	--	DIRECT	--	0.45	--	54.2	120	1	--	1	INTERLOCK WITH LIGHT	1
7-EF-4	CEILING	BSMT HSKPG	GEN. EXHAUST	100	[–]	0.25	[–]	CEILING	--	--	SIDEWALL WALL CAP DISCHARGE	--	[–]	--	DIRECT	--	0.20	--	8.4	120	1	--	1	INTERLOCK WITH LIGHT	1
7-RH-1	ROOF	7-AHU-3, 7-AHU-4	OUTDOOR AIR	485	[–]	--	[–]	--	--	--	--	--	[–]	--	--	--	--	--	--	--	--	--	--	--	2
7-TF-1	INLINE	ATTIC	ELEV. EXHAUST	100	[–]	0.25	[–]	INLINE	--	--	OPEN DISCHARGE COVERED WITH METAL MESH	--	[–]	--	DIRECT	--	--	1/20	58	120	1	--	1	RUN CONTINOUSLY	3

REMARKS

1. FAN BASED ON LOW-PROFILE (7" DEEP) CEILING EXHAUST FAN WITH ROUND DUCT CONNECTION. ROUND DUCT TO CONNECT AND ROUTE TO BUILDING EXTERIOR WALL FOR SIDEWALL DISCHARGE THROUGH WALL CAP. WALL CAP TO BE ALUMINUM FINISH, FIELD-PAINTABLE, AND PROVIDED WITH BIRD SCREEN AND BACKDRAFT DAMPER. ARCHITECT TO APPROVE GRILLE OPTION OF CEILING EXHAUST FAN IN SUBMITTALS. EXHAUST FAN SHALL BE INTERLOCKED WITH WALL LIGHT SWITCH. UPON ACTIVATION OF ROOM LIGHTS, FAN SHALL TURN ON.
2. GRAVITY INTAKE HOOD MOUNTED ON ROOF WITH BACKDRAFT DAMPER AND BIRDSCREEN.
3. FAN BASED ON INLINE CENTRIFUGAL EXHAUST FAN. PROVIDE WITH FAN SPEED CONTROLLER MOUNTED IN ACCESSIBLE LOCATION FOR BALANCING PURPOSES. FAN TO BE WIRED TO RUN CONTINOUSLY. BID ITEM NOTE: FAN TO BE OMITTED UNDER BID ITEM 5.

NOTE

ALL SELECTIONS ARE BASED ON AN ALTITUDE OF 1299 FT.

AIR HANDLING UNIT SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	EXTERNAL STATIC PRESSURE	AIR FLOW						SUPPLY FAN	RETURN AIR FAN MARK	EXHAUST FAN MARK	FILTER	AFTER FILTER MARK	FINAL FILTER MARK	HEAT RECOVERY MARK	PREHEAT COIL MARK	COOLING COIL MARK	REHEAT COIL	HUMIDIFIER MARK	REMARKS
					SUPPLY		MIN OA		RETURN													
					CFM	[L/s]	CFM	[L/s]	CFM	[L/s]												
7-AHU-1	BLDG 7 BASEMENT	BASEMENT/1ST FLR NORTH	INDOOR UPRIGHT, VERTICAL DISCHARGE	0.75	1225	[–]	147	[–]	1078	[–]	1.5 HP, 208/1	--	--	2" FLAT, MERV 8	--	--	--	7-HC1	7-CC1	--	--	1, 2
7-AHU-2	BLDG 7 BASEMENT	BASEMENT/1ST FLR CENTER	INDOOR UPRIGHT, VERTICAL DISCHARGE	0.75	1690	[–]	203	[–]	1487	[–]	1.5 HP, 208/1	--	--	2" FLAT, MERV 8	--	--	--	7-HC2	7-CC2	--	--	1, 2
7-AHU-3	BLDG 7 BASEMENT	BASEMENT/1ST FLR SOUTH	INDOOR UPRIGHT, VERTICAL DISCHARGE	0.75	1340	[–]	160	[–]	1180	[–]	1.5 HP, 208/1	--	--	2" FLAT, MERV 8	--	--	--	7-HC3	7-CC3	--	--	1, 2
7-AHU-4	BLDG 7 ATTIC	2ND FLR/ATTIC NORTH	INDOOR HORIZONTAL, SIDE DISCHARGE	0.75	1750	[–]	210	[–]	1540	[–]	1.0 HP, 208/1	--	--	2" FLAT, MERV 8	--	--	--	7-HC4	7-CC4	--	--	1, 3
7-AHU-5	BLDG 7 ATTIC	2ND FLR/ATTIC SOUTH	INDOOR HORIZONTAL, SIDE DISCHARGE	0.75	1750	[–]	210	[–]	1540	[–]	1.0 HP, 208/1	--	--	2" FLAT, MERV 8	--	--	--	7-HC5	7-CC5	--	--	1, 3

REMARKS

1. THE AHU WILL CONTAIN THE FOLLOWING COMPONENTS: FILTER BANK, PLANT STEAM HEATING COIL, DX COOLING COIL, SUPPLY FAN, AND DISCHARGE OUTLET.
2. AHU TO HAVE VERTICAL SUPPLY DISCHARGE, OFF TOP OF UNIT.
3. AHU TO HAVE HORIZONTAL SUPPLY DISCHARGE, OFF FRONT OF UNIT.

STEAM HEATING COIL SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	APPLICATION	AIR FLOW		MAX FACE VELOCITY		APD		TEMPERATURES				TOTAL MIN CAPACITY		STEAM								REMARKS
											EAT		LAT				ENT CONT VALVE		ENT COIL		FLOW		STEAM TRAP			
					CFM	[L/s]	FPM	[M/s]	IN WG	[Pa]	°F	[°C]	°F	[°C]	MBH	[kW]	PSIG	[kPa]	PSIG	[kPa]	LBS/HR	[kg/HR]	MARK	LBS/HR	[kg/HR]	
7-HC1	7-AHU-1	BSMT/1ST NORTH	7-AHU-1	HEATING	1225	[–]	500	[–]	0.20	[–]	60	[–]	95	[–]	48	[–]	12	[–]	5	[–]	51	[–]	7-TP1	100	[–]	--
7-HC2	7-AHU-2	BSMT/1ST SOUTH	7-AHU-2	HEATING	1690	[–]	500	[–]	0.17	[–]	60	[–]	95	[–]	64	[–]	12	[–]	5	[–]	70	[–]	7-TP2	140	[–]	--
7-HC3	7-AHU-3	BSMT/1ST SOUTH	7-AHU-3	HEATING	1340	[–]	500	[–]	0.17	[–]	60	[–]	95	[–]	51	[–]	12	[–]	5	[–]	56	[–]	7-TP3	110	[–]	--
7-HC4	7-AHU-4	2ND/ATTIC NORTH	7-AHU-4	HEATING	1750	[–]	500	[–]	0.37	[–]	60	[–]	95	[–]	84	[–]	12	[–]	5	[–]	92	[–]	7-TP4	180	[–]	--
7-HC5	7-AHU-5	2ND/ATTIC SOUTH	7-AHU-5	HEATING	1750	[–]	500	[–]	0.51	[–]	60	[–]	95	[–]	84	[–]	12	[–]	5	[–]	92	[–]	7-TP5	180	[–]	--

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED PROFESSIONAL ENGINEER 25996 11/19/2018

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **MECHANICAL SCHEDULES**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** Checked: CDF Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

Drawing Number: **M-501**

Dwg.

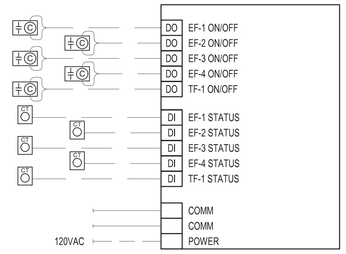
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

GENERAL EXHAUST CONTROL

EXHAUST FAN, EF-4, AND TRANSFER FAN, TF-1, TO BE ENERGIZED CONTINUOUSLY. EXHAUST FANS, EF-1, EF-2, AND EF-3, SHALL BE INTERLOCKED WITH WALL LIGHT SWITCH. UPON TURNING ON ROOM LIGHTS, EXHAUST FAN SHALL BE ENERGIZED.
BID ITEM NOTE: TRANSFER FAN TF-1 TO BE OMITTED UNDER BID ITEM 5.



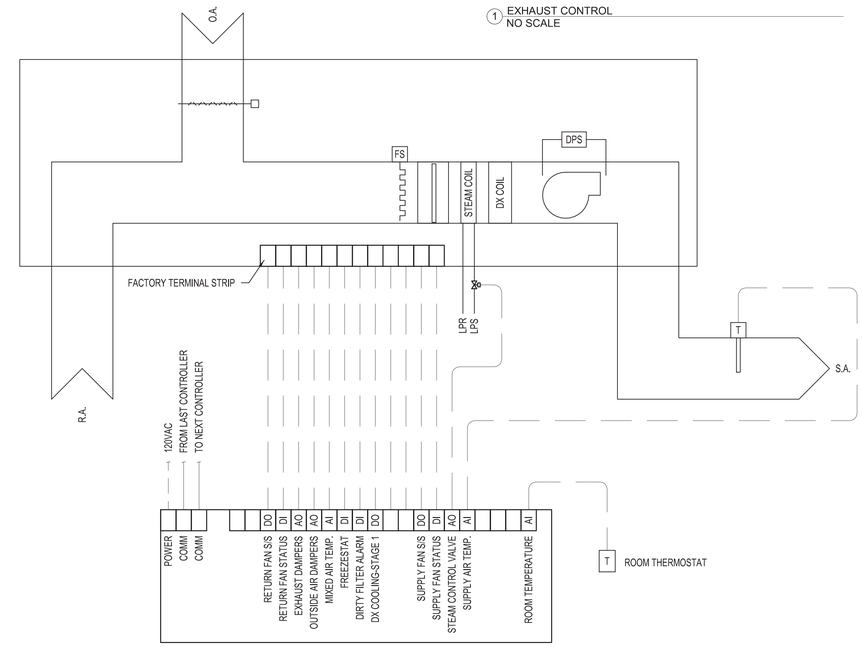
DDC CONTROLS TO TIE INTO EXISTING CAMPUS CONTROL SYSTEM

1 EXHAUST CONTROL
NO SCALE

CV AIR HANDLER UNIT CONTROL

OCCUPIED MODE
THE OUTSIDE AIR DAMPER SHALL BE OPEN AND THE AHU FAN RUN CONTINUOUSLY IN THE OCCUPIED MODE. ON A RISE IN TEMPERATURE, THE DX COOLING SHALL BE CYCLED ON TO MAINTAIN THE COOLING TEMPERATURE SETPOINT. WHEN THE SETPOINT IS MET, THE DX UNIT SHALL BE CYCLED OFF. ON A FURTHER DROP IN SPACE TEMPERATURE, THE STEAM VALVE SHALL BE MODULATED TO MAINTAIN THE HEATING TEMPERATURE SETPOINT. IF THE MIXED AIR TEMPERATURE FALLS BELOW 38F, THE FREEZESTAT SHALL CLOSE THE AIR DAMPER, SHUT OFF THE SUPPLY FAN, AND SIGNAL AN ALARM CONDITION.

UNOCCUPIED MODE
THE FANS ARE OFF, OA DAMPERS ARE CLOSED IN THE UNOCCUPIED MODE. ON A RISE IN SPACE TEMPERATURE TO ABOVE SET-UP OR SET-BACK TEMPERATURE, THE UNIT WILL CYCLE ON UNTIL SPACE TEMPERATURE REACHES OCCUPIED SETPOINT.



2 AHU CONTROL
NO SCALE

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER
LICENSED
25996
11/19/2018
PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title
MECHANICAL CONTROLS

Approved: Project Director

Project Title
RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location
Wichita, Kansas

Date **11/19/2018** | Checked CDF | Drawn AJS

Project Number **589A7-18-301**

Building Number **7**

Drawing Number **M-701**
Dwg.

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

PLUMBING ABBREVIATIONS

A/E	ARCHITECT/ENGINEER
AD	AREA DRAIN/ACCESS
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AG	AIR
AP	ACCESS
ASD	ADJUSTABLE SPEED
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
BRP	REDUCED PRESSURE BACKFLOW PREVENTER
BHP	BREAK HORSEPOWER
BSP	BLACK STEEL PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
C	CELSIUS
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CO	CLEANOUT
CV	CONTROL VALVE
CW	COLD WATER
DCW	DOMESTIC COLD WATER
DFU	DRAINAGE FIXTURE UNITS
DHW	DOMESTIC HOT WATER
DN	DOWN
DOE	DEPARTMENT OF ENERGY
DS	DOWNSPOUT
DWG	DRAWING
DWV	DRAIN WASTE VENT
EL	ELEVATION
ESC	ESCUTCHEON
ET	EXPANSION TANK
EX	EXISTING
F	FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FM	FLOW METER
FS	FLOOR SINK
FU	FIXTURE UNIT
GAL	GALLON
GCO	GRADE CLEANOUT
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H&C	HOT AND COLD WATER
HB	HOSE BIBB
HD	HUB DRAIN
HP	HORSEPOWER
HW	HOT WATER
HWC	HOT WATER CIRC.
ID	INSIDE DIAMETER
IPC	INTERNATIONAL PLUMBING CODE
IWH	INSTANTANEOUS WATER HEATER
KW	KILOWATT
KWH	KILOWATT-HOUR
L/S	LITER PER SECOND
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
M	METER
MBH	1000 BTUH
MH	MANHOLE
MSB	MOP SERVICE BASIN
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NOM	NOMINAL
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OVFL	OVERFLOW
PA	PASCAL
PD	PRESSURE DROP
PP	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PW	POTABLE WATER
R	ROOF DRAIN
RDL	ROOF DRAIN
RL	ROOF LEADER
RP	RECIRCULATION
SAN	SANITARY
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SP	SUMP PUMP
SQFT	SQUARE FEET
SS	STAINLESS STEEL
ST	STORAGE
SW	STORM WATER
TCV	TEMPERATURE CONTROL VALVE
TD	TEMPERATURE DIFFERENCE
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
TYP	TYPICAL
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WHA	WATER HAMMER ARRESTOR
WPD	WATER PRESSURE DROP
WSFU	WATER SUPPLY FIXTURE UNIT

PLUMBING PIPING SYMBOLS

- DOMESTIC COLD WATER, COLD WATER
- DOMESTIC HOT WATER, HOT WATER
- DOMESTIC HOT WATER RETURN, HOT WATER RETURN
- MEDICAL AIR
- MEDICAL VACUUM
- LABORATORY AIR
- LABORATORY VACUUM
- ORAL EVACUATION
- INDUSTRIAL AIR
- CONDENSATE DRAIN
- VENT (SANITARY)
- WASTE
- SOIL, WASTE, OR SANITARY SEWER
- SANITARY SEWER, BELOW GRADE
- STORM WATER
- STORM WATER, BELOW GRADE
- SOFTEN COLD WATER
- FILTERED COLD WATER
- DRINKING WATER SUPPLY
- DRINKING WATER RETURN
- TEMPERED WATER SUPPLY
- TEMPERED WATER RETURN

PLUMBING VALVE SYMBOLS

- GATE VALVE
- GLOBE VALVE
- GATE VALVE WITH 3/4" HOSE ADAPTER
- CHECK VALVE
- ANGLE GLOBE VALVE
- BUTTERFLY VALVE
- BALL VALVE
- MODULATING CONTROL VALVE
- TWO POSITION CONTROL VALVE
- THREE-WAY MODULATING CONTROL VALVE
- THREE-WAY TWO POSITION CONTROL VALVE
- PRESSURE REGULATING VALVE
- AUTOMATIC FLOW CONTROL VALVE
- PRESSURE RELIEF VALVE
- MANUAL AIR VENT
- TEST PLUG (PRESSURE/TEMPERATURE)
- AV — AUTOMATIC AIR VENT

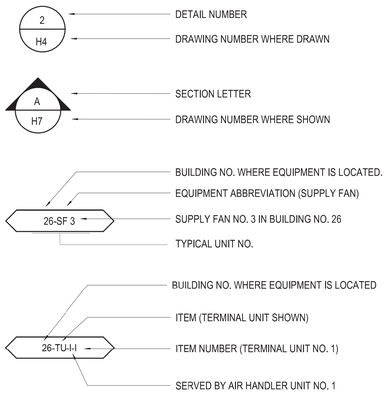
GENERAL PLUMBING SYMBOLS

- DIRECTION OF PIPE PITCH (DOWN)
- DIRECTION OF FLOW
- ANCHOR
- REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- RISE OR DROP IN PIPE
- UNION
- PIPE UP
- PIPE DOWN
- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- LIMIT OF DEMOLITION
- INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES
- FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES
- STRAINER
- THERMOMETER
- PRESSURE GAGE
- FE — FLOW ELEMENT
- CO — CLEAN OUT
- HOSE BIB

GENERAL PIPING SYMBOLS

- DIRECTION OF PIPE PITCH (DOWN)
- FLOW
- ANCHOR
- REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- RISE OR DROP IN PIPE
- UNION
- PIPE UP
- PIPE DOWN
- INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES SEE DETAIL
- FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES SEE DETAIL
- THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES SEE DETAIL
- THERMOMETER
- PRESSURE GAGE
- FE — FLOW ELEMENT
- REFRIGERANT SIGHT GLASS
- TEST PLUG (PRESSURE/TEMPERATURE)
- AV — AUTOMATIC AIR VENT
- MV — MANUAL AIR VENT
- QUICK-COUPLE HOSE CONNECTOR

DRAWING SYMBOLS



SHEET LIST

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING COVER SHEET**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

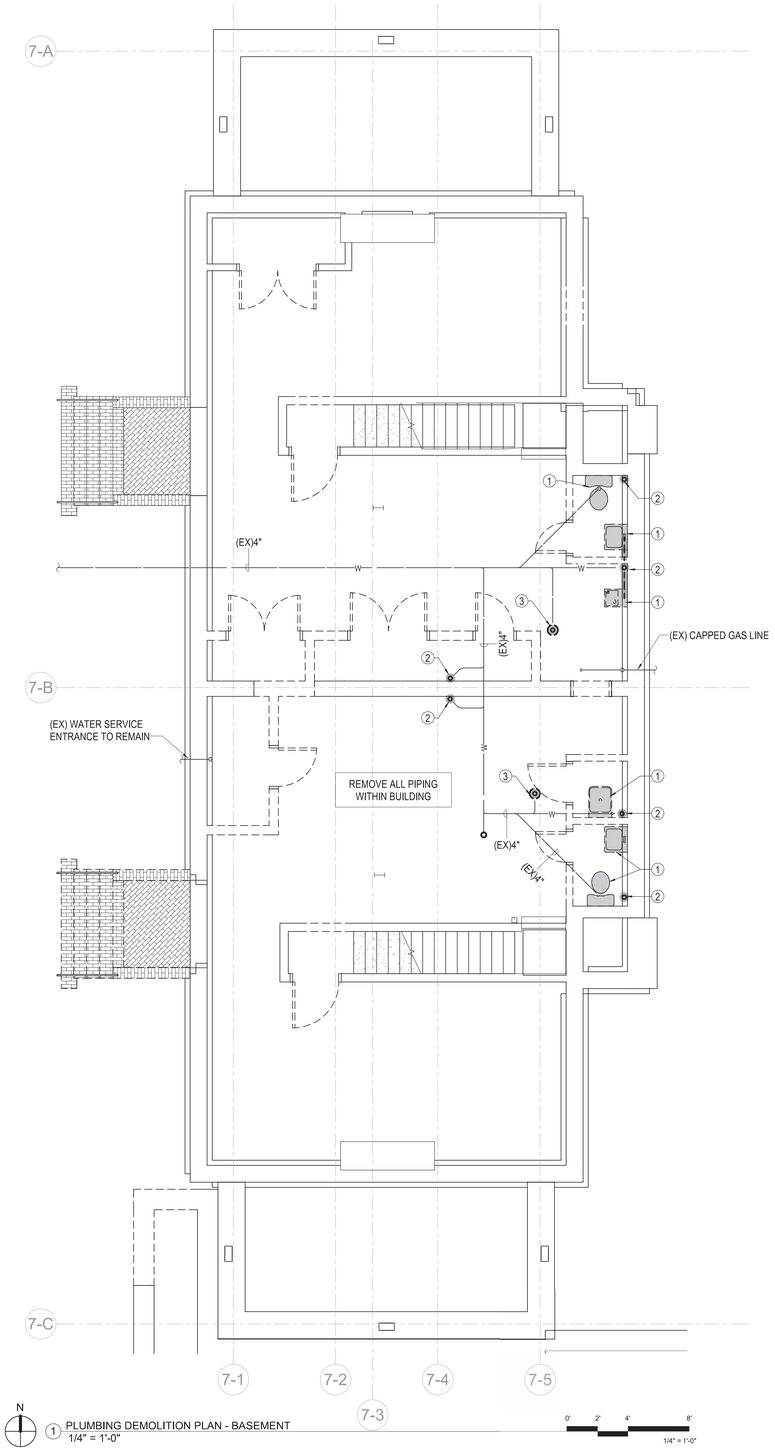
Drawing Number: **PP001**

Dwg.

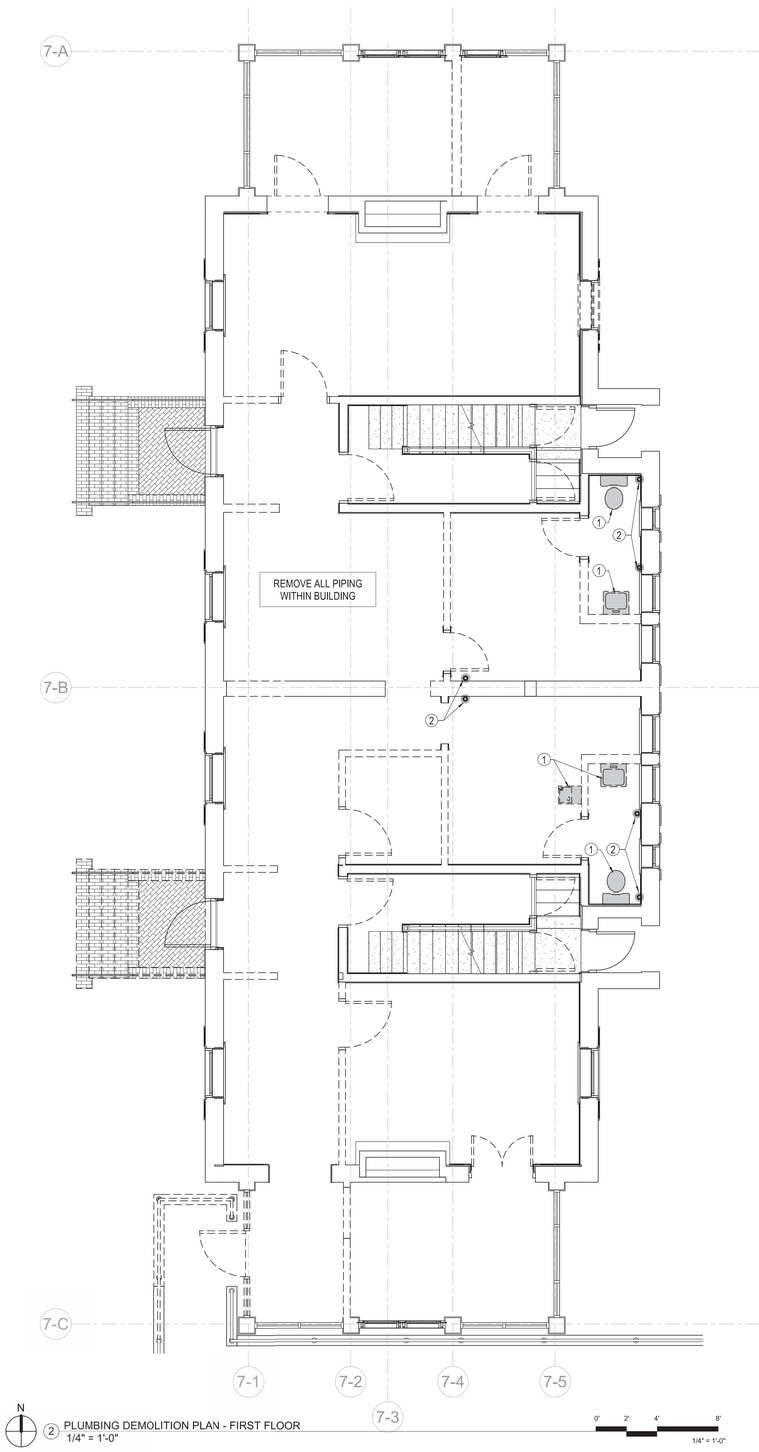
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



1 PLUMBING DEMOLITION PLAN - BASEMENT
1/4" = 1'-0"



2 PLUMBING DEMOLITION PLAN - FIRST FLOOR
1/4" = 1'-0"

PLUMBING DEMO NOTES

1. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
2. ALL CUTTING, PATCHING AND DEMOLITION WORK SHALL BE CLOSELY COORDINATED WITH THE EXISTING CONDITIONS AND THE REQUIRED NEW WORK. G.C. SHALL PATCH AND FINISH PENETRATIONS OF EXISTING SPACES TO MATCH ADJACENT SURFACES.
3. ALL PIPING TO BE REMOVED SHALL BE CAPPED AT THE MAINS UNLESS OTHERWISE NOTED.
4. ALL ACCESSIBLE ABANDONED PIPING SHALL BE REMOVED.
5. ALL PLUMBING FIXTURES, ACCESSORIES, AND PIPING TO BE REMOVED FROM BUILDING.
6. IN BASEMENT, CAP DEMOLISHED WASTE PIPING BELOW CONCRETE FLOOR. REMOVE, REPAIR, AND REPLACE CONCRETE AS REQUIRED.
7. PIPING TO BE REMOVED, BUT IS EMBEDDED WITHIN THE BUILDING STRUCTURE, MAY BE CAPPED AND ABANDONED IN PLACE. CAP BOTH ENDS AND PROVIDE SIGNAGE NOTIFYING STAFF THAT PIPING IS ABANDONED.

ⓧ PLAN NOTES

1. DEMOLISH EXISTING PLUMBING FIXTURE. DEMOLISH ALL ASSOCIATED PIPING BACK TO MAIN AND CAP.
2. EXISTING WASTE STACK TO BE DEMOLISHED. CAP WASTE LINE BELOW BASEMENT FLOOR. REMOVE, REPAIR, AND REPLACE CONCRETE AS REQUIRED.
3. EXISTING FLOOR DRAIN TO BE REMOVED AND WASTE LINE CAPPED BELOW THE FLOOR. REMOVE, REPAIR, AND REPLACE CONCRETE AS REQUIRED.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING DEMOLITION PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

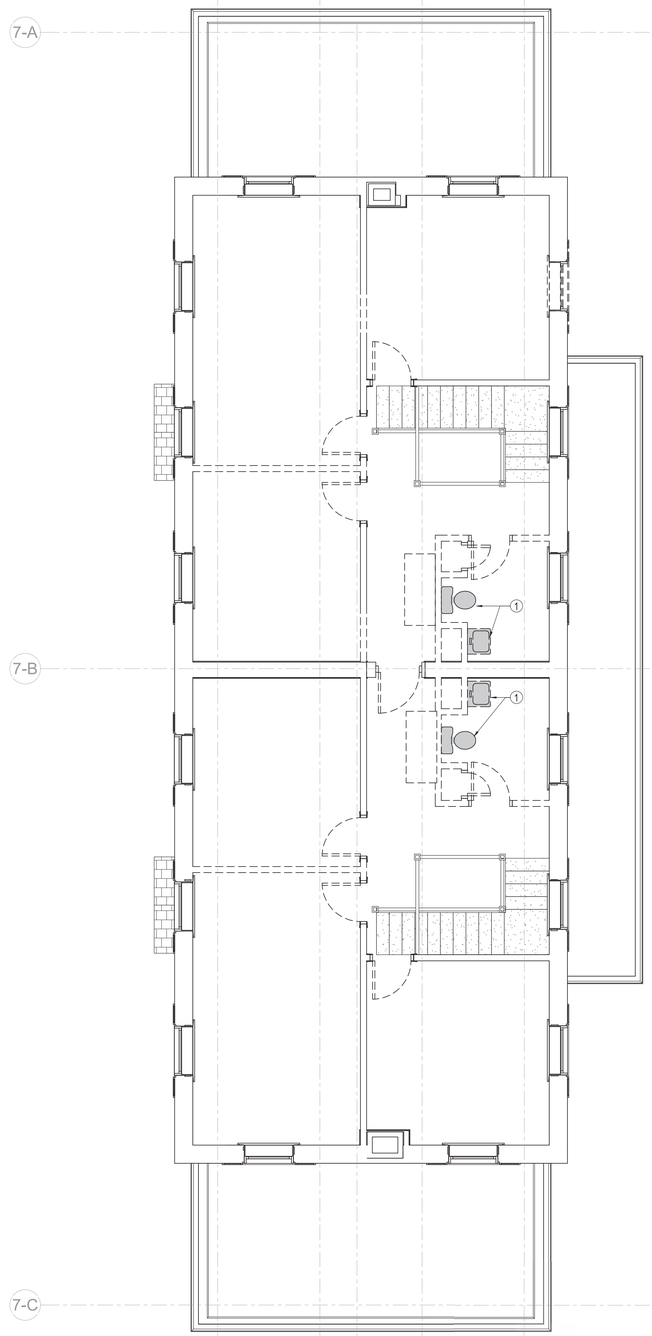
Drawing Number: **PD101**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

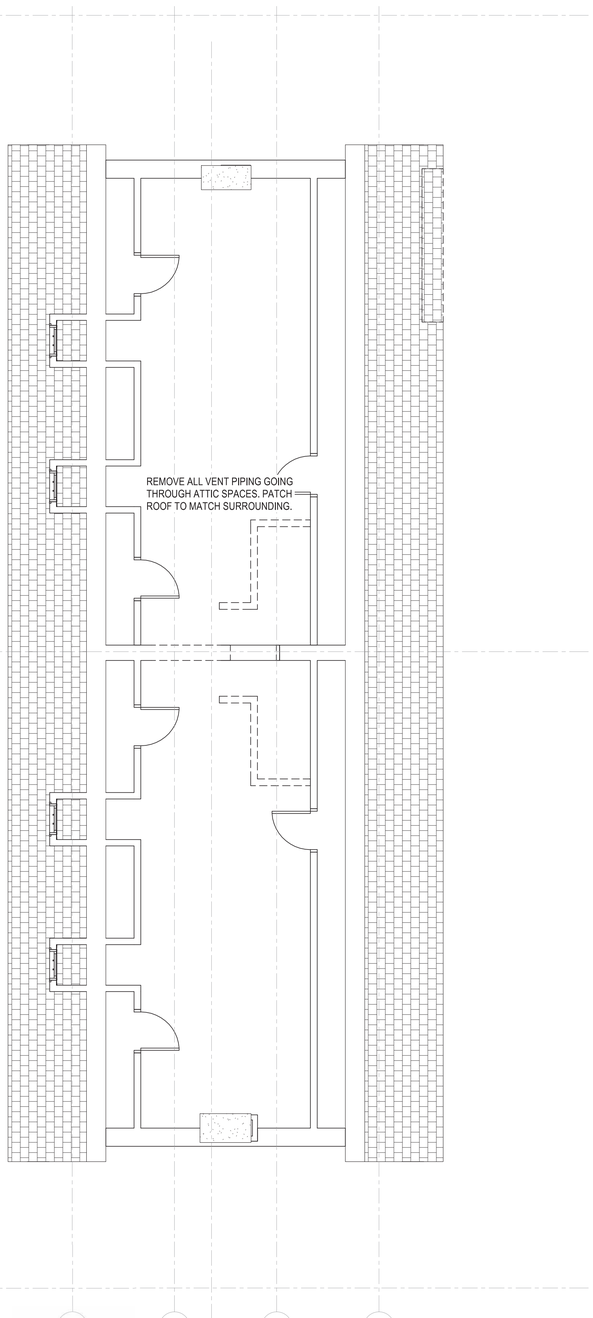
VA FORM 08-6231



N

1 PLUMBING DEMOLITION PLAN - SECOND FLOOR
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

2 PLUMBING DEMOLITION PLAN - ATTIC
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

PLUMBING DEMO NOTES

1. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
2. ALL CUTTING, PATCHING AND DEMOLITION WORK SHALL BE CLOSELY COORDINATED WITH THE EXISTING CONDITIONS AND THE REQUIRED NEW WORK. G.C. SHALL PATCH AND FINISH PENETRATIONS OF EXISTING SPACES TO MATCH ADJACENT SURFACES.
3. ALL PIPING TO BE REMOVED SHALL BE CAPPED AT THE MAINS UNLESS OTHERWISE NOTED.
4. ALL ACCESSIBLE ABANDONED PIPING SHALL BE REMOVED.
5. ALL PLUMBING FIXTURES, ACCESSORIES, AND PIPING TO BE REMOVED FROM BUILDING.
6. IN BASEMENT, CAP DEMOLISHED WASTE PIPING BELOW CONCRETE FLOOR. REMOVE, REPAIR, AND REPLACE CONCRETE AS REQUIRED.
7. PIPING TO BE REMOVED, BUT IS EMBEDDED WITHIN THE BUILDING STRUCTURE, MAY BE CAPPED AND ABANDONED IN PLACE. CAP BOTH ENDS AND PROVIDE SIGNAGE NOTIFYING STAFF THAT PIPING IS ABANDONED.

(X) PLAN NOTES

1. DEMOLISH EXISTING PLUMBING FIXTURE. DEMOLISH ALL ASSOCIATED PIPING.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER
LICENSED
25996
11/19/2018
PROFESSIONAL ENGINEER
KANSAS

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title
PLUMBING DEMOLITION PLANS

Approved: Project Director

Project Title
RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location
Wichita, Kansas

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

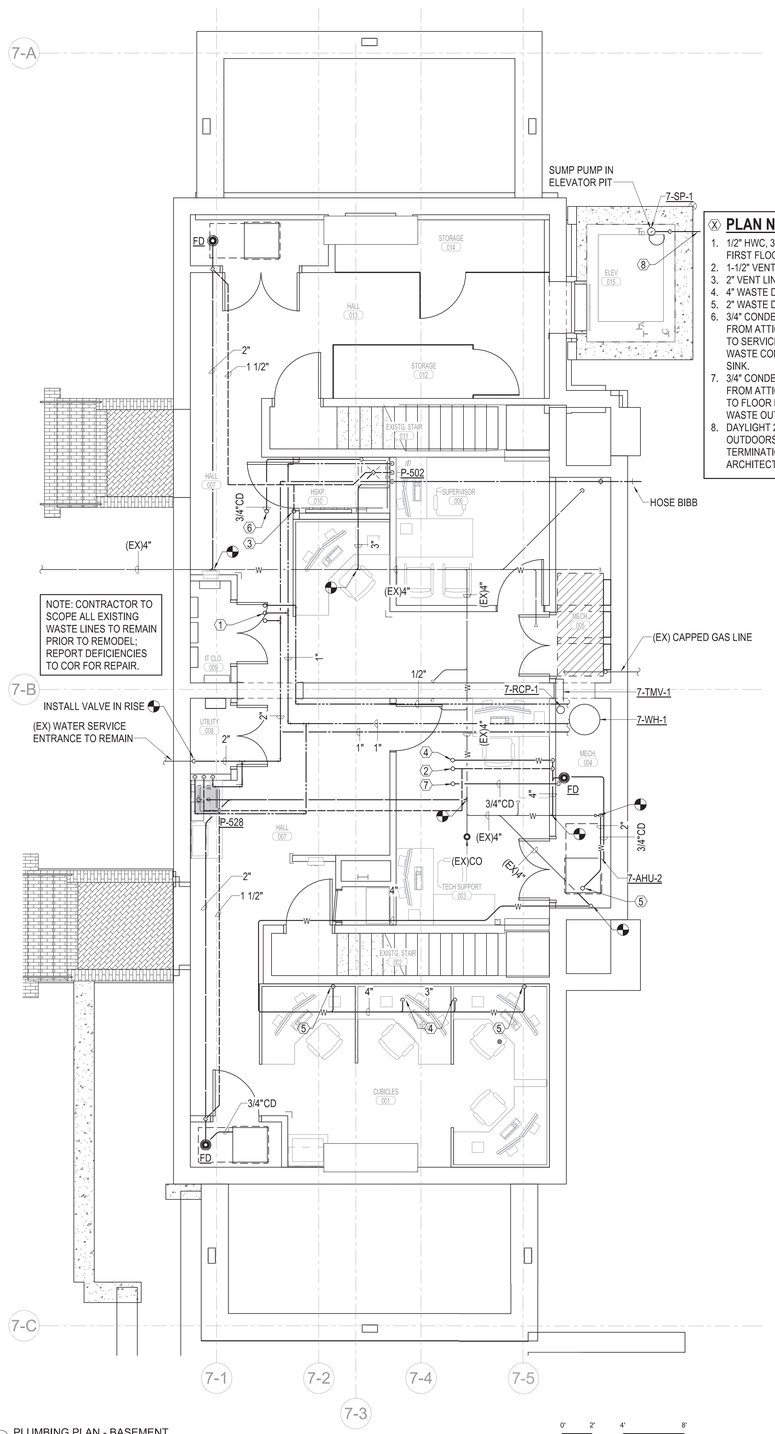
Drawing Number: **PD102**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

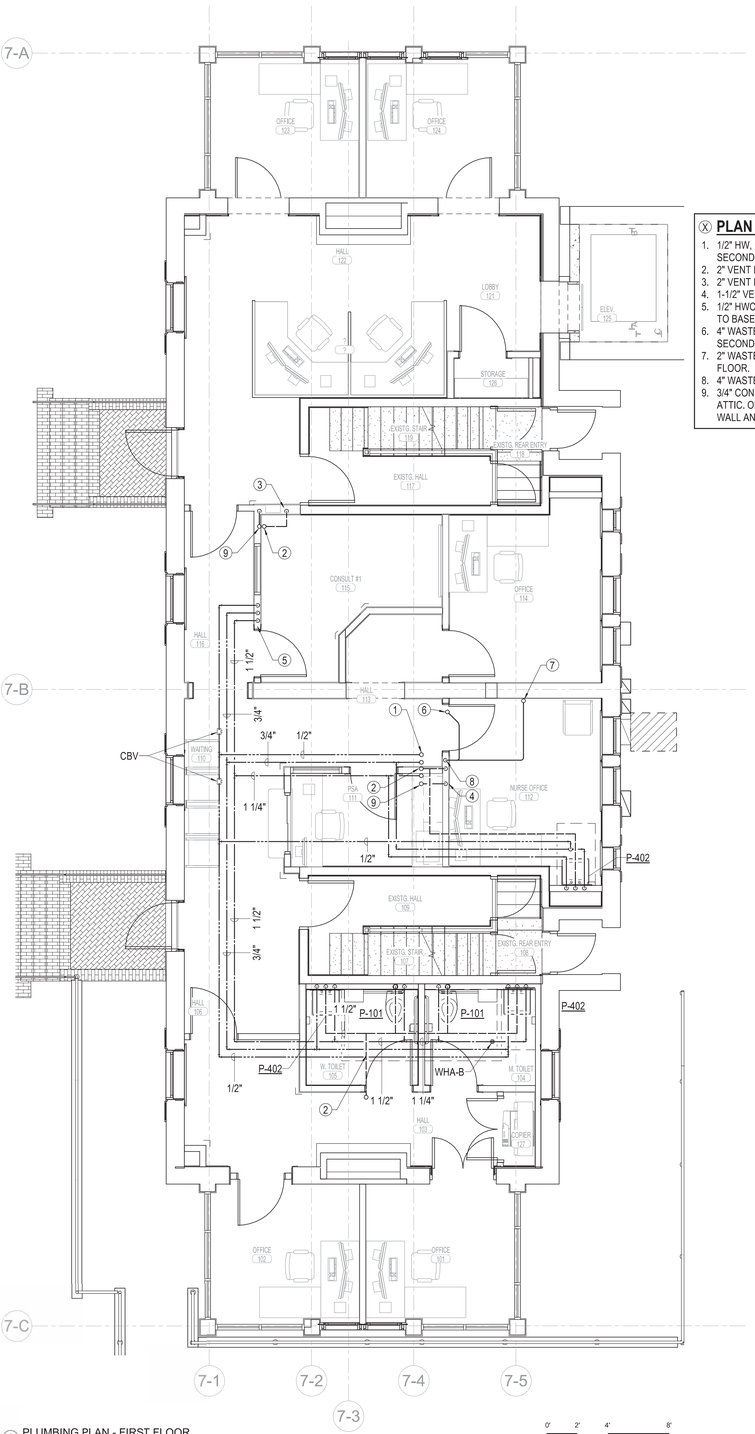
VA FORM 08-6231



PLAN NOTES

1. 1/2" HWC, 3/4" HW, AND 1-1/2" CW UP TO FIRST FLOOR.
2. 1-1/2" VENT LINE UP.
3. 2" VENT LINE UP.
4. 4" WASTE DOWN FROM FIRST FLOOR.
5. 2" WASTE DOWN FROM FIRST FLOOR.
6. 3/4" CONDENSATE LINE ROUTED DOWN FROM ATTIC. ROUTE CONDENSATE LINE TO SERVICE SINK. PROVIDE INDIRECT WASTE CONNECTION OVER SERVICE SINK.
7. 3/4" CONDENSATE LINE ROUTED DOWN FROM ATTIC. ROUTE CONDENSATE LINE TO FLOOR DRAIN AND PROVIDE INDIRECT WASTE OUTLET OVER FLOOR DRAIN.
8. DAYLIGHT 2" SUMP PUMP WASTE LINE TO OUTDOORS. COORDINATE PIPE TERMINATION LOCATION WITH ARCHITECTURAL PLANS.

1 PLUMBING PLAN - BASEMENT
1/4" = 1'-0"



PLAN NOTES

1. 1/2" HW, 1/2" HWC, AND 1-1/4" CW UP TO SECOND FLOOR.
2. 2" VENT LINE UP.
3. 2" VENT LINE DOWN.
4. 1-1/2" VENT LINE DOWN.
5. 1/2" HWC, 3/4" HW, AND 1-1/2" CW DOWN TO BASEMENT.
6. 4" WASTE UP TO WATER CLOSET ON SECOND FLOOR.
7. 2" WASTE UP TO LAVATORY ON SECOND FLOOR.
8. 4" WASTE DOWN TO BASEMENT.
9. 3/4" CONDENSATE LINE DOWN FROM ATTIC. OFFSET IN PLENUM TO NEAR WALL AND ROUTE DOWN TO BASEMENT.

2 PLUMBING PLAN - FIRST FLOOR
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES. PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

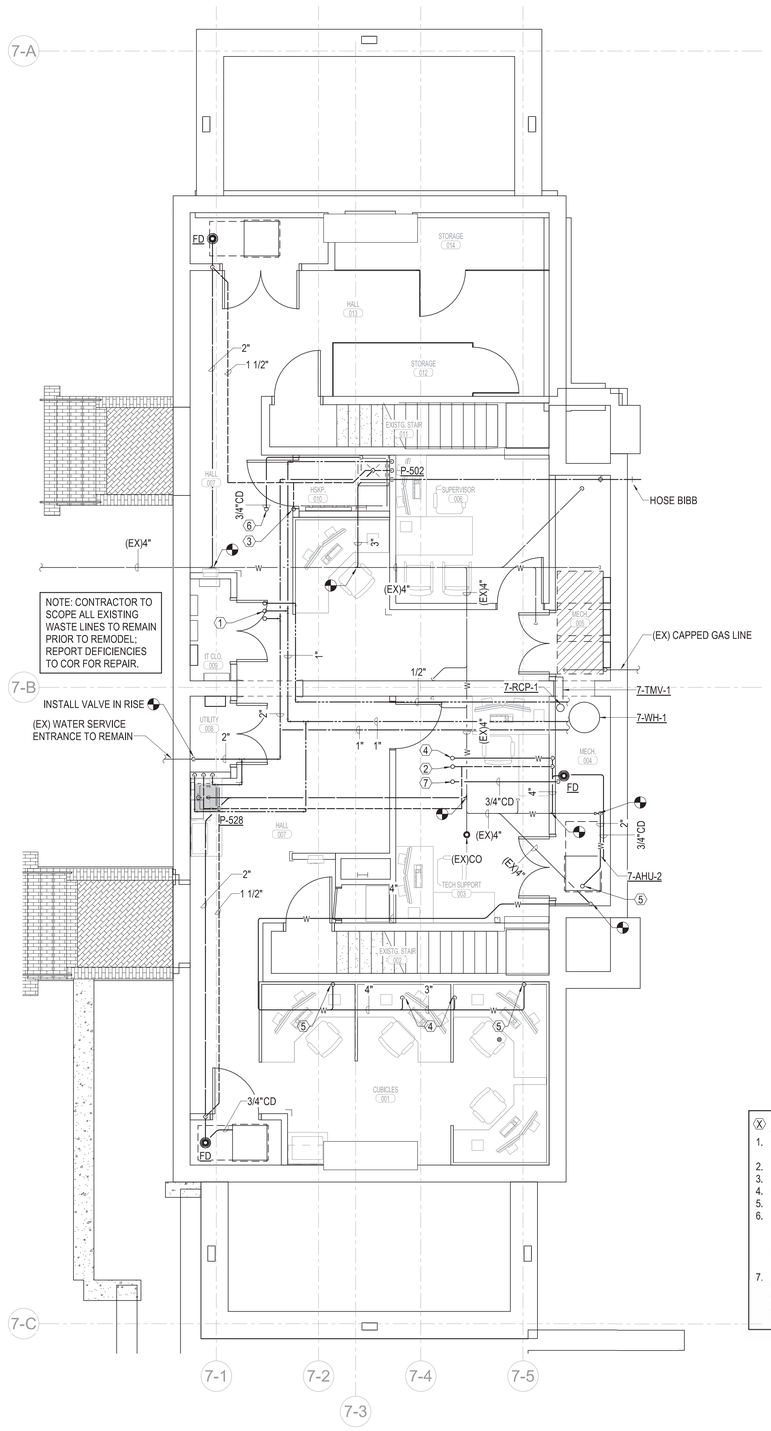
Drawing Number: **PL101**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

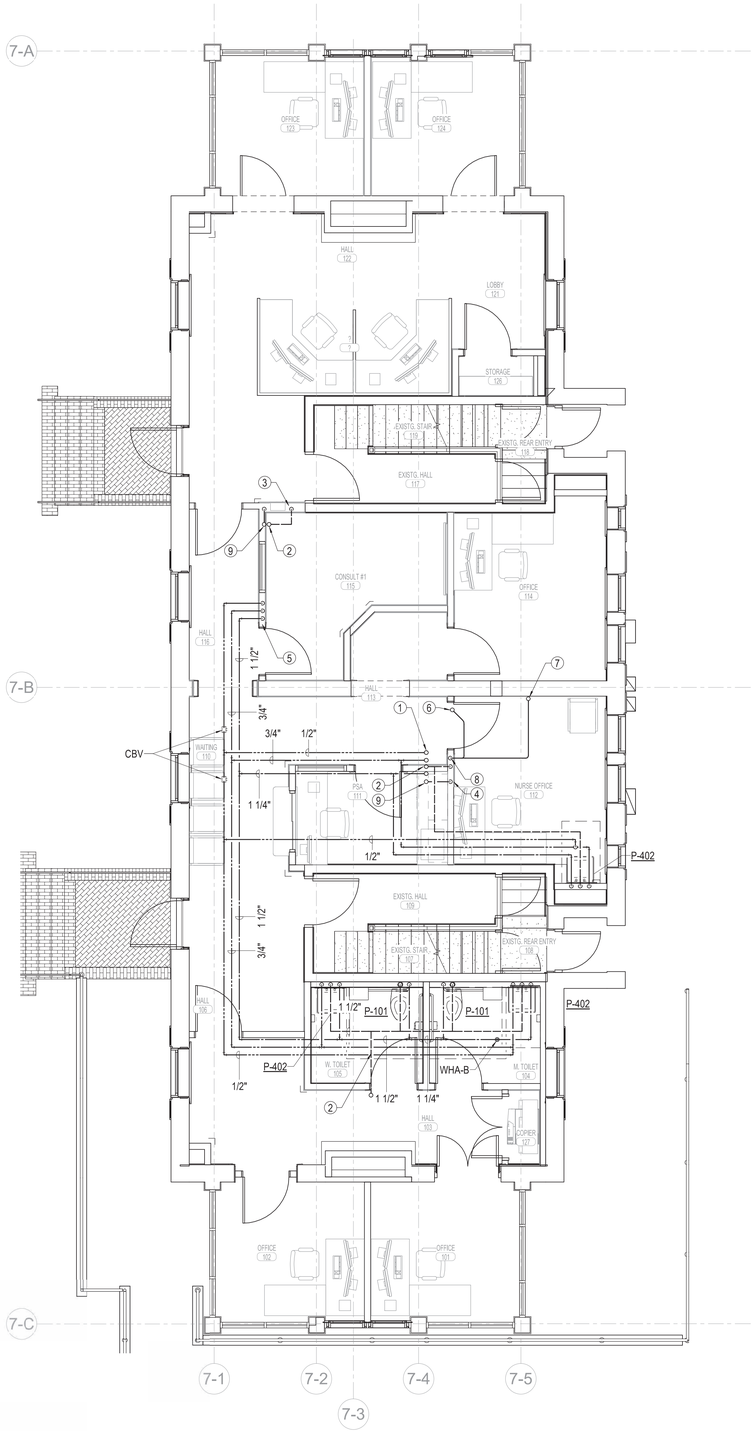
VA FORM 08-6231



PLAN NOTES

1. 1/2" HWC, 3/4" HW, AND 1-1/2" CW UP TO FIRST FLOOR.
2. 1-1/2" VENT LINE UP.
3. 2" VENT LINE UP.
4. 4" WASTE DOWN FROM FIRST FLOOR.
5. 2" WASTE DOWN FROM FIRST FLOOR.
6. 3/4" CONDENSATE LINE ROUTED DOWN FROM ATTIC. ROUTE CONDENSATE LINE TO SERVICE SINK. PROVIDE INDIRECT WASTE CONNECTION OVER SERVICE SINK.
7. 3/4" CONDENSATE LINE ROUTED DOWN FROM ATTIC. ROUTE CONDENSATE LINE TO FLOOR DRAIN AND PROVIDE INDIRECT WASTE OUTLET OVER FLOOR DRAIN.

1 PLUMBING PLAN - BASEMENT - BID ITEM 5
1/4" = 1'-0"



PLAN NOTES

1. 1/2" HW, 1/2" HWC, AND 1-1/4" CW UP TO SECOND FLOOR.
2. 2" VENT LINE UP.
3. 2" VENT LINE DOWN.
4. 1-1/2" VENT LINE DOWN.
5. 1/2" HWC, 3/4" HW, AND 1-1/2" CW DOWN TO BASEMENT.
6. 4" WASTE UP TO WATER CLOSET ON SECOND FLOOR.
7. 2" WASTE UP TO LAVATORY ON SECOND FLOOR.
8. 4" WASTE DOWN TO BASEMENT.
9. 3/4" CONDENSATE LINE DOWN FROM ATTIC. OFFSET IN PLENUM TO NEAR WALL AND ROUTE DOWN TO BASEMENT.

2 PLUMBING PLAN - FIRST FLOOR - BID ITEM 5
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES, PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

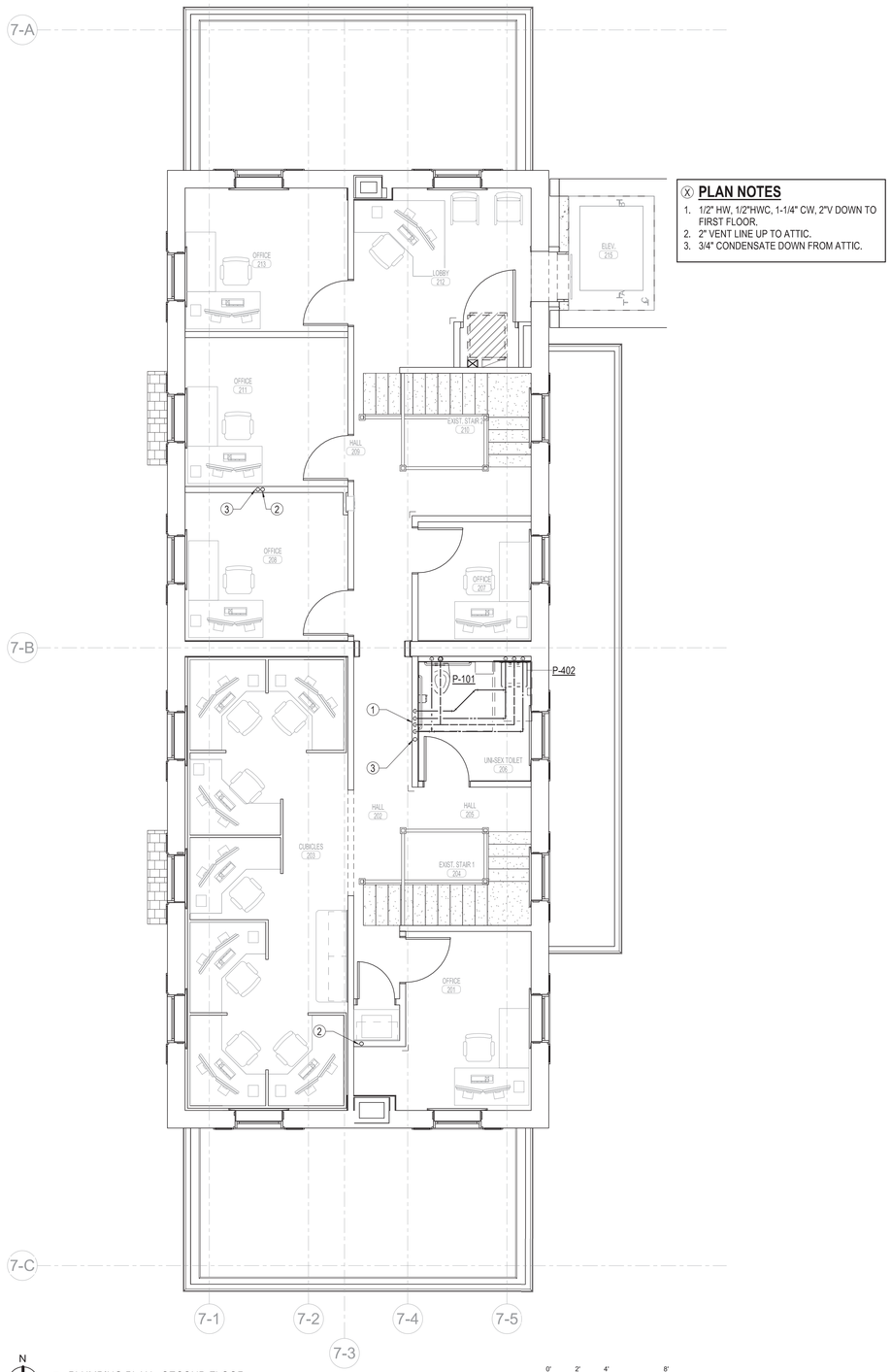
Building Number: **7**

Drawing Number: **PL101.5** Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



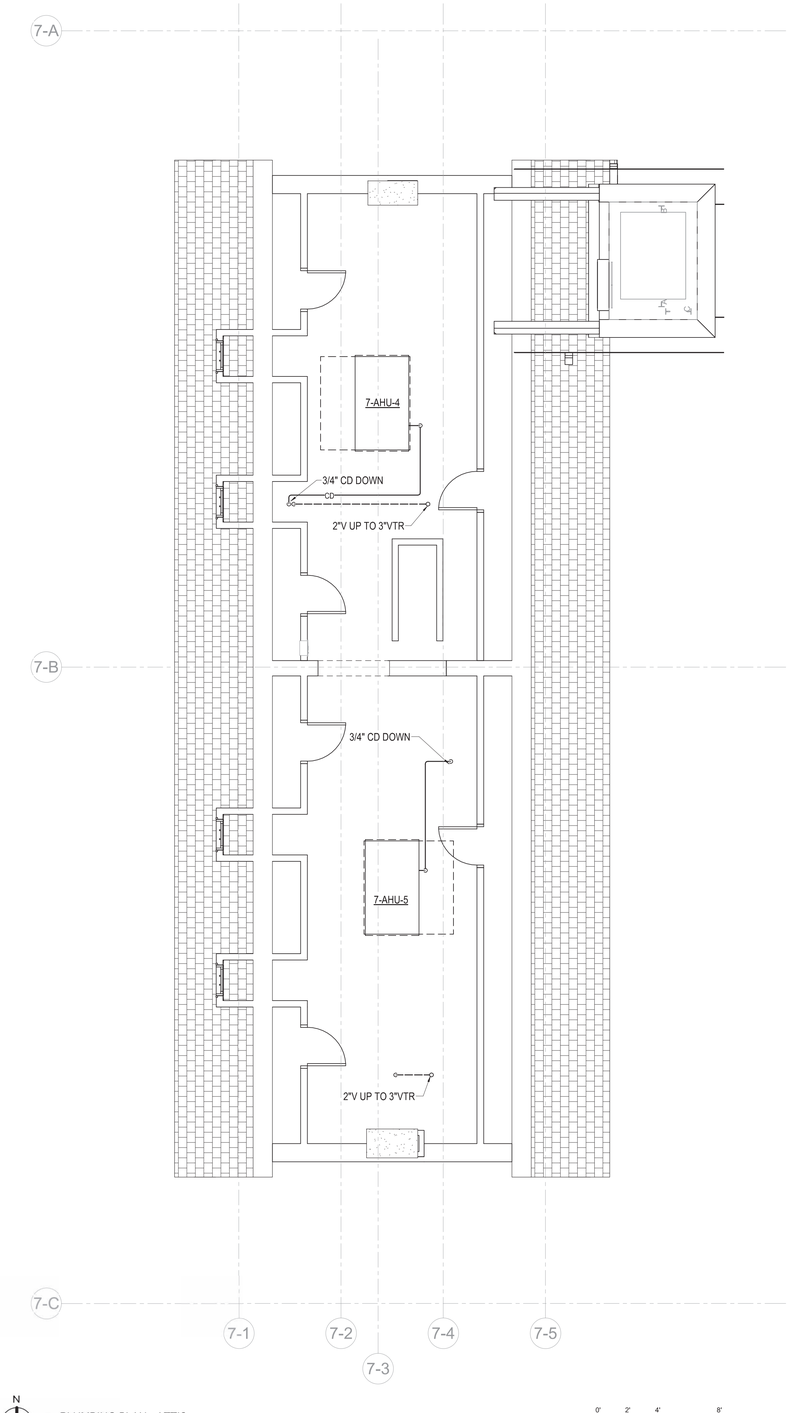
PLAN NOTES

1. 1/2" HW, 1/2"HWC, 1-1/4" CW, 2"V DOWN TO FIRST FLOOR.
2. 2" VENT LINE UP TO ATTIC.
3. 3/4" CONDENSATE DOWN FROM ATTIC.

N

① PLUMBING PLAN - SECOND FLOOR
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

② PLUMBING PLAN - ATTIC
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR. ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES. PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER KANSAS

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

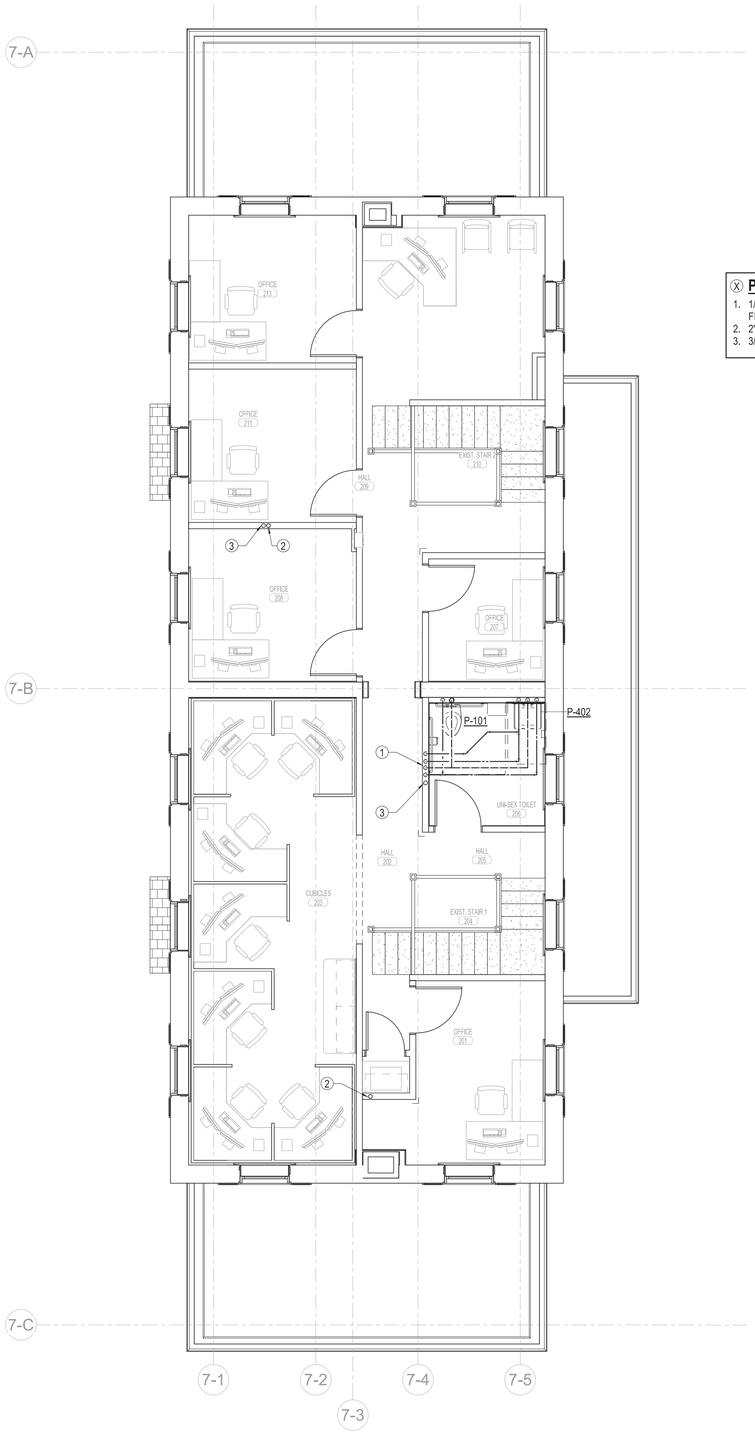
Drawing Number: **PL102**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

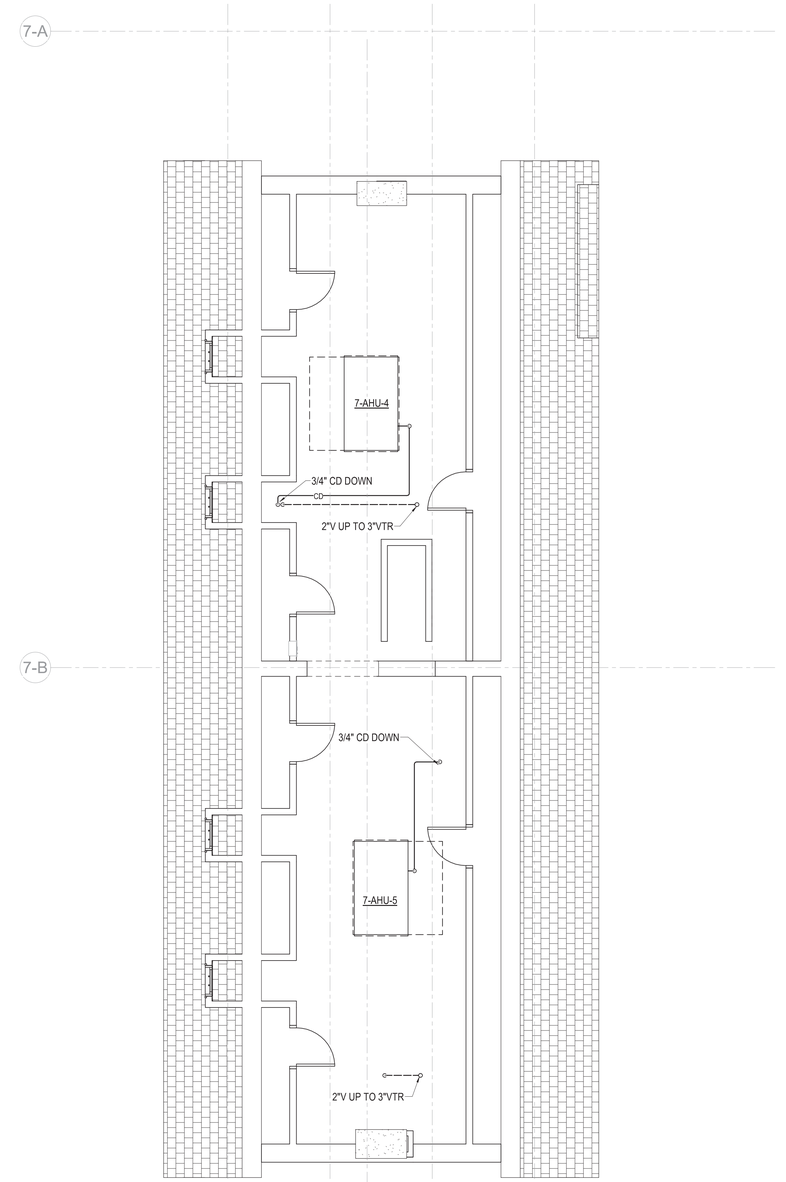
VA FORM 08-6231



Ⓧ PLAN NOTES

1. 1/2" HW, 1/2"HWC, 1-1/4" CW, 2"V DOWN TO FIRST FLOOR.
2. 2" VENT LINE UP TO ATTIC.
3. 3/4" CONDENSATE DOWN FROM ATTIC.

① PLUMBING PLAN - SECOND FLOOR - BID ITEM 5
1/4" = 1'-0"



② PLUMBING PLAN - ATTIC - BID ITEM 5
1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
4. COORDINATE WITH THE OWNER THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALL, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
5. ALL CUTTING AND CHANNELING OF EXISTING NON-STRUCTURAL ELEMENTS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
6. CUTTING OF STRUCTURAL MEMBERS IS NOT ALLOWED.
7. THIS CONTRACTOR SHALL GIVE FULL COOPERATION TO THE OWNER IN THE SCHEDULING AND PROCEDURE OF WORK AND SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE FROM FREEZING TO EXISTING SYSTEMS.
8. RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN.
9. CAP ALL EXISTING DUCTWORK SHOWN TO BE DISCONNECTED AND NOT RE-USED.
10. COORDINATE ROUTING OF PLUMBING AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET, AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE.
11. ANY EXPENSES RISING FROM LACK OF COORDINATION SHALL BE AT CONTRACTOR'S EXPENSE. ALL DUCT AND PIPE ELEVATIONS SHOWN IN PARENTHESIS ARE BOTTOM OF DUCT OR PIPE UNLESS INDICATED OTHERWISE ON PLANS.
12. ALL SUPPLY, RETURN, AND EXHAUST BRANCHES TO GRILLES, REGISTERS, AND DIFFUSERS SHALL HAVE A MANUAL BALANCE DAMPER.
13. CEILING PLENUM IS USED FOR RETURN AIR. KEEP PLENUM FREE OF COMBUSTIBLES, PVC PIPING, AND ANY OTHER MATERIALS NOT ALLOWED BY THE INTERNATIONAL FIRE CODE.

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

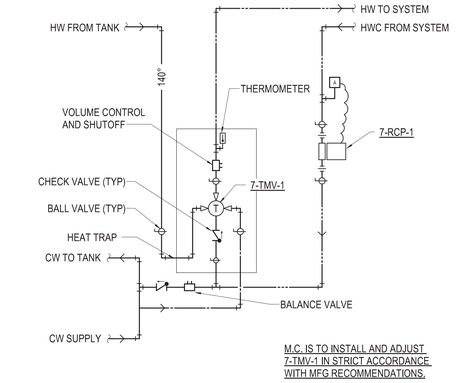
Drawing Number: **PL102.5**

Dwg.

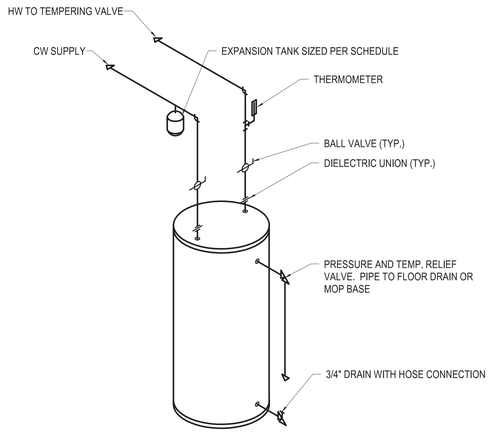
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



2 TEMPERING VALVE
NO SCALE



1 WATER HEATER - ELECTRIC DOMESTIC
NO SCALE

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	WASTE PIPE		VENT PIPE		COLD WATER		HOT WATER		WASTE FIXTURE UNITS	WATER FIXTURE UNITS	WRIST BLADE HANDLES	ELECTRONIC SENSOR	REMARKS
		IN	[mm]	IN	[mm]	IN	[mm]	IN	[mm]					
P-101	WATER CLOSET, FLOOR MTD	3	[75]	2	[50]	1.25	[31]	–	–	6	10	N/A	NO	HANDICAP ACCESSIBLE
P-402	LAVATORY ELBOW CONTROL	2	[50]	1.5	[38]	.5	[13]	.5	[13]	2	2	YES	NO	HANDICAP ACCESSIBLE
P-502	SINK SERVICE FLOOR MOUNTED	3	[75]	2	[50]	.75	[19]	.75	[19]	3	4	YES	NO	---
P-528	SINK	2	[50]	1.5	[38]	.5	[13]	.5	[13]	2	2	YES	NO	HANDICAP ACCESSIBLE

P-101: WATER CLOSET, FLOOR MOUNT:
BASED ON AMERICAN STANDARD 3043.001 FLOOR MOUNTED, BOTTOM OUTLET, VITREOUS CHINA, 17-1/8" HIGH ELONGATED BOWL, HIGH EFFICIENCY, SIPHON JET TOILET WITH 1-1/2" TOP SPUD - SLOAN WES 111, DUAL 1.6/1.1 GPF FLUSH VALVE WITH VACUUM BREAKER, OFFSET FLUSH TUBE FOR CLEARANCE AROUND GRAB BAR (IF NEEDED) - WHITE SOLID PLASTIC ELONGATED OPEN FRONT SEAT, LESS COVER. THE TOILET SHALL BE INSTALLED SO THAT THE CENTERLINE OF BOWL IS 16"-18" FROM THE NEAREST FINISHED WALL, AND FLUSH HANDLE SHALL BE ON THE WIDE SIDE OF THE TOILET ROOM.

P-402: LAVATORY:
BASED ON KOHLER K-2005 "KINGSTON" 20"X18" WALL HUNG VITREOUS CHINA LAVATORY WITH 4" CENTERS, FRONT OVERFLOW, DRILLED FOR CONCEALED ARM CARRIER - CHICAGO FAUCET 895-317GN2AET2XKAB DECK MOUNTED LAVATORY FAUCET WITH GOOSENECK SPOUT, 0.5 GPM LAMINAR FLOW DEVICE IN SPOUT, WRISTBLADE HANDLES, CERAMIC DISC CARTRIDGES - PROVIDE DRAIN WITH GRID STRAINER - CHROME PLATED WALL SUPPLIES WITH LOOSE KEY STOPS - 1-1/4" CHROME PLATED CAST BRASS "P" TRAP - FLOOR MOUNTED CONCEALED ARM CARRIER - INSULATE "P" TRAP AND HOT WATER SUPPLY.

P-502: SERVICE SINK, FLOOR MOUNTED:
BASED ON STERN WILLIAMS SBC-1700 24"X24"X12" DEEP TERRAZZO MOP BASIN WITH DROP FRONT AND STAINLESS STEEL CAP - CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER - CHICAGO FAUCET 540-LD897SWXF317 CP SERVICE SINK FAUCET WITH INTEGRAL CHECKSTOPS, SPOUT WITH BUCKET HOOK, 3/4" HOSE THREAD END, VACUUM BREAKER, ADJUSTABLE TOP BRACE, WRISTBLADE HANDLES - STAINLESS STEEL BACKSPLASH PANELS ON ADJACENT WALLS - 3" CAST IRON "P" TRAP.

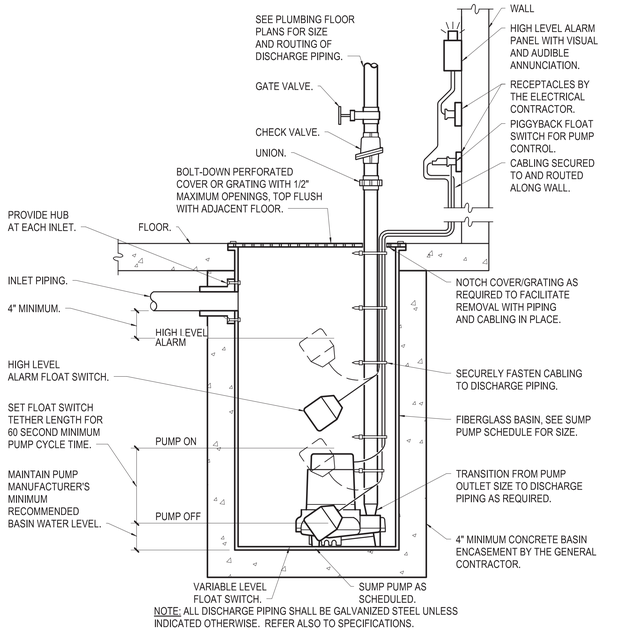
P-528: SINK:
BASED ON SOLID SURFACE SINK WITH OVERFLOW DRAIN PER ARCHITECTURAL PLANS. - FAUCET BASED ON CHICAGO FAUCET 786-GN8FCXKABCP DECK MOUNTED FAUCET WITH 1.5 GPM LAMINAR FLOW GOOSENECK SPOUT, CERAMIC CARTRIDGES, WRISTBLADE HANDLES - DUO STRAINER WITH NEOPRENE STOPPER - WALL SUPPLIES WITH LOOSE KEY STOPS - CHROME PLATED CAST BRASS "P" TRAP. INSTALL PIPING TO FIT WITHIN ARCHITECTURAL ENCLOSURE.

ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	TYPE	STORAGE CAPACITY		RECOVERY @ 100°F RISE		TIME TO RECOVER CONTENTS, MINUTES	RELIEF VALVE SETTINGS		NO. OF ELEMENTS	ELECTRICAL INPUT				REMARKS
					GAL	[L]	GAL/HR	[L/HR]		PSIG	[kPa]		TOTAL kW	kW PER ELEMENT	PHASE	VOLT	
7-WH-1	BASEMENT	BLDG 7	HW	ELECTRIC	20	--	10	--	120	125	--	1	2.5	2.5	1	208/1	--

DOMESTIC WATER THERMAL EXPANSION TANK SCHEDULE

MARK	LOCATION	TYPE	SYSTEM TEMPERATURE				INITIAL PRESSURE IN TANK		MAX OPERATING PRESSURE		RELIEF VALVE PSIG [kPa]		MIN TANK VOLUME		MIN ACCEPT VOLUME		PIPE SIZE TO TANK		REMARKS
			MIN		MAX														
			°F	[°C]	°F	[°C]	PSIG	[kPA]	PSIG	[kPA]	PSIG	[kPA]	GAL	[L]	GAL	[L]	IN	[mm]	
7-ET-1	BASEMENT	DIAPHRAGM	45	--	140	--	55	--	150	--	125	--	2	--	0.9	--	3/4"	--	--



NOTE: ALL DISCHARGE PIPING SHALL BE GALVANIZED STEEL UNLESS INDICATED OTHERWISE. REFER ALSO TO SPECIFICATIONS.

5 SUMP PUMP DETAIL - SIMPLEX
NO SCALE

PLUMBING PUMP SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	TYPE	CIRCULATING FLUID								SP. GR.	MIN. % EFF	ELECTRICAL POWER						REMARKS
					FLUID	FLOW		HEAD		NPSH AVAILABLE		TEMPERATURE				NOMINAL POWER		PHASE	VOLT	MAX RPM	SPEED CONTROL	
						GPM	[L/s]	FT	[kPA]	FT	[kPA]	°F	[°C]			HP	[kW]					
7-RCP-1	BASEMENT	BLDG 7	HWC	INLINE	WATER	1.0	--	20	--	--	--	110	--	1.0	--	.025	--	1	120	3250	1	1
7-SP-1	ELEVATOR PIT	BLDG 7	ELEVATOR	SUMP PUMP	WATER	50	--	20	--	--	--	50	--	--	--	0.50	--	1	120	1750	1	2, A

1. BASED ON INLINE CARTRIDGE CIRCULATOR.
2. BASED ON SUBMERSIBLE SUMP PUMP WITH 28"Wx28"Lx24"D BASIN AND CORD AND PLUG. PROVIDE ACCESSORIES PER SUMP PUMP DETAIL THIS SHEET.

A. SUMP PUMP IS TO BE OMITTED UNDER BID ITEM 5.

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	LOC AT ROOM	GPM		PRESS. DROP	CW		HW		140° HW		OUTLET TEMP	REMARKS
		MIN.	MAX.		RUNOUT	CONN.	RUNOUT	CONN.	RUNOUT	CONN.		
7-TMV-1	BASEMENT	0.5	5	5 PSI	3/4	3/4	3/4	3/4	3/4	3/4	110 F	

BID ITEM NOTE: SUMP PUMP, BASIN, AND ALL ACCESSORIES TO BE OMITTED UNDER BID ITEM 5

Revisions:	Date

CONSULTANTS:

--

ALEC J. STALLBAUMER LICENSED 25996 11/19/2018 PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **PLUMBING DETAILS, SCHEDULES**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: CDF | Drawn: AJS

Project Number: **589A7-18-301**

Building Number: **7**

Drawing Number: **P-501**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

SPECIAL OUTLETS

MARK	DESCRIPTION
D	EXISTING SPECIAL OUTLET TO BE REMOVED. ALL ASSOCIATED CONDUIT AND CABLING TO BE REMOVED BACK TO THE SOURCE.
WAP	WIRELESS ACCESS DEVICE. DEVICE PROVIDED BY VA. COORDINATE EXACT LOCATION WITH COR.

SHEET INDEX

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).
2. REFER TO RELATED ARCHITECTURAL, MECHANICAL, STRUCTURAL, AND CIVIL DRAWINGS FOR RELATED INFORMATION.
3. REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.
4. E.C. SHALL REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.
5. COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.
6. ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.
7. CONDUIT RUN W/CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250.122. CONDUIT SIZE AS REQUIRED.
8. WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND.
9. "CT" INDICATED ADJACENT TO DEVICE INDICATES DEVICE MOUNTED ABOVE BACKSPLASH OF COUNTER TOP. VERIFY EXACT HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS.
10. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
11. JUNCTION BOX OR RECEPTACLE FOR DRINKING FOUNTAINS SHALL BE LOCATED BEHIND THE EQUIPMENT SKIRT UNLESS OTHERWISE NOTED. COORDINATE CONNECTION TYPE AND LOCATION WITH EQUIPMENT PROVIDED.
12. LABEL THE FRONT OF EACH RECEPTACLE COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING CLEAR THERMAL TRANSFER (ELECTRONIC DYMO) LABELS WITH 1/8" HIGH BLACK LETTERS (OR CONTRASTING COLOR IF COVERPLATES ARE BLACK OR BROWN). LABELS SHALL BE SUITABLE FOR INDOOR/OUTDOOR USE. LABEL THE BACK OF EACH LIGHT SWITCH COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING A FINE BLACK PERMANENT MARKER.
13. PROVIDE 18" LONG (MIN.) CONDUIT SLEEVES THRU ALL WALLS WHERE CABLES ARE INDICATED OR REQUIRED TO PASS THRU WALLS. PROVIDE BUSHINGS ON BOTH ENDS. SIZE CONDUIT FOR CABLES INSTALLED. AT CABLE TRAYS, PROVIDE ONE 4" CONDUIT SLEEVE FOR EACH 4" WIDTH OF CABLE TRAY. MAXIMUMS SHALL BE:
    1"C. = 10 CABLES
    2 1/2"C. = 20 CABLES
    3"C. = 30 CABLES
    4"C. = 50 CABLES
14. LOCATE CABLE TRAYS 6" ABOVE CEILING. OFFSET TRAY UP AND OVER LIGHT FIXTURES AND DUCTWORK (FIELD VERIFY AND PROVIDE AS REQUIRED). IF PHYSICALLY IMPOSSIBLE TO RUN CABLE TRAY UP AND OVER, THEN PROVIDE CABLE SUPPORT HOOKS FROM STRUCTURE ABOVE, SIZED AND RATED FOR INSTALLED CABLES PLUS 25% SPARE.
15. PROVIDE DIMMER PER THE SPECIFICATIONS. COORDINATE DIMMER TYPE AND WIRING WITH ASSOCIATED LIGHT FIXTURE DIMMING REQUIREMENTS (I.E. 3-WIRE, 0-10V, ELECTRONIC OR MAGNETIC LOW VOLTAGE, ETC.) OR WITH LIGHTING CONTROL SYSTEM PROPRIETARY REQUIREMENTS (I.E. LUTRON, nLIGHT, DALI ETC.) AS NECESSARY. 3-WIRE DIMMERS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL FOR EACH CONTROL ZONE. 0-10V DIMMERS SHALL BE PROVIDED WITH DIM/ON/OFF CONTROL. COORDINATE PHASE CONTROL OF LED DRIVERS (I.E. REVERSE PHASE, FORWARD PHASE, ETC.) WITH LIGHT FIXTURE MANUFACTURER'S RECOMMENDATIONS. LOW VOLTAGE CONTROL WIRING IS NOT SHOWN ON PLANS FOR CLARITY, BUT SHALL BE PROVIDED AS REQUIRED.

COMMUNICATION / DATA

T1. EACH DATA, TELEPHONE, VIDEO, OR OTHER SYSTEMS OUTLET REQUIRES 1"C. WITH PULL ROPE STUBBED 6" ABOVE NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED ON PLANS. CONDUITS STUBBED UP ABOVE CEILINGS SHALL BE TURNED OUT 90 DEGREES. PROVIDE INSULATED BUSHINGS ON ALL CONDUITS. LABEL CONDUIT TO IDENTIFY ITS INTENDED USE (I.E. TELEPHONE, DATA, ETC.).

T2. RUN CABLES CONTINUOUS FROM JACK TO ASSOCIATED SYSTEM PATCH PANEL IN CONDUIT, CABLE TRAY, OR J-HOOKS PER THE PLANS AND SPECIFICATIONS. NUMBER BESIDE CABLE SYMBOL INDICATES QUANTITY OF CABLES REQUIRED PER HOME RUN.

T3. PROVIDE QUANTITY AND TYPE OF JACKS PER THE DRAWINGS, SPECIFICATIONS AND DETAILS. PROVIDE JACK AND CABLE LABELING PER THE SPECIFICATIONS.

FIRE ALARM

F1. THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

F2. FIELD VERIFY LOCATIONS OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF A HVAC DIFFUSER (SUPPLY OR RETURN), IN A DIRECT AIR FLOW, WITHIN 36" OF A SPRINKLER HEAD, OR WITHIN 36" OF THE TIP OF A CEILING FAN BLADE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTER LINE OF THE DOOR AND A MAXIMUM OF 5 FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR IS THE DEPTH OF THE WALL SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".

F3. FAN SHUTDOWN RELAY WIRING SHALL BE LOCATED WITHIN 3 FEET OF THE FAN CONTROLS AND THE WIRING TO THE RELAY SHALL BE MONITORED.

F4. LABEL REMOTE ALARM INDICATOR FOR DUCT MOUNTED SMOKE DETECTORS (I.E. RTU-=1 SUPPLY, RTU-2 RETURN, FIRE/SMOKE DAMPER, ETC.). DUCT DETECTORS SHOULD BE LOCATED IN THE AREA BETWEEN 6 AND 10 DUCT EQUIVALENT DIAMETERS OF STRAIGHT, UNITERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRST INLET OR OUTLET DOWNSTREAM OF THE DAMPER.

F5. PROVIDE 120V POWER AND FUSTAT FOR EACH FIRE/SMOKE DAMPER. INTERLOCK WITH FIRE ALARM CONTROL PANEL TO CLOSE THE FIRE/SMOKE DAMPER UPON ANY ALARM AT THE FIRE ALARM CONTROL PANEL AND TO SHUTDOWN THE ASSOCIATED MECHANICAL UNIT.

SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING	SYMBOL	DESCRIPTION	MOUNTING
FIRE ALARM					
'FACP'	FIRE ALARM CONTROL PANEL	WALL	'FAAP'	FIRE ALARM REMOTE ANNUNCIATOR	WALL
	FIRE ALARM MANUAL STATION	46"AFF		FIRE ALARM SPEAKER	WALL
	FIRE ALARM HORN	BOTTOM 80"		COMB FA SPEAKER & VISUAL SIGNAL	BOTTOM 80"
	FIRE ALARM VISUAL SIGNAL	BOTTOM 80"		COMB FA HORN & VISUAL SIGNAL	CEILING
	COMB. F.A. HORN & VISUAL SIGNAL	BOTTOM 80"	C	FIRE ALARM CONTROL MODULE	
CH	CHIME	WALL	M	FIRE ALARM MONITOR MODULE	
	FIRE SPRINKLER ALARM BELL	WALL	P	FIRE SPRINKLER PRESSURE SWITCH	
R	F.A. RELAY (GEN NOTE F3)			FIRE ALARM SPEAKER	CEILING
	IONIZATION AREA SMOKE DETECTOR (GEN NOTE F2)			FIRE ALARM SPEAKER	WALL
			H	HEAT DETECTOR (GEN NOTE F2)	
	PHOTO ELECTRIC AREA SMOKE DETECTOR (GEN NOTE F2)		T	FIRE SPRINKLER TAMPER SWITCH	SPRKLR RSR
			W	FIRE SPRINKLER WATER FLOW SW	SPRKLR RSR
	DUCT SMOKE DETECTOR (GEN NOTE F4)	DUCTWORK		ELECTROMAGNETIC DOOR HOLDER	WALL
FSD	DUCT SMOKE DETECTOR & FIRE/ SMOKE DAMPER (GEN NOTES F4 & F5)	DUCTWORK			
SECURITY					
	DURESS			DOOR POSITION SWITCH	
	DOOR RELEASE BUTTON			DOOR LOCK & POSITION SWITCH	
	CCTV CAMERA - PAN/TILT/ZOOM	CEILING	E	ELECTRIC DOOR STRIKE	
W	CCTV CAMERA - PAN/TILT/ZOOM	WALL	M	MAGNETIC LOCK	
	CCTV CAMERA - FIXED	CEILING		GLASS BREAK SENSOR	
W	CCTV CAMERA - FIXED	WALL		SECURITY BEAM DETECTOR	
CR	CARD READER			SEC ROOM MOTION DETECTOR	WALL/CLG
K	KEY PAD			SEC ROOM MOTION DETECTOR	CEILING
R	REQUEST TO EXIT DEVICE			SEC CORRIDOR MOTION DETECTOR	
AUDIO-VISUAL					
'PACP'	PA/SOUND SYSTEM W/RACK/SHELF	FLOOR/WALL		CALL SWITCH	46"AFF
	CEILING MOUNTED SPEAKER	CEILING	V	VOLUME CONTROL	46"AFF
	WALL MOUNTED SPEAKER	WALL		BELL	BOTTOM 80"
	CLOCK/SPEAKER (SYSTEM CLOCK)	WALL		MICROPHONE OUTLET	WALL
	SYSTEM CLOCK (A=ANALOG, D=DIGITAL)	WALL		DIGITAL CLOCK WITH TIMER	WALL

PEN WEIGHT LEGEND

ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN DARK SOLID LINES ARE NEW TO BE INSTALLED	ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN DARK DASHED LINES ARE EXISTING TO BE REMOVED
NEW DUPLEX GROUNDED RECEPTACLE	DUPLEX GROUNDED REC TO BE REMOVED
NEW LIGHT FIXTURE	LIGHT FIXTURE TO BE REMOVED
ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN LIGHT SOLID LINES ARE EXISTING TO REMAIN	ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN LIGHT DASHED LINES ARE EXISTING TO BE RELOCATED
EXISTING DUPLEX GROUNDED REC TO REMAIN	DUPLEX GROUNDED REC TO BE RELOCATED
EXISTING LIGHT FIXTURE TO REMAIN	LIGHT FIXTURE TO BE RELOCATED

- - - SYMBOL LIST IS FOR REFERENCE ONLY. ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT. - - -

SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING	SYMBOL	DESCRIPTION	MOUNTING
ABBREVIATIONS					
NL	NIGHT LIGHT - WIRE AHEAD OF CONTROLS		AFF	ABOVE FINISHED FLOOR	
			AFG	ABOVE FINISHED GRADE	
EM	ON EMERGENCY POWER		DF	DRINKING FOUNTAIN - SEE GENERAL NOTE 11	
WP	WEATHERPROOF				
CT	COUNTERTOP (SEE GEN. NOTE 9)				
UON	UNLESS OTHERWISE NOTED				
W	WALL				
CONDUIT AND WIRING					
	EMERGENCY CIRCUIT	CLG/WALL		CONDUIT HOME RUN, 1 CIRCUIT. 2#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	MASTER/SLAVE FIXTURE WHIP	CEILING		CONDUIT HOME RUN, 2 CIRCUITS. 4#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	LOW VOLTAGE WIRING	CLG/WALL		CONDUIT HOME RUN, 3 CIRCUITS. 6#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	CDT RUN 2#12 & 1#12 GRD.- 1/2"C. OR CDT RUN AS NOTED ON PLAN	CLG/WALL		CONDUIT HOME RUN, 2 CIRCUITS PHASE CONDUCTORS/ NEUTRAL CONDUCTOR (#12 UON) SWITCH LEGS (#12 UON) GROUND CONDUCTOR (#12 UON)	CLG/WALL
	CDT RUN 2#12 & 1#12 GRD.- 3/4"C. OR CDT RUN AS NOTED ON PLAN	EARTH/ FLOOR			
#10	CONDUIT HOME RUN, 1 CIRCUIT. 2#10 & 1#10 GRD.	CLG/WALL			
	CONDUIT RUN PARTIAL CIRCUIT. 2#12 & 1#12 GRD. - 1/2"C.	CLG/WALL			
	MISC. EQUIPMENT CONNECTION				
	CONDUIT SEAL OFF				
LIGHTING, SWITCHES AND SENSORS					
A	LIGHT FIXTURE & FIXTURE LETTER	CEILING	S S2 S3 S4	SWITCHES (1-POLE, 2-POLE, 3-WAY, 4-WAY)	46" AFF
	STRIP LIGHT FIXTURE & FIXT LETTER	CEILING			
A A	LIGHT FIXTURE & FIXTURE LETTER	CEILING	SK SP ST	SWITCHES (KEYED, PILOT, TIMER)	46" AFF
	LIGHT FIXTURE & FIXTURE LETTER	WALL	a, b, c	INDICATES SWITCHING SCHEME	
A	EXIT SIGN (SHADING DENOTES EXIT FACE SIDE)	CEIL/WALL	S	LOW VOLTAGE SWITCH	46" AFF
			S1	ON/OFF SWITCH	46" AFF
	LIGHT FIXTURE & FIXTURE LETTER	WALL	S2	ON/OFF/0-10V DIMMING SWITCH	46" AFF
	FIXTURE WITH SHADED LAMP(S) ON EMERGENCY POWER	CEILING	S3	DUAL TECH ON/OFF SENSOR	46" AFF
			S4	16-SCENE WALL CONTROLLER	46" AFF
A A	EMERGENCY BATTERY LIGHT FIXT	CEIL/WALL	S5	DUAL TECH ON/OFF/0-10V DIM SW	46" AFF
A	COMB EXIT SIGN/EM BATTERY LIGHT	WALL		PIR SENSOR	CLG/WALL
A A	LIGHT FIXTURE & FIXTURE LETTER	POLE		DUAL TECHNOLOGY SENSOR	CLG/WALL
M	1 RELAY PIR SENSOR	46" AFF	SP	SWITCHING POWER PACK	
2M	2 RELAY PIR SENSOR	46" AFF	SE	UL924 SWITCHING POWER PACK	
1D	1 RELAY DUAL TECH SENSOR	46" AFF	DP	DIMMING POWER PACK	
2D	2 RELAY DUAL TECH SENSOR	46" AFF	DE	UL924 DIMMING POWER PACK	
D	DIMMER (SEE GENERAL NOTE 15)	46" AFF	AV	AV SYSTEM/LIGHTING INTERFACE	
PC	PHOTOCELL				
POWER					
	SINGLE GROUNDED RECEPTACLE	18" AFF	A	BRANCH CIRCUIT PANEL AND PANEL DESIGNATION	72" TO TOP
	DUPLEX GROUNDED RECEPTACLE	18" AFF		ELECTRICAL DISTRIBUTION EQUIP	
	DUPLEX GROUNDED RECEPTACLE	CEILING	EA EA	EQUIPMENT - SEE EQUIPMENT CONNECTION SCHEDULE	
	DOUBLE DUPLEX GROUNDED REC	18" AFF		CONDUIT SLEEVE (GEN NOTE 13)	
	GROUND FAULT DUPLEX REC	18" AFF		CABLE TRAY (GEN NOTE 14)	
	GRD FAULT DOUBLE DUPLEX REC	18" AFF	M	MOTOR	
	DUPLEX GRD REC BOTTOM SWITCHD	18" AFF		DISCONNECT SWITCH	
			M	MANUAL STARTER	
A A	SPECIAL OUTLET (SEE SCHEDULE OR AS NOTED)	FLOOR/WALL		CIRCUIT BREAKER	
	SPECIAL DEVICE (AS NOTED)			STARTER OR ATS (AS NOTED)	
2	FEEDER DESIGNATION			COMBINATION STARTER/DISC	
J	JUNCTION BOX - 1-GANG		R	RELAY	
J	JUNCTION BOX - 2-GANG			PUSHBUTTON (1-BUTTON, 2-BUTTON)	46" AFF
F	FUSTAT BUSS #SSY		T	BOX MOUNTED TRANSFORMER	
TS	THERMOSTAT/TEMP SENSOR	46" AFF	K	CONTACTOR	
P	PLUG LOAD SENSOR	CEILING		METER	
H	HANDICAP DOOR PUSHBUTTON	36" AFF		PLUGMOLD SURFACE RACEWAY	WALL
				BUSDUCT PLUG	
COMMUNICATION / DATA					
	1-DATA OUTLET & JACK (GEN NOTES T1 & T3)	18"AFF		2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF
	1-VOICE OUTLET & JACK (GEN NOTES T1 & T3)	18"AFF		3-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF
	1-VOICE/1-DATA OUTLET & JACKS (GEN NOTES T1 & T3)	18"AFF		4-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF
	1-VOICE/2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF		2-VOICE/2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF
	CABLE TV OR VIDEO OUTLET & CONNECTOR (GEN NOTES T1 & T3)	18"AFF		1-VOICE/3-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18"AFF
	VOICE UTP CABLE HOME RUN	GEN NOTE T2		FIBER OPTIC CABLE HOME RUN (MULTI MODE)	GEN NOTE T2
	DATA UTP CABLE HOME RUN	GEN NOTE T2			
	VIDEO COAX CABLE HOME RUN	GEN NOTE T2		FIBER OPTIC CABLE HOME RUN (SINGLE MODE)	GEN NOTE T2

- - - SYMBOL LIST IS FOR REFERENCE ONLY. ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT. - - -

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL NOTES AND SYMBOLS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

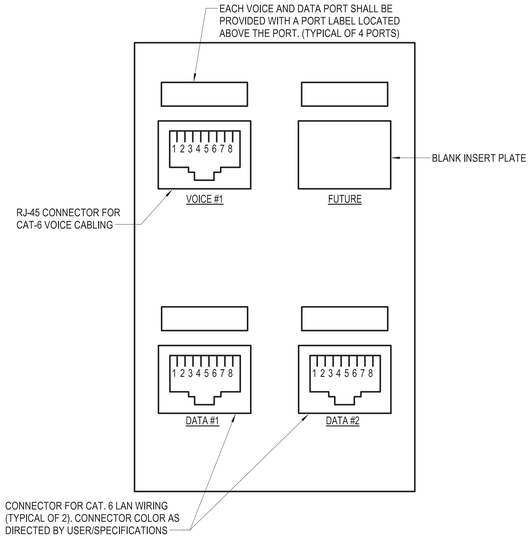
Building Number: **7**

Drawing Number: **E-001** Dwg.

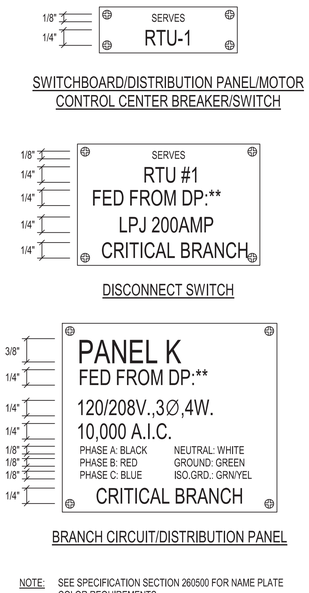
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

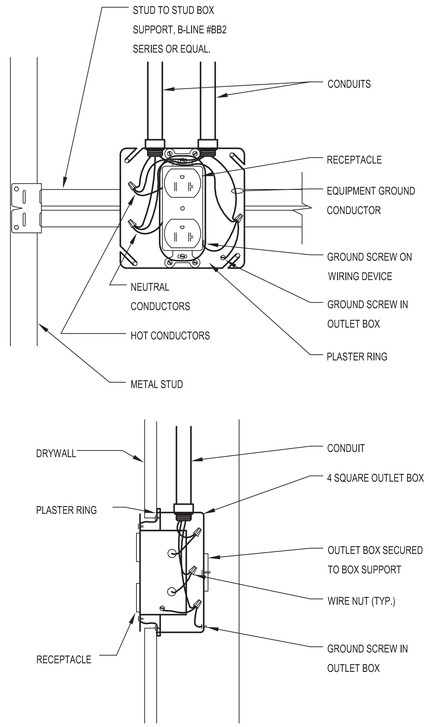


8 TYPICAL DATACOM OUTLET DETAIL
NO SCALE

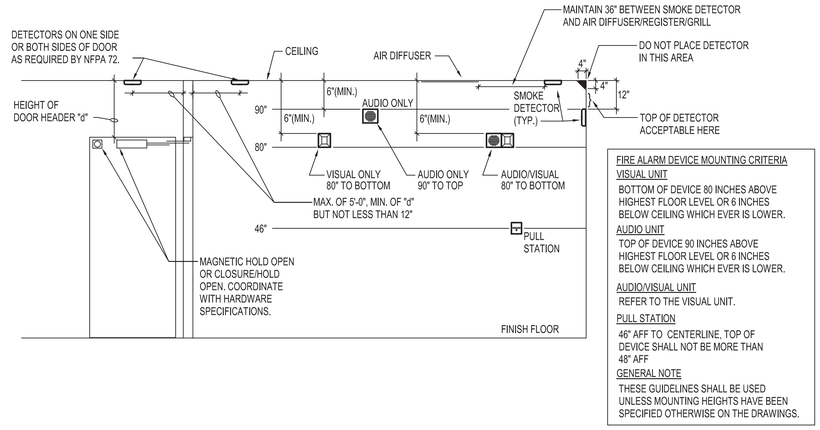


NOTE: SEE SPECIFICATION SECTION 260500 FOR NAME PLATE COLOR REQUIREMENTS.

7 TYPICAL NAMEPLATES
NO SCALE



6 TYPICAL RECEPTACLE MOUNTING DETAIL
NO SCALE



FIRE ALARM DEVICE MOUNTING CRITERIA

VISUAL UNIT

BOTTOM OF DEVICE 80 INCHES ABOVE HIGHEST FLOOR LEVEL OR 6 INCHES BELOW CEILING WHICH EVER IS LOWER.

AUDIO UNIT

TOP OF DEVICE 90 INCHES ABOVE HIGHEST FLOOR LEVEL OR 6 INCHES BELOW CEILING WHICH EVER IS LOWER.

AUDIO/VISUAL UNIT

REFER TO THE VISUAL UNIT.

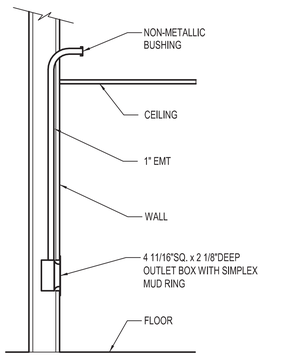
PULL STATION

46" AFF TO CENTERLINE, TOP OF DEVICE SHALL NOT BE MORE THAN 48" AFF

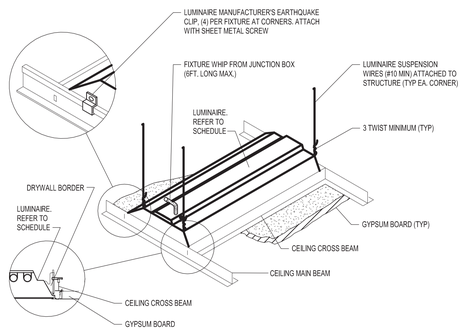
GENERAL NOTE

THESE GUIDELINES SHALL BE USED UNLESS MOUNTING HEIGHTS HAVE BEEN SPECIFIED OTHERWISE ON THE DRAWINGS.

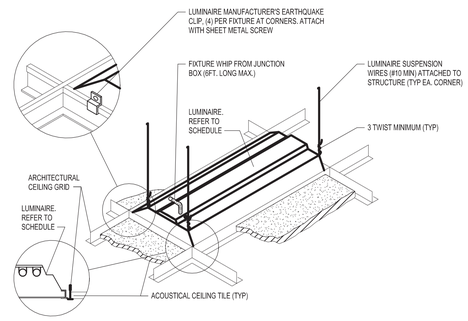
5 TYPICAL FIRE ALARM DEVICE MOUNTING DETAIL
NO SCALE



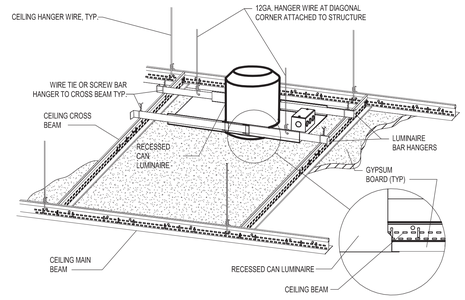
4 TYPICAL DATACOM OUTLET MOUNTING DETAIL
NO SCALE



3 TYPICAL LUMINAIRE MOUNTING - GYP TROFFER
NO SCALE



2 TYPICAL LUMINAIRE MOUNTING DETAIL - LAY-IN TROFFER
NO SCALE



1 TYPICAL LUMINAIRE MOUNTING DETAIL - DOWNLIGHT
NO SCALE

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL DETAILS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

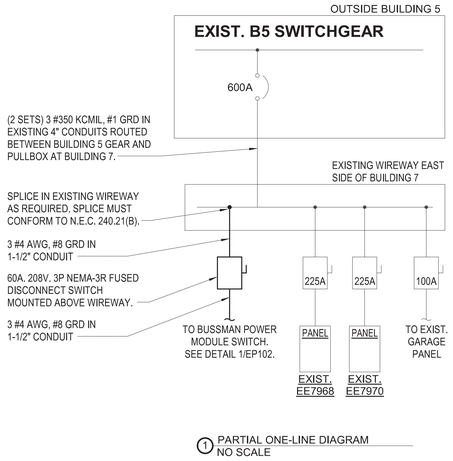
Drawing Number: **E-501**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



① PARTIAL ONE-LINE DIAGRAM
NO SCALE

LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER NAME	MANUFACTURER MODEL	MANUFACTURER NAME	MANUFACTURER MODEL	LAMP #	LAMP TYPE	WATTS	VOLTAGE	LENS/LOUVER/FINISH	W	L	D	REF. NOTE	Remarks
D	DEMO FIXTURE	EXISTING FIXTURE	TO BE REMOVED												
F2	2' STRIP	WILLIAMS	75R-2-L30-835-DRV-UNV		OR EQUAL	1	LED 3500K	24	UNV	WHITE	0.4	2.0	0.3	1,2,3,4,8	2900LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED
F2E	2' STRIP	WILLIAMS	75R-2-L30-835-DRV-UNV		OR EQUAL	1	LED 3500K	24	UNV	WHITE	0.4	2.0	0.3	1,2,3,4,8	2900LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED. PROVIDE WITH EMERGENCY BATTERY PACK
F4	4' STRIP	WILLIAMS	75R-4-L50-835-DRV-UNV		OR EQUAL	1	LED 3500K	44	UNV	WHITE	0.4	4.0	0.3	1,2,3,4,8	5500LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED
HA	4" DOWNLIGHT WITH LENS	WILLIAMS	4PR-TL-L20-835-DIM-LW-OF-WH-R		OR EQUAL	1	LED 3500K	23	UNV	SEMI-SPECULAR	0.5	0.5	0.0	1,2,3,4,8	2000LM, 3500K, 80+CRI, WIDE DISTRIBUTION, REMODEL KIT
K2	2X4 LAY-IN	METALUX	24CZ-LD5-45-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	36	UNV	SMOOTH ACRYLIC	2.0	4.0	0.3	1,2,3,4,8	4500LM, 3500K, 80+CRI
KA	2X2 LAY-IN	METALUX	22CZ-LD5-34-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	30	UNV	SMOOTH ACRYLIC	2.0	2.0	0.3	1,2,3,4,8	3400LM, 3500K, 80+CRI
KAE	2X2 LAY-IN	METALUX	22CZ-LD5-34-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	30	UNV	SMOOTH ACRYLIC	2.0	2.0	0.3	1,2,3,4,8	3400LM, 3500K, 80+CRI, PROVIDE WITH EMERGENCY BATTERY PACK
RD	EXTERIOR WALL MOUNT	LUMARK	XTOR4B-W-BZ-PC1		OR EQUAL	1	LED 4000K	39	UNV	DARK BRONZE	1.1	1.3	0.8	1,2,3,4	4000LM, 4000K, 70+CRI, PROVIDE WITH PHOTOCELL CONTROLLER AND WALL MOUNT KIT
UB	24" UNDERCABINET	HALO	HU10-24-30-WH		OR EQUAL	1	LED 3000K	10	120	WHITE	0.4	2.0	0.1	1,2,3,4	PROVIDE WITH POWER SUPPLY, CONNECTORS, END CAPS, MOUNTING ACCESSORIES, ETC. FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
X1	1 FACE/AC EXIT	LITHONIA	EDGR-1-R-EL		OR EQUAL	1	LED	5	UNV	CLEAR	0.0	0.0	0.0	1,2,3,4,6	RED WITH BATTERY, SELF DIAGNOSTICS
X2	2 FACE/AC EXIT	LITHONIA	EDGR-2-R-EL		OR EQUAL	1	LED	5	UNV	CLEAR	0.0	0.0	0.0	1,2,3,4,6	RED WITH BATTERY, SELF DIAGNOSTICS

NOTES:
1. GENERAL CONTRACTOR SHALL PROVIDE FIREPROOFING AROUND RECESSED FIXTURES INSTALLED IN FIRE RATED CEILING PER U.L. REQUIREMENTS. ELECTRICAL CONTRACTOR WILL COORDINATE.
2. MANUFACTURERS LISTED IN THIS SCHEDULE OR APPROVED BY WRITTEN ADDENDUM WILL BE THE ONLY APPROVED MANUFACTURERS TO BID THE LIGHTING FIXTURES FOR THIS PROJECT. CONTRACTORS AND SUPPLIERS USING PRICING FROM MANUFACTURERS NOT LISTED ON SCHEDULE OR BY ADDENDUM DO SO AT THEIR OWN RISK.
3. LIGHT FIXTURE SELECTIONS ARE BASED ON THE MANUFACTURER IN THE LEFT MOST COLUMN AS LISTED IN THE SCHEDULE. FIXTURES APROVED AS EQUALS IN THIS SCHEDULE OR BY ADDENDUM SHALL BE EQUAL TO THE UNIT SPECIFIED IN THE LEFT MOST COLUMN, IE: SPRING LOADED LATCHES, POST PAINTED FINISH, AND PHOTOMETRICS.
4. ALL LIGHT FIXTURES SHALL BE SECURED TO THE CEILING FRAMING SYSTEM BY MECHANICAL MEANS (SUCH AS BOLTS, SCREWS, OR RIVETS) OR BY CLIPS IDENTIFIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER AND LIGHT FIXTURE.
5. NOTE NOT USED.
6. PROVIDE ARROWS AND FACES AS INDICATED ON THE DRAWINGS.
7. NOTE NOT USED.
8. LIGHT FIXTURES SHALL BE PROVIDED WITH 0-10V DIMMING DRIVERS. DRIVERS SHALL BE CAPABLE OF DIMMING TO A MINIMUM OF 10% OF TOTAL LIGHT OUTPUT. LED DRIVERS SHALL HAVE A DISCONNECTING MEANS MEETING THE REQUIREMENTS OF NEC SECTION 410.130(G), EXCEPT FOR THOSE INSTALLED IN CORD-AND-PLUG CONNECTED FIXTURES. WHERE APPLICABLE, WHEN DIMMING SWITCHES ARE NOT PROVIDED AS PART OF THE DESIGN, CONTRACTOR SHALL CAP OFF 0-10V DIMMING WIRES FOR FUTURE EXTENSION BY OWNER.

EQUIPMENT CONNECTION SCHEDULE

MECHANICAL EQUIPMENT CONNECTIONS

UNIT DESIG	UNIT VOLTAGE	LOAD H.P.	LOAD FLA	LOAD KVA	PANEL DEVICE CIRCUIT NUMBER	PANEL DEVICE BKR. AMPS	PANEL DEVICE SW. AMPS	PANEL DEVICE FUSE AMPS	PANEL DEVICE O/L NEMA SIZE	PANEL DEVICE START. SIZE	DEVICE AT UNIT BKR. AMPS	DEVICE AT UNIT SW. AMPS	DEVICE AT UNIT FUSE AMPS	DEVICE AT UNIT O/L NEMA SIZE	DEVICE AT UNIT START. SIZE	OTHER	SETS	FEEDER DESCRIPTION OR SEE THE FEEDER SCHEDULE	REMARKS OR SEE THE INDICATED NOTES BELOW
7-AHU	AIR HANDLING UNIT																		
1	208/1	1.5	11.0	2.288	EE7970:17	20		2			30	17.5	2	'1'			1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
2	208/1	1.5	11.0	2.288	EE7970:21	20		2			30	17.5	2	'1'			1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
3	208/1	1.5	11.0	2.288	EE7970:25	20		2			30	17.5	2	'1'			1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
4	208/1	1	8.8	1.83	EE7970:29	20		2			30	15	2	'0'			1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
5	208/1	1	8.8	1.83	EE7970:33	20		2			30	15	2	'0'			1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
7-CU	CONDENSING UNIT																		
1	208/1	20.2A	23.0	4.784	EE7970:20	50		2			60	35	2			NEMA-3R	1	2 #6 AWG THWN; #10 AWG GRD; 3/4"C.	
2	208/1	26A	28.8	5.99	EE7970:24	60		2			60	45	2			NEMA-3R	1	2 #4 AWG THWN; #10 AWG GRD; 1"C.	
3	208/1	20.2A	23.0	4.784	EE7970:28	50		2			60	35	2			NEMA-3R	1	2 #6 AWG THWN; #10 AWG GRD; 3/4"C.	
4	208/1	26A	28.8	5.99	EE7970:32	60		2			60	45	2			NEMA-3R	1	2 #4 AWG THWN; #10 AWG GRD; 1"C.	
5	208/1	26A	28.8	5.99	EE7970:36	60		2			60	45	2			NEMA-3R	1	2 #4 AWG THWN; #10 AWG GRD; 1"C.	
7-EF	EXHAUST FAN																		
⑤ 1	120/1	1A	1.0	0.12	EE8606:3	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	CONTROLLED W/ LIGHTS
⑤ 2	120/1	1A	1.0	0.12	EE8606:3	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	CONTROLLED W/ LIGHTS
⑤ 3	120/1	1A	1.0	0.12	EE8606:5	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	CONTROLLED W/ LIGHTS
⑤ 4	120/1	1A	1.0	0.12	EE8606:1	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	CONTROLLED W/ LIGHTS
7-TF	TRANSFER FAN																		
1	120/1	1A	1.0	0.12	EE7968:3	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	RUNS CONTINUOUS
7-WH	ELECTRIC WATER HEATER																		
1	208/1		12.0	2.496	EE7970:14	20		2			30	--	2				1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
7-RCP	RECIRCULATION PUMP																		
1	120/1	.1	4.4	0.528	EE7968:1	20		1								FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	

① ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.

② REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.

③ SIZE FUSES FOR MOTOR FUSTATS BASED ON 125% OF MANUFACTURER'S NAMEPLATE FULL LOAD AMPERAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.

④ PROVIDE DUCT MOUNTED SMOKE DETECTORS IN THE SUPPLY AND RETURN DUCTS. VERIFY THE REQUIRED QUANTITY OF DUCT SMOKE DETECTORS FOR EACH UNIT WITH THE FINAL INSTALLED DUCTWORK LAYOUT TO MEET NFPA REQUIREMENTS. PROVIDE FAN SHUT DOWN RELAY TO SHUT DOWN MECHANICAL UNIT UPON ANY ALARM AT THE FIRE ALARM CONTROL PANEL.

⑤ PROVIDE RELAY AND INTERCONNECTING CABLING AS REQUIRED FOR EXHAUST FAN TO BE CONTROLLED VIA LIGHTING AUTOMATIC CONTROLS WITHIN SPACE.

① EXIST. PANEL: EE7970

208/120 VOLTS, 1 PHASE, 3 WIRE
225 AMP MLO, SURFACE MTD.
22000 AIC LABELED
W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
③ 1		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		2	③
③ 3		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		4	③
③ 5		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		6	③
③ 7		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		8	③
③ 9		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		10	③
③ 11		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		12	③
③ 13		SPAR	SPARE	1	20	A	20	2	7-WH-1	HEAT	2496	14	②
③ 15		SPAR	SPARE	1	20	B	|	--	----------	--	--	16	
② 17	2288	MOTR	7-AHU-1	2	20	A	20	1	SPARE	SPAR		18	③
19	--	--	----------	-	|	B	50	2	7-CU-1	LOM	4784	20	④
② 21	2288	MOTR	7-AHU-2	2	20	A	|	-	----------	--	--	22	
23	--	--	----------	-	|	B	60	2	7-CU-2	LOM	5990	24	④
② 25	2288	MOTR	7-AHU-3	2	20	A	|	-	----------	--	--	26	
27	--	--	----------	-	|	B	50	2	7-CU-3	LOM	4784	28	④
② 29	1830	MOTR	7-AHU-4	2	20	A	|	-	----------	--	--	30	
31	--	--	----------	-	|	B	60	2	7-CU-4	LOM	5990	32	④
④ 33	1830	MOTR	7-AHU-5	2	20	A	|	-	----------	--	--	34	
35	--	--	----------	-	|	B	60	2	7-CU-5	LOM	5990	36	④
37		SPAR	BLANK SPACE	1	20	A	|	-	----------	--	--	38	
39		SPAR	BLANK SPACE	1	20	B	20	1	BLANK SPACE			40	
41		SPAR	BLANK SPACE	1	20	A	20	1	SPARE	SPAR		42	③

① EXISTING SQUARE D NQOD PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ REMOVE EXISTING CIRCUIT BREAKER MADE SPARE BY DEMOLITION. PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.

EXIST. PANEL: EE7970

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Largest Motor	2.7	2.7	0.0	5.4	1.0	5.4	1.25	32.5	32.5	32.5	0.0
Motors	6.7	6.7	0.0	13.4	1.0	13.4	1.0	64.6	64.6	64.6	0.0
Cooling	9.6	9.6	0.0	19.2	1.0	19.2	1.0	92.4	92.4	92.4	0.0
Heating	1.2	1.2	0.0	2.5	1.0	2.5	1.25	15.0	15.0	15.0	0.0
TOTAL KVA:	20.3	20.3	0.0	40.6		40.6		TOTAL AMPS:	204.5	204.5	204.5	0.0
TOTAL AMPS:	195.0	195.0	0.0	195.0							

EXIST. PANEL: EE7968

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Lighting	0.0	0.1	0.0	0.1	1.0	0.1	1.25	0.6	0.4	0.8	0.0
Receptacles	18.2	17.3	0.0	10.0	1.0	10.0	> 1.0	109.4	112.1	106.6	0.0
(First 10000VA at 1.0 + remainder at 0.5)				25.5	0.5	12.8					
Power	0.0	1.0	0.0	1.0	1.0	1.0	1.0	4.8	0.0	9.6	0.0
Largest Motor	0.5	0.0	0.0	0.5	1.0	0.5	1.25	3.1	6.3	0.0	0.0
Motors	0.0	0.1	0.0	0.1	1.0	0.1	1.0	0.6	0.0	1.2	0.0
TOTAL KVA:	18.8	18.5	0.0	37.2		24.5		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	180.0	178.0	0.0	179.1					118.5	118.8	118.2	0.0

EXIST. PANEL: EE8606

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Lighting	2.1	1.4	0.0	3.5	1.0	3.5	1.25	21.0	25.0	16.9	0.0
Receptacles	0.6	2.2	0.0	2.8	1.0	2.8	1.0	13.5	5.8	21.2	0.0
Power	0.8	0.4	0.0	1.2	1.0	1.2	1.0	5.8	7.7	3.8	0.0
Motors	1.4	0.2	0.0	1.7	1.0	1.7	1.0	8.0	13.6	2.3	0.0
TOTAL KVA:	4.9	4.2	0.0	9.1		9.1		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	47.0	41.0	0.0	44.0					48.3	52.1	44.2	0.0

① EXIST. PANEL: EE7968

208/120 VOLTS, 1 PHASE, 3 WIRE
225 AMP MLO, SURFACE MTD.
22000 AIC LABELED
W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
② 1	528	MOTR	7-RCP-1	1	20	A	20	1	REC - OFFICE 101	RCPT	800	2	②
② 3	120	MOTR	7-TF-1	1	20	B	20	1	REC - OFFICE 102	RCPT	800	4	②
③ 5		SPAR	SPARE	1	20	A	20	1	REC - PRINTER 103	RCPT	1200	6	②
③ 7		SPAR	SPARE	1	20	B	20	1	REC - 103/104/105/127	RCPT	1000	8	②
③ 9		SPAR	SPARE	1	20	A	20	1	REC - PSA 111/HALL 113	RCPT	1000	10	②
② 11	1200	RCPT	REC - COPIER/FAX RM 127	1	20	B	20	1	REC - PRINTER 111 EAST	R/L	1010	12	②
② 13	1200	RCPT	REC - COPIER/FAX RM 201A	1	20	A	20	1	REC - NURSE OFFICE 112	RCPT	800	14	②
② 15	1035	P/L	ELEVATOR #1 CAB LTG/CONTROL	1	20	B	20	1	REC - OFFICE 123	RCPT	800	16	②
④ 17	1035	R/L	REC - PRINTER 001 SOUTH	1	20	A	20	1	REC - OFFICE 124	RCPT	800	18	②
④ 19	1200	RCPT	REC - CUBICLES 001 EAST	1	20	B	20	1	REC - CUBICLES 120	RCPT	800	20	②
④ 21	1200	RCPT	REC - CUBICLES 001 NORTH	1	20	A	20	1	REC - LOBBY 121/STOR 126	RCPT	800	22	④
④ 23	1510	R/L	REC - MICROWAVE 007	1	20	B	20	1	REC - CONSULT 115/HALL 116	RCPT	1200	24	④
④ 25	1000	RCPT	REC - TECH SUPPORT 003 WEST	1	20	A	20	1	REC - OFFICE 114	RCPT	1000	26	④
④ 27	1000	RCPT	REC - TECH SUPPORT 003 EAST	1	20	B	20	1	REC - OFFICE 201	RCPT	800	28	④
④ 29	600	RCPT	REC - HALL 013/MECH 015	1	20	A	20	1	REC - CUBICLES 203 SOUTH	RCPT	1200	30	④
④ 31	1000	RCPT	REC - HSKP 010/HALL 007	1	20	B	20	1	REC - PRINTER 203	R/L	1010	32	④
④ 33	1200	RCPT	REC - SUPERVISOR 006	1	20	A	20	1	REC - CUBICLES 203 WEST	RCPT	1200	34	②
④ 35	1000	RCPT	REC - LOBBY 212/OFFICE 213	1	20	B	20	1	REC - CUBICLES 203 NORTH	RCPT	1200	36	②
④ 37	1200	RCPT	REC - OFFICE 211/212/213	1	20	A	20	1	REC - 203 EAST/HALL 202	RCPT	1000	38	②
④ 39	800	RCPT	REC - OFFICE 208/211	1	20	B	20	1	REC - OFFICE 208/HALL 209	RCPT	1000	40	④
41			BLANK SPACE	1			20	1	REC - OFFICE 207	RCPT	1000	42	④

① EXISTING SQUARE D NQOD PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ REMOVE EXISTING CIRCUIT BREAKER MADE SPARE BY DEMOLITION. PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.

① EXIST. PANEL: EE8606

208/120 VOLTS, 1 PHASE, 3 WIRE
60 AMP MAIN BKR, SURFACE MTD.
22000 AIC LABELED
W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
② 1	1188	L/M	LTG-BASEMENT / 7-EF-4	1	20	A	20	1	REC - IT CLOSET 009	RCPT	400	2	②
② 3	1447	L/M	LTG-1ST FL / 7-EF-1&7-EF-2	1	20	B	20	1	REC/LTS - ELEVATOR PIT	R/L	235	4	②
② 5	916	L/M	LTG-2ND FL / 7-EF-3	1	20	A	20	1	EXIST. STEAM PUMP 015	MOTR	1176	6	②
② 7	568	L/R	LTG/REC-ATTIC	1	20	B	20	1	EXIST. REC - IT CLOSET 009	RCPT	400	8	
② 9	184	LGHT	LTS - EXTERIOR WALL MOUNT	1	20	A	20	1	EXIST. ADVANTOR SEC. PANEL	POWR	400	10	
③ 11		SPAR	SPARE	2	20	B	20	1	FIRE ALARM PANEL	POWR	400	12	②⑤
13	--	--	----------	-	|	A	20	1	ACCESS CONTROL PANEL	POWR	400	14	④
④ 15	1200	RCPT	7-SP-1	1	20	B			BLANK SPACE			16	
④ 17	235	R/L	REC/LTS - ELEVATOR EQ. RM.	1	20	A			BLANK SPACE			18	
19			BLANK SPACE			B			BLANK SPACE			20	
21			BLANK SPACE			A			BLANK SPACE			22	
23			BLANK SPACE			B			BLANK SPACE			24	
25			BLANK SPACE			A			BLANK SPACE			26	
27			BLANK SPACE			B			BLANK SPACE			28	
29			BLANK SPACE			A			BLANK SPACE			30	

① EXISTING SQUARE D NQ PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING CIRCUIT BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.
⑤ PROVIDE BREAKER WITH RED HANDLE LOCK-ON CLIP.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SCHEDULES**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

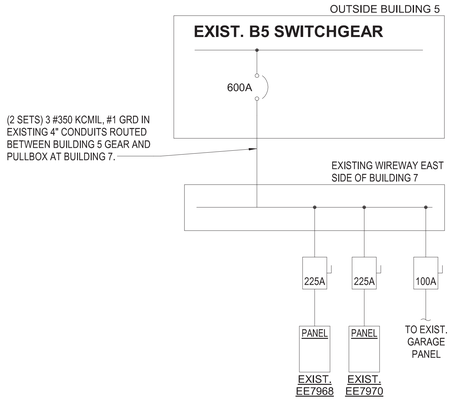
Building Number: **7**

Drawing Number: **E-601** Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



1 PARTIAL ONE-LINE DIAGRAM - BID ITEM 5
NO SCALE

LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER NAME	MANUFACTURER MODEL	MANUFACTURER NAME	MANUFACTURER MODEL	LAMP #	LAMP TYPE	WATTS	VOLTAGE	LENS/LOUVER/FINISH	W	L	D	REF. NOTE	Remarks
D	DEMO FIXTURE	EXISTING FIXTURE	TO BE REMOVED												
F2	2' STRIP	WILLIAMS	75R-2-L30-835-DRV-UNV		OR EQUAL	1	LED 3500K	24	UNV	WHITE	0.4	2.0	0.3	1,2,3,4,8	2900LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED
F2E	2' STRIP	WILLIAMS	75R-2-L30-835-DRV-UNV		OR EQUAL	1	LED 3500K	24	UNV	WHITE	0.4	2.0	0.3	1,2,3,4,8	2900LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED. PROVIDE WITH EMERGENCY BATTERY PACK
F4	4' STRIP	WILLIAMS	75R-4-L50-835-DRV-UNV		OR EQUAL	1	LED 3500K	44	UNV	WHITE	0.4	4.0	0.3	1,2,3,4,8	5500LM, 3500K, 80+ CRI. PROVIDE WITH WALL MOUNT OR CEILING MOUNT KIT AS REQUIRED
HA	4" DOWNLIGHT WITH LENS	WILLIAMS	4PR-TL-L20-835-DIM-LW-OF-WH-R		OR EQUAL	1	LED 3500K	23	UNV	SEMI-SPECULAR	0.5	0.5	0.0	1,2,3,4,8	2000LM, 3500K, 80+CRI, WIDE DISTRIBUTION, REMODEL KIT
K2	2X4 LAY-IN	METALUX	24CZ-LD5-45-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	36	UNV	SMOOTH ACRYLIC	2.0	4.0	0.3	1,2,3,4,8	4500LM, 3500K, 80+CRI
KA	2X2 LAY-IN	METALUX	22CZ-LD5-34-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	30	UNV	SMOOTH ACRYLIC	2.0	2.0	0.3	1,2,3,4,8	3400LM, 3500K, 80+CRI
KAE	2X2 LAY-IN	METALUX	22CZ-LD5-34-S-UNV-L835-CD1		OR EQUAL	1	LED 3500K	30	UNV	SMOOTH ACRYLIC	2.0	2.0	0.3	1,2,3,4,8	3400LM, 3500K, 80+CRI, PROVIDE WITH EMERGENCY BATTERY PACK
RD	EXTERIOR WALL MOUNT	LUMARK	XTOR4B-W-BZ-PC1		OR EQUAL	1	LED 4000K	39	UNV	DARK BRONZE	1.1	1.3	0.8	1,2,3,4	4000LM, 4000K, 70+CRI, PROVIDE WITH PHOTOCELL CONTROLLER AND WALL MOUNT KIT
UB	24" UNDERCABINET	HALO	HU10-24-30-WH		OR EQUAL	1	LED 3000K	10	120	WHITE	0.4	2.0	0.1	1,2,3,4	PROVIDE WITH POWER SUPPLY, CONNECTORS, END CAPS, MOUNTING ACCESSORIES, ETC. FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
X1	1 FACE/AC EXIT	LITHONIA	EDGR-1-R-EL		OR EQUAL	1	LED	5	UNV	CLEAR	0.0	0.0	0.0	1,2,3,4,6	RED WITH BATTERY, SELF DIAGNOSTICS
X2	2 FACE/AC EXIT	LITHONIA	EDGR-2-R-EL		OR EQUAL	1	LED	5	UNV	CLEAR	0.0	0.0	0.0	1,2,3,4,6	RED WITH BATTERY, SELF DIAGNOSTICS

NOTES:
1. GENERAL CONTRACTOR SHALL PROVIDE FIREPROOFING AROUND RECESSED FIXTURES INSTALLED IN FIRE RATED CEILING PER U.L. REQUIREMENTS. ELECTRICAL CONTRACTOR WILL COORDINATE.
2. MANUFACTURERS LISTED IN THIS SCHEDULE OR APPROVED BY WRITTEN ADDENDUM WILL BE THE ONLY APPROVED MANUFACTURERS TO BID THE LIGHTING FIXTURES FOR THIS PROJECT. CONTRACTORS AND SUPPLIERS USING PRICING FROM MANUFACTURERS NOT LISTED ON SCHEDULE OR BY ADDENDUM DO SO AT THEIR OWN RISK.
3. LIGHT FIXTURE SELECTIONS ARE BASED ON THE MANUFACTURER IN THE LEFT MOST COLUMN AS LISTED IN THE SCHEDULE. FIXTURES APROVED AS EQUALS IN THIS SCHEDULE OR BY ADDENDUM SHALL BE EQUAL TO THE UNIT SPECIFIED IN THE LEFT MOST COLUMN, IE: SPRING LOADED LATCHES, POST PAINTED FINISH, AND PHOTOMETRICS.
4. ALL LIGHT FIXTURES SHALL BE SECURED TO THE CEILING FRAMING SYSTEM BY MECHANICAL MEANS (SUCH AS BOLTS, SCREWS, OR RIVETS) OR BY CLIPS IDENTIFIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER AND LIGHT FIXTURE.
5. NOTE NOT USED.
6. PROVIDE ARROWS AND FACES AS INDICATED ON THE DRAWINGS.
7. NOTE NOT USED.
8. LIGHT FIXTURES SHALL BE PROVIDED WITH 0-10V DIMMING DRIVERS. DRIVERS SHALL BE CAPABLE OF DIMMING TO A MINIMUM OF 10% OF TOTAL LIGHT OUTPUT. LED DRIVERS SHALL HAVE A DISCONNECTING MEANS MEETING THE REQUIREMENTS OF NEC SECTION 410.130(G), EXCEPT FOR THOSE INSTALLED IN CORD-AND-PLUG CONNECTED FIXTURES. WHERE APPLICABLE, WHEN DIMMING SWITCHES ARE NOT PROVIDED AS PART OF THE DESIGN, CONTRACTOR SHALL CAP OFF 0-10V DIMMING WIRES FOR FUTURE EXTENSION BY OWNER.

EQUIPMENT CONNECTION SCHEDULE

①②③

MECHANICAL EQUIPMENT CONNECTIONS

	UNIT DESIG	UNIT VOLTAGE	LOAD H.P.	LOAD FLA	LOAD KVA	PANEL DEVICE CIRCUIT NUMBER	DEVICE AT UNIT BKR. AMPS	DEVICE AT UNIT SW. AMPS	DEVICE AT UNIT FUSE AMPS	DEVICE AT UNIT O/L NEMA SIZE	DEVICE AT UNIT START. SIZE	DEVICE AT UNIT OTHER	SETS	FEEDER DESCRIPTION OR SEE THE FEEDER SCHEDULE	REMARKS OR SEE THE INDICATED NOTES BELOW
	7-AHU	AIR HANDLING UNIT													
	1	208/1	1.5	11.0	2.288	EE7970:17	20		2			30 17.5	2 '1'	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
	2	208/1	1.5	11.0	2.288	EE7970:21	20		2			30 17.5	2 '1'	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
	3	208/1	1.5	11.0	2.288	EE7970:25	20		2			30 17.5	2 '1'	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
	4	208/1	1	8.8	1.83	EE7970:29	20		2			30 15	2 '0'	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
	5	208/1	1	8.8	1.83	EE7970:33	20		2			30 15	2 '0'	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.	
	7-CU	CONDENSING UNIT													
	1	208/1	20.2A	23.0	4.784	EE7970:20	50		2			60 35	2	NEMA-3R	1 2 #6 AWG THWN; #10 AWG GRD; 3/4"C.
	2	208/1	26A	28.8	5.99	EE7970:24	60		2			60 45	2	NEMA-3R	1 2 #4 AWG THWN; #10 AWG GRD; 1"C.
	3	208/1	20.2A	23.0	4.784	EE7970:28	50		2			60 35	2	NEMA-3R	1 2 #6 AWG THWN; #10 AWG GRD; 3/4"C.
	4	208/1	26A	28.8	5.99	EE7970:32	60		2			60 45	2	NEMA-3R	1 2 #4 AWG THWN; #10 AWG GRD; 1"C.
	5	208/1	26A	28.8	5.99	EE7970:36	60		2			60 45	2	NEMA-3R	1 2 #4 AWG THWN; #10 AWG GRD; 1"C.
	7-EF	EXHAUST FAN													
⑤	1	120/1	1A	1.0	0.12	EE8606:3	20		1					FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C. CONTROLLED W/ LIGHTS
⑤	2	120/1	1A	1.0	0.12	EE8606:3	20		1					FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C. CONTROLLED W/ LIGHTS
⑤	3	120/1	1A	1.0	0.12	EE8606:5	20		1					FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C. CONTROLLED W/ LIGHTS
⑤	4	120/1	1A	1.0	0.12	EE8606:1	20		1					FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C. CONTROLLED W/ LIGHTS
	7-WH	ELECTRIC WATER HEATER													
	1	208/1		12.0	2.496	EE7970:14	20		2			30	-- 2		1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.
	7-RCP	RECIRCULATION PUMP													
	1	120/1	.1	4.4	0.528	EE7968:1	20		1					FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2"C.

① ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.

② REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.

③ SIZE FUSES FOR MOTOR FUSTATS BASED ON 125% OF MANUFACTURER'S NAMEPLATE FULL LOAD AMPERAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.

④ PROVIDE DUCT MOUNTED SMOKE DETECTORS IN THE SUPPLY AND RETURN DUCTS. VERIFY THE REQUIRED QUANTITY OF DUCT SMOKE DETECTORS FOR EACH UNIT WITH THE FINAL INSTALLED DUCTWORK LAYOUT TO MEET NFPA REQUIREMENTS. PROVIDE FAN SHUT DOWN RELAY TO SHUT DOWN MECHANICAL UNIT UPON ANY ALARM AT THE FIRE ALARM CONTROL PANEL.

⑤ PROVIDE RELAY AND INTERCONNECTING CABLING AS REQUIRED FOR EXHAUST FAN TO BE CONTROLLED VIA LIGHTING AUTOMATIC CONTROLS WITHIN SPACE.

① EXIST. PANEL: EE7970

208/120 VOLTS, 1 PHASE, 3 WIRE
225 AMP MLO, SURFACE MTD.
22000 AIC LABELED

W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
③ 1		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		2	③
③ 3		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		4	③
③ 5		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		6	③
③ 7		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		8	③
③ 9		SPAR	SPARE	1	20	A	20	1	SPARE	SPAR		10	③
③ 11		SPAR	SPARE	1	20	B	20	1	SPARE	SPAR		12	③
③ 13		SPAR	SPARE	1	20	A	20	2	7-WH-1	HEAT	2496	14	②
③ 15		SPAR	SPARE	1	20	B	|	--	----------	--	--	16	
② 17	2288	MOTR	7-AHU-1	2	20	A	20	1	SPARE	SPAR		18	③
19	--	--	----------	-	|	B	50	2	7-CU-1	LOM	4784	20	④
② 21	2288	MOTR	7-AHU-2	2	20	A	|	-	----------	--	--	22	
23	--	--	----------	-	|	B	60	2	7-CU-2	LOM	5990	24	④
② 25	2288	MOTR	7-AHU-3	2	20	A	|	-	----------	--	--	26	
27	--	--	----------	-	|	B	50	2	7-CU-3	LOM	4784	28	④
② 29	1830	MOTR	7-AHU-4	2	20	A	|	-	----------	--	--	30	
31	--	--	----------	-	|	B	60	2	7-CU-4	LOM	5990	32	④
④ 33	1830	MOTR	7-AHU-5	2	20	A	|	-	----------	--	--	34	
35	--	--	----------	-	|	B	60	2	7-CU-5	LOM	5990	36	④
37		SPAR	BLANK SPACE	1	20	A	|	-	----------	--	--	38	
39		SPAR	BLANK SPACE	1	20	B	20	1	BLANK SPACE			40	
41		SPAR	BLANK SPACE	1	20	A	20	1	SPARE	SPAR		42	③

① EXISTING SQUARE D NQOD PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ REMOVE EXISTING CIRCUIT BREAKER MADE SPARE BY DEMOLITION. PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.

EXIST. PANEL: EE7970

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Largest Motor	2.7	2.7	0.0	5.4	1.0	5.4	1.25	32.5	32.5	32.5	0.0
Motors	6.7	6.7	0.0	13.4	1.0	13.4	1.0	64.6	64.6	64.6	0.0
Cooling	9.6	9.6	0.0	19.2	1.0	19.2	1.0	92.4	92.4	92.4	0.0
Heating	1.2	1.2	0.0	2.5	1.0	2.5	1.25	15.0	15.0	15.0	0.0
TOTAL KVA:	20.3	20.3	0.0	40.6		40.6		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	195.0	195.0	0.0	195.0					204.5	204.5	0.0

EXIST. PANEL: EE7968

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Lighting	0.0	0.1	0.0	0.1	1.0	0.1	1.25	0.6	0.4	0.8	0.0
Receptacles	18.2	17.3	0.0	10.0	1.0	10.0					
(First 10000VA at 1.0 + remainder at 0.5)				25.5	0.5	12.8	> 1.0	109.4	112.1	106.6	0.0
Power	0.0	1.0	0.0	1.0	1.0	1.0	1.0	4.8	0.0	9.6	0.0
Largest Motor	0.5	0.0	0.0	0.5	1.0	0.5	1.25	3.1	6.3	0.0	0.0
Motors	0.0	0.1	0.0	0.1	1.0	0.1	1.0	0.6	0.0	1.2	0.0
TOTAL KVA:	18.8	18.5	0.0	37.2		24.5		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	180.0	178.0	0.0	179.1					118.5	118.8	118.2	0.0

EXIST. PANEL: EE8606

	CONNECTED KVA: PH-A	PH-B	PH-C	TOTAL	DEMAND FACTOR	KVA	CONT. FACT	SIZING AMPS: TOTAL	PH-A	PH-B	PH-C
Lighting	2.1	1.4	0.0	3.5	1.0	3.5	1.25	21.0	25.0	16.9	0.0
Receptacles	0.6	2.2	0.0	2.8	1.0	2.8	1.0	13.5	5.8	21.2	0.0
Power	0.8	0.4	0.0	1.2	1.0	1.2	1.0	5.8	7.7	3.8	0.0
Motors	1.4	0.2	0.0	1.7	1.0	1.7	1.0	8.0	13.6	2.3	0.0
TOTAL KVA:	4.9	4.2	0.0	9.1		9.1		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	47.0	41.0	0.0	44.0					48.3	52.1	44.2	0.0

① EXIST. PANEL: EE7968

208/120 VOLTS, 1 PHASE, 3 WIRE
225 AMP MLO, SURFACE MTD.
22000 AIC LABELED

W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
② 1	528	MOTR	7-RCP-1	1	20	A	20	1	REC - OFFICE 101	RCPT	800	2	②
③ 3		SPAR	SPARE	1	20	B	20	1	REC - OFFICE 102	RCPT	800	4	②
③ 5		SPAR	SPARE	1	20	A	20	1	REC - PRINTER 103	RCPT	1200	6	②
③ 7		SPAR	SPARE	1	20	B	20	1	REC - 103/104/105/127	RCPT	1000	8	②
③ 9		SPAR	SPARE	1	20	A	20	1	REC - PSA 111/HALL 113	RCPT	1000	10	②
② 11	1200	RCPT	REC - COPIER/FAX RM 127	1	20	B	20	1	REC - PRINTER 111 EAST	R/L	1010	12	②
② 13	1200	RCPT	REC - COPIER/FAX RM 201A	1	20	A	20	1	REC - NURSE OFFICE 112	RCPT	800	14	②
③ 15		SPAR	SPARE	1	20	B	20	1	REC - OFFICE 123	RCPT	800	16	②
④ 17	1035	R/L	REC - PRINTER 001 SOUTH	1	20	A	20	1	REC - OFFICE 124	RCPT	800	18	②
④ 19	1200	RCPT	REC - CUBICLES 001 EAST	1	20	B	20	1	REC - CUBICLES 120	RCPT	800	20	②
④ 21	1200	RCPT	REC - CUBICLES 001 NORTH	1	20	A	20	1	REC - LOBBY 121/STOR 126	RCPT	800	22	④
④ 23	1510	R/L	REC - MICROWAVE 007	1	20	B	20	1	REC - CONSULT 115/HALL 116	RCPT	1200	24	④
④ 25	1000	RCPT	REC - TECH SUPPORT 003 WEST	1	20	A	20	1	REC - OFFICE 114	RCPT	1000	26	④
④ 27	1000	RCPT	REC - TECH SUPPORT 003 EAST	1	20	B	20	1	REC - OFFICE 201	RCPT	800	28	④
④ 29	600	RCPT	REC - HALL 013/MECH 015	1	20	A	20	1	REC - CUBICLES 203 SOUTH	RCPT	1200	30	④
④ 31	1000	RCPT	REC - HSKP 010/HALL 007	1	20	B	20	1	REC - PRINTER 203	R/L	1010	32	④
④ 33	1200	RCPT	REC - SUPERVISOR 006	1	20	A	20	1	REC - CUBICLES 203 WEST	RCPT	1200	34	②
④ 35	1000	RCPT	REC - LOBBY 212/OFFICE 213	1	20	B	20	1	REC - CUBICLES 203 NORTH	RCPT	1200	36	②
④ 37	1200	RCPT	REC - OFFICE 211/212/213	1	20	A	20	1	REC - 203 EAST/HALL 202	RCPT	1000	38	②
④ 39	800	RCPT	REC - OFFICE 208/211	1	20	B	20	1	REC - OFFICE 208/HALL 209	RCPT	1000	40	④
41			BLANK SPACE			A	20	1	REC - OFFICE 207	RCPT	1000	42	④

① EXISTING SQUARE D NQOD PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ REMOVE EXISTING CIRCUIT BREAKER MADE SPARE BY DEMOLITION. PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.

① EXIST. PANEL: EE8606

208/120 VOLTS, 1 PHASE, 3 WIRE
60 AMP MAIN BKR, SURFACE MTD.
22000 AIC LABELED

W/GRD. BUS

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	PHASE	AMP SIZE	P.	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.	
② 1	1188	L/M	LTG-BASEMENT / 7-EF-4	1	20	A	20	1	REC - IT CLOSET 009	RCPT	400	2	②
② 3	1447	L/M	LTG-1ST FL / 7-EF-1&7-EF-2	1	20	B	20	1	REC/LTS - ELEVATOR PIT	R/L	235	4	②
② 5	916	L/M	LTG-2ND FL / 7-EF-3	1	20	A	20	1	EXIST. STEAM PUMP 015	MOTR	1176	6	②
② 7	568	L/R	LTG/REC-ATTIC	1	20	B	20	1	EXIST. REC - IT CLOSET 009	RCPT	400	8	
② 9	184	LGHT	LTS - EXTERIOR WALL MOUNT	1	20	A	20	1	EXIST. ADVANTOR SEC. PANEL	POWR	400	10	
③ 11		SPAR	SPARE	2	20	B	20	1	FIRE ALARM PANEL	POWR	400	12	②⑤
13	--	--	----------	-	|	A	20	1	ACCESS CONTROL PANEL	POWR	400	14	④
15			BLANK SPACE			B			BLANK SPACE			16	
17			BLANK SPACE			A			BLANK SPACE			18	
19			BLANK SPACE			B			BLANK SPACE			20	
21			BLANK SPACE			A			BLANK SPACE			22	
23			BLANK SPACE			B			BLANK SPACE			24	
25			BLANK SPACE			A			BLANK SPACE			26	
27			BLANK SPACE			B			BLANK SPACE			28	
29			BLANK SPACE			A			BLANK SPACE			30	

① EXISTING SQUARE D NQ PANELBOARD. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN UNLESS OTHERWISE NOTED.
② CONNECT TO EXISTING SPARE BREAKER. BREAKER MADE SPARE BY DEMOLITION. UPDATE PANEL SCHEDULE ACCORDINGLY.
③ BREAKER MADE SPARE BY DEMOLITION.
④ PROVIDE AND INSTALL CIRCUIT BREAKER INDICATED. BREAKER TO MATCH TYPE AND MAX AIC RATING OF EXISTING CIRCUIT BREAKERS WITHIN EXISTING PANELBOARD. UPDATE PANEL SCHEDULE ACCORDINGLY.
⑤ PROVIDE BREAKERS WITH RED HANDLE LOCK-ON CLIP.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SCHEDULES - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

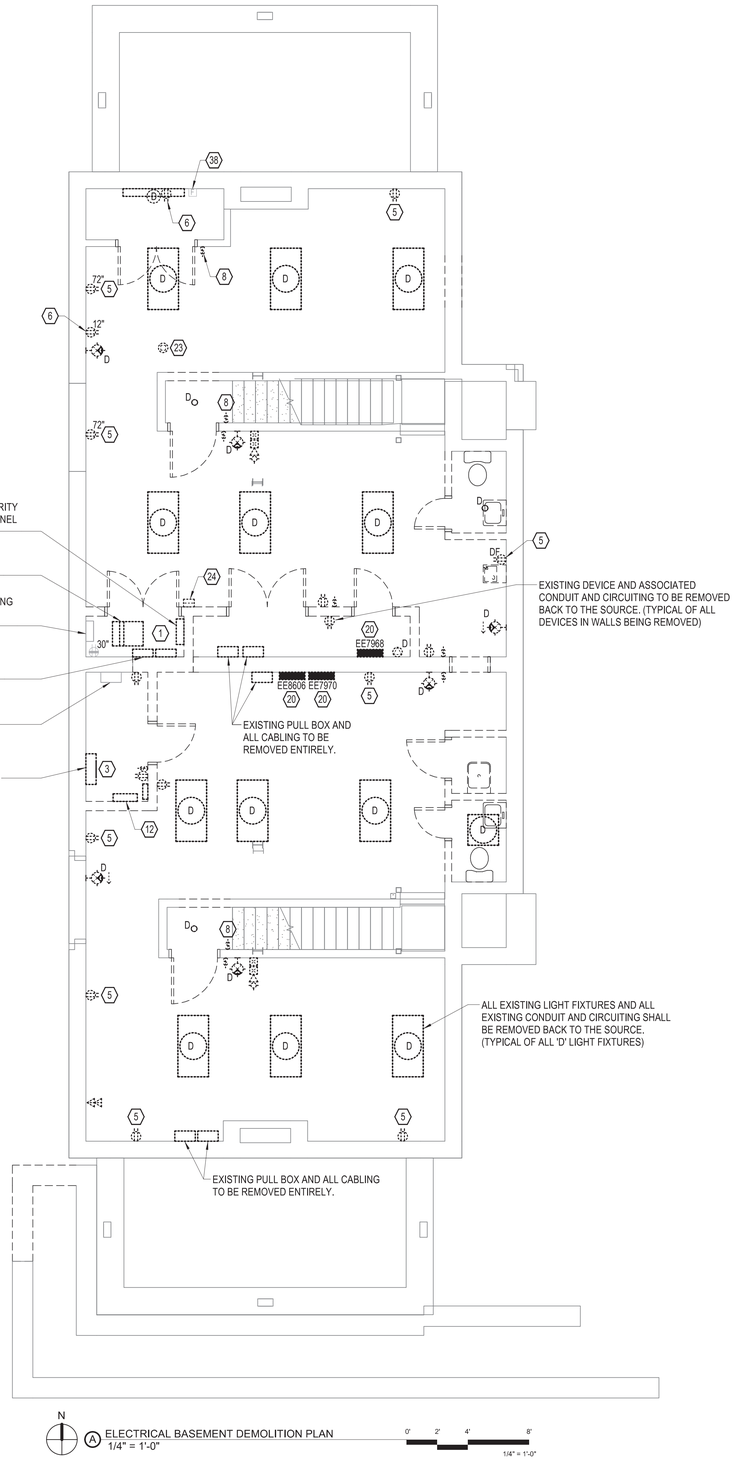
Drawing Number: **E-601.5**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

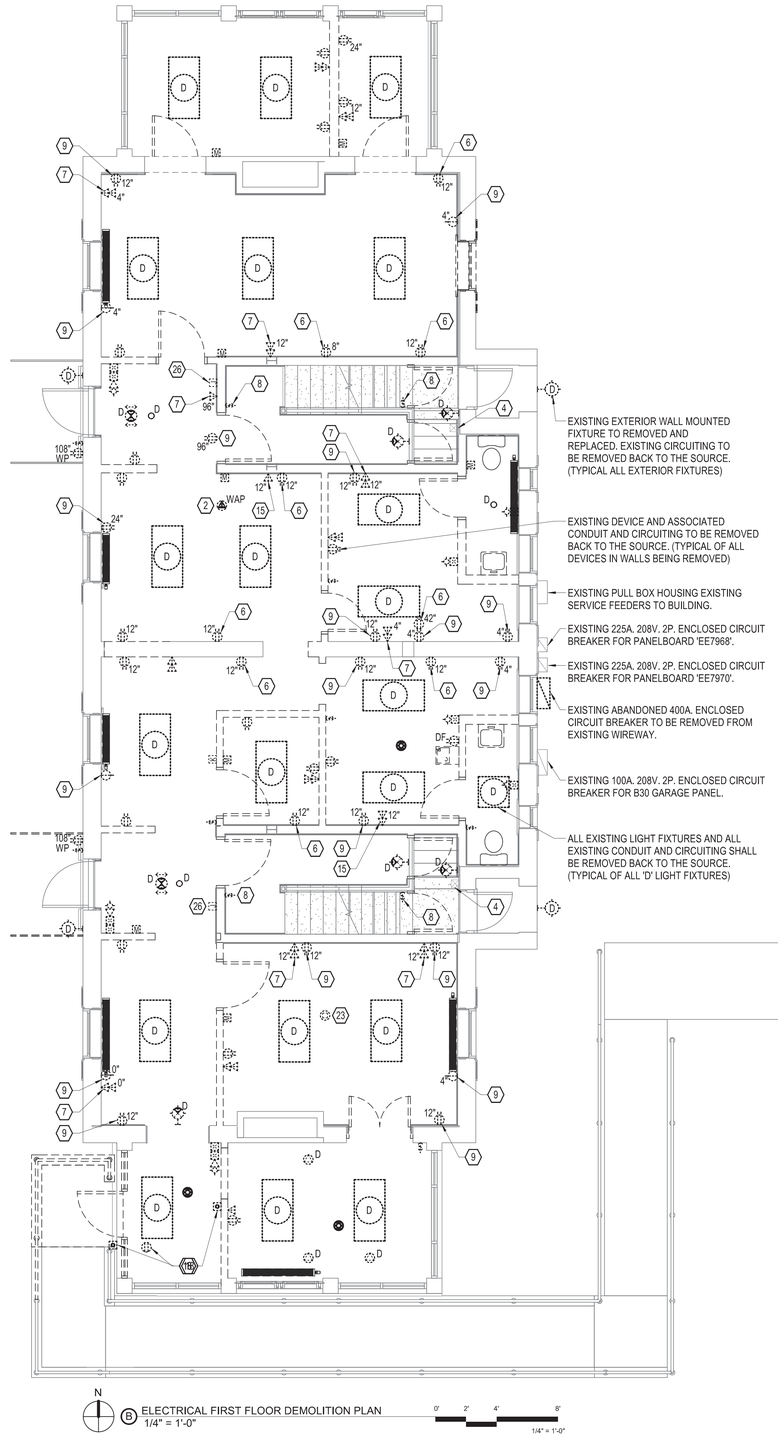
VA FORM 08-6231



N

A ELECTRICAL BASEMENT DEMOLITION PLAN
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL FIRST FLOOR DEMOLITION PLAN
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

DEMOLITION PLAN NOTES:

1. DEMOLITION PLANS SHOW THE GENERAL EXTENT OF THE ELECTRICAL DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED, SEE MECHANICAL PLANS. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS, SUCH AS COVERPLATES, RECEPTACLES, LIGHTS, PANELS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH OWNER PRIOR TO STARTING DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.
2. REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS. PLUG BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT.
3. ELECTRICAL OUTLETS, ETC. POSSIBLY CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC. ARE NOT SHOWN AND MAY REQUIRE REMOVAL.
4. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES, ETC.
5. WHERE EQUIPMENT AND OTHER DEVICES ARE BEING REMOVED, THE CIRCUITING SHALL BE REMOVED, IF POSSIBLE, BACK TO POINT OF SUPPLY. WHERE REQUIRED, CIRCUITING SHALL BE EXTENDED TO MAINTAIN CONTINUITY OF THE CIRCUIT OR OPERATION OF THE SYSTEM.
6. ALL DEVICES SHOWN DASHED ON THE DEMOLITION PLAN(S) SHALL BE REMOVED, UNLESS NOTED OTHERWISE.
7. PROVIDE MATCHING BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM EXISTING WALLS TO REMAIN.
8. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK.

(#) KEYED NOTES:

1 EXISTING TELECOMMUNICATIONS RACK, PATCH PANELS AND ALL ASSOCIATED COMPONENTS TO REMAIN. EXISTING I.T. CLOSET ORIENTATION TO BE ROTATED 90 DEGREES. SEE SHEET EY101 FOR LAYOUT CHANGE. EXISTING RACK AND PATCH PANELS SHALL BE RELOCATED AS REQUIRED TO FIT WITHIN NEW CLOSET. ALL EXISTING CABLING ROUTED TO EXISTING DEVICES BEING REMOVED SHALL BE REMOVED ENTIRELY.

2 EXISTING WIRELESS ACCESS DEVICE TO BE REMOVED. EXISTING CABLING TO BE REMOVED BACK TO THE PATCH PANEL. DEVICE SHALL BE PRESERVED DURING CONSTRUCTION AND REINSTALLED IN CEILING DURING NEW CONSTRUCTION. SEE SYSTEMS PLANS FOR NEW DEVICE LOCATION.

3 EXISTING FIRE ALARM PANEL TO BE REMOVED AND RELOCATED. SEE SHEET EY101 FOR NEW LOCATION. RE-ROUTE ALL EXISTING CABLING AS REQUIRED TO NEW PANEL LOCATION.

4 EXISTING FIRE ALARM DEVICE TO REMAIN. EXISTING CONDUIT AND CABLING SHALL REMAIN AND BE PROTECTED DURING DEMOLITION WORK.

5 EXISTING SURFACE MOUNTED DEVICE AND ASSOCIATED CONDUIT AND CIRCUITING TO BE REMOVED ENTIRELY.

6 EXISTING RECEPTACLE TO BE REMOVED AND REPLACED. EXISTING CIRCUITING TO BE REMOVED BACK TO SOURCE. EXISTING OUTLET BOX AND CONDUIT IN WALL TO REMAIN AND BE RE-USED AS REQUIRED. SEE POWER PLANS FOR NEW CIRCUIT INFORMATION.

7 EXISTING PHONE AND/OR DATA DEVICE, OUTLET BOX AND ALL ASSOCIATED CONDUIT AND CABLING TO BE REMOVED BACK TO SOURCE.

8 EXISTING TOGGLE SWITCH TO BE REMOVED AND REPLACED. EXISTING CIRCUITING TO BE REMOVED ENTIRELY. EXISTING CONDUIT IN WALL TO ABOVE CEILING SHALL REMAIN FOR NEW CIRCUIT. SEE LIGHTING PLANS FOR NEW CIRCUIT INFORMATION.

9 EXISTING RECEPTACLE, OUTLET BOX AND ALL ASSOCIATED CONDUIT AND CIRCUITING TO BE REMOVED ENTIRELY.

12 EXISTING ADVANTOR SECURITY PANEL, CORNING FIBER OPTIC PANEL, AND ASSOCIATED COMPONENTS TO BE REMOVED AND RELOCATED. SEE SHEET EY101 FOR NEW PANEL LOCATIONS.

15 EXISTING PHONE AND/OR DATA DEVICE TO BE REMOVED AND REPLACED. EXISTING CABLING TO BE REMOVED BACK TO SOURCE. EXISTING OUTLET BOX AND EXISTING PATHWAY TO REMAIN AND BE RE-USED AS REQUIRED. SEE SYSTEMS PLANS FOR NEW CABLING INFORMATION.

18 EXISTING POWER AND CONTROLS DEVICES FOR POWERED DOOR OPERATOR TO BE REMOVED.

20 EXISTING PANELBOARD TO BE REMOVED AND RELOCATED. SEE SHEET EP101 FOR NEW PANEL LOCATION. EXISTING CONDUIT AND FEEDER SERVING PANEL SHALL BE EXTENDED AS REQUIRED AND ROUTED TO NEW PANEL LOCATION. ALL EXISTING CIRCUITS FED FROM PANELBOARD THAT ARE REMAINING SHALL BE REWORKED AS REQUIRED AND ROUTED TO NEW PANEL LOCATION.

23 EXISTING CEILING MOUNTED SPEAKER TO BE REMOVED AND RELOCATED. PRESERVE SPEAKER AND EXISTING SPEAKER CIRCUITING DURING DEMOLITION WORK. SEE SYSTEMS PLANS FOR NEW SPEAKER LOCATION.

24 EXISTING SECURITY/ACCESS CONTROL DEVICE TO BE REMOVED AND RELOCATED. SEE SHEET EY101 FOR NEW DEVICE LOCATION. PROVIDE NEW CABLING AS REQUIRED TO RECONNECT DEVICE.

26 EXISTING SPEAKER TO BE REMOVED AND REPLACED WITH RECESSED CEILING TYPE. PRESERVE SPEAKER CIRCUITING DURING DEMOLITION WORK. SEE SYSTEMS PLANS FOR NEW SPEAKER LOCATION.

38 EXISTING FUSTAT FOR CONNECTION TO STEAM PUMP TO REMAIN IN PLACE. EXISTING CIRCUIT TO BE REMOVED ENTIRELY. SEE SHEET EP101 FOR NEW CIRCUIT INFORMATION.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL DEMOLITION PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

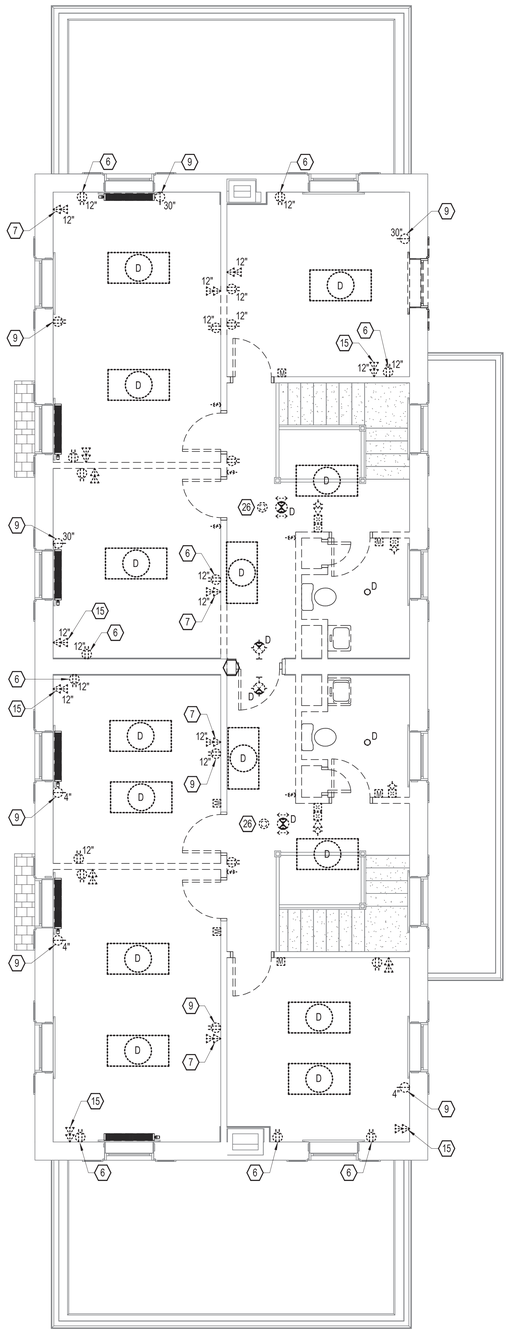
Building Number: **7**

Drawing Number: **ED101** Dwg.

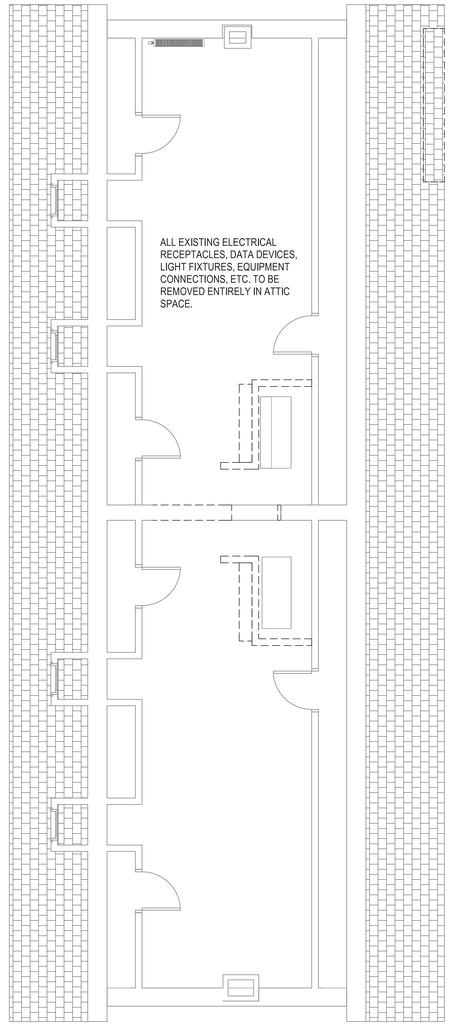
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A ELECTRICAL SECOND FLOOR DEMOLITION PLAN
1/4" = 1'-0"



B ELECTRICAL ATTIC DEMOLITION PLAN
1/4" = 1'-0"

DEMOLITION PLAN NOTES:

1. DEMOLITION PLANS SHOW THE GENERAL EXTENT OF THE ELECTRICAL DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED, SEE MECHANICAL PLANS. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS, SUCH AS COVERPLATES, RECEPTACLES, LIGHTS, PANELS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH OWNER PRIOR TO STARTING DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.
2. REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS. PLUG BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT.
3. ELECTRICAL OUTLETS, ETC. POSSIBLY CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC. ARE NOT SHOWN AND MAY REQUIRE REMOVAL.
4. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES, ETC.
5. WHERE EQUIPMENT AND OTHER DEVICES ARE BEING REMOVED, THE CIRCUITING SHALL BE REMOVED, IF POSSIBLE, BACK TO POINT OF SUPPLY. WHERE REQUIRED, CIRCUITING SHALL BE EXTENDED TO MAINTAIN CONTINUITY OF THE CIRCUIT OR OPERATION OF THE SYSTEM.
6. ALL DEVICES SHOWN DASHED ON THE DEMOLITION PLAN(S) SHALL BE REMOVED, UNLESS NOTED OTHERWISE.
7. PROVIDE MATCHING BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM EXISTING WALLS TO REMAIN.
8. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK.

(#) KEYED NOTES:

6 EXISTING RECEPTACLE TO BE REMOVED AND REPLACED. EXISTING CIRCUITING TO BE REMOVED BACK TO SOURCE. EXISTING OUTLET BOX AND CONDUIT IN WALL TO REMAIN AND BE RE-USED AS REQUIRED. SEE POWER PLANS FOR NEW CIRCUIT INFORMATION.

7 EXISTING PHONE AND/OR DATA DEVICE, OUTLET BOX AND ALL ASSOCIATED CONDUIT AND CABLING TO BE REMOVED BACK TO SOURCE.

9 EXISTING RECEPTACLE, OUTLET BOX AND ALL ASSOCIATED CONDUIT AND CIRCUITING TO BE REMOVED ENTIRELY.

15 EXISTING PHONE AND/OR DATA DEVICE TO BE REMOVED AND REPLACED. EXISTING CABLING TO BE REMOVED BACK TO SOURCE. EXISTING OUTLET BOX AND EXISTING PATHWAY TO REMAIN AND BE RE-USED AS REQUIRED. SEE SYSTEMS PLANS FOR NEW CABLING INFORMATION.

26 EXISTING SPEAKER TO BE REMOVED AND REPLACED WITH RECESSED CEILING TYPE. PRESERVE SPEAKER CIRCUITING DURING DEMOLITION WORK. SEE SYSTEMS PLANS FOR NEW SPEAKER LOCATION.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL DEMOLITION PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

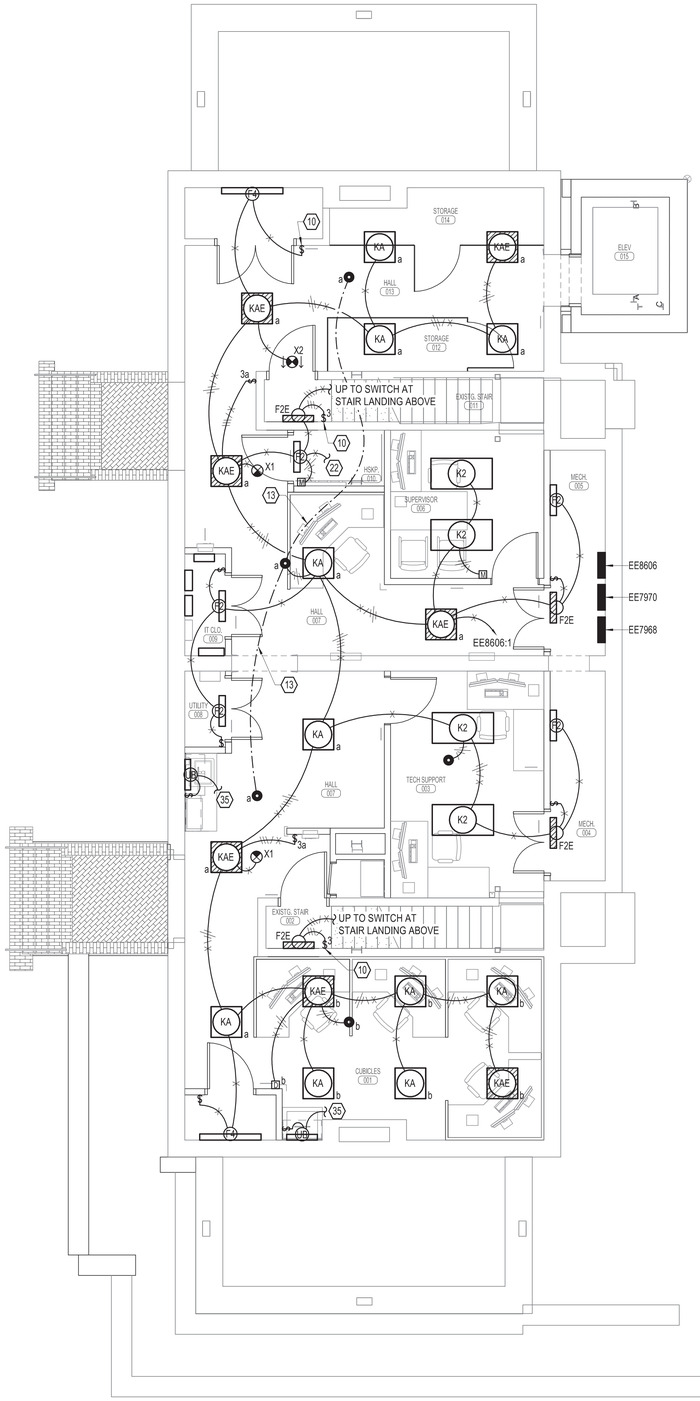
Drawing Number: **ED102**

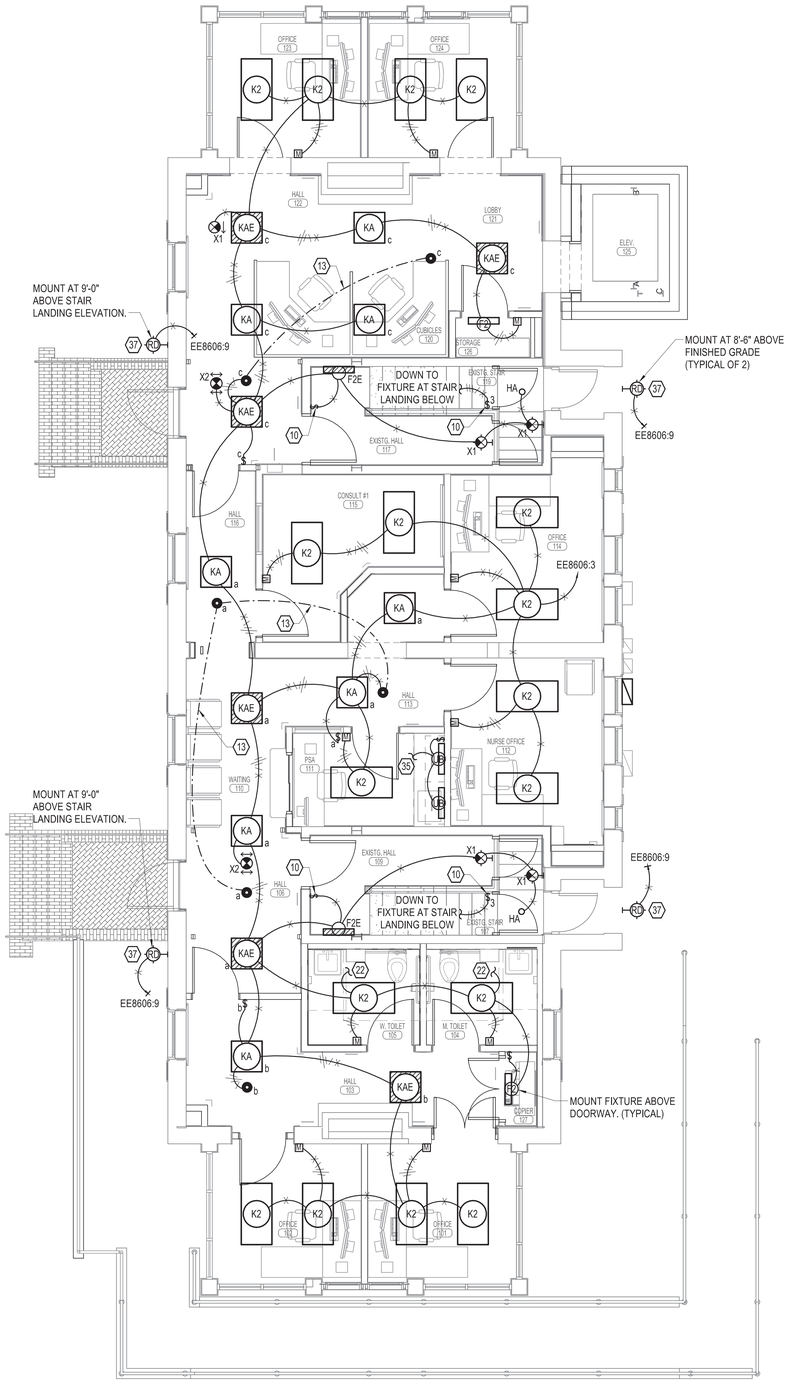
Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231





N

A ELECTRICAL BASEMENT LIGHTING PLAN
1/4" = 1'-0"

B ELECTRICAL FIRST FLOOR LIGHTING PLAN
1/4" = 1'-0"

LIGHTING PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
4. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.

(#) KEYED NOTES:

10 INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.

13 INTERLOCK OCCUPANCY SENSORS AS REQUIRED.

22 TO EXHAUST FAN WITHIN SPACE. PROVIDE RELAY AS REQUIRED FOR CONTROL OF FAN WITH LIGHTS IN SPACE.

35 CONNECT TO 120V. RECEPTACLE CIRCUIT AT COUNTERTOP BELOW. MOUNT TOGGLE SWITCH AND RECEPTACLE UNDER SAME COVERPLATE.

37 INSTALL FIXTURE IN SAME PLACE AS EXISTING LIGHT FIXTURE AND BOX IN EXTERIOR WALL. VERIFY EXISTING CUTOUT AND BOX IS COMPLETELY COVERED AND SEALED. CONTRACTOR HAS OPTION TO RE-USE EXISTING CONDUIT AS REQUIRED FOR ROUTING OF LIGHTING CIRCUIT.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL LIGHTING PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

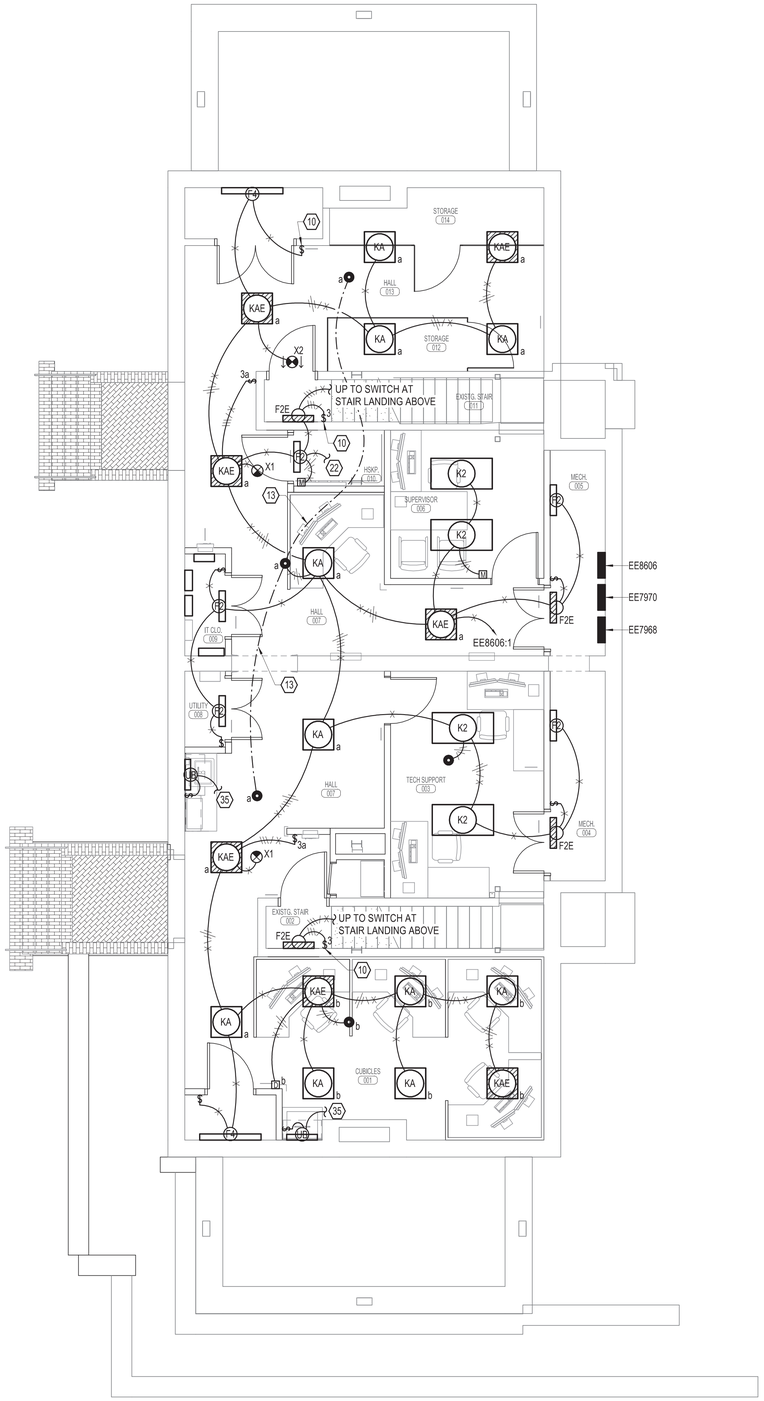
Drawing Number: **EL101**

Dwg.

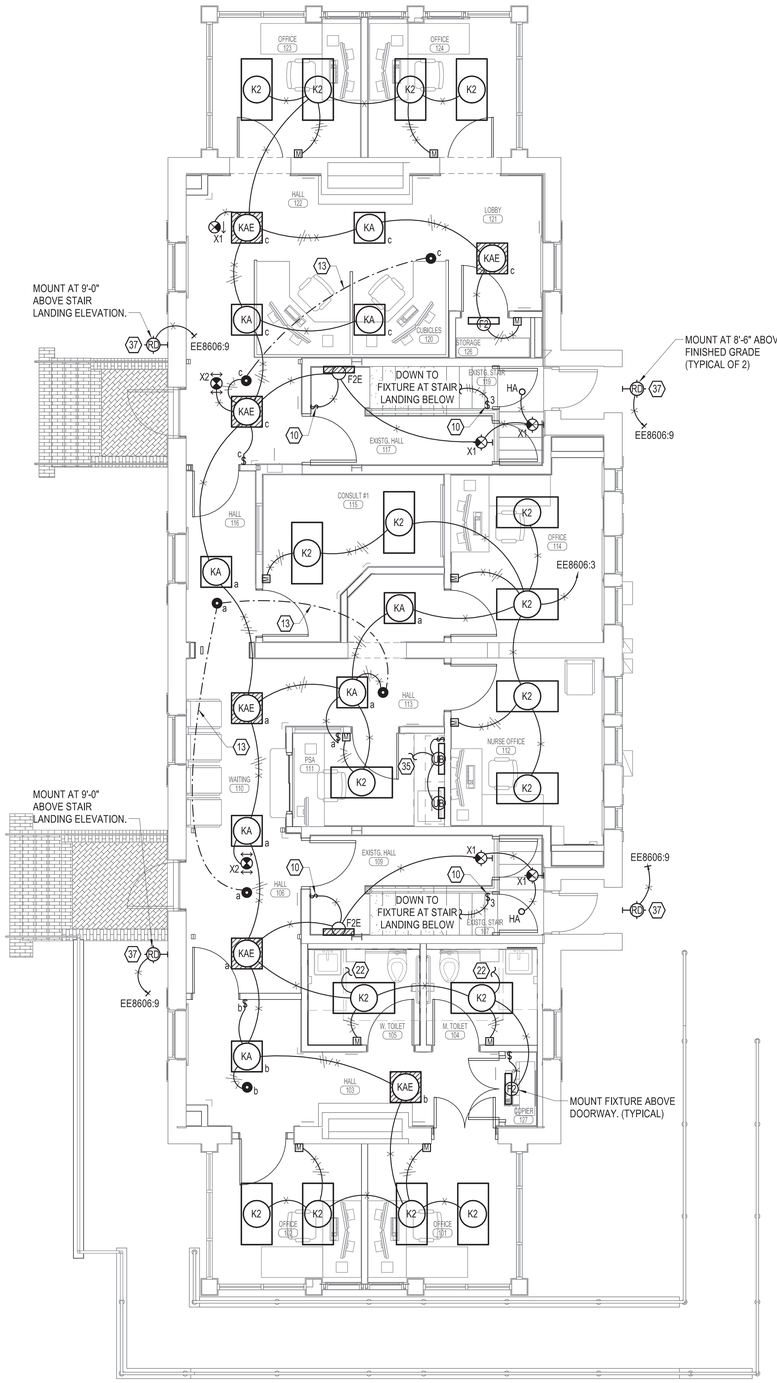
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A ELECTRICAL BASEMENT LIGHTING PLAN - BID ITEM 5
1/4" = 1'-0"



B ELECTRICAL FIRST FLOOR LIGHTING PLAN - BID ITEM 5
1/4" = 1'-0"

LIGHTING PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
4. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.

KEYED NOTES:

#	
10	INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.
13	INTERLOCK OCCUPANCY SENSORS AS REQUIRED.
22	TO EXHAUST FAN WITHIN SPACE. PROVIDE RELAY AS REQUIRED FOR CONTROL OF FAN WITH LIGHTS IN SPACE.
35	CONNECT TO 120V. RECEPTACLE CIRCUIT AT COUNTERTOP BELOW. MOUNT TOGGLE SWITCH AND RECEPTACLE UNDER SAME COVERPLATE.
37	INSTALL FIXTURE IN SAME PLACE AS EXISTING LIGHT FIXTURE AND BOX IN EXTERIOR WALL. VERIFY EXISTING CUTOUT AND BOX IS COMPLETELY COVERED AND SEALED. CONTRACTOR HAS OPTION TO RE-USE EXISTING CONDUIT AS REQUIRED FOR ROUTING OF LIGHTING CIRCUIT.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL LIGHTING PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

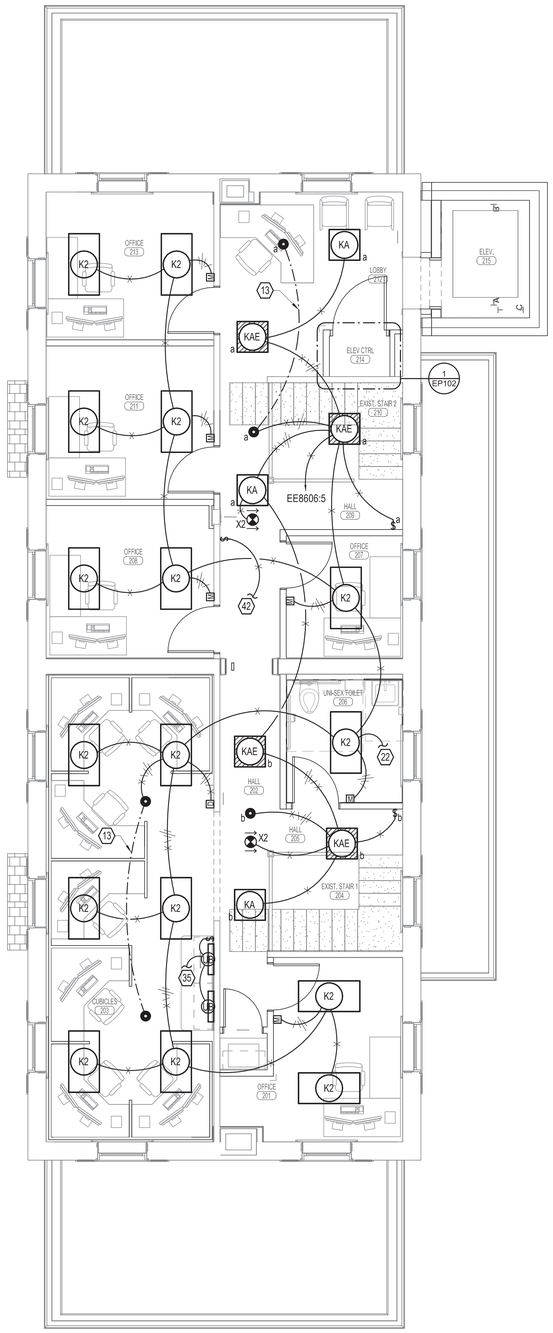
Building Number: **7**

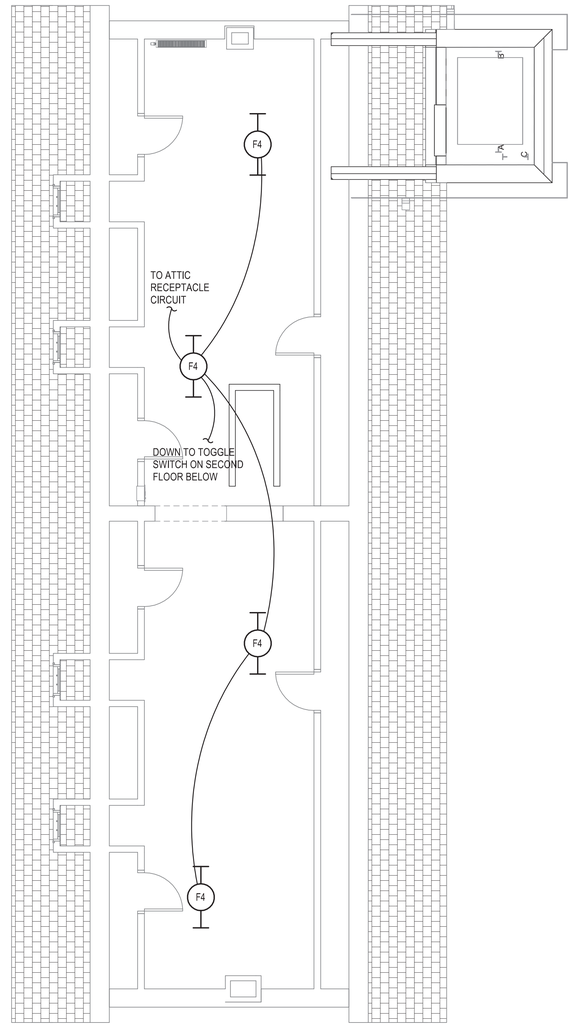
Drawing Number: **EL101.5** Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231





LIGHTING PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
4. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.

KEYED NOTES:

#	
13	INTERLOCK OCCUPANCY SENSORS AS REQUIRED.
22	TO EXHAUST FAN WITHIN SPACE. PROVIDE RELAY AS REQUIRED FOR CONTROL OF FAN WITH LIGHTS IN SPACE.
35	CONNECT TO 120V. RECEPTACLE CIRCUIT AT COUNTERTOP BELOW. MOUNT TOGGLE SWITCH AND RECEPTACLE UNDER SAME COVERPLATE.
42	SWITCH FOR CONTROL OF LIGHT FIXTURES IN ATTIC. ROUTE CIRCUITING UP TO FIXTURES ABOVE. LABEL SWITCH FOR CONTROL OF ATTIC LIGHT FIXTURES.

N

A ELECTRICAL SECOND FLOOR LIGHTING PLAN
1/4" = 1'-0"

N

B ELECTRICAL ATTIC LIGHTING PLAN
1/4" = 1'-0"

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALDRIDGE LICENSED 23475 11/19/2018 KANSAS REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL LIGHTING PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

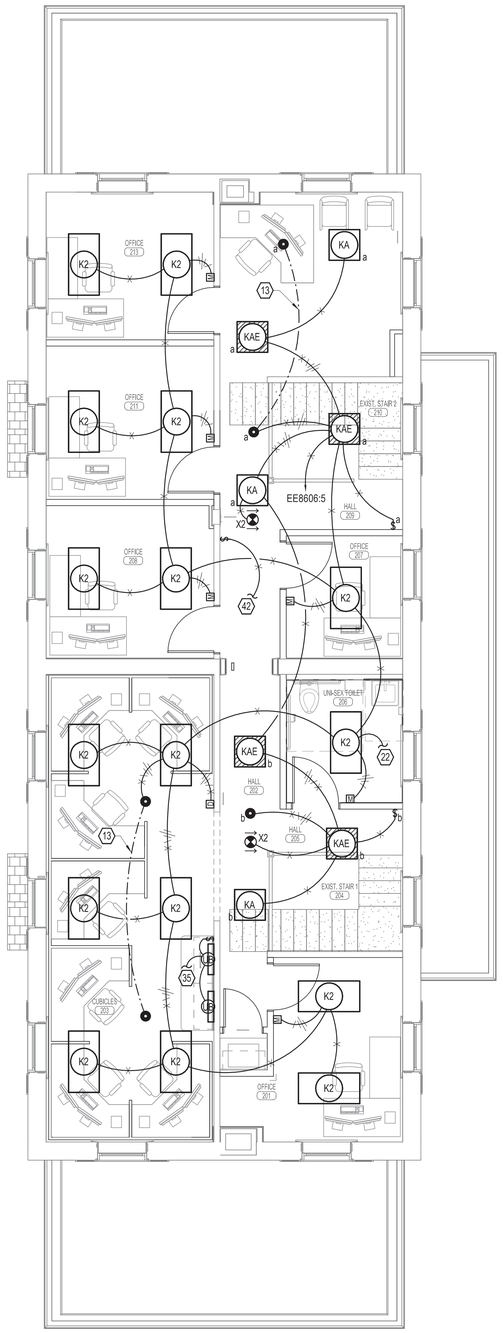
Drawing Number: **EL102**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

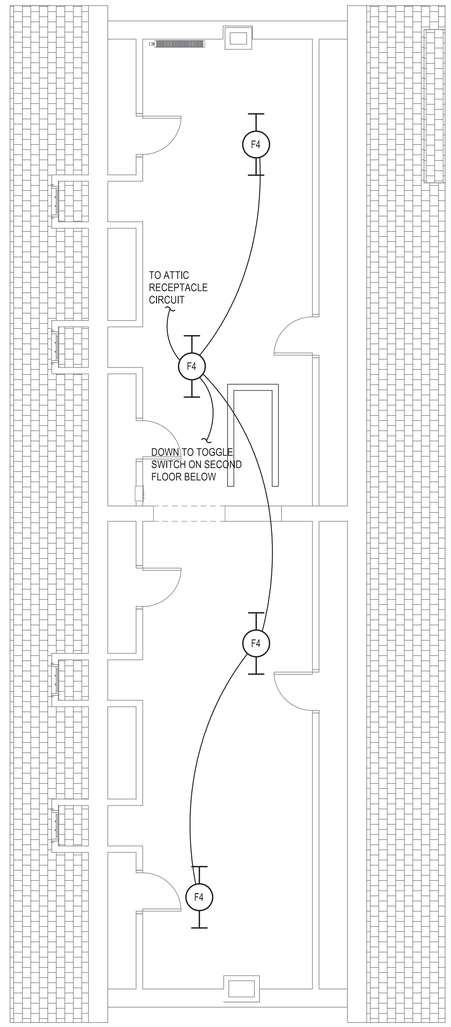
VA FORM 08-6231



N

A ELECTRICAL SECOND FLOOR LIGHTING PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL ATTIC LIGHTING PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

LIGHTING PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
4. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.

KEYED NOTES:

#	
13	INTERLOCK OCCUPANCY SENSORS AS REQUIRED.
22	TO EXHAUST FAN WITHIN SPACE. PROVIDE RELAY AS REQUIRED FOR CONTROL OF FAN WITH LIGHTS IN SPACE.
35	CONNECT TO 120V. RECEPTACLE CIRCUIT AT COUNTERTOP BELOW. MOUNT TOGGLE SWITCH AND RECEPTACLE UNDER SAME COVERPLATE.
42	SWITCH FOR CONTROL OF LIGHT FIXTURES IN ATTIC. ROUTE CIRCUITING UP TO FIXTURES ABOVE. LABEL SWITCH FOR CONTROL OF ATTIC LIGHT FIXTURES.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL LIGHTING PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

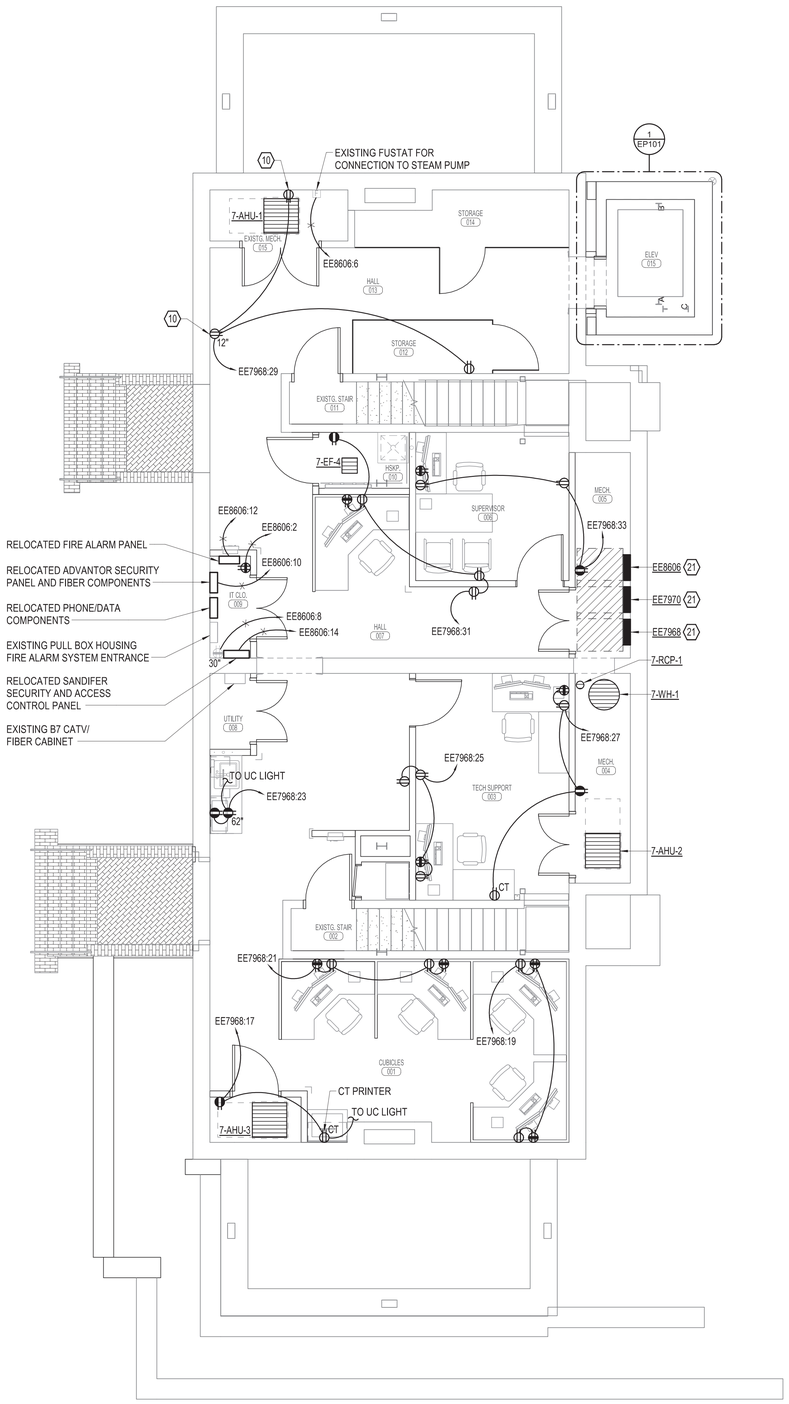
Drawing Number: **EL102.5**

Dwg.

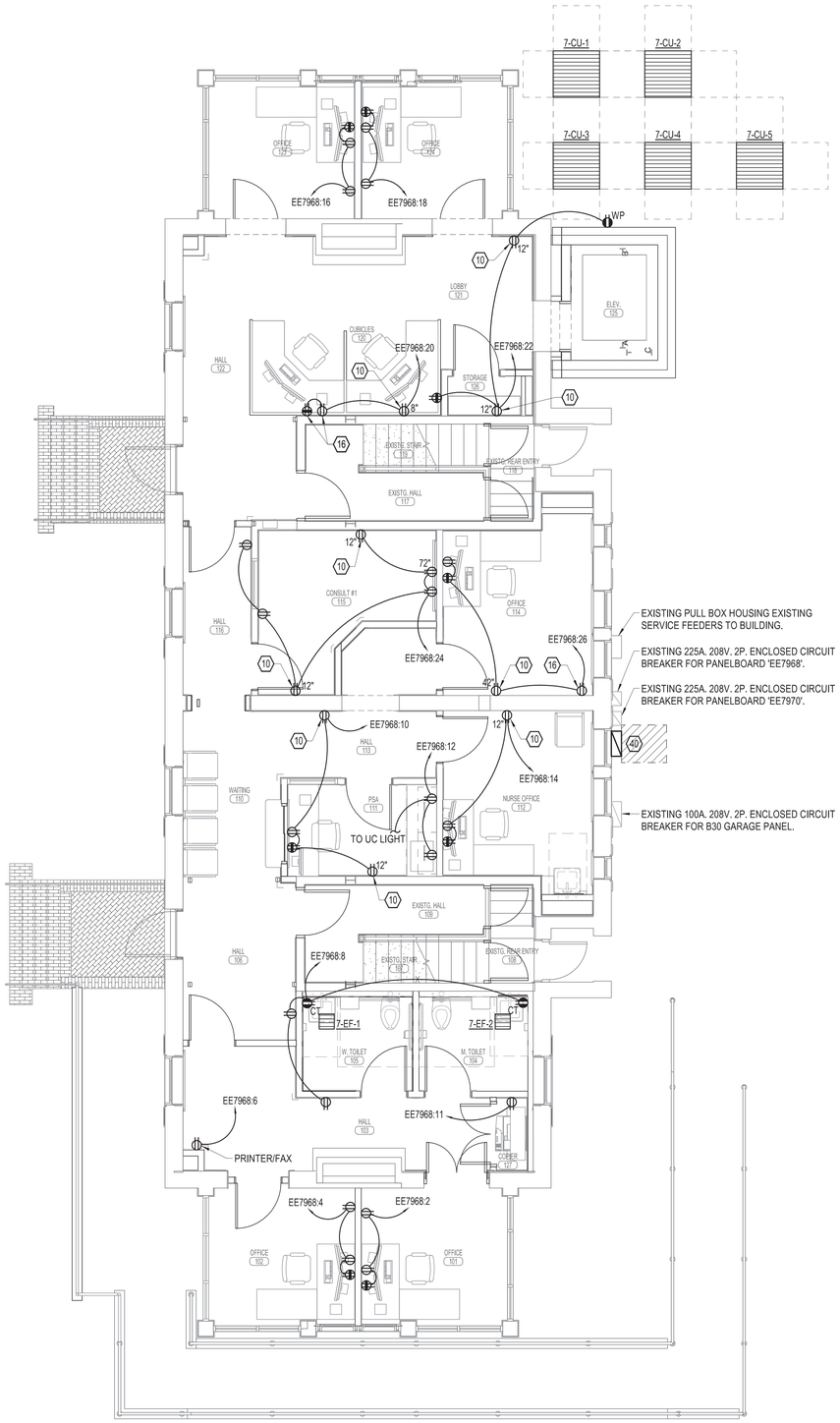
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A ELECTRICAL BASEMENT POWER PLAN
1/4" = 1'-0"



B ELECTRICAL FIRST FLOOR POWER PLAN
1/4" = 1'-0"

POWER PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
4. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
7. FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE-THROUGHS WITH ARCHITECT PRIOR TO ROUGH-IN.
8. PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

(#) KEYED NOTES:

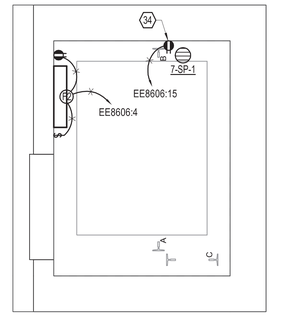
10 INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.

16 DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.

21 RELOCATED PANELBOARD. ALL EXISTING CIRCUITS NOT DEMOLISHED SHALL BE REWORKED AND EXTENDED AS REQUIRED TO BE FED FROM NEW PANELBOARD LOCATION. EXISTING CONDUIT AND FEEDER SERVING PANELBOARD SHALL BE RE-WORKED AS REQUIRED PANEL RELOCATION.

34 PROVIDE RECEPTACLE FOR CONNECTION TO SUMP PUMP. PROVIDE DEVICE WITH WEATHERPROOF "IN-USE" COVER.

40 PROVIDE 60A, 208V, 3ø FUSED DISCONNECT SWITCH IN NEMA-3R ENCLOSURE IN PLACE OF EXISTING ABANDONED DISCONNECT SWITCH FOR ELEVATOR POWER CONNECTION. SPLICE INTO EXISTING WIREWAY AS REQUIRED FOR 3-PHASE POWER. SEE DETAIL 1/E-601 FOR ADDITIONAL INFORMATION.



1 ENLARGED ELEVATOR PIT ELECTRICAL PLAN
1/2" = 1'-0"

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL POWER PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

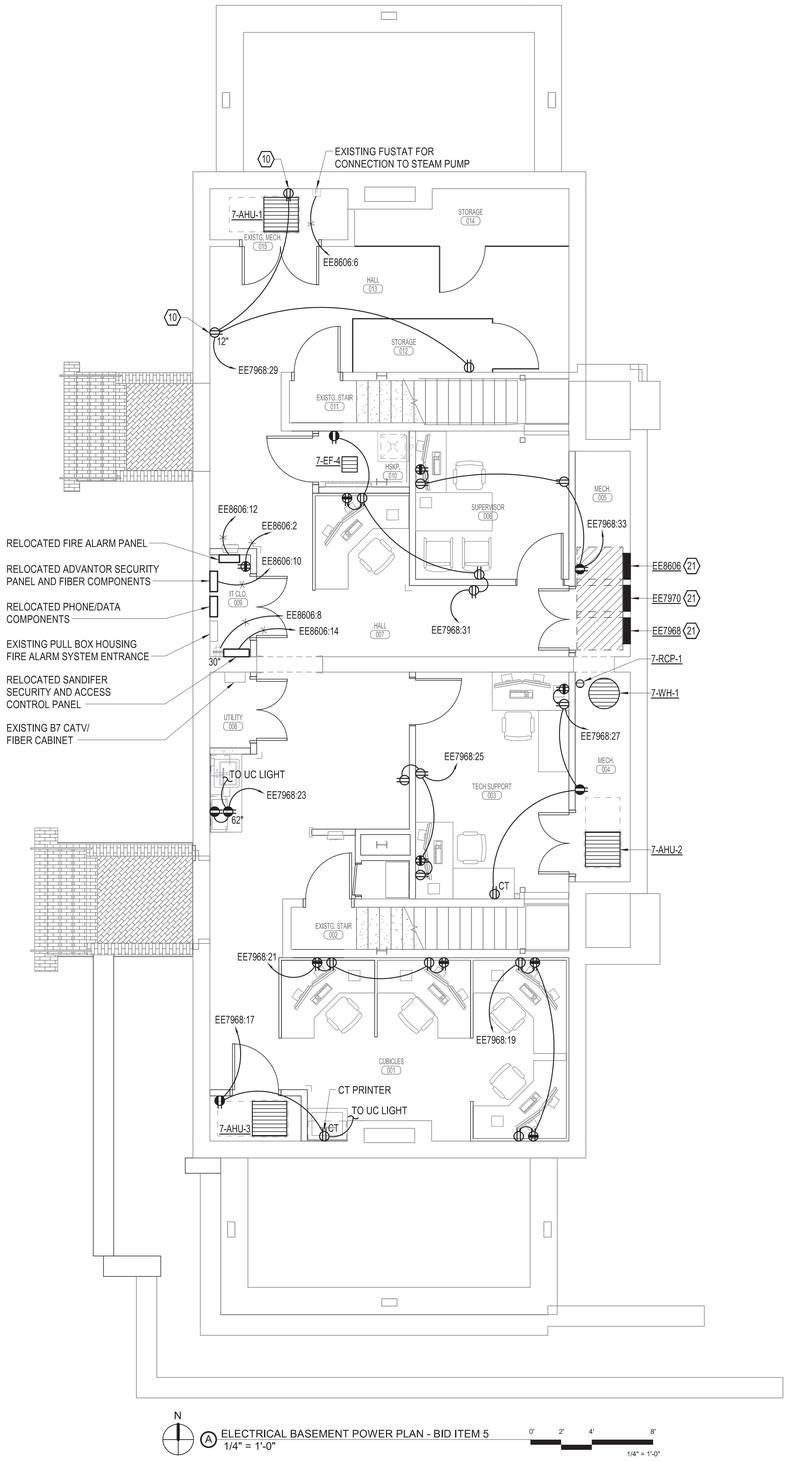
Building Number: **7**

Drawing Number: **EP101** Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

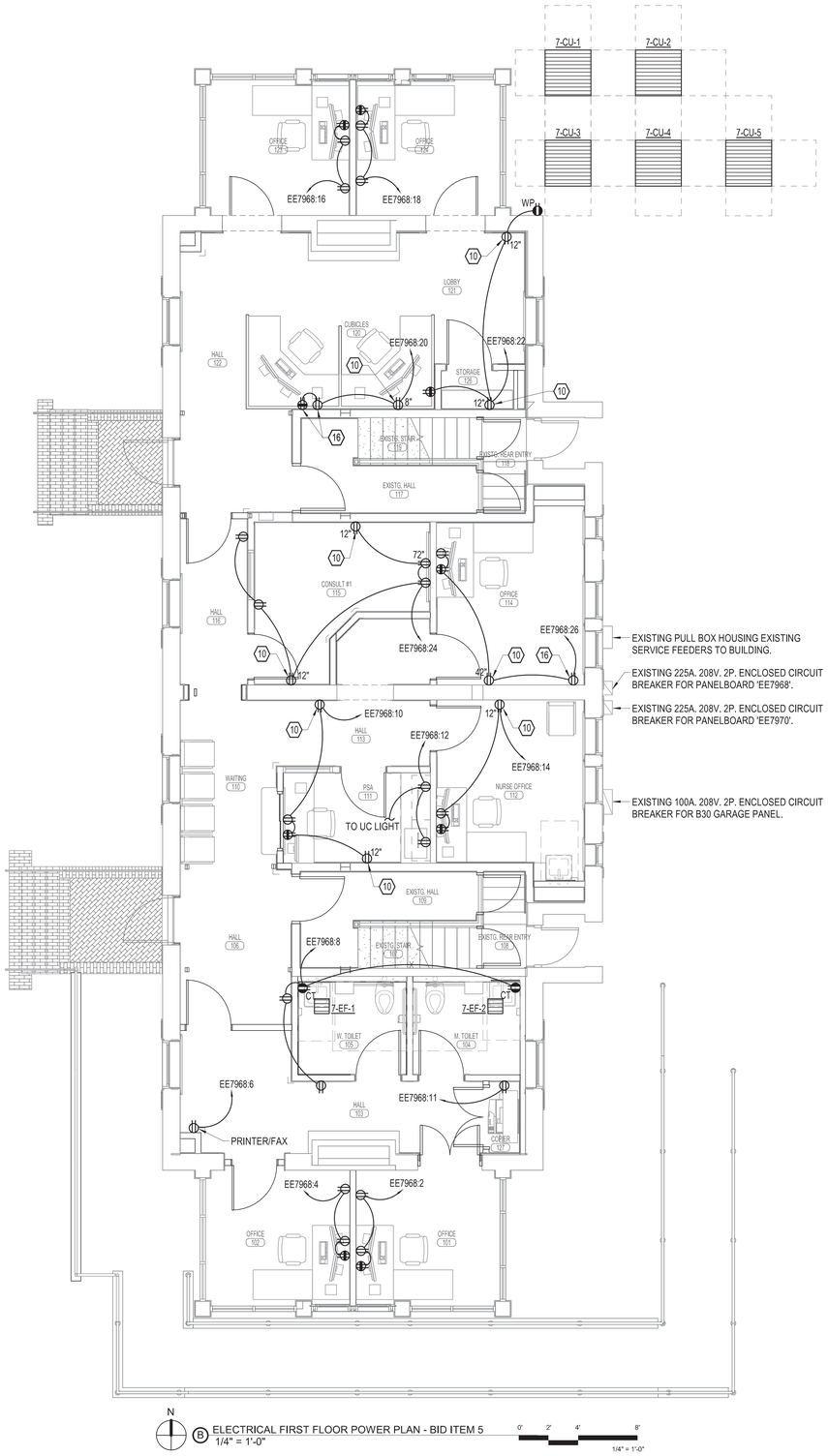
VA FORM 08-6231



N

A ELECTRICAL BASEMENT POWER PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL FIRST FLOOR POWER PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

POWER PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
4. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
7. FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE-THROUGHS WITH ARCHITECT PRIOR TO ROUGH-IN.
8. PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

KEYED NOTES:

#	
10	INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.
16	DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.
21	RELOCATED PANELBOARD. ALL EXISTING CIRCUITS NOT DEMOLISHED SHALL BE REWORKED AND EXTENDED AS REQUIRED TO BE FED FROM NEW PANELBOARD LOCATION. EXISTING CONDUIT AND FEEDER SERVING PANELBOARD SHALL BE RE-WORKED AS REQUIRED PANEL RELOCATION.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

m:HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL POWER PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

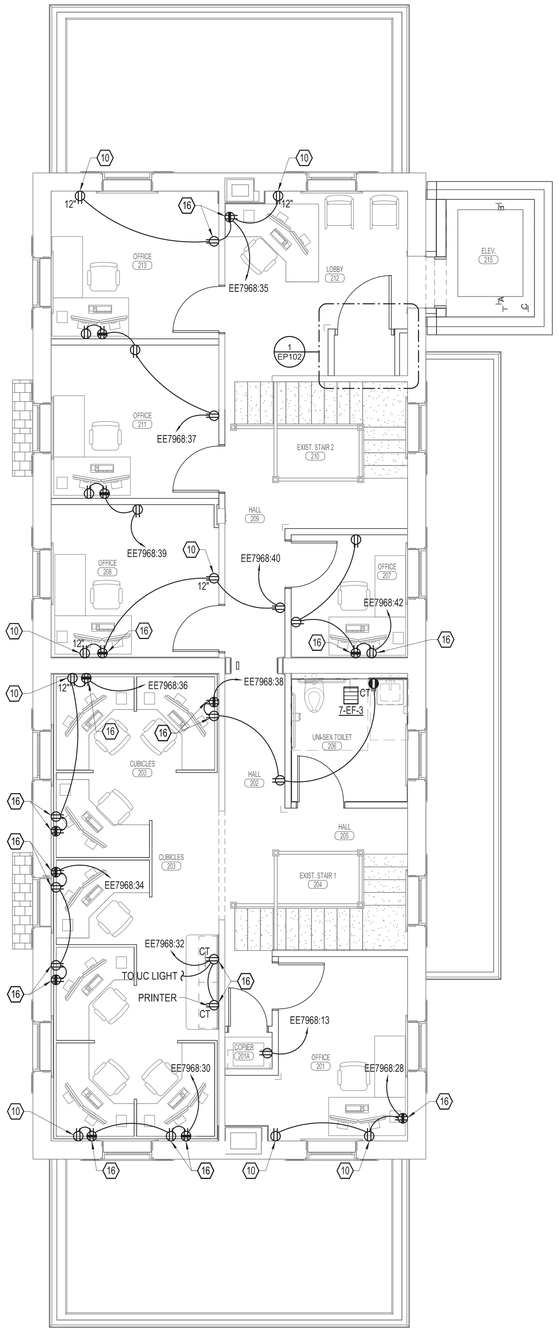
Drawing Number: **EP101.5**

Dwg.

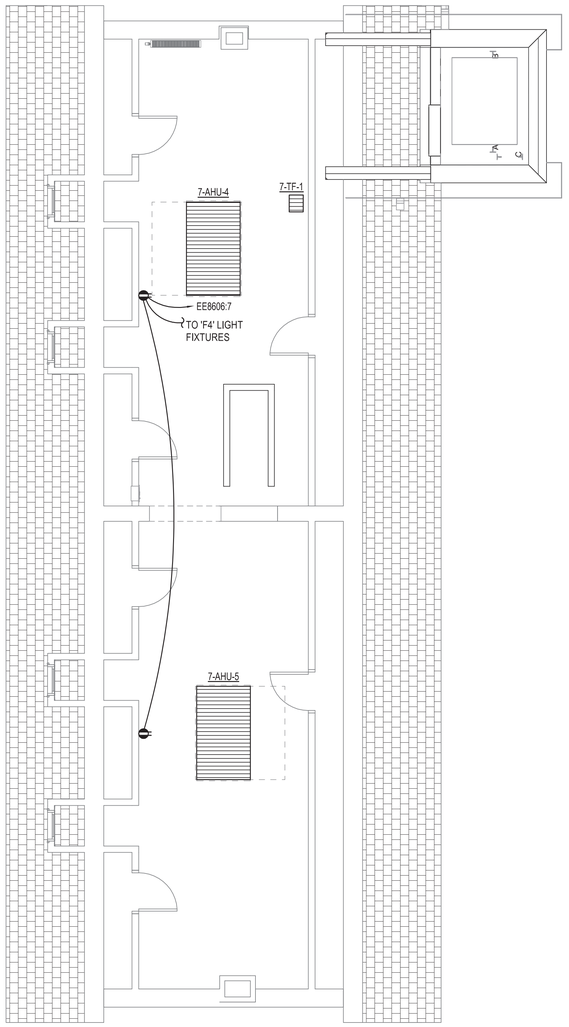
Office of Construction and Facilities Management

Department of Veterans Affairs

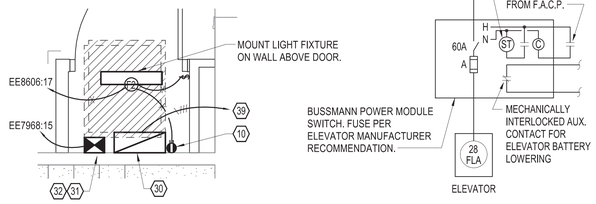
VA FORM 08-6231



A ELECTRICAL SECOND FLOOR POWER PLAN
1/4" = 1'-0"



B ELECTRICAL ATTIC POWER PLAN
1/4" = 1'-0"



1 ENLARGED ELEVATOR EQUIPMENT ROOM ELECTRICAL PLAN
1/2" = 1'-0"

POWER PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
4. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
7. FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE-THROUGHS WITH ARCHITECT PRIOR TO ROUGH-IN.
8. PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

(#) KEYED NOTES:

10 INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.

16 DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.

30 FUSED MAIN DISCONNECT SWITCH (BUSSMANN POWER MODULE SWITCH OR EQUAL) FOR ELEVATOR. PROVIDE A NAMEPLATE TO IDENTIFY THE LOCATION OF THE SUPPLY SIDE OVERCURRENT PROTECTIVE DEVICE PER N.E.C. ARTICLE 620. SEE ONE-LINE PORTION OF THIS DETAIL.

31 20A. 120V. GFCI CIRCUIT BREAKER WITH LOCKABLE COVER (OFF POSITION) FOR ELEVATOR CAR LIGHTING. PROVIDE A NAMEPLATE TO IDENTIFY THE LOCATION OF THE SUPPLY SIDE OVERCURRENT PROTECTIVE DEVICE PER N.E.C. ARTICLE 620.53.

32 CONNECT ELEVATOR CAB POWER AND CONTROLS AS REQUIRED BY ELEVATOR MANUFACTURER. VERIFY ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.

39 ROUTE 3 #4, #8 GRD, IN 1-1/2" CONDUIT TO DISCONNECT SWITCH MOUNTED ON EXTERIOR OF BUILDING AT ELECTRICAL SERVICE ENTRANCE.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL POWER PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

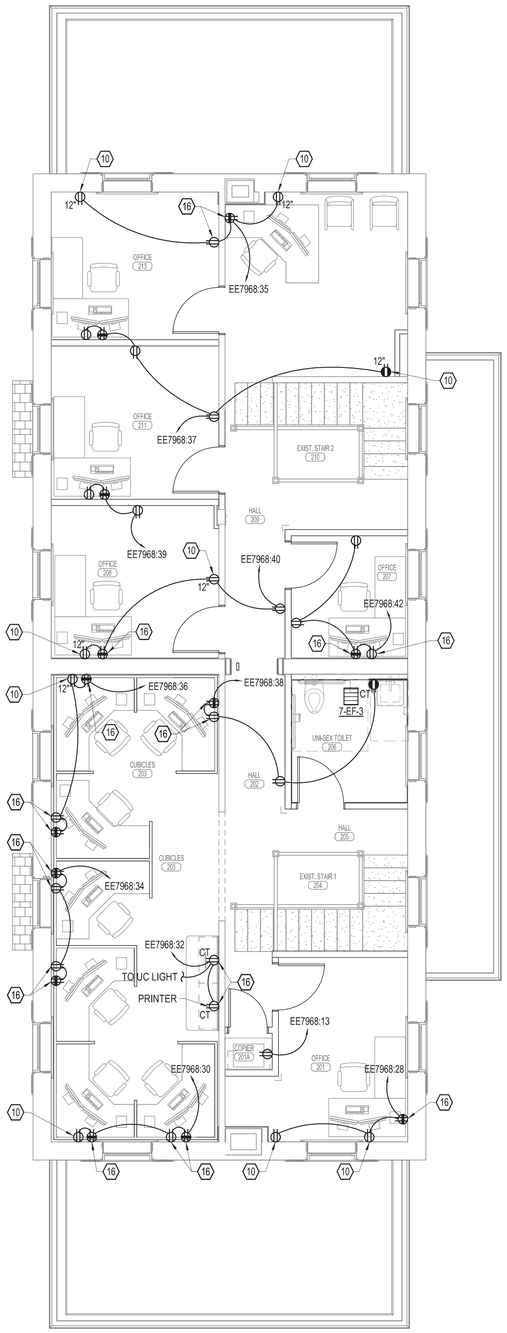
Building Number: **7**

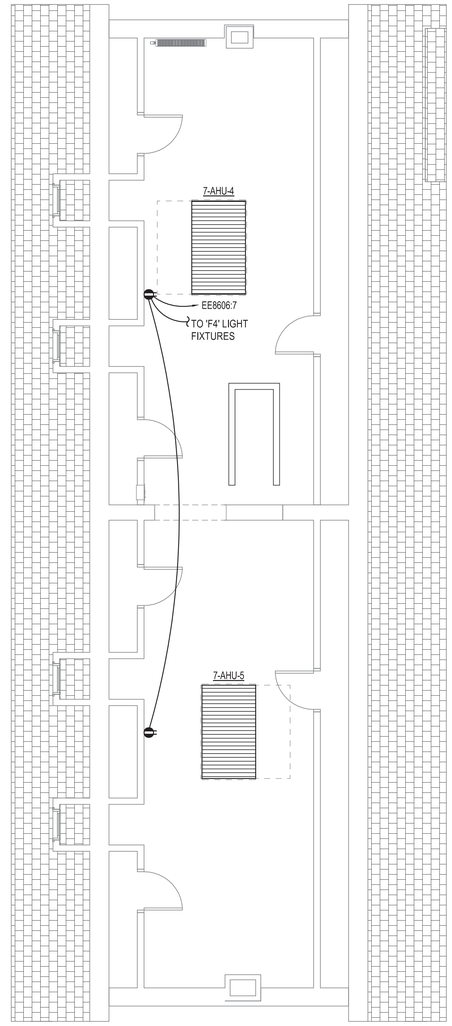
Drawing Number: **EP102** Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231





POWER PLAN NOTES:

1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
4. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
7. FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE-THROUGHS WITH ARCHITECT PRIOR TO ROUGH-IN.
8. PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

KEYED NOTES:

#	
10	INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.
16	DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.

N

A ELECTRICAL SECOND FLOOR POWER PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

N

B ELECTRICAL ATTIC POWER PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALDRIDGE LICENSED 23475 11/19/2018 KANSAS REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL POWER PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 569-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

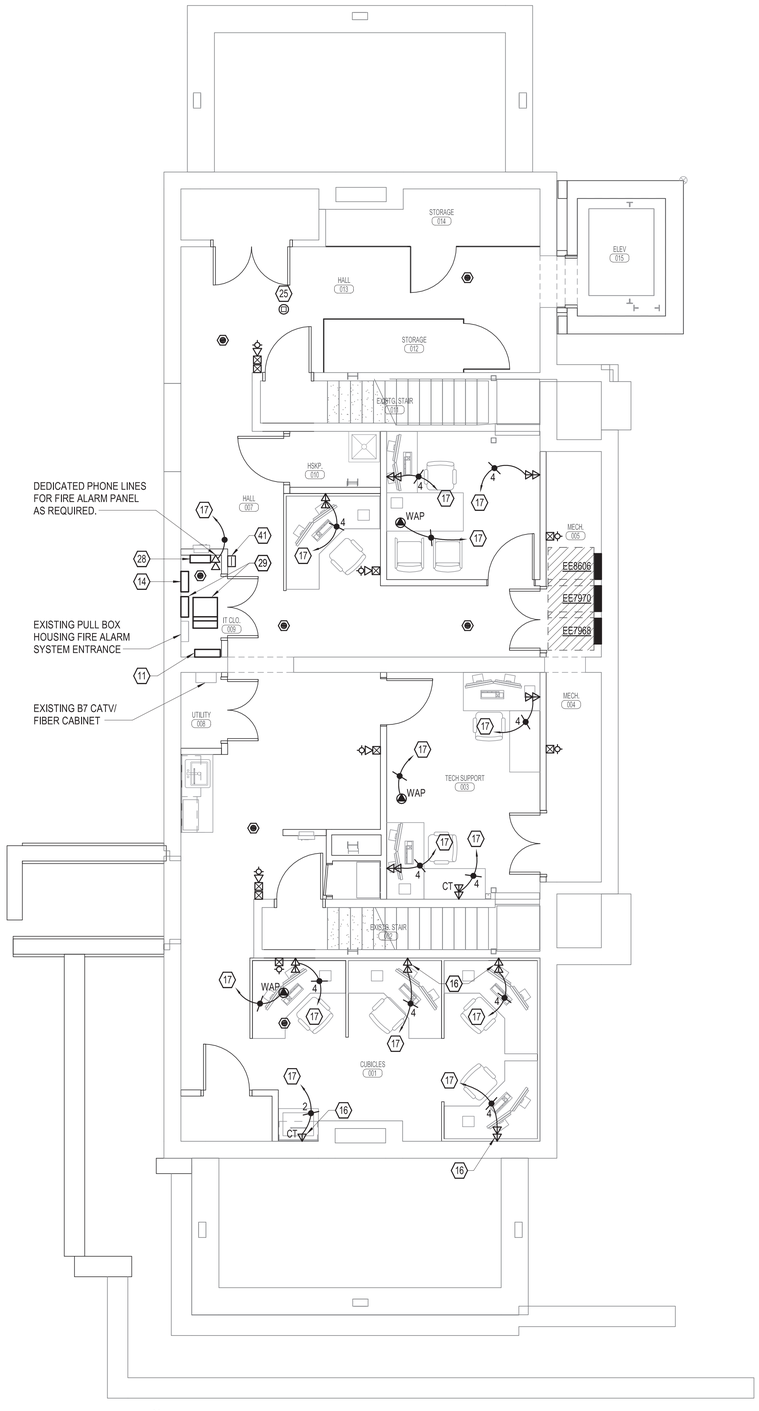
Drawing Number: **EP102.5**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

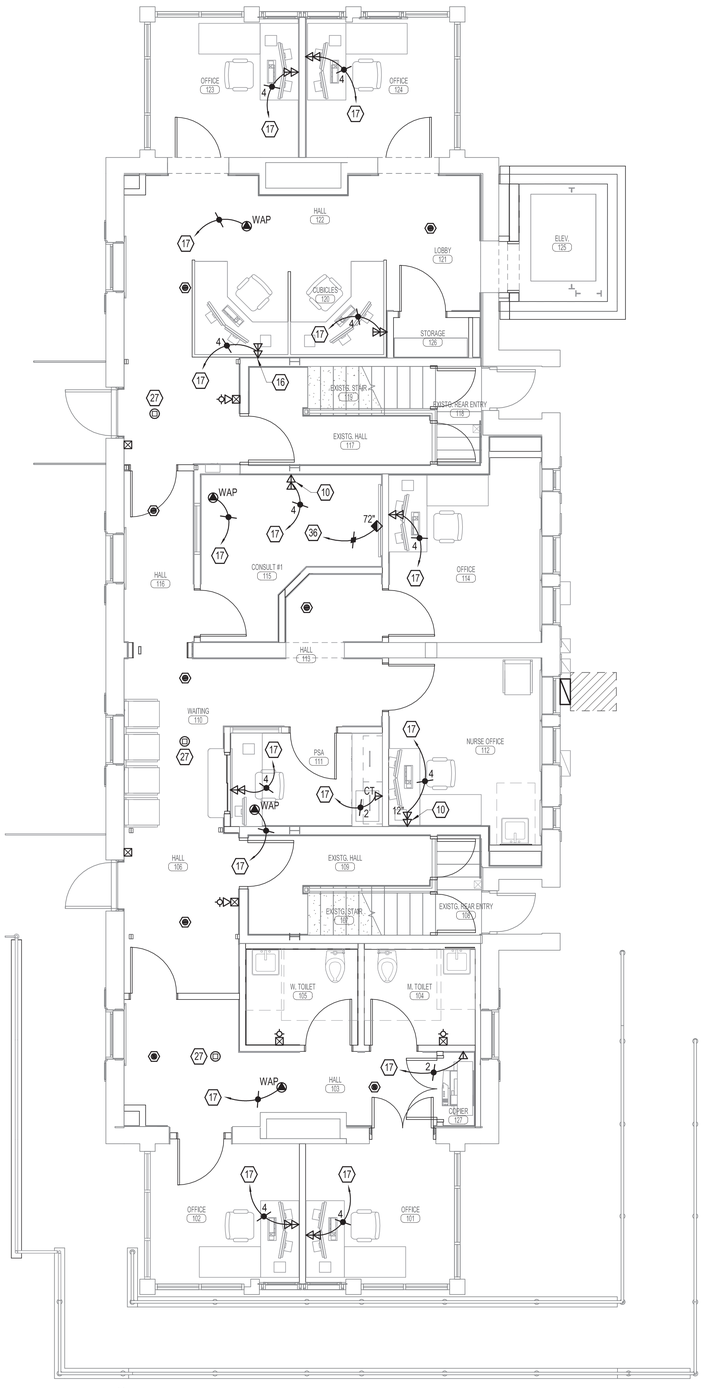
VA FORM 08-6231



N

A ELECTRICAL BASEMENT SYSTEMS PLAN
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL FIRST FLOOR SYSTEMS PLAN
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

SYSTEMS PLAN NOTES:

1. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
2. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
3. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
4. WHERE THE SAME DEVICE IS SHOWN IN THE SAME LOCATION ON BOTH THE POWER AND SYSTEMS PLAN, ONLY ONE DEVICE IS REQUIRED. PROVIDE BOTH POWER AND SYSTEMS WIRING AS SHOWN.
5. THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE THE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

(#) KEYED NOTES:

10 INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.

11 RELOCATED SANDIFER SECURITY AND ACCESS CONTROL COMPONENTS. RE-ROUTE ALL EXISTING CONDUIT AND CABLING AS REQUIRED TO NEW EQUIPMENT LOCATION.

14 RELOCATED ADVANTOR SECURITY PANEL, CORNING FIBER OPTIC PANEL, AND ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CONDUIT AND CABLING AS REQUIRED TO NEW PANEL LOCATIONS.

16 DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.

17 ROUTE CAT 6 VOICE/DATA CABLE(S) TO PATCH PANEL LOCATED IN LOWER LEVEL IT CLOSET 009. COORDINATE WITH COR AND OIT STAFF FOR ACCESS TO TELECOM CLOSET AND PATCH PANEL TERMINATIONS.

25 RELOCATED CEILING MOUNTED SPEAKER. INSTALL IN NEW CEILING AS REQUIRED AND CONNECT TO EXISTING SPEAKER CIRCUIT.

27 CONNECT TO NEAREST EXISTING SPEAKER CIRCUIT. EXTEND AND RE-ROUTE EXISTING CABLING AS REQUIRED.

28 RELOCATED FIRE ALARM PANEL AND ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CABLING AS REQUIRED TO NEW EQUIPMENT LOCATION.

29 RELOCATED TELECOMMINICATIONS RACK, PATCH PANELS AND ALL ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CABLING AND EQUIPMENT AS REQUIRED TO NEW RACK LOCATION. COORDINATE WITH COR AND OIT STAFF FOR TERMINATION OF CABLING AND EQUIPMENT LOCATION WITHIN RACK.

36 ROUTE CATV CABLING TO EXISTING B7 CATV CABINET LOCATED IN BASEMENT UTILITY ROOM 008. PROVIDE ADDITIONAL SPLITTER AS REQUIRED.

41 RELOCATED ACCESS CONTROL DEVICE. CONNECT TO EXISTING ACCESS CONTROLS CIRCUIT AS REQUIRED.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SYSTEMS PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

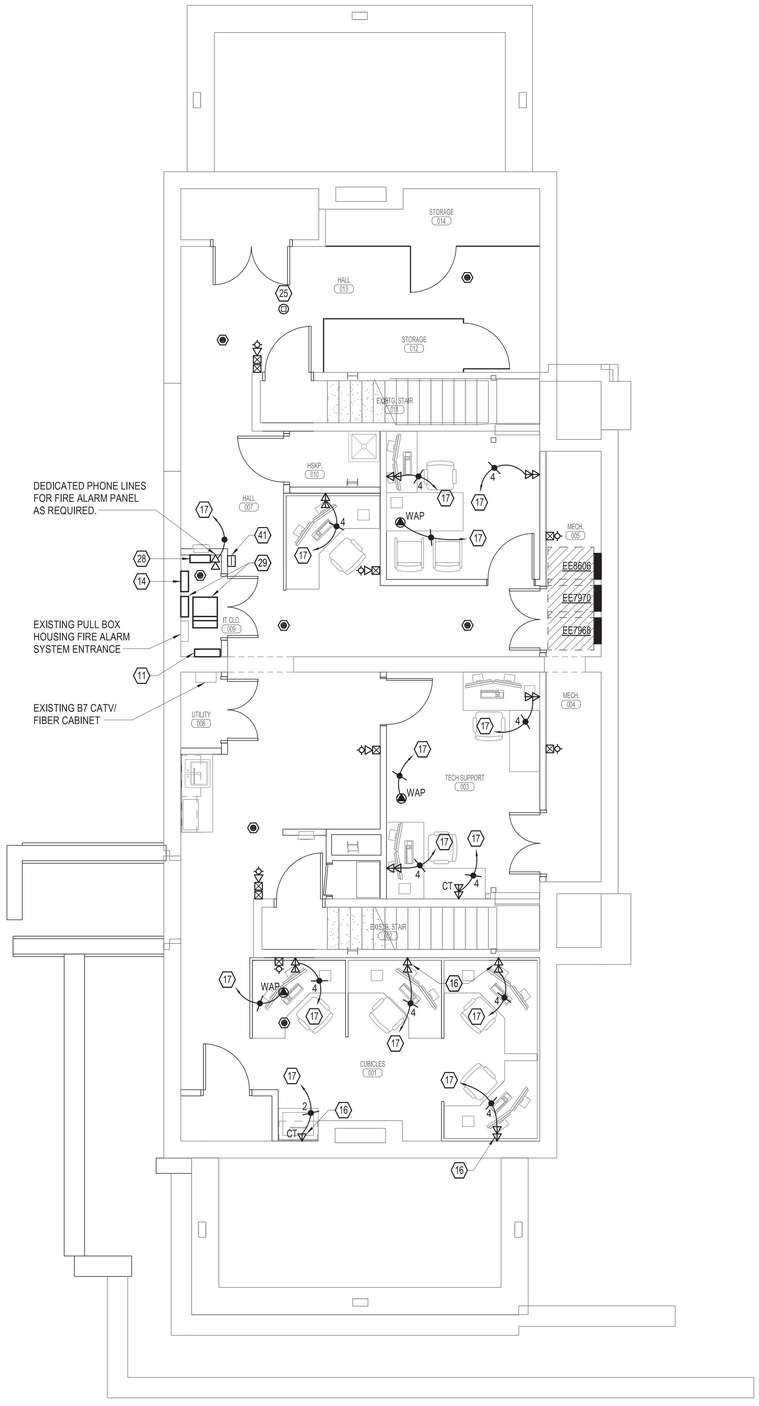
Drawing Number: **EY101**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

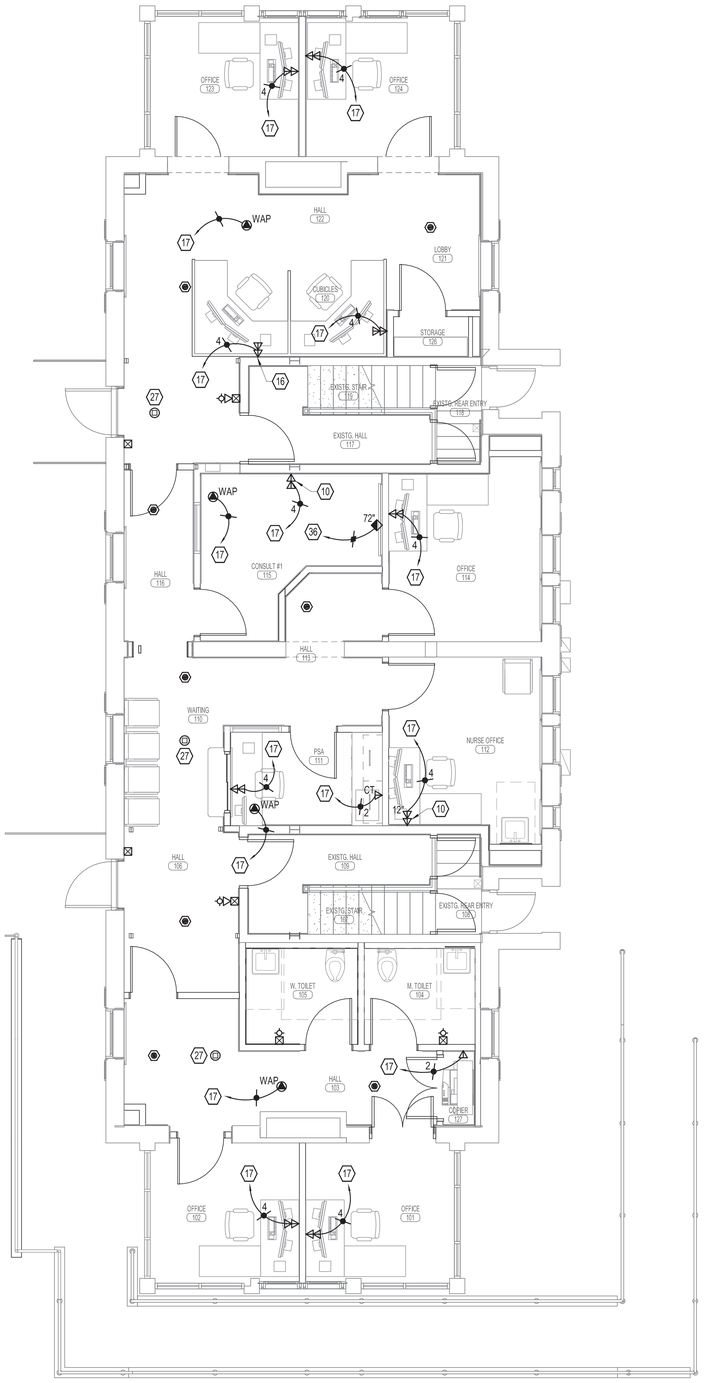
VA FORM 08-6231



N

A ELECTRICAL BASEMENT SYSTEMS PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL FIRST FLOOR SYSTEMS PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

SYSTEMS PLAN NOTES:

1. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
2. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
3. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
4. WHERE THE SAME DEVICE IS SHOWN IN THE SAME LOCATION ON BOTH THE POWER AND SYSTEMS PLAN, ONLY ONE DEVICE IS REQUIRED. PROVIDE BOTH POWER AND SYSTEMS WIRING AS SHOWN.
5. THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE THE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

KEYED NOTES:

#	
10	INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.
11	RELOCATED SANDIFER SECURITY AND ACCESS CONTROL COMPONENTS. RE-ROUTE ALL EXISTING CONDUIT AND CABLING AS REQUIRED TO NEW EQUIPMENT LOCATION.
14	RELOCATED ADVANTOR SECURITY PANEL, CORNING FIBER OPTIC PANEL, AND ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CONDUIT AND CABLING AS REQUIRED TO NEW PANEL LOCATIONS.
16	DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.
17	ROUTE CAT 6 VOICE/DATA CABLE(S) TO PATCH PANEL LOCATED IN LOWER LEVEL IT CLOSET 009. COORDINATE WITH COR AND OIT STAFF FOR ACCESS TO TELECOM CLOSET AND PATCH PANEL TERMINATIONS.
25	RELOCATED CEILING MOUNTED SPEAKER. INSTALL IN NEW CEILING AS REQUIRED AND CONNECT TO EXISTING SPEAKER CIRCUIT.
27	CONNECT TO NEAREST EXISTING SPEAKER CIRCUIT. EXTEND AND RE-ROUTE EXISTING CABLING AS REQUIRED.
28	RELOCATED FIRE ALARM PANEL AND ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CABLING AS REQUIRED TO NEW EQUIPMENT LOCATION.
29	RELOCATED TELECOMMINICATIONS RACK, PATCH PANELS AND ALL ASSOCIATED COMPONENTS. RE-ROUTE ALL EXISTING CABLING AND EQUIPMENT AS REQUIRED TO NEW RACK LOCATION. COORDINATE WITH COR AND OIT STAFF FOR TERMINATION OF CABLING AND EQUIPMENT LOCATION WITHIN RACK.
36	ROUTE CATV CABLING TO EXISTING B7 CATV CABINET LOCATED IN BASEMENT UTILITY ROOM 008. PROVIDE ADDITIONAL SPLITTER AS REQUIRED.
41	RELOCATED ACCESS CONTROL DEVICE. CONNECT TO EXISTING ACCESS CONTROLS CIRCUIT AS REQUIRED.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SYSTEMS PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

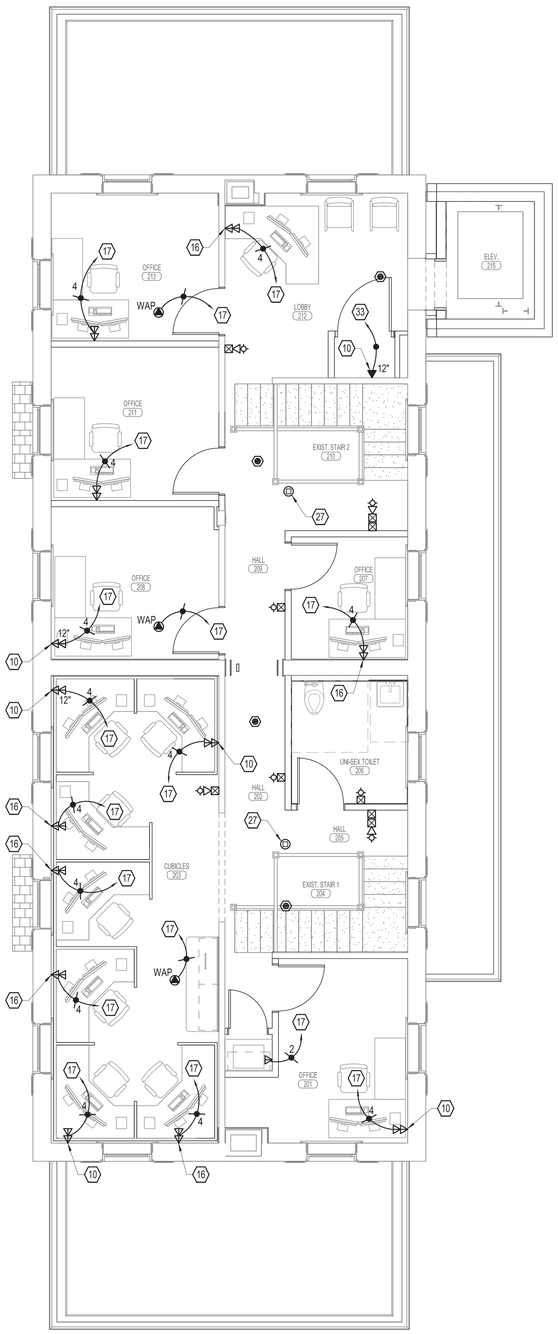
Building Number: **7**

Drawing Number: **EY101.5** Dwg.

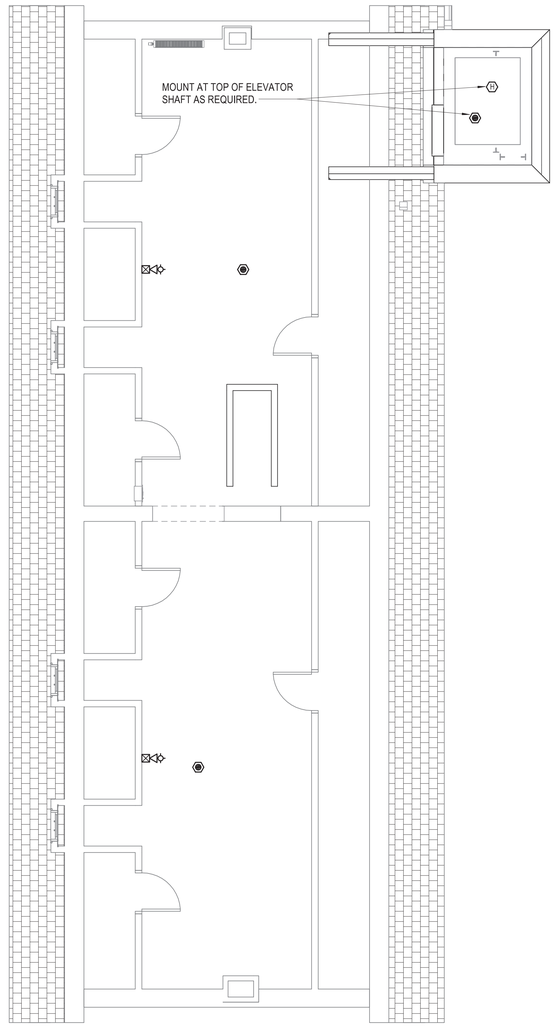
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A ELECTRICAL SECOND FLOOR SYSTEMS PLAN
1/4" = 1'-0"



B ELECTRICAL ATTIC SYSTEMS PLAN
1/4" = 1'-0"

SYSTEMS PLAN NOTES:

1. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
2. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
3. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
4. WHERE THE SAME DEVICE IS SHOWN IN THE SAME LOCATION ON BOTH THE POWER AND SYSTEMS PLAN, ONLY ONE DEVICE IS REQUIRED. PROVIDE BOTH POWER AND SYSTEMS WIRING AS SHOWN.
5. THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE THE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

(#) KEYED NOTES:

10 INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.

16 DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.

17 ROUTE CAT 6 VOICE/DATA CABLE(S) TO PATCH PANEL LOCATED IN LOWER LEVEL IT CLOSET 009. COORDINATE WITH COR AND OIT STAFF FOR ACCESS TO TELECOM CLOSET AND PATCH PANEL TERMINATIONS.

27 CONNECT TO NEAREST EXISTING SPEAKER CIRCUIT. EXTEND AND RE-ROUTE EXISTING CABLING AS REQUIRED.

33 PROVIDE CONNECTION AS REQUIRED FOR ELEVATOR CAB COMMUNICATIONS SYSTEM. PROVIDE 1" CONDUIT TO I.T. CLOSET 009 FOR ELEVATOR CAB COMMUNICATIONS CABLING. COORDINATE WITH COR AND OIT STAFF FOR COMMUNICATIONS CABLING TERMINATIONS.

Revisions:	Date

CONSULTANTS:

--

BRETT M. WALBRIDGE LICENSED 23475 11/19/2018 KANSAS PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SYSTEMS PLANS**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

Drawing Number: **EY102**

Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

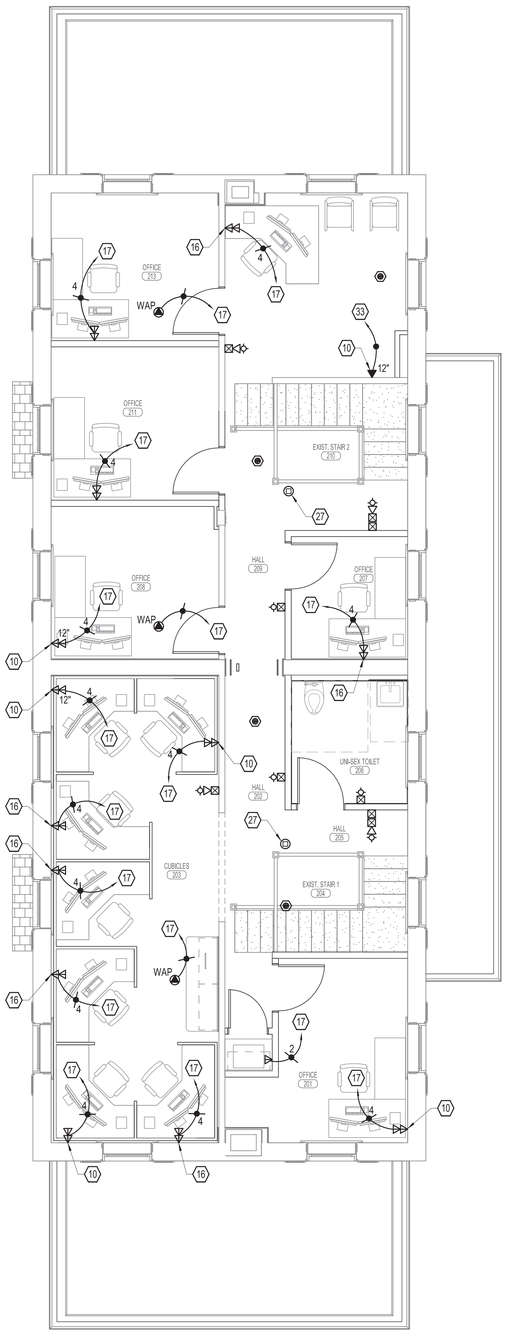
VA FORM 08-6231

SYSTEMS PLAN NOTES:

1. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
2. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
3. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
4. WHERE THE SAME DEVICE IS SHOWN IN THE SAME LOCATION ON BOTH THE POWER AND SYSTEMS PLAN, ONLY ONE DEVICE IS REQUIRED. PROVIDE BOTH POWER AND SYSTEMS WIRING AS SHOWN.
5. THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE THE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

KEYED NOTES:

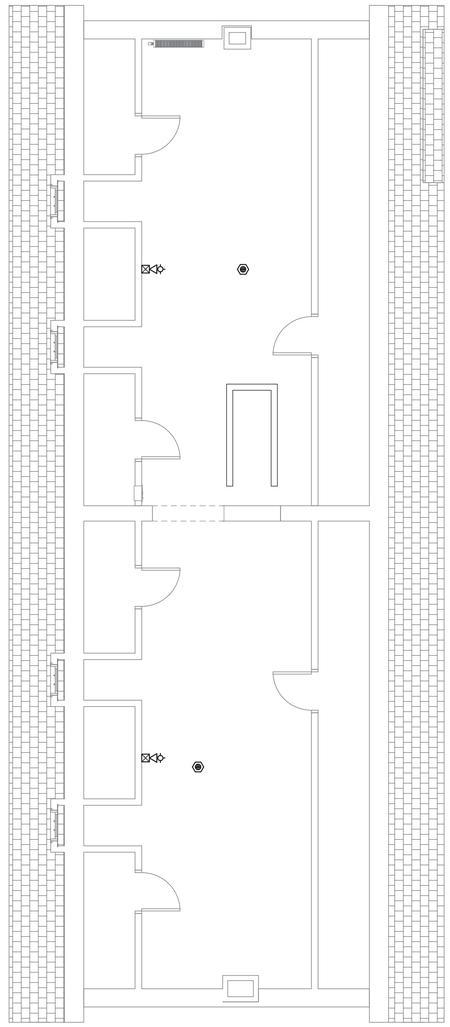
#	
10	INSTALL DEVICE IN EXISTING OUTLET BOX. CONTRACTOR HAS OPTION TO UTILIZE EXISTING CONDUIT OR PATHWAY FOR ROUTING OF NEW CABLING/CIRCUITING AS INDICATED.
16	DEVICE SHALL BE INSTALLED SURFACE MOUNTED AT 12" AFF WITH SURFACE MOUNTED CONDUIT. STUB CONDUIT AND CABLING UP FROM FLOOR CAVITY BELOW IN ORDER TO MINIMIZE THE LENGTH OF SURFACE MOUNTED CONDUIT.
17	ROUTE CAT 6 VOICE/DATA CABLE(S) TO PATCH PANEL LOCATED IN LOWER LEVEL IT CLOSET 009. COORDINATE WITH COR AND OIT STAFF FOR ACCESS TO TELECOM CLOSET AND PATCH PANEL TERMINATIONS.
27	CONNECT TO NEAREST EXISTING SPEAKER CIRCUIT. EXTEND AND RE-ROUTE EXISTING CABLING AS REQUIRED.
33	PROVIDE CONNECTION AS REQUIRED FOR ELEVATOR CAB COMMUNICATIONS SYSTEM. PROVIDE 1" CONDUIT TO I.T. CLOSET 009 FOR ELEVATOR CAB COMMUNICATIONS CABLING. COORDINATE WITH COR AND OIT STAFF FOR COMMUNICATIONS CABLING TERMINATIONS.



N

A ELECTRICAL SECOND FLOOR SYSTEMS PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"



N

B ELECTRICAL ATTIC SYSTEMS PLAN - BID ITEM 5
1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

mHFG ARCHITECTURE

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Drawing Title: **ELECTRICAL SYSTEMS PLANS - BID ITEM 5**

Approved: Project Director

Project Title: RENOVATE AND MODERNIZE VENTILATION SYSTEMS BLDG. 7
Contract No.: VA255-17-D-0080
Task Order No.: 36C25518N1024
Obligation No.: 589-C81081

Location: **Wichita, Kansas**

Date: **11/19/2018** | Checked: BMW | Drawn: JLW

Project Number: **589A7-18-301**

Building Number: **7**

Drawing Number: **EY102.5**
Dwg.

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231