• •

A B C D E F G H I J K L M N O P

INTERFACE

OUTPUTS

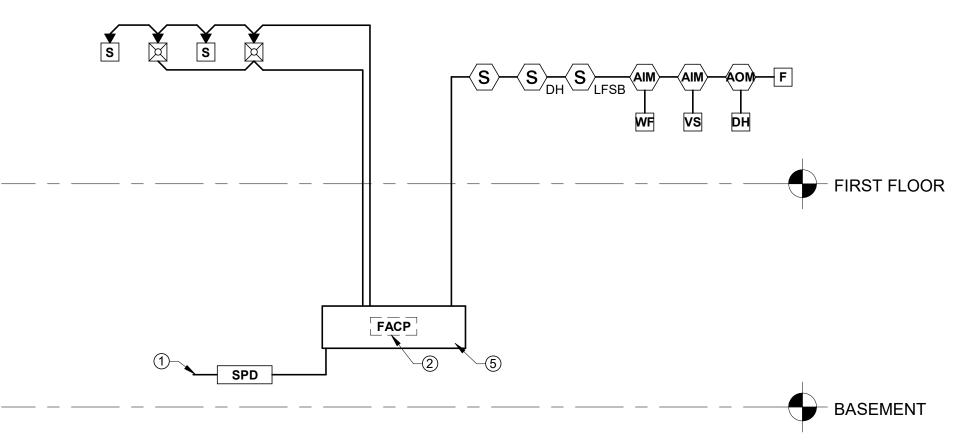
NOTIFICATION

NOTE: THIS MATRIX IS ONLY INTENDED TO SHOW THE MAJOR SYSTEM FUNCTIONS, SYSTEM SHALL ALSO PERFORM INPUTS/OUTPUTS REQUIRED BY NFPA 72 AND THE PRODUCTS' LISTING.

ALL OTHER TROUBLES 12

NOTIFICATION APPLIANCE CIRCUIT SHORT

FIRE ALARM INPUT/OUTPUT MATRIX



VA FORM 08-6231

1. TO DEDICATED 120VAC BRANCH CIRCUIT

2. EXISTING SIMPLEX 4100ES FIRE ALARM CONTROL PANEL IS LOCATED IN BASEMENT

EQUIPMENT ROOM A175B.

3. THIS RISER DIAGRAM IS INTENDED ONLY TO CAPTURE THE SYSTEM DESIGN INTENT, PANEL CONNECTIONS, AND GENERAL CIRCUIT ROUTING REQUIREMENTS. EXACT QUANTITIES AND TYPES OF DEVICES NECESSARY TO ACCOMPLISH THE DESIGN GOALS ARE NOT INDICATED. THE INTENT OF THIS RISER DIAGRAM IS TO INDICATE THE GENERAL SYSTEM CONFIGURATION AFTER SUCCESSFUL COMPLETION OF THE PROJECT.

FIRE ALARM RISER DIAGRAM

FIRE ALARM GENERAL NOTES

- 1. THE CONTRACTOR SHALL CAREFULLY REVIEW ALL APPLICABLE DESIGN CRITERIA. THESE DRAWINGS, AND THE PROJECT SPECIFICATIONS FOR IMPORTANT QUALIFICATION, DEFINITION, SUBMITTAL, PRODUCT, INSTALLATION, AND TESTING
- 2. ALL SUBMITTALS, INSTALLATION, AND TESTING SHALL BE COMPLETED IN A NEAT, WORKMAN-LIKE MANNER.
- 3. PRODUCT, DESIGN, INSTALLATION, AND TESTING ALTERNATE APPROACHES AND/OR SUBSTITUTIONS WILL BE CONSIDERED BY THE ENGINEER IF THE CONTRACTOR PROVIDES WRITTEN, WELL-DOCUMENTED, ENGINEERING-BASED SUBSTANTIATION FOR PROPOSED ALTERNATIVE.

APPLICABLE CODES AND STANDARDS: 1. INTERNATIONAL BUILDING CODE (2018)

- 2. NFPA 70 NATIONAL ELECTRIC CODE (2017)
- 3. NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (2019)

APPROVED DESIGN WITHOUT CONSULTING THE ENGINEER.

AUDIBILITY DESIGN:

- 1. BECAUSE OF UNPREDICTABLE BACKGROUND NOISES AND PROJECT CONDITIONS, THE AUDIBILITY DESIGN GOALS SHALL BE CONFIRMED BY MEASUREMENT WITH CALIBRATED TEST EQUIPMENT. IF RESULTS INDICATE THAT ADDITIONAL NOTIFICATION APPLIANCES, THE CONTRACTOR SHALL ADD THEM AT NO ADDITIONAL
- 2. THE EXPECTED AMBIENT SOUND PRESSURE LEVELS ARE AS FOLLOWS: A. OFFICES, RESTROOMS, RESIDENT ROOMS, CIRCULATION AREAS: 55 dBA
- B. MECHANICAL EQUIPMENT AREAS: 85 dBA 3. THE DESIGN GOAL IS FOR THE ALERT TONE PRECEDING THE VOICE MESSAGE TO REACH THE FOLLOWING SOUND PRESSURE LEVELS (PUBLIC MODE): A. OFFICES, RESTROOMS, RESIDENT ROOMS, CIRCULATION AREAS: 70 dBA
- B. MECHANICAL EQUIPMENT AREAS: 100 dBA 4. SPEAKERS MAY BE FIELD-LOCATED WITHIN 6 FT OF THE LOCATION INDICATED ON THE

- VISUAL NOTIFICATION DESIGN: 1. CLEAR STROBES SHALL BE PROVIDED WHERE INDICATED ON THE APPROVED
- 2. STROBES MAY BE FIELD-LOCATED WITHIN 3 FT OF THE LOCATION INDICATED ON THE APPROVED DESIGN WITHOUT CONSULTING THE ENGINEER. CONSULT WITH ENGINEER PRIOR TO RELOCATING STROBES MORE THAN 3 FT.

INITIATING DEVICES:

1. INITIATING DEVICES MAY BE FIELD-LOCATED WITHIN 3 FT OF THE LOCATION INDICATED ON THE APPROVED DESIGN WITHOUT CONSULTING THE ENGINEER. CONSULT WITH ENGINEER PRIOR TO RELOCATING INITIATING DEVICES MORE THAN 3

CIRCUITS AND CONDUIT:

- 1. ALL CIRCUITS SHALL BE PROVIDED IN CONDUIT IN ACCORDANCE WITH NFPA 70 AND
- THE CONDUIT LISTING. 2. NEW SIGNALING LINE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS SHALL BE ARRANGED SO THAT A SINGLE FAULT DOES NOT CAUSE THE LOSS OF ADDRESSABLE DEVICES ON MORE THAN ONE SMOKE COMPARTMENT.

- 1. ALL EQUIPMENT SHALL BE INSTALLED TIGHT TO THE BUILDING STRUCTURE AND SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE BUILDING STRUCTURE
- UNLESS NOTED OTHERWISE. 2. THE CONTRACTOR SHALL NOT APPRECIABLY DEVIATE FROM THE APPROVED DESIGN WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.

TESTING:

- 1. UNLESS SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR SHALL PERFORM ALL ACCEPTANCE TESTING IN ACCORDANCE WITH THE APPLICABLE DESIGN CRITERIA AND THE EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
- 2. UNLESS SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR SHALL PERFORM TESTING AND PROVIDE DOCUMENTATION PRIOR TO REQUESTING ENGINEER'S PRESENCE TO WITNESS TESTING.

FIRE ALARM LEGEND FACP EXISTING SIMPLEX 4100ES FIRE ALARM CONTROL PANEL SPD SURGE PROTECTIVE DEVICE FIRE ALARM PULL STATION ADDRESSABLE INPUT MODULE ADDRESSABLE OUTPUT MODULE WATERFLOW SWITCH VALVE SUPERVISORY SWITCH WALL MOUNTED STROBE DOOR HOLDERS SPEAKER SPEAKER STROBE SMOKE DETECTOR - SPOT TYPE SYMBOL MODIFIERS CEILING MOUNTED CANDELA RATING

WATT TAP

WP WEATHER PROOF

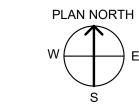
LOW FREQUENCY SPEAKER

LFSB | LOW FREQUENCY SOUNDER BASE

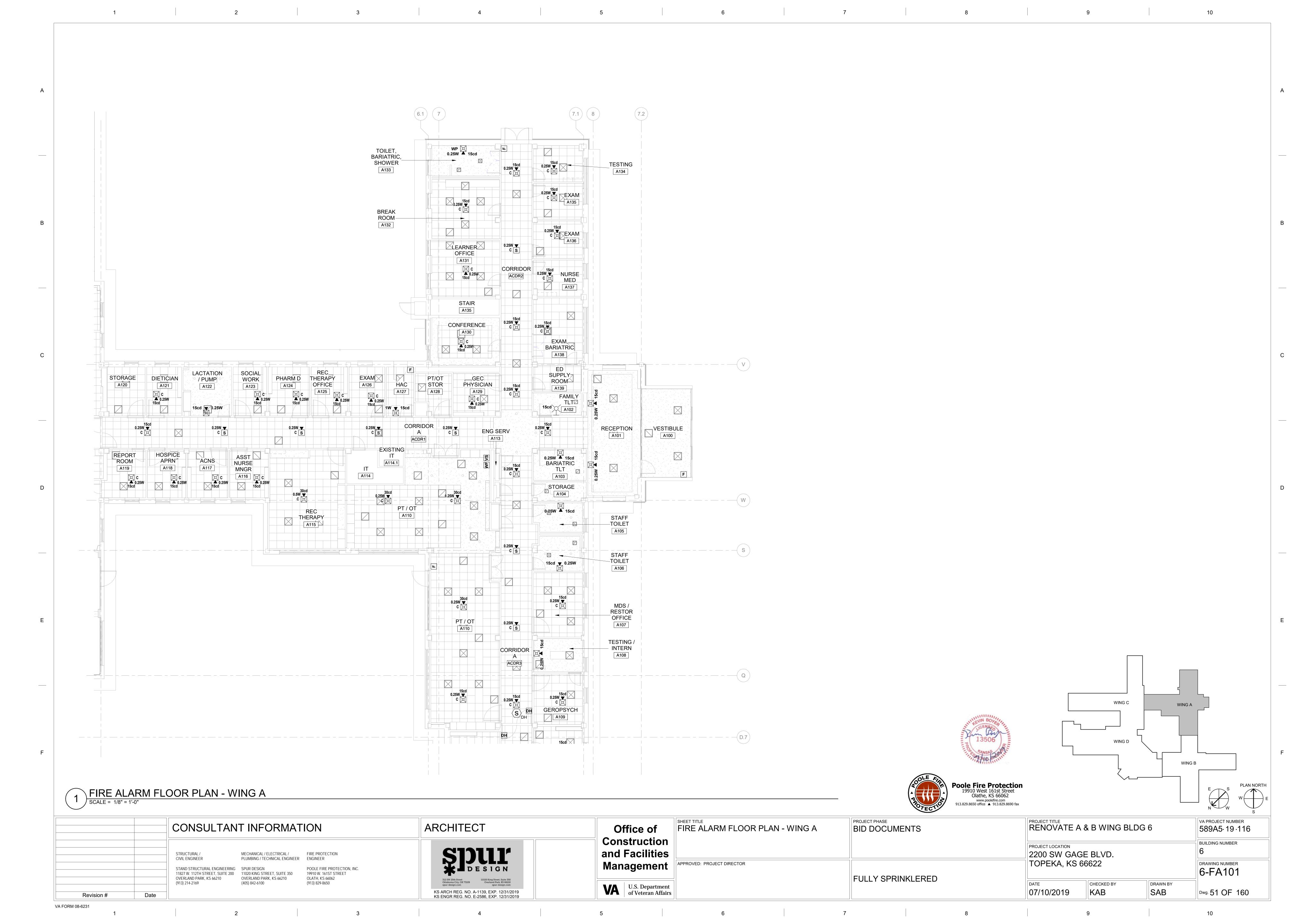
DOOR HOLD RELEASE

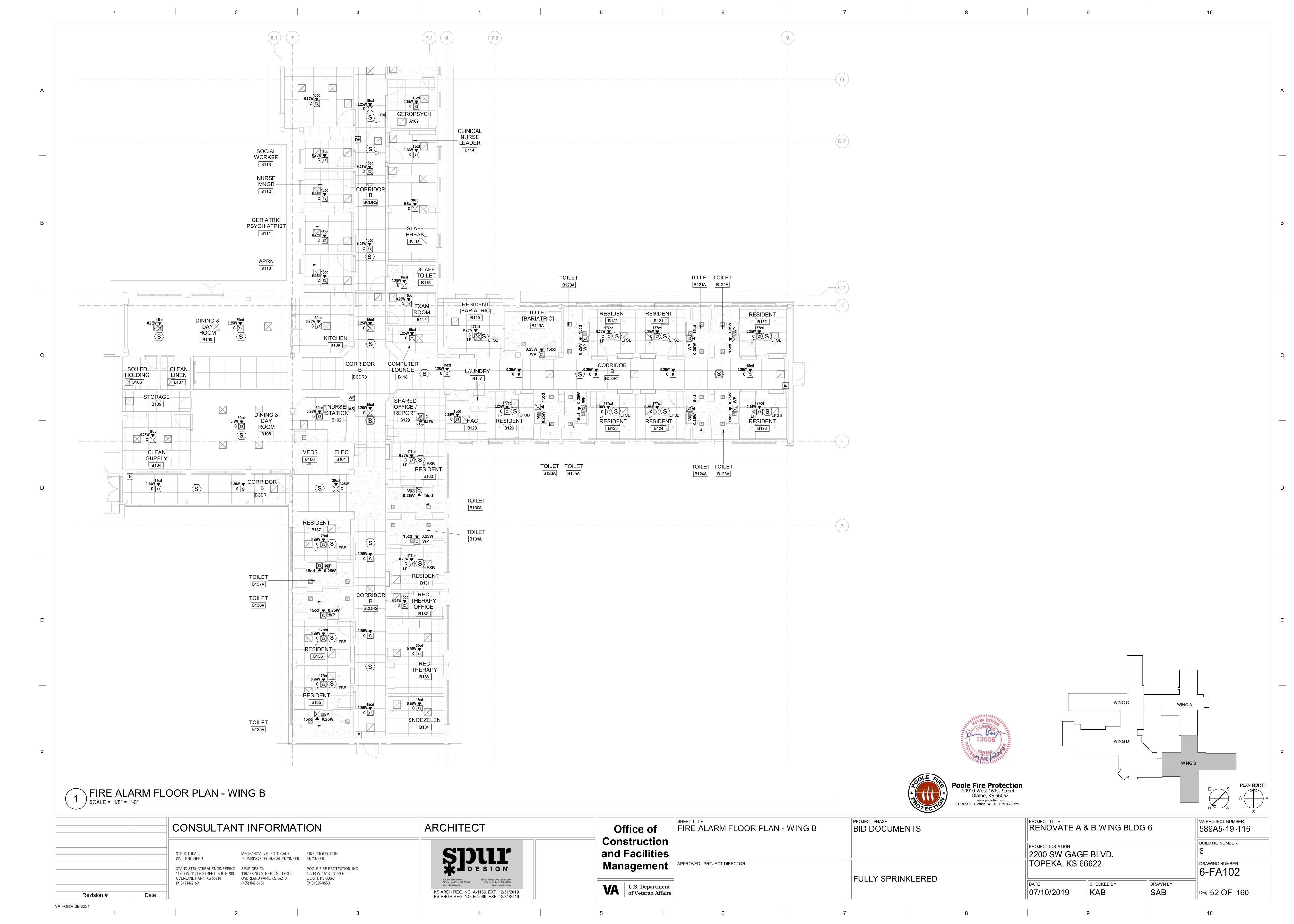




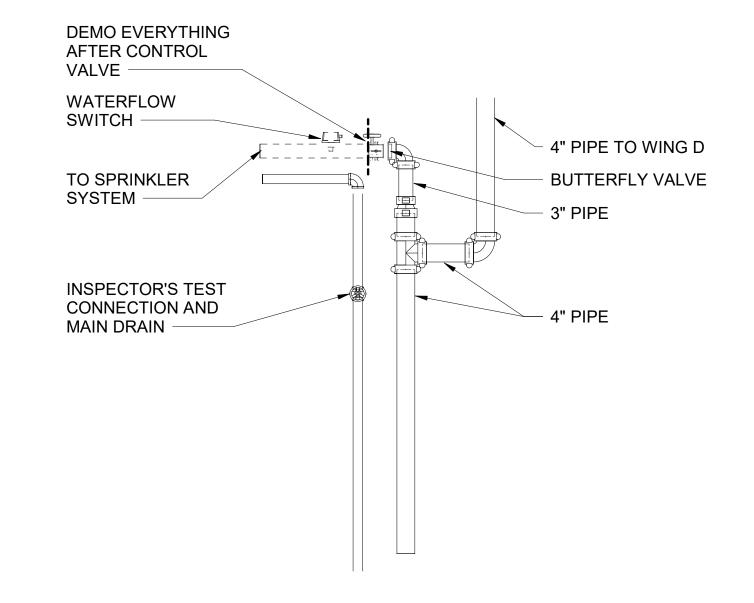


	CONSULTANT INFORMATION	ARCHITECT	Office of	FIRE ALARM GENERAL NOTES, LEGEND AND MATRIX	PROJECT PHASE BID DOCUMENTS	PROJECT TITLE RENOVATE A & B WING BLDG 6	VA PROJECT NUMBER 589A5-19-116
	STRUCTURAL / MECHANICAL / ELECTRICAL / FIRE PROTECTION CIVIL ENGINEER PLUMBING / TECHNICAL ENGINEER ENGINEER	SDUL	Construction and Facilities			PROJECT LOCATION 2200 SW GAGE BLVD.	BUILDING NUMBER 6
	STAND STRUCTURAL ENGINEERING SPUR DESIGN POOLE FIRE PROTECTION, INC. 11827 W. 112TH STREET, SUITE 200 11020 KING STREET, SUITE 350 19910 W. 161ST STREET OVERLAND PARK, KS 66210 OLATH, KS 66062	DESIGN	Management	APPROVED: PROJECT DIRECTOR	FULLY SPRINKLERED	TOPEKA, KS 66622	DRAWING NUMBER 6-FA001
Revision # Dat	(913) 214-2169 (405) 842-6100 (913) 829-8650 e	312 SW 25th Street Oklahoma City, OK 73109 spur-design.com KS ARCH REG. NO. A-1139, EXP. 12/31/2019 KS ENGR REG. NO. E-2586, EXP. 12/31/2019	VA U.S. Department of Veteran Affairs				SAB Dwg. 50 OF 16

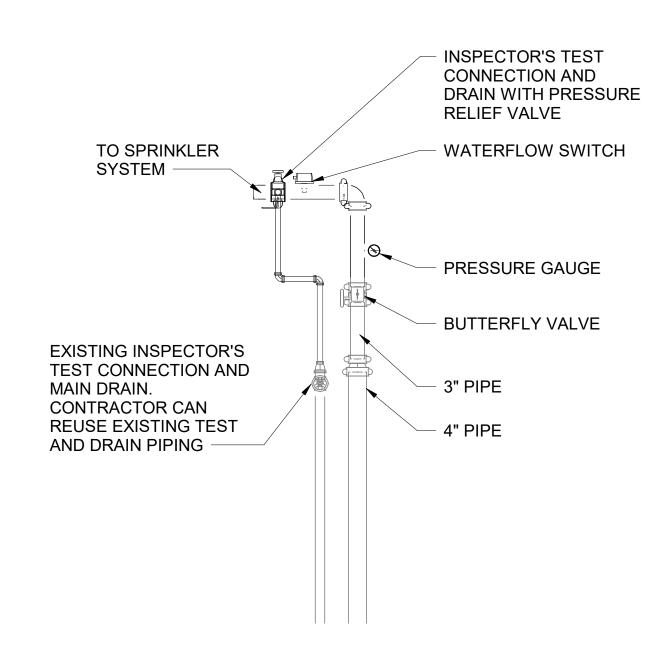






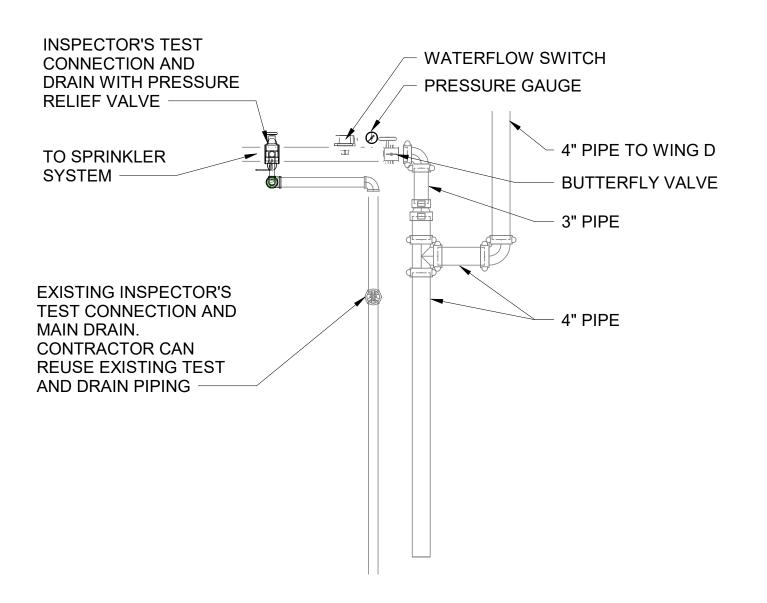


EXISTING SPRINKLER RISER ROOM B102



NEW SPRINKLER RISER ROOM A110 SCALE = 1/2" = 1'-0"

VA FORM 08-6231



NEW SPRINKLER RISER ROOM B102 SCALE = 1/2" = 1'-0"

FIRE SUPPRESSION GENERAL NOTES

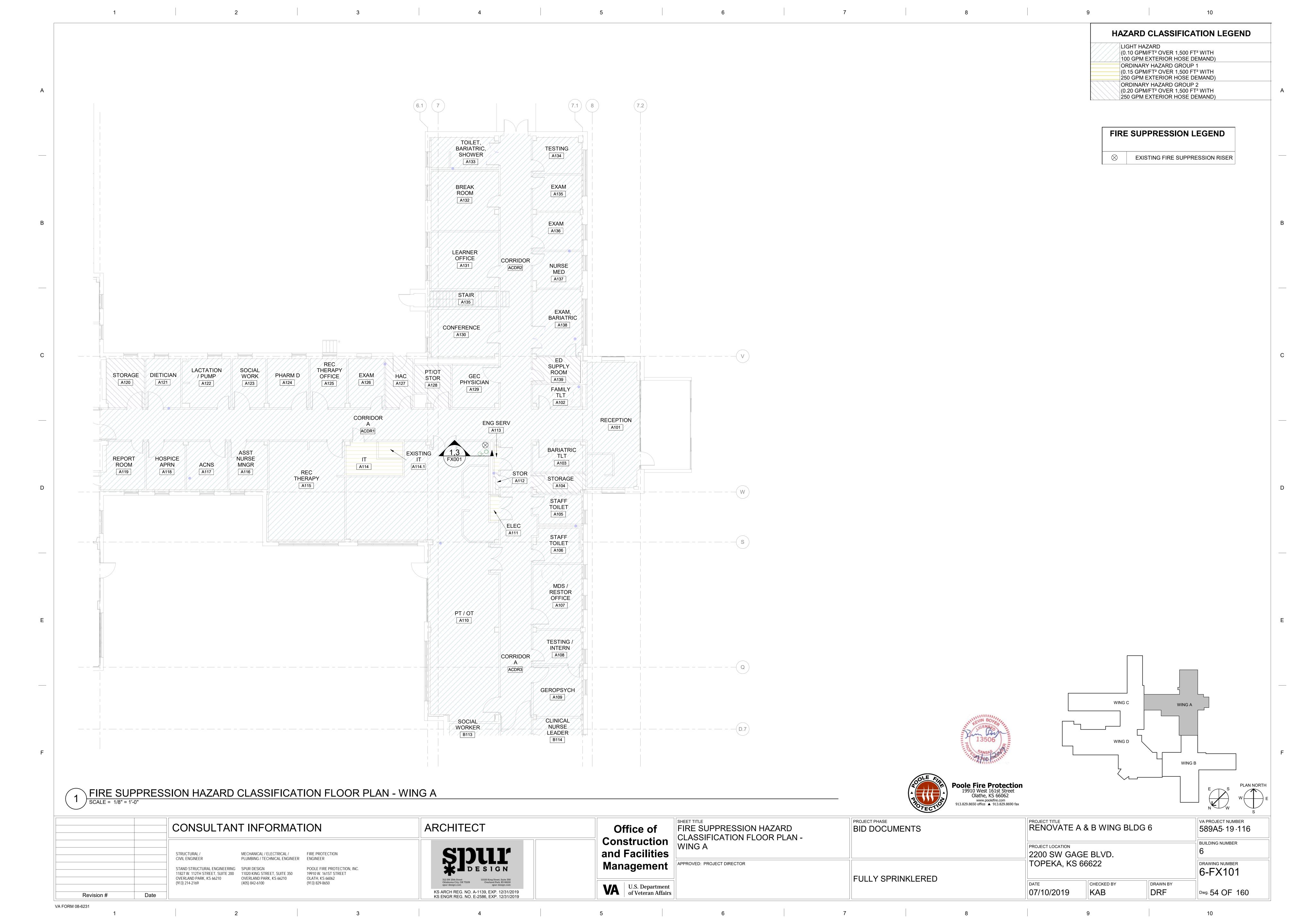
- 1. THE DESIGN AND INSTALLATION OF THE FIRE PROTECTION, FIRE SUPPRESSION SYSTEM MUST BE IN ACCORDANCE WITH U.S. DEPARTMENT OF VETERANS AFFAIRS FIRE PROTECTION DESIGN MANUAL, SEVENTH EDITION, DECEMBER 2015; NFPA 13: STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2019 EDITION; AND NFPA 291: RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS, 2019
- EDITION. 2. THIS INFORMATION HAS BEEN PREPARED TO PROVIDE GUIDANCE FOR BIDDING. THE CONTRACTOR SHALL BE THE ENGINEER OF RECORD. THE FIRE PROTECTION CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING A COMPLETE AND FULLY OPERABLE SYSTEM WHICH SHALL BE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE CODES AND STANDARDS. THE WORK THAT IS INDICATED IN THIS DOCUMENT IS AN OVERVIEW OF THE PROJECT, INTENDED TO ESTABLISH THE MINIMUM SCOPE REQUIREMENTS FOR THE PROJECT AS WELL AS THE CONTRACTOR'S RESPONSIBILITIES. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF WORKING DRAWINGS, EQUIPMENT, AND CALCULATIONS TO THE OWNER'S REPRESENTATIVE AND AHJ FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION WITH THEIR ENGINEERS
- 3. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, MEASUREMENTS AND LOCATIONS OF EXISTING FACILITIES, UTILITIES, EQUIPMENT AND OTHER EXISTING CONDITIONS WHICH MAY AFFECT CONSTRUCTION. BASE CIVIL ENGINEERING HAS MADE EVERY ATTEMPT TO VERIFY THIS INFORMATION. HOWEVER, IN THE EVENT OF DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS, CONTACT THE CONTRACTING OFFICER IMMEDIATELY.
- 4. SPRINKLER CONTRACTOR SHALL COORDINATE LOCATIONS OF FIRE PROTECTION COMPONENTS INCLUDING PIPING, ALARMS, DRAINS, SPRINKLERS, TEST POINTS, ETC., WITH ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS. OBSTRUCTIONS TO SPRINKLER DISCHARGE SHALL BE CONSIDERED DURING INSTALLATION. DO NOT INSTALL SPRINKLER PIPING BELOW EQUIPMENT OR WITHIN CLEARANCE SPACES FOR MECHANICAL AND ELECTRICAL EQUIPMENT. SPRINKLERS SHALL BE INSTALLED UNDER OBSTRUCTIONS IN ACCORDANCE WITH NFPA 13.
- 5. THE SPRINKLER SYSTEM MUST BE ZONED BY SMOKE COMPARTMENT. THE SPRINKLER RISER LOCATED IN WING A MUST ONLY FEED WING A AND THE SPRINKLER RISER LOCATED IN WING B MUST ONLY FEED WING B.
- 6. THE EXISTING 4-INCH FEED MAIN THAT SUPPLIES WING D MUST REMAIN IN SERVICE DURING THIS CONSTRUCTION PROJECT.
- 7. MATERIALS AND ACCESSORIES NECESSARY MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE NFPA CODES AND STANDARDS, PROJECT SPECIFICATIONS, AND BE UL LISTED OR FM APPROVED FOR FIRE PROTECTION USE, UNLESS OTHERWISE NOTED.
- 8. ALL VALVES INSIDE TO BE PROVIDED WITH ELECTRONIC TAMPER SWITCHES WIRED TO THE FACU. VALVES IN NORMAL CLOSED POSITION SHALL BE PROVIDED WITH TAMPER TO ACTIVATE IN THREE TURNS OR LESS. ALL VALVES OUTSIDE TO BE SUPERVISED WITH LOCK AND CHAIN.
- 9. ALL HANGERS MUST BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 13 AND PROJECT SPECIFICATIONS. 10. LOCATION AND INSTALLATION OF PIPE SUPPORTS (HANGERS, VERTICAL RESTRAINTS, AND GUIDES) SHALL MEET THE
- REQUIREMENTS OF NFPA 13 AND THE SPECIAL LISTING REQUIREMENTS (IF APPLICABLE) OF THE PIPE AND SUPPORTS. 11. THE INSPECTOR'S TEST VALVES MUST BE LOCATED NO MORE
- THAN 7 FEET AFF. 12. APPLICABLE UL CONSTRUCTION DETAILS AND SYSTEMS SHALL BE USED WHERE FIRE RATED BARRIERS ARE PENETRATED BY
- SPRINKLER PIPING.
- 13. ALL VALVES (DRAINS, INSPECTOR'S TEST, CONTROL) MUST BE IDENTIFIED AS REQUIRED BY NFPA 13.
- 14. PIPING MUST BE ARRANGED FOR FLUSHING. READILY REMOVABLE FITTINGS MUST BE PROVIDED AT THE END OF ALL CROSS MAINS.
- 15. ALL PENDENT SPRINKLERS MUST BE INSTALLED IN THE CENTER OF THE CEILING TILES. 16. DRAINS MUST BE LOCATED TO PROVIDE DRAINAGE IN
- ACCORDANCE WITH NFPA 13. ALL DRAINS AND TEST CONNECTIONS MUST DISCHARGE TO THE EXTERIOR OF THE BUILDING ON TO A SPLASH BLOCK OR PAVEMENT, AND SHALL NOT DISCHARGE ACROSS PATHS OF EGRESS.
- 17. ALL SPRINKLER SYSTEM ALARM INITIATING AND SUPERVISORY DEVICES MUST BE CONNECTED TO THE FIRE ALARM SYSTEM.
- 18. ADDITIONAL SPRINKLERS MAY BE REQUIRED UNDER DUCT WORK TO PROVIDE ADEQUATE COVERAGE PER NFPA 13.
- 19. A LISTED RELIEF VALVE MUST BE PROVIDED IN ACCORDANCE WITH NFPA 13, SECTION 8.1.2 FOR THE SPRINKLER SYSTEM.
- 20. AN AIR VENT MUST BE PROVIDED IN ACCORDANCE WITH NFPA 13, SECTION 8.1.5 AND SECTION 16.7 FOR THE SPRINKLER SYSTEM.
- 21. THIS BUILDING WILL HAVE A WET PIPE AUTOMATIC SPRINKLER SYSTEM WHICH WILL REQUIRE ALL AREAS OF THE BUILDING TO BE MAINTAINED ABOVE 40 DEGREES F.
- 22. PROVIDE SPRINKLER PROTECTION WITHIN ALL COMBUSTIBLE CONCEALED SPACES.
- 23. DEMOLISH THE SPRINKLER SYSTEM IN ALL AREAS OF WING A AND B FROM THE SPRINKLERS BACK TO THE SPRINKLER RISER BUTTERFLY VALVES. ALL DEMOLISHED EQUIPMENT AND MATERIALS MUST BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
- 24. INSTALL NEW CHECK VALVES, WATERFLOW SWITCHES, AND INSPECTOR'S TEST CONNECTIONS WITH PRESSURE RELIEF VALVE.

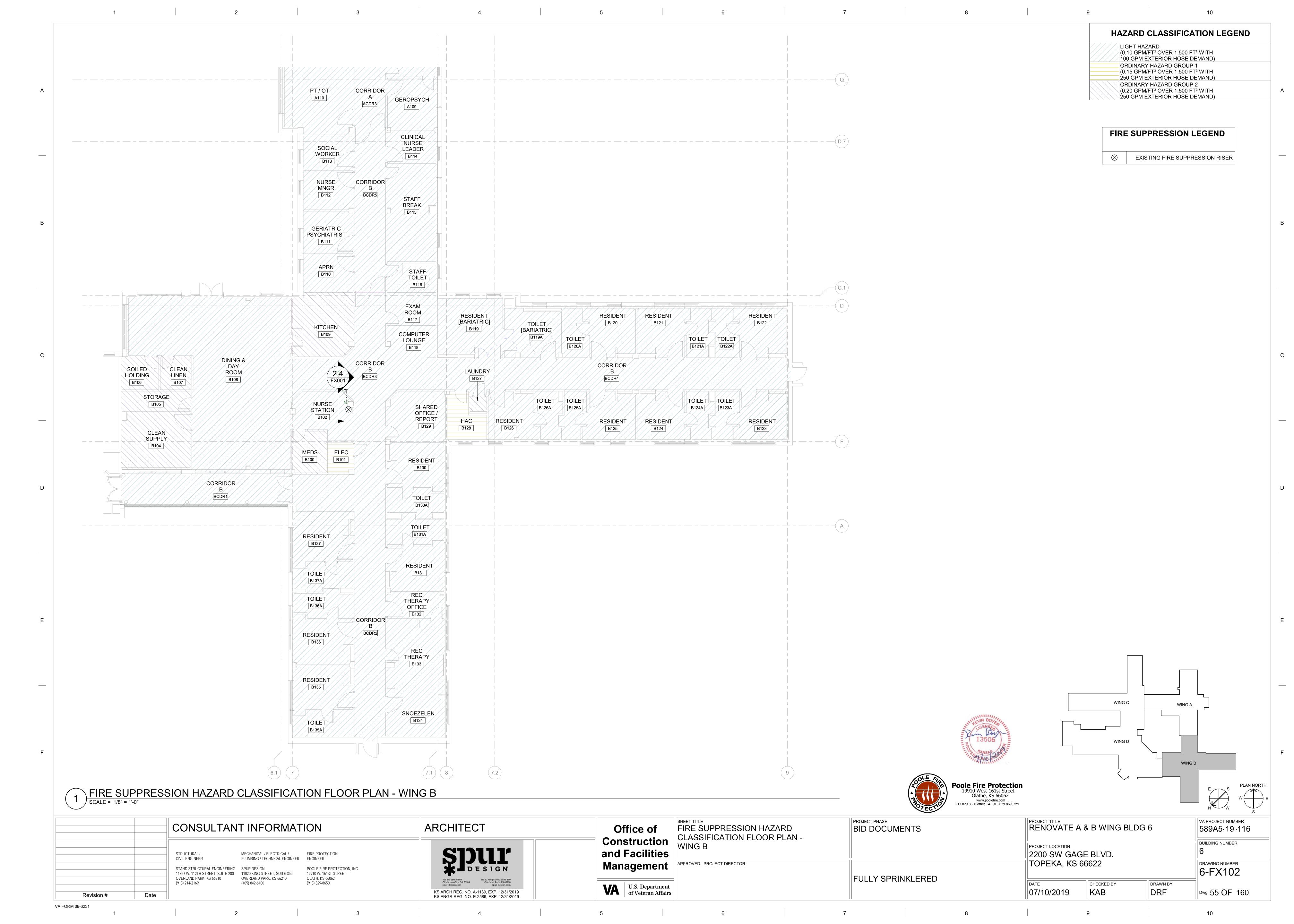






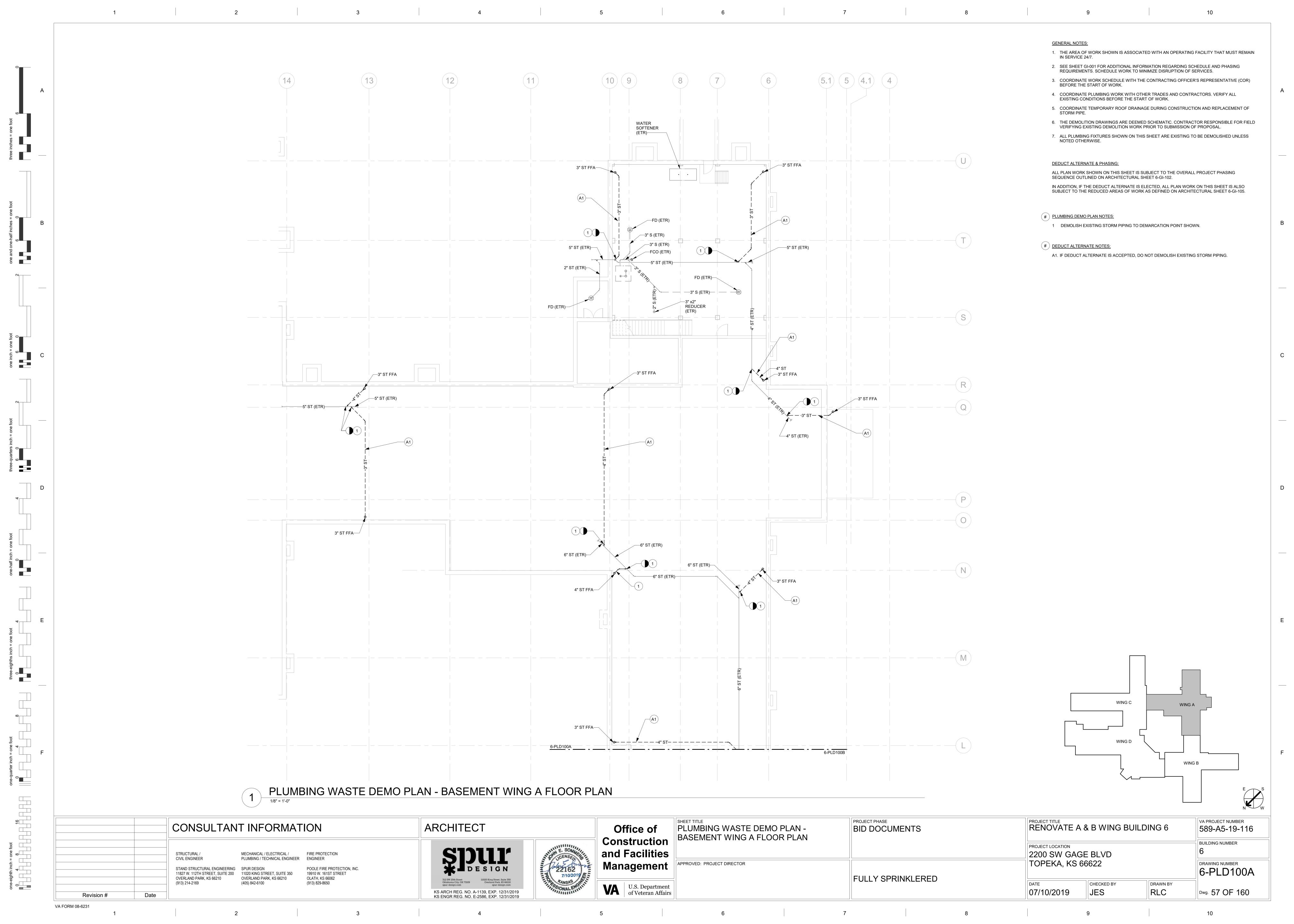
					VEC.				S
	CONSULTANT INFORMATION	ARCHITECT	Office of	FIRE SUPPRESSION GENERAL	PROJECT PHASE BID DOCUMENTS	PROJECT TITLE RENOVATE A	& B WING BLD	DG 6	VA PROJECT NUMBER 589A5-19-116
	STRUCTURAL / MECHANICAL / ELECTRICAL / FIRE PROTECTION	SINII	Construction and Facilities	NOTES		PROJECT LOCATION	E RI VD		BUILDING NUMBER
	CIVIL ENGINEER PLUMBING / TECHNICAL ENGINEER ENGINEER STAND STRUCTURAL ENGINEERING SPUR DESIGN POOLE FIRE PROTECTION, INC. 11827 W. 112TH STREET, SUITE 200 11020 KING STREET, SUITE 350 19910 W. 161ST STREET	DESIGN		APPROVED: PROJECT DIRECTOR		2200 SW GAGE BLVD. TOPEKA, KS 66622			DRAWING NUMBER 6-FX001
Revision # Date	OVERLAND PARK, KS 66210 OVERLAND PARK, KS 66210 OLATH, KS 66062 (913) 214-2169 (405) 842-6100 (913) 829-8650	312 SW 25th Street Oklahoma City, OK 73109 Spur-design.com KS ARCH REG. NO. A-1139, EXP. 12/31/2019 KS ENGR REG. NO. E-2586, EXP. 12/31/2019	VA U.S. Department of Veteran Affairs		FULLY SPRINKLERED	DATE 07/10/2019	CHECKED BY	DRAWN BY	Dwg. 53 OF 160

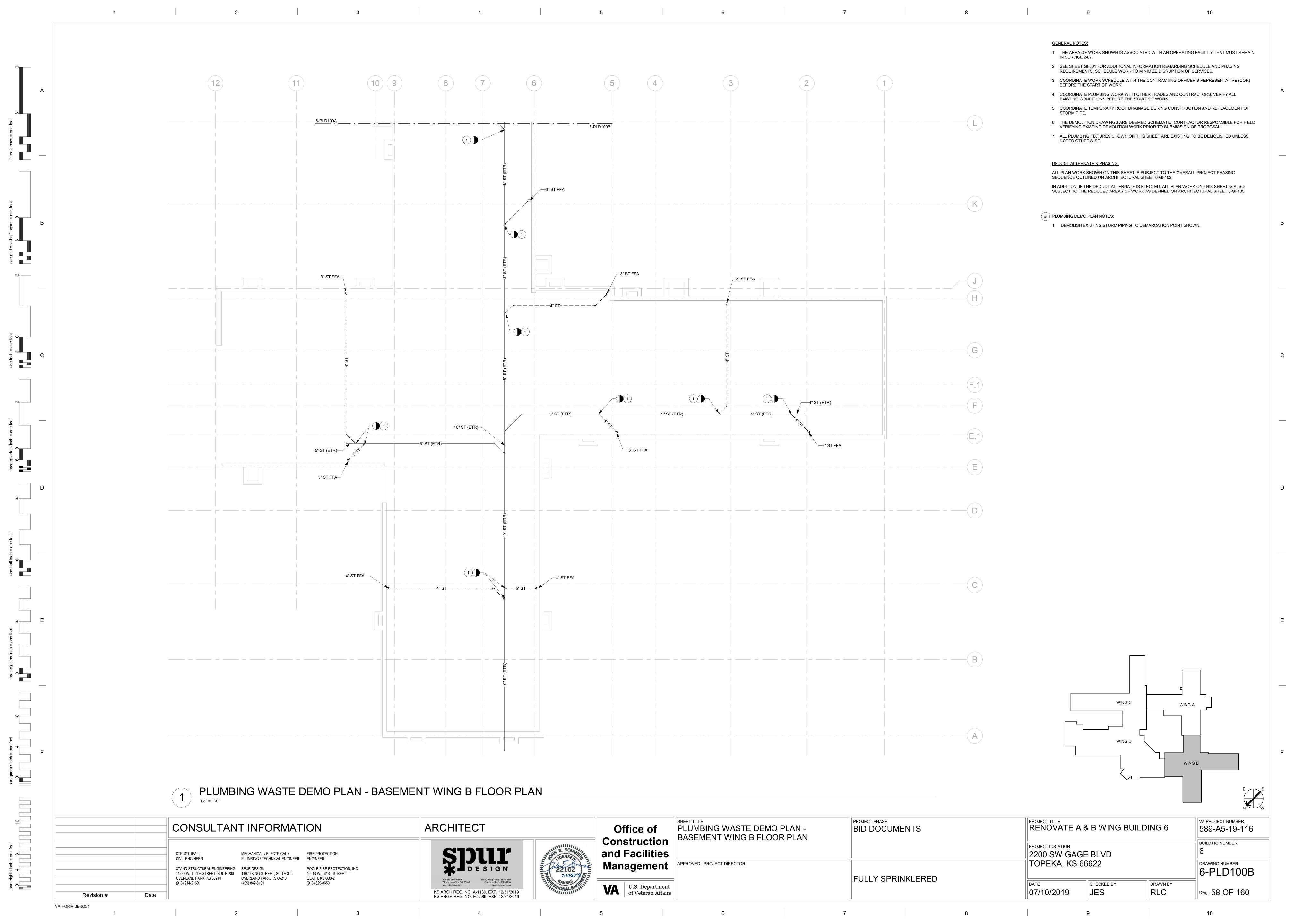


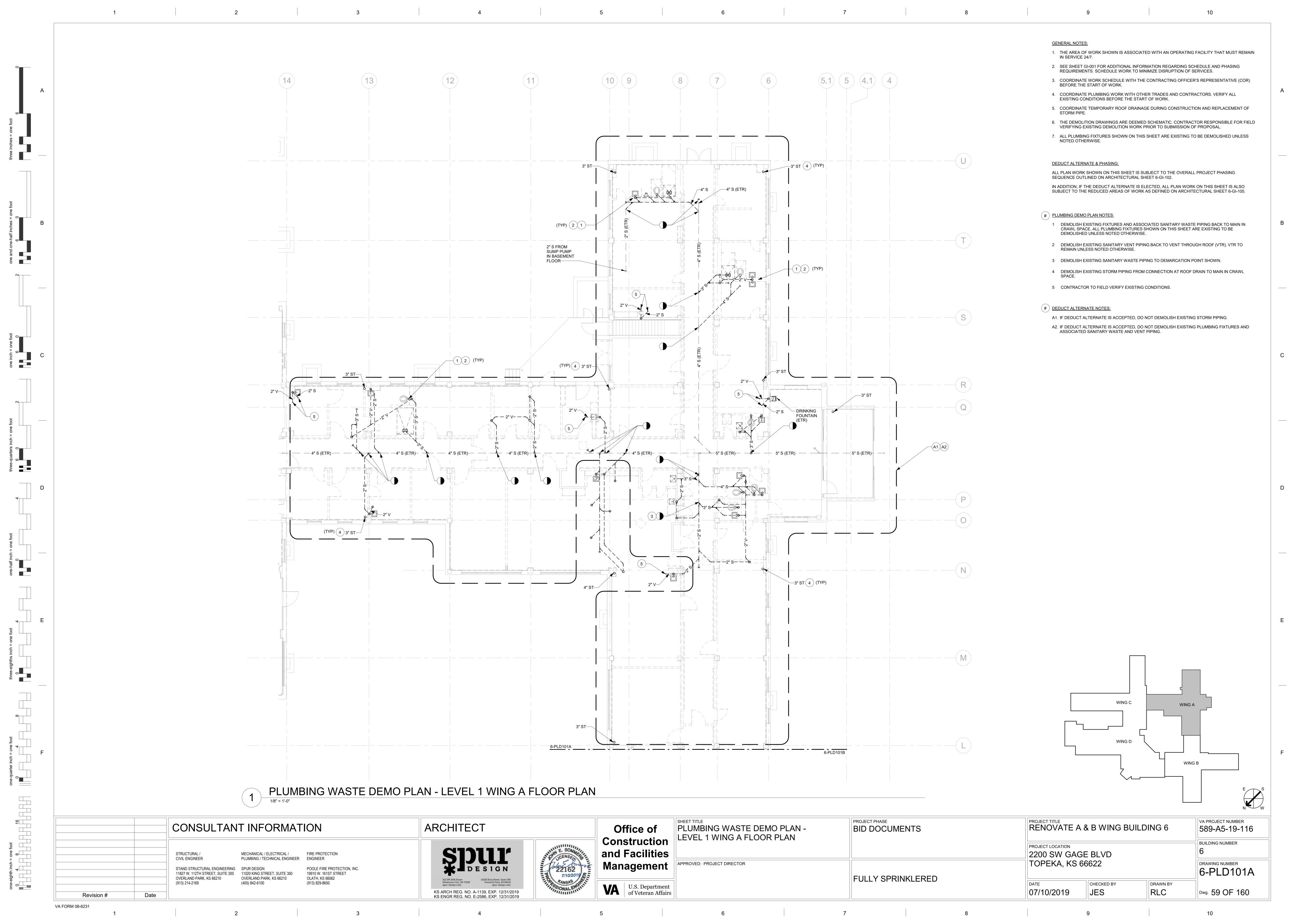


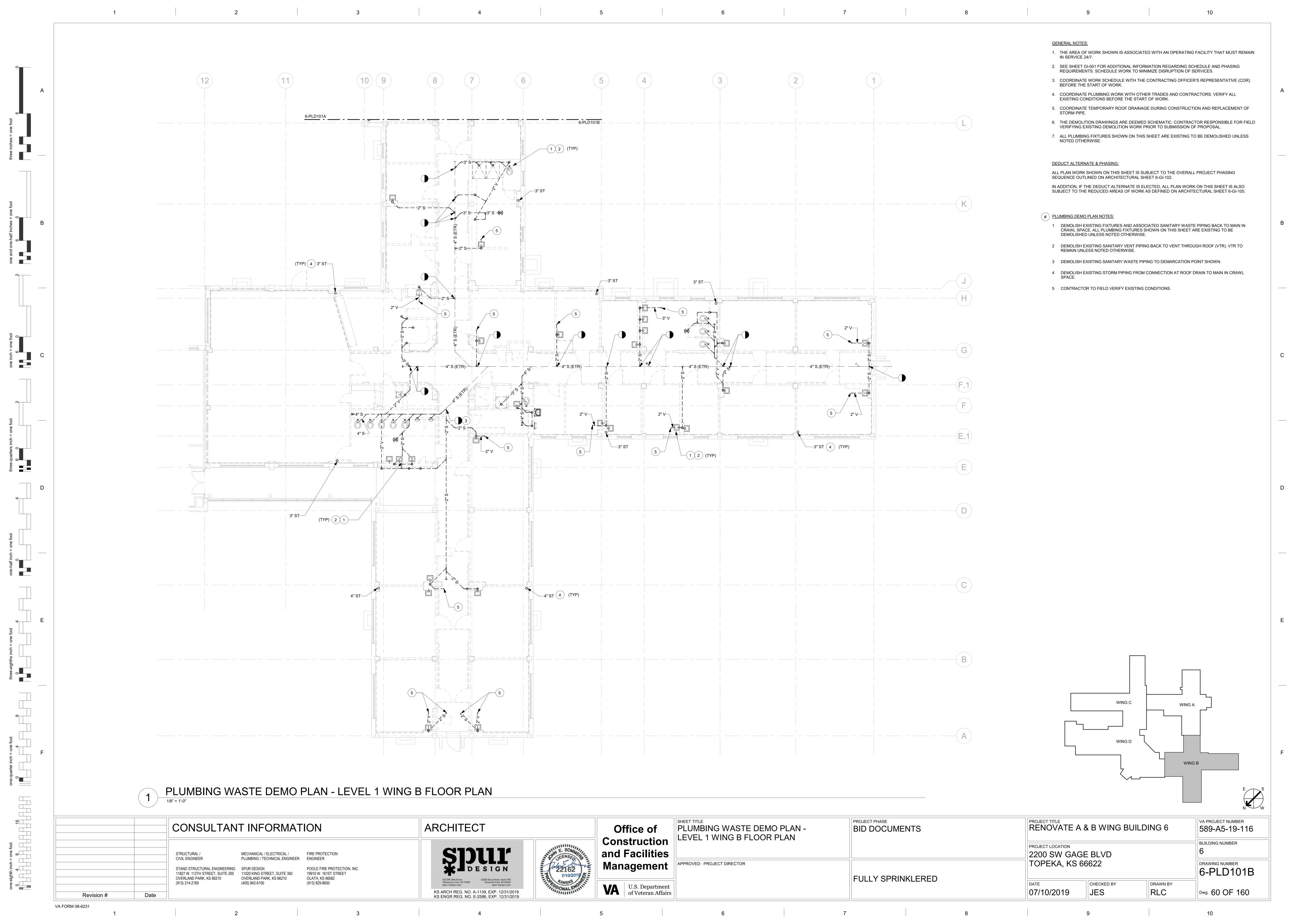
PIPING SYMBOLS **GENERAL PLUMBING SYMBOLS VALVE SYMBOLS ABBREVIATIONS** EXISTING PIPING CLEANOUTS ANGLE GLOBE VALVE L/S LITER PER SECOND AW— ACID WASTE - ABOVE FLOOR (AW) A/E ARCHITECT / ENGINEER EXISTING PIPING TO BE REMOVED LA LABORATORY AIR AREA DRAIN/ACCESS DOOR CLEANOUT AFF ABOVE FINISH FLOOR - —AW— — ACID WASTE - BELOW FLOOR (AW) EXISTING PIPING TO REMAIN LBS/HR POUNDS PER HOUR AFG ABOVE FINISH GRADE LCW LABORATORY COLD WATER AIR GAP DOUBLE EXTERIOR CLEANOUT (ECO) —— AUTOMATIC AIR VENT —AV——— ACID VENT (AV) LHW LABORATORY HOT WATER ACCESS PANEL LNG LIQUID NATURAL GAS AUTOMATIC FLOW CONTROL VALVE AUTOMATIC SPRINKLER -ACD----- AUXILIARY CONDENSATE DRAIN (ACD) LOX LIQUID OXYGEN ASD ADJUSTABLE SPEED DRIVES EXTERIOR CLEANOUT (ECO) ——FOD——— FUEL OIL DISCHARGE LV LABORATORY VACUUM ASD AUTOMATIC SPRINKLER DRAIN BALL VALVE LW LOW WATER CONDENSATE DRAIN (CD) ASHRAE AMERICAN SOCIETY OF HEATING, FLOOR CLEANOUT (FCO) — FUEL OIL SUPPLY (FOS) REFRIGERATION, AIR CONDITIONING WALL CLEANOUT (WCO) ENGINEERS EVACUATION (EV) BUTTERFLY VALVE - - FOR - - FUEL OIL RETURN (FOR) AMERICAN SOCIETY OF ECHANICAL M METER ENGINEERS FUEL OIL VENT (FOV) —ID——— INDIRECT DRAIN (ID) CHECK VALVE MA MEDICAL AIR ASPE AMERICAN SOCIETY OF PLUMBING MAV MANUAL AIR VENT ENGINEERS — LPG — LIQUIFIED PETROLEUM GAS (LPG) -GW----- GREASE WASTE - ABOVE FLOOR (GW) MBH 1000 BTUH ASR AUTOMATIC SPRINKLER RISER DRAINS AND TRAPS GATE VALVE MED MEDICAL MEDIUM PRESSURE NATURAL GAS (MPG) MER MECHANICAL EQUIPMENT GREASE WASTE - BELOW FLOOR (GW) AW ACID WASTE GATE VALVE WITH 3/4 " HOSE ADAPTER ROOM MH MANHOLE FLOOR SINK (FS), SIZE & TYPE — MPG — MEDIUM PRESSURE NATURAL GAS ON ROOF (MPG) SOIL PIPING - ABOVE FLOOR (S) MOU MEMORANDUM OF BFP REDUCED PRESSURE BACKFLOW GLOBE VALVE UNDERSTADING - NATURAL GAS (G) - ----S--- SOIL PIPING - BELOW FLOOR (S) PREVENTER MSB MOP SERVICE BASIN BHP BREAK HORSEPOWER FLOOR DRAIN (FD), SIZE & TYPE TRAP PRIMER LINE (T) MV MEDICAL VACUUM — G— MATURAL GAS BELOW GRADE (G) BSP BLACK STEEL PIPE BT BATHTUB MANUAL AIR VENT TRAP PRIMER LINE - BELOW SLAB (T) BTU BRITISH THERMAL UNIT ROOF DRAIN (RD), SIZE & TYPE N2 NITROGEN BTUH BRITISH THERMAL UNIT PER HOUR DENTAL − —VBF — — VENT BELOW FLOOR (VBF) N20 NITROUS OXIDE MODULATING CONTROL VALVE INDUSTRIAL AIR NC NORMALLY CLOSED INVERTED BUCKET TRAP SET INCLUDING - - - VBG-- - VENT BELOW GRADE (VBG) NG NATURAL GAS PIPING ACCESSORIES NIC NOT IN CONTRACT _____ LA ____ LABORATORY AIR PRESSURE REDUCING VALVE VENT PIPING (V) CA COMPRESSED AIR NO NORMALLY OPEN CGA COMPRESSED GAS ASSOCIATION NOM. NOMINAL FLOAT & THERMOSTATIC TRAP SET INCLUDING —W——— WASTE PIPING - ABOVE FLOOR (W) LABORATORY VACUUM CFM CUBIC FEET PER MINUTE NPW NON POTABLE WATER PIPING ACCESSORIES CI CAST IRON CO CLEANOUT NTS NOT TO SCALE — W— WASTE PIPING - BELOW FLOOR (W) OA———ORAL EVACUATION PRESSURE REGULATING VALVE CS CLINICAL SINK CV CONTROL VALVE MEDICAL GASES O OXYGEN OC ON CENTER PRESSURE RELIEF VALVE OD OUTSIDE DIAMETER **EQUIPMENT** DCW DOMESTIC COLD WATER OFD OVERFLOW DRAIN DFU DRAINAGE FIXTURE UNITS OR OPERATING ROOM DHW DOMESTIC HOT WATER OVFL OVERFLOW TEST PLUG (PRESSURE/TEMPERATURE) BACKFLOW PREVENTER DHWR DOMESTIC HOT WATER RETURN WATER DHWS DOMESTIC HOT WATER SUPPLY ———AI———— MEDICAL AIR INTAKE (AI) DI DEIONIZED WATER PRESSURE GAUGE PA PASCAL DN DOWN THERMOSTATIC MIXING VALVE MEDICAL AIR (MA) DOE DEPARTMENT OF ENERGY PD PRESSURE DROP OR DIFFERENCE —— - —— DOMESTIC COLD WATER PDI PLUMBING AND DRAINAGE DS DOWNSPOUT MEDICAL VACUUM (MV) INSTITUTE
PG PRESSURE GAGE - RECIRCULATION PUMP DW DISHWASHER ———— – – DOMESTIC HOT WATER DWG DRAWING THREE-WAY MODULATING CONTROL VALVE VE MEDICAL VACUUM EXHAUST (VE) DWH DOMESTIC WATER HEA PP PLUMBING PUMP - DOMESTIC HOT WATER RECIRC. DWR DRINKING WATER RETURN PPM PARTS PER MILLION THERMOMETER DWS DRINKING WATER SUPPLY PRS PRESSURE REDUCING STATION NITROGEN (N) PRV PRESSURE REDUCING VALVE THREE-WAY TWO POSITION CONTROL VALVE —FCW——— FILTERED COLD WATER DWV DRAIN WASTE VENT PSI POUNDS PER SQUARE INCH NO NITROUS OXIDE (NO) FIRE PROTECTION (FP) PSIA POUNDS PER SQUARE INCH WATER METER ATMOSPHERE TWO POSITION CONTROL VALVE **ELEVATION** ——O——— OXYGEN (O) PSIG POUNDS PER SQUARE INCH -NPW ---- NON POTABLE WATER (NPW) EMCS ENERGY MONOSERRAT + NONFREEZE WALL HYDRANT (NW) AND CENTRAL SYSTEM PTRV PRESSURE TEMPERATURE RELIEF MEDICAL GAS OUTLET (TYPE) -SCW-SOFTENED COLD WATER (SCW) ENVIROMENTAL PROTECTION AGENCY VALVE ANNOTATION EPACT ENERGY POLICY ACT PW POTABLE WATER HOSE BIBB (HB) TEMPERED WATER SUPPLY **ESCUTCHEON** STORM ESH EMERGENCY SHOWER BUILDING NO. WHERE EQUIPMENT TWR TEMPERED WATER RETURN EXPANSION TANK IS LOCATED. ETR EXISTING TO REMAIN RD ROOF DRAIN OST OVERFLOW STORM DRAIN - ABOVE FLOOR (OST) -WS----- WATER SERVICE (WS) RDL ROOF DRAIN LEADER EWH ELECTRIC WATER HEATER FITTINGS AND ACCESSORIES EQUIPMENT ABBREVIATION (PUMP) EWS EYE WASH STATION ROOF LEADER EWS/SH EYE WASH/DRENCH SHOWER RP RECIRCULATION PUMP —ST——— STORM DRAIN - ABOVE FLOOR (ST) ANCHOR - PUMP NO.3 IN BUILDING NO.26 EX EXISTING RO REVERSE OSMOSIS WATER — ST— STORM DRAIN - BELOW FLOOR (ST) RWL RAIN WATER LEADER CAP TYPICAL UNIT NO. SUMP OR SEWAGE PUMP DISCHARGE (SPD) CONNECTION - BOTTOM, 45° OR 90° **FAHRENHEIT** SAN SANITARY SEWER FCO FLOOR CLEANOUT FCW FILTERED COLD WATER SMACNA SHEET METAL AND AIR PLUMBING PLAN NOTE CALL OUT CONNECTION - SIDE **GENERAL EQUIPMENT** CONDITIONING CONTRACTORS FD FLOOR DRAIN FDC FIRE DEPARTMENT (HOSE) CONNECTION NATIONAL ASSOCIATION __ CONNECTION - TOP, 45° OR 90° MECHANICAL OR FIRE SPRINKLER PLAN NOTE CALL OUT SCFM STANDARD CUBIC FOOT/MINUTE FFA FROM FLOOR ABOVE FFB FROM FLOOR BELOW SCW SOFTENED COLD WATER DIRECTION OF FLOW FM FLOW METER SDMH STORM DRAIN MANHOLE BATHTUB COUNTER TOP LAVATORY & TYPE ELECTRICAL OR FIRE ALARM PLAN NOTE CALL OUT FOP FUEL OIL PUMP SMH SANITARY MANHOLE FOR FUEL OIL RETURN SP SUMP PUMP DIRECTION OF PIPE PITCH (DOWN) FOS FUEL OIL SUPPLY SPR SPRINKLER LINE TECHNOLOGY PLAN NOTE CALL OUT FOV FUEL OIL VENT SQFT/SF SQUARE FEET - ECCENTRIC REDUCER SHOWER FS FLOOR SINK SS STAINLESS STEEL WALL MOUNTED LAVATORY & TYPE FS FLOW SWITCH STORAGE TANK OWNER FURNISHED, CONTRACTOR INSTALLED ELBOW UP FU FIXTURE UNITS SW STORM WATER EQUIPMENT DESIGNATION **ELBOW DOWN** SHOWER HEADS DRINKING FOUNTAIN & TYPE PLUMBING EQUIPMENT DESIGNATION ELBOW UP WITH SHUT-OFF VALVE (SOV) TCV TEMPERATURE CONTROL VALVE GAL GALLON TEMPERATURE DIFFERENCE GCO GRADE CLEANOUTS ELBOW DOWN WITH SHUT-OFF VALVE (SOV) TRENCH DRAIN GPD GALLONS PER DAY TANK TYPE WATER CLOSET TDH TOTAL DYNAMIC HEAD MECHANICAL EQUIPMENT DESIGNATION TAG GPH GALLONS PER HOUR TEMP TEMPERATURE JANITORS SINK FLANGE CONNECTION GPM GALLONS PER MINUTE TFA TO FLOOR ABOVE GPR GAS PRESSURE REGULATOR TFB TO FLOOR BELOW
TMV THERMOSTATIC MIXING VALVE GRS GAS REGULATOR STATION
GT GREASE TRAP REDUCER DETAIL NUMBER FLOOR MOUNTED FLUSH VALVE TP TRAP PRIMER GVTR GAS VENT THROUGH ROOF SHEET NUMBER TSTAT THERMOSTAT RISE OR DROP IN PIPE CLOSET GWH GAS FIRED WATER HEATER TWR TEMPERED WATER RETURN TWS TEMPERED WATER SUPPLY TYP TYPICAL JANITORS SINK - CORNER SECTION NUMBER WALL MOUNTED FLUSH VALVE H&CW HOT AND COLD WATER WATER SHEET NUMBER HB HOSE BIBB ────────────────────── TEE UP CLOSET HEX HEAT EXCHANGER V VENT TEE DOWN URINAL SINK & TYPE HP HORSEPOWER NEW WORK TO EXISTING WORK CONNECTION POINT VAC VACUUM HS HAND SINK VB VACUUM BREAKER TEE UP WITH SHUT-OFF VALVE (SOV) HST HOT WATER STORAGE TANK (DOMESTIC) VCO VACUUM CLEANER OUTLET HWB HOT WATER BOILER VP VACUUM PUMP TEE DOWN WITH SHUT-OFF VALVE (SOV) → LIMIT OF DEMOLITION HWCP HOT WATER CIRCULATING PUMP VS VENT STACK HWP HOT WATER PUMP VSD VARIABLE SPEED DRIVE HYD HYDRANT VTR VENT THROUGH ROOF ETR EXISTING TO REMAIN W WASTE WC WATER CLOSET ID INSIDE DIAMETER INVERT ELEVATION WCO WALL CLEANOUT ICW INDUSTRIAL COLD WATER WG WATER GAGE IHW INDUSTRIAL HOT WATER WH WALL HYDRANT INV INVERT WH WATER HEATER IPC INTERNATIONAL PLUMBING CODE WHA WATER HAMMER ARRESTER IRW IRRIGATION WATER WL WATER LINE IW INDIRECT WASTE WM WATER METER IWH INSTANTANEOUS WATER HEATER WPD WATER PRESSURE DROP IWR INDUSTRIAL WATER RETURN WS WASTE STACK IWS INDUSTRIAL WATER SUPPLY WSFU WATER SUPPLY FIXTURE UNITS KW KILOWATT YCO YARD CLEANOUT KWH KILOWATT-HOUR YH YARD HYDRANT

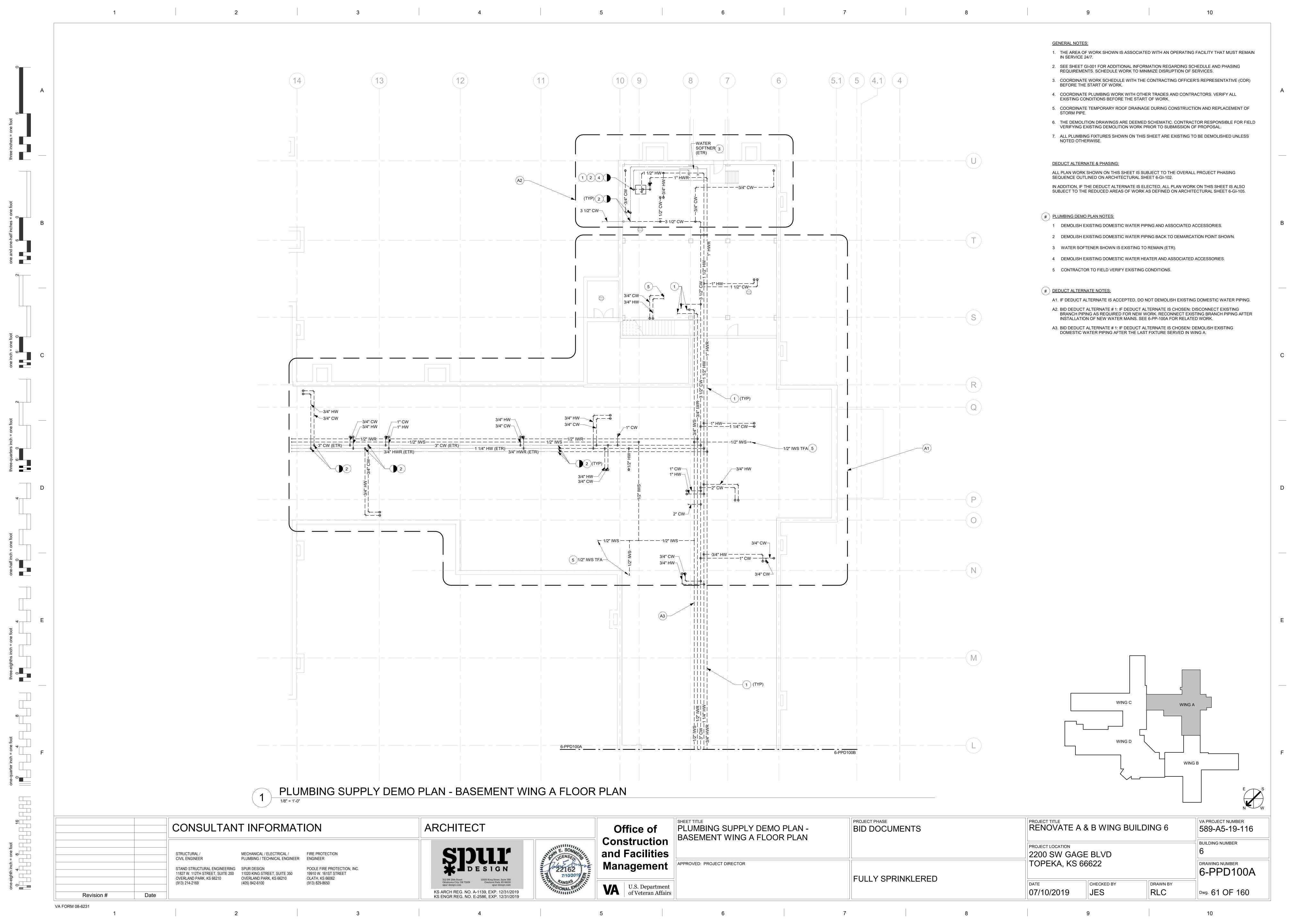
		CONSULTANT	INFORMAT	TON	ARCHITECT		Office of	PLUMBING LEGEND	BID DOCUMENTS	RENOVATE A	& B WING BU	JILDING 6	VA PROJECT NUMBER 589-A5-19-116
			MECHANICAL / ELECTRICAL /	FIRE PROTECTION	SDUL	STORM E. SOM	Construction and Facilities			PROJECT LOCATION 2200 SW GAG	E BLVD		BUILDING NUMBER 6
		CIVIL ENGINEER PLUMBING / TECHNICAL ENGINEER ENGINE STAND STRUCTURAL ENGINEERING SPUR DESIGN POOLE 11827 W. 112TH STREET, SUITE 200 11020 KING STREET, SUITE 350 19910 V	POOLE FIRE PROTECTION, INC. 19910 W. 161ST STREET	DESIGN	3 22162	Management	APPROVED: PROJECT DIRECTOR		TOPEKA, KS 66622			DRAWING NUMBER 6-P-000	
Revision #	Date		OVERLAND PARK, KS 66210 (405) 842-6100	OLATH, KS 66062 (913) 829-8650	312 SW 25th Street 11020 King Street, Suite 350 Oklahoma City, OK 73109 Overland Park, KS 66210 spur-design.com KS ARCH REG. NO. A-1139, EXP. 12/31/2019	7/10/2019	U.S. Department of Veteran Affairs		FULLY SPRINKLERED	DATE 07/10/2019	CHECKED BY JES	DRAWN BY RLC	Dwg. 56 OF 160

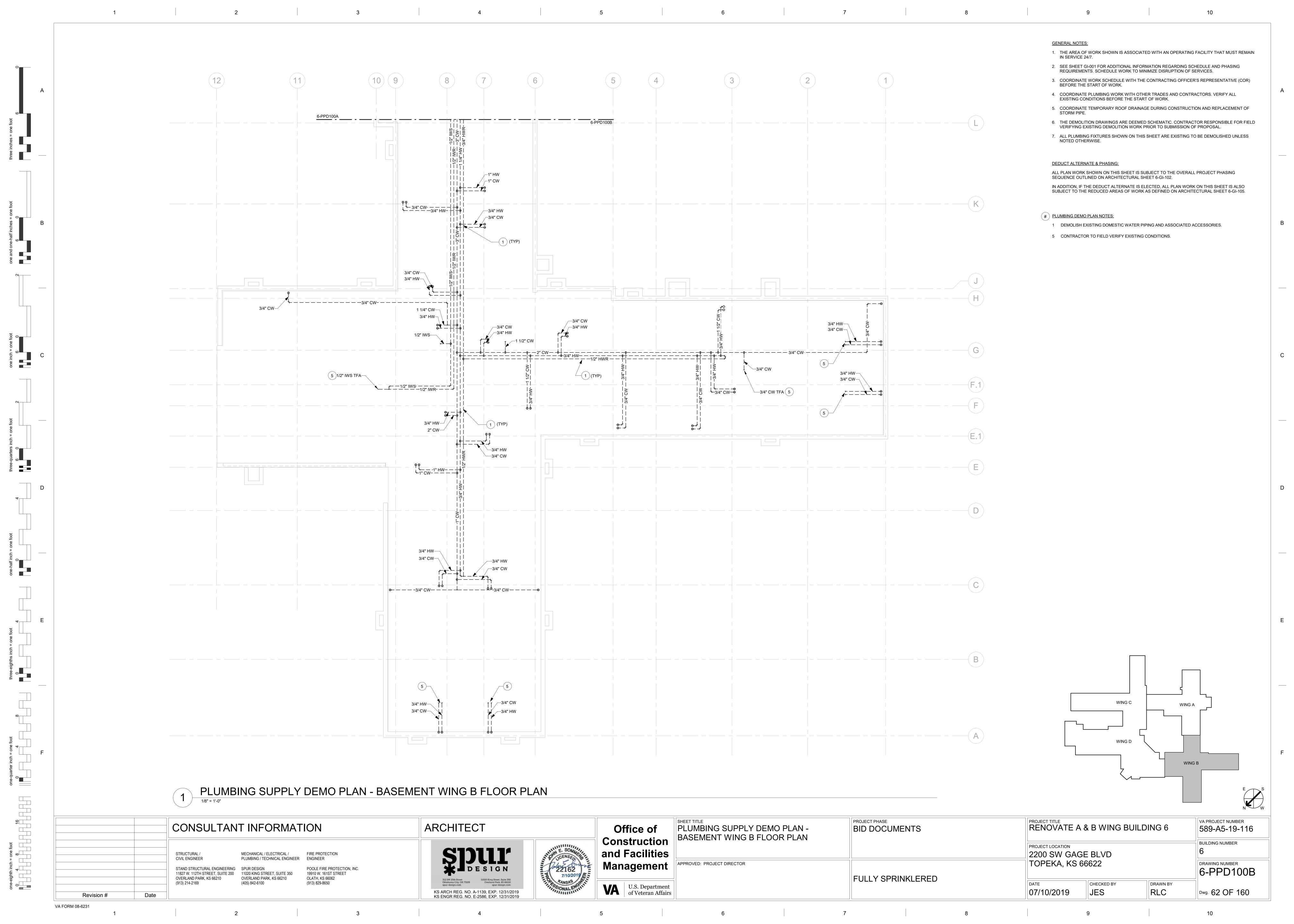


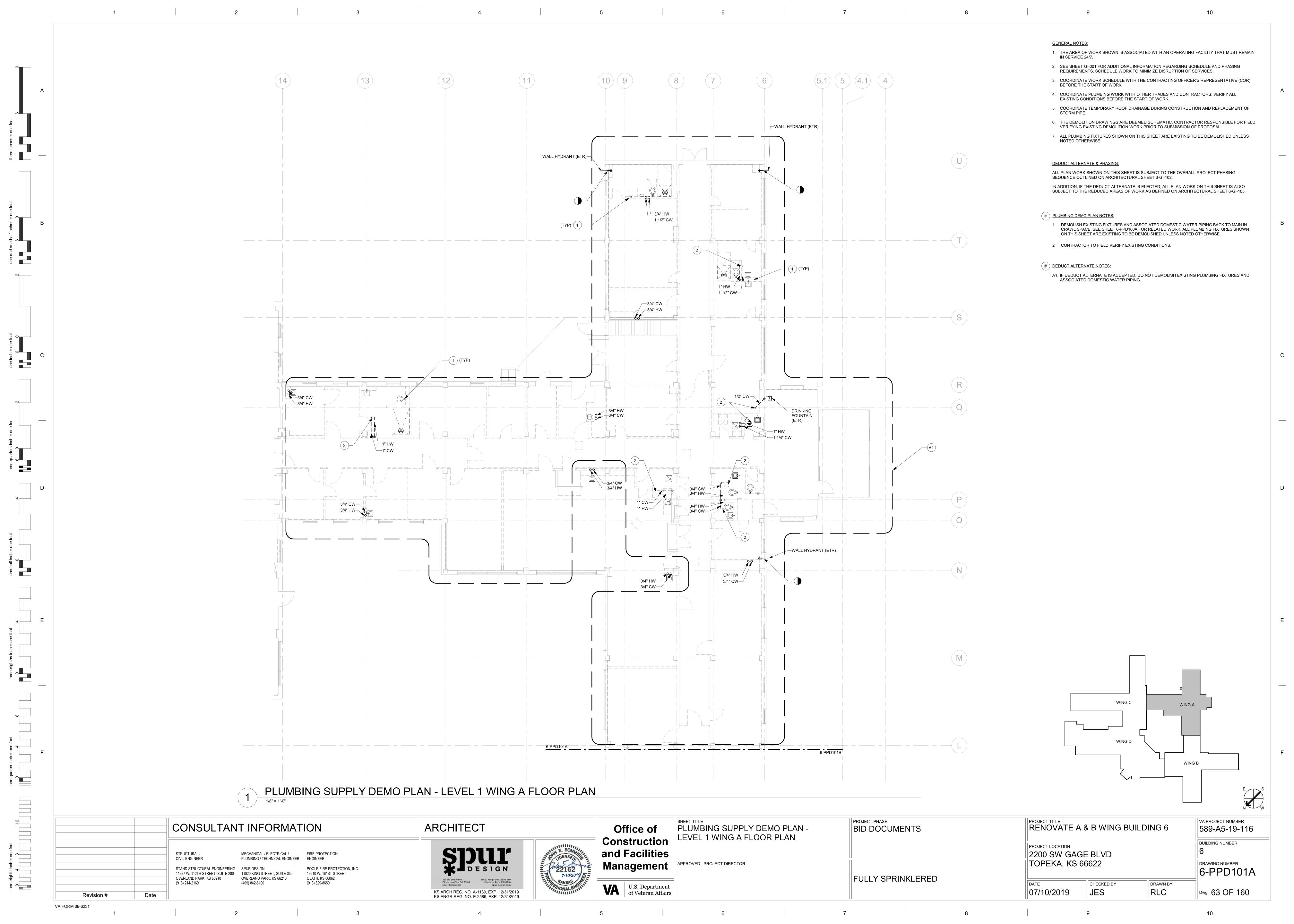


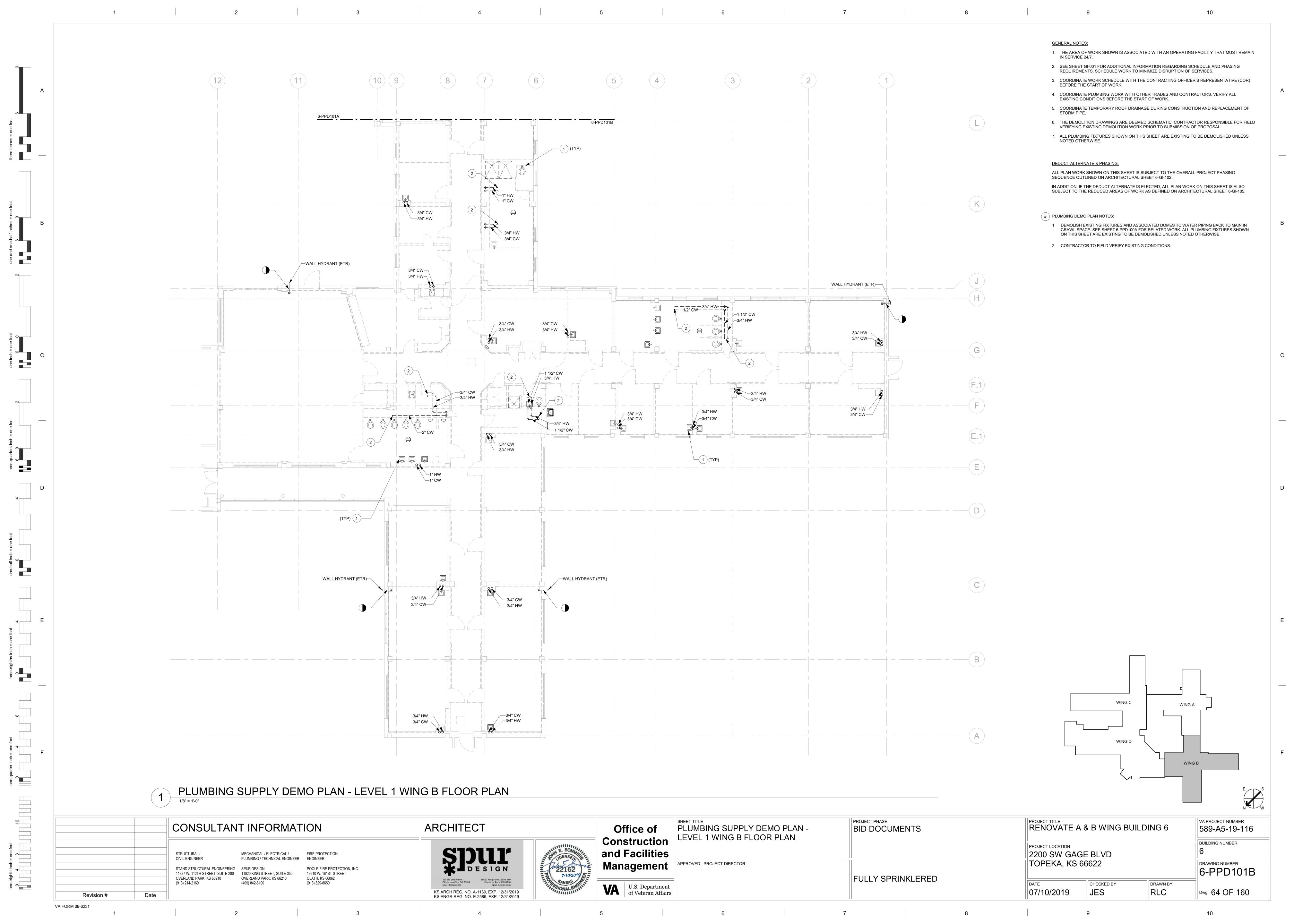


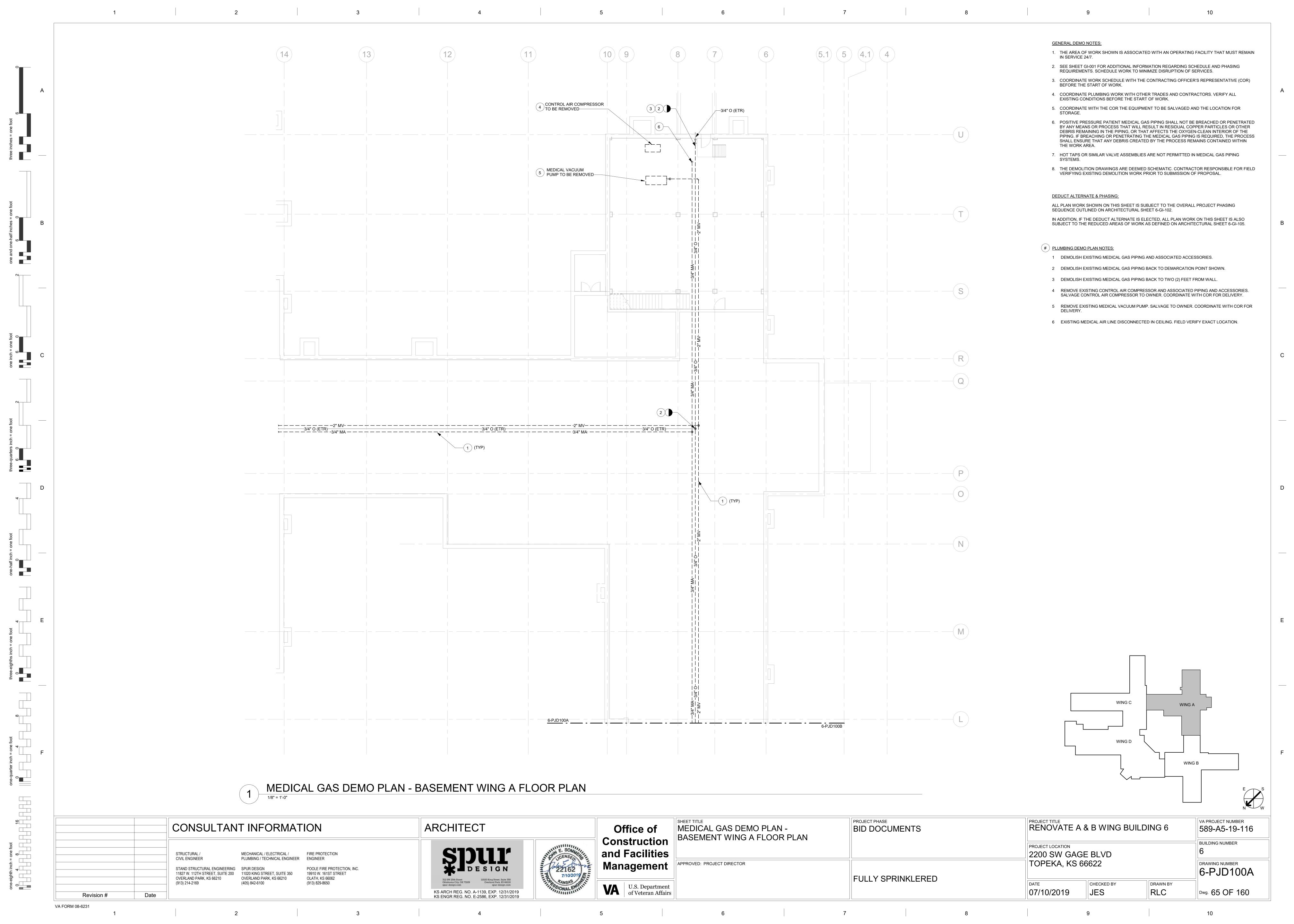


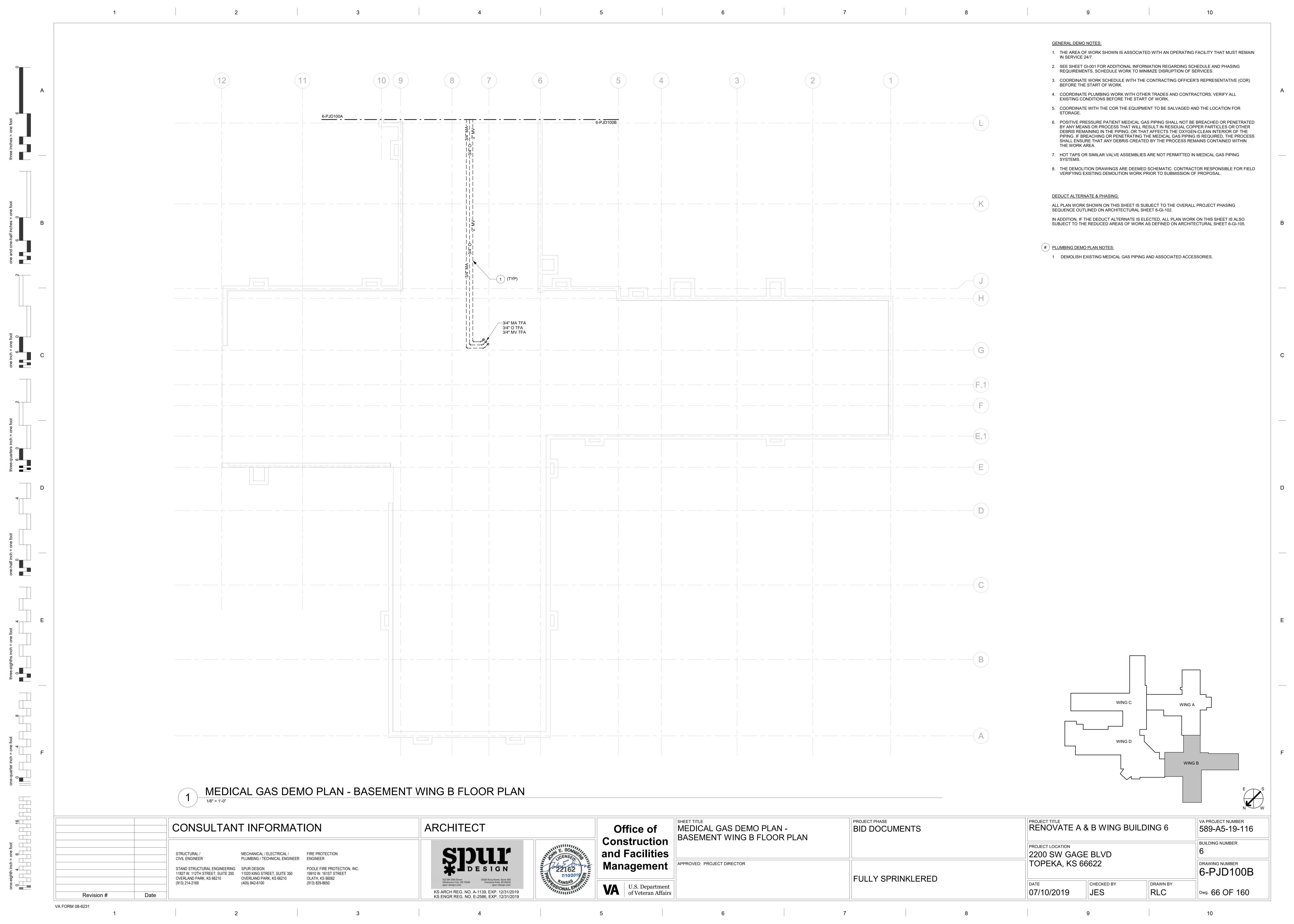


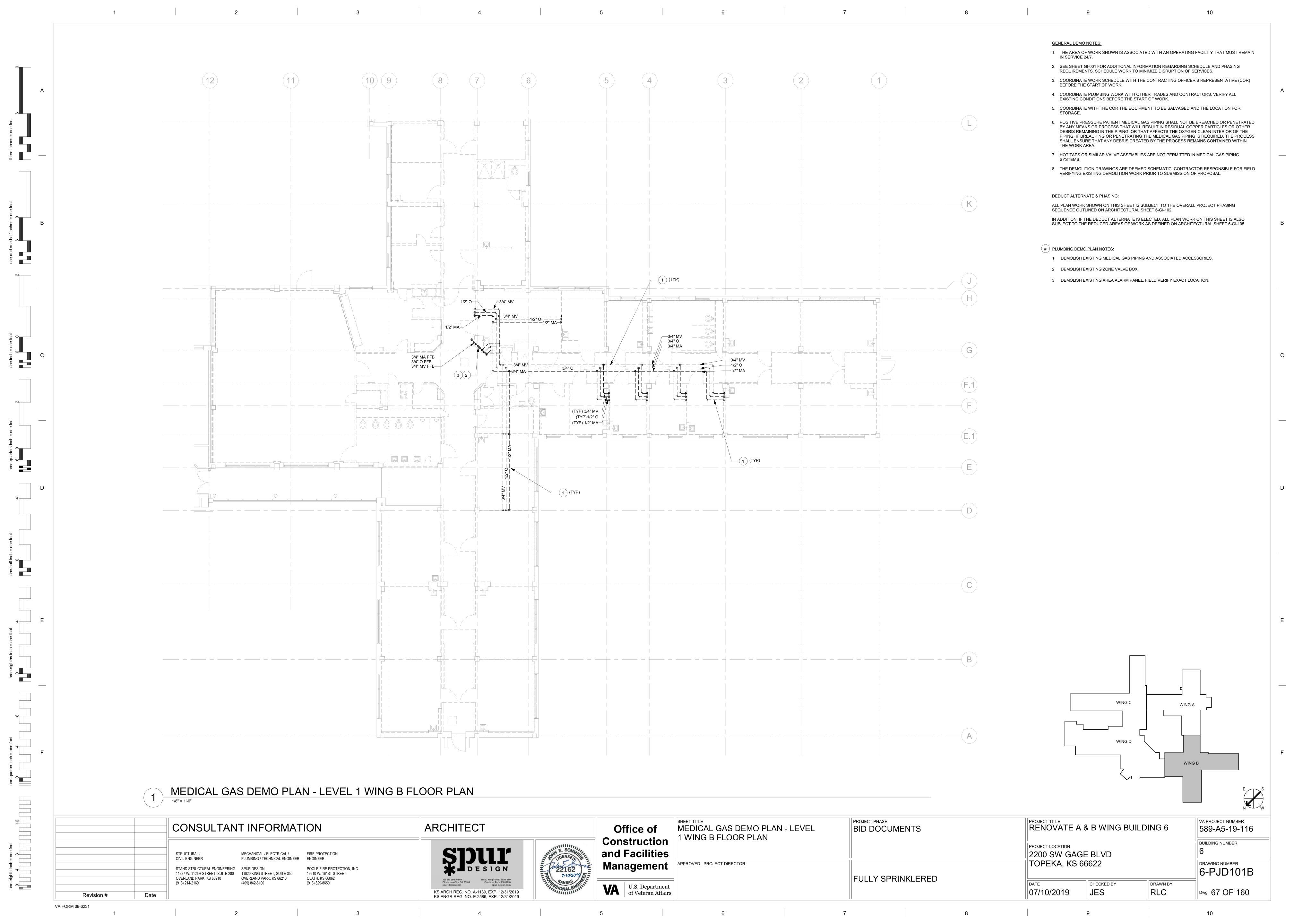


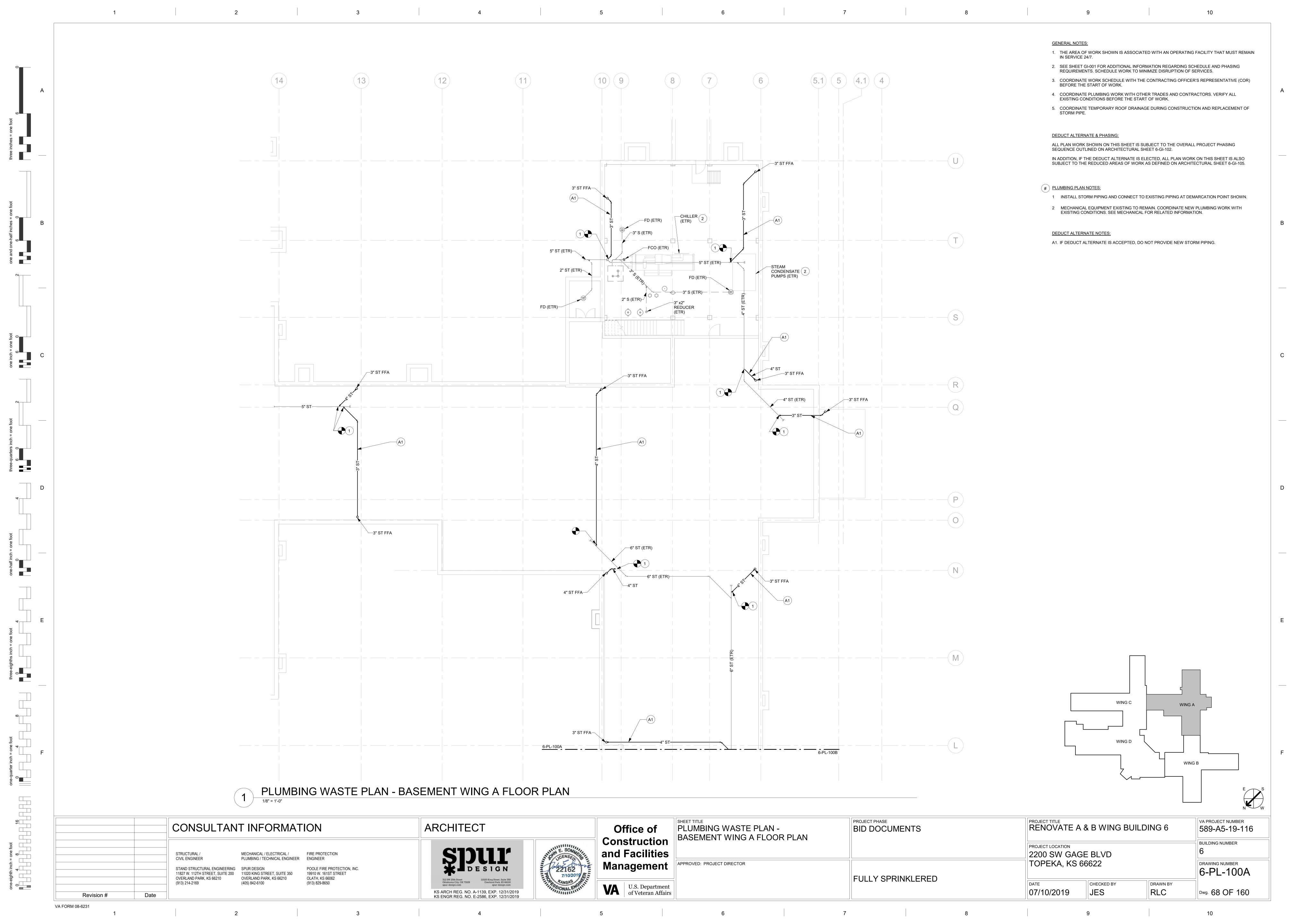


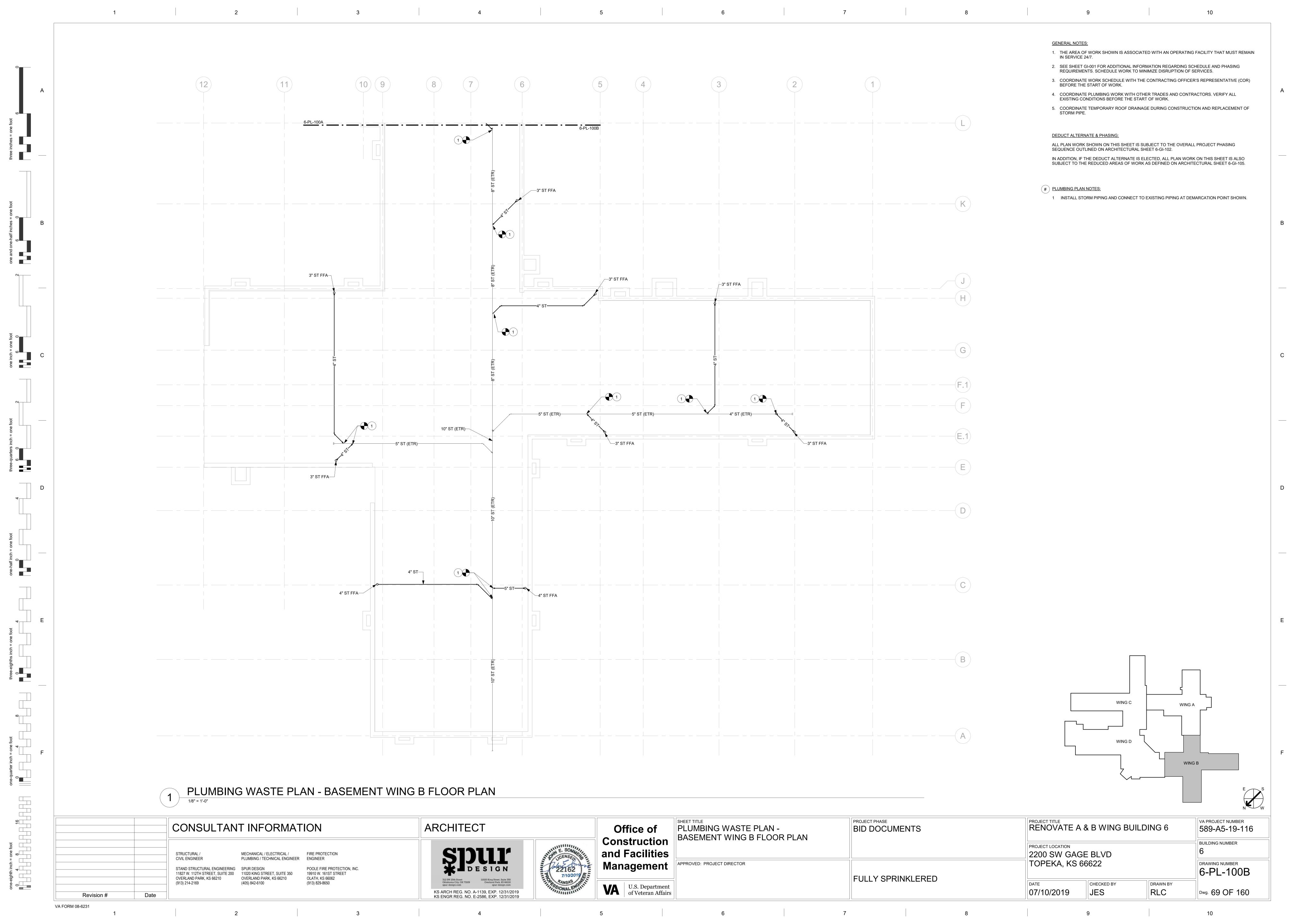


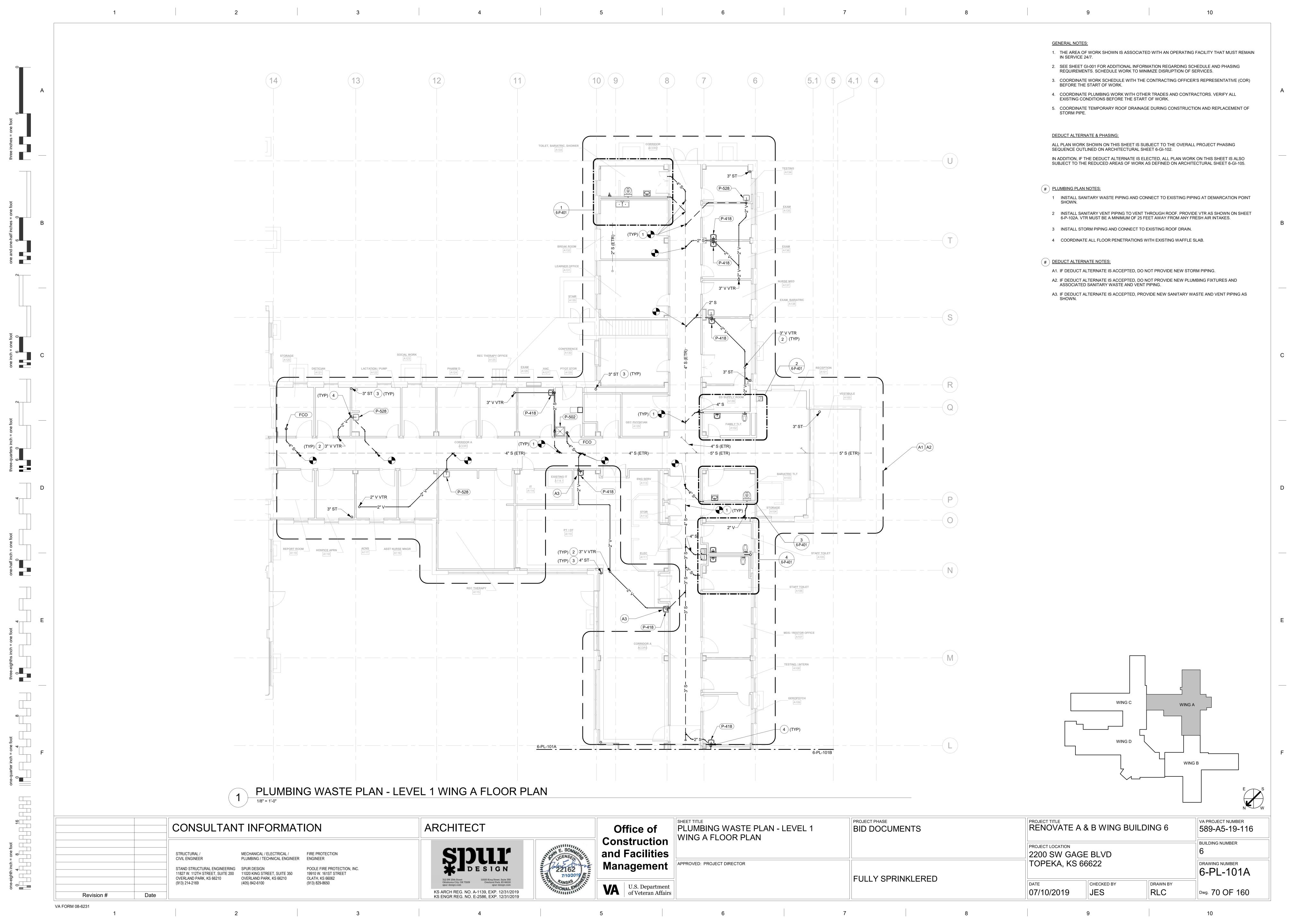


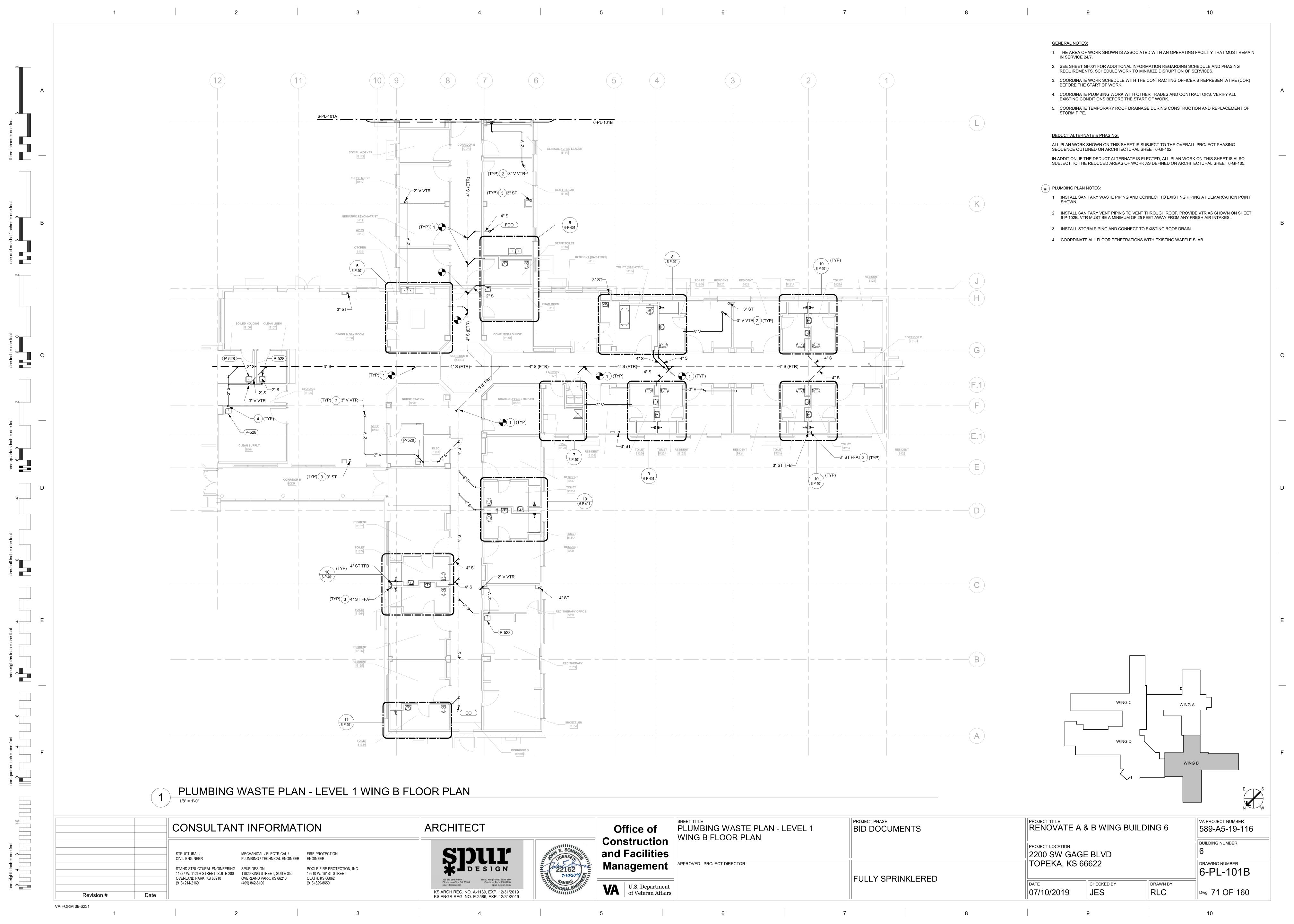


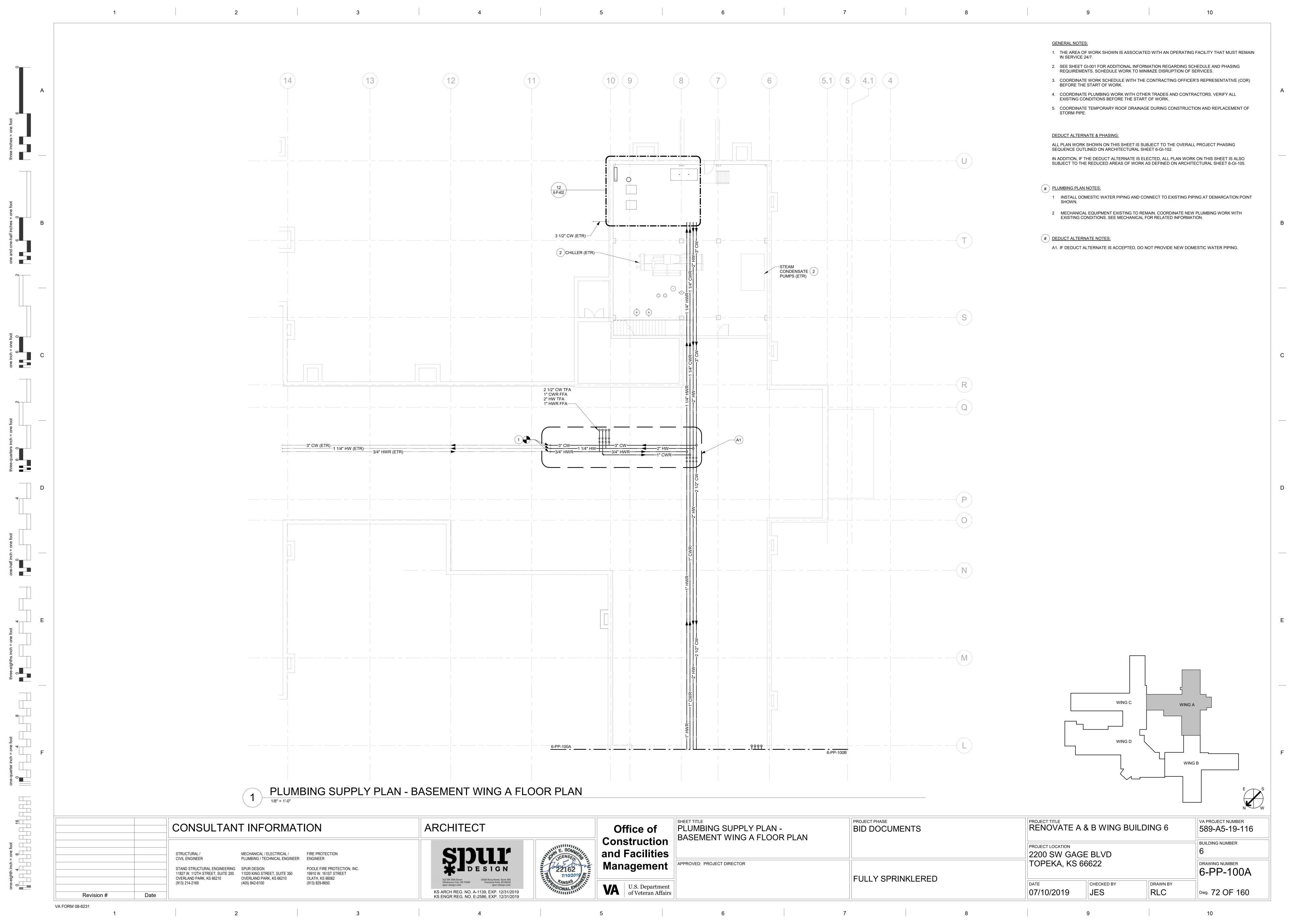


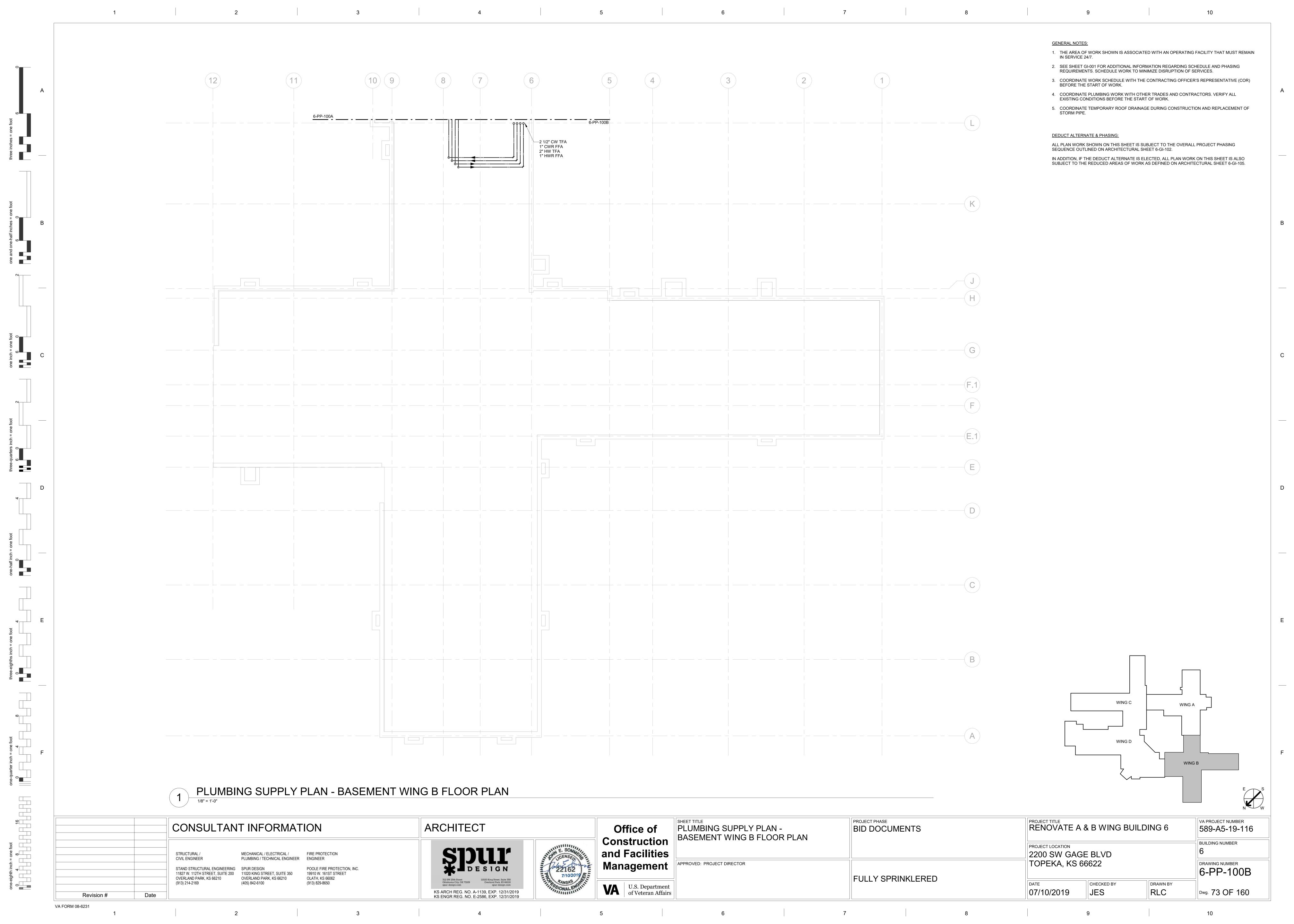


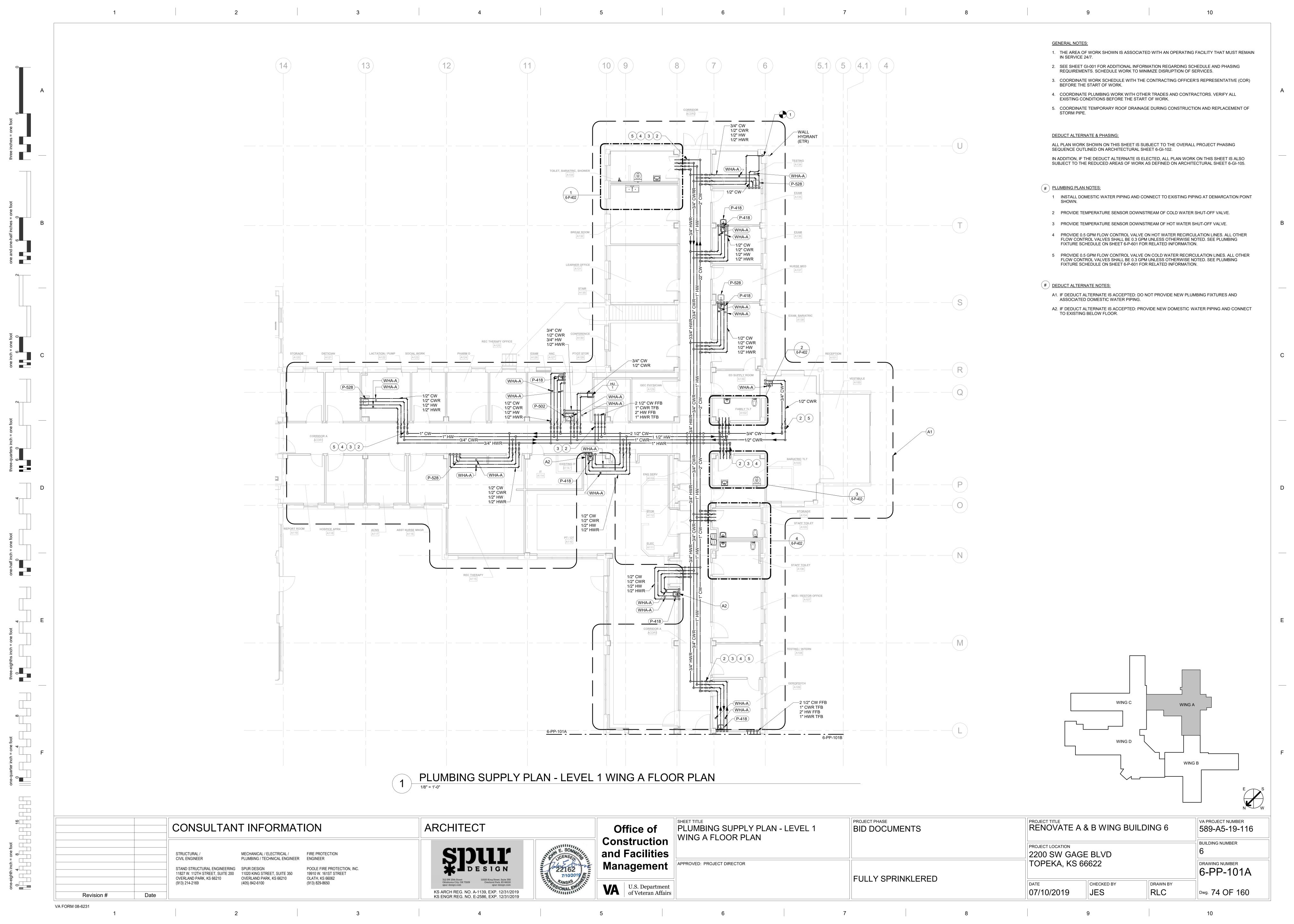


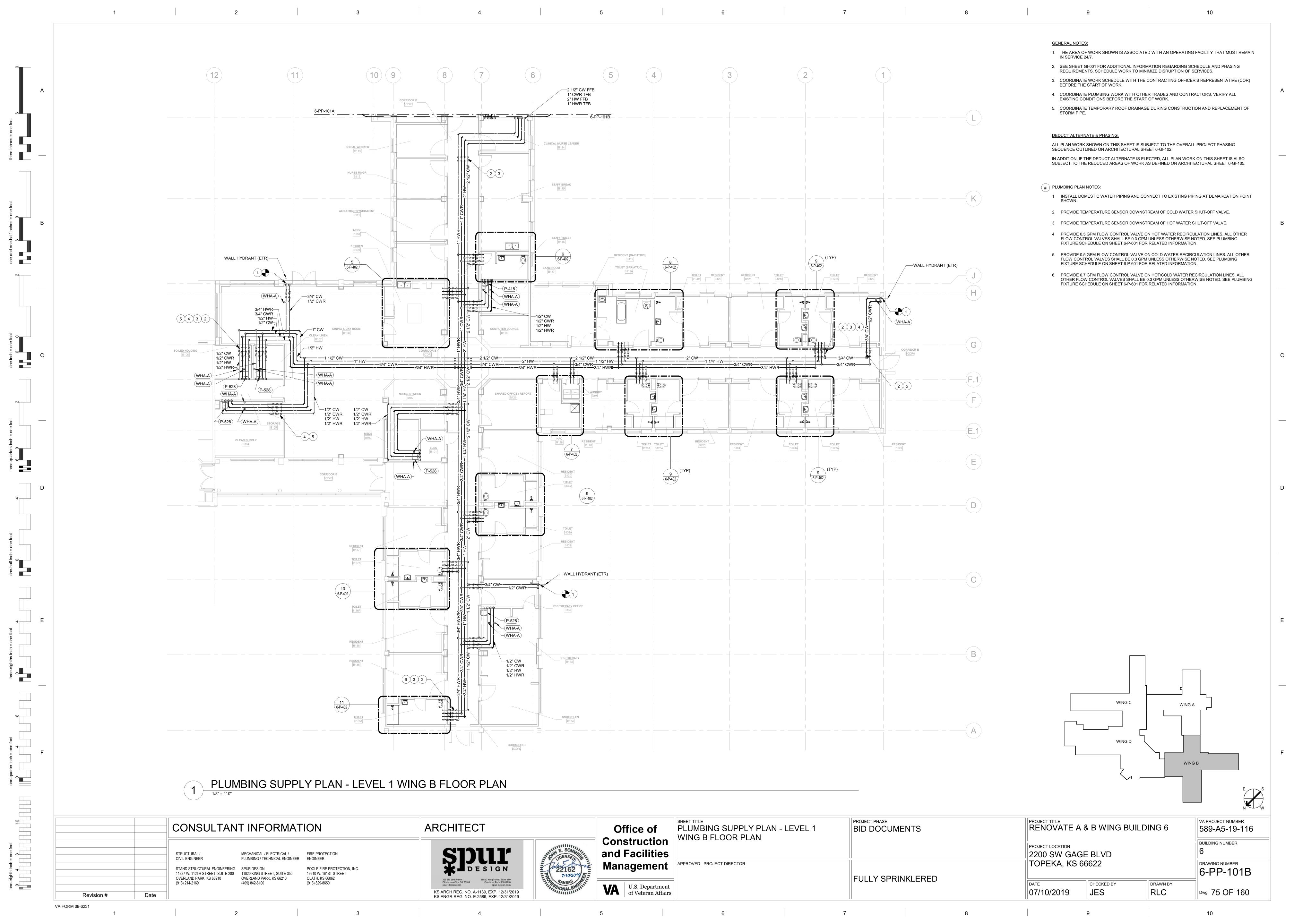


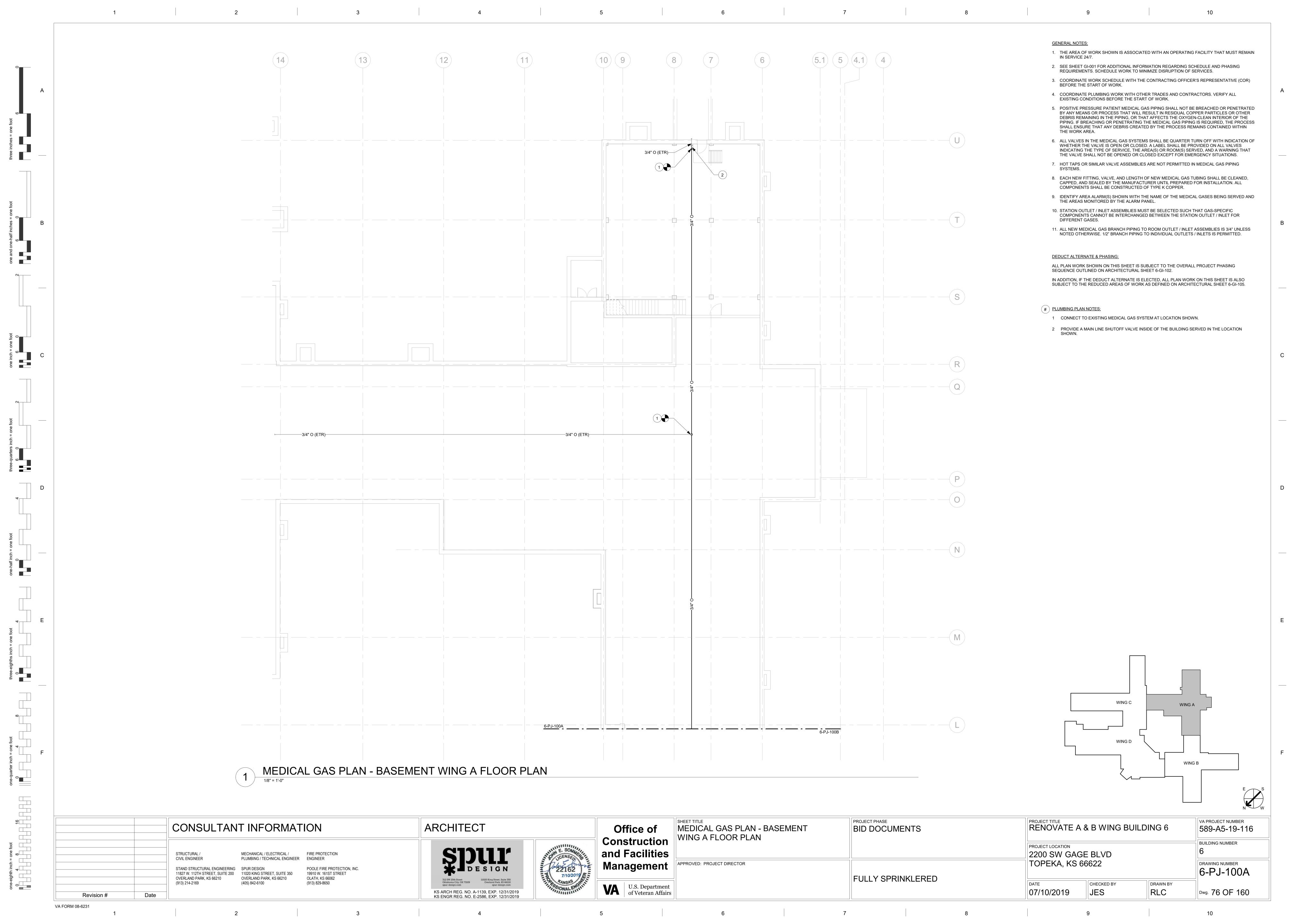


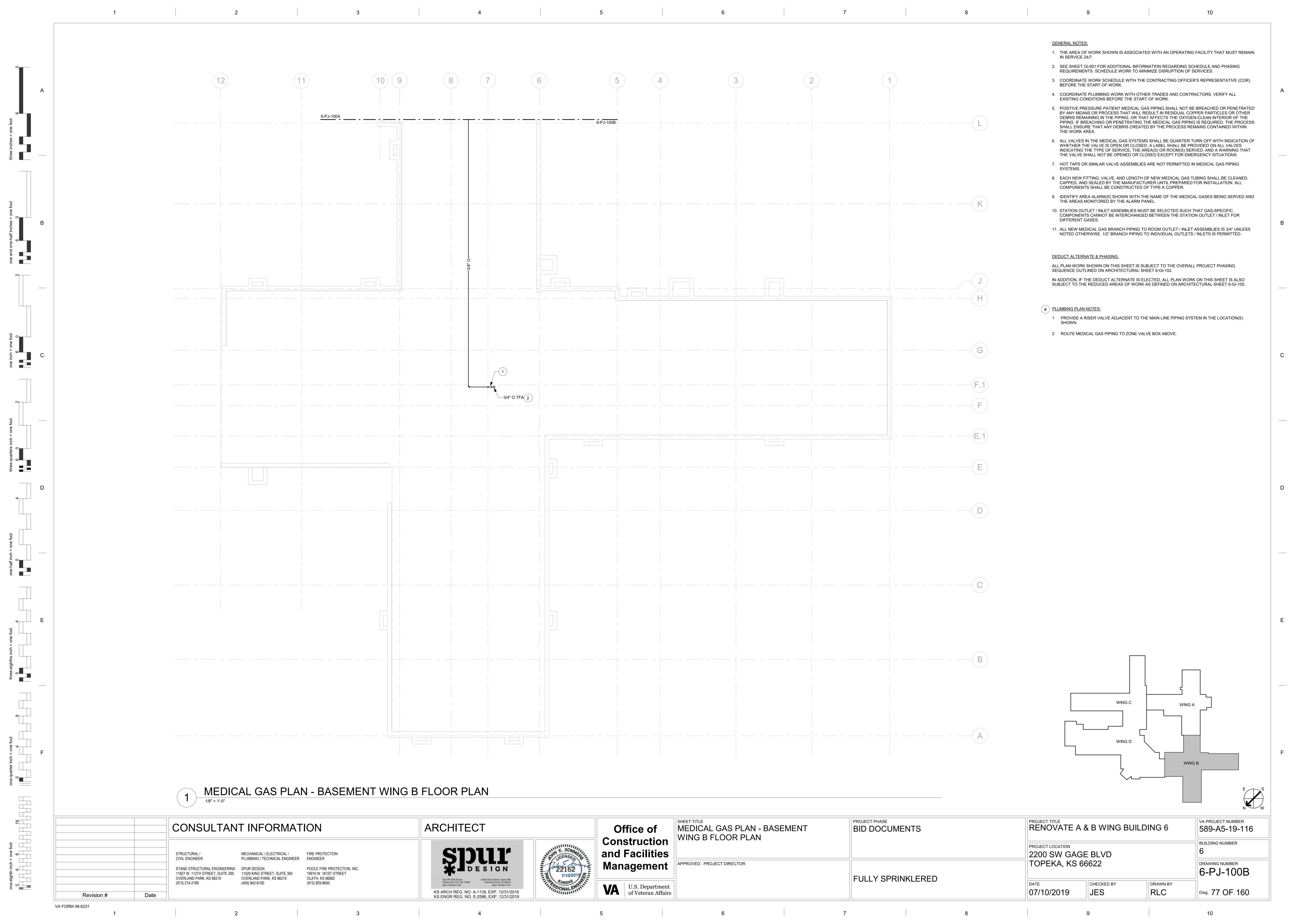


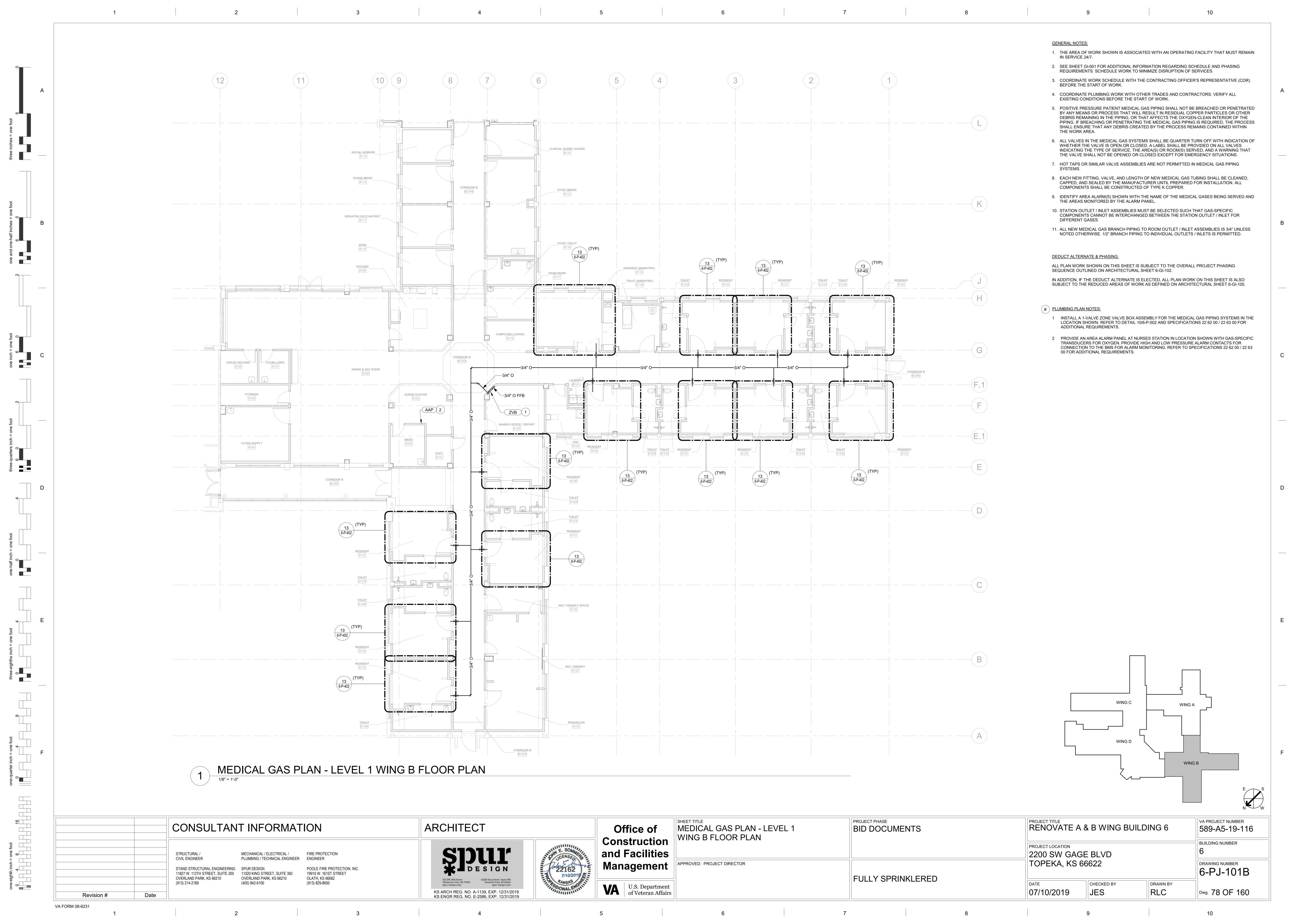


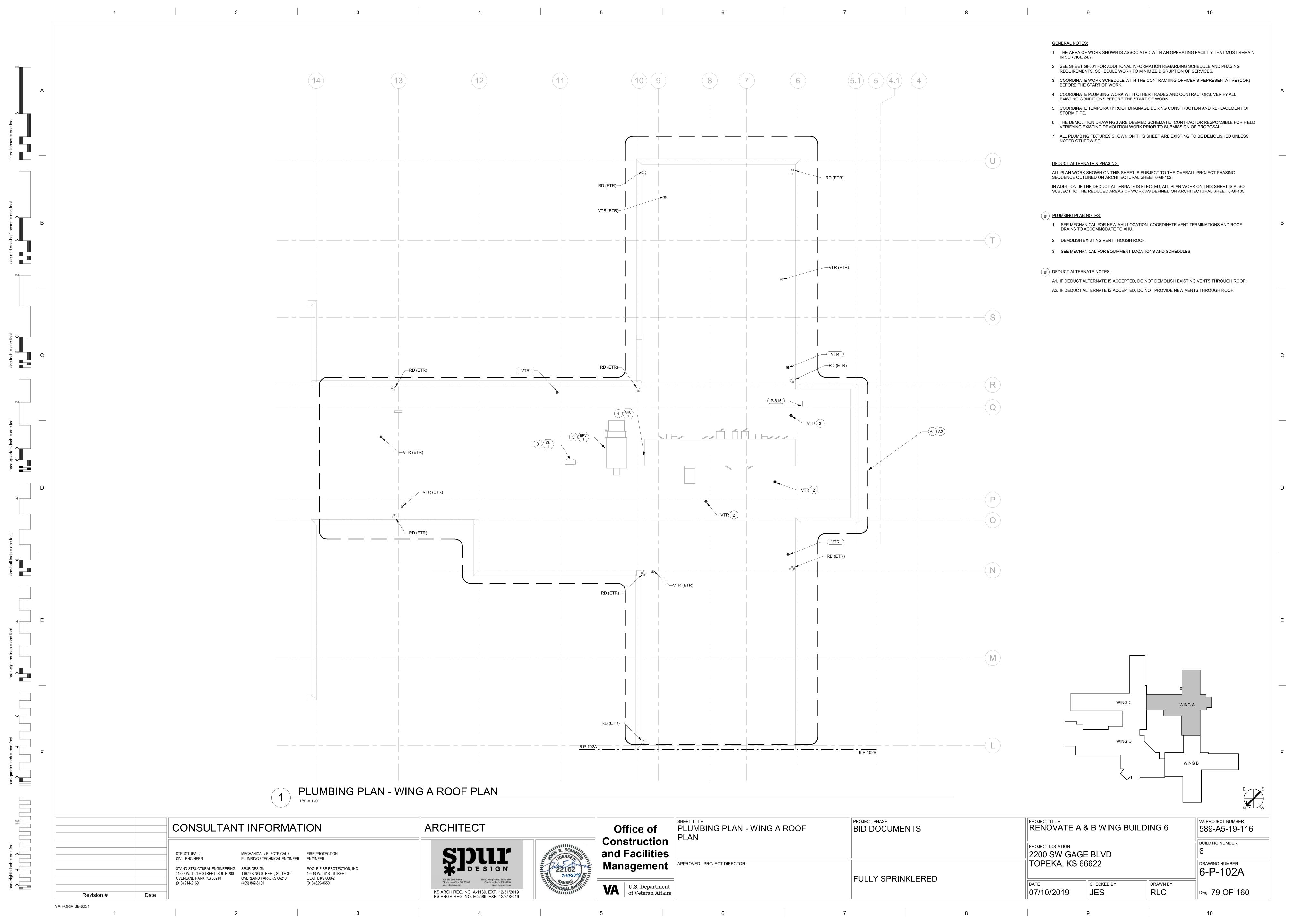


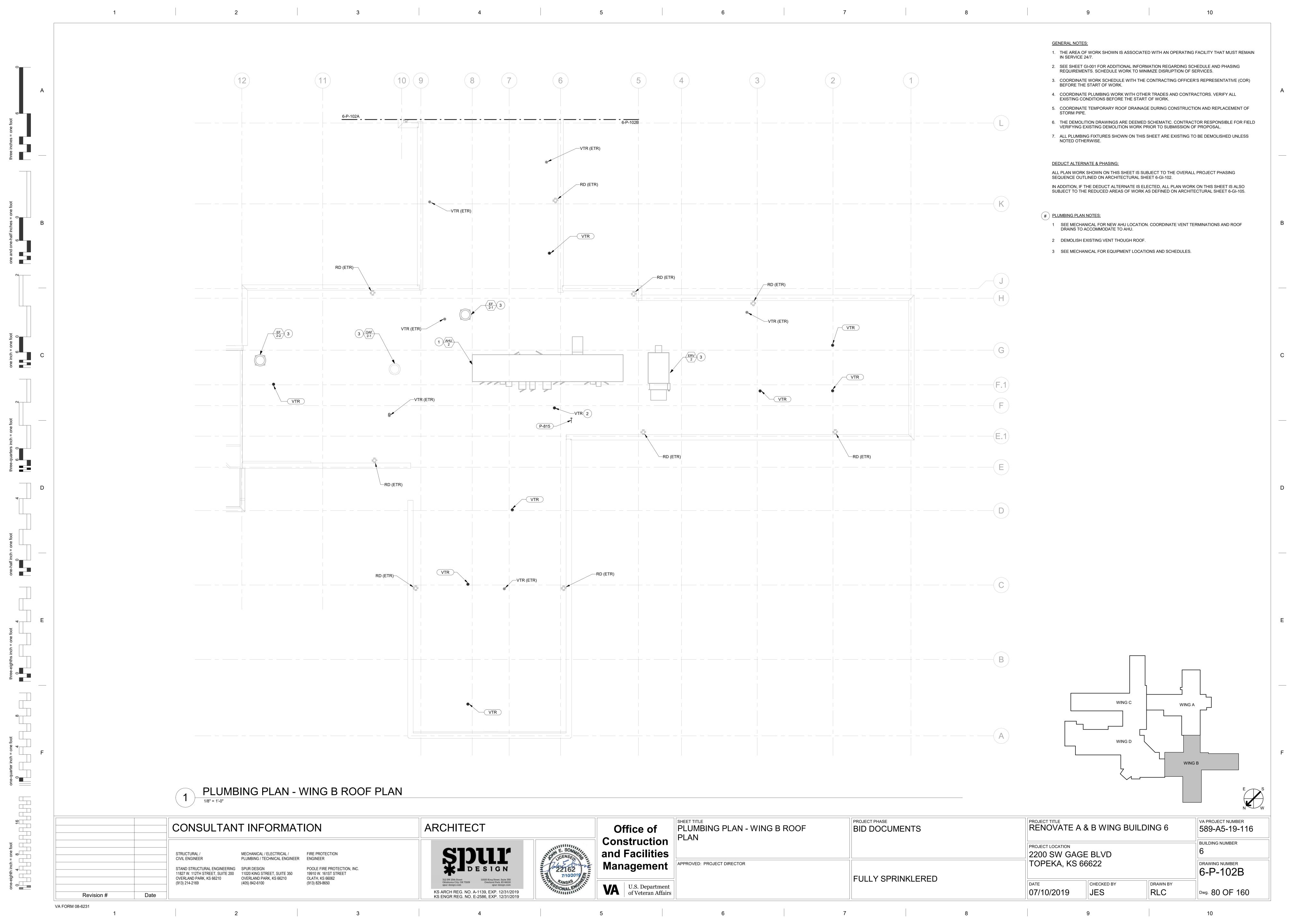


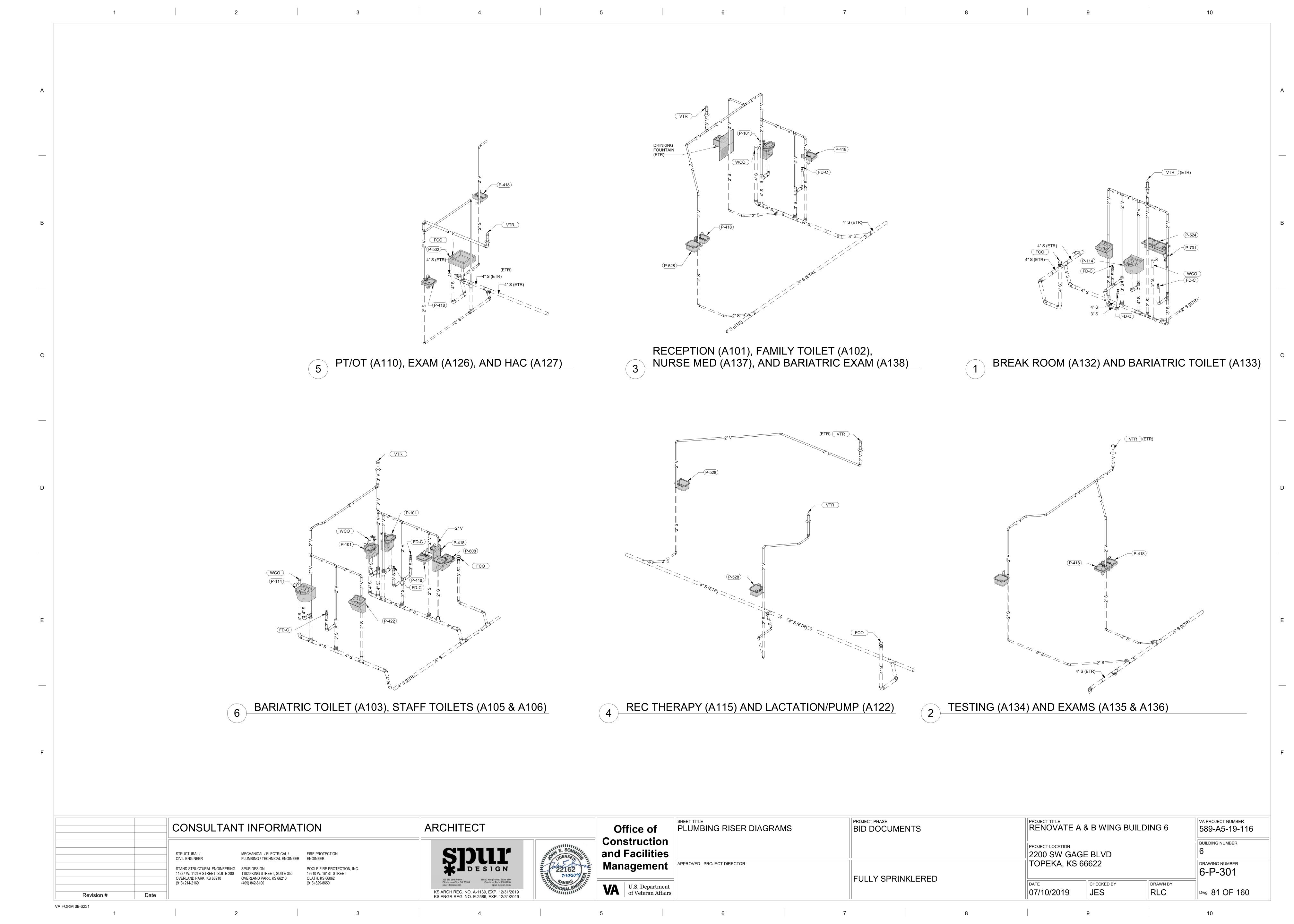


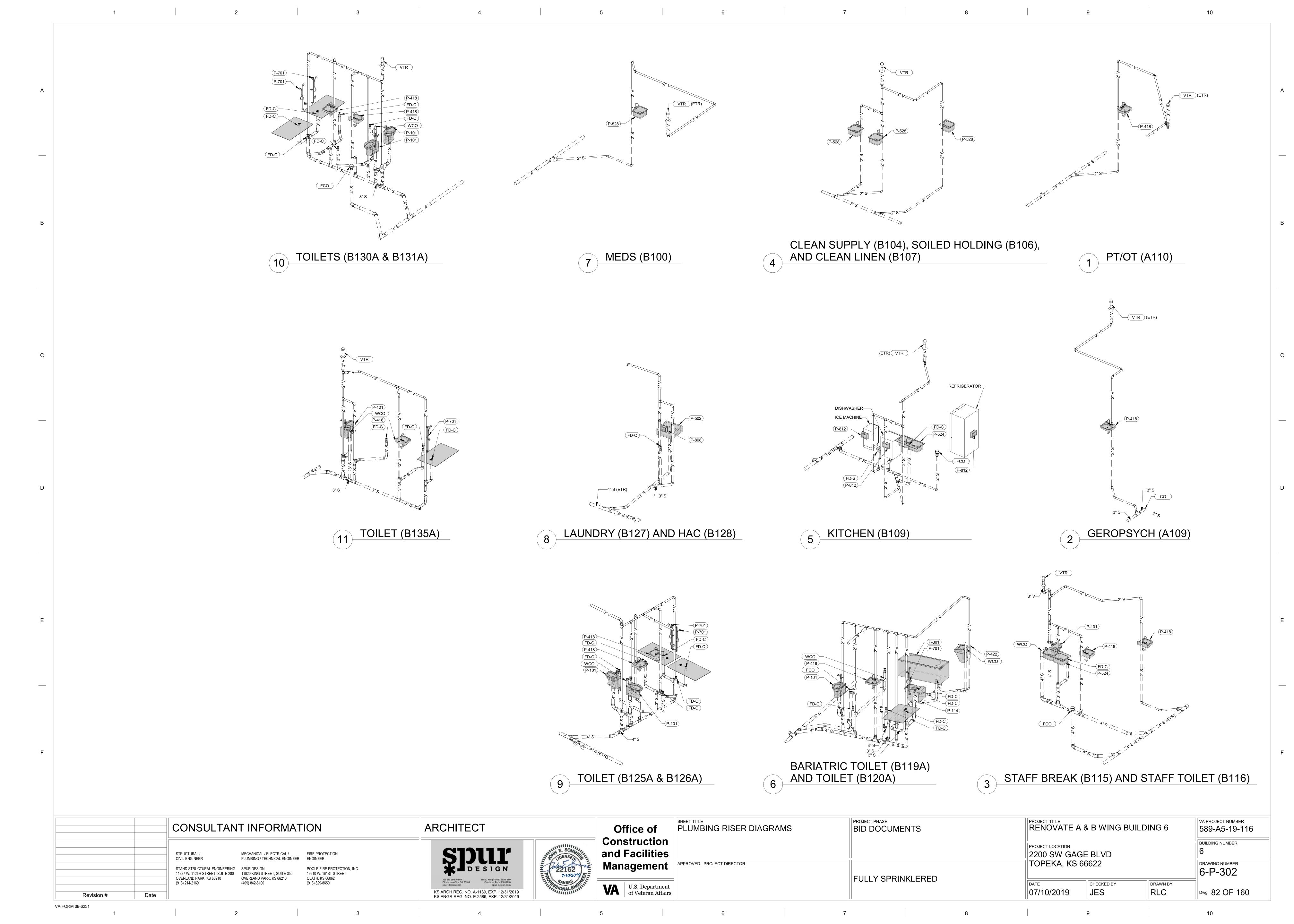


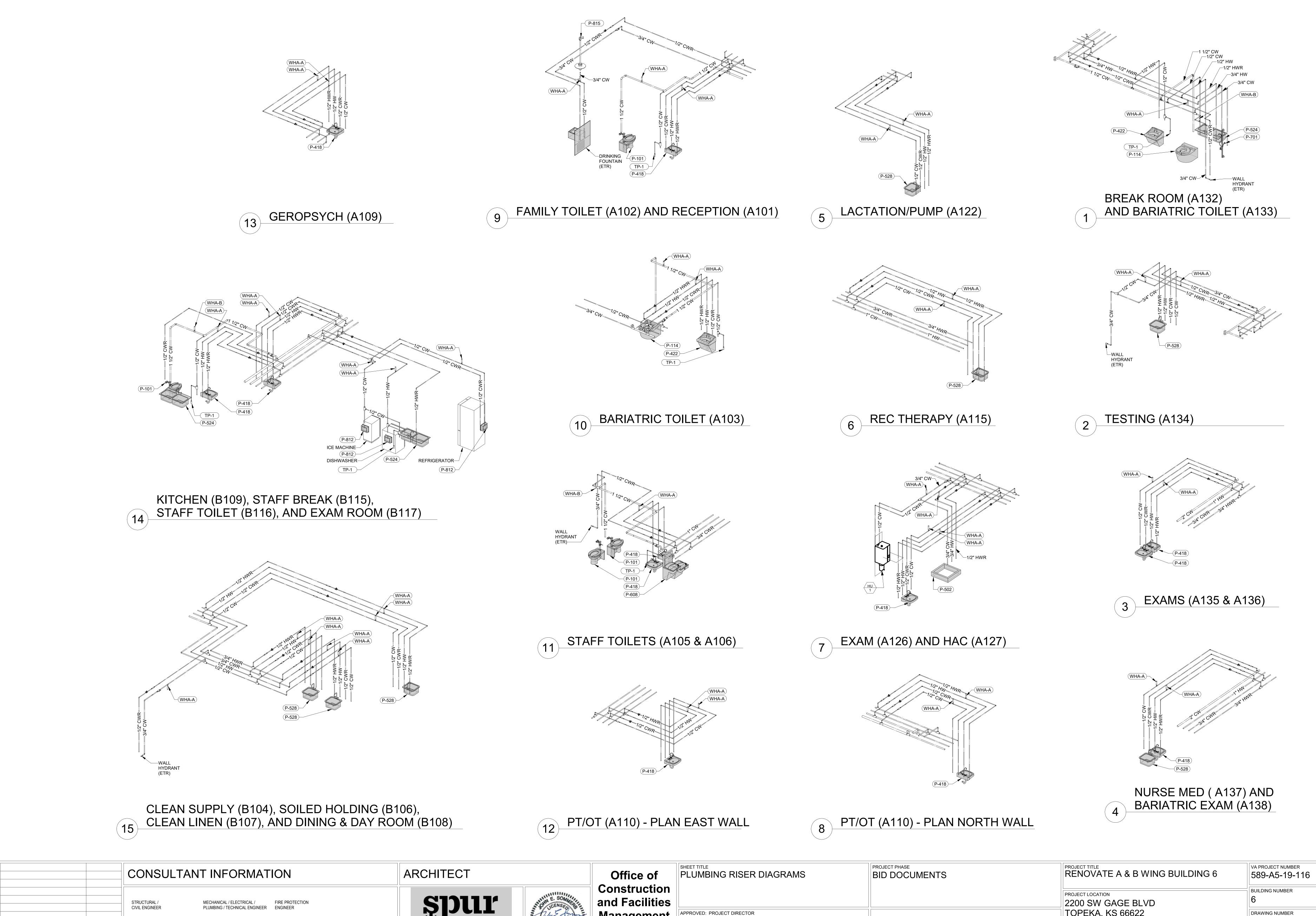




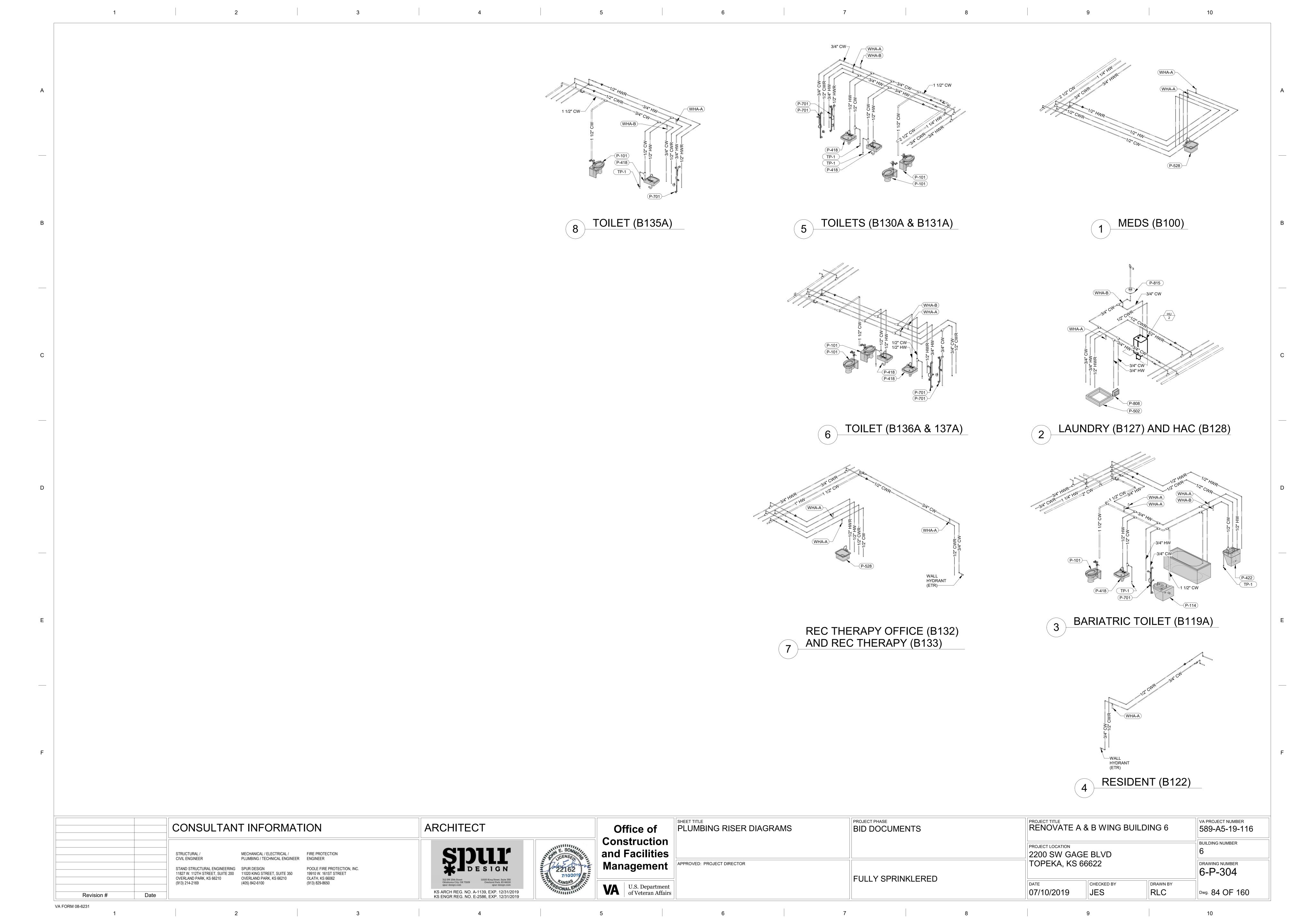


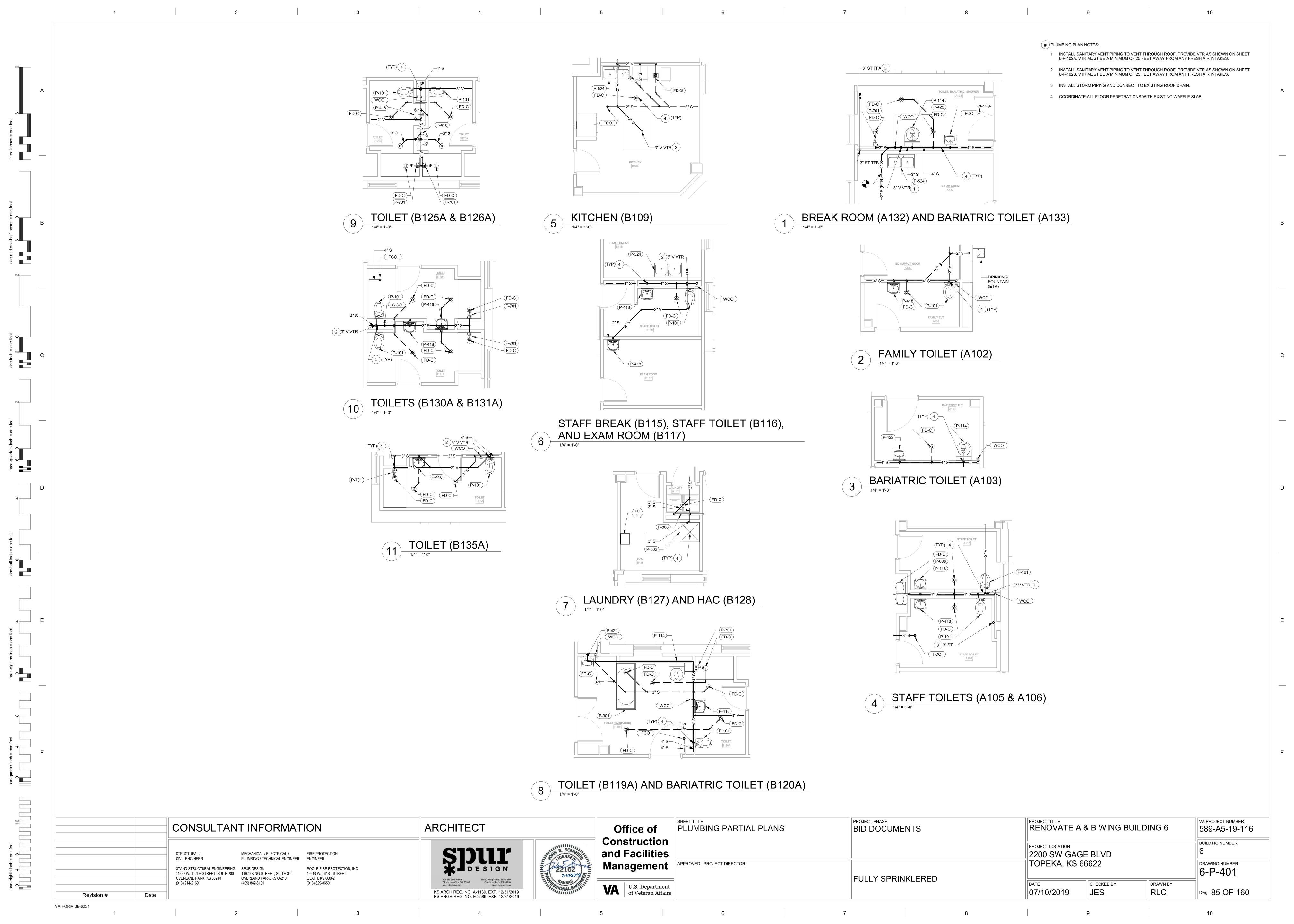


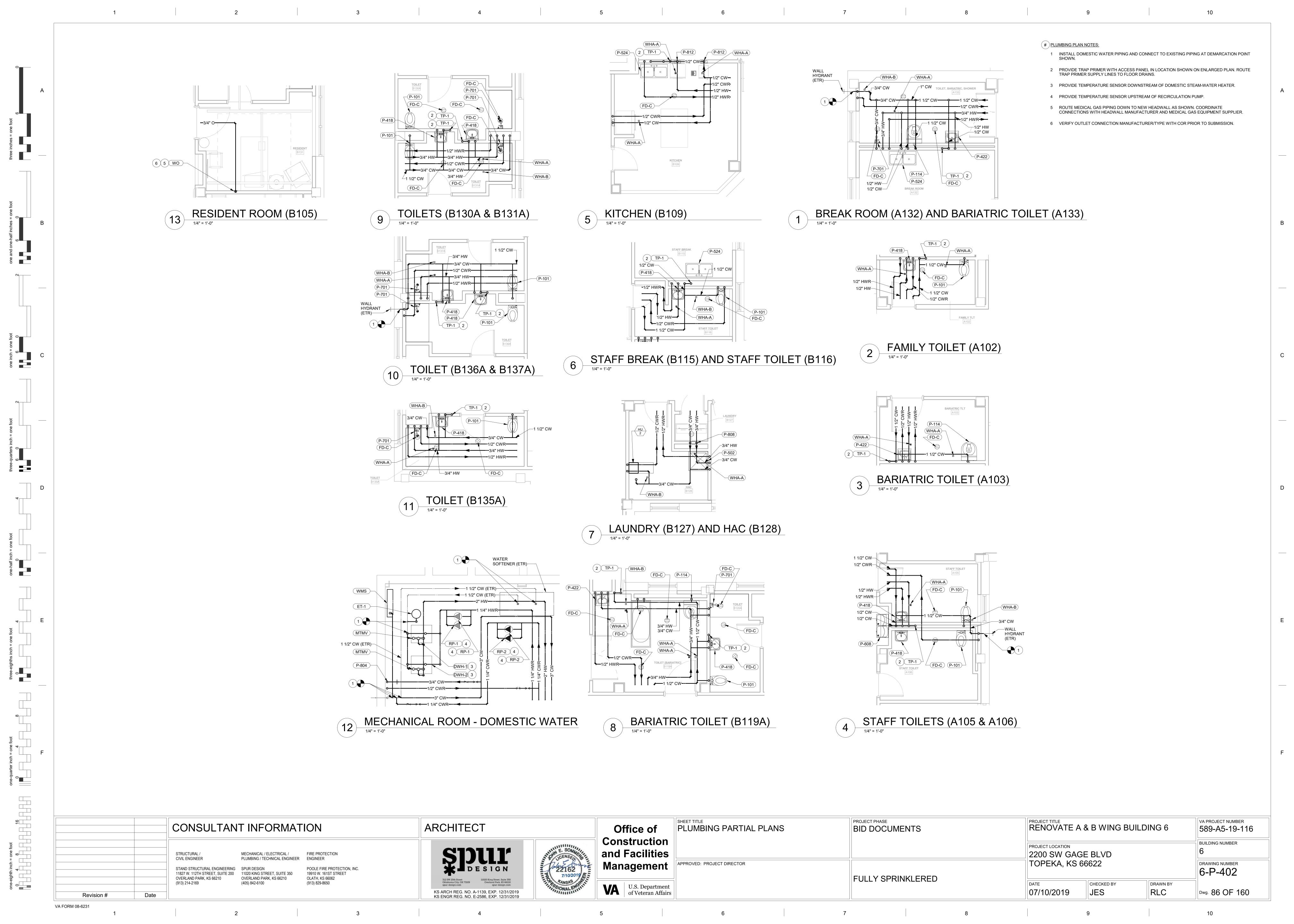


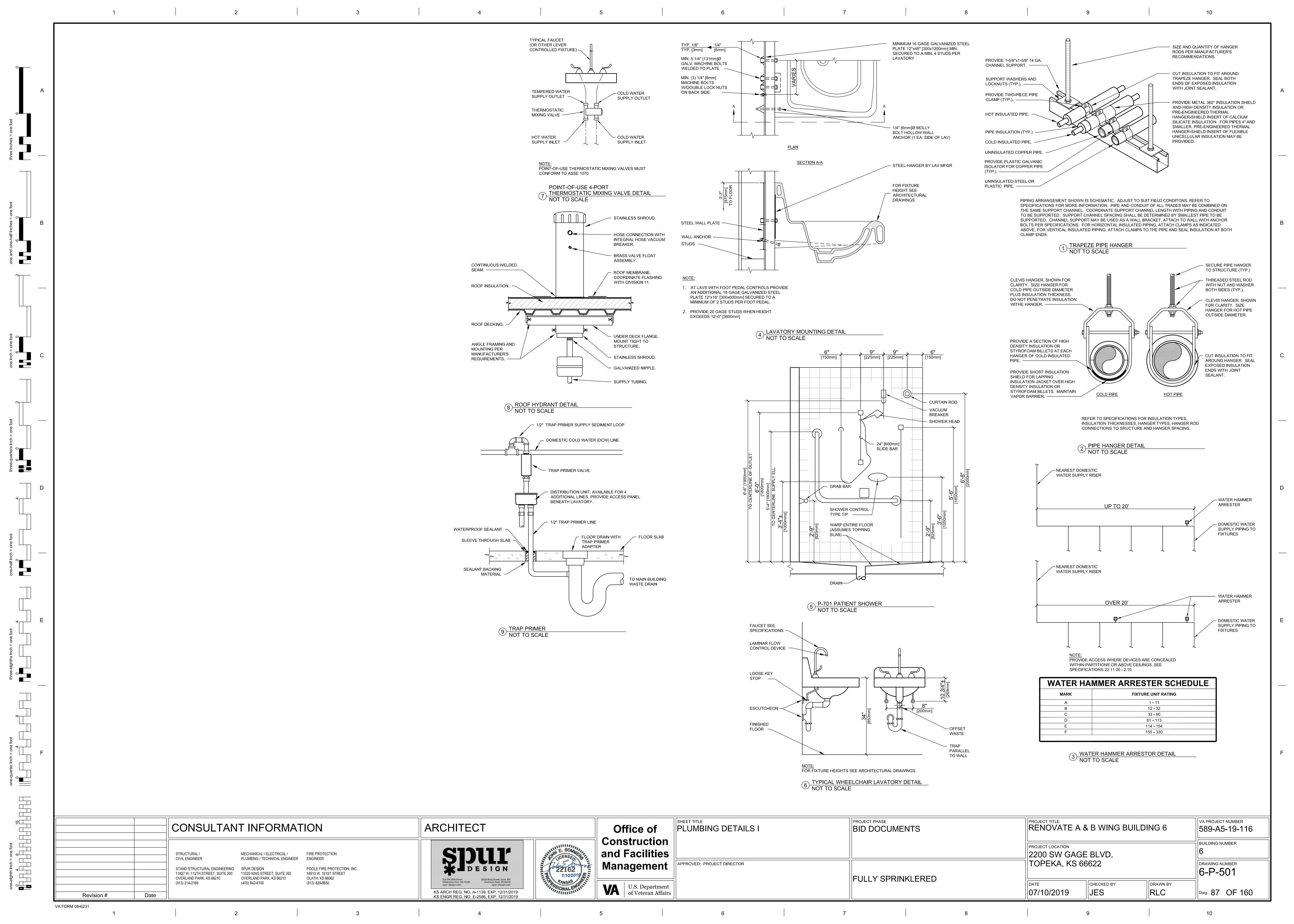


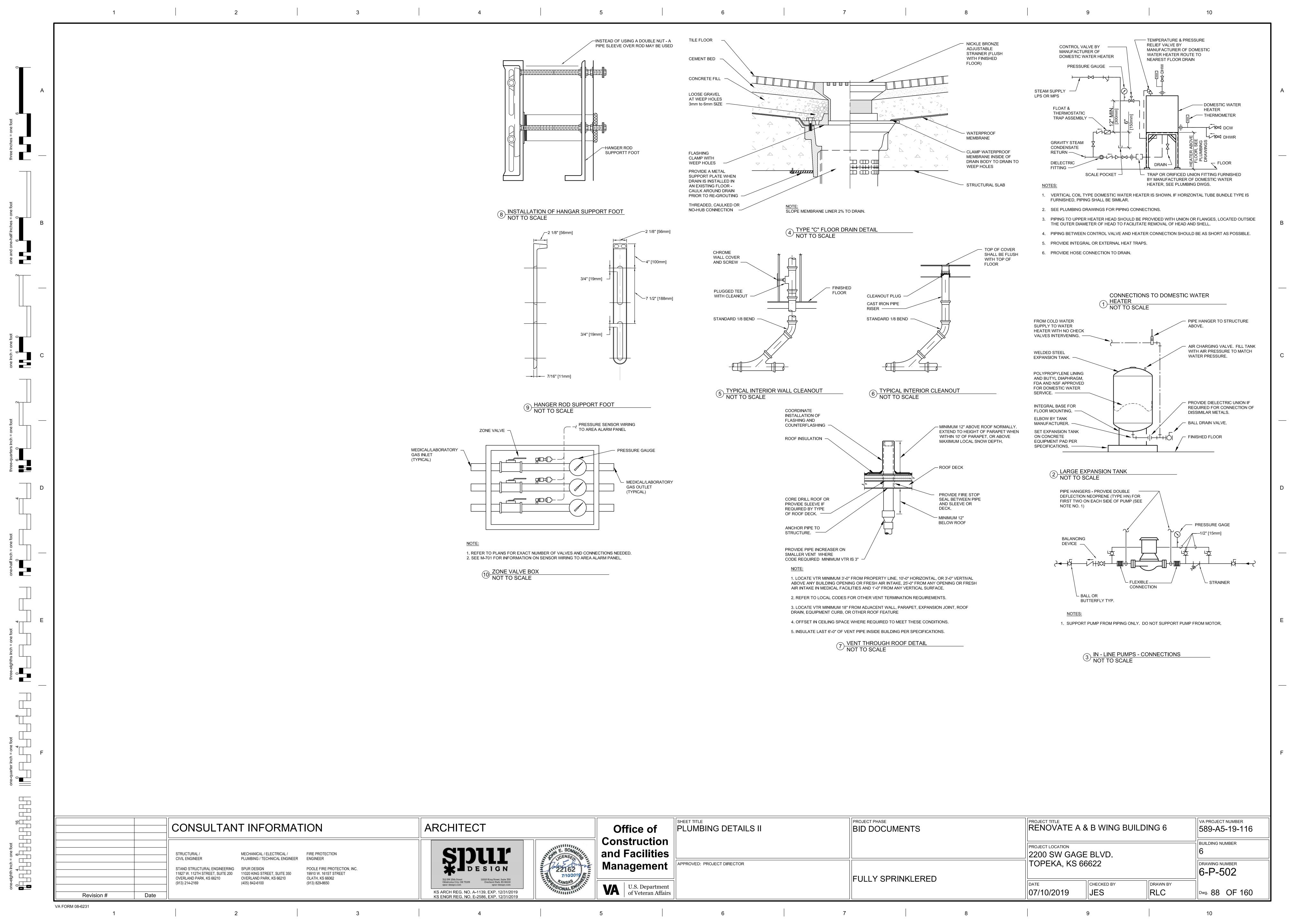
\$10111 TOPEKA, KS 66622 Management STAND STRUCTURAL ENGINEERING SPUR DESIGN POOLE FIRE PROTECTION, INC. 6-P-303 11827 W. 112TH STREET, SUITE 200 11020 KING STREET, SUITE 350 FULLY SPRINKLERED OVERLAND PARK, KS 66210 OVERLAND PARK, KS 66210 OLATH, KS 66062 CHECKED BY DRAWN BY U.S. Department of Veteran Affairs 07/10/2019 JES RLC Dwg. 83 OF 160 KS ARCH REG. NO. A-1139, EXP. 12/31/2019 Revision # Date KS ENGR REG. NO. E-2586, EXP. 12/31/2019 VA FORM 08-6231











		PLU	JMBING	3 FIXTU	RE SCH	IEDULE							
		WASTE PIPE	VENT PIPE	COLD	HOT WATER	WASTE	WATER	WRIST	ELECTRIC		POWER		
MARK	DESCRIPTION	IN	IN	IN	IN	FIXTURE UNITS	FIXTURE UNITS	BLADE HANDLES	SENSOR	HP	MCA	V/PH	REMARKS
P-101	WATER CLOSET FLOOR MTD	3	2	1.25	.5	6	10	N/A	NO	-	-	-	Floor Mount, ASME A112.19.2, Manual Flush Valve, High Efficiency Toilet, elongated bowl, floor outlet. WC: American Standard, Right Width FlowWise: Sloan Regal 111-1.28 XL. Sea Commercial Model 1655SSCT open elongated heavy duty plastic.
P-114	WATER CLOSET, FLOOR MOUNTED, BARIATRIC	3	2	1.25	-	6	10	N/A	NO	-	-	-	Floor Mounted-Floor Outlet, ASME A112.19.2, Manual Flush Valve, High Efficiency Toilet, 1.28 gpf, elongated bowl. WC: Acorn, Dura-Ware 2125-A Seriew, Sloan Regal 111-1.28 XL. Commercial Model 1655SSCT open elongated heavy duty plastic.
P-301	BATH TUB	2	1.5	.75	.75	2	2	N/A	NO	-	-	120/1	Bath Tub: Arjo Parker Height-Adjustable Reclining Sit Bath, provide with integral temperature/pressure mixing valve
P-418	LAV-1: LAVATORY	2	1.5	0.5	0.5	2	2	N/A	YES	-	-	-	Lavatory- American Standard Lucerne; straight back, approximately 508 mm by 457 mm (20 inches by 18 inches) and a 102 mm (4 inches) minimum apron, first quality vitreous china for faucet. Set rim 864 mm (34 inches) above finished floor. Faucet - Chicago Faucet #116.595.AB.1, Electronic Sensor Activated Centerset, 1.5 gpm, laminar flow outlet. Trim: McGuire #155A Grid with Tailpiece, McGuire #LF2165CC Stop Valves, risers and escutcheons. #B8872CF 1-1/4" P-trap, waste arm and cleanout plug. Concealed arm carrier v to floor. ADA Waste & Supply Covers: Truebro - LAV GUARD, #102 E-Z. Provide thermostatic tempering valve. See TMV-1.
P - 422	BARIATRIC LAVATORY	2	1.5	0.5	0.5	2	2	N/A	YES	-	-	-	Lavatory- Willoughby Industries BHS-3123; floor mounted bariatric lavatory, rated for 100 lbs, straight back, approximately 787 mm by 584 mm (31 inches by 23 inches) and a 102 m minimum apron, punching for faucet. Set rim 864 mm (34 inches) above finished floor. Faucet - Chicago Faucet #116.595.AB.1, Electronic Sensor Activated Centerset, 1.5 gpm, laminar flow outlet. Trim: McGuire #155A Grid with Tailpiece, McGuire #LF2165CC Stop Valves, risers and escutcheons. #B8872CF 1-1/4" P-trap, waste arm and cleanout plug. Provide thermostatic tempering valve. See TMV-1.
P-502	SS-1: SINK SERVICE FLOOR MOUNTED	3	2	0.75	0.75	3	4	N/A	NO	-	-	-	Service Sink: Acorn #TNC24-TF2, Square Front, Corner Terrazzo Mop Basin, 36 x 36", Fiat White - 6" Front Drop - 12" Deep - Includes Integral Stainless Steel Drain Assembly. Faucet - Chicago Faucet #897-CP with wall brace, itegral vacuum breaker, pail hook and 3/4" male hose threaded outlet. Provide blocking to secure faucet to wall. Trim - stainless steel wall guards, 3/4" x 3 ft hose and wall hook, bunber guard and stainless steel mop hanger. Provide thermostatic tempering valve. See TMV-1.
P-524	SK-1: SINK - DOUBLE COMPARTMENT	2	1.5	0.5	0.5	2	2	N/A	NO	-	-	-	Kitchen Sink: Elkay # LR-3319-3, Double Compartment, Counter Top, Kitchen Sinks) self-rimming, approximately (33" x 22") with two compartments inside dimensions approximately x 7 1/2"), 18 Gauge Stainless Steel. Faucet- American Standard - 4433.1F15, Kitchen Faucet with Pull-Out Spray, single hole mount, single lever handle, ceramic cartridges, swing stainless steel supply hose, 1.5 gpm spray. Trim- McGuire # LF2165CC Valve Stops, Risers and Escutcheons, McGuire # 151M CUP Strainers with 1-1/2" tailpiece; # 111C16G17, 1 Continuous waste, # 8912-C-F adjustable P-Trap, cleanout and escutcheon. Provide TMV-1 thermostatic mixing valve.
2-528	SK-1: SINK - SINGLE COMPARTMENT	2	1.5	.5	.5	2	2	N/A	NO	-	-	-	Single Compartment Sink: Elkay # LRAD191965PD, Single Compartment, Counter Top, self-rimming, approximately 16" x 19" x 7 1/2", 18 Gauge Stainless Steel. Faucet: Chicago # wristblade handles, gooseneck, centerset, laminar flow outlet. Trim: McGuire # 151M cup strainer with 1-1/2" tailpiece, McGuire #LF2165CC valve stops, risers, and escutcheons, M #8912-C-F adjustable p-trap, cleanout, and escutcheon. Provide with TMV-1. Provide in-line thermal disinfection unit. See ILTDU.
P-608	EWC-1: ELECTRIC WATER COOLER	2	1.5	0.5	-	2	2	N/A	NO	370 W	4 FLA	115/1	Electric Water Cooler: Mechanically cooled, self-contained, dual height station barrier free water cooler with high low (adult/child) access. Provided with bottle filling station. Elkay
P - 701	SHOWER SYSTEM	1.5	1.5	.5	.5	2	2	N/A	NO	-	-	-	Shower System: Powers HydroGuard T/P Series e700 hand shower system and temperature/pressure balancing valve, ASSE 1016, adjustable stop screw, elevated vacuum breaker flexible metal hose, ADA hand shower standard, 1.5 gpm flow, slide bar, 250 lb rated.
P-801	NWH: WALL HYDRANT, NON-FREEZE	-	-	0.75	-	-	5	N/A	NO	-	-	-	Wall Hydrant: All wall hydrants are existing to remain. Hose Bibb: Prier Products #C-158NP.75, Cast or wrought copper alloy, 3/4" female, 3/4" threaded hose connection, four-arm handle shall be cast/formed/drop forged copper alloy, as
⊃-804	HB: HOSE BIBB	-	-	0.75	0.75	-	5	N/A	NO	-	-	-	integral vacuum breaker.
P-808	WATER SUPPLY BOX	-	-	0.5	0.5	-	-	-	-	-	-	-	Washing Machine Outlet Box: IPS CorpGuy Gray #SSWB1 Stainless Steel Washing Machine Outlet Box with quarter turn sweat valves.
P-812	IMB: ICE MAKER / WATER SUPPLY BOX	-	-	0.5	-	-	-	-	-	-	-	-	Ice Maker Box: IPS CorpGuy Gray # SSIB1 Stainless Steel Ice Maker Box with quarter turn sweat valves.
P-815	NRH: PEDESTAL ROOF HYDRANT, NON-FREEZE	-	-	0.75	-	-	5	N/A	NO	-	-	-	Non-freeze, pedestal type hydrant with cast aluminum weather resistant dome control handle, 304 stainless steel shroud with welded stainless steel flange, 125 lb. 1" bronze globe a male hose fitting, quick disconnect with built in vacuum breaker, stainless steel reservoir. Insulation R-8, cellular foam insulation, under-deck support flange with hardware. Provide i breaker which automatically drains when shut below roof deck to reservoir. Mapa Products, Model MPH-24FP Pedestal Hydrant.
-D-C	FLOOR DRAIN	VARIES	-	-	-	2	-	-	-	-	-	-	Floor Drain: JAY R Smith #2005L (-A), Cast Iron body, Adjustable 6" round or square top, nickel bronze strainer and Speedi-set Outlet. Outlet size and top shape as shown on plan. primer connection as specified and shown on plans.
-D-S	FLOOR SINK	SEE PLAN	-	-	-	-	-	-	-	-	-	-	Floor Sink: Jay R. Smith # 3001, stainless steel body, weep holes, internal dome strainer, heavy duty non-tilting loose set grate. Outlet size and top shape as shown on plan. Provide connection as specified and shown on plans.
-CO	FLOOR CLEANOUT	SEE PLAN	SEE PLAN	-	-	-	-	-	-	-	-	-	Floor Cleanout: Jay R Smith # 4020S-F-C, cast iron body, flashing flange with clamping colloar, ABS plug and adjustable, round, secured, nickel bront top with scoriated top for exposition applications.
vco	WALL CLEANOUT	SEE PLAN	SEE PLAN	-	-	-	-	-	-	-	-	-	Wall Cleanout: Jay R Smith # 4530S, cast iron clean out tee and plug with gasket seal, counter sunk plug, stainless steel round cover and screw.
CV-1	FLOW CONTROL VALVE	-	-	SEE PLAN	-	-	-	-	-	-	-	-	Flow Control Valve: Flow Design # ICSS "Autoflow", series 300 stainless steel union body with nickel plated union nut, stainles steel catridge, NSF 61 Annex G, nameplate and 1/2" unless shown otherwise on plans. Provide 0.3 GPM flow rated cartridge unless shown otherwise on plans.
ITMV	MASTER THERMOSTATIC MIXING VALVE	-	-	2	2	-	-	-	-	-	-	-	Master Thermostatic Mixing Valve: Powers # LFMM435, ASSE 1017, Lead Free Brass Body, Adjustable Temperature setting - Temperature set at 130 F, 139 gpm @ 20 psi, and 0.5 flow.
MV-1	THERMOSTATIC MIXING VALVE	-	-	3/8	3/8	-	-	-	-	-	-	-	Thermostatic Mixing Valve: Watts# LFUSG-B-M2, ASSE 1070, Lead Free Brass Body, 4-port, Adjustable Temperature setting - Temperature set at 105 F and 0.25 gpm minimum flor for maintenance flushout ability.
TP-1	TRAP PRIMER PRESSURE ACTIVATED	-	-	.5	-	-	-	-	-	-	-	-	Trap Primer Pressure Activated: Precision Plumbing Products P1-500 Pressure Drop Actived Trap Primer. Provide with distribution unit. See specification. See plan for quantity of ou
VHA	WATER HAMMER ARRESTOR	-	-	VARIES	VARIES	-	-	-	-	-	-	-	Water Hammer Arrester: Precision Plumbing Products, ASSE 1010 OR PDI WH-201 Standards, hard drawn copper body and wrought copper fittings, piston type with lubricated EPE Seals, provide PDI sizes A-F as shown on plans.

SIZE SIZE TEM IN IN F		=		
	1	_		
TAGE MEGUANICAL BOOM BOMECTIC COLD WATER BUILDENIEG NOTEC 4.0.0 0.05 0.50 470	PSI	MCA	V/PH	
MS MECHANICAL ROOM DOMESTIC COLD WATER PHIGENICS NOTES 1 & 2 0.25 0.50 176	145	2	110/1	1-6
IOTES: 1 CONTRACTOR TO PROVIDE WME-1175 PWA ADVANCED MONITORING SYSTEM 2.0.				
CONTRACTOR TO PROVIDE WME-9999 HARDNESS MONITOR (QUANTITATIVE) ADD ON.				
CONTRACTOR TO PROVIDE WEB-BASED DATA MANAGEMENT SYSTEM.				

FACTURER	PLAN MANUFACTURER MODEL BODY MATERIAL										
ACTORER	MODEL	BODY MATERIAL	(GPM)	(FT)	TYPE	SIZE	POWER	VOLTAGE	PHASE	FLA	NOTES
GOSSETT	# BE-60 ECM	LEAD-FREE BRONZE	25	22	FLANGE	1-1/4"	1/2 HP	120	1	6.5	1-6
GOSSETT	# BE-60 ECM	LEAD-FREE BRONZE	25	22	FLANGE	1-1/4"	1/2 HP	120	1	6.5	1-6
_					GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE 1-1/4"	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE 1-1/4" 1/2 HP	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE 1-1/4" 1/2 HP 120	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE 1-1/4" 1/2 HP 120 1	GOSSETT # BE-60 ECM LEAD-FREE BRONZE 25 22 FLANGE 1-1/4" 1/2 HP 120 1 6.5

3 STARTER FURNISHED BY DIVISION 26 CONTRACTOR.

5 RECIRCULATION PUMP IS ON AND RUN CONTINUOUSLY.

6 PROVIDE TWO (2) PUMPS TO OPERATE IN LEAD-STANDBY CONFIGURATION.

4 PUMP MOTOR SHALL BE NON-OVERLOADING THROUGHOUT THE FULL RANGE OF THE PUMP CURVE.

MARK	LOCATION	SERVICE	MANUFACTURERS	MODEL	STORAGE	WATER					STEAM				RELIEF VALVE				NOTES
					CAPACITY	EWT	LWT	CAP	FLOW	WPD	PRESS.	CAP	CAP	MAX CV PRESS DROP	SETTING	DISC.	STARTER		
					GAL	°F	°F	MBH	GPM	FT	PSIG	MBH	LB/HR	PSIG	PSIG			V/PH	
DWH-1	MECHANICAL ROOM	DOMESTIC HOT WATER	RECO	-	27.0	40.0	140.0	1550	31.0	-	25.0	1500	1587	10.00	150.0	NOTE 2	NOTE 3	120/1	1-4
DWH-2	MECHANICAL ROOM	DOMESTIC HOT WATER	RECO	-	27.0	40.0	140.0	1550	31.0	-	25.0	1500	1587	10.00	150.0	NOTE 2	NOTE 3	120/1	1-4

2 PROVIDE MASTER THERMOSTATIC MIXING VALVE (MTMV) WITH WATER HEATER. SEE PLUMBING FIXTURE SCHEDULE FOR RELATED INFORMATION. 3 DISCONNECT SWITCH FURNISHED BY DIVISION 26 CONTRACTOR. 4 STARTER FURNISHED BY DIVISION 26 CONTRACTOR.

DOI	VIESTIC VVA	IEK INEKI	MAL EXPANSIO	IN IANK SU	PUEDOI								
MARK	LOCATION	MANUFACTURER	TYPE	MODEL	SYSTE	И ТЕМР.	SYSTEM	PRESSURE	RELIEF VALVE	MIN TANK	MIN ACCEPT	PIPE SIZE	
					MIN	MAX	MIN	MAX	PRESSURE	VOLUME	VOLUME	PIPE SIZE	NOTES
					°F	°F	PSIG	PSIG	PSIG	GAL	GAL	IN	
ET-1	MECHANICAL ROOM	AMTROL	POTABLE THERMAL EXPANSION TANK	ST-25V	40	200	60	150	150	5.7	3.1	.75	1

1 PROVIDE CONCRETE HOUSEKEEPING PAD PER SPECIFICATIONS FOR FLOOR-MOUNTED UNITS.

MARK	DEVICE	MANUFACTURER	MODEL	MEDICAL AIR	MEDICAL VACUUM	OXYGEN	LABORATORY AIR	LABORATORY VACUUM	NOTES
AAP	AREA ALARM PANEL	BEACON MEDAES	M3-A10-O	N/A	N/A	X	N/A	N/A	1-6
WO	WALL OUTLET	BEACON MEDAES	NOTE 4	N/A	N/A	X	N/A	N/A	1-6
ZVB	ZONE VALVE BOX	BEACON MEDAES	ZVB1-B-ENG	N/A	N/A	Х	N/A	N/A	1-6

1 PROVIDE COMPLETE INSTALLATION OF SYSTEMS PER NFPA 99 REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS. 2 INSTALL ITEMS AT LOCATIONS AND ELEVATIONS INDICATED ON ARCHITECTURAL DRAWINGS. COORDINATE LOCATIONS WITH OTHER TRADES.

3 DEVICES SHALL BE COMPATIBLE WITH EXISTING SITE FACILITIES. VERIFY AT SITE. 4 WALL OUTLETS SHALL BE QUICK-CONNECT PIN INDEX TYPE. MATCH TYPE WITH EXISTING SITE FACILITIES. VERIFY AT SITE.

5 INSTALL DEVICES WITH CENTERLINE OF BOXES AT 60" AFF, UNLESS OTHERWISE NOTED. 6 MAKE ZONE VALVE BOXES SAME SIZE AS PIPE THEY SERVE. REFER TO FLOOR PLANS FOR SIZES.

	CONSULTANT INFORMATION	ARCHITECT	Office of	PLUMBING SCHEDULES I	PROJECT PHASE BID DOCUMENTS	PROJECT TITLE RENOVATE A	& B WING BUIL	DING 6	VA PROJECT NUMBER 589-A5-19-116
	STRUCTURAL / MECHANICAL / ELECTRICAL / FIRE PROTECTION CIVIL ENGINEER PLUMBING / TECHNICAL ENGINEER ENGINEER	SDUL	Construction and Facilities			PROJECT LOCATION 2200 SW GAG	SE BLVD.		BUILDING NUMBER 6
	STAND STRUCTURAL ENGINEERING SPUR DESIGN POOLE FIRE PROTECTION, INC. 11827 W. 112TH STREET, SUITE 200 11020 KING STREET, SUITE 350 19910 W. 161ST STREET OVERLAND PARK, KS 66210 OVERLAND PARK, KS 66210 OLATH, KS 66062	# DESIGN	Management	APPROVED: PROJECT DIRECTOR	FULLY SPRINKLERED	TOPEKA, KS 6	66622		DRAWING NUMBER 6-P-601
Revision # Date	(913) 214-2169 (405) 842-6100 (913) 829-8650	312 SW 25th Street Oklahoma City, OK 73109 Overland Park, KS 66210 Spur-design.com KS ARCH REG. NO. A-1139, EXP. 12/31/2019 KS ENGR REG. NO. E-2586, EXP. 12/31/2019	7/10/2019 U.S. Department of Veteran Affairs			DATE 07/10/2019	JES	DRAWN BY RLC	Dwg. 89 OF 160

one-quart one-eighth inch = one foot $\begin{array}{c|c}
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 4 & 8 \\
 & 5 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 6 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 & 8 \\
 & 8 &$

VA FORM 08-6231