

HVAC / MECHANICAL SYMBOLS

ABBREVIATIONS:

AC	ALTERNATING CURRENT	MECH	MECHANICAL
ADJ	ADJUSTABLE	MFG	MANUFACTURER
AHJ	AUTHORITY HAVING JURISDICTION	MIN	MINIMUM
AHU	AIR HANDLING UNIT	MIN	MINUTE
AS	AIR SEPARATOR	mm	MILLIMETER
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	MPS	MEDIUM PRESSURE STEAM
BHP	BRAKE HORSEPOWER	MT	MOISTURE (HUMIDITY) TRANSMITTER
BMS	BUILDING MANAGEMENT SYSTEM	MV	MANUAL VENT
CALC	CALCULATED	N.C.	NORMALLY CLOSED
CC	CHILLED WATER COOLING COIL - AHU	NC	NOISE CRITERIA LEVEL
CD	CONDENSATE DRAIN	NC	NOISE CRITERIA LEVEL
CFM	CUBIC FEET PER MINUTE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CHWR	CHILLED WATER RETURN	NG	NATURAL GAS
CHWS	CHILLED WATER SUPPLY	N.O.	NORMALLY OPEN
C/L	CENTERLINE	NPT	NATIONAL PIPE THREAD
CO	CLEANOUT	OA	OUTSIDE AIR
COEF	COEFFICIENT	OAT	OUTSIDE AIR TEMPERATURE
COMLINK	COMMUNICATION LINK	ORD	OVERFLOW ROOF DRAIN
COND	CONDENSATION	OSA	OUTSIDE AIR
CONFIG	CONFIGURED	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
COR	CONTRACTING OFFICER'S REPRESENTATIVE	Pa	PASCAL
CNTRL	CONTROL	PC	PUMPED CONDENSATE
CP	CONDENSATE PUMP	PC	PREHEAT STEAM COIL - AHU
CPVC	CHLORINATED POLYVINYL CHLORIDE	PD	PRESSURE DROP
CR	CONDENSATE RETURN	PDS	PRESSURE DIFFERENTIAL SENSOR
CV	CONTROL VALVE	PH	PHASE
CV	FLOW COEFFICIENT	PI	PROPORTIONAL INTEGRAL
DAMP.	DAMPER	PID	PROPORTIONAL INTEGRAL DERIVATIVE
DAT	DISCHARGE AIR TEMPERATURE	PRESS.	PRESSURE
DB	DRY BULB	PSH	HIGH PRESSURE SWITCH
DC	DIRECT CURRENT	PSIG	POUNDS PER SQUARE INCH - GAUGE
DCW	DOMESTIC COLD WATER	PSL	LOW PRESSURE SWITCH
DEG	DEGREES	QUANT.	QUANTITY
DHR	DOMESTIC HOT WATER RETURN	R	RADIUS
DHW	DOMESTIC HOT WATER	R	RETURN
DIFF.	DIFFERENTIAL	RA	RETURN AIR
DIST	DISTRUBUTION	RC	REHEAT STEAM COIL - AHU
DS	DOWNSPOUT	RD	ROOF DRAIN
DSP	DEHUMIDIFICATION SET POINT	RE	RESIDENT ENGINEER
DVV	DRAIN, WASTE AND VENT	REQ'D	REQUIRED
(E)	EXISTING	RH	RELATIVE HUMIDITY
EA	EXHAUST AIR	RPM	REVOLUTIONS PER MINUTE
ECC	ENERGY CONTROL CENTER	S	SUPPLY
ELECT.	ELECTRICAL	SA	SUPPLY AIR
ELEV	ELEVATION	SAN	SANITARY
ENT	ENTERING	SD	SMOKE DAMPER
ERC	ENERGY RECOVERY COIL - AHU	SF	FAN SECTION - AHU
ES	END SWITCH	SF	SQUARE FEET
EWFC	ELECTRIC WATER COOLER	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS ASSOCIATION
F	FAHRENHEIT	SP	STATIC PRESSURE
FD	FLOOR DRAIN	SPEC	SPECIFICATION
FILT.	FILTER	SS	STAINLESS STEEL
FPM	FEET PER MINUTE	SST	START/STOP
FT	FEET	SUH	STEAM UNIT HEATER
GAL	GALLONS	SV	STEAM VALVE
GALV	GALVANIZED	SV	STEAM VENT
G.C.	GENERAL CONTRACTOR	T	THERMOSTAT
GPM	GALLONS PER MINUTE	TEMP.	TEMPERATURE
GT	GLYCOL TANK	TSP	TOTAL STATIC PRESSURE
H	HEIGHT	TT	TEMPERATURE SENSOR/TRANSMITTER
H	HUMIDIFIER - AHU	TYP	TYPICAL
HP	HORSEPOWER	UH	UNIT HEATER
HPS	HIGH PRESSURE STEAM	V	VENT
HR	HOUR	V	VOLTS
HROR	HEAT RECOVERY RETURN	VAV	VARIABLE AIR VOLUME
HRCS	HEAT RECOVERY SUPPLY	VFD	VARIABLE FREQUENCY DRIVE
HRP	HEAT RECOVERY PUMP	VSMC	VARIABLE SPEED MOTOR CONTROLLER
HSP	HUMIDIFICATION SET POINT	VTR	VENT THROUGH ROOF
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	W	WIDTH
HX	HEAT EXCHANGER	W/	WITH
HZ	HERTZ	WB	WET BULB
IBC	INTERNATIONAL BUILDING CODE	WG	INCHES OF WATER
ICVAMC	IOWA CITY VETERANS AFFAIRS MEDICAL CENTER	ZAT	ZONE AIR TEMPERATURE
IECC	INTERNATIONAL ENERGY CONSERVATION CODE	ZC	VALVE OR DAMPER CONTROLLER
IFB	INTEGRAL FACE AND BYPASS		
IMC	INTERNATIONAL MECHANICAL CODE		
I/O	INPUT/OUTPUT		
IPC	INTERNATIONAL PLUMBING CODE		
K.O.	COMMANDING OFFICER		
L	LENGTH		
LBS	POUNDS		
LPS	LOW PRESSURE STEAM		
LWA	SOUND POWER LEVEL		
MAX	MAXIMUM		
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR		
MC	MECHANICAL CONTRACTOR		
MD	MOTORIZED DAMPER		

	SUPPLY AIR DUCT FROM AHU		VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
	SUPPLY AIR DUCT FROM VAV		VANED RADIUS ELBOW (SHORT RADIUS)
	FRESH AIR DUCT FROM EXTERIOR		RADIUS ELBOW (SHORT RADIUS)
	RETURN AIR DUCT		NEW DUCT (INSIDE DIMENSIONS: WIDTH / DEPTH)
	EXHAUST AIR DUCT		SUPPLY DUCT UP
	HOT WATER SUPPLY		SUPPLY DUCT DOWN
	HOT WATER RETURN		RETURN/EXHAUST/RELIEF DUCT UP
	REHEAT HOT WATER SUPPLY		RETURN/EXHAUST/RELIEF DUCT DOWN
	REHEAT HOT WATER RETURN		MOTORIZED DAMPER W/ ACCESS DOOR
	HEAT RECOVERY WATER SUPPLY		FIRE DAMPER W/ ACCESS DOOR
	HEAT RECOVERY WATER RETURN		FIRE AND SMOKE DAMPER W/ ACCESS DOOR
	CHILLED WATER SUPPLY		BACK DRAFT DAMPER W/ ACCESS DOOR
	CHILLED WATER RETURN		MANUAL VOLUME DAMPER
	REFRIGERANT - LIQUID		MODULATING CONTROL VALVE
	REFRIGERANT - SUCTION		PIPE ELBOW
	LOW PRESSURE STEAM		PIPE DOWN
	MEDIUM PRESSURE STEAM		PIPE UP
	HIGH PRESSURE STEAM		PIPE TEE DOWN
	LOW PRES. STEAM CONDENSATE RETURN		WALL MOUNTED EXHAUST FAN
	MEDIUM PRES. STEAM CONDENSATE RETURN		VENTURI VALVE
	HIGH PRES. STEAM CONDENSATE RETURN		VENTURI VALVE W/REHEAT COIL
	PUMPED STEAM CONDENSATE RETURN		VARIABLE AIR VOLUME BOX
	STEAM BUCKET TRAP		DUCT HOT WATER REHEAT COIL
	FLOAT & THERMOSTATIC TRAP		FIRE/SMOKE DAMPER
	STEAM THERMOSTATIC TRAP		SMOKE DAMPER
	STRAINER		MOTORIZED DAMPER
	UNION		GRILLE, REGISTER, DIFFUSER TAG WITH CFM
	BALL VALVE		EQUIPMENT TAG WITH NUMBER DESIGNATION
	GATE VALVE		THERMOSTAT
	GLOBE VALVE		TEMPERATURE SENSOR
	CHECK VALVE		PRESSURE SENSOR
	MODULATING CONTROL VALVE		DIFFERENTIAL PRESSURE SENSOR
	PRESSURE REDUCING VALVE		HUMIDITY SENSOR
	MANUAL BALANCING / SHUT-OFF VALVE		SUPPLY DIFFUSER
	CONCENTRIC PIPE REDUCER		RETURN GRILLE
	ECCENTRIC PIPE REDUCER		EXHAUST GRILLE
	TEE		MECHANICAL PLAN NOTE
	PRESSURE GAUGE		DUCT FLEX CONNECTOR
	TEMPERATURE GAUGE		FLEX DUCT
	HEAT EXCHANGER		POINT OF CONNECTION
	STEAM CONDENSATE PUMP		POINT OF DISCONNECTION
	STEAM FLASH TANK		TO BE DEMOLISHED
	EXPANSION TANK		
	LIQUID FLOW DIRECTION		
	DIRECTION OF AIR FLOW		

MECHANICAL SHEET INDEX

M 0.00	SYMBOLS, LEGENDS AND ABBREVIATIONS
M 1.01	MECHANICAL ROOF DEMOLITION PLAN
M 1.01.1	MECHANICAL ROOF DEMOLITION PLAN-ALTERNATE BID#1
M 1.02	BASEMENT MECHANICAL PIPING PLAN BID ALTERNATE #3
M 1.03	FIRST FLOOR MECHANICAL PIPING PLAN BID ALTERNATE #3
M 2.01	INTERSTITIAL SPACE PIPING REMODEL PLAN
M 2.01.1	INTERSTITIAL SPACE PIPING REMODEL PLAN-ALTERNATE BID #1
M 2.01.2	INTERSTITIAL SPACE PIPING REMODEL PLAN-ALTERNATE BID #3
M 2.02	LEVEL 3 MECHANICAL PIPING REMODEL PLAN
M 2.02.1	LEVEL 3 MECHANICAL PIPING REMODEL PLAN-ALTERNATE BID #3
M 2.02.2	LEVEL 3 MECHANICAL PIPING REMODEL PLAN-ALTERNATE BID#4
M 2.03	INTERSTITIAL SPACE HVAC DUCT REMODEL PLAN
M 2.04	LEVEL 3 HVAC DUCT REMODEL PLAN
M 2.04.1	LEVEL 3 HVAC DUCT REMODEL PLAN-ALTERNATE BID#4
M 2.05	STEAM PIPING REMODEL PLAN
M 2.06	MECHANICAL ROOF PLAN
M 2.06.1	MECHANICAL ROOF PLAN-ALTERNATE BID#3
M 3.01	MECHANICAL SECTIONS
M 4.01	LARGE-SCALE VIEWS
M 5.00	Mechanical Details - Building 5 - Dry Side 1
M 5.01	Mechanical Details - Building 5 - Dry Side 2
M 5.10	Mechanical Details - Building 5 - Wet Side 1
M 5.11	Mechanical Details - Building 5 - Wet Side 2
M 5.12	Mechanical Details - Building 5 - Wet Side 3
M 6.01	MECHANICAL SCHEDULES
M 6.02	PIPING AND INSTRUMENTATION DIAGRAM/SCHEMATIC (PID)
M 6.03	ZONE/ROOM PRESSURE AND FLOWS DIAGRAM
M 6.04	DDC Controls
M 6.05	Control Diagrams
M 6.06	Control Diagrams
M 7.01	DUCTWORK ISOMETRIC VIEWS
M 7.01.1	DUCTWORK ISOMETRIC VIEWS BID ALTERNATE #4
M 7.02	MECHANICAL PIPING ISOMETRIC VIEWS
M 7.02.1	MECHANICAL PIPING ISOMETRIC VIEWS-ALTERNATE BID#3
M 7.02.2	MECHANICAL PIPING ISOMETRIC VIEWS-ALTERNATE BID#4

GENERAL MECHANICAL NOTES:

ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE (IMC), THE 2018 HVAC AND MECHANICAL DESIGN MANUAL 2018 SPECIFICATIONS AND GUIDELINES, AND THE AUTHORITIES HAVING JURISDICTION (AHJ).

PRIOR TO BIDDING WORK, CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS. THESE DRAWINGS WERE DEVELOPED FROM PREVIOUS PROJECT RECORD DRAWINGS AND THROUGH SITE INVESTIGATION. ALTHOUGH EVERY ATTEMPT HAS BEEN MADE TO INDICATE THE EXACT ROUTING AND LOCATION OF PROPOSED SYSTEMS, NOT ALL OFFSETS, REQUIRED FITTINGS, CONNECTIONS, AND/OR CONDITIONS COULD BE VERIFIED. THE CONTRACTOR SHALL COORDINATE WORK AND MAKE REQUIRED CHANGES TO THE ROUTING IN ORDER TO AVOID CONFLICTS WITHOUT ANY INCREASED COST TO THE OWNER.

CONTRACTOR IS TO VERIFY ALL DRAWING INFORMATION PRIOR TO STARTING WORK. MINOR CHANGES IN ROUTING IS EXPECTED. WHERE EXISTING CONDITIONS VARY GREATLY FROM THE PLANS CONTRACTOR SHALL CONTACT THE CONTRACTING OFFICER'S REPRESENTATIVE (COR) IMMEDIATELY BEFORE STARTING WORK. NO EXTRA CONSIDERATION WILL BE GIVEN FOR IGNORANCE OF EXISTING CONDITIONS.

CONTRACTOR IS TO COORDINATE WITH THE COR FOR DIRECTION AND HANDLING OF ANY DEMOLISHED ITEMS OR EQUIPMENT. CONTRACTOR IS TO VERIFY WITH COR WHICH ITEMS OR EQUIPMENT SHALL BE TURNED OVER TO THE VA OR SHALL BECOME PROPERTY OF THE CONTRACTOR TO BE REMOVED FROM JOB SITE.

EXCEPT WHERE INDICATED, ALL EQUIPMENT, MATERIALS, AND ARTICLES INCORPORATED IN THE WORK SHALL BE NEW AND OF COMPARABLE QUALITY AS SPECIFIED. ALL WORKMANSHIP SHALL BE FIRST-CLASS AND SHALL BE PERFORMED BY PERSONNEL SKILLED AND REGULARLY EMPLOYED IN THEIR RESPECTIVE TRADES. ITEMS REUSED AND/OR RELOCATED SHALL BE BROUGHT TO LIKE NEW CONDITION PRIOR TO BEING PLACED INTO SERVICE.

ALL WORK SHALL BE COORDINATED WITH ALL AFFECTED TRADES PRIOR TO STARTING WORK. REWORK REQUIRED DUE TO COORDINATION ISSUES SHALL BE DONE BY THE INSTALLATION CONTRACTOR WITHOUT INCREASED COST TO THE OWNER.

SYSTEMS DESIGNATED TO BE PROVIDED AND INSTALLED WITHIN THESE CONTRACT DOCUMENTS ARE INTENDED TO BE COMPLETE AND OPERATIONAL. PROVIDE EVERYTHING ESSENTIAL FOR THE COMPLETION OF THE WORK TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION. THIS INCLUDES ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

THE PROJECT IS REQUIRED TO BE PHASED AND AREAS MUST BE KEPT IN OPERATION THROUGHOUT THE PROJECT. SEE APPROPRIATE SECTIONS OF DIVISION 1.

IN GENERAL IT IS THE INTENT OF THESE DRAWINGS: ITEMS INSTALLED WHERE THE STRUCTURE IS EXPOSED - INSTALLED AS HIGH AS POSSIBLE. ALL VALVES AND CONTROL DEVICES SHOULD BE INSTALLED AS LOW AS POSSIBLE OR WHERE IT WILL BE MAINTAINABLE FROM A LADDER OR LIFT. CLOSE COORDINATION WILL BE REQUIRED IN ORDER TO AVOID ALL CONFLICTS.

ALL SUPPLY DUCTWORK BETWEEN AHU AND VAV'S SHALL BE 4" STATIC PRESSURE CLASS. ALL DUCT TO BE GALVANIZED STEEL.

ALL NEW MECHANICAL PIPING SHALL MATCH EXISTING SYSTEMS AND BE MADE OF BLACK IRON OR COPPER. NOTIFY COR AND ENGINEER FOR ANY DEVIATION FROM THESE MATERIALS. ALL NEW MECHANICAL PIPING SHALL BE INSULATED AND THICKNESS SHALL MATCH THE EXISTING SYSTEMS. CORE DRILLING MAY BE REQUIRED. EVERY EFFORT WAS PUT INTO IDENTIFYING THESE LOCATIONS BUT NOT ALL MAY BE SHOWN. CONTRACTOR IS TO IDENTIFY ANY OTHER LOCATIONS AND IS RESPONSIBLE FOR CORE DRILLING THOSE AS WELL.

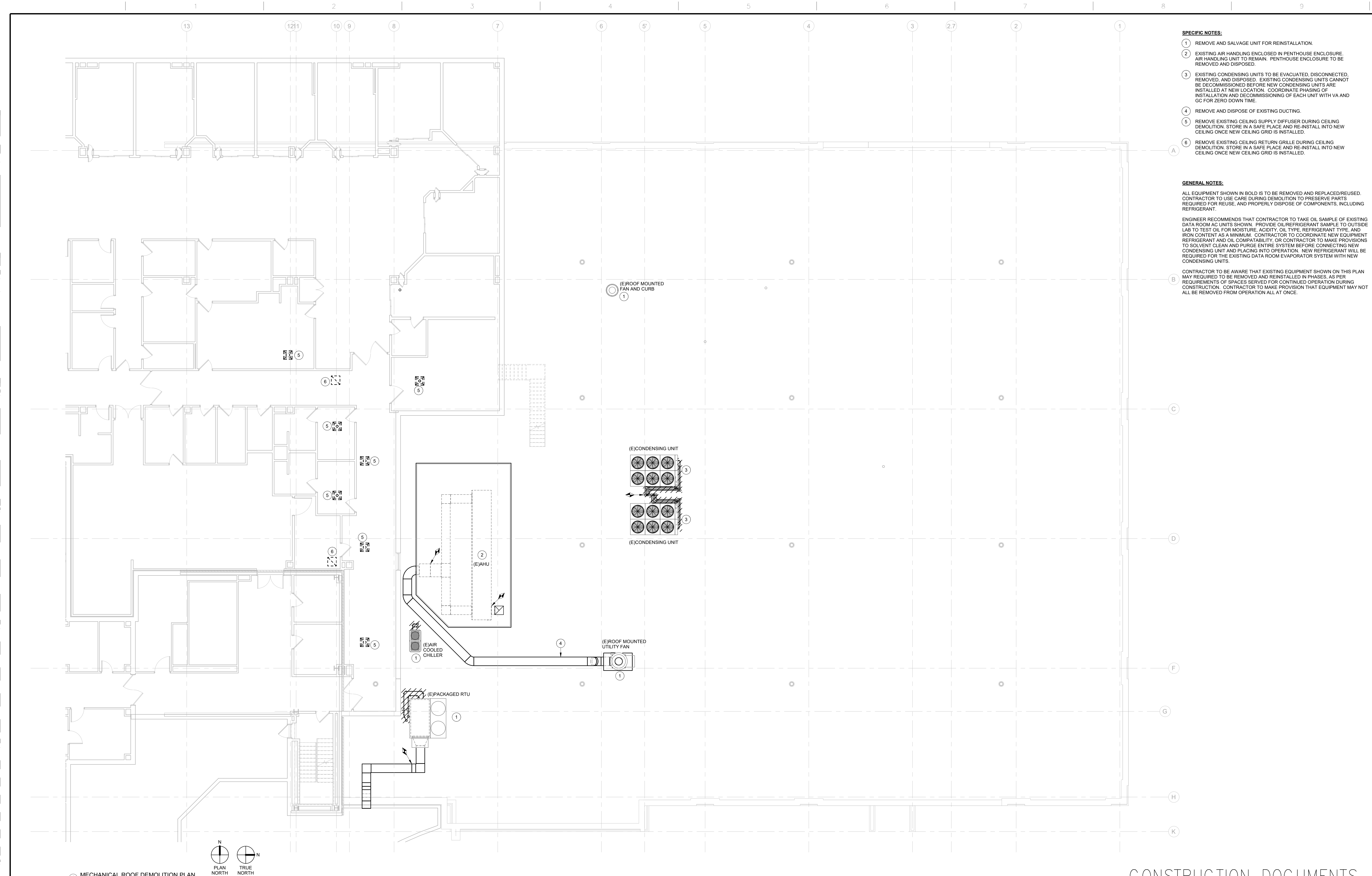
ALL SQUARE THROAT DUCT ELBOWS WITH ANY DIMENSIONS LARGER THAN 12" SHALL HAVE TURNING VANES, WHETHER SHOWN ON THE PLANS OR NOT.

COORDINATE WITH GC AND COR FOR WORK WITHIN SPACES SO AS TO NOT DISRUPT OCCUPIED AREAS DURING CONSTRUCTION.

MANUFACTURERS/MODEL NUMBERS INDICATED ON DRAWINGS ARE BASIS OF DESIGN. OTHER MANUFACTURERS/MODEL NUMBERS WILL BE ACCEPTED PROVIDING THEY MEET SPECIFICATIONS.

CONSTRUCTION DOCUMENTS

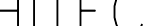
COMPLIANCE REVIEW INCLUDED Revisions:		2/23/2024 Date		CONSULTANTS: TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736 Albertson Engineering Inc. FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		ARCHITECT FOURFRONT DESIGN INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Drawing Title SYMBOLS, LEGENDS AND ABBREVIATIONS Approved: Project Director Omaha VA Medical Center 16.2330.A08		Project Title VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11 / 23 / 2020 Checked RD Drawn JB		Project Number 16.2330.A08 Building Number 25 Drawing Number M 0.00 Dwg. 105 of 193		Office of Construction and Facilities Management Department of Veterans Affairs	
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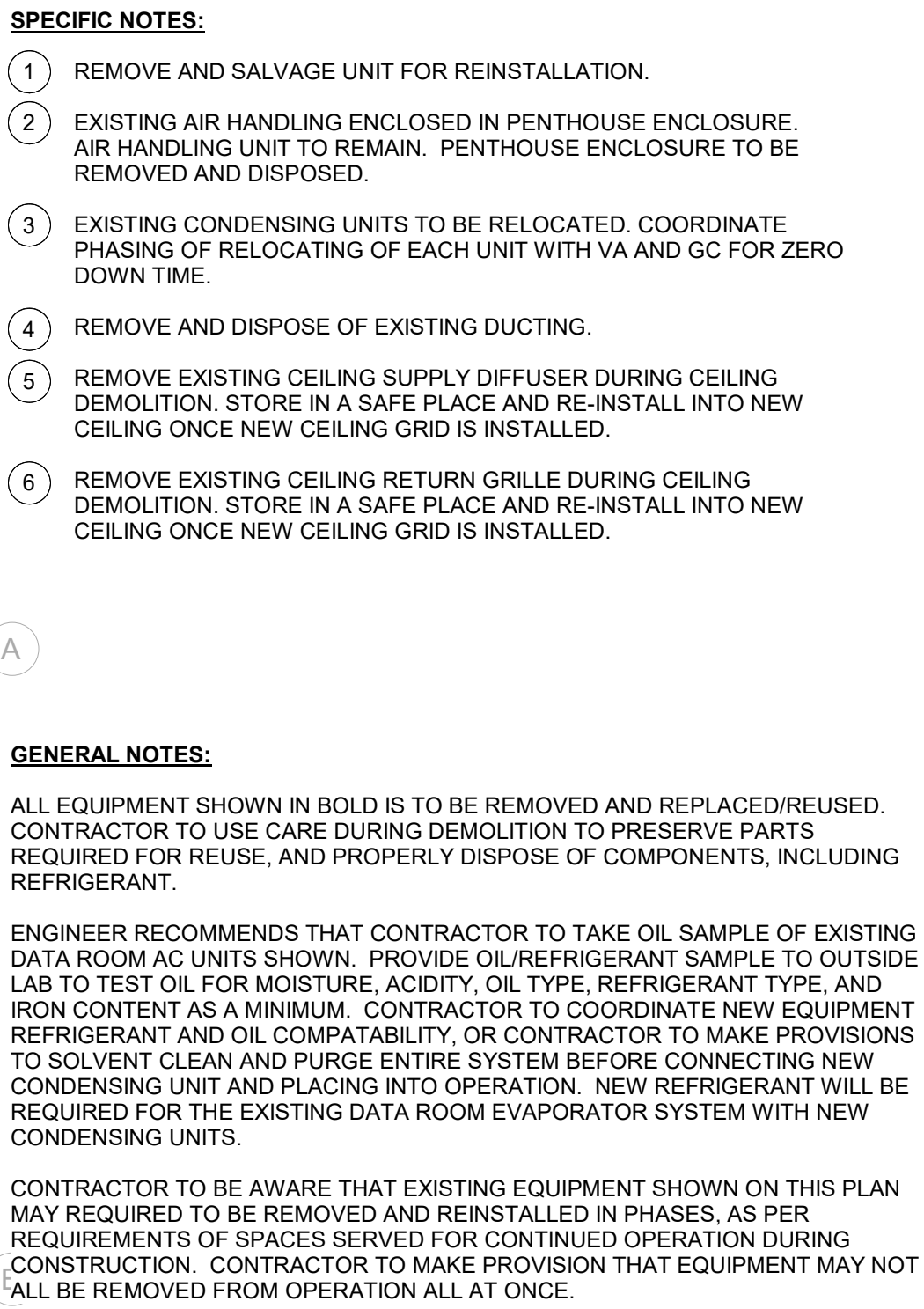


- GENERAL NOTES:**
CONTRACTOR TO USE CARE DURING DEMOLITION TO PRESERVE PARTS
REQUIRED FOR REUSE, AND PROPERLY DISPOSE OF COMPONENTS, INCLUDING
REFRIGERANT.

ENGINEER RECOMMENDS THAT CONTRACTOR TO TAKE OIL SAMPLE OF EXISTING
DATA ROOM AC UNITS SHOWN. PROVIDE OIL/REFRIGERANT SAMPLE TO OUTSIDE
LAB FOR ANALYSIS. OIL, FOR MOSTLY DRY OIL TYPE REFRIGERANT TYPE, AND
IRON CONTENT AS A MINIMUM. CONTRACTOR TO COORDINATE NEW EQUIPMENT
REFRIGERANT AND OIL COMPATIBILITY, OR CONTRACTOR TO MAKE PROVISIONS
FOR REFRIGERANT AND OIL LEAKAGE AND REPAIRS. CONTRACTOR TO REMOVE
CONDENSING UNIT AND PLACING INTO OPERATION. NEW REFRIGERANT WILL
BE REQUIRED FOR THE EXISTING DATA ROOM EVAPORATOR SYSTEM WITH NEW
CONDENSING UNITS.

CONTRACTOR TO BE AWARE THAT EXISTING EQUIPMENT SHOWN ON THIS PLAN
MAY BE REQUIRED TO BE REMOVED AND REINSTALLED IN PHASES. AS PER
REQUIREMENTS OF SPACES SERVED FOR CONTINUED OPERATION DURING
CONSTRUCTION. CONTRACTOR TO MAKE PROVISION THAT EQUIPMENT MAY NOT
ALL BE REMOVED FROM OPERATION ALL AT ONCE.

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COMPLIANCE REVIEW INCLUDED		2/23/2024															
Revisions:		Date															



Department of
Veterans Affairs

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one and one half inches = one foot

three quarters inch = one foot

three eighths inch = one foot

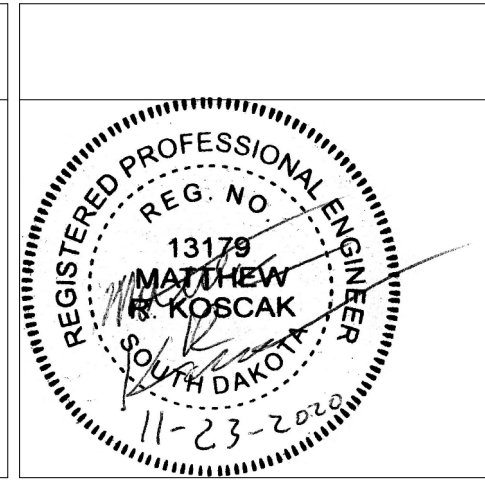
one quarter inch = one foot

one eighth inch = one foot

VA FORM 08-6231

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
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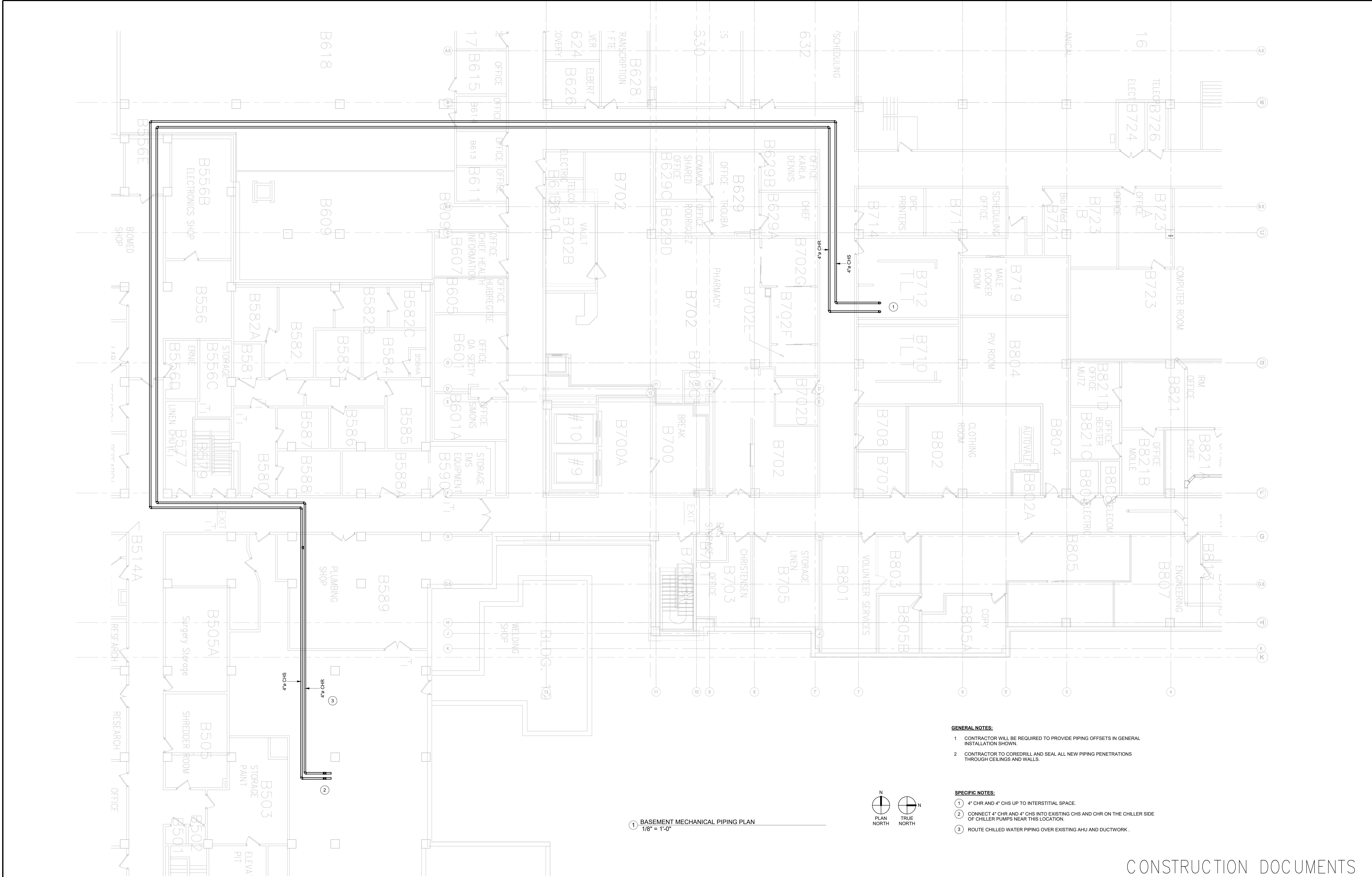


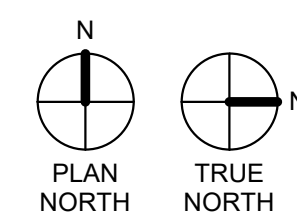
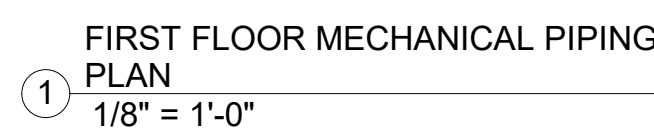
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Drawing Title	BASEMENT MECHANICAL PIPING PLAN BID ALTERNATE #3
Approved: Project Director	Omaha VA Medical Center

Project Title	VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service
Location	4101 Woolworth Ave #4199 Omaha, Ne 68105
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Drawn	MK
Project Number	16.2330.A08
Building Number	25
Drawing Number	M 1.02
Dwg. 108 of 193	

Office of Construction and Facilities Management
 Department of Veterans Affairs

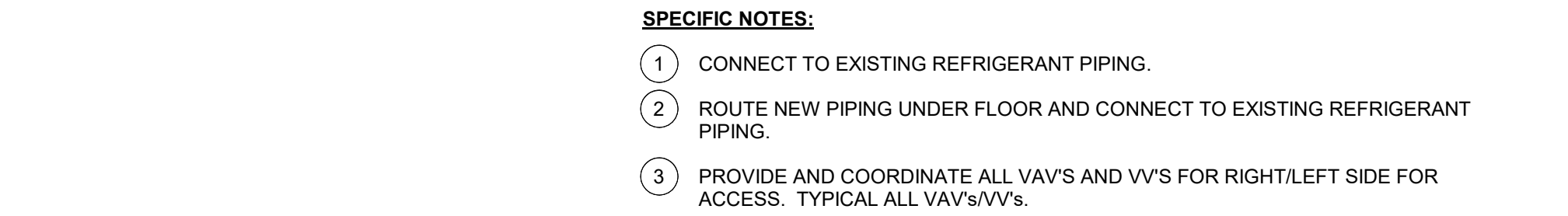




- GENERAL NOTES:**
- 1 CONTRACTOR WILL BE REQUIRED TO PROVIDE PIPING OFFSETS IN GENERAL INSTALLATION SHOWN.
 - 2 CONTRACTOR TO COREDRILL AND SEAL ALL NEW PIPING PENETRATIONS THROUGH CEILINGS AND WALLS.
- SPECIFIC NOTES:**
- ① 4" CHR AND 4" CHS DOWN TO BASEMENT TO EXISTING CHILLER PLANT.
 - ② 4" CHR AND 4" CHS UP TO INTERSTITIAL SPACE.
 - ③ ROUTE CHILLED WATER PIPING IN NEW CHASE IN WALL.

CONSTRUCTION DOCUMENTS

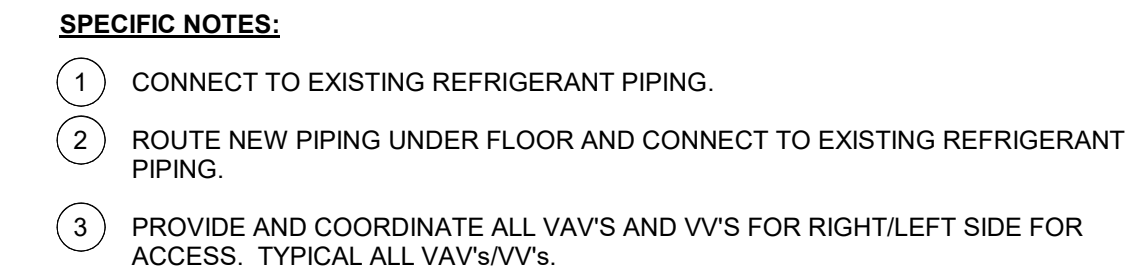
		CONSULTANTS:				ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management			
		 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering Inc.  FARRIS ENGINEERING OMAHA BRIDGE BENTLEY COLORADO SPRINGS Bismarck, ND PH: 701.828.81				 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		VA NWHIICS OMC CAMPUS - AE Construct Interl Processing Service		16.2330.A08					
								Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25				Drawing Number M 1.03	
COMPLIANCY REVIEW INCLUDED		2/23/2024						16.2330.A08		Date 11 / 23 / 2020		Checked RD		Drawn MK		Dwg. 109 of 193	
Revisions:		Date														Department of Veterans Affairs	



SPS MEDICAL EQUIPMENT LEGEND									
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS				
		1915 DECON		1915					
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A			
02	S0940	WASHER, DISINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A			
03	-	INNOVAVE PFC SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D			
3A	-	TRITEC 72	3	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D			
04	F2410	RACK RETURN	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A			
4A	-	SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
		1917 - AUTOMATIC CARTWASH AREA (CWSH2)		1917					
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,			
		1905 - SCOPE PROCESSING		1905					
06	F0540	CART, SCOPE, TRANSPORT	1	1905					
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW			
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60HZ, 1-Ph, 15A; 208V, 60HZ, 3-Ph, 15A			
		1906 - SCOPE STAGING ROOM (CSST1)		1906					
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A			
		1923 - PREP ASSEMBLY		1923					
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
11	S0048	CART, WASHER TRANSFER	3	1923					
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ			
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923					
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D			
		1920 - STERILIZATION		1920					
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A			
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS				
		1912 - H2O		1912					
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS				
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN				
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro				

NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.

Department of
Veterans Affairs

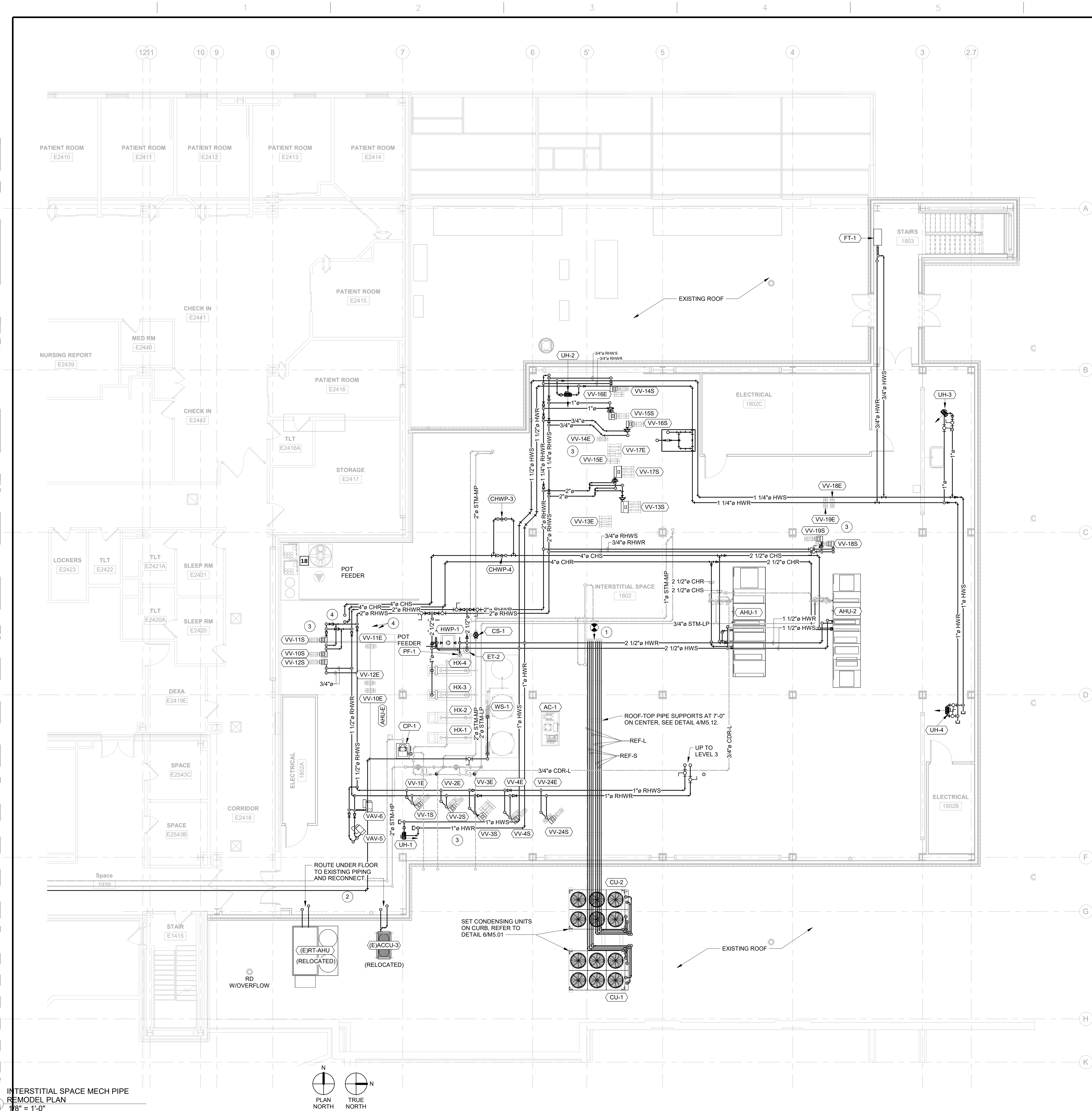


SPS MEDICAL EQUIPMENT LEGEND						
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS	
		1915 DECON		1915		
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A
02	S0940	WASHER, DISINFECTOR, STM, 100, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, 3, GR, HW, CW, PW, D, A
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D, A
3A		TRITEC 72	3	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D
04	F2410	RACK RETURN	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A
1A		SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A
		1917 - AUTOMATIC CARTWASH AREA (CWSH2)		1917		
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RCSD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,
		1905 - SCOPE PROCESSING		1905		
06	F0540	CART, SCOPE, TRANSPORT	1	1905		
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60Hz, 1-Ph, 15A, 208V, 60Hz, 3-Ph, 15A
		1906 - SCOPE STAGING ROOM (CSSY1)		1906		
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A
		1923 - PREP ASSEMBLY		1923		
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A
11	S0048	CART, WASHER TRANSFER	3	1923		
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923		
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D
		1920 - STERILIZATION		1920		
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS	
		1912 - H2O		1912		
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS	
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN	
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro	
NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.						

16.2330.A08

2/23/2024 10:46:33 AM

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot
thirteen inches = one foot
fourteen inches = one foot
fifteen inches = one foot
sixteen inches = one foot
seventeen inches = one foot
eighteen inches = one foot
nineteen inches = one foot
twenty inches = one foot
twenty one inches = one foot
twenty two inches = one foot
twenty three inches = one foot
twenty four inches = one foot
twenty five inches = one foot
twenty six inches = one foot
twenty seven inches = one foot
twenty eight inches = one foot
twenty nine inches = one foot
thirty inches = one foot
thirty one inches = one foot
thirty two inches = one foot
thirty three inches = one foot
thirty four inches = one foot
thirty five inches = one foot
thirty six inches = one foot
thirty seven inches = one foot
thirty eight inches = one foot
thirty nine inches = one foot
forty inches = one foot
forty one inches = one foot
forty two inches = one foot
forty three inches = one foot
forty four inches = one foot
forty five inches = one foot
forty six inches = one foot
forty seven inches = one foot
forty eight inches = one foot
forty nine inches = one foot
fifty inches = one foot
fifty one inches = one foot
fifty two inches = one foot
fifty three inches = one foot
fifty four inches = one foot
fifty five inches = one foot
fifty six inches = one foot
fifty seven inches = one foot
fifty eight inches = one foot
fifty nine inches = one foot
sixty inches = one foot
sixty one inches = one foot
sixty two inches = one foot
sixty three inches = one foot
sixty four inches = one foot
sixty five inches = one foot
sixty six inches = one foot
sixty seven inches = one foot
sixty eight inches = one foot
sixty nine inches = one foot
seventy inches = one foot
seventy one inches = one foot
seventy two inches = one foot
seventy three inches = one foot
seventy four inches = one foot
seventy five inches = one foot
seventy six inches = one foot
seventy seven inches = one foot
seventy eight inches = one foot
seventy nine inches = one foot
eighty inches = one foot
eighty one inches = one foot
eighty two inches = one foot
eighty three inches = one foot
eighty four inches = one foot
eighty five inches = one foot
eighty six inches = one foot
eighty seven inches = one foot
eighty eight inches = one foot
eighty nine inches = one foot
ninety inches = one foot
ninety one inches = one foot
ninety two inches = one foot
ninety three inches = one foot
ninety four inches = one foot
ninety five inches = one foot
ninety six inches = one foot
ninety seven inches = one foot
ninety eight inches = one foot
ninety nine inches = one foot
one hundred inches = one foot



INTERSTITIAL SPACE MECH PIPE
REMODEL PLAN
1/8" = 1'-0"

WALL RATING LEGEND	
◆	1-HOUR FIRE BARRIER
◆S	1-HOUR FIRE SMOKE BARRIER
◆◆	2-HOUR FIRE BARRIER
◆◆S	2-HOUR FIRE SMOKE BARRIER
—SP—	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

- SPECIFIC NOTES:**
- NOT USED
 - ROUTE NEW PIPING UNDER FLOOR AND CONNECT TO EXISTING REFRIGERANT PIPING.
 - PROVIDE AND COORDINATE ALL VAV'S AND VV'S FOR RIGHT/LEFT SIDE FOR ACCESS. TYPICAL ALL VAV'S/VV'S.
 - 4" CHR AND 4" CHS DOWN TO BASEMENT TO EXISTING CHILLER PLANT.

CONSTRUCTION DOCUMENTS

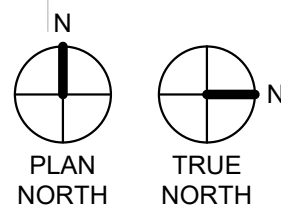
CONSULTANTS:  TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736  Albertson Engineering Inc.  FARRIS ENGINEERING OMAHA BRIDGES BUILD COLORADO SPRINGS PH: (402) 332-2821	ARCHITECT  FOURFRONT DESIGN INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	Drawing Title INTERSTITIAL SPACE PIPING REMODEL PLAN-ALTERNATE BID #3 Approved: Project Director Omaha VA Medical Center	Project Title VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11 / 23 / 2020 Checked MK Drawn JB	Project Number 16.2330.A08 Building Number 25 Drawing Number M 2.01.2 Dwg. 112 of 193	Office of Construction and Facilities Management  Department of Veterans Affairs
COMPLIANCE REVIEW INCLUDED Revisions: 2/23/2024 Date	16.2330.A08				

- SPECIFIC NOTES:**
- DOWN TO INTERSTITIAL SPACE.
 - DOWN TO INTERSTITIAL SPACE AND UP TO ROOF.
 - PROVIDE AND COORDINATE ALL VAV'S AND VV'S FOR RIGHT/LEFT SIDE FOR ACCESS. TYPICAL ALL VAV'S/VV'S.

WALL RATING LEGEND	
	1-HOUR FIRE BARRIER
	1-HOUR FIRE SMOKE BARRIER
	2-HOUR FIRE BARRIER
	2-HOUR FIRE SMOKE BARRIER
	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

SPS MEDICAL EQUIPMENT LEGEND									
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS				
1915 DECON					1915				
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A			
02	S0940	WASHER, DISINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A			
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D			
04		TRITEC 72	3	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D			
3A	F2410	RACK RETURN	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A			
4A		SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
1917 - AUTOMATIC CARTWASH AREA (CWSH2)					1917				
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,			
1905 - SCOPE PROCESSING					1905				
06	F0540	CART, SCOPE, TRANSPORT	1	1905					
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW			
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60Hz, 1-Ph, 15A, 208V, 60Hz, 3-Ph, 15A			
1906 - SCOPE STAGING ROOM (CSST1)					1906				
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A			
1923 - PREP ASSEMBLY					1923				
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
11	S0048	CART, WASHER TRANSFER	3	1923					
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ			
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923					
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D			
1920 - STERILIZATION					1920				
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A			
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS				
1912 - H2O					1912				
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS				
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN				
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro				
NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.									

1 LEVEL 3 MECH PIPE REMODEL PLAN
1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

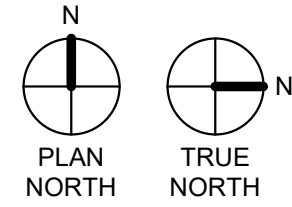
		CONSULTANTS:		ARC HITECT		Drawing Title LEVEL 3 MECHANICAL PIPING REMODEL PLAN		Project Title VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service		Project Number 16.2330.A08		Office of Construction and Facilities Management Department of Veterans Affairs	
		 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering, Inc.		 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25			
		 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900				Approved: Project Director Omaha VA Medical Center		Date 11 / 23 / 2020		Drawing Number M 2.02			
COMPLIANCE REVIEW INCLUDED		2/23/2024						Checked RD		Dwg. 113 of 193			
Revisions:		Date						Drawn JB					

- SPECIFIC NOTES:**
- 1 DOWN TO INTERSTITIAL SPACE.
 - 2
 - 3 PROVIDE AND COORDINATE ALL VAV'S AND VV'S FOR RIGHT/LEFT SIDE FOR ACCESS. TYPICAL ALL VAV's/VV's.

WALL RATING LEGEND	
	1-HOUR FIRE BARRIER
	1-HOUR FIRE SMOKE BARRIER
	2-HOUR FIRE BARRIER
	2-HOUR FIRE SMOKE BARRIER
	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

SPS MEDICAL EQUIPMENT LEGEND									
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS				
1915 DECON					1915				
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A			
02	S0940	WASHER, DISSINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A			
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D			
04	F2410	RACK RETURN	1	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D			
0A	-	SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A			
4A	-	SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
1917 - AUTOMATIC CARTWASH AREA (CWSH2)					1917				
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,			
1905 - SCOPE PROCESSING					1905				
06	F0540	CART, SCOPE, TRANSPORT	1	1905					
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW			
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60Hz, 1-Ph, 15A, 208V, 60Hz, 3-Ph, 15A			
1906 - SCOPE STAGING ROOM (CSST1)					1906				
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A			
1923 - PREP ASSEMBLY					1923				
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
11	S0048	CART, WASHER TRANSFER	3	1923					
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ			
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923					
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D			
1920 - STERILIZATION					1920				
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A			
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS				
1912 - H2O					1912				
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS				
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN				
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro				
NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.									

LEVEL 3 MECH PIPE REMODEL
PLAN-ALTERNATE BID#3
1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

CONSULTANTS:		ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management			
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 ALBERTSON ENGINEERING, INC. 3202 WEST MAIN STREET, SUITE C RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 343-9606		 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		LEVEL 3 MECHANICAL PIPING REMODEL PLAN-ALTERNATE BID #3		VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service				16.2330.A08	
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900				Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25				Drawing Number M 2.02.1	
COMPLIANCE REVIEW INCLUDED		2/23/2024		16.2330.A08		Date 11 / 23 / 2020		Checked Checker		Dwg. 114 of 193			

SPECIFIC NOTES:

- DOWN TO INTERSTITIAL SPACE.
- NOT USED.
- PROVIDE AND COORDINATE ALL VAV'S AND VV'S FOR RIGHT/LEFT SIDE FOR ACCESS. TYPICAL ALL VAV'S/VV'S.

WALL RATING LEGEND

- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE SMOKE BARRIER
- SPO SMOKE PARTITION

NOTE: SEE FIRE PROTECTION SHEETS.

SPS MEDICAL EQUIPMENT LEGEND

TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS
1915 DECON					
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS 120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A
02	S0940	WASHER, DISSINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS 480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS 208V, 30A, 3-PH, 60HZ, HW, CW, PW, D
04	F2410	RACK RETURN	1	1915	STERIS 120V, 15A, 1-PH, 60HZ, A
05	-	SCS LOAD-UNLOAD	1	1915	STERIS 120V, 15A, 1-PH, 60HZ, D, A
1917 - AUTOMATIC CARTWASH AREA (CWSH2)					
06	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS 480V, 50/60HZ, PW, HW, CW, S, A, D
1905 - SCOPE PROCESSING					
07	F0540	CART, SCOPE, TRANSPORT	1	1905	
08	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR 120V, 60HZ, D, A, HW, CW
09	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS 230V, 60Hz, 1-PH, 15A, 208V, 60Hz, 3-PH, 15A
1906 - SCOPE STAGING ROOM (CSST1)					
10	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR 100-240VAC, 50/60HZ, 15A, A
1923 - PREP ASSEMBLY					
11	S0047	SCS LOAD-UNLOAD	6	1923	STERIS 120V, 15A, 1-PH, 60HZ, D, A
12	S0048	CART, WASHER TRANSFER	3	1923	
13	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO 200-208V, 50-60HZ
14	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923	
15	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS 480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D
1920 - STERILIZATION					
16	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS 480V, 60HZ, 3-PH, 20A, S, CW, D, A
17	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS
1912 - H2O					
18	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS
19	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN
20	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro

NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.

LEVEL 3 MECH PIPE REMODEL
PLAN-ALTERNATE BID#4
1/8" = 1'-0"

CONSULTANTS:

TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 343-9606

Albertson Engineering Inc.

ALBERTSON ENGINEERING, INC.
3202 WEST MAIN STREET, SUITE C
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 343-9606

FARRIS ENGINEERING
12700 WEST DODGE ROAD
OMAHA, NEBRASKA 68154
PH: (402) 330-5900

ARCHITECT

FOURFRONT DESIGN INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 342-9470
FAX: (605) 342-2377
WWW.FOURFRONTDESIGN.COM

Drawing Title

LEVEL 3 MECHANICAL PIPING
REMODEL PLAN-ALTERNATE BID#4

Approved: Project Director

Omaha VA Medical Center

16.2330.A08

Project Title

VA NWIHCS OMC CAMPUS -
AE Construct Sterile Processing
ServiceLocation 4101 Woolworth Ave #4199
Omaha, Ne 68105

Date 11 / 23 / 2020

Checked MK

Drawn BM

Project Number

16.2330.A08

Building Number 25

Drawing Number

M 2.02.2

Dwg. 115 of 193

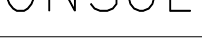
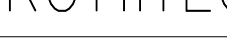
Office of
Construction
and Facilities
Management

Department of
Veterans Affairs

SPECIFIC NOTES:
1 RELOCATE EXISTING EXHAUST FAN. REROUTE DUCT BELOW CONCRETE DECK TO NEW LOCATION BELOW.

WALL RATING LEGEND	
	1-HOUR FIRE BARRIER
	1-HOUR FIRE SMOKE BARRIER
	2-HOUR FIRE BARRIER
	2-HOUR FIRE SMOKE BARRIER
	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

CONSTRUCTION DOCUMENTS

		CONSULTANTS:				ARC HITECT		Drawing Title INTERSTITIAL SPACE HVAC DUCT REMODEL PLAN		Project Title VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service		Project Number 16.2330.A08		Office of Construction and Facilities Management			
		 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering Inc.		ALBERTSON ENGINEERING, INC. 3202 WEST MAIN STREET, SUITE C RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 343-9606				 FOURFRONT DESIGN INC.		FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		16.2330.A08			
COMPLIANCE REVIEW INCLUDED		2/23/2024						Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Drawing Number M 2.03					
Revisions:		Date								Date 11 / 23 / 2020		Checked RD		Drawn JB		Dwg. 116 of 193	
																 Department of Veterans Affairs	

SPECIFIC NOTES:
1 ROUTE DUCT AROUND ROOF DRAIN PIPING.

WALL RATING LEGEND	
	1-HOUR FIRE BARRIER
	1-HOUR FIRE SMOKE BARRIER
	2-HOUR FIRE BARRIER
	2-HOUR FIRE SMOKE BARRIER
	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

SPS MEDICAL EQUIPMENT LEGEND									
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS				
1915 DECON				1915					
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A			
02	S0940	WASHER, DISSINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A			
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D			
04		TRITEC 72	3	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D			
3A	F2410	RACK RETURN	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A			
4A		SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
1917 - AUTOMATIC CARTWASH AREA (CWSH2)				1917					
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,			
1905 - SCOPE PROCESSING				1905					
06	F0540	CART, SCOPE, TRANSPORT	1	1905					
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW			
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60Hz, 1-Ph, 15A, 208V, 60Hz, 3-Ph, 15A			
1906 - SCOPE STAGING ROOM (CSST1)				1906					
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A			
1923 - PREP ASSEMBLY				1923					
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
11	S0048	CART, WASHER TRANSFER	3	1923					
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ			
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923					
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D			
1920 - STERILIZATION				1920					
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A			
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS				
1912 - H2O				1912					
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS				
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN				
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro				
NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.									

1 LEVEL 3 HVAC DUCT REMODEL PLAN
1/8" = 1'-0"

CONSULTANTS:

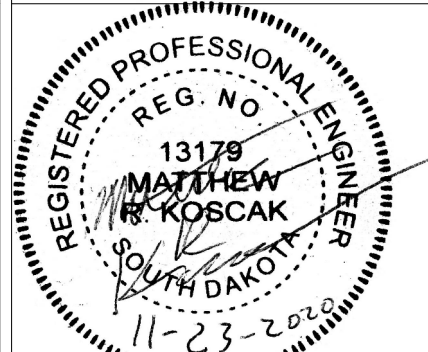
TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
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Drawing Title

LEVEL 3 HVAC DUCT REMODEL PLAN

Approved: Project Director

Omaha VA Medical Center

Project Title

VA NWIHCS OMC CAMPUS -
AE Construct Sterile Processing
Service

Location 4101 Woolworth Ave #4199
Omaha, Ne 68105

Date 11 / 23 / 2020

Checked RD

Drawn JB

Project Number
16.2330.A08

Building Number
25

Drawing Number
M 2.04

Dwg. 117 of 193

Office of
Construction
and Facilities
Management

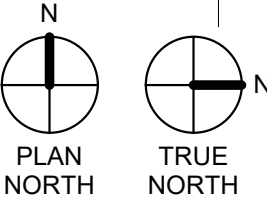


- SPECIFIC NOTES:**
- ROUTE DUCT AROUND ROOF DRAIN PIPING.
 - INSTALL BIRD SCREEN AT THE END OF THE DUCT.

WALL RATING LEGEND	
	1-HOUR FIRE BARRIER
	1-HOUR FIRE SMOKE BARRIER
	2-HOUR FIRE BARRIER
	2-HOUR FIRE SMOKE BARRIER
	SMOKE PARTITION
NOTE: SEE FIRE PROTECTION SHEETS.	

SPS MEDICAL EQUIPMENT LEGEND									
TAG	JSN	NAME	QTY	ROOM NO.	BASIS OF DESIGN UTILITY REQUESTS				
1915 DECON					1915				
01	A1195	COUNTER, CLEANUP, WITH 3 SINKS.	4	1915, 1905	STERIS	120V, 15A, LIFT SYSTEM - 120VAC, 3A, HW, CW, PW, D, A			
02	S0940	WASHER, DISINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	1915	STERIS	480V, 30A, 3-PH, 60HZ, S, CR, HW, CW, PW, D, A			
03	-	INNOVAVE PCF SONIC IRRIGATOR	2	1915	STERIS	208V, 30A, 3-PH, 60HZ, HW, CW, PW, D			
04		TRITEC 72	3	1915	STERIS	208V, 20A, 1-PH, 60HZ, HW, CW, D			
3A	F2410	RACK RETURN	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, A			
4A		SCS LOAD-UNLOAD	1	1915	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
1917 - AUTOMATIC CARTWASH AREA (CWSH2)					1917				
05	S3185	WASHER, CART & UTENSIL, 2 DO, PIT MNTD, RSCD 2 WLL	2	1917	STERIS	480V, 50/60HZ, PW, HW, CW, S, A, D,			
1905 - SCOPE PROCESSING					1905				
06	F0540	CART, SCOPE, TRANSPORT	1	1905					
07	S2627	WASHER, FIBER SCOPE, PASS-THROUGH	3	1905	MEDIVATOR	120V, 60HZ, D, A, HW, CW			
08	S1905	40" AUTOMATED PASS-THROUGH WINDOW	2	1915, 1905	STERIS	230V, 60Hz, 1-Ph, 15A, 208V, 60Hz, 3-Ph, 15A			
1906 - SCOPE STAGING ROOM (CSST1)					1906				
09	M3160	CABINET, STORAGE, HANGING SCOPES	4	1906	MEDIVATOR	100-240VAC, 50/60HZ, 15A, A			
1923 - PREP ASSEMBLY					1923				
10	S0047	SCS LOAD-UNLOAD	6	1923	STERIS	120V, 15A, 1-PH, 60HZ, D, A			
11	S0048	CART, WASHER TRANSFER	3	1923					
12	-	LOW TEMPERATURE STERILIZER	3	1923	AMSCO	200-208V, 50-60HZ			
13	S9610	ADJUSTABLE DELUXE WORKSTATION	8	1915, 1923					
14	-	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	1923	STERIS	480V, 60HZ, 3-PH, 4A, 120V, 60HZ, 1-PH, 15A, S, CW, D			
1920 - STERILIZATION					1920				
15	-	AMSCO 600 MEDIUM STEAM STERILIZER	3	1920	STERIS	480V, 60HZ, 3-PH, 20A, S, CW, D, A			
16	S0495	LOADING CAR & TRANSFER CARRIAGE, 26.5"x26.5"x63" CHAMBER	6	1920	STERIS				
1912 - H2O					1912				
17	K2020	DISPENSER, DETERGENT, AUTOMATIC	1	1912	STERIS				
18	M4871	SYSTEM, REVERSE OSMOSIS, WATER	1	1912	CULLIGAN				
19	-	TRACK MOUNTED - SUSPENDED SHELVING	2	1921	LEVpro				
NOTE: SEE SHEET QH-101 FOR MORE SPS MEDICAL EQUIPMENT DETAILS.									

LEVEL 3 HVAC DUCT REMODEL
PLAN-ALTERNATE BID#4
1/8" = 1'-0"



CONSULTANTS:

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Drawing Title
**LEVEL 3 HVAC DUCT REMODEL
PLAN-ALTERNATE BID#4**

Approved: Project Director
Omaha VA Medical Center

16.2330.A08

Project Title
**VA NWIHCS OMC CAMPUS -
AE Construct Sterile Processing
Service**

Location
**4101 Woolworth Ave #4199
Omaha, Ne 68105**

Date
11 / 23 / 2020

Checked
MK

Drawn
BM

Project Number
16.2330.A08

Building Number
25

Drawing Number
M 2.04.1

Dwg. 118 of 193

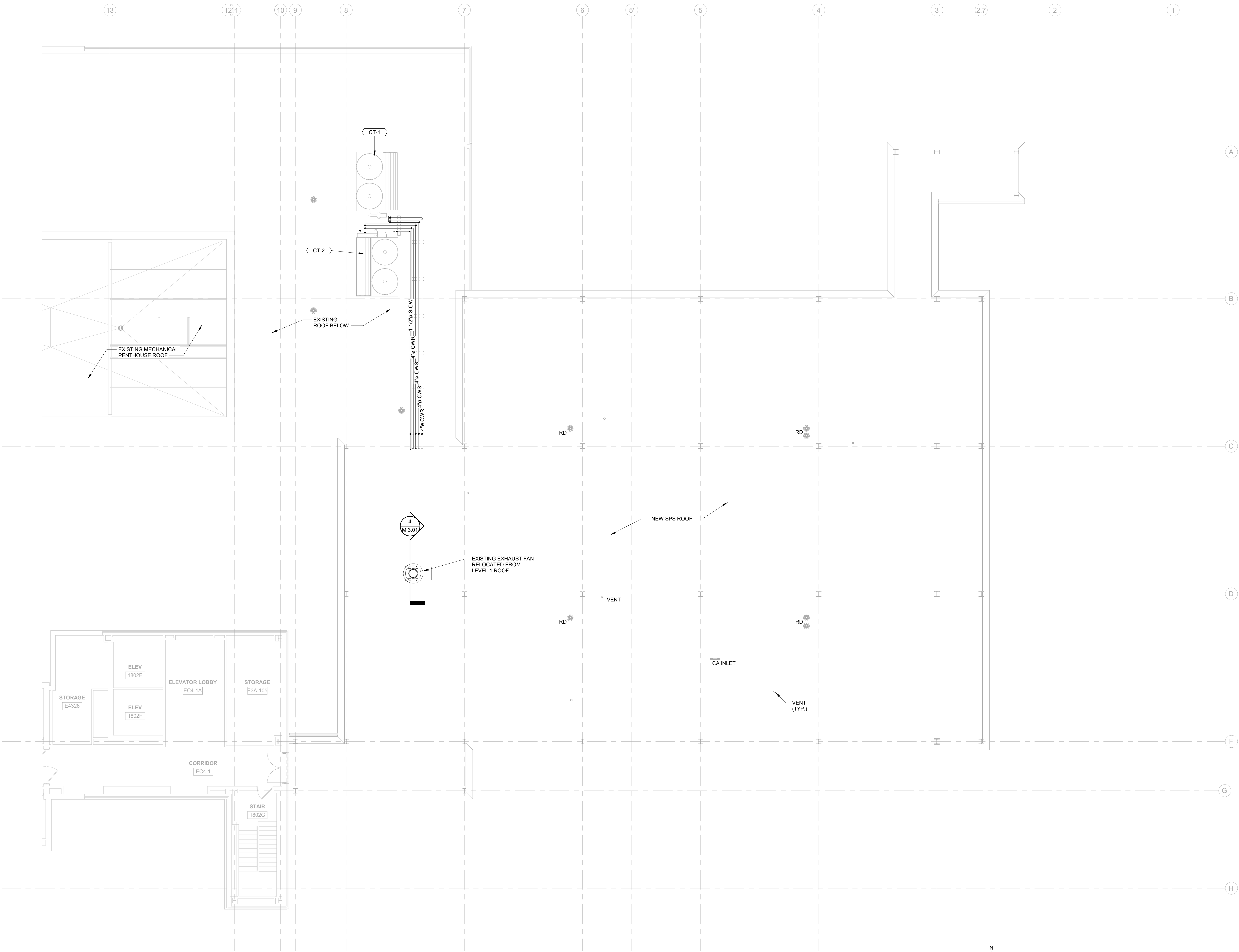
Office of
Construction
and Facilities
Management



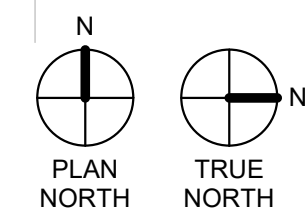
CONSTRUCTION DOCUMENTS

2/23/2024 10:17:32 AM

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one foot one inch = one foot
two feet
one and one half inches = one foot
one and one half inches = one foot
one and one half inches = one foot

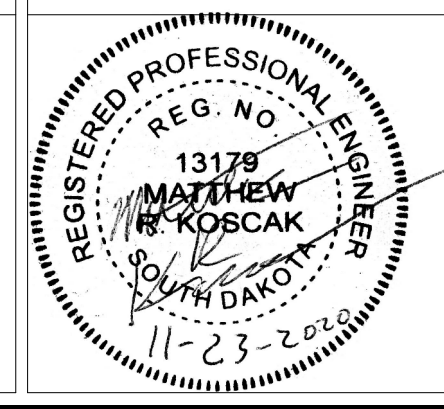


1 MECHANICAL ROOF PLAN
1/8" = 1'-0"



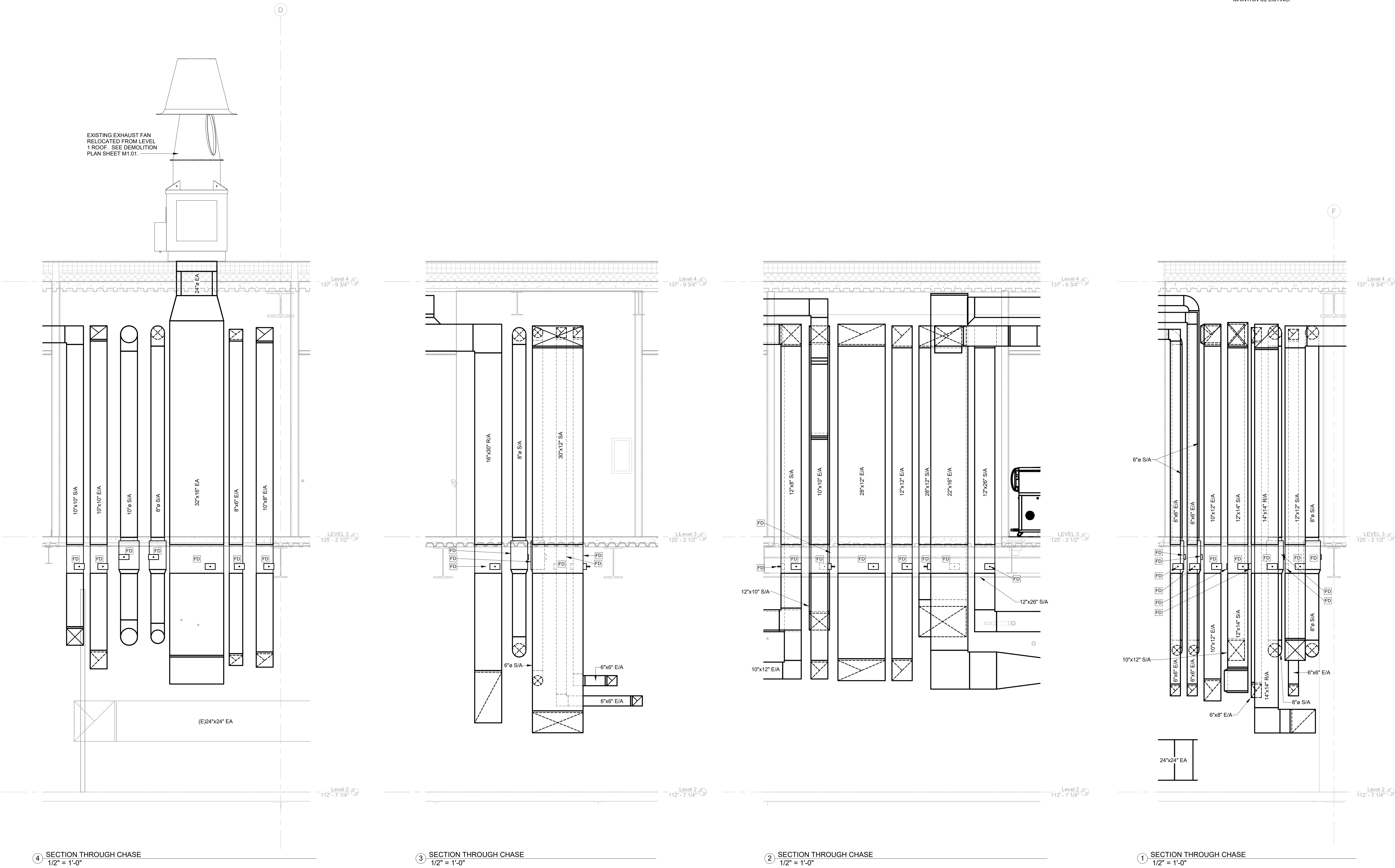
CONSTRUCTION DOCUMENTS

				CONSULTANTS:		ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management			
				 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering Inc. ALBERTSON ENGINEERING, INC. 3202 WEST MAIN STREET, SUITE C RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 343-9606		MECHANICAL ROOF PLAN		VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service		16.2330.A08					
				 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25					
COMPLIANCE REVIEW INCLUDED		2/23/2024		 FOURFRONT DESIGN, INC.		 FOURFRONT DESIGN, INC.		16.2330.A08		Date 11 / 23 / 2020		Checked RD		Drawing Number M 2.06		 Department of Veterans Affairs	
Revisions:		Date								Drawn JB		Dwg. 120 of 193					

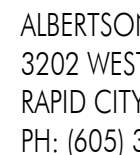
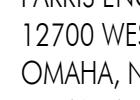


16.2330.A08

GENERAL NOTE:
INSTALL 2 HOUR RATED FIRE DAMPERS IN ALL DUCT FLOOR PENETRATIONS. FIRE DAMPERS TO BE ACCESSIBLE FROM INTERSTITIAL SPACE. PROVIDE ACCESS PANELS FOR ALL FIRE DAMPERS. INSTALL ACCORDING TO MANUFACTURERS INSTRUCTIONS TO MAINTAIN UL LISTING.



CONSTRUCTION DOCUMENTS

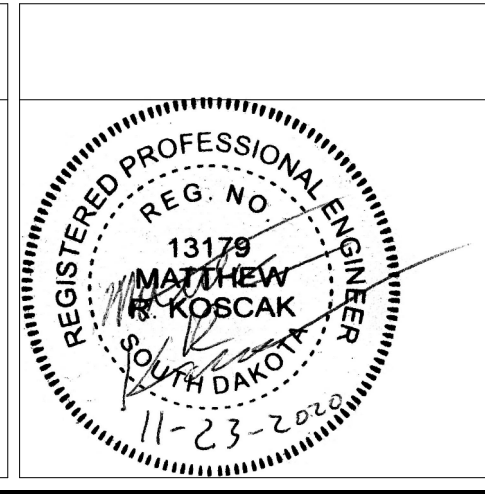
COMPLIANCE REVIEW INCLUDED Revisions:		2/23/2024 Date		CONSULTANTS:  TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736  Albertson Engineering Inc.  FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900  ALBERTSON ENGINEERING, INC. 3202 WEST MAIN STREET, SUITE C RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 343-9606  FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900				ARCHITECT  FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Drawing Title MECHANICAL SECTIONS Approved: Project Director Omaha VA Medical Center 16.2330.A08		Project Title VA NWIHCS OMC CAMPUS - AE Construct Sterile Processing Service Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11 / 23 / 2020 Checked RD Drawn JB		Project Number 16.2330.A08 Building Number 25 Drawing Number M 3.01 Dwg. 122 of 193		Office of Construction and Facilities Management  Department of Veterans Affairs	
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COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 ALBERTSON ENGINEERING, INC. 3202 WEST MAIN STREET, SUITE C RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 343-9606
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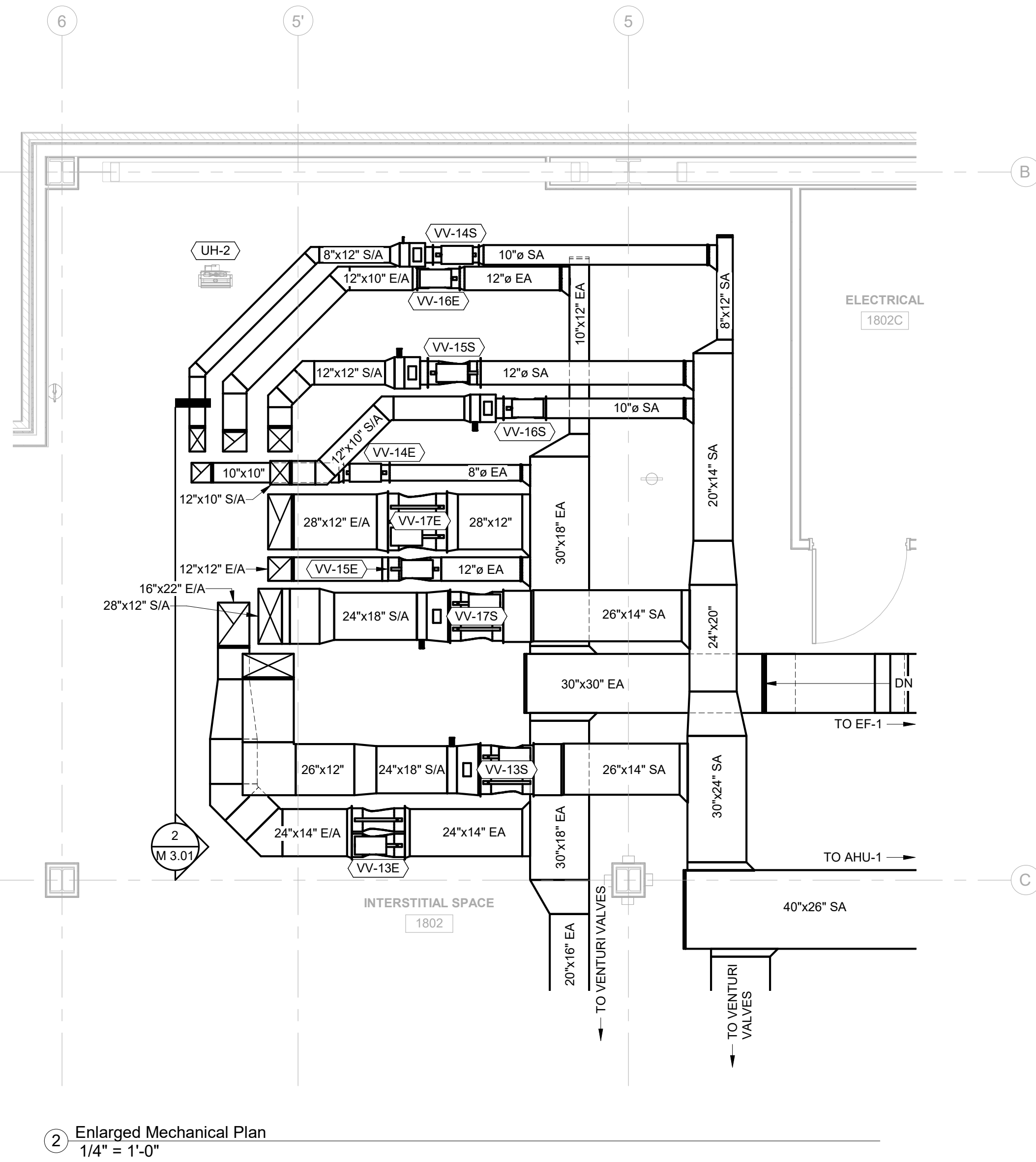
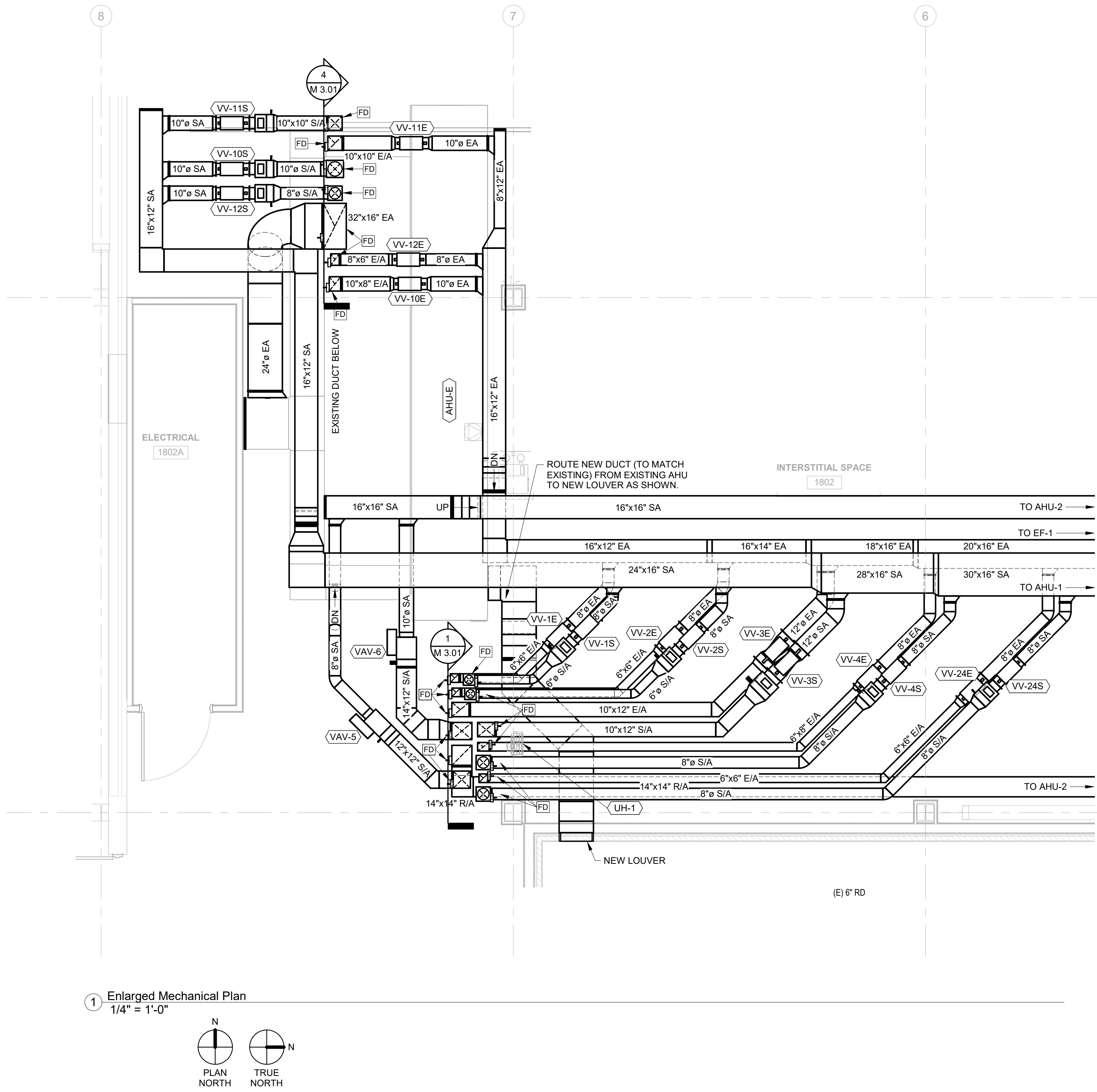


ARCHITECT	
 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	16.2330.A08

Drawing Title	
LARGE-SCALE VIEWS	
Approved: Project Director	
Omaha VA Medical Center	

Project Number	Building Number	Drawing Number
16.2330.A08	25	M 4.01
Date		Dwg. 123 of 193
11 / 23 / 2020		

Office of Construction and Facilities Management	Department of Veterans Affairs
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CONSTRUCTION DOCUMENTS