



U.S. Department of Veterans Affairs

Veterans Health Administration

PROJECT NAME:

# EHRM Infrastructure Upgrades

SITE ADDRESS:

## 2501 West 22nd St., Sioux Falls, SD 57105

VA PROJECT NUMBER:

438-20-910

OWNER AND CONSULTANTS:

VA COR: DANIEL JAMES

ARCHITECT:

ADDRESS: SIOUX FALLS MEDICAL CENTER  
2501 WEST 22ND STREET  
SIOUX FALLS, SD 57105

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PLYMOUTH, MN 55441  
CONTACT: TOM OLESAK  
PHONE: 763.412.4000

STRUCTURAL ENGINEER:

NAME: AST ENGINEERING  
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EDINA, MN 55439

CONTACT: XX  
PHONE: XX

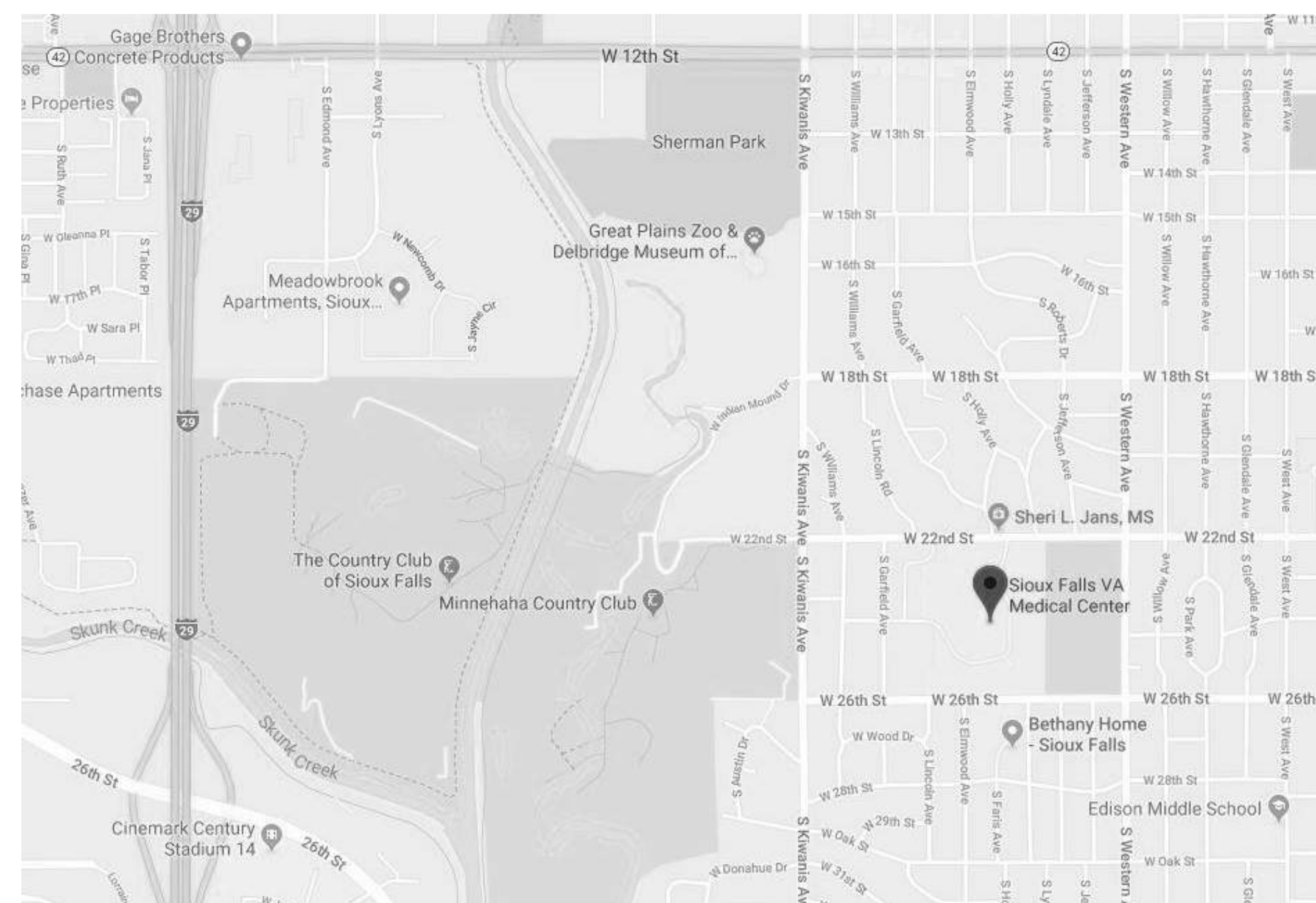
MECHANICAL ENGINEER:

NAME: SPECIALIZED ENGINEERING SOLUTIONS  
ADDRESS: 10360 ELLISON CIRCLE  
OMAHA, NE 68134  
CONTACT: PATRICK VORTHMANN  
PHONE: 402.991.5520

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NAME: SPECIALIZED ENGINEERING SOLUTIONS  
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CONTACT: NATE TIMM  
PHONE: 402.991.5520

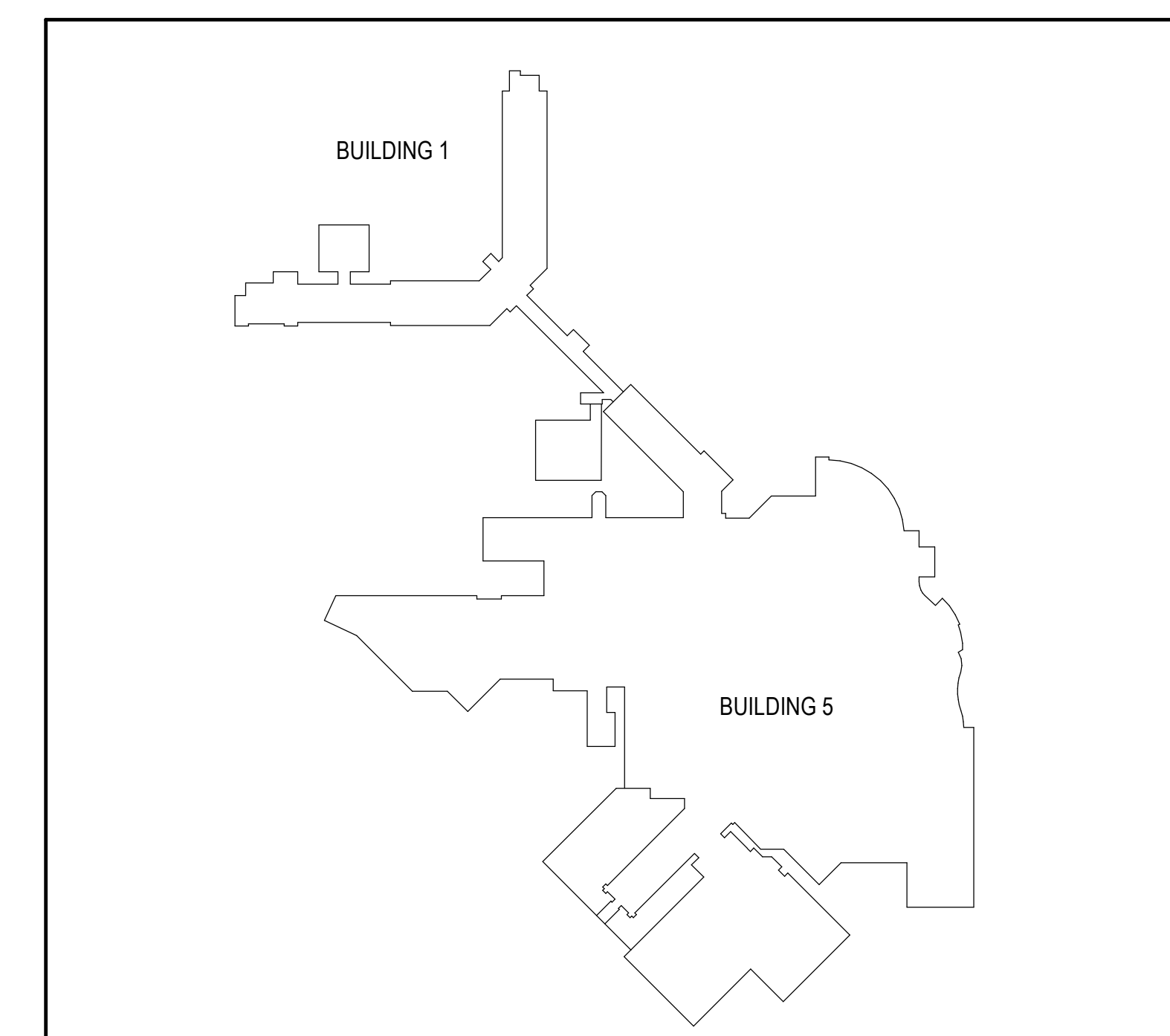
VICINITY MAP:



SITE LOCATION MAP:



KEY PLAN:



Revisions:	Date:


**CONSULTANT**




**SPECIALIZED ENGINEERING SOLUTIONS**

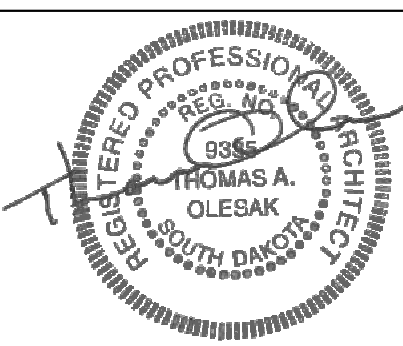
10360 Ellison Circle  
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**ARCHITECT/ENGINEER OF RECORD**



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P 763.412.4000 | F 763.412.4090 | ae-mn.com  
Anderson Engineering of Minnesota, LLC | Proj # 16090

**STAMP**



Date: 2021/07/06

Office of Construction and Facilities Management



U.S. Department of Veterans Affairs

Drawing Title: **COVER SHEET**

Approved: \_\_\_\_\_

Phase: **BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title: **VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location: **Sioux Falls, SD**

Issue Date: **07/06/2021**

Checked: **--**

Drawn: **GJB**

Project Number: **438-20-910**

Building Number: \_\_\_\_\_

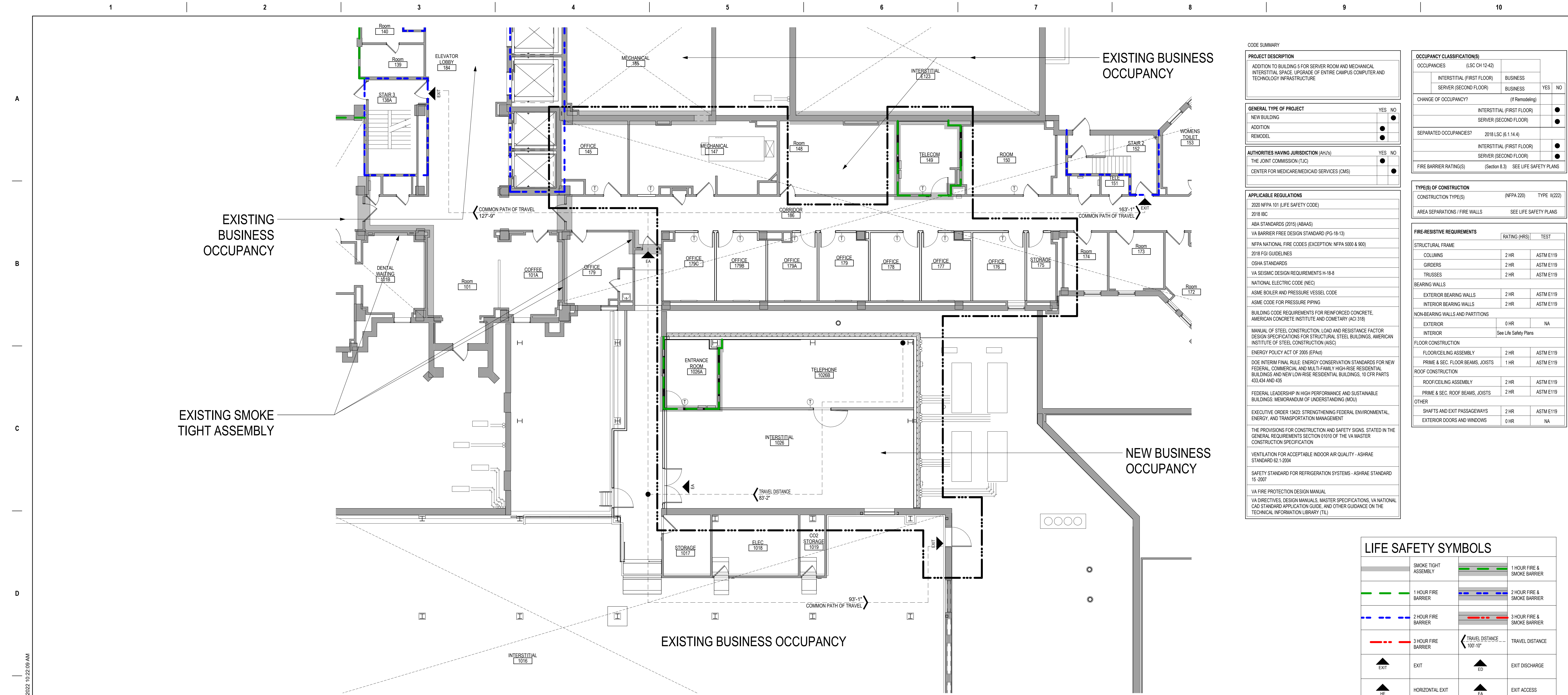
Drawing Number: **G1000**

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ARCHITECTURAL ABBREVIATIONS

A/C	AIR CONDITION	CNR	CORNER	F	FAHRENHEIT OR FEMALE	HST	HOIST	N	NORTH	RC	REMOTE CONTROL	T	TREAD OR THERMOSTAT
A/C UNIT	AIR CONDITIONING UNIT	CNTR	COUNTER	FA	FIRE ALARM	HSS	HOLLOW STRUCTURAL STEEL	NA	NOT APPLICABLE	RCP	REFLECTED CEILING PLAN	T&M	TIME AND MATERIALS
A/E	ARCHITECT/ENGINEER	CRTP	COUNTERTOP	FAB	FABRIC	HT	HEIGHT	NAT	NATURAL	RCV/R	RECEIVED	TB	TOWEL BAR
AAMA	AMERICAN ARCHITECTURAL MANUFACTURERS ASSN	CO	CARBON DIOXIDE	FAC	FACILITY	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	NATL	NATIONAL	RD	ROAD OR ROOF DRAIN	TBD	TACK BOARD
AAP	ALARM ANNUNCIATOR PANEL	CO2	CARBON DIOXIDE	FACIL	FACILITY	HVY	HEAVY	NC	NOISE CRITERIA OR NURSE CALL	REC	RECESSED	TECH	TECHNICAL
AB	ANCHOR BOLT	COL	COLUMN	FAS	FASCIA	HW	HOT WATER	NCMBL	NONCOMBUSTIBLE	RECD	RECEIVED	TEL	TELEPHONE
ABC	AGGREGATE BASE COURSE	COM	COMMON	FAS BD	FASCIA BOARD	HYD	HYDRANT	NEC	NATIONAL ELECTRICAL CODE	RECPT	RECEPTACLE	TEMP	TEMPERATURE OR TEMPORARY
ACC	ACCESSIBLE	COMB	COMBINATION, COMBINED	FAN	FAN COIL UNIT	HYDR	HYDRAULIC	NEG	NEGATIVE	RECT	RECTANGLE	THERM	THERMAL
ACI	AMERICAN CONCRETE INSTITUTE	COMM	COMMUNICATION	FCO	FLOOR CLEANOUT	IAQ	INDOOR AIR QUALITY	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSN	REF	REFERENCE OR REFRIGERATOR	THK	THICKNESS
ACT	ACOUSTICAL CEILING TILE	COMP	COMPONENT	FCTY	FACTORY	IBC	INTERNATIONAL BUILDING CODE	NEUT	NEUTRAL	REFR	REFRACTORY, REFRIGERATION	THRES	THRESHOLD
ACS DR	ACCESS DOOR	CONC	CONCRETE	FD	FLOOR DRAIN	ICF	INFECTION CONTROL	NFC	NATIONAL FIRE CODE	REG	REGISTER	THRU	THROUGH
ACS FLR	ACCESS FLOOR	COND FLR	CONDENSED FLOOR	FDG	FIRE DEPARTMENT CONNECTION	ICW	INFECTION CONTROL WALL	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	REINF	REINFORCE	THRUOUT	THRUOUT
ACS PNL	ACCESS PANEL	COND	CONDENSER OR CONDITION	FDTN	FOUNDATION	ID	INSIDE DIAMETER	NIC	NOT IN CONTRACT	REPL	REPLACE	TMPD	TEMPERED
ACST	ACOUSTIC	CONF	CONFERENCE	FE	FIRE EXTINGUISHER	ID NO	IDENTIFICATION NUMBER	NO	NUMBER	REQ	REQUIRE	TMPD GL	TEMPERED GLASS
AD	AREA DRAIN	CONN	CONNECT	FE	FIRE EXTINGUISHER CABINET	ILLUM	ILLUMINATION	NOM	NOMINAL	REQD	REQUIRED	TN	TRUE NORTH
ADA	AMERICANS WITH DISABILITIES ACT	CONSTR	CONSTRUCTION	FF	FINISH FACE	INCL	INCLUDED	NR	NOISE REDUCTION	RET	RETURN	TO	TOP OF
ADC	AUTOMATIC DOOR CLOSER	CONTINUE	CONTINUE	FF EL	FINISH FLOOR ELEVATION	IND	INDEPENDENT OR INDUSTRIAL	NRC	NOISE REDUCTION COEFFICIENT	REV	REVISION	TO FDN	TOP OF FOUNDATION
ADDL	ADDITIONAL	CONTR	CONTRACTOR	FF&E	FURNITURE, FIXTURE, AND EQUIPMENT	INFO	INFORMATION	NRCA	NATIONAL ROOFING CONTRACTORS ASSOCIATION	RFG	ROOFING	TOB	TOP OF BEAM
ADDN	ADDITION	COORD	COORDINATE	FHC	FIRE HOSE CABINET	INSUL	INSULATION	NRP	NONREMOVABLE	RFP	REQUEST FOR INFORMATION	TOM	TOP OF MASONRY
ADH	ADHESIVE	CORR	CORRIDOR	FHP	FULL HEIGHT PARTITION	INT	INTERIOR	NS	NARROW STYLE	RFP	REQUEST FOR PROPOSAL	TOS	TOP OF STEEL
ADJ	ADJACENT, ADJOINING, OR ADJUSTABLE	CPM	CRITICAL PATH METHOD	FIG	FIGURE	INTL	INTERNATIONAL	NUM	NUMERAL	RFS	ROOM FINISH SCHEDULE	TOW	TOP OF WALL
ADMIN	ADMINISTRATION	CPRS	COMPRESSIBLE	FIN	FINISH	JAN	JANITOR	O/O	OUT TO OUT	RL	ROOF LEADER	TPD	TOILET PAPER DISPENSER
AFF	ABOVE FINISHED FLOOR	CR	CARD READER	FIN FLR	FINISH FLOOR	KD	KILN DRIED OR KNOCKED DOWN	O	OXYGEN	RLG	RAILING	TRANS	TRANSOM
AFG	ABOVE FINISHED GRADE	CRS	CONCRETE REINFORCING STEEL INSTITUTE	FIN GR	FINISH GRADE	KIT	KITCHEN	OA	OUTSIDE AIR OR OVERALL	RM	ROOM	TRTD	TREATED
AFS	ABOVE FINISHED SLAB	CSB	CONCRETE SPLASH BLOCK	FIN WD	FINISH WOOD	KO	KNOCKOUT	OC	ON CENTER	RM LT	NURSE CALL LIGHT/ROOM LIGHT	TS	TUBE STEEL
AGC	ASSOCIATED GENERAL CONTRACTORS	CSG	CASING	FIXT	FIXTURE	KPL	KICKPLATE	OCT	OCTAGON	RND	ROUND	TSTAT	THERMOSTAT
AGGR	AGGREGATE	CSI	CONSTRUCTION SPECIFICATIONS INSTITUTE	FL	FLOORLINE	L	ANGLE	OD	OUTSIDE DIAMETER, OUTSIDE DIMENSION	RO	ROUGH OPENING	TV	TELEVISION
AHJ	AUTHORITY HAVING JURISDICTION	CSK	COUNTER SUNK	FLASH	FLASHING	LAB	LABORATORY	OD	OUTSIDE DIAMETER/OUTSIDE DIMENSION	ROW	RIGHT OF WAY	U	HEAT TRANSFER COEFFICIENT
AHR	ANCHOR	CSMT	CASEMENT	FLDG	FOLDING	LADR	LADDER	OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED	RSV	RESILIENT SHEET VINYL	UC	UNDERCUT
AHU	AIR HANDLING UNIT	CSWK	CASEWORK	FLEX	FLEXIBLE	LAM	LAMINATE	OFD	OVERFLOW DRAIN	RT	RIGHT	UGND	UNDERGROUND
AIA	AMERICAN INSTITUTE OF ARCHITECTS	CTG	COATING	FLG	FLOORING	LAM GL	LAMINATED GLASS	OFFO	OFFICE	RV	ROOF VENT	UL	UNDERWRITERS LABORATORIES
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FLR	FLOOR	FLR	FLOOR	LAU	LAUNDRY	OH	OVERHANG	RVS	REVERSE	ULT	ULTIMATE
ALT	ALTERNATE	CTRL	CONTROL	FLR FIN	FLOOR FINISH	LAV	LAVATORY	OH DR	OVERHEAD (COILING) DOOR	RWL	RAIN WATER LEADER	UNFIN	UNFINISH
ALT NO	ALTERNATE NUMBER	CTV	CABLE TELEVISION	FLR SK	FLOOR SINK	LBR	LUMBER	OPH	OPPOSITE HAND	S	SOLID SURFACE	UNO	UNLESS NOTED OTHERWISE
ALUM	ALUMINUM	CU FT	CUBIC FEET	FLUOR	FLUORESCENT	LBS	POUND	OPNG	OPENING	SA	SUPPLY AIR	UPS	UNINTERRUPTIBLE POWER SUPPLY
AMT	AMOUNT	CU IN	CUBIC INCH	FLUOR FIX	FLUORESCENT FIXTURE	LCS	LOCKABLE CHARTING STATION/ MED CABINET	OPP	OPPOSITE	SALV	SALVAGE	UR	URINAL
ANOD	ANODIZE	CU YD	CUBIC YARD	FM	FACTORY MUTUAL	LB BRG	LOAD-BEARING	OPR	OPERABLE	SAMP	SAMPLE	UV	ULTRAVIOLET
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CURT	CURTAIN	FM-G	FACTORY MUTUAL GLOBAL	LED	LEAD	OPT	OPTIONAL	SB	SPLASH BLOCK	VAC	VACUUM
ANT	ANTENNA	CYL	CYLINDER	FO	FINISHED OPENING	LED	LIGHT EMITTING DIODE	OR	OPERATING ROOM OR OUTSIDE RADIUS	SBS	STYRENE BUTADIEN STYRENE	VAR	VARIABLE
AP	ACCESS PANEL	CYL L	CYLINDER LOCK	FOC	FACE OF CONCRETE OR FACE OF CURB	LF	LINEAR FEET (FOOT)	ORD	ORDNANCE OR OVERFLOW ROOF DRAIN	SBSTR	SUBSTRATE	VEH	VEHICLE
APA	AMERICAN PLYWOOD ASSOCIATION	D	DEPTH OR PENNY (NAIL)	FOF	FACE OF FINISH	LIB	LIBRARY	ORG	ORGANIC	SC	SHARPS CONTAINER	VENT	VENTILATION
APC	ARCHITECTURAL PRECAST CONCRETE	DAT	DATUM	FOM	FACE OF MASONRY	LIN	LINEAR	ORN	ORNAMENTAL	SCH	SCHOOL	VERT	VERTICAL
APPD	APPROVED	DBL	DOUBLE	FOU	FACE OF SLAB OR FACE OF STUD	LIQ	LIQUID	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	SCHEM	SCHEMATIC	VFD	VARIABLE FREQUENCY DRIVE
APPROX	APPROXIMATE	DBL GLZ	DOUBLE GLAZE	FOUNT	FOUNTAIN	LKR	LOCKER	OUT	OUTLET	SCP	SCUPPER	VIC	VICINITY
AR	AS REQUIRED	DCS	DIAPER CHANGING STATION	FOW	FACE OF WALL	LKR RM	LOCKER ROOM	P	PAINT	SCRN	SCREEN	VID	VIDEO
ARCH	ARCHITECT	DP	DECORATIVE PANEL	FR	FIRE PROTECTION OR FIREPROOF	LMST	LIMESTONE	PAR	PARALLEL OR PARAPET	SCT	SHOWER CURTAIN TRACK	VIF	VERIFY IN FIELD
ASB	ASBESTOS	DEG	DEGREE	FR	FIRE RATING, FIRE RESISTANT, OR FRAME	LRG	LARGE	PARA	PARAGRAPH	SCWD	SOLID CORE WOOD DOOR	VNR	VENEER
ASI	ARCHITECT'S SUPPLEMENTAL INSTRUCTION	DEL	DELETE	FR SMK	FRUSHING RIM SINK	LRV	LOUVERED ROOF VENT	PART	PARTIAL	SD	SMOKE DETECTOR/SOAP DISPENSER	VOC	VOLATILE ORGANIC COMPOUND
ASKLR	AUTOMATIC SPRINKLER	DEMO	DEMOLITION	FREQ	FREQUENCY	LS	LIGHT SWITCH	PAT	PATTERN	SDG	SIDING	VOL	VOLUME
ASPH	ASPHALT	DEPT	DEPARTMENT	FRM	FRAMING	LT	LIGHT	PB	PUSHBUTTON	SECT	SECTION	VR	VAPOR RETARDER
ASSN	ASSOCIATION	DET	DETAIL	FRP	FIBERGLASS REINFORCED PLASTIC	LTG	LIGHTING	PBD	PARTICLEBOARD	SEL	SELECT	VTR	VENT THROUGH ROOF
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	DF	DRINKING FOUNTAIN	FRZ	FREEZER	LTG	LIGHTING	PC	PIECE, POLYCARBONATE OR PORTLAND CEMENT	SEP	SEPARATE	W/O	WITHOUT
ATCH	ATTACHMENT	DIA	DIAMETER	FS	FEDERAL SPECIFICATION	LT WT	LIGHTWEIGHT	PCA	PORTLAND CEMENT ASSOCIATION	SEF	SQUARE FOOT (FEET)	WBL	WOOD BLOCKING
ATM	AUTOMATIC TELLER MACHINE	DIAG	DIAGONAL	FSB	FOLDING SHOWER BENCH	LTG	LIGHTING	PCB	PRECAST CONCRETE	SFTWD	SOFTWOOD	WC	WATER CLOSET
AUTO	AUTOMATIC	DIFF	DIFFERENCE OR DIFFUSER	FSTNR	FASTENER	LTNG	LIGHTNING	PCP	CONCRETE PAVEMENT	SGD	SLIDING GLASS DOOR	WD	WOOD
AUX	AUXILIARY	DIM	DIMENSION	FT	FEET OR FOOT	LND	LOUVERED	PCF	PAPER CUP DISPENSER	SGL	SINGLE	WDW	WINDOW
AV	AUDIO VISUAL	DIR	DIRECTION	FTG	FOOTING	LVR	LOUVER	PCP	PORTLAND CEMENT PLASTER	SHR	SHOWER	WFR	WOOD FRAME
AVG	AVERAGE	DISP	DISPENSER	FURG	FURRING	LWC	LIGHTWEIGHT CONCRETE	PCT	PRIVACY CURTAIN TRACK	SHRD	SHOWER DRAIN	WFS	WOOD FURRING STRIPS
AW	ACID WASTE	DIST	DISTANCE	FURN	FURNISH OR FURNITURE	LWC	LIGHTWEIGHT CONCRETE	PED	PEDESTAL	SHT	SHEET	WH	WATER HEATER
AWI	ARCHITECTURAL WOODWORKING INSTITUTE	DIV	DIVIDE OR DIVISION	FUT	FUTURE	LWC	LIGHTWEIGHT CONCRETE	PEN	PENETRATE	SHTG	SHEATHING	WHSE	WAREHOUSE
AWPA	AMERICAN WOOD PRESERVERS' ASSOCIATION	DIA	DIAPHRAGM	FVC	FIRE VALVE CABINET	LWC	LIGHTWEIGHT CONCRETE	PEND	PENDANT	SHV	SHELVING	WP	WATERPROOFING
AWG	AMERICAN WELDING SOCIETY	DOC	DOCUMENT	FV	FIELD VERIFY	MACH	MACHINE	PERF	PERFORATED	SIM	SIMILAR	WPM	WATERPROOF MEMBRANE
B PL	BASE PLATE	DR	DOOR, DRAIN, DRESSING ROOM, OR DRIVE	GA	GAGE OR GYPSUM ASSOCIATION	MACH RM	MACHINE ROOM	PERM	PERIMETER	SJ	SCORED JOINT	WR	WEATHER RESISTANT
BAT	BATTEN	DR CL	DOOR CLOSER	GAL	GALLON	MAINT	MAINTENANCE	PERP	PERPENDICULAR	SJL	STEEL JOIST INSTITUTE	WS	WEATHERSTRIP OR WALL SCONCE
BD	BOARD	DR FR	DOOR FRAME	GALV	GALVANIC OR GALVANIZED	MANU	MANUAL	PHAR	PHARMACY	SKL	SKYLIGHT	WSCT	WAINSCOT
BD FT	BOARD FEET (FOOT)	DR OPNG	DOOR OPENING	GALV STL	GALVANIZED STEEL	MATL	MATERIAL	PHOTO	PHOTOGRAPH	SLG	SLIDING	WT	WEIGHT OR WINDOW TREATMENT
BEV	BEVEL	DS	DOWNSPOUT	GB	GRAB BAR	MATV	MASTER ANTENNA TELEVISION SYSTEM	PKG	PACKAGE	SLNT	SLANT	X BRACE	CROSS BRACE
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION	DSGN	DESIGN	GC	GENERAL CONTRACTOR	MAX	MAXIMUM	PL	PROPERTY LINE	SM	SHEET METAL	XPS	EXTRUDED POLYSTYRENE BOARD
BI FLD DR	BIFOLDING DOORS	DW	DISHWASHER	GD	GUARD	MCB	METAL CORNER BEAD	PL GL	PLATE GLASS	SMK	SMOKE	YD	YARD
BITUM	BITUMINOUS	DWG	DRAWING	GDR	GUARD RAIL	MD	DECK	PLG	PLUMBING	SND INS	SOUND INSULATION		
BKG	BACKING	E	EAST	GEN	GENERAL OR GENERATOR	ME	MECHANICAL ENGINEER	P/WVD	PLYWOOD	SPEC	SPECIFICATION		
BLD	BUILD	EA	EACH	GFRG	GLASS-FIBER-REINFORCED CONCRETE	MEAS	MEASUREMENT	PMTL	PAINTED METAL	SPKLR	SPRINKLER		
BLDG	BUILDING	EFF	EFFICIENCY	GFRG	GLASS-FIBER-REINFORCED GYPSUM	MECH	MECHANICAL	PNEU	PNEUMATIC	SPKR	SPEAKER		
BM	BEAM OR BENCHMARK	EFS	EXTERIOR FINISH SYSTEM	GFRP	GLASS-FIBER-REINFORCED PLASTIC	MECH RM	MECHANICAL ROOM	PNL	PANEL	SPLY	SUPPLY		
BOT	BOTTOM	EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	GI	GALVANIZED IRON	MED	MEDICAL	PO	POST OFFICE, PURCHASE ORDER	SPR	SINGLE PLY ROOF SYSTEM		
BRGG	BRACING	EJ	EXPANSION JOINT	GL	GLASS	MED	MEDICAL, MEDIUM	POLY	POLYETHYLENE (PLASTIC)	SQ	SQUARE		
BRDG	BRIDGING	EL	ELEVATION	GL BLK	GLASS BLOCK	MEK	METHYL ETHYL KETONE	PP	PUSH PLATE	SQ IN	SQUARE INCH		
BRDG JST	BRIDGING JOIST	ELAST	ELASTOMERIC	GLU LAM	GLUED LAMINATED WOOD	MEMB	MEMBRANE	PR	PAIR	SQ YD	SQUARE YARD		
BRG	BEARING	ELEC	ELECTRIC	GP	GRAB BAR	MEMO	MEMORANDUM	PRST	PRECAST	SST	STAINLESS STEEL		
BRG PL	BEARING PLATE	ELEC OP	ELECTRIC DOOR OPENER	GR	GROUND FLOOR	MEZZ	MEZZANINE	PREFAB	PREFABRICATE	STC	STAIRS OR STREET		
BRKT	BRACKET	ELEV	ELEVATOR	GR FL	GRANITE FLOOR	MF	MILL FINISH	PREFIN	PREFINISH	STD	STANDARD TRANSMISSION CLASS		
BRZ	BRONZE	EMER	EMERGENCY	GRN	GRANITE	MFG	MANUFACTURED	PRELIM	PRELIMINARY	STF	STIFFENER		
BSTM	BASEMENT	EMER SHR	EMERGENCY SHOWER	GRTG	GRATING	MFD	MANUFACTURED	PREP	PREPARATION	STL JST	STEEL JOIST		
BTWN	BETWEEN	ENCL	ENCLOSURE	GSB	GYPSUM SHEATHING BOARD	MFG	MANUFACTURING	PRESS	PRESSURE	STL LNTL	STEEL LINTEL		
BUR	BUILT-UP ROOFING	ENGR	ENGINEER	GSU	GALVANIZED SHEET METAL	MFR REC	MANUFACTURER'S RECOMMENDATION	PREV	PREVIOUS	STL PL	STEEL PLATE		
C CONC	CAST CONCRETE	ENVR	ENVIRONMENT	GT	GLAZED STRUCTURAL UNIT	MG	MANAGEMENT	PRKG	PARKING	STL RF DK	STEEL ROOF DECK		
C TO C	CENTER TO CENTER	EPA	ENVIRONMENTAL PROTECTION AGENCY	GUAR	GUARANTEE	MIC	MICROPHONE	PRMLD	PREMOLDED	STL TB	STEEL TUBE		
CAB	CABINET	ELEC OUTLET	ELECTRICAL OUTLET	GUT	GUTTER	MID	MIDDLE	PROJ	PROJECT	STL TR	STEEL TRUSS		
CAC	CEILING ATTENUATION CLASS	EPA	ENVIRONMENTAL PROTECTION AGENCY	GYP	GYPSUM	MIL STD	MILITARY STANDARD	PROP	PROPERTY	STNLS	STAINLESS		
CB	CATCH BASIN OR CORNER BEAD	EPDM	ETHYLENE PROPYLENE DIENE MONOMER	GYP BD	GYPSUM BOARD	MIR	MIRROR	PTS	POUNDS PER SQUARE FOOT	STR	STRINGERS		
CBB	CEMENTITIOUS (BACKER) BOARD	EPO	EMERGENCY POWER OFF	GYP PLAS	GYPSUM PLASTER	MISC	MISCELLANEOUS	PVC	POLYVINYL CHLORIDE (PLASTIC)	STR	STRINGERS		
CCD	CONSTRUCTION CHANGE DIRECTIVE	EPS	EXPANDED POLYSTYRENE BOARD (INSULATION)	H	HIGH OR HUMIDISTAT	MIT	MITER	PT	PORCELAIN TILE OR PRESSURE TREATED	STRUCT	STRUCTURAL		
CCTV	CLOSED CIRCUIT TELEVISION	EQ	EQUAL	HAZ MAT	HAZARDOUS MATERIALS	MKR	MARKER	PTD	PAPER TOWEL DISPENSER	STRUCT STL	STRUCTURAL STEEL		
CD	COUNTERCLOCKWISE	EQL SP	EQUALLY SPACED	HB	HOSE BIBB	ML	METAL LATH	PTH	PARTITION	SUB	SUBSTITUTE		
CD	CONSTRUCTION DOCUMENTS OR CONTRACT DOCUMENTS	EQUIP	EQUIPMENT	HC	HOLLOW CORE	MLDG	MOLDING (MOULDING)	PVS	POUNDS PER SQUARE INCH	SURF	SURFACE		
CEM	CEMENT	ERD	EXISTING ROOF DRAIN	HOWD	HOLLOW CORE WOOD DOOR	MLWK	MILLWORK	PT	PAPER TOWEL DISPENSER	SUSP	SUSPEND		
CEM PLAS	CEMENT PLASTER	ESC	ESCAPE OR ESCUTCHEON	HDBD	HARDBOARD	MM	MILLIMETER	PTD	PAPER TOWEL DISPENSER	SUSP CLG	SUSPENDED CEILING		
CER	CERAMIC	ESEM	EASEMENT	HDO	HIGH DENSITY OVERLAY	MOD	MODIFIED BITUMEN	PTS	POUNDS PER SQUARE INCH	SW	SWITCH		
CF	CONTRACTOR FURNISHED	ESP	ESPECIALLY	HDR	HEADER	MOD BIT	MODIFIED BITUMEN	PV	POLYETHYLENE (PLASTIC)	SWD	SWING DOOR		
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	EST	ESTIMATE	HWD	HARDWARE	MON	MONITOR	PWR	POWER	SYM	SYMBOL		
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED	ETC	AND SO FORTH OR ET CETERA	HOWD	HARDWOOD	MOPR	MOP RACK	QA	QUALITY ASSURANCE	SYN	SYNTHETIC		
CFG	COUNTERFLASHING	EW	EACH WAY	HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)	MOPR	MOP RACK	QC	QUALITY CONTROL	SYNTH	SYNTHETIC		
CFMF	COLD-FORMED METAL FRAMING	EWC	ELECTRIC WATER COOLER	HEX	HEXAGON	MR	MOISTURE RESISTANT	QRY	QUARRY	SYS	SYSTEM		
CG	CORNER GUARD	EWIS	EYE WASH STATION	HGR	HANGER	MS	MOP SINK	QTR	QUARTER				
CGSFU	CERAMIC GLAZED STRUCTURAL FACING UNITS	EXH	EXHAUST	HMD	HOLLOW METAL	MTG	MOUNTING	QTY	QUANTITY				
CH	COAT HOOK	EXIST	EXISTING	HMD	HOLLOW METAL DOOR	MTL	METAL	QUAD	QUADRANT				
CHEM	CHEMICAL	EXP	EXPANSION OR EXPOSED	HMDF	HOLLOW METAL DOOR AND FRAME	MULL	MULLION	QUAL	QUALITY				
CHFR	CHAMFER	EXP BT	EXPANSION BOLT	HMF	HOLLOW METAL FRAME	MW	MICROWAVE	R	RADIUS OR RISER				
CHK	CHECK	EXST GR	EXISTING GRADE	HND									



1 PARTIAL FIRST FLOOR LIFE SAFETY PLAN  
1/8" = 1'-0"

**CODE SUMMARY**

**PROJECT DESCRIPTION**  
ADDITION TO BUILDING 5 FOR SERVER ROOM AND MECHANICAL INTERSTITIAL SPACE. UPGRADE OF ENTIRE CAMPUS COMPUTER AND TECHNOLOGY INFRASTRUCTURE.

**GENERAL TYPE OF PROJECT**

NEW BUILDING	YES	NO
ADDITION	●	○
REMODEL	○	●

**AUTHORITIES HAVING JURISDICTION (AHJ'S)**

THE JOINT COMMISSION (TJC)	YES	NO
CENTER FOR MEDICARE/MEDICAID SERVICES (CMS)	○	●

**APPLICABLE REGULATIONS**

- 2020 NFPA 101 (LIFE SAFETY CODE)
- 2018 IBC
- ABA STANDARDS (2015) (ABAS)
- VA BARRIER FREE DESIGN STANDARD (PG-18-13)
- NFPA NATIONAL FIRE CODES (EXCEPTION: NFPA 5000 & 800)
- 2018 FGI GUIDELINES
- OSHA STANDARDS
- VA SEISMIC DESIGN REQUIREMENTS H-18-8
- NATIONAL ELECTRIC CODE (NEC)
- ASME BOILER AND PRESSURE VESSEL CODE
- ASME CODE FOR PRESSURE PIPING
- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMETARY (ACI 318)
- MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
- ENERGY POLICY ACT OF 2005 (EPAct)
- DOE INTERIM FINAL RULE: ENERGY CONSERVATION STANDARDS FOR NEW FEDERAL, COMMERCIAL AND MULTI-FAMILY HIGH-RISE RESIDENTIAL BUILDINGS AND NEW LOW-RISE RESIDENTIAL BUILDINGS, 10 CFR PARTS 433.434 AND 435
- FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS: MEMORANDUM OF UNDERSTANDING (MOU)
- EXECUTIVE ORDER 13423: STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT
- THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS, STATED IN THE GENERAL REQUIREMENTS SECTION 011010 OF THE VA MASTER CONSTRUCTION SPECIFICATION
- VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - ASHRAE STANDARD 62.1-2004
- SAFETY STANDARD FOR REFRIGERATION SYSTEMS - ASHRAE STANDARD 15-2007
- VA FIRE PROTECTION DESIGN MANUAL
- VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL)

**OCCUPANCY CLASSIFICATION(S)**

OCCUPANCIES (LSC CH 12-42)			
INTERSTITIAL (FIRST FLOOR)	BUSINESS		
SERVER (SECOND FLOOR)	BUSINESS	YES	NO

**CHANGE OF OCCUPANCY?** (If Remodeling)

INTERSTITIAL (FIRST FLOOR)	●
SERVER (SECOND FLOOR)	●

**SEPARATED OCCUPANCIES?** 2018 LSC (6.1.1.4)

INTERSTITIAL (FIRST FLOOR)	●
SERVER (SECOND FLOOR)	●

**FIRE BARRIER RATING(S)** (Section 6.3) SEE LIFE SAFETY PLANS

**TYPE(S) OF CONSTRUCTION**

CONSTRUCTION TYPE(S)	(NFPA 220)	TYPE I(222)
AREA SEPARATIONS / FIRE WALLS	SEE LIFE SAFETY PLANS	

**FIRE-RESISTIVE REQUIREMENTS**

STRUCTURAL FRAME	RATING (HRS)	TEST
COLUMNS	2 HR	ASTM E119
GIRDERS	2 HR	ASTM E119
TRUSSES	2 HR	ASTM E119
<b>BEARING WALLS</b>		
EXTERIOR BEARING WALLS	2 HR	ASTM E119
INTERIOR BEARING WALLS	2 HR	ASTM E119
<b>NON-BEARING WALLS AND PARTITIONS</b>		
EXTERIOR	0 HR	NA
INTERIOR	See Life Safety Plans	
<b>FLOOR CONSTRUCTION</b>		
FLOOR/CEILING ASSEMBLY	2 HR	ASTM E119
PRIME & SEC. FLOOR BEAMS, JOISTS	1 HR	ASTM E119
<b>ROOF CONSTRUCTION</b>		
ROOF/CEILING ASSEMBLY	2 HR	ASTM E119
PRIME & SEC. ROOF BEAMS, JOISTS	2 HR	ASTM E119
<b>OTHER</b>		
SHAFTS AND EXIT PASSAGEWAYS	2 HR	ASTM E119
EXTERIOR DOORS AND WINDOWS	0 HR	NA

**LIFE SAFETY SYMBOLS**

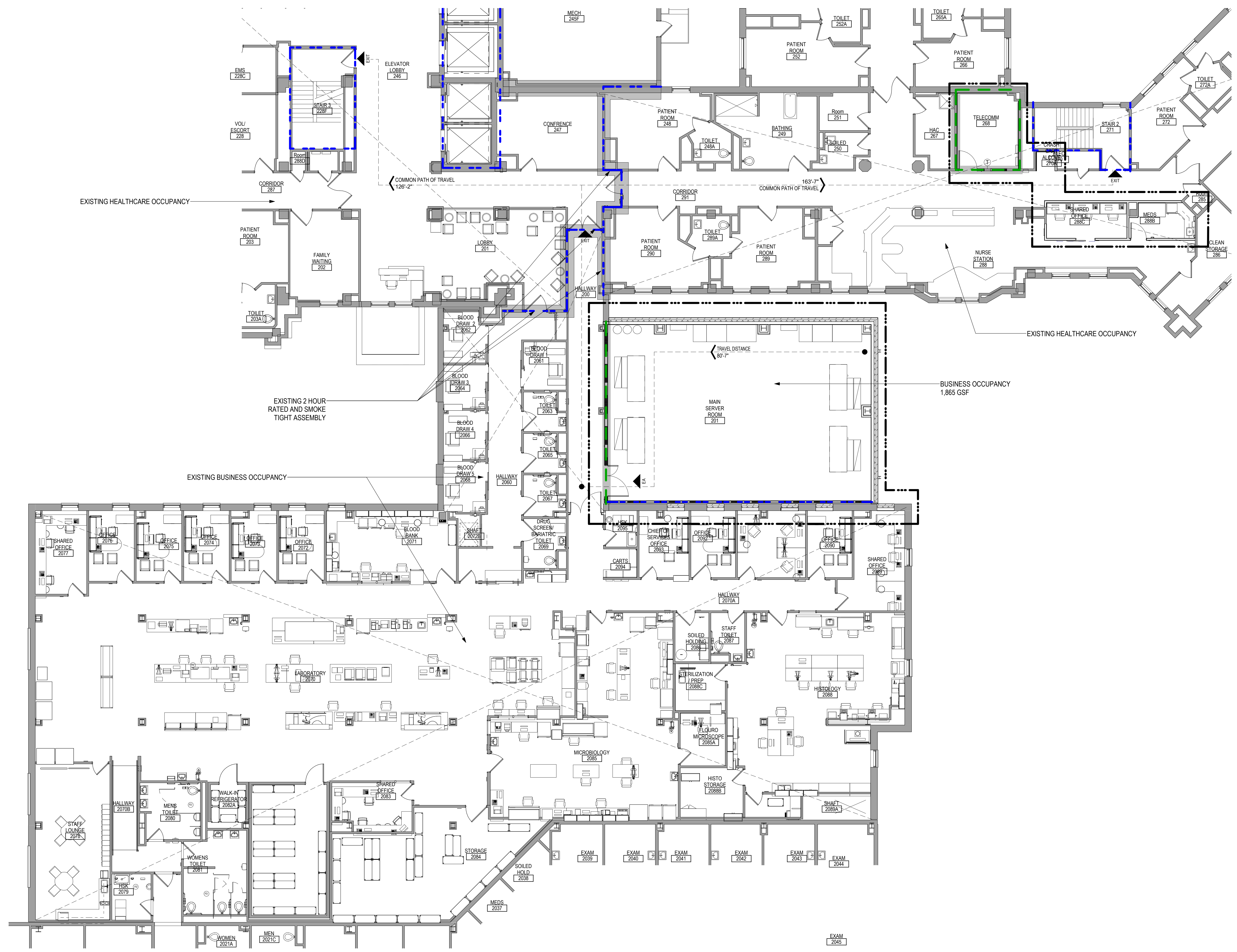
	SMOKE TIGHT ASSEMBLY		1 HOUR FIRE & SMOKE BARRIER
	1 HOUR FIRE BARRIER		2 HOUR FIRE & SMOKE BARRIER
	2 HOUR FIRE BARRIER		3 HOUR FIRE & SMOKE BARRIER
	3 HOUR FIRE BARRIER		TRAVEL DISTANCE 100'-10"
	EXIT		EXIT DISCHARGE
	HORIZONTAL EXIT		EXIT ACCESS
	FIRE EXTINGUISHER		FIRE EXTINGUISHER CABINET
	LIMITS OF CONSTRUCTION		
	SHAFT	ADJACENT SYMBOLS SHOW PARTITION RATING AND DAMPER REQUIREMENTS	
	HAZARDOUS USE	ADJACENT SYMBOLS SHOW PARTITION RATING, OPENINGS REQUIRE CLOSER & LATCH	
	EXIT PASSAGEWAY	RATE AS STAIR ALL OPENINGS TO BE RATED AS STAIR SHAFT	
	CORRIDOR	WALLS TO LIMIT THE TRANSFER OF SMOKE	
	ADJUNCT CORRIDOR or PSYCHIATRIC AREA	if CONSTRUCTED WITH MIN. 4'-0" CLEAR WITH (PER CHAPTER 19)	

NOTE: NOT ALL SYMBOLS MAY BE USED ON EACH PLAN

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VA FORM 08-6231

Revisions: _____ Date: _____	<b>CONSULTANT</b> 	<b>ARCHITECT/ENGINEER OF RECORD</b>  13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 18090	<b>STAMP</b>  U.S. Department of Veterans Affairs	Drawing Title <b>PARTIAL FIRST LEVEL LIFE SAFETY PLAN</b> Approved: _____	Phase <b>BID DOCUMENTS</b> <b>FULLY SPRINKLERED</b>	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b>	Project Number <b>438-20-910</b> Building Number _____
	Location <b>Sioux Falls, SD</b>	Issue Date <b>02/18/2022</b>	Checked --	Drawn <b>MM</b>	Drawing Number <b>GI010</b>		

A  
B  
C  
D  
E  
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**CODE SUMMARY**

**PROJECT DESCRIPTION**  
ADDITION TO BUILDING 5 FOR SERVER ROOM AND MECHANICAL INTERSTITIAL SPACE. UPGRADE OF ENTIRE CAMPUS COMPUTER AND TECHNOLOGY INFRASTRUCTURE

**GENERAL TYPE OF PROJECT**

NEW BUILDING	YES	NO
ADDITION	●	
REMODEL	●	

**AUTHORITIES HAVING JURISDICTION (AHJ's)**

THE JOINT COMMISSION (JC)	YES	NO
CENTER FOR MEDICARE/MEDICAID SERVICES (CMS)	●	

**APPLICABLE REGULATIONS**

2020 NFPA 101 (LIFE SAFETY CODE)  
2018 IBC  
ABA STANDARDS (2015) (ABAS)  
VA BARRIER FREE DESIGN STANDARD (PG-18-13)  
NFPA NATIONAL FIRE CODES (EXCEPTION: NFPA 5000 & 900)  
2018 FGI GUIDELINES  
OSHA STANDARDS  
VA SEISMIC DESIGN REQUIREMENTS H-18-8  
NATIONAL ELECTRIC CODE (NEC)  
ASME BOILER AND PRESSURE VESSEL CODE  
ASME CODE FOR PRESSURE PIPING  
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMETARY (ACI 318)  
MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)  
ENERGY POLICY ACT OF 2005 (EPAct)  
DOE INTERIM FINAL RULE: ENERGY CONSERVATION STANDARDS FOR NEW FEDERAL, COMMERCIAL AND MULTI-FAMILY HIGH-RISE RESIDENTIAL BUILDINGS AND NEW LOW-RISE RESIDENTIAL BUILDINGS, 10 CFR PARTS 431.434 AND 435  
FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS: MEMORANDUM OF UNDERSTANDING (MOU)  
EXECUTIVE ORDER 13423: STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT  
THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS, STATED IN THE GENERAL REQUIREMENTS SECTION 0110 OF THE VA MASTER CONSTRUCTION SPECIFICATION  
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - ASHRAE STANDARD 62.1-2004  
SAFETY STANDARD FOR REFRIGERATION SYSTEMS - ASHRAE STANDARD 15-2007  
VA FIRE PROTECTION DESIGN MANUAL  
VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL)

**OCCUPANCY CLASSIFICATION(S)**

OCCUPANCIES (LSC CH 12-42)	
INTERSTITIAL (FIRST FLOOR)	BUSINESS
SERVER (SECOND FLOOR)	BUSINESS
CHANGE OF OCCUPANCY?	(If Remodeling)
INTERSTITIAL (FIRST FLOOR)	●
SERVER (SECOND FLOOR)	●
SEPARATED OCCUPANCIES?	2018 LSC (6.1.14.4)
INTERSTITIAL (FIRST FLOOR)	●
SERVER (SECOND FLOOR)	●
FIRE BARRIER RATING(S)	(Section 8.3) SEE LIFE SAFETY PLANS

**TYPE(S) OF CONSTRUCTION**

CONSTRUCTION TYPE(S)	(NFPA 220)	TYPE (I/222)
AREA SEPARATIONS / FIRE WALLS	SEE LIFE SAFETY PLANS	

**FIRE-RESISTIVE REQUIREMENTS**

	RATING (HRS)	TEST
STRUCTURAL FRAME		
COLUMNS	2 HR	ASTM E119
GIRDERS	2 HR	ASTM E119
TRUSSES	2 HR	ASTM E119
BEARING WALLS		
EXTERIOR BEARING WALLS	2 HR	ASTM E119
INTERIOR BEARING WALLS	2 HR	ASTM E119
NON-BEARING WALLS AND PARTITIONS		
EXTERIOR	0 HR	NA
INTERIOR	See Life Safety Plans	
FLOOR CONSTRUCTION		
FLOOR/CEILING ASSEMBLY	2 HR	ASTM E119
PRIME & SEC. FLOOR BEAMS, JOISTS	1 HR	ASTM E119
ROOF CONSTRUCTION		
ROOF/CEILING ASSEMBLY	2 HR	ASTM E119
PRIME & SEC. ROOF BEAMS, JOISTS	2 HR	ASTM E119
OTHER		
SHAFTS AND EXIT PASSAGEWAYS	2 HR	ASTM E119
EXTERIOR DOORS AND WINDOWS	0 HR	NA

**LIFE SAFETY SYMBOLS**

	1 HOUR FIRE BARRIER		1 HOUR FIRE & SMOKE BARRIER
	2 HOUR FIRE BARRIER		2 HOUR FIRE & SMOKE BARRIER
	3 HOUR FIRE BARRIER		3 HOUR FIRE & SMOKE BARRIER
	TRAVEL DISTANCE		TRAVEL DISTANCE
	EXIT		EXIT DISCHARGE
	HORIZONTAL EXIT		EXIT ACCESS
	FIRE EXTINGUISHER		FIRE EXTINGUISHER CABINET
	LIMITS OF CONSTRUCTION		
	SHAFT	SHAFT ADJACENT SYMBOLS SHOW PARTITION RATING AND DAMPER REQUIREMENTS	
	HAZARDOUS USE	ADJACENT SYMBOLS SHOW PARTITION RATING, OPENINGS REQUIRE, CLOSER & LATCH	
	EXIT PASSAGEWAY	RATE AS STAIR ALL OPENINGS TO BE RATED AS STAIR SHAFT	
	CORRIDOR	WALLS TO LIMIT THE TRANSFER OF SMOKE	
	ADJUNCT CORRIDOR or PSYCHIATRIC AREA	or CONSTRUCTED WITH MIN. 4'-0" CLEAR WITH (PER CHAPTER 9)	

NOTE: NOT ALL SYMBOLS MAY BE USED ON EACH PLAN

1 PARTIAL SECOND FLOOR LIFE SAFETY PLAN  
1/8" = 1'-0"

Revisions:

	Date:
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<p>CONSULTANT</p>	<p>ARCHITECT/ENGINEER OF RECORD</p>	<p>STAMP</p>	<p>Phase</p> <p><b>BID DOCUMENTS</b></p>	<p>Project Title</p> <p><b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b></p>	<p>Project Number</p> <p><b>438-20-910</b></p>
<p>10360 Ellison Circle Omaha, NE 68134</p> <p>Phone: 402.991.5530 www.specializedeng.com</p>	<p>13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090</p>	<p>U.S. Department of Veterans Affairs</p>	<p>FULLY SPRINKLERED</p>	<p>Location</p> <p>Sioux Falls, SD</p>	<p>Building Number</p> <p>GI020</p>
<p>Issue Date</p> <p>02/18/2022</p>	<p>Checked</p> <p>Checker</p>	<p>Drawn</p> <p>Author</p>	<p>Drawing Number</p> <p>GI020</p>	<p> </p>	<p> </p>

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### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP	APPLICABLE AREAS
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	MECHANICAL SPACES. AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. ENGINEERING OR EMS OFFICE/WORK AREAS. OFFICE AREAS. AREAS NOT ATTACHED TO ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS. PUBLIC CORRIDORS. SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUTPATIENT CLINICS (CBOC'S)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS; RADIOLOGY/IM/CT/ULTRASOUND; NUCLEAR MEDICINE; CATERING/KITCHEN/CANTEEN; LABORATORIES; RADIATION / ONCOLOGY; DIALYSIS
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	ICU/SICU OR PACU/ENDOSCOPY GI STERILE PROCESSING SERVICES (SPS) PHARMACY CAT LAB
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING.)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA.		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST, DEBRIS 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH GLEANER/DISINFECTANT 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM. ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DONDOFF PPE		

### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

- SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
- THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS. WHERE PERMITTED BY CLASS, ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
- PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
- AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA INFECTION CONTROL CONSTRUCTION PERMIT TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
- CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER, SEE DETAILS, TAPE, HUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
- CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
- DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
- LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
- PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

### CONSTRUCTION PHASING GENERAL NOTES

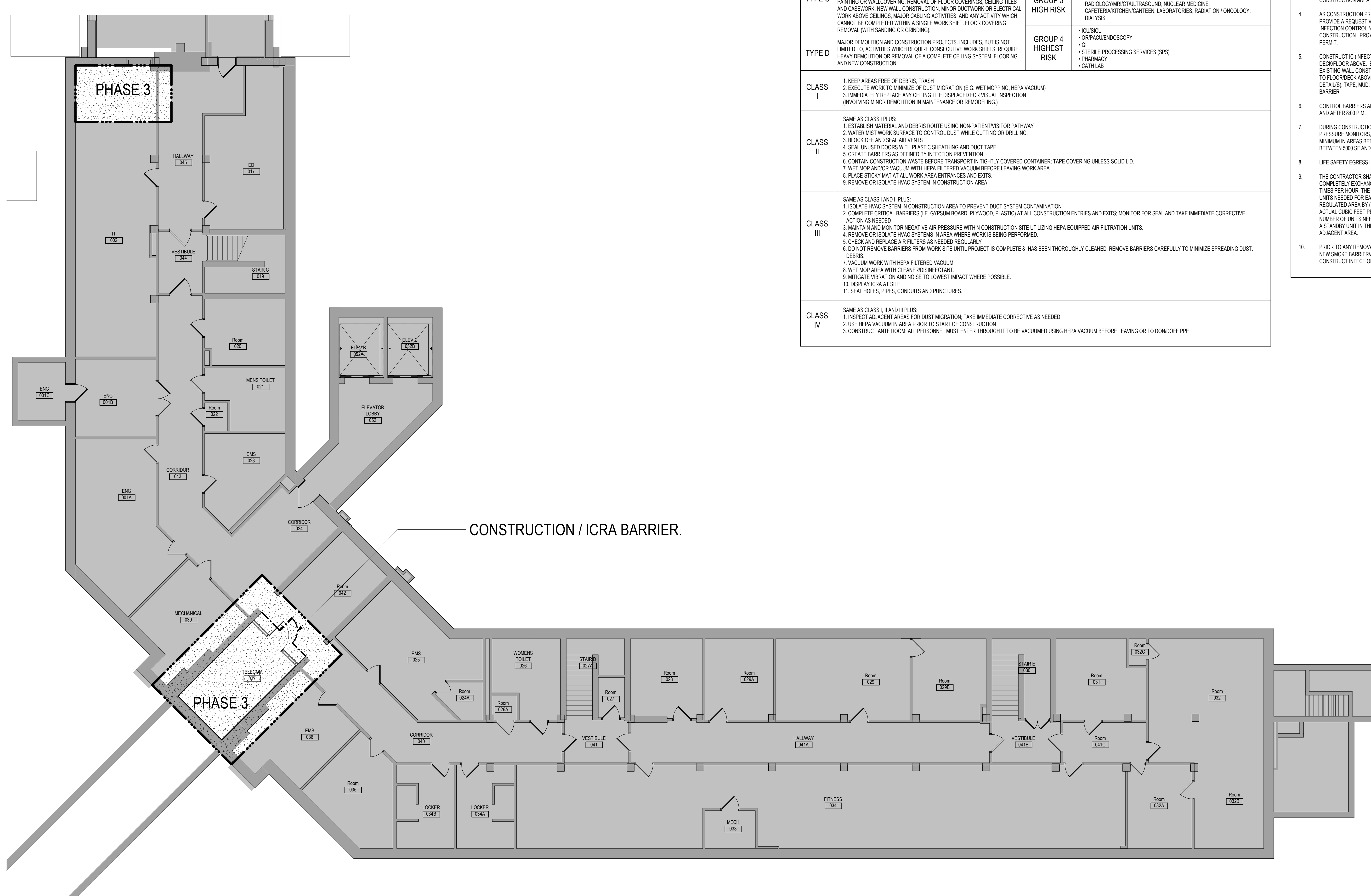
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.1 PHASING.
- THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
- THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNERS.
- THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES. OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNERS PERSONNEL FOR ALL PHASES OF THE WORK.
- THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
- THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
- BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
- ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
- THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
- FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
- ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
- THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
- THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

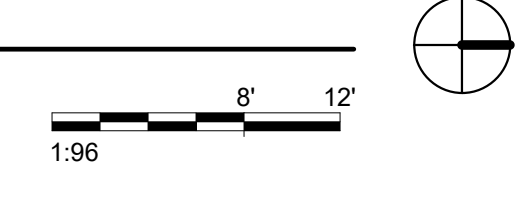
PHASE: ALL  
CONSTRUCTION PROJECT ACTIVITY TYPE: C  
INFECTION CONTROL RISK GROUP: GROUP 2 - MEDIUM RISK (MINIMUM) TO GROUP 4 - HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

NOTE:  
PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UP-TURNED AND EXTENDED TO 18" OF STRUCTURE.



1 LOWER LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 1  
1/8" = 1'-0"



Revisions:	Date:

**CONSULTANT**

**SPECIALIZED ENGINEERING SOLUTIONS**  
10360 Ellison Circle  
Omaha, NE 68134  
Phone: 402.991.5530  
www.specializedeng.com

**ARCHITECT/ENGINEER OF RECORD**

13605 1st Ave. N. #100 Plymouth, MN 55441  
P 763.412.4000 | F 763.412.4090 | ae-mn.com  
Anderson Engineering of Minnesota, LLC | Proj # 16090

**STAMP**

Office of Construction and Facilities Management  
**VA** U.S. Department of Veterans Affairs

Drawing Title  
**LOWER LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 1**

Approved:

Phase  
**BID DOCUMENTS**

FULLY SPRINKLERED

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
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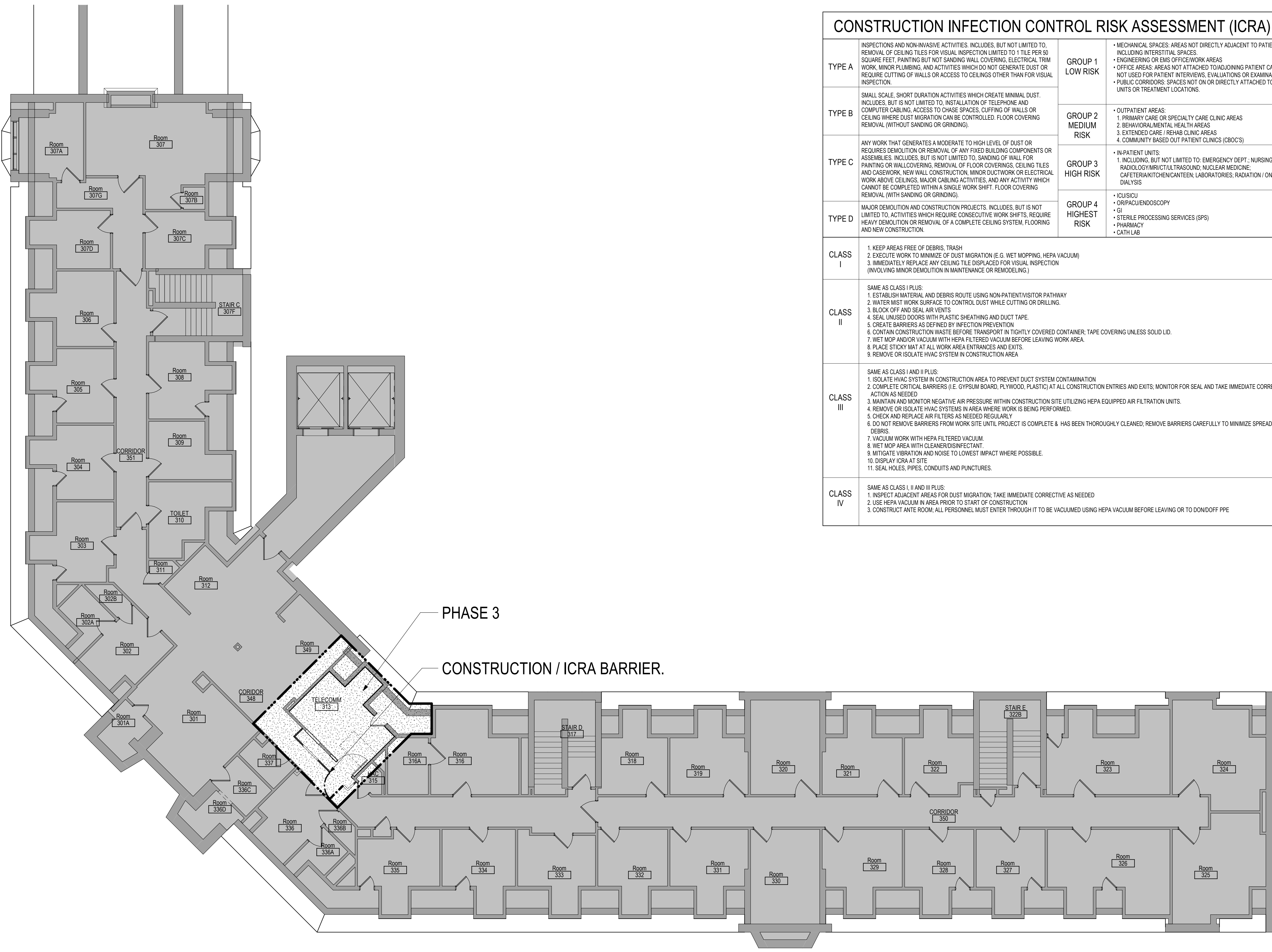
Drawn  
Author

Project Number  
438-20-910

Building Number  
1

Drawing Number  
GC101-01

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### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP	CHARACTERISTICS
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	<ul style="list-style-type: none"> <li>MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES.</li> <li>ENGINEERING OR EMS OFFICE/WORK AREAS</li> <li>OFFICE AREAS: AREAS NOT ATTACHED TO/ADJOINING PATIENT CARE AREAS. NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS.</li> <li>PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.</li> </ul>
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLEING, ACCESS TO CHASE SPACES, CLIFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED. FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	<ul style="list-style-type: none"> <li>OUTPATIENT AREAS:                             <ul style="list-style-type: none"> <li>PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS</li> <li>BEHAVIORAL/MENTAL HEALTH AREAS</li> <li>EXTENDED CARE / REHAB CLINIC AREAS</li> <li>COMMUNITY BASED OUTPATIENT CLINICS (CBOCS)</li> </ul> </li> </ul>
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILINGS, MAJOR CABLEING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	<ul style="list-style-type: none"> <li>IN-PATIENT UNITS:                             <ul style="list-style-type: none"> <li>INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/RITUAL TRANSOUND, NUCLEAR MEDICINE, CAFETERIA/KITCHEN/CANTEEN, LABORATORIES, RADIATION ONCOLOGY, DIALYSIS</li> </ul> </li> </ul>
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION	GROUP 4 HIGHEST RISK	<ul style="list-style-type: none"> <li>ICU/SICU</li> <li>ORPAC/ENDOSCOPY</li> <li>GI</li> <li>STERILE PROCESSING SERVICES (SPS)</li> <li>PHARMACY</li> <li>CATH LAB</li> </ul>
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE. 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS. MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED. REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST DEBRIS. 7. VACUUM WORK WITH HEPA FILTERED VACUUM. 8. WET MOP AREA WITH CLEANER/DISINFECTANT. 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY OSHA AT SITE. 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION, TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM. ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE		

- ### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES
- SEE SPEC SECTION 01 36 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
  - THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
  - PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAILS, TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS. MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (16) FEET AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER/FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.1 PHASING.
  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA. PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND MAKE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

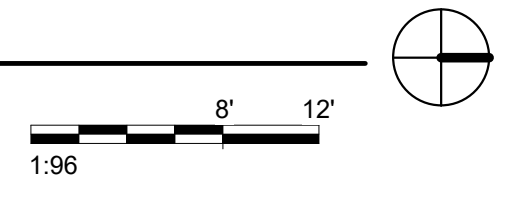
### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL  
 CONSTRUCTION PROJECT ACTIVITY TYPE - C  
 INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM). COORDINATE WITH OIR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. **WORK MUST BE ACCOMPLISHED** IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

NOTE:  
 PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.

1 THIRD LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN 1  
 1/8" = 1'-0"



Revisions: _____ Date: _____	<b>CONSULTANT</b>  <b>AST</b>	<b>ARCHITECT/ENGINEER OF RECORD</b>  <b>SPECIALIZED ENGINEERING SOLUTIONS</b> 10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5530 www.specializedeng.com	 <b>ANDERSON</b> 13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090	<b>STAMP</b>  Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title <b>THIRD LEVEL ICRA, CONSTRUCTION BARRIER &amp; PHASING PLAN - BUILDING 1</b> Approved: _____	Phase <b>BID DOCUMENTS</b> FULLY SPRINKLERED	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b> Location Sioux Falls, SD Issue Date 07/06/2021	Project Number <b>438-20-910</b> Building Number <b>1</b> Drawing Number <b>GC131-01</b>
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NOTE  
 PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.

PHASE 3  
 CONSTRUCTION /ICRA BARRER

- ### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES
- SEE SPEC SECTION 01 35 28 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
  - THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS. WHERE PERMITTED BY CLASS, ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS
  - PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA
  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIERS FROM FLOOR TO DECKFLOOR ABOVE, EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/CEILING ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER, SEE DETAILS; TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE CONTRACTOR SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER HOUR FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/FIRE RATED PARTITIONS PER PLAN OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 16.1 PHASING.
  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNERS PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE, SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERINGS, ELECTRICAL WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK

CLASS	DESCRIPTION
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR WAYS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE. 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER. TAPE COVERING UNLESS SOLID LD. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. OXYGEN BARRIER, PLWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST/DEBRIS 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH CLEANER/DISINFECTANT 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM. ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DOND/OFF PPE

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE: ALL  
 CONSTRUCTION PROJECT ACTIVITY: TYPE - C  
 INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

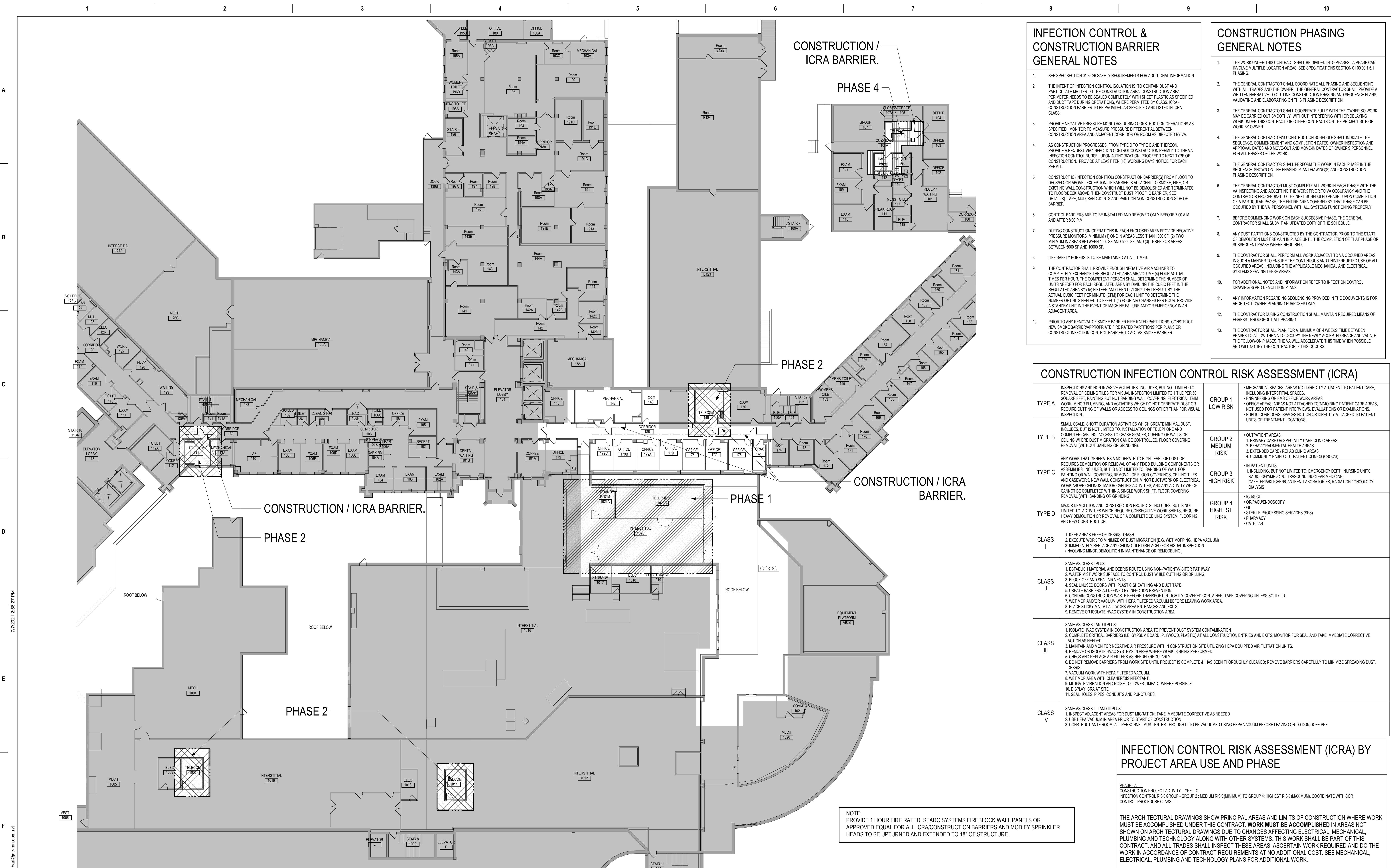
THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

1 LOWER LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5  
 1/16" = 1'-0"

CONSULTANT 	ARCHITECT/ENGINEER OF RECORD 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title <b>GROUND LEVEL ICRA-CONSTRUCTION BARRIER &amp; PHASING PLAN - BUILDING 5</b>	Project Number <b>438-20-910</b>
			Office of Construction and Facilities Management SPECIALIZED ENGINEERING SOLUTIONS	PHASE <b>BID DOCUMENTS</b>
Revisions:	Date:	U.S. Department of Veterans Affairs	Approved:	Location Sioux Falls, SD
			Fully Sprinklered <b>FULLY SPRINKLERED</b>	Issue Date 11/29/2021
			Checked Author	Drawing Number <b>GC101-05</b>

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- ### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES
- SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
  - THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS. WHERE PERMITTED BY CLASS, ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
  - PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL CONSTRUCTION BARRIER) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT TO CEILING. SEE THE DETAILS, TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS. MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.1 PHASING.
  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF PHASE 1 MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VICINATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERING. TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLES, ACCESS TO CHASE SPACES, CUFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED. FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK. NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLEING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)	
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER. TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA.	
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUST CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (E.G. GYPSUM BOARD, PL WOOD/PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH CLEANER/DISINFECTANT 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.	
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM; ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE	

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

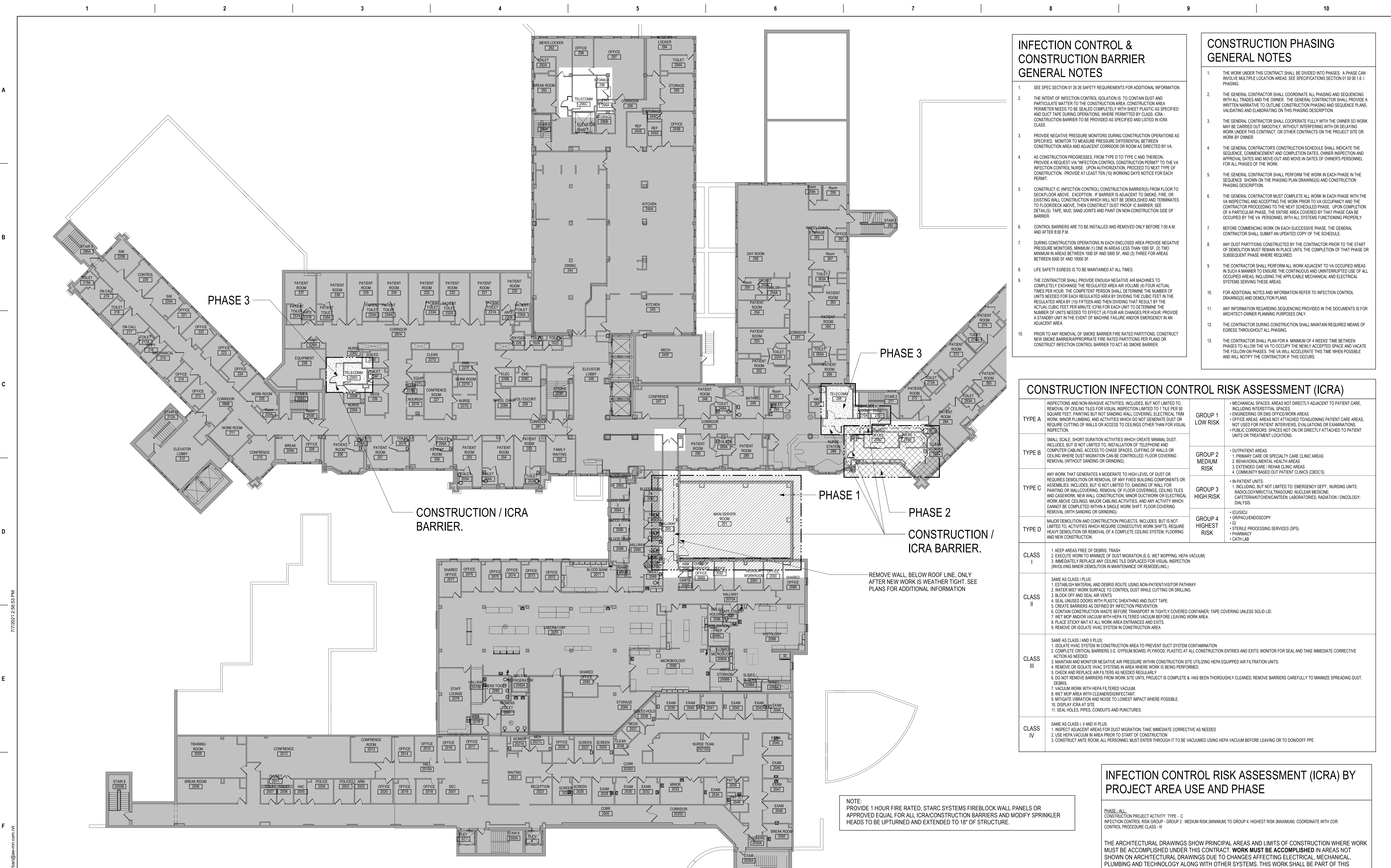
PHASE - ALL  
CONSTRUCTION PROJECT ACTIVITY TYPE - C  
INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM). COORDINATE WITH COR CONTROL PROCEDURE CLASS - II

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

NOTE: PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UP-TURNED AND EXTENDED TO 18" OF STRUCTURE.

1 FIRST FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN  
1/16" = 1'-0"

Revisions: _____ Date: _____	<b>CONSULTANT</b> 	<b>ARCHITECT/ENGINEER OF RECORD</b> 	<b>STAMP</b> 	<b>Phase</b> BID DOCUMENTS	<b>Project Title</b> VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES	<b>Project Number</b> 438-20-910
				<b>FULLY SPRINKLERED</b>	<b>Location</b> Sioux Falls, SD	<b>Building Number</b> 5
				<b>Approved:</b> _____	<b>Issue Date</b> 07/06/2021	<b>Drawing Number</b> GC111-05



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  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIERS FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH IS NOT TO BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAILS, TAPE, M.D. SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 6:30 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS. MINIMUM (1) ONE IN AREAS LESS THAN 100 SF, (2) TWO MINIMUM IN AREAS BETWEEN 100 SF AND 500 SF, AND (3) THREE FOR AREAS BETWEEN 500 SF AND 1000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
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  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES. OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNERS PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN (DRAWINGS) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWINGS AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCE PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP	EXAMPLES
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 30 SQUARE FEET. PAINTING, BUT NOT LIMITED TO, SANDING OF WALL FOR WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. ENGINEERING OR EMS OFFICE WORK AREAS. OFFICE AREAS: AREAS NOT ATTACHED TO ADJOINING PATIENT CARE AREAS. NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS. PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ADJACENT TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST, INCLUDING, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CLIFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL, (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUTPATIENT CLINICS (CBCOS)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES, INCLUDING, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT, FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	INPATIENT UNITS: INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/MR/CT/ULTRASOUND, NUCLEAR MEDICINE, CAFETERIA/KITCHEN/ENTERTAINMENT LABORATORIES, RADIATION / ONCOLOGY, DIALYSIS
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS, INCLUDING, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	ICUS/ICU OR/PHARMACY STERILE PROCESSING SERVICES (SPS) PHARMACY CATH LAB
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN A TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST/DEBRIS 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH CLEANER/DISINFECTANT 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM, ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE		

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL  
CONSTRUCTION PROJECT ACTIVITY TYPE - C  
INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

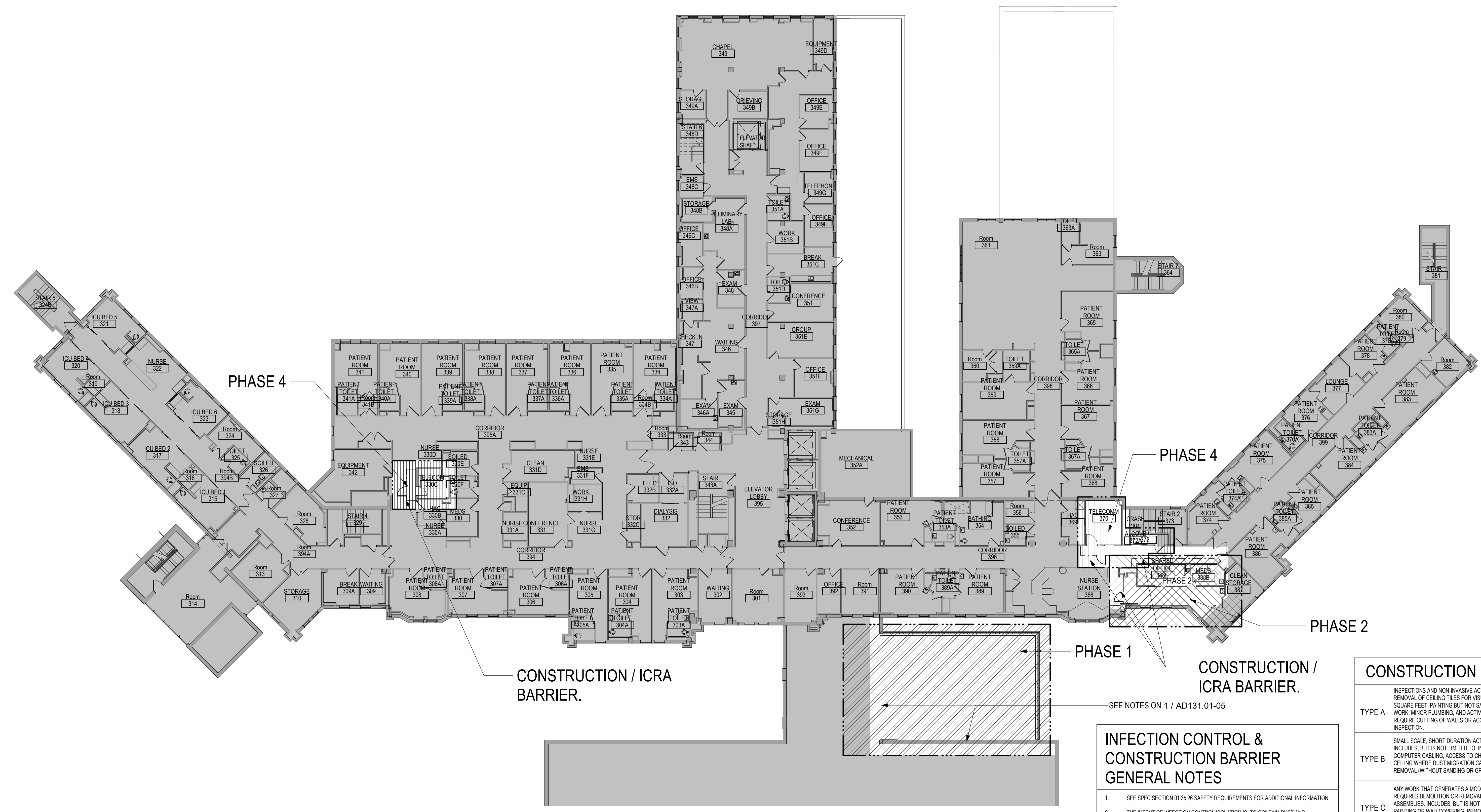
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1 SECOND FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN  
1/16" = 1'-0"

<b>CONSULTANT</b>  <b>AST</b>	<b>ARCHITECT/ENGINEER OF RECORD</b>  <b>ANDERSON</b> 13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16900	<b>Office of Construction and Facilities Management</b> U.S. Department of Veterans Affairs	Drawing Title <b>SECOND LEVEL ICRA, CONSTRUCTION BARRIER &amp; PHASING PLAN - BUILDING 5</b>	Phase <b>FULLY SPRINKLERED</b>	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b>	Project Number <b>438-20-910</b>
			Approved:	Location <b>Sioux Falls, SD</b>	Issue Date <b>07/06/2021</b>	Checked <b>--</b>

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  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

NOTE: PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.



1 THIRD FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN  
1/16" = 1'-0"

### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

- SEE SPEC SECTION 01 35 28 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION.
- THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
- PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
- AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
- CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIERS FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND FERMINTATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAIL(S), TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
- CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
- DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 3000 SF, AND (3) THREE FOR AREAS BETWEEN 3000 SF AND 10000 SF.
- LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
- PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL  
CONSTRUCTION PROJECT ACTIVITY TYPE - C  
INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. **WORK MUST BE ACCOMPLISHED** IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)			
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILING OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	• MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. • ENGINEERING OR EMS OFFICE/WORK AREAS • OFFICE AREAS: AREAS NOT ATTACHED TO/ADJACENT TO PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS • PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	• OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUTPATIENT CLINICS (CBCOS)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	• IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/MR/CT/ULTRASOUND, NUCLEAR MEDICINE, CATERING/KITCHEN/CANTEEN, LABORATORIES, RADIATION / ONCOLOGY, DIALYSIS
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	• ICUS/ICU • OR/PACU/ENDOSCOPY • GI • STERILE PROCESSING SERVICES (SPS) • PHARMACY • CATH LAB
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING.)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST/DEBRIS 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH CLEANER/DISINFECTANT 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUNTS AND PUNCTURES.		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM: ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE		

<b>CONSULTANT</b> 		<b>ARCHITECT/ENGINEER OF RECORD</b> 		<b>Office of Construction and Facilities Management</b> U.S. Department of Veterans Affairs		<b>Phase</b> BID DOCUMENTS		<b>Project Title</b> VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES		<b>Project Number</b> 438-20-910	
<b>Revisions:</b>		<b>STAMP</b>		<b>Drawing Title</b> THIRD LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5		<b>FULLY SPRINKLERED</b>		<b>Location</b> Sioux Falls, SD		<b>Building Number</b> 5	
<b>Date:</b>		<b>Office of Construction and Facilities Management</b> U.S. Department of Veterans Affairs		<b>Approved:</b>		<b>Issue Date</b> 07/06/2021		<b>Checked</b> Checker		<b>Drawn</b> Author	
										<b>Drawing Number</b> GC131-05	

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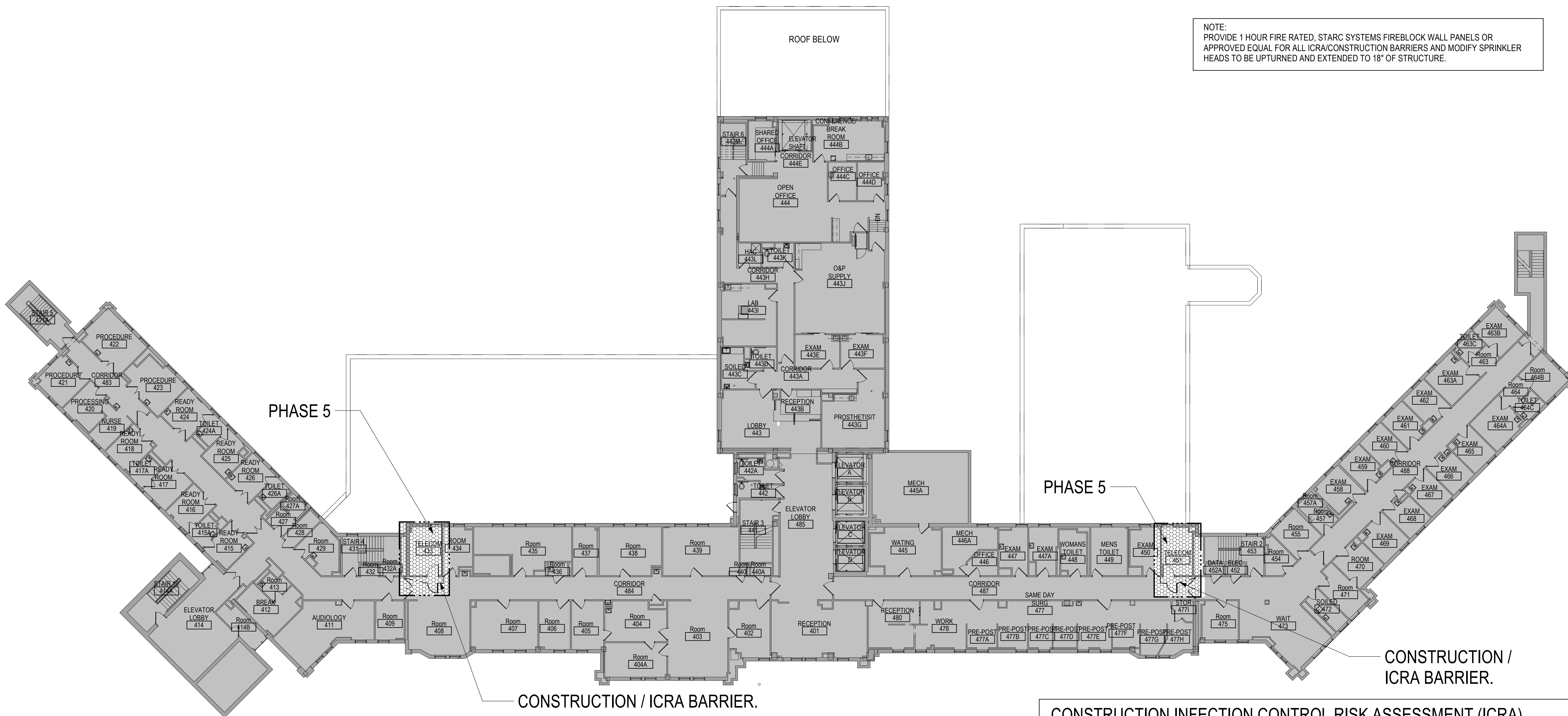
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CONSTRUCTION PHASING GENERAL NOTES

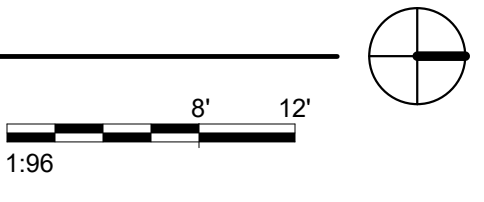
- 1. THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES... 2. THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING... 3. THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER... 4. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE... 5. THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE... 6. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE... 7. BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE... 8. ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR... 9. THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS... 10. FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWINGS... 11. ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY... 12. THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING... 13. THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES...

INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

- 1. SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION... 2. THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA... 3. PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS... 4. AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA INFECTION CONTROL CONSTRUCTION PERMIT TO THE VA INFECTION CONTROL NURSE... 5. CONSTRUCT IC (INFECTION CONTROL CONSTRUCTION BARRIER) FROM FLOOR TO DECK/FLOOR ABOVE... 6. CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M... 7. DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS... 8. LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES... 9. THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME... 10. PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.



1 FOURTH FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5



INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL CONSTRUCTION PROJECT ACTIVITY TYPE - C INFECTION CONTROL RISK GROUP - GROUP 2 - MEDIUM RISK (MINIMUM) TO GROUP 4 - HIGHEST RISK (MAXIMUM). COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP	DETAILS
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 30 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	• MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES • ENGINEERING OR EMS OFFICE/WORK AREAS • OFFICE AREAS: AREAS NOT ATTACHED TO ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS • PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST, INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CLIFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL, WITHOUT SANDING OR GRINDING.	GROUP 2 MEDIUM RISK	• OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUTPATIENT CLINICS (CBOCS)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT, FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	• IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/NUCLEAR MEDICINE, LABORATORY MEDICINE, CAFETERIA/KITCHEN/CANTEEN, NUCLEAR SERVICES, RADIATION / ONCOLOGY, DIALYSIS • ICU/SICU • OR/PACU/ENDOSCOPY • GI • STERILE PROCESSING SERVICES (SPS) • PHARMACY • CATH LAB
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. RECYCLE WORK TO MINIMIZE OR ELIMINATE DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA.		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLUMBING, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST. 7. VACUUM WORK WITH HEPA FILTERED VACUUM 8. WET MOP AREA WITH CLEANER/DISINFECTANT. 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION, TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM; ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE.		

Revisions:	Date:

CONSULTANT

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P 763.412.4000 | F 763.412.4090 | ae-mn.com  
Anderson Engineering of Minnesota, LLC | Proj # 1690

STAMP

Office of Construction and Facilities Management

U.S. Department of Veterans Affairs

Drawing Title

FOURTH LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5

Approved:

Phase

BID DOCUMENTS

FULLY SPRINKLERED

Project Title

VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

Location

Sioux Falls, SD

Issue Date

07/06/2021

Checked

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Drawn

GJB

Project Number

438-20-910

Building Number

5

Drawing Number

GC141-05

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### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

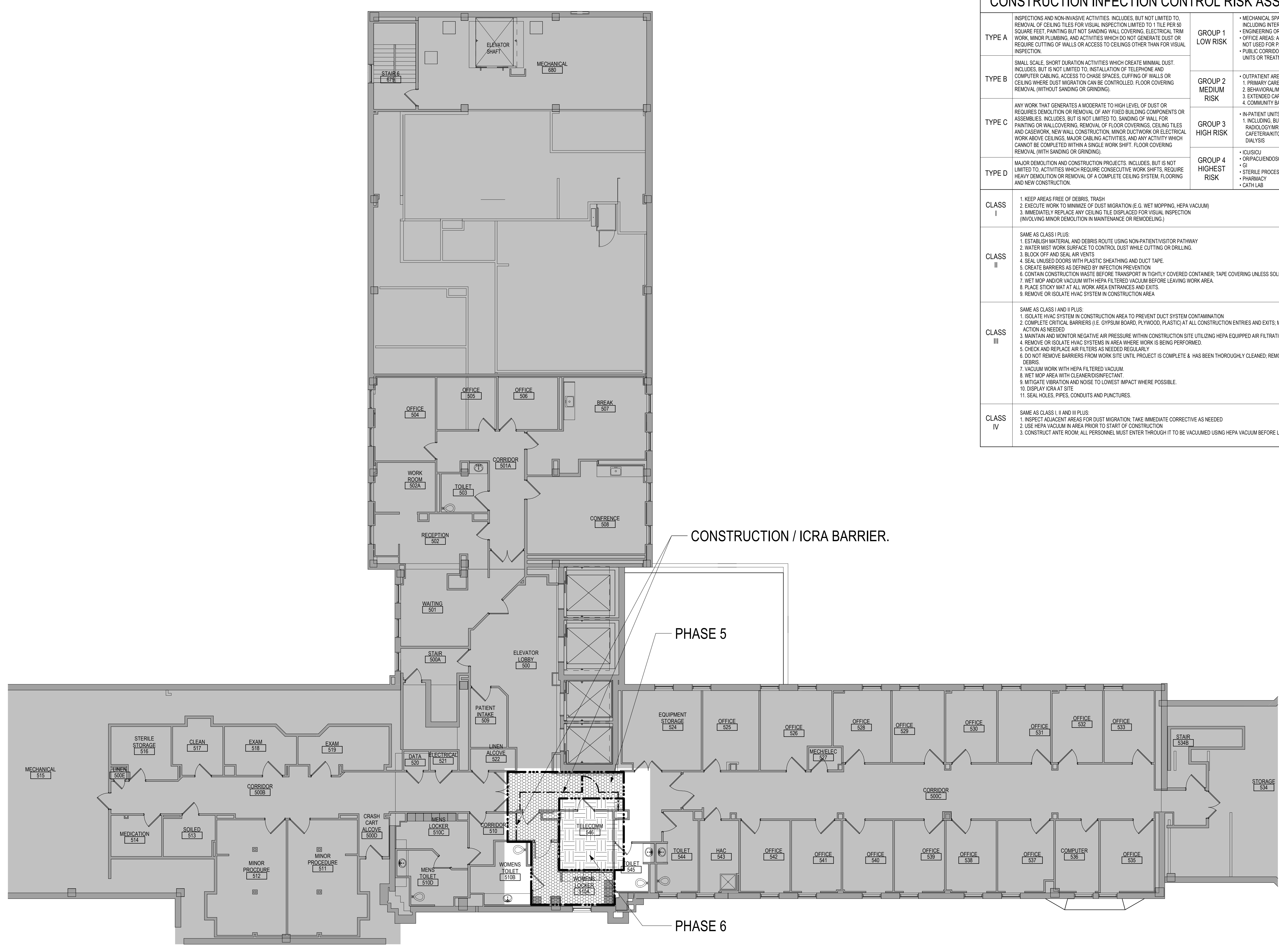
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET. PAINTING BUT NOT SANDING WALL COVERINGS, ELECTRICAL TROM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILING OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	MECHANICAL SPACES, AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. ENGINEERING OR EMS OFFICE/WORK AREAS OFFICE AREAS, AREAS NOT ATTACHED TO ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS. PUBLIC CORRIDORS, SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENSIVE CARE/ REHAB CLINIC AREAS 4. COMMUNITY BASED OUT PATIENT CLINICS (CBCOS)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALL COVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/MIXED/ULTRASOUND/ NUCLEAR MEDICINE, CAFETERIA/KITCHEN/CANTEEN, LABORATORIES, RADIATION / ONCOLOGY, DIALYSIS
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	ICU/ICU OR PACU/ENDOSCOPY STERILE PROCESSING SERVICES (SPS) PHARMACY CATH LAB
CLASS I	1. KEEP AREAS FREE OF DEBRIS, TRASH 2. EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) 3. IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING)		
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA		
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION. 2. COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS. MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED. 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY. 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST, DEBRIS. 7. VACUUM WORK WITH HEPA FILTERED VACUUM. 8. WET MOP AREA WITH CLEANER/DISINFECTANT. 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE. 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.		
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM; ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE		

### CONSTRUCTION PHASING GENERAL NOTES

1. THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 16.1 PHASING.
2. THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
3. THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
4. THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.
5. THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
6. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
7. BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
8. ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
9. THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
10. FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
11. ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
12. THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
13. THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOWING PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

1. SEE SPEC SECTION 01 35 28 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
2. THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
3. PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
4. AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
5. CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIERS FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAILS; TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
6. CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
7. DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
8. LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
9. THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
10. PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR APPROVED EQUAL FOR ALL ICRA CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.



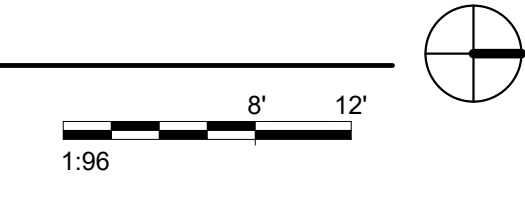
CONSTRUCTION / ICRA BARRIER.

PHASE 5

PHASE 6

1 FIFTH FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5

1/8" = 1'-0"



CONSULTANT



ARCHITECT/ENGINEER OF RECORD



STAMP

Office of Construction and Facilities Management  
VA U.S. Department of Veterans Affairs

Drawing Title  
FIFTH LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5

Approved:

Phase  
BID DOCUMENTS

FULLY SPRINKLERED

Project Title  
VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Author

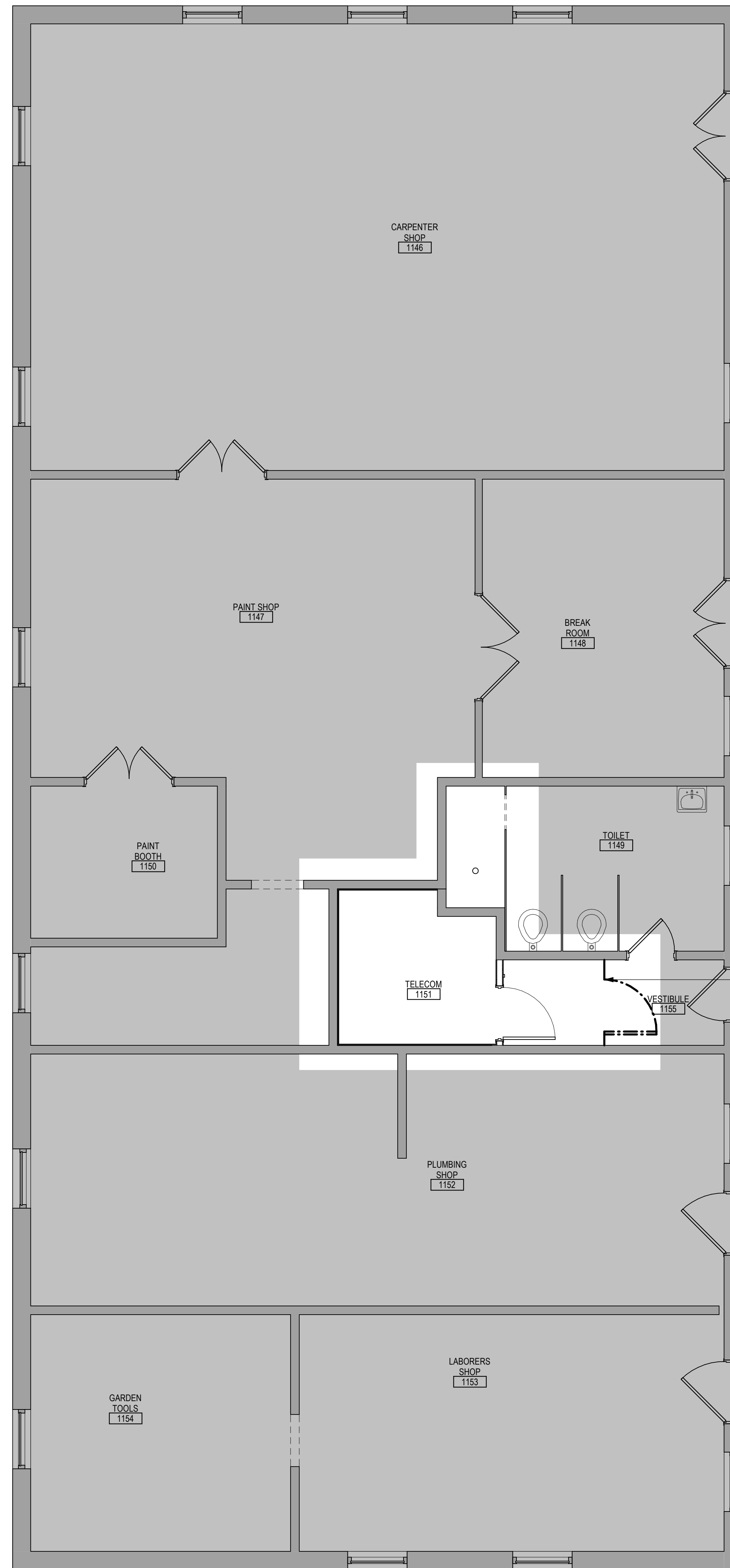
Project Number  
438-20-910

Building Number  
5

Drawing Number  
GC151-05

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A  
B  
C  
D  
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F



NOTE:  
PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.

- ### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES
- SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
  - THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
  - PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA INFECTION CONTROL CONSTRUCTION PERMIT TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAILS: TAPE, MUD, SAND, JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 6:00 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS. MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 3000 SF, AND (3) THREE FOR AREAS BETWEEN 3000 SF AND 10000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 1.6.1 PHASING.
  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNERS PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOWING PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

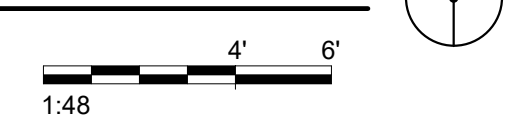
TYPE	DESCRIPTION	RISK GROUP	ADJACENT AREAS
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES, INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRM WORK, MINOR PLUMBING, AND ACTIVITIES THAT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	<ul style="list-style-type: none"> <li>MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES.</li> <li>ENGINEERING OR EMS OFFICE/WORK AREAS</li> <li>OFFICE AREAS: AREAS NOT ATTACHED TO/ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS.</li> <li>PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.</li> </ul>
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST, INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLES, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	<ul style="list-style-type: none"> <li>OUTPATIENT AREAS:                             <ol style="list-style-type: none"> <li>PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS</li> <li>BEHAVIORAL/MENTAL HEALTH AREAS</li> <li>EXTENDED CARE/REHABILITATION AREAS</li> <li>COMMUNITY BASED OUTPATIENT CLINICS (CBOS)</li> </ol> </li> </ul>
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES, INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALL COVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	<ul style="list-style-type: none"> <li>IN-PATIENT UNITS:                             <ol style="list-style-type: none"> <li>INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT.; NURSING UNITS; RADIOLOGY/RADIATION THERAPY; RADIOLOGY; INCLINAR MEDICINE; CATERAN/THORACIC/TEEN; LABORATORIES; RADIATION ONCOLOGY; DIALYSIS</li> </ol> </li> </ul>
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS, INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	<ul style="list-style-type: none"> <li>ICUS/ICU</li> <li>ORIPACU/ENDOSCOPY</li> <li>GI</li> <li>STERILE PROCESSING SERVICES (SPS)</li> <li>PHARMACY</li> <li>CATH LAB</li> </ul>
CLASS I	<ol style="list-style-type: none"> <li>KEEP AREAS FREE OF DEBRIS, TRASH</li> <li>EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM)</li> <li>IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING.)</li> </ol>		
CLASS II	<p>SAME AS CLASS I PLUS:</p> <ol style="list-style-type: none"> <li>ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY</li> <li>WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING.</li> <li>BLOCK OFF AND SEAL AIR VENTS</li> <li>SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE</li> <li>CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION</li> <li>CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER; TAPE COVERING UNLESS SOLID LID.</li> <li>WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA.</li> <li>PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA</li> </ol>		
CLASS III	<p>SAME AS CLASS I AND II PLUS:</p> <ol style="list-style-type: none"> <li>ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION</li> <li>COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS. MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED</li> <li>MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED.</li> <li>CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY</li> <li>DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE &amp; HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST, DEBRIS.</li> <li>VACUUM WORK WITH HEPA FILTERED VACUUM</li> <li>WET MOP AREA WITH CLEANER/DISINFECTANT.</li> <li>MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE.</li> <li>DISPLAY ICRA AT SITE</li> <li>SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.</li> </ol>		
CLASS IV	<p>SAME AS CLASS I, II AND III PLUS:</p> <ol style="list-style-type: none"> <li>INSPECT ADJACENT AREAS FOR DUST MIGRATION, TAKE IMMEDIATE CORRECTIVE AS NEEDED</li> <li>USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION</li> <li>CONSTRUCT ANTE ROOM: ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE</li> </ol>		

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE: ALL  
CONSTRUCTION PROJECT ACTIVITY: TYPE - C  
INFECTION CONTROL RISK GROUP: GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

1 FIRST LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 7  
1/4" = 1'-0"



Revisions:	Date:

**CONSULTANT**

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Anderson Engineering of Minnesota, LLC | Proj # 16090

**STAMP**

Office of Construction and Facilities Management

U.S. Department of Veterans Affairs

Drawing Title  
**FIRST LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 7**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Project Number  
**438-20-910**

Building Number  
**7**

Location  
**Sioux Falls, SD**

Drawing Number  
**GC111-07**

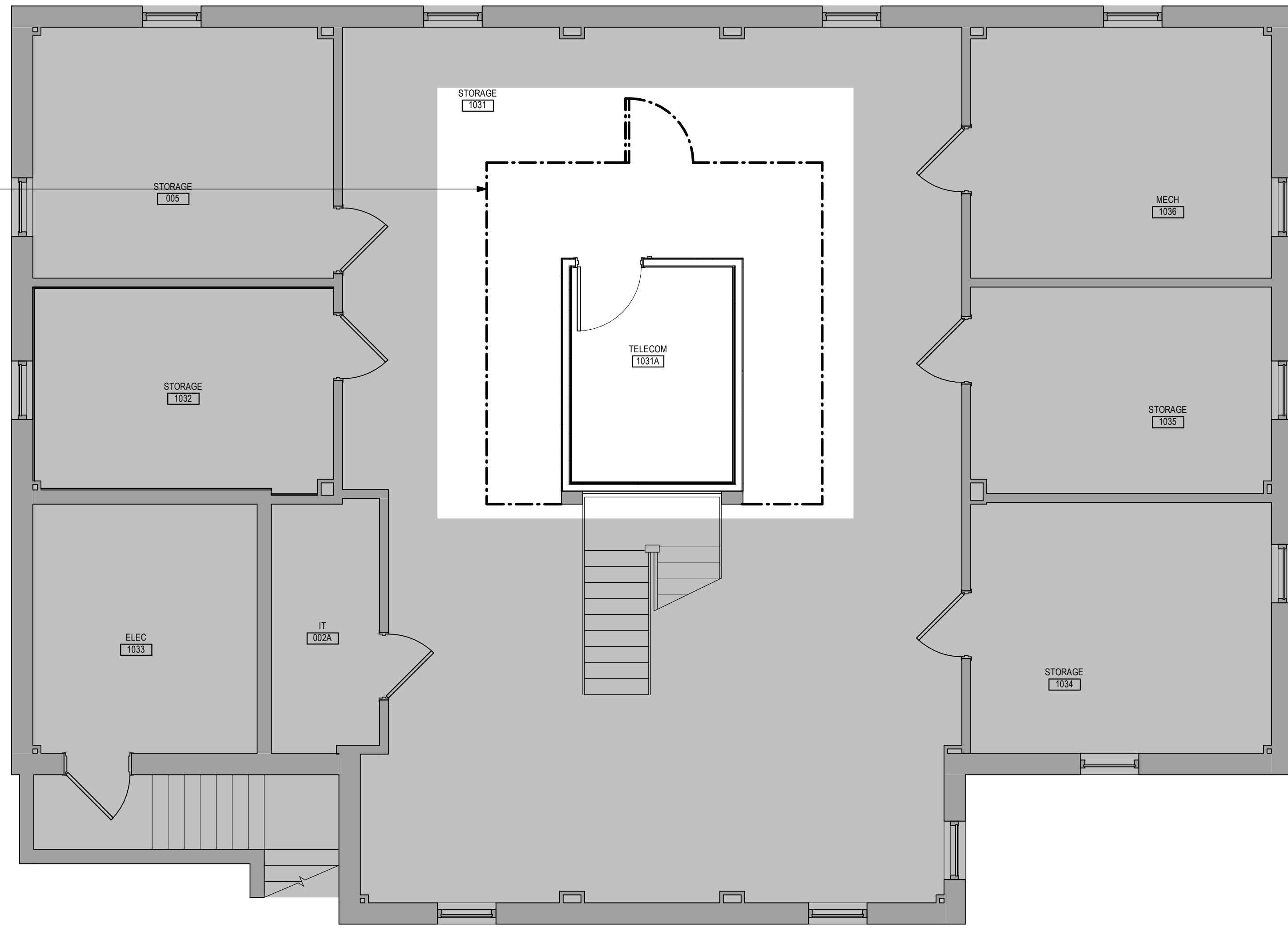
Issue Date  
**07/06/2021**

Checked  
**Checker**

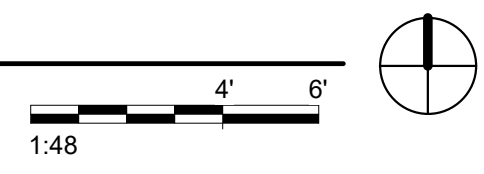
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**Author**

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CONSTRUCTION / ICRA BARRIER.  
PHASE: COORDINARE WITH COR



1 LOWER LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 5  
1/4" = 1'-0"



NOTE:  
PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.

- ### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES
- SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
  - THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
  - PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
  - AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
  - CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIERS FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER. SEE DETAILS) TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
  - CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
  - DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
  - LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
  - CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE CONTRACTOR PERSONNEL SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (10) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
  - PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

- ### CONSTRUCTION PHASING GENERAL NOTES
- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.1 PHASING.
  - THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
  - THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.
  - THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
  - THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA. PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
  - BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
  - ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
  - THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
  - FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
  - ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
  - THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
  - THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOWING PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK GROUP	EXAMPLES
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	<ul style="list-style-type: none"> <li>MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES.</li> <li>ENGINEERING OR EMS OFFICE/WORK AREAS</li> <li>OFFICE AREAS: AREAS NOT ATTACHED TO ADJACENT PATIENT CARE AREAS.</li> <li>NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS</li> <li>PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.</li> </ul>
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CLIPPING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	<ul style="list-style-type: none"> <li>OUTPATIENT AREAS:                             <ol style="list-style-type: none"> <li>PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS</li> <li>BEHAVIORAL/MENTAL HEALTH AREAS</li> <li>EXTENDED CARE / REHAB CLINIC AREAS</li> <li>COMMUNITY BASED OUTPATIENT CLINICS (CBCO'S)</li> </ol> </li> </ul>
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALL COVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILINGS, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	<ul style="list-style-type: none"> <li>IN-PATIENT UNITS:                             <ol style="list-style-type: none"> <li>INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS; RADIOLOGY/IM/RCT/CT/TRAUSS/IND; NUCLEAR MEDICINE; CAFETERIA/KITCHEN/CANTEEN; LABORATORIES; RADIATION / ONCOLOGY; DIALYSIS</li> </ol> </li> </ul>
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	<ul style="list-style-type: none"> <li>ICUS/ICU</li> <li>OR/PACU/ENDOSCOPY</li> <li>GI</li> <li>STERILE PROCESSING SERVICES (SPS)</li> <li>PHARMACY</li> <li>CATH LAB</li> </ul>
CLASS I	<ol style="list-style-type: none"> <li>KEEP AREAS FREE OF DEBRIS, TRASH</li> <li>EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM)</li> <li>IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR RENOVATING)</li> </ol>		
CLASS II	<p>SAME AS CLASS I PLUS:</p> <ol style="list-style-type: none"> <li>ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY</li> <li>WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING.</li> <li>BLOCK OFF AND SEAL AIR VENTS</li> <li>SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE.</li> <li>CREATE BARRIERS AS DIRECTED BY INFECTION PREVENTION</li> <li>CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID.</li> <li>WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA.</li> <li>PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA</li> </ol>		
CLASS III	<p>SAME AS CLASS I AND II PLUS:</p> <ol style="list-style-type: none"> <li>ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION</li> <li>COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED</li> <li>MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED.</li> <li>CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY</li> <li>DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE &amp; HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST/DEBRIS.</li> <li>VACUUM WORK WITH HEPA FILTERED VACUUM</li> <li>WET MOP AREA WITH CLEANER/DISINFECTANT.</li> <li>MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE.</li> <li>DISPLAY ICRA AT SITE</li> <li>SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.</li> </ol>		
CLASS IV	<p>SAME AS CLASS I, II AND III PLUS:</p> <ol style="list-style-type: none"> <li>INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED</li> <li>USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION</li> <li>CONSTRUCT ANTE ROOM. ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE</li> </ol>		

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL  
CONSTRUCTION PROJECT ACTIVITY TYPE - C  
INFECTION CONTROL RISK GROUP - GROUP 2 - MEDIUM RISK (MINIMUM) TO GROUP 4 - HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. **WORK MUST BE ACCOMPLISHED** IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

	<b>CONSULTANT</b>  	<b>SPECIALIZED ENGINEERING SOLUTIONS</b>  <small>10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5520 www.specializedeng.com</small>	<b>ARCHITECT/ENGINEER OF RECORD</b>  	<b>STAMP</b>  	<b>Office of Construction and Facilities Management</b>  U.S. Department of Veterans Affairs	Drawing Title <b>LOWER LEVEL ICRA, CONSTRUCTION BARRIER &amp; PHASING PLAN - BUILDING 16</b>  Approved: _____	Phase <b>BID DOCUMENTS</b>  <b>FULLY SPRINKLERED</b>	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b>  Location Sioux Falls, SD  Issue Date 07/06/2021	Project Number 438-20-910  Building Number 116  Drawing Number GC101-16
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A

B

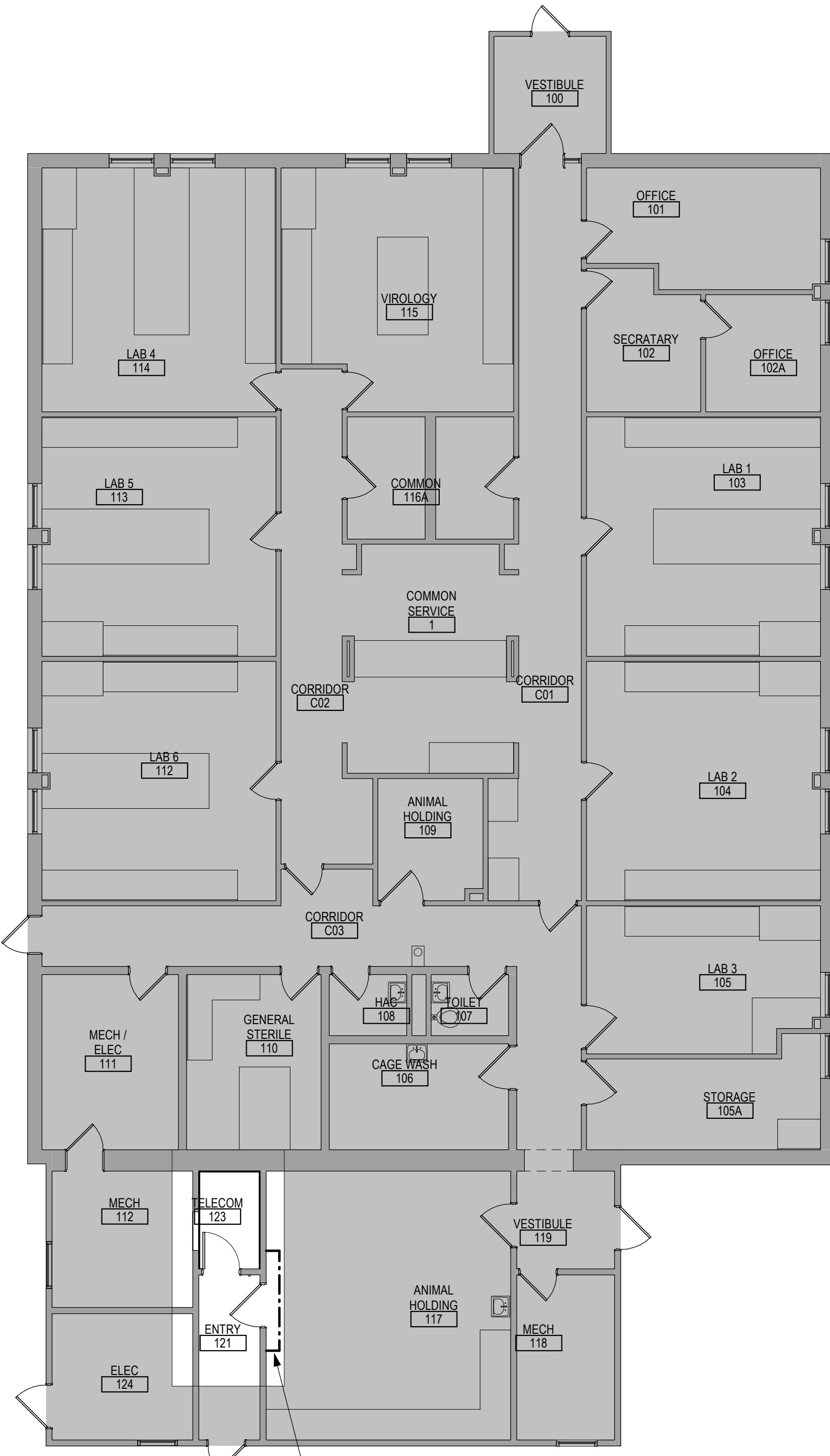
C

D

E

F

NOTE: PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.



CONSTRUCTION /ICRA BARRIER

INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

- 1. SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
2. THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA...
3. PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED...
4. AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA 'INFECTION CONTROL CONSTRUCTION PERMIT' TO THE VA INFECTION CONTROL NURSE...
5. CONSTRUCT IC (INFECTION CONTROL CONSTRUCTION BARRIERS) FROM FLOOR TO DECK/FLOOR ABOVE...
6. CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
7. DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS...
8. LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
9. THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME...
10. PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

CONSTRUCTION PHASING GENERAL NOTES

- 1. THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS...
2. THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER...
3. THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY...
4. THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES...
5. THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWINGS...
6. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY...
7. BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE...
8. ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE...
9. THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE...
10. FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
11. ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.
12. THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
13. THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES...

CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

Table with 4 columns: TYPE (A, B, C, D), CLASS (I, II, III, IV), RISK GROUP (1, 2, 3, 4), and DESCRIPTION. It details activities like tile removal, painting, and demolition, and their associated risk levels and control measures.

INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL
CONSTRUCTION PROJECT ACTIVITY TYPE - C
INFECTION CONTROL RISK GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM)...
THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS...

1 FIRST FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN



Revisions table with columns for Revisions and Date.

CONSULTANT: AST logo and contact information. SPECIALIZED ENGINEERING SOLUTIONS logo and contact information.

ARCHITECT/ENGINEER OF RECORD: ANDERSON logo and contact information.

STAMP: Office of Construction and Facilities Management logo.

Office of Construction and Facilities Management logo and U.S. Department of Veterans Affairs logo.

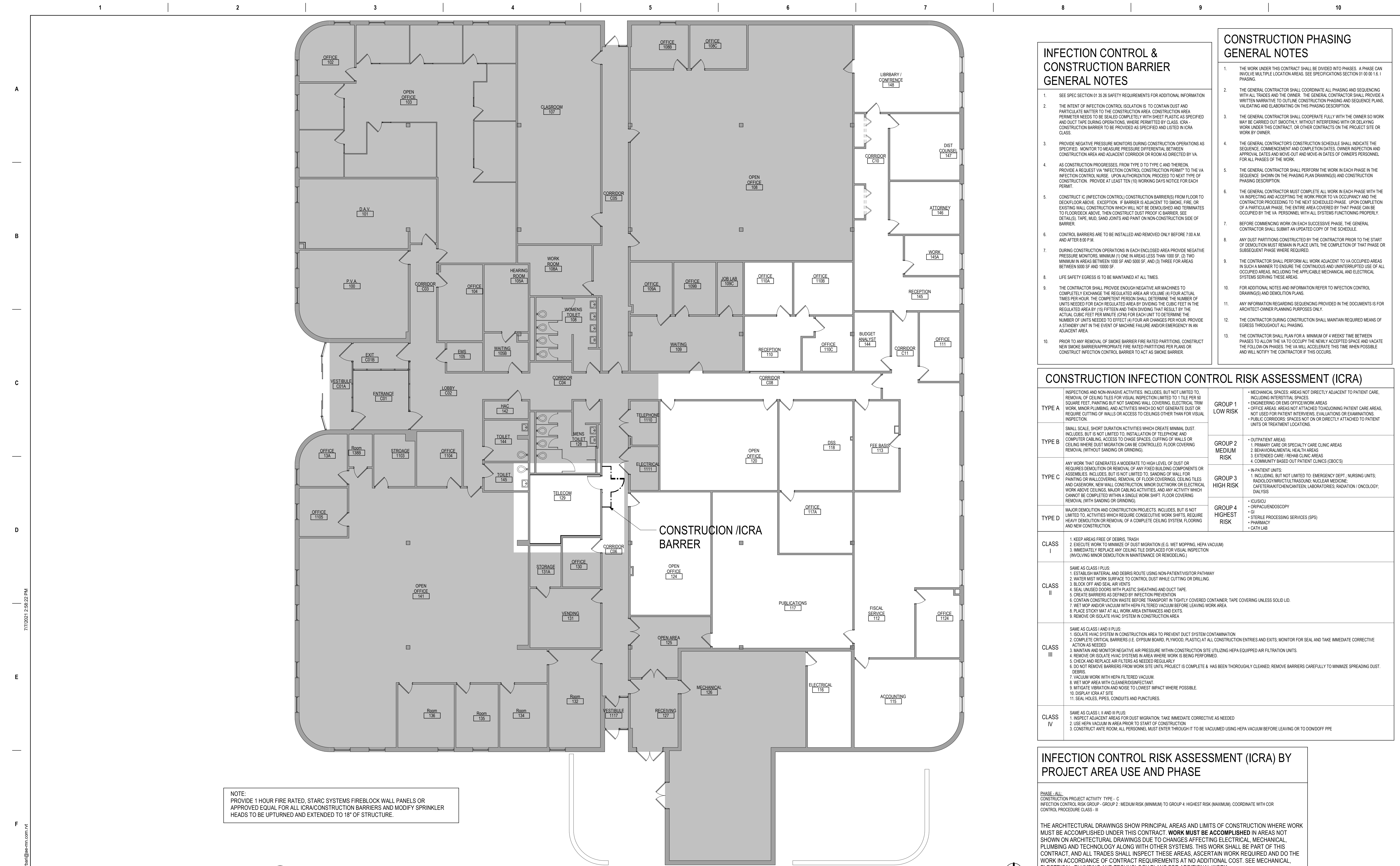
Drawing Title: FIRST LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 28. Approved: [Signature]

Phase: BID DOCUMENTS. FULLY SPRINKLERED.

Project Title: VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES. Location: Sioux Falls, SD. Issue Date: 07/06/2021. Checked: [Signature]. Drawn: [Signature].

Project Number: 438-20-910. Building Number: 28. Drawing Number: GC111-28.





### INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

- SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION
- THE INTENT OF INFECTION CONTROL IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA. CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.
- PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.
- AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.
- CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER, SEE DETAILS(S), TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.
- CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 A.M. AND AFTER 8:00 P.M.
- DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.
- LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.
- PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCTION INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

### CONSTRUCTION PHASING GENERAL NOTES

- THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INCLUDE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.1 PHASING.
- THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.
- THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.
- THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.
- THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.
- THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.
- BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.
- ANY DUST PARTITIONS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.
- THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.
- FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.
- ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT/OWNER PLANNING PURPOSES ONLY.
- THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.
- THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF A WEEKS TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

### CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE	DESCRIPTION	RISK LEVEL	APPLICABLE AREAS
TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	<ul style="list-style-type: none"> <li>MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES.</li> <li>ENGINEERING OR EMS OFFICE/WORK AREAS</li> <li>OFFICE AREAS: AREAS NOT ATTACHED TO/ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS.</li> <li>PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.</li> </ul>
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUFFING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	<ul style="list-style-type: none"> <li>OUTPATIENT AREAS</li> <li>PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS</li> <li>BEHAVIORAL/MENTAL HEALTH AREAS</li> <li>EXTENDED CARE / REHAB CLINIC AREAS</li> <li>COMMUNITY BASED OUT PATIENT CLINICS (CBOS)</li> </ul>
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALL COVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASINGWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILING, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	<ul style="list-style-type: none"> <li>PATIENT UNITS</li> <li>INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT., NURSING UNITS, RADIOLOGY/IR/RT/ULTRASOUND, NUCLEAR MEDICINE, CAPETERIA/KITCHEN/CANTEEN, LABORATORIES, RADIATION / ONCOLOGY, DIAGNOSIS</li> </ul>
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	<ul style="list-style-type: none"> <li>ICUS/ICU</li> <li>ORIPAC/ENDOSCOPY</li> <li>GI</li> <li>STERILE PROCESSING SERVICES (SPS)</li> <li>PHARMACY</li> <li>CATH LAB</li> </ul>
CLASS I	<ol style="list-style-type: none"> <li>KEEP AREAS FREE OF DEBRIS, TRASH</li> <li>EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM)</li> <li>IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING).</li> </ol>		
CLASS II	<ol style="list-style-type: none"> <li>SAME AS CLASS I PLUS:</li> <li>ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY</li> <li>WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING.</li> <li>BLOCK OFF AND SEAL AIR VENTS</li> <li>SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE</li> <li>CREATE BARRIERS AS DESIGNED BY INFECTION PREVENTION</li> <li>CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER, TAPE COVERING UNLESS SOLID LID.</li> <li>WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA.</li> <li>PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA.</li> </ol>		
CLASS III	<ol style="list-style-type: none"> <li>SAME AS CLASS I AND II PLUS:</li> <li>ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION</li> <li>COMPLETE CRITICAL BARRIERS (I.E. GYPSUM BOARD, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS. MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED</li> <li>MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS.</li> <li>REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED.</li> <li>CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY</li> <li>DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE &amp; HAS BEEN THOROUGHLY CLEANED. REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST, DEBRIS.</li> <li>VACUUM WORK WITH HEPA FILTERED VACUUM.</li> <li>WET MOP AREA WITH CLEANER/INFECTANT.</li> <li>MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE.</li> <li>DISPLAY ICRA AT SITE</li> <li>SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.</li> </ol>		
CLASS IV	<ol style="list-style-type: none"> <li>SAME AS CLASS I, II AND III PLUS:</li> <li>INSPECT ADJACENT AREAS FOR DUST MIGRATION, TAKE IMMEDIATE CORRECTIVE AS NEEDED</li> <li>USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION</li> <li>CONSTRUCT ANTE ROOM. ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE</li> </ol>		

### INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE: ALL  
 CONSTRUCTION PROJECT ACTIVITY: TYPE - C  
 INFECTION CONTROL RISK: GROUP - GROUP 2: MEDIUM RISK (MINIMUM) TO GROUP 4: HIGHEST RISK (MAXIMUM), COORDINATE WITH COR CONTROL PROCEDURE CLASS - III

THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. WORK MUST BE ACCOMPLISHED IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, PLUMBING AND TECHNOLOGY ALONG WITH OTHER SYSTEMS. THIS WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. SEE MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY PLANS FOR ADDITIONAL WORK.

NOTE: PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.

1 FIRST FLOOR ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 38  
 1/8" = 1'-0"

<b>CONSULTANT</b>  10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5520 www.specializedeng.com	<b>ARCHITECT/ENGINEER OF RECORD</b>  13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090	<b>Office of Construction and Facilities Management</b> U.S. Department of Veterans Affairs	<b>Drawing Title</b> FIRST LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN - BUILDING 38	<b>Phase</b> BID DOCUMENTS	<b>Project Title</b> VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES	<b>Project Number</b> 438-20-910
			<b>Approved:</b>	<b>FULLY SPRINKLERED</b>	<b>Location</b> Sioux Falls, SD	<b>Issue Date</b> 07/06/2021
						<b>Drawing Number</b> GC111-38

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ABETMENT PLAN SYMBOLS			
	ASBESTOS CONTAINING INSULATION		ASBESTOS CONTAINING JOINT COMPOUND
	ASBESTOS CONTAINING TRANSITE (ASSUMED)		ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

NOTE: SEE ASBESTOS TESTING AND SURVEY REPORT IN SPECIFICATIONS FOR SAMPLE RESULTS. COORDINATE GENERAL DEMOLITION WORK WITH ABATEMENT AND REMEDIATION WORK. SYMBOLS MAY DIFFER FROM THOSE USED ON ASBESTOS SURVEY REPORT. NOT ALL SYMBOLS MAY BE USED ON EVERY SHEET.



1 LOWER LEVEL ABATEMENT PLAN - BUILDING 1  
1/8" = 1'-0"

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Revisions:	Date:

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**VA** U.S. Department of Veterans Affairs

Drawing Title  
**LOWER LEVEL ABATEMENT AND REMEDIATION PLAN - BUILDING 1**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Checker

Drawn  
GJB

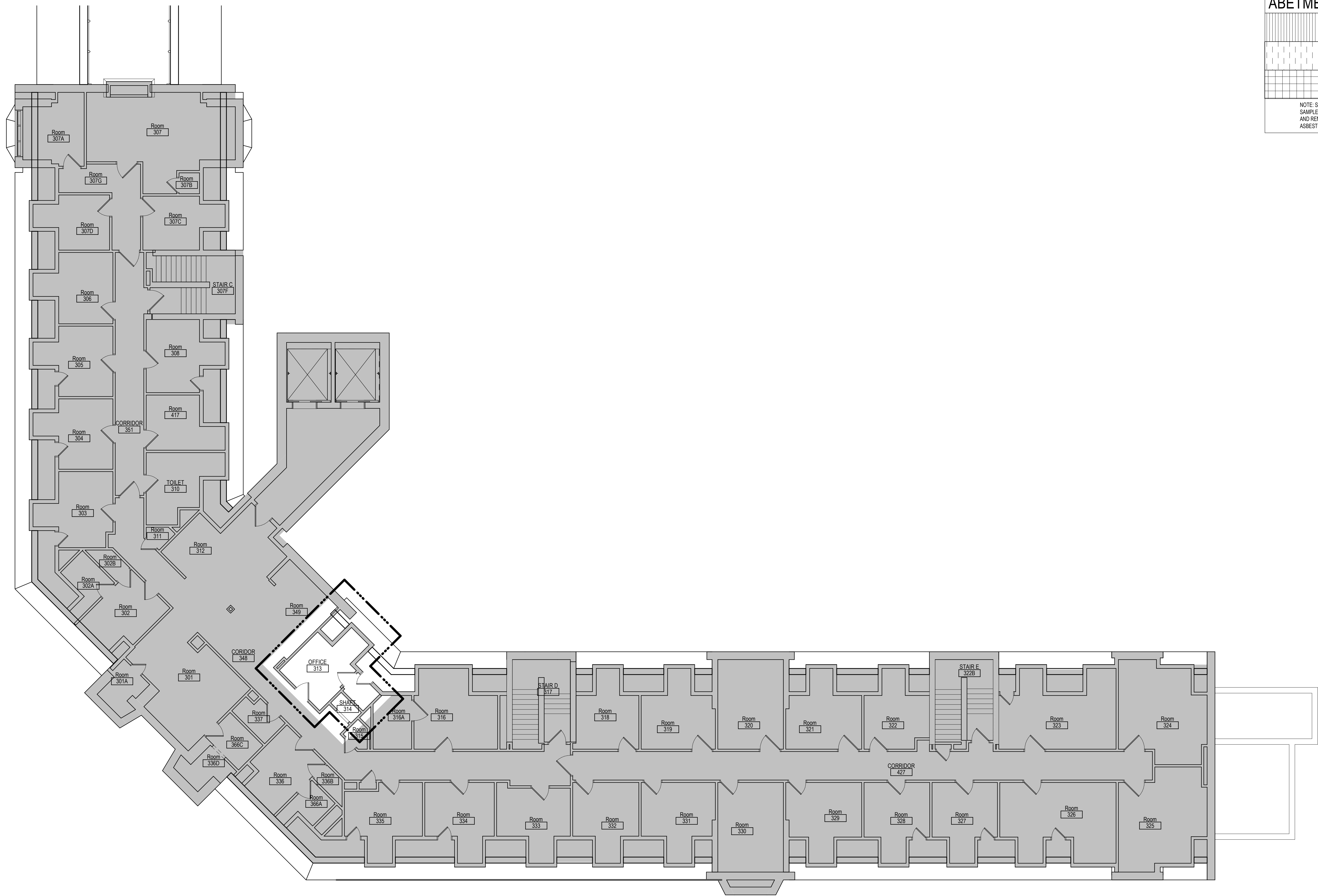
Project Number  
438-20-910

Building Number  
1

Drawing Number  
**ASB101-01**

ABETMENT PLAN SYMBOLS			
	ASBESTOS CONTAINING INSULATION		ASBESTOS CONTAINING JOINT COMPOUND
	ASBESTOS CONTAINING TRANSLITE (ASSUMED)		ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

NOTE: SEE ASBESTOS TESTING AND SURVEY REPORT IN SPECIFICATIONS FOR SAMPLE RESULTS. COORDINATE GENERAL DEMOLITION WORK WITH ABATEMENT AND REMEDIATION WORK. SYMBOLS MAY DIFFER FROM THOSE USED ON ASBESTOS SURVEY REPORT. NOT ALL SYMBOLS MAY BE USED ON EVERY SHEET.



1 THIRD LEVEL ABATEMENT PLAN - BUILDING 1  
1/8" = 1'-0"

Revisions:	Date:

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Office of Construction and Facilities Management  
**VA** U.S. Department of Veterans Affairs

Drawing Title  
**THIRD LEVEL ABATEMENT AND REMEDIATION PLAN - BUILDING 1**

Approved: \_\_\_\_\_

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Checker

Drawn  
Author

Project Number  
438-20-910

Building Number  
1

Drawing Number  
**ASB131-01**

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ABETMENT PLAN SYMBOLS			
	ASBESTOS CONTAINING INSULATION		ASBESTOS CONTAINING JOINT COMPOUND
	ASBESTOS CONTAINING TRANSITE (ASSUMED)		ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

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1 GROUND LEVEL ABATEMENT PLAN - BUILDING 5  
1/16" = 1'-0"

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Drawing Title  
**GROUND LEVEL ABATEMENT AND REMEDIATION PLAN - BUILDING 5**

Approved:

Phase  
**BID DOCUMENTS**

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Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Checker

Drawn  
Author

Project Number  
438-20-910

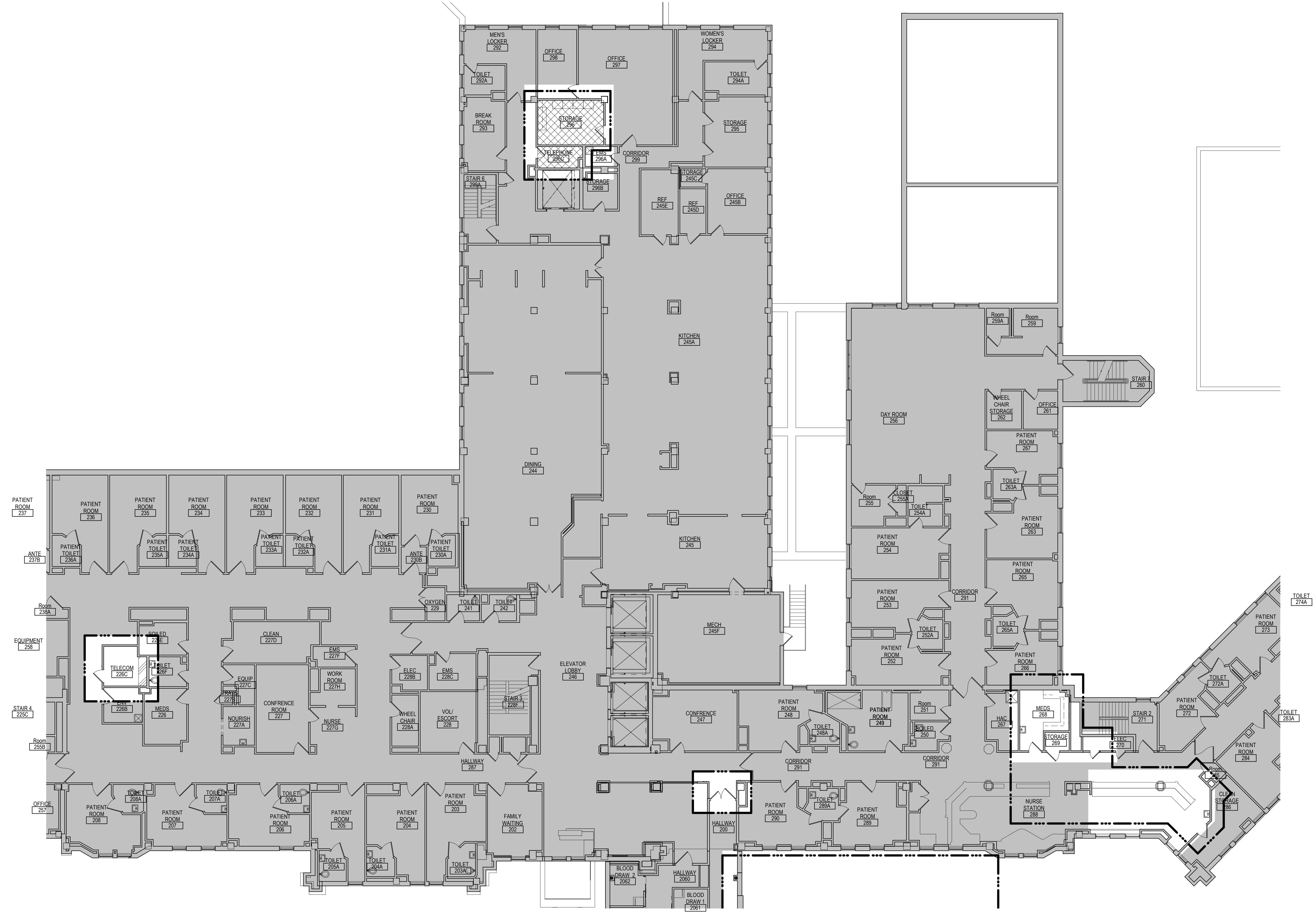
Building Number  
5

Drawing Number  
**ASB101-05**



ABETMENT PLAN SYMBOLS			
	ASBESTOS CONTAINING INSULATION		ASBESTOS CONTAINING JOINT COMPOUND
	ASBESTOS CONTAINING TRANSITE (ASSUMED)		ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

NOTE: SEE ASBESTOS TESTING AND SURVEY REPORT IN SPECIFICATIONS FOR SAMPLE RESULTS. COORDINATE GENERAL DEMOLITION WORK WITH ABATEMENT AND REMEDIATION WORK. SYMBOLS MAY DIFFER FROM THOSE USED ON ASBESTOS SURVEY REPORT. NOT ALL SYMBOLS MAY BE USED ON EVERY SHEET.



1 SECOND LEVEL ABATEMENT PLAN - BUILDING 5  
302' x 1'-0"

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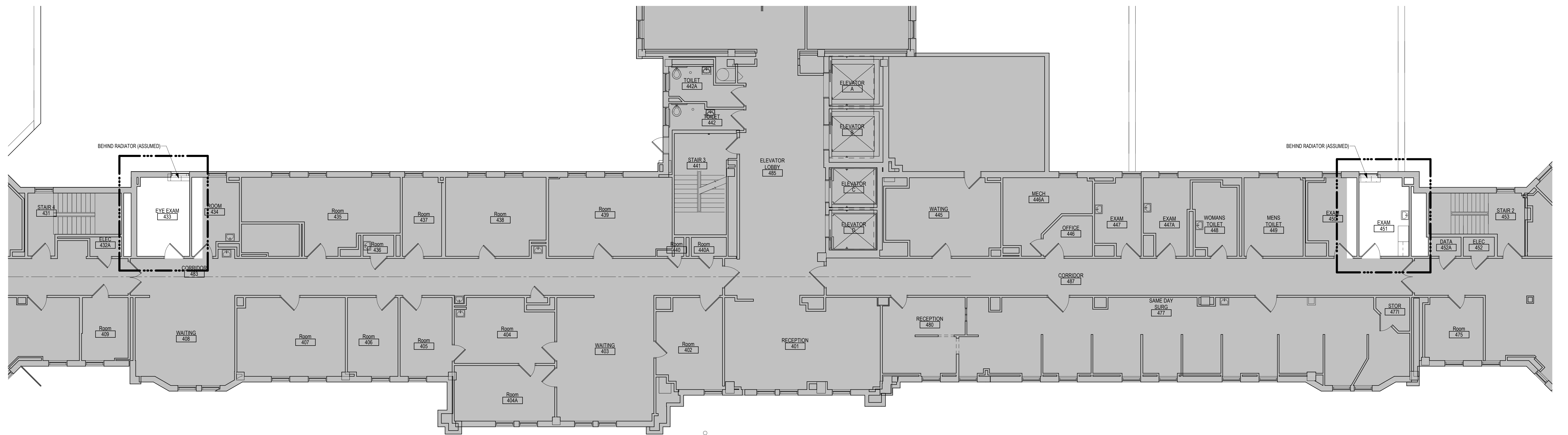
Revisions:	Date:

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								Fully Sprinklered <b>FULLY SPRINKLERED</b>		Location Sioux Falls, SD		Issue Date 07/06/2021		Checked Checker		Drawn Author		Building Number <b>5</b>		Drawing Number <b>ASB121-05</b>	



ABETMENT PLAN SYMBOLS			
	ASBESTOS CONTAINING INSULATION		ASBESTOS CONTAINING JOINT COMPOUND
	ASBESTOS CONTAINING TRANSITE (ASSUMED)		ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

NOTE: SEE ASBESTOS TESTING AND SURVEY REPORT IN SPECIFICATIONS FOR SAMPLE RESULTS. COORDINATE GENERAL DEMOLITION WORK WITH ABATEMENT AND REMEDIATION WORK. SYMBOLS MAY DIFFER FROM THOSE USED ON ASBESTOS SURVEY REPORT. NOT ALL SYMBOLS MAY BE USED ON EVERY SHEET.



1 FOURTH LEVEL ABATEMENT PLAN - BUILDING 5  
1/8" = 1'-0"

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Revisions:	Date:

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Office of Construction and Facilities Management



U.S. Department of Veterans Affairs

Drawing Title

**FOURTH LEVEL ABATEMENT AND REMEDIATION PLAN - BUILDING 5**

Approved:

Phase

**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title

**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Checker

Drawn  
Author

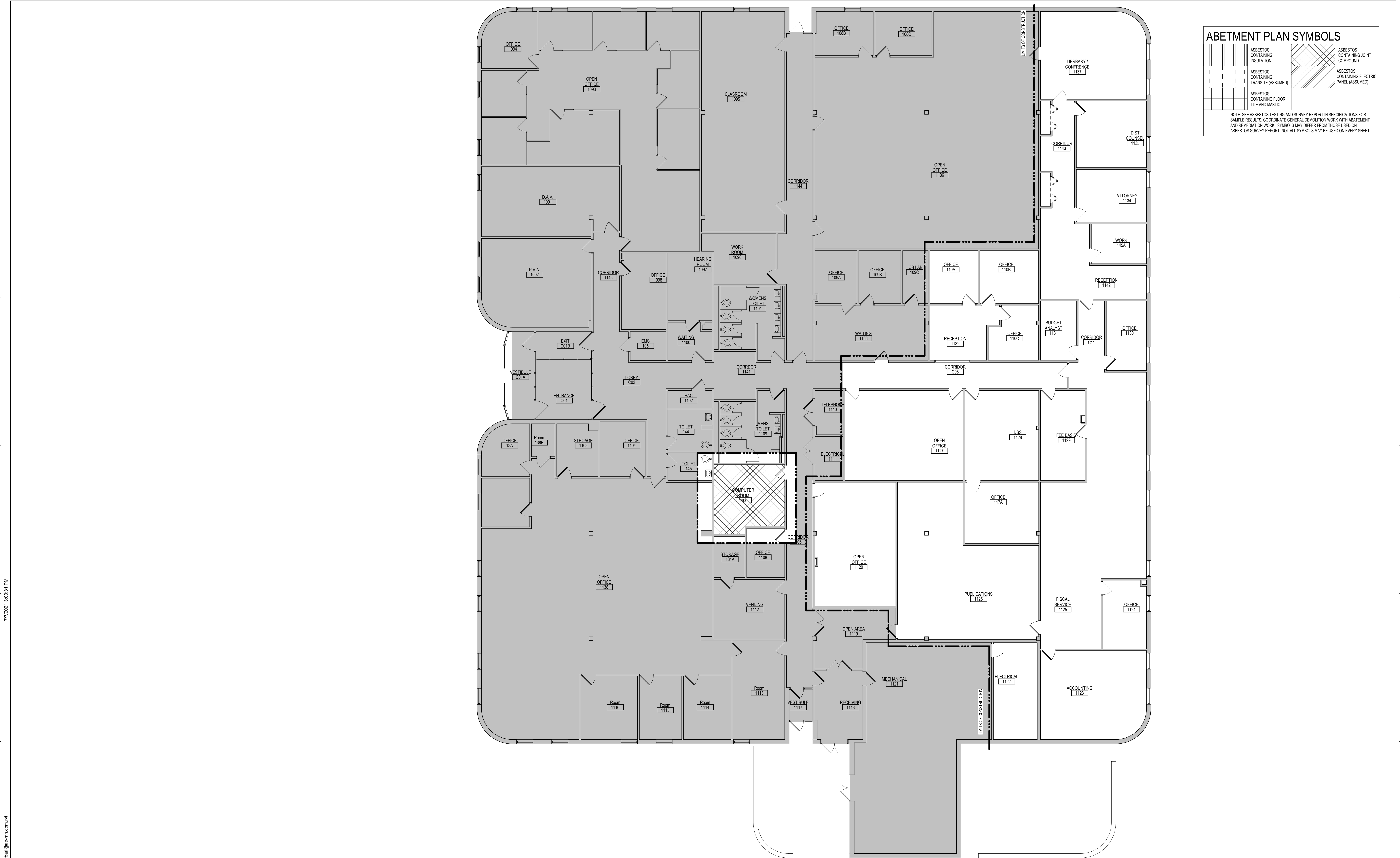
Project Number  
438-20-910

Building Number  
5

Drawing Number  
**ASB141-05**







ABETMENT PLAN SYMBOLS			
[Symbol: Vertical lines]	ASBESTOS CONTAINING INSULATION	[Symbol: Diagonal lines /]	ASBESTOS CONTAINING JOINT COMPOUND
[Symbol: Horizontal lines]	ASBESTOS CONTAINING TRANSITE (ASSUMED)	[Symbol: Diagonal lines \]	ASBESTOS CONTAINING ELECTRIC PANEL (ASSUMED)
[Symbol: Grid]	ASBESTOS CONTAINING FLOOR TILE AND MASTIC		

NOTE: SEE ASBESTOS TESTING AND SURVEY REPORT IN SPECIFICATIONS FOR SAMPLE RESULTS. COORDINATE GENERAL DEMOLITION WORK WITH ABATEMENT AND REMEDIATION WORK. SYMBOLS MAY DIFFER FROM THOSE USED ON ASBESTOS SURVEY REPORT. NOT ALL SYMBOLS MAY BE USED ON EVERY SHEET.

1 FIRST LEVEL ABATEMENT PLAN - BUILDING 38  
1/8" = 1'-0"

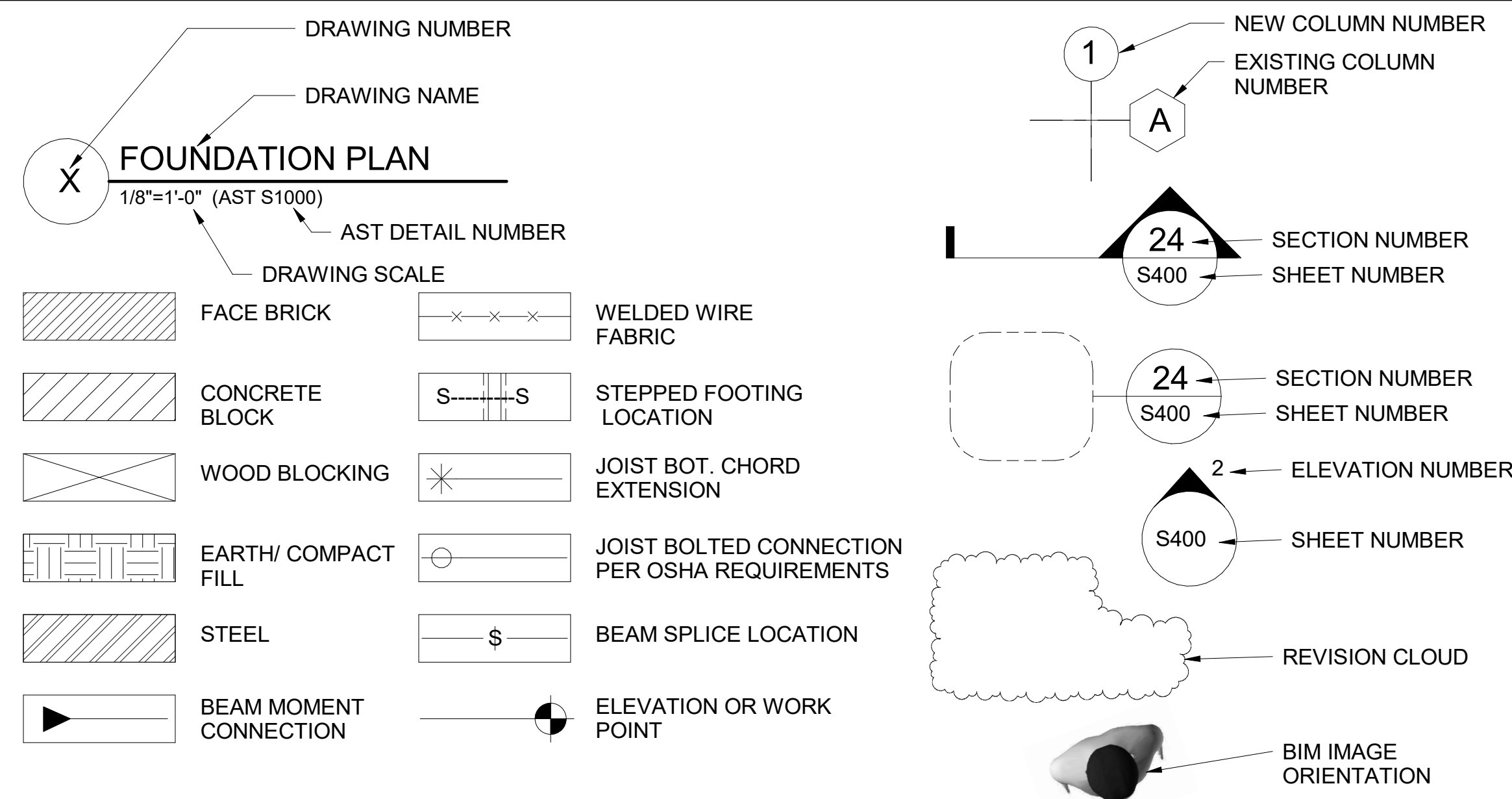
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			<b>FULLY SPRINKLERED</b>	<b>Location</b> Sioux Falls, SD	<b>Building Number</b> 38
<b>STAMP</b>	<b>Approved:</b>	<b>Issue Date</b> 07/06/2021	<b>Checked</b> Checker	<b>Drawn</b> Author	<b>Drawing Number</b> ASB111-38

# VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

## SIOUX FALLS, SD

### DRAWING SYMBOLS



### ABBREVIATIONS

<b>A</b>	ADDL. ALTERNATE ARCHITECTURAL ANCHOR RODS	<b>D</b>	DBL. DIAMETER DEAD LOAD DITTO DETAIL DRAWING	<b>I</b>	INFO. INFORMATION	<b>O</b>	OC. ON CENTER(S) OVERHEAD OPENING OPPOSITE	<b>S</b>	S. SOUTH SCHED. SCHEDULE SIM. SIMILAR SJI. STEEL JOIST INSTITUTE SPA. SPACE(S) SQ. SQUARE STD. STANDARD STL. STEEL STRUCT. STRUCTURAL
<b>B</b>	BLDG. BUILDING BLK. BLOCK BLKG. BLOCKING BM. BEAM BOT. BOTTOM BRG. BEARING BTWN. BETWEEN	<b>E</b>	EA. EACH ELEV. ELEVATION EMBED. EMBEDMENT EQ. EQUAL EXIST. EXISTING EXP. EXPANSION EXT. EXTERIOR	<b>J</b>	JBE. JOIST BEARING ELEVATION JOIST JOINT	<b>P</b>	PC. PRECAST CONCRETE PERIM. PERIMETER PL. PLATE PLF. POUNDS PER LINEAR FOOT	<b>T</b>	TBE. TOP OF BEAM ELEVATION TDE. TOP OF DECK ELEVATION TEMP. TEMPORARY TFE. TOP OF FOOTING ELEVATION TPC. TOP OF PILE CAP ELEVATION
<b>C</b>	CIP. CAST IN PLACE CJ. CONTROL JOINT CLR. CENTER LINE CMU. CONCRETE MASONRY UNIT	<b>F</b>	FAB. FABRICATE(OR) FD. FLOOR DRAIN FNDN. FOUNDATION FTG. FOOTING	<b>K</b>	K. KIP KO. KNOCK-OUT KSI. KIPS PER SQUARE INCH	<b>PROJ.</b>	PROJ. PROJECT PSF. POUNDS PER SQUARE FOOT	<b>TPE.</b>	TPE. TOP OF PIER ELEVATION TSE. TOP OF SLAB ELEVATION TWE. TOP OF WALL ELEVATION TYP. TYPICAL
<b>COL.</b>	COL. COLUMN COMP. COMPOSITE CONC. CONCRETE CONN. CONNECTION CONST. CONSTRUCTION CONT. CONTINUOUS COORD. COORDINATE CTRD. CENTERED	<b>G</b>	GA. GAGE, GAUGE GALV. GALVANIZED GC. GENERAL CONTRACT(OR)	<b>M</b>	MAS. MASONRY MATL. MATERIAL MAX. MAXIMUM MECH. MECHANICAL MEZZ. MEZZANINE MFG. MANUFACTURE(R) MIN. MINIMUM MISC. MISCELLANEOUS MO. MASONRY OPENING	<b>R</b>	RAD. RADIUS RD. ROOF DRAIN REIN. REINFORCE(D), (ING) REQ'D. REQUIRED REV. REVISION, REVISE(D)	<b>U</b>	U. UNLESS NOTED OTHERWISE
<b>H</b>	HORIZ. HORIZONTAL HK. HOOK HS. HEADED STUDS HSS. HOLLOW STRUCTURAL SECTION	<b>N</b>	N. NORTH NIC. NOT IN CONTRACT NTS. NOT TO SCALE	<b>Q</b>	QTY. QUANTITY	<b>REV.</b>	REV. REVISION, REVISE(D)	<b>V</b>	VERT. VERTICAL
<b>W</b>	W. WEST W. WITH WP. WORK POINT WWR. WELDED WIRE REINFORCEMENT								

### DRAWING INDEX

SHEET NUMBER	SHEET NAME
S100	TITLE SHEET
S110	STRUCTURAL NOTES
S111	SCHEDULES
S200	KEY PLAN
S210	FIRST FLOOR PLAN
S220	SECOND FLOOR FRAMING PLAN
S230	ROOF FRAMING PLAN
S240	SECTIONS AND DETAILS
S241	SECTIONS AND DETAILS
S250	WALL SECTIONS

Revisions:	Date:

**CONSULTANT**

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EDINA, MN 55439  
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Office of Construction and Facilities Management

**VA** U.S. Department of Veterans Affairs

Drawing Title  
**TITLE SHEET**

Approved:

Phase  
BID DOCUMENTS

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Project Title  
VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

Location  
SIOUX FALLS, SD

Issue Date  
07/06/2021

Checked  
KS

Drawn  
TB

Project Number  
SD 1008

Building Number

Drawing Number  
S100

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# STRUCTURAL NOTES

**I. DESIGN DATA**  
**A. BUILDING CODE**  
 1. INTERNATIONAL BUILDING CODE 2018 EDITION WITH STATE AND LOCAL AMENDMENTS

**B. DESIGN LOADS/DESIGN CRITERIA**  
 1. WIND LOAD  
 BASIC WIND SPEED (3-SECOND GUST) ----- V<sub>W</sub> = 125 MPH, RISK CATEGORY IV  
 V<sub>Wsd</sub> = 120 MPH  
 EXPOSURE ----- C  
 INTERNAL PRESSURE COEFFICIENTS, GC<sub>p</sub> ----- +/-0.18

2. ROOF LOADS  
 LIVE LOAD (L.L.) ----- 20 PSF\*\*  
 DEAD LOAD (SUPERIMPOSED) ----- 15 PSF

3. ROOF SNOW LOAD  
 GROUND SNOW LOAD, P<sub>g</sub> ----- 40 PSF  
 FLAT-ROOF SNOW LOAD, P<sub>f</sub> ----- 34 PSF  
 SLOPED ROOF SNOW LOAD P<sub>s</sub> ----- 1.0  
 SNOW EXPOSURE FACTOR, C<sub>e</sub> ----- 1.0  
 SNOW LOAD IMPORTANCE FACTOR, I ----- 1.2  
 THERMAL FACTOR, C<sub>t</sub> ----- 1.0

4. FLOOR LOADS - TYPICAL  
 LIVE LOAD (SERVER ROOM L.L.) ----- 125 PSF  
 DEAD LOAD (SUPERIMPOSED) ----- 5 PSF

5. STAIRS, CORRIDORS & LOBBIES (L.L.)  
 LIVE LOAD (L.L.) ----- 100 PSF\*

**B. SEISMIC DESIGN DATA**  
 SEISMIC IMPORTANCE FACTOR ----- 1.0  
 RISK CATEGORY ----- IV  
 MAPPED SPECTRAL RESPONSE ACCELERATIONS  
 ----- 0.092 S<sub>s</sub>  
 ----- 0.035 S<sub>1</sub>  
 SPECTRAL RESPONSE COEFFICIENTS  
 ----- 0.098 S<sub>0.2</sub>  
 ----- 0.057 S<sub>0.1</sub>  
 SITE CLASS ----- D  
 SEISMIC DESIGN CATEGORY ----- A  
 SEISMIC RESPONSE COEFFICIENT ----- 0.038 C<sub>s</sub>  
 RESPONSE MODIFICATION FACTOR ----- 3 R

SEISMIC DESIGN AND ANCHORAGE OF NON-STRUCTURAL COMPONENTS SHALL BE THE RESPONSIBILITY OF THE SUPPLIER OF THE COMPONENTS. NON-STRUCTURAL COMPONENTS INCLUDES, BUT IS NOT LIMITED TO, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STORAGE RACKING SYSTEMS. IT SHALL BE THE RESPONSIBILITY OF THE SUPPLIER TO EXAMINE THE SYSTEMS AND COMPONENTS BEING PROVIDED RELATIVE TO THE PROVISIONS OF ASCE-7, CHAPTER 13 TO DETERMINE APPLICABILITY OF THE PROVISIONS TO THE SCOPE OF WORK. IN THE EVENT THAT PROVISIONS APPLY TO THE SCOPE OF WORK, AN ENGINEER REGISTERED IN THE STATE OF THE PROJECT SHALL DESIGN THE APPLICABLE SUPPORT SYSTEMS AND ANCHORAGE FOR THE COMPONENTS AND PRODUCE SIGNED AND SEALED DRAWINGS AND CALCULATIONS FOR SUBMITTAL AND REVIEW BY THE ENGINEER OF RECORD.

7. DEFLECTION CRITERIA  
 ALL MEMBERS SUPPORTING MASONRY ARE DESIGNED FOR A MAXIMUM DEAD LOAD PLUS LIVE LOAD DEFLECTION OF SPAN/600 OR 0.3 INCHES, WHICHEVER IS LESS.  
 ALL PERIMETER MEMBERS ARE DESIGNED FOR A MAXIMUM LIVE LOAD DEFLECTION OF 0.5 INCHES UNLESS NOTED OTHERWISE ON PLANS.  
 \* REDUCED PER IBC, SEC. 1607.10  
 \*\* PLUS SNOW ACCUMULATION AS REQUIRED BY IBC, CHAPTER 16, SECTION 1608.

**C. ALTERNATE DESIGNS**  
 ALTERNATE STRUCTURAL SYSTEMS & DETAILS WILL ONLY BE CONSIDERED PROVIDED THEY ARE SUBMITTED WITH CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE CALCULATIONS MUST SHOW THE EQUIVALENCY OF THE ALTERNATE. ACCEPTANCE OF THE ALTERNATE BY THE ENGINEER OF RECORD MUST BE IN WRITING.

**D. EXPANSION JOINTS**  
 EXPANSION JOINTS ARE NOTED ON THE DRAWINGS. NO CONNECTIONS SHALL BE MADE ACROSS THESE JOINTS UNO.

**E. FUTURE EXPANSION**  
 THIS PROJECT IS NOT DESIGNED FOR FUTURE EXPANSION.

**F. GENERAL NOTES**  
 1. IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN REQUIREMENTS IN THE SPECIFICATION AND REQUIREMENTS ON THE DRAWINGS, THE STRUCTURAL ENGINEER OF RECORD SHALL BE IMMEDIATELY NOTIFIED IN WRITING AND THE STRUCTURAL ENGINEER OF RECORD SHALL INTERPRET THE INTENT OF THE CONTRACT DOCUMENT.  
 2. IN NO CASE, SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE STRUCTURAL DRAWINGS.  
 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE AND TO CROSS CHECK ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.  
 4. IN EXISTING FACILITIES, ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE STRUCTURAL DRAWINGS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE STRUCTURAL ENGINEER (IN WRITING).

**G. REFERENCE STANDARDS - SEE IBC CHAPTER 35 FOR ALL REFERENCE STANDARDS**

**II. SPECIAL INSPECTIONS**  
 A. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE "SPECIAL INSPECTIONS" DURING CONSTRUCTION. THE "SPECIAL INSPECTIONS" REQUIRED IN ACCORDANCE W/ THE IBC, SECTIONS 1704 AND 1705 - ARE SUMMARIZED BELOW.  
 1. SECTION 1705.2 STEEL CONSTRUCTION  
 2. SECTION 1705.3 CONCRETE CONSTRUCTION  
 3. SECTION 1705.10 FABRICATED ITEMS  
 SEE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION REGARDING TESTING AND INSPECTION OF FIELD APPLIED FIREPROOFING AND ASSEMBLIES.  
 SPECIAL INSPECTOR SHALL SUBMIT AN INSPECTION PLAN THAT SUMMARIZES ALL THE INSPECTIONS THAT WILL BE PROVIDED FOR THE PROJECT PRIOR TO START OF CONSTRUCTION.

**III. STRUCTURAL TESTS**  
 A. THE OWNER SHALL EMPLOY ONE OR MORE TESTING AGENCIES TO PROVIDE STRUCTURAL TESTING DURING CONSTRUCTION. THE MINIMUM STRUCTURAL TESTING - REQUIRED IN ACCORDANCE W/ THE IBC IS SUMMARIZED BELOW.  
 1. CONCRETE CYLINDER COMPRESSION TESTING  
 2. MASONRY HOLLOW UNIT BLOCK COMPRESSIONS TESTS (UNIT STRENGTH METHOD)  
 3. ANCHORAGE \*\* POST-INSTALLED EXPANSION OR ADHESIVE ANCHORS  
 \*\* WHEN DIRECTED BY THE STRUCTURAL ENGINEER OF RECORD TO PROVIDE POST-INSTALLED ANCHORAGES THE FOLLOWING GUIDELINES SHALL BE FOLLOWED:  
 1. A REPRESENTATIVE OF THE ANCHOR MANUFACTURER OR PROJECT SPECIAL INSPECTOR SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF THE FIRST FOUR ANCHORS FOR EACH TYPE OF ANCHOR INSTALLED. THIS MEASURE SHALL BE TAKEN FOR EACH INSTALLER OF THE ANCHORS. THIS SERVICE IS TYPICALLY PROVIDED FOR FREE BY THE LOCAL HILTI REPRESENTATIVE.  
 2. THE FIRST FOUR ANCHORS SHALL BE TENSION TESTED ONCE INSTALLATION IS COMPLETE FOR 100% OF THE SERVICE LEVEL LOAD CAPACITY AS SPECIFIED BY THE STRUCTURAL ENGINEER OF RECORD.

**IV. REQUIRED STRUCTURAL SUBMITTALS**  
 A. THE REVIEW OF THE FOLLOWING SUBMITTALS IS INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S (SEOR) SCOPE OF SERVICES. THE GENERAL CONTRACTOR SHALL PROVIDE THE ITEMS BELOW TO THE SEOR FOR REVIEW PRIOR TO CONSTRUCTION.  
 B. SHOP DRAWINGS SHALL BE ORIGINALS AND SHALL NOT BE CREATED, IN WHOLE OR IN PART, FROM THE ELECTRONIC STRUCTURAL CAD FILES OR REPRODUCTIONS OF THE STRUCTURAL DRAWINGS. REPRODUCING THE STRUCTURAL DRAWINGS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER IS A VIOLATION OF COPYRIGHT LAWS AND CODE OF STANDARD PRACTICE. SUBMITTALS NOT ADHERING TO THESE PROVISIONS WILL BE REJECTED WITHOUT REVIEW.  
 C. SHOP DRAWING PACKAGES MUST BE COMPLETE WHEN SUBMITTED AND MUST INCLUDE CERTIFIED CALCULATIONS IF REQUIRED. INCOMPLETE SHOP DRAWING PACKAGES WILL BE REJECTED WITHOUT REVIEW.  
 D. PRIOR TO SUBMITTING SHOP DRAWINGS TO SEOR, THE SHOP DRAWINGS MUST BE REVIEWED AND COORDINATED BY THE GENERAL CONTRACTOR.  
 E. ELECTRONIC VERSION IN PDF FORMAT OF ALL REQUIRED SHOP DRAWINGS AND CALCULATIONS MUST BE SUBMITTED BY THE SUPPLIER AND A MINIMUM OF 10 BUSINESS DAYS MUST BE PROVIDED FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD.  
 F. SEE THE APPROPRIATE MATERIALS SECTION ON THIS PAGE FOR ADDITIONAL INFORMATION ON EACH SUBMITTAL.

REQUIRED STRUCTURAL SUBMITTALS		
CATEGORY	ITEM	COMMENTS
CONCRETE	FOUNDATION REINFORCING	
	INT. AND EXT. SLAB REINFORCING	
	FOUNDATION WALL REINFORCING	
	MIX DESIGNS FOR ALL CLASSES OF CONCRETE	
STEEL	MILL CERTS. FOR REINFORCING	
	CURRENT AISC OR ICC SHOP CERTIFICATION	
STEEL	STRUCTURAL STEEL CONNECTIONS AND CALCULATIONS	PE CERTIFICATION REQUIRED
	STRUCTURAL STEEL EMBEDS	
	MILL CERTS. FOR STRUCTURAL STEEL	
	LIGHT GAGE METAL	
OTHER	LIGHT-GAGE SHOP DRAWINGS	PE CERTIFICATION REQUIRED
	LIGHT-GAGE CALCULATIONS	PE CERTIFICATION REQUIRED
OTHER	SPRINKLER SHOP DRAWINGS	
	DECK PENETRATION LAYOUT PLAN	

**V. SITE WORK**  
 A. GEOTECHNICAL (ASSUMED PROPERTIES)  
 1. FOUNDATIONS, RETAINING WALLS, FOUNDATION DRAINAGE, SLABS ON GRADE & OTHER ITEMS RELATED TO THE SOILS ARE DESIGNED ON THE ASSUMED DESIGN INFORMATION OUTLINED IN THIS SECTION. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF THE PROJECT, TO VISIT THE SITE AND CERTIFY IN WRITING THAT THE FOLLOWING ASSUMED DESIGN INFORMATION IS CORRECT.  
 2. DESIGN NET SOIL BEARING CAPACITY IS AS FOLLOWS:  
 STRIP FOOTINGS ----- 1,500 PSF  
 3. ALLOWABLE PASSIVE PRESSURE ----- 440 PCF  
 4. COEFFICIENT OF FRICTION ----- 0.45  
 5. MINIMUM DEPTH FROM EXTERIOR GRADE TO BOTTOM OF BUILDING PERIMETER FOOTINGS SHALL BE 4'-0". ALL OPEN AIR FOUNDATIONS HAVE A MINIMUM OF 5'-0" FROST PROTECTION.  
 6. UNRESTRAINED RETAINING WALLS ARE DESIGNED FOR AN ACTIVE EQUIVALENT FLUID PRESSURE OF 35 PSF/FT. THE BACKFILL MATERIAL SHALL CONSIST OF A WELL-COMPACTED, FREE-DRAINING SAND. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION ON MATERIAL GRADATION AND BACKFILL OPERATIONS.

**VI. CONCRETE**  
 A. CONCRETE MATERIAL PROPERTIES  
 1. CONCRETE PROPERTIES  
 STRENGTH (f<sub>c</sub> @ 28 DAYS)  
 FOOTINGS ----- 3000 PSI  
 CONC. OVER METAL DECK ----- 3500 PSI  
 2. CYLINDER TESTING SHALL BE COMPLETED PER ACI-318, SECTION 5.6. TESTING REPORTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER OF RECORD AT A MINIMUM. PREFERABLE DELIVERY METHOD IS VIA E-MAIL.  
 3. ALL EXTERIOR CONCRETE, PERMANENTLY EXPOSED TO WEATHER (DOES NOT APPLY TO BURIED FOUNDATIONS), SHALL BE AIR ENTRAINED TO GIVE THE CONCRETE AN AIR CONTENT OF 6% +/- 1.5% BY VOLUME. NATURALLY OCCURRING AIR SHALL NOT EXCEED 3% FOR NON-AIR ENTRAINED MIXES.  
 4. CONCRETE MIX DESIGNS & SUPPORTIVE DATA MUST BE SUBMITTED FOR APPROVAL ACCORDING TO ACI-318 SECTION 5.3, AND ACI-301, SECTION 1.5.  
 5. LIGHTWEIGHT CONCRETE SHALL HAVE A MINIMUM DRY UNIT WEIGHT OF 106 PCF & A MAXIMUM DRY UNIT WEIGHT OF 116 PCF WITH AIR CONTENT OF 4% TO 7%.

**B. REINFORCING MATERIAL PROPERTIES**

REINFORCING PROPERTIES	f <sub>y</sub> KSI	ASTM
ALL BARS UNLESS NOTED -----	60	A615
WELDED WIRE FABRIC (SMOOTH) -----	65	A185

2. EPOXY COATING FOR REINFORCING SHALL CONFORM TO ASTM A-775 AND ACI-301 SECTION 3.2.  
 3. WHERE EPOXY COATED REINFORCING IS REQUIRED, ALL CHAIRS, SLAB BOLSTERS, SUPPORT BARS, AND SPACERS SHALL BE PLASTIC COATED OR EPOXY COATED.  
 4. SOFT METRIC BAR SIZES VS. INCH-POUND (U.S. SYSTEM OF MEASURES) BAR SIZE TABLE. AST DRAWINGS REFLECT THE U.S. SYSTEM OF MEASURE.

INCH-POUND BAR SIZE DESIGNATION	SOFT METRIC BAR SIZE DESIGNATION
#4	#13
#5	#16
#7	#19
#8	#25

**C. CAST IN PLACE CONCRETE**  
 1. ALL CONCRETE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 19 & ACI-318.  
 2. ALL REINFORCING SHALL BE DETAILED, FABRICATED & PLACED IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE." THE STEEL REINFORCING SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL ELEMENTS & MEMBERS WITH REINFORCINGS FURNISHED BY THE SUPPLIER.  
 3. PER ACI 26.6.2.2, ALL REINFORCEMENT SHALL BE PLACED AND SUPPORTED PRIOR TO PLACING CONCRETE. "WET STICKING" OF REBAR, INCLUDING DOWELS IS PROHIBITED.  
 4. SPACING OF CONSTRUCTION OR CONTROL JOINTS IN WALLS EXPOSED TO VIEW SHALL NOT EXCEED 40 FEET UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. CUT HALF OF THE HORIZONTAL REINFORCING AT CONTROL JOINTS.  
 5. SLEEVES EMBEDDED IN SLABS AND WALLS SHALL BE LOCATED CLEAR BETWEEN REINFORCING BARS AND SHALL MAINTAIN CLEAR SPACING EQUAL TO THE DIAMETER OF THE LARGEST SLEEVE IN ANY DIRECTION. SLEEVE GROUPS THAT DO NOT COMPLY WITH THE ABOVE REQUIREMENTS SHALL BE CONSIDERED AS AN OPENING AND REINFORCED PER NOTE #6 BELOW.  
 6. UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE EXTRA REINFORCING ON ALL SIDES OF ALL MISCELLANEOUS WALL AND SLAB OPENINGS EQUAL TO ONE HALF THE INTERRUPTED REINFORCING BARS EACH SIDE BUT NOT LESS THAN 2 - #5 FOR EACH LAYER OF REINFORCEMENT. EXTEND BARS CLASS "B" LAP LENGTH BUT NOT LESS THAN 2 FEET BEYOND EDGE OF OPENINGS. PROVIDE 2 - #4x4'-0" DIAGONAL BARS AT EACH CORNER FOR EACH LAYER OF REINFORCEMENT.  
 7. PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CORNERS OF CONCRETE.  
 8. PROVIDE ISOLATION JOINTS AROUND COLUMNS AT SLAB ON GRADE AREAS.  
 9. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:  
 CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH ----- 3  
 CONCRETE EXPOSED TO EARTH OR WEATHER:  
 #6 THRU #18 BARS ----- 2  
 #5 & SMALLER BARS ----- 1 1/2  
 CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:  
 SLABS & WALLS:  
 #11 & SMALLER BARS ----- 3/4  
 BEAMS & COLUMNS:  
 PRIMARY REINFORCEMENT, TIES & STIRRUPS ----- 1 1/2

**D. COMPOSITE METAL DECK AND CONCRETE FLOOR SYSTEMS**  
 1. PRE-COMPOSITE (WET CONCRETE) REQUIREMENTS  
 A. EQUIPMENT FOR CONCRETE PLACING AND FINISHING OPERATIONS ON THE METAL DECK SHALL NOT BE USED WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.  
 B. THE PRE-COMPOSITE CONSTRUCTION LIVE LOAD LIMITS THE EQUIPMENT ALLOWED ON THE METAL DECK DURING PLACING OPERATIONS. SEE THE DESIGN LOADS SECTION FOR THE LIVE LOAD USED FOR DESIGN.  
 C. CONCRETE PUMP LINE EQUIPMENT USED TO MOVE THE LINE DURING PLACING MAY NOT BE USED ON FLOOR SYSTEMS DESIGNED WITH WELDED WIRE REINFORCING (WWR). WHERE FIBER REINFORCING IS USED IN LIEU OF WWR, LINE EQUIPMENT MAY BE USED AS LONG AS IT IS NOT LOCATED ON DECK SPANS WHERE CONCRETE IS ACTIVELY BEING PLACED. PERSONNEL OTHER THAN THE OPERATOR(S) SHALL REMAIN AT LEAST 10 FEET AWAY FROM THE EQUIPMENT.  
 2. POST-COMPOSITE (CURED CONCRETE) REQUIREMENTS  
 A. THE GENERAL CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PREVENT CRACKING OF THE ELEVATED CONCRETE SLABS DURING CONSTRUCTION AND BUILD-OUT ACTIVITIES. THIS INCLUDES LIMITING MATERIALS, EQUIPMENT AND OPERATIONS TO THOSE THAT DO NOT DAMAGE THE SLABS.  
 B. NO EQUIPMENT OR MATERIAL MAY BE USED OR STORED ON THE ELEVATED CONCRETE FLOOR WITHIN 7 DAYS OF CONCRETE PLACEMENT. IN ADDITION, CYLINDER TESTS SHALL CONFIRM THAT THE DESIGN COMPRESSIVE STRENGTH HAS BEEN REACHED.

C. LIFTS FOR PERSONNEL OR MATERIAL SHALL NOT BE USED ON THE ELEVATED CONCRETE SLAB WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD. THE DESIGN SHOWN ON THE CONSTRUCTION DOCUMENTS ASSUMES THAT LIFTS DO NOT EXCEED A TOTAL WEIGHT WITH PAYLOAD OF 2500 LBS AND THAT NO AXLE LOAD EXCEEDS 1500 LBS.  
 D. A MAXIMUM OF (2) TWO LIFTS MAY BE USED IN A GIVEN BAY. A MINIMUM CLEARANCE OF 10 FEET BETWEEN LIFTS MUST BE MAINTAINED AT ALL TIMES.  
 E. MATERIAL STOCKED OR STORED ON THE ELEVATED SLAB SHALL BE DISTRIBUTED SUCH THAT THE LOAD DOES NOT EXCEED THE DESIGN LIVE LOAD FOR THE FLOOR.  
 F. OPERATIONS SHALL MINIMIZE IMPACT LOADING BY SLOWLY LOWERING LOADS FROM PALLET JACKS AND OTHER SIMILAR EQUIPMENT.

**VII. STEEL**  
 A. STEEL MATERIAL PROPERTIES  
 1. STEEL PROPERTIES  
 STRUCTURAL WIDE FLANGE SHAPES ----- STRENGTH (PSI) 50,000 ASTM A992  
 OTHER STRUCT. SHAPES & PLATES, ETC ----- 36,000 A36  
 ANCHOR RODS ----- 36,000 F1554  
 WELDING ELECTRODES ----- E70XX A233  
 DECK WELDING ELECTRODES ----- 360XX A233  
 HEADED STUDS, TYPE B (F<sub>u</sub>=65,000) ----- 51,000 AWS D1.1 CHAPTER 7  
 EXPANSION BOLTS SHALL BE HILTI KWIK BOLT 3 OR PRE-APPROVED EQUAL.


2. SEE ITEM B.10 BELOW FOR ADDITIONAL REQUIREMENTS FOR SEISMIC FORCE RESISTING SYSTEMS.  
**B. STRUCTURAL STEEL**  
 1. STRUCTURAL STEEL DESIGN & CONSTRUCTION SHALL CONFORM TO IBC CHAPTER 22, AISC "LOAD & RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" & AISC "CODE OF STANDARD PRACTICE," APPLY UNO.  
 2. STRUCTURAL STEEL SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIAL SUPPLIED. IN ADDITION, THE STRUCTURAL STEEL SUPPLIER SHALL SUBMIT DRAWINGS AND CALCULATIONS FOR ALL PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT FOR ALL STAIRS, LADDERS, RAILINGS, CAP PLATES, BEARING PLATES, BASE PLATES, STIFFENERS, SPLICES, CONNECTIONS AND ANY OTHER COMPONENTS DESIGNED BY THE SUPPLIER.  
 3. STRUCTURAL STEEL SUPPLIER SHALL FURNISH BOLTS FOR OSHA CONNECTIONS (SEE DRAWINGS FOR DETAILS). BOLT HOLES IN BEAM TOP FLANGE SHALL BE MAXIMUM 9/16" DIA. FOR "K" SERIES JOISTS AND 13/16" DIA. FOR "LH" SERIES JOISTS.  
 4. CAMBERS SHOWN ON THE DRAWINGS REFLECT THE IN-PLACE, ERECTED BEAM SELF-WEIGHT CONDITIONS. CAMBERS SHALL BE INCREASED ACCORDINGLY BY STRUCTURAL STEEL SUPPLIER TO ACCOUNT FOR LOSS OF CAMBER DUE TO CAMBERING PROCESS, TRANSPORTATION AND HANDLING. BEAMS WITH CAMBER SHALL COMPLY WITH A CAMBER TOLERANCE OF -0", + 1/2". SINGLE POINT CAMBERING IS NOT ALLOWED.  
 5. THIS STRUCTURE IS A NON-SELF SUPPORTING STEEL FRAME REQUIRING INTERACTION WITH OTHER ELEMENTS TO PROVIDE THE REQUIRED STABILITY. THE STEEL ERECTOR SHALL PROVIDE TEMPORARY BRACING UNTIL FINAL STABILITY IS PROVIDED. AS A MINIMUM, TEMPORARY BRACING SHALL BE PROVIDED AT EACH GRID IN BOTH DIRECTIONS.  
 6. BOLTED CONNECTIONS SHALL BE 3/4" DIA., A325 BEARING-TYPE WITH THREADS INCLUDED IN THE SHEAR PLANE. INSTALL BOLTS IN PROPERLY ALIGNED HOLES AND TIGHTEN TO A SNUG-TIGHT CONDITION AS DEFINED BY THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" UNO.

**C. STEEL FLOOR DECK**  
 1. ALL STEEL DECK SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2210 - COLD FORMED STEEL AND THE STEEL DECK INSTITUTE SPECIFICATIONS AND RECOMMENDATIONS, UNO.  
 2. THE STEEL DECK SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL ELEMENTS & MEMBERS FURNISHED BY THE DECK SUPPLIER. DECK SUPPLIER SHALL SUBMIT ICC REPORTS SHOWING ALLOWABLE DIAPHRAGM SHEAR VALUES.  
 3. PRE-APPROVED DECK MANUFACTURERS ARE NUCOR/VULCRAFT/VERCO, WHEELING, AND CAN-AM. OTHER METAL DECK MANUFACTURERS MAY BE APPROVED PROVIDING THAT THE DECK SPECIFICATIONS MEET OR EXCEED THE SPECIFICATIONS OF THE PRE-APPROVED MANUFACTURERS. METAL DECK SIZE, GAGE AND TYPE ARE INDICATED ON THE DRAWINGS.  
 4. STRUCTURAL SLAB FORM (METAL CENTERING) SHALL BE DESIGNED FOR THE SPANS AND SLAB DEAD LOADS AS SHOWN ON THE DRAWINGS & INSTALLED IN ACCORDANCE WITH SDI SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS.  
 5. THE STEEL DECK SHALL SUPPORT THE WEIGHT OF WET CONCRETE AND OTHER CONSTRUCTION LOADS AS AN UN-SHORED FORM DECK. PLACEMENT AND SEQUENCE OF LOADING THE DECK WITH THE WET CONCRETE IS THE RESPONSIBILITY OF THE CONCRETE SUBCONTRACTOR AND SHALL BE COORDINATED WITH THE DECK SUPPLIER IN ADVANCE OF PLACING CONCRETE.  
 6. DECK FASTENING SHALL BE PER SDI & MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN THAT SHOWN ON THE DRAWINGS. BUTTON-PUNCHED OR CRIMPED SIDE LAP FASTENERS SHALL NOT BE USED ON THE COMPOSITE DECK. COMPOSITE DECK MUST BE SCREWED OR WELDED AS INDICATED ON THE DRAWINGS.  
 7. ALL METAL DECK TO BE SPRAY FIREPROOFED SHALL BE GALVANIZED, CLEANED & DEGREASED PRIOR TO SHIPPING. SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF FIREPROOFING.

**VIII. LIGHT GAGE METAL STUD FRAMING**  
 A. LIGHT GAGE FRAMING SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2210 - COLD FORMED STEEL.  
 1. LIGHT GAGE FRAMING SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2210 - COLD FORMED STEEL.  
 2. STUD DESIGNATION & RELATED ACCESSORIES ON DRAWINGS ARE BASED ON AISI/ SFA/ SSSA (STEEL STUD MANUFACTURERS ASSOCIATION) STANDARD SHAPES. OTHER MANUFACTURERS SHALL FURNISH ELEMENTS OF EQUAL OR GREATER SECTION PROPERTIES, MATERIAL STRENGTHS & STIFFNESS. F<sub>y</sub> = 50,000 psi (STUDS = 18 GA & THINNER), F<sub>y</sub> = 33,000 psi (STUDS = 16 GA & THICKER), F<sub>y</sub> = 33,000 psi (TRACK).  
 3. STEEL THICKNESS REFERENCE GAGE MILS MINIMUM DELIVERED THICKNESS (IN.)  
 20 33 0.0329  
 18 43 0.0428  
 16 54 0.0538  
 14 68 0.0677  
 12 97 0.0966  
 4. THE DRAWINGS ARE INTENDED TO EXPRESS THE MINIMUM DESIGN PERFORMANCE. ALTERNATE DESIGNS OF EQUIVALENT CAPACITY WILL BE CONSIDERED BY THE STRUCTURAL ENGINEER FOR APPROVAL. THIS WILL BE SUBJECT TO THE REVIEW OF THE FINAL DETAILED SHOP DRAWINGS AND RELATED DESIGN CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.  
 5. SCREW ALL STEEL SECTIONS AT WINDOW HEADS & SILLS TO JAMB STUDS WITH A MINIMUM OF ONE SCREW EACH SIDE EACH MEMBER.  
 6. ANCHOR EACH STUD TO RUNNERS WITH FOUR #10 SCREWS, TWO TOP AND TWO BOTTOM, WITH ONE SCREW IN EACH FLANGE UNO.  
 7. ALIGN RUNNER TRACK ACCURATELY & SECURE TO BASE & HEAD WITH FASTENERS AS SHOWN ON THE DRAWINGS OR EQUIVALENT OR AS NOTED IN THE MANUFACTURER'S STANDARD SPECIFICATION BUT FASTENER SPACING SHALL NOT EXCEED 24" ON CENTER.  
 8. SELF-DRILLING OR SELF-TAPPING MINIMUM 1/2" TYPE S-12 SCREWS MAY BE USED IN LIEU OF WELDING FOR ASSEMBLING STEEL STUD WALLS. ONE SCREW MAY BE SUBSTITUTED FOR EACH WELD UNO.

Revisions:	Date:

**CONSULTANT**



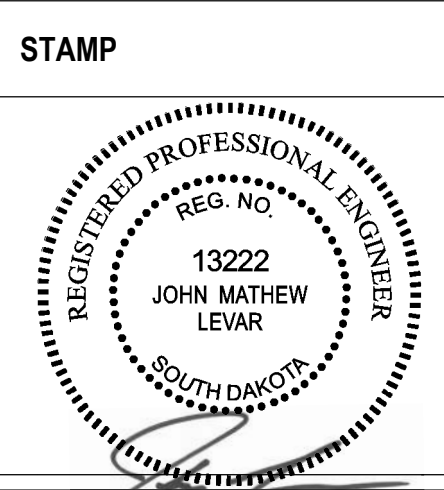
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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title  
**STRUCTURAL NOTES**

Approved:

Phase  
 BID DOCUMENTS

FULLY SPRINKLERED

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
 SIOUX FALLS, SD

Issue Date  
 07/06/2021

Checked  
 Checker

Drawn  
 Author

Project Number  
 SD 1008

Building Number

Drawing Number  
**S110**

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A  
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BEAM CONNECTION SCHEDULE					
SINGLE SHEAR TAB (FLEXIBLE) CONNECTION USING SHORT-SLOTTED HOLES TRANSVERSE TO DIRECTION OF LOAD					
CONNECTION CAPACITY (Ø Rn)	MINIMUM BEAM SIZE	SHEAR TAB SIZE	WELD SIZE "t"	NUMBER OF ROWS OF 3/4" Ø A325-N BOLTS	REMARKS
14k	W8 W10	PL. 1/4"x4 1/2"x0'-6"	3/16"	2	
27k	W12 W14	PL. 1/4"x4 1/2"x0'-9"	3/16"	3	
44k	W16	PL. 1/4"x4 1/2"x1'-0"	3/16"	4	
62k	W18	PL. 1/4"x4 1/2"x1'-3"	3/16"	5	
79k	W21	PL. 5/16"x4 1/2"x1'-6"	1/4"	6	2"x4 3/4" MAXIMUM COPE
96k	W27	PL. 3/8"x4 1/2"x1'-9"	5/16"	7	2 1/4"x5 3/4" MAXIMUM COPE
113k	W30	PL. 7/16"x4 1/2"x2'-0"	3/8"	8	2 1/4"x5 3/4" MAXIMUM COPE
130k	W33	PL. 7/16"x4 1/2"x2'-3"	3/8"	9	2 1/4"x5 3/4" MAXIMUM COPE
142k	W36	PL. 7/16"x4 1/2"x2'-6"	3/8"	10	2 1/4"x5 3/4" MAXIMUM COPE

**NOTES:**

- TYPICAL CONNECTION DESIGN IS FOR A MAXIMUM TOP COPE OF 1 1/2" DEEP AND 4" LONG. SHEAR TAB CONNECTION MAY REQUIRE A SMALLER COPE DEPTH. MINIMUM EDGE DISTANCE FOR STANDARD BOLT HOLES IS 1 1/4" (MINIMUM EDGE DISTANCE FOR SHORT SLOTTED HOLES IS 1 3/8").
- FOR SHEAR TAB CONNECTIONS WITH SUPPORTING MEMBER WEB THICKNESS GREATER THAN 3/4" USE 3/8" WELD AND 7/16" PLATE.
- USE DOUBLE ANGLE BOLTED CONNECTION SCHEDULE FOR REACTIONS EXCEEDING CONNECTION CAPACITY GIVEN IN THIS SCHEDULE.
- CONNECTION CAPACITY IS AN ULTIMATE LOAD PER AISC-LRFD THIRD EDITION.
- COORDINATE SHEAR TAB LENGTH WITH OTHER DETAILS ON THIS PROJECT.
- SHORT SLOTTED HOLES ARE IN THE BEAM.
- CONNECTION CAPACITY IS BASED ON SMALLEST BEAM DESIGNATION OF MINIMUM BEAM SIZE.

BEAM CONNECTION SCHEDULE					
ALL BOLTED DOUBLE ANGLE CONNECTIONS					
CONNECTION CAPACITY (Ø Rn)	BEAM SIZES	ANGLE SIZES	NUMBER OF ROWS OF 3/4" Ø A325-N BOLTS	REMARKS	
11k	W8 TO W14	L4"x4"x5/16"x0'-6"	2	1"x4" MAXIMUM COPE 21k WITHOUT COPED FLANGE	
24k	W10 TO W14	L4"x4"x5/16"x0'-6"	2	33 kips WITHOUT COPED FLANGE	
36k	W12 TO W18	L4"x4"x5/16"x0'-9"	3		
43k	W14 TO W18	L4"x4"x5/16"x0'-9"	3		
63k	W16 TO W27	L4"x4"x5/16"x1'-0"	4		
94k	W18 TO W33	L4"x4"x5/16"x1'-3"	5		
132k	W21 TO W36	L4"x4"x5/16"x1'-6"	6	1 3/8"x4 3/4" MAXIMUM COPE	
148k	W24 TO W36	L4"x4"x5/16"x1'-6"	6	1 3/8"x4 3/4" MAXIMUM COPE	
201k	W27 TO W36	L4"x4"x5/16"x1'-9"	7	2 1/4"x5 3/4" MAXIMUM COPE	
235k	W30 TO W36	L4"x4"x5/16"x2'-0"	8	2 1/4"x5 3/4" MAXIMUM COPE	
286k	W33 TO W36	L4"x4"x3/8"x2'-3"	9	2 1/4"x5 3/4" MAXIMUM COPE	
318k	W40	L4"x4"x3/8"x2'-6"	10	2 1/4"x5 3/4" MAXIMUM COPE	

**NOTES:**

- TYPICAL CONNECTION IS DESIGNED FOR A MAXIMUM TOP COPE OF 1 3/8" DEEP AND 4" LONG. UNO.
- CONNECTION CAPACITY IS AN ULTIMATE LOAD PER AISC-LRFD THIRD EDITION.
- COORDINATE ANGLE LENGTH WITH OTHER DETAILS ON THIS PROJECT. ALTERNATE CONNECTION: ANGLES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER OF RECORD PROVIDED CERTIFIED DESIGN CALCULATIONS ARE PROVIDED.
- SHORT SLOTTED HOLES TRANSVERSE TO THE DIRECTION OF LOAD ARE PERMITTED IN THE STEEL BEAM.
- CONNECTION CAPACITY IS BASED ON SMALLEST BEAM DESIGNATION OF MINIMUM BEAM SIZE.
- FABRICATOR TO COORDINATE BOLT CONFIGURATION FOR ERECTION PURPOSES.

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Revisions:	Date:

**CONSULTANT**

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13222  
JOHN MATHEW  
LEVAR  
MINNESOTA

**Office of Construction and Facilities Management**

**VA** U.S. Department of Veterans Affairs

Drawing Title  
**SCHEDULES**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
**SIOUX FALLS, SD**

Issue Date  
**07/06/2021**

Checked  
**KS**

Drawn  
**TB**

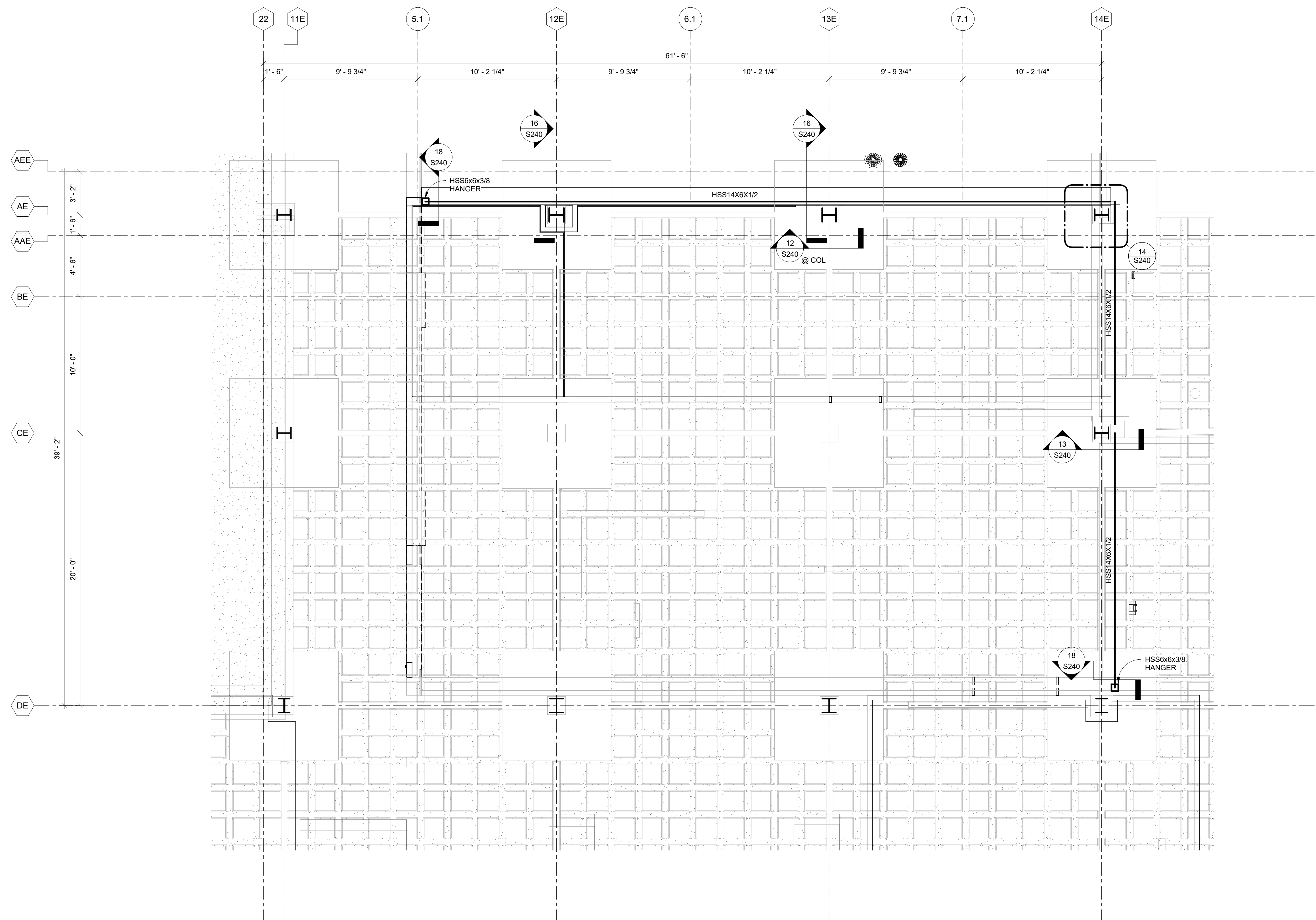
Project Number  
**SD 1008**

Building Number

Drawing Number  
**S111**



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1 FIRST FLOOR FRAMING PLAN  
1/4" = 1'-0"

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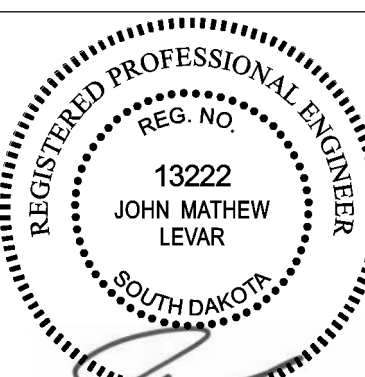
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Office of Construction and Facilities Management

**VA** U.S. Department of Veterans Affairs

Drawing Title  
**FIRST FLOOR PLAN**

Approved:

Phase  
BID DOCUMENTS

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Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
SIOUX FALLS, SD

Issue Date  
07/06/2021

Checked  
KS

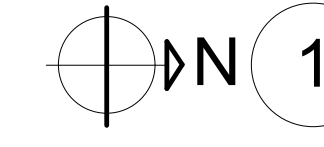
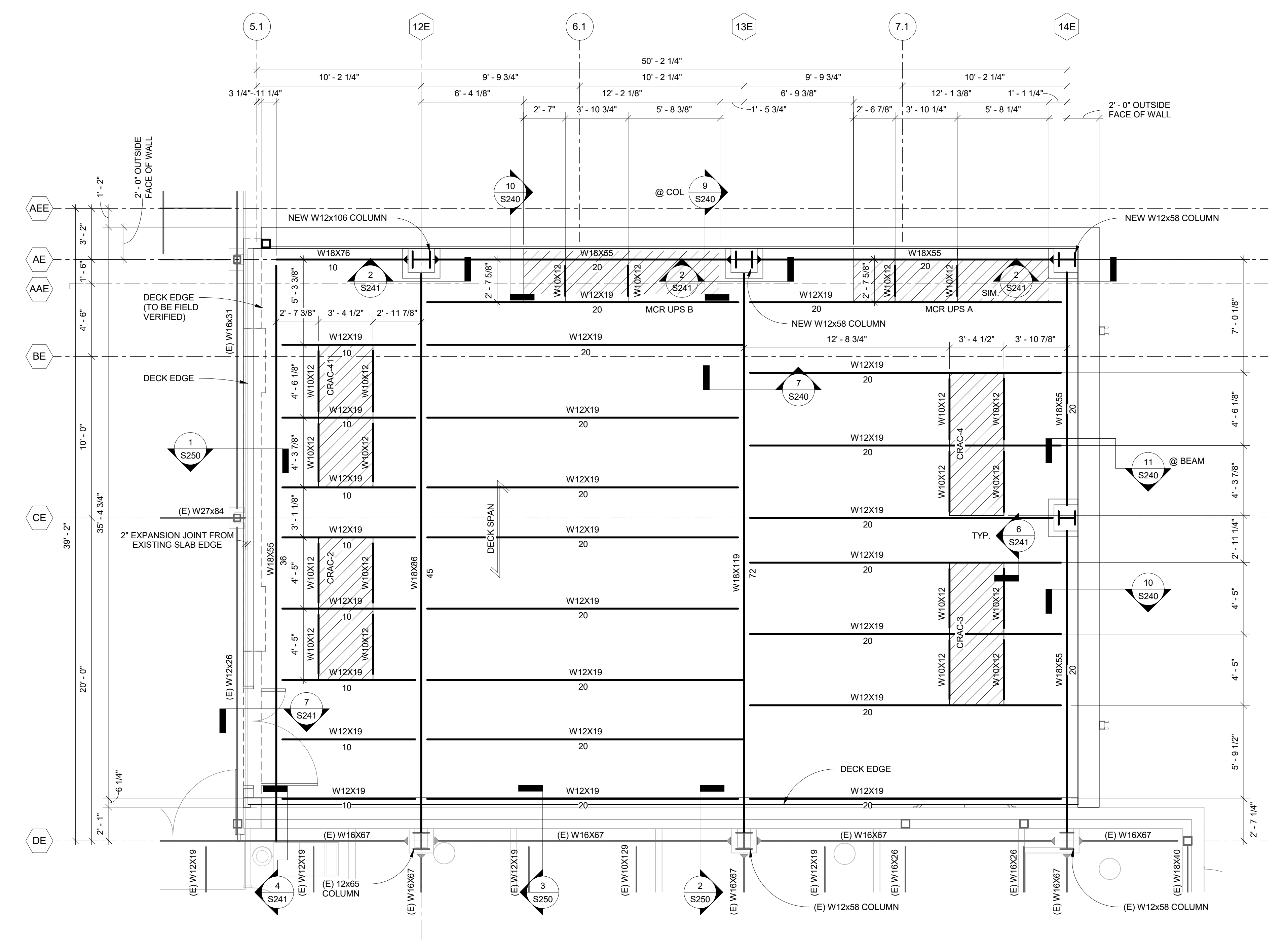
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Project Number  
SD 1008

Building Number

Drawing Number  
**S210**

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**1 SECOND FLOOR FRAMING PLAN**

1/4" = 1'-0"

**COMPOSITE SLAB PLAN NOTES:**

1. LEVEL 2 TOP OF SLAB ELEVATION (TSE) = 1522'-9 3/4"
2. FLOOR SHALL BE 1 1/2" - 18 GAUGE COMPOSITE METAL DECK (3-SPAN) w/ 3 1/4" LIGHT WEIGHT CONCRETE (4 3/4" TOTAL THICKNESS), REINF. w/ 6x6 - W2.1 x W2.1 WWR.
3. SEE DETAIL 1/S240 FOR TYPICAL COMPOSITE DECK ATTACHMENT INFORMATION.
4. SEE DETAIL 2/S240 FOR TYPICAL STUD LAYOUT AND SPACING DETAILS. USE 3/4"x3" WELDED STUDS, TYP. UNO.
5. SEE SHEET S111 FOR CONNECTION SCHEDULES.
6. BEAM LEGEND:
  - BEAM SIZE: W18x26 (1 3/4")
  - UPWARD CAMBER
  - # OF SHEAR STUDS
- LRFD VERTICAL BEAM SHEAR REACTION  
 \*BEAM REACTIONS NOTED ON PLAN ARE ULTIMATE LOADS. IF REACTION IS GIVEN ON ONE ONLY, USE THE SAME LOAD FOR BOTH ENDS
- \*BEAM CONNECTIONS WITHOUT REACTIONS ON PLAN SHALL BE DESIGNED FOR A MINIMUM OF 50% OF MAX. UNIFORM LOAD.
7. SEE 8/S240 FOR TYPICAL CONSTRUCTION JOINT.
8. SEE 3/S240 FOR TYPICAL METAL DECK OPENING.
9. INDICATES FIELD WELDED MOMENT CONNECTION.
10. VERIFY NUMBER, SIZE AND LOCATION OF ALL OPENINGS IN SLAB WITH ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS. SEE DETAIL 3/S240 FOR ADDITIONAL REINFORCING. ALL OPENINGS NOT SHOWN ON PLAN MUST BE APPROVED IN WRITING BY STRUCTURAL ENGINEER OF RECORD.

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Office of Construction and Facilities Management

**VA** U.S. Department of Veterans Affairs

Drawing Title  
**SECOND FLOOR FRAMING PLAN**

Approved:

Phase  
BID DOCUMENTS

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Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
SIOUX FALLS, SD

Issue Date  
07/06/2021

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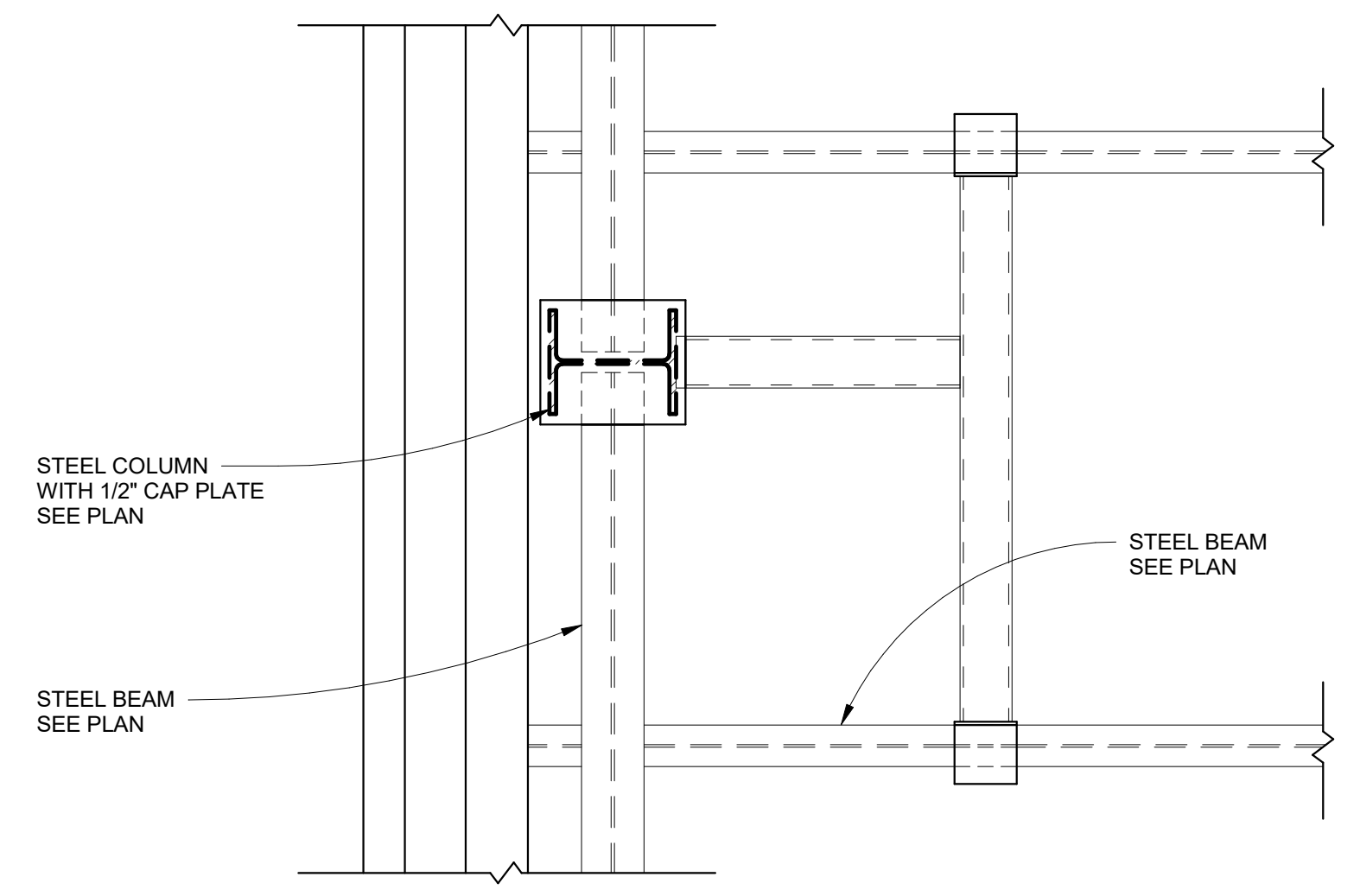
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SD 1008

Building Number

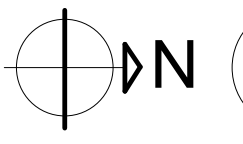
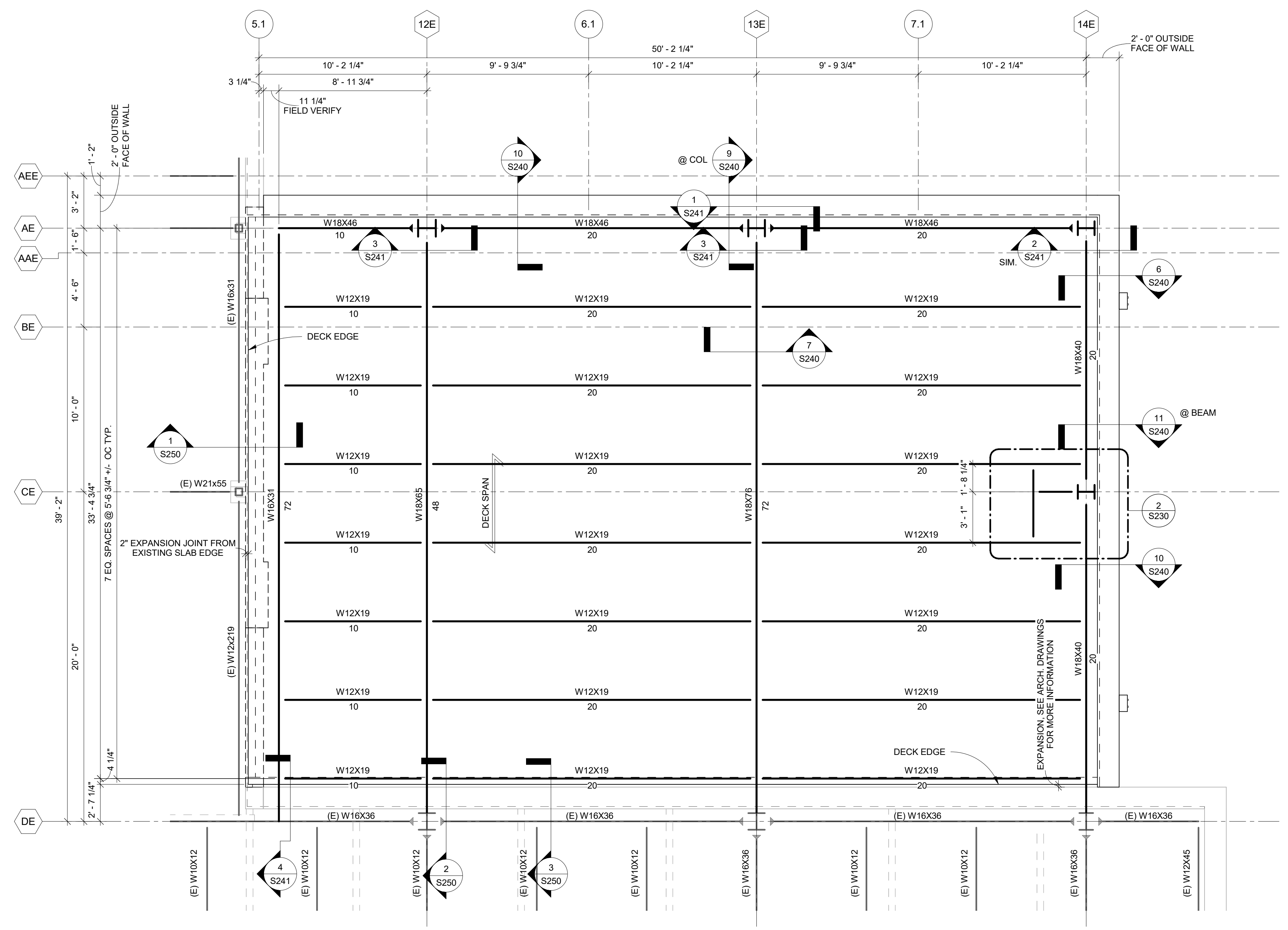
Drawing Number  
**S220**



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2 PLAN DETAIL  
3/4" = 1'-0"



1 ROOF FRAMING PLAN  
1/4" = 1'-0"

- PLAN NOTES:**
- ROOF LEVEL TOP OF SLAB ELEVATION (TSE) = 1537'-11 1/2"
  - ROOF SHALL BE 1 1/2" - 18 GAUGE COMPOSITE METAL DECK (3-SPAN) w/ 3 1/4" LIGHT WEIGHT CONCRETE (4 3/4" TOTAL THICKNESS). REINF. w/ 6x6 - W2.1 x W2.1 WWR.
  - ON PLAN INDICATES DIRECTION OF DECK SPAN.
  - SEE SECOND FLOOR FRAMING PLAN NOTES FOR ADDITIONAL INFORMATION.
  - GENERAL CONTRACTOR TO VERIFY SIZE, WEIGHT AND LOCATION OF ALL ROOF TOP UNITS. VERIFY NUMBER, SIZE & LOCATION OF ALL OPENINGS IN DECK WITH ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS. ALL OPENINGS & ROOF TOP UNIT LOCATIONS MUST BE SUBMITTED TO AND APPROVED IN WRITING BY S.E.O.R.
  - SEE 4/S240 FOR TYP. ROOF OPENING SUPPORT FRAME FOR MISC. OPENINGS SMALLER THAN 18". FOR ALL OTHER OPENINGS, SEE 3/S240.
- BEAM LEGEND:**
- BEAM SIZE: W16x26 (1 3/4")  
UPWARD CAMBER: 12  
# OF SHEAR STUDS: 37k
- LRFD VERTICAL BEAM SHEAR REACTION  
\*BEAM REACTIONS NOTED ON PLAN ARE ULTIMATE LOADS. IF REACTION IS GIVEN ON ONE ONLY, USE THE SAME LOAD FOR BOTH ENDS
- \*BEAM CONNECTIONS WITHOUT REACTIONS ON PLAN SHALL BE DESIGNED FOR A MINIMUM OF 50% OF MAX. UNIFORM LOAD.

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Drawing Title  
**ROOF FRAMING PLAN**

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BID DOCUMENTS

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Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
SIOUX FALLS, SD

Issue Date  
07/06/2021

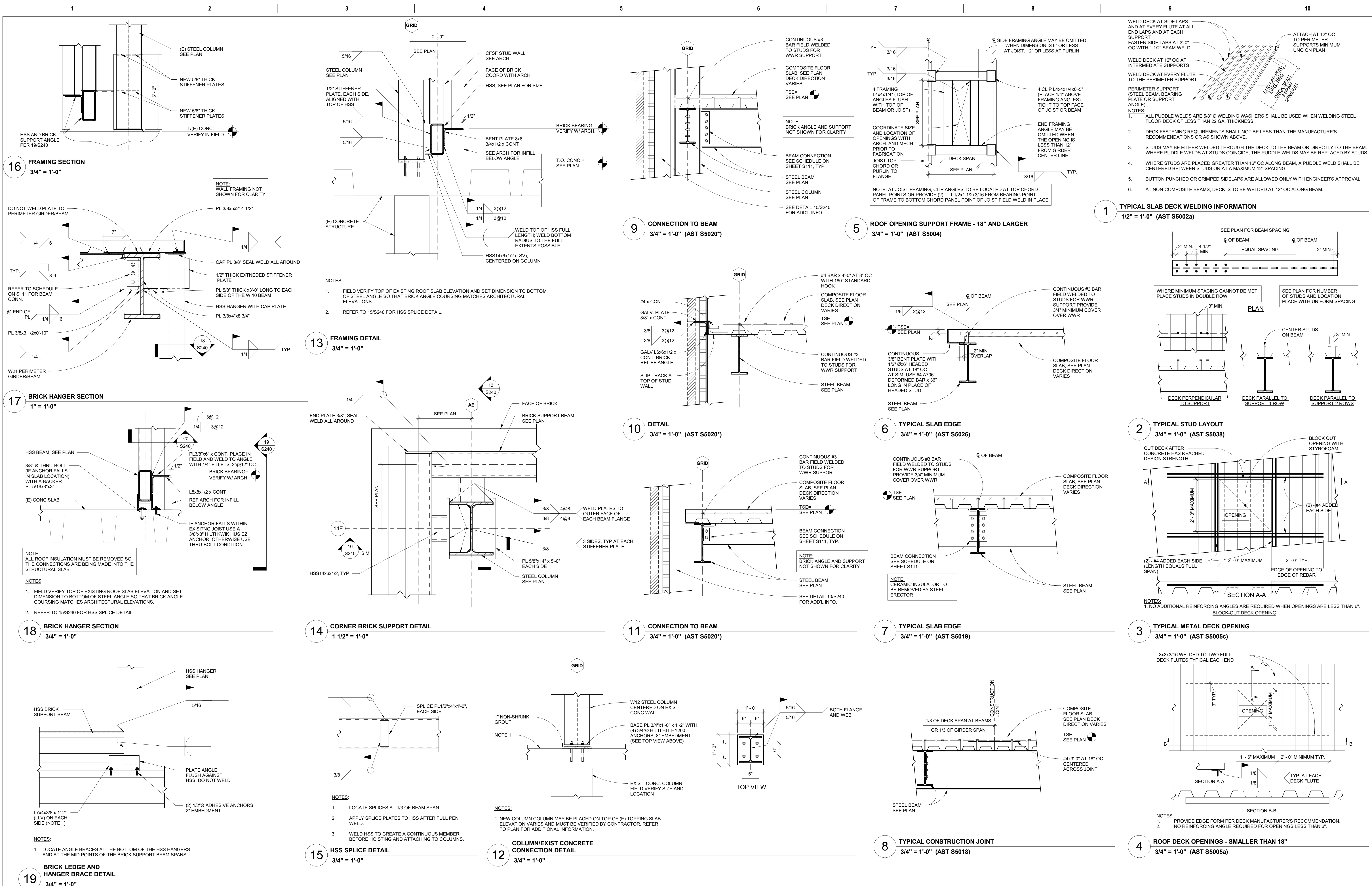
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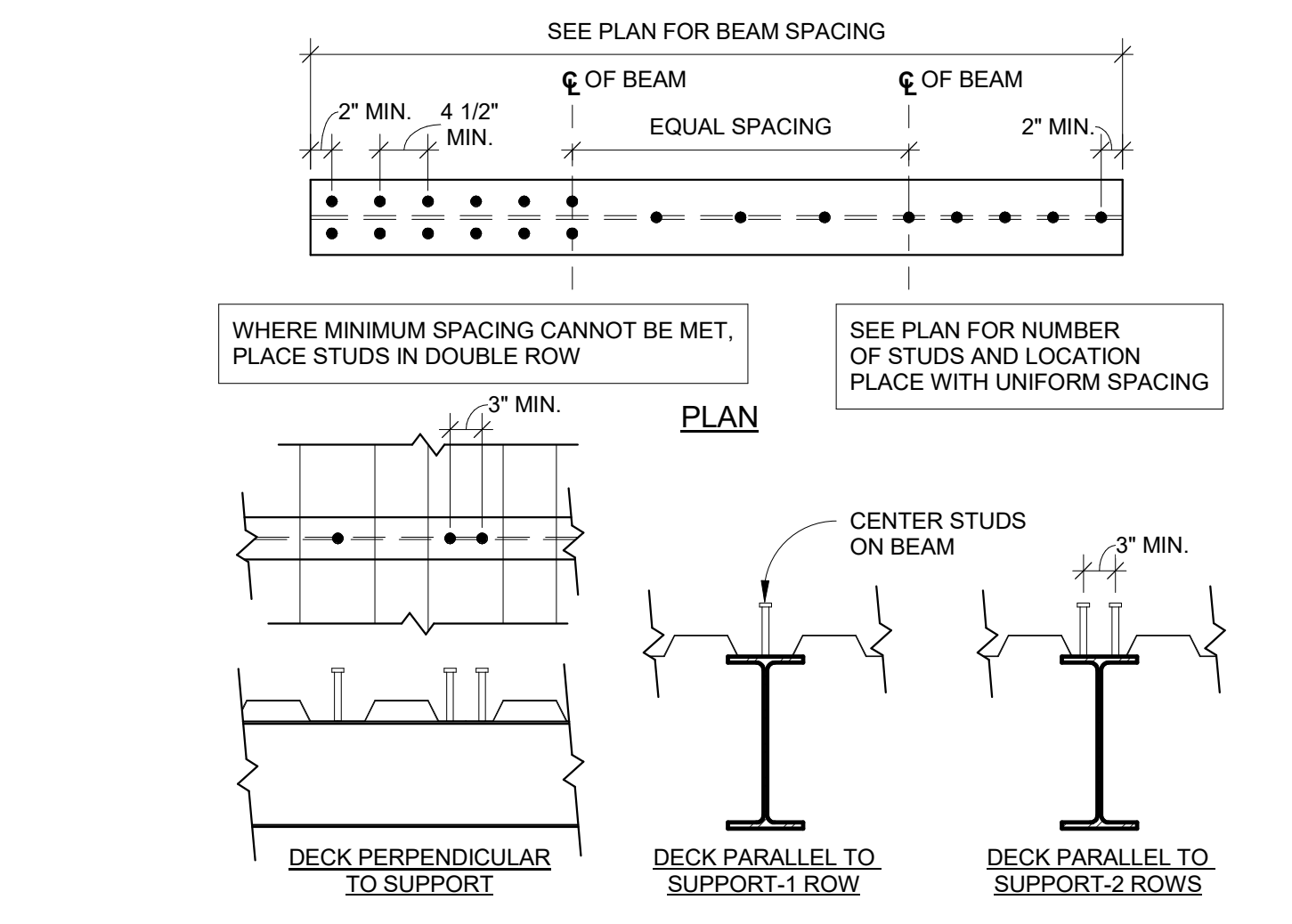
Project Number  
SD 1008

Building Number

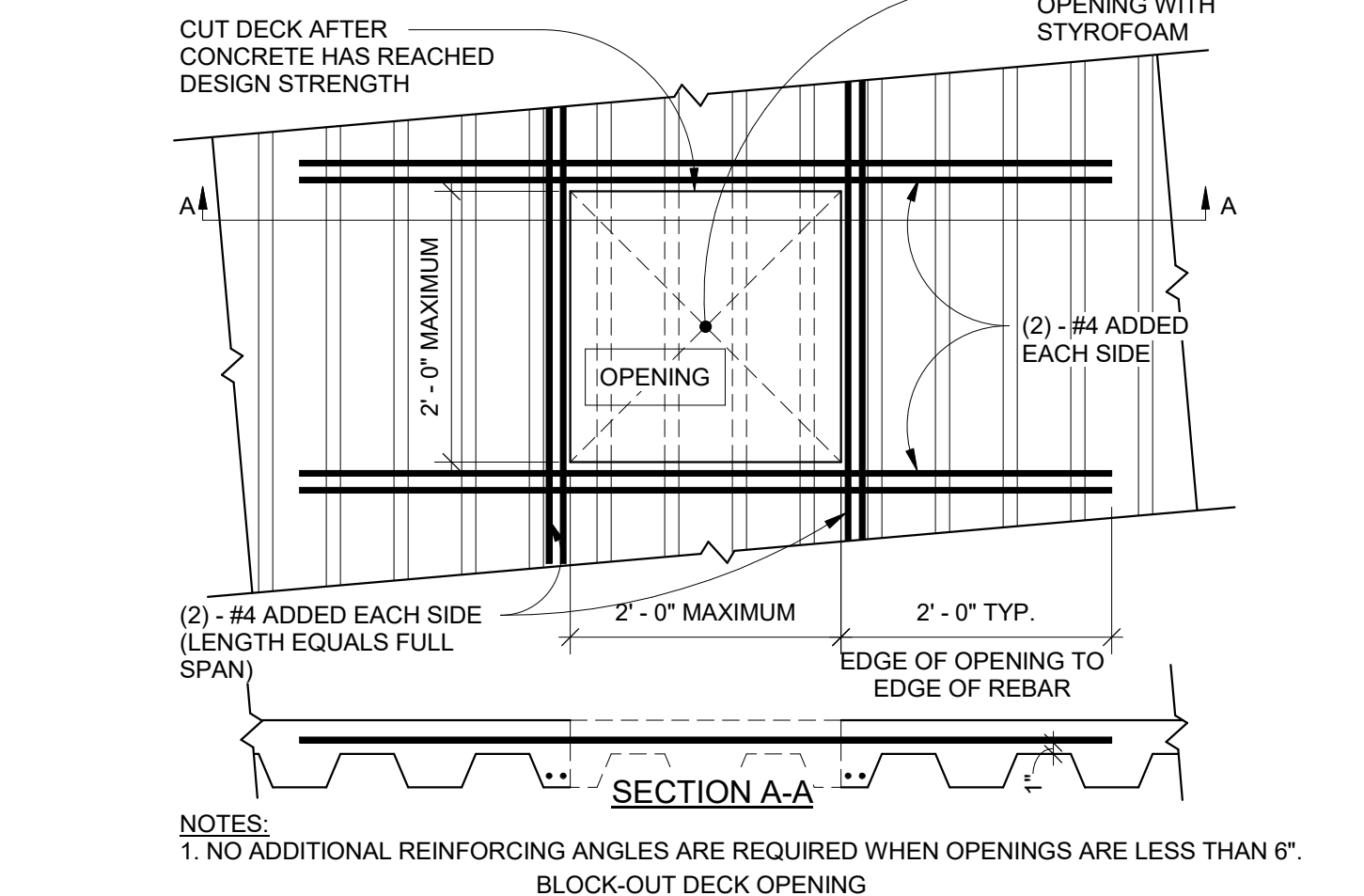
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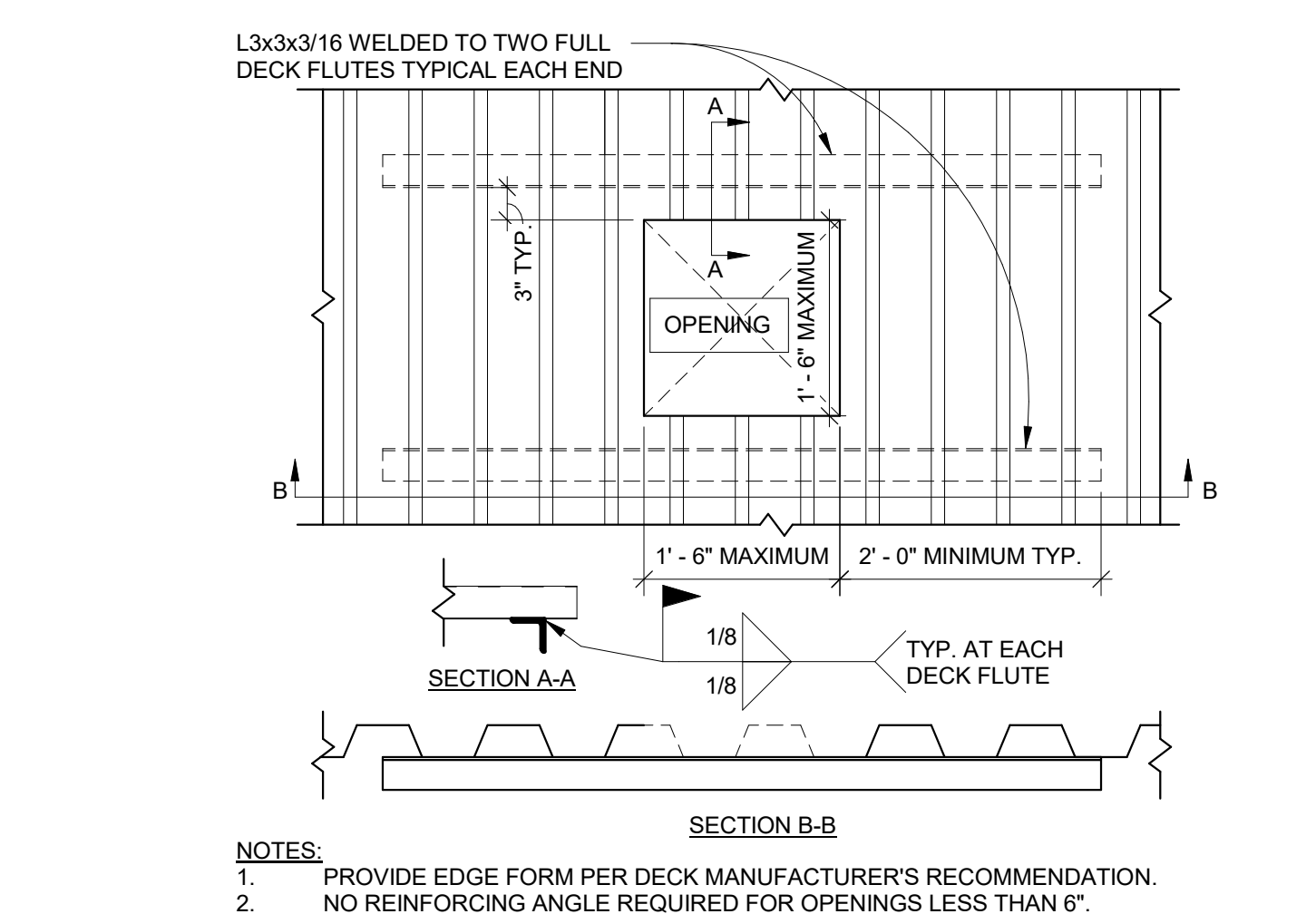
**1 TYPICAL SLAB DECK WELDING INFORMATION**  
1/2" = 1'-0" (AST S5002a)



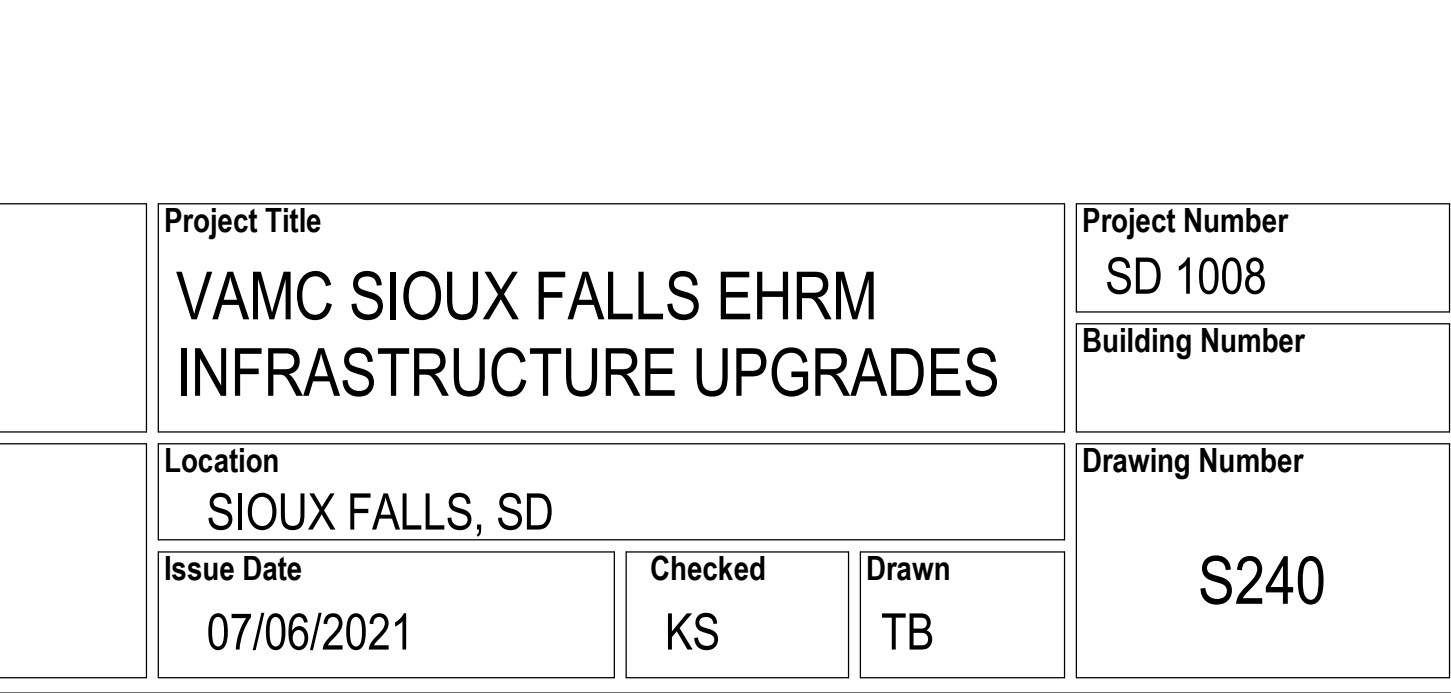
**2 TYPICAL STUD LAYOUT**  
3/4" = 1'-0" (AST S5038)



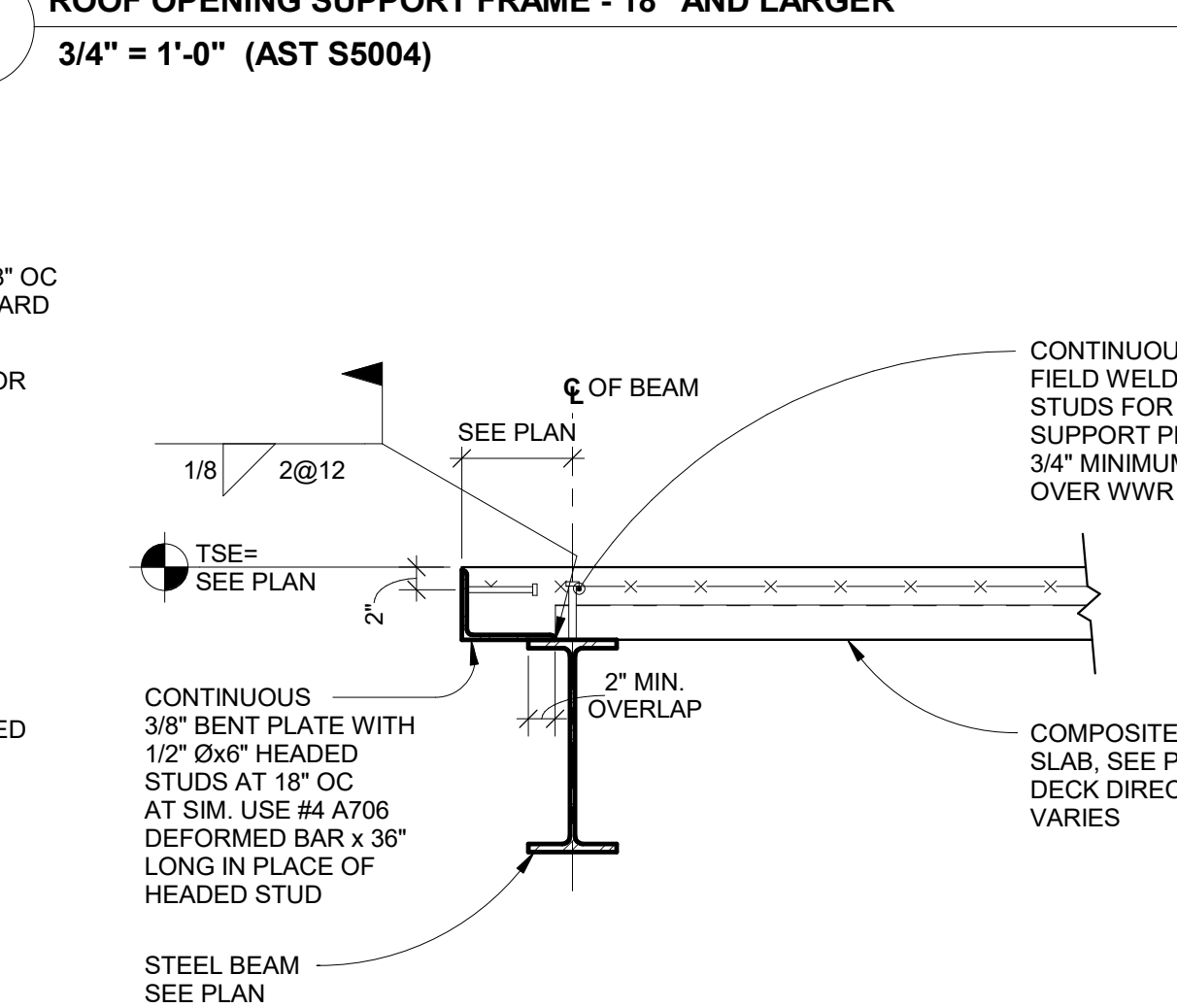
**3 TYPICAL METAL DECK OPENING**  
3/4" = 1'-0" (AST S5005c)



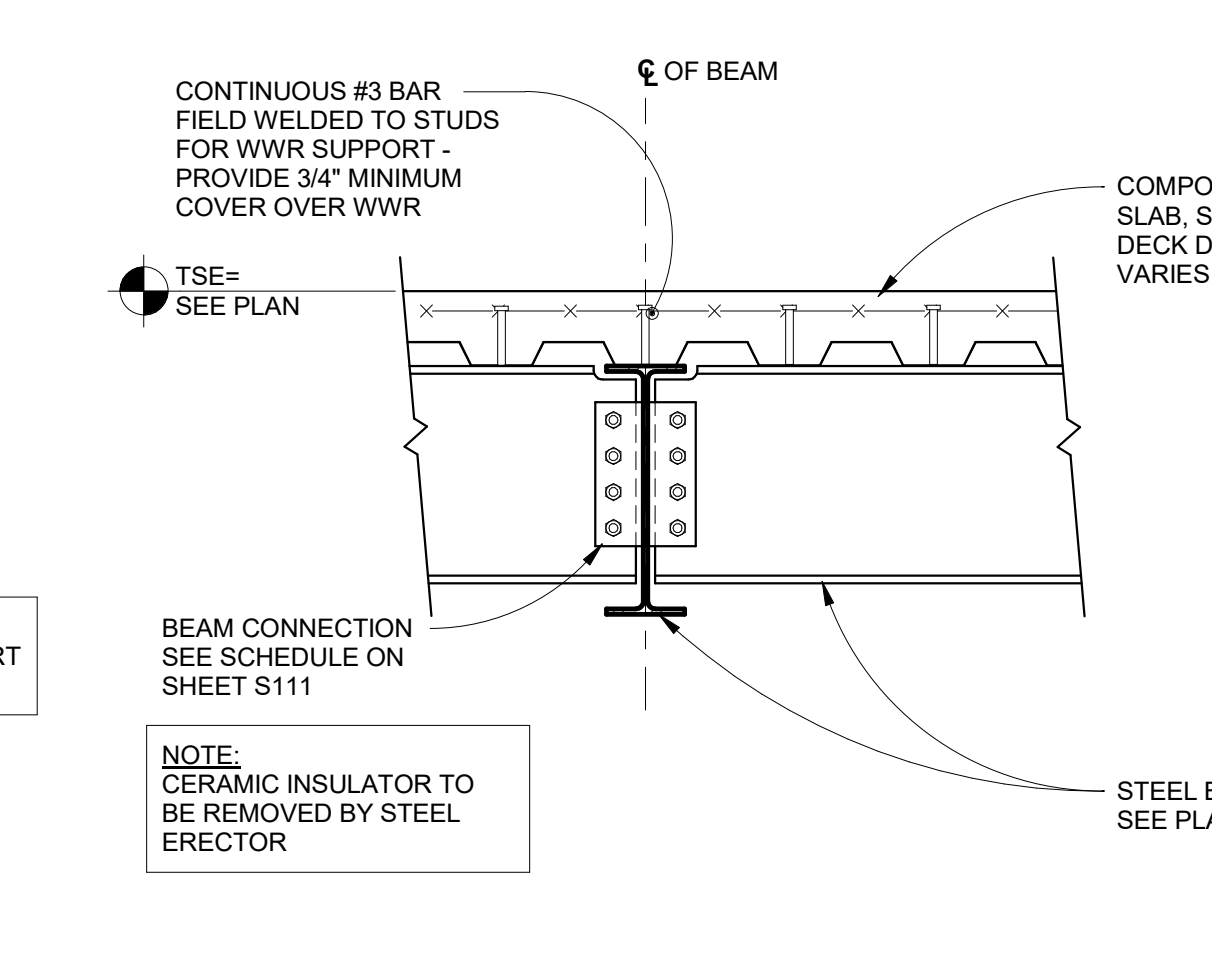
**4 ROOF DECK OPENINGS - SMALLER THAN 18"**  
3/4" = 1'-0" (AST S5005a)



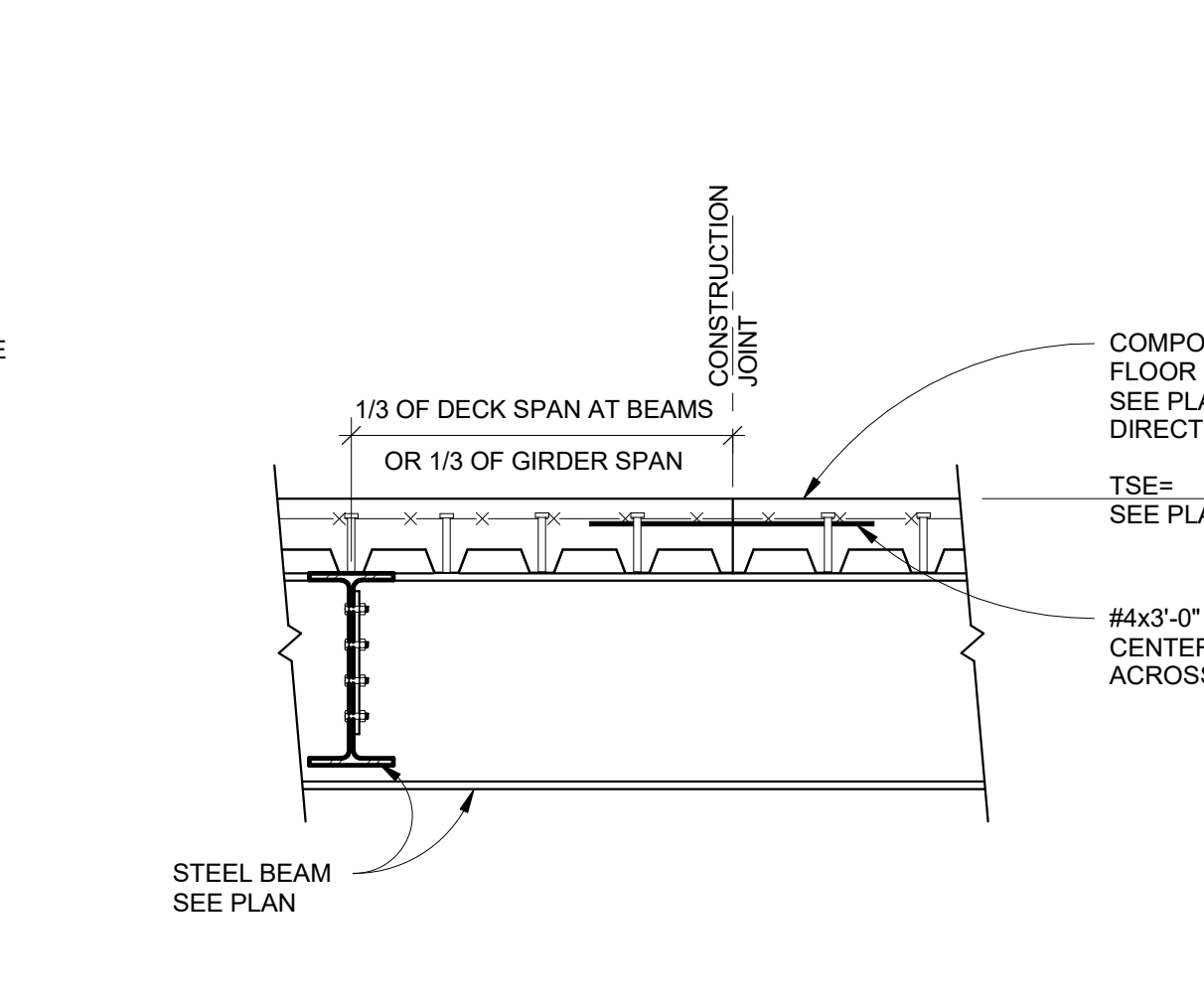
**5 ROOF OPENING SUPPORT FRAME - 18\"/>**



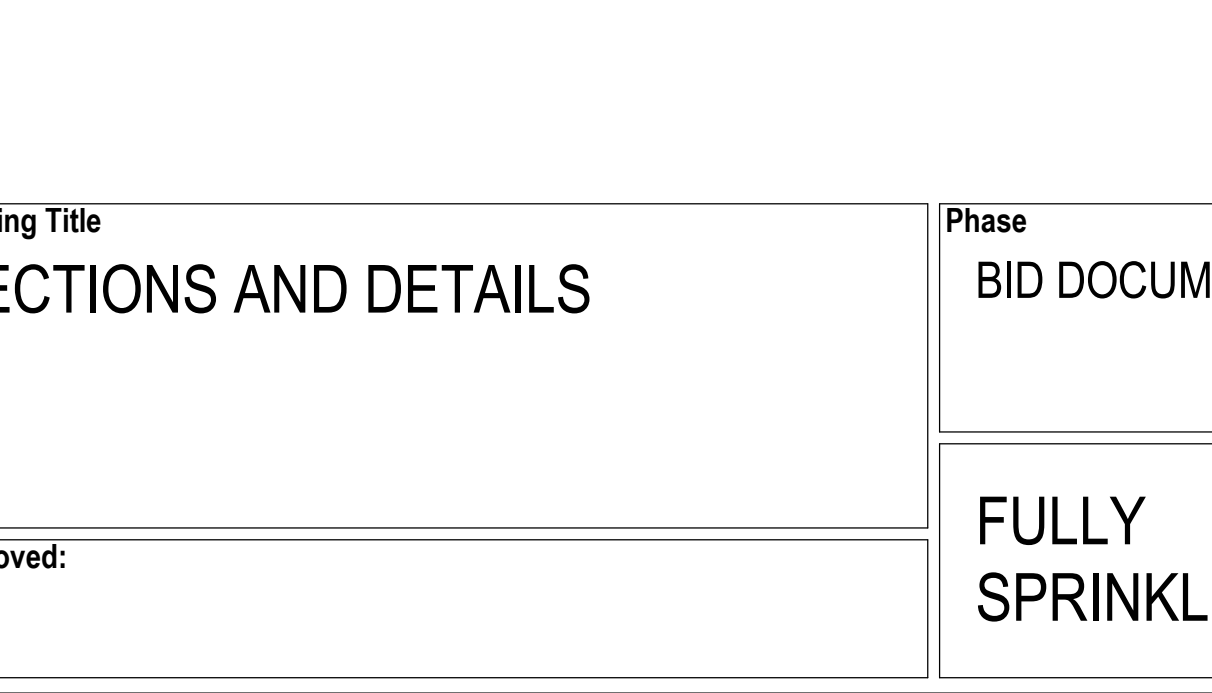
**6 TYPICAL SLAB EDGE**  
3/4" = 1'-0" (AST S5026)



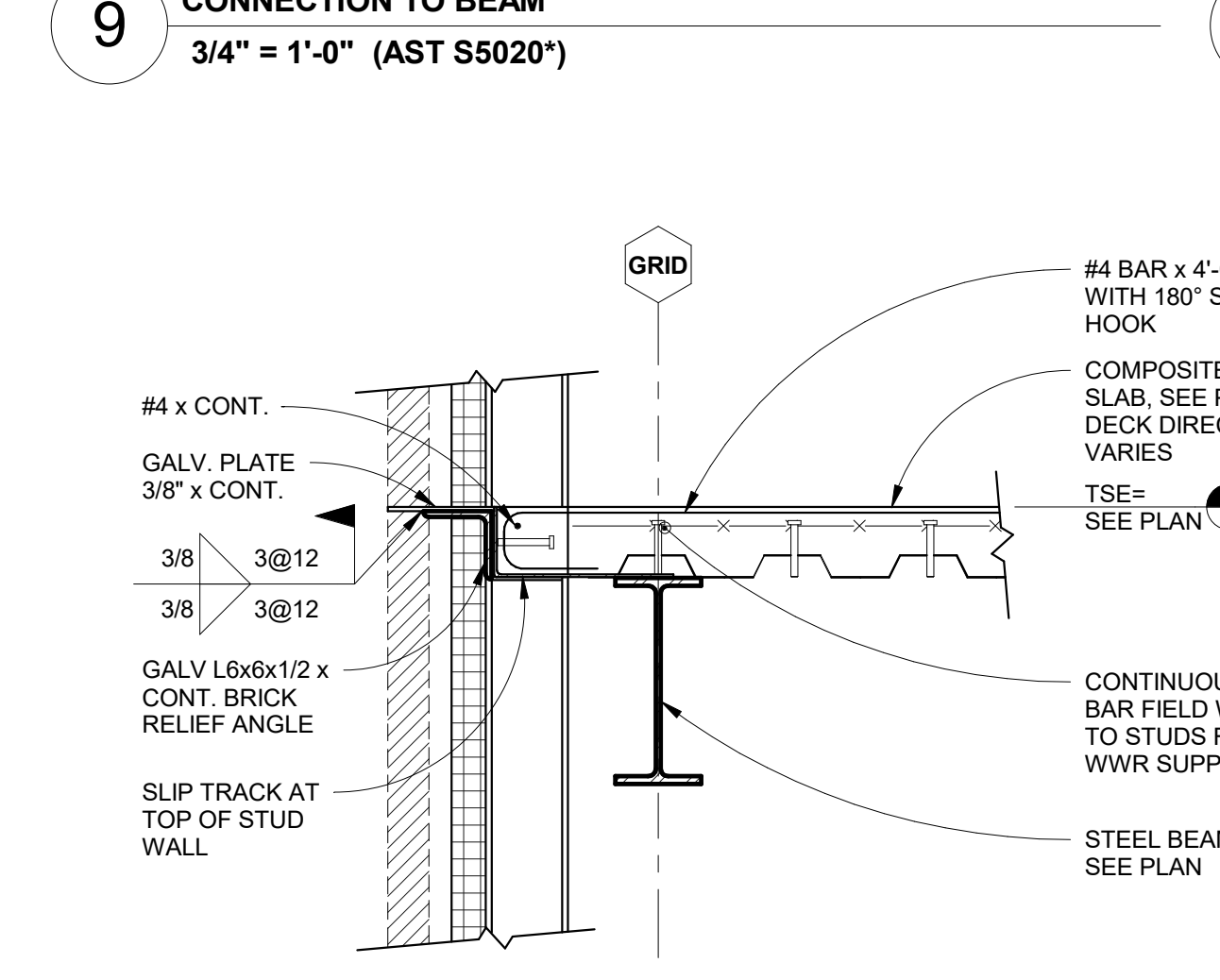
**7 TYPICAL SLAB EDGE**  
3/4" = 1'-0" (AST S5019)



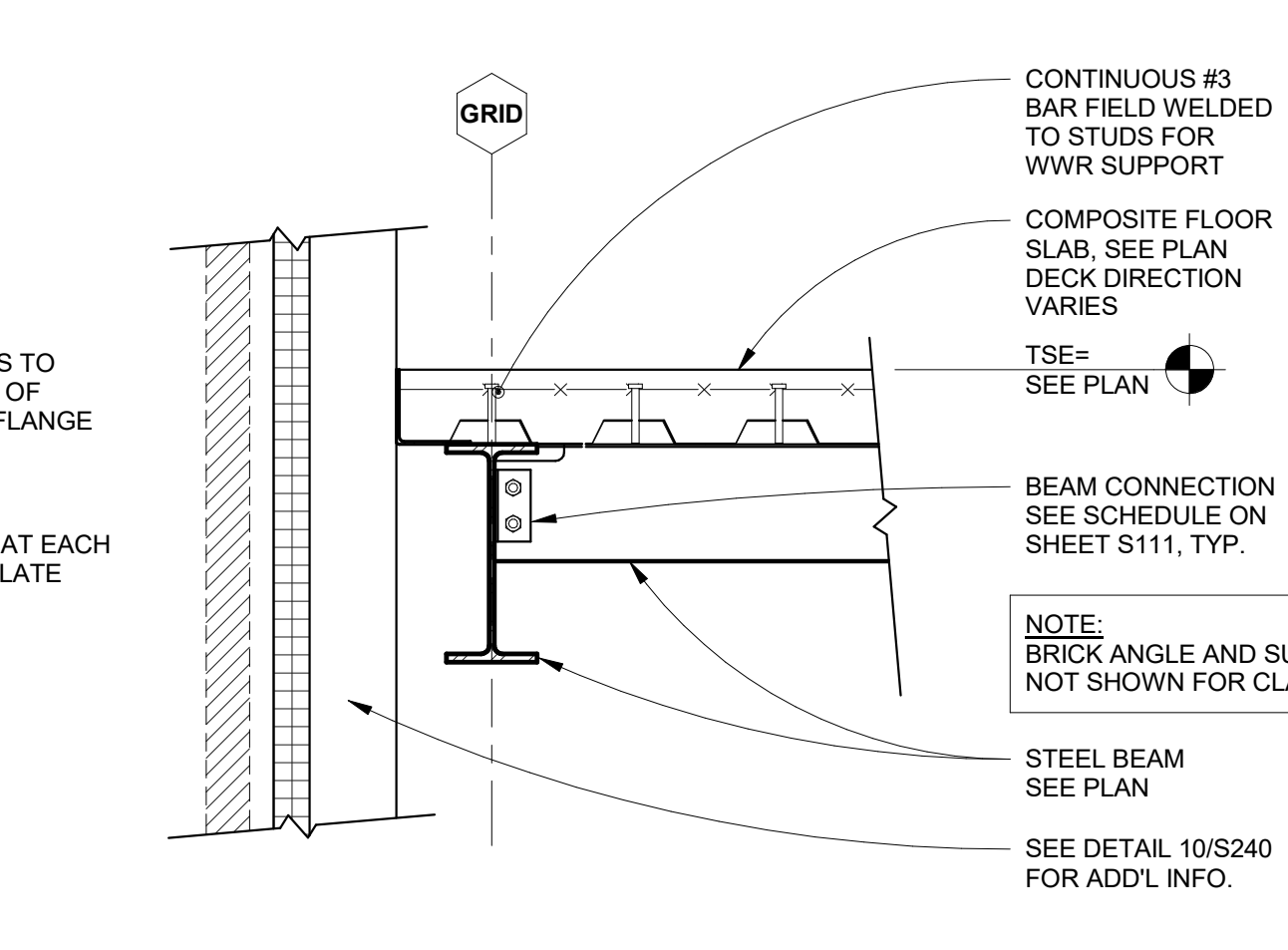
**8 TYPICAL CONSTRUCTION JOINT**  
3/4" = 1'-0" (AST S5018)



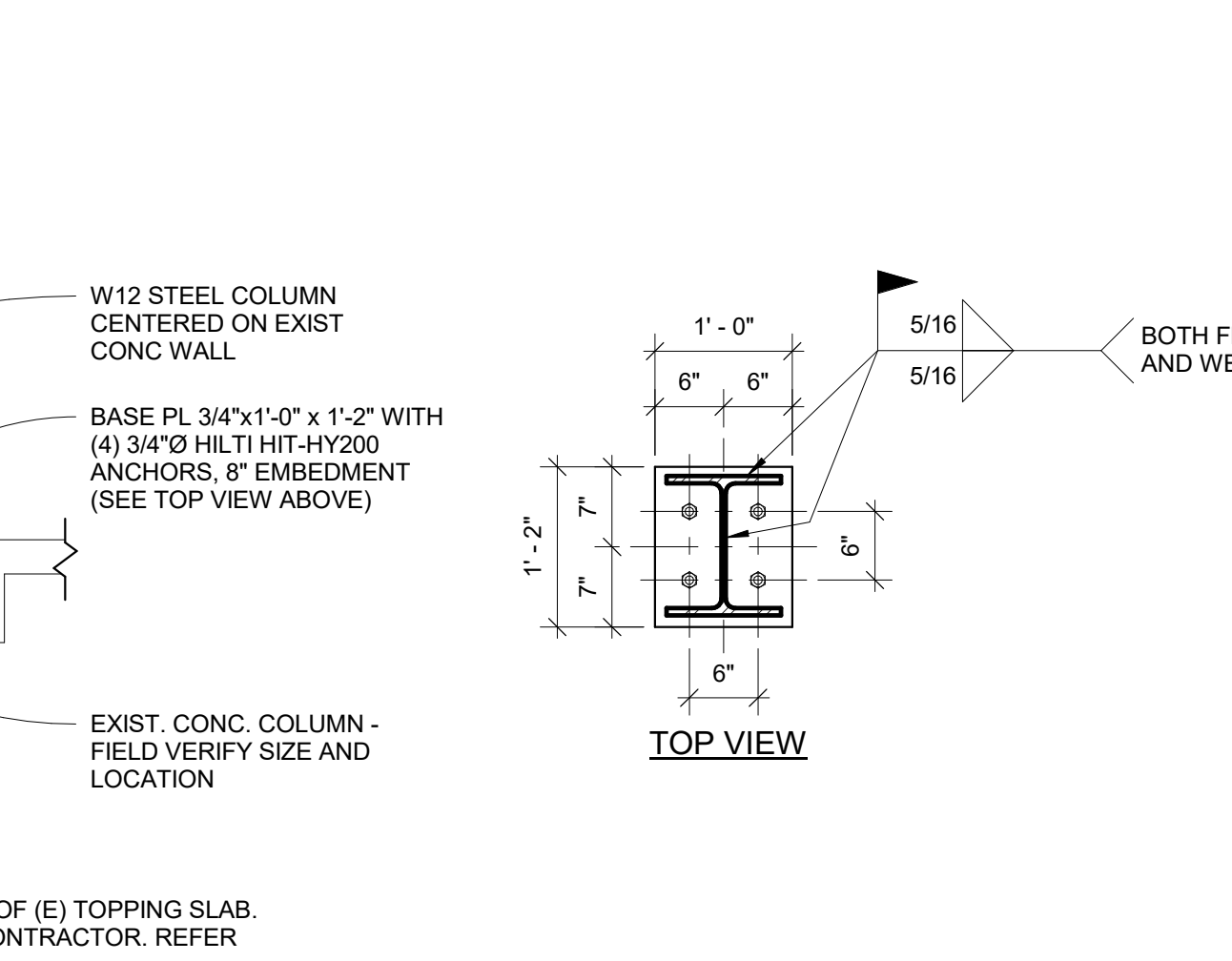
**9 CONNECTION TO BEAM**  
3/4" = 1'-0" (AST S5020\*)



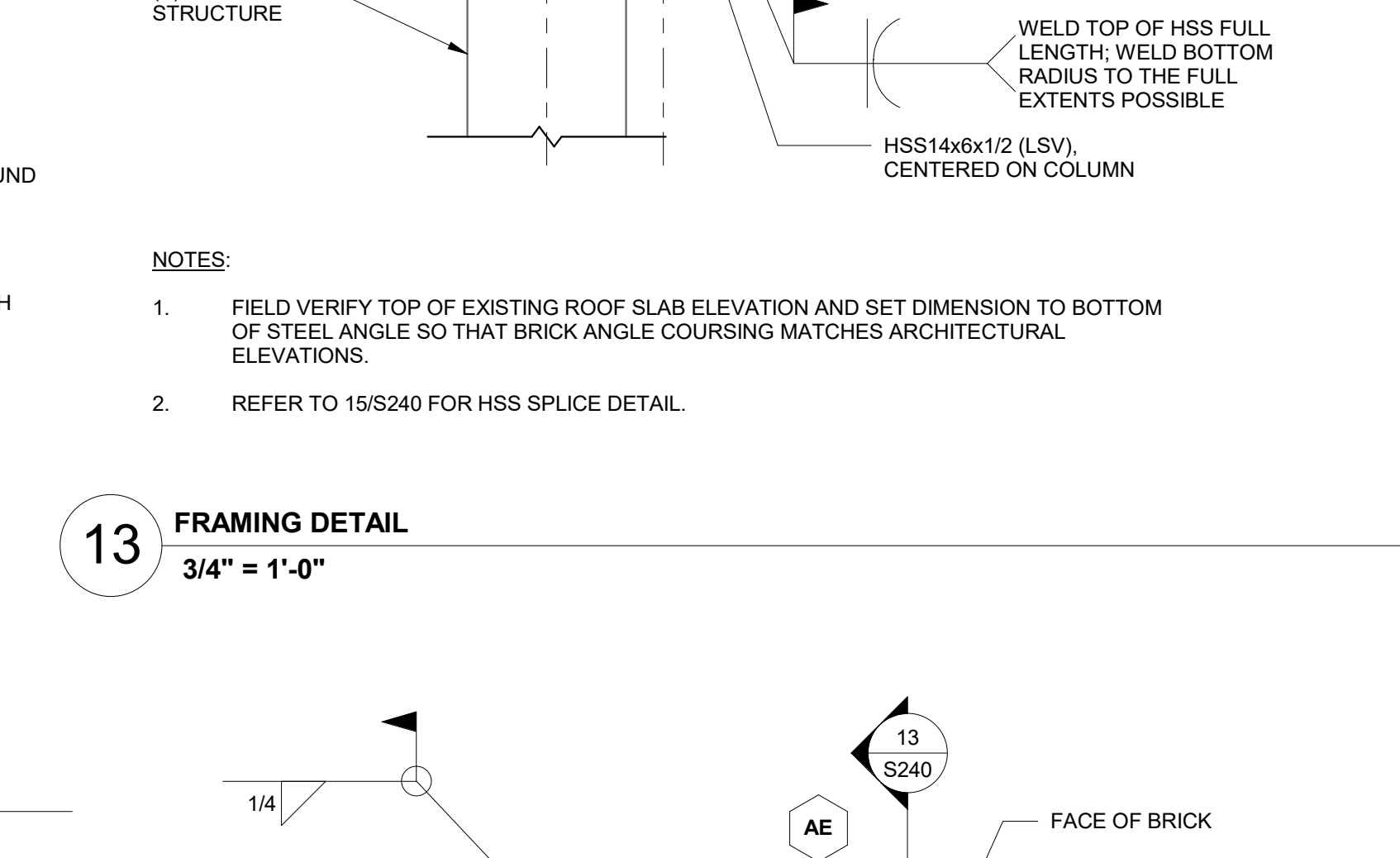
**10 DETAIL**  
3/4" = 1'-0" (AST S5020\*)



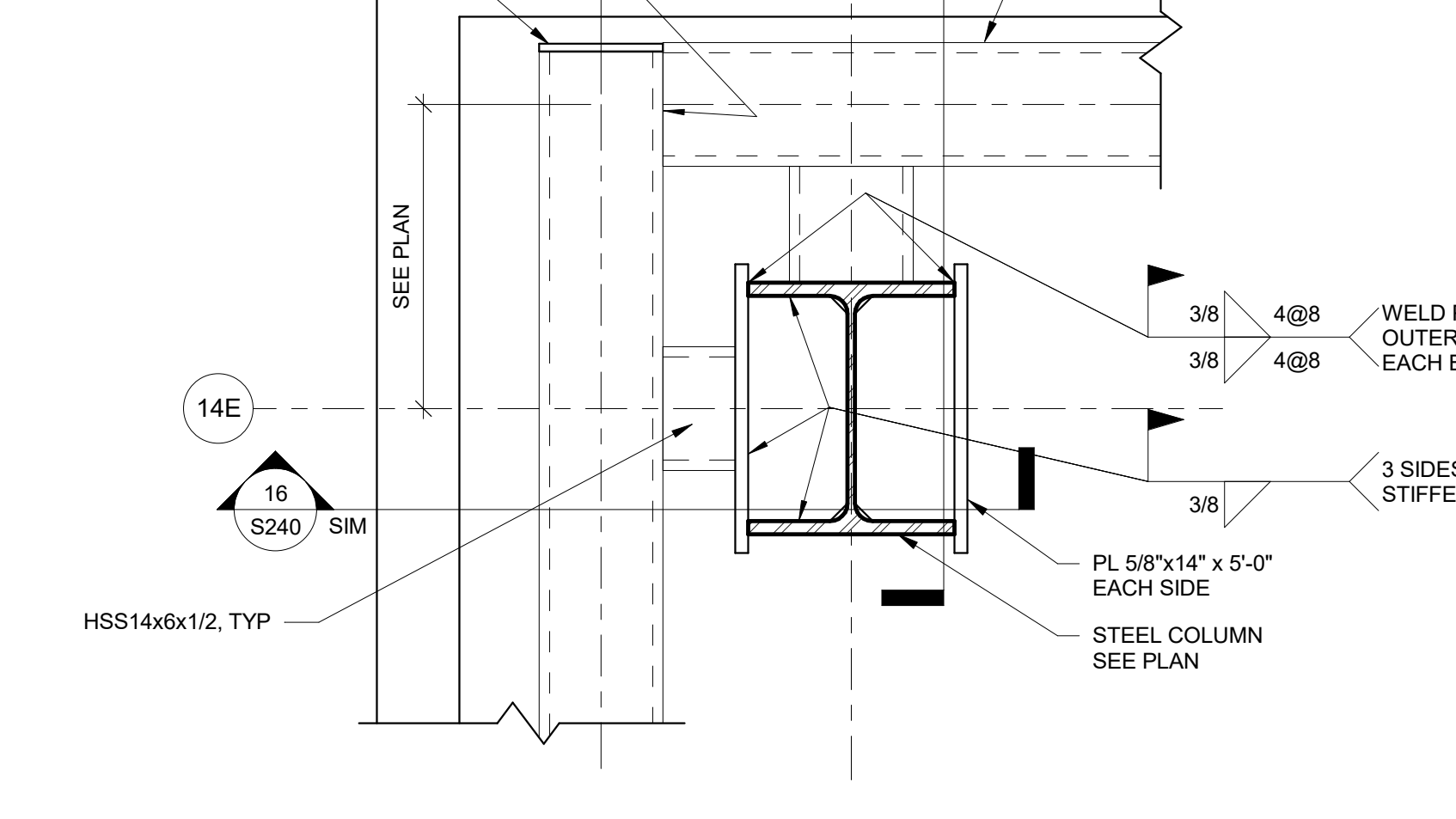
**11 CONNECTION TO BEAM**  
3/4" = 1'-0" (AST S5020\*)



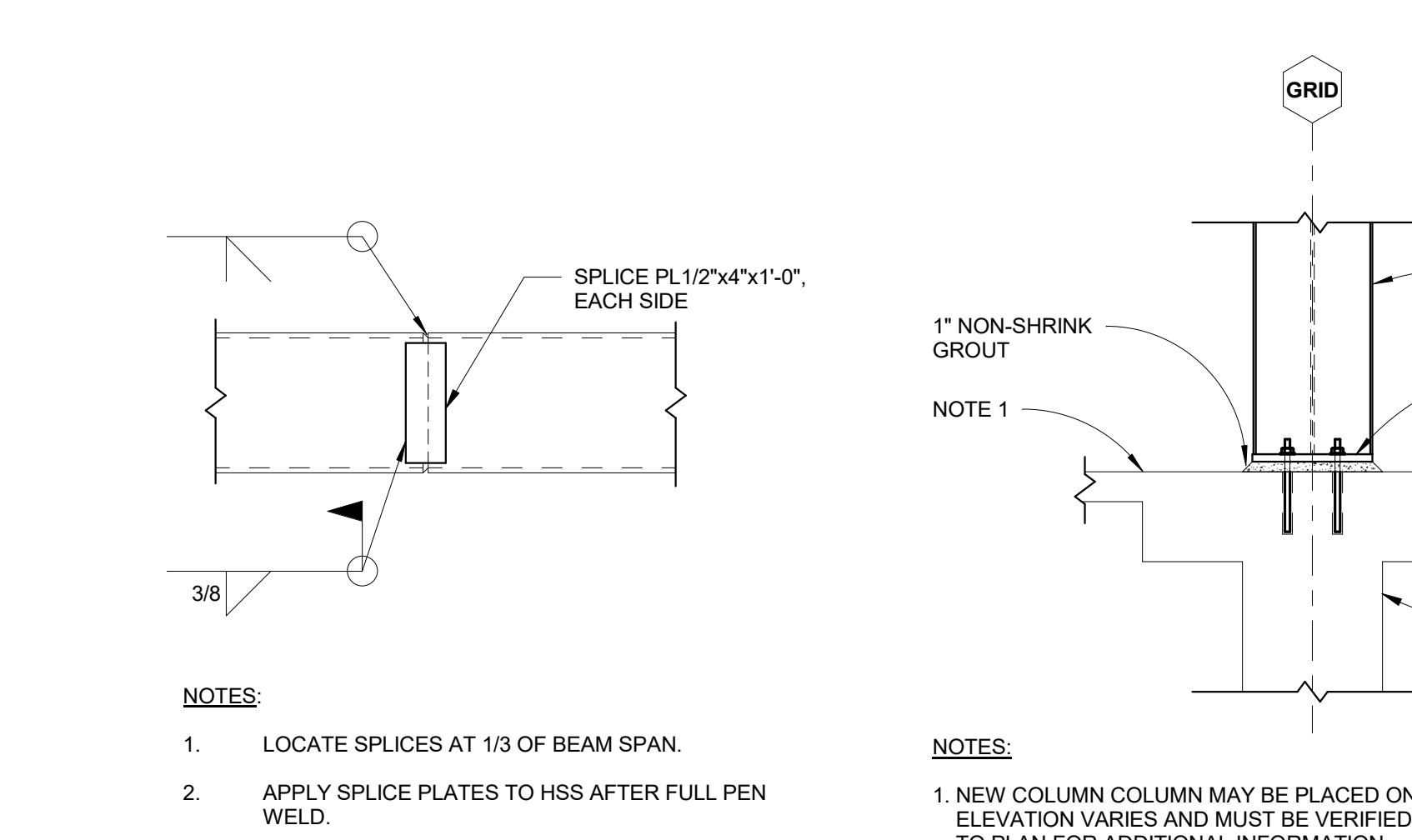
**13 FRAMING DETAIL**  
3/4" = 1'-0"



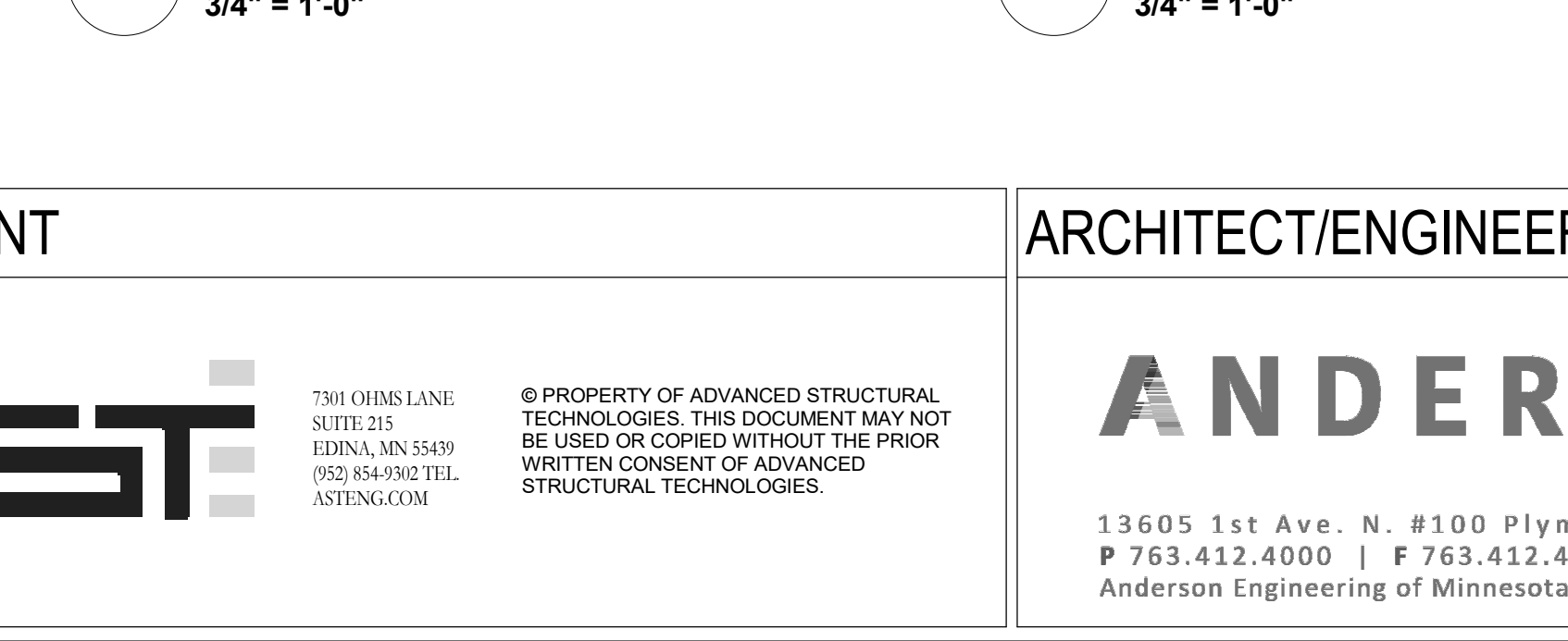
**14 CORNER BRICK SUPPORT DETAIL**  
1 1/2" = 1'-0"



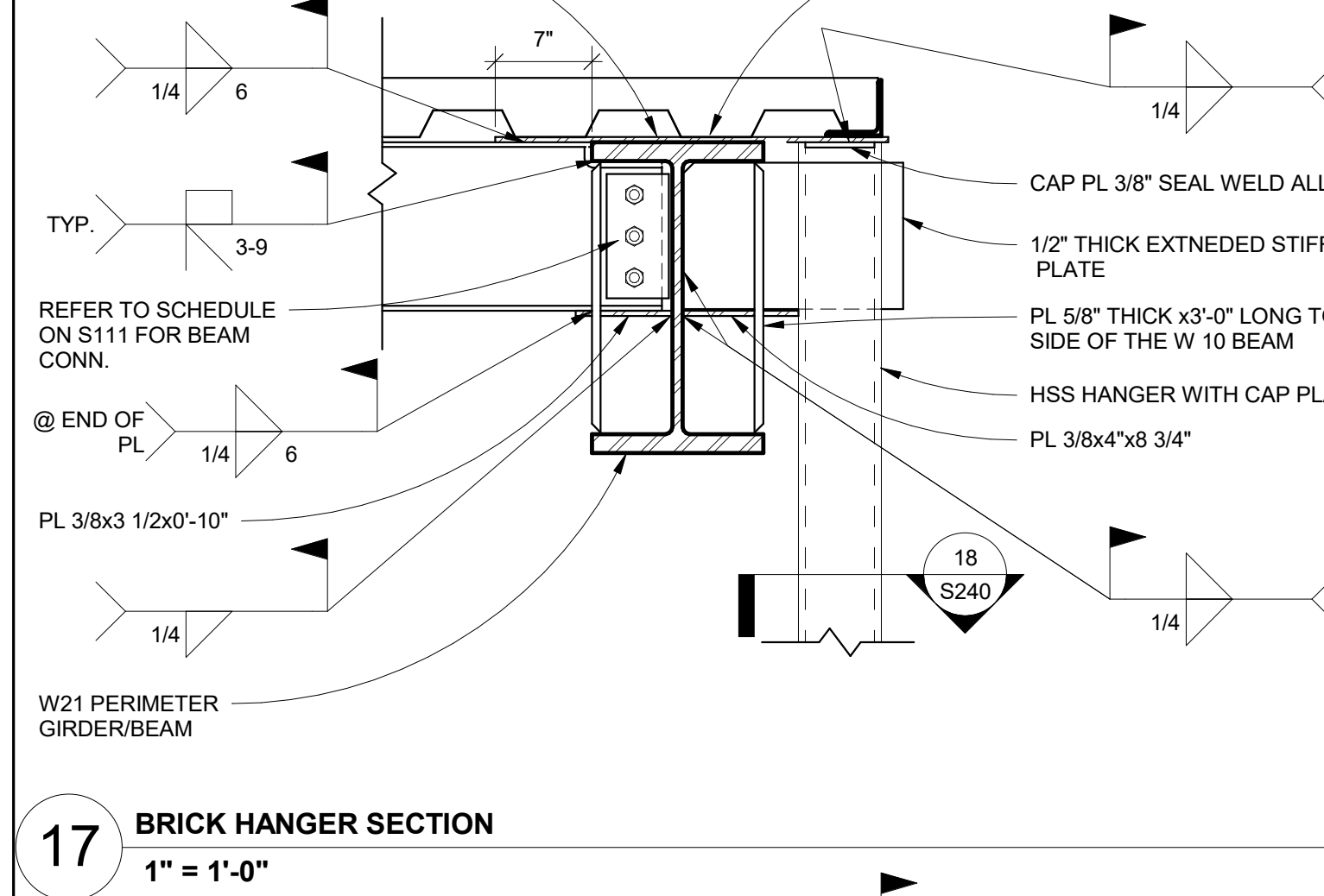
**15 HSS SPLICE DETAIL**  
3/4" = 1'-0"



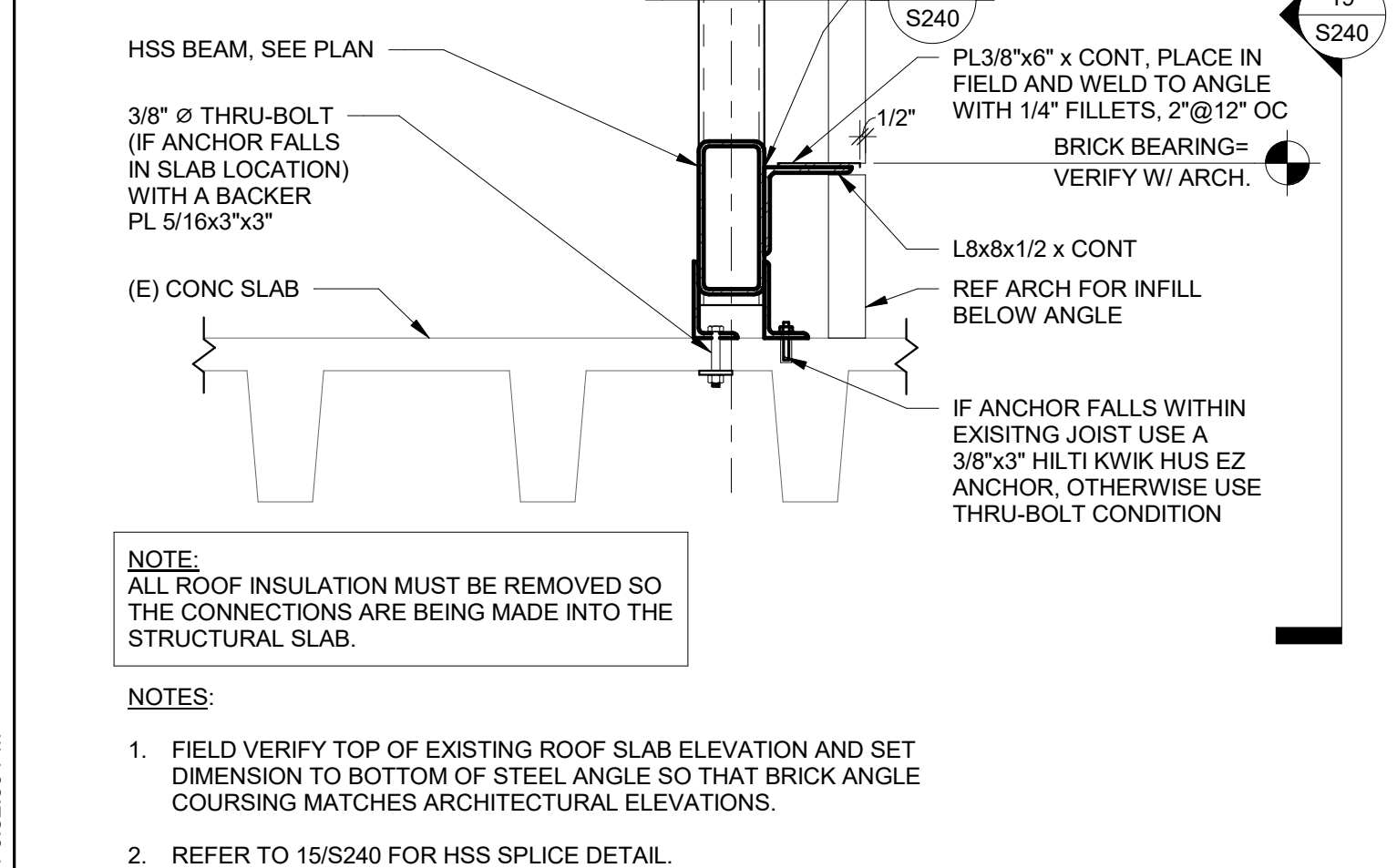
**12 COLUMN/EXIST CONCRETE CONNECTION DETAIL**  
3/4" = 1'-0"



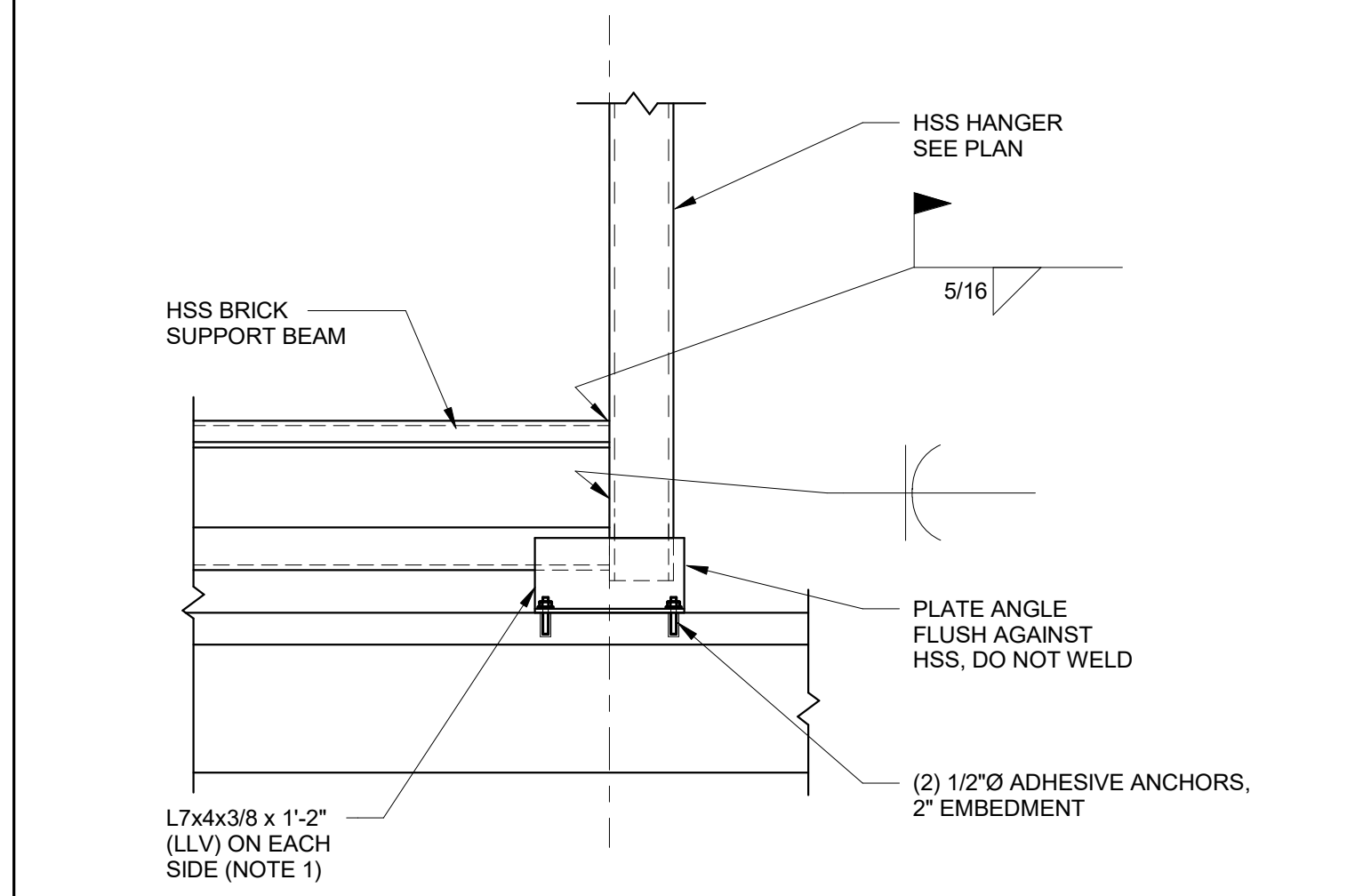
**16 FRAMING SECTION**  
3/4" = 1'-0"



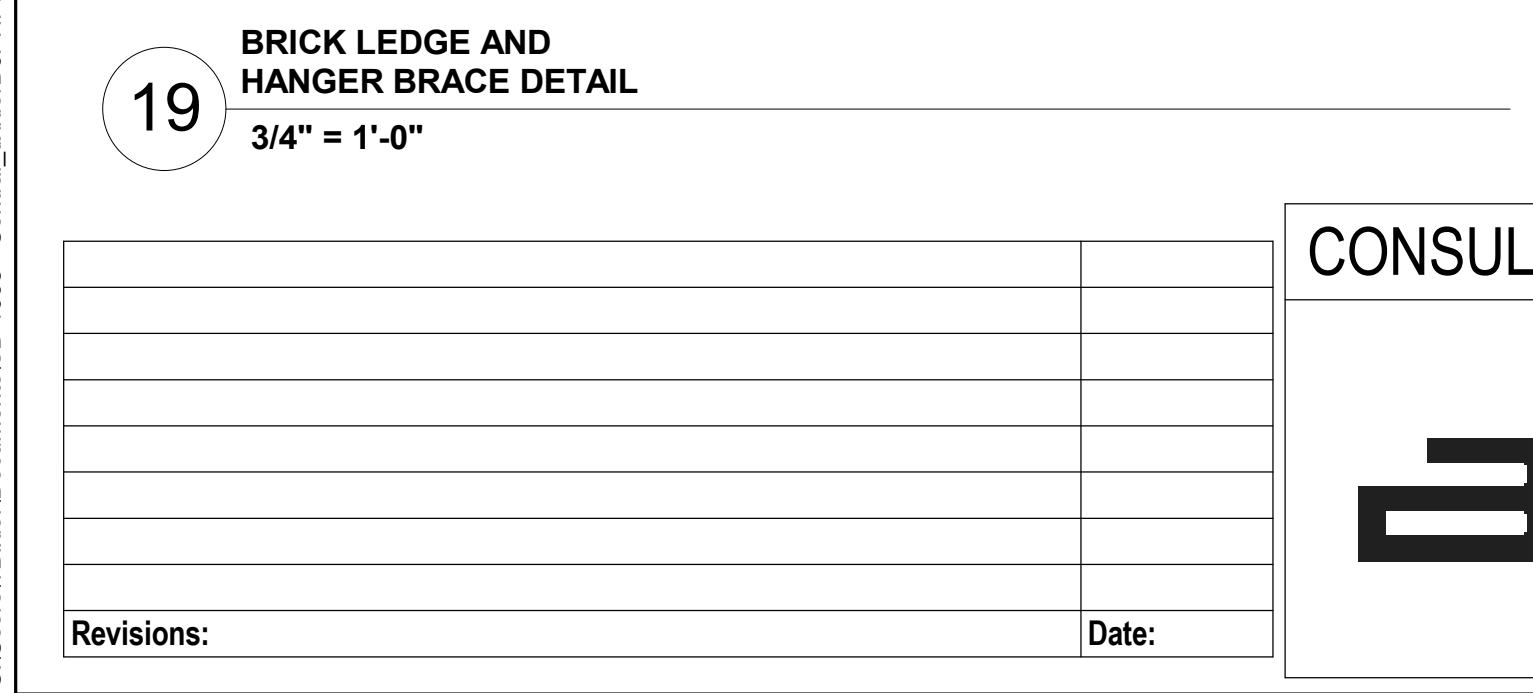
**17 BRICK HANGER SECTION**  
1" = 1'-0"



**18 BRICK HANGER SECTION**  
3/4" = 1'-0"



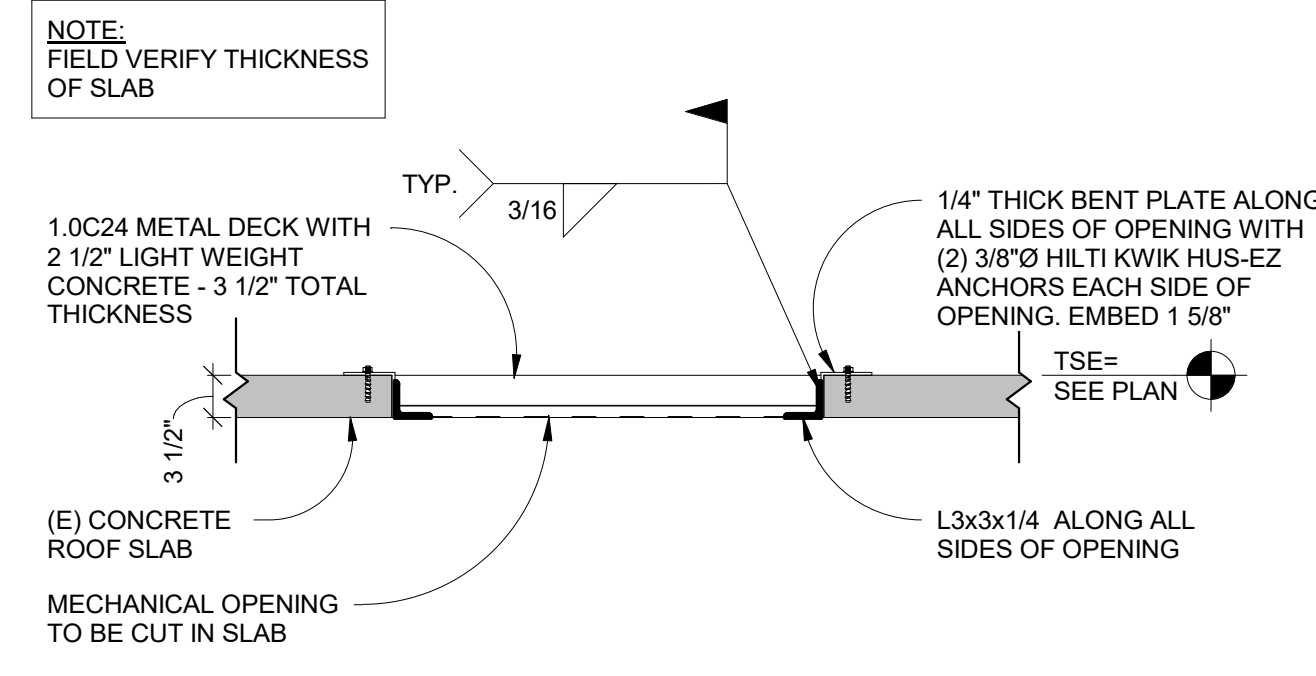
**19 BRICK LEDGE AND HANGER BRACE DETAIL**  
3/4" = 1'-0"



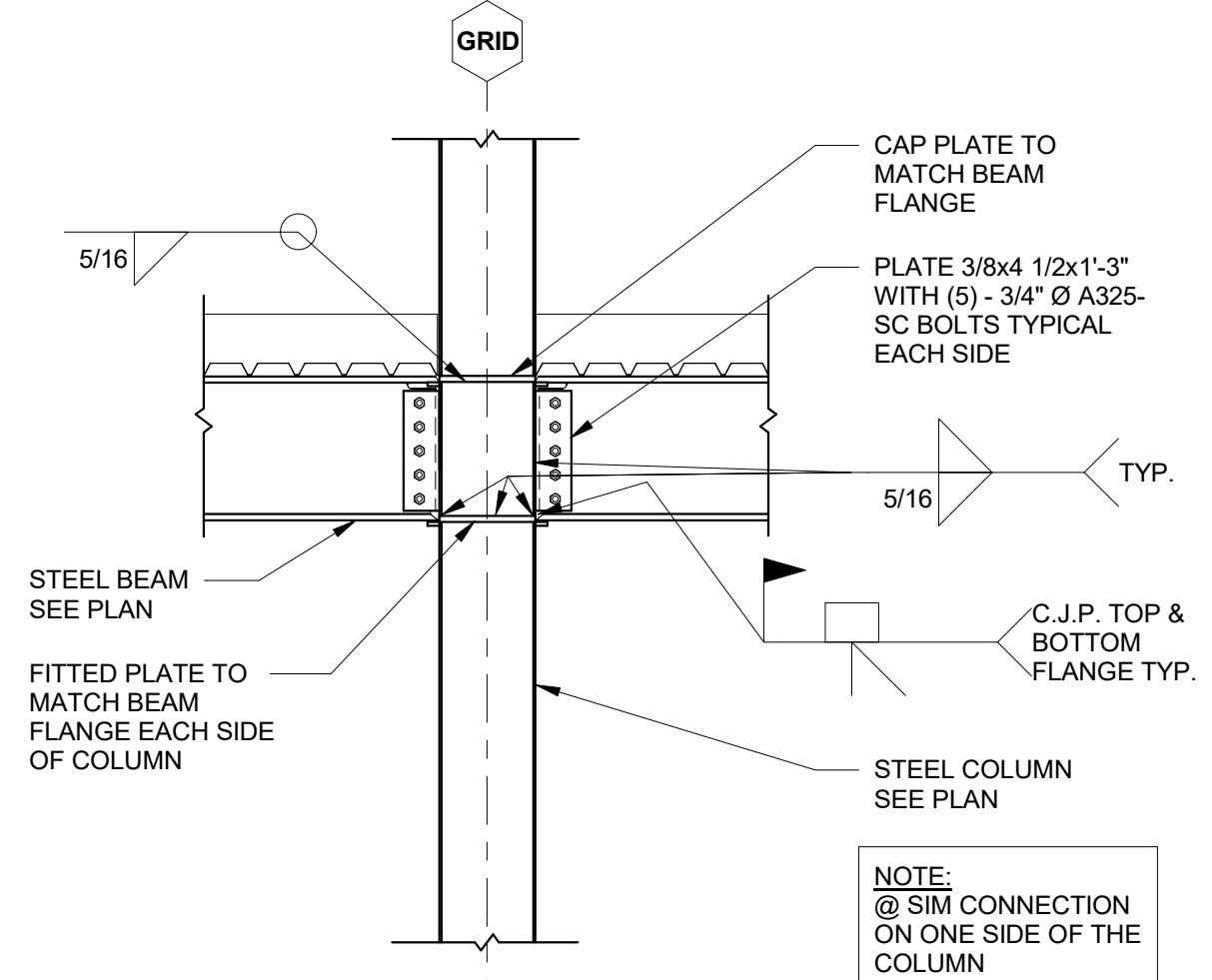
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				Approved:	<b>FULLY SPRINKLERED</b>	Location <b>SIOUX FALLS, SD</b>	Building Number
Revisions:	Date:	13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj #	U.S. Department of Veterans Affairs	Approved:	<b>FULLY SPRINKLERED</b>	Issue Date <b>07/06/2021</b>	Drawing Number <b>S240</b>

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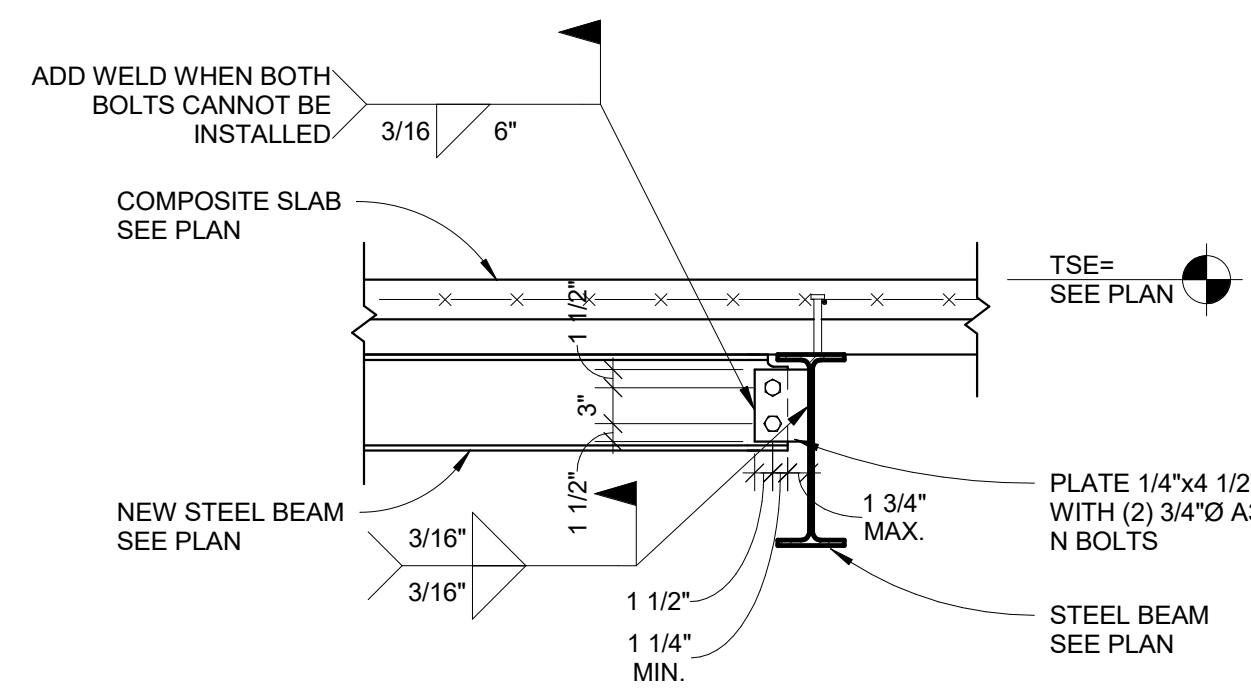
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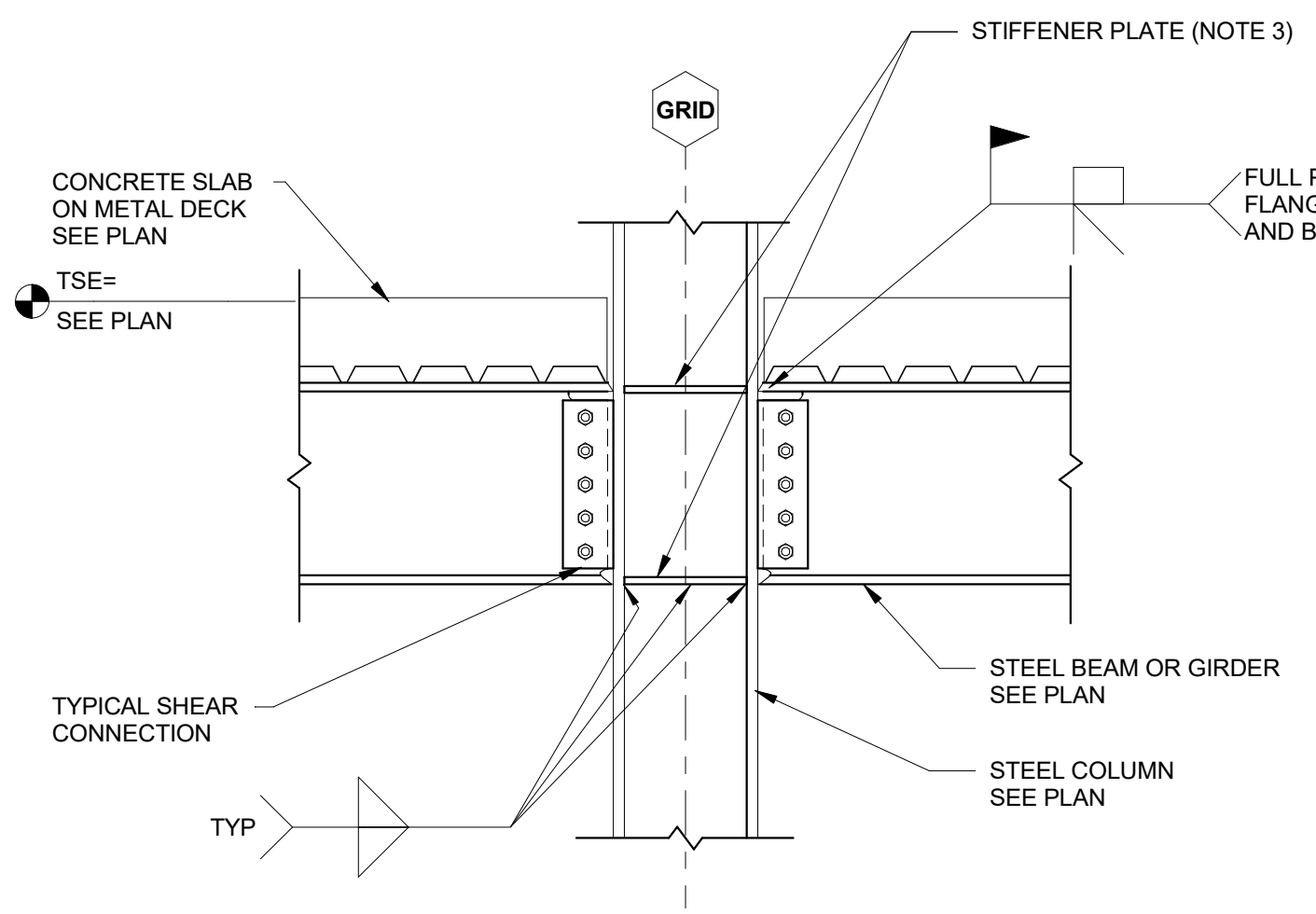
5 DETAIL - SLAB INFILL AT BUILDING 1 MECHANICAL TUNNEL  
3/4" = 1'-0"



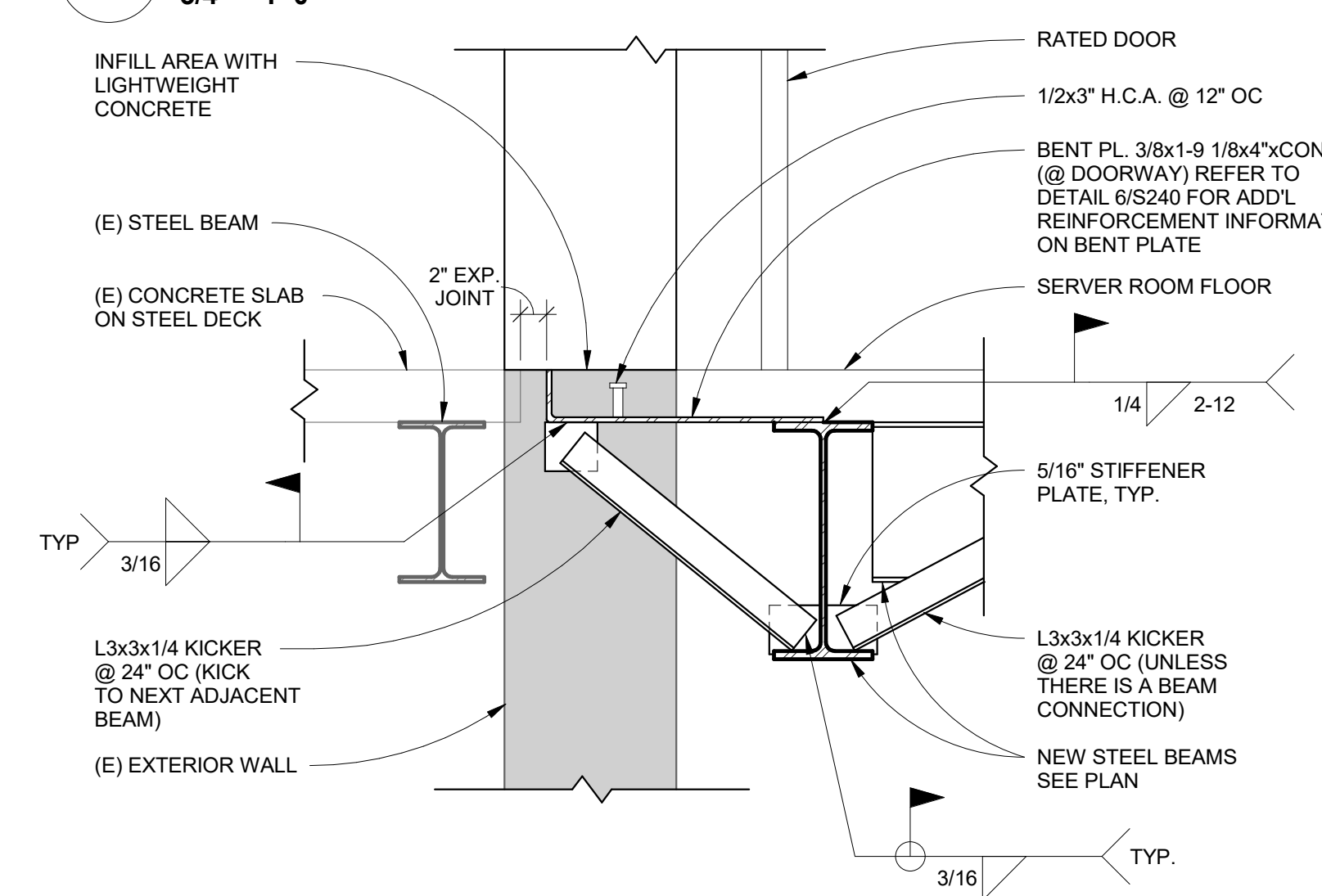
1 JOIST GIRDER TO COLUMN CONNECTION  
1/2" = 1'-0" (AST S5123)



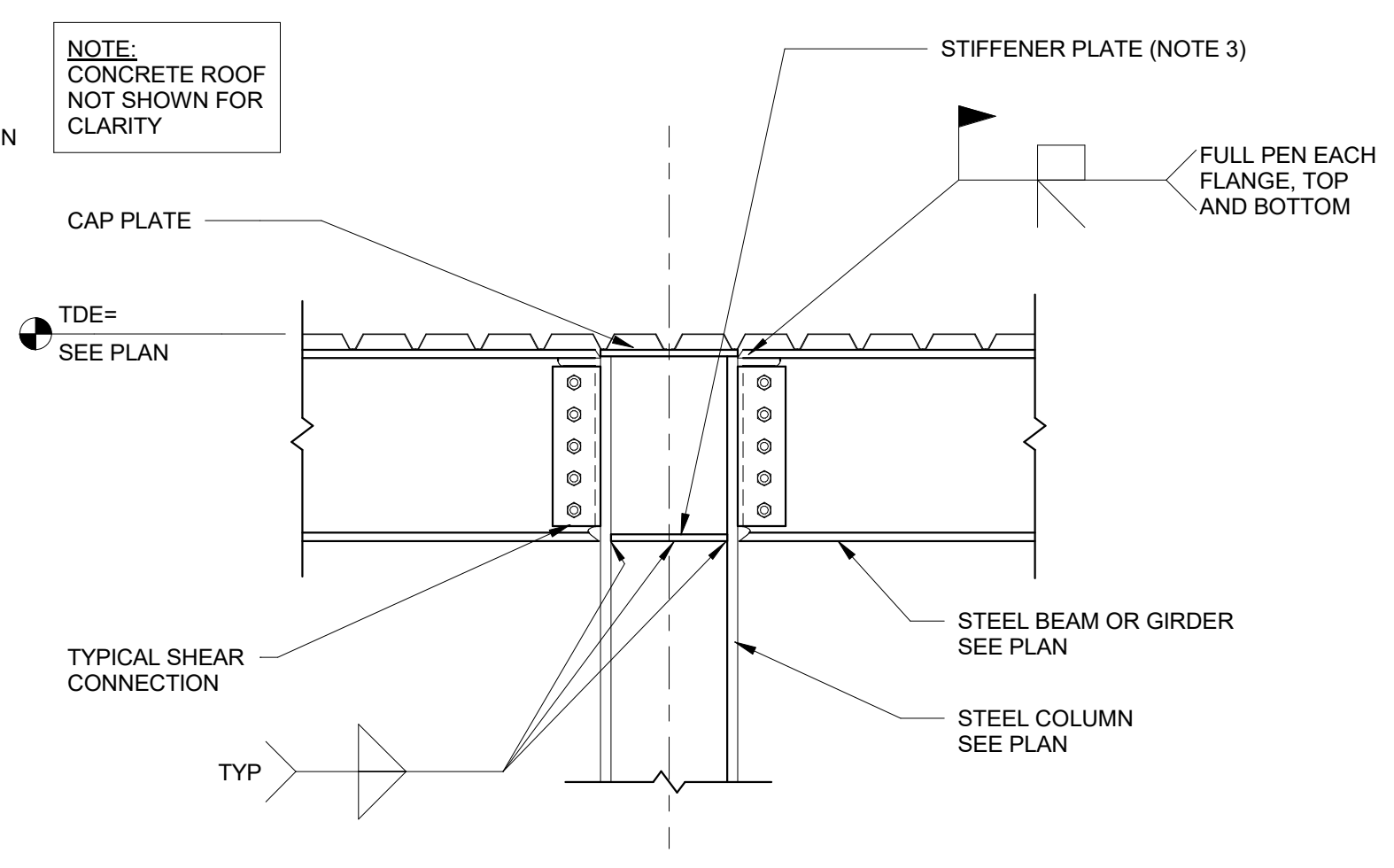
6 SECTION  
3/4" = 1'-0"



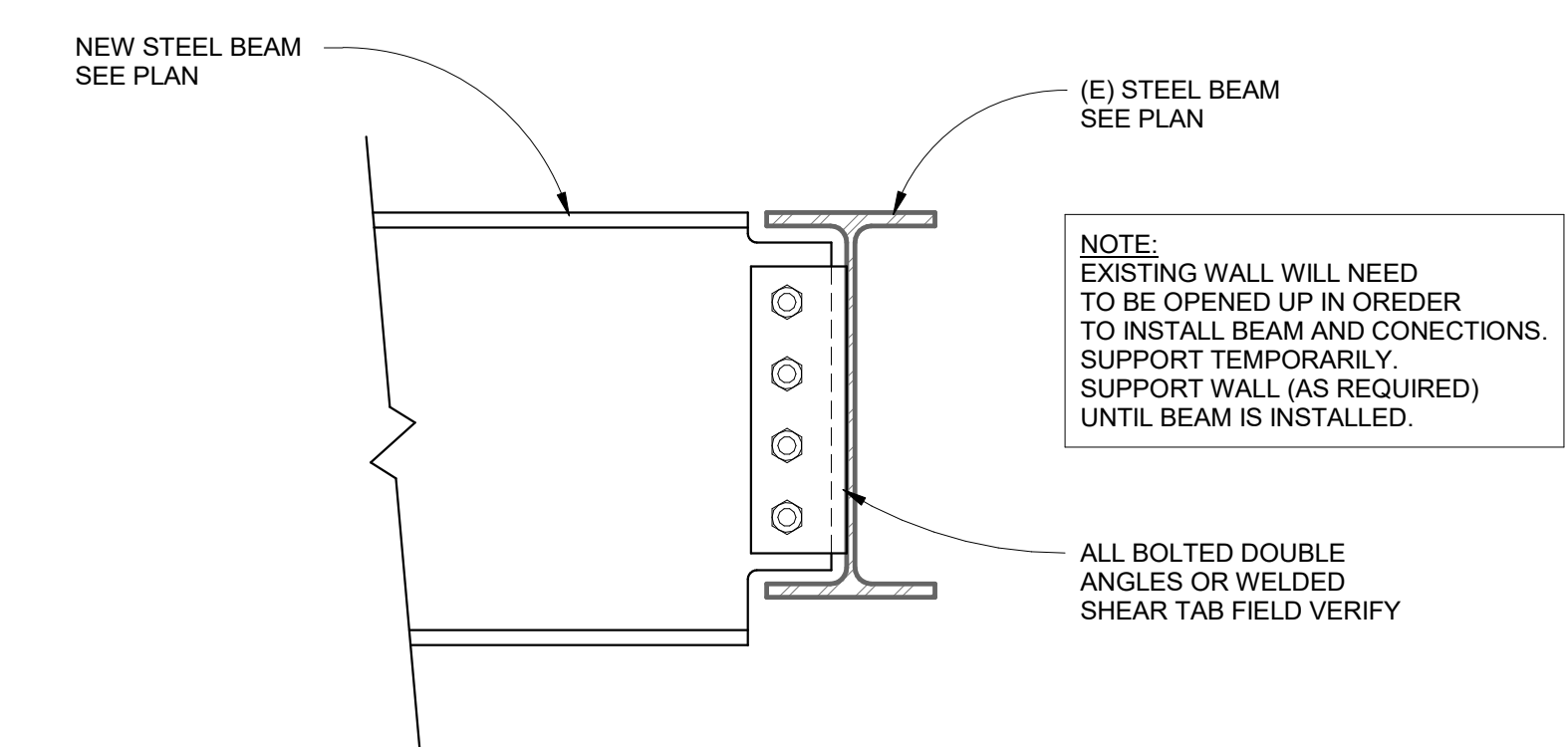
2 MOMENT CONNECTION AT SECOND LEVEL  
3/4" = 1'-0"



7 INFILL FOR NEW DOOR @ EXISTING SLAB AND NEW ADDITION  
1" = 1'-0"



3 MOMENT CONNECTION AT ROOF  
3/4" = 1'-0"



4 TYPICAL SLAB EDGE  
1 1/2" = 1'-0"

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Anderson Engineering of Minnesota, LLC | Proj #

**STAMP**

13222  
JOHN MATHEW  
LEVAR

**Office of Construction and Facilities Management**

U.S. Department of Veterans Affairs

**Drawing Title**  
SECTIONS AND DETAILS

Approved:

**Phase**  
BID DOCUMENTS

**FULLY SPRINKLERED**

**Project Title**  
VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

**Location**  
SIOUX FALLS, SD

**Issue Date**  
07/06/2021

**Checked**  
Checker

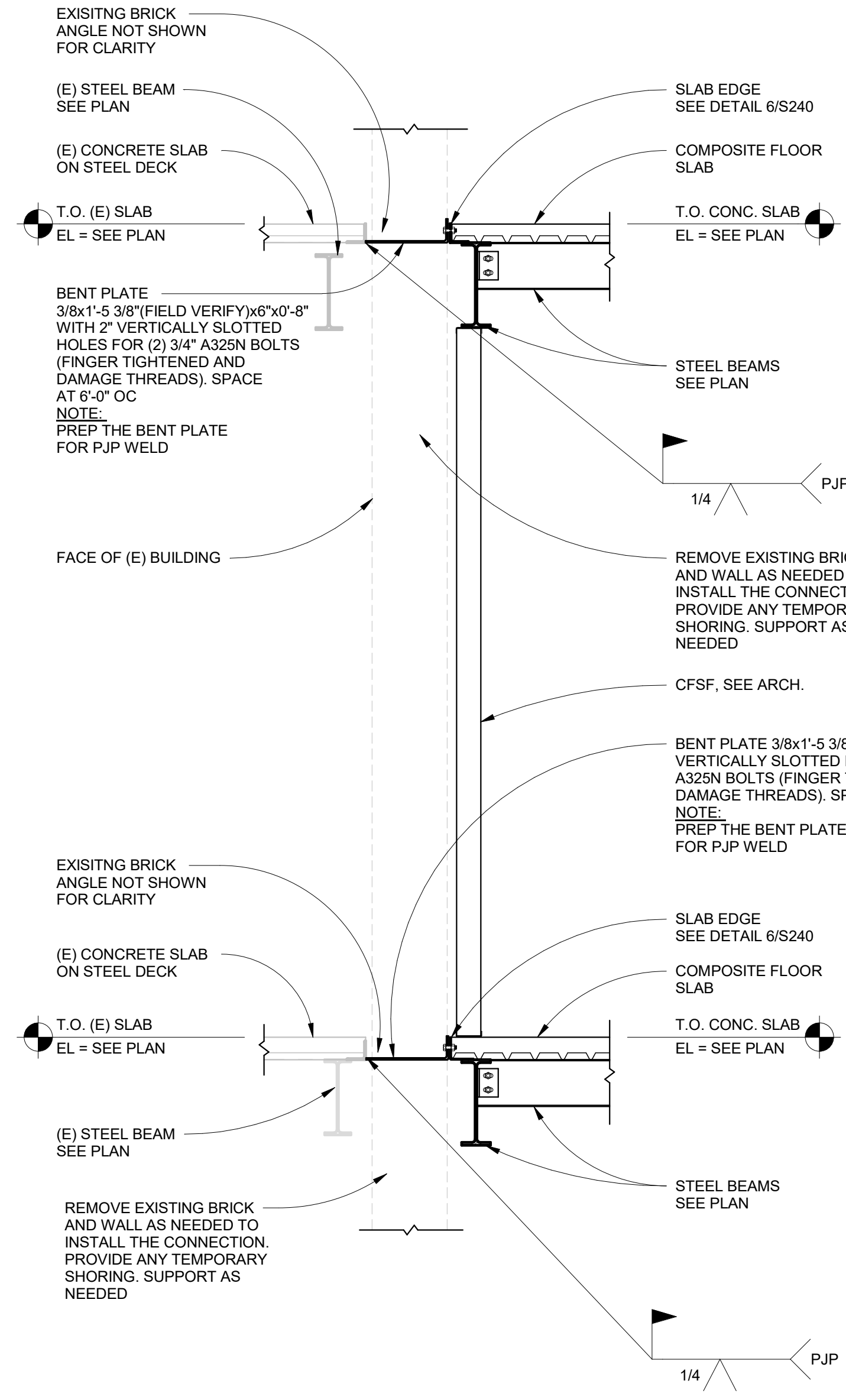
**Drawn**  
Author

**Project Number**  
SD 1008

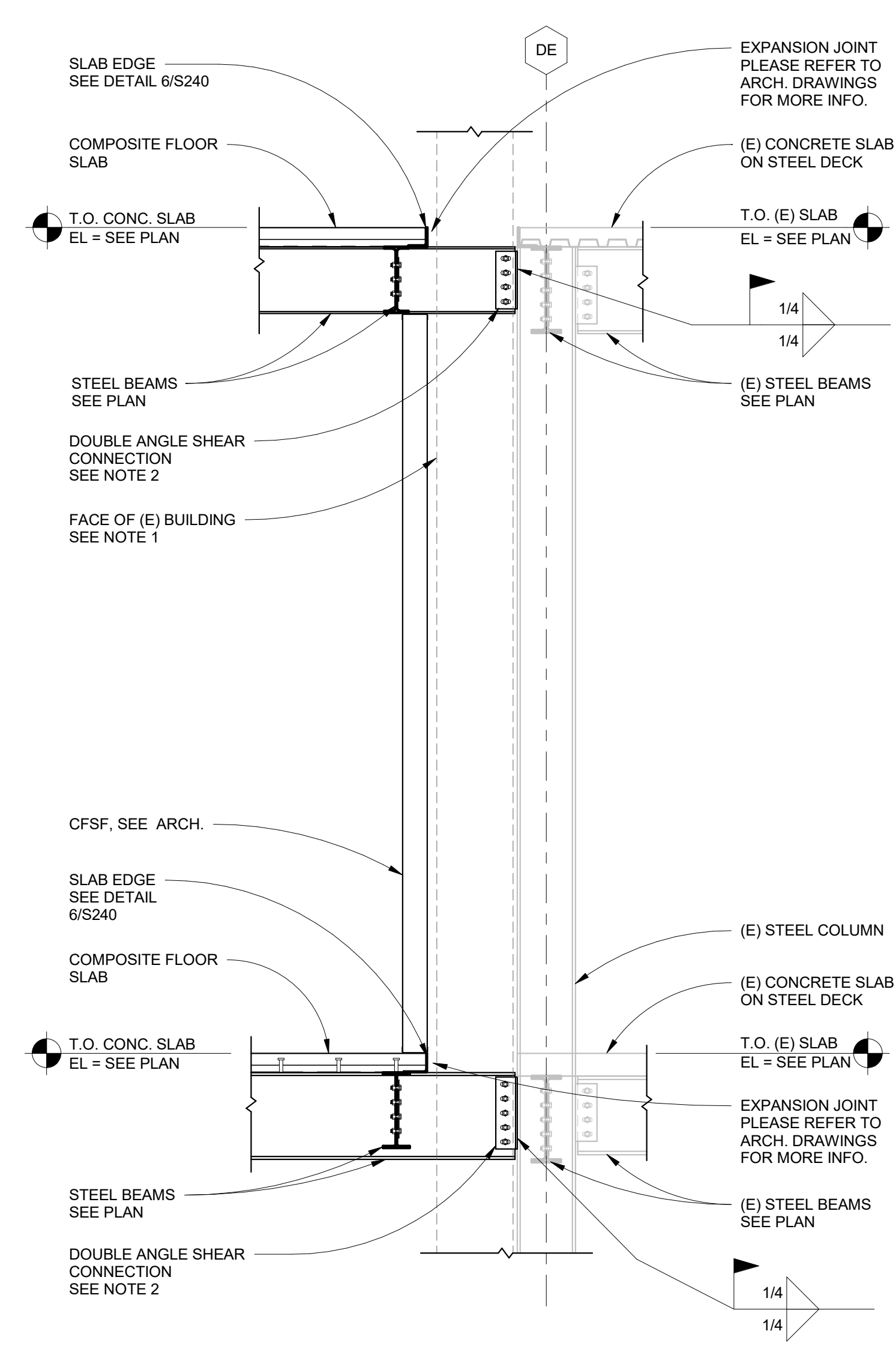
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S241

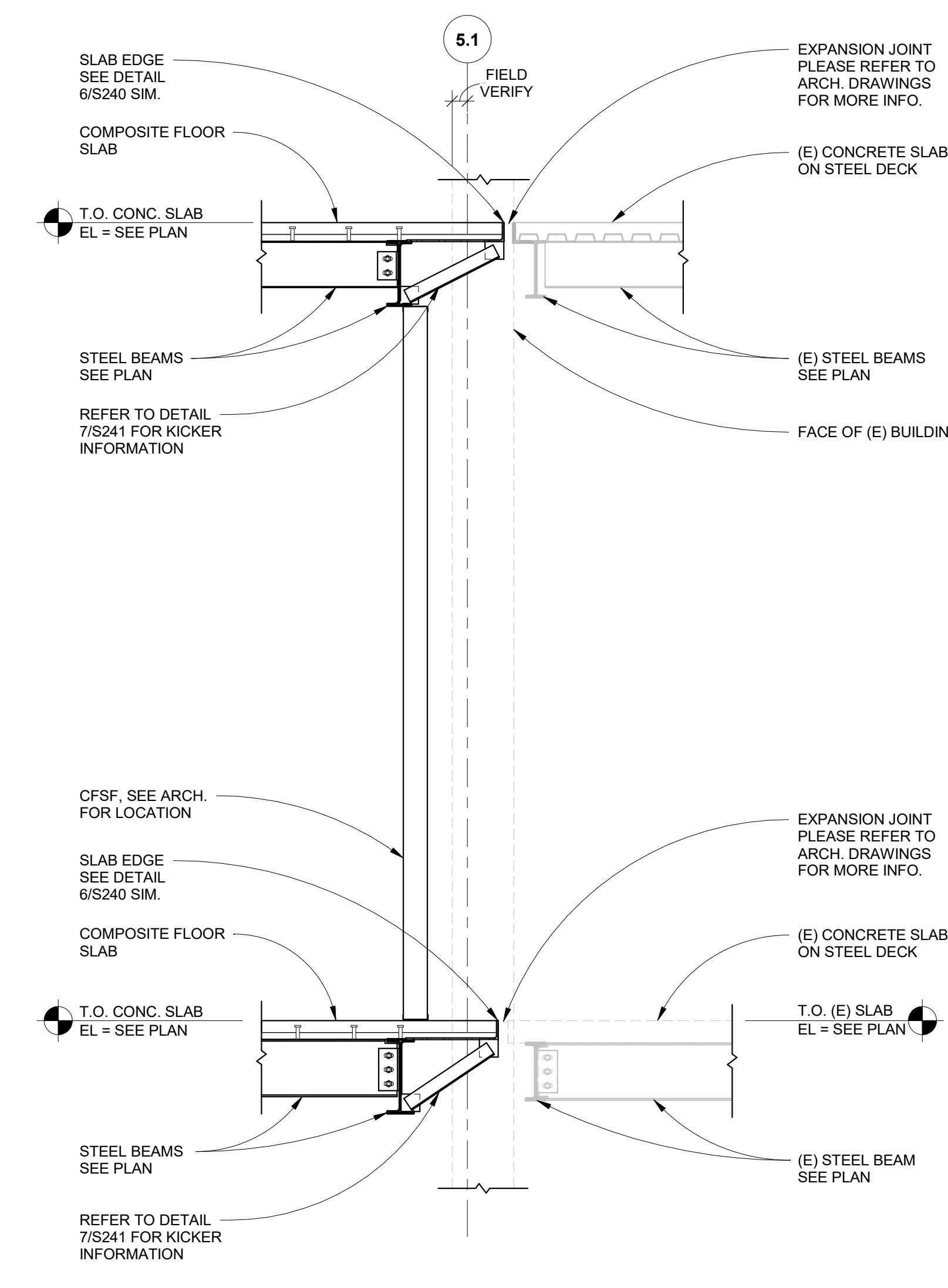
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B  
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3 NEW TO EXSITING SECTION  
1/2" = 1'-0"



2 NEW TO EXSITING SECTION  
1/2" = 1'-0"



1 NEW TO EXSITING SECTION  
1/2" = 1'-0"

- NOTES:**
1. REMOVE EXISTING BUILDING FINISHES AS REQUIRED TO ATTACH NEW STRUCTURE TO EXISTING COLUMN.
  2. REFER TO SCHEDULE ON SHEET S111 FOR TYPICAL STEEL SHEAR CONNECTION AND ANGLE SIZE.

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Revisions:	Date:

**CONSULTANT**

750 OJMS LANE  
SUITE 205  
EDINA, MN 55439  
(952) 854-9302 TEL.  
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**STAMP**

7/8/2021

**Office of Construction and Facilities Management**

**VA** U.S. Department of Veterans Affairs

Drawing Title  
**WALL SECTIONS**

Approved:

Phase  
BID DOCUMENTS

FULLY SPRINKLERED

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
SIOUX FALLS, SD

Issue Date  
07/06/2021

Checked  
KS

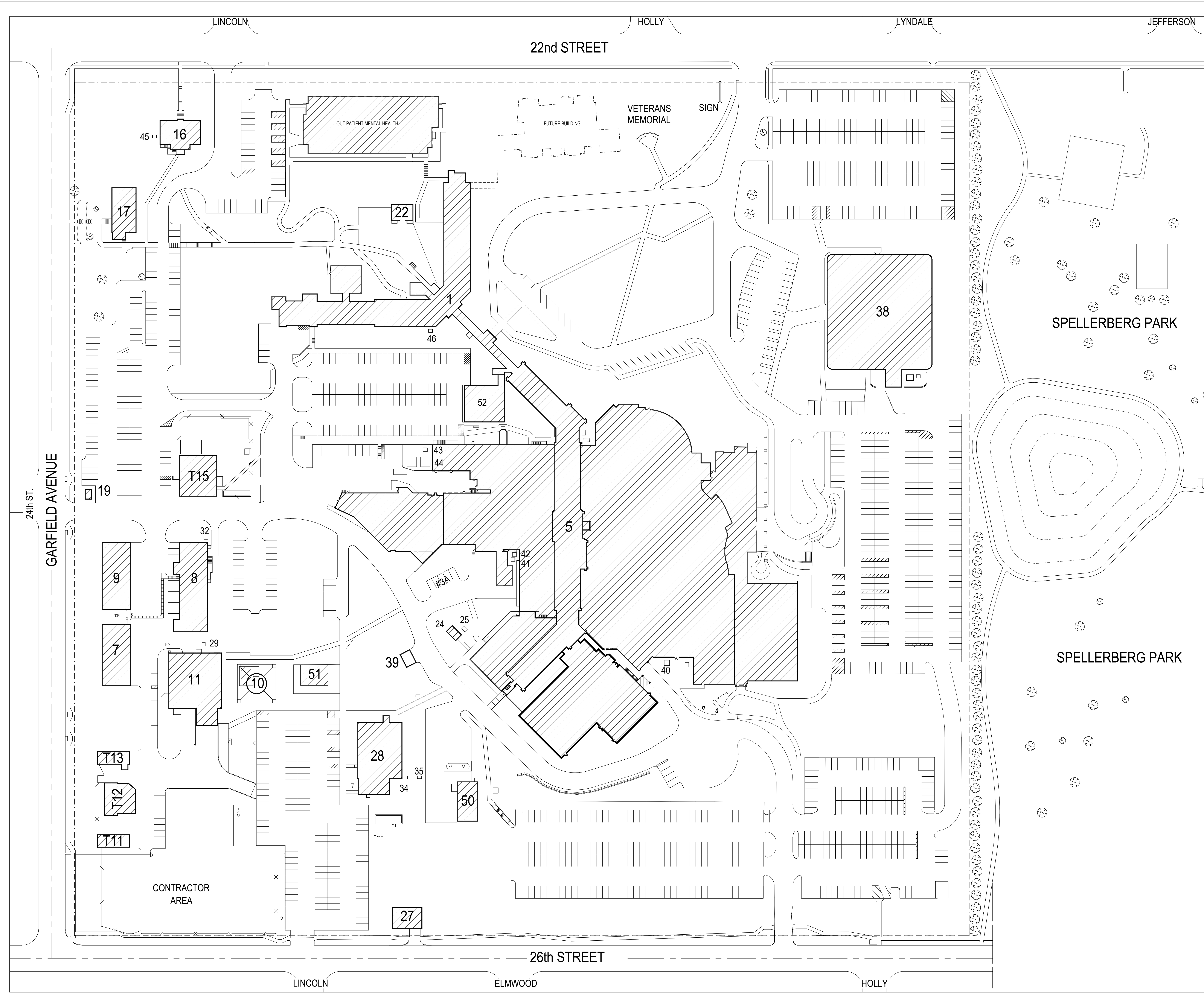
Drawn  
TB

Project Number  
SD 1008

Building Number

Drawing Number  
**S250**

- SITE / STAGING PLAN GENERAL NOTES:**
1. FENCE TO BE CHAIN LINK. GATES MUST BE LOCKED AT ALL TIMES OTHER THAN ENTRY/EXIT. REQUEST PADLOCKS FROM COR.
  2. MAINTAIN 1.5' SEPARATION FROM FENCE TO SIDEWALKS.
  3. PROVIDE SEDIMENT TRACKING DRIVE-OFF AT ALL VEHICLE ACCESSES. ANY TRACKED SEDIMENT MUST BE SWEEPED UP WITHIN 24 HOURS.
  4. PROVIDE INLET PROTECTION AT THE CATCH BASINS WITHIN THE STAGING AREA. MAINTAIN THROUGH THE LIFE OF THE PROJECT.
  5. KEEP ANY STORM SEWER MANHOLE WITHIN THE STAGING AREA ACCESSIBLE.
  6. STORAGE OF COMBUSTIBLE MATERIALS WITHIN 50 FEET OF ANY BUILDING IS NOT PERMITTED.
  7. CLEAR AND GRUB TREE AS NOTED. REPLACE WITH 2" BALLED AND BURLAPPED AMERICAN LINDEN, WARRANTY NEW, TREE FOR 1 YEAR.
  8. ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" MINIMUM SCREENED TOPSOIL AND STABILIZED WITH SALT RESISTANT SOD. WATER AND MAINTAIN SOD UNTIL IT IS ESTABLISHED/FULLY ROOTED. PROVIDE A MINIMUM OF 3 MOWINGS.
  9. CONTRACTOR MAY PARK ONE (1) SEMI TRAILER IN AREA MARKED ON SITE PLAN, AND APPROVED BY THE COR. FOR STORAGE OF EQUIPMENT AND MATERIALS. ALL OTHER STORAGE AND PARKING MUST BE WITHIN FENCED AREA SHOWN FOR CURRENT AREAS OF CONSTRUCTION. RELOCATION OF THE SEMI-TRAILER WITH THIS PARKING AREA MAY BE REQUIRED DURING CONSTRUCTION.



**1 SITE PLAN**  
1" = 60' 0"

Revisions:	Date:


**CONSULTANT**




**SPECIALIZED ENGINEERING SOLUTIONS**

10360 Ellison Circle  
Omaha, NE 68134  
Phone: 402.991.5520  
www.specializedeng.com

**ARCHITECT/ENGINEER OF RECORD**



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Office of Construction and Facilities Management  
**VA** U.S. Department of Veterans Affairs

Drawing Title  
**ARCHITECTURAL SITE & STAGING PLAN**  
Approved:

Phase  
**BID DOCUMENTS**  
**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
Checker

Drawn  
GJB

Project Number  
438-20-910

Building Number  
0

Drawing Number  
**AS100**

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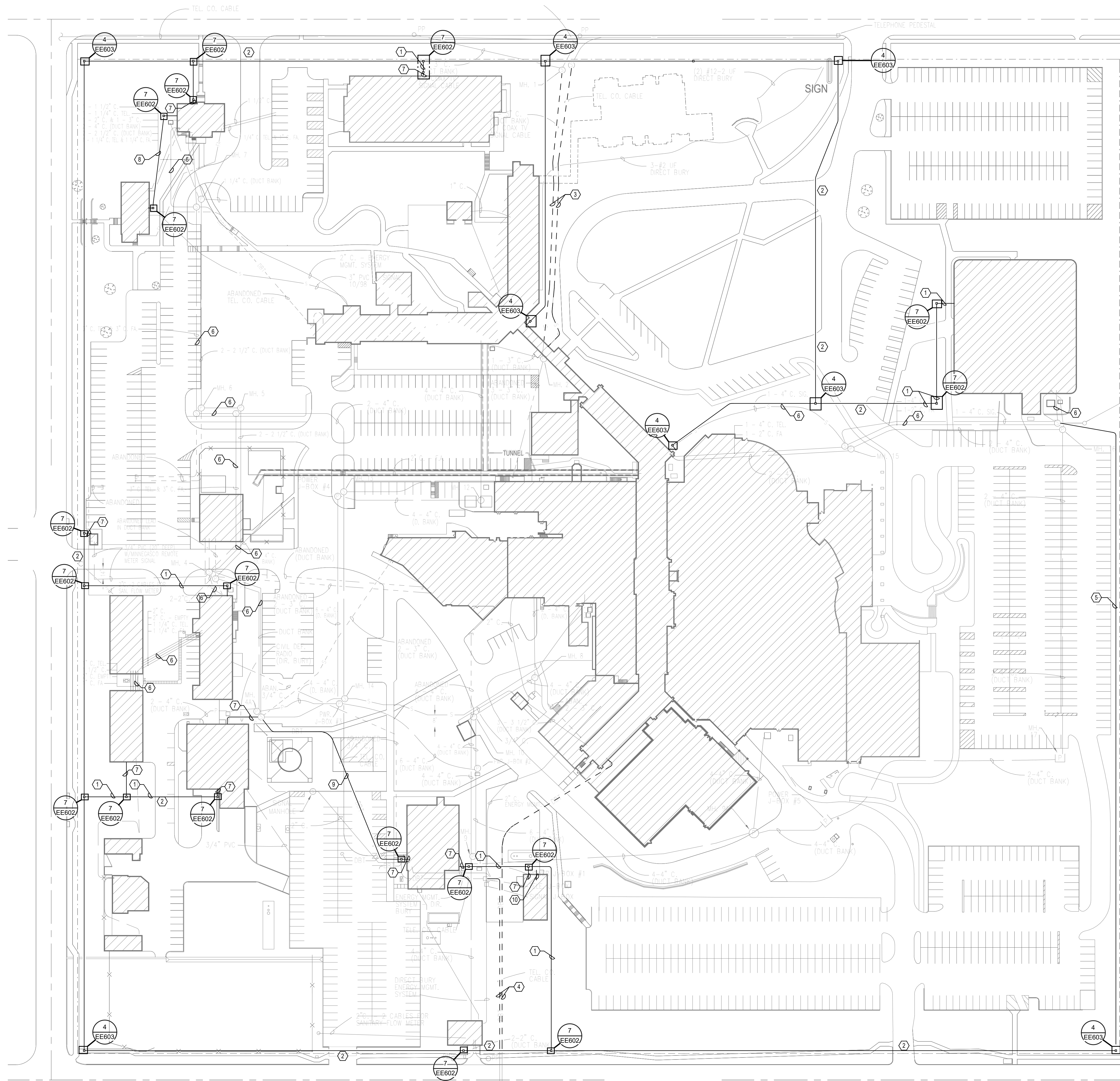
B

C

D

E

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**GENERAL NOTES:**

- A. ALL NEW TELECOMMUNICATIONS DUCT BANKS TO BE 8-WAY DUCT BANKS UNLESS OTHERWISE NOTED ON PLANS. REFER TO DETAIL 6 ON SHEET EE602 FOR DUCT BANK SECTION DETAILS.
- B. COORDINATE CENTURYLINK/INLUMEN REQUIREMENTS WITH TRELOR JANSSEN (805.254.5127).
- C. COORDINATE MDCO REQUIREMENTS WITH BRIAN KNOBIE (800.888.1300).
- D. COORDINATE SDN REQUIREMENTS WITH LAWRENCE ESCOBIN (605.310.7288).

**SHEET NOTES:**

- 1. PROVIDE 4-WAY TELECOMMUNICATIONS DUCT BANK.
- 2. CUT ROADWAY OR PARKING LOT AS REQUIRED TO ACCOMMODATE NEW TELECOMMUNICATIONS DUCT BANK. REPAIR PAVEMENT TO MATCH EXISTING ROADWAY OR PARKING LOT PAVEMENT. ROADWAY MUST REMAIN OPEN FOR VEHICULAR TRAFFIC DURING BUSINESS HOURS.
- 3. DEMOLISH UNUSED EXISTING DUCT BANK.
- 4. DEMOLISH DIRECT BURIED TELEPHONE CABLING. COORDINATE DEMOLITION OF CABLING WITH INSTALLATION OF NEW CENTURYLINK/INLUMEN CABLING AND STERILE PROCESSING SERVICES PROJECT.
- 5. PROVIDE TEMPORARY AERIAL TELECOMMUNICATIONS CABLE FOR CENTURYLINK/INLUMEN TEMPORARY FEED FROM EXISTING TELECOMMUNICATIONS UTILITY BOX TO EXISTING DUCT BANK. COORDINATE REQUIREMENTS WITH CENTURYLINK/INLUMEN PRIOR TO BEGINNING CONSTRUCTION.
- 6. ROUTE 8 SDUC FIBER OPTIC BACKBONE (24 STRAND OSS) TO EACH BUILDING THROUGH EXISTING DUCT BANK.
- 7. PROVIDE (1) 4\"/>

1 SITE PLAN - ELECTRICAL  
1" = 60'

11/24/2021 1:41:18 PM  
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 11/29/2021 11:28:02 AM  
 TRACY J. HAUSER  
 11/29/2021

Revisions:	Date:

CONSULTANT 	 SPECIALIZED ENGINEERING SOLUTIONS <small>10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5530 www.specializedeng.com</small>	ARCHITECT/ENGINEER OF RECORD  ANDERSON <small>13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090</small>	STAMP 	Office of Construction and Facilities Management  U.S. Department of Veterans Affairs	Drawing Title ELECTRICAL SITE PLAN Approved:	Phase BID DOCUMENTS FULLY SPRINKLERED	Project Title VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES Location Sioux Falls, SD Issue Date 11/29/2021 Checked KSB Drawn NMT	Project Number 438-20-910 Building Number - Drawing Number ES101
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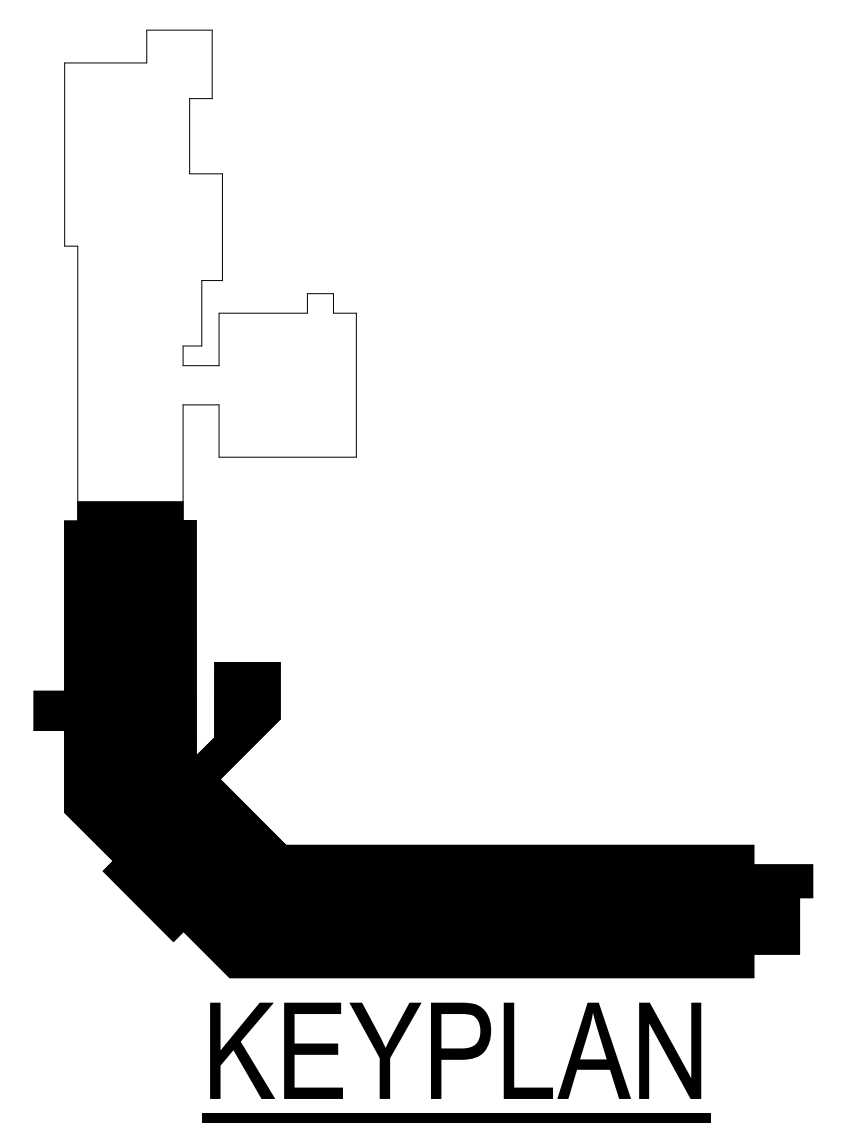
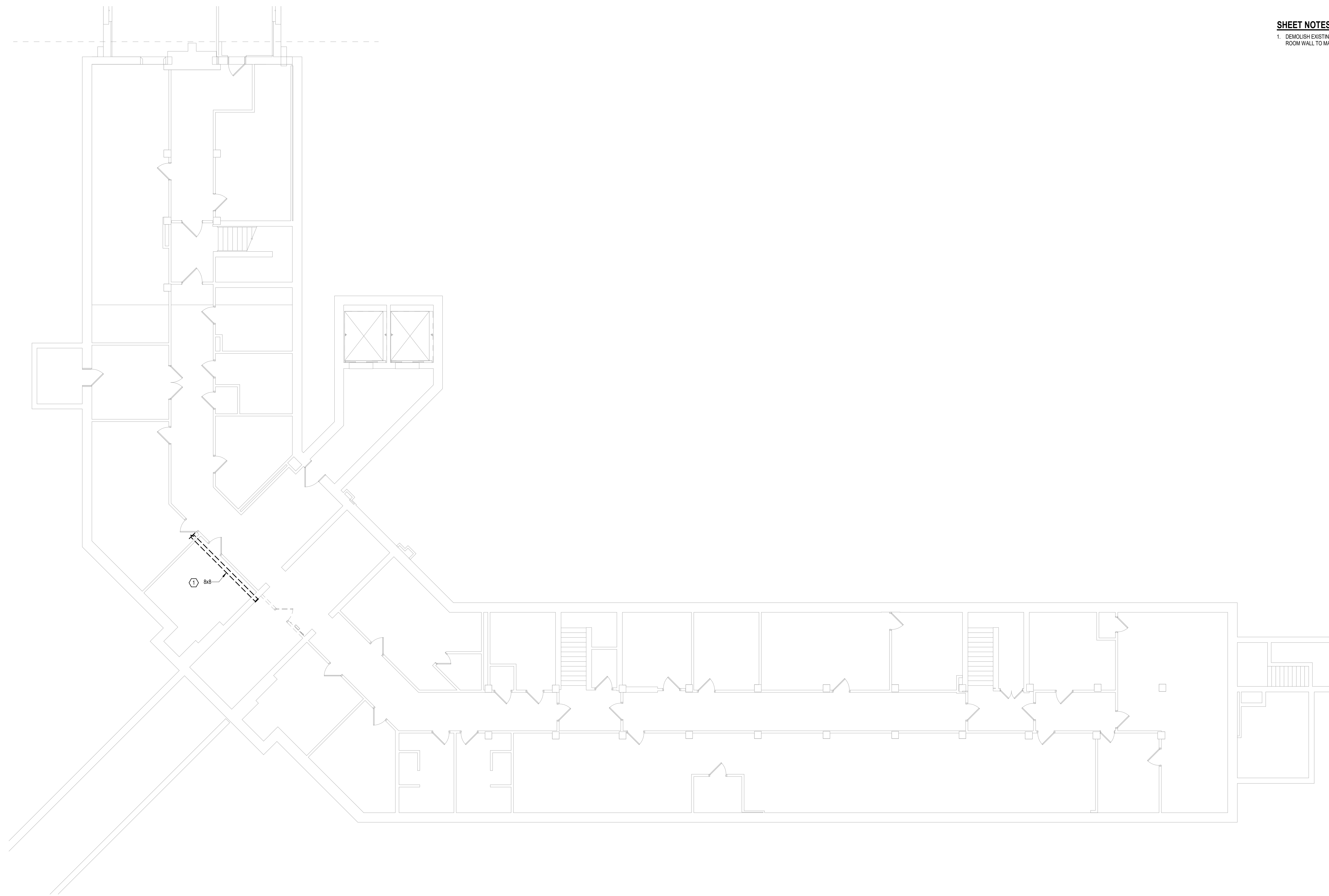


**GENERAL NOTES:**

1. COVER SHEET GENERAL NOTES APPLY TO ALL SHEETS.
2. ON DEMOLITION PLANS, EXISTING MECHANICAL SYSTEMS TO BE REMOVED ARE SHOWN DASHED, EXISTING MECHANICAL SYSTEMS TO REMAIN ARE SHOWN LIGHT LINE WEIGHT. ON ALL OTHER PLANS, NEW MECHANICAL SYSTEMS ARE INDICATED WITH HEAVY LINE WEIGHTS.
3. UNLESS NOTED OTHERWISE, DETAILS SHOWN WITHIN THESE DOCUMENTS ARE APPLICABLE FOR ALL PIPING, EQUIPMENT AND DUCTWORK INSTALLATIONS WHETHER OR NOT SPECIFICALLY NOTED.
4. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR THE MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THIS WORK.

**SHEET NOTES:**

1. DEMOLISH EXISTING SUPPLY AIR DUCT BACK TO DUCT MAIN AND CAP, PATCH AND REPAIR OPENING IN TR ROOM WALL TO MATCH EXISTING CONSTRUCTION.



1 FIRST LEVEL MECHANICAL DEMOLITION PLAN - BUILDING 1 - AREA A  
1/8" = 1'-0"

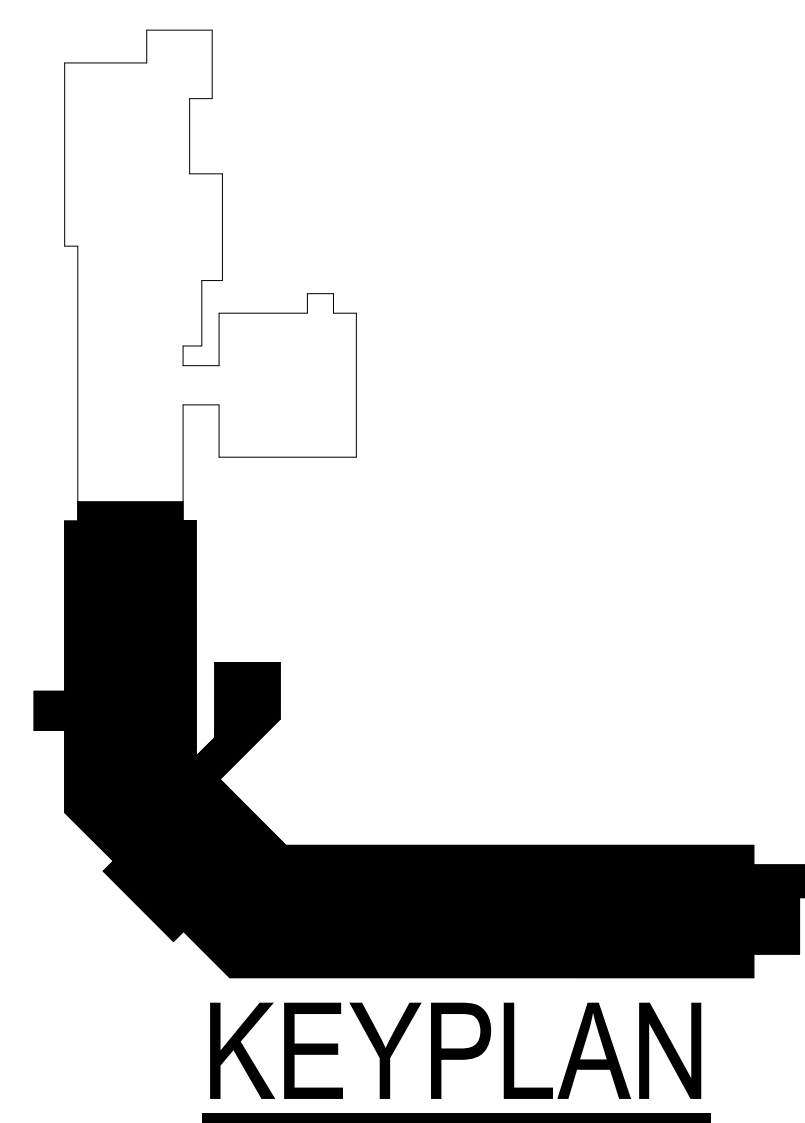
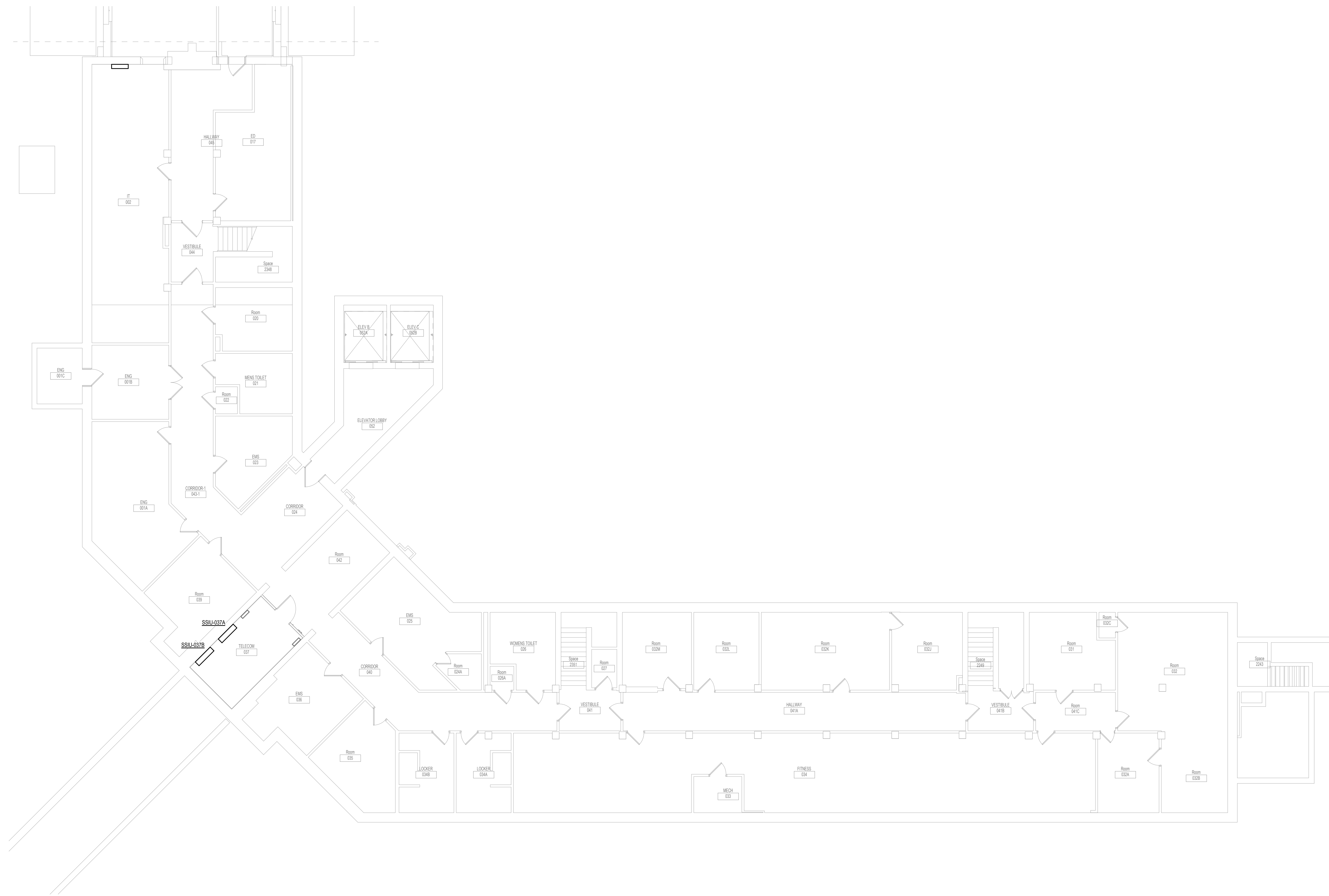


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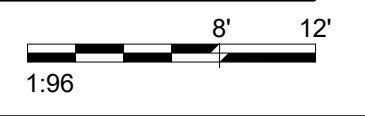
Revisions:	Date:

<b>CONSULTANT</b>  SPECIALIZED ENGINEERING SOLUTIONS <small>10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5520 www.specializedeng.com</small>	<b>ARCHITECT/ENGINEER OF RECORD</b>  <small>13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090</small>	<b>STAMP</b> 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title <b>LOWER LEVEL &amp; FIRST LEVEL                  MECHANICAL DEMOLITION PLAN -                  BUILDING 1 - AREA A</b>	Phase <b>BID DOCUMENTS</b>	Project Title <b>VAMC SIOUX FALLS EHRM                  INFRASTRUCTURE UPGRADES</b>	Project Number 438-20-910
				Fully SPRINKLERED	Location Sioux Falls, SD	Issue Date 02/18/2022	Checked EGS

- GENERAL NOTES:**
- COVER SHEET GENERAL NOTES APPLY TO ALL SHEETS.
  - ON DEMOLITION PLANS, EXISTING MECHANICAL SYSTEMS TO BE REMOVED ARE SHOWN DASHED, EXISTING MECHANICAL SYSTEMS TO REMAIN ARE SHOWN LIGHT LINE WEIGHT. ON ALL OTHER PLANS, NEW MECHANICAL SYSTEMS ARE INDICATED WITH HEAVY LINE WEIGHTS.
  - UNLESS NOTED OTHERWISE, DETAILS SHOWN WITHIN THESE DOCUMENTS ARE APPLICABLE FOR ALL PIPING, EQUIPMENT AND DUCTWORK INSTALLATIONS WHETHER OR NOT SPECIFICALLY NOTED.
  - THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR THE MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THIS WORK.



1 FIRST LEVEL DUCTWORK PLAN - BUILDING 1 - AREA A  
1/8" = 1'-0"



Revisions:	Date:

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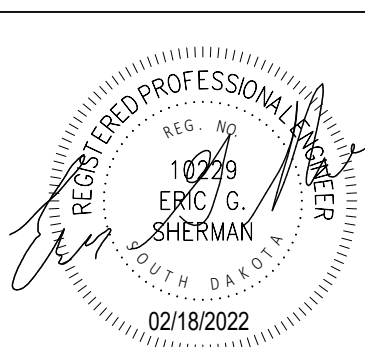
10360 Ellison Circle  
Omaha, NE 68134  
Phone: 402.991.5520  
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**ARCHITECT/ENGINEER OF RECORD**


**ANDERSON**

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**STAMP**



Office of Construction and Facilities Management



U.S. Department of Veterans Affairs

Drawing Title  
**LOWER LEVEL & FIRST LEVEL DUCTWORK PLAN - BUILDING 1 - AREA A**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
02/18/2022

Checked  
EGS

Drawn  
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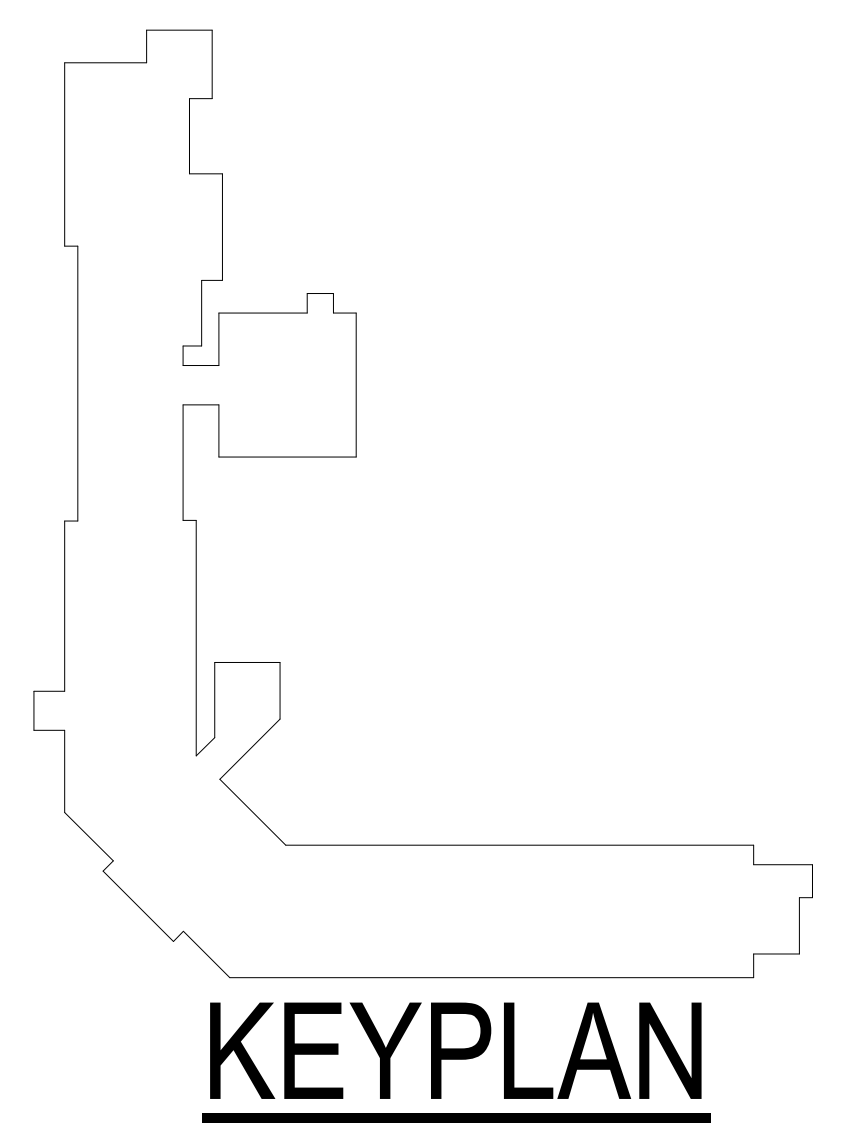
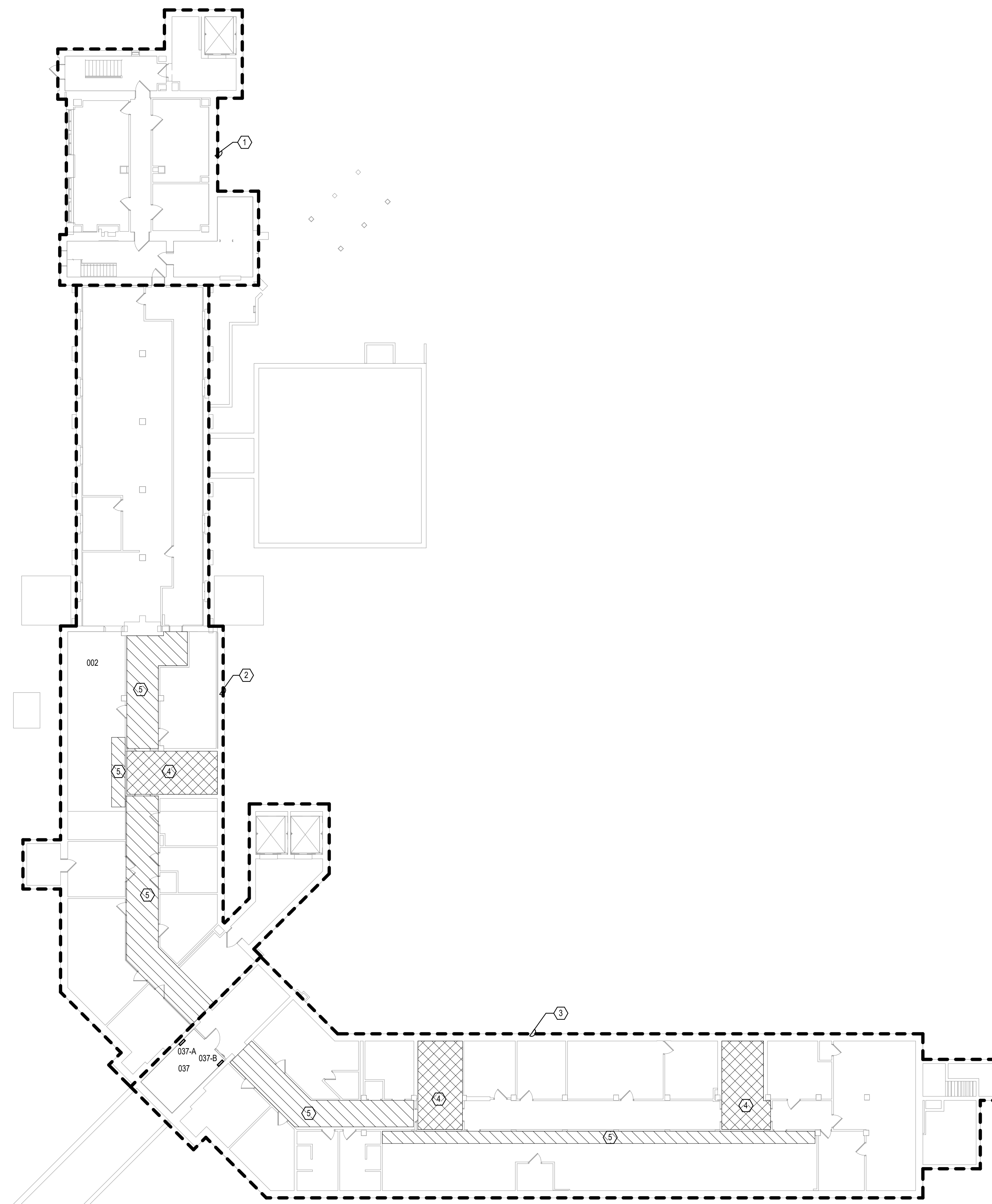
Project Number  
438-20-910

Building Number  
1

Drawing Number  
MH101-01-A



- SHEET NOTES:**
1. AREA IS RECENTLY RENOVATED AND FED FROM ROOM 122A ABOVE. NO RE-CABLING IS ANTICIPATED IN THIS AREA.
  2. RE-CABLE ALL CAT 5E AND LOWER CABLES TO ROOM 002.
  3. RE-CABLE ALL CAT 5E AND LOWER CABLES TO ROOM 037.
  4. EXIT STAIR ENCLOSURE. DO NOT ROUTE NEW CABLING THROUGH THIS SPACE.
  5. ROUTE NEW CABLING ON J-HOOKS IN THIS AREA.



1 OVERALL LOWER LEVEL FLOOR PLAN - BUILDING 1  
 1/16" = 1'-0"  
 16' 24'  
 1:192

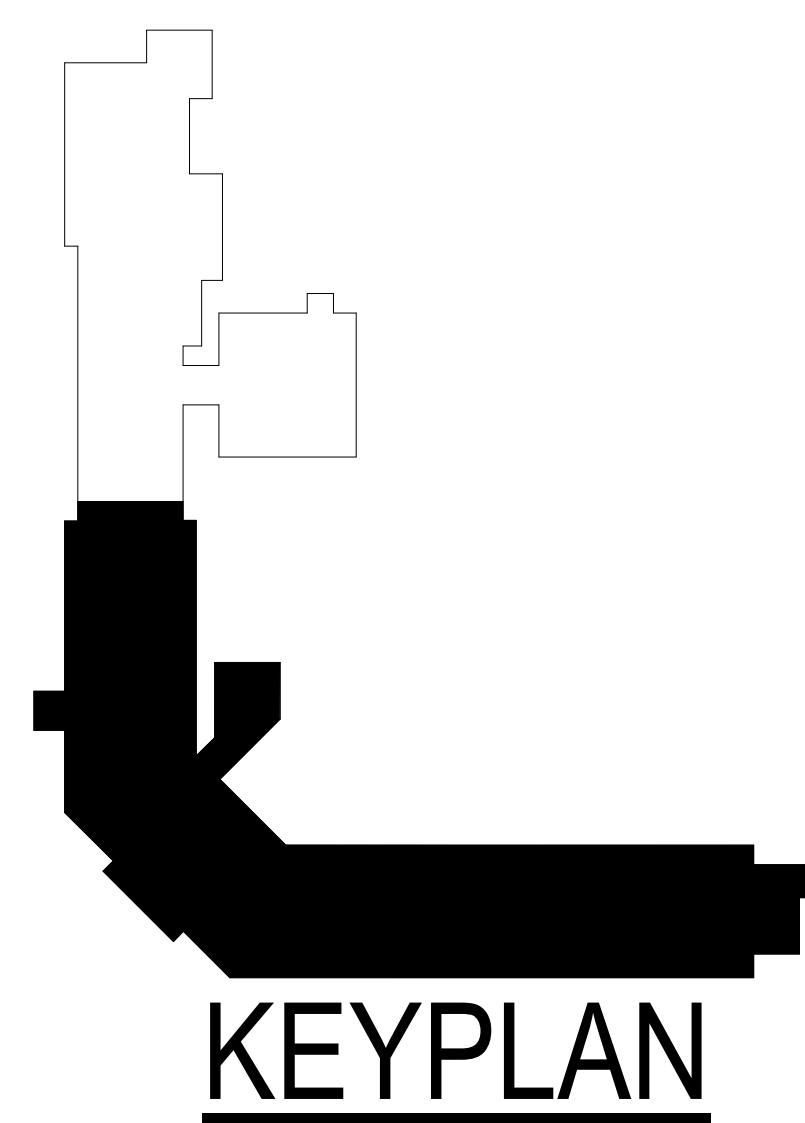
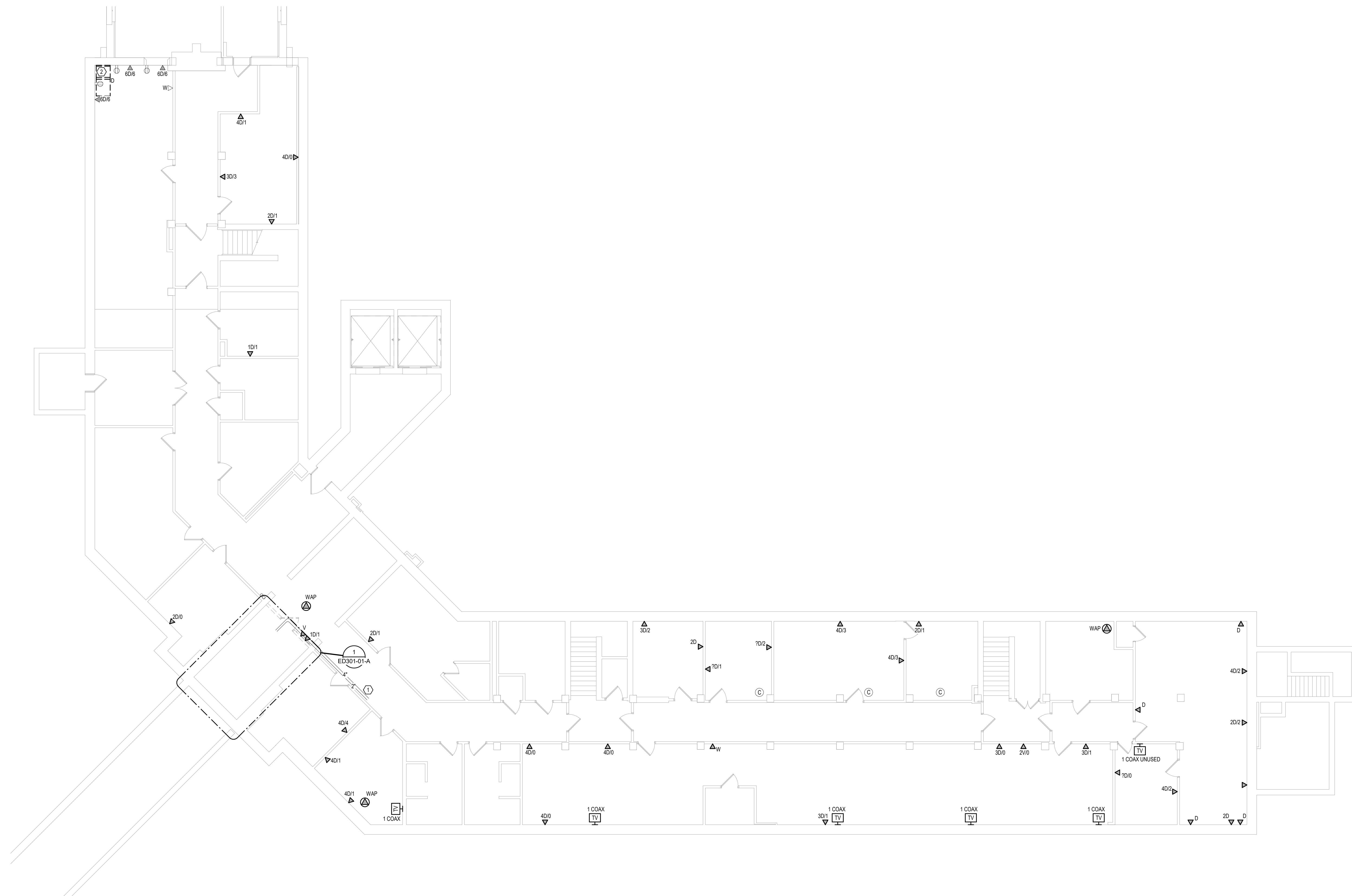
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<b>CONSULTANT</b> 		<b>ARCHITECT/ENGINEER OF RECORD</b>  13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090		<b>STAMP</b>  Nathan Timm BICSI ID # 346555 EXPIRES 12-31-22 REGISTERED COMMUNICATIONS DISTRIBUTION	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title <b>OVERALL LOWER LEVEL FLOOR PLAN - BUILDING 1</b> Approved:	Phase <b>BID DOCUMENTS</b> <b>FULLY SPRINKLERED</b>	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b>	Project Number 438-20-910 Building Number 1 Drawing Number EE101-01
Location Sioux Falls, SD		Issue Date 07/06/2021	Checked KSB	Drawn NMT					

**SHEET NOTES:**

- EXISTING CONDUIT UP TO FIRST FLOOR CHASE TO REMAIN.
- DEMOLISH EXISTING WALL RACK AND REPLACE WITH NEW FLOOR MOUNTED CHANNEL RACK.



1 FIRST LEVEL ELECTRICAL DEMOLITION PLAN - BUILDING 1 - AREA A  
1/8" = 1'-0"

1:96  
0' 6" 12"

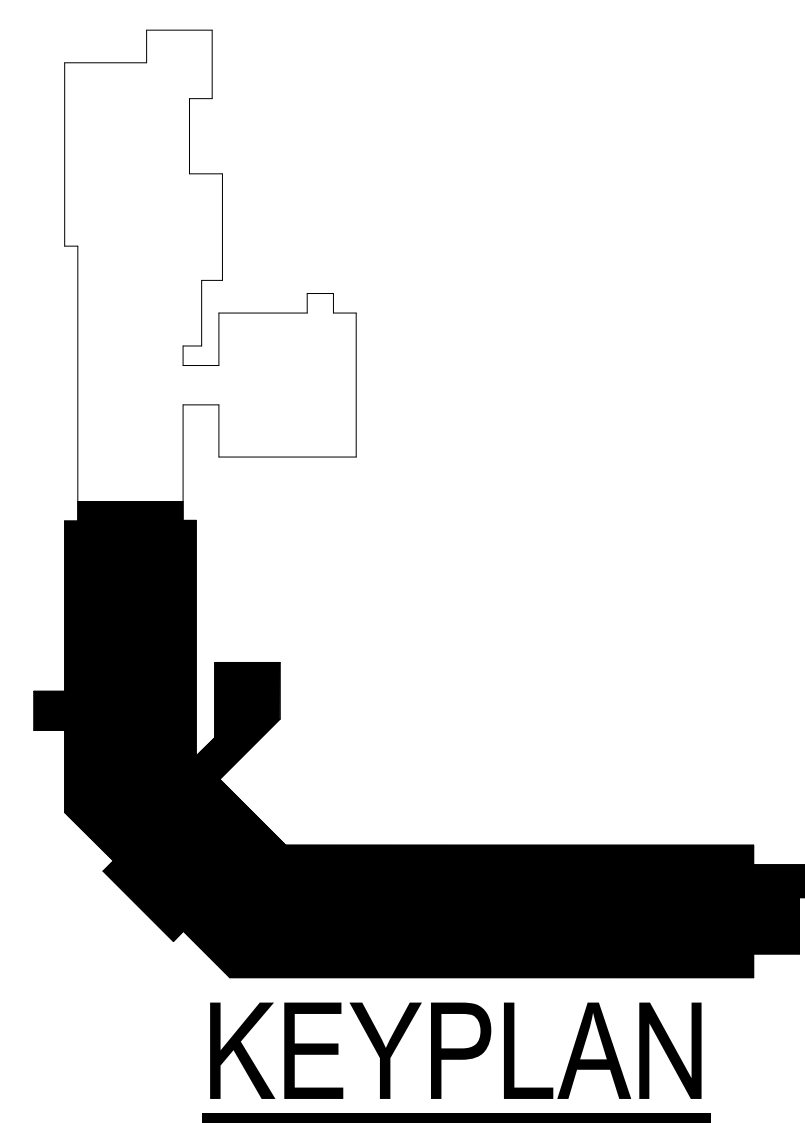
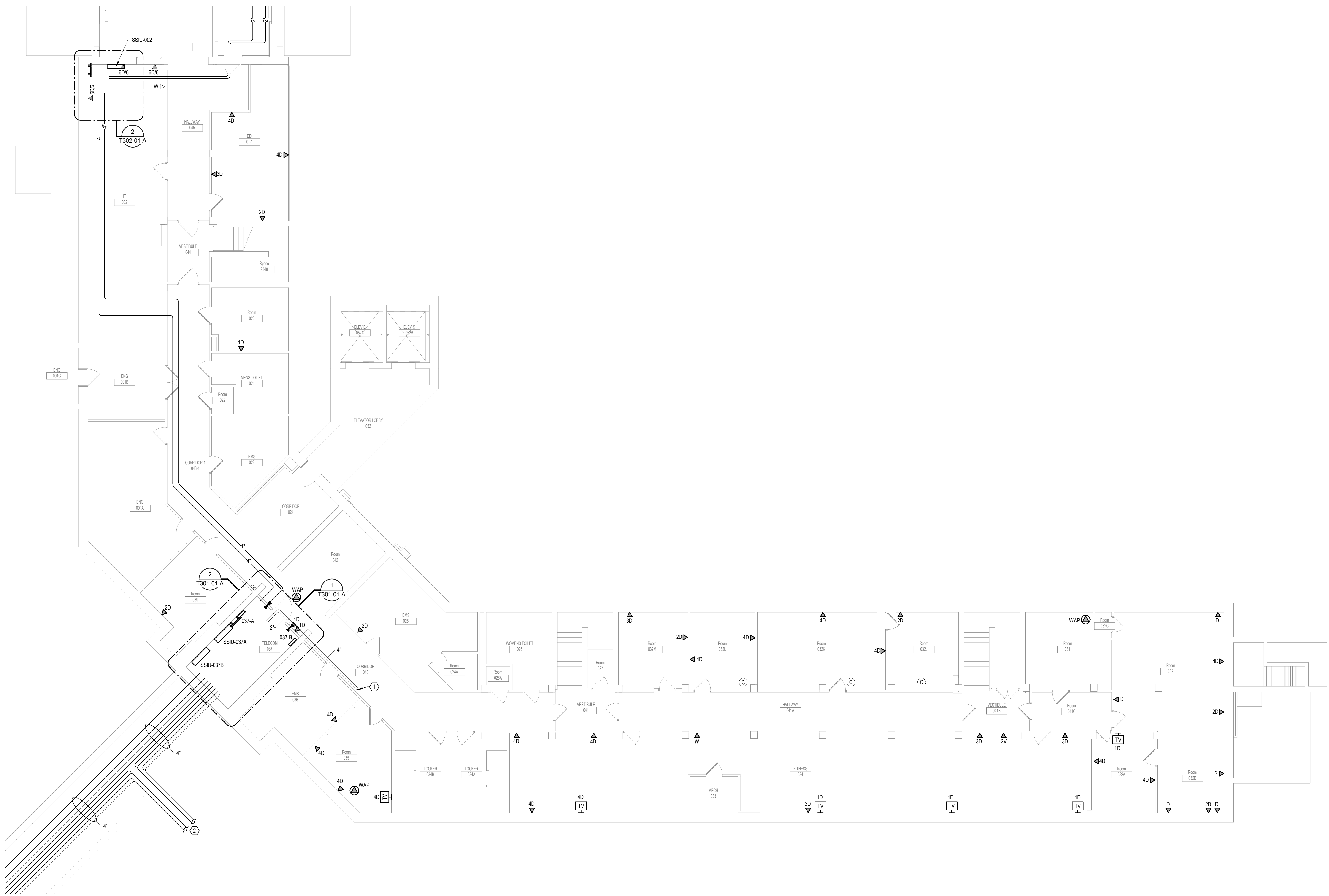
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Revisions:	Date:

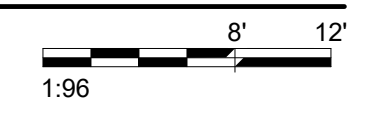
<b>CONSULTANT</b>   <b>SPECIALIZED ENGINEERING SOLUTIONS</b> 10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5520 www.specializedeng.com	<b>ARCHITECT/ENGINEER OF RECORD</b>  13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090	<b>STAMP</b>  Nathan Timm BICSI ID # 346555 EXPIRES 12-31-23 RCO	Office of Construction and Facilities Management  U.S. Department of Veterans Affairs	Drawing Title <b>LOWER LEVEL ELECTRICAL DEMOLITION FLOOR PLAN - BUILDING 1 - AREA A</b>	Phase <b>BID DOCUMENTS</b>	Project Title <b>VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES</b>	Project Number 438-20-910
				Approved:	Fully Sprinklered <b>FULLY SPRINKLERED</b>	Location Sioux Falls, SD	Issue Date 07/06/2021



- SHEET NOTES:**
1. PROVIDE NEW CONDUIT IN CHASE AS REQUIRED TO ACCOMMODATE PHASING AND CABLE REPLACEMENT. EXISTING CONDUIT TO FIRST FLOOR LOCATED IN CHASE MAY ALSO BE USED FOR NEW CABLING.
  2. PROVIDE NEW (6) 4" CONDUIT FROM TELECOMMUNICATIONS MANHOLE INTO BUILDING. EXCAVATE OUTSIDE OF BUILDING AS REQUIRED TO BRING THE (6) 4" CONDUITS INTO THE BUILDING TUNNEL. FIELD COORDINATE THE EXACT LOCATION OF THE CONDUIT ENTRANCE. ROUTE CONDUIT WITHIN THE TUNNEL AS HIGH AS PRACTICABLE.



1 LOWER LEVEL LOW VOLTAGE FLOOR PLAN OVERALL - BUILDING 1 - AREA A  
1/8" = 1'-0"



INSTALL GREEN INSULATED GROUND WIRE WITH LIGHTING, RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.  
INSTALL INDIVIDUAL (DEDICATED) NEUTRAL CONDUCTORS FOR EACH 120V OR 277V PHASE CONDUCTOR SERVED FROM A SINGLE POLE CIRCUIT BREAKER.

Revisions:	Date:

<b>CONSULTANT</b> 	<b>ARCHITECT/ENGINEER OF RECORD</b>  13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090	<b>STAMP</b>  Nathan Timm BICSI ID # 346555 Expires 12-31-23	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title LOWER LEVEL & FIRST LEVEL LOW VOLTAGE PLAN - BUILDING 1 - AREA A	Phase BID DOCUMENTS	Project Title VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES	Project Number 438-20-910
				Approved:	FULLY SPRINKLERED	Location Sioux Falls, SD	Building Number 1
Date:		Issue Date 07/06/2021		Checked KSB	Drawn NMT	Drawing Number TN101-01-A	







A

B

C

D

E

F

LIGHTING PANEL: 037-B

Table with columns: C..., CIRCUIT DESCRIPTION, OPT, RATI..., POL..., A, B, C, POL..., RATI..., OPT, CIRCUIT DESCRIPTION, C... and summary rows for LOAD CLASSIFICATION and PANEL TOTALS.

LIGHTING PANEL: 037-A

Table with columns: C..., CIRCUIT DESCRIPTION, OPT, RATI..., POL..., A, B, C, POL..., RATI..., OPT, CIRCUIT DESCRIPTION, C... and summary rows for LOAD CLASSIFICATION and PANEL TOTALS.

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Revisions table with columns: Revisions, Date

CONSULTANT: AST, SPECIALIZED ENGINEERING SOLUTIONS (SES)

ARCHITECT/ENGINEER OF RECORD: ANDERSON

STAMP: TRACY J. HAUSER, 07/06/2021

Office of Construction and Facilities Management, U.S. Department of Veterans Affairs

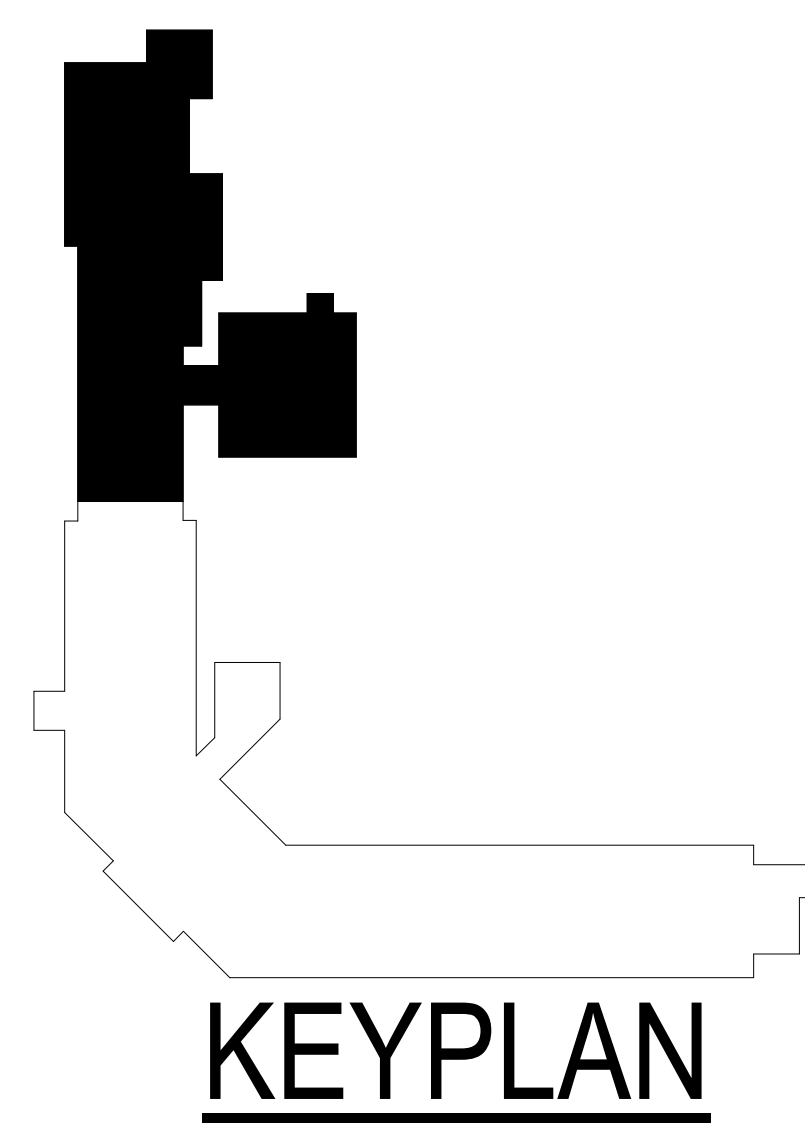
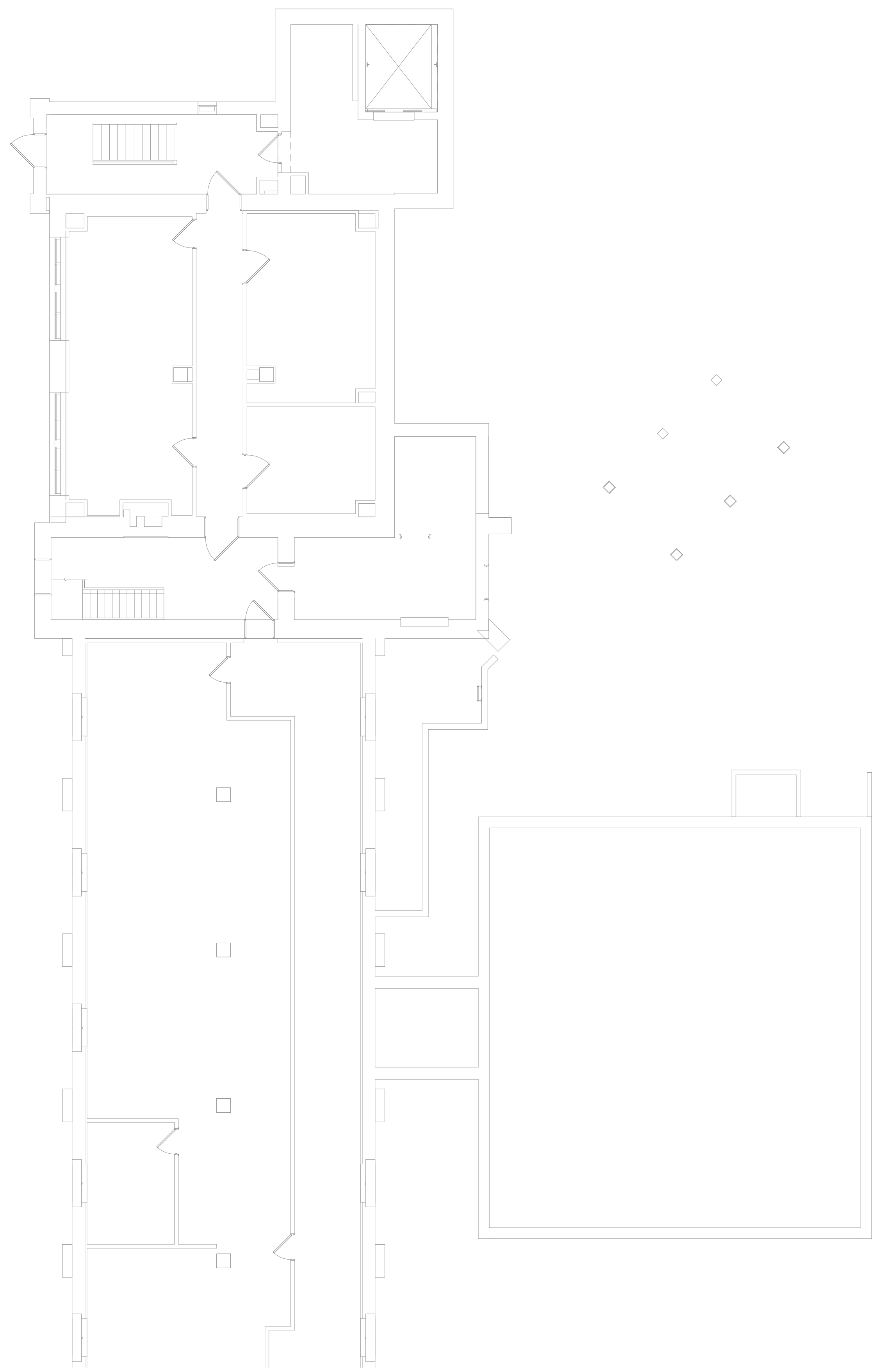
Drawing Title: PANEL SCHEDULES - BUILDING 1 - LOWER LEVEL - AREA A

Phase: BID DOCUMENTS, FULLY SPRINKLERED

Project Title: VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES

Project Number: 438-20-910, Building Number: 1, Drawing Number: EE401-01-A

**GENERAL NOTES:**  
 A. AREA HAS BEEN RENOVATED UNDER SEPARATE PROJECT. NO RECASING IS ANTICIPATED IN THIS AREA. SHEET IS INCLUDED FOR REFERENCE ONLY.



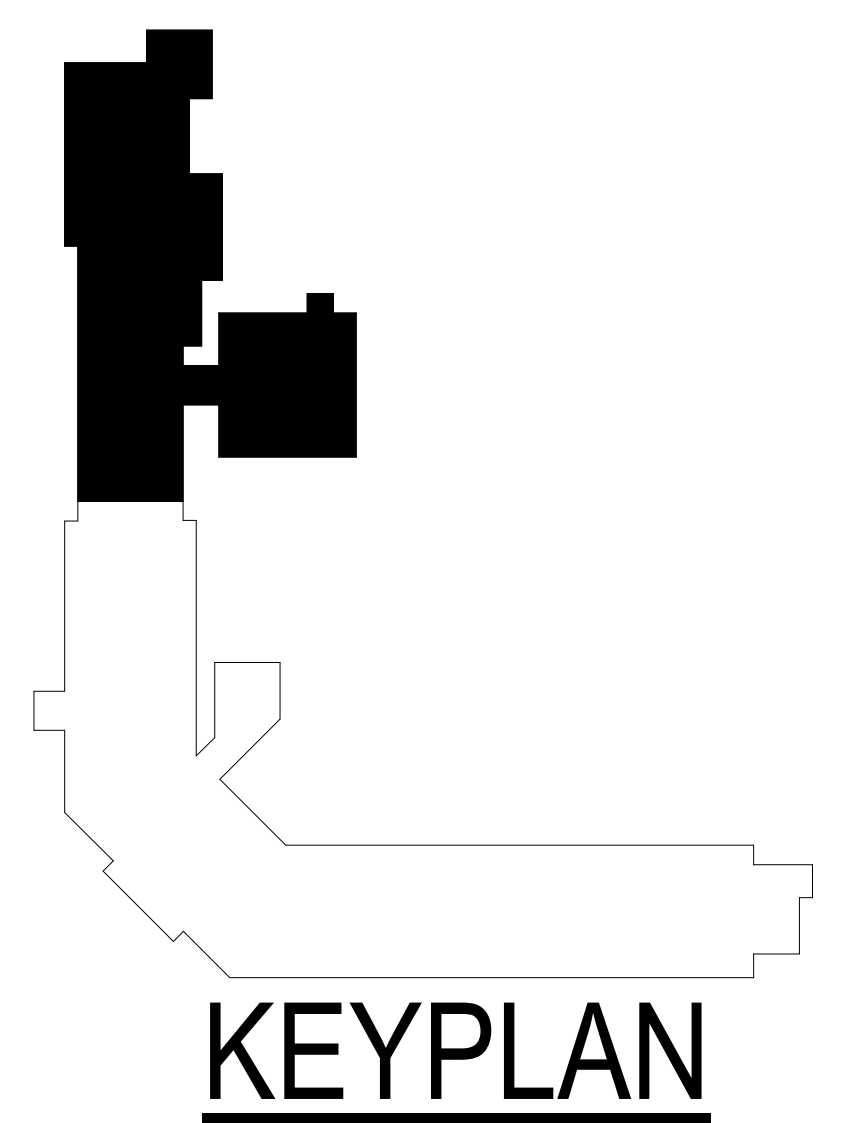
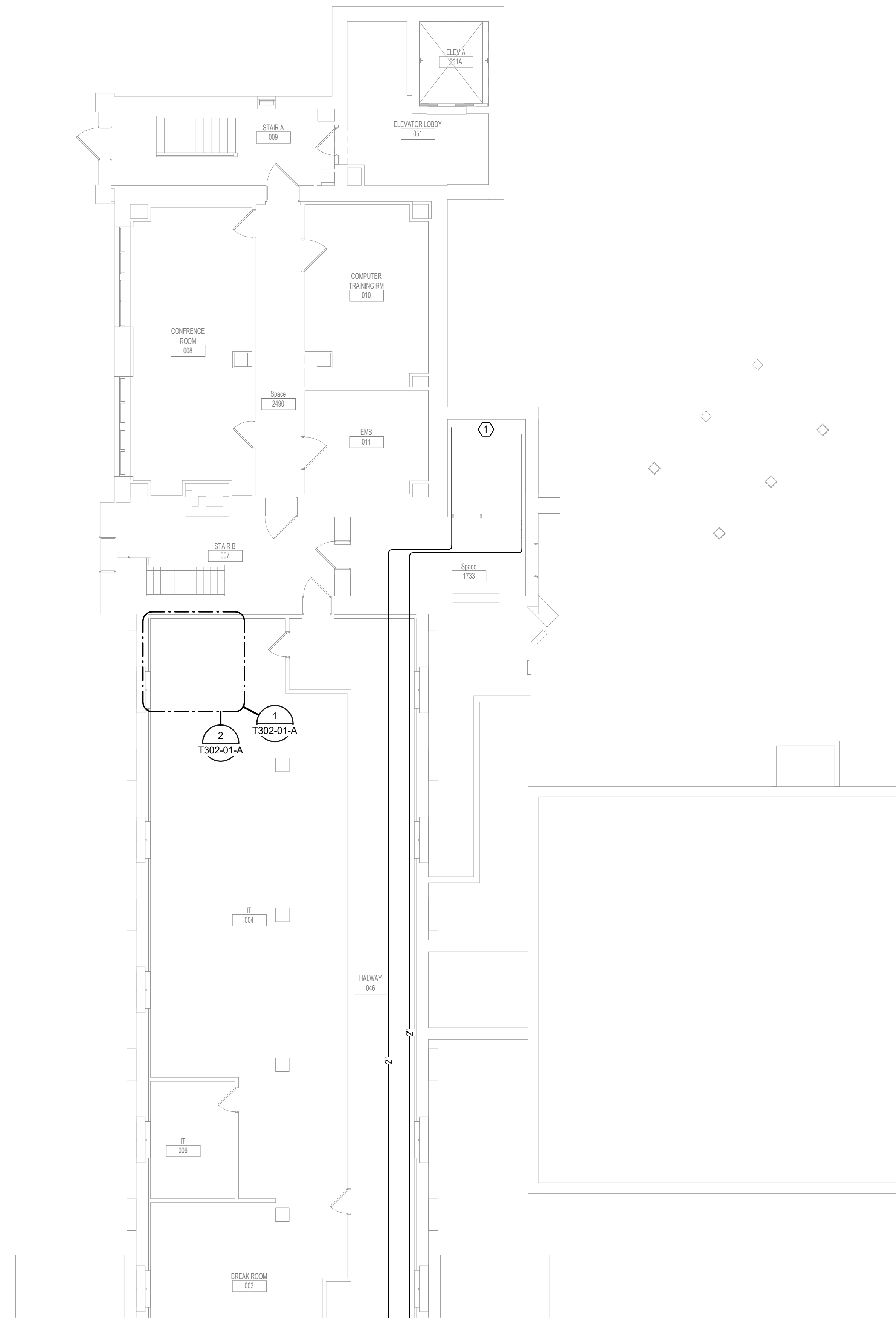
1 FIRST LEVEL ELECTRICAL DEMOLITION PLAN - BUILDING 1 - AREA B  
 1/8" = 1'-0" 1:96

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 7/16/2021 12:54:42 PM

Revisions:	Date:

<b>CONSULTANT</b> 		<b>ARCHITECT/ENGINEER OF RECORD</b> 		<b>STAMP</b> 	Office of Construction and Facilities Management  U.S. Department of Veterans Affairs	Drawing Title LOWER LEVEL ELECTRICAL DEMOLITION PLAN - BUILDING 1 - AREA B Approved:	Phase BID DOCUMENTS FULLY SPRINKLERED	Project Title VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES Location Sioux Falls, SD Issue Date 07/06/2021	Project Number 438-20-910 Building Number 1 Drawing Number ED101-01-B
 <b>SPECIALIZED ENGINEERING SOLUTIONS</b> 10360 Ellison Circle Omaha, NE 68134 Phone: 402.991.5520 www.specializedeng.com		13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000   F 763.412.4090   ae-mn.com Anderson Engineering of Minnesota, LLC   Proj # 16090		Nathan Timm BICSI ID # 346555 EXPIRES 12-31-21 RCO	VA	Checked KSB Drawn NMT	Checked KSB Drawn NMT	Checked KSB Drawn NMT	Checked KSB Drawn NMT

**SHEET NOTES:**  
 1. ROUTE CABLING IN THIS LOCATION THROUGH FLOOR PENETRATION TO TELECOMMUNICATION ROOM ON FLOOR ABOVE.



1 LOWER LEVEL LOW VOLTAGE FLOOR PLAN OVERALL - BUILDING 1 - AREA B  
 1/8" = 1'-0"  
 1" = 8' = 12"

INSTALL GREEN INSULATED GROUND WIRE WITH LIGHTING, RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.  
 INSTALL INDIVIDUAL (DEDICATED) NEUTRAL CONDUCTORS FOR EACH 120V OR 277V PHASE CONDUCTOR SERVED FROM A SINGLE POLE CIRCUIT BREAKER.

Revisions:	Date:

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				Fully Sprinklered <b>FULLY SPRINKLERED</b>	Location Sioux Falls, SD	Issue Date 07/06/2021	Checked KSB

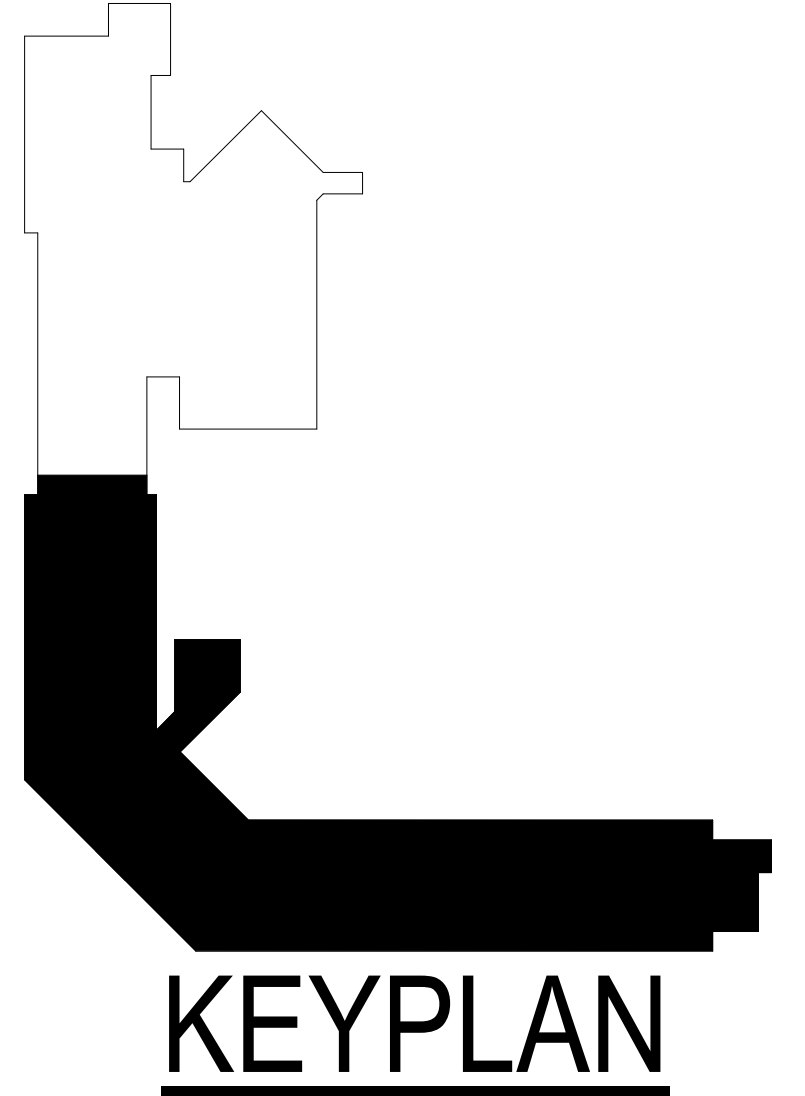
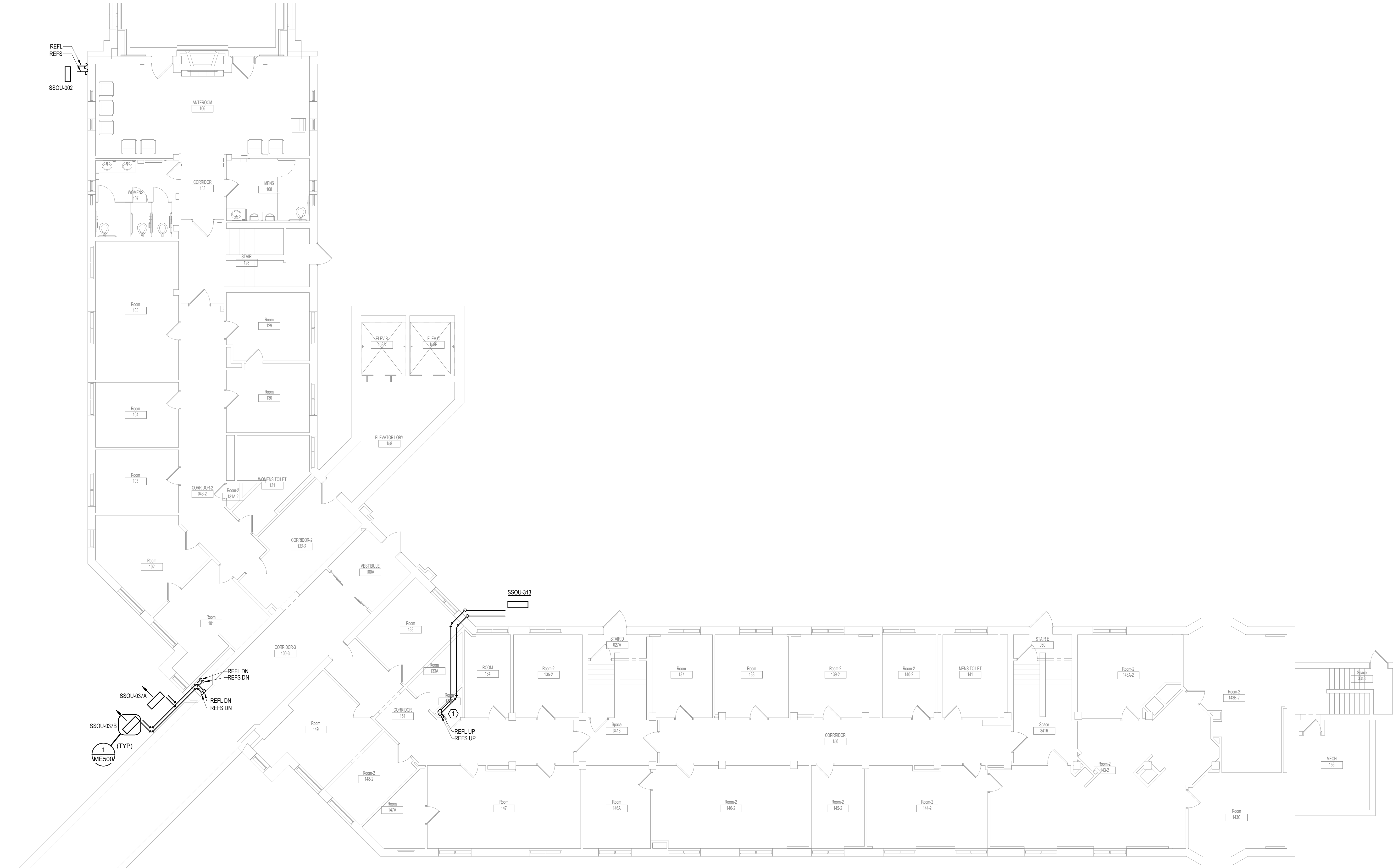
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 VA FORM 08 - 6231



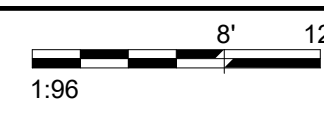


- GENERAL NOTES:**
- COVER SHEET GENERAL NOTES APPLY TO ALL SHEETS.
  - ON DEMOLITION PLANS, EXISTING MECHANICAL SYSTEMS TO BE REMOVED ARE SHOWN DASHED, EXISTING MECHANICAL SYSTEMS TO REMAIN ARE SHOWN LIGHT LINE WEIGHT. ON ALL OTHER PLANS, NEW MECHANICAL SYSTEMS ARE INDICATED WITH HEAVY LINE WEIGHTS.
  - UNLESS NOTED OTHERWISE, DETAILS SHOWN WITHIN THESE DOCUMENTS ARE APPLICABLE FOR ALL PIPING, EQUIPMENT AND DUCTWORK INSTALLATIONS WHETHER OR NOT SPECIFICALLY NOTED.
  - THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR THE MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THIS WORK.

- SHEET NOTES:**
- ROUTE REFRIGERANT PIPING UP TO THIRD FLOOR TELECOM ROOM. COORDINATE POSITION AND ROUTING WITH EXISTING CONDITIONS.



1 1-Floor Plan - Building 1 - Area A - PIPING  
1/8" = 1'-0"



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Revisions:	Date:

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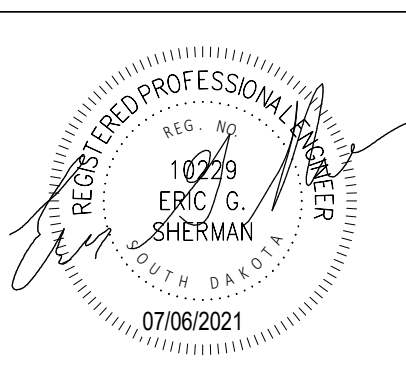

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Office of Construction and Facilities Management  
**VA** U.S. Department of Veterans Affairs

Drawing Title  
**FIRST LEVEL PIPING PLAN - BUILDING 1 - AREA A**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
EGS

Drawn  
PHV

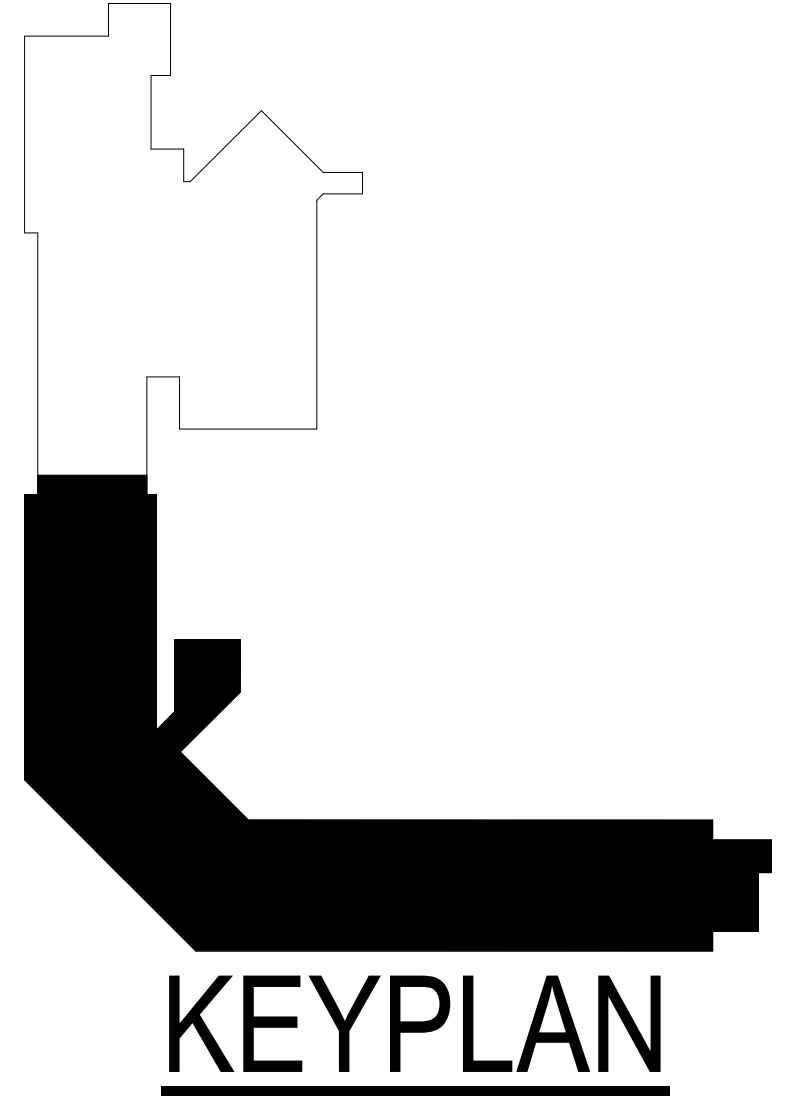
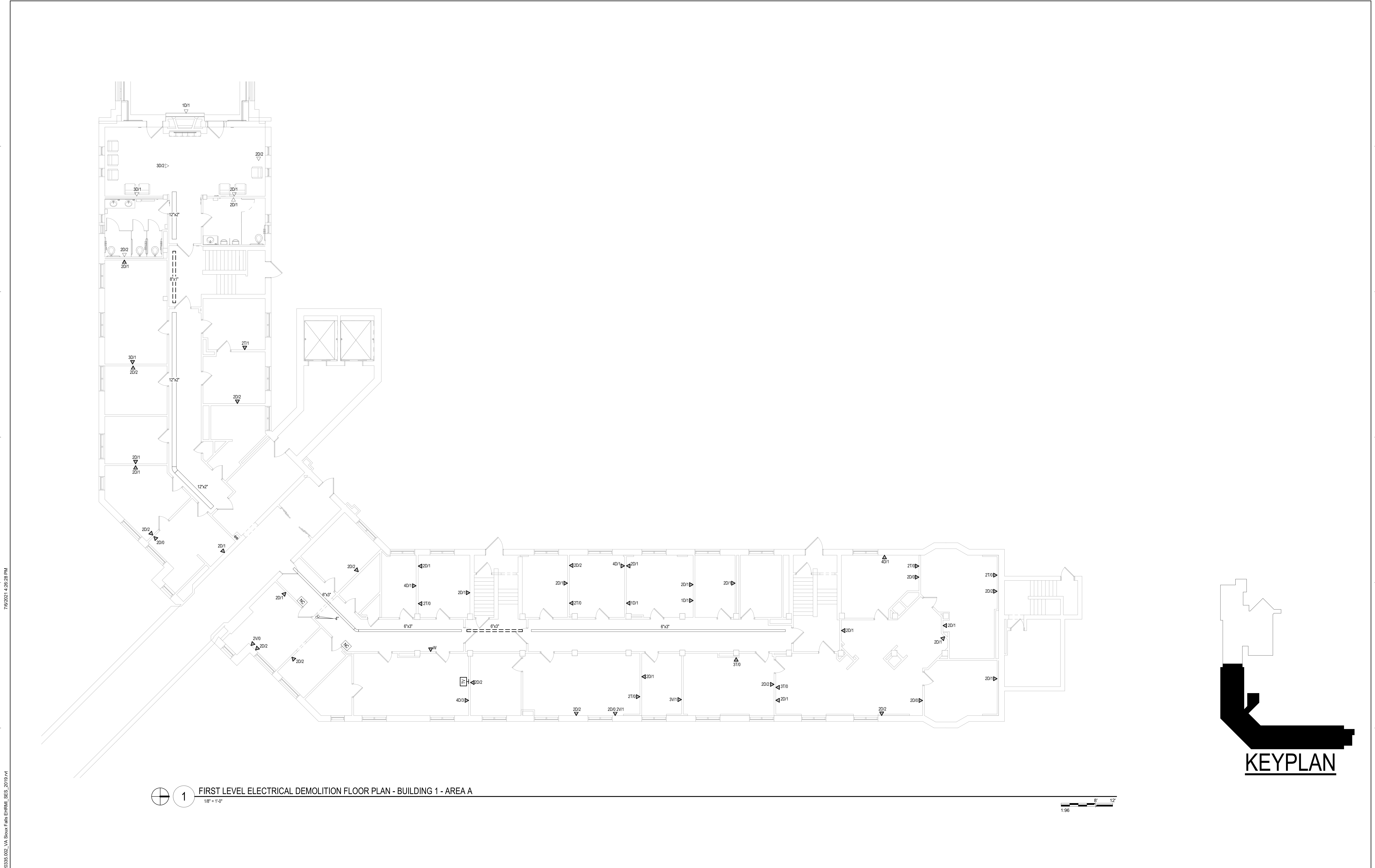
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438-20-910

Building Number  
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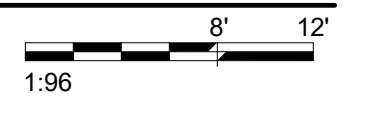
Drawing Number  
MP111-01-A







1 FIRST LEVEL ELECTRICAL DEMOLITION FLOOR PLAN - BUILDING 1 - AREA A  
1/8" = 1'-0"



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Office of Construction and Facilities Management

Drawing Title  
**FIRST LEVEL ELECTRICAL DEMOLITION FLOOR PLAN - BUILDING 1 - AREA A**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
KSB

Drawn  
NMT

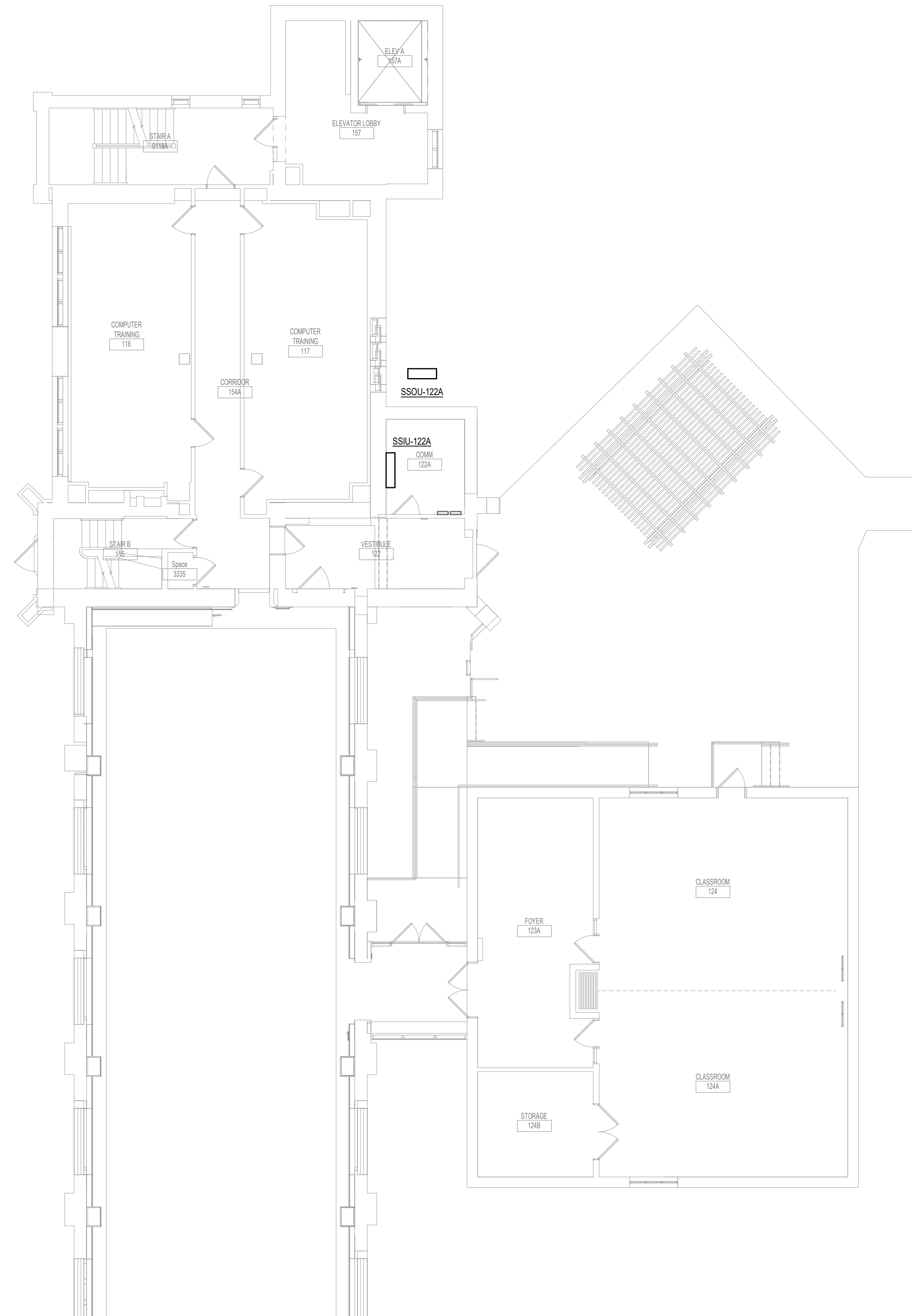
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Building Number  
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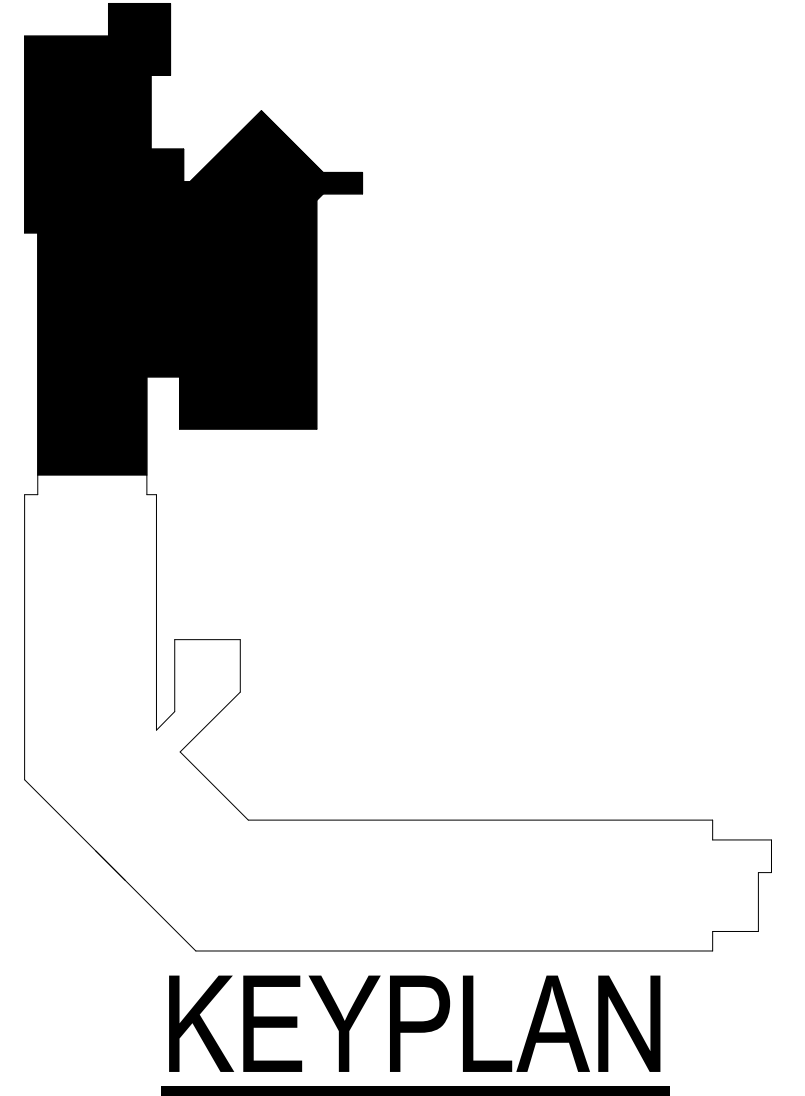
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- GENERAL NOTES:**
1. COVER SHEET GENERAL NOTES APPLY TO ALL SHEETS.
  2. ON DEMOLITION PLANS, EXISTING MECHANICAL SYSTEMS TO BE REMOVED ARE SHOWN DASHED, EXISTING MECHANICAL SYSTEMS TO REMAIN ARE SHOWN LIGHT LINE WEIGHT. ON ALL OTHER PLANS, NEW MECHANICAL SYSTEMS ARE INDICATED WITH HEAVY LINE WEIGHTS.
  3. UNLESS NOTED OTHERWISE, DETAILS SHOWN WITHIN THESE DOCUMENTS ARE APPLICABLE FOR ALL PIPING, EQUIPMENT AND DUCTWORK INSTALLATIONS WHETHER OR NOT SPECIFICALLY NOTED.
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1 1-Floor Plan - Building 1 - Area B - DUCTWORK  
1/8" = 1'-0"



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Revisions:	Date:

**CONSULTANT**



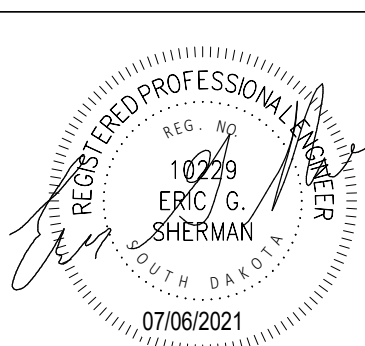

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Office of  
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and Facilities  
Management



Drawing Title  
**FIRST LEVEL DUCTWORK PLAN - BUILDING 1 - AREA B**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
**VAMC SIOUX FALLS EHRM INFRASTRUCTURE UPGRADES**

Location  
Sioux Falls, SD

Issue Date  
07/06/2021

Checked  
EGS

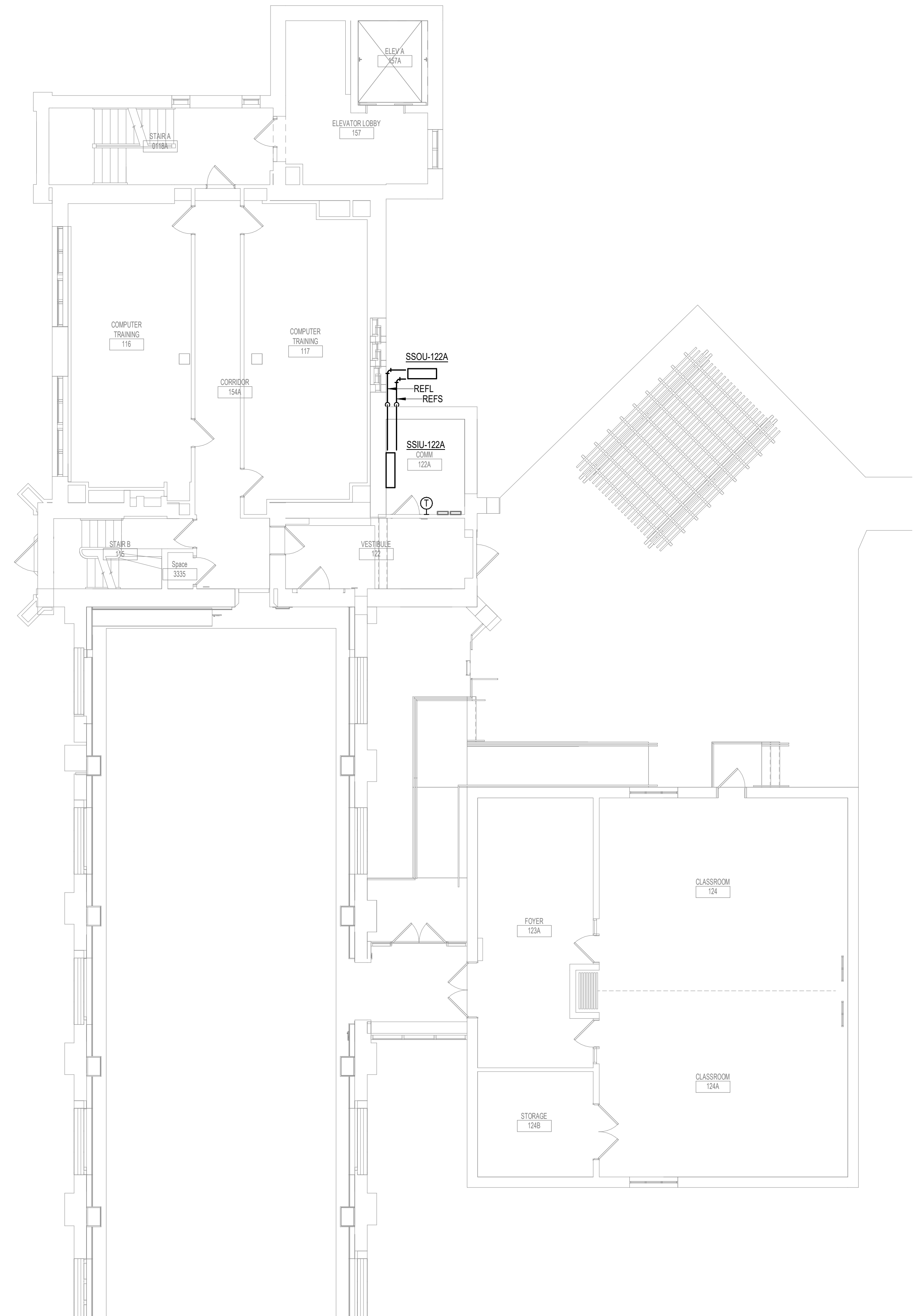
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Project Number  
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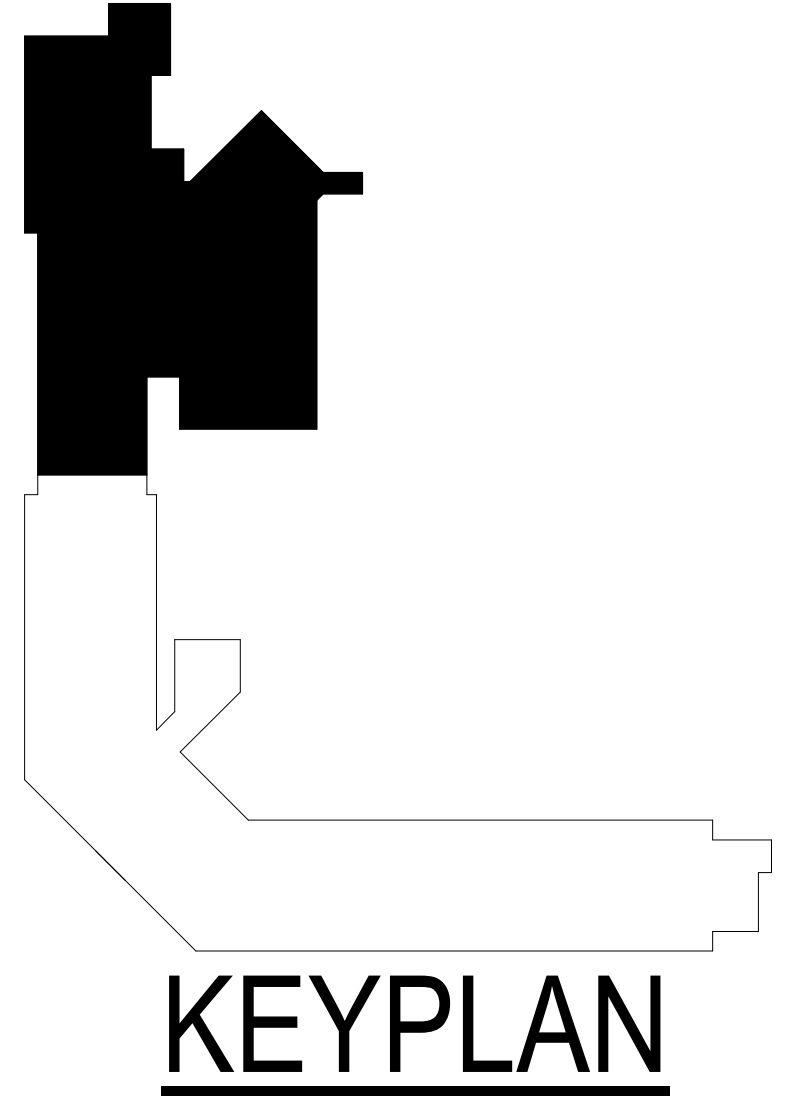
Building Number  
1

Drawing Number  
**MH111-01-B**

- GENERAL NOTES:**
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1 1-Floor Plan - Building 1 - Area B - PIPING  
1/8" = 1'-0"



Revisions:	Date:

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Office of Construction and Facilities Management

U.S. Department of Veterans Affairs

Drawing Title  
**FIRST LEVEL PIPING PLAN - BUILDING 1 - AREA B**

Approved:

Phase  
**BID DOCUMENTS**

**FULLY SPRINKLERED**

Project Title  
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