SPECTRUM DESIGN
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10 Church Avenue, SE
Roanoke, VA 24011

540.342.6001
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RENOVATIONS TO

MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

895 WASHINGTON ST SW. | BLACKSBURG, VA 24061

VIRGINIA TECH

NOT FOR CONSTRUCTION

PROJECT PHASE:
WORKING DRAWINGS

PROJECT DATE:
03.20.2026

SPECTRUM DESIGN PROJECT NO.:
26003

GENERAL PROJECT INFORMATION

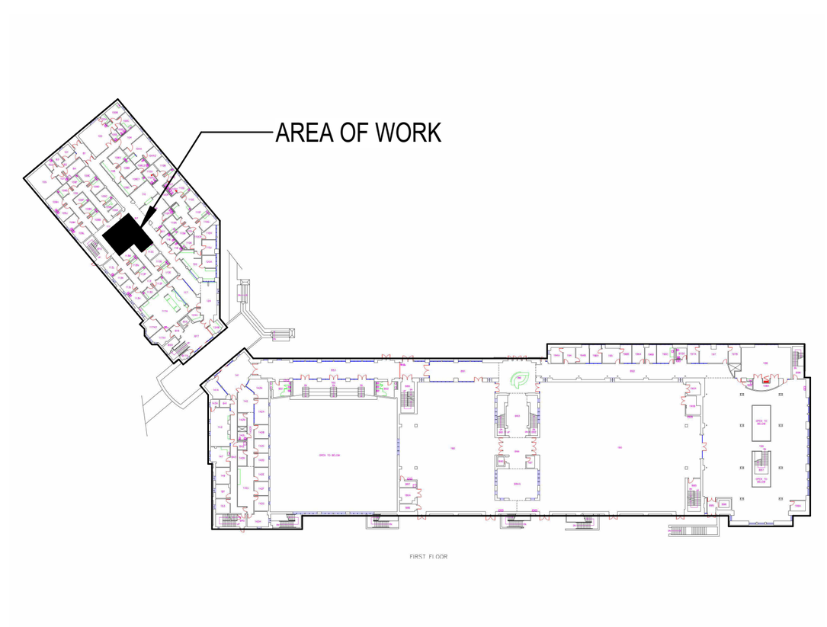
SITE INFORMATION

TAX MAP NO.: 070905
ZONING: UNIV
FLOOD ZONE: N/A
PERMIT AUTHORITY: VIRGINIA TECH

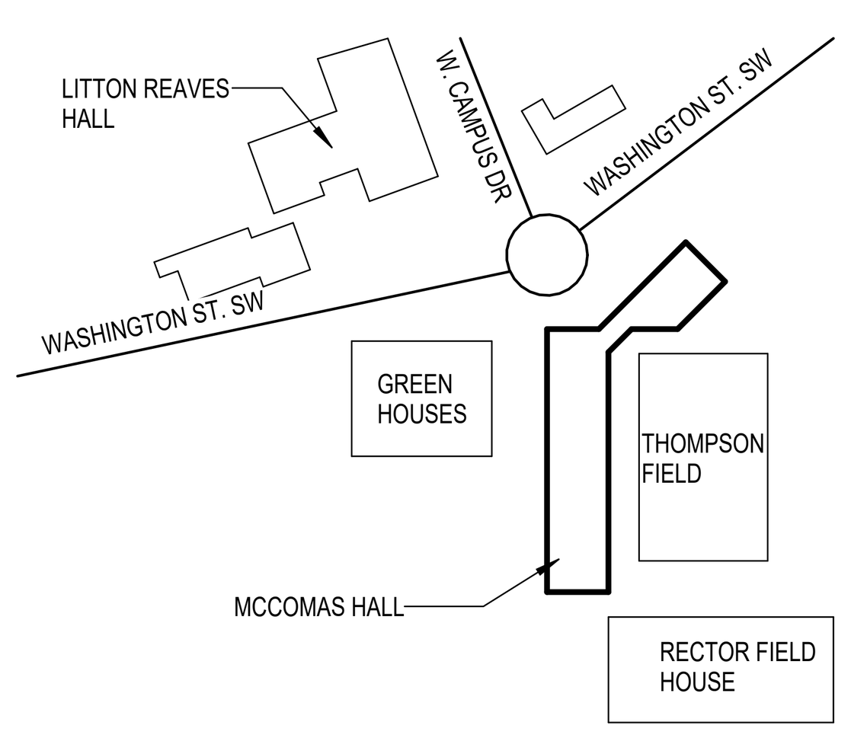
OWNER INFORMATION

OWNER/AUTHORIZED AGENT:
VIRGINIA TECH
TORY STEPHEN
PHONE: (828) 713-5707
EMAIL: TORYSTEP@VT.EDU

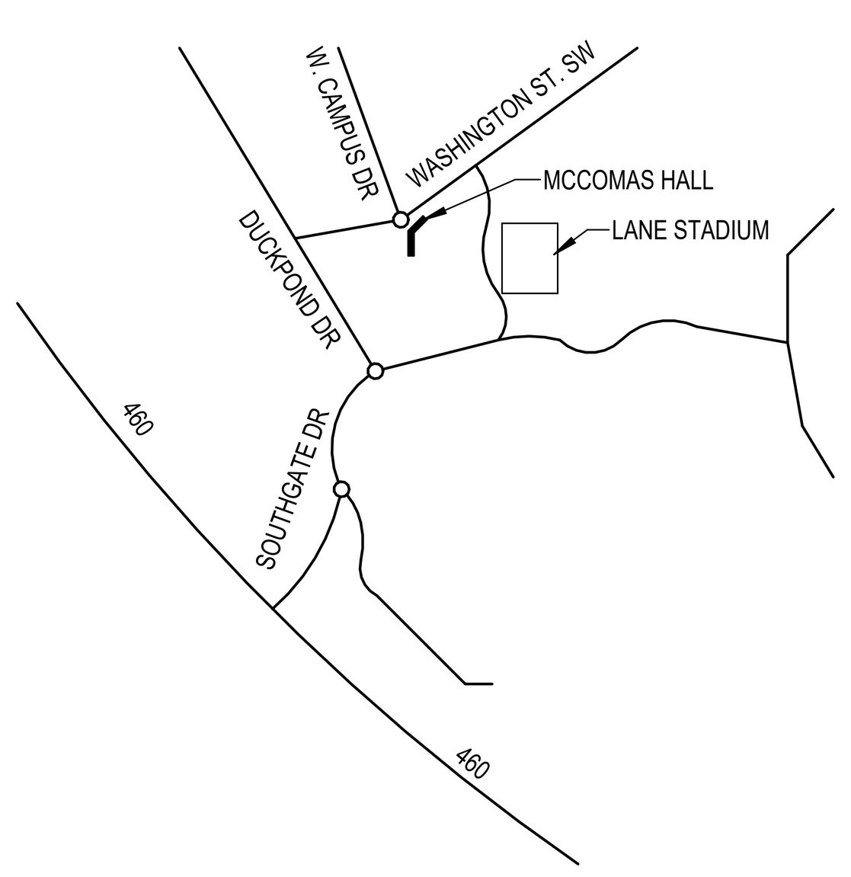
OWNER'S ADDRESS
OWENS HALL, RM 41C, MAINTENANCE VIRGINIA TECH, 150 KENT STREET
BLACKSBURG, VA 24060



BUILDING MAP
SCALE: N.T.S.

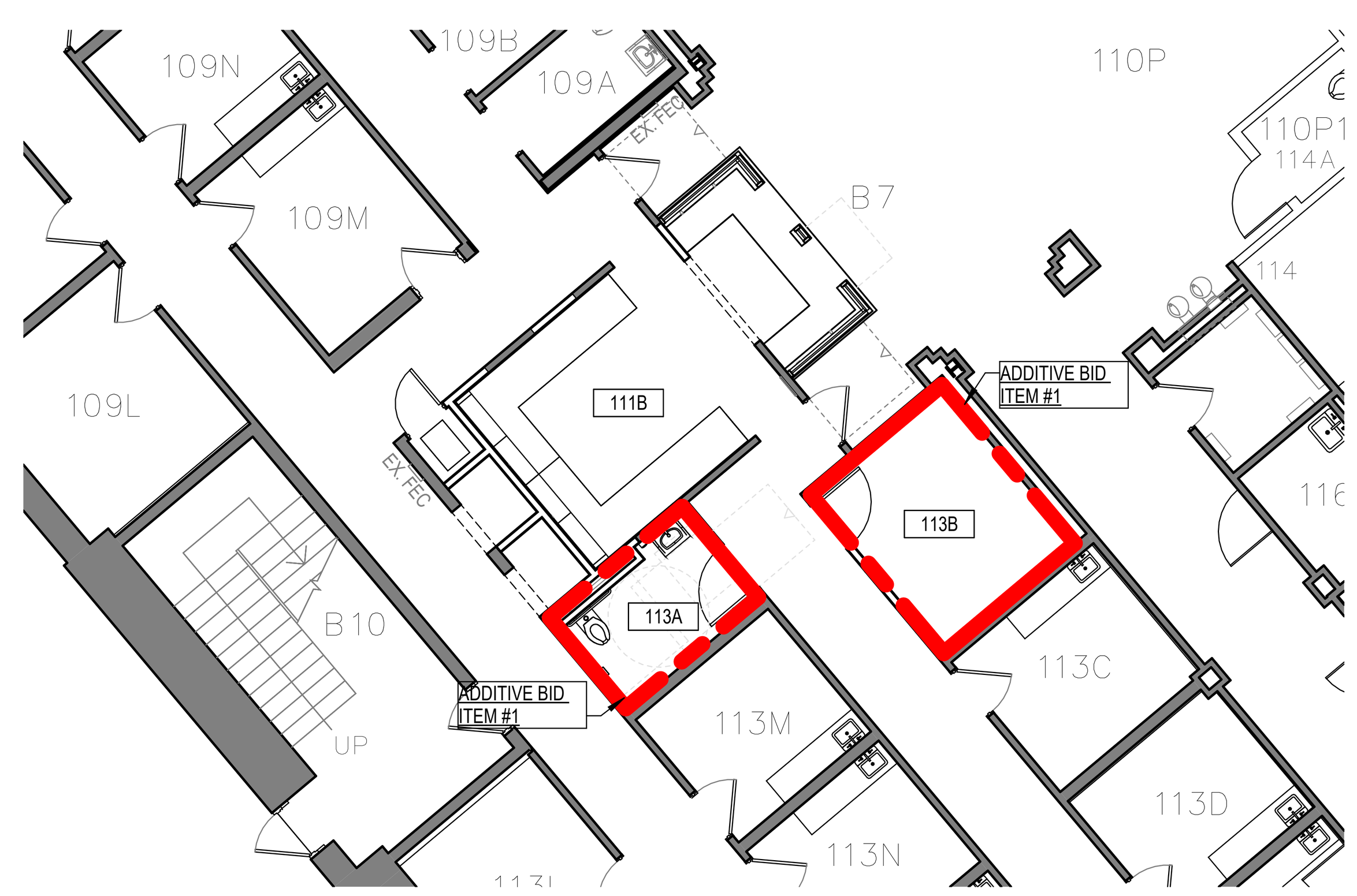


PROJECT LOCATION
SCALE: N.T.S.



PROJECT VICINITY
SCALE: N.T.S.

INDEX OF DRAWINGS:



ADDITIVE BID ITEMS
SCALE: 1/8" = 1'-0"

ADDITIVE BID ITEM #1
ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.

HIGH PERFORMANCE BUILDINGS ACT

CPSM 6.1.3.2 HIGH PERFORMANCE BUILDINGS ACT - COMPLIANCE STATEMENT

IN ACCORD WITH THE HIGH PERFORMANCE BUILDINGS ACT, THE BUILDING IS EXEMPT FROM COMPLIANCE BECAUSE THE RENOVATED BUILDING AREA IS NOT GREATER THAN 5,000 GROSS SQUARE FEET.

DEMOLITION OF HAZARDOUS MATERIALS

ASBESTOS DISCLOSURE STATEMENT

AN ASBESTOS INSPECTION WAS NOT PERFORMED BECAUSE ALL PORTIONS OF THE EXISTING BUILDING THAT MAY BE AFFECTED BY THE WORK WERE ORIGINALLY CONSTRUCTED AFTER JANUARY 1, 1985.

LEAD MATERIALS DISCLOSURE STATEMENT

AN INSPECTION TO IDENTIFY LEAD CONTAINING OR COATED BUILDING COMPONENTS HAS NOT BEEN CONDUCTED BECAUSE THE BUILDING WAS CONSTRUCTED AFTER JANUARY 1, 1985 AND THE OWNER HAS NO KNOWLEDGE OF LEAD CONTAINING OR COATED BUILDING COMPONENTS IN THE BUILDING.

WORKING DRAWINGS | 03.20.2026

MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

SPECTRUM DESIGN | PROJECT NUMBER : 26003

SHEET NUMBER:
T001

ORIGINAL SIZE : ARCH E1 (30X42) | 3/20/2026 9:23:40 AM
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GENERAL PROJECT INFORMATION

SITE INFORMATION

TAX MAP NO.: 070905
ZONING: UNIV
FLOOD ZONE: N/A
PERMIT AUTHORITY: VIRGINIA TECH

OWNER INFORMATION

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BLACKSBURG, VA 24060

PROJECT TYPE: RENOVATIONS TO

PROJECT NAME: MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

PROJECT ADDRESS: 895 WASHINGTON ST SW. BLACKSBURG, VA 24061

LEAD DESIGN PROFESSIONALS

DISCIPLINE	FIRM	NAME	LICENSE	TELEPHONE
ARCHITECTURAL	SPECTRUM DESIGN	REAGAN TERRILL	17647	540.342.6001
PLUMBING	SPECTRUM DESIGN	MIKE RAKES	28199	540.342.6001
MECHANICAL	SPECTRUM DESIGN	MIKE RAKES	28199	540.342.6001
ELECTRICAL	SPECTRUM DESIGN	MIKE RAKES	28199	540.342.6001

PROJECT CODE SUMMARY

PROJECT DESCRIPTION
THE PROJECT IS GENERALLY DESCRIBED AS RENOVATIONS OF THE EXISTING NURSE WORKSTATION, STAFF OFFICE, AND RESTROOM AT SHIFFERT HEALTH CENTER WITHIN MCCOMAS HALL.

APPLICABLE BUILDING CODES

2023 VIRGINIA TECH DESIGN AND CONSTRUCTION STANDARDS MANUAL (EFFECTIVE JULY 2023)
2021 VIRGINIA CONSTRUCTION CODE (VCC)
2021 VIRGINIA EXISTING BUILDING CODE (VEBC)
2021 VIRGINIA PLUMBING CODE (VPC)
2021 VIRGINIA MECHANICAL CODE (VMC)
2021 VIRGINIA ENERGY CONSERVATION CODE (VECC), CLIMATE ZONE 4A
2021 VIRGINIA STATEWIDE FIRE PREVENTION CODE (VSFPC)
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2019 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS(NFPA 13)
2019 NATIONAL FIRE ALARM AND SIGNALING CODE(NFPA 72)
2017 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (ANSI 117.1)

BUILDING INFORMATION

ORIGINAL BUILDING CONSTRUCTED: 1998

EXISTING USES AND OCCUPANCIES: NON-SEPARATED MIXED USE A-3 & B

NEW USES AND OCCUPANCIES: NO CHANGE

NUMBER OF STORIES: 2 STORIES WITH BASEMENT

AREA PER FLOOR: LOWER LEVEL: 51,127 SF
GROUND LEVEL: 63,708 SF
UPPER LEVEL: 23,837 SF
MECH PENTHOUSE: 3,158 SF

TOTAL BUILDING AREA: 141,830 SF

ACTUAL WORK AREA: 601 SF

CONSTRUCTION TYPE: IIB UN-PROTECTED, NON-COMBUSTIBLE

AUTOMATIC SPRINKLER SYSTEM: PRESENT

FIRE ALARM AND DETECTION SYSTEM: PRESENT

2021 VIRGINIA EXISTING BUILDING CODE

CLASSIFICATION OF WORK: REPAIRS (CHAPTER 5); ALTERATIONS - LEVEL 1,2 (CHAPTER 6); ALL NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS, AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC.

CHAPTER 3 (VEBC): GENERAL PROVISIONS AND SPECIAL DETAILED REQUIREMENTS

SECTION 302.1 EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED NO HAZARD TO LIFE, HEALTH OR PROPERTY IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE VCC WOULD NOT PERMIT THEIR USE IN BUILDINGS OR STRUCTURES OF SIMILAR OCCUPANCY, PURPOSE, AND LOCATION.

CHAPTER 4 (VEBC): ACCESSIBILITY

SECTION 404 ALTERATIONS - THE RENOVATIONS IN THIS WORK AREA DO NOT REDUCE OR HAVE THE EFFECT OF REDUCING ACCESSIBILITY OF THE FACILITY OR PORTION OF THE FACILITY.

CHAPTER 6 (VEBC): ALTERATIONS

SECTION 602 LEVEL 1 ALTERATIONS

SECTION 602.2 ALL ALTERATIONS SHALL BE DONE IN A MANNER THAT MAINTAINS THE EXISTING LEVEL OF FIRE PROTECTION AND MEANS OF EGRESS.

SECTION 602.3.1 ALL NEWLY INSTALLED INTERIOR FINISH AND TRIM MATERIALS SHALL COMPLY WITH CHAPTER 8 OF THE VCC. SEE FINISH SCHEDULE, MATERIAL FINISH NOTES.

SECTION 603 LEVEL 2 ALTERATIONS

SECTION 603.3 ALL LEVEL 2 ALTERATIONS SHALL COMPLY WITH LEVEL 1 ALTERATION REQUIREMENTS.

SECTION 603.4.3 ALL NEW INTERIOR FINISH MATERIALS ARE DESIGNED TO COMPLY WITH THE VCC.

SECTION 603.5 MECHANICAL - WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH THE 2021 VIRGINIA CONSTRUCTION CODE

CHAPTER 7 (VEBC): CHANGE OF OCCUPANCY

NO CHANGE OF OCCUPANCY TO OCCUR.

CHAPTER 12 (VEBC): CONSTRUCTION SAFEGUARDS

CONTRACTOR SHALL COMPLY WITH THE 2021 VIRGINIA CONSTRUCTION CODE

NOTE: CODE ANALYSIS IS LIMITED TO THE WORK AREAS DESIGNATED.

2021 VIRGINIA CONSTRUCTION CODE

CHAPTER 8 (VCC): INTERIOR FINISHES

INTERIOR FINISH REQUIREMENTS (TABLE 803.13) USE GROUP B
VERTICAL EXITS & PASSAGEWAYS: CLASS B MINIMUM (SPRINKLERED)
EXIT ACCESS CORRIDORS: CLASS B MINIMUM (SPRINKLERED)
ROOMS / ENCLOSED SPACES: CLASS C MINIMUM (SPRINKLERED)

CHAPTER 10 (VCC): MEANS OF EGRESS

EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2): WITH(OUT) SPRINKLER SYSTEM =300 FT MAX. - USE GROUP B
ACTUAL MAXIMUM EXIT ACCESS TRAVEL DISTANCE = 83'-6" FT

CORRIDOR FIRE RESISTANCE RATING (TABLE 1020.2): USE GROUP B WITH CORRIDOR OCCUPANT LOAD(>) 30 = 0 HR WITH AUTOMATIC SPRINKLER SYSTEM.

REQUIRED CORRIDOR WIDTHS (SECTION 1020.3): 44" MIN.; ACTUAL CORRIDOR WIDTHS = 44" MIN.

CHAPTER 29 (VCC): PLUMBING SYSTEMS:

MINIMUM PLUMBING FACILITIES (VCC SECTION 2902/ VPC SECTION 403): SEE CHART - PLUMBING FIXTURE CALCULATIONS. PLUMBING FIXTURE CALCULATIONS HAVE BEEN EVALUATED ONLY FOR THE FLOOR CONTAINING THE AREA OF WORK IN ACCORDANCE WITH THE REQUIREMENTS FOR PARTIAL BUILDING ALTERATIONS. THE SCOPE OF WORK DOES NOT CHANGE THE BUILDING OCCUPANCY, OCCUPANT LOAD, OR PLUMBING FIXTURE COUNTS ON OTHER FLOORS; THEREFORE, THOSE AREAS WERE NOT INCLUDED IN THIS ANALYSIS.

PLUMBING FIXTURE CALCULATIONS (VPC TABLE 403.1)

OCCUPANCY		WATER CLOSETS				LAVATORIES				DRINKING FOUNTAINS		SRVC SINKS
		MALE		FEMALE		MALE		FEMALE				
CLASSIFICATION	LOAD	RATIO	QTY	RATIO	QTY	RATIO	QTY	RATIO	QTY	RATIO	QTY	1 PER BLDG
LEVEL 01 PLUMBING FIXTURES												
B - BUSINESS	100	1 : 25 ≤ 50 1 : 50 > 50	2	1 : 25 ≤ 50 1 : 50 > 50	2	1 : 40 ≤ 80 1 : 40 > 80	1	1 : 40 ≤ 80 1 : 40 > 80	1	1 : 100	1	
LEVEL 01 TOTAL REQUIRED		2		2		1		1		1	1	
PROVIDED		2		3		2		3		2	1	

1 LIFE SAFETY PLAN
LS001 SCALE: 1/8" = 1'-0"

LIFE SAFETY GENERAL NOTES

GN-1: THE WORK SHALL MEET THE REQUIREMENTS OF THE 2021 VIRGINIA EXISTING BUILDING CODE (VEBC), THE 2021 VIRGINIA CONSTRUCTION CODE (VCC) CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION, AND THE 2021 INTERNATIONAL FIRE CODE CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

GN-1: THIS BUILDING WILL REMAIN OCCUPIED THROUGHOUT CONSTRUCTION. ALL UTILITIES TO AND MEANS OF EGRESS FROM THE BUILDING SHALL REMAIN UNINTERRUPTED DURING NORMAL BUSINESS HOURS. ANY INTERRUPTION OF SERVICES SHALL OCCUR AFTER HOURS AND BE COORDINATED WITH THE OWNER. 48-HOURS WRITTEN NOTICE REQUIRED FOR OWNER APPROVAL PRIOR TO ALL EQUIPMENT SHUTDOWNS OR INTERRUPTION OF UTILITIES AND FIRE ALARM.

GN-2: FIRE ALARM AND FIRE SPRINKLER SYSTEMS SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. WHERE CEILINGS ARE REMOVED DURING CONSTRUCTION, SPRINKLER HEADS SHOULD BE CHANGED TO UPRIGHT HEADS IN ORDER TO KEEP THE SYSTEM OPERATIONAL AS MUCH AS POSSIBLE. IN LIEU OF SPRINKLER HEADS BEING MODIFIED TO UPRIGHT HEADS, CEILING MAY BE RESTORED EVERY DAY. IN LIEU OF MODIFYING SPRINKLER HEADS OR RESTORING CEILINGS EVERYDAY, THE CONTRACTOR SHALL PROVIDE A DEDICATED FIRE WATCH THROUGHOUT THE PERIOD OF TIME IN WHICH THE EXISTING CEILING IS REMOVED AND REPLACED WITH NEW CEILINGS. CONTRACTOR SHALL COORDINATE SUCH REQUIREMENTS AND ACTIVITIES WITH THE OWNER PRIOR TO INITIATING FIRE WATCH

LIFE SAFETY LEGEND

SPACE IDENTIFIER

SPACE NAME
1200 SF — AREA OF SPACE
1 : 200 — SF PER OCCUPANT
200/200 — ACTUAL SEATS (IF APPLICABLE) / CALCULATED OCCUPANCY

TRAVEL DISTANCE

PATHS OF TRAVEL

Ex 100'-0" / MAX 200'-0" — EXIT ACCESS TRAVEL (Ex) DISTANCE AND DIRECTION

RATED ASSEMBLIES

1 HOUR FIRE RATING

FIRE EXTINGUISHER & MOUNTING TYPE

EX. FEC FIRE EXTINGUISHER & SEMI-RECESSED CABINET

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

STATE BUILDING OFFICIAL APPROVAL STAMP

SPECTRUM DESIGN
architects | engineers

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.: **26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM** CHECKED BY: **RTT** DRAWN BY: **RTT**

SHEET ISSUE DATE: **03.20.2026**

PROJECT PHASE: **WORKING DRAWINGS**

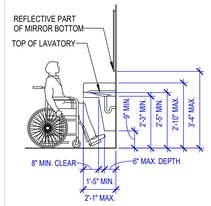
SHEET REVISIONS:

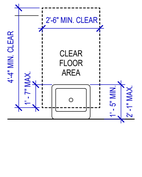
KEY PLAN:

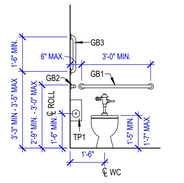
PLAN NORTH / SITE NORTH

SHEET NAME: **CODE SUMMARY & LIFE SAFETY PLAN**

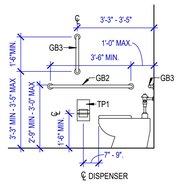
SHEET NUMBER: **LS001**

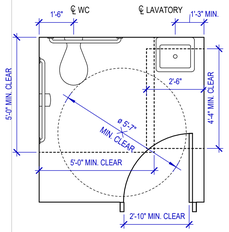


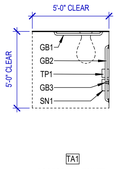




NOTE: FLUSH CONTROL TO BE INSTALLED TO WIDE SIDE OF TOILET AT ACCESSIBLE STALL







TA1
ACCESSIBLE TOILET

TOILETACCESSORY GROUP (TA-1)

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

PARTITION, WALL, & ASSEMBLY TYPES GENERAL NOTES

GN-1. FOR NEW CONSTRUCTION, PLAN DIMENSIONS ARE TO FACE OF METAL FRAMING MEMBERS U.N.O. FOR EXISTING CONSTRUCTION, PLAN DIMENSIONS ARE TO FACE OF FINISH OF EXISTING WALLS U.N.O. "CLEAR" DIMENSIONS ARE TO FACE OF FINISH (GWB, TILE, ETC).

GN-2. REFER TO FINISH SCHEDULES AND ELEVATIONS FOR APPLIED FINISHES NOT INDICATED IN WALL TYPES.

GN-2. WHERE TILE OCCURS AT STUDS AND FURRING, PROVIDE 5/8" GLASS FACED GWB IN LIEU OF PAPER FACED GWB. AT SHOWERS PROVIDE VAPOR BARRIER BEHIND TILE.

GN-4. PROVIDE DEFLECTION TRACKS OR CLIPS FOR ALL PARTITIONS ABUTTING STRUCTURE AND DECK ABOVE.

GN-5. ALL FIRE RATED WALLS AND PARTITIONS SHALL BE BUILT IN STRICT CONFORMANCE WITH A UL-LISTED ASSEMBLY OR OTHER TESTED ASSEMBLY WHICH PROVIDES THE INDICATED FIRE RATING. UL ASSEMBLIES INDICATED ESTABLISH A BASIS OF PERFORMANCE. OTHER ASSEMBLIES MAY BE CONSIDERED AT THE SOLE DISCRETION OF THE ARCHITECT IF EQUIVALENT PERFORMANCE IS PROVIDED. SUBSTITUTION/PROPOSALS SHALL INCLUDE CHANGES REQUIRED TO ALL COMPONENTS OF THE ASSEMBLY.

GN-6. PROVIDE A UL-LISTED AND APPROVED HEAD ASSEMBLY FOR RATED WALLS AND PARTITIONS THAT PROVIDES AN EQUAL OR GREATER FIRE RATING TO THAT OF THE FIRE RATED WALL OR PARTITION.

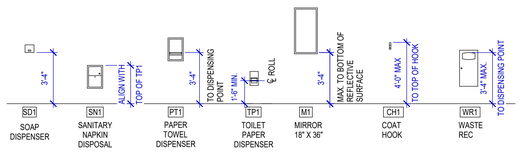
GN-7. FIRE-RESISTANCE ASSEMBLY MARKING (SECTION 703.7): WHERE THERE IS A CONCEALED FLOOR, FLOOR-CEILING, OR ATTIC SPACE, THE FIRE WALLS, FIREBARRIERS, FIRE PARTITIONS, SMOKE BARRIERS OR ANY OTHER ASSEMBLY REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE DESIGNATED ABOVE CEILINGS AND ON THE INSIDE OF ALL CEILING ACCESS DOORS THAT PROVIDE ACCESS TO SUCH FIRE RATED ASSEMBLIES BY SIGNAGE HAVING LETTERS NO SMALLER THAN ONE INCH IN HEIGHT. SUCH SIGNAGE SHALL INDICATE THE FIRE RESISTANCE RATING OF THE ASSEMBLY AND THE TYPE OF ASSEMBLY AND BE PROVIDED AT HORIZONTAL INTERVALS OF NO MORE THAN EIGHT FEET. AN EXAMPLE OF SUGGESTED FORMATTING FOR THE SIGNAGE WOULD BE'ONE HOUR FIRE PARTITION.'

EXTERIOR WALLS & INTERIOR PARTITIONS: X#A## — WALL/PARTITION TYPE (X = SCHEDULE); STRUCTURE WIDTH (# = NOMINAL); SUBCATEGORY / TERMINATION INDICATOR; FIRE RATING (# = HOURS)

FLOOR ASSEMBLIES (FA-) / ROOF ASSEMBLIES (RA-): XA-1 — ASSEMBLY TYPE (# = TYPE)

STRUCTURE WIDTH LEGEND

NOMINAL WIDTH	METAL STUD / FURRING	BRICK / CMU	CONCRETE	WOOD
1	7/8"	--	--	3/4"
2	1 5/8"	--	--	1 1/2"
3	2 1/2"	--	--	2 1/2"
4	3 5/8"	3 5/8"	4"	3 1/2"
6	6"	5 5/8"	6"	5 1/2"
8	8"	7 5/8"	8"	7 1/4"
10	10"	9 5/8"	10"	9 1/4"
12	12"	11 5/8"	12"	11 1/4"



GUIDELINES FOR ACCESSIBLE PLUMBING FIXTURES, AND TOILET AND BATH ACCESSORIES

SCALE: 3/8" = 1'-0"

TYPICAL TOILET AND BATH ACCESSORY ACCESSIBLE MOUNTING HEIGHTS

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

DOOR AND FRAME SCHEDULE

OPENING NO. / DOOR MARK	DOOR ELEV	DOOR PAIR	DOOR MATL	DOOR WIDTH	DOOR HEIGHT	FIRE RATING	FRAME ELEV	FRAME MATL	FRAME HEAD	FRAME JAMB	THRESH	HDWRE SET	KEYNOTES
FIRST FLOOR													
111A	F	--	WD/PNT	2'-6"	7'-10"	---	F1	HM	1H	1J	1T	001	2
113A	F	--	EXIST	3'-0"	7'-10"	---	F1	EXIST	EXIST	EXIST	1T	EXIST	1
113B	F	--	EXIST	3'-0"	7'-10"	---	F1	EXIST	EXIST	EXIST	1T	EXIST	1

DOOR ELEVATION TYPES

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

FRAME ELEVATION TYPES

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

DOOR SCHEDULE & SIGNAGE GENERAL NOTES

GN-1: SEE SPECIFICATIONS FOR DOOR HARDWARE SETS. DOOR LOCKING HARDWARE SHALL BE "KEYED" TO OWNER'S STANDARD. CONTRACTOR TO COORDINATE WITH OWNER AND DOOR LOCKING HARDWARE MANUFACTURER.

DOOR SCHEDULE INDICATORS

MATERIAL / FINISH LEGEND:
PNT - PAINT
WD - WOOD SOLID CORE

DOOR SCHEDULE KEYNOTES

1. RELOCATED EXISTING FRAME, DOOR, AND HARDWARE. SEE DEMO AND NEW WORK FOR MORE INFORMATION.

2. PAINT DOOR AND FRAME TO MATCH ADJACENT WALL COLOR.

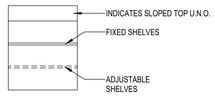
CASEWORK GENERAL NOTES

GN-1: CASEWORK NUMBERING SYSTEM BASIS: NAAWS CABINET DESIGN SERIES

CASEWORK TAG

NAAWS CABINET DESIGN SERIES NUMBER
* "M" = MODIFIED
** "V" = VARIES, MATCH WIDTH OF ADJ. CASEWORK BELOW
MODIFICATION DETAIL OR DESCRIPTION
000 M*
00 W**
00 H
00 D
X/AXXX
CASEWORK WIDTH **
NOMINAL CASEWORK HEIGHT (TOP FACE OF COUNTERTOP IF BASE CABINET)
NOMINAL CASEWORK DEPTH (REAR OF CABINET TO OUTSIDE FACE OF CABINET DOOR)
NOTE: COUNTERTOP MAX DEPTH = 24" FROM FACE OF WALL TO OUTSIDE EDGE OF COUNTERTOP

GN-2: SHELVING TYPES - SEE CASEWORK ELEVATIONS FOR LOCATIONS AND QUANTITY.



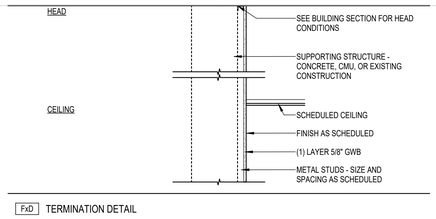
GN-3: GC TO COORDINATE INSTALLATION OF BLOCKING IN WALLS AS REQUIRED TO SUPPORT ALL CASEWORK; TYP.

GN-4: FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS TO ARCHITECT FOR REVIEW.

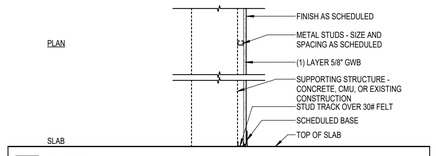
GN-5: ALL EXPOSED SURFACES SHALL BE PLASTIC LAMINATE UNLESS NOTED OTHERWISE; COORDINATE WITH SPECIFICATIONS.

GN-6: CONTINUE FLOORING AND WALL BASE INSIDE OPEN CABINETS AND OPENINGS BETWEEN CABINETS.

GN-7: CONTINUE WALL BASE ON FACE OF TOE KICK AND FACE OF END PANELS UNLESS NOTED OTHERWISE.

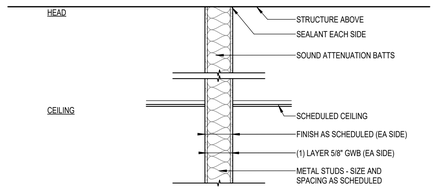


FxD TERMINATION DETAIL

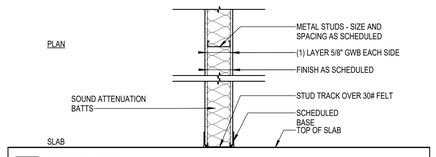


F PARTITION TYPE

ASSEMBLY TAG (F)	TOTAL WIDTH	STRUCT WIDTH	MIN. GAUGE	MAX. SPACING	LIMITING HEIGHT	UL NO.	FIRE RATING	TERM. DETAIL	STC RATING	STC TEST	KEYNOTES
F4A	4 1/4"	3 5/8"	20	16"	6" ABV CLG	--	--	FxA	--	--	--
F4D	4 1/4"	3 5/8"	20	16"	--	--	--	FxD	--	--	--

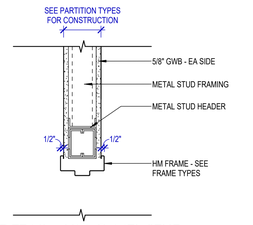


GxD TERMINATION DETAIL



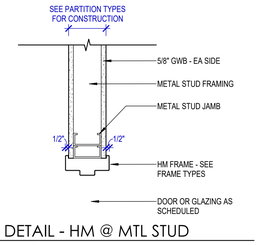
G PARTITION TYPE

ASSEMBLY TAG (G)	TOTAL WIDTH	STRUCT WIDTH	MIN. GAUGE	MAX. SPACING	LIMITING HEIGHT	UL NO.	FIRE RATING	TERM. DETAIL	STC RATING	STC TEST	KEYNOTES
G4B	4 7/8"	3 5/8"	20	16"	SEE PLANS	--	--	GxB			--
G4D	4 7/8"	3 5/8"	20	16"	--	--	--	GxD			--



1H HEAD DETAIL - HM @ MTL STUD

A001 SCALE: 1 1/2" = 1'-0"



1J JAMB DETAIL - HM @ MTL STUD

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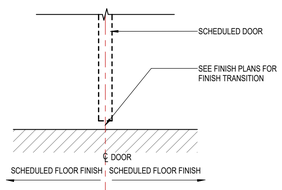
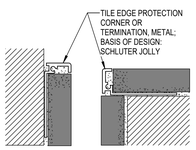


1T TYP. DOOR SILL DETAIL

A001 SCALE: 1 1/2" = 1'-0"

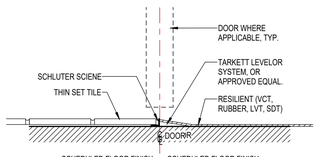
ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR FINISH	WALL BASE	WALL FINISH	CEILING MATERIAL	CEILING FINISH	REMARKS
FIRST FLOOR							
111	CORIDOOR	EXIST*	WB-1	PNT	EXIST	---	*REPAIR WHERE DAMAGED DUE TO NEW WORK
111A	IT	LVT-1	WB-1	PNT	ACP-1	---	
111B	NURSES STATION	LVT-1	WB-1	PNT	ACP-1	---	
111C	NURSES CHECK-IN	LVT-1	WB-1	PNT	ACP-1/GWB	PNT	
111D	CHECK IN	LVT-1	WB-1	PNT	ACP-1	---	
111E	CHECK IN	LVT-1	WB-1	PNT	ACP-1	---	
113A	TOILET	PT-1	PT-1 COVE BAS;	PNT-2 / GWB	GWB	---	SEE WALL FINISH PLAN FOR FULL HEIGHT PT-2 TILE LOCATION. PROVIDE PT-1 COVE BASE AT ALL OTHER GWB WALL LOCATIONS.



TYP. WALL TILE EDGE

SCALE: 12" = 1'-0"



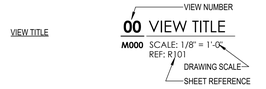
TR1 TILE TO RESILIENT

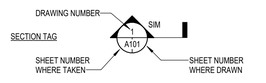
A001 SCALE: 3" = 1'-0"

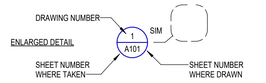
ROOM FINISH LEGEND (BASIS OF DESIGN)

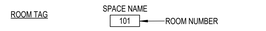
TAG	SUPPLIER / MANUFACTURER	PATTERN / PRODUCT	COLOR NAME	REMARKS	DIVISION
06 41 00 INTERIOR ARCHITECTURAL WOODWORK					
PL-1	WILSONART	DESIGNER WHITE	D354-60 MATTE FINISH	CASEWORK	06 41 00 INTERIOR ARCHITECTURAL WOODWORK
PL-2	WILSONART	TRO STRANDZ	4940K-18 LINEARITY FINISH	CASEWORK	06 41 00 INTERIOR ARCHITECTURAL WOODWORK
06 60 00 PLASTIC FABRICATIONS					
SS-1	CORIAN SOLID SURFACE	DUPONT	GLACIER WHITE	COUNTERTOP	06 60 00 PLASTIC FABRICATIONS
SS-2	CORIAN SOLID SURFACE	DUPONT	WEATHERED CONCRETE	COUNTERTOP	06 60 00 PLASTIC FABRICATIONS
09 30 00 TILING					
PT-1	DALTILE	HAUT MONDE	GLITTERATI GRANITE HM03 UNPOLISHED	FLOOR TILE: 2X2 MOSAIC; COVEBASE	09 30 00 TILING
PT-2	DALTILE	RIGID CLAY	ROCK RC12 - RIDGE	12X24; WALL TILE, STACKED BOND	09 30 00 TILING
09 51 00 ACOUSTICAL CEILINGS					
ACP-1	ARMSTRONG	GRAPHIS RUSTEX LINEAR BEVELED	WHITE	TYPICAL	09 51 00 ACOUSTICAL CEILINGS
09 65 00 RESILIENT FLOORING					
LVT-1	MANNINGTON COMMERCIAL	AMTICO SIGNATURE WOOD	HALO PINE AROW8250	MATCH EXISTING	09 65 00 RESILIENT FLOORING
09 65 13 RESILIENT BASE & ACCESSORIES					
WB-1	TARKETT	4" COVE	48 GREY WG	WALL BASE	09 65 13 RESILIENT BASE & ACCESSORIES
09 90 00 PAINTING AND COATING					
PNT-1	SHERWIN WILLIAMS	SEE SPECS	MATCH EXISTING	WALL - FIELD COLOR	09 90 00 PAINTING AND COATING
PNT-2	SHERWIN WILLIAMS	SEE SPECS	TBD	ACCENT	09 90 00 PAINTING AND COATING
PNT-CLG	SHERWIN WILLIAMS	SEE SPECS	SW7007 CEILING BRIGHT WHITE	GWB CEILING - FIELD COLOR	09 90 00 PAINTING AND COATING
PNT-TRIM	SHERWIN WILLIAMS	SEE SPECS	MATCH EXISTING	HM DOORS AND FRAMES	09 90 00 PAINTING AND COATING

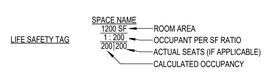
SYMBOLS LEGEND

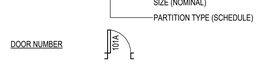


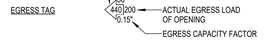


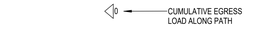


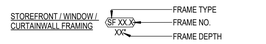


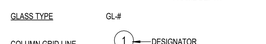


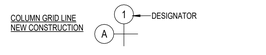








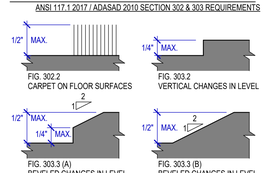




SIGNAGE TAG 101A

ACCESSIBLE CHANGES IN FLOOR FINISH LEVEL

ANSI 117.1 2017 / ADASAD 2010 SECTION 302 & 303 REQUIREMENTS



KEYNOTE INDICATOR

XX

A - ARCHITECTURAL / GENERAL
C - CIVIL
E - ELECTRICAL
D - DEMOLITION
F - FINISHES / FURNITURE
G - GLAZING / DOORS
LS - LIFE SAFETY
M - MECHANICAL
P - PLUMBING
R - ROOF
S - STRUCTURAL
W - WALLS
X - EXISTING

NOTES:
1. INDICATOR LETTER IS USED FOR KEYNOTE ORGANIZATION ONLY AND IS NOT INTENDED TO ASSIGN OR EXCLUDE WORK AND/OR COORDINATION TO OR FROM SPECIFIC TRADES OR DISCIPLINES.
2. KEYNOTES ARE TYPICALLY ASSOCIATED WITH A DRAWING SERIES. KEYNOTE NUMBERS MAY VARY FROM SERIES TO SERIES. SOME KEYNOTES MAY APPEAR IN A SHEET'S LEGEND, BUT NOT APPEAR IN A DRAWING ON THAT SPECIFIC SHEET.

ARCHITECTURAL ABBREVIATIONS

AB	ANCHOR BOLT		
ABV	ABOVE	LLH	LONG LEG HORIZONTAL
AC	ACCESS CONTROL		
ACM	ASBESTOS CONTAINING MATERIAL	LLV	LONG LEG VERTICAL
		LOC	LIMITS OF CONSTRUCTION
ACP	ACOUSTICAL CEILING PANEL	LP	LOW POINT
AED	AUTOMATED EXTERNAL DEFIBRILLATOR	MACH	MACHINE
		MAINT	MAINTENANCE
AFF	ABOVE FINISH FLOOR	MATL	MATERIAL
AHJ	AUTHORITY HAVING JURISDICTION	MCM	METAL COMPOSITE MATERIAL
ALT	ALTERNATE	MECH	MECHANICAL
ALUM	ALUMINUM	MO	MASONRY OPENING
AO	AUTOMATIC OPERATOR	MTD	MOUNTED
ARA	AREA OF RESCUE ASSISTANCE COMMUNICATION DEVICE	MTL	METAL
		NA	NOT APPLICABLE
		NIC	NOT IN CONTRACT
ARCH	ARCHITECTURAL	NTS	NOT TO SCALE
BD	BOARD	OC	ON CENTER
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BLKG	BLOCKING	OH	OPPOSITE HAND
BOT	BOTTOM	OHD	OVERHEAD DOOR
BRG	BEARING	OS	OVERFLW SCUPPER
CI	CONTINUOUS INSULATION	PLAM	PLASTIC LAMINATE
		PLUMB	PLUMBING
CJ	CONTROL JOINT	PNT	PAINT
CLG	CEILING	PR	PAIR
CMU	CONCRETE MASONRY UNIT	PT	PRESERVATIVE TREATED
CONC	CONCRETE		
CONF	CONFERENCE	R	RADIUS
CONT	CONTINUOUS	RCP	REFLECTED CEILING PLAN
CONTR	CONTRACTOR		
CW	CASEWORK	RD	ROOF DRAIN
		RE	REFER
DIA	DIAMETER	RECPT	RECEPTION
DS	DOWNSPOUT	REF	REFER TO
		REINF	REINFORCEMENT
EA	EACH	REV	REVERSED
EB	EXPANSION BOLT	RM	ROOM
EF	EACH FACE	RO	ROUGH OPENING
EJ	EXPANSION JOINT		
EL	ELEVATION	SCHED	SCHEDULE
ELEC	ELECTRICAL	SFRM	SPRAY APPLIED FIRE RESISTIVE MATERIAL
ELEV	ELEVATION		
ELEV	ELEVATOR	SHT	SHEET
EQ	EQUAL	SPEC	SPECIFICATION
EQUIP	EQUIPMENT	SS	STAINLESS STEEL
EW	EACH WAY	STL	STEEL
EXIST	EXISTING	STOR	STORAGE
EXT	EXTERIOR	STRUCT	STRUCTURAL
FE	FIRE EXTINGUISHER	THRESH	THRESHOLD
FEC	FIRE EXTINGUISHER AND CABINET	TLT	TOILET
		TOJ	TOP OF JOIST
FLR	FLOOR	TOS	TOP OF STEEL
FRT	FIRE RETARDANT TREATED	TOW	TOP OF WALL
		TYP	TYPICAL
FSM	FLEXIBLE SHEET MEMBRANE ROOFING	UNO	UNLESS NOTED OTHERWISE
FTG	FOOTING	UR	URINAL
GALV	GALVANIZED	VEST	VESTIBULE
GN	GENERAL NOTE	W/	WITH
GYB	GYPSUM WALL BOARD	W/O	WITHOUT
GYP	GYPSUM WALL BOARD	WC	WATER CLOSET
HDWRE	HARDWARE	WD	WOOD
HGT	HEIGHT	WHL CHR	WHEELCHAIR
HIPAC	HIGH PERFORMANCE ARCH COATING		
HP	HIGH POINT	°	DEGREE
HR	HOUR	±	PLUS / MINUS
ID	INSIDE DIAMETER	Ø	DIAMETER
INT	INTERIOR	≤	LESS THAN OR EQUAL TO
ISOL	ISOLATION	≥	GREATER THAN OR EQUAL TO
JAN	JANITOR	•	BULLET POINT
JT	JOINT		

ARCHITECTURAL MATERIALS

EARTH; FINISH WOOD; POROUS FILL (STONE OR GRAVEL); CAST-IN-PLACE CONCRETE; BRICK; CONCRETE MASONRY UNITS; BRICK VENEER (ELEVATIONS); CMU VENEER (ELEVATIONS); STEEL; ALUMINUM; PLYWOOD; RIGID INSULATION; BATT INSULATION; GYPSUM WALL BOARD; WOOD BLOCKING

**NOTE: THESE ARE STANDARD SYMBOLS - ALL SYMBOLS NOTED ON THIS SHEET MAY NOT APPLY.

STATE BUILDING OFFICIAL APPROVAL STAMP

SPECTRUM DESIGN
architects | engineers

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

NOT FOR CONSTRUCTION

SPECTRUM DESIGN PROJECT NO.:**26003**

PROJ. MGR.:	CHECKED BY:	DRAWN BY:
JM	RTT	RTT

SHEET ISSUE DATE:
03.20.2026

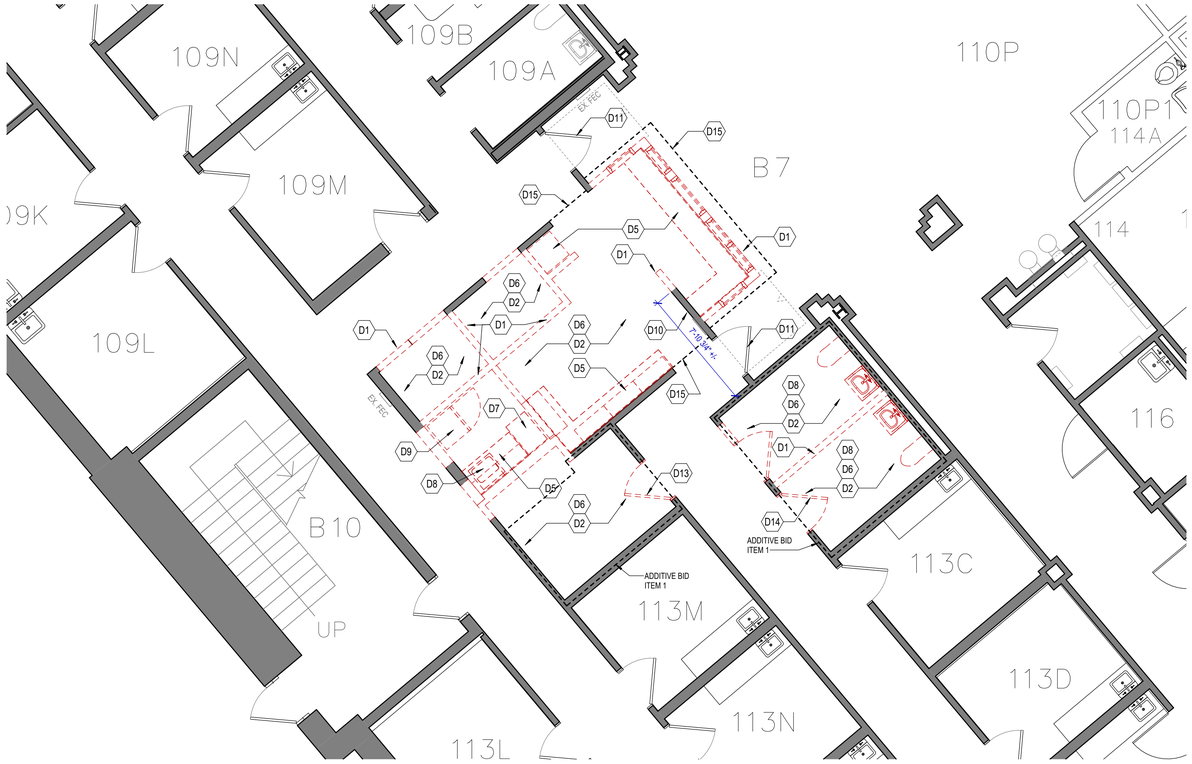
PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

PLAN NORTH; SITE NORTH

SHEET NAME:
GENERAL ARCHITECTURAL INFORMATION

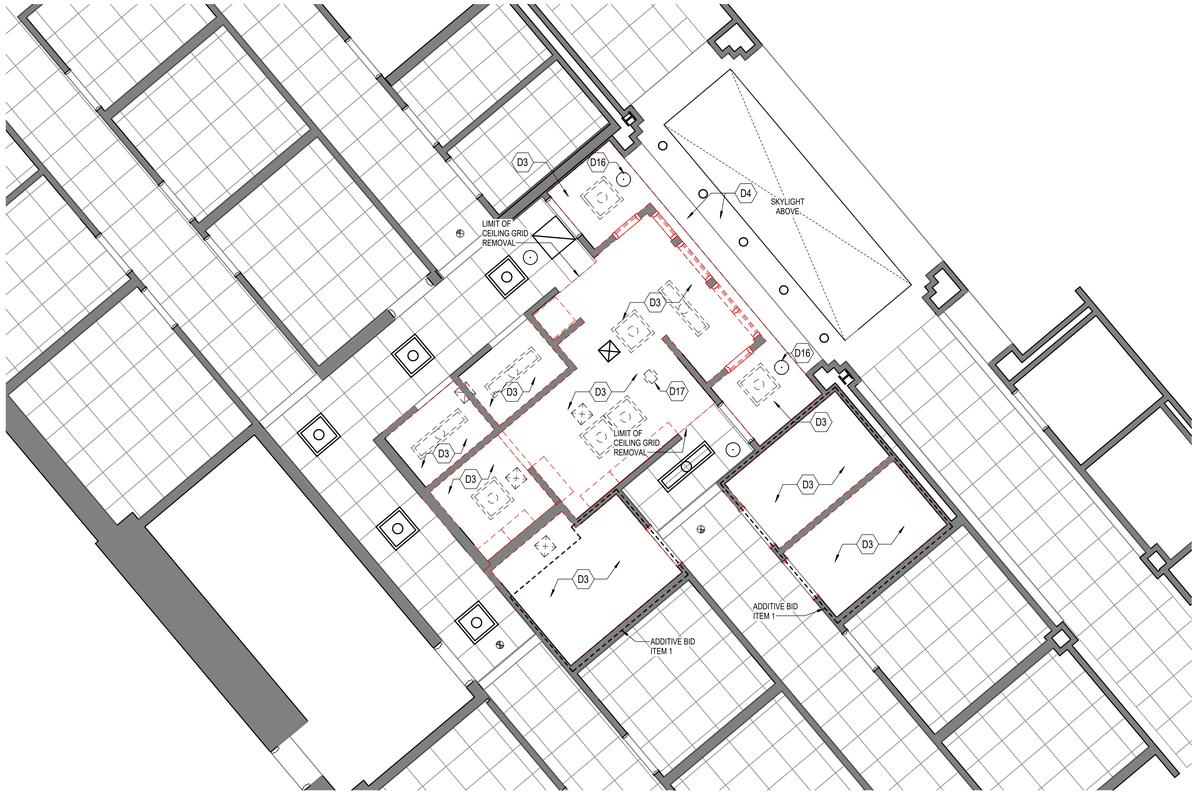
SHEET NUMBER:
A001



1 DEMOLITION PLAN

A041 SCALE: 1/4" = 1'-0"

ADDITIVE BID ITEM #1
ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.



2 DEMOLITION - REFLECTED CEILING PLAN

A041 SCALE: 1/4" = 1'-0"

ADDITIVE BID ITEM #1
ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.

DEMOLITION OF HAZARDOUS MATERIALS

ASBESTOS DISCLOSURE STATEMENT

AN ASBESTOS INSPECTION WAS NOT PERFORMED BECAUSE ALL PORTIONS OF THE EXISTING BUILDING THAT MAY BE AFFECTED BY THE WORK WERE ORIGINALLY CONSTRUCTED AFTER JANUARY 1, 1985.

LEAD MATERIALS DISCLOSURE STATEMENT

AN INSPECTION TO IDENTIFY LEAD CONTAINING OR COATED BUILDING COMPONENTS HAS NOT BEEN CONDUCTED BECAUSE THE BUILDING WAS CONSTRUCTED AFTER JANUARY 1, 1985 AND THE OWNER HAS NO KNOWLEDGE OF LEAD CONTAINING OR COATED BUILDING COMPONENTS IN THE BUILDING.

Dx DEMOLITION KEYNOTES

D1 REMOVE EXISTING INTERIOR WALL PARTITIONS INDICATED TO BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE, FINISHES, GYPSUM BOARD, STUD FRAMING, INSULATION, ROUGH-INS, DOORS, FRAMES, HARDWARE, ELECTRICAL DEVICES, CONDUIT, AND ALL ASSOCIATED COMPONENTS. COORDINATE DISCONNECTION OF ALL UTILITIES PRIOR TO REMOVAL. PATCH ADJACENT SURFACES TO MATCH EXISTING UNLESS NOTED OTHERWISE. STRUCTURAL COLUMNS AND STRUCTURAL ELEMENTS SHALL REMAIN UNLESS SPECIFICALLY INDICATED OTHERWISE.

D2 REMOVE EXISTING FLOOR FINISHES AND ALL ASSOCIATED COMPONENTS TO EXPOSE EXISTING CONCRETE FLOOR SLAB, INCLUDING BASE, ADHESIVES, MORTARS, GROUTS, LEVELING COMPOUNDS, ALL ASSOCIATED MATERIALS. PREPARE SLAB TO RECEIVE NEW FLOORING. REMOVE ALL ADHESIVE RESIDUES TO PROVIDE A CLEAN, SMOOTH SUBSTRATE SUITABLE FOR NEW FLOOR INSTALLATION. PATCH, REPAIR, AND LEVEL SLAB AS REQUIRED FOR NEW WORK.

D3 REMOVE EXISTING CEILING SYSTEMS IN AREAS INDICATED, INCLUDING GRID, TILES, HANGERS, PERIMETER TRIM, FASTENERS, AND ALL ASSOCIATED COMPONENTS. COORDINATE PROTECTION OF EXISTING STRUCTURE AND SYSTEMS ABOVE TO REMAIN. PREPARE SURFACES AS REQUIRED FOR NEW WORK.

D4 EXISTING BULKHEAD TO REMAIN. PROTECT DURING DEMOLITION AND CONSTRUCTION. REPAIR DAMAGE TO MATCH EXISTING.

D5 REMOVE EXISTING COUNTERTOPS AND ASSOCIATED CASEWORK, INCLUDING SUPPORTS, SEALANTS, AND FASTENERS.

D6 REMOVE EXISTING ELECTRICAL EQUIPMENT AS INDICATED. REFER TO ELECTRICAL DEMOLITION DRAWINGS FOR EXTENT.

D7 DISCONNECT, REMOVE, AND RELOCATE EXISTING IT RACK AS INDICATED. COORDINATE WITH OWNER PRIOR TO SHUTDOWN OR RELOCATION. MAINTAIN CONTINUITY OF SERVICE UNLESS SCHEDULED OUTAGE IS APPROVED BY OWNER.

D8 REMOVE EXISTING SINKS, FAUCETS, TRAPS, ACCESSORIES, AND ASSOCIATED PIPING TO POINT OF CAP. SEE PLUMBING DEMO FOR EXTENT OF WORK. PATCH AND REPAIR FINISHES TO MATCH EXISTING.

D9 REMOVE REFRIGERATOR AND RETURN TO OWNER.

D10 EXISTING NURSE CALL CONTROL PANEL AND ASSOCIATED SYSTEM COMPONENTS SHALL REMAIN. PROTECT FROM DAMAGE, DUST, VIBRATION, AND SERVICE INTERRUPTION DURING DEMOLITION AND CONSTRUCTION. COORDINATE WITH OWNER PRIOR TO ANY WORK THAT COULD IMPACT SYSTEM OPERATION. REPAIR OR REPLACE DAMAGED COMPONENTS AT NO ADDITIONAL COST.

D11 EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN SHALL BE PROTECTED DURING DEMOLITION AND CONSTRUCTION.

D13 REMOVE EXISTING DOOR AND ASSOCIATED HARDWARE AND RELOCATE TO NEW FRAME AT OFFICE 113B. EXISTING FRAME TO REMAIN AND BE REUSED.

D14 REMOVE EXISTING DOOR, FRAME AND HARDWARE. RELOCATE NEW DOOR TO NEW RESTROOM DOOR 113A. RELOCATE FRAME TO NEW OFFICE DOOR 113B. MODIFY DOOR AND FRAME AS REQUIRED TO RECEIVE RELOCATED HARDWARE. VERIFY DOOR SIZE, AND SWING, PRIOR TO RELOCATION.

D15 LIMITS OF FLOORING DEMOLITION AS INDICATED. COORDINATE WITH NEW WORK TO TIE NEW FLOOR FINISH INTO EXISTING FLOOR FINISH.

D16 REMOVE AND REINSTALL EXISTING PA SYSTEM SPEAKER AS REQUIRED FOR NEW WORK. COORDINATE LOCATION, POWER, AND CONNECTION WITH ELECTRICAL DRAWINGS.

D17 REMOVE AND REINSTALL EXISTING WAP AS REQUIRED FOR NEW WORK. COORDINATE LOCATION AND RECONNECTION WITH ELECTRICAL DRAWINGS AND OWNER IT REPRESENTATIVE.

DEMOLITION GENERAL NOTES

GN-1: EXISTING DIMENSION, SQUARE FOOTAGES, AND SIZES/LOCATIONS OF EXISTING EQUIPMENT ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS PRIOR TO SUBMITTING A BID. IF CONDITIONS IN FIELD DIFFER FROM THOSE SHOWN, NOTIFY OWNER/ARCHITECT IMMEDIATELY.

GN-2: CONTRACTOR SHALL NOTIFY ALL UTILITIES, INCLUDING BUT NOT LIMITED TO WATER/SEWER, ELECTRIC, GAS, TELEPHONE, HAVING SERVICE CONNECTIONS TO THE EXISTING BUILDING PRIOR TO DEMOLITION TO ENSURE THAT ANY EQUIPMENT HAS BEEN PROPERLY REMOVED, UNPLUGGED, CAPPED/PLUGGED, OR SEALED AS REQUIRED FOR DEMOLITION AND/OR NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL, CAPPING/PLUGGING, AND SEALING OF SERVICES REMAINING IN WORK AREAS AS REQUIRED FOR DEMOLITION AND/OR NEW WORK

GN-3: CONTRACTOR SHALL REMOVE WALLS AND OTHER ELEMENTS SHOWN DASHED IN THEIR ENTIRETY.

GN-4: CONTRACTOR SHALL REMOVE / DISPOSE OF ANY AND ALL DEMOLITION DEBRIS PROPERLY AND IN ITS ENTIRETY TAKING CARE TO KEEP A CLEAN AND SAFE WORKING ENVIRONMENT AT ALL TIMES.

GN-5: CONTRACTOR SHALL ENSURE WORK IS DONE IN A COMPETENT / SAFE MANNER TAKING CARE NOT TO DAMAGE OR DISTURB SURROUNDING SURFACES MORE THAN REQUIRED TO COMPLETE DEMOLITION.

GN-6: CONTRACTOR SHALL REMOVE EXISTING TRIM AS REQUIRED TO COMPLETE WORK IN DESIGNATED AREAS. STORE IN A SAFE, SECURE, DRY AREA UNTIL ITEMS ARE TO BE REINSTALLED.

GN-7: CONTRACTOR SHALL REPAIR / PREP / PRIME AND PAINT AREAS AND ADJACENT SURFACES DAMAGED OR DISTURBED BY CONSTRUCTION. MATCH ADJACENT WALL COLOR, FINISH AND TEXTURE.

GN-8: ANY DOOR LOCK HARDWARE & CORES REMOVED SHALL BE TURNED OVER TO THE VIRGINIA TECH KEY SHOP.

GN-9: EXISTING ITEMS AND ADJACENT CONSTRUCTION TO REMAIN IN AREAS OF WORK SHALL BE PROTECTED DURING DEMOLITION ACTIVITIES. ITEMS DAMAGED BY CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER.

GN-10: OWNER SHALL REMOVE AND STORE ALL FURNISHINGS AND OTHER LOOSE ITEMS LOCATED IN AREA WHERE WORK IS TO BE DONE.

GN-11: CONTRACTOR SHALL PROVIDE ADEQUATE BRACING OF STRUCTURAL MEMBERS AND EXISTING/TEMPORARY STRUCTURES, AND PROVIDE ADDITIONAL SHORING DURING DEMOLITION OF EXISTING WALLS, ETC. AS REQUIRED FOR THE DURATION OF THE PROJECT.

GN-12: THE BUILDING WILL BE IN USE FOR THE DURATION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF WORK WITH OWNER ACTIVITIES AND OTHER TRADES INVOLVED WITH WORK AT THE PROJECT SITE. DISRUPTIVE ACTIVITIES TO BE COORDINATED WITH THE VIRGINIA TECH PROJECT MANAGER.

GN-13: CONTRACTOR TO PROVIDE A RATED TEMPORARY DUST PARTITION TO LIMIT DUST & DIRT MIGRATION TO AREAS NOT UNDER THE CONTROL OF THE CONTRACTOR. COORDINATE FINAL PARTITION LOCATIONS W/ ARCHITECT & OWNER.
- 3-5/8" 20 GA. MTL STD WALLS WITH 5/8" TYPE X GWB W/ TAPED JOINTS ON EACH SIDE OR CERTIFIED FIRE RETARDANT PLASTIC SHEETING 6 MIL. MINIMUM.
- DO NOT ATTACH TEMPORARY WALLS TO FLOOR OR CEILING.
- CONTRACTOR SHALL REPAIR ANY DAMAGED DUE TO THE DUST PARTITION WALL TO SURROUNDING EXISTING SURFACES AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.
- DOORS TO BE 3'-0" WIDTH W/ SELF CLOSING DEVICES.
- ALTERNATE DUST CONTROL METHODS SHALL BE COORDINATED WITH THE VIRGINIA TECH PROJECT MANAGER AND APPROVED BY THE UNIVERSITY BUILDING OFFICIAL PRIOR TO INSTALLATION.

GN-14: CONTRACTOR SHALL PROVIDE AND MAINTAIN CLEAR PATHS OF EGRESS FOR THE DURATION OF THE WORK.

GN-15: ANY REQUIRED MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION TO BE PERFORMED IN, OR AFFECTING THE USE OF, ADJACENT SPACES IN THE BUILDING SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE START OF WORK. A MINIMUM OF (5) DAYS NOTICE SHALL BE REQUIRED TO ANY UTILITY SHUTDOWN.

GN-16: MAINTAIN WORKING CONDITION OF ANY EXISTING EMERGENCY & FIRE ALARM SYSTEMS AND COMPONENTS FOR THE DURATION OF THE WORK

GN-17 MAINTAIN ANY EXISTING FIRE RESISTANCE RATINGS OF STRUCTURAL ELEMENTS AND FIRE SEPARATION ASSEMBLY RATING INDICATED BETWEEN NEW WORK AND EXISTING AREAS AND OCCUPANCIES FOR THE DURATION OF THE PROJECT.

GN-18 ALL EXISTING UTILITIES TO BE RELOCATED AS REQUIRED TO ACCOMMODATE NEW CEILING HEIGHTS. ALL UTILITIES TO BE CONCEALED ABOVE NEW CEILINGS. UTILITIES TO INCLUDE, BUT NOT LIMITED TO ALL PLUMBING, MECHANICAL, ELECTRICAL, SPRINKLER, PNEUMATIC AND DATA SERVICES.

DEMOLITION LEGEND

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE REMOVED
- EXISTING MISCELLANEOUS ITEMS TO BE REMOVED
- EXISTING DOOR TO BE REMAIN
- EXISTING DOOR TO BE REMOVED

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

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

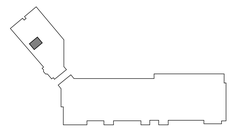
PROJ. MGR.:	CHECKED BY:	DRAWN BY:
JM	RTT	RTT

SHEET ISSUE DATE:
03.20.2026

PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

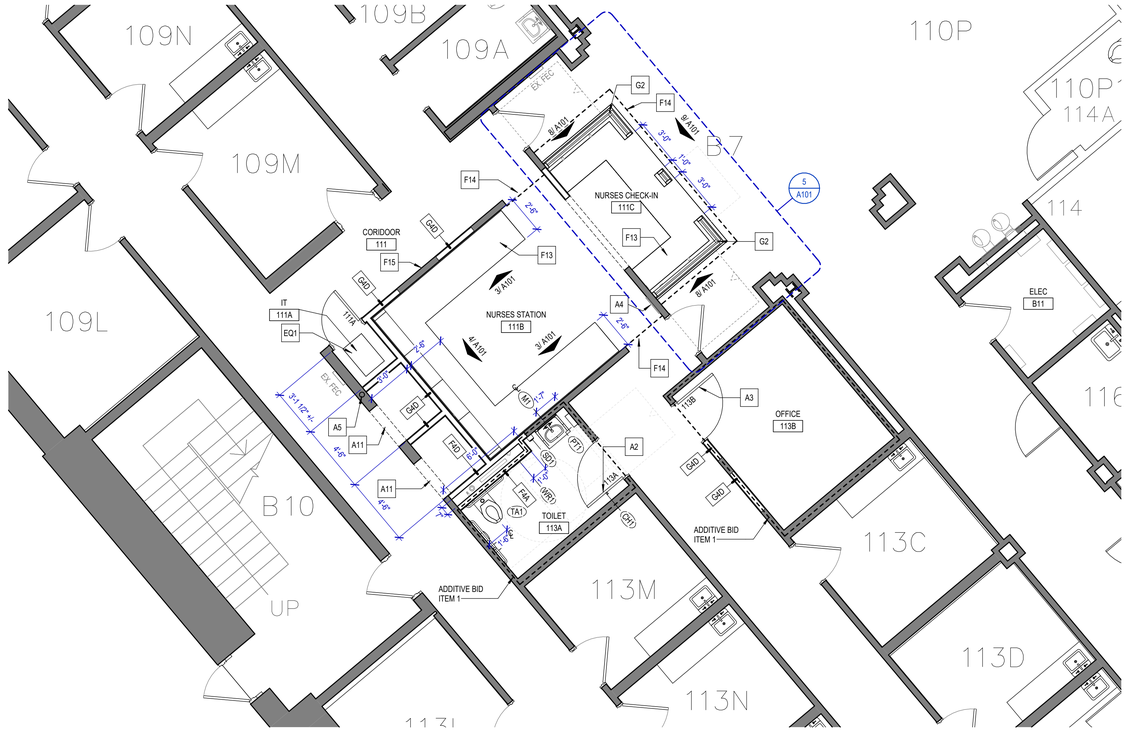
KEY PLAN:



PLAN NORTH N SITE NORTH

SHEET NAME:
DEMOLITION PLAN

SHEET NUMBER:
A041



1 FLOOR PLAN

A101 SCALE: 1/4" = 1'-0"

NOTE: PROVIDE CORNER GUARDS AT ALL EXPOSED GWB WALL CORNERS WITHIN WORK AREA. MATCH EXISTING HEIGHT, WIDTH, PROFILE, AND COLOR OF ADJACENT CORNER GUARDS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS. SEE SPECIFICATION SECTION 102813.

ADDITIVE BID ITEM #1
ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.

2 REFLECTED CEILING PLAN

A101 SCALE: 1/4" = 1'-0"

ADDITIVE BID ITEM #1
ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.

REFLECTED CEILING GENERAL NOTES

GN-1: MECHANICAL SUPPLY AND RETURN GRILLES, ELECTRICALFIXTURES AND EQUIPMENT, AND SPRINKLER HEADS (NOT SHOWN) TO BE CENTERED IN ACP OR WITHIN SPACE AT GWB CEILINGS. EXISTING SPRINKLER SYSTEM TO BE MODIFIED AS REQUIRED TO PROVIDE A FULLY FUNCTIONAL SYSTEM. EXISTING AND NEW SPRINKLER HEADS TO BE RAISED OR LOWERED AS REQUIRED TO COORDINATE W/ NEW CEILING HEIGHTS & CONDITIONS. SPRINKLER CONTRACTOR TO VERIFY COVERAGE OF EXISTING HEADS & MODIFY ACCORDINGLY TO INSURE THAT THE SYSTEMMEETS ALL NATIONAL, STATE, & LOCAL BUILDING CODES.

GN-2: DIMENSION GUIDELINES:
- REFLECTED CEILING PLAN DIMENSIONS ARE FROM FACE OFWALL FINISH (GWB, CMU, ETC) TO FACE OF BULKHEAD FINISH , CENTERLINE OF ACP GRID, CENTERLINE OF STRUCTURAL GRID,ETC. U.N.O.

GN-3: SUPPORT FRAMING SHOWN AT GWB CEILINGS AND BULKHEADS INDICATES DIMENSIONAL DESIGN INTENT. AT CONTRACTOR'S OPTION, SUBSTITUTE SUSPENDED METAL GRID FRAMING SYSTEM FOR STUD FRAMING AT GWB . CONTRACTOR TO COORDINATE FRAMING AS REQUIRED FOR RECESSED AND SURFACE MOUNTED CEILING ELEMENTS, INCLUDING LIGHTS, BULKHEADS, TRANSITIONS, ROLLER SHADES, PROJECTORS, ETC.

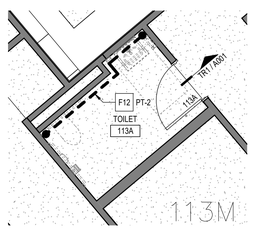
GN-5: REFER TO ELECTRICAL DRAWINGS FOR WALL MOUNTED AND UNDER CABINET FIXTURES AND SPEAKERS NOT INDICATED ON RCP.

GN-6: AT LOCATIONS WHERE ACP WILL BE 6" OR LESS IN WIDTH, USE A 2X4 ACP OF THE SAME TYPE AND MANUFACTURER. FOR EXAMPLE: IN LIEU OF A 6"X24" ACP NEXT TO A 24"X24" ACP, THE PANEL SHALL BE 30"X24" AND EXTEND TO THE WALL OR SOFFIT.

GN-7: PROVIDE ACCESS PANELS FOR ABOVE CEILING ACCESS AT GWB CEILINGS WHERE REQUIRED. SEE PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR EQUIPMENT REQUIRING ACCESSPANELS.

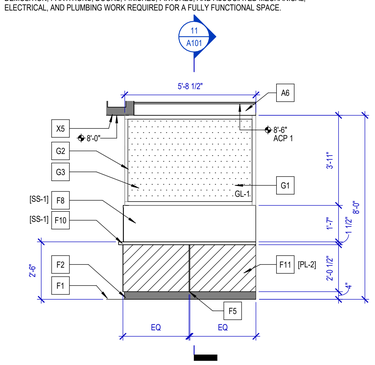
GN-8: PAINT ALL EXPOSED GWB, EXPOSED STRUCTURE, AND DECK U.N.O. - SEE FINISH LEGEND AND SCHEDULE.

GN-9: SEE CASEWORK DRAWINGS FOR EXTENT OF BULKHEADS AT CASEWORK LOCATIONS.



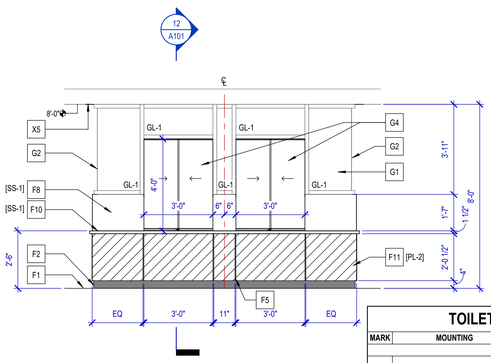
10 WALL FINISH PLAN

A101 SCALE: 1/4" = 1'-0"
REF: A101



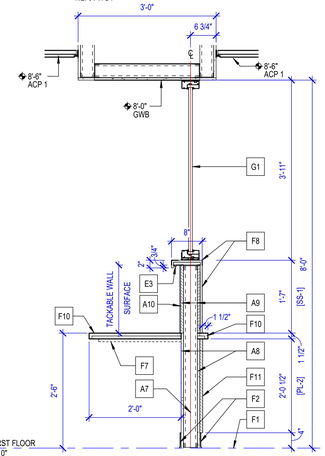
8 CASEWORK ELEVATION

A101 SCALE: 3/8" = 1'-0"
REF: A101



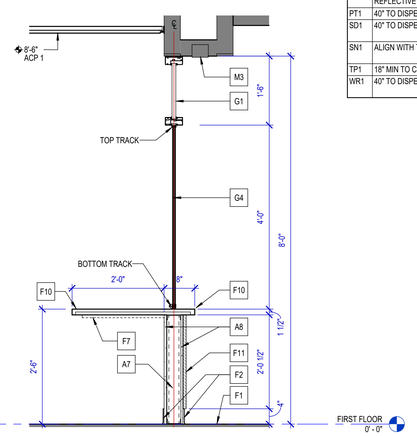
9 CASEWORK ELEVATION

A101 SCALE: 3/8" = 1'-0"
REF: A101



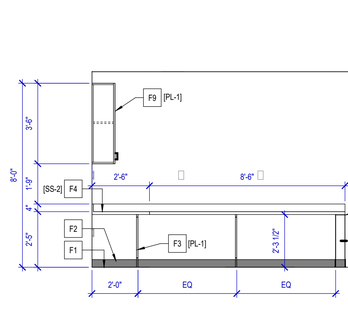
11 CASEWORK SECTION

A101 SCALE: 3/4" = 1'-0"
REF: A101



12 CASEWORK SECTION @ TRANSACTION WINDOW

A101 SCALE: 3/4" = 1'-0"
REF: A101

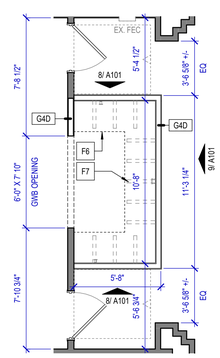


3 NURSES STATION CASEWORK

A101 SCALE: 3/8" = 1'-0"
REF: A101

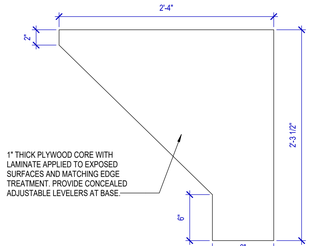
4 NURSES STATION REAR CASEWORK

A101 SCALE: 3/8" = 1'-0"
REF: A101



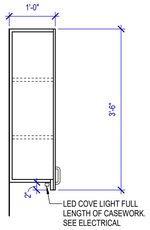
5 CASEWORK LOWER

A101 SCALE: 1/4" = 1'-0"
REF: A101



6 COUNTER TOP SUPPORT

A101 SCALE: 1 1/2" = 1'-0"



7 CASEWORK DETAIL

A101 SCALE: 3/4" = 1'-0"

TOILET AND BATH ACCESSORIES

MARK	MOUNTING	DESCRIPTION	MANUFACTURER	MODEL
CH1	48" MAX TO TOP OF HOOK	COAT / ROBE HOOK	BRADLEY	9B1-1102
GB1	SEE SHEET A-001	36" GRAB BAR	BRADLEY	832 x 36"
GB2	SEE SHEET A-001	42" GRAB BAR	BRADLEY	832 x 42"
GB3	SEE SHEET A-001	18" VERTICAL GRAB BAR	BRADLEY	832 x 18"
M1	40" MAX TO BOTTOM OF REFLECTIVE SURFACE	18" X 36" MIRROR	BRADLEY	781-1836
PT1	40" TO DISPENSING POINT	PAPER TOWEL DISPENSER	BRADLEY	250-15
SD1	40" TO DISPENSING POINT	SOAP DISPENSER	OWNER PROVIDED	OWNER PROVIDED
SN1	ALIGN WITH TOP OF PT1	SANITARY NAPKIN DISPOSAL	BRADLEY	4A10-11
TP1	18" MIN TO CL OF ROLL	TOILET TISSUE DISPENSER	BRADLEY	5263
WR1	40" TO DISPENSING POINT	RECESSED WASTE RECEPTACLE	BRADLEY	3257

REFLECTED CEILING PLAN LEGEND

- GWB CEILING - PAINTED
- SUSPENDED ACOUSTICAL CEILING PANEL SYSTEM (ACP)
- 1X4 LIGHT FIXTURE, RE: ELEC
- 2X2 LIGHT FIXTURE, RE: ELEC
- EXIT SIGN, RE: ELEC
- (S) CEILING MOUNTED SPEAKER
- (OC) OCCUPANCY SENSOR
- HVAC SUPPLY DIFFUSER, RE: MECH
- HVAC RETURN GRILLE, RE: MECH
- ABOVE FINISH FLOOR (A.F.F.)

FLOOR PLAN GENERAL NOTES

GN-1: DIMENSION GUIDELINES:
- NEW CONSTRUCTION = PLAN DIMENSIONS ARE TO FACE OF FRAMING MEMBERS AT GWB, FACE OF MASONRY, AND CENTERLINE OF STRUCTURAL GRID U.N.O.
- EXISTING CONSTRUCTION = PLAN DIMENSIONS ARE TO FACE OF FINISH OF EXISTING WALLS TO REMAIN U.N.O.
- PLUMBING FIXTURES = PLAN DIMENSIONS ARE FROM FACE OF FINISH (GWB, TILE, ETC) TO CENTERLINE OF FIXTURE.
- "CLEAR" = DIMENSIONS ARE TO FACE OF FINISH (GWB, TILE, ETC).

GN-2: WHERE PARTITIONS OF DIFFERENT THICKNESSES ABUT OR ADJOIN IN THE SAME LOCATION, THE EXPOSED / FINISH FACES SHALL BE INSTALLED FLUSH / ALIGNED.

GN-3: SEE LIFE SAFETY PLANS FOR FIRE EXTINGUISHER CABINET TYPES AND LOCATIONS.

GN-4: SEE FINISH PLANS FOR TILE LOCATIONS.

XX SHEET KEYNOTES

A2 REINSTALL EXISTING DOOR LEAF IN EXISTING FRAME. CLEAN, ADJUST, AND REHANG DOOR TO PROVIDE PROPER ALIGNMENT AND OPERATION. REINSTALL EXISTING HARDWARE UNLESS NOTED OTHERWISE. REPAIR OR REPLACE DAMAGED COMPONENTS TO MATCH EXISTING.

A3 REINSTALL EXISTING DOOR FRAME AND DOOR LEAF. PROVIDE NEW ANCHORAGE, SHIMS, AND FASTENERS AS REQUIRED. INSTALL FRAME PLUMB, LEVEL, AND SECURE. REHANG DOOR AND REINSTALL HARDWARE IN PROPER WORKING ORDER. PATCH AND REPAIR ADJACENT WALL CONSTRUCTION TO MATCH EXISTING.

A4 EXISTING NURSE CALL CONTROL PANEL AND ASSOCIATED SYSTEM COMPONENTS SHALL REMAIN. PROTECT FROM DAMAGE, DUST, VIBRATION, AND SERVICE INTERRUPTION DURING CONSTRUCTION. COORDINATE WITH OWNER PRIOR TO ANY WORK THAT COULD IMPACT SYSTEM OPERATION. REPAIR OR REPLACE DAMAGED COMPONENTS AT NO ADDITIONAL COST.

A5 FIELD VERIFY LOCATION OF EXISTING PLUMBING CLEANOUT PRIOR TO CUTTING OR CREATING OPENING IN PARTITION. NOTIFY ARCHITECT IF CLEANOUT CONFLICTS WITH NEW WORK PRIOR TO PROCEEDING.

A6 GWB BULKHEAD BEYOND

A7 3-5/8" METAL STUD FRAMING AT 16" O.C. MAXIMUM

A8 5/8" GWB

A9 3/4" PLYWOOD SUBSTRATE AS REQUIRED FOR ATTACHMENT OF FINISHES, CASEWORK, AND ACCESSORIES.

A10 1/4" THICK TACKABLE WALL SURFACE ADHERED TO PLYWOOD SUBSTRATE AS INDICATED.

A11 3'-0" X 7'-10" GWB FRAMED OPENING

A12 EXTENT OF NEW ACOUSTICAL CEILING PANEL (ACP) AND GRID SYSTEM AS INDICATED. TIE INTO AND ALIGN WITH EXISTING CEILING GRID TO MAINTAIN CONTINUOUS GRID PATTERN.

E3 CONTINUOUS LED STRIP LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPE.

EQ1 RELOCATE EXISTING IT RACK TO LOCATION INDICATED. COORDINATE POWER, DATA, AND SERVICE REQUIREMENTS WITH ELECTRICAL DRAWINGS AND OWNER IT REPRESENTATIVE.

F1 FLOOR FINISH AS SCHEDULED

F2 WALL BASE AS SCHEDULED

F3 PROVIDE COUNTERTOP SUPPORT AS DETAILED. REFER TO DETAIL FOR CONFIGURATION AND ATTACHMENT REQUIREMENTS. COORDINATE BLOCKING AND STRUCTURAL SUPPORT AS REQUIRED.

F4 SOLID SURFACE COUNTERTOP WITH UNDERCOUNTER CONCEALED SUPPORT BRACKETS. PROVIDE 28" LONG x 2-1/2" WIDE x 1/2" THICK HEAVY-DUTY STEEL CONCEALED FLOATING COUNTERTOP WALL BRACKETS AT 16" O.C. MAXIMUM. COORDINATE REQUIRED WALL BLOCKING AND ATTACHMENT TO STRUCTURE.

F5 1/2" WIDE CLEAR ANODIZED ALUMINUM U-CHANNEL REVEAL

F6 COUNTERTOP ABOVE

F7 PROVIDE 22" LONG x 2-1/2" WIDE x 1/2" THICK HEAVY-DUTY STEEL CONCEALED FLOATING COUNTERTOP WALL BRACKETS AT 16" O.C. MAXIMUM. COORDINATE REQUIRED WALL BLOCKING AND ATTACHMENT TO STRUCTURE.

F8 SOLID SURFACE MATERIAL AT HORIZONTAL COUNTERTOP AND VERTICAL FACE OF CASEWORK

F9 CASEWORK FINISH AS INDICATED

F10 SOLID SURFACE COUNTERTOP WITH 3/4" PLYWOOD SUBSTRATE. ADHERE SOLID SURFACE TO SUBSTRATE PER MANUFACTURERS REQUIREMENTS. COORDINATE WITH CONCEALED STEEL SUPPORT BRACKETS AS DETAILED.

F11 PLASTIC LAMINATE (P-LAM) PANEL OVER 3/4" PLYWOOD OR MDF SUBSTRATE WITH LAMINATE APPLIED TO EXPOSED FACES AND EDGES.

F12 EXTENT OF TILE WORK AS INDICATED. EXTEND TILE FROM FINISHED FLOOR TO CEILING.

F13 PROVIDE PASS-THROUGH GROMMETS AS REQUIRED. COORDINATE LOCATION OF PASS-THROUGH GROMMETS WITH OWNER.

F14 EXTENT OF NEW FLOOR FINISH. MATCH EXISTING LVT FLOORING AND TIE INTO ADJACENT FLOORING FOR CONTINUOUS APPEARANCE.

F15 PAINT FULL LENGTH OF WALL FROM FINISHED FLOOR TO CEILING.

G1 PREFINISHED ALUMINUM STOREFRONT SYSTEM

G2 BUTT-GLAZED GLASS CORNER. PROVIDE CLEAR STRUCTURAL SILICONE SEALANT AT JOINT.

G3 PROVIDE FROSTED PRIVACY FILM AT GLASS. REFER TO SPECIFICATIONS FOR MATERIAL AND PATTERN

G4 SLIDING TRANSACTION WINDOW WITH LOCKING MECHANISM AS INDICATED. REFER TO SPECIFICATIONS FOR MATERIAL, GLAZING, HARDWARE.

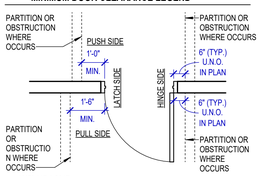
M3 EXISTING MECHANICAL DIFFUSER TO REMAIN. FIELD VERIFY LOCATION AND COORDINATE NEW GLAZING INSTALLATION TO AVOID CONFLICT.

X5 EXISTING BULKHEAD TO REMAIN. PATCH, REPAIR, AND PAINT AS REQUIRED TO ACCOMMODATE NEW WORK.

FLOOR PLAN WALL LEGEND

- EXISTING WALLS TO REMAIN
- NEW WALLS TO BE CONSTRUCTED
- EXISTING DOOR
- 101 NEW DOOR

MINIMUM DOOR CLEARANCE LEGEND



ANSI 117.1 2017
WHERE LATCH SIDE OF DOORWAYS ARE LOCATED ADJACENT TO A PERPENDICULAR PARTITION AND NOT OTHERWISE DIMENSIONED:

- PUSH SIDE - PROVIDE 1'-0" MIN. CLEAR BETWEEN INSIDE EDGE OF FRAME OPENING AND FINISH FACE OF ADJACENT PARTITION.
- PULL SIDE - PROVIDE 1'-6" MIN. CLEAR BETWEEN INSIDE EDGE OF FRAME OPENING AND FINISH FACE OF ADJACENT PARTITION.

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

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.:	CHECKED BY:	DRAWN BY:
JM	RTT	RTT

SHEET ISSUE DATE:
03.20.2026

PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

PLAN NORTH | SITE NORTH

SHEET NAME:
FLOOR PLAN, RCP, & CASEWORK DETAILS

SHEET NUMBER:
A101

SECTION 033000
CAST-IN-PLACE CONCRETE– SLAB INFILL
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes cast-in-place concrete infill for slab-on-grade areas where existing concrete slabs have been removed for plumbing trenching and other underground utility installation.

B. Work includes:

1. Preparation of existing slab edges.
2. Reinforcement doweling into existing slab.
3. Placement of concrete infill to match existing slab thickness.
4. Patching and finishing to receive scheduled floor finishes.

PART 2 – PRODUCTS
2.1 CONCRETE MATERIALS

A. Normal weight concrete.
B. Minimum compressive strength: 3000 psi at 28 days, unless noted otherwise.
C. Maximum slump: 4 inches.

2.2 REINFORCEMENT

A. Reinforcing bars:
ASTM A615 Grade 60.

B. Dowels:

1. #4 bars minimum.
2. Epoxy anchored into existing slab edges.
3. 12" embedment minimum.

2.3 BONDING AGENT

A. Latex bonding agent compatible with concrete patching applications.

PART 3 – EXECUTION
3.1 PREPARATION

A. Remove loose debris, dust, and contaminants from trench and existing slab edges.
B. Sawcut edges of existing slab to provide straight, clean edges.
C. Drill and install reinforcing dowels into existing slab.
D. Install vapor barrier patch where existing vapor barrier is present.

3.2 PLACEMENT

A. Place reinforcement as indicated.
B. Place concrete to match the thickness of the existing slab.
C. Consolidate concrete and finish flush with adjacent slab surface.

3.3 FINISHING

A. Finish surface to match adjacent slab condition.
B. Provide smooth trowel finish where flooring is to be installed.

3.4 CURING

A. Cure concrete in accordance with ACI recommendations.

3.5 PATCHING

A. Patch adjacent surfaces disturbed by trenching.
B. Prepare slab to receive floor finishes indicated on drawings.

SECTION 061000
ROUGH CARPENTRY
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes rough carpentry items required to support interior construction.
B. Work includes, but is not limited to:
1. Wood blocking and nailers.
2. Wood furring and grounds.
3. Plywood backing for wall-mounted fixtures and equipment.
4. Miscellaneous wood framing required to support interior finishes and accessories.

C. Rough carpentry work is non-structural and limited to concealed applications supporting interior construction.

1.2 RELATED SECTIONS

A. Section 092216 – Non-Structural Metal Framing.
B. Section 092900 – Gypsum Board.
C. Section 064000 – Architectural Woodwork.
D. Division 22 – Plumbing.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International and American Wood Council.

1.4 NONCOMBUSTIBLE CONSTRUCTION LIMITATIONS

A. Building construction type is Type IIB noncombustible construction.
B. Wood materials specified in this Section are permitted only for:
1. Blocking.
2. Nailers.
3. Plywood backing for fixtures and accessories.
4. Miscellaneous concealed supports for interior finishes.
C. Wood framing shall not be used for structural or load-bearing construction.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original bundles and store off the ground protected from moisture and damage.

PART 2 – PRODUCTS
2.1 LUMBER

A. Dimension lumber:
1. Construction grade or better.
2. Species: Spruce-Pine-Fir or equivalent.
B. Moisture content: Maximum 19 percent.

2.2 PLYWOOD

A. Exterior-grade plywood.
B. Thickness:
1. 3/4 inch plywood backing for wall-mounted fixtures, casework, and accessories unless noted otherwise.

2.3 FASTENERS

A. Nails, screws, and anchors suitable for the materials being connected.
B. Fasteners exposed to moisture shall be corrosion resistant.

PART 3 – EXECUTION
3.1 INSTALLATION

A. Install blocking, nailers, and backing where required to support wall-mounted items including, but not limited to:

1. Grab bars.
2. Plumbing fixtures and accessories.
3. Casework and countertops.
4. Toilet partitions and accessories.
5. Wall-mounted equipment.

B. Install blocking flush with framing and securely fastened.
C. Coordinate blocking locations with architectural drawings and equipment shop drawings.

3.2 TOLERANCES

A. Install rough carpentry level, plumb, and true to line.

SECTION 064023
INTERIOR ARCHITECTURAL WOODWORK (CASEWORK)
PART 1 – GENERAL
A. Section includes plastic laminate casework and related components.
B. Work includes:
1. Plastic laminate casework.
2. Cabinet boxes, doors, and drawer fronts.
3. Adjustable shelving.
4. Casework hardware and accessories.
5. Plastic laminate finishes.

1.2 RELATED SECTIONS
A. Section 066100 – Solid Surface Fabrications.
B. Section 096500 – Resilient Flooring.
C. Section 099123 – Interior Painting.

1.3 REFERENCES
A. Comply with standards published by:
1. Architectural Woodwork Institute
2. ANSI
B. Casework shall comply with AWI Quality Standards- Custom Grade unless otherwise indicated.

1.4 SUBMITTALS
A. Product data for casework materials.
B. Shop drawings indicating:
1. Cabinet construction.
2. Dimensions.
3. Hardware locations.
4. Laminate finishes.
5. Countertop coordination.
C. Laminate samples for Architect review.

1.5 QUALITY ASSURANCE
A. Fabricator shall be experienced in fabrication of institutional casework.
B. Provide materials from a single manufacturer where possible.
C. Installation shall comply with AWI quality standards.

PART 2 – PRODUCTS (BASIS OF DESIGN)
2.1 CASEWORK CONSTRUCTION
A. Casework shall comply with AWI Custom Grade construction.
1. Cabinet Boxes
A. Cabinet sides, tops, bottoms, and stretchers shall be 3/4 inch plywood construction.
B. Particleboard cabinet boxes are not permitted.
C. Cabinet backs shall be minimum 1/2 inch plywood.
D. Cabinets shall be assembled using mechanical fasteners and adhesives.
2. Shelving
A. Adjustable shelves shall be 3/4 inch plywood construction.
B. Shelves shall receive plastic laminate finish on exposed surfaces.
C. Provide metal shelf supports engaging cabinet shelf pin holes.
D. Provide minimum four supports per shelf.

2.2 PLASTIC LAMINATE
Manufacturer: Wilsonart
Laminate shall be high-pressure decorative laminate complying with ANSI standards.

PL-1
Manufacturer: Wilsonart
Color: Designer White
Product Number: D354-60
Finish: Matte
Application: Casework

PL-2
Manufacturer: Wilsonart
Color: TRO STRANDZ
Product Number: 4940K-18
Finish: Linearity
Application: Casework

2.3 EDGE BANDING
A. Provide edge banding at all exposed edges of casework components including cabinet doors, drawer fronts, shelves, and exposed panels.
B. Edge banding material:
1. PVC edge banding or matching plastic laminate.
2. Color shall match adjacent laminate surfaces.
C. Thickness:
1. Doors and drawer fronts: 3 mm PVC edge banding.
2. Shelves and exposed panels: 1 mm PVC edge banding minimum.
D. Edge banding shall be machine applied and securely bonded.

2.4 CASEWORK HARDWARE
Cable Grommets
1. Manufacturer: Häfele
2. Product: Catalog No. 429.93.322
3. Type: Cable pass-through grommet
4. Size: 2 inch diameter
5. Provide at locations indicated by Owner.
Cabinet Pulls
1. Manufacturers:Stanley Hardware Ives
2. Type: "U" pull handle
3. Material: Satin anodized aluminum
4. Dimensions:
A. Diameter: 5/16 inch
B. Projection: 1-5/16 inches
C. Centers: 3-1/2 inches
Cabinet Hinges
1. Manufacturer: Stanley Hardware
2. Model: 1592
3. Type: Knuckle hinge for flush overlay doors
4. Finish: Manufacturer standard finish matching cabinet pulls.

2.5 CABINET LOCKS
General
1. All cabinets shall be provided with locks unless noted otherwise on drawings.
2. Provide complete locking hardware including cylinders, cams, and strike plates.

Lever Type Cam Lock
1. Manufacturer: Häfele
2. Product: Similar to Häfele Catalog No. 235.04 series
3. Type: Lever type cam lock
4. Operation: Lock shall operate in G and H directions
5. Door Compatibility: Suitable for 1-3/8 inch thick cabinet doors
6. Strike Plate :Provide flush screw-mounted strike plate suitable to receive cam lock strike.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify supporting walls and substrates are ready to receive casework.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install casework plumb, level, and securely anchored.
B. Align adjacent units to produce a continuous installation
C. Coordinate installation with countertops and adjacent construction.
D. Install hardware, grommets, and accessories at locations indicated.

3.3 CLEANING
A. Remove protective coverings.
B. Clean laminate surfaces and leave casework free of defects.

SECTION 066100
SOLID SURFACE FABRICATIONS
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes solid surface fabrications including countertops and related accessories.
B. Work includes:
1. Solid surface countertops
2. Countertop backsplashes where indicated.
3. Countertop support bracing and accessories.
4. Pass-through grommets and cutouts.

1.2 RELATED SECTIONS
A. Section 064023 – Interior Architectural Woodwork.
B. Section 224000 – Plumbing Fixtures.
C. Section 079200 – Joint Sealants.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International
2. American National Standards Institute

1.4 SUBMITTALS
A. Product data for solid surface materials.
B. Samples of solid surface material indicating color and finish.
C. Shop drawings indicating:
1. Countertop layouts.
2. Edge profiles.
3. Backsplashes.
4. Seam locations.
5. Support conditions.
6. Locations of pass-through grommets and cutouts.

1.5 QUALITY ASSURANCE
A. Fabricator shall be experienced in solid surface fabrication.
B. Provide materials from a single manufacturer.
C. Installation shall comply with manufacturer requirements to obtain manufacturer warranty.

PART 2 – PRODUCTS (BASIS OF DESIGN)
2.1 SOLID SURFACE MATERIAL
1. Manufacturer: DuPont
2. Material: Corian® Solid Surface.
3. Thickness: Minimum 1/2 inch solid surface material laminated to substrate.
4. Finish: Matte finish unless otherwise indicated.

2.2 SOLID SURFACE TYPES
SS-1
1. Material: Corian® Solid Surface
2. Color: Glacier White
3. Application: Countertops

SS-2
1. Material: Corian® Solid Surface
2. Color: Weathered Concrete
3. Application: Countertops

2.3 SUBSTRATE
A. Provide minimum 3/4 inch exterior-grade plywood substrate continuous beneath solid surface countertops.
B. Substrate shall be securely fastened to supporting casework or framing.

2.4 COUNTERTOP SUPPORT
A. Provide concealed heavy-duty support bracing for countertops where required to support spans or overhangs.
B. Bracing shall be concealed within cabinetry or wall construction.
C. Bracing shall be capable of supporting imposed loads without visible deflection.

2.5 FABRICATION
A. Fabricate countertops to sizes and shapes indicated on drawings.
B. Provide seamless joints where possible using manufacturer-approved adhesives.
C. Edge profile: Square eased edge unless otherwise indicated.
D. Provide integral backsplashes where indicated on drawings.
E. Provide cutouts for plumbing fixtures, devices, and accessories as required.
F. Provide 2 inch diameter pass-through grommets at locations indicated on drawings.

2.6 ACCESSORIES
A. Adhesives:
Manufacturer-approved adhesives compatible with solid surface material.
B. Sealants:
Silicone sealant compatible with solid surface material and adjacent construction.
C. Grommets:
Plastic or metal pass-through grommets sized for 2 inch diameter openings.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify casework, framing, and supports are properly installed and ready to receive countertops.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install countertops level and securely anchored.
B. Provide tight seams and joints.
C. Conceal fasteners where possible.
D. Install concealed heavy-duty support bracing where required.
E. Coordinate installation with plumbing fixtures and accessories.
F. Install pass-through grommets at locations indicated.

3.3 CLEANING
A. Clean solid surface materials after installation.
B. Remove excess adhesives and debris.

SECTION 079200
JOINT SEALANTS
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes sealants for interior joints in walls, floors, ceilings, and around penetrations.

B. Work includes, but is not limited to:

1. Sealant joints at plumbing fixtures and countertops.
2. Joints between dissimilar materials.
3. Perimeter joints at door frames, casework, and built-in fixtures.
4. Floor and wall joints in wet areas.

1.2 RELATED SECTIONS

A. Section 092900 – Gypsum Board.
B. Section 093000 – Tiling.
C. Section 096500 – Resilient Flooring.
D. Section 224000 – Plumbing Fixtures.

1.3 REFERENCES

A. Comply with the following standards published by ASTM International:

1. ASTM C920 – Elastomeric Joint Sealants.
2. ASTM C1193 – Guide for Use of Joint Sealants.

1.4 SUBMITTALS

A. Product data for each sealant type.
B. Color samples when color selection is required.

1.5 QUALITY ASSURANCE

A. Sealants shall be compatible with adjacent materials.
B. Installer shall have experience with sealant applications indicated.

PART 2 – PRODUCTS
2.1 SEALANTS

A. Interior General Sealant

1. Type: Acrylic latex with silicone additives
2. Use: Interior joints at drywall, door frames, and casework.

B. Wet Area Sealant

1. Type: Mildew-resistant silicone sealant.
2. Use: Plumbing fixtures, sinks, countertops, and tile joints in wet areas.

C. Floor Sealant

1. Type: Single-component polyurethane sealant.
2. Use: Joints between flooring materials and at floor penetrations.

2.2 ACCESSORIES

A. Backer rod: Closed-cell polyethylene foam.
B. Bond breaker tape where backer rod cannot be installed.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify joint surfaces are clean, dry, and ready to receive sealant.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 PREPARATION

A. Clean joint surfaces of dust, oil, grease, and loose materials.
B. Install backer rod where required to control joint depth.

3.3 INSTALLATION

A. Install sealants in accordance with ASTM C1193 and manufacturer instructions.
B. Fill joints completely and tool to provide a smooth concave profile.
C. Avoid sealant on exposed adjacent surfaces.

3.4 CLEANING

A. Remove excess sealant from adjacent surfaces immediately.
B. Leave joints neat and uniform in appearance.

SECTION 081113
HOLLOW METAL FRAMES
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes hollow metal door frames for interior applications.
B. Work includes:
1. Hollow metal door frames.
2. Frame anchors and accessories.
3. Factory preparation for hardware.

1.2 RELATED SECTIONS

A. Section 081416 – Flush Wood Doors.
B. Section 087100 – Door Hardware.
C. Section 092216 – Non-Structural Metal Framing.
D. Section 099123 – Interior Painting.

1.3 REFERENCES

A. Comply with applicable standards published by Steel Door Institute and ASTM International including:

1. SDI 100 – Standard Steel Doors and Frames.
2. ASTM A653 – Steel Sheet, Zinc-Coated (Galvanized).
3. ASTM A568 – Steel Sheet, Carbon Steel.

1.4 SUBMITTALS

A. Product data for hollow metal frames.
B. Shop drawings showing frame profiles, dimensions, anchors, and hardware preparation.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver frames in manufacturer packaging and clearly labeled.
B. Store frames off the ground and protected from damage and corrosion.

PART 2 – PRODUCTS
2.1 HOLLOW METAL FRAMES

A. Frames shall comply with SDI 100.
B. Material: Cold-rolled steel.

C. Minimum thickness: 16 gauge.

D. Frame construction: Welded frame construction with continuously welded corners ground smooth.

E. Frames shall include:
1. Anchors for metal stud construction.
2. Reinforcement for door hardware including hinges, strikes, and closers where required.

2.2 FINISH

A. Frames shall be factory primed for field-applied paint finish.
B. Primer shall be compatible with finish paint specified in Section 099123- Interior Painting.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify openings and framing are ready to receive frames.
B. Do not install frames until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install frames plumb, level, and square.
B. Secure frames to metal stud framing using manufacturer-recommended anchors.
C. Coordinate installation with gypsum board work.

3.3 ADJUSTING

A. Adjust frames as required to ensure proper door operation.

3.4 PROTECTION

A. Protect frames from damage until final completion.

SECTION 081416
FLUSH WOOD DOORS
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes solid core flush wood doors for interior applications.
B. Work includes:
1. Solid core wood doors.
2. Factory preparation for hardware.
3. Priming for field-applied paint finish.

1.2 RELATED SECTIONS

A. Section 081113 – Hollow Metal Doors and Frames.
B. Section 087100 – Door Hardware.
C. Section 099123 – Interior Painting.

1.3 REFERENCES

A. Comply with applicable standards from AWI and WDMA including:
1. WDMA I.S.1A – Industry Standard for Architectural Flush Wood Doors.

1.4 SUBMITTALS

A. Product data for wood doors.
B. Shop drawings indicating door sizes, construction, and hardware preparation.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver doors in manufacturer packaging.
B. Store doors flat in a dry, ventilated space and protect from moisture and damage.

PART 2 – PRODUCTS
2.1 FLUSH WOOD DOORS

A. Interior flush wood doors complying with WDMA I.S.1A.
B. Core: Solid particleboard core or structural composite lumber core.
C. Door thickness: 1-3/4 inches.
D. Face: Hardwood veneer suitable for painted finish.
E. Construction: Five-ply bonded construction.

2.2 DOOR PREPARATION

A. Factory machine doors for hardware in accordance with approved hardware schedule.
B. Reinforce doors where required for closers, kick plates, and other hardware.

2.3 FACTORY FINISH

A. Doors shall be factory primed for field painting.
B. Final finish to be applied under Section 099123- Interior Painting.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify door openings and frame installation prior to door installation.
B. Do not install doors until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install doors in accordance with manufacturer instructions.
B. Fit doors to frames with uniform clearances.
C. Adjust hardware for proper operation.

3.3 ADJUSTING

A. Adjust doors and hardware to operate smoothly without binding.

3.4 PROTECTION

A. Protect installed doors from damage during construction.

SECTION 083313
ACCESS DOORS AND FRAMES
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes access doors and frames for installation in walls and ceilings to provide access to concealed building systems.

B. Work includes:

1. Access panels for plumbing, mechanical, and electrical systems.
2. Frames, doors, hardware, and accessories required for installation.

1.2 RELATED SECTIONS

A. Section 092900 – Gypsum Board.
B. Section 099123 – Interior Painting.
C. Division 22 – Plumbing.
D. Division 23 – HVAC.
E. Division 26 – Electrical.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International.

1.4 SUBMITTALS

A. Product data for each type of access door and frame.
B. Shop drawings indicating sizes, locations, and installation details.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver access doors in manufacturer packaging and clearly labeled.
B. Store materials protected from damage and moisture.

PART 2 – PRODUCTS
2.1 ACCESS DOORS AND FRAMES

A. Material:
1. 16-gauge steel frame minimum.
2. 16-gauge steel door panel minimum.

B. Frame:
1. Flanged frame suitable for installation in gypsum board or plaster.

C. Door:
1. Flush panel construction.
2. Concealed hinge.

D. Latching:
1. Screwdriver-operated cam latch or keyed latch where indicated.

E. Finish:
1. Factory prime coat for field-applied paint finish.

2.2 SIZE

A. Access doors shall be sized as required to provide adequate access to concealed equipment and controls.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify wall or ceiling openings are prepared to receive access doors and frames.
B. Do not begin installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install access doors and frames plumb and level.
B. Secure frames to surrounding construction in accordance with manufacturer instructions.
C. Coordinate installation with gypsum board and ceiling work.

3.3 ADJUSTING

A. Adjust doors and hardware to ensure smooth operation and proper alignment.

3.4 CLEANING AND PROTECTION

A. Clean installed access doors and remove protective coverings.
B. Protect installed units from damage during construction.

SECTION 084113
ALUMINUM FRAMED ENTRANCES AND STOREFRONTS
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes interior aluminum-framed storefront systems and pass-through window assemblies.
B. Work includes:
1. Aluminum storefront framing members.
2. Aluminum interior pass-through window assemblies.
3. Sliding glass hardware for pass-through window operation.
4. Anchors, fasteners, and installation accessories.
C. Work occurs at Nurses Check-In Station 111C as indicated on the Drawings.

1.2 RELATED SECTIONS

A. Section 088000 – Glazing.
B. Section 088713 – Decorative Glass Films.
C. Section 079200 – Joint Sealants.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International and Aluminum Association including:
1. ASTM B221 – Aluminum Extruded Bars, Rods, Wire, Profiles, and Tubes.
2. ASTM B209 – Aluminum Sheet and Plate.

1.4 SUBMITTALS

A. Product data for aluminum storefront system and pass-through window hardware.
B. Shop drawings indicating:
1. Framing member profiles and dimensions.
2. Glazing configuration.
3. Pass-through window layout.
4. Sliding hardware and locking mechanisms.
5. Anchoring and attachment methods.

1.5 QUALITY ASSURANCE

A. Provide storefront framing manufactured by a single manufacturer.
B. Pass-through window components shall be compatible with the storefront framing system.

PART 2 – PRODUCTS
2.1 ALUMINUM STOREFRONT SYSTEM

A. Basis of Design:
Kawneer Trifab® VersaGlaze® 450 Framing System.

B. System characteristics:
1. Frame depth: 4-1/2 inches.
2. Sightline: 1-3/4 inches.
3. Glazing method: Front-set glazing.
4. Extruded aluminum framing members.
C. Aluminum extrusions:
1. Alloy and temper complying with ASTM B221.
D. Fabrication:
1. Factory fabricated framing members with integral glazing pockets and attachment provisions.

2.2 GLAZING

A. Glass type:
1. GL-1 – 1/4 inch clear tempered glass as specified in Section 088000- Glazing.
B. Glazing method:
1. Manufacturer standard gaskets and glazing accessories compatible with the front-set glazing system.

2.3 INTERIOR PASS-THROUGH WINDOW ASSEMBLY

A. Pass-through window assembly integrated within aluminum storefront framing.
B. Sliding glass hardware Basis of Design:
1. CR Laurence Continental Style Security Track Assembly- Model CTA36A.

C. Assembly characteristics:
1. Satin anodized aluminum sliding track system.
2. Top and bottom aluminum track assemblies supporting sliding glass panels.
3. Lockable sliding glass panels capable of securing the window in the closed position.
4. Anti-lift feature to prevent removal of panels from the track.
5. Compatible with 1/4 inch tempered glass panels.
6. Sliding panels shall operate smoothly within track assemblies.

D. Acceptable manufacturers:
1. CR Laurence.
2. Approved equal meeting the same functional and security characteristics.

2.4 FINISH

A. Aluminum finish: Clear anodized finish.
B. Finish shall comply with Aluminum Association standards.

2.5 ACCESSORIES

A. Anchors and fasteners compatible with adjacent construction.
B. Glazing gaskets and sealants compatible with aluminum framing and glass.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify openings and supporting construction are ready to receive storefront framing.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Install aluminum storefront framing plumb, level, and aligned.
B. Secure framing to adjacent construction in accordance with manufacturer instructions.
C. Install glazing and sliding pass-through window components per manufacturer recommendations.

3.3 ADJUSTING

A. Adjust sliding glass panels and hardware to ensure smooth operation.
B. Verify locking hardware functions properly.

3.4 CLEANING AND PROTECTION

A. Remove protective coverings and clean exposed aluminum surfaces.
B. Protect installed assemblies from damage during construction.

SECTION 087100
DOOR HARDWARE
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes hardware for interior swinging doors including hinges, locksets, stops, and accessories.
B. Hardware shall be provided complete with fasteners and accessories required for proper installation and operation.

1.2 RELATED SECTIONS
A. Section 081113 – Hollow Metal Frames.
B. Section 081416 – Flush Wood Doors.

1.3 REFERENCES
A. Hardware shall comply with applicable standards published by:
1. Builders Hardware Manufacturers Association
2. American National Standards Institute

1.4 SUBMITTALS
A. Product data for door hardware items.
B. Hardware schedule indicating locations, functions, and finishes.

1.5 QUALITY ASSURANCE
A. Provide hardware from manufacturers listed in the Owner standards where applicable.
B. Coordinate keying with Owner.

PART 2 – PRODUCTS
2.1 HINGES
A. Manufacturer: Ives
B. Model: 5BB1
C. Size: 4-1/2" × 4-1/2"
D. Finish: 630 Satin Stainless Steel

2.2 LOCKSET
A. Manufacturer: Best Access Systems
B. Type: Cylindrical lockset
C. Function: Storeroom function
1. Outside: Key operated
2. Inside: Always free
D. Finish: 630 Satin Stainless Steel

2.3 DOOR STOP
A. Manufacturer: Ives
B. Model: WS406
C. Type: Wall stop
D. Finish: 630 Satin Stainless Steel

PART 3 – EXECUTION
3.1 INSTALLATION

A. Install hardware in accordance with manufacturer instructions.
B. Provide fasteners appropriate for door and frame materials.
C. Adjust hardware to ensure smooth door operation.

HARDWARE SET 001 – DOOR 111A

ROOM: IT / Storage Closet

Qty	Item	Description
3	Hinges	Ives 5BB1, 4-1/2" x 4-1/2", Finish 630
1	Lockset	Best CORMAX Cylindrical Lockset, Storeroom Function, Finish 630
1	Wall Stop	Ives WS406, Finish 630

Notes.
1. Coordinate lockset keying with Owner.

SECTION 088000
GLAZING
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes glazing for interior aluminum storefront framing systems and aluminum interior pass window assemblies.

B. Work includes:
1. Glass for interior glazing systems.
2. Glazing materials including setting blocks, gaskets, and sealants.

C. Locations include interior storefront system and aluminum interior pass window assemblies at Nurses Check-In Station 111C.

1.2 RELATED SECTIONS

A. Section 084113 – Aluminum Framed Entrances and Storefronts.
C. Section 079200 – Joint Sealants.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International including:

1. ASTM C1036 – Flat Glass.
2. ASTM C1048 – Heat-Treated Flat Glass.
3. ASTM C920 – Elastomeric Joint Sealants.
4. ASTM C864 – Dense Elastomeric Compression Seal Gaskets.

1.4 SUBMITTALS

A. Product data for glass and glazing materials.
B. Shop drawings indicating glazing sizes and system compatibility.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver glass in manufacturer packaging and clearly labeled.
B. Store glass upright in a dry location protected from damage.

PART 2 – PRODUCTS
2.1 GLASS TYPES

GL-1 – CLEAR TEMPERED GLASS
A. Thickness: 1/4 inch (6 mm).
B. Type: Fully tempered safety glass complying with ASTM C1048.
C. Glass shall be clear and free from scratches, distortion, or visual defects.

2.2 GLAZING MATERIALS

A. Setting blocks:
1. Neoprene or silicone compatible with glass and aluminum framing.
B. Glazing gaskets:
1. EPDM or neoprene gaskets compatible with aluminum storefront system.
C. Glazing sealants:
1. Neutral cure silicone sealant compatible with aluminum framing and glass.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify aluminum framing systems are installed and ready to receive glazing.
B. Do not begin glazing until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Install glass in accordance with manufacturer instructions for the aluminum framing system.
B. Provide setting blocks and maintain clearances recommended by the framing manufacturer.
C. Install glass plumb and free of stress or distortion.

3.3 CLEANING

A. Remove labels and protective coatings.
B. Clean glass surfaces after installation.

3.4 PROTECTION

A. Protect installed glazing from damage during construction.

SECTION 088713
DECORATIVE GLASS FILMS
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes decorative privacy film applied to interior glazing surfaces.
B. Work includes:
1. Frosted privacy film applied to interior glass.
2. Surface preparation and installation of film.
3. Layout and placement as indicated on the Drawings.

1.2 RELATED SECTIONS
A. Section 088000 – Glazing.
B. Section 084113 – Aluminum Framed Storefronts.
C. Section 079200 – Joint Sealants.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International.

1.4 SUBMITTALS

A. Product data for decorative glass film.
B. Manufacturer installation instructions.
C. Samples of film material.

1.5 QUALITY ASSURANCE

A. Installer shall be experienced in application of decorative films.
B. Install film in accordance with manufacturer recommendations.

PART 2 – PRODUCTS
2.1 DECORATIVE PRIVACY FILM

A. Basis of Design Product:
LLumar® Dusted Crystal (NRMV80DC PS3) Film manufactured by Eastman Chemical Company.

B. Type:
1. Frosted decorative privacy film.
C. Characteristics:
1. Translucent appearance allowing light transmission while obscuring views.
2. Self-adhesive application.
3. Designed for interior glazing applications.
D. Acceptable manufacturers:
1. LLumar.
2. 3M.
3. Solar Gard.
4. Or approved equal.

2.2 ACCESSORIES

A. Cleaning solutions and installation materials recommended by manufacturer.
B. Application fluids and tools required for proper installation.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify glass surfaces are clean, smooth, and ready to receive film.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 PREPARATION

A. Thoroughly clean glass surfaces prior to installation.
B. Remove dust, grease, and contaminants.

3.3 INSTALLATION

A. Install decorative film in accordance with manufacturer instructions.
B. Apply film smoothly with no visible bubbles, wrinkles, or distortions.
C. Install film in locations and extents indicated on the Drawings.

3.4 CLEANING AND PROTECTION

A. Remove installation residue and clean surfaces after installation.
B. Protect installed film from damage during construction.

SECTION 092216
NON-STRUCTURAL METAL FRAMING
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes interior non-load-bearing metal stud framing for partitions and framing supporting gypsum board and other interior finishes.

B. Work includes:

1. Metal stud wall framing.
2. Metal track, bridging, and bracing.
3. Framing for soffits, bulkheads, and miscellaneous interior framing.

1.2 RELATED SECTIONS

A. Section 092900 – Gypsum Board.
B. Section 061000 – Rough Carpentry.
C. Section 079200 – Joint Sealants.

1.3 REFERENCES

A. Comply with the requirements of the following:

1. ASTM International ASTM C645– Nonstructural Steel Framing Members.
2. ASTM C754 – Installation of Steel Framing Members.
3. ASTM C1007 – Installation of Load Bearing (Axial) Steel Studs where applicable.

1.4 SUBMITTALS

A. Product Data for metal studs, track, and accessories.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's original packaging.
B. Store materials off the ground and protected from moisture and damage.

PART 2 – PRODUCTS
2.1 METAL FRAMING MATERIALS

A. Metal studs:
1. Cold-formed steel studs conforming to ASTM C645.
2. Minimum thickness: 20 gauge (33 mil) unless noted otherwise.
3. Minimum flange width: 1-1/4 inch.
B. Tracks:
1. Same gauge as studs.
2. Width to match stud depth.
C. Stud spacing:
1. 16 inches on center unless indicated otherwise on drawings.

2.2 FRAMING ACCESSORIES

A. Bridging and braging as required for stud stability.
B. Fasteners:
1. Self-drilling screws suitable for steel framing.
C. Anchors:
1. Expansion anchors or powder-actuated fasteners for track attachment to concrete.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify existing conditions and substrate suitability prior to installation.
B. Notify Architect of conditions that may affect installation.

3.2 INSTALLATION

A. Install metal framing in accordance with ASTM C754 and manufacturer recommendations.
B. Secure floor and ceiling track to structure.
C. Install studs plumb and aligned at spacing indicated.
D. Provide additional framing at:
1. Doors and borrowed lights.
2. Wall-mounted fixtures and equipment.
3. Casework and accessories.
4. Plumbing fixtures where required.

3.3 TOLERANCES

A. Install framing plumb, level, and true to line.
B. Maximum variation: 1/8 inch in 10 feet.

3.4 PROTECTION

A. Protect installed framing from damage prior to enclosure.

SECTION 092900
GYPSUM BOARD
PART 1 – GENERAL
1.1 SUMMARY

A. Section includes gypsum board assemblies for interior walls, partitions, soffits, and ceilings.

B. Work includes:

1. High-impact gypsum board at interior partitions.
2. Cementitious backer board at tile locations.
3. Gypsum board ceilings and soffits.
4. Joint treatment and finishing.

1.2 RELATED SECTIONS

A. Section 092216 – Non-Structural Metal Framing.
B. Section 093000 – Tiling.
C. Section 079200 – Joint Sealants.
D. Section 099123 – Interior Painting.

1.3 REFERENCES

A. Comply with applicable standards published by ASTM International and Gypsum Association including:

1. ASTM C1396 – Gypsum Board.
2. ASTM C840 – Application and Finishing of Gypsum Board.
3. ASTM C1629 – Abuse-Resistant Gypsum Panels.
4. ASTM C1325 – Cementitious Backer Units.
5. GA-216 – Application and Finishing of Gypsum Panel Products.

PART 2 – PRODUCTS
2.1 HIGH-IMPACT GYPSUM BOARD

A. Abuse-resistant / impact-resistant gypsum panels complying with ASTM C1629.
B. Thickness: 5/8 inch.
C. Use at interior wall partitions unless otherwise indicated.

2.2 CEMENTITIOUS BACKER BOARD

A. Cementitious backer units complying with ASTM C1325.
B. Thickness: 1/2 inch minimum.
C. Use at all tile wall locations and wet areas.

2.3 GYPSUM CEILING BOARD

A. Gypsum board complying with ASTM C1396.
B. Thickness: 5/8 inch sag-resistant gypsum ceiling boar
C. Use at all gypsum board ceilings and soffits unless noted otherwise.

2.4 ACCESSORIES

A. Joint tape: Paper reinforcing tape.
B. Joint compound: Ready-mixed or setting type.
C. Corner beads: Metal or vinyl.
D. Fasteners: Self-drilling drywall screws suitable for metal stud framing.

PART 3 – EXECUTION
3.1 EXAMINATION

A. Verify framing is properly installed, aligned, and ready to receive gypsum board.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Install gypsum board in accordance with ASTM C840 and GA-216.
B. Install cementitious backer board at all locations receiving tile.
C. Install ceiling boards perpendicular to framing where possible.
D. Provide additional framing and blocking where required for fixtures, accessories, and equipment.

3.3 FINISHING

A. Tape and finish gypsum board joints in accordance with GA-214.
B. Provide Level 4 finish unless otherwise indicated.
C. Do not finish cementitious backer board joints where concealed by tile.

3.4 PROTECTION

A. Protect installed boards from damage and moisture prior to installation of finishes.

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

NOT FOR CONSTRUCTION

SPECTRUM DESIGN PROJECT NO.:**26003**

PROJ. MGR.: **JM**
CHECKED BY: **RTT**
DRAWN BY: **RTT**

SHEET ISSUE DATE:
03.20.2026

PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

PLAN NORTH — N — SITE NORTH

SHEET NAME:
ARCHITECTURAL SPECIFICATIONS

SHEET NUMBER:
A102

SECTION 093000
TILING
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes ceramic and porcelain tile for floor and wall applications including accessories and setting materials.
B. Work includes:
1. Floor tile.
2. Wall tile.
3. Mosaic tile.
4. Tile base.
5. Mortar, grout, and accessories.

1.2 RELATED SECTIONS
A. Section 092900 – Gypsum Board.
B. Section 079200 – Joint Sealants.

1.3 REFERENCES
A. Comply with applicable standards published by:
1. Tile Council of North America
2. ANSI
B. Tile installation shall comply with the TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.

1.4 SUBMITTALS
A. Product data for tile, mortar, grout, and accessories.
B. Tile samples for Architect review.

1.5 QUALITY ASSURANCE
A. Installation shall follow manufacturer recommendations to obtain full system warranty.
B. Contractor shall provide compatible materials from a single manufacturer where required to obtain system warranty.

PART 2 – PRODUCTS (BASIS OF DESIGN)
2.1 TILE TYPES

PT-1 – MOSAIC FLOOR TILE
1. Manufacturer: Daltile
2. Product Line: Haut Monde
3. Color/Finish: Glitterati Granite HM03- Unpolished
4. Tile Size: 2" x 2" mosaic
5. Application:Floor tile
6. Accessories: Matching cove base
7. Grout Color: Mapei 47 Charcoal

PT-2 – WALL TILE
1. Manufacturer: Daltile
2. Product Line: Rigid Clay
3. Color: Rock RC12 – Ridge
4. Tile Size: 12" × 24"
5. Application: Wall tile
6. Installation Pattern: Stacked bond.
7. Grout Color: Mapei 27 Silver

2.2 SETTING MATERIALS
Thinset Mortar
1. Manufacturer: Laticrete
1. Product: 254 Platinum
2. Type:Polymer-modified thin-set mortar
3. Performance: Meets ANSI A118.4 and A118.11
4. Approved equal products may be submitted for review.

Grout
A. Type: Epoxy grout
B. Performance: Comply with ANSI A118.3.
C. Color: Selected by Architect from manufacturer's standard color range.

2.3 ACCESSORIES

A. Tile trim and edge profiles:
1. Manufacturer standard metal edge trim where tile terminates.
B. Backer board:
1. Cementitious backer board where tile is applied to framed walls.
C. Sealant:
1. Silicone sealant compatible with grout and tile.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify substrates are clean, dry, and suitable to receive tile.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install tile in accordance with TCNA installation methods appropriate for substrate and application.
B. Install tiles with uniform joint widths and consistent alignment.
C. Install PT-2 wall tile in stacked bond pattern unless otherwise indicated.
D. Provide movement joints as recommended by TCNA.

3.3 GROUTING
A. Grout joints using epoxy grout.
B. Tool grout smooth and flush with tile surface.
C. Grout color shall be selected by Architect.

3.4 CLEANING
A. Remove grout haze and clean tile surfaces after installation.

3.5 WARRANTY
A. Contractor shall install tile using materials and methods recommended by the manufacturer.

SECTION 095113
ACOUSTICAL PANEL CEILINGS
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes acoustical ceiling panels and exposed suspension systems.
B. Work includes:
1. Acoustical ceiling panels.
2. Exposed suspension grid system.
3. Suspension accessories and trim.

1.2 RELATED SECTIONS
A. Section 092900 – Gypsum Board.
B. Section 260500 – Electrical (for coordination of ceiling devices).
C. Section 233300 – Air Duct Accessories.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International
2. Ceilings and Interior Systems Construction Association
B. Installation shall comply with ASTM C636 and manufacturer recommendations.

1.4 SUBMITTALS

A. Product data for ceiling panels and suspension systems.
B. Samples of ceiling panels.

1.5 QUALITY ASSURANCE

A. Provide complete ceiling system components from a single manufacturer.
B. Ceiling system shall be installed in accordance with manufacturer requirements to obtain system warranty.

PART 2 – PRODUCTS
2.1 ACOUSTICAL CEILING PANELS

Manufacturer: Armstrong World Industries (MATCH EXISTING)
Product Line: Graphis® Rustex™ Linear Beveled
1. Panel Characteristics:
A. Panel Size: 24" × 24"
B. Thickness: 3/4 inch
C. Edge: Beveled Tegular
D. Surface Texture: Rustex™ coarse texture
E. Color: White (WH)
Performance:
1. Noise Reduction Coefficient (NRC): 0.55
2. Light Reflectance: 0.75
3. Fire Rating: Class A
4. Mold and mildew resistant surface
5. Anti-sag performance
6. Minimum 30-year system warranty when installed with Armstrong suspension system

Panel construction:
1. Wet-formed mineral fiber ceiling panels with factory-applied latex finish .

2.2 SUSPENSION SYSTEM
Manufacturer: Armstrong World Industries
System Type: Exposed grid suspension system
Grid Face Width: 15/16 inch
Acceptable System:
Prelude® 15/16" suspension system
Material: Hot-dipped galvanized steel
Finish: White factory finish
Accessories:
1. Wall angle moldings
2. Hangers
3. Clips and trim as required

2.3 ACCESSORIES
A. Hold-down clips where required.
B. Edge moldings at perimeter conditions.
C. Suspension wires and anchors compatible with supporting structure.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify supporting structure is ready to receive suspension system.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Install suspension system in accordance with ASTM C636.
B. Install ceiling panels in accordance with manufacturer instructions.
C. Provide complete ceiling system including panels, grid, hangers, and accessories.
D. Coordinate ceiling layout with lighting fixtures, diffusers, and ceiling devices.

3.3 ADJUSTING AND CLEANING
A. Replace damaged panels.
B. Clean ceiling surfaces after installation.

SECTION 096500
RESILIENT FLOORING
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes resilient flooring and accessories.
B. Work includes:
1. Luxury vinyl tile (LVT) flooring.
2. Adhesives and accessories required for installation.

1.2 RELATED SECTIONS
A. Section 096513 – Resilient Base and Accessories.
B. Section 079200 – Joint Sealants.
C. Section 093000 – Tiling.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International
2. Resilient Floor Covering Institute
B. Luxury vinyl tile shall comply with ASTM F1700.

1.4 SUBMITTALS
A. Product data for resilient flooring and adhesives.
B. Manufacturer color samples for Architect review.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver flooring materials in manufacturer's original packaging.
B. Store materials in a clean, dry area protected from damage.

1.6 QUALITY ASSURANCE
A. Install flooring in accordance with manufacturer recommendations.
B. Use adhesives and installation materials recommended by the flooring manufacturer.

PART 2 – PRODUCTS
2.1 LUXURY VINYL TILE (LVT-1)
1. Manufacturer: Mannington Commercial
2. Product Line: Amtico Signature Wood
3. Color / Pattern: Halo Pine AR0W8250
4. Application: Resilient luxury vinyl tile flooring
5. Requirement: Match existing flooring in adjacent areas.

2.2 ADHESIVE
A. Provide manufacturer recommended adhesive compatible with the resilient flooring system.
B. Adhesive shall comply with applicable VOC requirements.

2.3 ACCESSORIES
A. Transition strips where flooring transitions to other flooring materials.
B. Adhesives and accessories required for a complete installation.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify substrates are clean, smooth, and suitable for installation.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install flooring in accordance with manufacturer instructions.
B. Install flooring with tight joints and consistent alignment.
C. Coordinate layout with adjacent flooring to match existing installation pattern where applicable.

3.3 CLEANING
A. Remove adhesive residue and debris after installation.
B. Clean flooring surfaces in accordance with manufacturer recommendations.

SECTION 096513
RESILIENT BASE AND ACCESSORIES
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes resilient wall base and accessories.
B. Work includes:
1. Resilient wall base.
2. Adhesives and accessories required for installation.

1.2 RELATED SECTIONS
A. Section 096500 – Resilient Flooring.
B. Section 093000 – Tiling.
C. Section 099123 – Interior Painting.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International
2. Resilient Floor Covering Institute
B. Resilient wall base shall comply with ASTM F1861.

1.4 SUBMITTALS
A. Product data for resilient base and accessories.
B. Color samples for Architect review.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials in manufacturer packaging with labels intact.
B. Store materials in a clean, dry location protected from damage.

PART 2 – PRODUCTS
2.1 RESILIENT WALL BASE [WB-1]

Manufacturer: Tarkett
1. Product Type: Rubber wall base
2. Height: 4 inches
3. Profile: Cove base
4. Color: 48 Grey WG
5. Material Form:
6. Provide resilient base as continuous rolled goods.
7. Pre-cut base sections are not acceptable.

2.2 ACCESSORIES
A. Adhesive:
1. Manufacturer recommended adhesive for resilient base installation.
B. Trim and corners:
1. Preformed inside and outside corners where available.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify wall surfaces are clean, dry, smooth, and ready to receive resilient base.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install resilient base in accordance with manufacturer instructions.
B. Install base tight to floor and wall surfaces.
C. Provide longest practical lengths to minimize seams.
D. Form tight joints between sections.
E. Provide preformed corners or neatly formed mitered corners.

3.3 CLEANING
A. Clean exposed surfaces after installation.
B. Remove adhesive residue and debris.

SECTION 099123
INTERIOR PAINTING
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes surface preparation and application of interior paint systems.
B. Work includes painting of:
1. Gypsum board walls and ceilings.
2. Wood doors and trim.
3. Hollow metal frames and miscellaneous ferrous metal items.
4. Other interior surfaces as indicated on the Drawings.

1.2 RELATED SECTIONS
A. Section 092900 – Gypsum Board.
B. Section 081416 – Flush Wood Doors.
C. Section 081113 – Hollow Metal Frames.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International
B. Surface preparation shall comply with PDCA standards.

1.4 SUBMITTALS
A. Product data for each paint product specified.
B. Paint color samples for Architect review.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver paint materials in original sealed containers bearing manufacturer labels.
B. Store materials in accordance with manufacturer recommendations.

1.6 QUALITY ASSURANCE
A. Provide products from a single manufacturer for each coating system.
B. Paint products shall comply with applicable VOC regulations.

PART 2 – PRODUCTS
2.1 MANUFACTURERS
Acceptable manufacturers:
1. Sherwin-Williams
2. Benjamin Moore
3. PPG Paints
Approved equal products may be submitted for review.

2.2 INTERIOR PAINT MATERIALS
A. Primer:
1. Manufacturer's standard primer compatible with substrate and finish coat.
B. Interior wall paint:
1. Acrylic latex paint
2. Satin finish.
C. Interior trim and door paint:
1. Acrylic enamel paint.
2. Semi-gloss finish
D. Metal primer:
1. Rust-inhibitive primer for ferrous metal surfaces.

2.3 COLORS
A. Paint colors shall be selected by Architect from manufacturer's standard color range.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify surfaces are dry and free of dust, grease, and contaminants prior to painting.
B. Do not begin painting until unsatisfactory conditions are corrected.

3.2 SURFACE PREPARATION
A. Prepare surfaces in accordance with manufacturer recommendations.
B. Fill cracks, holes, and surface defects prior to painting.
C. Sand and smooth surfaces where required.

3.3 APPLICATION
A. Apply paint in accordance with manufacturer instructions.
B. Minimum coats unless otherwise recommended by manufacturer:
1. Gypsum board: Primer + 2 finish coats
2. Wood doors and trim: Primer + 2 finish coats
3. Metal surfaces: Primer + 2 finish coats
C. Apply coatings evenly to produce uniform color and finish.

3.4 CLEANING
A. Remove paint splatter and debris from adjacent surfaces.
B. Leave surfaces clean and free of defects.

SECTION 102113
CORNER GUARDS
PART 1 – GENERAL
1.1 SUMMARY
A. Section includes interior corner guards and accessories for protection of wall corners from impact and abuse.
B. Work includes:
1. Interior corner guards.
2. Fasteners and accessories required for installation.
C. Provide corner guards at all exposed wall corners within the project work area unless noted otherwise on the drawings.

1.2 RELATED SECTIONS
A. Section 092900 – Gypsum Board.
B. Section 099123 – Interior Painting.

1.3 REFERENCES
A. Comply with standards published by:
1. ASTM International

1.4 SUBMITTALS
A. Product data for corner guards.
B. Samples if requested by Architect.

1.5 QUALITY ASSURANCE
A. Provide corner guards from a single manufacturer to maintain uniform appearance.

PART 2 – PRODUCTS
2.1 MANUFACTURERS
Basis of Design:
1. Construction Specialties
2. Approved equal products may be submitted for review.

2.2 CORNER GUARDS
A. Corner guards shall be impact-resistant rigid vinyl or thermoplastic wall protection units designed for surface mounting on gypsum board walls.
B. Height:
1. Corner guards shall match the height of existing corner guards in adjacent areas.
C. Width and Profile:
1. Corner guards shall match the width and profile of existing corner guards.
D. Color:
1. Corner guards shall match existing corner guard color.
E. Contractor shall field verify existing corner guard dimensions, profile, and color prior to ordering materials.
F. Provide manufacturer's standard accessories required for installation.

PART 3 – EXECUTION
3.1 EXAMINATION
A. Verify wall surfaces are ready to receive corner guards.
B. Do not begin installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION
A. Install corner guards in accordance with manufacturer instructions.
B. Install guards plumb and aligned with wall corners.
C. Secure guards with manufacturer recommended fasteners or adhesive.
D. Provide corner guards at all exposed wall corners within the work area.

3.3 CLEANING
A. Remove protective coverings and clean installed corner guards.
B. Replace damaged corner guards prior to project completion.

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM**
CHECKED BY: **RTT**
DRAWN BY: **RTT**

SHEET ISSUE DATE:
03.20.2026

PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

PLAN NORTH
SITE NORTH

SHEET NAME:
ARCHITECTURAL SPECIFICATIONS

SHEET NUMBER:
A103

ABBREVIATIONS

DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRCULATION
DIA, Ø	DIAMETER
EXIST, (E)	EXISTING
GPF	GALLONS PER FLUSH
LAV	LAVATORY
LWT	LEAVING WATER TEMPERATURE
V	SANITARY VENT
WC	WATER CLOSET
WHA	WATER HAMMER ARRESTOR

SYMBOLS LEGEND

	POINT OF CONNECT NEW TO EXISTING
	POINT OF DEMOLITION
1	NEW WORK NOTE
1	DEMOLITION NOTE
T	THERMOSTAT / TEMPERATURE SENSOR
	DIRECTION OF FLOW
	DIRECTION OF FLOW
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER (120°F)
	INDICATES ITEM TO BE PROVIDED
	INDICATES ITEM TO BE DEMOLISHED
	INDICATES EXISTING ITEM TO REMAIN
	SANITARY VENT
	SUPPLY AIR DEVICE (DIFFUSER)
	RETURN / EXHAUST / TRANSFER AIR DEVICE (GRILLE)
123	ROOM NUMBER

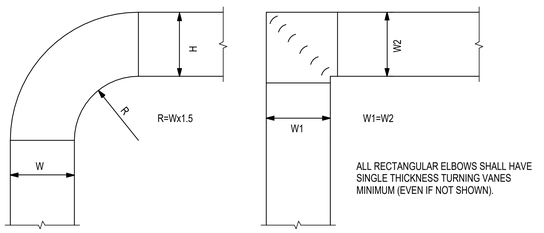
SPRINKLER - FIRE PROTECTION GENERAL NOTES

1. SCOPE OF WORK SHALL INCLUDE A FULLY FUNCTIONAL WET PIPE SPRINKLER SYSTEM WITHIN THE AREA OF WORK. EXTEND NEW PIPING AS REQUIRED TO NEW SPRINKLER HEAD LOCATIONS CONFORMING TO THE REQUIREMENTS OF NFPA 13 AND THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, 2021 EDITION. SPRINKLER SYSTEM TO COMPLY WITH ALL CODES AND THE AUTHORITY HAVING JURISDICTION (AHJ). SUBMIT SHOP DRAWINGS (DRAWINGS, MATERIAL DATA AND HYDRAULIC CALCULATIONS) TO THE AHJ AND ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL BEFORE INSTALLATION OF WORK.
2. THE BUILDING WILL REMAIN OCCUPIED AND IN SERVICE DURING THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING WORK IN PHASES TO ENSURE THE FIRE PROTECTION SYSTEM REMAINS FUNCTIONAL IN ACCORDANCE WITH NFPA 13 AND LOCAL FIRE CODES AT ALL TIMES. SHUTDOWNS MUST BE SCHEDULED, APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ), AND LIMITED TO THE MINIMUM TIME NECESSARY. THE CONTRACTOR SHALL PROVIDE A, 24-HOUR, 7-DAY-A-WEEK FIRE WATCH WHENEVER ANY PART OF THE SYSTEM IS OUT OF SERVICE.
3. COORDINATE WORK WITH OWNER INCLUDING TIME AND LOCATION OF WORK TO BE PERFORMED.
4. CONTRACTOR SHALL ADJUST EXISTING SPRINKLER HEAD LAYOUT TO ACCOMMODATE NEW INTERIOR PARTITIONS AND NEW CEILING CONFIGURATIONS.
5. UTILIZE EXISTING SPRINKLER PIPING AS MUCH AS PRACTICAL IN ALL AREAS. IN AREAS WHERE THE EXISTING CEILING GRID WILL REMAIN AND EXISTING CEILING TILES WILL BE REPLACED, UTILIZE EXISTING SPRINKLER HEADS, PIPING AND ESCUTCHEONS WHERE PRACTICAL.

PLUMBING FIXTURE SCHEDULE

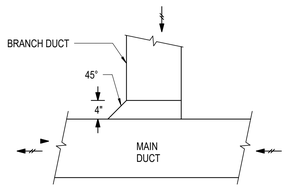
FIXTURES												
MARK	FIXTURE NAME	MANUFACTURER	MODEL NO.#	MANUFACTURER TYPE / STYLE	COLD WATER INLET SIZE	HOT WATER INLET SIZE	WASTE SIZE	VENT SIZE	FIXTURE MOUNTING	FIXTURE MOUNTING HEIGHT	ACCESSORIES / MANUFACTURER'S MODEL NUMBER	NOTES
WC-1	WATER CLOSET (ADA)	TOTO	CT705ULN(G)	TOTO, WALL-MOUNTED WITH 1-1/2" TO SPUD INLET ELONGATED, GLAZE VITREOUS CHINA. BOLT CAPS AND JOSAM #12000 SERIES WALL CARRIER.	1"	-	4"	2"	WALL	17"	TOTO EXPOSED SENSOR WATER CLOSET FLUSHOMETER, MODEL TET1LA, 1.28 GPF, ADJUSTABLE TAILPEICE TO ACCOMMODATE DIFFERENT HEIGHT, ADA-COMPLIANT, SELF-POWERED HYDROELECTRIC, SENSOR OPERATED, PISTON FLUSH VALVE, 1" IPS INLET SIZE, 1-1/2" VACUUM BREAKER TUBE, SOLID RING PIPE SUPPORT. PROVIDE BEMIS #1955SSCT ELONGATED OPEN FRONT SEAT AND BELLOWS TYPE WATER HAMMER ARRESTOR.	
LAV-1	LAVATORY (ADA)	AMERICAN STANDARD	0356.041	LUCERNE WALL-MOUNTED GLAZE VITREOUS CHINA, SINGLE HOLE. PROVIDE JOSAM #17000 SERIES WALL CARRIER.	1/2"	1/2"	2"	1-1/2"	WALL	34"	MOEN M POWER MODEL 8553 SENSOR FAUCET, HANDS FREE, BATTERY OPERATED, SINGLE HOLE SINK APPLICATION, DECK MOUNT. PROVIDE WITH CHROME GRID STRAINER, CHROME P-TRAP, CHROME SUPPLIES, COMPRESSION FITTINGS AND STOPS. PROVIDE TRUEBRO #102W PRE-MOLDED INSULATION ON BOTH WATER SUPPLIES AND DRAIN. PROVIDE LAWLER #570 ASSE 1070 POINT OF USE MIXING VALVE AND SET TO 110 DEGREE FAHRENHEIT LWT.	1

NOTES:
1. MOUNTING HEIGHT DIMENSIONS ARE TO FLOOD LEVEL OF FIXTURE RIM.

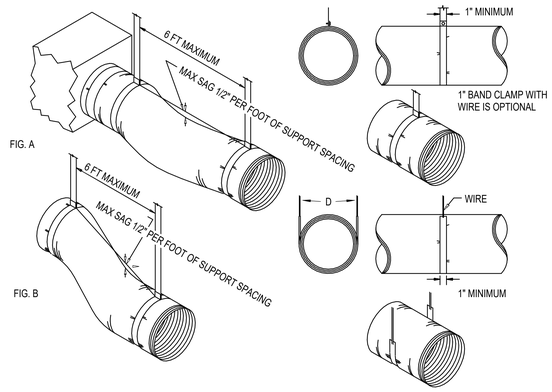


ALL DUCT ELBOWS SHALL BE CONSTRUCTED AS INDICATED ABOVE; OTHER CONFIGURATIONS ARE NOT PERMITTED.

3 DETAIL - DUCT ELBOWS
MP001 SCALE: NOT TO SCALE

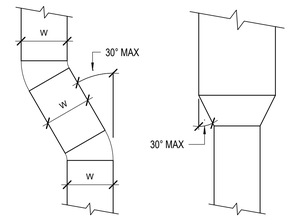


1 DETAIL - DUCT BRANCH CONNECTION
MP001 SCALE: NOT TO SCALE



NOTES:
1. SUPPORT SYSTEM SHALL NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
2. FLEX DUCT SHALL BE INSTALLED FULLY EXTENDED.
3. WHEN LENGTH OF STRAIGHT DUCT UPSTREAM OF DIFFUSER IS LESS THAN 3 X D, PROVIDE AN EQUALIZING GRID.
4. FLEX DUCT ELBOW RADIUS SHALL BE MINIMUM 1.5 X D. SUSPEND ALL ELBOWS WITH HANGER.

4 DETAIL - FLEX DUCT CONNECTION
MP001 SCALE: NOT TO SCALE



DUCT OFFSETS AND TRANSITIONS SHALL BE CONSTRUCTED AS INDICATED ABOVE. DO NOT USE BACK-TO-BACK ELBOWS FOR OFFSETS.

2 DETAIL - DUCT OFFSETS AND TRANSITIONS
MP001 SCALE: NOT TO SCALE

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM** CHECKED BY: **MAR** DRAWN BY: **ZAZ**

SHEET ISSUE DATE: **03.20.2026**

PROJECT PHASE: **WORKING DRAWINGS**

SHEET REVISIONS:

SHEET NAME:
MECHANICAL / PLUMBING - NOTES, DETAILS, SCHEDULES AND ABBREVIATIONS

SHEET NUMBER:
MP001

SPRINKLER SPECIFICATIONS

GENERAL PROVISIONS
1. PERFORMANCE REQUIREMENTS
   A. STANDARD-PRESSURE PIPING SYSTEM COMPONENT: LISTED FOR 175-PSIG MINIMUM WORKING PRESSURE.
   B. SPRINKLER SYSTEM DESIGN SHALL BE APPROVED BY AUTHORITIES HAVING JURISDICTION.
2. QUALITY ASSURANCE
   A. INSTALLER QUALIFICATIONS:
      A. INSTALLER'S RESPONSIBILITIES INCLUDE DESIGNING, FABRICATING, AND INSTALLING SPRINKLER SYSTEMS AND PROVIDING PROFESSIONAL ENGINEERING SERVICES NEEDED TO ASSUME ENGINEERING RESPONSIBILITY. NICET LEVEL III CERTIFIED-TECHNICIAN IS ALSO ACCEPTABLE FOR DESIGN OF THIS SYSTEM.
      B. WELDING QUALIFICATIONS: QUALIFY PROCEDURES AND OPERATORS ACCORDING TO ASME BOILER AND PRESSURE VESSEL CODE.
      C. NFPA STANDARDS: SPRINKLER SYSTEM EQUIPMENT, SPECIALTIES, ACCESSORIES, INSTALLATION, AND TESTING SHALL COMPLY WITH THE FOLLOWING:
         • NFPA 13, "INSTALLATION OF SPRINKLER SYSTEMS."
3. COORDINATION
   A. COORDINATE LAYOUT AND INSTALLATION OF SPRINKLERS WITH OTHER CONSTRUCTION THAT PENETRATES CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT, AND PARTITION ASSEMBLIES.
4. PIPE AND FITTINGS
   A. FLEXIBLE SPRINKLER HOSE FITTINGS:
      A. STANDARDS:
         • UL 2443.
         • FM 1637.
      b. DESCRIPTION: FLEXIBLE HOSE FOR CONNECTION TO SPRINKLER, AND WITH BRACKET FOR CONNECTION TO CEILING GRID.
      C. PRESSURE RATING: 175 PSIG MINIMUM.
      D. SIZE: SAME AS CONNECTED PIPING, FOR SPRINKLER.
   B. SCHEDULE 10, BLACK-STEEL PIPE: ASTM A 135 OR ASTM A 795/A 795M, SCHEDULE 10 IN NPS 5 AND SMALLER; AND NFPA 13-SPECIFIED WALL THICKNESS IN NPS 6 TO NPS 10, PLAIN END.
   C. BLACK STEEL PIPE NIPPLES: ASTM A 733, MADE OF ASTM A 53/A 53M, STANDARD-WEIGHT, SEAMLESS STEEL PIPE WITH THREADED ENDS.
   D. GALVANIZED AND UNCOATED, STEEL COUPLINGS: ASTM A 865, THREADED.
   E. GALVANIZED AND UNCOATED, GRAY-IRON THREADED FITTINGS: ASME B16.4, CLASS 125, STANDARD PATTERN.
   F. MALLEABLE- OR DUCTILE-IRON UNIONS: UL 860.
   G. FLANGES AND FITTINGS IN FIRST PARAGRAPH BELOW ARE AVAILABLE IN NPS 1/2 TO NPS 24 (DN 15 TO DN 600).
   H. STEEL FLANGES AND FLANGED FITTINGS: ASME B16.5, CLASS 150.
   I. STEEL WELDING FITTINGS: ASTM A 234/A 234M AND ASME B16.9.
   J. GROOVED-JOINT, STEEL-PIPE APPURTENANCES:
      A. PRESSURE RATING: 175 PSIG MINIMUM.
   K. GALVANIZED AND UNCOATED, GROOVED-END FITTINGS FOR STEEL PIPING: ASTM A 47/A 47M, MALLEABLE-IRON CASTING OR ASTM A 536, DUCTILE-IRON CASTING; WITH DIMENSIONS MATCHING STEEL PIPE.
   L. GROOVED-END-PIPE COUPLINGS FOR STEEL PIPING: AWWA C606 AND UL 213, RIGID PATTERN, UNLESS OTHERWISE INDICATED, FOR STEEL-PIPE DIMENSIONS. INCLUDE FERROUS HOUSING SECTIONS, EPDM-RUBBER GASKET, AND BOLTS AND NUTS.
   M. STEEL PRESSURE-SEAL FITTINGS: UL 213, FM-APPROVED, 175-PSIG PRESSURE RATING WITH STEEL HOUSING, RUBBER O-RINGS, AND PIPE STOP; FOR USE WITH FITTING MANUFACTURERS' PRESSURE-SEAL TOOLS.
5. PIPING JOINING MATERIALS
   A. PIPE-FLANGE GASKET MATERIALS: AWWA C110, RUBBER, FLAT FACE, 1/8 INCH THICK OR ASME B16.21, NONMETALLIC AND ASBESTOS FREE.
   B. CLASS 125, CAST-IRON FLANGES AND CLASS 150, BRONZE FLAT-FACE FLANGES: FULL-FACE GASKETS.
   C. CLASS 250, CAST-IRON FLANGES AND CLASS 300, STEEL RAISED-FACE FLANGES: RING-TYPE GASKETS.
   D. METAL, PIPE-FLANGE BOLTS AND NUTS: ASME B18.2.1, CARBON STEEL UNLESS OTHERWISE INDICATED.
   E. WELDING FILLER METALS: COMPLY WITH AWS D10.12M/D10.12 FOR WELDING MATERIALS APPROPRIATE FOR WALL THICKNESS AND CHEMICAL ANALYSIS OF STEEL PIPE BEING WELDED.
6. SPRINKLERS
   A. STANDARDS:
      A. UL 199.
      B. UL 1767.
      C. UL 1626.
      D. FM 2000.
      E. FM 2008.
      F. FM 2030.
   B. PRESSURE RATING FOR SPRINKLERS:
      A. STANDARD AUTOMATIC SPRINKLERS: 175 PSIG MINIMUM.
   C. SPRINKLERS, AUTOMATIC WET WITH HEAT-RESPONSIVE ELEMENT:
      A. CHARACTERISTICS: NOMINAL 1/2-INCH ORIFICE WITH DISCHARGE COEFFICIENT K OF 5.6, AND FOR "ORDINARY" TEMPERATURE CLASSIFICATION RATING UNLESS OTHERWISE INDICATED OR REQUIRED BY APPLICATION.
   D. STANDARD SPRAY, STANDARD RESPONSE:
      A. RECESSED PENDENT.
   E. FINISH
      A. CHROME RECESSED SPRINKLER HEADS WITH CHROME PLATED STEEL ESCUTCHEONS.
7. DEMOLITION
   A. SPRINKLER BRANCH/ARM OVER/DROP PIPING NO LONGER NEEDED SHALL BE REMOVED BACK TO THE PIPING MAINS/BRANCHES.
8. PIPING INSTALLATION
   A. PIPING STANDARD: COMPLY WITH REQUIREMENTS FOR INSTALLATION OF SPRINKLER PIPING IN NFPA 13.
   B. USE LISTED FITTINGS TO MAKE CHANGES IN DIRECTION, BRANCH TAKEOFFS FROM MAINS, AND REDUCTIONS IN PIPE SIZES.
   C. INSTALL UNIONS ADJACENT TO EACH VALVE IN PIPES NPS 2 AND SMALLER.
   D. INSTALL FLANGES, FLANGE ADAPTERS, OR COUPLINGS FOR GROOVED-END PIPING ON VALVES, APPARATUS, AND EQUIPMENT HAVING NPS 2-1/2 AND LARGER END CONNECTIONS.
   E. INSTALL HANGERS AND SUPPORTS FOR SPRINKLER SYSTEM PIPING ACCORDING TO NFPA 13. COMPLY WITH REQUIREMENTS FOR HANGER MATERIALS IN NFPA 13.
9. IDENTIFICATION
   A. INSTALL LABELING AND PIPE MARKERS ON EQUIPMENT AND PIPING ACCORDING TO REQUIREMENTS IN NFPA 13.
10. FIELD QUALITY CONTROL
   A. PERFORM TESTS AND INSPECTIONS.
   B. TESTS AND INSPECTIONS:
      A. LEAK TEST: AFTER INSTALLATION, CHARGE SYSTEMS AND TEST FOR LEAKS. REPAIR LEAKS AND RETEST UNTIL NO LEAKS EXIST.
11. CLEANING
   A. CLEAN DIRT AND DEBRIS FROM SPRINKLERS.
   B. REMOVE AND REPLACE SPRINKLERS WITH PAINT OTHER THAN FACTORY FINISH.
12. PIPING SCHEDULE
   A. STANDARD-PRESSURE, WET-PIPE SPRINKLER SYSTEM, NPS 2 AND SMALLER, SHALL BE THE FOLLOWING:
      A. SCHEDULE 10 BLACK-STEEL PIPE WITH ROLL-GROOVED ENDS; UNCOATED, GROOVED-END FITTINGS FOR STEEL PIPING; GROOVED-END-PIPE COUPLINGS FOR STEEL PIPING; AND GROOVED JOINTS.
      B. SCHEDULE 10, BLACK-STEEL PIPE WITH PLAIN ENDS; UNCOATED, PLAIN-END-PIPE FITTINGS; AND TWIST-LOCKED JOINTS.
      C. SCHEDULE 10, BLACK-STEEL PIPE WITH PLAIN ENDS; WELDING FITTINGS; AND WELDED JOINTS.
      D. SCHEDULE 5 STEEL PIPE; STEEL PRESSURE-SEAL FITTINGS; AND PRESSURE-SEALED JOINTS.
   B. STANDARD-PRESSURE, WET-PIPE SPRINKLER SYSTEM, NPS 2-1/2 TO NPS, SHALL BE THE FOLLOWING:
      A. SCHEDULE 10 BLACK-STEEL PIPE WITH ROLL-GROOVED ENDS; UNCOATED, GROOVED-END FITTINGS FOR STEEL PIPING; GROOVED-END-PIPE COUPLINGS FOR STEEL PIPING; AND GROOVED JOINTS.
      B. SCHEDULE 10 BLACK-STEEL PIPE WITH PLAIN ENDS; WELDING FITTINGS; AND WELDED JOINTS.

END OF SPECIFICATIONS

MECHANICAL SPECIFICATIONS

1. GENERAL PROVISIONS
   A. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE INCLUDING REFERENCED CODES AND STANDARDS AND IN ACCORDANCE WITH MANDATES OF THE LOCAL BUILDING OFFICIALS.
   B. THE GENERAL ARRANGEMENT AND LOCATIONS OF DUCTWORK, APPARRATUS, ETC. ARE INDICATED BY THE DRAWINGS AND SHALL BE INSTALLED IN ACCORDANCE THEREWITH; WITH THE EXCEPTION OF SUCH CHANGES AS MAY BE REQUIRED ON ACCOUNT OF OTHER TRADES. CONTRACTOR SHALL COORDINATE WORK WITH INSTALLATION OF OTHER TRADES.
   C. HVAC WORK SHALL BE COORDINATED BY THE CONTRACTOR AS TO SCHEDULING, DIMENSIONING AND LOCATION OF EQUIPMENT.
   D. MAJOR ITEMS ARE SHOWN ON THE PROJECT PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INCIDENTAL ITEMS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
   E. TRADE NAMES AND CATALOG NUMBERS SHALL BE INTERPRETED AS ESTABLISHING A GENERAL DESIGN AND STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. DRAWINGS SHOWING CHANGES OR REVISIONS REQUIRED BY THE SUBSTITUTION FOR SPECIFIED ITEMS SHALL BE SUBMITTED WITH THE SHOP DRAWING DATA, AND THE COSTS OF ALL SUCH CHANGES SHALL BE BORNE BY THE CONTRACTOR.
   F. SIMILAR ITEMS SHALL BE PROVIDED BY A SINGLE MANUFACTURER.
   G. ALL REQUIRED WALL, FLOOR AND ROOF OPENINGS SHALL BE COORDINATED BY THE CONTRACTOR.
   H. ALL PIPING AND DUCTWORK SHALL BE ABOVE CEILING UNLESS INDICATED OTHERWISE.
   I. SIZES FOR EXISTING DUCTWORK, REGISTERS, ETC. ARE SHOWN FOR REFERENCE ONLY AND SHALL BE VERIFIED BY FIELD MEASUREMENTS WHEN EXACT SIZE IS REQUIRED.
   J. ACCESS SHALL BE MAINTAINED TO ALL VALVES AND CONTROL DEVICES. ACCESS PANEL SIZES AND LOCATIONS SHALL BE DETERMINED PRIOR TO BIDDING AND SHALL BE INCLUDED IN THE BID PRICE FOR CONTRACT WORK. ACCESS PANELS SHALL BE INSTALLED WHERE REQUIRED AND SHALL BE FIRE RATED WHEN USED IN FIRE RESISTIVE CONSTRUCTION.
   K. DUCTWORK SHALL BE SUPPORTED FROM, OR ANCHORED TO, THE BUILDING STRUCTURE; CEILING CONSTRUCTION, NEW OR EXISTING, SHALL NOT BE USED FOR SUPPORT OR ANCHORING OF NEW WORK.
2. DEMOLITION
   A. MECHANICAL WORK NECESSARY FOR DEMOLITION AND REMODELING IN THE EXISTING BUILDINGS SHALL BE PROVIDED UNDER THIS SECTION.
   B. WORK NECESSARY TO BE PERFORMED IN, OR OTHERWISE AFFECTING THE USE OR COMFORT OF, THE EXISTING BUILDING SHALL BE COORDINATED WITH THE OCCUPANTS' SCHEDULE.
   C. CONTRACTOR SHALL REMOVE EXISTING DUCTWORK, DIFFUSERS AND GRILLES AS INDICATED ON THE DRAWINGS.
   D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL DEMOLISHED EQUIPMENT AND MATERIALS. AT THE OWNER'S REQUEST, ANY DEMOLISHED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER.
3. SUBMISSION OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND PROJECT INFORMATION
   A. SHOP DRAWINGS SHALL BE SUBMITTED FOR EQUIPMENT SCHEDULED ON THE DRAWINGS AND THE FOLLOWING ITEMS:
      a. INSULATED FLEXIBLE DUCT
      b. VOLUME DAMPERS
   B. IDENTIFY ALL SUBMITTALS WITH THE NAME OF THE PROJECT. CLEARLY MARK THE SPECIFIC ITEMS INTENDED FOR USE. SUBMIT ALL RELATED ITEMS AT ONE TIME.
   C. PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT, SUBMIT THE FOLLOWING INFORMATION FOR REVIEW AND APPROVAL.
      a. "AS BUILT" DRAWINGS.
4. GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION AND CONTRACTOR SHALL MAKE GOOD, WITHOUT ADDITIONAL COST TO THE OWNER, ANY DEFECTS WHICH MAY APPEAR WITHIN THAT PERIOD. MANUFACTURER'S WARRANTIES EXTENDING BEYOND ONE YEAR SHALL BE PROCESSED AND TURNED OVER TO THE OWNER.
5. "AS BUILT" DRAWINGS: CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF THE LOCATION OF ALL CONCEALED PIPING, VALVES, CONTROLS, ETC., BOTH INTERIOR AND EXTERIOR. ON COMPLETION OF THE WORK, ONE PRINT EACH OF THE CONTRACT DRAWINGS WHICH ARE APPLICABLE SHALL BE NEATLY AND CLEARLY MARKED IN COLOR TO SHOW ALL VARIATIONS BETWEEN THE WORK ACTUALLY PROVIDED AND THAT INDICATED ON THE CONTRACT DRAWINGS.
6. ACCESS DOORS: ACCESS DOORS SHALL BE PROVIDED FOR ALL CONCEALED VALVES, DAMPERS AND ANY OTHER EQUIPMENT OR MATERIALS REQUIRING INSPECTION OR MAINTENANCE. ACCESS DOORS SHALL BE FURNISHED FOR FLOORS, WALLS AND CEILINGS, OF ADEQUATE SIZE SO THAT CONCEALED ITEMS WILL BE READILY ACCESSIBLE FOR SERVICING OR FOR REMOVAL AND REPLACEMENT IF NECESSARY.
7. IDENTIFICATION
   A. STENCILS
      a. STENCILS: WITH CLEAN CUT SYMBOLS AND LETTERS OF FOLLOWING SIZE
         • 3/4 TO 1-1/4 INCH (20-30 MM) OUTSIDE DIAMETER OF INSULATION OR PIPE: 8 INCH (200 MM) LONG COLOR FIELD, 1/2 INCH (15 MM) HIGH LETTERS.
         • 1-1/2 TO 2 INCH (40-50 MM) OUTSIDE DIAMETER OF INSULATION OR PIPE: 8 INCH (200 MM) LONG COLOR FIELD, 3/4 INCH (20 MM) HIGH LETTERS.
      b. STENCIL PAINT: AS SPECIFIED IN SECTION 09900, SEMI-GLOSS ENAMEL, COLORS CONFORMING TO ASME A13.1.
   B. INSTALLATION
      a. DEGREASE AND CLEAN SURFACES TO RECEIVE ADHESIVE FOR IDENTIFICATION MATERIALS.
      b. IDENTIFY NEW DUCTWORK WITH STENCILED PAINTING.
8. INSULATION
   A. FLAME/SMOKE RATINGS: PROVIDE COMPOSITE MECHANICAL INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES) WITH FLAME-SPREAD RATING OF 25 OR LESS, AND SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 METHOD. INSULATION SHALL BE LABELED BY THE MANUFACTURER. THE LABEL SHALL INDICATE THE INSULATING VALUE, FLAME SPREAD AND SMOKE-DEVELOPED RATING.
   B. SUBMITTALS: SUBMIT MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR EACH TYPE OF MECHANICAL INSULATION.
   C. INSTALLATION: INSULATION SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS USING ONLY ADHESIVES, MASTICS AND MECHANICAL FASTENERS APPROVED BY THE INSULATION MANUFACTURER. INSULATION SHALL NOT BE APPLIED UNTIL AFTER THE EQUIPMENT HAS BEEN TESTED WITH RESULTS ACCEPTABLE TO THE ENGINEER. INSULATION WITH A VAPOR BARRIER JACKET SHALL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL AND ALL JOINTS SHALL BE SEALED WITH A VAPOR BARRIER ADHESIVE UNLESS OTHERWISE INDICATED. STAPLES, STICK CLIPS AND HANGERS SHALL BE VAPOR SEALED WHERE THEY PUNCTURE VAPOR BARRIER JACKETS. EXISTING INSULATION DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH INSULATION AS SPECIFIED FOR NEW WORK.
   D. MATERIALS
      a. FLEXIBLE GLASS FIBER DUCT INSULATION: 3/4 PCF DENSITY BLANKET WITH THERMAL CONDUCTIVITY "K"=0.30 BTU-IN/HOUR-SF-DEG F AT 75 DEGREES F AND VAPOR BARRIER JACKET OF FOIL REINFORCED KRAFT LAMINATE. EQUAL TO OWENS-CORNING FRK-25.
   E. DUCTWORK INSULATION
      a. THE FOLLOWING DUCTS SHALL BE INSULATED WITH MATERIAL AS HEREINAFTER SPECIFIED
         • ALL SUPPLY DUCTS [EXCEPT THOSE EXPOSED IN FINISHED SPACES].
9. LOW PRESSURE DUCTWORK
   A. SMACNA STANDARDS: COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE" FOR FABRICATION AND INSTALLATION OF DUCTWORK.
   B. GALVANIZED SHEET STEEL: COMPLY WITH ASTM A653/A653M.
      a. GALVANIZED COATING DESIGNATION: G60.
      b. FINISH FOR SURFACES EXPOSED TO VIEW: MILL PHOSPHATIZED (PAINT GRIP).
   C. MISCELLANEOUS DUCTWORK MATERIALS
      a. DUCT SEALANT: NON-HARDENING, WATER RESISTANT, FIRE RESISTIVE, COMPATIBLE WITH MATING MATERIALS; LIQUID USED ALONE OR WITH TAPE, OR HEAVY MASTIC.
      b. DUCTWORK SUPPORT MATERIALS: EXCEPT AS OTHERWISE INDICATED, PROVIDE HOT-DIPPED GALVANIZED STEEL FASTENERS, ANCHORS, RODS, STRAPS, TRIM AND ANGLE FOR SUPPORT OF DUCTWORK.
   D. INSULATED FLEXIBLE DUCTS
      a. MANUFACTURERS:
         • FLEXMASTER USA TYPE 5M.
         • ATCO RUBBER PRODUCTS INC. #036.
         • THERMAFLEX MODEL M-KC.
      b. PRODUCT DESCRIPTION: UL 181, CLASS 1 AIR DUCT, POLYESTER OR COATED FIBERGLASS FABRIC LINER SUPPORTED BY HELICAL WOUND SPRING OF GALVANIZED OR COATED STEEL WIRE; FIBERGLASS INSULATION; REINFORCED METALIZED POLYESTER OUTER JACKET.
         • PRESSURE RATING: 6 INCHES WG POSITIVE AND 3/4 INCH WG NEGATIVE.
         • MAXIMUM VELOCITY: 4,000 FPM.
         • TEMPERATURE RANGE: -20 DEGREES F TO 250 DEGREES F.
         • THERMAL RESISTANCE: 6.0 SQUARE FEET-HOUR- DEGREE F PER BTU.
         • MAXIMUM FLAME SPREAD RATING = 25; MAXIMUM SMOKE DEVELOPED RATING = 50.
   E. INSTALLATION OF DUCTWORK
      a. SEAL ALL JOINTS, SEAMS AND DUCT WALL PENETRATIONS WITH LIQUID OR MASTIC SEALANT.
      b. LOCATE DUCTWORK RUNS, EXCEPT AS OTHERWISE INDICATED, VERTICALLY AND HORIZONTALLY AND AVOID DIAGONAL RUNS WHEREVER POSSIBLE. HOLD DUCTS CLOSE TO WALLS, OVERHEAD CONSTRUCTION, COLUMNS, AND OTHER STRUCTURAL AND PERMANENT-ENCLOSURE ELEMENTS OF THE BUILDING. COORDINATE LAYOUT WITH SUSPENDED CEILING AND LIGHTING LAYOUTS AND SIMILAR FINISHED WORK.
      c. COORDINATE DUCT INSTALLATIONS WITH INSTALLATION OF ACCESSORIES, DAMPERS, COIL FRAMES, EQUIPMENT, CONTROLS AND OTHER ASSOCIATED WORK OF DUCTWORK SYSTEM.
      d. SUPPORT DUCTWORK IN COMPLIANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE" HANGERS AND SUPPORTS SECTION.
      e. CLEANING AND PROTECTION: CLEAN DUCTWORK INTERNALLY, UNIT-BY-UNIT AS IT IS INSTALLED, OF DUST AND DEBRIS. CLEAN EXTERNAL SURFACES OF FOREIGN SUBSTANCES WHICH MIGHT CAUSE CORROSIVE DETERIORATION OF METAL OR, WHERE DUCTWORK IS TO BE PAINTED, MIGHT INTERFERE WITH PAINTING OR CAUSE PAINT DETERIORATION.
   F. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF SIDE SHOWN OR INDICATED.
   G. VOLUME DAMPERS SHALL EQUAL TO RUSKIN MD-35. MULTIPLE BLADE DAMPERS SHALL BE THE OPPOSED BLADE TYPE. PROVIDE QUADRANT TYPE OPERATOR. OPERATOR SHALL BE LOCATED OUTSIDE INSULATION ON INSULATED DUCTS.
   H. TURNING VANES: PROVIDE TURNING VANES CONSTRUCTED OF 1-1/2 INCH WIDE CURVED BLADES SET AT 3/4 INCH O.C., SUPPORTED WITH BARS PERPENDICULAR TO BLADES SET AT 2 INCHES O.C., AND SET INTO SIDE STRIPS SUITABLE FOR MOUNTING IN DUCTWORK. INSTALL TURNING VANES IN SQUARE OR RECTANGULAR 90 DEGREE ELBOWS IN ALL SUPPLY, RETURN AND EXHAUST AIR SYSTEMS.
   I. DUCT ACCESS DOORS: PROVIDE WHERE NECESSARY FOR SERVICE OF DAMPERS, AIR DEVICES, ETC. OF SIZE COMPATIBLE WITH DUCT SIZE. CONSTRUCT OF SAME OR GREATER GAGE AS DUCTWORK SERVED, PROVIDE INSULATED DOORS FOR INSULATED DUCTWORK.
10. DIFFUSERS, REGISTERS AND GRILLES
   A. GENERAL: INSTALL DIFFUSERS, REGISTERS AND GRILLES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO INSURE THAT PRODUCTS SERVE INTENDED FUNCTIONS.
   B. INSTALLATION OF DIFFUSERS, REGISTERS AND GRILLES SHALL BE COORDINATED WITH CEILING LAYOUT, STRUCTURAL MEMBERS AND ADJACENT FINISHES FOR COORDINATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES, LIGHTING FIXTURES AND CEILING GRID.
   C. SIZES OF DIFFUSERS, REGISTERS AND GRILLES SHOWN ON FLOOR PLANS ARE NECK SIZES.
11. FINAL TESTS
   A. ALL SYSTEMS AND EQUIPMENT SHALL BE PROVEN TO OPERATE SATISFACTORILY WITH ALL ROOMS HEATING AND COOLING UNIFORMLY. IF NOT, ADJUSTMENTS AND CORRECTIONS SHALL BE MADE UNTIL SATISFACTORY OPERATION IS ACHIEVED.

END OF SPECIFICATIONS

PLUMBING SPECIFICATIONS

1. GENERAL PROVISIONS
   A. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, 2021 EDITION, INCLUDING ALL REFERENCED CODES AND STANDARDS AND IN ACCORDANCE WITH MANDATES OF THE LOCAL BUILDING OFFICIALS AND/OR AUTHORITY HAVING JURISDICTION.
   B. THE GENERAL ARRANGEMENT AND LOCATIONS PIPING, FIXTURES AND EQUIPMENT ARE INDICATED BY THE DRAWINGS AND SHALL BE INSTALLED IN ACCORDANCE THEREWITH; WITH THE EXCEPTION OF SUCH CHANGES AS MAY BE REQUIRED ON ACCOUNT OF OTHER TRADES. CONTRACTOR SHALL COORDINATE WORK WITH INSTALLATION OF OTHER SUBCONTRACTORS.
   C. PLUMBING WORK SHALL BE COORDINATED WITH THE CONTRACTOR AS TO SCHEDULING, DIMENSIONING AND LOCATION OF EQUIPMENT.
   D. MAJOR ITEMS ARE SHOWN ON THE PROJECT PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INCIDENTAL ITEMS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
   E. SIMILAR ITEMS SHALL BE PROVIDED BY A SINGLE MANUFACTURER.
   F. ALL REQUIRED WALL OR FLOOR OPENINGS SHALL BE COORDINATED WITH THE CONTRACTOR.
   G. ALL PIPING SHALL BE ABOVE CEILING OR WITHIN WALL UNLESS INDICATED OTHERWISE.
   H. DO NOT INSTALL PVC PIPING OR ANY COMBUSTIBLE MATERIAL IN ANY AIR PLENUM.
   I. ALL EQUIPMENT SHALL BE WIPED CLEAN, REMOVING ALL TRACES OF OIL, DIRT, OR PAINT SPOTS.
   J. PROVIDE SUPPORTS TO RIGIDLY ATTACH ALL EQUIPMENT, APPURTENANCES AND PIPE AS REQUIRED FOR SUPPORT. PRIOR TO INSTALLATION OF HANGERS AND INSERTS, THE CONTRACTOR SHALL COORDINATE LOCATIONS AND REQUIREMENTS TO MINIMIZE CONFLICTS WITH OTHER BUILDING SYSTEMS. INSTALLATION OF PIPE HANGERS AND SUPPORTS SHALL BE IN STRICT ACCORDANCE WITH MSS SP-58, 69 AND 89.
   K. CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL EQUIPMENT INDICATED TO BE FURNISHED BY OTHERS.
   L. SIZES AND LOCATIONS FOR EXISTING PIPING ARE SHOWN FOR REFERENCE ONLY AND SHALL BE VERIFIED BY FIELD MEASUREMENTS WHEN EXACT SIZE AND LOCATION IS REQUIRED.
2. DEMOLITION
   A. PLUMBING WORK NECESSARY FOR DEMOLITION AND REMODELING IN THE EXISTING BUILDINGS SHALL BE PROVIDED UNDER THIS SECTION. DOMESTIC WATER PIPING RUNOUTS NO LONGER USED SHALL BE REMOVED BACK TO THE DOMESTIC WATER PIPING MAINS TO PREVENT "DEAD ENDS". SANITARY VENT AND SANITARY WASTE PIPING RUNOUTS SHALL BE PLUGGED, CAPPED OR RECONNECTED AS NECESSARY. EXISTING UNDERGROUND UTILITIES SERVING THE REMAINING EXISTING BUILDING SHALL REMAIN IN SERVICE, WITH RELOCATIONS AND/OR RECONNECTIONS AS NECESSARY FOR COORDINATION WITH THE NEW WORK. WORK NECESSARY TO BE PERFORMED IN OR OTHERWISE AFFECTING THE USE OR COMFORT OF THE REMAINING EXISTING BUILDING SHALL BE COORDINATED WITH THE OCCUPANTS SCHEDULE.
   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL DEMOLISHED EQUIPMENT AND MATERIALS. AT THE OWNER'S REQUEST, ANY DEMOLISHED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER.
3. SUBMISSION OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND PROJECT INFORMATION
   A. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS:
      a. PIPING, VALVES AND INSULATION.
      b. ALL ITEMS CONTAINED WITHIN THE PLUMBING EQUIPMENTS SCHEDULE.
   B. IDENTIFY ALL PLUMBING SHOP DRAWINGS, PRODUCT DATA AND SAMPLES WITH THE NAME OF THE PROJECT. CLEARLY MARK THE SPECIFIC ITEMS INTENDED FOR USE. SUBMIT ALL RELATED ITEMS AT ONE TIME.
   C. PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT, SUBMIT THE FOLLOWING INFORMATION FOR REVIEW AND APPROVAL.
      a. "AS BUILT" DRAWINGS.
4. GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE AND CONTRACTOR SHALL MAKE GOOD, WITHOUT ADDITIONAL COST TO THE OWNER, ANY DEFECTS WHICH MAY APPEAR WITHIN THAT PERIOD. MANUFACTURER'S WARRANTIES EXTENDING BEYOND ONE YEAR SHALL BE PROCESSED AND TURNED OVER TO THE OWNER.
5. "AS BUILT" DRAWINGS: CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF THE LOCATION OF ALL CONCEALED PIPING, VALVES, CONTROLS, ETC. UPON COMPLETION OF THE WORK, ONE PRINT EACH OF THE CONTRACT DRAWINGS WHICH ARE APPLICABLE SHALL BE NEATLY AND CLEARLY MARKED IN COLOR TO SHOW ALL VARIATIONS BETWEEN THE WORK ACTUALLY PROVIDED AND THAT INDICATED ON THE CONTRACT DRAWINGS.
6. ACCESS DOORS: ACCESS DOORS SHALL BE PROVIDED FOR ALL CONCEALED VALVES, CONTROLS, AND ANY OTHER EQUIPMENT OR MATERIALS REQUIRING INSPECTION OR MAINTENANCE. ACCESS DOORS SHALL BE FURNISHED FOR FLOORS, WALLS AND CEILINGS, OF ADEQUATE SIZE SO THAT CONCEALED ITEMS WILL BE READILY ACCESSIBLE FOR SERVICING OR FOR REMOVAL AND REPLACEMENT IF NECESSARY.
7. IDENTIFICATION
   A. PIPE MARKERS
      a. COLOR: CONFORM TO ASME A13.1.
      b. PLASTIC PIPE MARKERS: FACTORY FABRICATED FLEXIBLE, SEMI- RIGID PLASTIC, PREFORMED TO FIT AROUND PIPE OR PIPE COVERING; MINIMUM INFORMATION INDICATING FLOW DIRECTION ARROW AND IDENTIFICATION OF FLUID BEING CONVEYED.
   B. INSTALLATION
      a. DEGREASE AND CLEAN SURFACES TO RECEIVE ADHESIVE FOR IDENTIFICATION MATERIALS.
      b. INSTALL PLASTIC NAMEPLATES WITH CORROSIVE-RESISTANT MECHANICAL FASTENERS, OR ADHESIVE. APPLY WITH SUFFICIENT ADHESIVE TO ENSURE PERMANENT ADHESION AND SEAL WITH CLEAR LACQUER.
      c. INSTALL PLASTIC PIPE MARKERS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
      d. IDENTIFY CONCEALED PIPING WITH PLASTIC PIPE MARKERS. IDENTIFY SERVICE AND FLOW DIRECTION. INSTALL IN CLEAR VIEW AND ALIGN WITH AXIS OF PIPING. LOCATE IDENTIFICATION NOT TO EXCEED 20 FEET (6 M) ON STRAIGHT RUNS INCLUDING RISERS AND DROPS, ADJACENT TO EACH VALVE AND TEE, AT EACH SIDE OF ENCLOSURE, AND AT EACH OBSTRUCTION.
8. PIPING SPECIALTIES
   A. PIPE ESCUTCHEONS: INSTALL PIPE ESCUTCHEONS ON EACH PIPE PENETRATION THRU FLOORS, WALLS, PARTITIONS, AND CEILINGS WHERE PENETRATION IS EXPOSED TO VIEW. SECURE ESCUTCHEON TO PIPE OR INSULATION SO ESCUTCHEON COVERS PENETRATION HOLE, AND IS FLUSH WITH ADJOINING SURFACE. PROVIDE CHROME SHEET STEEL ESCUTCHEONS, SOLID.
9. INSULATION
   A. FLAME/SMOKE RATINGS: PROVIDE COMPOSITE PLUMBING INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES) WITH FLAME-SPREAD RATING OF 25 OR LESS, AND SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 METHOD. INSULATION SHALL BE LABELED BY THE MANUFACTURER. THE LABEL SHALL INDICATE THE INSULATING VALUE, FLAME SPREAD AND SMOKE-DEVELOPED RATING.
   B. INSTALLATION: INSULATION SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS USING ONLY ADHESIVES, MASTICS AND PLUMBING FASTENERS APPROVED BY THE INSULATION MANUFACTURER. INSULATION SHALL NOT BE APPLIED UNTIL AFTER THE EQUIPMENT HAS BEEN TESTED WITH RESULTS ACCEPTABLE TO THE OWNER. INSULATION WITH A VAPOR BARRIER JACKET SHALL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL AND ALL JOINTS SHALL BE SEALED WITH A VAPOR BARRIER ADHESIVE UNLESS OTHERWISE INDICATED. STAPLES, STICK CLIPS AND HANGERS SHALL BE VAPOR SEALED WHERE THEY PUNCTURE VAPOR BARRIER JACKETS. EXISTING INSULATION DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH INSULATION AS SPECIFIED FOR NEW WORK.
   C. MATERIALS:
      a. GLASS FIBER PIPE INSULATION: HEAVY DENSITY PREFORMED PIPE INSULATION WITH OPERATING TEMPERATURE RANGE OF -60 DEGREES F TO 350 DEGREES F, THERMAL CONDUCTIVITY "K"=0.24 BTU-IN/HOUR-SF-DEG F AT 100 DEGREES F. FACTORY APPLIED JACKET (ASJ) SHALL CONSIST OF WHITE KRAFT PAPER BONDED TO ALUMINUM FOIL AND REINFORCED WITH GLASS FIBER YARN. EQUAL TO OWENS-CORNING ASJ.
      b. CELLULAR FOAM PIPE INSULATION: TUBULAR, FLEXIBLE, FIRE RESISTANT INSULATION WITH OPERATING TEMPERATURE RANGE OF -40 DEGREES F TO 220 DEGREES F, THERMAL CONDUCTIVITY "K"=0.27 BTU-IN/HOUR-SF-DEG F AT 75 DEGREES F. EQUAL TO ARMSTRONG ARMAFLEX AP. APPLY ARMSTRONG WB ARMAFLEX FINISH, OR EQUAL, TO INSULATION INSTALLED OUTDOORS.
      c. POLYETHYLENE PIPE INSULATION: NOMACO K-FLEX IMCOA, FLEXIBLE CLOSED CELL POLYETHYLENE TUBING, ASTM C534, "K"=0.24 AT 75 DEGREES F, SERVICE TEMPERATURE -110F TO 210F.
   D. PIPE INSULATION
      a. INSULATION OMITTED: OMIT INSULATION ON EXPOSED PLUMBING FIXTURE RUNOUTS FROM FACES OF WALL OR FLOOR TO FIXTURE; ON UNIONS, FLANGES, STRAINERS, FLEXIBLE CONNECTIONS, AND EXPANSION JOINTS.
      b. COVER VALVES, FITTINGS AND SIMILAR ITEMS IN EACH PIPING SYSTEM WITH EQUIVALENT THICKNESS AND COMPOSITION OF INSULATION AS APPLIED TO ADJOINING PIPE RUN.
      c. EXTEND PIPING INSULATION WITHOUT INTERRUPTION THROUGH WALLS, FLOORS AND SIMILAR PIPING PENETRATIONS, EXCEPT WHERE OTHERWISE INDICATED.
      d. INSTALL PROTECTIVE METAL SHIELDS AND INSULATED INSERTS WHEREVER NEEDED TO PREVENT COMPRESSION OF INSULATION.
      e. PIPE HANGER INSULATION INSERTS: BUTT PIPE INSULATION AGAINST PIPE INSULATION INSERTS. FOR HOT PIPES, APPLY 3 INCH WIDE VAPOR BARRIER TAPE OR BAND OVER THE BUTT JOINTS. FOR COLD PIPING APPLY WET COAT OF VAPOR BARRIER LAP CEMENT ON BUTT JOINTS AND SEAL JOINTS WITH 3 INCH WIDE VAPOR BARRIER TAPE OR BAND.
      f. DOMESTIC WATER PIPING, ABOVE GROUND: PIPING SHALL BE INSULATED WITH GLASS FIBER PIPE INSULATION. CELLULAR FOAM OR POLYETHYLENE PIPE INSULATION MAY BE USED ON PIPE SIZES 1 INCH AND SMALLER. VAPOR SEAL IS NOT REQUIRED ON HOT WATER PIPING.
         • DOMESTIC COLD WATER PIPING SHALL REQUIRE MINIMUM 1/2" INSULATION THICKNESS - ALL SIZES.
         • DOMESTIC HOT WATER AND DOMESTIC HOT WATER RECIRCULATION PIPING SHALL REQUIRE MINIMUM 1/2" INSULATION FOR PIPING 1" AND SMALLER.
         • DOMESTIC HOT WATER AND DOMESTIC HOT WATER RECIRCULATION PIPING SHALL REQUIRE MINIMUM 1" INSULATION FOR PIPING 1-1/4" AND LARGER.
10. PLUMBING PIPING
   A. DOMESTIC WATER PIPING ABOVE GROUND
      a. PIPE: TYPE L HARD DRAWN COPPER
      b. FITTINGS: CAST BRONZE OR WROUGHT COPPER
      c. JOINTS: SOLDERED
   B. SOIL, WASTE AND VENT PIPING BELOW GRADE
      a. SIZE: 4 INCHES AND SMALLER
      b. PIPE: SERVICE WEIGHT CAST IRON ASTM A-74 OR SCH. 40 FITTINGS:SERVICE WEIGHT CAST IRON OR PVC SOCKET FITTINGS (DWV)
      c. JOINTS: HUB & SPIGOT CAULKED OR COMPRESSION GASKETS FOR CAST IRON OR SOLVENT CEMENT JOINTS FOR PVC
   C. SOIL, WASTE AND VENT PIPING ABOVE GRADE
      a. SIZE: ALL
      b. PIPE: SERVICE WEIGHT CAST IRON ASTM A-74 OR HUBLESS ASTM C-564
      c. FITTINGS: SERVICE WEIGHT OR HUBLESS CAST IRON
   D. SOCKET FITTINGS (DWV)
      a. JOINTS: HUB & SPIGOT CAULKED, COMPRESSION GASKETS OR NEOPRENE SLEEVES AND STAINLESS STEEL BANDS FOR CAST IRON
   E. ALL PIPE OF THE SAME SIZE SHALL BE THE SAME MATERIAL.
   F. SLOPE ALL DRAIN LINES 1/4 INCH PER FOOT MINIMUM FOR SIZES LESS THAN 4 INCHES; SLOPE 1/8 INCH PER FOOT FOR SIZES 4 INCHES AND LARGER.
   G. SOIL, WASTE AND VENT PIPING LOCATED BELOW GRADE SHALL BE MINIMUM 2 INCH SIZE.
   H. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BELOW GRADE WORK IN ACCORDANCE WITH THE FOLLOWING:
      a. TRENCHES SHALL BE GRADED TO UNIFORM PITCH AND SHALL BE NO WIDER THAN NECESSARY AND FREE FROM LOOSE EARTH. CLEAN BACKFILL SHALL BE USED AND THOROUGHLY TAMPED IN LAYERS NOT EXCEEDING 6 INCHES TO A MINIMUM DEPTH OF 1 FOOT ABOVE PIPE.
      b. COMPACTED BACKFILL SHALL BE USED FOR ENTIRE DEPTH OF EXCAVATION UNDER SLAB ON GRADE CONSTRUCTION.
   I. DOMESTIC HOT AND COLD WATER PIPING SHALL BE 1/2 INCH SIZE UNLESS INDICATED OTHERWISE.
11. PLUMBING VALVES
   A. PROVIDE SHUT-OFF VALVE AND UNION OR EQUIVALENT AT EACH HOT AND COLD WATER EQUIPMENT CONNECTION. PROVIDE SHUT-OFF VALVE ON EACH BRANCH OR RISER THAT SERVES TWO OR MORE PLUMBING FIXTURES.
   B. BALL VALVES 2 INCHES AND SMALLER: BALL VALVES SHALL HAVE BRONZE BODY, FULL PORT, BRONZE BALL AND PTFE SEATS AND SEALS.
12. PLUMBING FIXTURES
   A. CODES AND STANDARDS: COMPLY WITH APPLICABLE PORTIONS OF NATIONAL STANDARD PLUMBING CODE PERTAINING TO MATERIALS AND INSTALLATION OF PLUMBING FIXTURES.
      a. ANSI STANDARDS: COMPLY WITH APPLICABLE ANSI STANDARDS PERTAINING TO PLUMBING FIXTURES AND SYSTEMS.
      b. PDI COMPLIANCE: COMPLY WITH STANDARDS ESTABLISHED BY PDI PERTAINING TO PLUMBING FIXTURE SUPPORTS AND WATER HAMMER ARRESTOR SIZING/INSTALLATION.
      c. FEDERAL STANDARDS: COMPLY WITH APPLICABLE FS WW-P-541/SERIES SECTIONS PERTAINING TO PLUMBING FIXTURES.
      d. ANSI AND ADA COMPLIANCE: CONSTRUCT AND INSTALL BARRIER FREE PLUMBING FIXTURES IN ACCORDANCE WITH ANSI STANDARD A117.1 "SPECIFICATIONS FOR MAKING BUILDINGS AND FACILITIES ACCESSIBLE TO AND USABLE BY PHYSICALLY HANDICAPPED PEOPLE" AND WITH THE "AMERICANS WITH DISABILITIES ACT GUIDELINES".
   B. ALL EXPOSED FIXTURE SUPPLIES AND WASTE LINES SHALL BE CHROME PLATED. NO EXPOSED COPPER, PVC AND/OR CAST IRON PIPING IS ALLOWED. UTILIZE CHROME NIPPLES AS REQUIRED FOR DOMESTIC ROUGH-IN.
   C. PLUMBING FIXTURES SHALL BE POSITIVELY VENTED AND TRAPPED IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE. LOCATION OF VENT SHALL NOT EXCEED MAXIMUM DISTANCES TO THE TRAP AS ESTABLISHED IN THE CODE.
13. CLEANING AND TESTING
   A. ALL WATER PIPING, VALVES, ETC. SHALL BE THOROUGHLY FLUSHED OF FOREIGN MATTER AND TESTED FOR LEAKS IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, 2021 EDITION. ANY LEAKAGE SHALL BE REPAIRED. DISINFECT DOMESTIC WATER PIPING INCLUDING WATER SERVICE PIPING IN ACCORDANCE WITH AWWA C601.
   B. ALL DRAIN, WASTE AND VENT PIPING SHALL BE TESTED FOR LEAKS IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE. NO VISIBLE DROP IN WATER LEVEL WILL BE ACCEPTABLE.

END OF SPECIFICATIONS

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.:	CHECKED BY:	DRAWN BY:
JM	MAR	ZAZ

SHEET ISSUE DATE:
03.20.2026

PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

SHEET NAME:
MECHANICAL / PLUMBING - SPECIFICATIONS

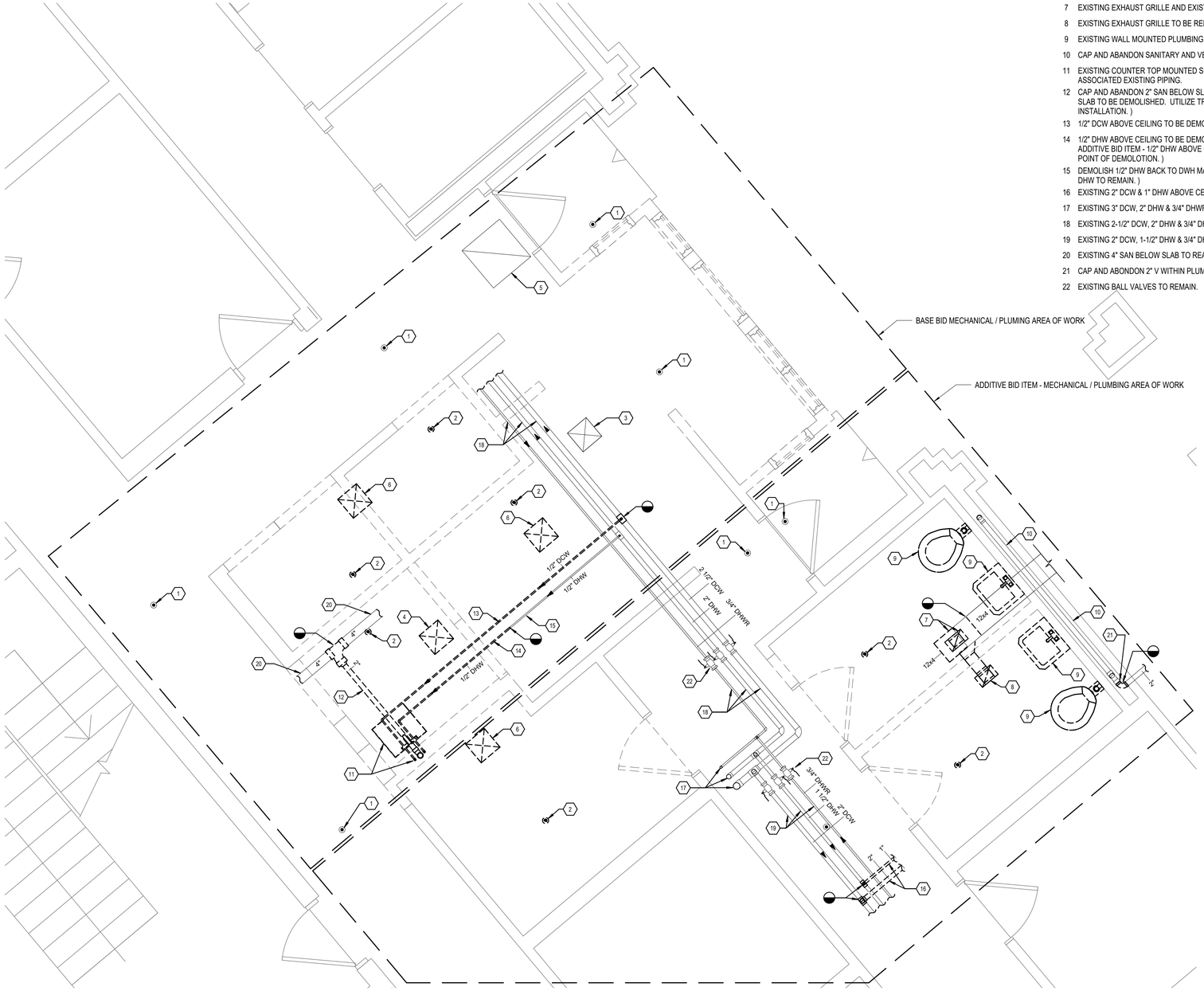
SHEET NUMBER:
MP002

GENERAL NOTES

1. BASE BID SCOPE OF WORK IS GENERALLY CONFINED TO THE NURSES STATION AND CHECK-IN IN AREAS. BASE BID WORK INCLUDES REMOVAL OF A SINK, REMOVAL / RELOCATION OF SPRINKLER HEADS AND REMOVAL / RELOCATION OF DIFFUSERS.
2. DEMOLITION NOTES 12, 13 & 14 REFLECT THE SCOPE OF WORK NOT ABLE TO BE SHOWN SOLELY WITHIN THE BOUNDARY OF "ADDITIVE BID ITEM" ON THIS SHEET.

 # DEMOLITION NOTES

1 EXISTING SPRINKLER HEAD TO REMAIN.
2 EXISTING SPRINKLER HEAD TO BE REMOVED.
3 EXISTING DIFFUSER TO REMAIN
4 EXISTING DIFFUSER EXPOSED TO VIEW WITHIN CEILING GRID TO BE REMOVED AND RELOCATED.
5 EXISTING FILTER RETURN REGISTER TO REMAIN.
6 EXISTING DIFFUSER CONCEALED ABOVE CEILING AND CONNECTED TO EXISTING SUPPLY DUCTWORK VIA FLEX DUCT. EXISTING DIFFUSER TO BE REMOVED AND RELOCATED.
7 EXISTING EXHAUST GRILLE AND EXISTING EXHAUST DUCT TO BE REMOVED.
8 EXISTING EXHAUST GRILLE TO BE REMOVED AND RELOCATED.
9 EXISTING WALL MOUNTED PLUMBING FIXTURES TO BE DEMOLISHED.
10 CAP AND ABANDON SANITARY AND VENT PIPING WITHIN CHASE.
11 EXISTING COUNTER TOP MOUNTED SINK TO BE DEMOLISHED. DEMOLISH ALL ASSOCIATED EXISTING PIPING.
12 CAP AND ABANDON 2" SAN BELOW SLAB. (ADDITIVE BID ITEM - 2" SAN BEL SLAB TO BE DEMOLISHED. UTILIZE TRENCH FOR NEW SANITARY PIPING INSTALLATION.)
13 1/2" DCW ABOVE CEILING TO BE DEMOLISHED.
14 1/2" DHW ABOVE CEILING TO BE DEMOLISHED BACK TO DWH MAIN PIPING. (ADDITIVE BID ITEM - 1/2" DHW ABOVE CEILING TO BE DEMOLISHED BACK TO POINT OF DEMOLOTION.)
15 DEMOLISH 1/2" DHW BACK TO DWH MAIN PIPING. (ADDITIVE BID ITEM - 1/2" DHW TO REMAIN.)
16 EXISTING 2" DCW & 1" DHW ABOVE CEILING TO BE DEMOLISHED.
17 EXISTING 3" DCW, 2" DHW & 3/4" DHWR FROM ABOVE.
18 EXISTING 2-1/2" DCW, 2" DHW & 3/4" DHWR ABOVE CEILING TO REMAIN
19 EXISTING 2" DCW, 1-1/2" DHW & 3/4" DHWR ABOVE CEILING TO REMAIN
20 EXISTING 4" SAN BELOW SLAB TO REAMIAN.
21 CAP AND ABONDON 2" V WITHIN PLUMBING CHASE.
22 EXISTING BALL VALVES TO REMAIN.



1 FIRST FLOOR MECHANICAL/PLUMBING DEMOLITION
MP041 SCALE: 1/2" = 1'-0"

0 1' 2' 4'
SCALE: 1/2" = 1' - 0"

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VIRGINIA TECH

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PROJ. MGR.: **JM** CHECKED BY: **MAR** DRAWN BY: **ZAZ**

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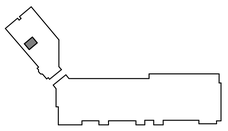


PLAN NORTH N SITE NORTH

SHEET NAME:
MECHANICAL / PLUMBING - FIRST FLOOR PLAN - DEMOLITION

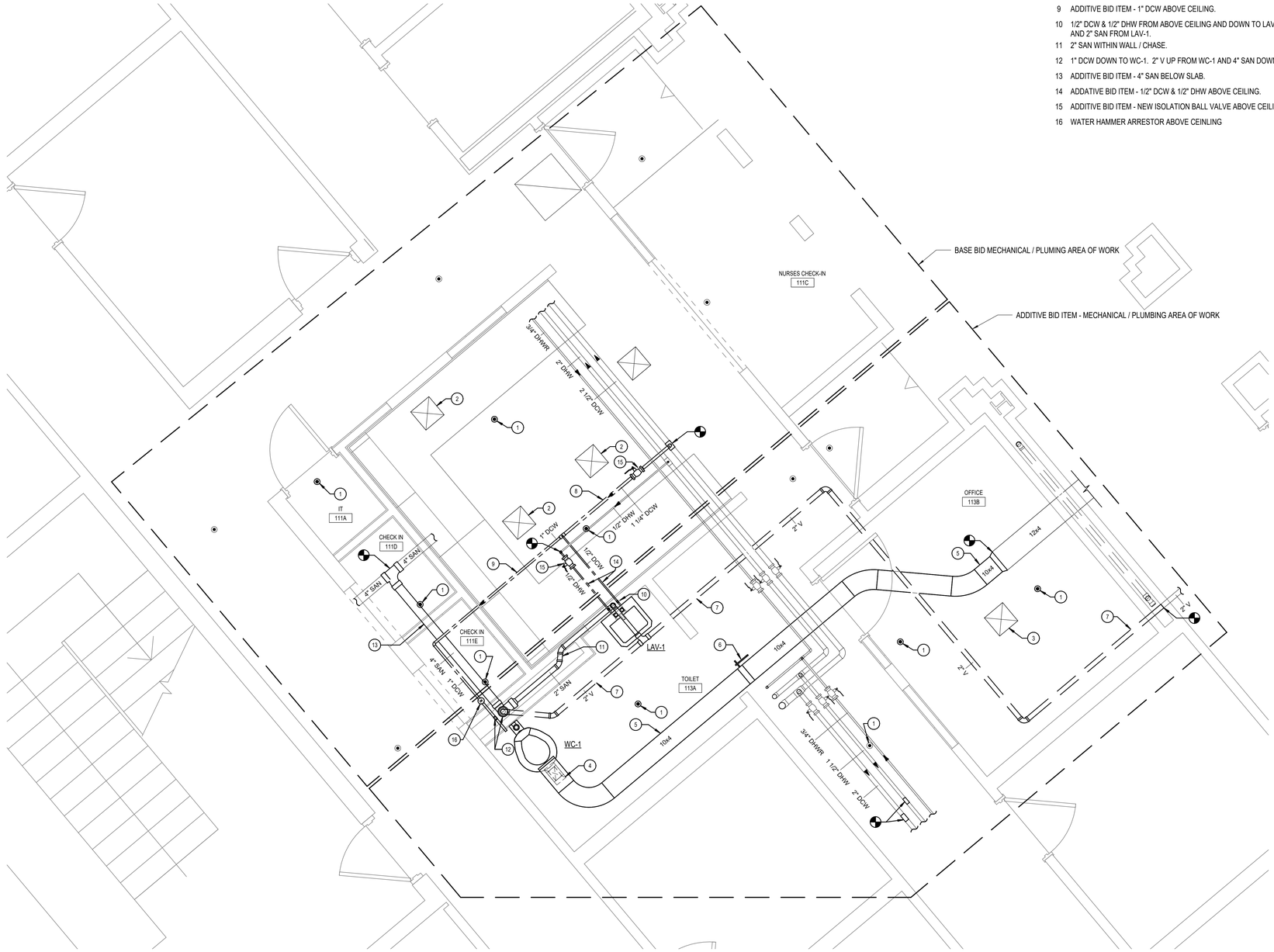
SHEET NUMBER:
MP041

GENERAL NOTES

1. BASE BID SCOPE OF WORK IS GENERALLY CONFINED TO THE NURSES STATION AND CHECK-IN IN AREAS. BASE BID WORK INCLUDES REMOVAL OF A SINK, REMOVAL / RELOCATION OF SPRINKLER HEADS AND REMOVAL / RELOCATION OF DIFFUSERS.
2. ADDITIVE BID ITEM SCOPE OF WORK IS REMOVAL OF 2 BATHROOMS, REMOVAL / RELOCATION OF SPRINKLER HEADS, INSTALLATION OF 1 BATHROOM AND RELOCATION OF 1 OFFICE
3. NEW WORK NOTES 8, 9, 13, 14 & 15 REFLECT THE SCOPE OF WORK NOT ABLE TO BE SHOWN SOLELY WITHIN THE BOUNDARY OF "ADDITIVE BID ITEM" ON THIS SHEET.

(#) SHEET NOTES

1. PROPOSED NEW LOCATION OF SPRINKLER HEAD. COORDINATE EXACT LOCATION WITH OTHER TRADES. PROVIDE RECESSED CHROME SPRINKLER HEAD WITH CHROME ESCUTCHEON TO MATCH EXISTING. TRIM / EXTEND EXISTING BRANCH PIPING ABOVE CEILING AS NECESSARY FOR NEW CONNECTION.
2. RELOCATED DIFFUSER FROM THE SAME GENERAL AREA, ALIGNED WITH NEW CEILING GRID.
3. RELOCATED DIFFUSER FROM THE EXISTING OFFICE AREA TO THE NEW OFFICE AREA, ALIGNED WITH NEW CEILING GRID.
4. NEW LOCATION OF EXISTING EXHAUST GRILL FROM EXISTING BATHROOM. INSTALLED FLUSH WITH NEW GYPSUM BOARD CEILING. (75 CFM)
5. 10x4 EXHAUST DUCT INSTALLED ABOVE CEILING.
6. VOLUME DAMPER.
7. 2" V ABOVE CEILING.
8. ADDITIVE BID ITEM - 1-1/4" DCW ABOVE CEILING.
9. ADDITIVE BID ITEM - 1" DCW ABOVE CEILING.
10. 1/2" DCW & 1/2" DHW FROM ABOVE CEILING AND DOWN TO LAV-1. 1-1/2" V UP AND 2" SAN FROM LAV-1.
11. 2" SAN WITHIN WALL / CHASE.
12. 1" DCW DOWN TO WC-1. 2" V UP FROM WC-1 AND 4" SAN DOWN BEL SLAB.
13. ADDITIVE BID ITEM - 4" SAN BELOW SLAB.
14. ADDATIVE BID ITEM - 1/2" DCW & 1/2" DHW ABOVE CEILING.
15. ADDITIVE BID ITEM - NEW ISOLATION BALL VALVE ABOVE CEILING.
16. WATER HAMMER ARRESTOR ABOVE CEINLING



1 FIRST FLOOR MECHANICAL/PLUMBING NEW WORK
MP101 SCALE: 1/2" = 1'-0"

0 1' 2' 4'
SCALE: 1/2" = 1' - 0"

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VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM** CHECKED BY: **MAR** DRAWN BY: **ZAZ**

SHEET ISSUE DATE:
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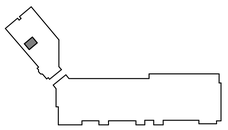
PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

KEY PLAN:



PLAN NORTH N SITE NORTH

SHEET NAME:
MECHANICAL / PLUMBING - FIRST FLOOR PLAN - NEW WORK

SHEET NUMBER:
MP101

SYMBOLS LEGEND

POWER	
	DUPLEX RECEPTACLE
G	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER
48	DUPLEX RECEPTACLE WITH MOUNTING HEIGHT
A	DUPLEX RECEPTACLE - A INDICATES ABOVE COUNTER
B	QUADPLEX RECEPTACLE - B INDICATES BELOW COUNTER

SWITCH AND CONTROL	
$	SINGLE POLE LIGHT SWITCH
$D	DIMMER LIGHT SWITCH
$OC	OCCUPANCY SENSOR CONTROLLED SWITCH
OS	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR

DATA COMMUNICATIONS	
	COMPUTER WALL OUTLET
WAP	WIRELESS ACCESS POINT

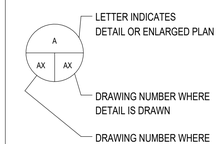
AUDIO / VISUAL AND SPECIAL SYSTEMS	
S	SPEAKER - CEILING MOUNTED

FIRE ALARM	
	FIRE ALARM MANUAL PULL STANTON
SD	SMOKE DETECTOR
	VISUAL DEVICE STROBE

POWER DISTRIBUTION AND EQUIPMENT	
	PANELBOARD

LIGHT FIXTURES - (SYMBOL SHAPE MAY VARY. REFER TO SCHEDULE)	
	2X2 LIGHT FIXTURE, LETTER INDICATES FIXTURE TYPE TYPICAL , SHADING INDICATES EMERGENCY FIXTURE, TYPICAL
	DOWNLIGHT LIGHT FIXTURE
	LINEAR RECESSED SLOT FIXTURE
	TAPE LIGHT FIXTURE WITH CHANNEL
	EXIT LIGHT

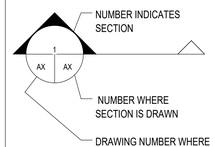
DRAFTING SYMBOLS



LETTER INDICATES DETAIL OR ENLARGED PLAN

DRAWING NUMBER WHERE DETAIL IS DRAWN

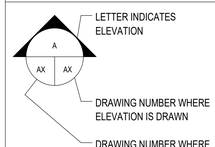
DRAWING NUMBER WHERE DETAIL IS TAKEN



NUMBER INDICATES SECTION

NUMBER WHERE SECTION IS DRAWN

DRAWING NUMBER WHERE ENLARGED PLAN IS TAKEN



LETTER INDICATES ELEVATION

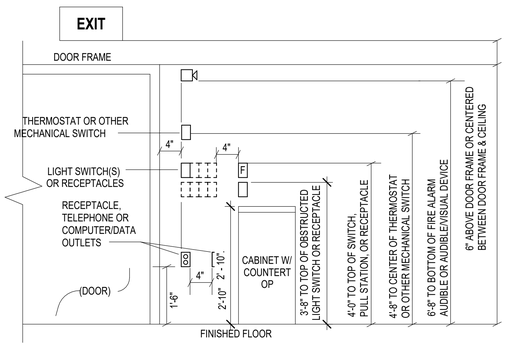
DRAWING NUMBER WHERE ELEVATION IS DRAWN

DRAWING NUMBER WHERE ELEVATION IS TAKEN

1	NUMBERED CONSTRUCTION NOTES
1	NUMBERED DEMOLITION NOTES
	LIGHT LINE WORK - EXISTING TO REMAIN
	DARK DASHED LINE WORK - DEMOLITION
	DARK CONTINUOUS LINE WORK - NEW WORK

GENERAL ELECTRICAL NOTES

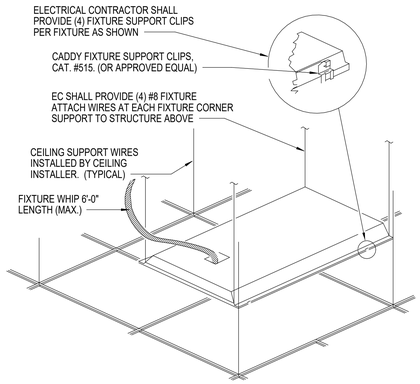
1. INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE 2021 NATIONAL ELECTRICAL CODE, UNIFORM STATEWIDE BUILDING CODE, AND MANDATES OF THE LOCAL BUILDING OFFICIALS.
2. THE GENERAL ARRANGEMENT AND LOCATIONS OF LIGHT FIXTURES, OUTLETS AND EQUIPMENT IS INDICATED BY THE DRAWINGS AND SHALL BE INSTALLED IN ACCORDANCE THEREWITH, WITH THE EXCEPTION OF SUCH CHANGES WHICH MAY BE NECESSARY TO COORDINATE WITH EXISTING CONDITIONS. ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH INSTALLATION OF OTHER CONTRACTORS, WITH EXISTING CONDITIONS, AND WITH OWNER SUPPLIED EQUIPMENT AND FURNISHINGS.
3. INSTALLATION OF LIGHT FIXTURES SHALL BE COORDINATED WITH CEILING LAYOUT, STRUCTURAL MEMBERS AND ADJACENT FINISHES.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING OF POWER WIRING TO ALL PLUMBING AND HVAC EQUIPMENT THAT MAY BE IN THE AREA OF WORK. ELECTRICAL CONTRACTOR SHALL REVIEW ALL LOCATIONS OF EQUIPMENT. 120 VOLT CONTROL WIRING AND CONDUIT SHALL ALSO BE PROTECTED BY THE ELECTRICAL CONTRACTOR.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL TESTING THE ELECTRICAL SYSTEM FOR:
   A. VOLTAGE AND TOTAL LOAD IN AMPS AND FOR INSULATION RESISTANCE IN OHMS ON EACH PHASE FOR SERVICE ENTRANCE.
   B. VOLTAGE AND TOTAL LOAD IN AMPS FOR EACH PANELBOARD OR MOTOR CONTROL CENTER INSTALLED.
   C. VOLTAGE AND TOTAL LOAD IN AMPS FOR EACH FEEDER CIRCUIT WITH #4 CONDUCTORS OF LARGER.
6. MAJOR ITEMS ARE SHOWN ON THE PROJECT PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INCIDENTAL ITEMS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
7. ELECTRICAL WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AS TO SCHEDULING, DIMENSIONING AND LOCATION OF EQUIPMENT.
8. WIRE SHALL BE COPPER OF MINIMUM OF 12 GAUGE SIZE AND SHALL BE TYPE THW, THWN, THHN, AND STRANDED IF NUMBER 8 AWG OR LARGER. WIRE SHALL BE RATED FOR 75 DEGREES MINIMUM. AND CONDUCTOR SIZES SHALL BE SELECTED BASED UPON 75 DEGREE WIRE. PROVIDE OVERSIZED WIRE FOR LONG CIRCUIT RUNS TO MAINTAIN VOLTAGE DROP WITHIN 3% AT FULL LOAD. 120 VOLT EXAMPLE: FOR 20 AMP CIRCUIT WITH 13 AMP LOAD, PROVIDE # 12 WIRE UP TO 70' LENGTH, PROVIDE #10 WIRE FROM 71 TO 115' LENGTH; PROVIDE #8 WIRE FROM 116 TO 185' LENGTH, AND PROVIDE #6 WIRE FOR BRANCH CIRCUITS OVER 185'.
9. ALL WIRING SHALL BE IN CONDUIT. RIGID METAL WHERE EXPOSED OUTDOORS AND BELOW SWITCH HEIGHT OR SUBJECT TO DAMAGE; MC CABLE WHERE HIDDEN IN WALLS. FLEXIBLE METALLIC FOR EQUIPMENT CONNECTIONS AND EMT OTHERWISE. A SEPARATE GREEN INSULATED GROUND WIRE SHALL BE INSTALLED IN ALL CONDUITS. ALL CONDUIT SHALL BE NEATLY RUN AND SUPPORTED PER NATIONAL ELECTRIC CODE..
10. ALL CONDUIT TO BE RUN CONCEALED WHERE POSSIBLE IN FINISHED SPACES. EXPOSED CONDUIT IS ACCEPTABLE IN MECHANICAL ROOMS AND JANITOR CLOSETS. PVC CONDUIT IS NOT PERMITTED IN AIR PLENUM OR EXPOSED INSIDE THE BUILDING. WHERE UNDERGROUND PVC CONDUITS ENTER THE BUILDING, CONCRETE ENCASEMENT OR METAL SHROUD MAY BE USED TO PROTECT THE PVC FROM POSSIBLE DAMAGE.
11. SOME ELECTRICAL SYSTEM CABLING, SUCH AS FIRE ALARM, SOUND, TELEVISION, DATA OR TELEPHONE MAY BE PERMITTED ABOVE ACCESSIBLE CEILING WITHOUT CONDUIT. HOWEVER, SUCH CABLING IS NOT PERMITTED TO BE EXPOSED. PROVIDE PARTIAL CONDUIT SYSTEM AS NEEDED TO PROTECT AND CONCEAL THE WIRING FROM VIEW. ANY LOCATIONS WHERE CABLES PASS ABOVE NON-ACCESSIBLE CEILINGS OR THROUGH FIRE RATED PARTITIONS SHALL UTILIZE CONDUIT AND SLEEVES WITH SEALANT TO RESTORE THE FIRE RATING OF THE PARTITION.
12. ALL CABLING RUN IN PLENUM AREAS ABOVE CEILING ARE TO BE PLENUM RATED UNLESS OTHERWISE APPROVED.



NOTES:
1. WHERE MULTIPLE SWITCHES ARE USED, PROVIDE MULTIPLE GANG BOXES AS REQUIRED UP TO SIX GANGS. FOR GREATER NUMBER OF SWITCHES OR LIGHT CONTROL DIMMERS, USE ADDITIONAL ROWS AT 8" LOWER HEIGHT. DIVIDE MULTIPLE SWITCHES EVENLY, FOR MATCHING BOX GANGS.
2. FOR DIMMER, DERATE AND PROVIDE SPACING AS RECOMMENDED BY THE MANUFACTURER.
3. RECEPTACLES AND OTHER OUTLETS SHALL ALIGN VERTICALLY WITH LIGHT SWITCHES AND OTHER DEVICES MOUNTED ABOVE.
4. RECEPTACLES SHOWN AT 48" HEIGHT MAY BE INCORPORATED INTO SAME SWITCHPLATE WITH LIGHT SWITCH.
5. RECEPTACLES AND OTHER OUTLETS AT SAME ELEVATION SHOWN SIDE BY SIDE ON PLANS SHALL BE MOUNTED 4" APART IN WALL UNLESS OTHERWISE REQUIRED BY FIRE ASSEMBLY DETAILS.
6. FOR RECEPTACLES AND OTHER DEVICE BOXES MOUNTED IN CASEWORK, SEE ARCHITECTURAL CASEWORK ELEVATIONS AND DETAILS.

TYPICAL ELECTRICAL ELEVATIONS

SCALE: 12" = 1'-0"



NOTE: BEAM CLAMPS NOT ALLOWED TO SUSPEND MEP ITEMS. ITEMS HUNG FROM JOIST MUST LOOP THE ENTIRE CHORD OF THE JOIST.

DETAIL - TROFFER FIXTURE MOUNTING

SCALE: 12" = 1'-0"

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.: **26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM** CHECKED BY: **MAR** DRAWN BY: **CLH**

SHEET ISSUE DATE: **03.20.2026**

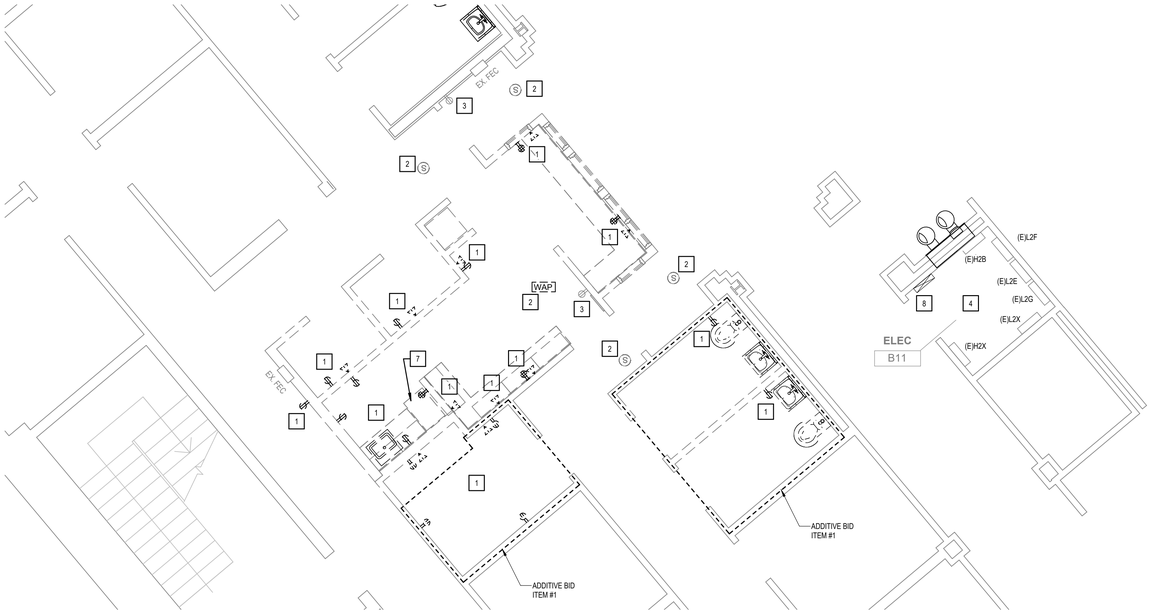
PROJECT PHASE: **WORKING DRAWINGS**

SHEET REVISIONS:

PLAN NORTH / SITE NORTH

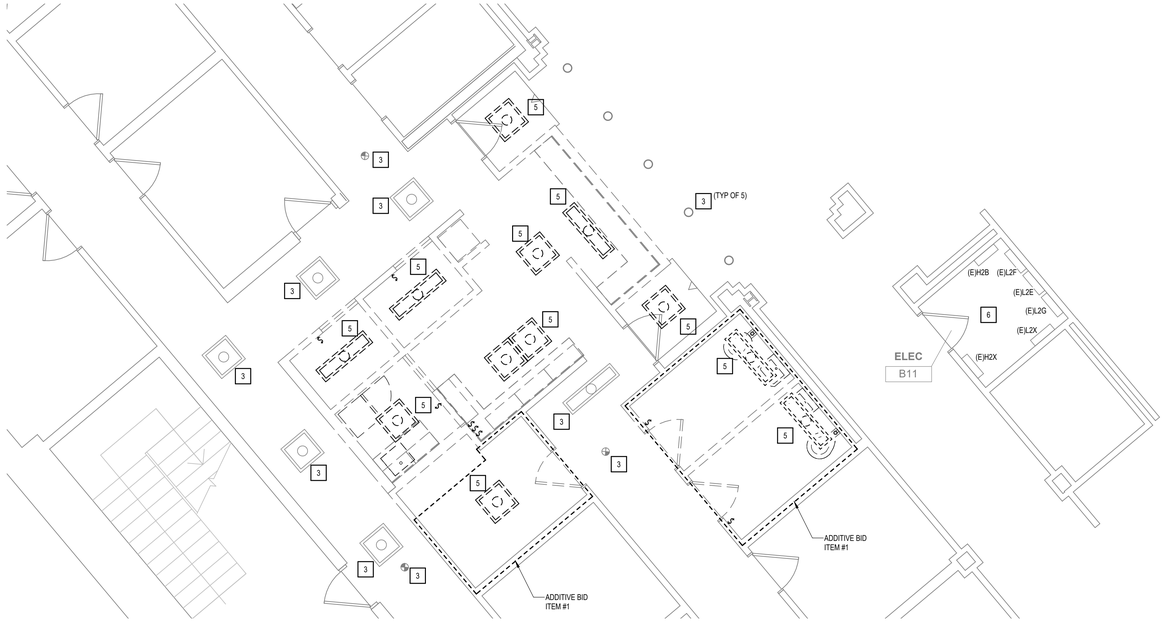
SHEET NAME: **ELECTRICAL - LEGEND, DETAILS AND NOTES**

SHEET NUMBER: **E001**



1 E041 E041 FLOOR PLAN - DEMOLITION

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



2 E041 E041 FLOOR PLAN LIGHTING - DEMOLITION

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

GENERAL DEMOLITION NOTES:

1. EXISTING LIGHTING FIXTURES, DEVICES, POWER CONNECTIONS, EQUIPMENT LOCATED INSIDE THE LIMITS OF WORK SHALL BE DISCONNECTED AND REMOVED FROM THE PREMISES, UNLESS OTHERWISE NOTED. RETAIN CIRCUITRY AND PROTECT ALL WIRING FOR RE-USE. PROTECT CIRCUITRY THAT MAY BE FEEDING FIXTURES THAT ARE NOT BEING DEMOLISHED THAT MAY BE ON THE SAME CIRCUIT.

2. EXISTING CONDUIT AND CONDUCTORS MAY BE REUSED. CIRCUIT BREAKERS IN EXISTING PANEL BOARDS TO BE REUSED FOR RE-CIRCUITING FOR BRANCH CIRCUITS WHERE PRACTICAL. NEW CIRCUIT BREAKERS REQUIRED SHALL BE ADDED TO EXISTING PANELBOARD AND BE COMPATIBLE WITH SAME EXISTING PANELBOARD SHALL BE PROVIDED WITH NEW TYPE-WRITTEN DIRECTORIES UNDER PLASTIC COVER IDENTIFYING ALL BRANCH CIRCUITS AS THEY EXIST AFTER RENOVATION WORK. ALL FEEDER DISCONNECTS SHALL BE RELABELED AS NECESSARY

GENERAL NOTES

1. SEE SHEET E001 FOR LEGEND AND GENERAL NOTES AND DETAILS.
2. SEE SHEETS E600 SERIES FOR SCHEDULES AND DIAGRAMS.
3. ELECTRICAL DEVICES EXISTING TO REMAIN ARE SHOWN AS LIGHT LINE WORK. DEMO WORK SHOWN AS DARK DASHED LINE WORK. NEW ELECTRICAL WORK SHOWN AS DARK LINE WORK. SEE LINE WORK LEGEND SHEET E001.

SHEET NOTES:

1. DEMOLISH RECEPTACLES AND DATA DEVICES ASSOCIATED WITH WALLS BEING DEMOLISHED. PULL CIRCUITRY BACK TO NEAREST JUNCTION BOX DURING DEMOLISHING AND RETAIN FOR RE-USE WHERE PRACTICAL.
2. REMOVE AND PROTECT CEILING MOUNTED DEVICES SUCH AS SPEAKERS AND WIRELESS ACCESS POINTS FOR RE-INSTALLATION. PROTECT ALL CABLING DURING CONSTRUCTION FOR RE-USE.
3. EXISTING TO REMAIN. PROTECT CIRCUITRY DURING CONSTRUCTION.
4. EXISTING PANELS AND CIRCUITS ASSOCIATED WITH RECEPTACLES TO BE DEMOLISHED.
   PANEL L2E - CIRCUITS 17,19 .
   PANEL L2F - CIRCUITS 1,3,5 .
   EXISTING PANELS ARE LOCATED IN ROOM B11.
   SEE EXISTING PANEL SCHEDULES SHEET E601.
5. DEMOLISH LIGHT FIXTURES AND LIGHTING DEVICE CONTROLS ASSOCIATED WITH CEILINGS BEING DEMOLISHED. PULL CIRCUITRY BACK TO NEAREST JUNCTION BOX AND RETAIN FOR RE-USE WHERE PRACTICAL.
6. EXISTING PANELS AND CIRCUITS ASSOCIATED WITH LIGHTING TO BE DEMOLISHED.
   PANEL H2B - 3,5 .
   PANEL H2X - 3,5 .
   EXISTING PANELS ARE LOCATED IN ROOM B11.
   SEE EXISTING PANEL SCHEDULES SHEET E601.
7. REMOVE AND PROTECT PA SYSTEM RACK, COORDINATE WITH OWNER FOR UNIT TO BE RELOCATED. PROTECT LOW VOLTAGE CABLING FOR RE-USE.
8. EXISTING FIRE ALARM BOOSTER PANEL LOCATED IN ELECTRICAL ROOM B11. PROTECT FIRE ALARM CIRCUITS IN THE AREA OF WORK DURING CONSTRUCTION.

0 2' 4' 8'

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

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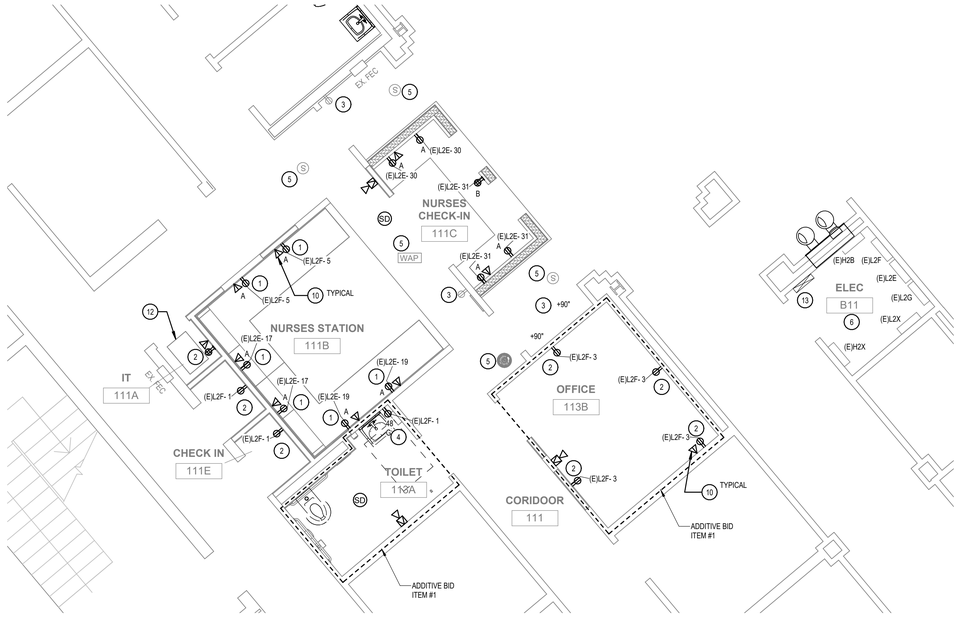
SHEET REVISIONS:

PLAN NORTH SITE NORTH

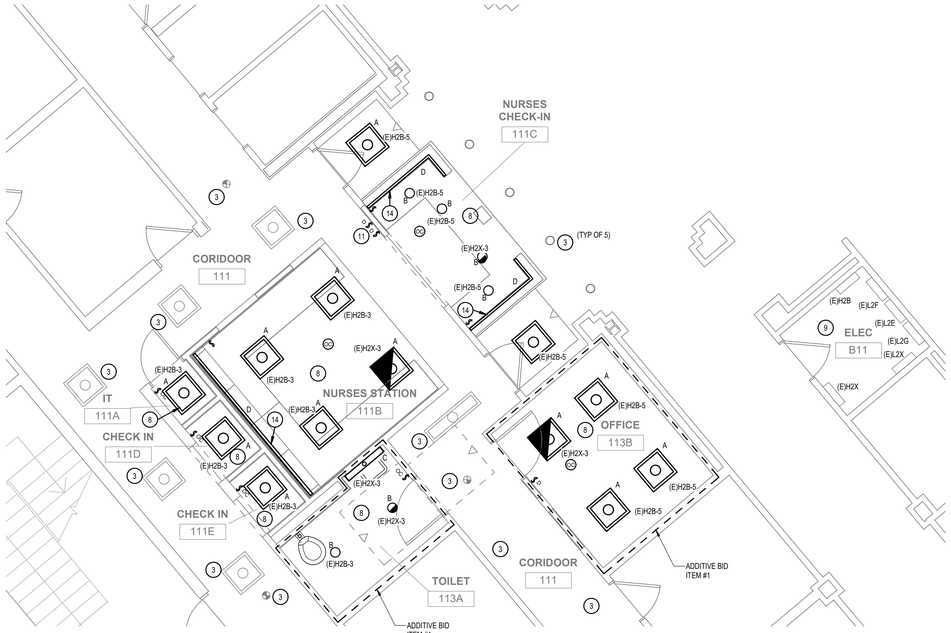
SHEET NAME: **ELECTRICAL - DEMOLITION FLOOR PLANS**

SHEET NUMBER: **E041**



1 E101 E101 1ST FLOOR PLAN POWER

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



2 E101 E101 1ST FLOOR PLAN LIGHTING

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

GENERAL NOTES

1. SEE SHEET E001 FOR LEGEND AND GENERAL NOTES AND DETAILS.
2. SEE SHEETS E600 SERIES FOR SCHEDULES AND DIAGRAMS.
3. ELECTRICAL DEVICES EXISTING TO REMAIN ARE SHOWN AS LIGHT LINE WORK. DEMO WORK SHOWN AS DARK DASHED LINE WORK. NEW ELECTRICAL WORK SHOWN AS DARK LINE WORK. SEE LINE WORK LEGEND SHEET E001.

SHEET NOTES:

1. INSTALL RECEPTACLES ABOVE COUNTER. RE-CIRCUIT AS INDICATED USING CIRCUITS RETAINED FOR RE-USE.
2. INSTALL RECEPTACLES AT 18" AFF. RE-CIRCUIT AS INDICATED USING CIRCUITS RETAINED FOR RE-USE.
3. EXISTING TO REMAIN. PROTECT CIRCUITRY DURING CONSTRUCTION.
4. INSTALL GFCI RECEPTACLE 48" AFF. RE-CIRCUIT AS INDICATED USING CIRCUITS RETAINED FOR RE-USE.
5. RE-INSTALL CEILING MOUNTED DEVICES SUCH AS SPEAKERS AND WIRELESS ACCESS POINTS. RE-CONNECT TO CABLING RETAINED DURING CONSTRUCTION. SEE STRUCTURED CABLING DIAGRAM SHEET E651.
6. EXISTING PANELS AND CIRCUITS ASSOCIATED WITH RECEPTACLES TO BE RE-USED. PANEL L2E - CIRCUITS 17,19 . PANEL L2F - CIRCUITS 1,3,5 . EXISTING PANELS ARE LOCATED IN ROOM B11. SEE EXISTING PANEL SCHEDULES SHEET E601.
8. INSTALL RECESSED LIGHTING FIXTURES TYPE AS INDICATED. CIRCUIT AS INDICATED USING CIRCUITS RETAINED FOR RE-USE.
9. EXISTING PANELS AND CIRCUITS ASSOCIATED WITH LIGHTING TO BE RE-USED. PANEL H2B - 3,5 . PANEL H2X - 3,5 . EXISTING PANELS ARE LOCATED IN ROOM B11. SEE EXISTING PANEL SCHEDULES SHEET E601.
10. SEE STRUCTURED CABLING DIAGRAM FOR DATA DEVICE LOCATION COORDINATION.
11. DIMMER SWITCHES AT THIS LOCATION FOR CONTROL OF ROOMS NURSES CHECK 111C NURSES STATION 111B.
12. RE-INSTALL PA SYSTEM RACK. COORDINATE WITH OWNER FOR INSTALLATION. RE-CONNECT AS REQUIRED LOW VOLTAGE CABLING.
13. FIRE ALARM BOOSTER PANEL LOCATED IN ELECTRICAL ROOM B11. CONNECT FIRE ALARM DEVICES PER THE PARTIAL FIRE ALARM DIAGRAM SHEET E661. PROVIDE DEVICES COMPATIBLE WITH SIMPLEX MODEL 4009 IDNET NAC EXTENDER PANEL.
14. PROVIDE 24V LED TAPE LIGHT FIXTURE TYPE D MOUNTED IN CORNER CHANNEL AS INDICATED ON FIXTURE SCHEDULE. COORDINATE LOCATION WITH SHEET A101 CASEWORK DETAILS. CIRCUIT TO 120V RECEPT. CIRCUIT THIS SPACE BY MEANS OF 24V LED DRIVER/TRANSFORMER TO CONVERT THE VOLTAGE.

ADDITIVE BID ITEM #1

ADDITIVE BID INCLUDES ALL WORK NECESSARY FOR THE COMPLETE CONSTRUCTION OF NEW RESTROOM 113A AND NEW OFFICE 113B AS INDICATED ON THE DRAWINGS, INCLUDING ALL DEMOLITION, PARTITIONS, DOORS, FINISHES, FIXTURES, AND ASSOCIATED MECHANICAL, ELECTRICAL, AND PLUMBING WORK REQUIRED FOR A FULLY FUNCTIONAL SPACE.

NORMAL ILLUMINANCE RESULTS

Calculation Points Name	Average	Maximum	Minimum	Avg/Min	Max/Min
TOILET 113A	28 fc	38 fc	8 fc	3.4	4.6
NURSES STATION 111B	63 fc	76 fc	44 fc	1.4	1.7
OFFICE 113B	63 fc	75 fc	54 fc	1.2	1.4
NURSES CHECK-IN 111C	62 fc	73 fc	50 fc	1.2	1.5
CHECK IN 111D	44 fc	45 fc	43 fc	1.0	1.0
CHECK IN 111E	41 fc	44 fc	39 fc	1.1	1.1

LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	LAMP	COLOR TEMPERATURE	ELECTRICAL DATA	MOUNTING TYPE	MOUNTING HEIGHT	COMMENTS
A	2 X 2 RECESSED LED TROFFER	LITHONIA	2BLT2 33L ADSM	LED	3500 K	277 V/1-32 VA	RECESSED CEILING		
B	4" OPEN LED DOWNLIGHT	LITHONIA	LDN4 35K 25 LO6 WR LD TRW MVOLT GZ10	LED	3500 K	277 V/1-28 VA	RECESSED CEILING		
C	3' LINEAR RECESSED LED SLOT FIXTURE	LEDALITE	23-0-1-L-935-L-N-N-N-20-3-03-D-E	LED	3500 K	277 V/1-25 VA	RECESSED CEILING		
D	FLEXIBLE CONTINUOS LED STRIP WITH CORNER CHANNEL	JESCO	DL-FLEX2-NPXCC-5W	LED	3500 K	120 V/1-5 VA	SURFACE		PROVIDE WITH JESCO CORNER CHANNEL MODEL : CH-SM-35

0 2' 4' 8'

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

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03.20.2026

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PLAN NORTH N SITE NORTH

SHEET NAME:
ELECTRICAL - FLOOR PLANS

SHEET NUMBER:
E101

PANELBOARD AND WIRING SCHEDULE

PANEL: (E)H2B | **MAINS TYPE:** MLO | **kAIC VALUE:**
VOLTAGE: 480/277 Wye,3P,4W | **SPD:** | **AIC RATING:** 16kA
AMPERES: 400 A | **MOUNTING:** Surface | **LOCATION:** ELEC B11
SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		CKT	B		CKT	C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
(E) LTS 113, 113L-113P				20	1	1	3.8	0.0							2	1	20				(E) FAN BOXES
(E) LTS HALL 113,109M,111A,118				20	1	3			3.2	0.0					4	1	20				(E) FAN BOXES
(E) LTS 109C-109L,101,103,106,107				20	1	5					4.0	0.0			6	1	20				(E) FAN BOXES
(E) LTS 114,114B-114E,118,122				20	1	7	3.7	0.0							8	1	20				SPARE
(E) LTS B17,124,124A				20	1	9			1.6	0.0					10	1	20				SPARE
(E) LTS 117,117A,117A1,117A2				20	1	11					3.4	0.0			12	1	20				SPARE
(E) LTS 112,114A,110, 110F				20	1	13	2.4	0.0							14	1	20				SPARE
(E) LTS 110A,110B,104A, A1,A2,108				20	1	15			2.5	0.0					16	1	20				SPARE
(E) LTS...				20	1	17					2.8	0.0			18	1	20				SPARE
SPACE				--	1	19	--	--							20	1	--				SPACE
SPACE				--	1	21			--	--					22	1	--				SPACE
SPACE				--	1	23					--	--			24	1	--				SPACE
SPACE				--	1	25	--	--							26	1	--				SPACE
SPACE				--	1	27			--	--					28	1	--				SPACE
SPACE				--	1	29					--	--			30	1	--				SPACE
X-RAY EQUIPMENT VIA XFME T-9				60	3	31	7.2	--							32	1	--				SPACE
						33			7.2	--					34	1	--				SPACE
						35					7.2	--			36	1	--				SPACE
SPACE				--	1	37	--	--							38	1	--				SPACE
SPACE				--	1	39			--	--					40	1	--				SPACE
SPACE				--	1	41					--	--			42	1	--				SPACE
(E) PANEL L2E VIA XFMR T-7				150	3	43	42.4	32.0							44						
						45			41.2	31.0					46	3	175				(E) PANEL H3C
						47					44.1	31.0			48						
TOTAL LOAD (kVA):							91.5 kVA		86.7 kVA		92.5 kVA										
TOTAL CURRENT (A):							333 A		313 A		336 A										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	270614 VA	60.00%	162368 VA	TOTAL CONNECTED LOAD:	270614 VA
				TOTAL ESTIMATED DEMAND:	162368 VA
				TOTAL CONNECTED CURRENT:	325 A
				TOTAL ESTIMATED DEMAND CURRENT:	195 A
				TOTAL EST. DEMAND + RESERVE CAPACITY:	244 A

NOTES: (E) DENOTES EXISTING

PANELBOARD AND WIRING SCHEDULE

PANEL: (E)L2E | **MAINS TYPE:** MCB | **kAIC VALUE:**
VOLTAGE: 120/208 Wye,3P,4W | **SPD:** | **AIC RATING:** 14KA
AMPERES: 400 A | **MOUNTING:** Surface | **LOCATION:** ELEC B11
SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		CKT	B		CKT	C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
(E) REC PHARMACY				20	1	1	0.7	0.4							2	1	20				(E) REC 109M,109N
(E) REC 117A1,171A2				20	1	3			0.7	0.5					4	1	20				(E) REC 109K,109L
(E) REC 113C,113D				20	1	5					0.7	0.4			6	1	20				(E) REC 109J,109P
(E) REC 113E, 113F				20	1	7	0.7	0.7							8	1	20				(E) REC 109L,109M
(E) REC 113G, 113H				20	1	9			0.7	0.7					10	1	20				(E) REC 109N,109P
(E) REC 113L, 113M				20	1	11					0.7	0.7			12	1	20				(E) REC 109J,109K
(E) REC 113N,113M				20	1	13	0.7	0.7							14	1	20				(E) REC 109C,109D
(E) REC 113J,113P				20	1	15			0.7	0.4					16	1	20				(E) REC 109F
REC NURSES STATION 111B	***12***	***12***	***3/4***	20	1	17					0.4	0.7			18	1	20				(E) REC 109G,109H
REC NURSES STATION 111B	***12***	***12***	***3/4***	20	1	19	0.4	0.7							20	1	20				(E) REC 109C,109D
(E) REC PHARMACY COUNTER				20	1	21			0.7	0.7					22	1	20				(E) REC 109E,109F
(E) TV MAIN LOBBY				20	1	23					0.7	0.7			24	1	20				(E) REC 109G,109H
(E) REC SICK WAIT, A02				20	1	25	0.7	0.9							26	1	20				(E) NURSE CALL REC,111C
(E) REC A02,A03				20	1	27			0.7	0.7					28	1	20				(E) REC 111A,111B
(E) REC A25,A26				20	1	29					0.7	0.4			30	1	20	***3/4***	***12***	***12***	***REC NURSES CHECK-IN 111C***
REC NURSES CHECK-IN 111C	***12***	***12***	***3/4***	20	1	31	0.7	14.5							32						
(E) REC 122B				30	1	33			0.4	15.2					34	3	225				(E) PNL L2G
(E) REC 122B				30	1	35					0.4	16.6			36						
(E) PNL L2F				100	3	37	5.7	9.8							38						
						39			6.0	9.2					40	3	20				(E) PNL L3D
						41					6.4	7.9			42						
TOTAL LOAD (kVA):							37.3 kVA		37.3 kVA		37.3 kVA										
TOTAL CURRENT (A):							311 A		311 A		311 A										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	110110 VA	60.00%	66066 VA	TOTAL CONNECTED LOAD:	111910 VA
RECEPTACLE	1800 VA	100.00%	1800 VA	TOTAL ESTIMATED DEMAND:	67866 VA
				TOTAL CONNECTED CURRENT:	311 A
				TOTAL ESTIMATED DEMAND CURRENT:	188 A
				TOTAL EST. DEMAND + RESERVE CAPACITY:	235 A

NOTES: (E) DENOTES EXISTING

PANELBOARD AND WIRING SCHEDULE

PANEL: (E)L2F | **MAINS TYPE:** MLO | **kAIC VALUE:**
VOLTAGE: 120/208 Wye,3P,4W | **SPD:** | **AIC RATING:** 10kA
AMPERES: 100 A | **MOUNTING:** Surface | **LOCATION:** ELEC B11
SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		CKT	B		CKT	C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
REC CHECK IN 111D	***12***	***12***	***3/4***	20	1	1	0.5	0.2							2	1	20				(E) REC 120
REC OFFICE 113B	***12***	***12***	***3/4***	20	1	3			0.7	0.4					4	1	20				(E) REC 112C,110D
REC NURSES STATION 111B	***12***	***12***	***3/4***	20	1	5					0.4	0.7			6	1	20				(E) REC 110,115,115,B11
(E) REC 113M, 113N				20	1	7	0.4	0.7							8	1	20				(E) NURSES STATION
(E) REC 113K,113J,113P				20	1	9			0.7	0.5					10	1	20				(E) WATER COOLER 110
(E) REC 113L, EXT.REC				20	1	11					0.9	0.2			12	1	20				(E) REC 110H
(E) REC EXAM #3				20	1	13	0.2	0.4							14	1	20				(E) REC 114B,114C
(E) REC EXAM #3				20	1	15			0.2	0.2					16	1	20				(E) REC 120A
(E) REC EXAM #3				20	1	17					0.2	0.2			18	1	20				(E) REC 110J
(E) X-RAY				20	1	19	0.7	0.4							20	1	20				(E) REC 122,120
(E) X-RAY				20	1	21			0.7	0.4					22	1	20				(E) REC 120
(E) X-RAY				20	1	23					0.7	0.4			24	1	20				(E) REC 120
(E) REC 113C,113D				20	1	25	0.4	0.4							26	1	20				(E) REC 120, COORIDOR
(E) REC 113E,113F				20	1	27			0.4	0.4					28	1	20				(E) REC 110E, 110F
(E) REC 113G, 113H				20	1	29					0.4	0.4			30	1	20				(E) REC 114C,114D
(E) REC CORRIDOR B7,WAITNG				20	1	31	0.4	0.2							32	1	20				(E) EMERGENCY PHONE
(E) REC 117A, 117A2				20	1	33			0.4	0.2					34	1	20				(E) WATING RM
(E) REC 124,124A, INFORMATION				20	1	35					0.7	0.2			36	1	20				(E) WAITING RM
(E) SPARE				60	3	37	0.0	1.1							38						
						39			0.0	1.1					40	2	20				(E) AUTOCLAVE
						41					0.0	0.2			42	1	20				(E) EXAM RM 110N
TOTAL LOAD (kVA):							6.1 kVA		6.3 kVA		5.6 kVA										
TOTAL CURRENT (A):							51 A		53 A		46 A										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	16320 VA	60.00%	9792 VA	TOTAL CONNECTED LOAD:	17940 VA
RECEPTACLE	1620 VA	100.00%	1620 VA	TOTAL ESTIMATED DEMAND:	11412 VA
				TOTAL CONNECTED CURRENT:	50 A
				TOTAL ESTIMATED DEMAND CURRENT:	32 A
				TOTAL EST. DEMAND + RESERVE CAPACITY:	40 A

NOTES: (E) DENOTES EXISTING

PANELBOARD AND WIRING SCHEDULE

PANEL: (E)H2X | **MAINS TYPE:** MLO | **kAIC VALUE:**
VOLTAGE: 480/277 Wye,3P,4W | **SPD:** | **AIC RATING:** 14KA
AMPERES: 100 A | **MOUNTING:** Surface | **LOCATION:** ELEC B11
SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		CKT	B		CKT	C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
(E) LTS UPPER LEVEL				20	1	1	0.5	0.0							2	1	20				SPARE
(E) LTS GR. LEVEL CLINIC				***20***	1	3			1.3	0.0					4	1	20				SPARE
(E) LTS GR. LEVEL CLINIC				***20***	1	5					1.5	0.0			6	1	20				SPARE
SPARE				20	1	7	0.0	0.0							8	1	20				SPARE
SPARE				20	1	9			0.0	0.0					10	1	20				SPARE
SPARE				20	1	11					0.0	0.0			12	1	20				SPARE
SPACE				--	1	13	--	5.8							14						
SPACE				--	1	15			--	5.9					16	3	45				(E) PNL L2X VIA XFMR T-8
SPACE				--	1	17					--	5.3			18						
SPACE				--	1	19	--	--							20	1	--				SPACE
SPACE				--	1	21			--	--					22	1	--				SPACE
TOTAL LOAD (kVA):							6.3 kVA		7.1 kVA		6.8 kVA										
TOTAL CURRENT (A):							23 A		26 A		25 A										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	20195 VA	60.00%	12117 VA	TOTAL CONNECTED LOAD:	20195 VA
				TOTAL ESTIMATED DEMAND:	12117 VA
				TOTAL CONNECTED CURRENT:	24 A
				TOTAL ESTIMATED DEMAND CURRENT:	15 A
				TOTAL EST. DEMAND + RESERVE CAPACITY:	18 A

NOTES: (E) DENOTES EXISTING

STATE BUILDING OFFICIAL APPROVAL STAMP

SPECTRUM DESIGN
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Roanoke, VA 24011

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MCCOMAS SCHIFFERT HEALTH TENANT IMPROVEMENT PROJECT

VIRGINIA TECH

SPECTRUM DESIGN PROJECT NO.:**26003**

NOT FOR CONSTRUCTION

PROJ. MGR.: **JM** | CHECKED BY: **MAR** | DRAWN BY: **CLH**

SHEET ISSUE DATE:
03.20.2026

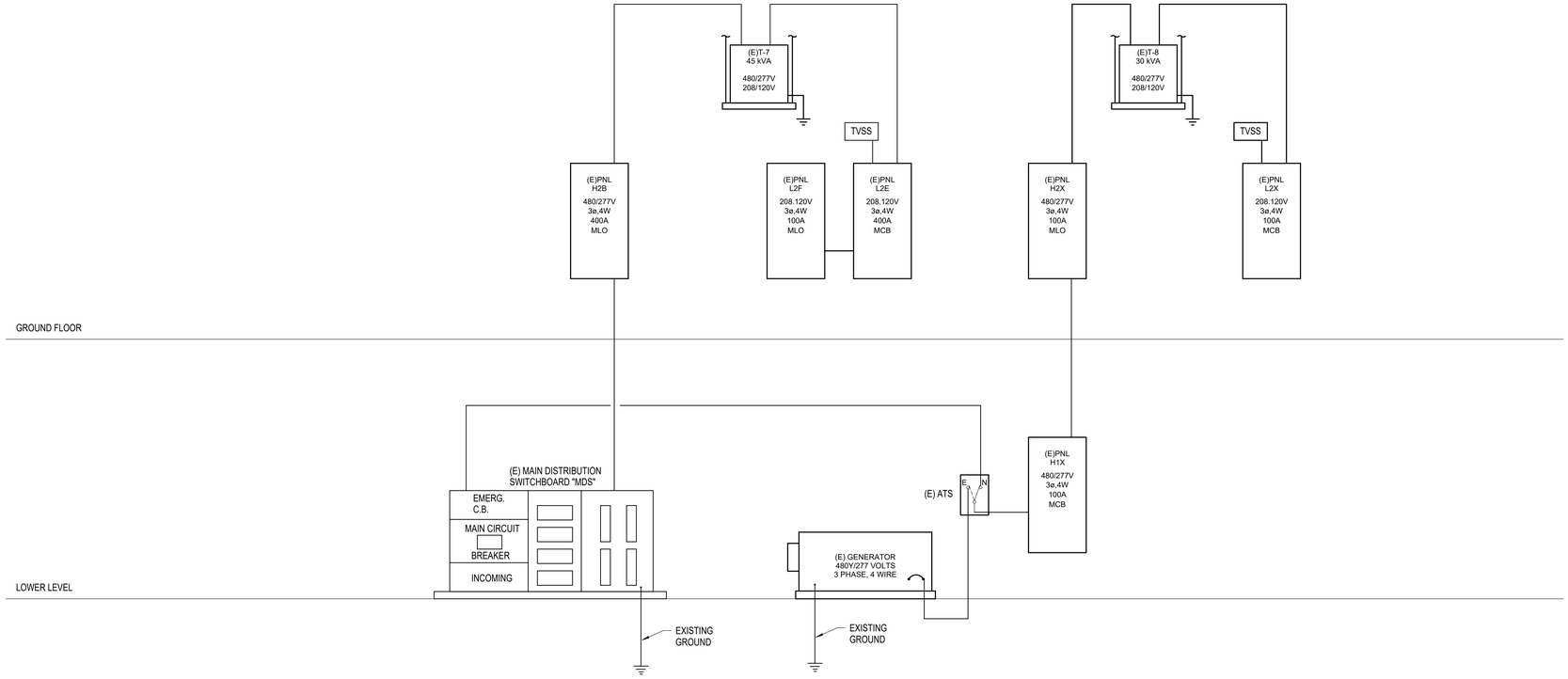
PROJECT PHASE:
WORKING DRAWINGS

SHEET REVISIONS:

PLAN NORTH | SITE NORTH

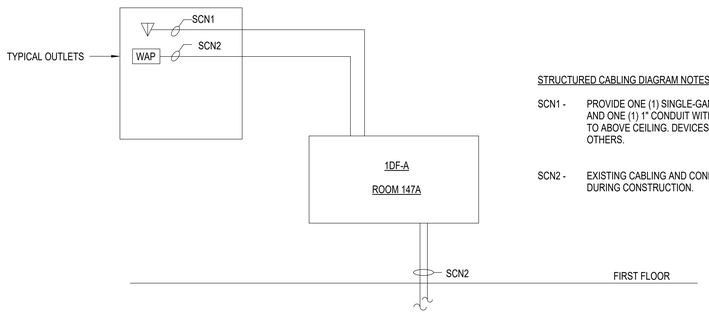
SHEET NAME:
ELECTRICAL - PANEL SCHEDULES

SHEET NUMBER:
E601



1 E651 | E651 (EXISTING) PARTAIL POWER-SINGLE LINE DIAGRAM

SCALE: 12" = 1'-0"



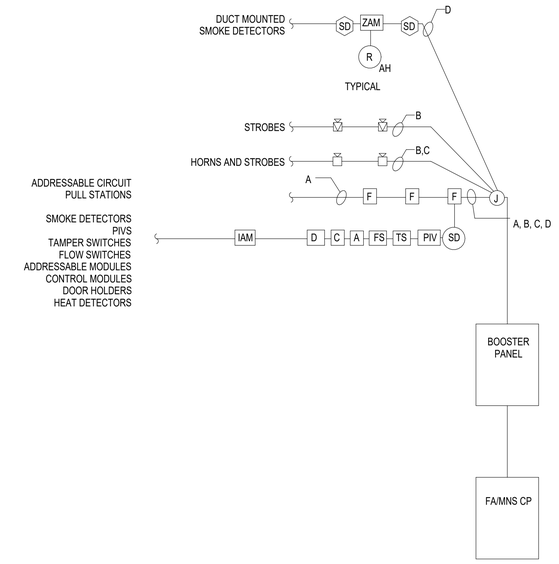
STRUCTURED CABLING DIAGRAM NOTES:

SCN1 - PROVIDE ONE (1) SINGLE-GANG OUTLET BOX AND ONE (1) 1" CONDUIT WITH PULL STRING TO ABOVE CEILING. DEVICES AND CABLING BY OTHERS.

SCN2 - EXISTING CABLING AND CONDUITS. PROTECT DURING CONSTRUCTION.

2 E651 | E651 DIAGRAM OF STRUCTURED CABLING AND CONDUITS

SCALE: 12" = 1'-0"



FIRE ALARM SYSTEM CABLE LEGEND:

A - ADDRESSABLE INITIATING CIRCUIT: 2#18 MINIMUM TWISTED PAIR IN 3/4" MINIMUM CONDUIT.
B - VISUAL STROBE ALARM CIRCUIT: 2#14 MINIMUM TWISTED PAIR IN 3/4" MINIMUM CONDUIT.
C - AUDIBLE HORN ALARM CIRCUIT: 2#14 MINIMUM TWISTED PAIR IN 3/4" MINIMUM CONDUIT.
D - DUCT SMOKE CIRCUIT: 2#14 MINIMUM TWISTED PAIR IN 3/4" MINIMUM CONDUIT.

3 E651 | E651 PARTIAL FIRE ALARM RISER DIAGRAM

SCALE: 12" = 1'-0"

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PROJECT PHASE: **WORKING DRAWINGS**

SHEET REVISIONS:

PLAN NORTH | SITE NORTH

SHEET NAME: **ELECTRICAL - DIAGRAMS**

SHEET NUMBER: **E651**