VIRGINIA COMMONWEALTH UNIVERSITY SCHERER HALL RENOVATION

5

923 W FRANKLIN ST, RICHMOND, VA 23284

6

PC:236-B2236-038

OWNER / CLIENT

VIRGINIA COMMONWEALTH UNIVERSITY 700 W. GRACE ST. SUITE 1500 RICHMOND, VA 23284 804.828.7080 CONTACT: KAREN NICELY

COST ESTIMATION

CCS 1815 S. MEYERS ROAD, SUITE 1070 OAKBROOK TERRACE, IL 60181 800.443.8607 CONTACT: WOODY SANNER

STRUCTURAL ENGINEER

DUNBAR STRUCTURAL 1025 BOULDERS PARKWAY, SUITE 310 RICHMOND, VA 23225 804.495.2274 CONTACT: A.J. RICKEL

ARCHITECTURE / INTERIORS / MEP

BASKERVILL 1051 E CARY ST., SUITE 200 (23219) RICHMOND, VA 23218-0400 804.343.1010 WWW.BASKERVILL.COM CONTACT: JESSIE WALTON

FIRE PROTECTION

FISHER ENGINEERING 317 OFFICE SQUARE LANE, SUITE 101A VIRGINIA BEACH, VA 23462 757.276.1272 CONTACT: BRIAN CARNAZZA



ALTERATION LEVEL KEY PLAN

4



3

DESCRIPTION OF WORK

THE EXISTING 17,000 SF BRICK BUILDING BUILT IN 1910 UNDERWENT AN INTERIOR RENOVATION IN 1989. SINCE 1989, LEVELS 1 THROUGH 5 WITHIN THE CENTER PORTION OF THE BUILDING HAVE STARTED TO SAG. THE PRIMARY SCOPE OF THIS WORK IS TO CORRECT THE FLOOR LEVELNESS ISSUES BY JACKING AND SHORING THE EXISTING FLOOR SYSTEM. SINCE SELECTIVE DEMOLITION OF INTERIOR WALLS WILL BE REQUIRED FOR THE STRUCTURAL WORK, VCU HAS ELECTED TO UPGRADE THE EXISTING 2-PIPE DUAL TEMPERATURE SYSTEM TO A 4-PIPE HEATING AND COOLING SYSTEM WHICH WILL REQUIRE FUTHER DEMOLITION OUTSIDE THE STRUCTURAL WORK EXTENTS. ALL FINISHES WILL BE "PUT-BACK" TO MATCH EXISTING WHEN THE WORK IS COMPLETE.

ALL RENOVATION WORK IS A LEVEL 2 ALTERATION PER 2018 VEBC.

GENERAL NOTES

THERE IS NO EXTERIOR SCOPE.

DEFINITION: THE TERM "DESIGN PROFESSIONAL" MEANS "ARCHITECT", "PROFESSIONAL ENGINEER", "INTERIOR DESIGNER" OR OTHER PARTY RESPONSIBLE FOR PROVIDING DESIGN SERVICES AS APPROPRIATE.

- VERIFY ALL EXISTING CONDITIONS.
 CONTRACTOR TO MAINTAIN EGRESS ROUTES FROM EXISTING BUILDING
- THROUGHOUT THE COURSE OF CONSTRUCTION.
- 3. VERTICAL DIMENSIONS ARE FROM "FLOOR LINE" UNLESS OTHERWISE NOTED. REFER TO ELEVATIONS FOR "FLOOR LINE" DATUMS.
- 4. HORIZONTAL DIMENSIONS FOR NEW CONSTRUCTION ARE FROM FACE OF FINISH UNLESS OTHERWISE NOTED. HORIZONTAL DIMENSIONS FOR EXISTING CONSTRUCTION ARE FROM FACE OF EXISTING FINISHED SURFACE.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. IN CASE OF CONFLICT, CONSULT WITH THE DESIGN PROFESSIONAL TO OBTAIN CLARIFICATION BEFORE CONTINUING WITH CONSTRUCTION.
 HOLES CUT THROUGH EXISTING OR NEW FIRE RATED CONSTRUCTION FOR
- INSTALLATION OF PIPING, DUCTWORK, OR OTHER PENETRATIONS SHALL BE KEPT TO A MINIMUM NUMBER AND HELD TO A MINIMUM SIZE. FILL VOIDS BETWEEN PIPES, DUCTS, OTHER PENETRATING ITEMS AND RATED CONSTRUCTION WITH FIRE RETARDANT SEALANT SYSTEM LISTED IN THE UL FIRE RESISTANCE DIRECTORY WITH FIRE (F) AND TEMPERATURE (T) RATINGS EQUAL TO OR GREATER THAN THE FIRE RESISTANCE RATING OF THE ASSEMBLY BEING SEALED.
- 7. ALIGN NEW FLOOR FINISHES WITH EXISTING ADJACENT FLOOR FINISHES UNLESS OTHERWISE INDICATED. WHERE NEW AND EXISTING FINISHED SURFACES ARE INDICATED TO BE ALIGNED, INSTALL SO FINISHED SURFACES ARE FLUSH (FEATHER MAXIMUM 1/8" PER FOUR FEET).
- 8. IT IS UNDERSTOOD AND AGREED THAT DRAWING REFINEMENTS, ADDITIONAL DETAILING AND CLARIFICATIONS WILL BE ISSUED DURING THE CONSTRUCTION SCHEDULE AND NO ADJUSTMENT WILL BE MADE IN THE CONTRACTORS' OR SUB-CONTRACTORS' PRICE UNLESS SUCH REFINEMENT, DETAILING OR CLARIFICATIONS RESULT IN CHANGES TO THE SCOPE, QUALITY, FUNCTION AND OR INTENT OF THE DRAWINGS AND THE PROJECT MANUAL NOT REASONABLY INFERABLE BY A CONTRACTOR OR SUB-CONTRACTOR EXPERIENCED IN THIS TYPE OF WORK.
- ALL CONTRACTORS AND SUB-CONTRACTORS MUST QUOTE ON COMPLETED, FULLY OPERABLE SYSTEMS BASED ON THE DESIGN INTENT OF THE CONTRACT DOCUMENTS, AND ALL MATERIAL AND LABOR IMPLIED THEREFROM.
 UNLESS OTHERWISE REQUIRED BY THE OWNER, CONSTRUCTION ADMINISTRATION
- SERVICES WILL BE COMPLETED USING NEWFORMA PROJECT CENTER. REFERENCE DIVISION 1 OF THE SPECIFICATIONS FOR THE PROCEDURES FOR REQUESTS FOR INFORMATION AND SUBMITTALS.
- 11. REMOVE AND REINSTALL ALL COVER PLATES IN SAME LOCATION.
 12. REMOVE AND REINSTALL ALL THRESHOLD IN SAME LOCATION.
- REMOVE AND REINSTALL ALL INTERIOR BUILDING SIGNAGE IN SAME LOCATION.
 CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING EXISTING FURNITURE IN A SAFE AND CONDITIONED SPACE DURING CONSTRUCTION. COORDINATE WITH THE OWNER FOR RE-INSTALLATION OF FURNITURE.

ABATEMENT NOTES

DUE TO THE ORIGINAL CONSTRUCTION DATE AND AGE OF THIE STRUCTURE DESCRIBED WITHIN THIS RENOVATION PROJECT'S SCOPE OF WORK, A HAZARDOUS MATERIAL SURVEY BY A QUALIFIED LICENSED PROFESSIONAL FOLLOWING THE EPA, NIOSH, AND ASTM METHODOLOGIES AND STANDARDS SHALL BE CONDUCTED BY THE OWNER / GC COORDINATION BETWEEN THE LICENSED INSPECTING PROFESSIONAL AND THE LOCAL AHJ IS REQUIRED TO ENSURE ALL LOCAL REQUIREMENTS OF TESTING, REPORTING, AND RECOMMENDED ABATMENT PROCEDURES ARE IDENTIFIED AND MET, AND ALL RELATED DOCUMENTATION IS TO BE SUBMITTED AS PER THE LOCAL AHJ'S CRITERIA.

TOBACCO FREE WORKZONE NOTES

USE OF TOBACCO PRODUCTS IS NOT PERMITTED ANYWHERE ON OWNER'S PROPERTY. PROHIBIT USE OF ALL TOBACCO PRODUCTS, INCLUDING BUT NOT LIMITED TO CIGARETTES, CIGARS, PIPES, CHEWING TOBACCO, SNUFF, DIP, SNUS AND ELECTRONIC CIGARETTES BY ALL PERSONNEL COVERED BY THIS CONTRACT WHILE ON OWNER'S PROPERTY. THIS PROHIBITION APPLIES TO OCCUPANTS OF JOBSITE OFFICES, STORAGE OR WORK SHEDS, WORK AREAS ASSIGNED EXCLUSIVELY TO THE CONTRACTOR, AND VEHICLES WHILE THE VEHICLE IS ON OWNER'S PROPERTY. ENFORCE REQUIREMENTS STRICTLY.

ASBESTOS DISCLOSURE NOTE

THE BUILDING UNDERWENT A FULL RENOVATION IN 1989, THEREFORE THE AGENCY HAS INDICATED THAT THEY DO NOT BELIEVE ASBESTOS IS PRESENT IN THE AREA OF PROJECT WORK. HOWEVER, THE AGENCY WILL PERFORM AN ASBESTOS SURVEY FOR THE AREA OF WORK. IF ASBESTOS IS FOUND AND WILL BE DISTURBED BY THE PROJECT WORK, IT WILL BE ABATED BY A LICENSED CONTRACTOR AS PART OF THE CURRENT CONTRACT.

LEAD PAINT DISCLOSURE NOTE

THE BUILDING UNDERWENT A FULL RENOVATION IN 1989, THEREFORE THE AGENCY HAS INDICATED THAT THEY DO NOT BELIEVE LEAD PAINT IS PRESENT IN THE AREA OF PROJECT WORK. HOWEVER, THE AGENCY WILL PERFORM A LEAD PAINT SURVEY FOR THE AREA OF WORK. IF LEAD PAINT IS FOUND AND WILL BE DISTURBED BY THE PROJECT WORK, IT WILL BE ABATED BY A LICENSED CONTRACTOR AS PART OF THE CURRENT CONTRACT.

HPBA - COMPLIANCE STATEMENT

4

IN ACCORD WITH THE HIGH PERFORMANCE BUILDINGS ACT, THE BUILDING IS EXEMPT FROM COMPLIANCE BECAUSE THE COST OF THE RENOVATIONS DOES NOT EXCEED 50% OF THE VALUE OF THE BUILDING.

VICINITY MAP

217.55°



DESIGN RESPONSIBILITY NOTES

- THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS ARE LIMITED TO THE DESIGN SERVICES CONVEYED WITHIN THE CONTRACT DOCUMENTS. THESE DESIGN SERVICES ARE LIMITED TO:

 A. ARCHITECTURAL DESIGN
 B. INTERIOR DESIGN
 - C. MECHANICAL ENGINEERING DESIGND. ELECTRICAL ENGINEERING DESIGN
 - E. FIRE PROTECTION ENGINEERINGF. STRUCTURAL ENGINEERING DESIGN
- EXCLUDED SERVICES ARE, BUT NOT LIMITED TO, THE FOLLOWING:
 A. GEOTECHNICAL ENGINEERING
 B. CIVIL ENGINEERING
 - 2. LANDSCAPE DESIGN 2. COST ESTIMATION
 - . PLUMBING ENGINEERING DESIGN
 - REFERENCE THE OWNER ARCHITECT AGREEMENT FOR ALL EXCLUDED SERVICES.
- 3. THE PROJECT SPECIFICATIONS INDICATE SEVERAL AREAS OF DELEGATED DESIGN WHERE A QUALIFIED PROFESSIONAL MUST BE ENGAGED BY THE CONTRACTOR
- AND/OR SUBCONTRACTOR TO PROVIDE DESIGN SERVICES AND/OR SHOP DRAWINGS.
- THESE MAY INCLUDE, BUT ARE NOT LIMITED TO: A. COLD-FORMED METAL FRAMING
- METAL FABRICATIONS
 SUSPENDED CEILING SYSTEMS
 SIGNAGE
- E. PIPE HANGERS & EQUIPMENT SUPPORTS
- REFERENCE SPECIFICATIONS FOR ALL REQUIREMENTS RELATED TO DELEGATED DESIGN ALONG WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA.

SHEET LAYOUT

	6	5	4	3	2	1	
E	6E	5E	4E	3E	2E	1E	
D	6D	5D	4D	3D	2D	1D	
С	6C	5C	4C	3C	2C	1C	
В	6B	5B	4B	3B	2B	1B	
А	6A	5A	4A	3A	2A	1A	

GENERAL SYMBOLS



LOCATION MAP



DRAWING INDEX

SHEET NO	SHEET TITLE	REV NO	REV DATE
T001			
1001			
G001	LIFE SAFETY LEGEND & LIFE SAFETY PLANS		
G002	LIFE SAFETY LEGEND & LIFE SAFETY PLANS		
G003	LIFE SAFETY LEGEND & OL ASSEMBLY		
D100	BASEMENT FLOOR DEMOLITION PLAN & RCP		
D101	1ST FLOOR DEMOLITION PLAN & RCP		
D102	2ND FLOOR DEMOLITION PLAN & RCP		
D103	4TH FLOOR DEMOLITION PLAN & RCP		
D105	5TH FLOOR DEMOLITION PLAN & RCP		
A100 A101	IST ELOOR NEW WORK PLAN & RCP		
A101	2ND FLOOR NEW WORK PLAN & RCP		
A103	3RD FLOOR NEW WORK PLAN & RCP		
A104	4TH FLOOR NEW WORK PLAN & RCP		
A105			
A600 A610	ENLARGED PLANS & TOILET ACCESSORIES		
71010			
S001	GENERAL STRUCTURAL NOTES		
S100	BASEMENT SHORING/ JACKING SUPPORT PLAN		
S101	SUPPORT PLANS		
S102	2ND FLOOR EXISTING SPOT ELEVATIONS AND SHORING SUPPORT PLANS		
S103	3RD FLOOR EXISTING SPOT ELEVATIONS AND SHORING		
S104	SUPPORT PLANS 4TH FLOOR EXISTING SPOT ELEVATIONS AND SHORING		
S105	SUPPORT PLANS 5TH FLOOR EXISTING SPOT ELEVATIONS AND SHORING		
\$201	SUPPORT PLANS		
S202	SOUTH STAIR WALL ELEVATION AND MASONRY REPAIR		
0004			
5301	I YPICAL SHORING /JACKING DETAILS		
FP101	BASEMENT FLOOR FIRE PROTECTION PLAN		
FP102	1ST FLOOR FIRE PROTECTION PLAN		
FP103	2ND FLOOR FIRE PROTECTION PLAN		
FP104	3RD FLOOR FIRE PROTECTION PLAN		
FP106	5TH FLOOR FIRE PROTECTION PLAN		
M001	LEGEND, ABBREVIATION, AND GENERAL NOTES		
M002			
M101 M102	FLOW DIAGRAMS		
M200	BASEMENT FLOOR PIPING - DEMOLITION PLAN		
M201	1ST FLOOR PIPING - DEMOLITION PLAN		
M202	2ND FLOOR PIPING - DEMOLITION PLAN		
M203			
M204 M205	5TH FLOOR PIPING - DEMOLITION PLAN		
M210	BASEMENT FLOOR PIPING - NEW WORK PLAN		
M211	1ST FLOOR PIPING - NEW WORK PLAN		
M212	2ND FLOOR PIPING - NEW WORK PLAN		
M213 M214	ATH FLOOR PIPING - NEW WORK PLAN		
M214 M215	5TH FLOOR PIPING - NEW WORK PLAN		
M300	MECHANICAL ROOM 3D VIEW		
M301	SECTIONS		
M401			
101402	DETAILS		
E001	LEGEND, FIXTURE SCHEDULE & GENERAL NOTES		
E002	SINGLE-LINE DIAGRAM & PANEL SCHEDULES		
E100	BASEMENT DEMOLITION & NEW WORK PLANS		
E101	1ST FLOOR DEMOLITION & NEW WORK PLANS		
E102	3RD FLOOR DEMOLITION & NEW WORK PLANS		
E104	4TH FLOOR DEMOLITION & NEW WORK PLANS		
E105	5TH FLOOR DEMOLITION & NEW WORK PLANS		

FIREPROOFING NOTES

- ALL FIREPROOFING DESIGNS SHOULD BE CONSIDERED THERMALLY UNRESTRAINED.
- SPRAYED FIREPROOFING FOR STRUCTURAL MEMBERS WITH W/D OR A/P RATIOS
 OTHER THAN THE SPECIFIED UL DESIGN, WILL BE ADJUSTED IN ACCORDANCE WITH THE ADJUSTMENT OF SPRAYED PROTECTION MATERIAL THICKNESS FOR
- WITH THE ADJUSTMENT OF SPRATED PROTECTION MATERIAL THICKNESS FOR UNRESTRAINED RATINGS FOR VARIOUS BEAM AND COLUMN SIZES AS FOUND IN THE MOST CURRENT EDITION OF THE UL FIRE RESISTANCE DIRECTORY.
 3. ALL BEAMS AND COLUMNS SHALL BE ADJUSTED USING W/D OR A/P RATIOS TO DETERMINE THE CORDECT EXPERIENCE THE MATERIAL THICKNESS FOR
- DETERMINE THE CORRECT FIREPROOFING THICKNESS.4. PENETRATIONS AT CHASE WALLS SHALL BE FIRE SEALED.



TOO1

	ABBRV	FULL WORD	
	@ A/C		LH
	AB AC	ANCHOR BOLT ACOUSTICAL	LLV
	ACP	ACOUSTICAL CEILING PANEL ACCESS DOOR	MAS
	ADJ AFF	ADJACENT, ADJUSTABLE ABOVE FINISHED FLOOR	MAT MAX
	AL ALT	ALUMINUM ALTERNATE	MEC MEN
ш	AP APPROX	ARMOR PLATE APPROXIMATE	MEZ
	AWC	ACOUSTICAL WALL COVERING	MIN
	BC BLDG	BRICK COURSES(ING) BUILDING	MLD
	BLKG	BLOCK BLOCKING	MO MT
	BM BOT	BENCH MARK, BEAM BOTTOM	MTL MUL
	BRG BRK	BEARING BRICK	MWF
	BUR	BASEMENT BUILT UP ROOFING	NIC
	CB CF	CATCH BASIN CUBIC FOOT (FEET)	NOM NOM
	CFCI	CONTRACTOR FURNISHED CONTRACTOR	OC
		COBIC FOOT PER MINUTE CORNER GUARD	OD OFC
	CHR	CHAIR RAIL CAST IRON	OFF OFO
	CIP CJ	CAST IN PLACE CONTROL JOINT	OPN OPP
	CLG CLO	CEILING CLOSET	OPP OVF
	CLR cm	CLEAR CENTIMETER CONCRETE MASONRY LINIT	#LBS
•	CO	CLEAN OUT COLUMN	PAR PAR
	COMP CONC	COMPOSITION, COMPOSITE CONCRETE	PER
	CONT CORR	CONTINUOUS CORRIDOR	PL PLAI
	CPT CR	CARPET CRASH RAIL	PLAS PLBO
	CR/BG CT	CRASH RAIL / BUMPER GUARD	PLW PNL PNT
	CTR CV	CENTER CHECK VALVE	PP PR
	CW CY	CLEAR WIRE GLASS CUBIC YARD	PRV PSF
	Ѥ	CENTERLINE	PSI PT PWC
	D DBL	DEPTH DOUBLE	
	DEG DEMO	DEGREE DEMOLITION	QTY QUA
	DF DIA	DRINKING FOUNTAIN DIAMETER	R
	DIAG DIFF	DIAGONAL DIFFUSER	RAD RAD
	DIM DISP	DIMENSION DISPENSER	RD REB
	DIV DN	DIVISION DOWN DAMPROOFING	REC REF
	DR DS	DOOR, DRAIN DOWNSPOUT	REF
υ	DWG DWGS	DRAWING DRAWINGS	REIN
	EA		REQ RES
	EIFS	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT	REV RFG
	ELEC ELEV	ELECTRICAL ELEVATOR, ELEVATION	RL RM
	EMER ENGR	EMERGENCY ENGINEER(ING) ETHYLENE DROBYLENE DIENE MONOMER	RO RT
	EQ	(ROOF MEMBRANE) EQUAL	S
	EQUIP ETR	EQUIPMENT EXISTING TO REMAIN	SCH SCU
	EWC EXIST	ELECTRIC WATER COOLER EXISTING EXPANSION ANCHOR	SD SEC
	EXT	EXTERIOR	SHT
	F FA	FAHRENHEIT FIRE ALARM	SIM SND SNR
	FEC FF	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET EINISH ELOOR	SP SPE
	FHC FIN	FIRE HOSE CABINET FINISH(ED)	SPM SS
	FO FOF	FINISHED OPENING FACE OF FINISH	ST ST
	FOS FRTW	FACE OF STUD FIRE RETARDANT TREATED WOOD EIELD VERIEIED	STN STO
m	FWC	FABRIC WALL COVERING	STR SUS
ш	GA GALV	GAGE GALVANIZED	SV SYS
	GB GC	GRAB BAR GENERAL CONTRACTOR	T T GI
	GEN GL GND	GENERAL GLASS, GLAZING GROUND	T&G TB
	GNV GR	GOOSE NECK VENTILATOR GROUT	TD TEL
	GYP GYP BD	GYPSUM GYPSUM BOARD	TER THK
	Н		TLT TOC
	HC HD	HOLLOW CORE HEAVY DUTY	TOM
	HDW HGT	HARDWARE	TOS TTD
	HM HORIZ	HOLLOW METAL HORIZONTAL	TYP
	HR HRL		UC UNF
	HWD	HARDWOOD	UNC
	ID IN	INSIDE DIAMETER INCH	VB VC
	INSUL INT	INSULATION INTERIOR	VER
			VIF
۷	JAN JCT JST	JANITOR JUNCTION JOIST	VIT VNR
	JT	JOINT	VP

ABBREVIATIONS

ABBREVIATIONS ABBRV FULL WORD LEFT HAND LINEAR LONG LEG VERTICAL LOUVER MASONRY MATERIAL MAXIMUM MECHANICAL MEMBRANE MEZZANINE MANUFACTURER MINIMUM MIRROR MISCELLANEOUS MOLDING MILLIMETER MASONRY OPENING METAL THRESHOLD METAL MULLION MILLWORK NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE ON CENTER OUTSIDE DIAMETER OWNER FURNISHED CONTRACTOR INSTALLED OFFICE OWNER FURNISHED OWNER INSTALLED OVERHEAD OPENING OPPOSITE OPPOSITE HAND OVERFLOW POUNDS PARALLEL PARTIAL PARTITION PERIMETER PERPENDICULAR PLATE PLASTIC LAMINAT PLASTER, PLASTIC PLUMBING PLYWOOD PANEL PAINT PITCH POCKET POWERED ROOF VENTILATOR POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PRESSURE TREATED, PORCELAIN TILE PLASTIC WALL COVERING QUARRY TILE QUANTITY QUALITY RISER **RETURN AIR** RADIUS RUBBER, RUBBER BASE ROOF DRAIN REINFORCING BAR RECEPTACLE, RECEPTION REFERENCE REFLECTED REFRIGERATOR REGULAR REINFORCED REPAIR REQUIRE, REQUIRED RESILIENT REVISION ROOFING **RIGHT HAND** RAIN LEADER ROOM ROUGH OPENING RIGHT SOUTH SOLID CORE SCHEDULE SCUPPER SOAP DISPENSER SECTION SHEET SHOWER SIMILAR SANITARY NAPKIN DISPENSER SANITARY NAPKIN RECEPTACLE STAND PIPE SPECIFICATION SINGLE PLY MEMBRANE SERVICE SINK, STAINLESS STEEL SOLID SURFACE MATERIAL STAINLESS STEEL STONE STORAGE STRUCTURAL SUSPENDED SHEET VINYL SYSTEM TREAD TEMPERED GLASS TONGUE & GROOVE TOWEL BAR TRENCH DRAIN TELEPHONE TEMPERED, TEMPORARY TERRAZZO THICK TOILET TOP OF CURB, TOP OF CONCRETE TOP OF MASONRY TOP OF STEEL TOP OF SLAB TOILET TISSUE DISPENSER THRU-WALL SCUPPER TYPICAL UNDERCOUNTER, UNDERCUT UNFINISHED UNLESS NOTED OTHERWISE VAPOR BARRIER, VINYL BASE VALVE CABINET VINYL COMPOSITION TILE VERTICAL VESTIBULE VERIFY IN FIELD VINYL VITREOUS CHINA VENEER VENT PIPE, VAPOR PROOF VENT THRU ROOF VINYL WALL COVERING WIDTH WITH WITHOUT WAINSCOT WOOD BASE WALL COVERING, WATER CLOSET WOOD WIRE GLASS WATER HEATER WINDOW

5

EXISTING CODE DA
THIS BUILDING SUI SET PRODUCED BY DATED 12/28/89.

BUILDING CODES: VIRGINIA UNIFORM STATEWIDE BUIDLING CODE, 1990 TITLE II AMERICANS WITH DISABILITIES ACT, 1990 UNIFORM FEDERAL ACCESSIBILITY STANDARDS, 1988

BUILDING CLASSIFICATION:

NEW WORK CODE DATA **CHAPTER 1: ADMINISTRATION**

CHAPTER 2: DEFINITIONS THE SCOPE OF WORK FOR THE EXISTING BUILDING ENTAILS SELECTIVE DEMOLITION AND FINISH IMPROVEMENTS OF SCHERER HALL RESULTING FROM STRUCTURAL REPAIRS AND MECHANICAL UPGRADES, SEE DESCRIPTION ON T001

CHAPTER 3: USE & CLASSIFICATION

FIRE RESISTANCE RATINGS OF STRUCTURAL EL PRIMARY STRUC INCLUDING COL & TRUSSES

BEARING WALLS EXTERIOR INTERIOR NON-BEARING V EXTERIOR (I INTERIOR

FLOOR CONSTR SUPPORTING BE ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOIST

COMPLIANCE WITH NFPA 13.

CHAPTER 8: INTERIOR FINISHES:

EXIT ACCESS STAIRWAYS AND RAMPS: C ROOMS AND ENCLOSED SPACES: C

LOCATION

CHAPTER 10: MEANS OF EGRESS: NO CHANGE

EGRESS PATHS. OCCUPANT LOA CALCULATIONS LOAD FACTOR E BUILDING USE;

LOAD. FUNCTION OF S BASEMENT (ME BASEMENT (BUS 1ST FLOOR (BUS 2ND FLOOR (BU 3RD FLOOR (BU 4TH FLOOR (BU 4TH FLOOR (ASS

5TH FLOOR (BUS TOTAL:

CHAPTER 11: ACCESSIBILITY: NO CHANGE / LIST CHANGES HERE

CODE DATA (EXISTING BUILDING)

CODE BUILDING CLASSIFICATION:

GROSS SQUARE FOOTAGE:

SCHERER HALL BUILDING = 17,824 VOLUME: SCHERER HALL BUILDING = 96,064

CAPITAL OUTLAY PROJECT #236-14046 APPROPRITION CHAPTER 800 - ITEM C-80

ABBREVIATIONS

ABBRV	FULL WORD
WPR	WATERPROOFING
WPT	WORK POINT
WR	WATER RESISTANT, WASTE RECEPTACLE
WT	WEIGHT
WWF	WELDED WIRE FABRIC

POUNDS-FORCE 1/25/2024 3:14:20 PM TEMPLATE 2021.A

JOINT BACKER

KEYBOARD

KITCHEN

KNOCKOUT

KICK PLATE

LENGTH

LAVATORY

POUND

KNEE SPACE

LAMINATE, LAMINATED

LAMINATED GLASS

JT B

I AM

I AV

LBF

LAM GL

C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

ATA

IMMARY INFORMATION BELOW IS REPLICATED FROM THE DRAWING BY BALLOU, JUSTICE & UPTON AND ASSOCIATES ARCHITECTS AND

4

CONSTRUCTION CLASSIFICATION = TYPE 3B (PROTECTED) OCCUPANCY CLASSIFICATION = USE GROUP B

GROSS SQUARE FOOTAGE: 17,824 SF

BUILDING CODES:	2018 VIRGINIA EXISTING BUILDING CODE 2018 VIRGINIA CONSTRUCTION CODE
MECHANICAL CODE:	2018 VIRGINIA MECHANICAL CODE
PLUMBING CODE:	2018 VIRGINIA PLUMBING CODE
ELECTRICAL CODE:	2017 NATIONAL ELECTRICAL CODE
FIRE CODE:	2018 INTERNATIONAL FIRE CODE
ENERGY CODE:	2018 VIRGINIA ENERGY CONSERVATION CODE
ACCESSIBILITY STANDARD:	2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

EXISTING USE GROUP: BUSINESS (NO CHANGE)

CHAPTER 4: SPECIAL DETAILED REQUIREMENTS : NOT APPLICABLE

CHAPTER 5: GENERAL BUILDING HEIGHTS & AREAS:

AREA: 17,824 SF (NO CHANGE) HEIGHT: 5 STORIES (NO CHANGE), 59' - 4" (NO CHANGE)

CHAPTER 6: TYPE OF CONSTRUCTION: (UN)CHANGED

CONSTRUCTION TYPE: IIIA (EQUIVALENT TO BOCA 3B)

LEMENTS	
CTURAL FRAME .UMNS, GIRDERS	1
S	2 1
WALLS IBC TABLE 602)	0 0
RUCTION INCLUDING EAMS & JOIST	1

REQUIRED RATINGS (HRS)

CHAPTER 7: FIRE & SMOKE PROTECTION FEATURES:

THE SCOPE WILL NOT CHANGE THE EXISTING FIRE SPRINKLER AND FIRE ALARM SYSTEMS. DURING THIS RENOVATION, THE BUILDING WILL NOT BE OCCUPIED WHICH WILL ALLOW SELECTIVE PORTIONS OF THE EXISTING SPRINKLER AND FIRE ALARM SYSTEMS TO BE REMOVED FOR STRUCTURAL REPAIRS. THE ITEMS THAT ARE REMOVED WILL BE PUT-BACK IN THE SAME PLACE AND TESTED FOR

INTERIOR EXIT STAIRWAYS AND RAMPS: B

CORRIDORS AND ENCLOSURE FOR

CHAPTER 9: FIRE PROTECTION SYSTEMS:

NO CHANGE TO THE FIRE PROTECTION OR FIRE ALARM SYSTEMS. ANY DEVICES REMOVED TO ACCESS THE STRUCTURE WILL BE PUT BACK IN THE SAME

GENERAL MEANS OF EGRESS (1003) REFERENCE LIFE SAFETY PLANS ON G001, G002, AND G003 FOR GENERAL

AD COUNT IS ASSUMED TO BE 238 BASED ON FUNCTION OF SPAC
. THE BUSINESS FUNCTION OF SPACE UTILIZES 100 OCCUPANT
BASED ON 1990 EXISTING CODE. THERE IS NO CHANGE TO THE
THEREFORE, WE ASSUME NO CHANGE TO EXISTING OCCUPANT

SPACE	AREA (SF)	OCC LOAD	# OCCUPANT
CH/STORAGE):	2,340 SF	300 GROSS	8
SINESS):	397 SF	100 GROSS	4
SINESS):	3,464 SF	100 GROSS	35
JSINESS):	3,464 SF	100 GROSS	35
JSINESS):	3,464 SF	100 GROSS	35
SINESS):	2,575 SF	100 GROSS	26
SEMBLÝ):	889 SF	15 NSF/Person	60
SINESS):	3,464 SF	100 GROSS	35
	20,057 SF		238

VIECTNIA UNIFORM STATEWIDE BUILDING CODE, 1990 TITLE ILAMERICANS WITH DISABILITIES ACT, 1990 UNIFORM FEDERAL ACCESSIBILITY STANDARDS, 1988

* CONSTRUCTION CLASSIFICATION - TYPE 3B (PROTECTED) * OCCUPANCY CLASSIFICATION = USE GROUP B



4



2

1

3







3B 1ST FLOOR AREA PLAN G001 1/8" = 1'-0"







			ТҮРЕ	PATH OF EG
RED BORDER INDICATES EXIT DISCHARGE		00 COMMON PATH 0A & 0	В	
EXIT OPENING: ANTICIPATED LOAD / CAPAC	ITY PER CODE	COMMON PATH OF EGRE	SS TRAVEL	27'-11" 27'-11" CON
		00 EXIT PATH 0A EXIT ACCESS TRAVEL DIS	STANCE	62'-11"
3'-0"		00 EXIT PATH 0B		62'-11" CON
		EXIT ACCESS TRAVEL DIS	STANCE	43'-5" 43'-5" CON
CLEAR		01 COMMON PATH '1A & 1 COMMON PATH OF EGRE	B' SS TRAVEL	27'-8"
WIDTH EXIT OPENING CAPACITY = .15" PER OCCUPA	ANT	01 EXIT PATH '1A'		27'-8" CON
TRAVEL DISTANCE LIMITATION	IS (1017)	EXIT ACCESS TRAVEL DIS	STANCE	95'-8" 95'-8" CON
		01 EXIT PATH '1B' EXIT ACCESS TRAVEL DIS	STANCE	35'-6"
POINT OF EXIT ACCESS EGRESS TRAVEL DISTANCE COM (1000)	IMON	02 COMMON PATH 'C & D'		35'-6" CON
(1017) (B USE = 300' MAXIMUM) (B USE = 100		COMMON PATH OF EGRE	SS TRAVEL	19'-3" 19'-3" CON
	· ···· - ···· ,	02 EXIT PATH 'C' EXIT ACCESS TRAVEL DIS	STANCE	56'-0"
EXIT/ EGRESS SYMBOLS		02 EXIT PATH יח'		56'-0" CON
		EXIT ACCESS TRAVEL DIS	STANCE	35'-3"
		03 COMMON PATH 'E & F'	SS TRAVEL	10'-11"
EP EXIT EXIT (1020)	ACCESS CORRIDOR)			19'-11" CON
· · · · · · · · · · · · · · · · · · ·		EXIT ACCESS TRAVEL DIS	STANCE	55'-11"
EXISTING DIRECTIONAL ILLUMINATED EXIT SIGN (1013)		03 EXIT PATH 'F'	STANCE	UON 11-50
				38'-0" CON
ELEV ELEVATOR (3001) EAS EXIT.	ACCESS)	COMMON PATH OF EGRE	SS TRAVEL	22'-6"
		04 EXIT PATH 'G'	STANCE	22-0 CON
IES INTERIOR EXIT STAIRWAY		LEAT AUGESS TRAVEL DIS	JIANGE	51'-2" 51'-2" CON
(1023)		EXIT ACCESS TRAVEL DIS	STANCE	42'-4"
LIFE SAFETY GENERAL NOTES	5	05 COMMON PATH 'I & J'		42-4" CON
			33 IRAVEL	20'-1" 20'-1" CON
1. FIRE EXTINGUISHER CABINETS SHALL BE LOCATED SO DISTANCE SHALL NOT EXCEED 75'-0" (906.3).		EXIT ACCESS TRAVEL DIS	STANCE	57'-9"
2. MINIMUM EGRESS WIDTH PER OCCUPANT AT STAIRS = ((1005.3.1). MINIMUM EGRESS WIDTH PER OCCUPANT AT COMPONENTS = 0.15" PER OCCUPANT (1005.2.2)	U.2" PER OCCUPANT OTHER EGRESS	05 EXIT PATH 'J'		57'-9" CON
 A FIRE RATED ASSEMBLY AND SMOKE BARRIER ASSEMI WITH THE RELEVANT DESIGNATION AS FOLLOWS (703.7 	BLY SHALL BE STENCILED):	EXIT ACCESS TRAVEL DIS	STANCE	35'-4" 35'-4" CON
 3-INCH TALL LETTERS IN RED INK OR PAINT. APPLIED AT ALL CONCEALED LOCATIONS (EG., ABOY) 	VE CEILING AND INSIDE			
FIRE PROTECTION & ALARM D	EVICES (906 -908)	PARTITIO	N DESIGNATIONS (70	05-710)
F FIRE ALARM PULL STATION, +48" FEC FIRE (REC	EXTINGUISHER CABINET ESSED/ SEMI RECESSED)	T07 FIRE BARRIERS	B NUN-KATED PAKTITION	
			2 HR FIRE BARRIER	
80" SYNCHRONIZED 15 CANDELA UNLESS OTHERWISE	ALARIVI HURIN/STRUBE CE, +80" SYNCHRONIZED ANDELA UNLESS			
	ERWISE NOTED			
DUCT SMOKE DETECTOR HOUSING WITH SENSOR AND	ALARM			
	TOELECTRIC SMOKE			
STATION DETE				
STATION DETE MOU	ECTOR CEILING NTED			
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE	ECTOR CEILING NTED REINSTALLED, AND RETESTED IN			
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS	ECTOR CEILING NTED REINSTALLED, AND RETESTED IN			
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS	ECTOR CEILING NTED REINSTALLED, AND RETESTED IN			
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE	ECTOR CEILING NTED , REINSTALLED, AND RETESTED IN MIN. LAVATORIES	MIN. DRINKING FOUNTAIN	OTHER	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS	ECTOR CEILING NTED REINSTALLED, AND RETESTED IN MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS	OTHER 1 SERVICE SINK	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50	MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS	OTHER 1 SERVICE SINK	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE	MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS	OTHER 1 SERVICE SINK 1 SERVICE SINK	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE	MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS 1/1,000 OCCUPANTS	OTHER 1 SERVICE SINK 1 SERVICE SINK	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE MOU OCC # WATER CLOSETS	MIN. LAVATORIES MIN. LAVATORIES MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS # LAVATORIES	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS 1/1,000 OCCUPANTS # DRINKING FOUNTAIN	OTHER 1 SERVICE SINK 1 SERVICE SINK OTHER	
NOTE LED/ALARMITEST DETE STATION DETE MOU NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/100 OCCUPANTS OCC # WATER CLOSETS 1ST FLOOR - 5TH FLOOR: B 128 OCCUPANTS	CTOR CEILING NTED REINSTALLED, AND RETESTED IN MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS # LAVATORIES	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS 1/1,000 OCCUPANTS # DRINKING FOUNTAIN	OTHER 1 SERVICE SINK 1 SERVICE SINK OTHER	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/100 OCCUPANTS MOU 1ST FLOOR - 5TH FLOOR: B 138 OCCUPANTS 4 TOTAL REQUIRED 4	CTOR CEILING NTED REINSTALLED, AND RETESTED IN MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS # LAVATORIES 3 3	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS 1/1,000 OCCUPANTS # DRINKING FOUNTAIN 2 2	OTHER 1 SERVICE SINK 1 SERVICE SINK OTHER 1 SERVICE SINK 1 SERVICE SINK	
NOTE: ALL FIRE ALARM SYSTEMS ARE TO BE REMOVED, ACCORDANCE WITH 2018 INTERNATIONAL FIRE CODE PLUMBING CALCULATIONS OCC PLUMBING USE MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/100 OCCUPANTS MOU MOU MIN. WATER CLOSETS B BUSINESS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/100 OCCUPANTS S STORAGE 1/100 OCCUPANTS 1/25 FOR THE FIRST 50 AND 1/50 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/100 OCCUPANTS 1/20 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/20 FOR THE REMAINDER EXCEEDING 50 S STORAGE 1/20 OCCUPANTS 4 TOTAL REQUIRED 4 EXISTING 10 BASEMENT:	ECTOR CEILING NTED REINSTALLED, AND RETESTED IN MIN. LAVATORIES 1/40 FOR THE FIRST 80 AND 1/80 FOR THE REMAINDER EXCEEDING 80 1/100 OCCUPANTS # LAVATORIES 3 3 10	MIN. DRINKING FOUNTAIN 1/100 OCCUPANTS 1/1,000 OCCUPANTS # DRINKING FOUNTAIN 2 3 5	OTHER 1 SERVICE SINK 1 SERVICE SINK OTHER 1 SERVICE SINK 1 SERVICE SINK 5 SERVICE SINK	

TEMPLATE 2021.A 1/25/2024 3:14:30 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

TOTAL REQUIRED EXISTING

В

۷

6

1

1

1

5

1 SERVICE SINK **1 SERVICE SINK**

4



3D 1ST FLOOR LIFE SAFETY PLAN G002 1/8" = 1'-0"



3C BASEMENT LIFE SAFETY PLAN G002 1/8" = 1'-0"



3B 5TH FLOOR AREA PLAN G002 1/8" = 1'-0"



3A 4TH FLOOR AREA PLAN G002 1/8" = 1'-0"





6

∢

PENETRATING ITEM	1-HOUR RATED FLOOR ASSEMBLY		
SINGLE METALLIC PIPE	UL F-C-5036		
NOTE: ASSUMED TO BE A IIIA CONSTRUCTION TYPE PER 2018 VCC CHAPTER 6 SECTION 601			

EGRESS PATH DISTANCES

4

ТҮРЕ	PATH OF EGRESS
) COMMON PATH OF ECRESS TRAVEL	07' 11"
OWIMON FATH OF EGRESS TRAVEL	27-11 COMPLIES
DEXIT PATH 0A	21 11 00
XIT ACCESS TRAVEL DISTANCE	62'-11"
	62'-11" COMPLIES
DEXIT PATH 0B	
XIT ACCESS TRAVEL DISTANCE	43'-5"
	43-5" COMPLIES
OMMON PATH OF EGRESS TRAVEL	27'-8"
	27'-8" COMPLIES
1 EXIT PATH '1A'	
XIT ACCESS TRAVEL DISTANCE	95'-8"
	95'-8" COMPLIES
1 EXIT PATH '1B'	
XIT ACCESS TRAVEL DISTANCE	35-6" COMPLIES
2 COMMON PATH 'C & D'	33-0 COMPLIES
OMMON PATH OF EGRESS TRAVEL	19'-3"
	19'-3" COMPLIES
2 EXIT PATH 'C'	
XIT ACCESS TRAVEL DISTANCE	56'-0"
	56'-0" COMPLIES
2 EXIL PATH 'D' VIT ACCESS TRAVEL DISTANCE	251.2"
ATTACCESS TRAVEL DISTANCE	35-3 35'-3" COMPLIES
3 COMMON PATH 'E & F'	
OMMON PATH OF EGRESS TRAVEL	19'-11"
	19'-11" COMPLIES
3 EXIT PATH 'E'	
XIT ACCESS TRAVEL DISTANCE	55'-11"
	55-11" COMPLIES
XIT ACCESS TRAVEL DISTANCE	38'-0"
	38'-0" COMPLIES
4 COMMON PATH 'G & H'	
OMMON PATH OF EGRESS TRAVEL	22'-6"
	22'-6" COMPLIES
4 EXIT PATH 'G'	541 O N
XIT ACCESS TRAVEL DISTANCE	51'-2"
1 FXIT PATH 'H'	51-2 COMPLIES
XIT ACCESS TRAVEL DISTANCE	42'-4"
	42'-4" COMPLIES
5 COMMON PATH 'I & J'	
OMMON PATH OF EGRESS TRAVEL	20'-1"
	20'-1" COMPLIES
	57' 0"
5 EXIT PATH 'J'	
XIT ACCESS TRAVEL DISTANCE	35'-4"
	35'-4" COMPLIES

4



2

1

3D 5TH FLOOR LIFE SAFETY PLAN G003 1/8" = 1'-0"

3



3C 4TH FLOOR LIFE SAFETY PLAN G003 1/8" = 1'-0"



3B 3RD FLOOR LIFE SAFETY PLAN G003 1/8" = 1'-0"







6A BASEMENT DEMOLITION PLAN D100 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:54 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

02.41.21 LIGHT FIXTURES THROUGHOUT BASEMENT LEVEL EXISTING TO REMAIN. TYPICAL, SEE ELECTRICAL DRAWINGS FOR FURTHER INFORMATION. 02.41.22 MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS FOR FURTHER 02.41.23 DASHED LINES INDICATE LOCATION OF STRUCTURAL SHORING SHOWN FOR

COORDINATION PURPOSES ONLY. REFER TO STRUCTURAL DRAWINGS FOR



DEMOLITION PLAN & RCP D100



6A 1ST FLOOR DEMOLITION PLAN D101 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:58 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

KEYN	OTES

4

41.04.01	CUT AND REMOVE PORTION OF DRYWALL, FULL HEIGHT AS INDICATED ON PLAN. STUD FRAMING, WALL INSULATION (IF ANY) TO REMAIN DURING CONSTRUCTION. REMOVE, SALVAGE, LABEL, AND STORE RUBBER WALL BASE FOR REUSE IN SAME LOCATION AFTER CONSTRUCTION. LOCATE, IDENTIFY AND PROTECT ALL ELECTRICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE OF DEMOLITION LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF DEMOLITION LIMITS. COORDINATE WITH ELECTRICAL PLANS.
41.04.01a	SELECTIVE DEMOLITION OF WALL FOR NEW BACKFLOW PREVENTER CLOSET
41.04.02	REMOVE EXISTING LVT FLOORING. PROTECT, LABEL, AND STORE FOR RE-INSTALLATION IN SAME LOCATION ONCE REPAIRS ARE COMPLETED.
41.04.03	REMOVE CEILING GRID AND PANELS ABOVE WINDOW POCKET. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING GRID AND PANELS TO BE RE-INSTALLED ONCE REPAIRS ARE COMPLETED.
41.04.04	REMOVE CARPET, PADDING AND ADHESIVE (IF ANY) AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. CARPET WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED.
41.04.05	REMOVE VINYL FLOORING IN ITS ENTIRETY. REMOVE ALL GLUES AND PREPARE SUBFLOOR AS REQUIRED TO RECEIVE NEW FLOOR FINISHES WHEN REPAIRS ARE COMPLETED.

3

02.41.04.06 REMOVE CEILING GRID AND PANELS AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED. 02.41.04.07 REMOVE EXISTING DRYWALL CEILING.

02.4

02.4

02.4

RESTROOM 114 02.41.04.05 02.41.04.12 02.41.04.12 02.41.04.15 02.41.04.10		FISCAL TECH 18	O2.41.24 DN Image: Contraction of the second sec	
4.04 HR & S	FINANCE ECHNICIAN III	CFFICE ROOM 2 17		217.55°

02.41.04.08	ALL EXISTING RECESSED DOWN LIGHTS MOUNTED WITHIN GYPSUM CORRIDOR CEILINGS TO BE REMOVED. FIXTURES SHALL BE DISCONNECTED, REMOVED, LABELED, PROTECTED, AND STORED DURING DEMOLITION. INSTALL IN SAME LOCATIONS WITHIN NEW CEILINGS. COORDINATE WITH ELECTRICAL PLANS. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING DURING DEMOLITION IN THOSE CORRIDORS AS REQUIRED.	02.41.04
02.41.04.09	ALL EXISTING RECESSED FLUORESCENT 2'X2' AND 2'X4' LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS. CONTRACTOR SHALL PROTECT LIGHT FIXTURES FROM DAMAGE DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED.	02.41.04
02.41.04.10	REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED.	02.41.04
02.41.04.11	REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610.	02.41.04
02.41.04.12	REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK AND FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION	02.41.04

2

UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED TOILET PLANS ON A610. 02.41.04.13 REMOVE SWITCH PLATES, SIGNAGE, AND ADHESIVE THROUGHOUT ENTIRE CONSTRUCTION AREA. LABEL, SAVE, AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.

04.14 REMOVE EXISTING WATER COOLER AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP. LABEL, SALVAGE, AND STORE ALL WATER COOLERS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. 4.15 REMOVE AND SALVAGE FLOORING TRANSITION STRIPS FOR REUSE IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REMOVE EXISTING COUNTERTOPS, CASEWORK, AND HARDWARE AS 4.16 SHOWN. PROTECT AND STORE FOR RE-INSTALLATION IN SAME LOCATION ONCE REPAIRS ARE COMPLETED. 04.17 ALL CEILING MOUNTED SIGNAGE TO BE REMOVED, LABELED ACCORDING TO LOCATION, AND STORED DURING CONSTRUCTION. RE-INSTALL IN SAME LOCATIONS AFTER CONSTRUCTION IS COMPLETE. COORDINATE WITH ELECTRICAL PLANS. 4.18 EXISTING LINEAR LIGHT FIXTURES TO BE REMOVED, LABELED FOR RE-INSTALLATION IN SAME LOCATION, AND STORED DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED. 4.19 REMOVE ALL WALL BASE THROUGHOUT EXTENT OF STRUCTURAL WORK WHEREVER FINISH WALLS ARE TO BE DEMOLISHED. LABEL, SAVE, AND STORE WALL BASE FOR RE-INSTALLATION IN SAME LOCATION UPON

1

COMPLETION OF CONSTRUCTION. DASHED LINES INDICATE LOCATION OF STRUCTURAL SHORING SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION.

LIMITED SCOPE OF WORK TO INCLUDE PAINT ONLY AS INDICATED BY STRUCTURAL DRAWINGS

KEYNOTES

02.41.23

02.41.24

KEYNOTES

REFLECTED CEILING PLAN LEGEND - DEMO

6

5

4

2' X 4' LIGHT FIXTURE TO BE AFFIXED TO STRUCTURE R AND PROTECTED DURING DEMO

ш

Δ

- RECESSED DOWN LIGHT FIXTURE TO BE REMOVED AND SALVAGED ()FOR PUT BACK IN SAME LOCATION DURING NEW CONSTRUCTION
- SUSPENDED CEILING SYSTEM TO BE REMOVED, SALVAGED, - - - + - LABELED, AND STORED FOR REUSE
 - NOT IN CONTRACT

4

6A 2ND FLOOR DEMOLITION PLAN D102 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:14:02 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

3

EYNOTES		KEYNOTES	
41.04.01	CUT AND REMOVE PORTION OF DRYWALL, FULL HEIGHT AS INDICATED ON PLAN. STUD FRAMING, WALL INSULATION (IF ANY) TO REMAIN DURING CONSTRUCTION. REMOVE, SALVAGE, LABEL, AND STORE RUBBER WALL BASE FOR REUSE IN SAME LOCATION AFTER CONSTRUCTION LOCATE	02.41.04.09	ALL EXISTING RECESSED FLUORESCENT 2'X2' AND 2'X4' LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS. CONTRACTOR SHALL PROTECT LIGHT FIXTURES FROM DAMAGE DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED
	IDENTIFY AND PROTECT ALL ELECTRICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE OF DEMOLITION LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF	02.41.04.10	REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED.
41.04.03	REMOVE CEILING GRID AND PANELS ABOVE WINDOW POCKET. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE	02.41.04.11	REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610.
	DURING CONSTRUCTION. CEILING GRID AND PANELS TO BE RE-INSTALLED ONCE REPAIRS ARE COMPLETED.	02.41.04.12	REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK AND
41.04.04	REMOVE CARPET, PADDING AND ADHESIVE (IF ANY) AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. CARPET WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED.		FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED
41.04.05	REMOVE VINYL FLOORING IN ITS ENTIRETY. REMOVE ALL GLUES AND PREPARE SUBFLOOR AS REQUIRED TO RECEIVE NEW FLOOR FINISHES WHEN REPAIRS ARE COMPLETED.	02.41.04.13	TOILET PLANS ON A610. REMOVE SWITCH PLATES, SIGNAGE, AND ADHESIVE THROUGHOUT ENTIRE CONSTRUCTION AREA. LABEL, SAVE, AND RE-INSTALL IN SAME LOCATIONS
41.04.06	REMOVE CEILING GRID AND PANELS AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED	02.41.04.14	AFTER REPAIRS ARE COMPLETED. REMOVE EXISTING WATER COOLER AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP. LABEL, SALVAGE, AND STORE ALL WATER COOLERS AND ASSOCIATED PIPING AND
41.04.07	REMOVE EXISTING DRYWALL CEILING.		ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF
41.04.08	ALL EXISTING RECESSED DOWN LIGHTS MOUNTED WITHIN GYPSUM CORRIDOR CEILINGS TO BE REMOVED. FIXTURES SHALL BE DISCONNECTED, REMOVED, LABELED, PROTECTED, AND STORED DURING	02.41.04.15	REMOVE AND SALVAGE FLOORING TRANSITION STRIPS FOR REUSE IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.
	DEMOLITION. INSTALL IN SAME LOCATIONS WITHIN NEW CEILINGS. COORDINATE WITH ELECTRICAL PLANS. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING DURING DEMOLITION IN THOSE CORRIDORS AS REQUIRED.	02.41.04.17	ALL CEILING MOUNTED SIGNAGE TO BE REMOVED, LABELED ACCORDING TO LOCATION, AND STORED DURING CONSTRUCTION. RE-INSTALL IN SAME LOCATIONS AFTER CONSTRUCTION IS COMPLETE. COORDINATE WITH ELECTRICAL PLANS.
		02.41.04.19	REMOVE ALL WALL BASE THROUGHOUT EXTENT OF STRUCTURAL WORK WHEREVER FINISH WALLS ARE TO BE DEMOLISHED. LABEL, SAVE, AND STORE WALL BASE FOR RE-INSTALLATION IN SAME LOCATION UPON COMPLETION OF CONSTRUCTION.
		02.41.23	DASHED LINES INDICATE LOCATION OF STRUCTURAL SHORING SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION.

1

2

D102

LR

 $- \rightarrow - - + -$

ш

Δ

- 2' X 4' LIGHT FIXTURE TO BE AFFIXED TO STRUCTURE AND PROTECTED DURING DEMO
- RECESSED DOWN LIGHT FIXTURE TO BE REMOVED AND SALVAGED ()FOR PUT BACK IN SAME LOCATION DURING NEW CONSTRUCTION
- ______ SUSPENDED CEILING SYSTEM TO BE REMOVED, SALVAGED, - - - + - LABELED, AND STORED FOR REUSE
 - NOT IN CONTRACT

4

	3
KEYNO	TES
02.41.04.01	CUT AND REMOVE PORTION OF DRYWALL, FULL HEIGHT AS INDICATED ON PLAN. STUD FRAMING, WALL INSULATION (IF ANY) TO REMAIN DURING CONSTRUCTION. REMOVE, SALVAGE, LABEL, AND STORE RUBBER WALL BASE FOR REUSE IN SAME LOCATION AFTER CONSTRUCTION. LOCATE, IDENTIFY AND PROTECT ALL ELECTRICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE OF DEMOLITION LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF DEMOLITION LIMITS. COORDINATE WITH ELECTRICAL PLANS.
02.41.04.03	REMOVE CEILING GRID AND PANELS ABOVE WINDOW POCKET. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING GRID AND PANELS TO BE RE-INSTALLED ONCE REPAIRS ARE COMPLETED.
02.41.04.04	REMOVE CARPET, PADDING AND ADHESIVE (IF ANY) AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. CARPET WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED.
02.41.04.05	REMOVE VINYL FLOORING IN ITS ENTIRETY. REMOVE ALL GLUES AND PREPARE SUBFLOOR AS REQUIRED TO RECEIVE NEW FLOOR FINISHES WHEN REPAIRS ARE COMPLETED.
02.41.04.06	REMOVE CEILING GRID AND PANELS AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED.
02.41.04.07	REMOVE EXISTING DRYWALL CEILING.

4

5

	2
KEYNC	TES
02.41.04.08	ALL EXISTING RECESSED DOWN LIGHTS MOUNTED WITHIN GYPSUM CORRIDOR CEILINGS TO BE REMOVED. FIXTURES SHALL BE DISCONNECTED, REMOVED, LABELED, PROTECTED, AND STORED DURING DEMOLITION. INSTALL IN SAME LOCATIONS WITHIN NEW CEILINGS. COORDINATE WITH ELECTRICAL PLANS. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING DURING DEMOLITION IN THOSE CORRIDORS AS REQUIRED.
02.41.04.09	ALL EXISTING RECESSED FLUORESCENT 2'X2' AND 2'X4' LIGHT FIXTURES

TOILET PLANS ON A610.

02.41.04.10

SHALL BE SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS. CONTRACTOR SHALL PROTECT LIGHT FIXTURES FROM DAMAGE DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED. REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED.

02.41.04.11 REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610. 02.41.04.12 REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK AND FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED

KEYNOTES	

02.41.04.13	REMOVE SWITCH PLATES, SIGNAGE, AND ADHESIVE THROUGHOUT ENTIRE CONSTRUCTION AREA. LABEL, SAVE, AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.
02.41.04.14	REMOVE EXISTING WATER COOLER AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP. LABEL, SALVAGE, AND STORE ALL WATER COOLERS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS.
02.41.04.15	REMOVE AND SALVAGE FLOORING TRANSITION STRIPS FOR REUSE IN SAM LOCATIONS AFTER REPAIRS ARE COMPLETED.
02.41.04.17	ALL CEILING MOUNTED SIGNAGE TO BE REMOVED, LABELED ACCORDING LOCATION, AND STORED DURING CONSTRUCTION. RE-INSTALL IN SAME LOCATIONS AFTER CONSTRUCTION IS COMPLETE. COORDINATE WITH ELECTRICAL PLANS.
02.41.04.19	REMOVE ALL WALL BASE THROUGHOUT EXTENT OF STRUCTURAL WORK WHEREVER FINISH WALLS ARE TO BE DEMOLISHED. LABEL, SAVE, AND STORE WALL BASE FOR RE-INSTALLATION IN SAME LOCATION UPON COMPLETION OF CONSTRUCTION.
02.41.23	DASHED LINES INDICATE LOCATION OF STRUCTURAL SHORING SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION.

REFLECTED CEILING PLAN LEGEND - DEMO

6

- \square 2' X 4' LIGHT FIXTURE TO BE AFFIXED TO STRUCTURE AND PROTECTED DURING DEMO LR
- RECESSED DOWN LIGHT FIXTURE TO BE REMOVED AND SALVAGED ()FOR PUT BACK IN SAME LOCATION DURING NEW CONSTRUCTION
- SUSPENDED CEILING SYSTEM TO BE REMOVED, SALVAGED, - - - + - LABELED, AND STORED FOR REUSE
 - NOT IN CONTRACT

ш

Δ

 $- \rightarrow - - + -$

TEMPLATE 2021.A 1/25/2024 3:14:09 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

KEYNOTES

02.41.04.01

3

02.41.04.03

02.41.04.04

02.41.04.05

02.41.04.06

02.41.04.07 02.41.04.08

02.41.04.09

4

4

5

LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF DEMOLITION LIMITS. COORDINATE WITH ELECTRICAL PLANS. REMOVE CEILING GRID AND PANELS ABOVE WINDOW POCKET. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING GRID AND PANELS TO BE RE-INSTALLED ONCE REPAIRS ARE COMPLETED. REMOVE CARPET. PADDING AND ADHESIVE (IF ANY) AS INDICATED. LABEL

UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. CARPET WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED. REMOVE VINYL FLOORING IN ITS ENTIRETY. REMOVE ALL GLUES AND PREPARE SUBFLOOR AS REQUIRED TO RECEIVE NEW FLOOR FINISHES WHEN REPAIRS ARE COMPLETED. REMOVE CEILING GRID AND PANELS AS INDICATED. LABEL UPON REMOVAL FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING CONSTRUCTION. CEILING WILL BE RE-INSTALLED IN SAME ROOM ONCE REPAIRS ARE COMPLETED.

REMOVE EXISTING DRYWALL CEILING. ALL EXISTING RECESSED DOWN LIGHTS MOUNTED WITHIN GYPSUM CORRIDOR CEILINGS TO BE REMOVED. FIXTURES SHALL BE DISCONNECTED, REMOVED, LABELED, PROTECTED, AND STORED DURING DEMOLITION. INSTALL IN SAME LOCATIONS WITHIN NEW CEILINGS. COORDINATE WITH ELECTRICAL PLANS. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING DURING DEMOLITION IN THOSE CORRIDORS AS REQUIRED.

ALL EXISTING RECESSED FLUORESCENT 2'X2' AND 2'X4' LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS. CONTRACTOR SHALL PROTECT LIGHT FIXTURES FROM DAMAGE DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED.

KEYNOTES		
02.41.04.10	REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED.	
02.41.04.11	REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610.	
02.41.04.12	REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK AND FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED TOILET PLANS ON A610.	
02.41.04.13	REMOVE SWITCH PLATES, SIGNAGE, AND ADHESIVE THROUGHOUT ENTIRE CONSTRUCTION AREA. LABEL, SAVE, AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.	
02.41.04.14	REMOVE EXISTING WATER COOLER AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP. LABEL, SALVAGE, AND STORE ALL WATER COOLERS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS.	
02.41.04.15	REMOVE AND SALVAGE FLOORING TRANSITION STRIPS FOR REUSE IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.	
02.41.04.17	ALL CEILING MOUNTED SIGNAGE TO BE REMOVED, LABELED ACCORDING TO LOCATION, AND STORED DURING CONSTRUCTION. RE-INSTALL IN SAME LOCATIONS AFTER CONSTRUCTION IS COMPLETE. COORDINATE WITH ELECTRICAL PLANS.	
02.41.04.19	REMOVE ALL WALL BASE THROUGHOUT EXTENT OF STRUCTURAL WORK WHEREVER FINISH WALLS ARE TO BE DEMOLISHED. LABEL, SAVE, AND STORE WALL BASE FOR RE-INSTALLATION IN SAME LOCATION UPON COMPLETION OF CONSTRUCTION.	
02.41.04.20	REMOVE EXISTING CARPET TILE FROM ROOM 401. PROTECT AND STORE DURING CONSTRUCTION. CARPET REMOVED FROM ROOM 401 TO SERVE AS ATTIC STOCK FOR IN KIND CARPET. REUSE CARPET TILES UPON COMPLETION OF CONSTRUCTION AS NEEDED TO INFILL AND REPAIR THROUGHOUT BUILDING.	
02.41.23	DASHED LINES INDICATE LOCATION OF STRUCTURAL SHORING SHOWN FOR	

TEMPLATE 2021.A 1/25/2024 3:14:12 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

6 5TH FLOOR DEMOLITION PLAN D105 1/4" = 1'-0"

4

ш

Δ

R

()RECESSED DOWN LIGHT FIXTURE TO BE REMOVED AND SALVAGED FOR PUT BACK IN SAME LOCATION DURING NEW CONSTRUCTION

REFLECTED CEILING PLAN LEGEND - DEMO

2' X 4' LIGHT FIXTURE TO BE AFFIXED TO STRUCTURE

AND PROTECTED DURING DEMO

6

5 4

3

02.41.04.09

02.41.04.10

02.41.04.11

	2
KEYNO	TES
02.41.04.01	CUT AND REMOVE PORTION OF DRYWALL, FULL HEIGHT AS INDICATED ON PLAN. STUD FRAMING, WALL INSULATION (IF ANY) TO REMAIN DURING CONSTRUCTION. REMOVE, SALVAGE, LABEL, AND STORE RUBBER WALL BASE FOR REUSE IN SAME LOCATION AFTER CONSTRUCTION. LOCATE, IDENTIFY AND PROTECT ALL ELECTRICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE OF DEMOLITION LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF DEMOLITION LIMITS. COORDINATE WITH ELECTRICAL PLANS.
02.41.04.06	REMOVE CEILING GRID AND PANELS AS INDICATED. LABEL UPON REMOVAL

FOR RE-INSTALLATION IN SAME LOCATION. STORE AND SAVE DURING
CONSTRUCTION. CEILING WILL BE RE-INSTALLED IN SAME ROOM ONCE
REPAIRS ARE COMPLETED.
ALL EXISTING RECESSED FLUORESCENT 2'X2' AND 2'X4' LIGHT FIXTURES
SHALL BE SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING
COMPONENTS. CONTRACTOR SHALL PROTECT LIGHT FIXTURES FROM
DAMAGE DURING CONSTRUCTION, CLEAN AND RE-LAMP AS REQUIRED.

REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED. REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610.

02.41.04.12	REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK AND FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED TOILET PLANS ON A610.
02.41.04.13	REMOVE SWITCH PLATES, SIGNAGE, AND ADHESIVE THROUGHOUT ENTIRE CONSTRUCTION AREA. LABEL, SAVE, AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED.
02.41.04.14	REMOVE EXISTING WATER COOLER AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP. LABEL, SALVAGE, AND STORE ALL WATER COOLERS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS.
02.41.04.16	REMOVE EXISTING COUNTERTOPS, CASEWORK, AND HARDWARE AS SHOWN. PROTECT AND STORE FOR RE-INSTALLATION IN SAME LOCATION ONCE REPAIRS ARE COMPLETED.
02.41.04.17	ALL CEILING MOUNTED SIGNAGE TO BE REMOVED, LABELED ACCORDING TO LOCATION, AND STORED DURING CONSTRUCTION. RE-INSTALL IN SAME LOCATIONS AFTER CONSTRUCTION IS COMPLETE. COORDINATE WITH ELECTRICAL PLANS.
02.41.04.19	REMOVE ALL WALL BASE THROUGHOUT EXTENT OF STRUCTURAL WORK

KEYNOTES

1

WHEREVER FINISH WALLS ARE TO BE DEMOLISHED. LABEL, SAVE, AND STORE WALL BASE FOR RE-INSTALLATION IN SAME LOCATION UPON COMPLETION OF CONSTRUCTION.

	REFLECT	ہ ED CEILING PLAN LEGE	ND	5 REFLECTED CEILING PLAN NOTES
ш	□ 2 ¹ • RI • <	2x2' LIGHT FIXTURE 2x4' LIGHT FIXTURE EECESSED CAN LIGHT FIXTURE TRIP FLUORESCENT LIGHT FIXTURE ENDANT LIGHT FIXTURE VALL MOUNTED LIGHT FIXTURE MERGENCY WALL MOUNTED LIGHT FIXTURE VITH BATTERY BACKUP - REFER TO ELEC. XIT SIGN	 SPRINKLER EXHAUST GRILLE RETURN GRILLE SUPPLY DIFFUSER SUSPENDED CEILING SYSTEM NOT IN CONTRACT 	 THE REFLECTED CEILING PLAN PROVIDES INFORMATION CONCERNING THE LOCATIONS OF LIGHTS, CEILING FIXTURES, HVAC GRILLES, ETC. REFER TO THE REFLECTED CEILING PLAN FOR LOCATIONS ONLY. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR APPLICABLE ENGINEERING INFORMATION. SPRINKLER HEADS ARE NOT INDICATED. REFER TO FIRE PROTECTION DRAWINGS FOR SPRINKLER REQUIREMENTS AND INFORMATION. CEILING FIXTURES INCLUDING GRILLES, DIFFUSERS, INCANDESCENT LIGHTS, ETC ARE TO BE LOCATED IN THE SAME LOCATION AS EXISTING IN ACOUSTIC CEILING PANELS UNLESS NOTED OTHERWISE. ALL CEILING HEIGHTS NOTED ARE ABOVE FINISHED FLOOR (A.F.F.) STRUCTURAL REPAIRS MAY REQUIRE THAT NOTED CEILING HEIGHTS ADJUST IN SOME AREAS. COORDINATE FINAL CEILING HEIGHTS WITH MECHANICAL DRAWINGS AND UPON COMPLETION OF STRUCTURAL REPAIRS.
			CRAWLSPACE B	
υ		6C BASEMENT FLOO A100 1/4" = 1'-0"	R PLAN	
			<section-header></section-header>	STAIR E-10 HD HD HD HD HD HD HD HD HD HD

6A BASEMENT NEW WORK PLAN A100 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:31 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

OVIDES INFORMATION CONCERNING THE XTURES, HVAC GRILLES, ETC. REFER TO THE CATIONS ONLY. REFER TO MECHANICAL, VINGS FOR APPLICABLE ENGINEERING ATED. REFER TO FIRE PROTECTION DRAWINGS LLES, DIFFUSERS, INCANDESCENT LIGHTS, ETC. LOCATION AS EXISTING IN ACOUSTIC CEILING ABOVE FINISHED FLOOR (A.F.F.) STRUCTURAL ED CEILING HEIGHTS ADJUST IN SOME AREAS.

4

3

2

3

4

GENERAL BASEMENT NOTES

 NO ARCHITECTURAL DEMOLITION SCOPE INCLUDED IN THE BASEMENT LEVEL OF THE PROJECT. INCLUSION OF BASEMENT LEVEL PLANS IN THE ARCHITECTURAL DRAWING SET IT TO DENOTE THE EXTENT OF THE SCOPE OF WORK FOR OTHER DISCIPLINES. SEE MEP AND STRUCTURAL DRAWINGS FOR DETAILS AND INFORMATION REGARDING THE BASEMENT LEVEL.

1

BASEMENT NEW WORK FLOOR PLAN & RCP **A100**

	2'x2' LIGHT FIXTURE	•	SPRINKLER
	2'x4' LIGHT FIXTURE		EXHAUST GRILLE
			RETURN GRILLE
0	RECESSED CAN LIGHT FIXTURE		SUPPLY DIFFUSER
	STRIP FLUORESCENT LIGHT FIXTURE		
\bigcirc	PENDANT LIGHT FIXTURE		
Ю	WALL MOUNTED LIGHT FIXTURE		SUSPENDED CEILING SYSTEM
	EMERGENCY WALL MOUNTED LIGHT FIXTUI	RE	
\leftrightarrow	WITH BATTERY BACKUP - REFER TO ELEC.		
	EXIT SIGN		NOT IN CONTRACT

6

6A 1ST FLOOR NEW WORK PLAN A101 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:33 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

TITION INDICATIONS LEGEND

4

EXISTING PARTITION TO REMAIN
NEW DRYWALL

H LEGEND

5

CPT-03	
VCT-01	

KEYNOTES

02.41.24	LIMITED SCOPE OF WORK TO INCLUDE PAINT ONLY AS INDICATED BY STRUCTURAL DRAWINGS
08.11.13	NEW WOOD DOOR IN EXISTING DOOR FRAME. REF. DOOR SCHEDULE. RE-USE HARDWARE SAVED FROM DEMOLITION.
08.14.16	RE-INSTALL DOOR FRAME SAVED FROM DEMOLITION, LEVEL AND PLUMB SO REVEAL AROUND DOOR IS EVEN. RE- USE EXISTING HARDWARE.
09.10.00	2-HR FIRE RATED DUCT SHAFT WITH UL DESIGN U438 PER 1990 STATE REVIEWED RECORD DRAWINGS BY BALLOU JUSTICE UPTON ASSOCIATES ARCHITECTS
09.29.00	REPLACE ALL REMOVED DRYWALL WITH NEW 5/8" GYP. BD. INSTALL GYP. BD AS REQUIRED FOR FLUSH SURFACES IN ALL NEW FINISHED SPACE. TAPE, PRIME AND PAINT TO MATCH EXISTING ADJACENT WALLS. ONCE GYP IS INSTALLED, REPLACE WALL BASE SALVAGED FROM DEMOLITION BACK INTO PLACE.
09.51.00	NEW SUSPENDED CEILING: 5/8" GYPSUM BOARD ON SUSPENDED METAL STUD FRAMING. FINISH AND PAINT TO MATCH EXISTING, PNT-02 FLAT.
09.51.00.B	NEW BULKHEAD - REFER TO DETAIL AS CALLED OUT.
09.51.00.C	WINDOW POCKET - NEW DRYWALL SOFFIT TO MATCH HEIGHT AND SIZE OF EXISTING. REFER TO DETAIL AS CALLED OUT.
09.51.23.A	RE- INSTALL CEILING GRID AND PANELS SALVAGED FROM DEMOLITION. CEILING WILL BE RE-INSTALLED IN SAME ROOM REMOVED FROM DURING DEMO. COORDINATE WITH ELECTRICAL FOR LIGHT FIXTURE LAYOUT. IF NEEDED REPLACE DAMAGED PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401.

3

4

09.51.23.B	RE-INSTALL SUSPENDED CEILING SYSTEM ABOVE WINDOW POCKETS. RI USE GRID AND PANELS FROM DEMOLITION. IF NEEDED PROVIDE NEW GRID TO MATCH EXISTING AND REPLACE PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401.
09.65.14	RE-INSTALL FLOORING TRANSITION STRIPS SALVAGED DURING DEMOLITION BACK INTO PLACE. REFER TO FLOOR TRANSITION DETAILS ON SHEET A600.
09.65.14a	INSTALL FLOORING TRANSITION STRIP. REFER TO FLOOR TRANSITION DETAILS ON SHEET A600
09.65.19	RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PROVIDE AND INSTALL NEW RESILIENT FLOORING, VCT-01. REFER TO FINISH SCHEDUL
09.68.01	RE-INSTALL SALVAGED CARPET AND PAD IN SAME INSTALLATION DIRECTION, QUARTER TURN, AND SAME ROOMS AS EXISTING. IF NEEDE REPLACE DAMAGED CARPET WITH ATTIC STOCK RESERVED FROM

2

DEMOLITION OF ROOM 401. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PATCH AND REPAIR TO MATCH EXISTING IF NEEDED. 09.68.02 RE-INSTALL SALVAGED LVT IN SAME INSTALLATION DIRECTION AS EXISTING. RE-INSTALL SALVAGED WALL BASE. PATCH AND REPAIR TO MATCH EXISTING AS NEEDED. 10.14.01 INSTALL SIGNAGE ON RIGHT SIDE OF DOUBLE-DOOR ENTRY FOR

BACKFLOW PREVENTER CLOSET. SHALL COMPLY WITH 2010 ADA STANDARDS FOR ACCESIBLE DESIGN SECTION 703.4

KEYNOTES

10.14.05 RE-INSTALL EXISTING SIGNAGE. SIGNAGE WILL BE AT SAME HEIGHT AND SAME LOCATIONS AS PREVIOUS INSTALLATION. COORDINATE WITH ELECTRICAL PLANS.

10.28.04 RE-INSTALL ALL TOILET ACCESSORIES SALVAGED AND STORED DURING CONSTRUCTION BACK INTO PLACE. CONFIRM THAT ACCESSORY LOCATIONS MEET ADA REQUIREMENTS. REFER TO ENLARGED PLANS AND

1

MOUNTING HEIGHT DIAGRAMS ON A610. 22.42.02 RE-INSTALL SALVAGED SINK AND FAUCET. CONNECT TO EXISTING PIPING. RE-INSTALL COMPLETE WITH SALVAGED P-TRAP, ANGLE VALVES AND FLEXIBLE CONNECTIONS. PROVIDE COMPLETE WITH ASSE 1070 THERMOSTATIC MIXING VALVE SET AT 95 DEG. F. DISCHARGE TEMPERATURE.

22.47.17 RE-INSTALL WATER COOLER. CONNECT TO EXISTING PIPING. PROVIDE COMPLETE WITH NEW P-TRAP, ANGLE VALVES AND FLEXIBLE CONNECTIONS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL. 26.51.19.A ALL 2X4 LIGHTING SECURED TO STRUCTURE DURING DEMO TO BE PLACED BACK INTO GRID AS SHOWN ON PLANS. COORDINATE WITH

ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. 26.51.19.B ALL RECESSED DOWNLIGHTS REMOVED AND STORED DURING DEMO TO BE RELOCATED INTO NEW GYP CEILINGS WHERE SHOWN. COORDINATE WITH ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

_ACT-EXIST 9' - 8" A.F.F.

1/25/2024 3:13:36 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt TEMPLATE 2021.A

PARTITION INDICATIONS LEGEND

4

EXISTING PARTITION TO REMAIN

FINISH LEGEND

CPT-03

5

VCT-01

3

KEYNOTES 02.41.24 LIMITED SCOPE OF WORK TO INCLUDE PAINT ONLY AS INDICATED BY STRUCTURAL DRAWINGS 08.11.13 NEW WOOD DOOR IN EXISTING DOOR FRAME. REF. DOOR SCHEDULE. RE-USE HARDWARE SAVED FROM DEMOLITION. 08.14.16 RE-INSTALL DOOR FRAME SAVED FROM DEMOLITION, LEVEL AND PLUMB SO 09.65.14 REVEAL AROUND DOOR IS EVEN. RE- USE EXISTING HARDWARE. 09.10.00 2-HR FIRE RATED DUCT SHAFT WITH UL DESIGN U438 PER 1990 STATE REVIEWED RECORD DRAWINGS BY BALLOU JUSTICE UPTON ASSOCIATES ARCHITECTS 09.29.00 REPLACE ALL REMOVED DRYWALL WITH NEW 5/8" GYP. BD. INSTALL GYP. BD AS REQUIRED FOR FLUSH SURFACES IN ALL NEW FINISHED SPACE. TAPE, PRIME AND PAINT TO MATCH EXISTING ADJACENT WALLS. ONCE GYP IS INSTALLED, REPLACE WALL BASE SALVAGED FROM DEMOLITION BACK INTO PLACE.

2

09.29.02 PROVIDE NEW GYPSUM BOARD CEILING. PAINT AND FINISH TO MATCH EXISTING. COORDINATE WITH ELECTRICAL FOR LIGHT FIXTURE LOCATIONS. 09.51.00 NEW SUSPENDED CEILING: 5/8" GYPSUM BOARD ON SUSPENDED METAL STUD FRAMING. FINISH AND PAINT TO MATCH EXISTING, PNT-02 FLAT. 09.51.00.B NEW BULKHEAD - REFER TO DETAIL AS CALLED OUT. 09.51.00.C WINDOW POCKET - NEW DRYWALL SOFFIT TO MATCH HEIGHT AND SIZE OF

EXISTING. REFER TO DETAIL AS CALLED OUT. 09.51.23.A RE- INSTALL CEILING GRID AND PANELS SALVAGED FROM DEMOLITION. CEILING WILL BE RE-INSTALLED IN SAME ROOM REMOVED FROM DURING DEMO. COORDINATE WITH ELECTRICAL FOR LIGHT FIXTURE LAYOUT. IF NEEDED REPLACE DAMAGED PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401.

KEYNOTES

09.68.01

22.47.17

09.51.23.B RE-INSTALL SUSPENDED CEILING SYSTEM ABOVE WINDOW POCKETS. RE USE GRID AND PANELS FROM DEMOLITION. IF NEEDED PROVIDE NEW GRID TO MATCH EXISTING AND REPLACE PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401.

1

RE-INSTALL FLOORING TRANSITION STRIPS SALVAGED DURING DEMOLITION BACK INTO PLACE. REFER TO FLOOR TRANSITION DETAILS ON SHEET A600. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PROVIDE AND 09.65.19 INSTALL NEW RESILIENT FLOORING, VCT-01. REFER TO FINISH SCHEDULE. RE-INSTALL SALVAGED CARPET AND PAD IN SAME INSTALLATION DIRECTION, QUARTER TURN, AND SAME ROOMS AS EXISTING. IF NEEDED

REPLACE DAMAGED CARPET WITH ATTIC STOCK RESERVED FROM DEMOLITION OF ROOM 401. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PATCH AND REPAIR TO MATCH EXISTING IF NEEDED. 10.14.05 RE-INSTALL EXISTING SIGNAGE. SIGNAGE WILL BE AT SAME HEIGHT AND SAME LOCATIONS AS PREVIOUS INSTALLATION. COORDINATE WITH ELECTRICAL PLANS.

RE-INSTALL ALL TOILET ACCESSORIES SALVAGED AND STORED DURING 10.28.04 CONSTRUCTION BACK INTO PLACE. CONFIRM THAT ACCESSORY LOCATIONS MEET ADA REQUIREMENTS. REFER TO ENLARGED PLANS AND MOUNTING HEIGHT DIAGRAMS ON A610. 22.42.02 RE-INSTALL SALVAGED SINK AND FAUCET. CONNECT TO EXISTING PIPING.

RE-INSTALL COMPLETE WITH SALVAGED P-TRAP, ANGLE VALVES AND FLEXIBLE CONNECTIONS. PROVIDE COMPLETE WITH ASSE 1070 THERMOSTATIC MIXING VALVE SET AT 95 DEG. F. DISCHARGE TEMPERATURE.

RE-INSTALL WATER COOLER. CONNECT TO EXISTING PIPING. PROVIDE COMPLETE WITH NEW P-TRAP. ANGLE VALVES AND FLEXIBLE CONNECTIONS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL 26.51.19.A ALL 2X4 LIGHTING SECURED TO STRUCTURE DURING DEMO TO BE PLACED BACK INTO GRID AS SHOWN ON PLANS. COORDINATE WITH ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

A102

REFLECTED CEILING PLAN LEGEND

6

Δ

	2'x2' LIGHT FIXTURE	•	SPRINKLER	
	2'x4' LIGHT FIXTURE		EXHAUST GRILLE	FI
			RETURN GRILLE	
٥	RECESSED CAN LIGHT FIXTURE		SUPPLY DIFFUSER	
	STRIP FLUORESCENT LIGHT FIXTURE			
0	PENDANT LIGHT FIXTURE		OUODENDED OF INO OVOTEM	
Ю	WALL MOUNTED LIGHT FIXTURE		SUSPENDED CEILING SYSTEM	
	EMERGENCY WALL MOUNTED LIGHT FIXTURE WITH BATTERY BACKUP - REFER TO ELEC.			
\bigotimes	EXIT SIGN		NOT IN CONTRACT	

5

4

6A 3RD FLOOR NEW WORK PLAN A103 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:40 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

4

3

KEYNOTES

09.51.23.B RE-INSTALL SUSPENDED CEILING SYSTEM ABOVE WINDOW POCKETS. RE USE GRID AND PANELS FROM DEMOLITION. IF NEEDED PROVIDE NEW GRID TO MATCH EXISTING AND REPLACE PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401. RE-INSTALL FLOORING TRANSITION STRIPS SALVAGED DURING DEMOLITION BACK INTO PLACE. REFER TO FLOOR TRANSITION 09.65.14 DETAILS ON SHEET A600. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PROVIDE AND 09.65.19 INSTALL NEW RESILIENT FLOORING, VCT-01. REFER TO FINISH SCHEDULE. 09.68.01 RE-INSTALL SALVAGED CARPET AND PAD IN SAME INSTALLATION DIRECTION, QUARTER TURN, AND SAME ROOMS AS EXISTING. IF NEEDED REPLACE DAMAGED CARPET WITH ATTIC STOCK RESERVED FROM DEMOLITION OF ROOM 401. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PATCH AND REPAIR TO MATCH EXISTING IF NEEDED.

RE-INSTALL EXISTING SIGNAGE. SIGNAGE WILL BE AT SAME HEIGHT AND SAME LOCATIONS AS PREVIOUS INSTALLATION. COORDINATE WITH ELECTRICAL PLANS.

10.14.05

KEYNOTES

26.51.19.A ALL 2X4 LIGHTING SECURED TO STRUCTURE DURING DEMO TO BE PLACED BACK INTO GRID AS SHOWN ON PLANS. COORDINATE WITH ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. 26.51.19.B ALL RECESSED DOWNLIGHTS REMOVED AND STORED DURING DEMO TO BE RELOCATED INTO NEW GYP CEILINGS WHERE SHOWN. COORDINATE WITH ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

6A 4TH FLOOR NEW WORK PLAN A104 1/4" = 1'-0"

TEMPLATE 2021.A 1/25/2024 3:13:43 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

CONFERENCE ROOM 401 C ACT-01 W EXIST B EXIST F CPT-03

4

CLOSET

LOCATIONS MEET ADA REQUIREMENTS. REFER TO ENLARGED PLANS PLACED BACK INTO GRID AS SHOWN ON PLANS. COORDINATE WITH

REFLECTED CEILING PLAN LEGEND

6

Δ

5

4

TEMPLATE 2021.A 1/25/2024 3:13:46 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

3

EXISTING PARTITION TO REMAIN NEW DRYWALL

4

KEYNOTES

02.41.24 LIMITED SCOPE OF WORK TO INCLUDE PAINT ONLY AS INDICATED BY STRUCTURAL DRAWINGS NEW WOOD DOOR IN EXISTING DOOR FRAME. REF. DOOR SCHEDULE. 08.11.13 RE-USE HARDWARE SAVED FROM DEMOLITION. 08.14.16 RE-INSTALL DOOR FRAME SAVED FROM DEMOLITION, LEVEL AND PLUMB SO REVEAL AROUND DOOR IS EVEN. RE- USE EXISTING HARDWARE. 2-HR FIRE RATED DUCT SHAFT WITH UL DESIGN U438 PER 1990 STATE 09.10.00 REVIEWED RECORD DRAWINGS BY BALLOU JUSTICE UPTON ASSOCIATES ARCHITECTS 09.29.00 REPLACE ALL REMOVED DRYWALL WITH NEW 5/8" GYP. BD. INSTALL GYP. BD AS REQUIRED FOR FLUSH SURFACES IN ALL NEW FINISHED SPACE. TAPE, PRIME AND PAINT TO MATCH EXISTING ADJACENT WALLS. ONCE GYP IS INSTALLED, REPLACE WALL BASE SALVAGED FROM DEMOLITION BACK INTO PLACE. 09.51.23.A RE- INSTALL CEILING GRID AND PANELS SALVAGED FROM DEMOLITION. CEILING WILL BE RE-INSTALLED IN SAME ROOM REMOVED FROM DURING DEMO. COORDINATE WITH ELECTRICAL FOR LIGHT FIXTURE LAYOUT. IF

2

NEEDED REPLACE DAMAGED PANELS WITH PANELS RESERVED FROM DEMOLITION OF ROOM 401. 10.14.05 RE-INSTALL EXISTING SIGNAGE. SIGNAGE WILL BE AT SAME HEIGHT AND SAME LOCATIONS AS PREVIOUS INSTALLATION. COORDINATE WITH ELECTRICAL PLANS.

KEYNOTES

10.28.04

RE-INSTALL ALL TOILET ACCESSORIES SALVAGED AND STORED DURING CONSTRUCTION BACK INTO PLACE. CONFIRM THAT ACCESSORY LOCATIONS MEET ADA REQUIREMENTS. REFER TO ENLARGED PLANS AND MOUNTING HEIGHT DIAGRAMS ON A610.

1

26.51.19.A ALL 2X4 LIGHTING SECURED TO STRUCTURE DURING DEMO TO BE PLACED BACK INTO GRID AS SHOWN ON PLANS. COORDINATE WITH ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

ш

Δ

U

ш _____

4

TEMPLATE 2021.A 1/25/2024 3:13:49 PM C:\Users\mjones\Documents\2.220318.0 - VCU SHR Reno - Arch R22_mjonesMJ99E.rvt

INTERIOR FINISH LEGEND

5

FINISH NO. MATERIAL		MANUFACTURER	STYLE NAME / NO.	COLOR	SIZE	DESCRIPTION / REMARKS
ACOUSTIC CI	EILING TILE		1	1		
ACT-01	ACOUSTIC CEILING TILE ROCKFON		EDUCATION STANDARD - SQUARE TEGULAR NARROW	WHITE	24X24	ROOM 401 NEW CEILING ONLY
ACT-EXIST	ACOUSTIC CEILING TILE	ETR	ETR	ETR	ETR	FOR PUT BACK IN PRIOR LOCATION
CARPET						
CPT-01	CARPET TILE	J&J FLOORING	ENERGY	7997		ETR. INSTALLATION - QUARTER TURN
CPT-02	BROADLOOM CARPET	J&J FLOORING	IMPULSE III	2433/8400		ETR. BROADLOOM FOR OFFICES
CPT-03	CARPET TILE	SHAW CONTRACT	DISPERSE 59576	NAVIGATION 75760	24X24	ROOM 401 ONLY. INSTALL - QUARTER TURN
	/1 TILE					
LVT-01		PATCRAFT	142IV TIMBER GROVE	07003 PERGOLA-V2	5.96" X 48"	ETR. PATCH AND REPAIR WITH NEW AS NEEDED.
PNT-01	PAINT	SHERWIN WILLIAMS	SW7056	RESERVED WHITE		GENERAL PAINT, EGGSHELL FINISH
PNT-02	PAINT	SHERWIN WILLIAMS	SW7006	EXTRA WHITE		DOOR FRAMES - SEMI GLOSS, CEILINGS - FLAT
PNT-03	PAINT	SHERWIN WILLIAMS	SW7106	HONIED WHITE		LEVEL 5 BREAK ROOM
PLASTIC LAM	IINATE					
PLAM-01	PLASTIC LAMINATE	FORMICA	NEUTRAL WEFT			ETR. BREAK AREA
PLAM-02	PLASTIC LAMINATE	FORMICA	WHITE SHALESTONE			ETR. 5TH FLOOR PANTRY
	F					
RB-01	RUBBER BASE	ROPPE	700 SERIES WALL BASE	197 ICEBERG	4" H CONTINUOUS ROLLED GOODS	ETR. GENERAL WALL BASE
RB-02	RUBBER BASE	ROPPE	700 SERIES WALL BASE	195 LIGHT GRAY	4" H CONTINUOUS ROLLED GOODS	ETR. RESTROOMS
RB-03	RUBBER BASE	ROPPE	700 SERIES WALL BASE	137 CINNABAR	4" H CONTINUOUS ROLLED GOODS	ETR. OFFICES
	KOBBER					ROPPE ENVIRE. FINAL PRODUCT TO BE CONFIRMED WITH OWNER PRIOR TO INSTALLATION
SMM-01	SOLID SURFACE MATERIAL	CORIAN		AURORA		ETR. BREAK AREA
			,			
		ARMSTRONG	IMPERIAL	51906 TEAL		NEW IN RESTROOMS

4

1. ALL FINISHES ARE EXISTING TO REMAIN AND SUBJECT TO DEMOLITION, SALVAGE, LABEL AND STORE FOR PUT BACK IN PRIOR LOCATION UNLESS OTHERWISE NOTED.

2. REFER TO PLANS FOR AREAS TO RECIEVE NEW FINISHES.

 PAINT REFINISHED GYP WALLS IN EGGSHELL FINISH TO MATCH ADJACENT EXISTING WALLS.
 PAINT GYP CEILING FLAT FINISH. 5. PAINT INTERIOR HM DOOR FRAMES WITH PNT-02 IN SEMI GLOSS FINISH UNLESS OTHERWISE

NOTED. 6. ALL MECHANCIAL/FIRE PROTECTION PIPING, CONDUIT, AND EQUIPMENT ON A PAINTED CEILING SHALL BE PAINTED TO MATCH CEILING COLOR, UON. DO NOT PAINT SPRINKLER HEADS.7. PROVIDE ADA COMPLIANT TRANSITION STRIPS WHERE DIFFERENT FLOOR MATERIALS MEET PER TYPICAL TRANSITION STRIP DETAILS. REUSE EXISTING TRANSITION STRIPS SALVAGED DURING DEMO WHERE POSSIBLE.

4

8. ALL FLOORING TRANSITIONS SHALL OCCUR AT CENTERLINE OF DOORS OR CENTER OF WALL OPENS, UON.

9. TRANSITION STRIPS TO MATCH HEIGHT OF ADJACENT FLOORING FINISH.

TRANSITION STRIP TO BE SALVAGED & REUSED -CPT RESILIENT FLOORING -EXISTING TRANSITION STRIP TO BE SALVAGED & REUSED — CPT CPT ------AMMAK MAMAMAK (A MAMAK (A CARAMARA) YAAMMA) YA WHERE NO LONGER POSSIBLE TO REUSE EXISTING

THE DETAILS BELOW CERAMIC TOOL CTV TRANSITION -

TRANSITION STRIP, REFER TO

FLOOR TRANSITIONS

3

EXISTING

5. ALL HM FRAMES TO BE FULLY WELDED, UNO. 6. OPENINGS IN LEAD LINED PARTITIONS SHALL RECIEVE LEAD LINED DOORS & FRAMES.

SINGLE PANEL

DOOR FRAMES AT INSULATED PARTITIONS SHALL RECEIVE INSULATION IN JAMB & HEAD CAVITY. 4. ALL FRAMES & ANCHORS TO BE INSTALLED ACCORDING TO FRAME MANUFACTURER'S INSTRUCTIONS.

1. PROVIDE EITHER WALL STOPS OR TRACK TYPE OVERHEAD STOPS AS REQUIRED. FLOOR STOPS ARE NOT ACCEPTABLE. DOORS SHOULD NOT BE UNDERCUT MORE THAN 3/4" ABOVE NEW FINISHED SURFACES.

AS SCHEDULED

107A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
108A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
109A	(2)F	6' - 0" x 7' - 0"	WD	STN	A	HM	PNT	SEE SPEC	180 DEGREE SWING AT DOUBLE DOORS
110A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
111A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
112A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
114A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
							- I I I		
2ND FLOOR P	LAN								
203A	F	2' - 10" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
205A	F	2' - 10" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
206A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
209A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
210A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
211A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
212A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
213A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
214A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
215A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
3RD FLOOR P	LAN								
303A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
305A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
308A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
309A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
310A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
311A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
312A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
313A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
314A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
315A	F	3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
4TH FLOOR P	LAN								
403A		3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
404A		3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
405A		3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
405AA		3' - 0" x 6' - 8"	WD	STN	EXIST	HM	PNT	EXIST	RE- USE EXIST. FRAME AND HARDWARE
406A		3' - 0" x 6' - 8"	WD	SIN	EXIST	HM	PNI	EXIST	RE- USE EXIST. FRAME AND HARDWARE
407A		3' - 0" x 6' - 8"	WD	SIN	EXIST	HM	PNI	EXIST	RE- USE EXIST. FRAME AND HARDWARE
408A		3' - 0" x 6' - 8"	WD	SIN	EXIST	HM	PNI	EXIST	RE- USE EXIST. FRAME AND HARDWARE
409A		3' - 0" x 6' - 8"	WD	SIN	EXIST	HM	PNI	EXIST	RE- USE EXIST. FRAME AND HARDWARE
410A		3' - 0" x 6' - 8"	WD	SIN	EXIST	HM	PNI	EXIST	RE- USE EXIST. FRAME AND HARDWARE
5TH FLOOR P		01 01 01 01		OTH	EVIOT		DUT	EVIOT	
503A		3' - U" X 6' - 8"	WD	SIN		HM		EXIST	
503A		$3 - 0 \times 0 - 8$	WD	SIN	EXIST			EXIST	
507A		$3 - 0 \times 0 - 8$		SIN	EXIST			EXIST	
A80C		$3 - 0 \times 0 - 8$	WD	SIN	EXIST			EXIST	
509A		$3 - U X 0 - \delta^{2}$			EVICT				
51UA E11A		$3 - 0 \times 0 - 0$			EVIOT				
510A		3-U X 0-0			EVICT				
512A		3' 0" x 6' 0"			EVIET				
513A		3'_0" x 6' 8"			EVICT				
515/		3'_0" v 6' 8"			EVICT			EVICT	
						1 1111	INI	LAIDT	
DOOR	SCH	IEDULE	NOTES	5					

FRAME

PNT

HM

 FRAME
 HARDWAR

 TYPE
 MATERIAL
 FINISH
 DETAIL
 E TYPE
 RATING

EXIST

1ST FLOOR PLAN

2

STN

EXIST

DOOR

DOOR NO. PANEL SIZE (WxH) MATERIAL FINISH

105A F 3' - 0" x 6' - 8" WD

1

COMMENTS

RE- USE EXIST. FRAME AND HARDWARE

- SCHEDULED PARTITION

- REINFORCE HEAD PER

- CONT. SEALANT EACH SIDE

PARTITION FRAMING

DETAILS

TOILET ACCI	ESSORY MOL	JNTING DIAC	GRAM (ANSI	2009 604)1	NOTE: EQUIPMENT	NDICATED IN DIAGRAM MA	Y OR MAY NOT BE US	ED ON THIS PROJE	CT. REFER TO EQUIPMENT	PLAN(S), INTER	IOR ELEVATIONS, ETC	. FOR LOCATION AND (QUANTITIES OF ITEMS. CO	NFIRM WITH OWNE	R ALL REQUIREMENTS F	FOR OWNER FURNISHED, CONTRACTOR INSTALLED (OFCI) ITEMS.
TOILET ACCESSORY#	<u>TA-1</u>	<u>TA-2</u>	<u>TA-3</u>	<u>TA-4</u>	<u>TA-5</u>	<u>TA-6</u>	<u>TA-7</u>	<u>TA-8</u>	<u>TA-9</u>	<u>TA-10</u>	<u>TA-11</u>	<u>TA-12</u>	<u>TA-13</u>	<u>TA-14</u>	<u>TA-15</u>	<u>TA-16</u>
ILLUSTRATION	39" - 41" 39" - 41" MIN	24" NIW	36" NIW	42" 	SE XFW	EAT DVER JRFACE	38" MAX			0 	48" MAX	48" MAX				
ACCESSORY ITEM	GRAB BAR - 18"	GRAB BAR - 24"	GRAB BAR - 36"	GRAB BAR - 42"	SEAT COVER DISPENSER	WALL MOUNTED SOAP DISPENSER	MIRROR	SHELF	НООК	WALL BUMP	PAPER TOWEL DISPENSER	COMBINATION PAPER TOWEL DISPENSER	SANITARY NAPKIN DISPOSAL UNIT	NOT USED	TOILET TISSUE DISPENSER	NOT USED
RESPONSIBILITY																
BLOCKING TYPE	C2	C2	C2	C2	A1	A1	C1		C1 (OR DOOR MOUNTED)	A1	A1	A2	A1		C1	A1
MANUFACTURER	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		ETR	
MODEL NUMBER	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		ETR	

PARTITION TYPE SCHEDULE

υ

В

	CONSTRUC	TION DATA	FIRE I	PARTITIONS		
TYPE FRAMING / CORE SIZE		OVERALL PARTITION WIDTH	RATING	UL DESIGNATION	STC RATING	
A4a						
A4a	Metal Stud	4 3/8"	UNKNOWN			

PARTITION TYPE DESIGNATIONS LEGEND

N/A N/A N/A 0 - .99" 1" - 1.99" N/A N/A 7/8" N/A 2" - 2.99" N/A 3" - 3.99" N/A N/A 3 5/8" 3 1/2" 3 5/8" 4" N/A N/A 4" - 4.99" 5" - 5.99" 6" - 6.99" <u>5 1/2" 5 5/8"</u> 7" - 7.99" N/A N/A N/A 8" - 8.99" N/A <u>7 1/4"</u> <u>7 5/8"</u> 9" - 9.99" N/A N/A N/A 10" - 10.99" N/A N/A <u>9 5/8"</u> N/A 11" - 11.99" N/A N/A 12" - 12.99" <u>11 5/8"</u> 12 N/A N/A

PARTITION TYPE

A = MTL STUD; DECK TO DECK; (1) LAYER GYP BD EA SIDE

PARTITION TYPE NOTES

- GENERAL INTERRUPTED BY ANOTHER SYMBOL.
- DELEGATED DESIGN
- MAXIMUM WITH AN ALLOWABLE DEFLECTION OF L/240. BLOCKING
- PROVIDE IMPALING CLIPS WHERE REQUIRED TO SUPPORT INSULATION FIRE BLOCKING.
- GRAB BARS, SHELVING, HANDRAILS, TOILET PARTITIONS, ETC. REF BLOCKING DIAGRAMS. CONTROL JOINTS
- PLANS. SEALANT
- STC RATED OR FIRE RATED ASSEMBLIES, AND ALL FULL-HEIGHT PARTITIONS. THICKNESS
- FINISH 1. ALL INTERIOR PARTITIONS SHALL RECEIVE BASE FINISH AS SCHEDULED, UNO. 2. AT PARTITIONS RECEIVING TILE FINISH, PROVIDE METAL STUD FRAMING IN ACCORDANCE WITH CURRENT TCNA "HANDBOOK FOR CERAMIC, GLASS, AND STONE TILE INSTALLATION".
- SCHEDULED TO RECEIVE CERAMIC TILE OR STONE. FOR OTHER WET APPLICATIONS (SHOWERS, ETC), USE CEMENTITIOUS TILE BACKER BOARDS.

THE PARTITION TYPE SCHEDULE INCLUDES ONLY NEW PARTITIONS WITHIN THE SCOPE OF WORK. PARTITION SYMBOL INDICATIONS ON FLOOR PLANS DESIGNATE THE ENTIRE LENGTH OF WALL INDICATED UNLESS

 ALL STUD SPACING SHALL BE 16" OC, UNO.
 WHERE STUD GAGES ARE INDICATED ON THIS SHEET, MIN GAGES ARE TO BE VERIFIED WITH MANUF STUD CHARTS.
 PROVIDE DOUBLED STUDS AROUND ALL DOOR, WINDOW OR CASED OPENINGS, UNO. 4. CONTRACTOR SHALL ENGAGE A QUALIFIED PROFESSIONAL ENGINEER TO DESIGN METAL STUD FRAMING PARTITIONS SUPPORTING WALL MOUNTED CASEWORK OR EQUIPMENT, AND PARTITIONS EXCEEDING 10'-0" IN HEIGHT. 5. NON-LOAD BEARING METAL STUD PARTITIONS THAT ARE 10'-0" HIGH OR LESS SHALL HAVE 20 GA (33 MIL) MIN STUDS AT 24" OC

1. PROVIDE FIRE BLOCKING FOR ALL PARTITIONS OPEN TO CEILING CAVITY. UTILIZE GYPSUM WALLBOARD WITH STEEL FRAMING WHERE SPACE IS TOO WIDE FOR SOLID STEEL OR INSULATION TYPE FIRE BLOCKING, UNLESS OTHERWISE INDICATED. 2. PROVIDE WOOD OR METAL BLOCKING FOR ALL WALL MOUNTED EQUIPMENT, INCLUDING BUT NOT LIMITED TO CASEWORK,

1. PROVIDE CONTROL JOINTS IN ALL GYPSUM WALLBOARD PARTITIONS AT 30'-0" OC MAXIMUM OR AS INDICATED ON FLOOR

1. PROVIDE CONTINUOUS SEALANT UNDER METAL TRACKS AND AT PERIMETER OF GYPSUM BOARD PANELS AT SMOKE RATED,

1. ALL GYPSUM BOARDS SHALL BE 5/8" THICK AND HELD OFF 1/2" FROM FLOOR SURFACE AND 1" OFF ROOF SURFACE, UNO.

3. SUBSTITUTE MOISTURE RESISTANT BOARD (PURPLE BOARD) FOR WET LOCATIONS (RESTROOMS, KITCHENS, ETC) OR WHERE

3ABACKFLOW PREVENTER - CLOSETA6101/2" = 1'-0"

4

□-- + –⊈‡⊒– 02.41.04.11 ______ ▲ → DRINKING FOUNTAIN DOOR OPERATED 08.11.13 PUSH-BUTTON 08.14.16

2

<u>TA-16</u>

KEYNOTES

08.31.13a

09.29.00a

09.65.14

09.65.19

10.13.00

10.28.04

02.41.04.01 CUT AND REMOVE PORTION OF DRYWALL, FULL HEIGHT AS INDICATED ON PLAN. STUD FRAMING, WALL INSULATION (IF ANY) TO REMAIN DURING CONSTRUCTION. REMOVE, SALVAGE, LABEL, AND STORE RUBBER WALL BASE FOR REUSE IN SAME LOCATION AFTER CONSTRUCTION. LOCATE, IDENTIFY AND PROTECT ALL ELECTRICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE OF DEMOLITION LIMITS. MAINTAIN ELECTRICAL SERVICE TO AREAS OUTSIDE OF DEMOLITION LIMITS. COORDINATE WITH ELECTRICAL PLANS. 02.41.04.05 REMOVE VINYL FLOORING IN ITS ENTIRETY. REMOVE ALL GLUES AND PREPARE SUBFLOOR AS REQUIRED TO RECEIVE NEW FLOOR FINISHES WHEN REPAIRS ARE COMPLETED. 02.41.04.10 REMOVE EXISTING DOOR AND DOOR FRAME. PROTECT AND SALVAGE

DOOR FRAME AND ALL HARDWARE FOR RE-USE. PATCH AND REPAIR OPENING FOR NEW DOOR AS SCHEDULED. REMOVE ALL TOILET ACCESSORIES WITHIN SCOPE OF DEMOLITION. STORE, SAVE AND RE-INSTALL IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. REFER TO ENLARGED TOILET PLANS ON A610. 02.41.04.12 REMOVE EXISTING SINK, FAUCET AND ASSOCIATED PIPING AND ACCESSORIES BACK TO WALL AND TEMPORARILY CAP FOR NEW SINK

AND FAUCET UNDER NEW WORK. LABEL AND STORE ALL SINKS, FAUCETS AND ASSOCIATED PIPING AND ACCESSORIES FOR PUT BACK IN PRIOR LOCATION UPON COMPLETION OF STRUCTURAL REPAIRS. REFER TO ENLARGED TOILET PLANS ON A610. 02.41.04.15 REMOVE AND SALVAGE FLOORING TRANSITION STRIPS FOR REUSE IN SAME LOCATIONS AFTER REPAIRS ARE COMPLETED. NEW WOOD DOOR IN EXISTING DOOR FRAME. REF. DOOR SCHEDULE.

RE-USE HARDWARE SAVED FROM DEMOLITION. RE-INSTALL DOOR FRAME SAVED FROM DEMOLITION, LEVEL AND PLUMB SO REVEAL AROUND DOOR IS EVEN. RE- USE EXISTING HARDWARE. 180 DEGREE DOOR SWING. SEE DOOR SCHEDULE FOR DETAILS PRIME AND PAINT TO MATCH EXISTING ADJACENT WALLS.

RE-INSTALL FLOORING TRANSITION STRIPS SALVAGED DURING DEMOLITION BACK INTO PLACE. REFER TO FLOOR TRANSITION DETAILS ON SHEET A600. RE-INSTALL WALL BASE SALVAGED FROM DEMOLITION. PROVIDE AND INSTALL NEW RESILIENT FLOORING, VCT-01. REFER TO FINISH

SCHEDULE. BACKFLOW PREVENTER SYSTEM. PROVIDE SUPPORTS FOR SYSTEM AS REQUIRED BY THE CROSS CONNECTION AND BACKFLOW PREVENTION MANUAL. SEE MECHANICAL DRAWINGS FOR DETAILS RE-INSTALL ALL TOILET ACCESSORIES SALVAGED AND STORED DURING

CONSTRUCTION BACK INTO PLACE. CONFIRM THAT ACCESSORY LOCATIONS MEET ADA REQUIREMENTS. REFER TO ENLARGED PLANS AND MOUNTING HEIGHT DIAGRAMS ON A610.

RESOLVED. GBC-3: NO LOADS IN EXCESS OF THE DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION, UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE LOADS.

GBC-5: ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS. <u>GBC-6:</u> THE CONTRACTOR SHALL ABIDE AND BE HELD IN STRICT COMPLIANCE TO OSHA AND ALL OTHER APPLICABLE RULES AND REGULATIONS.

<u>GBC-7:</u> MATERIAL STORAGE, STAGING, ETC. ARE <u>NOT</u> PERMITTED ON SHORED AREAS UNLESS NOTED OTHERWISE GBC-8: ALTERATIONS TO THE EXISTING BUILDING DO NOT INCREASE THE DEMAND/CAPACITY RATIO OF ANY EXISTING STRUCTURAL LATERAL FORCE RESISTING ELEMENT BY MORE THAN 10%; THEREFORE, AN ENGINEERING EVALUATION AND ANALYSIS OF THE ALTERED EXISTING STRUCTURE IS NOT REQUIRED.

STRUCTURAL MEMBERS.

DL-2: LIVE LOADS LIVE LOADS (1989 RENOVATION)

SNOW (STAIR AND FI EVATOR SHAFT) WIND OFFICE CORRIDOR CORRIDOR CONFEREN

STAIRS LIVE LOADS OFFICE CORRIDORS

P_a=20 PSF (GROUND SNOW) C_t=1.0 (THERMAL FACTOR)

DL-4: WIND LOADS $V_{asd} = 89 \text{ MPH}$ EXPOSURE B K_{zt}=1.0 (TOPOGRAPHIC FACTOR)

GC_{pi}=±0.18 (PARTIALLY OPEN BUILDING) DL-5: SEISMIC LOADS

S_s=24.0%G S1=5.6%G F_a=1.6 F_v=2.4

OFFICE

◄

GENERAL STRUCTURAL NOTES

GENERAL/BUILDING CODE

<u>GBC-1:</u> ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE **2018 VIRGINIA UNIFORM STATEWIDE** BUILDING CODE (VUSBC), EFFECTIVE JULY 1, 2021.

4

A. NEW CONSTRUCTION - PART 1 OF VUSBC - "VIRGINIA CONSTRUCTION CODE"

B. RENOVATION/ ALTERATION - **PART II OF THE VUSBC - "VIRGINIA EXISTING BUILDING CODE"**

CLASSIFICATION OF WORK FOR THIS PROJECT = ALTERATION LEVEL 2

GBC-2: THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS, DIMENSIONS, SECTIONS, AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO INSTALLING TEMPORARY SHORING AND PERFORMING JACKING OPERATIONS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO DUNBAR IN ORDER THAT THE CONDITION MAY BE

<u>GBC-4:</u> THE ENGINEER SHALL NOT HAVE THE AUTHORITY OR RESPONSIBILITY TO SUPERVISE OR DIRECT THE CONSTRUCTION WORK.

EXISTING CONSTRUCTION

<u>EC-1:</u> INFORMATION REGARDING STRUCTURAL MEMBERS INDICATED TO BE EXISTING WAS OBTAINED DURING LIMITED FIELD OBSERVATIONS AND FROM LIMITED AVAILABLE EXISTING DRAWINGS. ACTUAL CONDITIONS MAY DIFFER FROM THAT WHICH IS INDICATED. IF THE CONTRACTOR UNCOVERS EXISTING CONDITIONS THAT DIFFER FROM THAT WHICH IS INDICATED ON PLAN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD OF THE DISCREPANCY IN ORDER THAT THE CONDITION MAY BE RESOLVED.

<u>EC-2:</u> FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE FABRICATION AND CONSTRUCTION OF ANY NEW STRUCTURAL MEMBERS. AT ALL LOCATIONS WHERE NEW ROOFS AND FLOORS ADJOIN EXISTING ROOFS AND FLOORS, EMPLOY A LICENSED SURVEYOR TO VERIFY EXISTING DIMENSIONS, FLOOR ELEVATIONS, AND FLOOR-TO-FLOOR HEIGHTS BEFORE ORDERING, DETAILING, FABRICATING, OR ERECTING ANY NEW

EC-3: EXISTING CONSTRUCTION IS DENOTED USING SLANTED LETTERING, PHANTOM LINETYPE (DASH DOUBLE DOT), AND HALFTONE.

SPECIAL INSPECTIONS

SI-1: SPECIAL INSPECTIONS ARE REQUIRED BY THE BUILDING CODE (CHAPTER 17). REFER TO SECTION 014000 OF THE SPECIFICATIONS FOR THE GENERAL INSPECTION REQUIREMENTS. THE FOLLOWING IS A LIST OF ITEMS THAT REQUIRE SPECIAL INSPECTION. REFER TO THE REFERENCED SPECIFICATION SECTION FOR THE SPECIFIC REQUIREMENTS FOR EACH ITEM.

A. ROUGH CARPENTRY

SECTION 061000

DESIGN LOADS AND PARAMETERS

<u>DL-1: BUILDING RISK CATEGORY</u> (TABLE 1604.5) = CATEGORY II

THE FOLLOWING DESIGN LIVE LOADS WERE OBTAINED FROM 1989 STRUCTURAL DRAWINGS BY SAINT CLAIR, CALLOWAY AND FRYE STRUCTURAL ENGINEERS DATED DECEMBER 28, 1989:

R AND ELEVATOR SHAFT) (1ST FLOOR) S (ABOVE FIRST FLOOR)	20 PSF 80 MPH 50 PSF 100 PSF 80 PSF	(1989 RENOVATION DESIGN LOAD) (1989 RENOVATION DESIGN LOAD) (1989 RENOVATION DESIGN LOAD) (1989 RENOVATION DESIGN LOAD) (1989 RENOVATION DESIGN LOAD)
	100 PSF 100 PSF	(1989 RENOVATION DESIGN LOAD) (1989 RENOVATION DESIGN LOAD)
<u>(CURRENT RENOVATION):</u> TION LIVE LOAD	20 PSF	
S (ABOVE FIRST FLOOR)	50 PSF 80 PSF	(REFER TO NOTE <u>DL-6)</u> (REFER TO NOTE <u>DL-6</u>)

DL-3: SNOW LOADS

Ce=1.0 (SNOW EXPOSURE FACTOR)

Is=1.0 (SNOW LOAD IMPORTANCE FACTOR: ASCE 7-16 TABLE 1.5-2)

P_f (SNOW LOAD FOR LOW-SLOPE ROOF)=0.7X(C_e)X(C_t)X(I_s)X(P_a) = 0.7X1.0X1.0X1.0X20 = 14.0 PSF RAIN-ON-SNOW SURCHARGE (LOW-SLOPE ROOFS ONLY WHERE Pg<= 20 PSF)= 5.0 PSF

TOTAL (LOW-SLOPE ROOF) = 14.0 PSF + 5.0 PSF = 19.0 PSF MINIMUM P_f (LOW-SLOPE ROOF WHERE $P_g \le 20.0 \text{ PSF}$) = $P_m = (P_g)X(I_s) = 20.0X1.0 = 20.0 \text{ PSF}$ (USE 20 PSF MINIMUM)

V=115 MPH (BUILDING RISK CATEGORY: II) (BASIC WIND SPEED: 3-SECOND GUST)

K_d=0.85 (WIND DIRECTIONALITY FACTOR)

K_e=1.0 (GROUND ELEVATION FACTOR)

WIND LOAD DETERMINATION BY: ASCE 7-16, CHAPTERS 26, 27, 29, 30 (DIRECTIONAL PROCEDURE)

I₂=1.0 (ASCE 7-16 TABLE 1.5-2) SEISMIC SITE CLASS = D (ASSUMED)

> $S_{ms}=(F_a)X(S_s)=(1.6)X(24.0) = 38.4\%G$ $S_{m1}=(F_v)X(S_1)=(2.4)X(5.6) = 13.4\%G$ $S_{ds}=(2/3)X(S_{ms})=25.6\%G$

 $S_{d1}=(2/3)X(S_{m1})=8.9\%G$ SEISMIC DESIGN CATEGORY = B

BASIC STRUCTURAL SYSTEM: BEARING WALL SYSTEMS

SEISMIC- FORCE- RESISTING SYSTEM: ORDINARY PLAIN MASONRY SHEAR WALLS

R= (RESPONSE MODIFICATION FACTOR) = 1.5 Ω_{0} = (SYSTEM OVERSTRENGTH FACTOR) = 2.5 C_d= (DEFLECTION AMPLIFICATION FACTOR) = 1.25

THIS WORK DOES NOT ALTER OR IMPACT THE EXISTING LATERAL FORCE RESISTING SYSTEM.

DL-6: THE ORIGINAL 1910 APARTMENT BUILDING WAS RENOVATED INTO AN OFFICE BUILDING IN 1989. THE

STRUCTURAL ENGINEER OF RECORD FOR THIS RENOVATION WAS SAINT CLAIR, CALLOWAY AND FRYE STRUCTURAL ENGINEERS. IT IS DUNBAR'S OPINION THAT THE 1989 STRUCTURAL DESIGN REMAINS UNCHANGED FOR THE CURRENT RENOVATION AND THAT THE EXISTING FLOOR FRAMING REMAINS STRUCTURALLY ADEQUATE TO SUPPORT THE DESIGN LIVE LOADS LISTED BELOW: 50 PSF

CORRIDORS (ABOVE 1ST FLOOR)
 80 PSF

TEMPORARY SHORING/ BRACING SUBMITTAL

SH-1: PROVIDE TEMPORARY SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT. SETTLEMENT. OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN. AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. WHERE SHORING AND BRACING MEMBERS ARE NOT SPECIFICALLY SPECIFIED, SHORING MEMBERS SUPPORTING CONSTRUCTION TO REMAIN SHALL BE DESIGNED TO L/480 DEFLECTION CRITERIA FOR TOTAL LOAD SUPPORTED. PROVIDE ANALYSIS DATA FOR ALL SHORING AND BRACING NOT SPECIFICALLY SPECIFIED, SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER. REGISTERED IN THE JURISDICTION OF THE PROJECT. RESPONSIBLE FOR THEIR PREPARATION. SUBMIT PRODUCT DATA FOR SHORING AND BRACING MEMBERS.

CONCRETE

<u>C-1:</u> ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

CONCRETE	PROJECT	EXPOSURE	CONC	<u>MIN F'c</u>	MAX W/CM	<u>AIR</u>
CLASS	LOCATION	CLASS	WT	(PSI)	RATIO	<u>CONTENT</u>
A	INTERIOR SOG	F0	NW	3500	NA	<u>≤</u> 3.0%

C-2: SCOPE OF CONCRETE WORK INCLUDES MECHANICAL EQUIPMENT HOUSEKEEPING PADS IN THE BASEMENT C-3: STEEL REINFORCING OF CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS.

ASTM A615 GRADE 60 (TYPICAL REINFORCING STEEL) ASTM A1064 (PLAIN WELDED WIRE FABRIC - USE FLAT SHEETS ONLY) •

STRUCTURAL MASONRY

M-1: ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF TMS 402/602-16 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES."

ASTM C90 (BLOCK) ASTM C270 (MORTAR) - TYPE S (CMU) ASTM C476 (GROUT) - 2000 PSI MINIMUM COMPRESSIVE STRENGTH • f'_m=2000 PSI

STRUCTURAL STEEL

SS-1: ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC 360-16 "SPECIFICATION" FOR STRUCTURAL STEEL BUILDINGS".

ASTM A36 (ANGLES, PLATE, AND BAR) $F_v = 36 \text{ KSI}$ E70XX (SMAW PROCESS WELDING)

SS-2: ALL FIELD WELDING TO EXISTING STRUCTURAL STEEL SHALL COMPLY WITH AISC AND AWS D1.1 FOR WELDING PROCEDURES TO EXISTING STEEL. EXISTING STEEL SHALL BE PROPERLY PRE-HEATED AND ALLOWED TO COOL DOWN BETWEEN PASSES TO LIMIT STEEL BEAM DISTORTION. ALL UNDERCUTS, NOTCHES, AND GOUGES SHALL BE FILLED AND GROUND OUT. ALL EXISTING STEEL SHALL BE CLEANED TO REMOVE ALL RUST, FIREPROOFING, PAINT OR CONTAMINANTS TO EXPOSE BARE METALS FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF WELD. EXISTING STEEL BEAMS SHALL BE TEMPORARILY SHORED AS REQUIRED DURING FIELD WELDING PROCESS.

ROUGH CARPENTRY

RC-1: ALL ROUGH CARPENTRY SHALL CONFORM TO THE REQUIREMENTS OF THE NDS-2018 "NATIONAL DESIGN SPECIFICATIONS (NDS) FOR WOOD CONSTRUCTION WITH 2018 SUPPLEMENT".

RC-2: PROVIDE NO. 2 SOUTHERN PINE WITH 19% MAXIMUM MOISTURE CONTENT FOR ALL FRAMING LUMBER INCLUDING, LINTELS, JOISTS, RAFTERS, AND BEAMS UNLESS NOTED OTHERWISE, WALL STUDS AND PLATES MAY BE S-P-F No. 1 / 2 UNO ON PROJECT SPECIFIC DETAILS AND NOTES.

<u>RC-3</u> ALL FRAMING CONNECTIONS NOT SPECIFICALLY INDICATED ON THESE CONSTRUCTION DOCUMENTS SHALL COMPLY WITH THE MINIMUMS ESTABLISHED BY TABLE 2304.10.1 OF THE VUSBC.

RC-4: ALL NAILED CONNECTIONS (OF TWO 2x MEMBERS) SPECIFICALLY INDICATED ON THESE CONSTRUCTION DOCUMENTS ARE ASSUMED TO BE DONE USING A MINIMUM NAIL SIZE OF 0.131" DIAMETER x 3" LONG UNLESS NOTED OTHERWISE.

RC-5: ALL COLD-FORMED STEEL PRE-FORMED CONNECTORS SHALL BE INSTALLED USING THE NUMBER OF NAILS AND NAIL TYPE LISTED FOR THAT CONNECTOR BY THE MANUFACTURER IN THEIR PUBLISHED LITERATURE. ALL NAILS LISTED AS 1 1/2" LONG SHALL BE MADE BY THE MANUFACTURER OF THAT CONNECTOR. HANGERS OR CONNECTORS USED WITH PRESSURE TREATED LUMBER SHALL HAVE G185 MINIMUM ZINC COATING (I.E. SIMPSON ZMAX G185).

<u>RC-6:</u> PROVIDE A MINIMUM OF THREE INCHES OF BEARING FOR ENGINEERED LUMBER BEAMS, UNLESS OTHERWISE NOTED.

RC-7: ALL BEAMS SHALL BE LATERALLY SUPPORTED BY BLOCKING OR OTHER MEANS AT ALL POINTS OF BEARING. <u>*RC-8:*</u> NAILS INSTALLED PARALLEL TO THE GLUE LINES ON THE NARROW FACE OF ENGINEERED LUMBER BEAMS SHALL NOT BE SPACED CLOSER THAN FOUR INCHES FOR 10d COMMON NAILS AND THREE INCHES FOR 8d COMMON NAILS.

RC-9: DO NOT DRILL, NOTCH, CUT (EXCEPT TO LENGTH), OR ALTER ENGINEERED LUMBER BEAMS OR JOISTS WITHOUT WRITTEN APPROVAL OF FABRICATOR AND REVIEW BY STRUCTURAL ENGINEER.

800 PSI 475 PSI

750 PSI 450 PSI

RC-10: THE FOLLOWING ALLOWABLE STRESSES WERE USED IN DESIGN OF WOOD FRAMING MEMBERS. NO.1/NO.2 SPRUCE-PINE-FIR:

F _b = Ft = F _v = F _{C⊥} = F _C = E = 1	875 PSI 450 PSI 135 PSI 425 PSI 1,150 PSI ,400.000 PSI		
NO.2 SOUTHERI	N PINE:		
2"-4" WIDE 5"-6" WIDE 8" WIDE	F₀ 1,100 PSI 1,000 PSI 925 PSI	F _C 675 PSI 600 PSI 550 PSI	F _∨ 175 PSI 175 PSI 175 PSI

POST-INSTALLED ANCHORS

10" WIDE

12" WIDE

PA-1: ALL POST-INSTALLED ANCHORS (IN CONCRETE OR CMU) ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING BUT NOT LIMITED TO DRILL BIT SIZE, PROPER CLEANING OF HOLES, INSTALLATION TORQUE, AND TEMPERATURE CONSTRAINTS).

175 PSI

175 PSI

PA-2: WHEN A SPECIFIC PRODUCT AND MANUFACTURER IS REFERENCED IN THE CONTRACT DOCUMENTS. THAT SPECIFIC PRODUCT SHALL BE USED UNLESS AN ALTERNATE PRODUCT IS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CODE COMPLIANT STRENGTH DESIGN CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC - ES REPORT SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES. LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

PA-3: THE ANCHOR MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT DURING THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR TO REVIEW AND APPROVE OF THE CONTRACTOR'S INSTALLATION PROCEDURES. SUBMIT REPORT FROM MANUFACTURER'S REPRESENTATIVE FOR DUNBAR REVIEW. INSTALLATION OF ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR APPROVED EQUIVALENT. SUBMIT CREDENTIALS OF CERTIFIED INSTALLERS. CONTINUOUS INSPECTION IS REQUIRED FOR ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS. REMOVE AND REPLACE MISPLACED OR MALFUNCTIONING ANCHORS FILL EMPTY ANCHOR HOLES AND PATCH FAILED ANCHOR LOCATIONS WITH HIGH-STRENGTH, NONMETALLIC GROUT.

PA-4: FASTENERS REFERRED TO AS "SCREW ANCHOR" ON THE DRAWINGS SHALL BE ONE OF:

 TITEN HD BY SIMPSON STRONG-TIE KWIK HUS-EZ (KH-EZ) BY HILTI

SCREW-BOLT+ BY DEWALT

FOR THESE SCREW ANCHORS LISTED, USE STANDARD ANSI DRILL BIT (NO SPECIAL BIT REQUIRED). PROVIDE HOLES IN STEEL MEMBERS 1/8" LARGER THAN NOMINAL DIAMETER OF ANCHOR. PROVIDE STD ZINC-PLATED CARBON STEEL ANCHOR UNLESS MECHANICAL GALVANIZED FINISH OR STAINLESS STEEL ANCHOR IS INDICATED ON DRAWINGS.

POST-INSTALLED ANCHORS (CONTINUED)

PA-5: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN HOLLOW MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

 HIT-HY 270 BY HILTI SET XP SYSTEM BY SIMPSON STRONG-TIE

AC100+ GOLD BY DEWALT

USE SCREEN TUBES BY THE SAME MANUFACTURER WHEN USING THESE ADHESIVES IN MASONRY WITH VOIDS OR HOLLOW CMU. INSTALL USING DRILL IN ROTATION-ONLY MODE TO KEEP FROM DAMAGING INSIDE OF FACE SHELL.

PA-6: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN SOLID OR GROUTED MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

- SET XP BY SIMPSON STRONG TIE HIT-HY 270 BY HILTI
- AC100+ GOLD BY DEWALT

PA-7: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN CONCRETE GENERICALLY REFERRED TO AS "ADHESIVE ANCHORS" SHALL BE ONE OF :

- SET 3G BY SIMPSON STRONG-TIE HIT-RE 500-V3 BY HILTI
- HIT-HY 200-V3 BY HILTI PURE 110+ BY DEWALT AC 200+ BY DEWALT

THREADED ROD ANCHORS USED WITH THESE SYSTEMS SHALL BE PROVIDED BY THE ADHESIVE MANUFACTURER AND HAVE A MINIMUM STEEL STRENGTH OF $F_v = 36$ KSI UNLESS NOTED OTHERWISE.

PA-8: CHEMICAL ADHESIVE ANCHOR SYSTEMS FOR USE WITH REINF STEEL IN CONCRETE SHALL BE ONE OF:

 SET-3G BY SIMPSON STRONG-TIE HIT-RE 500-V3 BY HILTI HIT-HY 200 BY HILTI

UNLESS NOTED OTHERWISE, REINFORCING STEEL USED WITH THESE SYSTEMS SHALL BE ASTM A615 GRADE 60.

- PA-9: FASTENERS REFERRED TO AS "EXPANSION ANCHORS" OR "WEDGE ANCHORS" SHALL BE ONE OF:
- KWIK BOLT 1 (KB1) BY HILTI STRONG-BOLT 2 BY SIMPSON STRONG-TIE
- POWER- STUD+SD2 BY DEWALT, POWER-STUD+SD6 BY DEWALT (STAINLESS) KWIK BOLT TZ2 (KB-TZ2) BY HILTI

WHEN STAINLESS STEEL ANCHOR IS CALLED OUT, PROVIDE TYPE 316. IF KB-TZ2 PRODUCT IS CALLED OUT SPECIFICALLY ON SECTIONS AND DETAILS, ANY PROPOSED SUBSTITUTIONS REQUIRE AN ENGINEERED SOLUTION INDICATING A LARGER QUANTITY OF ANCHORS REQUIRED TO PROVIDE THE SAME CAPACITY AS THE SPECIFIED PRODUCT.

PA-10: FASTENERS GENERICALLY REFERRED TO AS "CONCRETE/MASONRY SCREWS" SHALL BE ONE OF:

TITEN TURBO BY SIMPSON STRONG-TIE KWIK-CON II+ BY HILTI

TAPPER+ BY DEWALT

<u>PA-11:</u> ANCHORS OR REINFORCING STEEL SHALL BE INSTALLED ONLY IN DRY CONCRETE A MINIMUM OF 21 DAYS OLD. DRILL AND INSTALL BY ONE OF THE FOLLOWING METHODS:

- USE ONLY A CARBIDE BIT (NO CORE DRILLING) AND CLEAN HOLE FOLLOWING MANUFACTURER'S INSTRUCTIONS USING AIR COMPRESSOR WITH NOZZLE AND WIRE BRUSH PROVIDED BY ADHESIVE
- MANUFACTURER. USE HOLLOW DRILL BIT SYSTEM WITH ACCOMPANYING VACUUM PROVIDED BY THE ADHESIVE MANUFACTURER.

FOR ADHESIVE ANCHORS, OVERHEAD HOLES AND ANY HOLES GREATER THAN 10 INCHES DEEP REQUIRE THE USE OF A PISTON PLUG AT THE END OF THE ADHESIVE APPLICATOR. USE ADHESIVE RETAINING CAP AT OVERHEAD CONDITIONS.

PA-12: FASTENERS GENERICALLY REFERRED TO AS "PAF" (POWER ACTUATED FASTENERS) SHALL BE ONE OF : PAF INTO CONCRETE OR STRUCTURAL STEEL

	ANCHOR	MANUF	SHANK DIAMETER
1.	X-U	HILTI	0.157"
2.	8 mm HEAD SPIRAL CSI PIN	DEWALT FASTENERS	0.157"
3.	PDPA	SIMPSON	0.157"

USE ONLY HILTI X-U PAF IN STRUCTURAL STEEL GREATER THAN 1/2" THICK. 1/2" MINIMUM POINT PENETRATION IS REQUIRED IN STRUCTURAL STEEL GREATER THAN 1/2" THICK.

PROVIDE MINIMUM 1 1/4" EMBEDMENT OF PAF INTO CONCRETE.

PA-13: OTHER MANUFACTURER'S PRODUCTS MAY BE SUBMITTED AS A FORMAL REQUEST FOR SUBSTITUTION IF REQUIREMENTS ABOVE ARE MET. SIZES AND EMBEDMENTS OF SUBSTITUTE ANCHORS SHALL BE INCREASED AS NECESSARY TO ACHIEVE SHEAR AND TENSION VALUES PUBLISHED FOR LISTED ANCHORS. CONTRACTOR SHALL SUBMIT A COMPLETE SUBSTITUTION LIST FOR ALL ANCHOR SIZES AND SUBSTRATES. DUE TO HIGH VARIABILITY BETWEEN NOMINAL SIZES AND ACTUAL SIZES OF SCREW ANCHORS (AND HOLES REQUIRED), THIS SUBSTITUTION REQUEST SHALL BE SUBMITTED PRIOR TO STEEL SHOP DRAWINGS. ANY PRODUCTS SUBMITTED AS A REQUEST FOR SUBSTITUTION IN CONCRETE SHALL BE COMPLIANT WITH ACI 318-14 CHAPTER 17 AND APPROVED FOR USE IN CRACKED CONCRETE. PROPOSED SUBSTITUTE PRODUCTS SHALL HAVE AN ICC-ES REPORT WHICH CONSIDERS EQUIVALENT EDGE AND SPACING REQUIREMENTS AS THE SPECIFIED PRODUCTS.

ABBREVIATIONS

- AB = ANCHOR BOLT
- AFF = ABOVE FINISHED FLOOR APC = ARCHITECTURAL PRECAST CONCRETE
- ARCH = ARCHITECTURAL BLDG = BUILDING
- BM = BEAM BOT = BOTTOM
- BRG = BEARINGCANT = CANTILEVEF
- CFS-S = COLD-FORMED STEEL- STRUCTURAL
- CFS-NS= COLD-FORMED STEEL- NON STRUCTURAL CFST = COLD-FORMED STEEL TRUSS
- CIP = CAST-IN-PLACE CJ = CONTROL JOINT
- CL = CENTERLINE CLG = CEILING
- CLR = CLEAR
- CLSM = CONTROLLED LOW-STRENGTH MATERIAL CMU = CONCRETE MASONRY UNIT
- COL = COLUMNCONC = CONCRETE
- CONN = CONNECTION
- CONT = CONTINUOUS COORD = COORDINATE
- CSP = CONCRETE SURFACE PROFILE DBA = DEFORMED BAR ANCHOR
- DET = DETAIL DFT = DRY FILM THICKNESS
- DIA = DIAMETER DIAG = DIAGONAL
- DIM = DIMENSION DL = DEAD LOAD
- DN = DOWN DWGS= DRAWINGS
- EA = EACH
- EJ = EXPANSION JOINT EL = ELEVATION
- ELEV = ELEVATOREOS = EDGE OF SLAB
- EQ = EQUAL EQUIP = EQUIPMENT
- EXIST = EXISTING
- EW = EACH WAY EXP = EXPANSION
- EXT = EXTERIORFFE = FINISHED FLOOR ELEVATION
- FLR = FLOOR FLT = FLAT BAR
- FRT = FIRE RETARDANT TREATED FTG = FOOTING
- GA = GAUGE
- GALV = GALVANIZED GC = GENERAL CONTRACTOR
- GT = GIRDER TRUSS HK = HOOK
- HORIZ = HORIZONTAL HS = HIGH STRENGTH

HТ	_	HEIGHT
	_	
IINT	=	INTERIOR
.IRF	_	JOIST BEARING ELEVATION
UDC IT	_	
JI	=	JOINT
I BS	=	POUNDS
	_	
LL	=	LIVE LOAD
LLH	=	LONG LEG HORIZONTAL
11.1	_	
	=	LONGLEG VENTICAL
LSH	=	LONG SIDE HORIZONTAL
LSV	_	LONG SIDE VERTICAL
	-	
LVL	=	LAMINATED VENEER LUMBER
I W	=	LIGHT WEIGHT
IVIA5	=	MASONRY
MAX	=	MAXIMUM
	_	
	=	
MFR	=	MANUFACTURER
MISC	_	
	-	
MIN	=	MINIMUM
INC1	=	NON-COMPOSITE
NO.	=	NUMBER
NIC	=	NOT IN CONTRACT
NTS	_	NOT TO SCALE
	-	NOTIO JUAL
NW	=	NORMAL WEIGHT
00	=	ON CENTER
UPP	=	OPPOSITE
OH	=	OPPOSITE HAND
0000	=	OFEN WED STEEL JOIST
PAF	=	POWDER ACTUATED FASTENE
PI	_	ρίατε
	-	
PLF	=	POUNDS PER LINEAR FOOT
POJ	=	PLANE OF JOIST
гог	=	FUUNDS FER SQUARE FUUT
PSI	=	POUNDS PER SQUARE INCH
REE	_	REFERENCE
	. –	
REINF	. =	REINFORCING
REOD	-	REQUIRED
OFOT	_	CECTION
SECT	=	SECTION
SIM	=	SIMILAR
202	_	
300	=	
SPA	=	SPACE
STD	_	STANDARD
	-	
SHFF	=	SHFFENER
TBE	=	TRUSS BEARING ELEVATION
TOD		
	=	
T&G	=	TONGUE AND GROOVE
TOR	_	ΤΟΡ ΟΕ ΒΕΑΜ
TOD	-	
TOC	=	TOP OF CONCRETE
TOS	=	TOP OF STEEL
	-	
	=	
UNO	=	UNLESS NOTED OTHERWISE
	_	VERTICAL
	-	
WCJ	=	WALL CONTROL JOINT
WΤ	=	WEIGHT
	=	WELDED WIKE FABRIG
(H)	=	HIGH
àí	_	
(L)	=	

3

[

4

- C

- ш

- A

6

- 5 4

- 2. REFERENCE DRAWING S301 FOR TYPICAL SHORING DETAILS.
- 3. FLOOR LIVE LOADING USED FOR DESIGN:

ONCE FINISHES ARE REMOVED.

- 20 PSF CONSTRUCION LOAD TYPICAL UNO
- 4. ALL LUMBER SHOWN SHALL BE NO. 2 SOUTHERN PINE.
- 5. PERIODICALLY INSPECT SHORING FOR DAMAGE OR MOVEMENT. 6. FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE FABRICATION AND CONSTRUCTION OF ANY NEW
- STRUCTURAL MEMBERS. 7. EXISTING STRUCTURAL INFORMATION SHOWN ON THESE DRAWINGS IS FROM ORIGINAL 1910 DRAWINGS, 1989 SCHERER HALL RENOVATION DRAWINGS AND FIELD OBSERVATIONS. FIELD VERIFY ACTUAL CONDITIONS THAT AFFECT THE WORK

2

2

1

◄

6

5

4

2ND FLOOR EXISTING SPOT ELEVATIONS PLAN

EXISTING 2ND FLOOR ELEVATION = (+11'-9" ±) MEASURED RELATIVE TO EXISTING 1ST FLOOR 1. ELEVATION (+0'-0").

- 2. EXISTING SPOT ELEVATIONS SHOWN ARE INDICATED THUS $\pm X' X''$ RELATIVE TO REFERENCE FINISH FLOOR ELEVATION = 0'-0" AT SOUTH END OF THE CORRIDOR.
- EXISTING SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND FOR REFERENCE ONLY. 3 CONTRACTOR SHALL FIELD VERIFY EXISTING FLOOR ELEVATIONS.

2A

S102 1/4"=1'-0"

N(+)

 \bigvee

4. THE CONTRACTOR SHALL KEEP AN AS-BUILT RECORD OF NEW ELEVATIONS FOR THE FINAL LEVELING THAT CORRESPOND TO EACH OF THE EXISTING SPOT ELEVATIONS BY DUNBAR THAT ARE SHOWN ON THE EXISTING SPOT ELEVATIONS PLAN.

3RD FLOOR EXISTING SPOT ELEVATIONS PLAN ЗA

N(+)

 ∇

S103

1/4"=1'-0

EXISTING 3RD FLOOR ELEVATION = (+23'-0" ±) MEASURED RELATIVE TO EXISTING 1ST FLOOR 1. ELEVATION (+0'-0").

- 2. EXISTING SPOT ELEVATIONS SHOWN ARE INDICATED THUS $\pm X' X''$ RELATIVE TO REFERENCE FINISH FLOOR ELEVATION = 0'-0" AT SOUTH END OF THE CORRIDOR.
- EXISTING SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY EXISTING FLOOR ELEVATIONS. 3
- 4. THE CONTRACTOR SHALL KEEP AN AS-BUILT RECORD OF NEW ELEVATIONS FOR THE FINAL LEVELING THAT CORRESPOND TO EACH OF THE EXISTING SPOT ELEVATIONS BY DUNBAR THAT ARE SHOWN ON THE EXISTING SPOT ELEVATIONS PLAN.

◄

6

5

4

4TH FLOOR EXISTING SPOT ELEVATIONS PLAN 4A

 \bigvee

S104 1/4"=1'-0"

- EXISTING 4TH FLOOR ELEVATION = (+34'-2 1/2" ±) MEASURED RELATIVE TO EXISTING 1ST FLOOR 1. ELEVATION (+0'-0").
- 2. EXISTING SPOT ELEVATIONS SHOWN ARE INDICATED THUS $\pm X' X''$ RELATIVE TO REFERENCE FINISH FLOOR ELEVATION = 0'-0" AT SOUTH END OF THE CORRIDOR.
- EXISTING SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY EXISTING FLOOR ELEVATIONS. 3
- 4. THE CONTRACTOR SHALL KEEP AN AS-BUILT RECORD OF NEW ELEVATIONS FOR THE FINAL LEVELING THAT CORRESPOND TO EACH OF THE EXISTING SPOT ELEVATIONS BY DUNBAR THAT ARE SHOWN ON THE EXISTING SPOT ELEVATIONS PLAN.

THAT AFFECT THE WORK ONCE FINISHES ARE REMOVED.

4

5

4

6

- EXISTING SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY EXISTING FLOOR ELEVATIONS.
- 4. THE CONTRACTOR SHALL KEEP AN AS-BUILT RECORD OF NEW ELEVATIONS FOR THE FINAL LEVELING THAT CORRESPOND TO EACH OF THE EXISTING SPOT ELEVATIONS BY DUNBAR THAT ARE SHOWN ON THE EXISTING SPOT ELEVATIONS PLAN.

SHORING / JACKING NOTES

6

- 1. SHORING / JACKING SHOWN ON THESE DRAWINGS IS REQUIRED DUE TO UNLEVEL FLOORS 2-5 THAT HAVE SAGGED BEYOND AN ACCEPTABLE LEVEL AS SHOWN ON THE EXISTING SPOT ELEVATION PLANS.
- THE ORIGINAL DRAWINGS, DATED JANUARY 1910, INDICATE IT WAS AN APARTMENT BUILDING. IT APPEARS VCU ACQUIRED THE BUILDING IN THE 1970'S BASED ON DOCUMENTS IN THEIR ARCHIVES. A MAJOR RENOVATION WAS DONE IN 1989 WHEN THE BUILDING WAS RENOVATED TO AN OFFICE BUILDING. BASED UPON DUNBAR INVESTIGATIONS, IT APPEARS THAT THE INTERIOR CORRIDOR BEARING WALL WAS DISTURBED DURING CONSTRUCTION, RESULTING IN THE CURRENT UNLEVEL FLOORS IN THE CORRIDOR. IT ALSO APPEARS THAT CONTINUED MINOR DOWNWARD MOVEMENT OF THE FLOORS HAS OCURRED SINCE THE RENOVATION, RESULTING IN REPAIRS TO DOORS AND WALLS.
- ERECT SHORING / JACKING LINES AS SHOWN ON THE DRAWINGS. SHORING / JACKING LINES AND DETAILS MAY HAVE TO BE ADJUSTED ONCE EXISTING FINISHES ARE REMOVED. INSTALL SHORING / JACKING LINES IN THE BASEMENT DOWN TO THE EXISTING CONCRETE SLAB-ON-GRADE TO ALLOW JACKING ABOVE THE FIRST FLOOR. TIGHTEN JACKS IN PLACE. LOCATE SHORING / JACKING LINES TO MINIMIZE REMOVAL OF EXISTING EQUIPMENT. DUCTWORK, PIPING, AND ELECTRICAL CONDUIT. REFER TO SHORING / JACKING DETAILS FOR MINIMIZING DEMOLITION.
- 4. ERECT SHORING / JACKING LINES BEGINNING AT THE SECOND FLOOR AND PROCEEDING UPWARD TO EACH SUCCESSIVE FLOOR THROUGH THE FOURTH FLOOR. CENTER OF SHORING / JACKING POSTS CAN BE OFFSET FROM FLOOR-TO-FLOOR NO MORE THAN 11" TO MINIMIZE DEMOLITION AND REMOVAL OF EXISTING MEP ELEMENTS.
- ERECT SHORING / JACKING AND HAND TIGHTEN TO STRUCTURE ABOVE. USE 'AS 550' POST SHORE SCREW JACKS AS SHOWN.
- REFER TO SHORING / JACKING LOAD TABLE THIS SHEET.
- BEGIN JACKING THE SECOND FLOOR BY USE OF SCREW JACKS IN COMBINATION WITH HYDRAULIC JACKS SIMILAR TO BUCKINGHAM JACKING-SHORING POSTS AS NECESSARY TO RAISE THE STRUCTURE FROM THE SECOND FLOOR UP TO AND INCLUDING THE ROOF. JACK CAUTIOUSLY AND GRADUALLY TO PREVENT UNNECESSARY DAMAGE TO THE STRUCTURE. MONITOR THE FLOOR AND ROOF LEVELS ABOVE TO DETERMINE HOW MUCH JACKING SHOULD BE DONE FROM THE SECOND FLOOR. SINCE ALL FLOOR AND ROOF LEVELS HAVE NOT SETTLED EQUALLY, THIS MAY REQUIRE SUBSEQUENT JACKING ABOVE THE SECOND FLOOR. IF A FLOOR LEVEL IS OVER-JACKED UPWARD AND PROUD, THIS LEVEL MAY REQUIRE CUTTING THE TOP OF THE EXISTING STUD WALL AND LOWERING THE FLOOR LEVEL. THE INTENTION OF THE JACKING IS TO RAISE THE FLOOR LEVELS TO WITHIN 1/2" OF LEVEL. EXISTING ARCHITECTURAL FINISHES WILL BE REMOVED TO PROVIDE ACCESS FOR JACKING AND WILL BE REPLACED AFTER JACKING AND STABILIZING IS COMPLETE AND APPROVED BY ARCHITECT, ENGINEER, AND OWNER.
- PROVIDE PERMANENT SUPPORT FOR EXISTING FLOOR JOISTS, INCLUDING BLOCKING AND SHIMS, AS SPECIFIED IN DETAIL B ON SHEET S301 (TYPICAL JOIST SUPPORT DETAIL).
- AFTER ALL PERMANENT SUPPORT IS INSTALLED AND LEVEL STABILIZATION IS COMPLETE, REMOVE SHORING / JACKING.

SHORING / JACKING LOADS						
LINE	SECOND (DL/LL) - PLF	THIRD (DL/LL) - PLF	FOURTH (DL/LL) - PLF	FIFTH (DL/LL) - PLF	ROOF (DL/LL) - PLF	TOTAL (DL/LL) - PLF
LINE #1	90/90	90/90	90/90	90/90	68/68	428/428
LINE #2	175/175	175/175	175/175	175/175	131/131	831/831
LINE #3	175/175	175/175	175/175	175/175	131/131	831/831

SHORING / JACKING LOADS NOTES:

4

6

- 1. LOADS AT FLOORS ARE BASED ON 20 PSF DEAD LOAD AND A CONSTRUCTION LIVE LOAD OF 20 PSF.
- 2. LOADS AT ROOF ARE BASED ON 15 PSF DEAD LOAD AND A LIVE LOAD OF 15 PSF.

3

2

3

TYPICAL SHORING/JACKING SECTION AT NORTH CORRIDOR

SECTION S100 S201 1/4" = 1'-0"

4

5

4

5

TYPICAL SHORING/JACKING SECTION AT SOUTH CORRIDOR

SECTION 2 S100 S201 1/4" = 1'-0"

5

O

Δ

٩

6

3

4

3

4

5

MASONRY REPAIR NOTES

2

1. ALL MASONRY REPAIRS SHALL BE MADE BY A MASONRY REPAIR SPECIALIST WITH EXPERIENCE IN SIMILAR REPAIR WORK.

1

- 2. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING TO COMPLETE MASONRY REPAIRS. ALL SHORING SHALL BE IN PLACE PRIOR TO PERFORMING DEMOLITION AND REPAIRS.
- 3. REPAIR ALL VISIBLE CRACKS IN MORTAR JOINTS AS FOLLOWS:
 - A. RAKE OUT MORTAR FROM JOINTS TO DEPTHS EQUAL TO 2 1/2 TIMES THEIR WIDTHS BUT NOT LESS THAN 1/2 INCH NOR LESS THAN THAT REQUIRED TO EXPOSE SOUND, UNDAMAGED MORTAR. CUT OUT DAMAGED MORTAR BY HAND WITH A CHISEL AND MALLET.
 - B. REMOVE MORTAR FROM MASONRY SURFACES WITHIN RAKED-OUT JOINTS TO PROVIDE REVEALS WITH SQUARE BACKS AND TO EXPOSE MASONRY FOR CONTACT WITH POINTING MORTAR. BRUSH, VACUUM OR FLUSH JOINTS TO REMOVE DIRT AND LOOSE DEBRIS.
 - C. DO NOT SPALL EDGES OF MASONRY UNITS OR WIDEN JOINTS. REPLACE DAMAGED MASONRY JOINTS.
 - D. CLEAN MASONRY JOINT SURFACES WITH WATER TO REMOVE DUST AND MORTAR PARTICLES. TIME THE RINSING APPLICATION SO THAT AT THE TIME OF POINTING EXCESS WATER HAS EVAPORATED OR RUN OFF AND JOINT SURFACES ARE DAMP BUT FREE OF STANDING WATER.
 - E. PREHYDRATE MORTAR TO REDUCE EXCESSIVE SHRINKAGE. MIX ALL DRY INGREDIENTS THOROUGHLY. ADD ONLY ENOUGH CLEAN WATER TO THE DRY MIX TO PRODUCE A DAMP, UNWORKABLE CONSISTENCY WHICH WILL RETAIN ITS SHAPE WHEN FORMED INTO A BALL. LET THE MORTAR STAND IN THIS DAMPENED CONDITION FOR 1 TO 11/2 HRS THEN ADD WATER TO BRING IT TO A WORKABLE CONSISTENCY (SOMEWHAT DRIER THAN CONVENTIONAL MORTAR). USE MORTAR WITHIN 30 MINUTES OF FINAL MIXING. DO NOT RETEMPER OR USE PARTIALLY HARDENED MATERIAL.
 - F. APPLY THE FIRST LAYER OF POINTING MORTAR TO AREAS WHERE EXISTING MORTAR WAS REMOVED TO DEPTHS GREATER THAN SURROUNDING AREAS. APPLY IN LAYERS NOT GREATER THAN 3/8 INCH UNTIL A UNIFORM DEPTH IS FORMED. COMPACT EACH LAYER THOROUGHLY AND ALLOW IT TO BECOME THUMBPRINT HARD BEFORE APPLYING THE NEXT LAYER.
 - G. AFTER JOINTS HAVE BEEN FILLED TO A UNIFORM DEPTH, PLACE REMAINING POINTING MORTAR IN THREE LAYERS WITH EACH OF FIRST AND SECOND LAYERS FILLING APPROXIMATELY TWO FIFTHS OF JOINT DEPTH AND THIRD LAYER THE REMAINING ONE FIFTH. FULLY COMPACT EACH LAYER AND ALLOW TO BECOME THUMBPRINT HARD BEFORE APPLYING NEXT LAYER. TAKE CARE NOT TO SPREAD MORTAR OVER EDGES ONTO EXPOSED MASONRY SURFACES OR TO FEATHEREDGE MORTAR.
 - H. WHEN MORTAR IS THUMBPRINT HARD, TOOL JOINTS TO MATCH ORIGINAL APPEARANCE OF JOINTS. REMOVE EXCESS MORTAR FROM EDGE OF JOINT BY BRUSHING.
 - I. CURE MORTAR BY MAINTAINING IN A DAMP CONDITION FOR NOT LESS THAN 72 HOURS.
- 4. REMOVE ALL MASONRY UNITS (CMU) THAT ARE DAMAGED, SPALLED OR DETERIORATED AS FOLLOWS:
 A. CUT OUT FULL UNITS BY HAND FROM JOINT TO JOINT AND IN A MANNER TO PERMIT REPLACEMENT WITH FULL SIZE UNITS WITHOUT DAMAGING SURROUNDING MASONRY. FOR EASE OF REMOVAL,
 - THE UNITS TO BE REMOVED CAN BE BROKEN.B. SUPPORT AND PROTECT REMAINING MASONRY SUPPORTED BY REMOVED UNITS.
 - C. REMOVE MORTAR, LOOSE PARTICLES AND DEBRIS FROM EXISTING MASONRY SURROUNDING EXISTING UNITS IN PREPARATION FOR REPLACEMENT. CLEAN WITH STIFF BRUSHES OR BY FLUSHING WITH WATER AND COMPRESSED AIR. DO NOT ALLOW DEBRIS TO FALL INTO THE CAVITY.
- 5. REPLACE DAMAGED MASONRY UNITS AS FOLLOWS:
 - A. SET REPLACEMENT UNITS IN A FULL BED OF MORTAR WITH BOTH HORIZONTAL AND VERTICAL JOINTS OF SAME WIDTH AS EXISTING UNITS.
 - B. POINT NEW MORTAR JOINTS TO COMPLY WITH REQUIREMENTS FOR REPOINTING EXISTING MASONRY AS NOTED IN NOTE 3 ABOVE.
 - C. WHEN MORTAR IS THUMBPRINT HARD, TOOL JOINT TO MATCH ORIGINAL PROFILE. REMOVE EXCESS MORTAR BY BRUSHING.
- . TOOTH NEW MASONRY INTO EXISTING WALL JAMB CONSTRUCTION AT ALL INFILL CONDITIONS AT EXISTING DOORS AND WINDOWS

SCALE:	1/4" =	= 1'-0"	
' 2'·	- 0" 4	! ' - 0"	8' - 0"
SCALE:	1" =	1' - 0"	
' O' ·	· 6" 1	' - 0"	2' - 0"

REPOINT ALL CRACKED MORTAR JOINTS AND REPLACE CRACKED AND DAMAGED CMU. REFER TO MASONRY REPAIR NOTES THIS SHEET. VERIFY EXTENT IN THE FIELD. ASSUME 100 LF FOR BIDDING PURPOSES IN

ALL WALLS AND SHAFT WALLS

<u>5TH FLOOR</u> (+45'-5")

<u>4TH FLOOR</u> (+34'-2 1/2")

<u>3RD FLOOR</u> (+23'-0")

PROVIDE VERTICAL COVE SEALANT AT INTERSECTING WALLS FULL HEIGHT OF SHAFT

<u>2ND FLOOR</u> (+11'-9")

<u>1ST FLOOR</u> (+0'-0")

<u>BASEMENT</u> (-8'-1 1/2")

5

1. THIS DETAIL IS SIMILAR AT THE SOUTH CORRIDOR NON-BEARING WALL

6

ш

ш

4

6

REFER TO DETAIL A/S301 FOR OTHER NOTES AND DETAILS -

WOOD FLOORING WOOD SUB-FLOORING

(4) 2X6 LAYERS (MAXIMUM) -

#10 X 3 1/2" SCREW INTO 6X6 OR 6X8 (TYPICAL) -

NOTES:

5

LEVEL FLOORS AND PRIOR TO REMOVING SHORING.

2

1

TYPICAL SHORING/JACKING LINE BRACING DETAIL

THIS DETAIL IS REQUIRED WITH DETAIL D/S301 TO PROVIDE LATERAL BRACING TO THE TOP OF THE SHORING/JACKING LINE.

4

1" = 1'-0"

NOTES:

2

THIS DETAIL IS WHERE EXISTING LARGER PIPING AND SMALL DUCTS RUN PARALLEL TO EXISTING JOISTS AND PROVIDES SPACE ABOVE LOWERED TOP OF SHORING/JACKING

NOTES:

3

4

THIS DETAIL IS TO SHOW WHERE SHORING/JACKING LINES CAN BE OFFSET AT FLOORS TO HELP MINIMIZE REMOVAL OF UTILITIES

 1
 FIRE PROTECTION BASEMENT FLOOR PLAN

 FP101
 1/4" = 1'-0"

TEMPLATE

5

3

4

FIRE RISER AND BACKFLOW
LOCATION (EXISTING)

TEMPLATE

4

3

5

6

5

4

- PROVIDE NEW LISTED MINIMUM K-5.6 SPRINKLER IN ROOM 107. SPRINKLER TO BE WHITE FINISH WITH WHITE ESCUTCHEON

1FIRE PROTECTION 2ND FLOOR PLANFP1031/4" = 1'-0"

۲

3

4

WORK AND DEACTIVATE FIRE SPRINKLER SYSTEM. REMOVE SPRINKLERS AND PIPE AS REQUIRED FOR COMPLETION OF STRUCTURAL REPAIRS

37.55°

ALL FIRE PROTECTION ITEMS OUTSIDE THE AREA

1

FP104 1/4" = 1'-0"

2 FIRE PROTECTION 3RD FLOOR DEMOLITION PLAN FP104 1/4" = 1'-0"

3

2

COMPLETION OF STRUCTURAL REPAIRS

4

6

4

37.55°

3

2 FIRE PROTECTION 4TH FLOOR DEMOLITION PLAN FP105 1/4" = 1'-0"

TEMPLATE

2/1/2024 10:33:29 AM

6

4

C:\Users\hunters\OneDrive - Bowman Consulting Group\Documents\My Work Stuff\00_Scheer Hall\2.220318.0 - VCU SHR Reno - Fire R22.rvt

I

5

37.55°

THE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATICAL IN NATURE. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING FIRE PROTECTION

THE FIRE PROTECTION SYSTEM MUST BE HYDROSTATICALLY TESTED AT

SYSTEM WORKING PRESSURE IN ACCORDANCE WITH THE REQUIREMENTS

SYSTEM EQUIPMENT.

1

2

FIRE PROTECTION LEGEND

COMPLETION OF STRUCTURAL REPAIRS

2

PENDENT SPRINKLER

UPRIGHT SPRINKLER

6

 I
 FIRE PROTECTION 5TH FLOOR PLAN

 FP106
 1/4" = 1'-0"

۲

ш

4

1

4

5

SIDEWALL SPRINKLER

 ∇

2

FIRE PROTECTION NOTES

1

THE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATICAL IN NATURE. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING FIRE PROTECTION SYSTEM EQUIPMENT. THE FIRE PROTECTION SYSTEM MUST BE HYDROSTATICALLY TESTED AT

SYSTEM WORKING PRESSURE IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13 AT THE COMPLETION OF THE PROJECT. THE STATE FIRE MARSHALL'S OFFICE SHALL WITNESS THE TEST AND PROVIDE WRITTEN VERIFICATION OF ACCEPTANCE.

ш

۷

TEMPLATE 2021.A 1/30/2024 9:50:13 AM

C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

LEGEND – RATED WALLS

4

WALL & CEILING BARRIERS

5

	NON-RATED PARTITION
	NON-RATED SMOKE RESISTIVE PARTITION
	1 HR FIRE BARRIER
	1 HR SMOKE COMPARTMENT BARRIER
	2 HR FIRE BARRIER
	2 HR SMOKE COMPARTMENT BARRIER
	3 HR FIRE BARRIER
	3 HR SMOKE COMPARTMENT BARRIER
(FOR REFERENCE ONLY.	SEE ARCH DRAWINGS FOR BARRIER DETAILS)

LEGEND – MECHANICAL SYMBOLS

DUCT SECTION - RISE / DROP SUPPLY MPS
DUCT SECTION - RISE / DROP SUPPLY LPS
DUCT SECTION - RISE / DROP SUPPLY HPS
DUCT SECTION - RISE / DROP OUTSIDE AIR
DUCT SECTION - RISE / DROP MAKEUP AIR
DUCT SECTION - RISE / DROP RETURN
DUCT SECTION - RISE / DROP TRANSFER
DUCT SECTION - RISE / DROP EXHAUST
DUCT SECTION - RISE / DROP RELIEF

4

GENERAL NOTES - MECHANICAL

- 1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIR TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- 2. CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMMA AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.
- 3. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANC WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS AND
- APPLICABLE CODES AND REGULATIONS. 4. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIF DRAWINGS. COORDINATE AND PROVIDE ALL DUCT AND PIPING TRANSITIONS
- REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS PRIOR TO FABRICATION. 5. WORK SHALL BE ACCURATELY LAID OUT WITH REFERENCE TO THE
- ARCHITECTURAL DRAWINGS AND IN COOPERATION WITH OTHER TRADES, WHIC SHALL AFFORD MAXIMUM ACCESSIBILITY FOR OPERATION, MAINTENANCE AND HEADROOM. FAILURE TO COORDINATE WORK WITH OTHER TRADES SHALL NO BE CONSIDERED AS A BASIS FOR EXTRA COST CHANGES. 6. WHERE PLENUMS ARE USED FOR SUPPLY, RETURN, EXHAUST, RELIEF OR
- VENTILATION SYSTEMS, MATERIALS WITHIN THE PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF N MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. 7. DIMENSIONS SHOWN ON DRAWINGS FOR DUCTWORK ARE INSIDE CLEAR. 8. ALL DUCTWORK, INCLUDING FIRE DAMPERS, SHALL BE SEALED AND TESTED F
- LEAKS PRIOR TO COVERING WORK. 9. PATCH ALL CUTTING OR DRILLING OF FINISHED WALLS, CEILINGS AND FLOORS
- 10. DIFFUSER AND GRILLE LOCATIONS TO BE COORDINATED WITH ARCHITECTURA CEILING PLAN. ANY CEILING MOUNTED DIFFUSERS OR GRILLES WHICH DO NOT
- MATCH CEILING TILE SIZES ARE TO BE MOUNTED IN CENTER OF TILE. 11. CONTRACTOR SHALL INSTALL ANY BALANCING DEVICE NECESSARY TO ACHIEV PROPER ADJUSTING AND BALANCING OF MECHANICAL SYSTEMS.
- 12. RUNOUTS TO DIFFUSERS / GRILLES SHALL BE THE SAME SIZE AS THE DIFFUSE GRILLE NECK SIZE UNLESS OTHERWISE NOTED.

13. REFER TO SPECIFICATION SECTION 230800 - HVAC SYSTEMS COMMISSIONING PROJECT COMMISSIONING SCOPE.

GENERAL NOTES – DEMOLITION

- 1. CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMM/ AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. 2. PATCH ALL CUTTING OR DRILLING OF FINISHED WALLS, CEILINGS AND FLOORS 3. UNLESS SPECIFICALLY NOTED, REMOVE ALL HVAC SYSTEMS IN THEIR ENTIRET THIS INCLUDES BUT IS NOT LIMITED TO EQUIPMENT, THERMOSTATS, TERMINAL
- UNITS, DUCTWORK, PIPING, AIR DEVICES, AND ALL ASSOCIATED COMPONENTS AND SUPPORTS. PATCH AND REPAIR ALL AREAS THAT ARE TO REMAIN WHERE ITEMS WERE ATTACHED OR SUPPORTED.
- 4. COORDINATE EXTENT OF DEMOLITION WITH NEW WORK IN ALL LOCATIONS WHERE MECHANICAL COMPONENTS ARE TO REMAIN.
- 5. CONTRACTOR TO REMOVE ANY MECHANICAL COMPONENTS WITHIN WALLS INDICATED TO BE DEMOLISHED ON ARCHITECTURAL DEMOLITION PLANS. 6. PROTECT ALL EQUIPMENT TO REMAIN FROM DAMAGE DURING DEMOLITION. PROVIDE TEMPORARY COVERS AND CAP ENDS OF ALL PIPING AND DUCTWOR
- AT COMPLETION OF PARTIAL DEMOLITION. 7. COORDINATE WITH ELECTRICAL DEMOLITION BEFORE REMOVING DUCTWORK CONTAINING SMOKE DETECTORS OR EQUIPMENT, DEVICES, AND SYSTEMS HAVING ELECTRICAL CONNECTIONS.

MECHANICAL SCOPE SUMMARY

MECHANICAL ABBREVIATIONS

	Demition	
AD	ACCESS DOOR	
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING AND	
BDD		
BFW	BOILER FEEDWATER	
CEM		
	CHILLED WATER SUPPLY	
	(REMOTE) CABLE-CONTROLLED VOLUME DAMPER	
	CONDENSER WATER RETURN	
	CONDENSER WATER SUPPLY	
FX	EXISTING	
EXH	EXHAUST (AIR SYSTEM)	
FD	FIRE DAMPER	
FM	FLOW METER	
FOR	FLAT ON BOTTOM	
FOR		
FOS		
FOT	FLAT ON TOP	
GPM	GALLONS PER MINUTE	
GR	GLYCOL RETURN	
GS	GLYCOL SUPPLY	
HPS	HIGH PRESSURE STEAM / HIGH PRESSURE SUPPLY (AIR SYSTEM	
HRR		
HRS	HEAT RECOVERY SUPPLY	
HVAC	HEATING, VENTILATING AND AIR-CONDITIONING	
HWR	(HEATING) HOT WATER RETURN	
HWS	(HEATING) HOT WATER SUPPLY	
LPS	LOW PRESSURE STEAM / LOW PRESSURE SUPPLY (AIR SYSTEM)	
MPS	MEDIUM PRESSURE STEAM / MEDIUM PRESSURE SUPPLY (AIR SYSTEM)	
NA or N/A	NOT APPLICABLE	
OA	OUTSIDE AIR (SYSTEM)	
PCR	PUMPED CONDENSATE RETURN	
PRV	PRESSURE REDUCING VALVE	
RA	RETURN AIR (SYSTEM)	
RHG	REFRIGERANT HOT GAS	
RL	REFRIGERANT LIQUID	
RS	REFRIGERANT SUCTION	
RV	RELIEF VALVE	
SA	SUPPLY AIR (SYSTEM)	
SD	SMOKE DAMPER	
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION	
TYP.	TYPICAL	
VD	VOLUME DAMPER	

APPLICABLE CODES

THE BUILDING 2-PIPE DUAL TEMPERATURE SYSTEM WILL BE CONVERTED TO A 4-PIPE HOT AND CHILLED WATER SYSTEM. THE EXISTING FAN COIL UNITS WILL BE REPLACED TO ACCOMMODATE THE 4-PIPE SYSTEM. THE EXISTING BOILER AND CHILLER WILL REMAIN. THE EXISTING PIPING WILL BE USED TO CONVEY HEATING HOT WATER. NEW CHILLED WATER PIPING WILL BE RUN VERTICALLY THROUGH THE BUILDING IN TWO SETS OF PIPE RISERS. BRANCH PIPING FROM THE RISERS WILL FEED THE NEW FAN COILS FROM UNDERNEATH EACH FLOOR. ALL OF THE CONDENSATE DRAINAGE PIPING IN THE BUILDING WILL HAVE THE EXISTING INSULATION REMOVED AND REPLACED WITH NEW. A PORTION OF THE HEATING HOT WATER PIPING INSULATION IN THE BASEMENT WILL BE REMOVED AND REPLACED WITH NEW. STRUCTURAL REINFORCING OF THE EXISTING BUILDING WILL ALSO OCCUR AS PART OF THIS PROJECT. THE STRUCTURAL JACKING OF THE BUILDING WILL AFFECT THE EXISTING PIPE RISERS. THE EXISTING PIPING SYSTEM SHALL BE COMPLETELY DRAINED AND THE PIPE RISER SHALL BE CUT WHERE THEY PENETRATE THROUGH THE FIRST FLOOR AND THROUGH THE FOURTH FLOOR. AFTER THE JACKING IS COMPLETE, THE PIPES SHALL BE RECONNECTED WITH FLEX CONNECTIONS. THE NEW CHILLED WATER PIPING WILL BE INSTALLED AFTER STRUCTURAL JACKING IS FINISHED. TEMPORARY HEATING OF THE BUILDING WILL BE REQUIRED DURING THE STRUCTURAL REPAINS OF THE BUILDING WILL BE REQUIRED DURING THE STRUCTURAL REPAINS OF THE BUILDING WILL BE REQUIRED DURING THE STRUCTURAL REPAINS OF THE BUILDING WILL BE REQUIRED DURING THE	ALL WORK SHALL B STANDARDS, INCLU 2022 CONSTRUM 2018 VIRGINIA U 2018 VIRGINIA O 2018 VIRGINIA E 2018 VIRGINIA F 2018 VIRGINIA F 2018 VIRGINIA E 018 VIRGINIA E 019 VIRGINIA E 010 ASHRAE 90 2016 ASHRAE 90 2018 VIRGINIA E 2018 VIRGINIA E	BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND JDING, BUT NOT LIMITED TO: CTION & PROFESSIONAL SERVICES MANUAL (REVISION 0; 8/1/2022) JNIFORM STATEWIDE BUILDING CODE CONSTRUCTION CODE EXISTING BUILDING CODE AECHANICAL CODE EVEL GAS CODE ENERGY CONSERVATION CODE WITH THE VIRGINIA ENERGY CONSERVATION CODE (VECC), THE HALL COMPLY WITH VECC SECTIONS C402 THROUGH C405 AND C408. 406 DOES NOT APPLY AS PROJECT IS A RENOVATION OF AN EXISTING 0.1 2.1 IA STANDARDS PMENT MEETS OR EXCEEDS ENERGY AND EFFICIENCY STANDARDS. CAL SHEET LIST
	M001	LEGEND, ABBREVIATIONS AND GENERAL NOTES
	M002	SCHEDULES
	M102	FLOW DIAGRAMS
	M200	BASEMENT FLOOR PIPING- DEMOLITION PLAN
	M201	1ST FLOOR PIPING - DEMOLITION PLAN
	M202	2ND FLOOR PIPING - DEMOLITION PLAN
	M203	3RD FLOOR PIPING - DEMOLITION PLAN
	M204	4TH FLOOR PIPING - DEMOLITION PLAN
	M205	5TH FLOOR PIPING - DEMOLITION PLAN
	M210	BASEMENT FLOOR PIPING - NEW WORK PLAN
	M211	1ST FLOOR PIPING - NEW WORK PLAN
	M212	2ND FLOOR PIPING - NEW WORK PLAN
	M213	3RD FLOOR PIPING - NEW WORK PLAN
	M214	4TH FLOOR PIPING - NEW WORK PLAN
	M215	5TH FLOOR PIPING - NEW WORK PLAN
	M300	MECHANICAL ROOM 3D VIEW
	M301	SECTIONS
	M401	DETAILS
	N4400	

GRAPHIC SCALES

- PROJECT (PLAN) NORTH - TRUE NORTH - ANGLE BETWEEN TRUE &

PROJECT NORTH

SHEET NUMBERING

MARKED FOR PHASE WORK PHASE WORK SENSOR, DUC S SENSOR, AIR	COMPOSITION. (DASHED LINE TYPE)
PHASE WORK	- TEMPORARY DUCTWORK, PIPING OR EQUIPME
SENSOR, DUC	
SENSOR, DUC	
	T SMOKE DETECTOR
(F)	FLOW MEASURING
ACCESS DOO	R
	TORIZED
DAMPER, VOL	UME (BALANCING)
DAMPER, BAC	CK DRAFT
	E - RECTANGULAR / ROUND
DAMPER, SMO	DKE - RECTANGULAR / ROUND
FSD DAMPER, COI	MBINATION FIRE SMOKE - RECTANGULAR / ROUNI
	IES
DUCT SECTION SUPPLY, MAK	N - RISE / DROP EUP AIR, OUTSIDE AIR
	N - RISE / DROP NSFER
	N - RISE / DROP
	SHOWING INSULATION)
TRANSITION,	FLAT ON TOP
TRANSITION,	FLAT ON BOTTOM
SPLITTER DAI	MPER
	CT CONNECTION
	СТ
SUPPLY DIFFI	JSER WITH BLANK-OFF
300 CFM SUPPLY AIR D 12x12 R-1 RETURN AIR D	DEVICE
300 CFM	
300 CFM EXHAUST AIR	DEVICE
DOOR UNDEF GATE VALVE	CUT SCREWED OR SOLDERED
GATE VALVE	FLANGED
	RAIN VALVE
GLOBE VALVE	≣
	≣
	ALVE /ALVE, 3-WAY, PNUEMATIC
	ALVE, 3-WAY, ELECTRIC/ELECTRONIC
	ECONNECTOR
	-
BUTTERFLY V	'ALVE
WATER PRES	
	IRAP ASSEMBLY
	NING DOWN
	NING UP
TEE OFF BOT	ТОМ
	OL VALVE
	F FLOW
	MANUAL AIR VENT (SEE DETAIL)
	C / ECCENTRIC REDUCER
PIPE GUIDE	
	K
PIPE CAP	
DP DIFFERENTIA	L PRESSURE SWITCH
C CARBON DIO	KIDE SENSOR (MOUNT 4'-0" A.F.F.)
H HUMIDITY SFI	NSOR (MOUNT 4'-0" A.F.F.)
TS TEMPERATUR	RE SENSOR (MOUNT 4'-0" A.F.F.)
T THERMOSTAT	Г (MOUNT 4'-0" А.F.F.)
	MOUNT 4'-0" A.F.F.)
	THIS POINT
	1

LEGEND - MECHANICAL SYMBOLS

	PHASE WORK - NEW DUCTWORK, PIPING OR EQUIPMENT.
	PHASE WORK - TEMPORARY DUCTWORK, PIPING OR EQUIPMEN
	SENSOR, DUCT SMOKE DETECTOR
	SENSOR, AIR FLOW MEASURING
	ACCESS DOOR
	DAMPER, MOTORIZED
	DAMPER, VOLUME (BALANCING)
	DAMPER, BACK DRAFT
	DAMPER, FIRE - RECTANGULAR / ROUND
	DAMPER, SMOKE - RECTANGULAR / ROUND
•	
	DAMPER, COMBINATION FIRE SMOKE - RECTANGULAR / ROUND
	TURNING VANES
×	DUCT SECTION - RISE / DROP
	DUCT SECTION - RISE / DROP
	RETURN, TRANSFER
\succ	EXHAUST, RELIEF
	DUCTWORK WITH LINER
	DUCTWORK (SHOWING INSULATION)
OT T	TRANSITION, FLAT ON TOP
OB	TRANSITION, FLAT ON BOTTOM
	SPLITTER DAMPER
	FLEXIBLE DUCT CONNECTION
\$	FLEXIBLE DUCT
6-1	SUPPLY DIFFUSER WITH BLANK-OFF
-Π R-1	SUPPLY AIR DEVICE
M	RETURN AIR DEVICE
^I M	EXHAUST AIR DEVICE
	DOOR UNDERCUT
	GATE VALVE SCREWED OR SOLDERED
	HOSE BIBB DRAIN VALVE
	BALL VALVE
	CHECK VALVE
	UNION
	BALANCING VALVE
	AUTOMATIC VALVE, 3-WAY, ELECTRIC/ELECTRONIC
	FLEXIBLE PIPE CONNECTOR
	AUTOMATIC VALVE, 2-WAY, PNUEMATIC
	RELIEF VALVE
	STRAINER
	STEAM PRESSURE REGULATING VALVE
	STEAM DRIP TRAP ASSEMBLY
	TEE OFF TOP
	TEE OFF BOTTOM
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW
MAV	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL)
MAV	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE
MAV	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE ANCHOR
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP
MAV	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.)
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.)
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.)
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.) TEMPERATURE SENSOR (MOUNT 4'-0" A.F.F.)
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.) TEMPERATURE SENSOR (MOUNT 4'-0" A.F.F.) THERMOSTAT (MOUNT 4'-0" A.F.F.) HUMIDISTAT (MOUNT 4'-0" A.F.F.) POINT OF CONNECTION, NEW TO EXISTING
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.) TEMPERATURE SENSOR (MOUNT 4'-0" A.F.F.) THERMOSTAT (MOUNT 4'-0" A.F.F.) HUMIDISTAT (MOUNT 4'-0" A.F.F.) POINT OF CONNECTION, NEW TO EXISTING REMOVE TO THIS POINT
	TEE OFF BOTTOM FLOW CONTROL VALVE DIRECTION OF FLOW PITCH DOWN IN DIRECTION OF ARROW AUTOMATIC / MANUAL AIR VENT (SEE DETAIL) CONCENTRICC / ECCENTRIC REDUCER PIPE GUIDE PIPE GUIDE PIPE ANCHOR FLOW METER PIPE CAP DIFFERENTIAL PRESSURE SWITCH CARBON DIOXIDE SENSOR (MOUNT 4'-0" A.F.F.) CARBON MONOXIDE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDITY SENSOR (MOUNT 4'-0" A.F.F.) TEMPERATURE SENSOR (MOUNT 4'-0" A.F.F.) HUMIDISTAT (MOUNT 4'-0" A.F.F.) POINT OF CONNECTION, NEW TO EXISTING REMOVE TO THIS POINT

LEGEND, ABBREVIATIONS AND GENERAL NOTES **M001**

	SPACE IDENTITY			PEOPLE COUNT	1	CALCU	JLATED OUTDO	OR AIR	
NUMBER	NAME	OCCUPANCY CLASSIFICATION	AREA PER PERSON	SPACE AREA	PEOPLE	PER PERSON	BY AREA	MINIMUM OA	SCHEDULED OA
1ST FLOOR	PLAN								
100		Corridor/Transition	108 ft ²	83 ft ²	0	0 CFM	0.06 CFM/SF	5 CFM	10 CFM 25 CFM
100A	COORIDOR	Corridor/Transition	108 ft ²	316 ft ²	1	0 CFM	0.06 CFM/SF	19 CFM	25 CFM
101	HR GENERALIST	Office - Enclosed	200 ft ²	133 ft ²	1	5 CFM	0.06 CFM/SF	11 CFM	25 CFM
102	OFFICE ROOM 1	Office - Enclosed Office - Open Plan	200 ft ² 200 ft ²	142 ft ²	1	5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF	12 CFM 11 CFM	25 CFM 25 CFM
104	RECEPTION	Office - Open Plan	200 ft ²	155 ft ²	1	5 CFM	0.06 CFM/SF	13 CFM	25 CFM
105	FACULTY & STAFF MAIL ROOM	Active Storage	359 ft ²	245 ft ²	1	0 CFM	0.12 CFM/SF	29 CFM	25 CFM
107	DIR. OF HR & OPS	Office - Open Plan	200 ft ² 200 ft ²	205 ft ²	1	5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF	17 CFM 18 CFM	25 CFM 25 CFM
112	RESTROOM	Corridor/Transition	108 ft ²	48 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	25 CFM
114	RESTROOM	Corridor/Transition	108 ft ²	48 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	25 CFM
116	TELECOM	Active Storage	359 ft ²	55 ft ²	0	0 CFM	0.12 CFM/SF	7 CFM	15 CFM
117	OFFICE ROOM 2	Office - Enclosed	200 ft ²	175 ft ²	1	5 CFM	0.06 CFM/SF	15 CFM	25 CFM
118 1ST FLOOR	FISCAL TECH R PLAN: 16	Office - Enclosed	200 ft ²	139 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM 209 CFM	25 CFM 375 CFM
2ND FLOOF 200		Corridor/Transition	108 ft²	293 ft ²	1	0 CFM	0.06 CFM/SF	18 CFM	25 CFM
200A	COORRIDOR	Corridor/Transition	108 ft ²	359 ft ²	2	0 CFM	0.06 CFM/SF	22 CFM	25 CFM
201	PROGRAM OFFICE	Office - Enclosed	200 ft ²	286 ft ²	1	5 CFM	0.06 CFM/SF	24 CFM	30 CFM
201A 201B		Office - Enclosed	200 ft ²	222 ft ²	1	5 CFM	0.06 CFM/SF	19 CFM 55 CFM	30 CFM 55 CFM
205	STAFF OFFICE	Office - Enclosed	200 ft ²	193 ft ²	1	5 CFM	0.06 CFM/SF	16 CFM	30 CFM
209	ASSISTANT PROFESSOR (HSEP)	Office - Enclosed	200 ft ²	132 ft ²	1	5 CFM	0.06 CFM/SF	11 CFM	30 CFM
211	OFFICE ROOM	Office - Enclosed	200 ft ²	105 ft ²	1	5 CFM	0.06 CFM/SF	9 CFM	30 CFM
212	RESTROOM	Office - Enclosed	200 ft ²	52 ft ²	0	5 CFM	0.06 CFM/SF	4 CFM	5 CFM
213	ASSISTANT PROFESSOR	Office - Enclosed	200 ft ²	129 ft ²	1	5 CFM	0.06 CFM/SF	11 CFM	30 CFM
214	ASSISTANT PROFESSOR	Office - Enclosed	200 ft ²	117 ft ²	1	5 CFM	0.06 CFM/SF	10 CFM	30 CFM
216	TELECOM	Office - Enclosed	200 ft ²	65 ft ²	0	5 CFM	0.06 CFM/SF	5 CFM	5 CFM
217	ASSISTANT PROFESSOR	Office - Enclosed	200 ft ²	136 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	30 CFM
218	ASSIST PROF ASSISTANT PROGRAM CHAIR	Office - Enclosed	200 ft ² 200 ft ²	145 ft ²	1	5 CFM 5 CFM	0.06 CFM/SF	12 CFM 16 CFM	30 CFM 30 CFM
2ND FLOOF	R PLAN: 16							247 CFM	420 CFM
300	COORIDOR	Corridor/Transition	108 ft ²	293 ft ²	1	0 CFM	0.06 CFM/SF	18 CFM	20 CFM
300A	COORIDOR	Corridor/Transition	108 ft ²	348 ft ²	1	0 CFM	0.06 CFM/SF	21 CFM	20 CFM
301	MPA PROGRAM OFFICE	Office - Enclosed	200 ft ²	291 ft ²	1	5 CFM	0.06 CFM/SF	25 CFM	25 CFM
301A	OFFICE ROOM	Office - Enclosed	200 ft ²	177 ft ²	1	5 CFM	0.06 CFM/SF	15 CFM	25 CFM
305	ASSOCIATE PROFESSOR	Office - Enclosed	200 ft ²	192 ft ²	1	5 CFM	0.06 CFM/SF	16 CFM	25 CFM
309	ASSOCIATE PROFESSOR	Office - Enclosed	200 ft ²	136 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	25 CFM
311	RESTROOM	Corridor/Transition	200 It ² 108 ft ²	53 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	10 CFM
313	ASSISTANT PROFESSOR	Office - Enclosed	200 ft ²	133 ft ²	1	5 CFM	0.06 CFM/SF	11 CFM	25 CFM
314	RESTROOM	Corridor/Transition	108 ft ²	50 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	10 CFM
315	TELECOM	Office - Enclosed	200 ft ²	62 ft ²	0	5 CFM	0.06 CFM/SF	5 CFM	5 CFM
317	OFFICE	Office - Enclosed	200 ft ²	138 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	25 CFM
318	ASSIST PROG CHAIR	Office - Enclosed	200 ft ²	140 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	25 CFM
3RD FLOOF	R PLAN: 16	Office - Enclosed	200 11-	109 11-	I		0.00 CFW/SF	206 CFM	340 CFM
400	COORIDOR	Corridor/Transition	108 ft ²	297 ft ²	0	0 CFM	0.06 CFM/SF	18 CFM	25 CFM
400A	COORIDOR	Corridor/Transition	108 ft ²	308 ft ²	0	0 CFM	0.06 CFM/SF	18 CFM	25 CFM
401 405	OFFICE OF RESEARCH AND	Conference Meeting/Multipurpose Office - Open Plan	20 ft ² 200 ft ²	702 ft ² 207 ft ²	3	5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF	218 CFM 18 CFM	225 CFM 25 CFM
405A	DIR OF ADMIN	Office - Enclosed	200 ft ²	123 ft²	1	5 CFM	0.06 CFM/SF	10 CFM	25 CFM
407	SMALL CONFERENCE ROOM	Conference Meeting/Multipurpose	20 ft ²	180 ft ²	1	5 CFM	0.06 CFM/SF	56 CFM	60 CFM
408	SR PRACT IN RES	Office - Enclosed	200 ft ²	50 ft ²	0	5 CFM	0.06 CFM/SF	3 CFM 14 CFM	25 CFM
410	RESTROOM	Corridor/Transition	108 ft ²	50 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	5 CFM
411	EXEC ASSISTANT	Office - Enclosed	200 ft ²	138 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	25 CFM
412	TELECOM	Office - Enclosed	200 ft ²	63 ft ²	0	5 CFM	0.06 CFM/SF	5 CFM	5 CFM
414	SR DIRECTOR	Office - Enclosed	200 ft ²	141 ft ²	1	5 CFM	0.06 CFM/SF	12 CFM	25 CFM
4TH FLOOR	R PLAN: 13							403 CFM	500 CFM
5TH FLOOR		Corridor/Transition	108 ft²	317 ft ²	1	0 CEM	0.06 CEM/SE	19 CEM	25 CEM
500A	COORIDOR	Corridor/Transition	108 ft ²	310 ft ²	1	0 CFM	0.06 CFM/SF	19 CFM	25 CFM
501	ASSISTANT TO THE DEAN	Office - Enclosed	200 ft ²	290 ft ²	1	5 CFM	0.06 CFM/SF	25 CFM	25 CFM
501A	DEAN DEAN'S ROOM	Office - Enclosed	200 ft ²	219 ft ²	1	5 CFM	0.06 CFM/SF	19 CFM	25 CFM
505	OFFICE	Office - Enclosed	200 ft ²	188 ft ²	1	5 CFM	0.06 CFM/SF	16 CFM	25 CFM
507	BREAK ROOM	Lounge/Recreation	33 ft ²	32 ft ²	1	5 CFM	0.06 CFM/SF	7 CFM	25 CFM
	OFFICE COORD OF DEV & ALUMNI	Office - Enclosed Office - Enclosed	200 ft ² 200 ft ²	139 ft ² 104 ft ²	1	5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF	12 CFM 9 CFM	25 CFM 25 CFM
509 511			400.00			0.07		0.0	
509 511	RELATIONS	o '	100 ft2	50 ft ²	0	0 CFM	0.06 CFM/SF	3 CFM	5 CFM
509 511 512 513	RELATIONS RESTROOM	Corridor/Transition	200 ft2	121 f+2				11 (```) <u> </u>
509 511 512 513 514	RELATIONS RESTROOM OFFICE RESTROOM	Corridor/Transition Office - Enclosed Corridor/Transition	200 ft ² 108 ft ²	131 ft² 49 ft²	0	0 CFM	0.06 CFM/SF 0.06 CFM/SF	11 CFM 3 CFM	5 CFM
509 511 512 513 514 515	RELATIONS RESTROOM OFFICE RESTROOM OFFICE	Corridor/Transition Office - Enclosed Corridor/Transition Office - Enclosed	200 ft ² 108 ft ² 200 ft ²	131 ft² 49 ft² 119 ft²	0	0 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF	11 CFM 3 CFM 10 CFM	25 CFM 5 CFM 25 CFM
509 511 512 513 514 515 516 517	RELATIONS RESTROOM OFFICE RESTROOM OFFICE TELECOM	Corridor/Transition Office - Enclosed Corridor/Transition Office - Enclosed Office - Enclosed	108 ft² 200 ft² 108 ft² 200 ft² 200 ft² 200 ft² 200 ft²	131 ft² 49 ft² 119 ft² 63 ft² 140 ft²	1 0 1 0	0 CFM 5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF	11 CFM 3 CFM 10 CFM 5 CFM	25 CFM 5 CFM 25 CFM 5 CFM 25 CFM
509 511 512 513 514 515 516 517 518	RELATIONS RESTROOM OFFICE RESTROOM OFFICE TELECOM ASSOCIATE DIRECTOR OF COMMUNICATION DIR OF COMM AND FXT	Corridor/Transition Office - Enclosed Corridor/Transition Office - Enclosed Office - Enclosed Office - Enclosed	200 ft ² 108 ft ² 200 ft ² 200 ft ² 200 ft ² 200 ft ²	131 ft² 49 ft² 119 ft² 63 ft² 140 ft² 139 ft²	1 0 1 0 1	0 CFM 5 CFM 5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF	11 CFM 3 CFM 10 CFM 5 CFM 12 CFM 12 CFM	25 CFM 5 CFM 25 CFM 5 CFM 25 CFM 25 CFM
509 511 512 513 514 515 516 517 518	RELATIONS RESTROOM OFFICE RESTROOM OFFICE TELECOM ASSOCIATE DIRECTOR OF COMMUNICATION DIR OF COMM AND EXT RELATIONS	Corridor/Transition Office - Enclosed Corridor/Transition Office - Enclosed Office - Enclosed Office - Enclosed Office - Enclosed	108 ft² 200 ft² 108 ft² 200 ft²	131 ft² 49 ft² 119 ft² 63 ft² 140 ft² 139 ft²	1 0 1 0 1 1	0 CFM 5 CFM 5 CFM 5 CFM 5 CFM 5 CFM	0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF 0.06 CFM/SF	11 CFM 3 CFM 10 CFM 5 CFM 12 CFM 12 CFM	25 CFM 5 CFM 25 CFM 5 CFM 25 CFM 25 CFM

C

В

∢

5

UNIT TAG S-1

	MECHANICAL EQUIPMENT SCHEDULE - FAN COIL UNIT SCHEDULE																																		
							HYDROI	VIC HEATING CO	DIL DATA											COOLI	NG COIL DATA								FAN M	OTOR DATA					
		AIR				CONTROL VA	LVE				WATER					AIR			CONTROL VA	LVE				WATER					MO	FOR DATA					
				-		MIN.dP (FT.					WATERSIDE dP (MAX,	FI	INS/IN. FA				Y		MIN. dP (MAX. dP (FLOWRATE			WATERSIDE							STARTER /	FURNISHE			
DESIGNATIO	N FLOWRA	TE CAPAC	IIY LA		TYPE	H2O)	MAX.dP (F1. H2O) FLOWRATE	EWI('F DE	B) LWT(FDB)	F1.H2O)	ROWS ((MAX) (N	MIN. SF)	(CFM)	(MBH)	LAI ('F L	DB) TYPE	FT.H2O)	FT.H2O)	(GPM)	EVVI (F)	LVVI ('F)	(MAX F1. H20) ROWS (MAX	SF) (MIN.S	F) VOLI	PHASE MO	A FLA	. IYPE	DISCONNECT	BY	MANUFACTURE	-R MODEL	REMARKS
FCU-A	200 CFM	7800 Btu	′h 100.0	°F CV	/, BALL	2.30 ftH2O	3.45 ftH2O	1.0 GPM	130.0 °F	114.0 °F	1.50 ftH2O	2 10	0.7	75 SF 2	200 CFM	5300 Btu/h	າ 58.6 °F	CV, BALL	2.30 ftH2O	6.44 ftH2O	1.0 GPM	44.0 °F	54.4 °F	2.80 ftH2O	3 10	0.75 SF	115 V	1 1.5 A	1.2 A	ECM	YES	DIV. 23	IEC	FXA02 1	1, 2, 3
FCU-B	210 CFM	8800 Btu	′h 102.6	°F CV	/, BALL	2.30 ftH2O	9.90 ftH2O	2.0 GPM	130.0 °F	121.1 °F	4.30 ftH2O	2 10	0.7	75 SF 2	210 CFM	6600 Btu/h	າ 54.7 °F	CV, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	44.0 °F	50.5 °F	8.30 ftH2O	3 10	0.75 SF	115 V	1 1.5 A	15.0 A	ECM	YES	DIV. 23	IEC	FXA02 1	1, 2, 3
FCU-C	270 CFM	9900 Btu	′h 98.0 °	F CV	/, BALL	2.30 ftH2O	3.90 ftH2O	1.0 GPM	130.0 °F	110.2 °F	1.70 ftH2O	2 10) 1.0	00 SF 2	270 CFM	6600 Btu/h	າ 59.3 °F	CV, BALL	2.30 ftH2O	7.13 ftH2O	1.0 GPM	44.0 °F	57.1 °F	3.10 ftH2O	3 10	1.00 SF	115 V	1 1.8 A	. 1.4 A	ECM	YES	DIV. 23	IEC	FXA03 1	1, 2, 3
FCU-D	270 CFM	11000 Bt	u/h 101.9	°F CV	/, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	130.0 °F	118.9 °F	4.90 ftH2O	2 10) 1.0	00 SF 2	270 CFM	8100 Btu/h	າ 57.4 °F	CV, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	44.0 °F	52.0 °F	9.30 ftH2O	3 10	1.00 SF	115 V	1 1.8 A	. 1.4 A	ECM	YES	DIV. 23	IEC	FXA03 ⁴	1, 2, 3
FCU-E	350 CFM	12300 Bt	u/h 96.7 °	F CV	/, BALL	2.30 ftH2O	4.60 ftH2O	1.0 GPM	130.0 °F	105.4 °F	2.00 ftH2O	2 10) 1.0)8 SF 3	350 CFM	8200 Btu/h	າ 59.7 °F	CV, BALL	2.30 ftH2O	8.30 ftH2O	1.0 GPM	44.0 °F	60.3 °F	3.60 ftH2O	3 10	1.08 SF	115 V	1 1.9 A	. 1.5 A	ECM	YES	DIV. 23	IEC	FXA04 1	1, 2, 3
FCU-F	350 CFM	14000 Bt	u/h 101.2	°F CV	/, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	130.0 °F	115.9 °F	5.80 ftH2O	2 10	0 1.0	08 SF 3	350 CFM	10100 Btu/	/h 57.8 °F	CV, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	44.0 °F	54.0 °F	10.80 ftH2O	3 10	1.08 SF	115 V	1 1.9 A	. 1.5 A	ECM	YES	DIV. 23	IEC	FXA04 ⁴	1, 2, 3
FCU-G	520 CFM	18700 Bt	u/h 97.4 °	F CV	/, BALL	2.30 ftH2O	2.76 ftH2O	2.0 GPM	130.0 °F	111.2 °F	1.20 ftH2O	2 10) 2.0	00 SF 5	520 CFM	12400 Btu/	/h 59.6 °F	CV, BALL	2.30 ftH2O	5.06 ftH2O	2.0 GPM	44.0 °F	56.3 °F	2.20 ftH2O	3 10	2.00 SF	115 V	1 2.8 A	. 2.2 A	ECM	YES	DIV. 23	IEC	FXA06 1	1, 2, 3
FCU-H	750 CFM	17900 Bt	u/h 86.6 °	F CV	/, BALL	2.30 ftH2O	10.00 ftH2O	2.0 GPM	130.0 °F	112.0 °F	4.60 ftH2O	2 10) 3.6	61 SF 7	750 CFM	16600 Btu/	/h 59.4 °F	CV, BALL	2.30 ftH2O	1.61 ftH2O	2.0 GPM	44.0 °F	60.5 °F	0.70 ftH2O	4 10	3.61 SF	115 V	1 4.4 A	. 3.9 A	ECM	YES	DIV. 23	IEC	FXA10 ⁴	1, 2, 3
FCU-I	840 CFM	20400 Bt	u/h 86.9 °	F CV	/, BALL	2.30 ftH2O	10.00 ftH2O	3.0 GPM	130.0 °F	116.3 °F	8.70 ftH2O	2 10) 3.6	61 SF 8	340 CFM	21500 Btu/	/h 58.3 °F	CV, BALL	2.30 ftH2O	3.22 ftH2O	3.0 GPM	44.0 °F	58.2 °F	1.40 ftH2O	4 10	3.61 SF	115 V	1 4.4 A	. 3.9 A	ECM	YES	DIV. 23	IEC	FXA10 1	1, 2, 3
FCU-J	200 CFM	11900 Bt	u/h 105.0	°F CV	/, BALL	2.30 ftH2O	4.60 ftH2O	1.0 GPM	180.0 °F	160.0 °F	2.00 ftH2O	2 10	0.7	75 SF													115 V	1 1.5 A	. 1.2 A	ECM	YES	DIV. 23	IEC	GXY02 /	4.

SPECIFICATION SECTIONS: 238219 FAN COIL UNITS 238233 CONVECTORS

PROVIDE EC MOTORS WITH UNIT MOUNTED THERMOSTAT.
 FAN COIL UNITS INSTALLED ON THE 5TH FLOOR SHALL HAVE A 3-WAY VALVE FOR THE COOLING COILS, UNITS INSTALLED ON THE 4TH AND 5TH FLOORS SHALL HAVE 3-WAY VALVES FOR HEATING COILS TO ENSURE MINIMUM FLOW BYPASS TO PUMPS. ALL OTHER COILS ARE 2-WAY VALVES.

4. PROVIDE 3-WAY VALVES FOR UNITS. 5

TEMPLATE 2021.A 1/30/2024 9:50:18 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

AIR	
MINIMUM OA	SCHEDULED OA
	10 CFM
	25 CFM
11 CFM	25 CFM
12 CFM	25 CFM
11 CFM	25 CFM
13 CFM	25 CFM
29 CFM	25 CFM
17 CFM	25 CFM
18 CFM	25 CFM
3 CFM	25 CFM
3 CFM	25 CFM
	25 CFM
	25 CEM
12 CFM	25 CFM
209 CFM	375 CFM
18 CFM	25 CFM
22 CFM	25 CFM
24 CFM	30 CFM
19 CFM	30 CFM
55 CFM	55 CFM
16 CFM 11 CFM	30 CFM 30 CFM
9 CFM	30 CEM
4 CFM	5 CFM
11 CFM	30 CFM
3 CFM	5 CFM
10 CFM	30 CFM
5 CFM	5 CFM
12 CFM	30 CFM
12 CFM	30 CFM
247 CFM	420 CFM
18 CFM	20 CEM
21 CFM	20 CFM
25 CFM	25 CFM
19 CFM	25 CFM
15 CFM	25 CFM
16 CFM	25 CFM
12 CFM	25 CFM
9 CFM	25 CFM
10 CFM	25 CFM
5 CFM	5 CFM
12 CFM	25 CFM
12 CFM	25 CFM
16 CFM	25 CFM
206 CFM	340 CFM
18 CFM	25 CFM
	25 CFM
18 CFM	225 CFM 25 CFM
10 CFM	25 CFM
56 CFM	60 CFM
3 CFM	5 CFM
14 CFM	25 CFM
3 CFM	5 CFM
	25 CFM

212 CFM 365 CFM 1277 CFM 2000 CFM

AIR BALANCE SUMMARY AIR HANDLING UNIT NUMBER SUPPLY AIR (CFM) OUTSIDE AIR (CFM) CONTINUOUS EXHAUST (CFM)

(E)-ERU/(E)-AHU/(E)-EF

4

1. EXISTING UNITS TO BE RE-BALANCED TO AIRFLOW SHOWN ABOVE

2000 CFM

3

2000 CFM

MECHANICAL EQUIPMENT SCHEDULE - EXISTING PUMPS

				-										
		IDENTITY DATA		PERFORM	ANCE DATA	CONNEC	TION SIZES			N	IOTOR DATA			
DESIGNATION	SERVICE TO	LOCATION	TYPE	FLOW	HEAD	SUCTION	DISCHARGE	POWER	RPM	VOLTS	PHASE	VFD	STARTER/DISCONNECT	REMARKS
						-								
(E)P-3	HOT WATER	MECHANICAL ROOM	BASE MOUNTED END SUCTION	144.0 GPM	55.00 ftH2O	3"	1 1/2"	3.00 hp	1750	208 V	3	Х	X	1, 3
(E)P-4	HOT WATER	MECHANICAL ROOM	BASE MOUNTED END SUCTION	144.0 GPM	55.00 ftH2O	3"	1 1/2"	3.00 hp	1750	208 V	3	Х	X	1, 3
(E)PHWP-1	HOT WATER	MECHANICAL ROOM	CENTRIFUGAL IN-LINE	64.0 GPM	7.00 ftH2O	1 1/2"	1 1/2"	0.25 hp	1750	208 V	1	-	-	2.
(E)SHWP-2	HOT WATER	MECHANICAL ROOM	CENTRIFUGAL IN-LINE	27.0 GPM	15.00 ftH2O	1 1/2"	1 1/2"	0.25 hp	1750	208 V	1	-	-	2.
(E)P-4 (E)PHWP-1 (E)SHWP-2	HOT WATER HOT WATER HOT WATER	MECHANICAL ROOM MECHANICAL ROOM MECHANICAL ROOM	BASE MOUNTED END SUCTION CENTRIFUGAL IN-LINE CENTRIFUGAL IN-LINE	144.0 GPM 64.0 GPM 27.0 GPM	55.00 ftH2O 7.00 ftH2O 15.00 ftH2O	3" 1 1/2" 1 1/2"	1 1/2" 1 1/2" 1 1/2"	3.00 hp 0.25 hp 0.25 hp	1750 1750 1750	208 V 208 V 208 V	3 1 1	X - -	X - -	-

SPECIFICATION SECTION: 232123 - HYDRONIC PUMPS

REMARKS: 1. PROVIDE WALL MOUNTED VFDS. 2. EXISTING TO REMAIN; SHOWN FOR REFERENCE ONLY.

3. EXISTING PUMP TO REMAIN; REBALANCE TO FLOWS SHOWN.

NSULATION SCHEDULE				
APPLICATION	LOCATION	THICKNESS (IN.)	INSULATION TYPE	REMARKS
IYDRONIC PIPING SYSTEMS				
CHILLED WATER - (42°F AND ABOVE)	1" AND LESS	1"	CLOSED CELL ELASTOMERIC OR CELLULAR GLASS	1-1/2" THICK OUTDOORS OR IN UNCONDITIONED AREAS
CHILLED WATER - (42°F AND ABOVE)	BETWEEN 1-1/4" AND 2"	1-1/2"	CLOSED CELL ELASTOMERIC OR CELLULAR GLASS	2" THICK OUTDOORS OR IN UNCONDITIONED AREAS
CHILLED WATER - (42°F AND ABOVE)	LARGER THAN 2"	1-1/2"	CELLULAR GLASS	2" THICK OUTDOORS OR IN UNCONDITIONED AREAS
CHILLED WATER - COLD PIPE HANGER SUPPORT BLOCK		MATCH	FOAMGLASS	
COIL CONDENSATE	ALL SIZES	1/2"	CLOSED CELL ELASTOMERIC	REPLACE ALL EXISTING CONDENSATE INSULATION WITH NEW
HEATING WATER - (250°F AND BELOW)	2" NPS AND LESS	2"	RIGID FIBERGLASS	
HEATING WATER - (250°F AND BELOW)	2-1/2" NPS TO 14" NPS	2"	RIGID FIBERGLASS	
QUIPMENT INSULATION REQUIREMENTS				
CHILLED WATER PUMPS	COLD SURFACE	1-1/2"	CLOSED CELL ELASTOMERIC OR CELLULAR GLASS	REMOVABLE COVER

SPECIFICATION SECTIONS: 230716 - HVAC EQUIPMENT INSULATION 230719 - HVAC PIPING INSULATION

MECHANICAL EQUIPMENT SCHEDULE - PUMPS

	-																	
	10	DENTITY DATA		PE	RFORMANCE D	ΑΤΑ	CONNECT	TION SIZES					MOTOR	DATA				
	NATION SERVICE TO LOCATION TYPE					DUTY POINT												
DESIGNATION	SERVICE TO	LOCATION	TYPE	FLOW	HEAD	EFFICIENCY	SUCTION	DISCHARGE	POWER	RPM	VOLTS	PHASE	MCA	MOCP	VFD	STARTER/DISCONNECT	FURNISHED BY	REMARKS
PCHWP-1	CHILLED WATER	BASEMENT	BASE MOUNTED END SUCTION	140.0 GPM	72.00 ftH2O	71%	3"	1 1/2"	7.50 hp	1800	208 V	3	20.9 A	30 A	Х		DIV. 23	ALL
PCHWP-2	CHILLED WATER	BASEMENT	BASE MOUNTED END SUCTION	140.0 GPM	72.00 ftH2O	71%	3"	1 1/2"	7.50 hp	1800	208 V	3	20.9 A	30 A	Х		DIV. 23	ALL
					•			· · ·		•			•					

SPECIFICATION SECTION: 232123 - HYDRONIC PUMPS

REMARKS: 1. PROVIDE TEFC MOTORS WITH WALL MOUNTED VFDS. "X" IN THE SCHEDULE CELL INDICATES THIS ITEM SHALL BE PROVIDED.
 PUMP IMPELLER SIZE - 9.5 IN. NPSHR 3.71FT. MIN. FLOW 35.2 GPM.

MECHANICAL EQUIPMENT SCHEDULE - GRILLES, REGISTERS AND DIFFUSERS

				••••===					·													
	TYPE SERVICE TO					MOUNTING DAT	A					CONSTRUCTION DA	ГА					SELECTION BA	ASED ON			
													ACC	ESSORIES			PATTERN					
													VOLUME	REMOTE CABLE								
G	R	D	SA	RA	EA	TA	CEILING	DUCT	WALL	SHAPE	MATERIAL	COLOR	DAMPER	OPERATOR	1-W	2-W	3-W	4-W	E/R	MANUFACTURER	MODEL	COMMENTS
X			X				Х		Х	RECTANGULAR	STEEL	PER ARCH.	Х			X				TITUS	300RS	ALL

SPECIFICATION SECTIONS: 233713 - DIFFUSERS, REGISTERS, AND GRILLES

REMARKS: 1. FINAL COLOR SELECTION BY ARCHITECT. VENDOR TO SUBMIT FULL COLOR CHART.

1100 CFM

MECHANICAL FOUIPMENT SCHEDULE - FIN TUBE HEATERS														
		HEATER	CAPACITY	FINS PER	AVG WATER									
DESIGNATION	SERVICE TO	LENGTH	PER FOOT	FOOT	TEMP	MANUFACTURER	MODEL	REMARKS						
FTH-1	RESTROOM	2' - 0"	680.0 Btu/h	50	170.0 °F	STERLING	LB-2	ALL						

1

SPECIFICATION SECTIONS: 23 82 33 - CONVECTORS

2

1. PROVIDE TAMPER RESISTANT DAMPER 2. 3/4" COPPER CONNECTION, 3-3/4" X 2-3/4" FIN SIZE, BALANCE 3-WAY VALVE FLOW TO 1 GPM. 3. CONVECTOR PERFORMANCE BASED ON 180F EWT AND 65F EAT.

MECHAI	MECHANICAL EQUIPMENT SCHEDULE - AIR SEPARATORS														
	SIZE CONNECTION														
DESIGNATION	TYPE	DIAMETER	HEIGHT	VOLUME	SIZE	TYPE	FLOW RATE	REMARKS							
AS-2	TANGENTIAL VORTEX	12 3/4"	31 7/16"	13 gal	4"	FLANGE	140.0 GPM	ALL							

SPECIFICATION SECTION: 232100 - HYDRONIC PIPING AND PUMPS 232116 - HYDRONIC SPECIALTIES

REMARKS: 1. MAXIMUM WORKING PRESSURE: 125 PSIG (862 kPa) 1. MAXIMUM WORKING TEMPERATURE: 350°F (177°C) 2. MAXIMUM OPERATING TEMPERATURE: 350°F (177°Ć)

MECHA	NICAL EQU	JIPMEN		DULE - E	XPANS	ION TAN	K						
	SIZE CONNECTION SELECTION BASED ON												
DESIGNATION	TYPE	DIAMETER	LENGTH	VOLUME	SIZE	TYPE	MANUFACTURER	REMARKS					
ET-2	DIAPHRAGM TANK	20"	38"	45 gal	1"	THREADED	Bell & Gossett	D-80	ALL				

<u>REMARKS:</u> 1. PROVIDE A DRAIN WITH VALVE AT THE BOTTOM OF THE TANK. 2. PROVIDE A BELL & GOSSETT TANK PURGE VALVE AT THE TOP OF THE TANK.

M002

5

SEQUENCE OF OPERATION

CHILLED WATER SYSTEM (UNDER NORMAL POWER CONDITION):

GENERAL:

CHILLED WATER SYSTEM IS DESIGNED AS A VARIABLE PRIMARY FLOW SYSTEM. IT CONSISTS OF ONE EX. AIR-COOLED CHILLER. TWO CHILLED WATER PUMPS (PRIMARY/STANDBY) AND TERMINAL UNITS. CHILLED WATER PUMP PRIMARY/STANDBY DUTY SHALL BE ROTATED ON A WEEKLY BASIS. ROTATION ORDER SHALL BE BASED ON EQUIPMENT RUNTIME. WHENEVER THE PRIMARY PUMP FAILS, THE STANDBY PUMP SHALL BE ENERGIZED AUTOMATICALLY AND AN ALARM SHALL BE SENT TO THE BAS SYSTEM.

ONCE ENERGIZED, CHILLER(S) AND PUMP(S) SHALL RUN AT MINIMUM 10 MINUTES UNLESS THERE IS AN ALARM CONDITION THAT REQUIRES IMMEDIATE SHUT-DOWN. EX. CHILLER CONTROL SEQUENCE SHALL REMAIN UNLESS NOTED BELOW.

UNDER ANY ONE OF THE FOLLOWING CONDITIONS, CHILLED WATER SYSTEM SHALL BE ENABLED:

• OUTDOOR AIR TEMPERATURE REACHES 70°F, WITH 4°F CYCLE DIFFERENTIAL. • THERE IS CALL FOR COOLING (CHW VALVE ON UNIT OPEN TO THE COIL - CALL WHEN ANY ONE VALVE COMMAND RISES TO 30% OPEN, STOP CALLING WHEN ALL VALVE COMMANDS FALL TO LESS THAN 5%).

6

UPON A FAILURE OF NETWORK COMMUNICATIONS THAT PREVENTS THE SHARING OF LOAD VALVE COMMANDS, AN OUTDOOR AIR TEMPERATURE ENABLE SETPOINT OF 55°F (ADJUSTABLE), WITH 4°F CYCLE DIFFERENTIAL, SHALL BE USED, WHEN CHILLED WATER SYSTEM IS ENABLED, PRIMARY CHILLED WATER PUMP SHALL BE ENERGIZED AND RAMP UP TO SPEED AT A RATE OF 1 HZ/SECOND UNTIL DIFFERENTIAL PRESSURE SETTING IS MET.

DIFFERENTIAL PRESSURE SETTING SHALL BE DENAMICALLY ADJUSTED TO MAINTAIN TWO CHILLED WATER CONTROL VALVES ARE OPEN GREATER THAN 90% TO THE COIL. AFTER EVAPORATOR WATER FLOW HAS BEEN PROVED BY THE FLOW SWITCH, LEAD CHILLER SHALL BE ENERGIZED. ONCE STARTED, CHILLER SHALL MAINTAIN 44°F SUPPLY WATER TEMPERATURE. CHILLED WATER PUMP SHALL CONTINUE TO RUN FOR 60 SECONDS AFTER CHILLER SHUTDOWN. MIN. FLOW THRU THE CHILLER SHALL BE MAINTAIN AT ALL TIMES.

S

(6B) CHILLED WATER / HOT WATER CONTROL DIAGRAMS M101 12" = 1'-0"

	VALVE POSITION	VALN	/E FAN ION STARTER AI	START/STOP
HWR HWS			CHR CHS	T SPACE TEMPERATU
SEE I BELC VALV ARRA			DI STATUS MOISTURE SENSOR IN AUXILARY DRAIN PAN	AI SEE NOTES BELOW FOR VALVE ARRANGEMENT
<u>SE</u>	QUENCE OF OPERATION (FOU	<u>R-PIPE FCU)</u>		
ON SE SH AN	A RISE IN SPACE TEMPERATU IPOINT IN THE SPACE (MAINTA ALL BE MODULATED TO CLOSE ALL BE MODULATED TO OPEN D COOLING.	IRE, THE COOLING AIN 75°F, ADJ.). OI E. ON A CONTINO TO MAINTAIN 70°I	G COIL VALVE SHALL BE M N A FALL IN SPACE TEMPE JS FALL IN SPACE TEMPEF F, ADJ. THERE SHALL BE A	ODULATED TO OPEN TO MAIN RATURE, COOLING COIL VALV RATURE, HEATING COIL VALV 5°F DEADBAND BETWEEN HE
TH HE	E BAS SHALL CONSTANTLY MC ATING/COOLING COILS.	DNITOR SPACE TE	MPERATURE, 2-WAY / 3-W	AY VALVE POSITION
AN SE	ALARM SHALL BE SENT TO TH NSES MOISTURE LEVEL EXCEE	IE BAS SYSTEM W EDING ITS SETPO	HEN MOISTURE SENSOR	N THE AUXILIARY DRAIN PAN
CH	W COILS GET 3-WAY VALES ON	N THE 5TH FLOOR	. ALL OTHER FLOORS TO I	RECEIVE 2-WAY VALVE
HV	COILS GET 3-WAY VALES ON	THE 4TH AND 5TH	I FLOOR. ALL OTHER FLOO	ORS TO RECEIVE 2-WAY VALV
	ERMOSTATIC SETBACK CONTR STEM TO MAINTAIN ZONE TEM	ROLS SHALL BE C	ONFIGURED TO SET BACK /N TO 55°F (13°C) OR UP To	OR TEMPORARILY OPERATE O 85°F (29°C).
TH SY				THE SYSTEM FOR SEVEN

TEMPLATE 2021.A 1/30/2024 9:50:19 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

CHILLED WATER SYSTEM CONTROL DIAGRAM

4

4

3

HEATING HOT WATER – GENERAL NOTES

2

- 1. HEATING HOT WATER SYSTEM IS WATER (NO GLYCOL). 2. WHERE A PRESSURE TRANSDUCER OR TEMPERATURE SENSOR IS LOCATED, PROVIDE A LOCAL INDICATION (PRESSURE GAUGE OR
- THERMOMETER) ADJACENT. 3. MODULATING CÓNTROL VALVES 1-1/2" AND SMALLER SHALL BE ACTUATED BALL VALVE TYPE.
- 4. MODULATING CONTROL VALVES LARGER THAN 1-1/2" SHALL BE ACTUATED HIGH-PERFORMANCE BUTTERFLY TYPE. 5. ALL MOTORIZED TWO POSITION AND MODULATION VALVES IN THE
- BUILDING SHALL BE POWERED FROM DIN RAILS LOCATED IN THE CONTROL PANELS. PROVIDE INDIVIDUAL CIRCUIT PROTECTION FOR
- EACH VALVE CIRCUIT. 6. EXISTING WATER LINES WILL BECOME THE PRIMARY HOT WATER LINES.

CHILLED WATER – GENERAL NOTES

1. CHILLED WATER SYSTEM IS WATER (NO GLYCOL). 2. WHERE A PRESSURE TRANSDUCER OR TEMPERATURE SENSOR IS LOCATED, PROVIDE A LOCAL INDICATION (PRESSURE GAUGE OR THERMOMETER) ADJACENT. 3. MODULATING CONTROL VALVES 1-1/2" AND SMALLER SHALL BE

1

- ACTUATED BALL VALVE TYPE. 4. MODULATING CONTROL VALVES LARGER THAN 1-1/2" SHALL BE
- ACTUATED HIGH-PERFORMANCE BUTTERFLY TYPE. 5. ALL MOTORIZED TWO POSITION AND MODULATION VALVES IN THE BUILDING SHALL BE POWERED FROM DIN RAILS LOCATED IN THE CONTROL PANELS. PROVIDE INDIVIDUAL CIRCUIT PROTECTION FOR EACH VALVE CIRCUIT.

NOTES:

1. EXISTING BOILER SUPPLIES WATER AT 180F AND THIS IS DISTRIBUTED TO THE RADIATORS AND EXISTING AHU. V-2 MIXES THE WATER DOWN TO 130F WHEN SYSTEM IS IN HEATING MODE.

(2A)EXISTING DUAL TEMPERATURE SYSTEM FLOW DIAGRAM M101 12" = 1'-0"

FLOW DIAGRAMS M101

5

4

ш

Δ

υ

ш

∢

5

TEMPLATE 2021.A 1/30/2024 9:50:20 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

2

1

HOT WATER WATER SYSTEM CONTROL DIAGRAM

SEQUENCE OF OPERATION

3

HOT WATER SYSTEM (UNDER NORMAL POWER CONDITION): GENERAL:

3

NEW VFDS ARE ADDED TO EX. DUAL TEMPERATURE WATER PUMP #3 AND #4. THEY BECOME THE NEW SECONDARY HW PUMPS AS REFERRED BELOW. SECONDARY HOT WATER PUMP PRIMARY/STANDBY DUTY SHALL BE ROTATED ON A WEEKLY BASIS. ROTATION ORDERS SHALL BE BASED ON EQUIPMENT RUNTIME. WHENEVER THE PRIMARY PUMP FAILS, THE STANDBY PUMP SHALL BE ENERGIZED AUTOMATICALLY AND AN ALARM SENT TO THE BAS SYSTEM. EX. BOILER CONTROL SEQUENCE SHALL REMAIN UNLESS NOTED BELOW.

UNDER ANY OF THE FOLLOWING CONDITIONS, CHILLED WATER SYSTEM SHALL BE ENABLED: OUTDOOR AIR TEMPERATURE REACHES 55F, WITH A 4F CYCLE DIFFERENTIAL THERE IS A CALL FOR HEATING (HW VALVE ON UNIT OPEN TO THE COIL - CALL WHEN ANY ONE VALVE COMMAND RISES TO 30% OPEN, STOP CALLING WHEN ALL VALVE COMMANDS FALL TO LESS THAN 5%.

UPON A FAILURE OF NETWORK COMMUNICATIONS THAT PREVENTS THE SHARING OF LOAD VALVE COMMANDS, AN OUTDOOR AIR TEMPERATURE ENABLE SETPOINT OF 55F (ADJUSTABLE) WITH 4F CYCLE DIFFERENTIAL SHALL BE USED. DIFFERENTIAL PRESSURE SETTING SHALL BE DYNAMICALLY ADJUSTED TO MAINTAIN TWO HOT WATER CONTROL VALVES ARE OPEN GREATER THAN 90% TO THE COIL.

ONCE ENERGIZED, PUMP(S) SHALL RUN AT MINIMUM 10 MINUTES UNLESS THERE IS AN ALARM CONDITION THAT REQUIRES IMMEDIATE SHUT-DOWN. WHEN SECONDARY HOT WATER SYSTEM IS ENABLED, SECONDARY HOT WATER PUMP (PRIMARY) SHALL BE ENERGIZED AND RAMP UP TO SPEED AT A RATE OF 1 HZ/SECOND UNTIL DIFFERENTIAL PRESSURE SETTING IS MET. DIFFERENTIAL PRESSURE SETTING SHALL BE BASED ON LOWEST MEASUREMENT OF THE FOUR SENSORS.

4

2

M102

5 TEMPLATE 2021.A 1/30/2024 9:50:26 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

6A BASEMENT FLOOR DEMOLITION PLAN M200 1/4" = 1'-0"

3

4

ш

Δ

6 4

KEYNOTE LEGEND

1

2

2

- 23.01 REMOVE BOILER FLUE DUCT (B VENT) TO ALLOW FOR TEMPORARY STRUCTURAL SUPPORT INSTÀLLATIÓN. CONTRACTOR TO PROVIDE TEMPORARY HEAT SOURCE FOR THE BUILDING IF CONSTRUCTION OCCURS DURING HEATING SEASON.
- 23.02 DISCONNECT AND REMOVE CHILLED WATER PIPING WHERE INDICATED. REFERENCE FLOW DIAGRAMS ON M601. 23.16 3/4" EXISTING PIPES UP TO FAN COILS ON FLOOR ABOVE.
- 23.17 EXISTING PIPES TO AIR-COOLED CHILLER. 23.18 EXISTING PIPES UP IN RISER. DRAIN SYSTEM AND CUT RISER AT 1ST FLOOR
- AND 4TH FLOOR PRIOR TO STRUCTURAL REPAIR. 23.20 REPLACE 3-WAY VALVE.
- 23.21 REMOVE ALL DOMESTIC WATER PIPING FROM AND INCLUDING MAIN SHUT OFF VALVE TO POINT SHOWN ON PLANS, CAP OPENINGS. EXISTING 3/4" BRANCH PIPE TO BE TEMPORARY CAPPED.

BASEMENT FLOOR PIPING-DEMOLITION PLAN M200

3

6A 1ST FLOOR DEMOLITION PLAN M201 1/4" = 1'-0"

ш

Δ

6

6 TEMPLATE 2021.A 1/30/2024 9:50:29 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

5 4

4

3

1. EXISTING PIPING, DUCT, AND GRILLES/REGISTERS ON THIS FLOOR ARE NOT SHOWN BECAUSE IT IS ALL EXISTING TO REMAIN.

2

KEYNOTE LEGEND

23.03 DISCONNECT AND REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED APPURTENANCES. 23.04 DISCONNECT AND REMOVE EXISTING CABINET UNIT HEATER AND ASSOCIATED APPURTENANCES. 23.05 DISCONNECT AND REMOVE EXISTING FIN TUBE HEATER AND ASSOCIATED APPURTENANCES.

1

1ST FLOOR PIPING -DEMOLITION PLAN M201

232.45°

Δ

3

2

6A 2ND FLOOR DEMOLITION PLAN M202 1/4" = 1'-0"

5 TEMPLATE 2021.A 1/30/2024 9:50:32 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

3

4

5 4

2 **GENERAL SHEET NOTES**

EXISTING PIPING, DUCT, AND GRILLES/REGISTERS ON THIS FLOOR ARE NOT SHOWN BECAUSE IT IS ALL EXISTING TO REMAIN.

KEYNOTE LEGEND

23.03 DISCONNECT AND REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED APPURTENANCES. 23.05 DISCONNECT AND REMOVE EXISTING FIN TUBE HEATER AND ASSOCIATED APPURTENANCES.

1

2ND FLOOR PIPING -**DEMOLITION PLAN** M202

6 TEMPLATE 2021.A 1/30/2024 9:50:35 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

6A 3RD FLOOR DEMOLITION PLAN M203 1/4" = 1'-0"

3

4

3

ш

6

5 4

GENERAL SHEET NOTES

EXISTING PIPING, DUCT, AND GRILLES/REGISTERS ON THIS FLOOR ARE NOT SHOWN BECAUSE IT IS ALL EXISTING TO REMAIN.

2

KEYNOTE LEGEND

23.03 DISCONNECT AND REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED APPURTENANCES. 23.04 DISCONNECT AND REMOVE EXISTING CABINET UNIT HEATER AND ASSOCIATED APPURTENANCES.

1

23.05 DISCONNECT AND REMOVE EXISTING FIN TUBE HEATER AND ASSOCIATED APPURTENANCES.

3RD FLOOR PIPING -DEMOLITION PLAN M203

3

4

2

3

5 4

6A 4TH FLOOR DEMOLITION PLAN M204 1/4" = 1'-0"

ш

6

6 TEMPLATE 2021.A 1/30/2024 9:50:38 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

GENERAL SHEET NOTES²

1. EXISTING PIPING, DUCT, AND GRILLES/REGISTERS ON THIS FLOOR ARE NOT SHOWN BECAUSE IT IS ALL EXISTING TO REMAIN.

KEYNOTE LEGEND

23.03 DISCONNECT AND REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED APPURTENANCES.
23.05 DISCONNECT AND REMOVE EXISTING FIN TUBE HEATER AND ASSOCIATED APPURTENANCES.

1

4TH FLOOR PIPING -DEMOLITION PLAN M204

23.03 23.03 ۲ **r---**

23.03

6A 5TH FLOOR DEMOLITION PLAN M205 1/4" = 1'-0"

23.03

ш

Δ

6

5 TEMPLATE 2021.A 1/30/2024 9:50:41 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

2

5 4

4

3

3

2 **GENERAL SHEET NOTES**

EXISTING DUCT AND GRILLES/REGISTERS ON THIS FLOOR ARE NOT SHOWN BECAUSE IT IS ALL EXISTING TO REMAIN.

KEYNOTE LEGEND

23.03 DISCONNECT AND REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED

1

- APPURTENANCES. 23.04 DISCONNECT AND REMOVE EXISTING CABINET UNIT HEATER AND ASSOCIATED APPURTENANCES.
- 23.05 DISCONNECT AND REMOVE EXISTING FIN TUBE HEATER AND ASSOCIATED APPURTENANCES.

5TH FLOOR PIPING -**DEMOLITION PLAN** M205

232.45° 1 2

1

TEMPLATE 2021.A 1/30/2024 9:50:51 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

6A BASEMENT FLOOR NEW WORK PLAN M210 1/4" = 1'-0"

5

3

4

6

(E)P-3

4

GENERAL SHEET NOTES

1. EXISTING PIPING ON FLOOR PLAN SERVES FAN COIL UNITS ON LEVEL ABOVE. 2. REPLACE ALL CONDENSATE INSULATION.

KEYNOTE LEGEND

23.10 REINSTALL BOILER FLUE PERMANENT FLUE PIPING ONCE STRUCTURAL REPAIRS ARE COMPLETE. SCHEDULE WORK SO THAT BOILER IS AVAILABLE TO HEAT BUILDING DURING PROJECT DURATION.

1

- 23.12 EXTEND NEW CHILLED WATER PIPING TO CONNECT TO EXISTING 3-WAY VALVE TO FEED CHILLED WATER COIL. 3-WAY VALVE SHALL REMAIN TO PROVIDE SUFFICIENT MINIMUM SPEED PUMP FLOW RATE. 23.14 NEW SUPPLY AND RETURN PIPE RISER UP. PROVIDE FIRE RATED CAULK
- SEALANT AROUND EACH PIPE SHAFT PENETRATION. 23.16 3/4" EXISTING PIPES UP TO FAN COILS ON FLOOR ABOVE. 23.17 EXISTING PIPES TO AIR-COOLED CHILLER.
- 23.19 EXISTING PIPES UP IN RISER. RE-ATTACH RISER AT 1ST FLOOR AND 4TH FLOOR AFTER STRUCTURAL REPAIR IS COMPLETE. PROVIDE FIRE RATED CAULK SEALANT AROUND EACH PIPE SHAFT PENETRATION. 23.20 REPLACE 3-WAY VALVE.
- 23.22 PROVIDE AND INSTALL NEW 3/4" BACKFLOW PREVENTER FOR MECHANICAL MAKE-UP. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION. 23.24 PIPING TO BE CONNECTED TO NEW FAN COIL UNIT IN STAIRWELL. REFER TO PLAN M211.

NOTE: ALL BACKFLOW PREVENTERS SHALL BE INSTALLED PER REQUIREMENTS OF THE CITY OF RICHMOND.

3C DOMESTIC WATER SERVICE RISER DIAGRAM

2

NEW WORK PLAN

M210

5 TEMPLATE 2021.A 1/30/2024 9:50:52 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

6A 1ST FLOOR NEW WORK PLAN M211 1/4" = 1'-0"

6

ш

Δ

5

4

3

4

GENERAL SHEET NOTES

3

1. EXISTING PIPING ON FLOOR PLAN SERVES FAN COIL UNITS ON LEVEL ABOVE. 2. REPLACE ALL CONDENSATE INSULATION.

KEYNOTE LEGEND

23.06 ROUTE NEW CHILLED WATER PIPING DOWN HALLWAY, ABOVE CEILING. BRANCH PIPING WILL FEED FAN COILS LOCATED ON THE FLOOR ABOVE. SPACE ABOVE CEILING IS CONGESTED WITH BUILDING SERVICES. CONTRACTOR TO ADJUST PIPING ACCORDINGLY BASED ON EXISTING CONDITIONS. PUMP STATIC PRESSURE

- CALCULATIONS HAVE ACCOMMODATED 6 SETS OF ELBOWS ON MAIN PIPING. 23.07 INSTALL NEW FAN COIL UNIT. CONNECT UNIT TO EXISTING HOT WATER AND NEW CHILLED WATER PIPING ENTERING FROM FLOOR BELOW. 23.08 INSTALL NEW CABINET UNIT HEATER. CONNECT UNIT TO EXISTING HOT WATER
- PIPING. 23.09 INSTALL NEW CONVECTOR HEATER. CONNECT UNIT TO EXISTING HOT WATER PIPING.
- 23.14 NEW SUPPLY AND RETURN PIPE RISER UP. PROVIDE FIRE RATED CAULK SEALANT AROUND EACH PIPE SHAFT PENETRATION. 23.23 PROVIDE AND INSTALL NEW 2-1/2" BACKFLOW PREVENTER COMPLETE WITH STRAINER. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION. PROVIDE COMPLETE WITH AIR-GAP AND INDIRECTLY DISCHARGE DRAIN TO FLOOR DRAIN.
- ROUTE DRAIN TO BASEMENT CEILING, ROUTE ALONG CEILING AND DISCHARGE OUT EXTERIOR WALL. INSTALL PER CITY OF RICHMOND REQUIREMENTS. 23.25 NEW 4" FLOOR DRAIN EQUAL TO J.R. SMITH 2010 WITH 8" STRAINER. PROVIDE COMPLETE WITH P-TRAP AND CODE COMPLIANT TRAP GUARD. ROUTE DRAIN TO BASEMENT CEILING, ROUTE ALONG CEILING AND DISCHARGE OUT EXTERIOR WALL. PROVIDE A 2" VENT WITHIN 16'-0" OF P-TRAP AND CONNECT TO EXISTING VENT SYSTEM.
- 23.26 PROVIDE A FIELD FABRICATED STAINLESS STEEL DRAIN PAN WITH 2" LIP. DRAIN PAN SHALL COVER THE ENTIRE FLOOR AREA IN THE CLOSET. PROVIDE 6" OPENING WHERE FLOOR DRAIN IS LOCATED TO ALLOW THE FLOW OF DRAIN PAN INTO FLOOR DRAIN. PROVIDE COMPLETE WITH AUDIBLE FLOAT ALARM.

3

4

3

GENERAL SHEET NOTES²

EXISTING PIPING ON FLOOR PLAN SERVES FAN COIL UNITS ON LEVEL ABOVE.
 REPLACE ALL CONDENSATE INSULATION.

2

KEYNOTE LEGEND

23.07 INSTALL NEW FAN COIL UNIT. CONNECT UNIT TO EXISTING HOT WATER AND NEW CHILLED WATER PIPING ENTERING FROM FLOOR BELOW.

1

23.09 INSTALL NEW CONVECTOR HEATER. CONNECT UNIT TO EXISTING HOT WATER PIPING.

23.14 NEW SUPPLY AND RETURN PIPE RISER UP. PROVIDE FIRE RATED CAULK SEALANT AROUND EACH PIPE SHAFT PENETRATION.

2ND FLOOR PIPING – NEW WORK PLAN M212

6 TEMPLATE 2021.A 1/30/2024 9:51:01 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

3

4

3

4

ш

Δ

6

5

GENERAL SHEET NOTES

EXISTING PIPING ON FLOOR PLAN SERVES FAN COIL UNITS ON LEVEL ABOVE.
 REPLACE ALL CONDENSATE INSULATION.

2

KEYNOTE LEGEND

23.07 INSTALL NEW FAN COIL UNIT. CONNECT UNIT TO EXISTING HOT WATER AND NEW CHILLED WATER PIPING ENTERING FROM FLOOR BELOW.
23.08 INSTALL NEW CABINET UNIT HEATER. CONNECT UNIT TO EXISTING HOT

1

WATER PIPING. 23.09 INSTALL NEW CONVECTOR HEATER. CONNECT UNIT TO EXISTING HOT WATER

PIPING. 23.14 NEW SUPPLY AND RETURN PIPE RISER UP. PROVIDE FIRE RATED CAULK SEALANT AROUND EACH PIPE SHAFT PENETRATION.

M213

5 TEMPLATE 2021.A 1/30/2024 9:51:05 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

6A 4TH FLOOR NEW WORK PLAN M214 1/4" = 1'-0"

3

4

3

6

ш

Δ

5

4

GENERAL SHEET NOTES

1. EXISTING PIPING ON FLOOR PLAN SERVES FAN COIL UNITS ON LEVEL ABOVE. 2. REPLACE ALL CONDENSATE INSULATION.

2

KEYNOTE LEGEND

23.07 INSTALL NEW FAN COIL UNIT. CONNECT UNIT TO EXISTING HOT WATER AND NEW CHILLED WATER PIPING ENTERING FROM FLOOR BELOW. 23.09 INSTALL NEW CONVECTOR HEATER. CONNECT UNIT TO EXISTING HOT WATER PIPING.

1

23.19 EXISTING PIPES UP IN RISER. RE-ATTACH RISER AT 1ST FLOOR AND 4TH FLOOR AFTER STRUCTURAL REPAIR IS COMPLETE. PROVIDE FIRE RATED CAULK SEALANT AROUND EACH PIPE SHAFT PENETRATION.

WORK PLAN

M214

5 TEMPLATE 2021.A 1/30/2024 9:51:08 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

3

4

3

ш

6

5

4

۷

6A 5TH FLOOR NEW WORK PLAN M215 1/4" = 1'-0"

GENERAL SHEET NOTES

1. REPLACE ALL CONDENSATE INSULATION.

KEYNOTE LEGEND

23.07 INSTALL NEW FAN COIL UNIT. CONNECT UNIT TO EXISTING HOT WATER AND NEW CHILLED WATER PIPING ENTERING FROM FLOOR BELOW. 23.08 INSTALL NEW CABINET UNIT HEATER. CONNECT UNIT TO EXISTING HOT WATER PIPING. 23.09 INSTALL NEW CONVECTOR HEATER. CONNECT UNIT TO EXISTING HOT WATER PIPING.

232.45° 7 4

2

6A MECHANICAL ROOM - 3D VIEW

6 TEMPLATE 2021.A 1/30/2024 9:51:10 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

۷

1

ш

۵

U

ш

۷

TYP. -

TYP. -

3

4

- ROOF 59' - 4 1/2"

_____ _ _ _ _ _ _ _ _ _ _

ROOF 59' - 4 1/2"

1

2

M301

6

5

ш

Δ

ш

∢

TEMPLATE 2021.A 1/30/2024 9:51:14 AM

CHW COIL WITH 2-W CONTROL VALVE PIPING DETAIL - FCU UNITS

MAIN DOWNSTREAM

SERVICE VALVE

SECURE FEEDER TO PAD WITH EXPANSION BOLTS (TYPICAL) -4" CONCRETE

HOUSEKEEPING

PAD —

<u>CHW COIL WITH 3-W CONTROL VALVE PIPING</u> DETAIL - FCU UNITS ON FIFTH FLOOR

Y-STRAINER SERVICE VALVE

CONTINUOUS PIPE CLOSURE _ 3/8" DRAIN

> NOTE: PROVIDE FACTORY INSTALLED THERMOSTATIC CONTROL VALVE AND APPURTENANCES AS SHOWN.

5

C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

4

1" —

5-GAL CHEMICAL

FEEDER

CHEMICAL FEEDER DETAIL

NOTE: COORDINATE WITH FLOOR PLANS

MAIN UPSTREAM
 OF SYSTEM PUMP

- SERVICE VALVE

1/2" AIR BLEED LINE

UNION (TYPICAL)

SERVICE VALVE

- TO DRAIN

3

SENSOR/THERMOMETER WELL INSTALLATION DETAIL NOTE: FOR PIPE SIZES 1" THRU 2"

SENSOR/THERMOMETER WELL INSTALLATION DETAIL NOTE: FOR PIPE SIZES 2-1/2" AND ABOVE

TICKNESS GREATER THAN

NOTE: COORDINATE WITH FLOOR PLANS

3/4" -

HW BASEBOARD RADIATOR W/T-STAT PIPING DETAIL

4

NOTE: COORDINATE WITH MANUFACTURER'S INSTALLATION GUIDE

2

1

<u>DESIGNER NOTE</u>: CHECK WITH STRUCTURAL ENG. FOR PROPER SIZING. USE ONLY FOR LARGE BOILERS AND CHILLERS.

HEAVY EQUIPMENT PAD ON EXISTING SLAB DETAIL NOTE: COORDINATE WITH STRUCTURAL DRAWINGS

COOLING COIL CONDENSATE DRAIN DETAIL

NOTE: APPLIED TO DRAW-THROUGH COIL

4

5

4

6 TEMPLATE 2021.A 1/30/2024 9:51:16 AM C:\Users\pmaccormac\Documents\2.220318.0 - VCU SHR Reno - Mech R22 Lu&S_pmaccormac.rvt

3

CITY OF RICHMOND DEPARTMENT OF PUBLIC UTILITIES TYPICAL INSTALLATION PROCEDURES

1. REFER TO ALL APPLICABLE CODES AND MANUALS DURING DESIGN.

2. THE BFP ASSEMBLY'S SHUTOFF VALVES SHALL BE THE ONES APPROVED BY THE MANUFACTURER FOR THAT BFP ASSEMBLY.

3. SUBMIT PLANS SEALED AND SIGNED BY A PROFESSIONAL ENGINEER TO CROSS CONNECTION DEPT.

4. APPLY FOR A PLUMBING PERMIT FROM BUILDING INSPECTIONS OFFICE.

5. APPLY FOR A WATER SERVICE PERMIT FROM DPU DEVELOPMENT OFFICE.

6. INSTALL PIPING AND BACKFLOW PREVENTER, INCLUDING TEST COCKS ADAPTERS – (4) STRAIGHT HOSE ADAPTER FITTINGS, 1/4" S.A.E. 45° FLARE TUBE X 1/4" NPT, FOR CONNECTION TO TEST DEVICE. BACKFLOW PREVENTION DEVICES WILL BE INSTALLED OUTSIDE (OR INSIDE OF A BUILDING WITH APPROVAL OF THE CROSS CONNECTION CONTROL SPECIALIST). REFER TO PLANS FOR TYPICAL INSTALLATION DETAILS. NO TAP-INS WILL BE PERMITTED FOR ANY PURPOSE UPSTREAM OF THE BACKFLOW PREVENTION DEVICE.

7. CALL CROSS CONNECTION CONTROL SPECIALIST FOR INSPECTION OF THE BACKFLOW PREVENTER. INSPECTION AND APPROVAL IS REQUIRED BEFORE ANY METER WILL BE INSTALLED. [804–646–8544]

8. CALL PLUMBING INSPECTOR FOR INSPECTION OF ALL PIPING AND PLUMBING WORK DOWNSTREAM OF THE METER. CALL MECHANICAL INSPECTOR FOR INSPECTION OF ALL WORK DOWNSTREAM OF THE DETECTOR CHECK METER.

DATE	ΤΥΡΙΛΑΙ	DWG. NO.
REVISIONS SEP. 2014	INSTALLATION PROCEDURES	RPZ-IP
	-64	

4

3

2

2

1

<u>HW COIL WITH 3-W CONTROL VALVE PIPING</u> <u>DETAIL - FCU UNIT</u>

EX. AHU CHW COIL WITH 3-WAY VALVE

5

ш

۷

C:\Users\ccolpitts\Documents\2.220318.0 - VCU SHR Reno - Elec R22_ccolpitts9799W.rvt TEMPLATE 2021.A 1/30/2024 11:35:08 AM

ABBREVIATIONS

4

Electrical Abbreviation	Electrical Definitions
1P	
10 10H	SINGLE PHASE
2P	
3P	THREE POLE
3PH	THREE PHASE
A	AMPERES
A/V	AUDIO / VISUAL
AFCI	ARC-FAULT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERE
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
С	CONDUIT
C/I	
CAIV	
CE	
CF	
CU	COPPER
DISC	DISCONNECT
ELEC	FLECTRICAL
ELTG	EXTERIOR LIGHTING
EM	EMERGENCY
EQ	EQUIPMENT
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOT CANDLE
FT	FEET
FVNR	FULL VOLTAGE NON-REVERSING
G	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTING
GFI	GROUND FAULT INTERRUPTING
GND	GROUND
HP	
KCMII	
KVA	KILOVOLT AMPS
KW	KILOWATTS
KWH	KILOWATT HOURS
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
LTS	LIGHTS
MCC	MOTOR CONTROL CENTER
MISC	MISCELLANEOUS
MTD	MOUNTED
MTR	MOTOR
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NO.	
P/BD	
PVC	
PW/R	POWER
RCPT	RECEPTACIE
REL	RELOCATED
SEC	SECURITY
SW	SWITCH
SWBD	SWITCHBOARD
TELECOM	TELECOMMUNICATIONS
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPRESSOR
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTAGE

4

	3
POW	ER LEGEND
	DESCRIPTION DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT +18" AFF
+ 	BRANCH CIRCUIT HOMERUN, HATCH MARKS INDICATE TYPE AND NUMBER OF CONDUCTORS, DASHED LINES INDICATE UNDER FLOOR/GROUND ROUTING, PROVIDE 3#12 IN 3/4" CONDUIT UNLESS OTHERWISE INDICATED.
	—INDICATES PHASE CONDUCTOR —INDICATES NEUTRAL CONDUCTOR —INDICATES GROUNDING CONDUCTOR
	NON-FUSED DISCONNECT SWITCH
\ominus	RECESSED DUPLEX FLOOR BOX
$\overline{\oplus}$	RECESSED QUAD FLOOR BOX
	PANELBOARD, SURFACE MOUNT
	PANELBOARD, RECESS MOUNT

LIGHTING LEGEND

VARIES	DESCRIPTION
	LIGHT FIXTURE
€+ \$€\$	EXIT SIGN, SHADED SIDE INDICATES FACE(S) OF SIGN, DIRECTIONAL CHEVRONS AS INDICATED
ě.	EXIT SIGN WITH DUAL EMERGENCY LIGHTING HEADS, SHADED SIDE INDICATES FACE(S) OF SIGN, DIRECTIONAL CHEVRONS AS INDICATED
Ę	EGRESS EXIT LIGHT WITH BATTERY PACK, WALL MOUNT +90" AFF
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, CEILING MOUNT, OMNI-DIRECTIONAL AND DIRECTIONAL
S	LIGHT SWITCH, LOW VOLTAGE, MOUNT +46" AFF
IRE A	
	DESCRIPTION

- FIRE ALARM VISIBLE NOTIFICATION APPLIANCE, MOUNT STROBE > LENS NOT LESS THAN +80" AFF AND NOT MORE THAN +96" AFF. STROBE CANDELA RATING AS INDICATED
- FIRE ALARM VISIBLE/AUDIBLE NOTIFICATION APPLIANCE, MOUNT **⊳**F• STROBE LENS NOT LESS THAN +80" AFF AND NOT MORE THAN +96" AFF. STROBE CANDELA RATING AS INDICATED
- MANUAL PULL STATION, MOUNT +46" AFF SMOKE DETECTOR, CEILING MOUNT

LIGHTING FIXTURE S

3

TVDE	MANUEACTURER	MODEL		LAMP		MOUNTING	COMMENTS
ITPE	MANUFACIURER	MODEL	VOLTAGE	WATTS	TYPE	MOUNTING	COMMENTS
А	MATCH BUILDING STANDARD	MATCH BUILDING STANDARD	120 V	2 W	LED	CEILING	NEW CEILING MOUNTED EXIT SIGN WITH BATTERY BACK-UP
В	MATCH BUILDING STANDARD	MATCH BUILDING STANDARD	120 V	0 W	LED	RECESSED	NEW RECESSED 2X2 LED
С	LITHONIA	CSS L48 4000LM MVOLT 35K 80CRI	120 V	36 W	LED	SURFACE	NEW WALL MOUNTED LED STRIP
EM	MATCH BUILDING STANDARD	MATCH BUILDING STANDARD	120 V	3 W	LED	WALL	NEW EMERGENCY WALL PACK

GENERAL DEMOLITION NOTES

- 1. DEMOLITION DRAWINGS ARE PROVIDED AS REFERENCE ONLY. DEMOLITION DRAWINGS ARE BASED ON NON-DESTRUCTIVE FIELD INVESTIGATION AND
- 2. VISIT THE PROJECT SITE AND BECOME FAMILIAR WITH EXISTING FIELD
- CONDITIONS PRIOR TO PROCEEDING WITH THE WORK. 3. CLEAN AND REPAIR ALL EQUIPMENT INDICATED FOR REUSE OR SALVAGE.
- 4. DISPOSE OF, IN A LEGAL MANNER, ALL MATERIALS INDICATED FOR REMOVAL AND NOT INDICATED FOR REUSE OR SALVAGE.
- 5. MAINTAIN CONTINUITY OF EXISTING BRANCH CIRCUITS AND FEEDERS NOT INDICATED FOR REMOVAL BUT MAY BE DISTURBED BY THE WORK. REROUTE
- CIRCUITS AS REQUIRED DUE TO THE WORK. 6. EXISTING CONDUIT MAY BE ABANDONED IN THE WALLS, FLOOR SLAB, AND BELOW GRADE ONLY. REMOVE CONDUITS TO THE SURFACE OF THE WALL/FLOOR AND
- 7. REMOVE UNUSED CABLING AND CONDUCTORS ALL THE WAY BACK TO THE SOURCE.
- 8. SUPPORT ALL EXISTING RECESSED FLUORESCENT 2X2 AND 2X4 LIGHT FIXTURES INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS PRIOR TO REMOVAL OF FINISHED CEILINGS. PROTECT LIGHT FIXTURES FROM DAMAGE DURING CONSTRUCTION. CLEAN AND RE-LAMP AS REQUIRED.
- 9. DISCONNECT, REMOVE, AND STORE ALL EXISTING RECESSED DOWNLIGHT FIXTURES MOUNTED WITHIN GYPSUM CORRIDOR CEILINGS, DURING DEMOLITION. REINSTALL IN SAME LOCATIONS WITHIN NEW CEILINGS. PROVIDE TEMPORARY LIGHTING DURING DEMOLITION IN CORRIDORS AS REQUIRED.

SHEET LAYOUT

EXISTING DRAWINGS.

PATCH.

	6	5	4	3	2	1	
E	 6E	5E	4E	3E	2E	1E	
D	6D	5D	4D	3D	2D	1D	
С	6C	5C	4C	3C	2C	1C	
В	6B	5B	4B	3B	2B	1B	
A	6A	5A	4A	3A	2A	1A	

SHEET NUMBERS - STANDARD

PROJECT NORTH, TRUE NORTH

— PROJECT (PLAN) NORTH

— ANGLE BETWEEN TRUE &

PROJECT NORTH

	PROJECT (PLA
	TRUE NORTH
45.00°	ANGLE BETWE

RATED WALL LEGEND

<u>SYMBOL</u>	DESCRIPTION
	NON-RATED PARTITION
	NON-RATED SMOKE RESISTIVE PARTITION
	1 HOUR FIRE BARRIER
	1 HOUR SMOKE COMPARTMENT BARRIER
	2 HOUR FIRE BARRIER
/// /// ///	2 HOUR SMOKE COMPARTMENT BARRIER
	3 HOUR FIRE BARRIER
	3 HOUR SMOKE COMPARTMENT BARRIER

PROJECT INFORMATION

- 1. PROJECT DESCRIPTION: SELECTIVE DEMOLITION OF INTERIOR WALLS AND FLOORS TO ACCOMMODATE STRUCTURAL AND MECHANICAL RENOVATION OF THE ROUGHLY 17,000 SF BUILDING. ELECTRICAL SYSTEMS UPGRADE WILL BE LIMITED TO WHAT IS REQUIRED AS PART OF THE MECHANICAL UPGRADE.
- 2. APPLICABLE CODES: VIRGINIA UNIFORM STATEWIDE BUILDING CODE: VUSBC, 2018 CONSTRUCTION AND PROFESSIONAL SERVICES MANUAL - CHAPTER 4 ONLY: CPSM, 2022, REV 0 VCU HIGHER EDUCATION CAPITAL OUTLAY (HECO) MANUAL, 2014 NATIONAL ELECTRICAL CODE: NFPA 70, 2017 AMERICANS WITH DISABILITIES ACT: ASAD, SEPTEMBER 15, 2010 NATIONAL FIRE ALARM AND SIGNALING CODE: NFPA 72, 2016 VIRGINIA ENERGY CONSERVATION CODE (VECC): 2018 VEES: INTERNATIONAL GREEN CONSTRUCTION CODE (IgCC) 2018, MODIFIED BY

1989

59'-4"

147

NO

17,000 SQFT

NOT IN A FLOOD PLAIN

NO FIRE PENETRATIONS

- CPSM APPENDIX V . YEAR CONSTRUCTED:
- . EXISTING USE GROUP: . CONSTRUCTION CLASSIFICATION: 3B (PROTECTED) 4. NUMBER OF STORIES:
- 5. BUILDING HEIGHT: 6. TOTAL BUILDING AREA:
- . PROJECT: . FIRE RESISTANCE RATING:
- 9. OCCUPANCY: 10. CHANGE OF USE:

ENGINEER OF RECORD

THOMAS K. FARLEIGH, PE TFARLEIGH@BASKERVILL.COM (804)343-1010 1051 E. CARY STREET, SUITE 200

GENERAL NOTES

RICHMOND, VA 23219

- 1. PROVIDE LABOR, MATERIAL, AND OTHER SERVICES AS MAY BE NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.
- 2. NOTIFY THE ARCHITECT/ENGINEER AND RESOLVE ANY ISSUES EXPERIENCED DURING THE COURSE OF THE WORK PRIOR TO EXECUTION OF THE WORK.

3. SHOP DRAWINGS MUST BE APPROVED BY ENGINEER PRIOR TO PURCHASE. IF A SUBSTITUTION IS PROPOSED, BE PREPARED TO PROVIDE SAMPLES FOR EVALUATION.

- 4. PROVIDE MATERIAL WITHIN ONE YEAR OF MANUFACTURE, BEARING A U.L. LABEL, AND LISTED FOR ITS INSTALLED APPLICATION.
- 5. PROVIDE "AS-BUILT" DRAWINGS TO THE OWNER AT CONTRACT CLOSEOUT.
- 6. PROVIDE MAJOR COMPONENTS OF THE ELECTRICAL SYSTEM BY THE SAME MANUFACTURER.
- 7. IN FINISHED SPACES: FLUSH MOUNT LIGHT SWITCHES, RECEPTACLES, AND TELECOMMUNICATIONS OUTLETS, ROUTE RACEWAYS CONCEALED.
- 8. PROVIDE WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. 9. USE MOUNTING HEIGHTS INDICATED ON THE LEGEND EXCEPT WHERE INDICATED ON THE DRAWINGS. MOUNTING HEIGHTS ARE MEASURED FROM THE MIDDLE OF WALL MOUNTED DEVICES AND FROM THE BOTTOM OF PENDENT MOUNTED DEVICES.
- ASSEMBLE, HANG, AND CONNECT LIGHTING FIXTURES FURNISHED COMPLETE WITH SOCKETS, TRIM HANGERS, SUPPORTS, ETC, AS REQUIRED FOR A COMPLETE INSTALLATION. MOUNT LIGHT FIXTURES SUPPORTED INDEPENDENTLY OF SUSPENDED CEILING COMPONENTS.
- 11. PROVIDE MOTOR OVERLOAD DEVICES IN STARTERS BASED ON NAMEPLATE RATING ON THE MOTORS BEING INSTALLED.
- 12. PROVIDE "HACR" TYPE CIRCUIT BREAKERS FOR CIRCUITS THAT SERVE HEATING, AIR CONDITIONING, OR REFRIGERATION EQUIPMENT.
- 13. PROVIDE SPLICES IN OUTLET OR JUNCTION BOXES ONLY.
- 14. GUARANTEE WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER OWNER ACCEPTANCE.
- 15. PERFORM ALL WORK IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (2017), VIRGINIA UNIFORM STATEWIDE BUILDING CODE (2018), ADA STANDARDS FOR ACCESSIBLE DESIGN (2018), AND CONSTRUCTION AND PROFESSIONAL SERVICES MANUAL, REV 0 (2018).
- 16. CONTRACTOR SHALL COMPLY WITH AND MAINTAIN A COPY OF VIRGINIA STATE FIRE PROTECTION CODE (2018) AND NFPA 241-2000 "STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS" ON SITE.
- 17. NOTIFY CONSTRUCTION MANAGER, OWNER, FIRE DEPARTMENT, AND AUTHORITY HAVING JURISDICTION A MINIMUM OF SEVEN DAYS PRIOR TO ANY FIRE ALARM OR SPRINKLER SYSTEM SERVICE INTERRUPTION.
- 8. CONTRACTOR SHALL DISCONNET AND REMOVE CONDUITS IN CONFLICT WITH STRUCTURAL BRACING. REMOVE CONDUIT IN CONFLICT AND DISCONNECT WIRE FROM PANEL, AND PULL BACK PAST AREA OF WORK. ONCE STRUCTURAL WORK IS COMPLETE, REPLACE CONDUIT AND WIRE AND RECONNECT TO PANEL.

CHI	EDU	LE

ELECTRICAL DRAWING LIST

SHEET NO	SHEET TITLE	REV NO	REV DATE
E001	LEGEND, FIXTURE SCHEDULE & GENERAL NOTES		
E002	SINGLE-LINE DIAGRAM & PANEL SCHEDULES		
E100	BASEMENT DEMOLITION & NEW WORK PLANS		
E101	1ST FLOOR DEMOLITION & NEW WORK PLANS		
E102	2ND FLOOR DEMOLITION & NEW WORK PLANS		
E103	3RD FLOOR DEMOLITION & NEW WORK PLANS		
E104	4TH FLOOR DEMOLITION & NEW WORK PLANS		
E105	5TH FLOOR DEMOLITION & NEW WORK PLANS		

6 5 4 3

Ψ

U

Δ

-

<

EXISTING SINGLE-LINE DIAGRAM

PA	ANELBOARD: PP2													
LOCATION: MECH. RM. B-2 SUPPLY FROM: MDP MOUNTING: SURFACE ENCLOSURE: NEMA 1				VOLTS: 120/208 Wye PHASES: 3 WIRES: 4							A.I.C. RATING: 18,000 MAINS TYPE: MCB MAINS RATING: 100 A MCB RATING: 100 A			
Notes			1							1				1
скт	Circuit Description	Trip	Poles		4	В		с		Poles	Trip	Circuit De	escription	скт
1	• •			2.5	0.0									2
3	PCHWP-1, BASEMENT	35 A	3			2.5	0.0			3	35 A	PCHWP-2 (REDUND	ANT), BASEMENT	4
5								2.5	0.0					6
7	SPACE ONLY		1							1		SPACE ONLY		8
9	SPACE ONLY		1							1		SPACE ONLY		10
11	SPACE ONLY		1							1		SPACE ONLY		12
13	SPACE ONLY		1							1		SPACE ONLY		14
15	SPACE ONLY		1							1		SPACE ONLY		16
17	SPACE ONLY		1							1		SPACE ONLY		18
19	SPACE ONLY		1							1		SPACE ONLY		20
21	SPACE ONLY		1							1		SPACE ONLY		22
23	SPACE ONLY		1							1		SPACE ONLY		24
		Tota	I Load:	2.5 kVA 2.5 kVA 2.5 kV				kVA						
		Total	Amps:	21	А	21	А	21	A					
Legen	d:				I			1						
Load	Classification	Con	nected	Load	Dem	nand Fa	actor	Estimated Deman		emand	d Panel		I Totals	
Other			7500 VA	4	100.00%		7500 VA		A					
												Total Conn. Load:	7.5 kVA	
												Total Est. Demand:	7.5 kVA	
												Total Conn. Current:	21 A	
												Total Est. Demand	21 A	
													217	
Notes	:													

VOLTAGE DROP & FAULT CURRENT CALCULATION																					
CIRCUIT DESCRIPTION		FEEDER OR				LOAD	DISTANCE		PHASE		NEUTRAL		GROUND		CONDUIT		Vdrop CALCULATION		FAULT CURRENT CALCULATION		
FROM	то	BRANCH	CU or AL	VOLTAGE	PHASE	(KVA)	(FEET)	# OF SETS	NUMBER	SIZE	NUMBER	SIZE	NUMBER	SIZE	SIZE	TYPE	ALLOWED	CALCULATED	PERCENT	START	END
MDP	PP2	FEEDER	COPPER	208	3	12	70	1	3	1	1	1	1	8	1-1/2"	EMT	4.16	0.62	0.30%	65000	10492
1					•	1		•									•		•		i.

4 3

2

LOCATION: STORAGE B-4 SUPPLY FROM: C/T MOUNTING: SURFACE ENCLOSURE: NEMA 1					VOLTS: 120/208 Wye PHASES: 3 WIRES: 4						A.I.C. RATING: 65,000 MAINS TYPE: MAIN SWITCH MAINS RATING: 1000 A MCB RATING: 1000 A				
lotes	:														
скт	Circuit Description		Poles	Α		В		С		Poles Trip		Circuit Description	СКТ		
1				32.0						1		UNAVAILABLE SPACE	2		
3		400 A	3			32.0		00.0		1			4		
5				15.0	7.0			32.0		1		UNAVAILABLE SPACE	6		
/		200 4	3	15.0	7.0	15.0	7.0			2	200 A	EXLOAD	8		
9	EXELEVATOR	200 A				15.0	7.0	15.0	7.0	3		EXLOAD	10		
13				9.0	9.0			15.0	7.0				1/		
15	EX PNIL "PP" BASEMENT	200 4	3	3.0	5.0	89	89			3	200 4		16		
17	EXTINE IT, DAGEMENT	200 A				0.3	0.3	8.0	80	5	200 A		18		
10			3	7.0	9.0			0.9	0.9				20		
21		200 4		7.0	5.0	69	89			3	200 4	EX PNI "E" 5TH FI	20		
23		200 A	5			0.3	0.3	6.9	89	5	200 A		24		
25				7.0	8.0			0.5	0.5				29		
27	EX PNL "C" 3RD FL	200 A	3	7.0	0.0	6.9	8.0			3	200 A	EX PNI "A" 1ST FI	28		
29		20071	Ŭ			0.0	0.0	69	8.0	Ŭ	2007		30		
31				7.0	2.5			0.0	0.0				32		
33	FX PNI "D" 4TH FI	200 A	3	1.0	2.0	6.9	2.5			3 100	100 A	NEW PNI "PP2" BASEMENT	34		
35		20071	Ŭ			0.0	2.0	6.9	2.5	Ŭ	10071	······································	36		
37	SPACE ONLY		1							1		SPACE ONLY	38		
39	SPACE ONLY		1							1		SPACE ONLY	40		
41	SPACE ONLY		1							1		SPACE ONLY	42		
		Total	Load:	112.5 kVA		111.9 kVA		111.9 kVA			1	1			
Total Ar			Amps: 9		938 A		933 A		933 A						
eger	ıd:	Total Total	Load: Amps:	112.5 93	5 kVA 8 A	93	9 kVA 3 A	93	9 kVA 3 A						

**EXISTING LOADS BASED ON DATA FROM 1993 DRAWINGS. FIELD MEASURE CONNECTED LOAD WHEN BUILDING IS OCCUPIED

2

EOAD CAECOLATION (MDL)	
EX LIGHTING LOAD:	51.4 KVA
EX RECEPTACLE LOAD:	83.0 KVA
EX ELEVATOR LOAD:	63.0 KVA
EX CHILLER LOAD:	104.8 KVA
EX HEATING LOAD:	1.8 KVA
EX PUMP LOAD:	10.8
EX AIR COMPRESSOR LOAD:	4.0 KVA
EX FAN COIL UNIT LOAD:	28.8 KVA
EX EXH. FAN LOAD:	0.7 KVA
TOTAL EXISTING LOAD:	= 348.3 KVA
NEW PUMP LOAD PCHWP-1 (FROM PANEL "PP2"): (PCHWP-2 IS REDUNDANT)	7.5 KVA
(101101-2101CED010DA01)	

TOTAL EST. DEMAND LOAD: = 355.8KVA TOTAL EST. DEMAND CURRENT: = 985.5 A

= 7.5 KVA = 355.8KVA

PANEL SCHEDULES

4

6 TEMPLATE 2021.A 1/30/2024 11:35:12 AM C:\Users\ccolpitts\Documents\2.220318.0 - VCU SHR Reno - Elec R22_ccolpitts9799W.rvt

6

KEYNOTES

26.2 PROVIDE NEW 120/208V, 3PH, 4W, 100A MCB PANEL. COORDINATE EXACT LOCATION WITH OWNER IN FIELD AND MAINTAIN NEC 110.26 CLEARANCE REQUIREMENTS. INSTALL NEW FEEDER IN EXPOSED CONDUIT TIGHT TO STRUCTURE, AVOID OBSTRUCTED PATHS AND STRUCTURAL SUPPORTS. 26.3 AREA OF WORK WITH EXISTING CONDUIT IN CONFLICT WITH STRUCTURAL BRACING. DISCONNECT AND REMOVE CONDUIT ON THE BOTTOM OF JOISTS. DISCONNECT WIRE FROM PANEL AND PULL BACK TO AN ACCESSIBLE AREA. OUT OF AREA OF WORK. ONCE STRUCTURAL WORK IS COMPLETE, REPLACE CONDUIT AND RECONNECT WIRING. 26.7 PCHWP-1 & PCHWP-2: 208V, 3PH, MCA = 20.9, MOCP = 30. DISCONNECTS AND LOCATION OF DISCONNECTS PROVIDED BY MECHANICAL CONTRACTOR. MAINTAIN 36" CLEARANCE IN FRONT OF SWITCH. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. 26.8 WHERE EXISTING DEVICES ARE TO BE REMOVED DUE TO STRUCTURAL BRACING, DISCONNECT AND REMOVE ASSOCIATED CONDUIT, BOXES, AND WIRE PAST AREA OF WORK. DEVICES SHALL BE RECONNECTED AFTER STRUCTURAL SCOPE HAS BEEN COMPLETED. 26.10 ALL ELECTRICAL EQUIPMENT IN THIS ROOM IS EXISTING TO REMAIN. 26.11 PCHWP VFD. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

1

3

BASEMENT DEMOLITION & NEW WORK PLANS

6

4

5

3

4

GENERAL NOTES

1. EXISTING LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING GRID AND SHALL REMAIN IN PLACE DURING DEMOLITION, UON. CONTRACTOR SHALL PROTECT FIXTURES FROM PHYSICAL DAMAGE WHEREVER POSSIBLE. PROVIDE TEMPORARY LIGHTING IN AREAS LIGHTING CIRCUITS NEED TO BE INTERRUPTED. 2. EXISTING RECESSED DOWNLIGHTS TO BE DISCONNECTED, REMOVED, AND THEN PUT BACK IN PLACE AND RECONNECTED WITHIN NEW GYPSUM CEILINGS. PROVIDE TEMPORARY LIGHTING WHERE FIXTURES ARE REMOVED.

2

KEYNOTES

- 26.1 IN THIS AREA, PULL BACK WIRING IN EXISTING HORIZONTAL CONDUITS IN CEILING TO POINT OUTSIDE AREA OF STRUCTURAL WORK. COORDINATE LIMITS OF CONSTRUCTION PRIOR TO PULLING WIRE. DISCONNECT AND REMOVE MECHANICAL UNIT; WIRING AND CONDUIT TO 26.5 REMAIN. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. 26.6 NEW MECHANICAL UNIT. CONNECT TO EXISTING WIRING PREVIOUSLY FEEDING DEMOLISHED UNIT IN SAME LOCATION. CONTRACTOR TO VERIFY EXISTING WIRING HAS CAPACITY FOR NEW UNIT PRIOR TO INSTALLATION.
- REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. 26.9 CONNECT TO EXISTING LIGHTING CIRCUIT SERVING THE AREA, CONNECT ON THE LINE SIDE AHEAD OF SWITCH/CONTROL PER NEC 700.12(F).
- CONNECT TO EXISTING LIGHTING CIRCUIT / CONTROL SERVING THE AREA. 26.12 CIRCUIT NOT TO EXCEED 1920W.
- TO EXCEED 1920W.

26.13 CONNECT TO EXISTING LIGHTING CIRCUIT SERVING THE AREA. CIRCUIT NOT

NEW WORK PLANS E101

3

4

6C 2ND FLOOR DEMOLITION PLAN E102 1/4" = 1'-0"

В

۲

6

5

4

6A 2ND FLOOR NEW WORK PLAN E102 1/4" = 1'-0"

6 TEMPLATE 2021.A 1/30/2024 11:35:19 AM C:\Users\ccolpitts\Documents\2.220318.0 - VCU SHR Reno - Elec R22_ccolpitts9799W.rvt

GENERAL NOTES

 EXISTING LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING GRID AND SHALL REMAIN IN PLACE DURING DEMOLITION, UON. CONTRACTOR SHALL PROTECT FIXTURES FROM PHYSICAL DAMAGE WHEREVER POSSIBLE. PROVIDE TEMPORARY LIGHTING IN AREAS LIGHTING CIRCUITS NEED TO BE INTERUPTED.
 EXISTING RECESSED DOWNLIGHTS TO BE DISCONNECTED, REMOVED, AND THEN PUT BACK IN PLACE AND RECONNECTED WITHIN NEW GYPSUM CEILINGS. PROVIDE TEMPORARY LIGHTING WHERE FIXTURES ARE REMOVED.

2

KEYNOTES

26.1 IN THIS AREA, PULL BACK WIRING IN EXISTING HORIZONTAL CONDUITS IN CEILING TO POINT OUTSIDE AREA OF STRUCTURAL WORK. COORDINATE LIMITS OF CONSTRUCTION PRIOR TO PULLING WIRE.
 26.5 DISCONNECT AND REMOVE MECHANICAL UNIT; WIRING AND CONDUIT TO DEMAND. DEFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

 REMAIN. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
 26.6 NEW MECHANICAL UNIT. CONNECT TO EXISTING WIRING PREVIOUSLY FEEDING DEMOLISHED UNIT IN SAME LOCATION. CONTRACTOR TO VERIFY EXISTING WIRING HAS CAPACITY FOR NEW UNIT PRIOR TO INSTALLATION. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

1

2

3

E102

6 TEMPLATE 2021.A 1/30/2024 11:35:23 AM C:\Users\ccolpitts\Documents\2.220318.0 - VCU SHR Reno - Elec R22_ccolpitts9799W.rvt

4

Δ

6

3

4

5

GENERAL NOTES

 EXISTING LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING GRID AND SHALL REMAIN IN PLACE DURING DEMOLITION, UON. CONTRACTOR SHALL PROTECT FIXTURES FROM PHYSICAL DAMAGE WHEREVER POSSIBLE. PROVIDE TEMPORARY LIGHTING IN AREAS LIGHTING CIRCUITS NEED TO BE INTERUPTED.
 EXISTING RECESSED DOWNLIGHTS TO BE DISCONNECTED, REMOVED, AND THEN PUT BACK IN PLACE AND RECONNECTED WITHIN NEW GYPSUM CEILINGS. PROVIDE TEMPORARY LIGHTING WHERE FIXTURES ARE REMOVED.

2

KEYNOTES

26.5

26.6

26.1 IN THIS AREA, PULL BACK WIRING IN EXISTING HORIZONTAL CONDUITS IN CEILING TO POINT OUTSIDE AREA OF STRUCTURAL WORK. COORDINATE

LIMITS OF CONSTRUCTION PRIOR TO PULLING WIRE. DISCONNECT AND REMOVE MECHANICAL UNIT; WIRING AND CONDUIT TO REMAIN. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. NEW MECHANICAL UNIT. CONNECT TO EXISTING WIRING PREVIOUSLY FEEDING DEMOLISHED UNIT IN SAME LOCATION. CONTRACTOR TO VERIFY EXISTING WIRING HAS CAPACITY FOR NEW UNIT PRIOR TO INSTALLATION. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

2

3

NEW WORK PLANS

6A 4TH FLOOR NEW WORK PLAN E104 1/4" = 1'-0"

6C 4TH FLOOR DEMOLITION PLAN E104 1/4" = 1'-0"

TEMPLATE 2021.A 1/30/2024 11:35:26 AM C:\Users\ccolpitts\Documents\2.220318.0 - VCU SHR Reno - Elec R22_ccolpitts9799W.rvt

Δ

U

6

4

5

3

GENERAL NOTES

1. EXISTING LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING GRID AND SHALL REMAIN IN PLACE DURING DEMOLITION, UON. CONTRACTOR SHALL PROTECT FIXTURES FROM PHYSICAL DAMAGE WHEREVER POSSIBLE. PROVIDE TEMPORARY LIGHTING IN AREAS LIGHTING CIRCUITS NEED TO BE INTERUPTED. 2. EXISTING RECESSED DOWNLIGHTS TO BE DISCONNECTED, REMOVED, AND THEN PUT BACK IN PLACE AND RECONNECTED WITHIN NEW GYPSUM CEILINGS. PROVIDE TEMPORARY LIGHTING WHERE FIXTURES ARE REMOVED.

2

KEYNOTES

26.1 IN THIS AREA, PULL BACK WIRING IN EXISTING HORIZONTAL CONDUITS IN CEILING TO POINT OUTSIDE AREA OF STRUCTURAL WORK. COORDINATE

REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

LIMITS OF CONSTRUCTION PRIOR TO PULLING WIRE. DISCONNECT AND REMOVE MECHANICAL UNIT; WIRING AND CONDUIT TO 26.5 REMAIN. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. NEW MECHANICAL UNIT. CONNECT TO EXISTING WIRING PREVIOUSLY 26.6 FEEDING DEMOLISHED UNIT IN SAME LOCATION. CONTRACTOR TO VERIFY

EXISTING WIRING HAS CAPACITY FOR NEW UNIT PRIOR TO INSTALLATION.

26.6

6C 5TH FLOOR DEMOLITION PLAN E105 1/4" = 1'-0"

26.6

4

5 4

Δ

U

6

3

GENERAL NOTES

1. EXISTING LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING GRID AND SHALL REMAIN IN PLACE DURING DEMOLITION, UON. CONTRACTOR SHALL PROTECT FIXTURES FROM PHYSICAL DAMAGE WHEREVER POSSIBLE. PROVIDE TEMPORARY LIGHTING IN AREAS LIGHTING CIRCUITS NEED TO BE INTERUPTED.

2

KEYNOTES

26.1 IN THIS AREA, PULL BACK WIRING IN EXISTING HORIZONTAL CONDUITS IN CEILING TO POINT OUTSIDE AREA OF STRUCTURAL WORK. COORDINATE LIMITS OF CONSTRUCTION PRIOR TO PULLING WIRE. DISCONNECT AND REMOVE MECHANICAL UNIT; WIRING AND CONDUIT TO 26.5 REMAIN. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION. NEW MECHANICAL UNIT. CONNECT TO EXISTING WIRING PREVIOUSLY 26.6 FEEDING DEMOLISHED UNIT IN SAME LOCATION. CONTRACTOR TO VERIFY

REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

EXISTING WIRING HAS CAPACITY FOR NEW UNIT PRIOR TO INSTALLATION.

1

2

E105