

PROJECT LOCATION:  
PATIENT CARE TOWER BUILDING - 8TH FLOOR



NOT USED

# PATIENT CARE TOWER - 8TH FLOOR BONE MARROW TRANSPLANT UNIT RENOVATION

MU PROJECT NO. - CP221933

AT UNIVERSITY OF MISSOURI  
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI



McCLUREENGINEERING



University of Missouri

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FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI

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MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1



BSA

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Architectural Registration Number (Missouri) - 2017014317

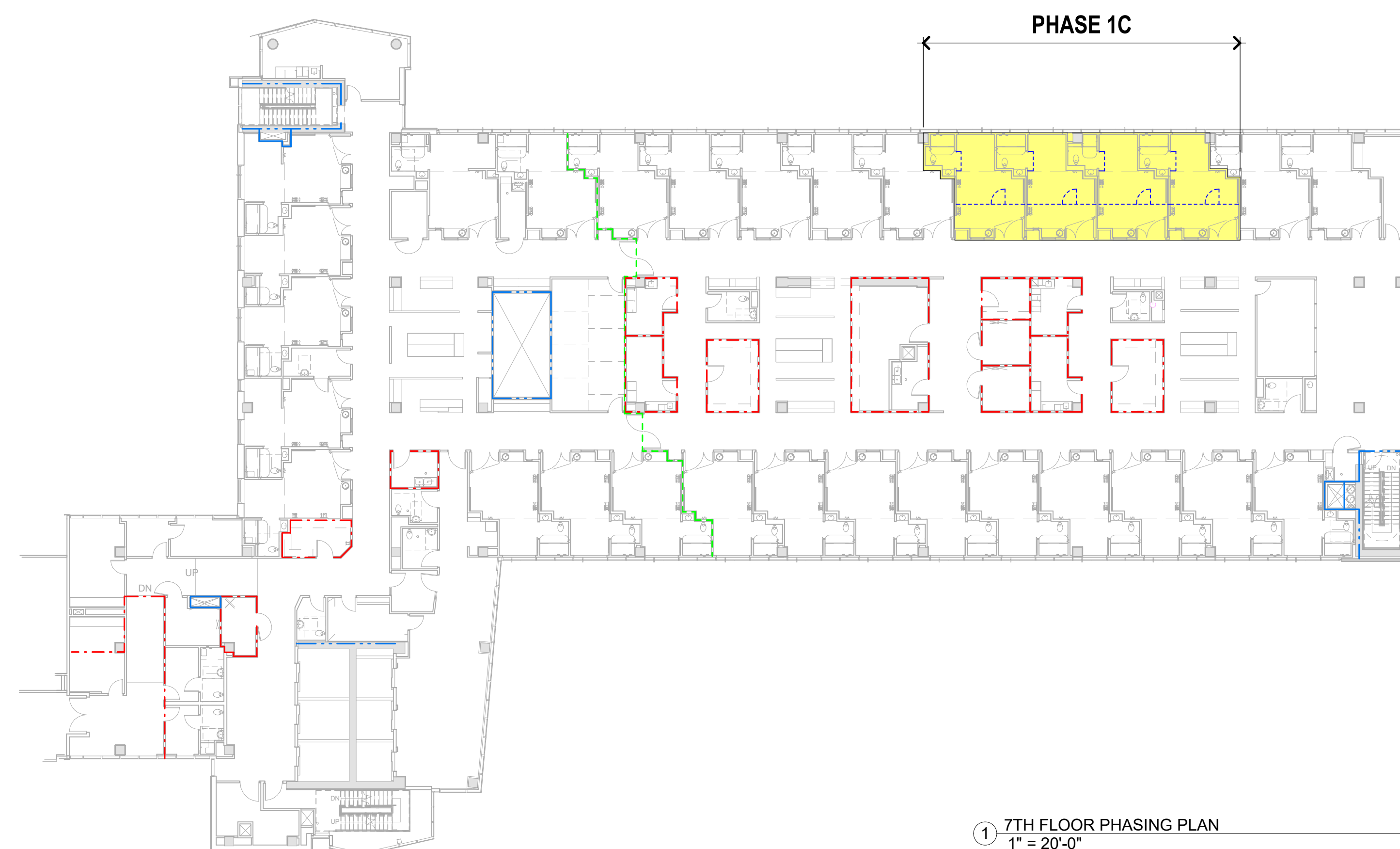
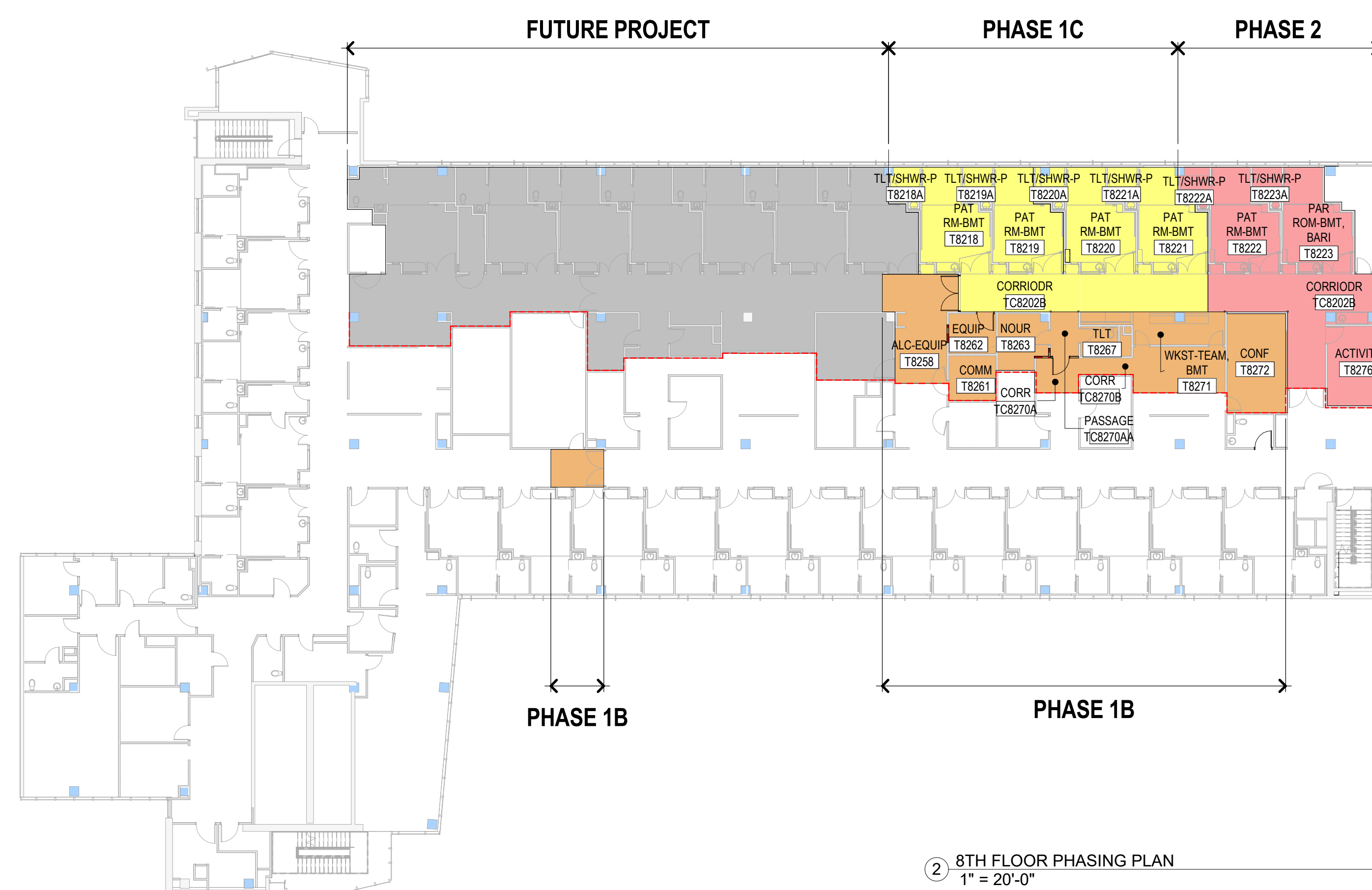
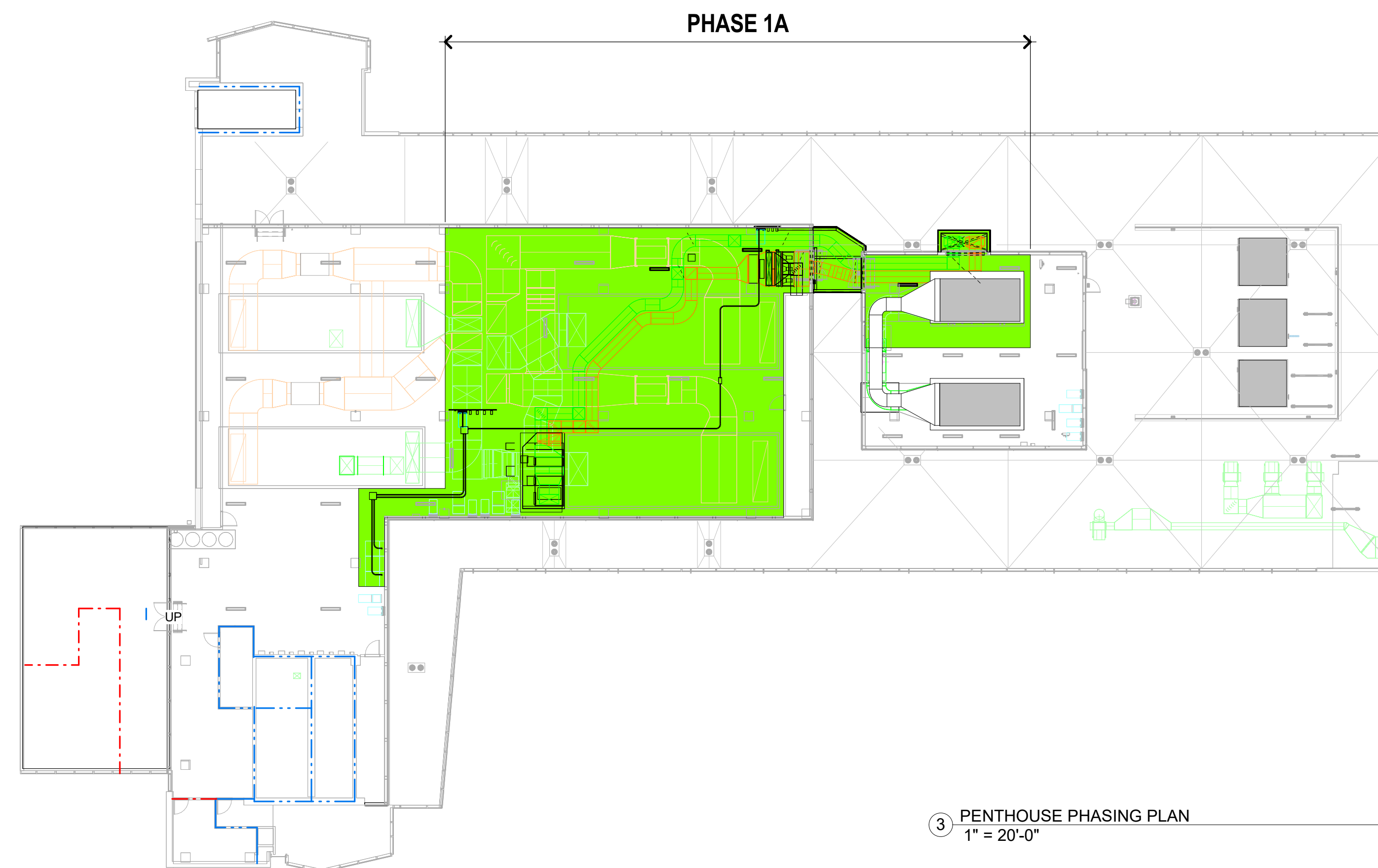
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09 MAY, 2024

COVER SHEET

BSALS PROJECT NO. 14110006.02A  
DATE 09 MAY, 2024

G000










## PHASING PLAN NOTES

- |    |  |
|----|--|
| A. | COORDINATE ALL PHASING WORK AND SEQUENCING WITH OWNER AND STAFF PRIOR TO THE START OF EACH PHASE. PHASING TO BE FINALIZED DURING PRE-CONSTRUCTION MEETING WITH OWNER, ARCHITECT, ENGINEER, CONTRACTOR, SUB-CONTRACTORS, AND STAFF  |
| B. | PROVIDE TEMPORARY BARRIERS BETWEEN PHASES AS DIRECTED IN THE SPECIFICATIONS. PRIOR TO THE INSTALLATION, REMOVAL, AND SEQUENCING OF TEMPORARY BARRIERS, REFER TO THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET M305 AND ELECTRICAL SHEETS FOR ALL ABOVE CEILING RELATED WORK. |
| C. | ALLOW A MINIMUM OF 15 BUSINESS DAYS FOR OWNER MOVE INTO NEWLY COMPLETED SPACE AND MOVE OUT OF NEXT PHASE AREAS   |

## APPROXIMATE PHASE DURATIONS

- |   |  |
|---|--|
|  | <p><b>PHASE 1A</b><br/> <b>PENTHOUSE WORK</b> *</p> <p>REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR SEQUENCING</p>                                    |
|  | <p><b>PHASE 1B</b><br/> <b>SUPPORT ROOMS, CEILING &amp; ABOVE CEILING MEP WORK</b></p> <p>REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR SEQUENCING</p> |
|  | <p><b>PHASE 1C</b><br/> <b>FOUR PATIENT ROOMS &amp; CORRIDOR</b></p>   |
|  | <p><b>PHASE 2</b><br/> <b>TWO PATIENT ROOMS</b></p>  |
|  | <p><b>FUTURE PROJECT</b> *</p> <p>FUTURE SEPARATE CONTRACT &amp; PROJECT</p>   |

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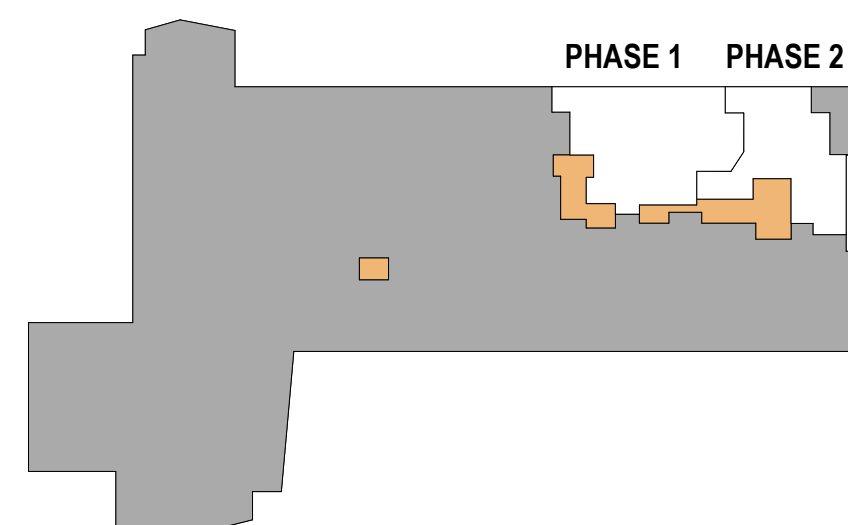
 University of Missouri

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**PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION**

COLUMBIA, MO  
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MISSOURI

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Matthew Jeans - Architect  
MO# A-2017014317

## PHASING PLANS

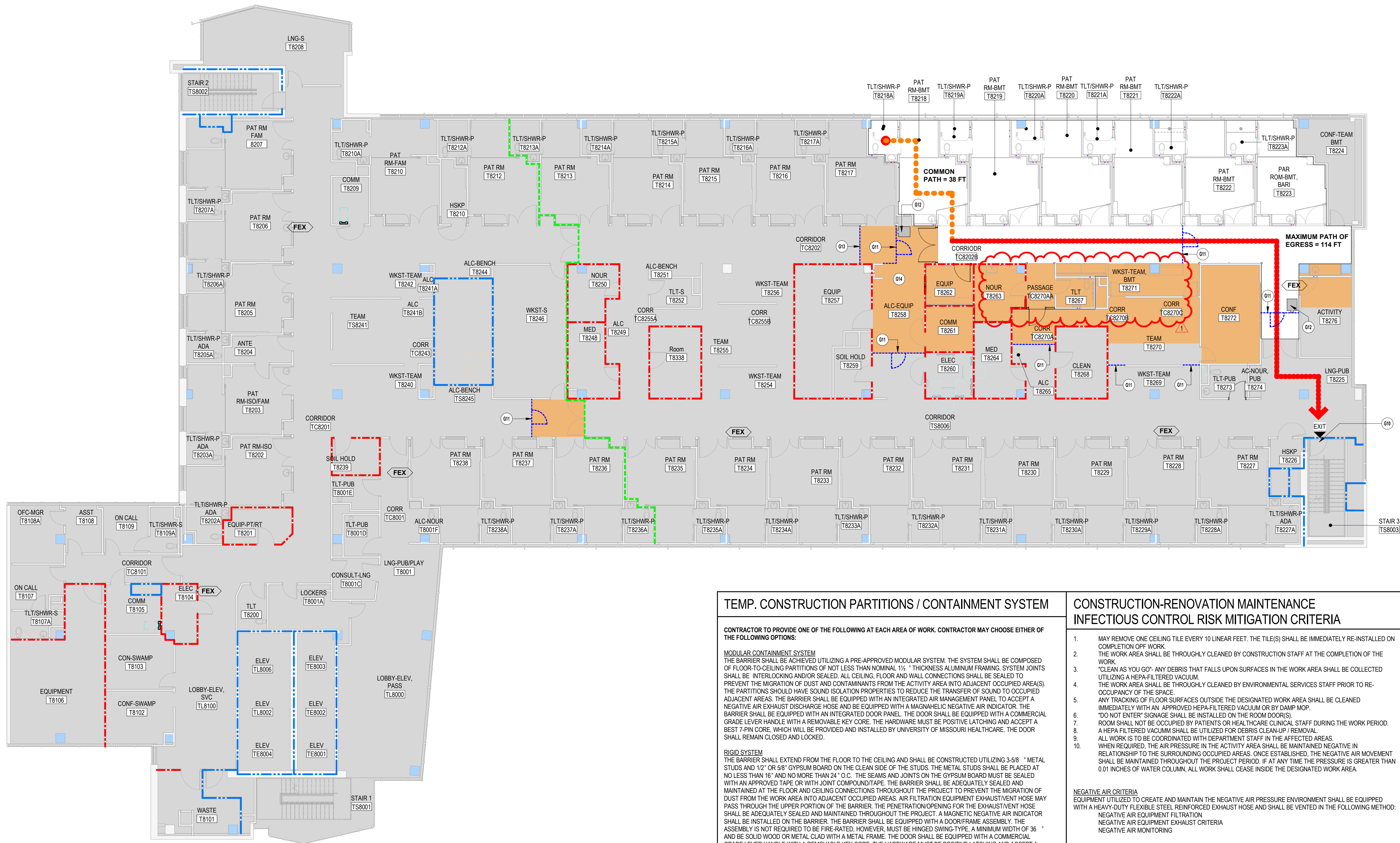
DATE	09 MAY, 2024
BSALS PROJECT NO.	14110006.02A

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5/17/2024 3:37:18 PM  
Autodesk Docs: 4410006 - Bone Marrow Transplant Unit/4410006-Phase 1B-ARCH-BSA.S 2023-14  
PROJECT  
OWNER  
DESIGN  
APPROVED  
Agreement



1 8TH FLOOR LIFE SAFETY PLAN  
3/32" = 1'-0"

#### TEMP. CONSTRUCTION PARTITIONS / CONTAINMENT SYSTEM

CONTRACTOR TO PROVIDE ONE OF THE FOLLOWING AT EACH AREA OF WORK. CONTRACTOR MAY CHOOSE EITHER OF THE FOLLOWING OPTIONS:

##### MODULAR CONTAINMENT SYSTEM

THE BARRIER SHALL BE ACHIEVED UTILIZING A PRE-APPROVED MODULAR SYSTEM. THE SYSTEM SHALL BE COMPOSED OF FLOOR-TO-CEILING PARTITIONS OF NOT LESS THAN NOMINAL 1 1/2" THICKNESS ALUMINUM FRAMING SYSTEM JOINTS SHALL BE INTERLOCKING AND/OR SEALED. ALL CEILING, FLOOR AND WALL CONNECTIONS SHALL BE SEALED TO PREVENT THE MIGRATION OF DUST AND CONTAMINANTS FROM THE ACTIVITY AREA INTO ADJACENT OCCUPIED AREAS. THE PARTITIONS SHOULD HAVE SOUND ISOLATION PROPERTIES TO REDUCE THE TRANSFER OF SOUND TO OCCUPIED ADJACENT AREAS. THE BARRIER SHALL BE EQUIPPED WITH AN INTEGRATED AIR MANAGEMENT PANEL TO ACCEPT A NEGATIVE AIR EXHAUST DISCHARGE HOSE AND BE EQUIPPED WITH A MAGNETIC NEGATIVE AIR INDICATOR. THE BARRIER SHALL BE EQUIPPED WITH AN INTEGRATED DOOR PANEL. THE DOOR SHALL BE EQUIPPED WITH A COMMERCIAL GRADE LEVER HANDLE WITH A REMOVABLE KEY CORE. THE HARDWARE MUST BE POSITIVE LATCHING AND ACCEPT A BEST 7-PIN CORE, WHICH WILL BE PROVIDED AND INSTALLED BY UNIVERSITY OF MISSOURI HEALTHCARE. THE DOOR SHALL REMAIN CLOSED AND LOCKED.

##### RIGID SYSTEM

THE BARRIER SHALL EXTEND FROM THE FLOOR TO THE CEILING AND SHALL BE CONSTRUCTED UTILIZING 3/8" METAL STUDS AND 1/2" OR 5/8" GYPSUM BOARD ON THE CLEAN SIDE OF THE STUDS. THE METAL STUDS SHALL BE PLACED AT NO LESS THAN 16" AND NO MORE THAN 24" O.C. THE SEAMS AND JOINTS ON THE GYPSUM BOARD MUST BE SEALED WITH AN APPROVED TAPE OR WITH JOINT COMPOUND TAPE. THE BARRIER SHALL BE ADEQUATELY SEALED AND MAINTAINED AT THE FLOOR AND CEILING CONNECTIONS THROUGHOUT THE PROJECT TO PREVENT THE MIGRATION OF DUST FROM THE WORK AREA INTO ADJACENT OCCUPIED AREAS. AIR FILTRATION EQUIPMENT EXHAUST VENT HOSE MAY PASS THROUGH THE UPPER PORTION OF THE BARRIER. THE PENETRATION/OPENING FOR THE EXHAUST VENT HOSE SHALL BE ADEQUATELY SEALED AND MAINTAINED THROUGHOUT THE PROJECT. A MAGNETIC NEGATIVE AIR INDICATOR SHALL BE INSTALLED ON THE BARRIER. THE BARRIER SHALL BE EQUIPPED WITH A DOOR/FRAME ASSEMBLY. THE ASSEMBLY IS NOT REQUIRED TO BE FIRE-RATED, HOWEVER, MUST BE HINGED SWING-TYPE, A MINIMUM WIDTH OF 36" AND BE SOLID WOOD OR METAL CLAD WITH A METAL FRAME. THE DOOR SHALL BE EQUIPPED WITH A COMMERCIAL GRADE LEVER HANDLE WITH A REMOVABLE KEY CORE. THE HARDWARE MUST BE POSITIVE LATCHING AND ACCEPT A BEST 7-PIN CORE, WHICH WILL BE PROVIDED AND INSTALLED BY THE UNIVERSITY OF MISSOURI HEALTHCARE. A DOOR SWEEP MAY BE REQUIRED. THE BARRIER DOOR SHALL REMAIN CLOSED AND LOCKED DURING THE WORK PERIOD.

#### CONSTRUCTION-RENOVATION MAINTENANCE INFECTIOUS CONTROL RISK MITIGATION CRITERIA

- MAY REMOVE ONE CEILING TILE EVERY 10 LINEAR FEET. THE TILE(S) SHALL BE IMMEDIATELY RE-INSTALLED ON COMPLETION OF WORK.
- THE WORK AREA SHALL BE THOROUGHLY CLEANED BY CONSTRUCTION STAFF AT THE COMPLETION OF THE WORK.
- CLEAN AS YOU GO: ANY DEBRIS THAT FALLS UPON SURFACES IN THE WORK AREA SHALL BE COLLECTED UTILIZING A HEPA-FILTERED VACUUM.
- THE WORK AREA SHALL BE THOROUGHLY CLEANED BY ENVIRONMENTAL SERVICES STAFF PRIOR TO RE-OCCUPANCY OF THE SPACE.
- ANY TRACKING OF FLOOR SURFACES OUTSIDE THE DESIGNATED WORK AREA SHALL BE CLEANED IMMEDIATELY WITH AN APPROVED HEPA-FILTERED VACUUM OR BY DAMP MOP.
- DO NOT ENTER SIGNAGE SHALL BE INSTALLED ON THE ROOM DOORS.
- ROOM SHALL NOT BE OCCUPIED BY PATIENTS OR HEALTHCARE CLINICAL STAFF DURING THE WORK PERIOD.
- A HEPA FILTERED VACUUM SHALL BE UTILIZED FOR DEBRIS CLEAN-UP / REMOVAL.
- ALL WORK IS TO BE COORDINATED WITH DEPARTMENT STAFF IN THE AFFECTED AREAS.
- WHEN REQUIRED, THE AIR PRESSURE IN THE ACTIVITY AREA SHALL BE MAINTAINED NEGATIVE IN RELATIONSHIP TO THE SURROUNDING OCCUPIED AREAS. ONCE ESTABLISHED, THE NEGATIVE AIR MOVEMENT SHALL BE MAINTAINED THROUGHOUT THE PROJECT PERIOD. IF AT ANY TIME THE PRESSURE IS GREATER THAN 0.01 INCHES OF WATER COLUMN, ALL WORK SHALL CEASE INSIDE THE DESIGNATED WORK AREA.

##### NEGATIVE AIR CRITERIA

EQUIPMENT UTILIZED TO CREATE AND MAINTAIN THE NEGATIVE AIR PRESSURE ENVIRONMENT SHALL BE EQUIPPED WITH A HEAVY-DUTY FLEXIBLE STEEL REINFORCED EXHAUST HOSE AND SHALL BE VENTED IN THE FOLLOWING METHOD:  
NEGATIVE AIR EQUIPMENT FILTRATION  
NEGATIVE AIR EQUIPMENT EXHAUST CRITERIA  
NEGATIVE AIR MONITORING

#### SPECIAL INSPECTIONS

CHECK IF REQUIRED	INSPECTION TASK	CONTINUOUS	PERIODIC	STANDARD	NOTES / COMMENTS
<input checked="" type="checkbox"/>	PENETRATION FIRESTOPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ASTM E2174	TESTING TO BE CONDUCTED BY AN APPROVED AGENCY
<input checked="" type="checkbox"/>	INSTALLATION OF MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING DUCT WORK, PIPING SYSTEMS AND THEIR STRUCTURAL SUPPORTS, WHERE AUTOMATIC FIRE SPRINKLER SYSTEMS ARE INSTALLED.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	IBC 2021 1705.13.6	
<input type="checkbox"/>	SOILS/COMPACTION TESTS				
<input type="checkbox"/>	DRILLED FOUNDATIONS				
<input type="checkbox"/>	MICRO PILE FOUNDATIONS				
<input type="checkbox"/>	REINFORCEMENT INSPECTIONS				
<input checked="" type="checkbox"/>	EMBEDDED ANCHORS				
<input type="checkbox"/>	CONCRETE TESTING				
<input checked="" type="checkbox"/>	MASONRY TESTING/INSPECTIONS				
<input type="checkbox"/>	STRUCTURAL STEEL				
<input type="checkbox"/>	STRUCTURAL STEEL WELDS				
<input type="checkbox"/>	STRUCTURAL WOOD CONSTRUCTION				
<input type="checkbox"/>	MASTIC/SPRAYED FIRE RESISTIVE MATERIALS				
<input type="checkbox"/>	SMOKE CONTROLS				
<input checked="" type="checkbox"/>	SEISMIC COMPLIANCE				
<input type="checkbox"/>	WOOD OR STEEL FABRICATION PROCESS				

#### DEFERRED SUBMITTALS (2021 IBC 107.3.4.1)

CHECK IF REQUIRED	TYPE OF SUBMITTAL	CHECK IF REQUIRED	TYPE OF SUBMITTAL
<input type="checkbox"/>	SURVEY	<input type="checkbox"/>	FIRE ALARM
<input type="checkbox"/>	CIVIL	<input type="checkbox"/>	FIRE SPRINKLER
<input type="checkbox"/>	LANDSCAPING	<input type="checkbox"/>	AV
<input type="checkbox"/>	ARCHITECTURAL	<input type="checkbox"/>	FIRESTOPPING
<input type="checkbox"/>	STRUCTURAL	<input type="checkbox"/>	SEISMIC (SEISMIC RESISTANCE OF MEP SYSTEMS)
<input type="checkbox"/>	MECHANICAL	<input type="checkbox"/>	CITY/PUBLIC WORK DETAILS
<input type="checkbox"/>	ELECTRICAL	<input type="checkbox"/>	OTHER
<input type="checkbox"/>	PLUMBING	<input type="checkbox"/>	OTHER

#### CODE SUMMARY

PROJECT INFORMATION:	
NAME:	PATIENT CARE TOWER - 8TH FLOOR BONE MARROW TRANSPLANT UNIT RENOVATION
ADDRESS:	BMT UNIT - PHASE 1B 1 HOSPITAL DR, COLUMBIA, MO 65201 COLUMBIA, MO 65201
PROJECT DESCRIPTION:	RENOVATION OF APPROXIMATELY ~2,114 SF EXISTING PATIENT CARE TOWER 8TH FLOOR
OWNER:	CURATORS OF THE UNIVERSITY OF MISSOURI
DESIGN PROFESSIONAL:	
ARCHITECT:	BSA LIFE STRUCTURES
ADDRESS:	12645 OLIVE BOULEVARD, SUITE 100 CREVE COEUR, MO 63141 OVERLAND PARK, KS 66211
CONTACT:	ENJO ASSEFA EASSEFA@BSALS.COM 913 748 8813 KATHRYN KENAGY KENAGY@BSALS.COM 913 522 0853

CODE INFORMATION:	
2021	INTERNATIONAL BUILDING CODE
2021	INTERNATIONAL PLUMBING CODE
2021	INTERNATIONAL MECHANICAL CODE
2021	INTERNATIONAL EXISTING BUILDING CODE (FOR LEVEL 1 & LEVEL 2 ALTERATIONS ONLY WITH PRE-APPROVAL FROM THE AIA)
2021	INTERNATIONAL FIRE CODE
2021	INTERNATIONAL FUEL GAS CODE
2021	ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - 2017 (APPLICABLE SECTIONS PER CODE DETERMINATION 08)
2020/2011	NATIONAL ELECTRIC CODE/NFPA 70 - 2020
2019/2010	NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
2012	NFPA 101 LIFE SAFETY CODE
2012	NFPA 99 STANDARD FOR HEALTH CARE FACILITIES
2019/2012	NFPA 90A INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS
2020	NFPA 75 STANDARD FOR THE FIRE PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT
2019/2010	NFPA 72 NATIONAL FIRE ALARM CODE
2019	NFPA 518 STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK
2019	NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY FIRE PUMPS FOR FIRE PROTECTION
2019/2010	NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE, PRIVATE HYDRANTS AND HOSE SYSTEMS
2019/2010	NFPA 13 INSTALLATION OF FIRE SPRINKLER SYSTEMS
2019	ASHRAE 62.1 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - (VENTILATION RATES FOR SPACES NOT FOUND IN ASHRAE STANDARD 170 OR THE HIGHER OF THE TWO AIR CHANGE RATES PRESCRIBED IN BOTH)
2019	ASHRAE 90.1 - ENERGY STANDARD FOR BUILDINGS
2021	ASHRAE 170 - VENTILATION OF HEALTH CARE FACILITIES
2016	ASME A17.1 - SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	AMERICANS WITH DISABILITIES ACT - STANDARDS FOR ACCESSIBLE DESIGN FACILITY GUIDELINES INSTITUTE
2022	

BUILDING DATA:	
TYPE OF CONSTRUCTION: RENOVATION OF EXISTING	
ZONING: R-MF	
FIRE SPRINKLERS: FULLY SPRINKLED	
LOCAL FIRE DEPARTMENT: CITY OF COLUMBIA FIRE DEPARTMENT	
AUTHORITY HAVING JURISDICTION: UM DIRECTOR OF FACILITIES PLANNING & DEVELOPMENT, UNIVERSITY OF MISSOURI SYSTEM	
USE GROUP: HEALTHCARE I-2	
CONSTRUCTION TYPE: IB	
NFPA CONSTRUCTION TYPE: TYPE II (222)	
PROJECT AREA: ~2,114	
RISK CATEGORY IV	

COMMON PATH OF EGRESS TRAVEL:	
1-2 OCCUPANCY	75 FT
1-2 OCCUPANCY SLEEPING ROOMS	90 FT
1-2 OCCUPANCY CARE SUITES	100 FT
SPRINKLERED	
EXIT ACCESS TRAVEL DISTANCE:	
1-2 OCCUPANCY	200 FT
SPRINKLERED	
EXIT CAPACITY:	
1-2 OCCUPANCY	STAIRWAYS = ETR

CORRIDORS:	
MINIMUM WIDTH:	44"
DEAD END:	50'-0"
FIRE EXTINGUISHERS (EXISTING TO REMAIN):	
MAXIMUM TRAVEL DISTANCE:	75'-0"
LIFE-SAFETY FEATURES:	
EXISTING SPRINKLER SYSTEM THROUGH-OUT	
EXISTING FIRE RATED SEPARATION WALLS	
EXISTING FIRE RATED & SMOKE RESISTIVE CORRIDOR CONSTRUCTION	
EXISTING SMOKE DETECTORS & FIRE ALARM SYSTEM	
EXISTING EMERGENCY LIGHTS	
EXISTING EXIT LIGHTS	

PLUMBING FIXTURE COUNT:	
EXISTING PLUMBING FIXTURES ARE NOT IN SCOPE OF WORK	
EXISTING PLUMBING COUNTS MEET REQUIREMENTS OF OCCUPANT LOAD PER IBC TABLE 2902.1	

#### LIFE-SAFETY SYMBOLS LEGEND

ROOM	ROOM NAME DESIGNATION
000	ROOM NUMBER DESIGNATION
1	PLAN NOTE DESIGNATION
EXIT	EXIT SYMBOL
	AREA IN SCOPE
	AREA IN SCOPE FOR CEILING AND ABOVE CEILING WORK
	AREA NOT IN SCOPE
FEX	FIRE EXTINGUISHER CABINET (EXISTING)

#### PROJECT/SCOPE SF TABLE

FOR REFERENCE ONLY	
ALTERATION LEVEL 2	2,114 SF

#### WALL RATINGS

SMOKE PARTITION- (SP)	
1-HOUR SMOKE BARRIER- (SB)	
1-HOUR RATED FIRE- (1HR)	
1-HOUR RATED FIRE + SMOKE BARRIER- (1HRS)	
2-HOUR RATED FIRE- (2HR)	
2-HOUR RATED FIRE + SMOKE BARRIER- (2HRS)	
3-HOUR RATED FIRE- (3HR)	

NOTE: RATINGS OF EXISTING WALLS IS ONLY SHOWN FOR PARTITION WALLS AT AND IMMEDIATE AREA OF WHERE THE EXTENT OF THE SCOPE WORK IS LOCATED

#### KEYNOTE LEGEND

	REFER TO A000 FOR GENERAL NOTES
G10	PROVIDE TEMPORARY CONSTRUCTION BARRIER FOR CONTRACTOR ACCESS AT THIS LOCATION PER INFECTION CONTROL SPECIFICATIONS
G11	PROVIDE TEMPORARY CONSTRUCTION BARRIER WITH STICKY MATS TO RESTRICT PUBLIC ACCESS AT THIS LOCATION PER INFECTION CONTROL SPECIFICATIONS. BARRIER SYSTEM TO EXTEND UP TO CEILING, AND PROVIDE 6 MIL FIRE RETARDANT POLYETHYLENE SHEETING ENCLOSURE ABOVE CEILING TO BOTTOM OF FLOOR STRUCTURE ABOVE. PROVIDE MANOMETER 6 INCH FROM CEILING TO INSURE CONSTRUCTION AREA IS NEGATIVE PRESSURE. PRIOR TO THE INSTALLATION, REMOVAL AND SEQUENCING OF TEMPORARY BARRIERS, REFER TO THE PHASING PLAN AND NOTES ON SHEET G10 AND THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET M008. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL ABOVE CEILING RELATED WORK. COORDINATE SEQUENCING WITH OWNER AND STAFF.
G12	NEGATIVE AIR MACHINE. COORDINATE LOCATION WITH OWNER AND STAFF.
G13	ZIPWALL DUST BARRIER SYSTEM
G14	PROVIDE AN ANTE ROOM WITH NEGATIVE AIR MACHINE, A CLOSER ON THE DOOR, AND A HEPA VAC TO CLEAN BOOTS, CARTS, PEOPLE, AND SUPPLIES LEAVING THE WORKING AREA. COORDINATE WITH THE OWNER PRIOR TO THE INSTALLATION, REMOVAL, AND SEQUENCING OF AN ANTE ROOM AND REFER TO THE PHASING PLAN AND NOTES ON SHEET G10 AND THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET M008.

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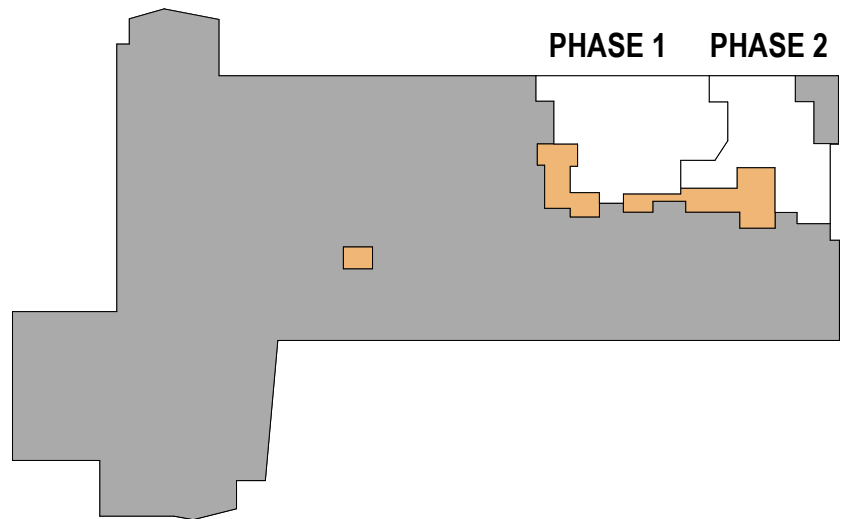
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#### BID SET



#### KEYPLAN

MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1



Matthew Jeans - Architect  
MOR A-2017014317

## LIFE SAFETY & INFECTION CONTROL PLAN - 8TH FLOOR

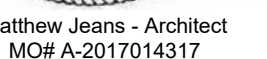
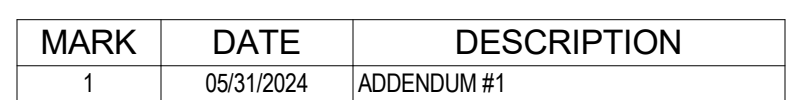
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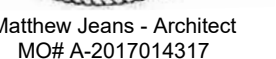
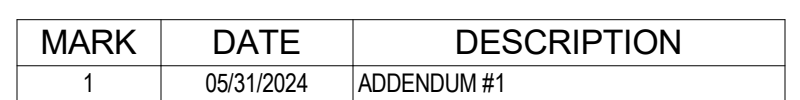


 **G302**





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DATE	09 MAY, 2024
BSALS PROJECT NO.	14110006.02A

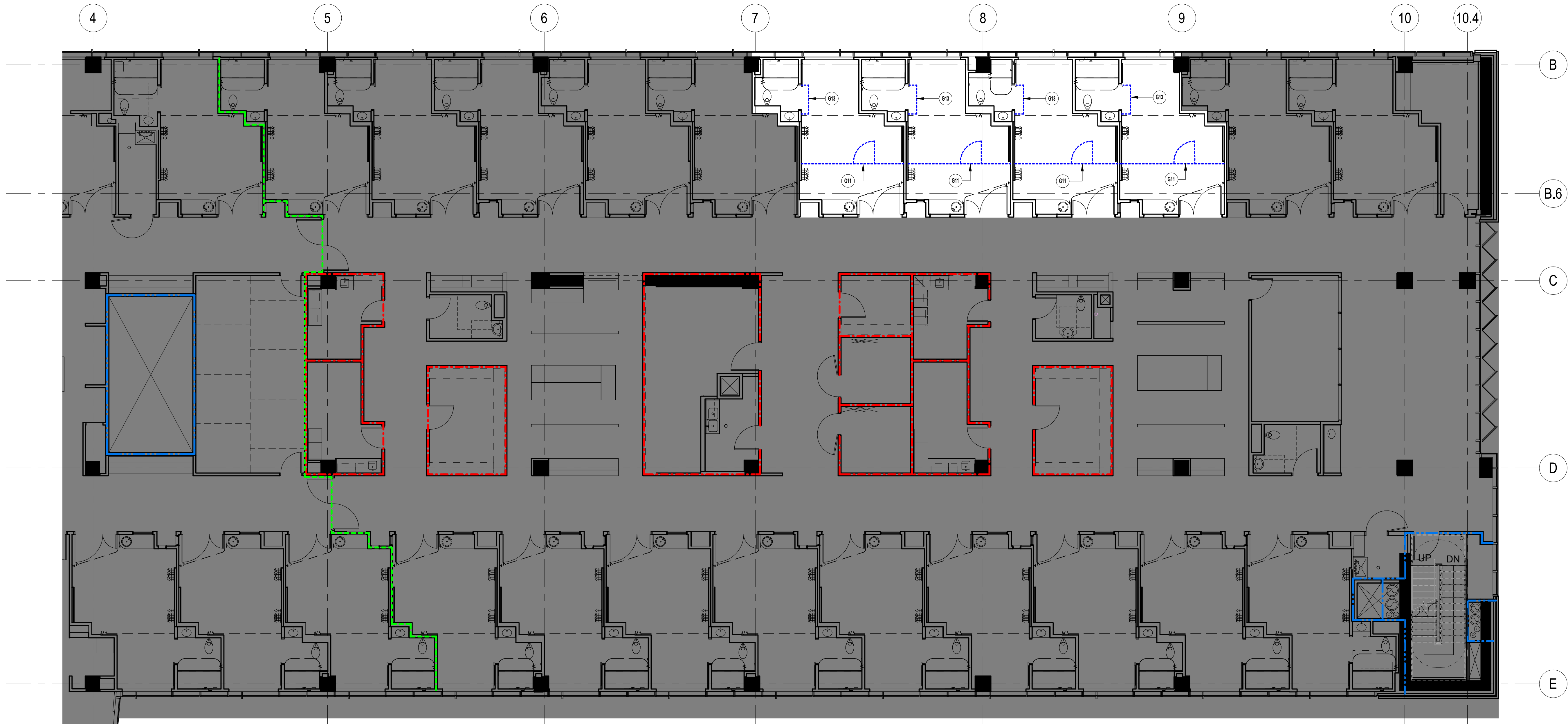
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SEVENTH FLOOR REFLECTED CEILING  
PLAN - REFERENCE ONLY  
1/8" = 1'-0"



07- SEVENTH FLOOR INFECTION  
CONTROL PLAN  
1/8" = 1'-0"

**KEYNOTE LEGEND**

REFER TO A200 FOR GENERAL NOTES

G11 PROVIDE TEMPORARY CONSTRUCTION BARRIER WITH STICKY MATS TO RESTRICT PUBLIC ACCESS AT THIS LOCATION PER INFECTION CONTROL SPECIFICATIONS. BARRIER SYSTEM TO EXTEND UP TO CEILING, AND PROVIDE 6 MIL FIRE RETARDANT POLYETHYLENE SHEETING ENCLOSURE ABOVE CEILING TO BOTTOM OF FLOOR STRUCTURE ABOVE. PROVIDE MANOMETER 6 INCH FROM CEILING TO INSURE CONSTRUCTION AREA IS NEGATIVE PRESSURE. PRIOR TO THE INSTALLATION, REMOVAL, AND SEQUENCING OF TEMPORARY BARRIERS, REFER TO THE PHASING PLAN AND NOTES ON SHEET A107 AND THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET M308. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL ABOVE CEILING RELATED WORK. COORDINATE SEQUENCING WITH OWNER AND STAFF.

G13 ZIPWALL DUST BARRIER SYSTEM.

X27 CEILING WITHIN OCCUPIED AREA TO BE TEMPORARILY REMOVED FOR SCOPE OF UNDERLOOK PLUMBING DEMO/NEW WORK, AS INDICATED BY SHADDED REGION. CEILING TILES SHALL NOT BE DOWN FOR MORE THAN 24 HOURS. REFER TO PLUMBING DRAWINGS AND COORDINATE EXTENT. ALL CEILINGS EXISTING CONDITIONS TO BE MAINTAINED. REPLACED DAMAGED TILES & GRID AS REQUIRED. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS. WORK TO BE SCHEDULED WITH OWNER.

**WALL RATINGS**

SMOKE PARTITION - (SP)  
1-HOUR SMOKE BARRIER - (SB)  
1-HOUR RATED FIRE - (1HR)  
1-HOUR RATED FIRE + SMOKE BARRIER - (1HRS)  
2-HOUR RATED FIRE - (2HR)  
2-HOUR RATED FIRE + SMOKE BARRIER - (2HRS)  
3-HOUR RATED FIRE - (3HR)

NOTE: RATING OF EXISTING WALLS IS ONLY SHOWN FOR PARTITION WALLS AT AND IMMEDIATE AREA OF WHERE THE EXTENT OF THE SCOPE WORK IS LOCATED

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Engineering Registration Number (Missouri) - 000087

**University of Missouri**

MU PROJECT #: CP221933

## PATIENT CARE TOWER - 8TH FLOOR BONE MARROW TRANSPLANT UNIT RENOVATION

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

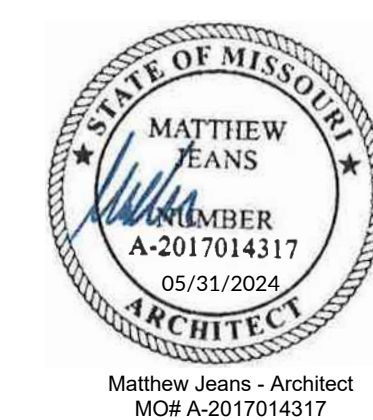
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PHASE 1 PHASE 2

**KEYPLAN**

PLAN NORTH

MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1



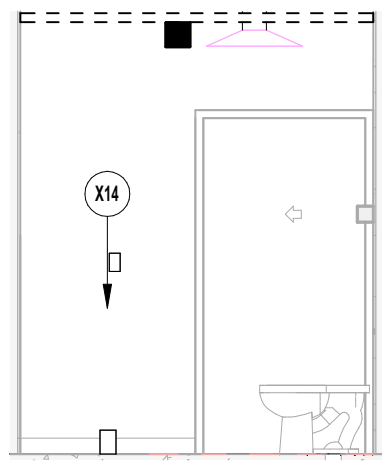
## 7TH FLOOR INFECTION CONTROL & DEMOLITION REFLECTED CEILING PLAN

DATE 09 MAY, 2024  
BSA'S PROJECT NO. 1411006.02A

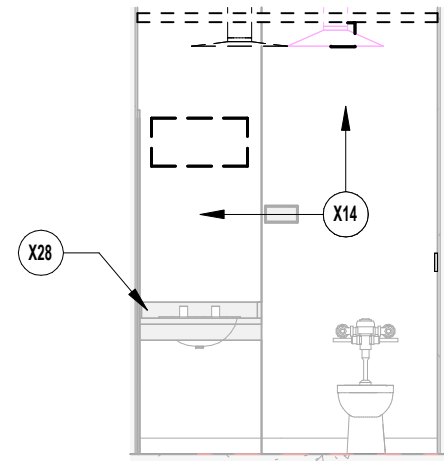
**A107**

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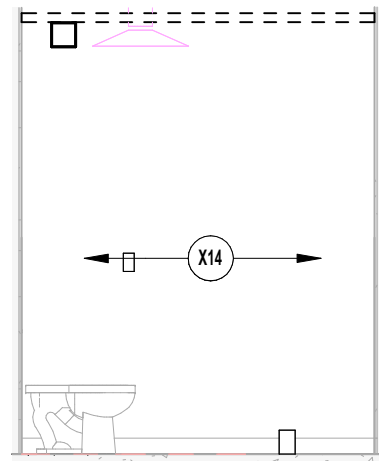




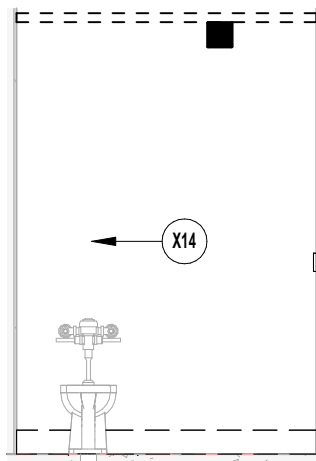
11 RESTROOM DEMO ELEVATION - A  
1/4" = 1'-0"



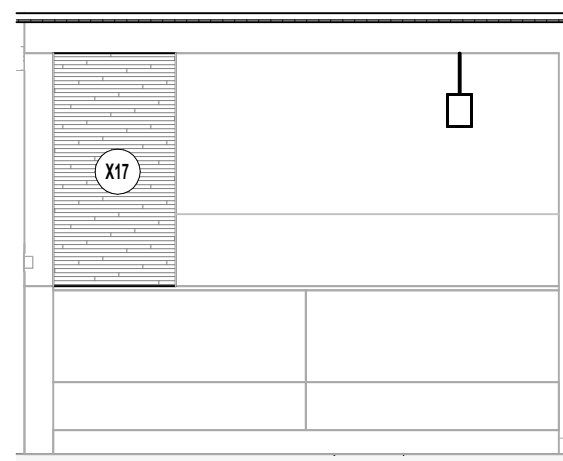
10 RESTROOM DEMO ELEVATION - B  
1/4" = 1'-0"



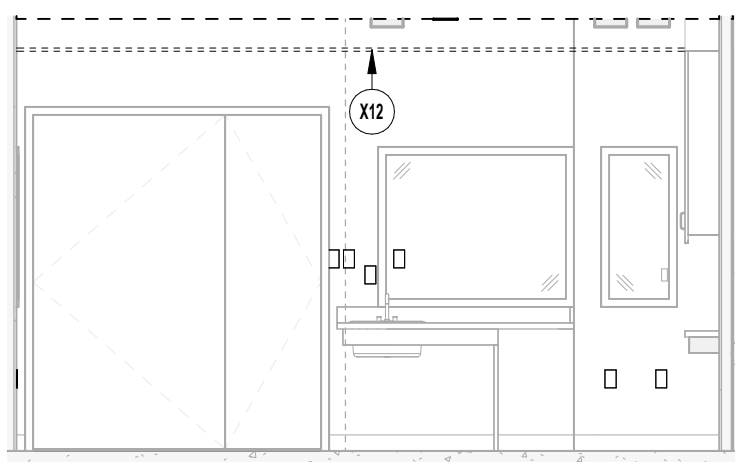
9 RESTROOM DEMO ELEVATION - C  
1/4" = 1'-0"



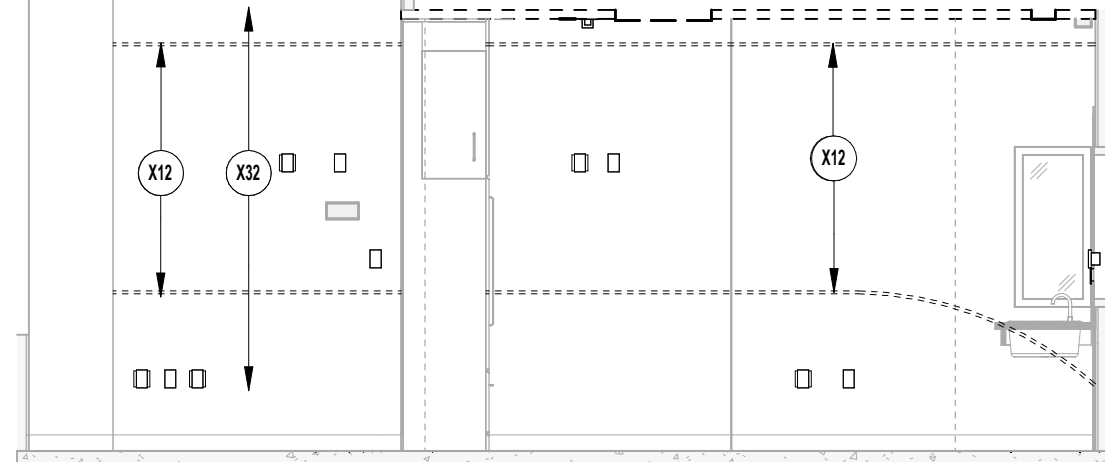
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1/4" = 1'-0"



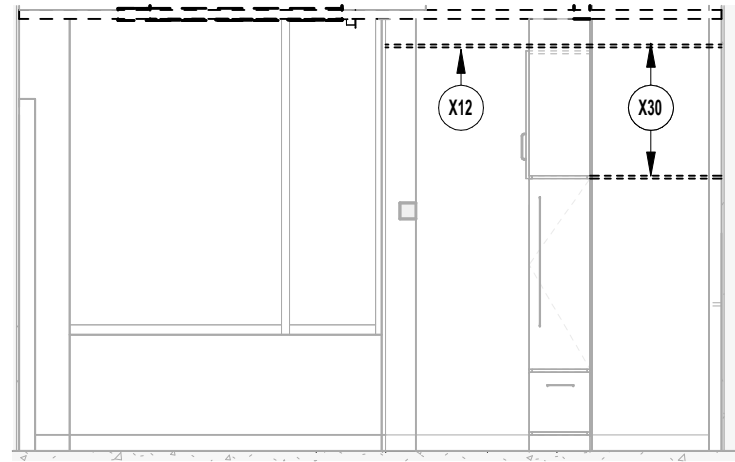
2 ALC-BENCH BMT DEMO ELEVATION  
1/4" = 1'-0"



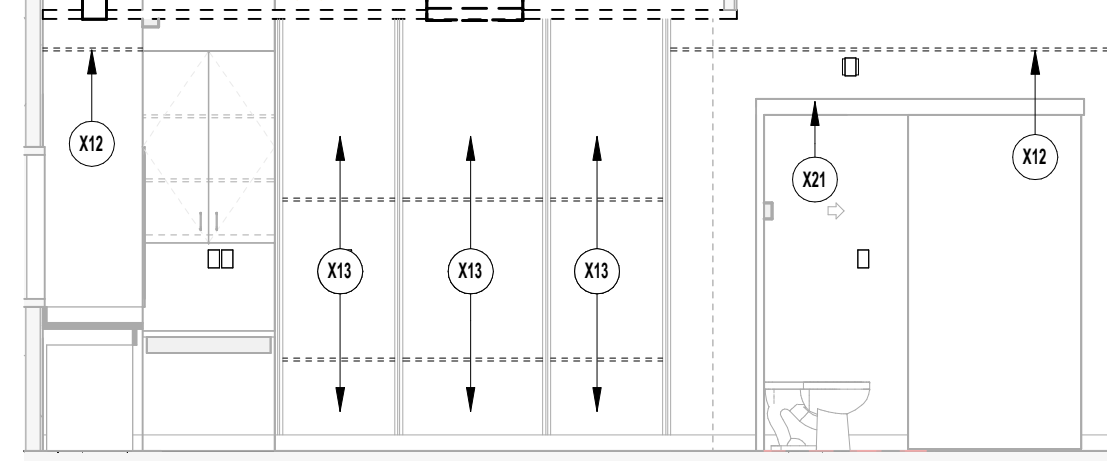
7 PATIENT RM DEMO ELEVATION - D  
1/4" = 1'-0"



6 PATIENT RM DEMO ELEVATION - C  
1/4" = 1'-0"



4 PATIENT RM DEMO ELEVATION - B  
1/4" = 1'-0"



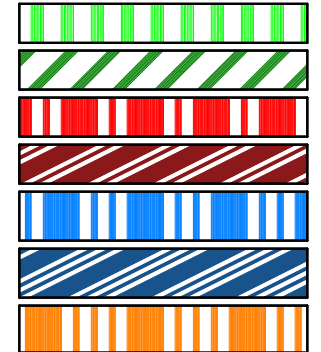
3 PATIENT RM DEMO ELEVATION - A  
1/4" = 1'-0"

#### KEYNOTE LEGEND

- REFER TO A100 FOR GENERAL NOTES
- G11 PROVIDE TEMPORARY CONSTRUCTION BARRIER WITH STICKY MATS TO RESTRICT PUBLIC ACCESS AT THIS LOCATION PER INFECTION CONTROL SPECIFICATIONS. BARRIER SYSTEM TO EXTEND UP TO CEILING, AND PROVIDE 6 MIL FIRE RETARDANT POLYETHYLENE SHEETING ENCLOSURE ABOVE CEILING TO BOTTOM OF FLOOR STRUCTURE ABOVE. PROVIDE MANMETERS 6 INCH FROM CEILING TO INSURE CONSTRUCTION AREA IS NEGATIVE PRESSURE. PRIOR TO THE INSTALLATION, REMOVAL, AND SEQUENCING OF TEMPORARY BARRIERS, REFER TO THE PHASING PLAN AND NOTES ON SHEET 10.4 AND THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET 1A338. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL ABOVE CEILING RELATED WORK. COORDINATE SEQUENCING WITH OWNER AND STAFF.
- G13 ZIPWALL DUST BARRIER SYSTEM.
- G14 PROVIDE AN ANTE ROOM WITH NEGATIVE AIR MACHINE, A CLOSER ON THE DOOR, AND A HEPA VAC TO CLEAN BOOTS, CARTS, PEOPLE, AND SUPPLIES LEAVING THE WORKING AREA. COORDINATE WITH THE OWNER PRIOR TO THE INSTALLATION, REMOVAL, AND SEQUENCING OF AN ANTE ROOM AND REFER TO THE PHASING PLAN AND NOTES ON SHEET 10.4 AND THE SHUTDOWN AND SEQUENCING NOTES ON MECHANICAL SHEET 1A338.
- X05 REMOVE EXISTING DOOR AND FRAME IN ITS ENTIRETY. PREPARE OPENING TO BE INFILLED WITH NEW WALL CONSTRUCTION. SALVAGE DOOR HARDWARE FOR REUSE AS NEEDED FOR THE NEW DOOR TO BE INSTALLED ON THE NORTH SIDE OF EQUIPMENT ROOM T8262. REFER TO ARCHITECTURAL DIMENSION PLANS FOR ADDITIONAL INFORMATION.
- X06 REMOVE EXISTING MOSAIC TILE FLOORING & CERAMIC WALL TILE IN THEIR ENTIRETY. PREPARE ALL REMAINING SURFACES TO RECEIVE NEW FINISH AS SCHEDULED. REF: NEW WORK PLANS.
- X12 REMOVE HORIZONTAL METAL GYP. REVEAL. PATCH REMAINING VOID LEFT BY REVEAL. PREP ALL SURFACES FOR NEW FINISH AS SCHEDULED.
- X13 REMOVE PLASTIC LAMINATE PANEL & HORIZONTAL REVEAL TRIM.
- X14 REMOVE EXISTING WALL TILE. PATCH & REPAIR REMAINING SURFACES. PREP FOR NEW FINISH AS SCHEDULED. REF: NEW WORK PLANS.
- X15 REF: T8221 FOR TYP. DEMO ELEVATIONS.
- X16 REF: T8221A FOR TYP. DEMO ELEVATIONS AND NOTES.
- X17 REMOVE GLASS MOSAIC WALL TILE. PATCH & REPAIR REMAINING SURFACE. PREP FOR NEW FINISH AS SCHEDULED. REF: NEW WORK PLANS.
- X21 REMOVE SLIDER DOOR TOP VALANCE IN PREPARATION FOR NEW SLOPED VALANCE.
- X22 REMOVE EXISTING VINYL WALLCOVERING ON ALL WALLS UP TO THIS LOCATION.
- X23 REMOVE EXISTING BUMPER RAILS & HANDRAILS. SALVAGE & STORE FOR RE-INSTALLATION IN SAME LOCATIONS. REF: NEW WORK PLANS.
- X24 REMOVE EXISTING SNAP-ON CORNER GUARDS & ASSOCIATED RETAINERS. SALVAGE & RETURN TO OWNER FOR STORAGE.
- X25 REMOVE EXISTING TRENCH DRAIN IN ITS ENTIRETY. AND PREPARE THE EXISTING DRAIN HOLE THROUGH THE SLAB AS REQUIRED TO RECEIVE NEW DRAIN SLEEVE. FIELD VERIFY AND TEMPORARILY REMOVE CEILING FROM ROOM BELOW AS NEEDED TO ACCESS UNDERSIDE OF FLOOR. CEILING TILES SHALL NOT BE DOWN FOR MORE THAN 24 HOURS. ALL CEILING EXISTING CONDITIONS TO BE MAINTAINED. PATCH/PAINT GYP. BD. CEILING AS REQUIRED. REPLACE DAMAGED TILES & GRID AS REQUIRED. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS. ACCESS TO ROOM BELOW AND WORK TO BE SCHEDULED WITH OWNER.
- X26 TEMPORARILY REMOVE THE EXISTING SINK AND COUNTERTOP TO ALLOW FOR TILE REMOVAL. PROTECT AND STORE SINK, COUNTERTOP AND BACKSPLASH FOR RE-INSTALLATION IN NEW WORK.
- X30 REMOVE HORIZONTAL METAL REVEAL FROM EXISTING PLASTIC LAMINATE WALL PANEL. REF: NEW WORK PLANS FOR NEW FINISH.
- X32 REMOVE EXISTING WALL COVERING. PATCH AND PREP WALL AS REQUIRED FOR NEW FINISH AS SCHEDULED. RE: NEW WORK PLANS FOR ADDITIONAL INFORMATION.
- X36 REMOVE EXISTING CARPET AND BASE IN ITS ENTIRETY UP TO INDICATED DASHED LINE. REMOVE EXISTING WALL COVERING. PREPARE FLOOR AND WALL SURFACES TO RECEIVE NEW FLOORING AND BASE. REFER TO NEW WORK PLAN FOR ADDITIONAL INFORMATION.
- X37 REMOVE EXISTING FLOOR AND WALL TILE IN ITS ENTIRETY. PREPARE FLOOR AND WALL SURFACE TO RECEIVE NEW FLOORING AND WALL FINISH. TEMPORARILY REMOVE PLUMBING FIXTURES AS REQUIRED FOR INSTALLATION OF NEW FINISHES. RE-INSTALL PLUMBING FIXTURES AND WALL MOUNTED ACCESSORIES IN ORIGINAL LOCATION AFTER COMPLETION. REFER TO NEW WORK PLAN FOR ADDITIONAL INFORMATION.
- X39 REMOVE PORTION OF EXISTING WALL. REFER TO NEW WORK FLOOR PLAN FOR LOCATION & ADDITIONAL INFORMATION.
- X40 REMOVE AND SALVAGE EXISTING DOOR, DOOR FRAME, AND DOOR HARDWARE FOR RE-INSTALLATION AT THE NEW SOUTH WALL ADDED IN PASSAGE T8270AA.
- X41 REMOVE AND SALVAGE EXISTING DOOR, DOOR FRAME, AND DOOR HARDWARE FOR RE-INSTALLATION AT THE SAME LOCATION FOLLOWING ABOVE CEILING DUCT CHASE CONSTRUCTION.
- X44 TEMPORARILY REMOVE WINDOW BLINDS, CURTAIN TRACKS, AND WALL MOUNTED ACCESSORIES SUCH AS GLOVE BOX HOLDERS, BRACKETS, FILE HOLDERS, ETC. AS REQUIRED. RE-INSTALL BACK TO THEIR RESPECTIVE ORIGINAL LOCATIONS AFTER COMPLETION OF WORK.

#### WALL RATINGS

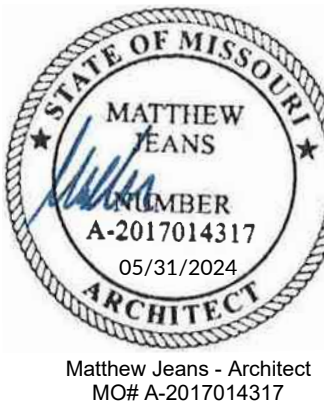
- SMOKE PARTITION- (SP)
- 1-HOUR SMOKE BARRIER- (SB)
- 1-HOUR RATED FIRE - (1HR)
- 1-HOUR RATED FIRE + SMOKE BARRIER - (1HRS)
- 2-HOUR RATED FIRE - (2HR)
- 2-HOUR RATED FIRE + SMOKE BARRIER - (2HRS)
- 3-HOUR RATED FIRE - (3HR)



NOTE: RATING OF EXISTING WALLS IS ONLY SHOWN FOR PARTITION WALLS AT AND IMMEDIATE AREA OF WHERE THE EXTENT OF THE SCOPE WORK IS LOCATED

#### KEYPLAN

MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1



#### 8TH FLOOR - DEMOLITION PLANS & ELEVATIONS

DATE	09 MAY, 2024
BSA'S PROJECT NO.	1411006.02A

A108

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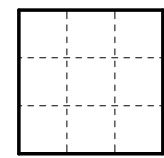
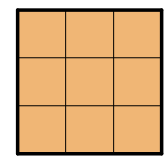
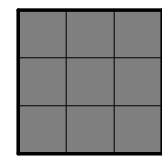
8TH FLOOR DEMOLITION PLAN - PHASE 1B  
1B  
3/16" = 1'-0"

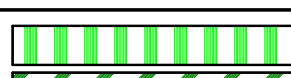




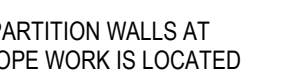
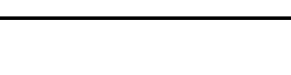


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CREATED  
DESIGNED  
APPROVED



8TH FLOOR DEMOLITION REFLECTED  
CEILING PLAN - PHASE 1B  
3/16" = 1'-0"

CEILING REMOVAL LEGEND		
	=	EXISTING CEILING TILES AND GRIDS TO BE REMOVED IN THEIR ENTIRETY.
	=	EXISTING CEILING TILES AND GRIDS WITHIN OCCUPIED AREA TO BE REMOVED AS REQUIRED FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION SCOPE. REFER TO KEYNOTE X38 FOR ADDITIONAL INFORMATION.
	=	EXISTING CEILING TILES TO REMAIN OUTSIDE OF SCOPE BOUNDARY.

WALL RATINGS	
SMOKE PARTITION - (SP)	
1-HOUR SMOKE BARRIER - (SB)	
1-HOUR RATED FIRE - (1HR)	
1-HOUR RATED FIRE + SMOKE BARRIER - (1HRS)	
2-HOUR RATED FIRE - (2HR)	
2-HOUR RATED FIRE + SMOKE BARRIER - (2HRS)	
3-HOUR RATED FIRE - (3HR)	
NOTE: RATING OF EXISTING WALLS IS ONLY SHOWN FOR PARTITION WALLS AT AND IMMEDIATE AREA OF WHERE THE EXTENT OF THE SCOPE WORK IS LOCATED	

KEYNOTE LEGEND	
X10	REFER TO A000 FOR GENERAL NOTES
X10	REMOVE EXISTING PRIVACY CURTAIN & RETURN TO OWNER.
X20	EXISTING CURTAIN TRACK TO REMAIN.
X34	REMOVE EXISTING CEILING TILE AND GRID.
X34	REMOVE PORTION OF EXISTING WALL ABOVE CEILING TO PROVIDE ROOM FOR NEW MECHANICAL SUPPLY AND RETURN AIR DUCT CHASE. REFER TO NEW WORK PLAN AND SECTION DETAILS FOR RATED WALLS AND SOFFIT CONSTRUCTION ABOVE CEILING.
X35	REMOVE EXISTING FAN FILTER UNITS.
X38	REMOVE CEILING TILES AND GRIDS WITHIN OCCUPIED AREA AS REQUIRED FOR SCOPE INDICATED BY SHADED REGION. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS AND COORDINATE EXTENT OF SCOPE. SALVAGE ALL EXISTING CEILING TILES FOR RE-INSTALLATION. CEILING TILES EXISTING CONDITIONS TO BE MAINTAINED. REPLACE DAMAGED TILES AS REQUIRED TO MATCH EXISTING. ANY REMOVED AND REPLACED OR CUT AND PATCHED EXISTING GYPSUM SOFFIT ON THE BONE MARROW TRANSPLANT UNIT SIDE NEED TO BE REPAINTED WITH EPOXY PAINT AS SCHEDULED FOR CEILING ON THE INTERIOR FINISH SPECIFICATIONS. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS. WORK TO BE SCHEDULED WITH OWNER.

BSA

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Architectural Registration Number (Missouri) - 2017014317

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Engineering Registration Number (Missouri) - 000087

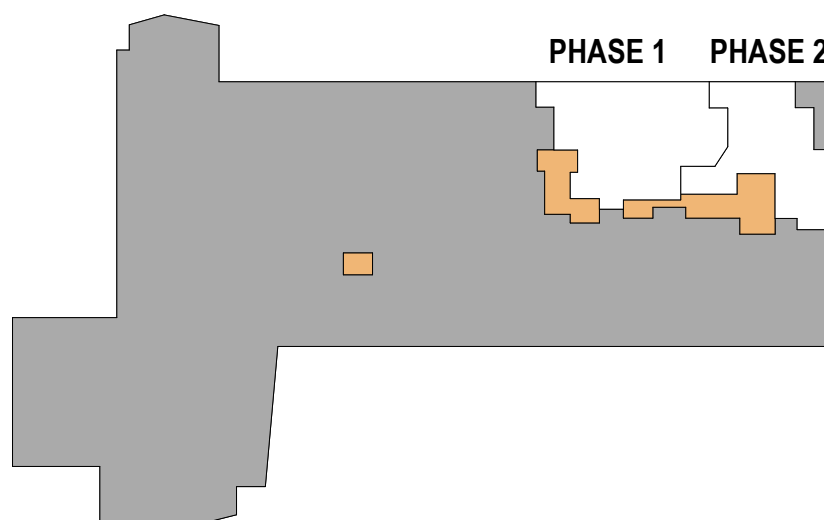
University of Missouri

MU PROJECT #: CP221933

## PATIENT CARE TOWER - 8TH FLOOR BONE MARROW TRANSPLANT UNIT RENOVATION

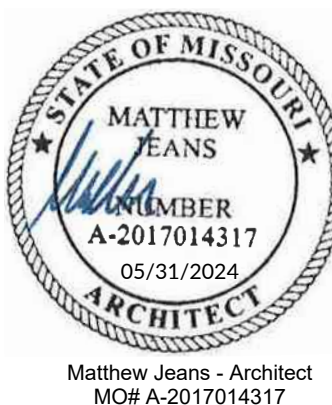
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



KEYPLAN  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1



8TH FLOOR - DEMOLITION  
REFLECTED CEILING PLAN

DATE 09 MAY, 2024  
BSA'S PROJECT NO. 1411006.02A

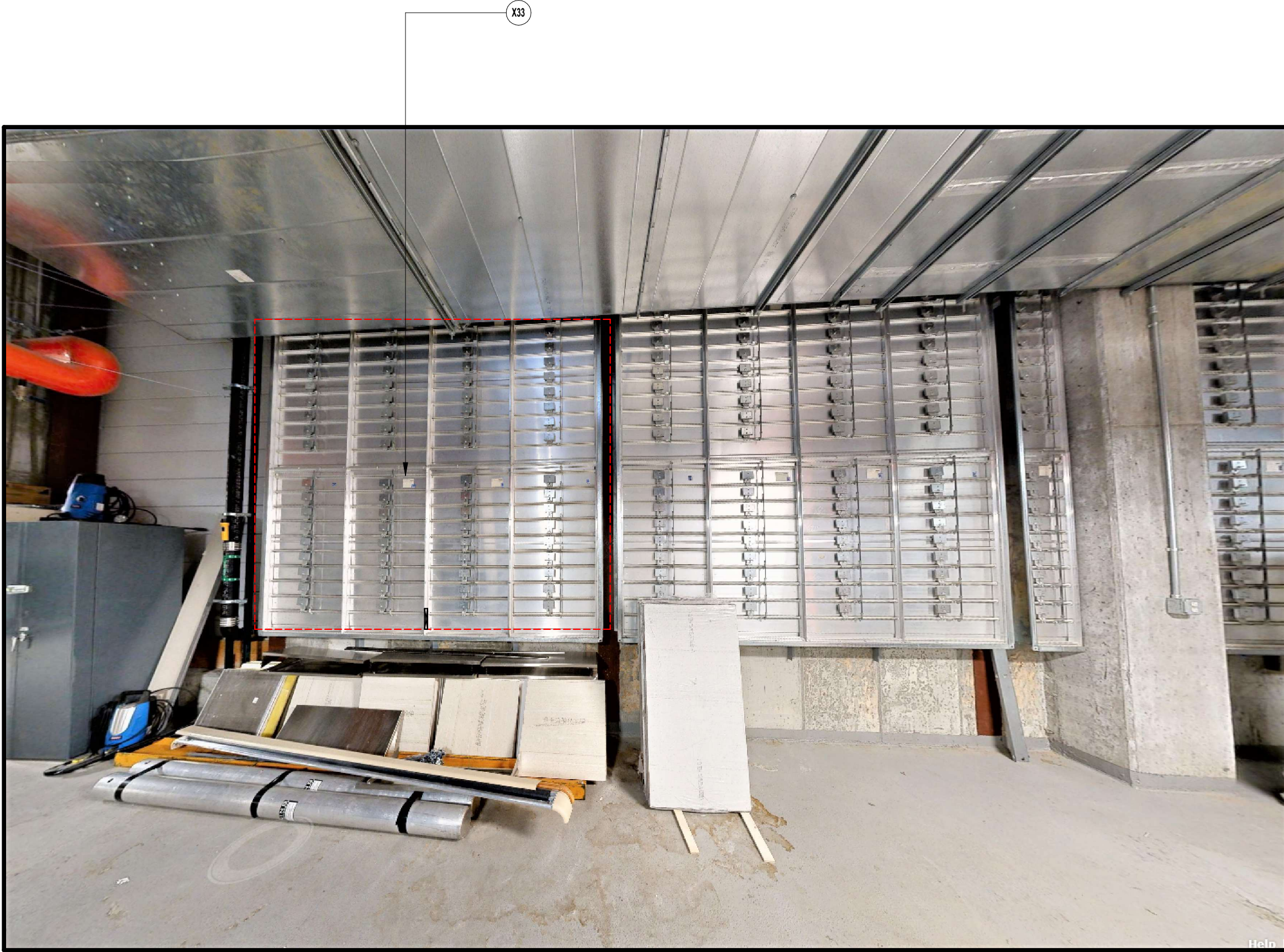
A109

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③ PENTHOUSE MECHANICAL VENTILATION  
LOUVERS - EXTERIOR  
12" = 1'-0"



② PENTHOUSE MECHANICAL VENTILATION  
LOUVERS - INTERIOR  
12" = 1'-0"

KEYNOTE LEGEND	
REFER TO A000 FOR GENERAL NOTES	
X33	TEMPORARILY REMOVE EXISTING VENTILATION LOUVERS TO PROVIDE ACCESS FOR THE CONVEYANCE OF THE NEW AIR HANDLING UNIT TO THE MECHANICAL PENTHOUSE. AREA SHOWN IS AN APPROXIMATE LOCATION. COORDINATE WITH MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF THE NEW UNIT. FIELD VERIFY FOR THE BEST ROUTE TO MOVE THE UNIT TO POSITION. RE-INSTALL LOUVERS BACK TO THEIR ORIGINAL CONDITION.
X42	REMOVE PORTION OF EXISTING INSULATED METAL WALL PANELS AS REQUIRED TO PROVIDE OPENING FOR NEW MECHANICAL SUPPLY AND RETURN AIR DUCTS. REPAIR AND PATCH THE EXISTING INSULATED METAL PANELS AROUND THE NEW OPENING AS REQUIRED TO RESTORE TO ORIGINAL CONDITION. REFER TO NEW WORK PLAN AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
X43	REMOVE EXISTING ROOFING AND CONCRETE SLAB BETWEEN STRUCTURAL RIBS AS NEEDED TO PROVIDE NEW OPENING CHASE FOR AIR SUPPLY AND RETURN MECHANICAL DUCTS. REPAIR AND PATCH THE EXISTING ROOF AROUND THE NEW CHASE OPENING AS REQUIRED TO RESTORE TO ORIGINAL CONDITION. REFER TO NEW WORK PLANS, SECTIONS, DETAILS, AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

BSA

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Architectural Registration Number (Missouri) - 2017014317

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ph: 314.645.6232

Engineering Registration Number (Missouri) - 000087

University of Missouri

MU PROJECT #: CP221933

## PATIENT CARE TOWER - 8TH FLOOR BONE MARROW TRANSPLANT UNIT RENOVATION

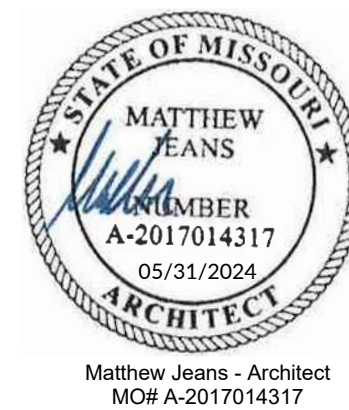
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



KEYPLAN  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	05/31/2024	ADDENDUM #1

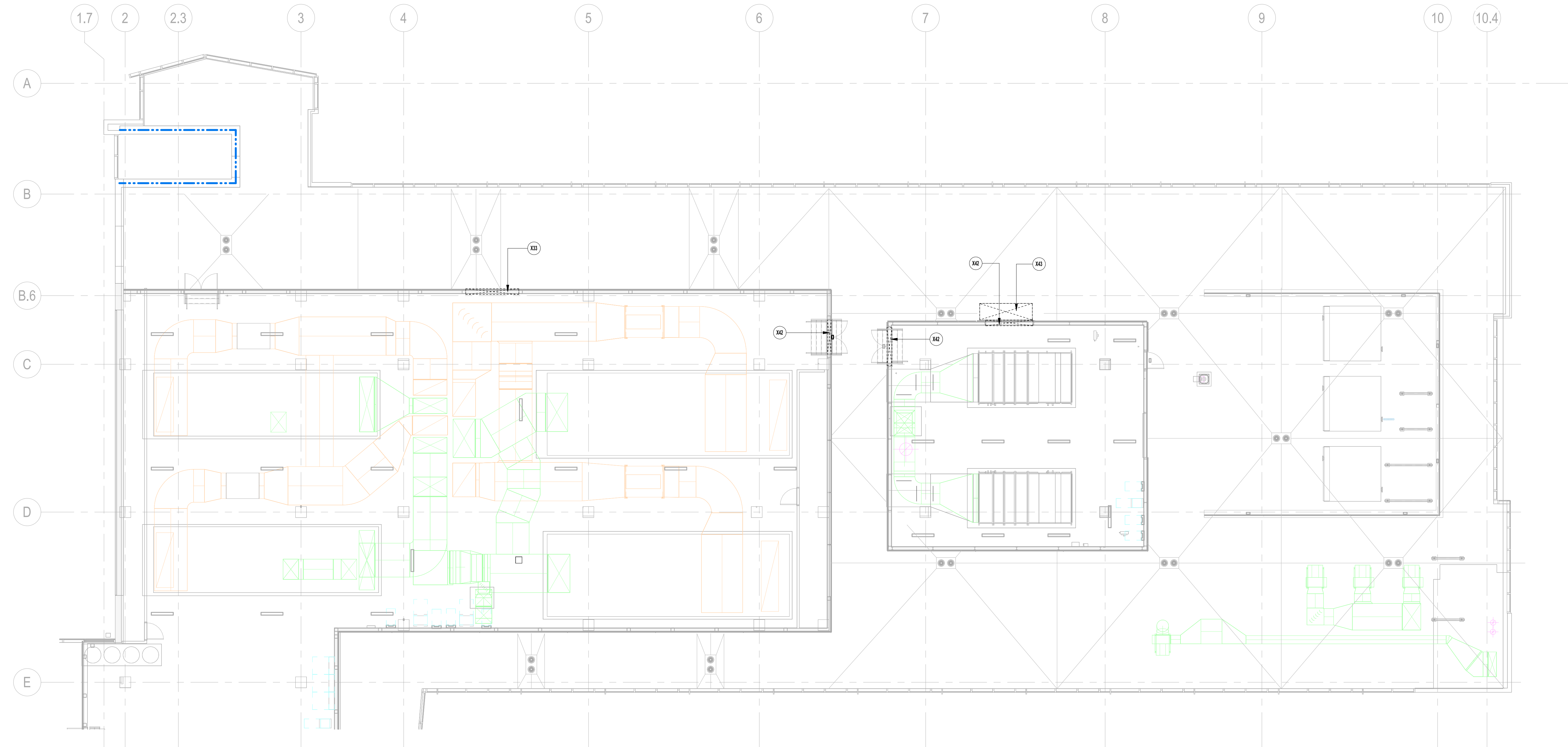


## PENTHOUSE DEMOLITION PLAN

DATE 09 MAY, 2024  
BSA'S PROJECT NO. 1411006.02A

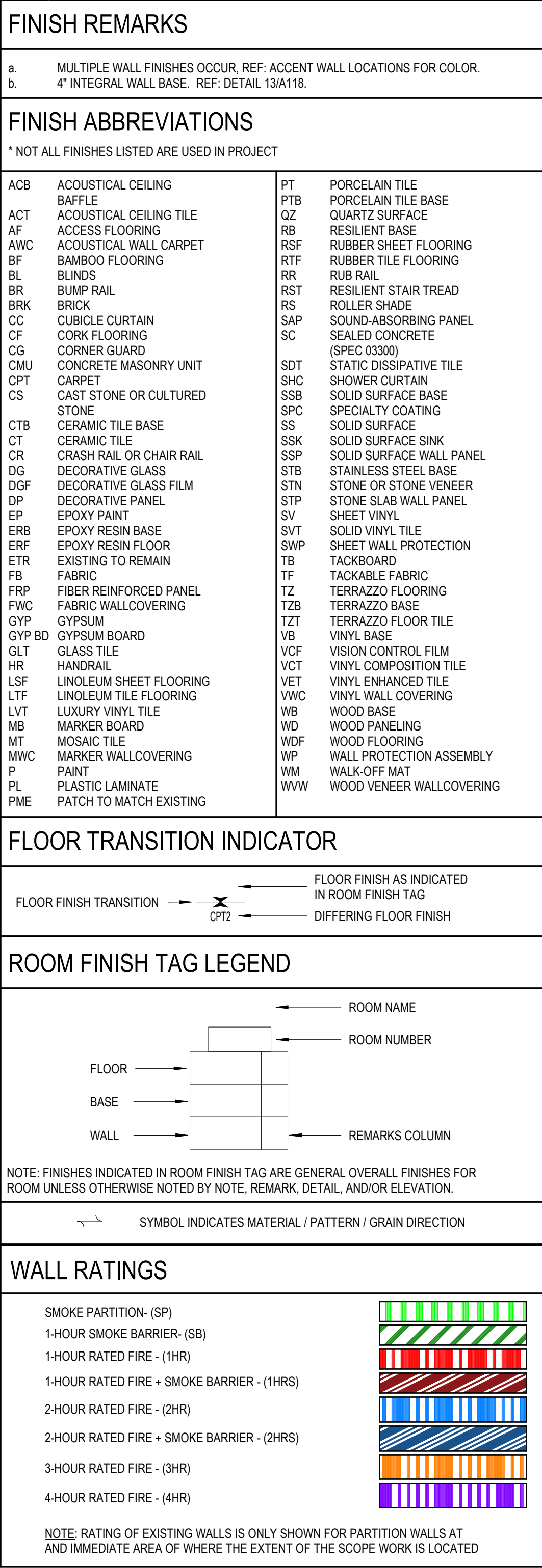
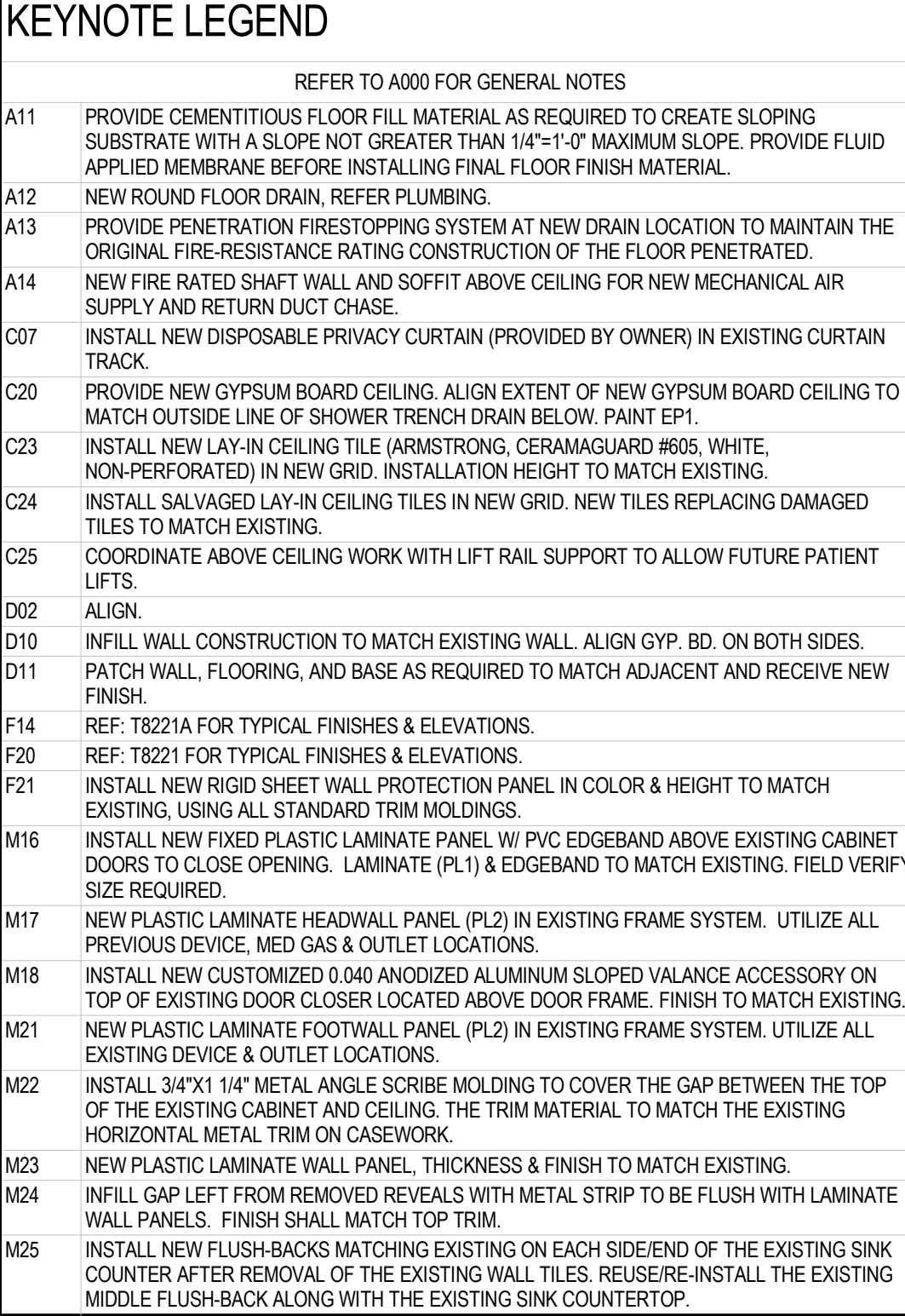
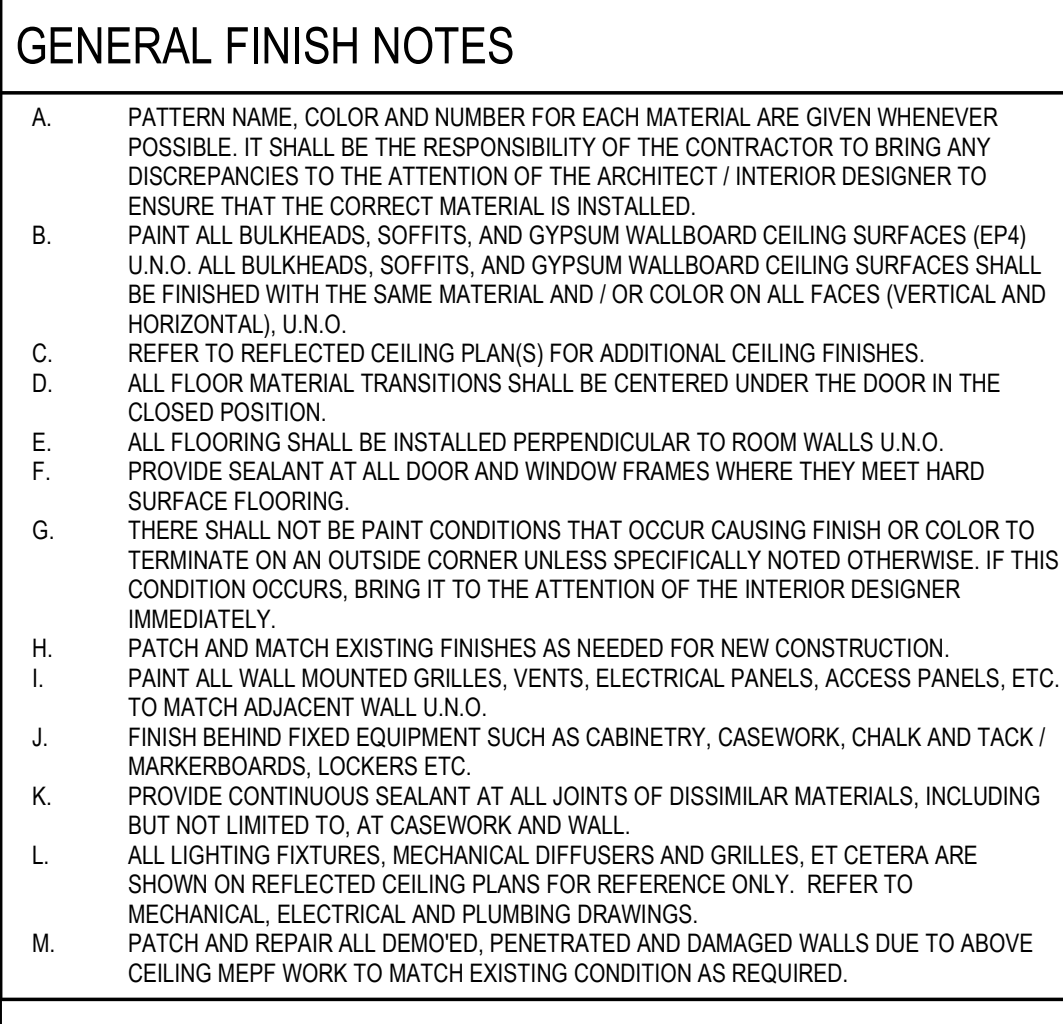
A110

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① EXISTING PENTHOUSE DEMOLITION  
PLAN  
1" = 10'-0"



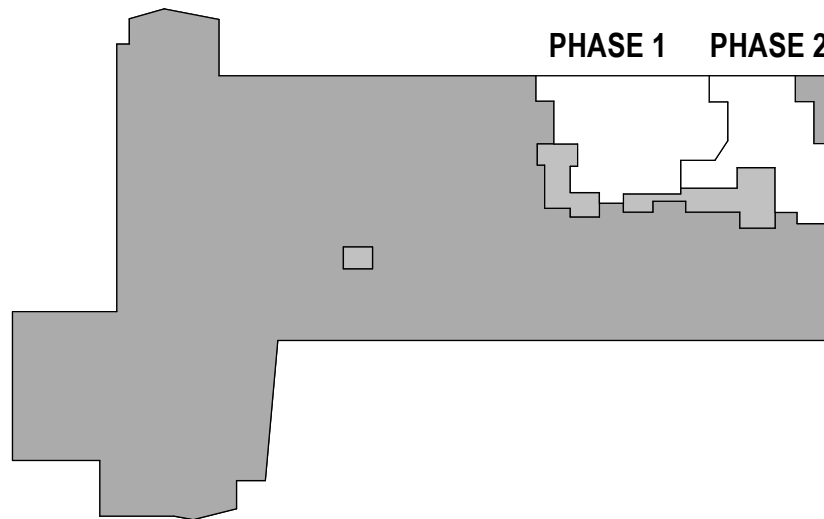




PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



ERIC A. REUTHER  
PE-2011015762

SEISMIC CODE BLOCK  
SCHEDULE

DATE	09 MAY, 2024
McCLURE PROJECT NO.	071671.000

M002

MECHANICAL AND PLUMBING EQUIPMENT COMPONENTS EARTHQUAKE LOAD RESISTANCE					Seismic Design Category: C			
					Seismic Site Class: C			
					Risk Category IV			
Listing of Equipment and System Components	Anchorage to Floors, Roofs, etc.		Sway Bracing		Location of Professionally Sealed Anchorage and Sway Bracing Details		EXEMPTIONS	COMMENTS / NOTES
	Not Provided for Project	Provided for Project	Not Provided for Project	Provided for Project	On Const. Documents Drawing No. or Spec. Section	SUBSEQUENT SUBMITTAL Separate Permit & Plans		
FIRE PROTECTION, DETECTION & ALARM EQUIPMENT & SYSTEM COMPONENTS; IP = 1.5								
Fire Sprinkler Piping	X			X		X		
(High Deformability Piping Systems) Welded, Brazed, Soldered and Flanged Steel and Copper Piping Suspended From Structure								
Steel / Copper Piping	X			X		X		
(Limited Deformability Piping Systems) Threaded and Grooved Steel and Copper Piping Suspended From Structure								
Steel / Copper Piping	X			X		X		
(Low Deformability Piping Systems) Cast Iron and Nonductile Plastic Piping Systems or Any System Joined with Cast Iron Fittings								
Cast Iron / PVC Piping	X			X		X		
HAZARDOUS EQUIPMENT & SYSTEM COMPONENTS; IP = 1.5								
High Deformability Piping Systems or Limited Deformability Piping Systems								
Hazardous Medical Gas Piping ≤ 2" , Supported Overhead	X		X				5	
Hazardous Medical Gas Piping > 2" , Supported Overhead	X			X		X		
OTHER GENERAL EQUIPMENT & SYSTEM COMPONENTS; IP = 1.5								
Floor Mounted:								
AHU		X	X			X		
Piping Suspended From Structure:								
Steel / Copper / Cast Iron / PVC - hangers ≤ 12"	X		X				5	
(High Deformability Piping Systems) Welded, Brazed, Soldered and Flanged Steel and Copper Piping Suspended From Structure								
Steel / Copper Piping - larger than 2"	X			X		X		
Steel / Copper Piping - 2" and smaller - hangers ≤ 12"	X		X				5	
(Limited Deformability Piping Systems) Threaded and Grooved Steel and Copper Piping...								
Steel / Copper Piping - larger than 2"	X			X		X		
Steel / Copper Piping - 2" and smaller - hangers ≤ 12"	X		X				5	
(Low Deformability Piping Systems) Cast Iron and Nonductile Plastic Piping Systems or Any System Joined with Cast Iron Fittings								
Cast Iron / PVC Piping	X			X		X		
Ductwork Suspended From Structure:								
Ductwork < 6 sq. ft. X-section AND ≤ 20 lb/ft AND provisions made to avoid impacts of other mechanical components	X		X				4	
Ductwork > 6 sq. ft. X-section OR > 20 lb/ft OR ductwork could be impacted by other components	X			X		X		
Equipment Supported By A Suspended Ceiling:								
Air Devices < 20 lbs	X			X		X		1
Equipment Suspended From Structure:								
Air Devices ≥ 20 lbs. < 56 lbs	X			X		X		1,2
Air Devices ≥ 56 lbs	X			X		X		1,3
In-line components	X			X		X		
FCU, VAV, FTU	X			X		X		
Duct Mounted Reheat Coils/Control Dampers	X			X		X		
Return Fans	X			X		X		
Preheat Coil Pump	X		X					
In-line components > 75 lbs	X			X		X		
Wall mounted equipment:								
Fire dampers, louvers		X				X		

\* applies to equipment and devices directly attached to structure

MECHANICAL, ELECTRICAL, FIRE PROTECTION, PLUMBING AND TECHNOLOGY SYSTEM SHUTDOWN MATRIX						
Sheet	Discipline	System	Area(s) Affected	Shutdown Location	Outage Time Of Day	Description
MD309, M309	Mechanical	Chilled Water	Areas served by AHU-3,4,5, & 6	PT9001 MECH PENTHOUSE	Off Hours - OAT shall be 50°F or below for duration of outage.	Temp shutdown for tie-in of piping relocated to accommodate new ductwork. New piping shall be installed prior to shutdown to limit duration.
MD309, M309	Mechanical	Heating Water	Areas served by AHU-3,4,5, & 6	PT9001 MECH PENTHOUSE	Off Hours - OAT shall be 40°F or above for duration of outage.	Temp shutdown for tie-in of piping relocated to accommodate new ductwork. New piping shall be installed prior to shutdown to limit duration.
MD309, M309	Mechanical	Steam	Areas served by AHU-3,4,5, & 6	PT9001 MECH PENTHOUSE	Off Hours - OAT shall be 40°F or above for duration of outage.	Temp shutdown for tie-in of piping relocated to accommodate new ductwork. New piping shall be installed prior to shutdown to limit duration.
MD108, M108	Mechanical	Medical Gas	8th floor PCT, ZV-801, ZV-802, ZV-804, ZV-805	PT8240 WKST-TEAM	Normal Hours	Temp shutdown for medical gas reconnection to new zone valve box ZV-805. New valve box shall be installed and piped to above ceiling prior to shutdown to minimize duration.
MD108, M108	Mechanical	Medical Gas	ZV-805	PT8262 EQUIP	Normal Hours	Temp shutdown for relocation of med gas piping to accommodate new ductwork within patient rooms. Occurs downstream of ZV-805.
MD208, M208	Plumbing	Plumbing	8th floor PCT	PTC8101	Off Hours - Between 10 PM and 4 AM	Intermittent shutdowns of hot water and cold water for relocation of piping throughout work area to accommodate new ductwork.
MD208, M208	Plumbing	Plumbing	8th floor PCT	PTC8101	Off Hours - Between 10 PM and 4 AM	Temp shutdown of hot water and cold water for relocation of piping mains to accommodate new ductwork in corridor.
MD308, M308	Mechanical	HVAC - AHU-5	Areas served by AHU-5	PT9001 MECH PENTHOUSE	Off Hours	Temp shutdown to connect supply and return flex ducts to serve phase 2 areas and to connect new RA duct main into existing RA duct main on 8th floor. New RA main serving areas south of scope area shall be installed prior to shutdown to minimize duration.
MD308, M309	Mechanical	Heating Water	8th floor PCT	TC82028 Corridor	Off Hours - OAT shall be 40°F or above for duration of outage.	During HW shutdown, install service valves on HW piping to each patient room to prevent system HW shutdowns with each patient room VAV relocation scope.
M808, M809	Mechanical	Fire Protection	8th floor and Penthouse ACD	PTS8002 STAIR 2 and PT9001 MECH PENTHOUSE	Normal Hours	Temp shutdown for relocation of fire protection piping to accommodate new ductwork.
E309	Electrical	Emergency Equipment Branch Power	Panels AEDP-3, EMCC-1, AE9A, E9P1, E9P1A	PT9001 MECH PENTHOUSE	Off Hours - Thursday nights 10PM to 4 AM	Shut down panel AEDP-3 to terminate new panel loads serving AHU-51.
NOTES: 1. THIS MATRIX IS INTENDED TO CONVEY MAJOR SYSTEM SHUTDOWNS AFFECTING MULTIPLE AREAS OF THE CAMPUS. THIS MATRIX DOES NOT INDICATE ALL SHUTDOWNS OR PHASING REQUIRED AS PART OF PROJECT SCOPE. 2. DUE TO PHASING OF PROJECT CONSTRUCTION, MULTIPLE SHUTDOWNS OF THE SAME SYSTEM MAY BE REQUIRED AT SEVERAL POINTS DURING CONSTRUCTION. 3. DURING BIDDING CONTRACTOR SHALL REVIEW PROPOSED SHUTDOWN DURATIONS AND ALERT OWNER AND ARCHITECT/ENGINEER OF POTENTIAL CONCERNS. 4. CONTRACTOR SHALL ACCOUNT FOR COMMISSIONING OF NEW SWITCH BOARDS IF THE TIE DIFFERENTIAL REQUIRES BOTH BOARDS TO BE DOWN AT THE SAME TIME. 5. EACH NDP SHALL HAVE A TIE BREAKER CREATING A MAIN-TIE-MAIN SETUP.						

GENERAL NOTES:

A. It is the basic intent of this Code Block to declare whether or not anchorage and sway bracing is being provided on the project. If so, to declare whether or not the details are shown on the plans or will be shown on a subsequent submission. If seismic restraint of a component is not required by code this should be stated in comments. If seismic restraint, which is not required by code, is being provided due to owner/designer requirements this should also be stated in the comments.

B. Plans signed and sealed by a Professional Engineer along with a separate permit application need to be submitted to the AHJ a minimum of two weeks prior to the planned installation to allow for plan review and distribution to the inspector. Additional time may be needed if such submissions are deficient.

C. All anchors and attachments to structure shall be seismically rated and listed.

COMMENTS/NOTES:

1. Shall be positively attached to the ceiling grid using four approved attachment devices.

2. Shall have two No. 12 gauge wires connecting opposite corners of the air device to the structure above.

3. Shall be independently supported from the structure above by approved hangers.

SEISMIC DESIGN REQUIREMENT EXEMPTIONS FOR MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS	
1 - General Exemptions (ASCE 07-16 Chap 13.1.4)	1) Seismic Design Category A, B.
	2) Seismic Design Category C and the component importance factor IP = 1.0 provided that EITHER 1) The component is positively attached to the structure, or 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems.
	3) Seismic Design Category D, E, or F that are positively attached to the structure and EITHER: 1) The component weights 400 lbs. or less, the center of mass is located 4 ft or less above the adjacent floor, flexible connections are provided between the component and associated ductwork, piping, and conduit, and the component IP = 1.0, OR 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems.
2 - Light Fixture, Sign and Ceiling Fan Exemptions (ASCE 07-16 Chap 13.6.1)	1) Not connected to ducts or piping, supported by chains or otherwise suspended from the structure, provided ALL of the following criteria A. through C. below are met:  A. The design load for such items shall be equal to 1.4 times the operating weight acting down with a simultaneous horizontal load equal to 1.4 times the operating weight. The horizontal load shall be applied in the direction that results in the most critical loading for design.  B. Seismic interaction effects shall be considered per Section 13.2.3 of ASCE 7-16.  C. The connection to the structure shall allow a 360 degree range of motion in the horizontal plane.
	1) Raceways with IP = 1.0 where flexible connections or other assemblies are provided between the cable tray or raceway and associated components to accommodate the relative displacement, where the cable tray or raceway is positively attached to the structure, and where ONE of items A. through D. below apply:  A. Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length and the total weight supported by any single trapeze is 100 lbs. or less.  B. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. in length and the total weight supported by any single trapeze is 200 lbs. or less.  C. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. in length and the total weight supported by any single trapeze is 100 lbs. or less.  D. Individual rod hangers 3/8 in. or 1/2 in. diameter and each hanger is 12 in. or less in length and the total weight per any single rod is 50 lbs. or less.  2) Conduit less than 2.5 in. trade size.
	1) IP = 1.0 where flexible connections or other assemblies are provided to accommodate the relative displacement between the duct system and associated components, the duct system is positively attached to the structure, and where ONE of items A. through D. below apply:  A. Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length and the total weight supported by any single trapeze is less than 10 lbs./ft.  B. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. in length and the total weight supported by any single trapeze is 200 lbs. or less.  C. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. in length and the total weight supported by any single trapeze is 100 lbs. or less.  D. Individual rod hangers 3/8 in. or 1/2 in. diameter and each hanger is 12 in. or less in length and the total weight per any single rod is 50 lbs. or less.  2) Locations where provisions are made to avoid impact with other ducts or mechanical components or to protect the ducts in the event of such impact, the distribution system is positively attached to the structure, and HVACR ducts have a cross-sectional area of less than 6 sq. ft and weight 20 lbs./ft or less.  3) Components installed in line with duct systems with an operating weight of 75 lbs. or less (terminal units, dampers, louvers, and diffusers) that are independently braced or positively attached to the ductwork with mechanical fasteners on both sides.
3 - Distribution Systems: Conduit, Cable Tray, and Raceways Exemptions (ASCE 07-16 Chap 13.6.5.1)	Piping systems where flexible connections, expansion loops, or other assemblies are provided to accommodate the relative displacement between component and piping, where the piping system is positively attached to the structure and where ONE of items 1 through 7 below apply:  1) Trapeze assemblies are used to support piping whereby no single pipe exceeds the limits set forth in 5A, 5B, or 5C. below and the total weight of the piping supported by the trapeze assemblies is less than 10 lbs./ft  2) Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 100 lbs. or less.  3) Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 200 lbs. or less.  4) Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 100 lbs. or less.
	5) Piping that has an RP in ASCE 7-16 Table 13.6-1 of 4.5 or greater is either supported by rod hangers and provisions are made to avoid impact with other structural or non-structural components or to protect piping in the event of such impact, or pipes with IP = 1.0 are supported by individual rod hangers 3/8 in. or 1/2 in. in diameter; where each hanger is 12 in. or less and the total weight supported by any single hanger is 50 lbs. or less. Pipe size limitations in items 5A, 5B, and 5C below apply:  5A) Seismic Design Category C where IP > 1.0 nominal pipe size shall be 2 in. or less 5B) Seismic Design Category D, E, or F where IP > 1.0 nominal pipe size shall be 1 in. or less 5C) Seismic Design Category D, E, or F where IP = 1.0 nominal pipe size shall be 3 in. or less  6) Pneumatic tube systems supported with trapeze assemblies using 3/8 in. diameter rod hangers not exceeding 12 in. and the total weight supported by any single trapeze is 100 lbs. or less.  7) Pneumatic tube systems supported with trapeze assemblies using 3/8 in. or 1/2 in. diameter rod hangers not exceeding 12 in. and the total weight supported by any single rod is 50 lbs. or less.
4 - Duct System Exemptions (ASCE 07-16 Chap 13.6.6)	
5 - Piping and Tubing Distribution Systems (not including fire protection systems installed per NFPA 13) (ASCE 07-16 Chap 13.6.7.3)	

Exemptions General Notes:

1. Flexible connections are not required for connections to appliances or electrical or plumbing fixtures that are mounted to walls or floors.

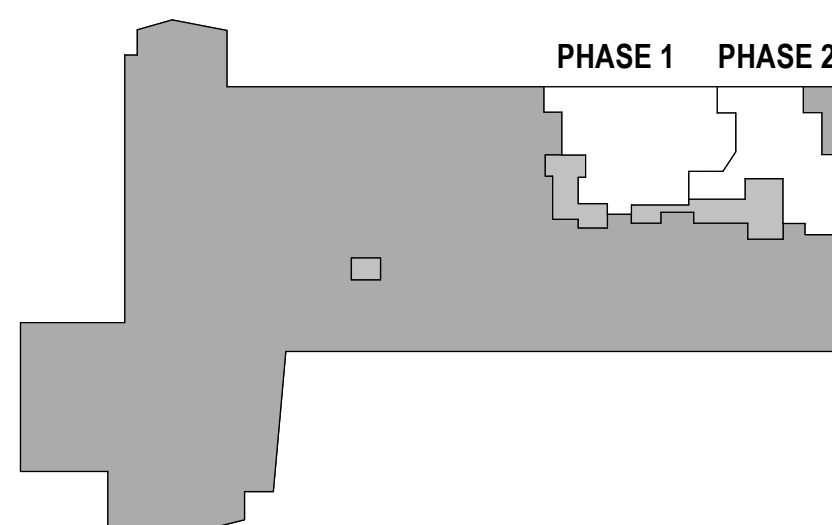
2. Distribution systems would include the following code complying components:

- The following sanitary, drain, waste and vent pipe: Schedule 40 PVC, 6" or less in diameter; Schedule 80 PVC, 4" or less in diameter; service weight and no hub cast iron, 2" or less in diameter.
- The following storm drain pipe: Schedule 40 and 80 PVC, 3" or less in diameter; service weight and no hub cast iron, not applicable.
- The following water pipe: Type L & M copper, 2-1/2" or less in diameter; Schedule 40 and 80 CPVC, 3" or less in diameter.
- The following electrical conduit: Rigid steel and intermediate metal conduit (IMC), 1-1/2" and less in diameter; EMT conduit and rigid aluminum conduit 2" and less in diameter.
- Flexible electrical wiring methods weighing 5 lbs./ft or less.



PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

ERIC A. REUTHER  
PE-2011015762EIGHTH FLOOR MED GAS  
PLAN - DEMOLITION

DATE	09 MAY, 2024
McCLURE PROJECT NO.	071671.000

MD108

## SHUTDOWN/SEQUENCING NOTES:

1. NEW ZONE VALVE BOX AND PIPING SHALL BE INSTALLED PRIOR TO DEMOLITION OF EXISTING ZONE VALVE BOX. REFER TO M108. COORDINATE MVB INSTALLATION WITH DOOR DEMOLITION SUCH THAT ACCESS TO THE ROOM IS MAINTAINED.

## COORDINATION DRAWINGS:

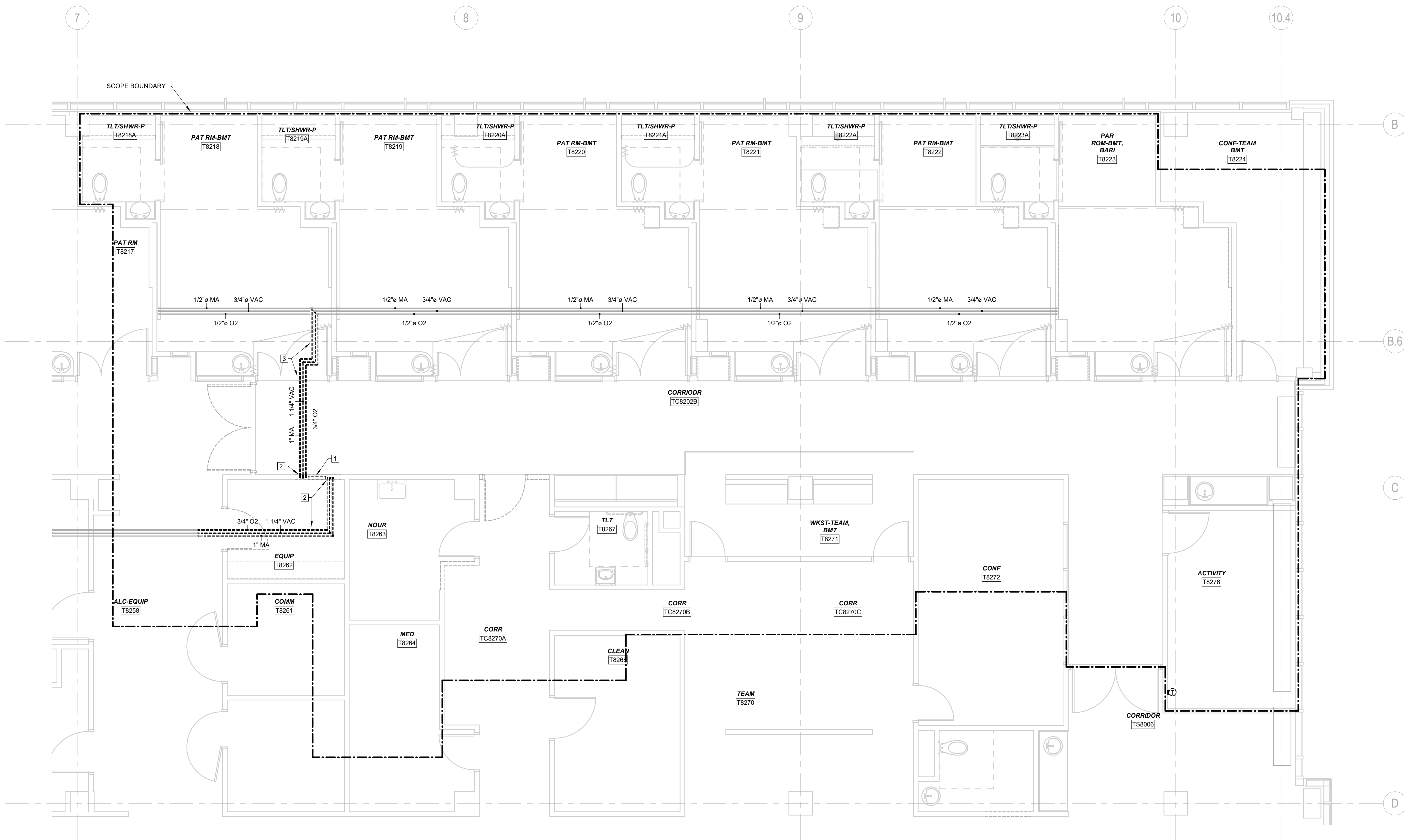
DETAILED COORDINATION DRAWINGS ARE REQUIRED. 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

## MECHANICAL KEYED NOTES:

- DEMOLISH EXISTING ZONE VALVE BOX. REFER TO M108 FOR NEW VALVE BOX LOCATION.
- DEMOLISH MEDICAL GAS PIPING ABOVE CEILING AND DROPS IN AREA SHOWN.
- REWORK MEDICAL GAS PIPING ABOVE CEILING TO ACCOMMODATE NEW HVAC SCOPE.

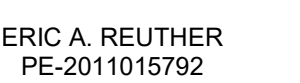
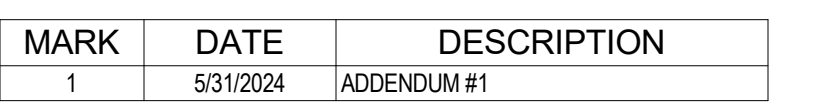
## MECHANICAL GENERAL NOTES:

- THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR SHALL TAKE EXTREME CARE HANDLING MATERIAL DEBRIS IN AN EFFORT TO AVOID ANY DISRUPTIONS OF ONGOING BUILDING OPERATIONS. PROJECT SHALL BE CLEANED FREE OF DUST AND DEBRIS AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL COORDINATE ANY SHUTDOWN OF UTILITIES WITH THE OWNER'S REPRESENTATIVE. NOTICE FOR SHUTDOWN SHALL BE GIVEN TO THE OWNER AT LEAST THREE DAYS PRIOR TO SHUTDOWN.
- CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR FIELD COORDINATION AND DIMENSIONAL VERIFICATION AS SPECIFIED IN THE PROJECT MANUAL.
- ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.
- ALL WORK SHALL BE INSTALLED TO ALLOW 24" CLEAR ACCESS PATHWAY TO VAV CONTROL PANELS.
- REFER TO ARCHITECTURAL SHEETS FOR PHASING CONSTRUCTION BOUNDARIES.
- VAV CONTROLLERS AND THERMOSTATS SHALL BE REMOVED BY OWNER PRIOR TO DEMOLITION WORK. NOTIFY OWNER PRIOR TO START OF DEMOLITION.
- PIPING IN MECHANICAL ROOM SHALL HAVE COLOR CODED PVC JACKETING. REFER TO SPECIFICATION SECTION 20 25 14 FOR ADDITIONAL INFORMATION.
- NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR. BLOWER DOOR TESTING REQUIRED PRIOR TO CEILING INSTALLATION. REFER TO SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL ENSURE FC BUS REMAINS INTACT THROUGHOUT CONSTRUCTION.
- ALL EXISTING AND NEW DUCTWORK SHALL BE SEALED WHILE NOT BEING CONNECTED TO OR ACTIVELY INSTALLED. EXISTING DUCTWORK SHALL BE CLEANED AND ALL DUCTWORK SHALL MAINTAIN CLEANLINESS THROUGHOUT CONSTRUCTION.
- ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
- ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.

MECHANICAL MED GAS EIGHTH FLOOR PLAN - DEMOLITION  
SCALE: 1/4" = 1'-0"



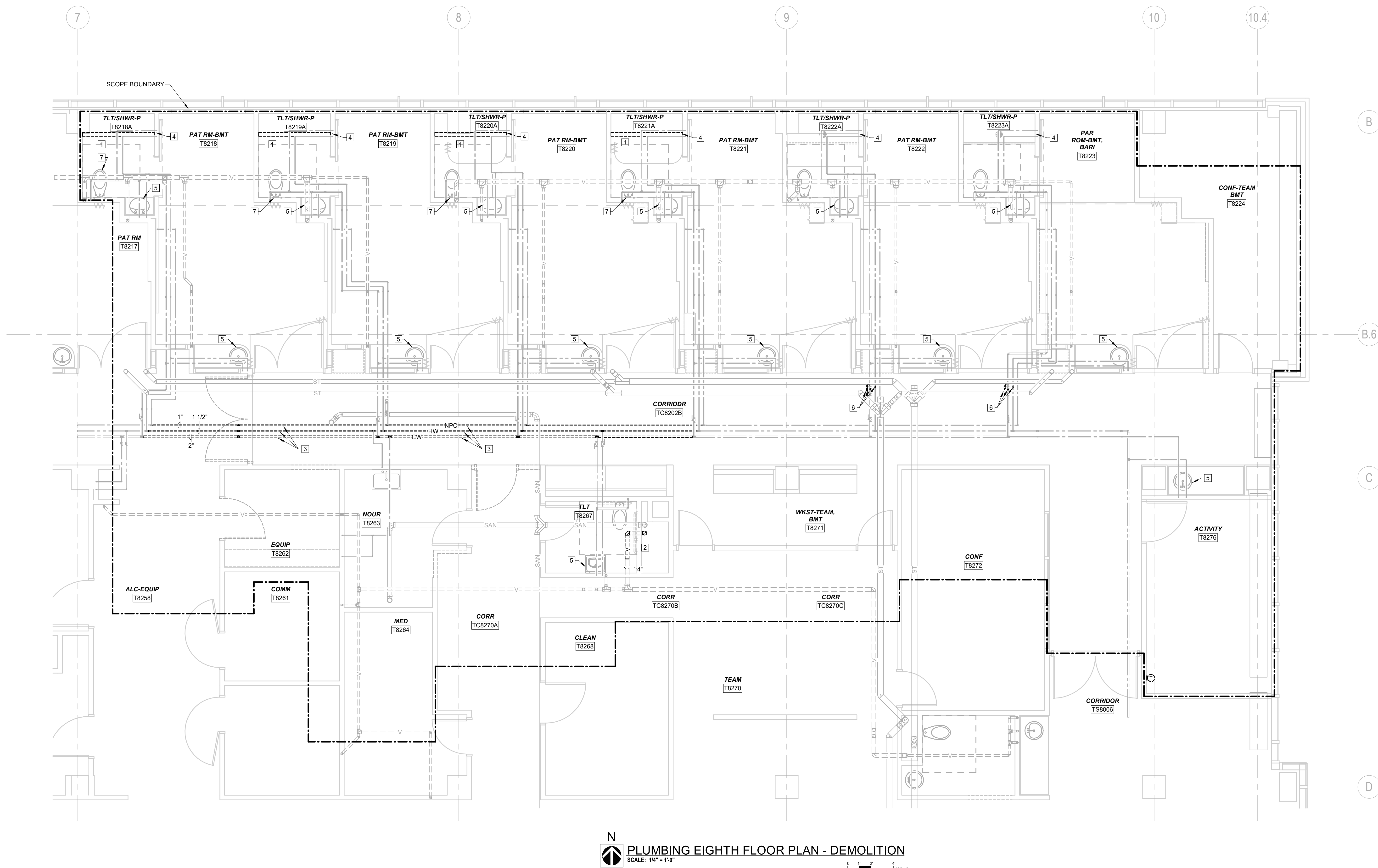
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI



DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

BSA LifeStructures Inc.

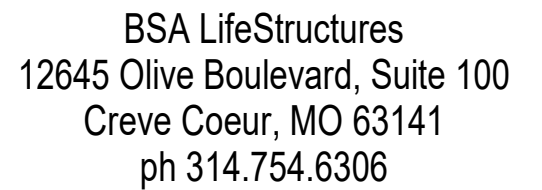
1. FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES. FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PDI WH201 AND AS INDICATED ON INSTALLATION VALVES IN ACCESSIBLE LOCATION. IF LOCATION IS NOT READILY ACCESSIBLE, COORDINATE ACCESS PANEL REQUIREMENTS WITH GENERAL CONTRACTOR.
2. ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
3. EQUIPMENT AND FIXTURE SYMBOLLOGY ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
4. LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. INDICATED ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S EXPENSE.
5. NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR.
6. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL, WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWING FOR ADDITIONAL INFORMATION.
7. ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
8. ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.



N  
 PLUMBING EIGHTH FLOOR PLAN - DEMOLITION  
 SCALE: 1/4" = 1'-0" 0 1' 2' 4'

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Architectural Registration Number (Missouri) - 2017014317

**MCCLURE ENGINEERING**

1000 CLARK AVE.  
ST. LOUIS, MO 63102  
ph: 314.645.6232

Engineering Registration Number (Missouri) - 000087



MU PROJECT #: CP221933

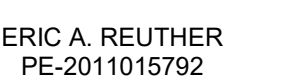
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

BSA LifeStructures Inc.

(APPLICABLE TO ALL PENTHOUSE SCOPE)

NEW SYSTEM (AHU, RETURN FAN, PIPING, DUCTWORK, ETC.) SHALL BE INSTALLED, OPERATIONAL, AND COMMISSIONING ACTIVITIES SCHEDULED PRIOR TO

COORDINATION DRAWINGS:

DETAILED COORDINATION DRAWINGS ARE REQUIRED, 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

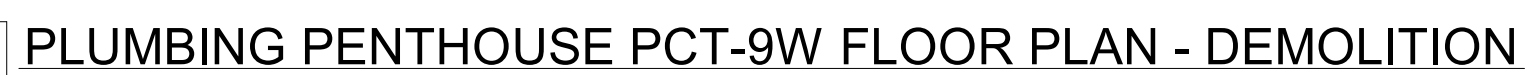
**PLUMBING KEYED NOTES:**

- 1 DEMOLISH PORTION OF CW LINE TO MAKE ROOM FOR NEW DUCTWORK. COORDINATE WITH MECHANICAL CONTRACTOR. SEE NEW WORK.
- 2 DEMOLISH FLOOR SINK AND EXISTING TRAP. PREPARE WASTE PIPE AND FLOOR FOR NEW LARGER FLOOR SINK. SEE NEW WORK.

PLUMBING GENERAL NOTES:

1. FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES. FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PDJ WH01 AND AS INDICATED ON DRAWINGS. INSTALL VALVES IN ACCESSIBLE LOCATIONS; IF LOCATION IS NOT READILY ACCESSIBLE, COORDINATE ACCESS POINTS WITH THE GENERAL CONTRACTOR.
2. ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
3. EQUIPMENT AND FIXTURE SYMBOLLOGY ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
4. LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. INDICATED ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE; THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S EXPENSE.
5. NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.1 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR.
6. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL, WHERE REQUIRED, REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

7. ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
8. ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.



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



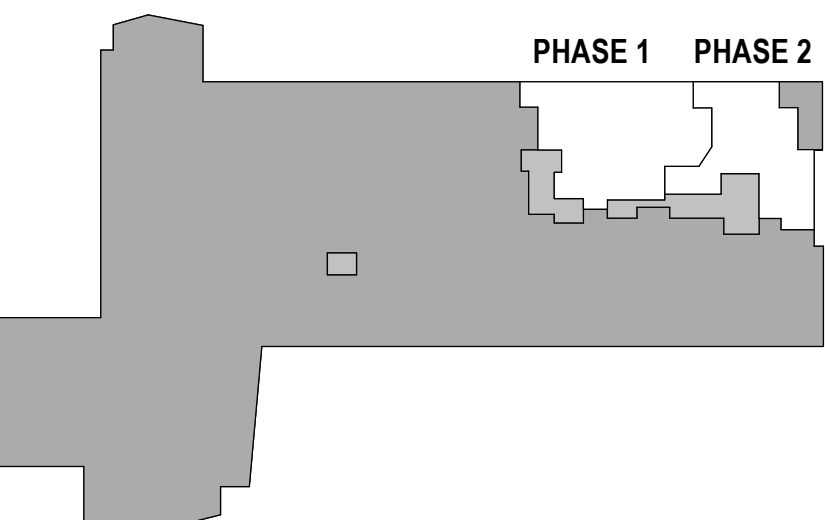
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PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



## KEYPLAN

PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

ERIC A. REUTHER  
PE-2011015762EIGHTH FLOOR HVAC PLAN  
- DEMOLITIONDATE 09 MAY, 2024  
McCLURE PROJECT NO. 071671.000

MD308

## SHUTDOWN/SEQUENCING NOTES:

- NEW RA DUCT MAIN SERVING EXISTING AREAS SOUTH OF SCOPE AREA SHALL BE INSTALLED PRIOR TO DEMOLITION. EACH SHALL BE COMPLETED AND TURNED OVER TO OWNER BEFORE PROCEEDING TO NEXT SECTION. COORDINATE SCHEDULING WITH OWNER. REFER TO M308.
- AHU-5 SHUTDOWN:
  - CONNECT SOUTH AREAS TO NEW RA DUCT
  - CONNECT NEW SOUTH RA DUCT INTO MAIN
  - CONNECT TEMPORARY FLEX DUCT ON SA AND RA DUCTS TO REFEED EAST AREAS
  - STARTUP AHU-5. ALL AREAS OUTSIDE PH1 CONSTRUCTION BOUNDARY REMAIN ACTIVE DURING CONSTRUCTION ACTIVITIES.
- DEMOLISH RA MAIN IN CORRIDOR. DEMOLISH SA IN PATIENT ROOMS.
- INSTALL NEW RA MAIN IN CORRIDOR. INSTALL NEW SA DUCTWORK IN PATIENT ROOMS. REFER TO M308.
- AHU-5 SHUTDOWN:
  - REMOVE TEMPORARY FLEX DUCT (SA/RA).
  - PATCH/SEAL CONNECTIONS
  - CONNECT DUCTWORK INTO NEW AHU-51
  - STARTUP AHU-5. STARTUP AHU-51
- REMAINING EAST AREAS ARE SHUT DOWN FOR PHASE 2 SCOPE. AT COMPLETION OF PH2, AHU-51 SHUTDOWN TO MAKE FINAL CONNECTIONS AND BRING ENTIRE SUITE ONLINE.

## COORDINATION DRAWINGS:

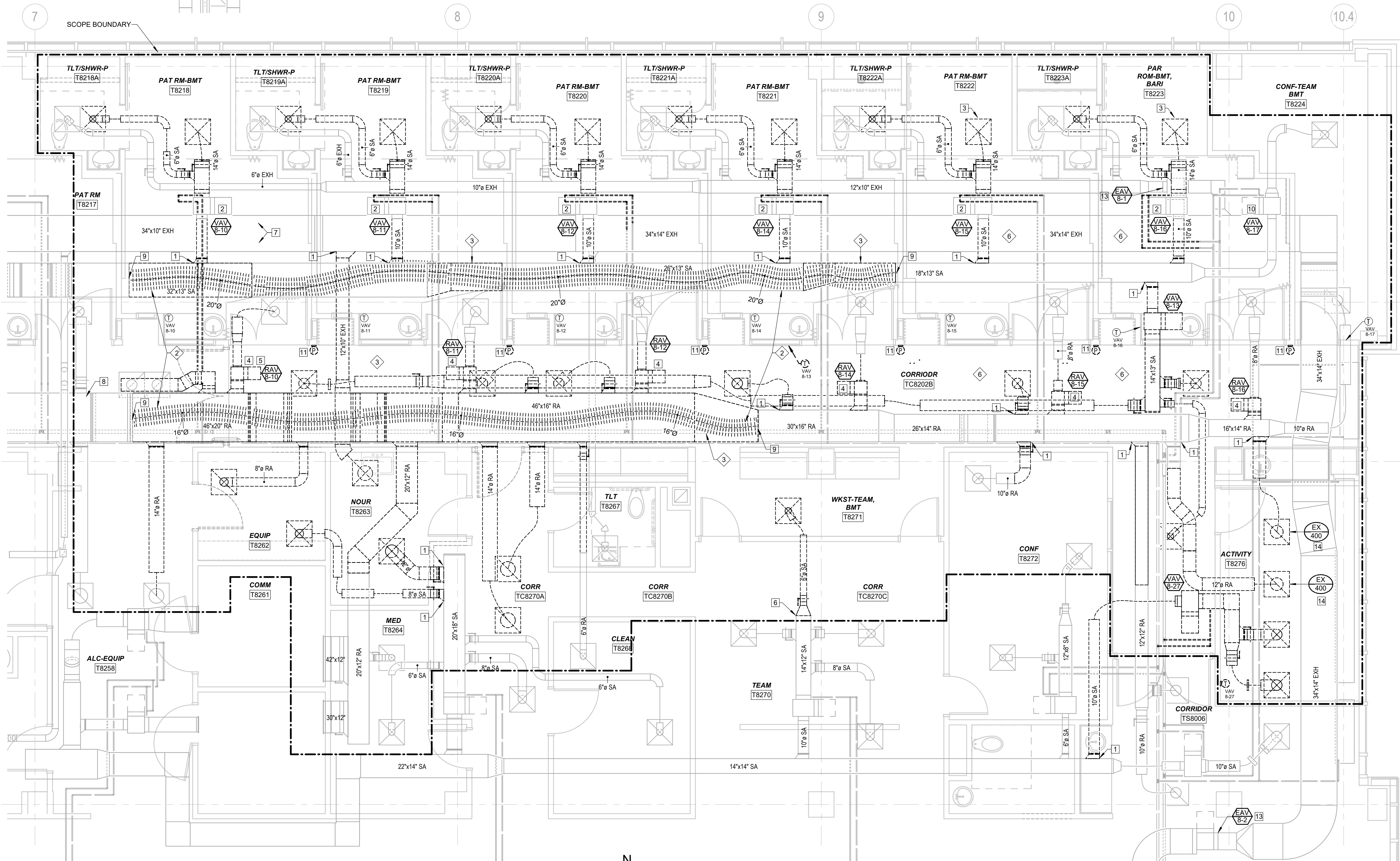
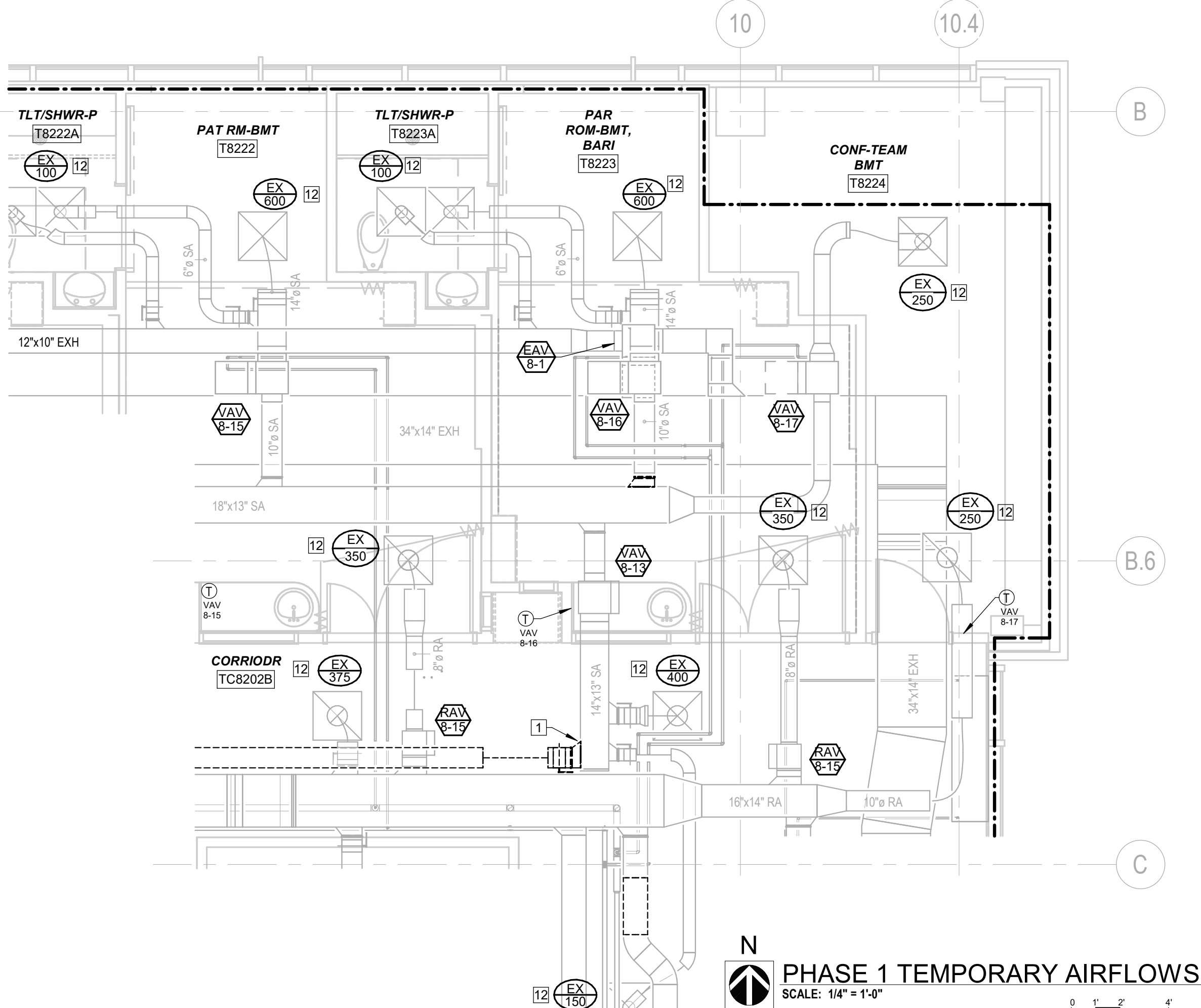
DETAILED COORDINATION DRAWINGS ARE REQUIRED. 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

## MECHANICAL KEYED NOTES:

- PATCH, SEAL, AND INSULATE DUCT MAINS WHERE TAP WAS REMOVED.
- REMOVE SUPPLY VAV IN PATIENT ROOMS FROM ITS CURRENT LOCATION. RETAIN VAV BOX FOR REUSE. VAVS AND REHEAT COILS SHALL BE STORED IN A CLEAN AREA AND SEALED TO PROTECT FROM DUST/DEBRIS. CLEAN VAVS AND REHEAT COILS AND PROVIDE SIGNOFF PRIOR TO REINSTALLATION. SEE NEW WORK FOR NEW LOCATION AND EQUIPMENT DESIGNATION.
- DEMOLISH EXISTING HEPA FAN-POWERED AIR DEVICE.
- DEMOLISH EXISTING RAV BOX ALONG WITH DUCT TAPS FROM MAIN. PREPARE FOR NEW ACCUVALVE IN ITS PLACE.
- MOVE VAV / REWORK DUCTWORK TO COORDINATE WITH NEW DUCTWORK.
- CAP DUCT.
- DEMOLISH EXISTING UNUSED UNISTRUT ABOVE CEILING IN THIS LOCATION.
- RECORD EXISTING STATIC PRESSURE AT THIS LOCATION PRIOR TO WORK. DUCTWORK TO BE REBALANCED TO EXISTING STATIC PRESSURE UPON COMPLETION OF CONSTRUCTION.
- INSTALL TEMPORARY FLEX DUCT TO KEEP SUPPLY AND RETURN ACTIVE SERVING EAST AREAS DURING PH1 CONSTRUCTION. CUT WALL OPENINGS AS REQUIRED TO INSTALL FLEX DUCT. PATCH AND PAINT WALL OPENINGS TO MATCH EXISTING AFTER REMOVAL OF TEMPORARY FLEX.
- SEE NEW WORK FOR UPDATED EQUIPMENT DESIGNATION.
- REMOVE ROOM PRESSURE MONITOR AND RETURN TO OWNER.
- BALANCE DIFFUSERS AND GRILLES TO SPECIFIED TEMPORARY AIRFLOWS. AIRFLOWS SHALL BE ACHIEVED THROUGHOUT PHASE 1 CONSTRUCTION.
- ADJUST EAV SETPOINT DURING CONSTRUCTION TO ACCOUNT FOR PHASING ACTIVITIES. CLOSE OFF AND SEAL AIR DEVICES WITHIN CONSTRUCTION ZONE FOR DURATION OF CONSTRUCTION ACTIVITIES. PROVIDE TAB FOR EACH PHASE TO ENSURE AIRFLOWS TO ACTIVE SPACES REMAIN UNCHANGED.
- DURING PHASE 1, TEMPORARILY CONNECT RETURNS FROM ACTIVITY ROOM TO NEW RA MAIN WITH 12" DIA. FLEX AND BALANCE TO MAINTAIN EXISTING AIRFLOWS. REFER TO NEW WORK.

## MECHANICAL GENERAL NOTES:

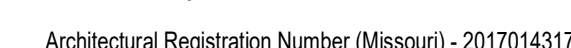
- THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR SHALL TAKE EXTREME CARE HANDLING MATERIAL DEBRIS IN AN EFFORT TO AVOID ANY DISRUPTIONS OF ONGOING BUILDING OPERATIONS. PROJECT SHALL BE CLEANED FREE OF DUST AND DEBRIS AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL COORDINATE ANY SHUTDOWN OF UTILITIES WITH THE OWNER'S REPRESENTATIVE. NOTICE FOR SHUTDOWN SHALL BE GIVEN TO THE OWNER AT LEAST THREE DAYS PRIOR TO SHUTDOWN.
- CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR FIELD COORDINATION AND DIMENSIONAL VERIFICATION AS SPECIFIED IN THE PROJECT MANUAL.
- ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.
- ALL WORK SHALL BE INSTALLED TO ALLOW 24" CLEAR ACCESS PATHWAY TO VAV CONTROL PANELS.
- REFER TO ARCHITECTURAL SHEETS FOR PHASING CONSTRUCTION BOUNDARIES.
- VAV CONTROLLERS AND THERMOSTATS SHALL BE REMOVED BY OWNER PRIOR TO DEMOLITION WORK. NOTIFY OWNER PRIOR TO START OF DEMOLITION.
- PIPING IN MECHANICAL ROOM SHALL HAVE COLOR CODED PVC JACKETING. REFER TO SPECIFICATION SECTION 20 25 14 FOR ADDITIONAL INFORMATION.
- NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR. BLOWER DOOR TESTING REQUIRED PRIOR TO CEILING INSTALLATION. REFER TO SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL ENSURE FC BUS REMAINS INTACT THROUGHOUT CONSTRUCTION.
- ALL EXISTING AND NEW DUCTWORK SHALL BE SEALED WHILE NOT BEING CONNECTED TO OR ACTIVELY INSTALLED. EXISTING DUCTWORK SHALL BE CLEANED AND ALL DUCTWORK SHALL MAINTAIN CLEANLINESS THROUGHOUT CONSTRUCTION.
- ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
- ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.



## MECHANICAL HVAC EIGHTH FLOOR PLAN - DEMOLITION

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





**MCCLURE ENGINEERING**  
1000 CLARK AVE.  
ST. LOUIS, MO 63102  
ph: 314.645.6232

Engineering Registration Number (Missouri) - 000087



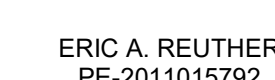
MU PROJECT #: CP221933

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



## PENTHOUSE FLOOR HVAC PLAN - DEMOLITION

DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

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(APPLICABLE TO ALL PENTHOUSE SCOPE)

1 NEW SYSTEM (AHU, RETURN FAN, PIPING, DUCTWORK, ETC.) SHALL BE INSTALLED, OPERATIONAL, AND COMMISSIONING ACTIVITIES SCHEDULED PRIOR TO

DETAILED COORDINATION DRAWINGS ARE REQUIRED, 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

1. THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL TAKE EXTREME CARE HANDLING MATERIAL DEBRIS IN AN EFFORT TO AVOID ANY DISRUPTIONS OF ONGOING BUILDING OPERATIONS. PROJECT SHALL BE CLEANED FREE OF DUST AND DEBRIS AT THE END OF THE WORK DAY.
3. CONTRACTOR SHALL COORDINATE ANY SHUTDOWN OF UTILITIES WITH THE OWNER'S REPRESENTATIVE. NOTICE FOR SHUTDOWN SHALL BE GIVEN TO THE OWNER AT LEAST THREE DAYS PRIOR TO SHUTDOWN.
4. CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO BEGINNING WORK.
5. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR FIELD COORDINATION AND DIMENSIONAL VERIFICATION AS SPECIFIED IN THE PROJECT MANUAL.
6. ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.
7. ALL WORK SHALL BE INSTALLED TO ALLOW 24" CLEAR ACCESS PATHWAY TO VAV CONTROL PANELS.
8. REFER TO ARCHITECTURAL SHEETS FOR PHASING CONSTRUCTION BOUNDARIES.
9. VAV CONTROLLERS AND THERMOSTATS SHALL BE REMOVED BY OWNER PRIOR TO DEMOLITION WORK. NOTIFY OWNER PRIOR TO START OF DEMOLITION.
10. PIPING IN MECHANICAL ROOM SHALL HAVE COLOR CODED PVC JACKETING. REFER TO SPECIFICATION SECTION 20 25 14 FOR ADDITIONAL INFORMATION.
11. NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR. BLOWER DOOR TESTING REQUIRED PRIOR TO CEILING INSTALLATION. REFER TO SPECIFICATIONS.
12. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
13. CONTRACTOR SHALL ENSURE FC BUS REMAINS INTACT THROUGHOUT CONSTRUCTION.
14. ALL EXISTING AND NEW DUCTWORK SHALL BE SEALED WHILE NOT BEING CONNECTED TO OR ACTIVELY INSTALLED. EXISTING DUCTWORK SHALL BE CLEANED AND ALL DUCTWORK SHALL MAINTAIN CLEANLINESS THROUGHOUT CONSTRUCTION.
15. ALL EXISTING AND NEW DUCTWORK SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
16. ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.

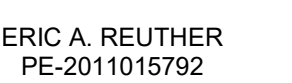


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COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

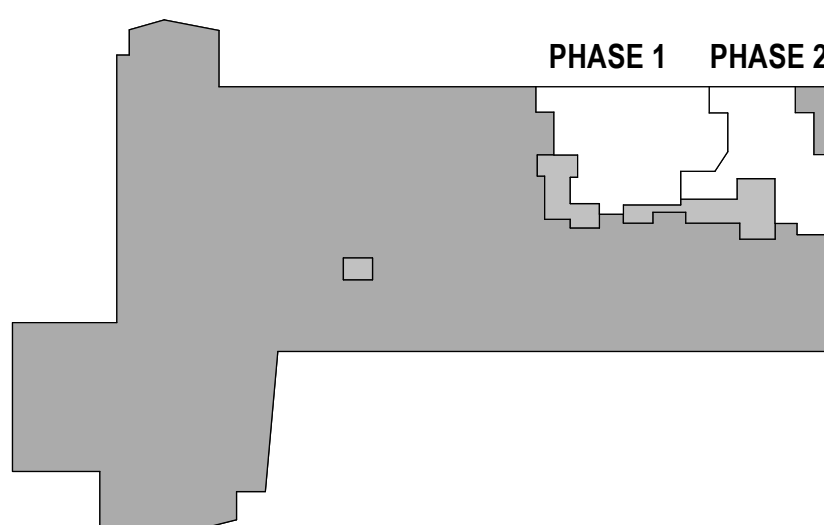
BSA LifeStructures Inc.

N  
MECHANICAL MED GAS EIGHT FLOOR PLAN - NEW WORK  
SCALE: 1/4" = 1'-0"  
0 1' 2' 4'



PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

ERIC A. REUTHER  
PE-2011015762EIGHTH FLOOR PLUMBING  
PLAN - NEW WORKDATE 09 MAY, 2024  
McCLURE PROJECT NO. 071671.000

M208

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## COORDINATION DRAWINGS:

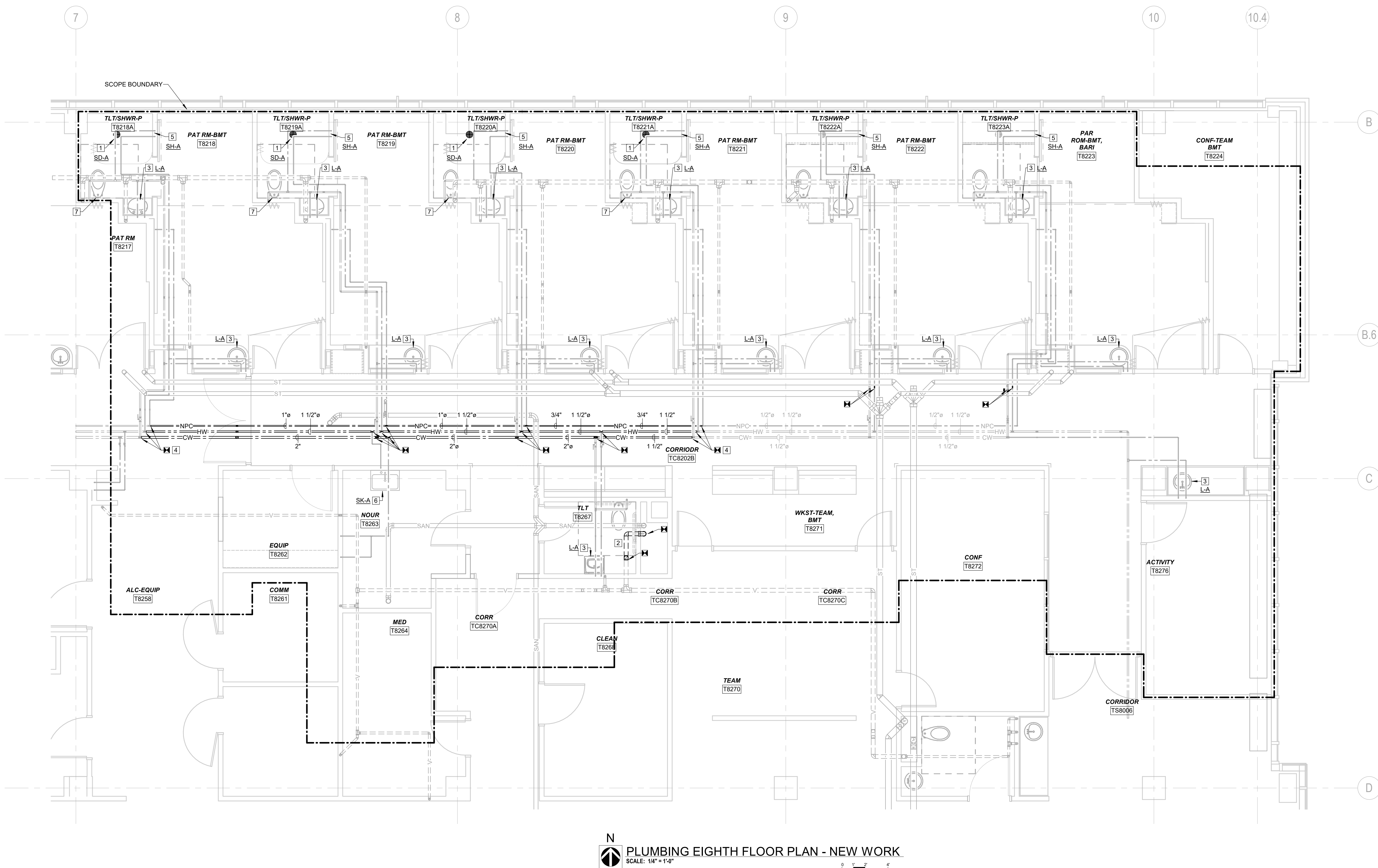
DETAILED COORDINATION DRAWINGS ARE  
REQUIRED, 1 SET FOR THE PENTHOUSE SCOPE  
AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER  
TO SPECIFICATIONS FOR ADDITIONAL DETAIL  
AND INFORMATION.

## PLUMBING KEYED NOTES:

- 1] PROVIDE AND INSTALL NEW SHOWER DRAIN IN EACH  
SHOWER AS SHOWN. REWORK WASTE PIPING TO  
ACCOMMODATE NEW SHOWER DRAIN AND TRAP.
- 2] REWORK ABOVE CEILING 4" VENT LINE TO NEW LOWER  
ELEVATION TO ALLOW FOR NEW DUCTWORK. COORDINATE  
WITH MECHANICAL CONTRACTOR.
- 3] PROVIDE AND INSTALL NEW FAUCET WITH LOCAL  
DOMESTIC WATER FILTRATION.
- 4] INSTALL DOMESTIC WATER PIPING IN NEW LOCATION TO  
ALLOW FOR INSTALLATION OF NEW DUCTWORK.  
COORDINATE ROUTING, HANGERS, AND INSTALLATION  
SEQUENCE WITH MECHANICAL CONTRACTOR.
- 5] PROVIDE AND INSTALL NEW SHOWER WAND WITH LOCAL  
DOMESTIC WATER FILTRATION.
- 6] PROVIDE AND INSTALL LOCAL DOMESTIC WATER FILTER ON  
SINK TRIM.
- 7] REINSTALL EXISTING WATER CLOSET.

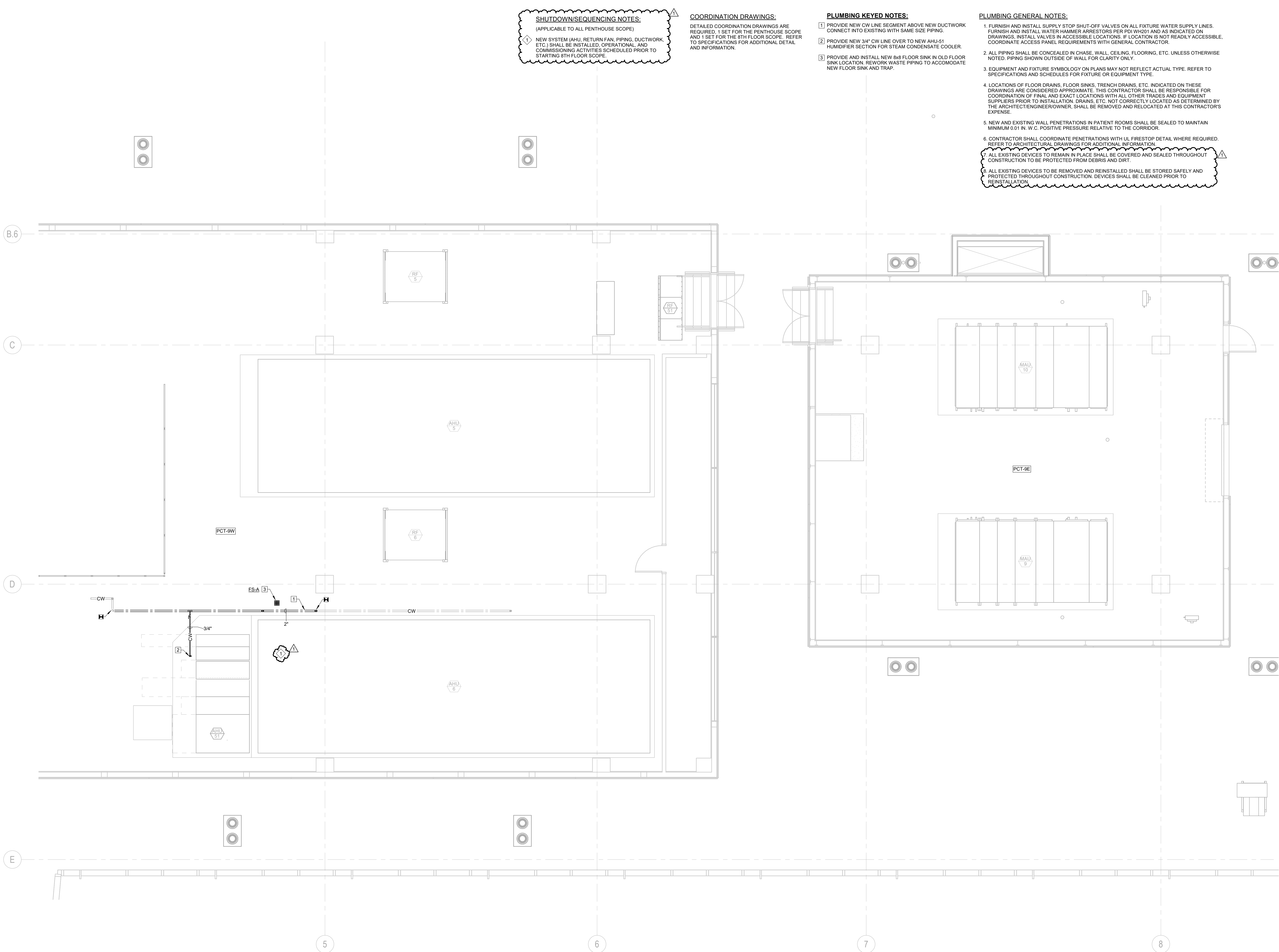
## PLUMBING GENERAL NOTES:

1. FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES.  
FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PDI WH201 AND AS INDICATED ON  
DRAWINGS. INSTALL VALVES IN ACCESSIBLE LOCATIONS. IF LOCATION IS NOT READILY ACCESSIBLE,  
COORDINATE ACCESS PANEL REQUIREMENTS WITH GENERAL CONTRACTOR.
2. ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE  
NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
3. EQUIPMENT AND FIXTURE SYMBOLS ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO  
SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
4. LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. INDICATED ON THESE  
DRAWINGS ARE CONSIDERED APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR  
COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT  
SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY  
THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S  
EXPENSE.
5. NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN  
MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR.
6. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED.  
REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT  
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8. ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND  
PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO  
REINSTALLATION.

N  
PLUMBING EIGHTH FLOOR PLAN - NEW WORK  
SCALE: 1/4" = 1'-0"

0 2 4 1/4"=1'





**SHUTDOWN/SEQUENCING NOTES:**

(APPLICABLE TO ALL PENTHOUSE SCOPE)

1. NEW SYSTEM (AHU, RETURN FAN, PIPING, DUCTWORK, ETC.) SHALL BE INSTALLED, OPERATIONAL, AND COMMISSIONING ACTIVITIES SCHEDULED PRIOR TO STARTING 8TH FLOOR SCOPE.

**COORDINATION DRAWINGS:**

DETAILED COORDINATION DRAWINGS ARE REQUIRED. 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

**PLUMBING KEYED NOTES:**

1. PROVIDE NEW CW LINE SEGMENT ABOVE NEW DUCTWORK CONNECT INTO EXISTING WITH SAME SIZE PIPING.
2. PROVIDE NEW 3/4" CW LINE OVER TO NEW AHU-51 HUMIDIFIER SECTION FOR STEAM CONDENSATE COOLER.
3. PROVIDE AND INSTALL NEW 8x8 FLOOR SINK IN OLD FLOOR SINK LOCATION. REWORK WASTE PIPING TO ACCOMMODATE NEW FLOOR SINK AND TRAP.

**PLUMBING GENERAL NOTES:**

1. FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES. FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PDI WH201 AND AS INDICATED ON DRAWINGS. INSTALL VALVES IN ACCESSIBLE LOCATIONS. IF LOCATION IS NOT READILY ACCESSIBLE, COORDINATE ACCESS PANEL REQUIREMENTS WITH GENERAL CONTRACTOR.
2. ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
3. EQUIPMENT AND FIXTURE SYMBOLS ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
4. LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. INDICATED ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S EXPENSE.
5. NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01 IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR.
6. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
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**BSA**

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Architectural Registration Number (Missouri) - 2017014317

**McCLUREENGINEERING**

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Engineering Registration Number (Missouri) - 000087

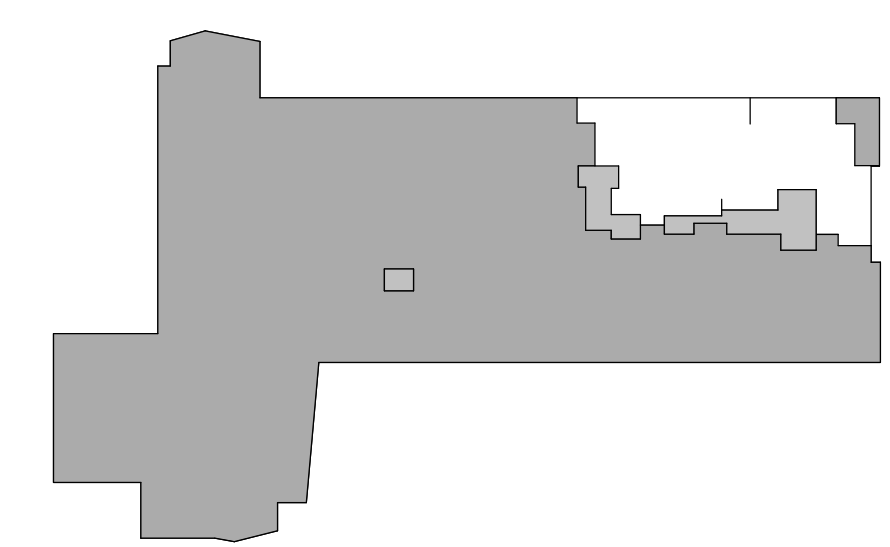
**University of Missouri**

MU PROJECT #: CP221933

**PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION**

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



**KEYPLAN**  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



ERIC A. REUTHER  
PE-2011015762

**PENTHOUSE FLOOR  
PLUMBING PLAN - NEW  
WORK**

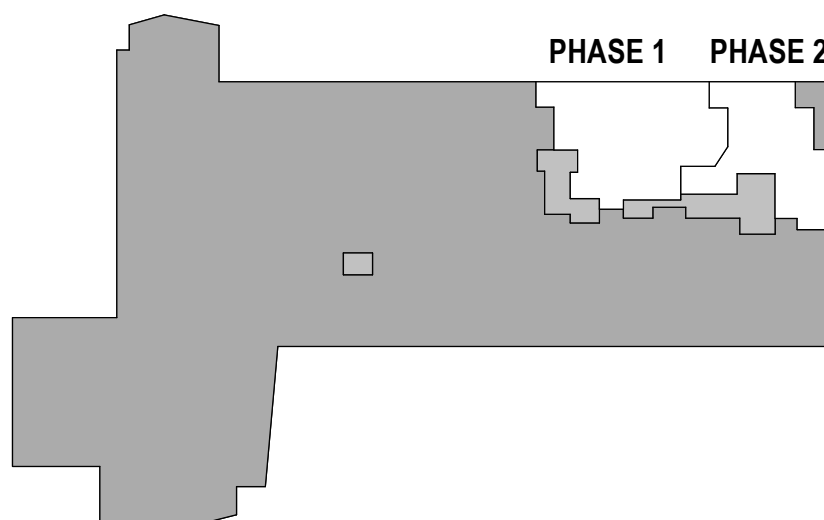
DATE	09 MAY, 2024
McCLURE PROJECT NO.	071671.000

**M209**



PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

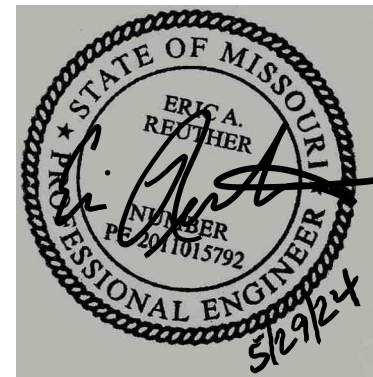
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## KEYPLAN

PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

ERIC A. REUTHER  
PE-2011015762EIGHTH FLOOR HVAC PLAN  
- NEW WORK

DATE	09 MAY, 2024
McCLURE PROJECT NO.	071671.000

M308

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## SHUTDOWN/SEQUENCING NOTES:

- NEW RA DUCT MAIN SERVING EXISTING AREAS SOUTH OF SCOPE AREA SHALL BE INSTALLED PRIOR TO PHASE 1. WORK SHALL BE COMPLETED IN 3 SECTIONS, NOT ALL AT ONE TIME. EACH SHALL BE COMPLETED AND TURNED OVER TO OWNER BEFORE PROCEEDING TO NEXT SECTION. COORDINATE SCHEDULING WITH OWNER.
- AHU-5 SHUTDOWN:
  - CONNECT SOUTH AREAS TO NEW RA DUCT
  - CONNECT NEW SOUTH RA DUCT INTO MAIN
  - CONNECT TEMPORARY FLEX DUCT ON SA AND RA DUCTS TO REFEED EAST AREAS
  - STARTUP AHU-5. ALL AREAS OUTSIDE PH1 CONSTRUCTION BOUNDARY REMAIN ACTIVE DURING CONSTRUCTION ACTIVITIES.
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- AHU-5 SHUTDOWN:
  - REMOVE TEMPORARY FLEX DUCT (SA/RA), PATCH/SEAL CONNECTIONS
  - CONNECT DUCTWORK INTO NEW AHU-51
  - STARTUP AHU-5. STARTUP AHU-51
- REMAINING EAST AREAS ARE SHUT DOWN FOR PHASE 2 SCOPE. AT COMPLETION OF PH2, AHU-51 SHUTDOWN TO MAKE FINAL CONNECTIONS AND BRING ENTIRE SUITE ONLINE.

## COORDINATION DRAWINGS:

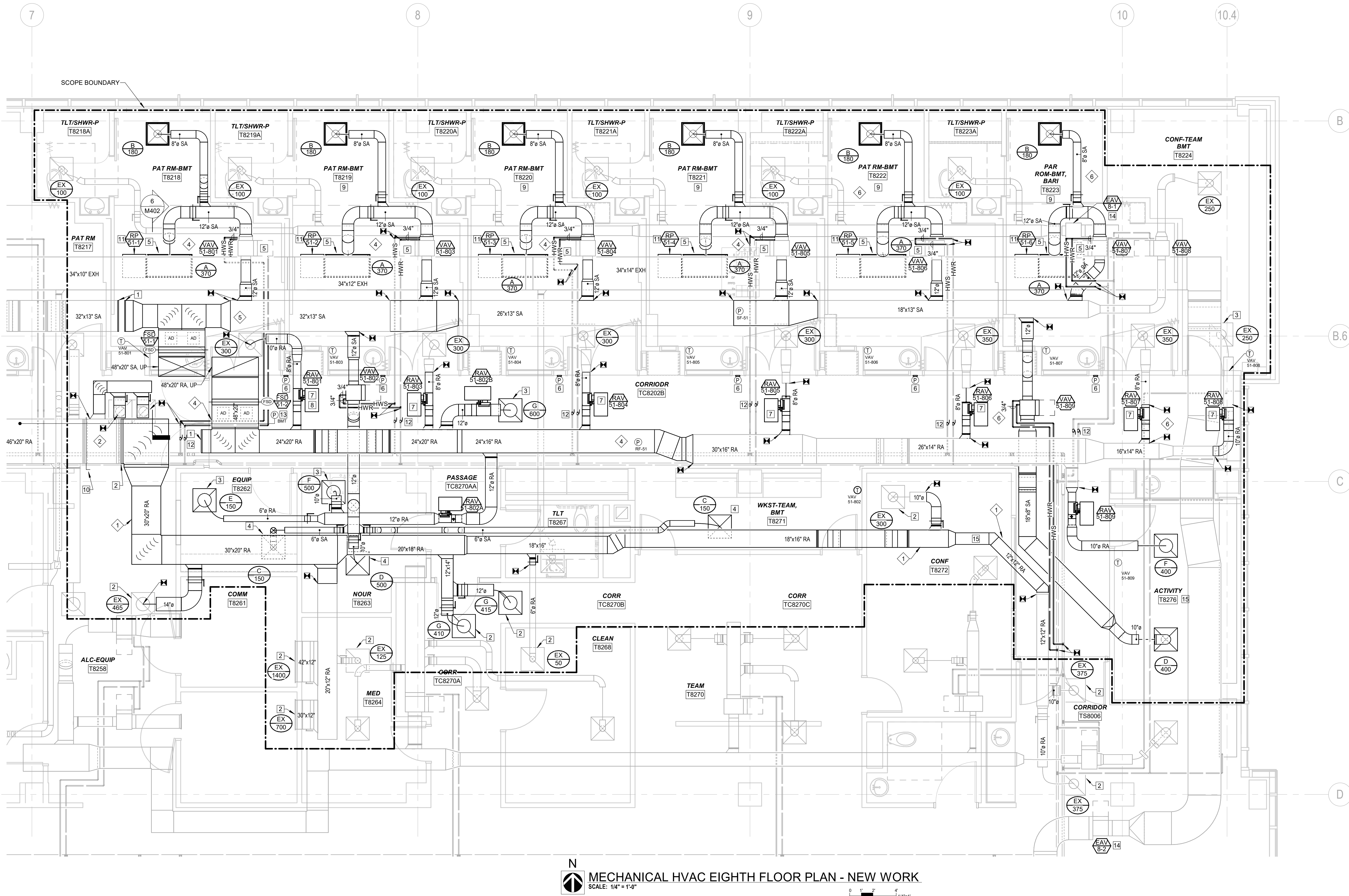
DETAILED COORDINATION DRAWINGS ARE REQUIRED. 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

## MECHANICAL KEYED NOTES:

- CAPPED DUCT PROVIDED FOR FUTURE DISTRIBUTION.
- ROUTE NEW RETURN DUCT TO REFEED ROOMS OUTSIDE BONE MARROW TRANSPLANT SUITE BOUNDARY.
- SPACE TO BE SERVED BY NEW BMT AHU. REWORK DUCTWORK TO CONNECT TO NEW RETURN VAV FOR RETURN CONTROL AND SUITE PRESSURIZATION CONTROL.
- SPACE TO BE SERVED BY NEW BMT AHU. REWORK DUCTWORK TO CONNECT TO SUPPLY VAV.
- INSTALL EXISTING SUPPLY VAV IN ITS NEW LOCATION AND INSTALL NEW SUPPLY AIR DEVICE OVER BED. CLEAN VAVS AND REHEAT COILS AND PROVIDE SIGNOFF PRIOR TO REINSTALLATION.
- INSTALL NEW PRESSURE MONITORING DEVICE FOR PATIENT ROOM. POSITIVE PRESSURE 0.01" W.C. SHALL BE MAINTAINED WITHIN EACH PATIENT ROOM. FC BUS SHALL BE REROUTED WITHOUT SPLICES.
- REPLACE EXISTING RAV WITH NEW ACCUVALVE.
- MOVE VAV / REWORK DUCTWORK TO COORDINATE WITH NEW DUCTWORK.
- COORDINATE NEW DUCTWORK IN ROOM WITH EXISTING UNISTRUT TO ALLOW FUTURE PATIENT LIFT IN ROOM.
- PROVIDE NEW MANUAL BALANCE DAMPER AND SET TO MAINTAIN PRESSURE RECORDED PRIOR TO CONSTRUCTION.
- ALTERNATE #1: ROUTE NEW BRANCH 1/2" HEATING WATER PIPING TO EACH RADIANT CEILING PANEL.
- INSTALL SERVICE VALVES DURING HW SHUTDOWN TO PREVENT SYSTEM HW SHUTDOWNS WITH EACH PATIENT ROOM VAV RELOCATION.
- INSTALL BUILDING PRESSURE SENSOR FOR BMT SUITE. REFERENCE ADJACENT CORRIDOR PRESSURE.
- BALANCE EXISTING EAVS AS NOTED IN VARIABLE AIR VOLUME UNIT SCHEDULE.
- DURING PHASE 1, TEMPORARILY CONNECT RETURNS FROM ACTIVITY ROOM TO NEW RA MAIN WITH 12" DIA. FLEX AND BALANCE TO MAINTAIN EXISTING AIRFLOWS.

## MECHANICAL GENERAL NOTES:

- THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
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- ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.
- ALL WORK SHALL BE INSTALLED TO ALLOW 24" CLEAR ACCESS PATHWAY TO VAV CONTROL PANELS.
- REFER TO ARCHITECTURAL SHEETS FOR PHASING CONSTRUCTION BOUNDARIES.
- VAV CONTROLLERS AND THEMOSTATS SHALL BE REMOVED BY OWNER PRIOR TO DEMOLITION WORK. NOTIFY OWNER PRIOR TO START OF DEMOLITION.
- PIPING IN MECHANICAL ROOM SHALL HAVE COLOR CODED PVC JACKETING. REFER TO SPECIFICATION SECTION 20 25 14 FOR ADDITIONAL INFORMATION.
- NEW AND EXISTING WALL PENETRATIONS IN PATIENT ROOMS SHALL BE SEALED TO MAINTAIN MINIMUM 0.01" IN. W.C. POSITIVE PRESSURE RELATIVE TO THE CORRIDOR. BLOWER DOOR TESTING REQUIRED PRIOR TO CEILING INSTALLATION. REFER TO SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL ENSURE FC BUS REMAINS INTACT THROUGHOUT CONSTRUCTION.
- ALL EXISTING AND NEW DUCTWORK SHALL BE SEALED WHILE NOT BEING CONNECTED TO OR ACTIVELY INSTALLED. EXISTING DUCTWORK SHALL BE CLEANED AND ALL DUCTWORK SHALL MAINTAIN CLEANLINESS THROUGHOUT CONSTRUCTION.
- ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
- ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.

MECHANICAL HVAC EIGHTH FLOOR PLAN - NEW WORK  
SCALE: 1/4" = 1'-0"



PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET

## KEYPLAN

PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

ERIC A. REUTHER  
PE-2011015762PENTHOUSE FLOOR HVAC  
PLAN - NEW WORKDATE 09 MAY, 2024  
McCLURE PROJECT NO. 071671.000

M309

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## SHUTDOWN/SEQUENCING NOTES:

(APPLICABLE TO ALL PENTHOUSE SCOPE)

1. NEW SYSTEM (AHU, RETURN FAN, PIPING, DUCTWORK, ETC.) SHALL BE INSTALLED, OPERATIONAL, AND COMMISSIONING ACTIVITIES SCHEDULED PRIOR TO STARTING 8TH FLOOR SCOPE.

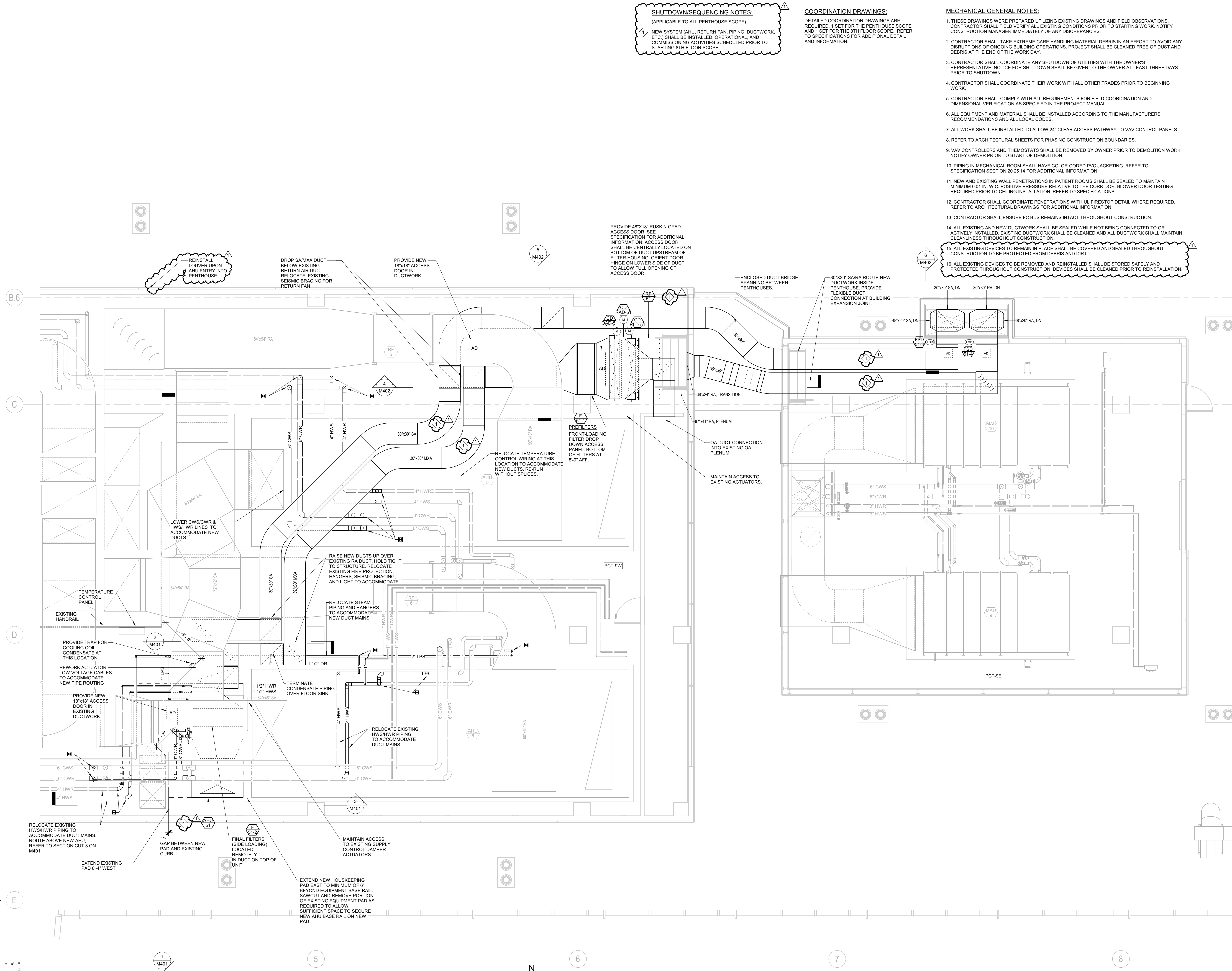
## COORDINATION DRAWINGS:

DETAILED COORDINATION DRAWINGS ARE REQUIRED, 1 SET FOR THE PENTHOUSE SCOPE AND 1 SET FOR THE 8TH FLOOR SCOPE. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL AND INFORMATION.

## MECHANICAL GENERAL NOTES:

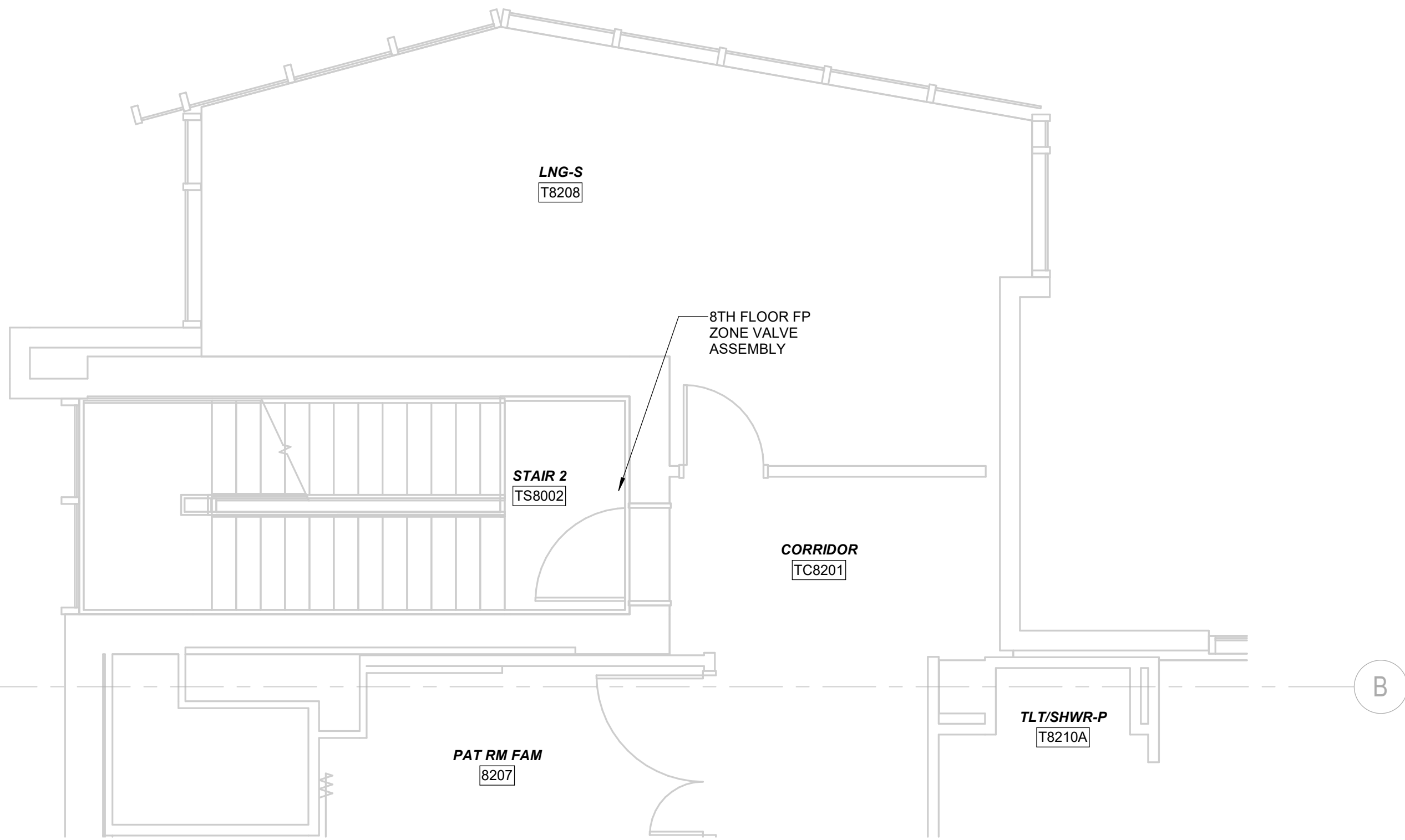
- THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR SHALL TAKE EXTREME CARE HANDLING MATERIAL DEBRIS IN AN EFFORT TO AVOID ANY DISRUPTIONS OF ONGOING BUILDING OPERATIONS. PROJECT SHALL BE CLEANED FREE OF DUST AND DEBRIS AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL COORDINATE ANY SHUTDOWN OF UTILITIES WITH THE OWNER'S REPRESENTATIVE. NOTICE FOR SHUTDOWN SHALL BE GIVEN TO THE OWNER AT LEAST THREE DAYS PRIOR TO SHUTDOWN.
- CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR FIELD COORDINATION AND DIMENSIONAL VERIFICATION AS SPECIFIED IN THE PROJECT MANUAL.
- ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.
- ALL WORK SHALL BE INSTALLED TO ALLOW 24" CLEAR ACCESS PATHWAY TO VAV CONTROL PANELS.
- REFER TO ARCHITECTURAL SHEETS FOR PHASING CONSTRUCTION BOUNDARIES.
- VAV CONTROLLERS AND THERMOSTATS SHALL BE REMOVED BY OWNER PRIOR TO DEMOLITION WORK. NOTIFY OWNER PRIOR TO START OF DEMOLITION.
- PIPING IN MECHANICAL ROOM SHALL HAVE COLOR CODED PVC JACKETING. REFER TO SPECIFICATION SECTION 20 25 14 FOR ADDITIONAL INFORMATION.
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- CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL ENSURE FC BUS REMAINS INTACT THROUGHOUT CONSTRUCTION.

- ALL EXISTING AND NEW DUCTWORK SHALL BE SEALED WHILE NOT BEING CONNECTED TO OR ACTIVELY INSTALLED. EXISTING DUCTWORK SHALL BE CLEANED AND ALL DUCTWORK SHALL MAINTAIN CLEANLINESS THROUGHOUT CONSTRUCTION.
- ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
- ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.

MECHANICAL HVAC PENTHOUSE PCT-9W FLOOR PLAN - NEW WORK  
SCALE: 1/4" = 1'-0"

0 1' 2' 4' 8' 16'





**FIRE PROTECTION EIGHTH FLOOR PLAN-NORTHWEST**  
SCALE: 1/4" = 1'-0"

**FIRE PROTECTION KEYED NOTES:**

1. REMOVE AND REINSTALL EXISTING SPRINKLER HEADS TO ACCOMMODATE ABOVE CEILING WORK. REWORK PIPING TO ACCOMMODATE HVAC SCOPE. REFER TO M808.
2. PROVIDE NEW GASKETED CLEANROOM STYLE SPRINKLER HEADS.

**FIRE PROTECTION GENERAL NOTES:**

1. THE WORK CONSISTS OF FURNISHING ALL LABOR AND MATERIALS AS REQUIRED BY NFPA 13, THE AUTHORITY HAVING JURISDICTION, AND THE PROJECT DOCUMENTS.
2. CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING DESCRIPTIONS, HEIGHTS, AND LAYOUTS.
3. AREAS SHOULD NOT BE LEFT UNPROTECTED PER IBC DURING CONSTRUCTION.
4. CONTRACTOR TO COORDINATE AND PARTICIPATE WITH OWNER DURING ALL SYSTEM DRAIN DOWN.
5. CONTRACTOR TO COORDINATE AND PARTICIPATE WITH OWNER DURING ALL SYSTEM REFILL(S).
6. COORDINATE WITH GENERAL CONTRACTOR FOR ANY REQUIRED WORK OUTSIDE OF RENOVATION AREA.
7. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
8. NEW GASKETED CLEANROOM STYLE SPRINKLER HEADS SHALL BE PROVIDED FOR ALL ROOMS WITHIN BMT SUITE.
9. ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
10. ALL EXISTING DEVICES TO BE REMOVED AND REINSTALLED SHALL BE STORED SAFELY AND PROTECTED THROUGHOUT CONSTRUCTION. DEVICES SHALL BE CLEANED PRIOR TO REINSTALLATION.

**FIRE SPRINKLER LEGEND**

- AREA TO BE PROTECTED AS LIGHT HAZARD.
- AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 1.
- AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 2.
- AREA TO BE PROTECTED WITH CLEAN AGENT FIRE SUPPRESSION. ALL PERIMETER WALLS IN THESE ROOMS ARE TO WITHSTAND 30 PSF LATER LOAD, POSITIVE AND NEGATIVE. WALLS ALSO HAVE SEALING REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
- INDICATES BOUNDARY OF FIRE PROTECTION ZONE.



**FIRE PROTECTION EIGHTH FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**BSA**

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12645 Olive Boulevard, Suite 100  
Creve Coeur, MO 63141  
ph 314.754.6306

Architectural Registration Number (Missouri) - 2017014317

**McCLUREENGINEERING**

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Engineering Registration Number (Missouri) - 000087

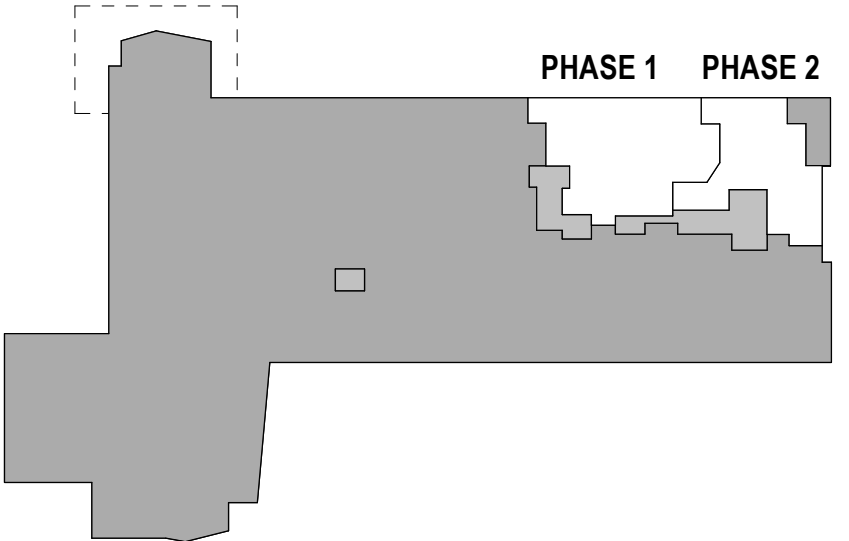
**University of Missouri**

MU PROJECT #: CP221933

**PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION**

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

**BID SET**



**KEYPLAN**  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



ERIC A. REUTHER  
PE-2011015762

**EIGHTH FLOOR FIRE  
PROTECTION PLAN**

DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

**M808**

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5/9/2024 9:09:59 AM  
Autodesk Docs: /411006 - Bone Marrow Transplant Unit/2023 MPFS 071671.000.rvt  
DESIGNED BY: [Signature]  
DRAWN BY: [Signature]  
APPROVED BY: [Signature]

**FIRE PROTECTION PENTHOUSE FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

0 1' 2' 4'  
1/4"=1'

**FIRE PROTECTION KEYED NOTES:**

- REWORK SPRINKLER PIPING AND HEADS WITHIN SCOPE AREA TO COORDINATE WITH NEW HVAC SCOPE AND MEET NFPA COVERAGE REQUIREMENTS. PROVIDE NEW HEADS UNDER NEW DUCTWORK WHERE REQUIRED BY NFPA.
- RELOCATE FIRE PROTECTION MAIN TO ACCOMMODATE NEW DUCTWORK IN THIS AREA.

**SHUTDOWN/SEQUENCING NOTES:**

(APPLICABLE TO ALL PENTHOUSE SCOPE)

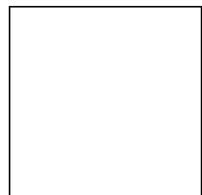
- NEW SYSTEM (AHU, RETURN FAN, PIPING, DUCTWORK, ETC.) SHALL BE INSTALLED, OPERATIONAL, AND COMMISSIONING ACTIVITIES SCHEDULED PRIOR TO STARTING 8TH FLOOR SCOPE.

**FIRE PROTECTION GENERAL NOTES:**

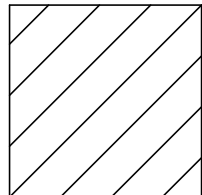
- THE WORK CONSISTS OF FURNISHING ALL LABOR AND MATERIALS AS REQUIRED BY NFPA 13, THE AUTHORITY HAVING JURISDICTION, AND THE PROJECT DOCUMENTS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING DESCRIPTIONS, HEIGHTS, AND LAYOUTS.
- AREAS SHOULD NOT BE LEFT UNPROTECTED PER IBC DURING CONSTRUCTION.
- CONTRACTOR TO COORDINATE AND PARTICIPATE WITH OWNER DURING ALL SYSTEM DRAIN DOWN.
- CONTRACTOR TO COORDINATE AND PARTICIPATE WITH OWNER DURING ALL SYSTEM REFILL(S).
- COORDINATE WITH GENERAL CONTRACTOR FOR ANY REQUIRED WORK OUTSIDE OF RENOVATION AREA.
- CONTRACTOR SHALL COORDINATE PENETRATIONS WITH UL FIRESTOP DETAIL WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW GASKETED CLEANROOM STYLE SPRINKLER HEADS SHALL BE PROVIDED FOR ALL ROOMS WITHIN BMT SUITE.

- ALL EXISTING DEVICES TO REMAIN IN PLACE SHALL BE COVERED AND SEALED THROUGHOUT CONSTRUCTION TO BE PROTECTED FROM DEBRIS AND DIRT.
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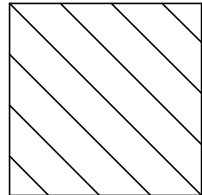
**FIRE SPRINKLER LEGEND**



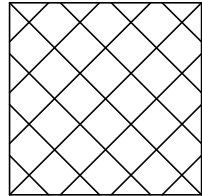
AREA TO BE PROTECTED AS LIGHT HAZARD.



AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 1.



AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 2.



AREA TO BE PROTECTED WITH CLEAN AGENT FIRE SUPPRESSION. ALL PERIMETER WALLS IN THESE ROOMS ARE TO WITHSTAND 30 PSF LATER LOAD, POSITIVE AND NEGATIVE. WALLS ALSO HAVE SEALING REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.

--- INDICATES BOUNDARY OF FIRE PROTECTION ZONE.

**BSA**

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Engineering Registration Number (Missouri) - 000087

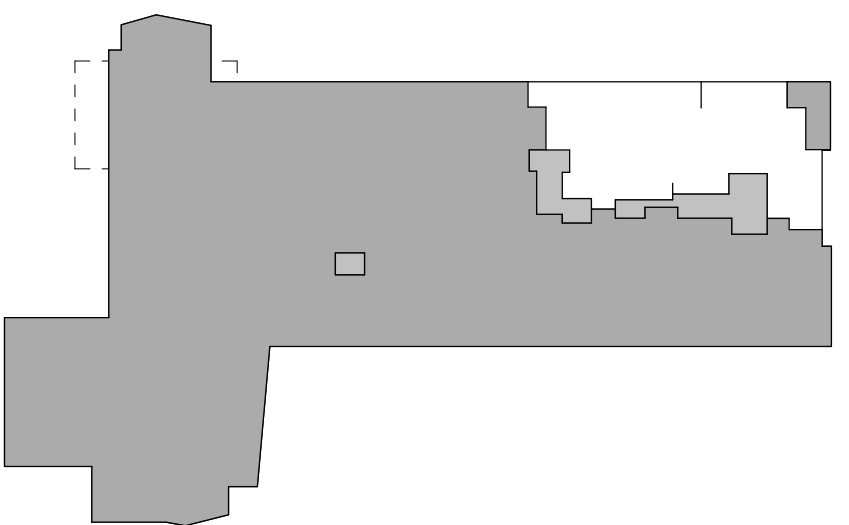
**University of Missouri**

MU PROJECT #: CP221933

**PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION**

COLUMBIA, MO  
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MISSOURI

BID SET



**KEYPLAN**  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



ERIC A. REUTHER  
PE-2011015762

**PENTHOUSE FLOOR FIRE  
PROTECTION PLAN**

DATE: 09 MAY, 2024  
MCCLURE PROJECT NO. 071671.000

**M809**

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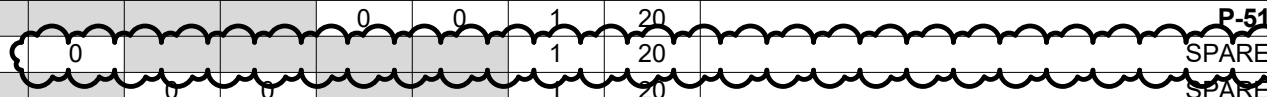


KEYED NOTES:

1 ALL CIRCUIT BREAKERS SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION.

Branch Panel: L8A						Volts: 120/208 Wye		A.I.C. Rating: 22,000												
Location: ELEC T8280						Phases: 3		Mains Type: MCB												
Supply From:						Wires: 4		Mains Rating: 100 A												
Mounting: SURFACE						Frequency:		Serves: LIFE SAFEY BRANCH												
Enclosure: NEMA 1																				
CKT	Circuit Description					Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	Circuit Description					CKT		
1	MED GAS AREA ALARM PANEL					20	1	0	0			1	20	FIRE ALARM POWER SUPPLIES					2	
3	MED GAS AREA ALARM PANEL					20	1		0	0		1	20	FIRE ALARM POWER SUPPLIES					4	
5	MED GAS AREA ALARM PANEL					20	1			0	0	1	20	FIRE ALARM POWER SUPPLIES					6	
7	MED GAS AREA ALARM PANEL					20	1	0	0			1	20	FIRE ALARM POWER SUPPLIES					8	
9	MED GAS AREA ALARM PANEL					20	1		0	0		1	20	FIRE/SMOKE DAMPERS					10	
11	DOOR POWER					20	1			0	0	1	20	FIRE/SMOKE DAMPERS					12	
13	DOOR POWER					20	1	0	0			1	20	FIRE/SMOKE DAMPERS					14	
15	DOOR POWER					20	1		0	1000		1	20	FIRE/SMOKE DAMPERS					16	
17	SPARE					20	1				0	0	1	20	SPARE					18
19	SPARE					20	1	0	0			1	20	SPARE					20	
21	SPARE					20	1		0	0		1	20	SPARE					22	
23	SPARE					20	1				0	0	1	20	SPARE					24
25	SPARE					20	1	0	0			1	20	SPARE					26	
27	SPARE					20	1		0	0		1	20	SPARE					28	
29	SPARE					20	1				0	0	1	20	SPARE					30
31	SPARE					20	1	0	0			1	20	SPARE					32	
33	SPARE					20	1		0	0		1	20	SPARE					34	
35	SPARE					20	1				0	0	1	20	SPARE					36
37	SPARE					20	1	0	0			1	20	SPARE					38	
39	SPARE					20	1		0	0		1	20	SPARE					40	
41	SPARE					20	1				0	0	1	20	SPARE					42
Notes:																				

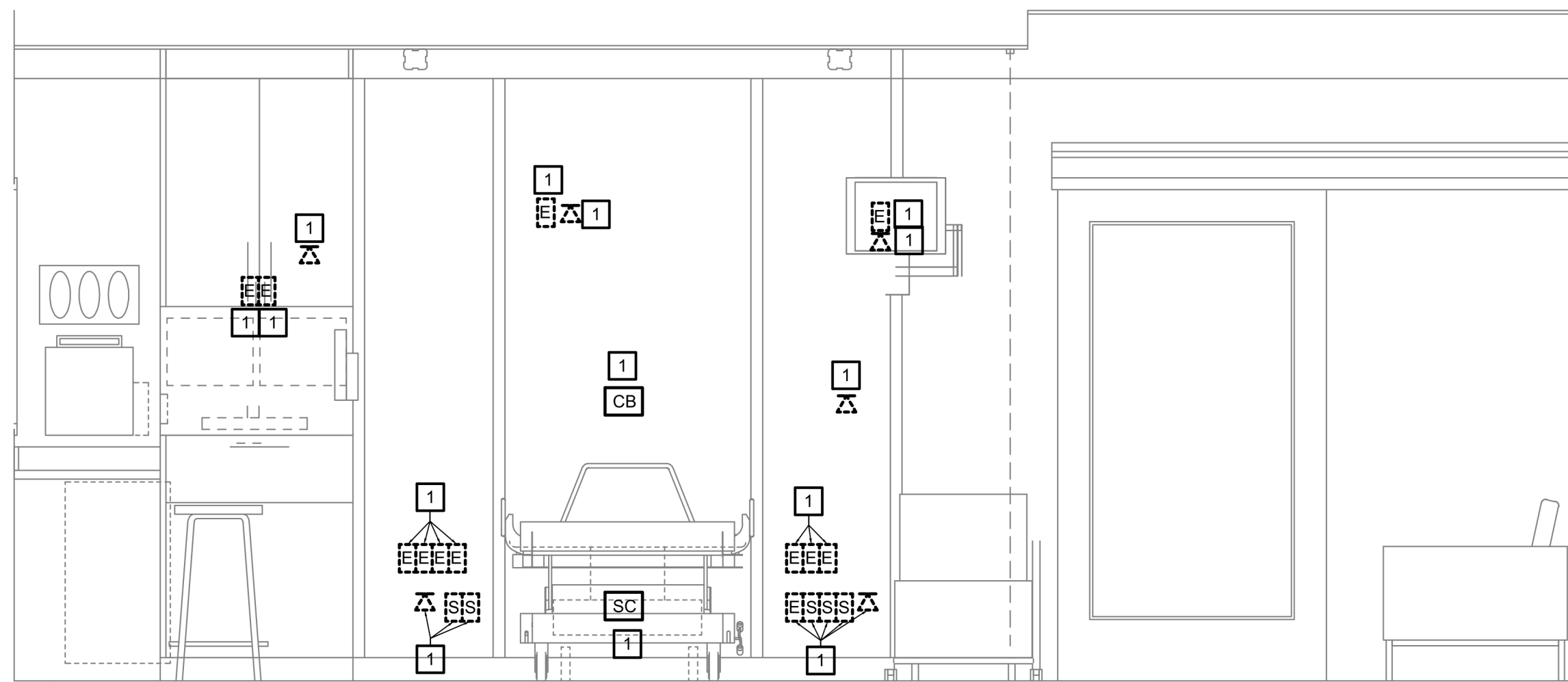
Branch Panel: L9A																	
Location: MECHANICAL PENTHOUSE...					Volts: 120/208 Wye					A.I.C. Rating: 22,000							
Supply From: TL91					Phases: 3					Mains Type: MLO							
Mounting: SURFACE					Wires: 4					Mains Rating: 100 A							
Enclosure: NEMA 1					Frequency:					Serves: LIFE SAFEY BRANCH							
CKT	Circuit Description				Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	Circuit Description				CKT	
1	SPARE				20	1	0	0			1	20	ELEVATOR CAB				2
3	SPARE				20	1		0	0		1	20	ELEVATOR CAB				4
5	SPARE				20	1			0	0	1	20	ELEVATOR CAB				6
7	FIRE/SMOKE DAMPERS				20	1	0	0			1	20	ELEVATOR CAB				8
9	FIRE/SMOKE DAMPERS				20	1		0	0		1	20	ELEVATOR CAB				10
11	FIRE/SMOKE DAMPERS				20	1			1000	0	1	20	ELEVATOR CAB				12
13	SPARE				20	1	0	0			1	20	FIRE ALARM POWER SUPPLIES				14
15	SPARE				20	1		0	0		1	20	FIRE ALARM POWER SUPPLIES				16
17	SPARE				20	1			0	0	1	20	SPARE				18
19	SPARE				20	1	0	0			1	20	SPARE				20
21	SPARE				20	1		0	0		1	20	SPARE				22
23	SPARE				20	1			0	0	1	20	SPARE				24
25	SPARE				20	1	0	0			1	20	SPARE				26
27	SPARE				20	1		0	0		1	20	SPARE				28
29	SPARE				20	1			0	0	1	20	SPARE				30
31	SPARE				20	1	0	0			1	20	SPARE				32
33	SPARE				20	1		0	0		1	20	SPARE				34
35	SPARE				20	1			0	0	1	20	SPARE				36
37	SPARE				20	1	0	0			1	20	SPARE				38
39	SPARE				20	1		0	0		1	20	SPARE				40
41	SPARE				20	1			0	0	1	20	SPARE				42
Notes:																	

Branch Panel: AE9A																				
Location: MECHANICAL PENTHOUSE...						Volts: 120/208 Wye				A.I.C. Rating: 22,000										
Supply From:						Phases: 3				Mains Type: MLO										
Mounting: SURFACE						Wires: 4				Mains Rating: 225 A										
Enclosure: NEMA 1						Frequency:				Serves: EQUIPMENT BRANCH										
CKT	Circuit Description					Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	Circuit Description					CKT		
1	LEVEL 8 VAV BOXES					20	1	0	0			1	20	MOTORIZED ROOF VENT					2	
3	LEVEL 8 VAV BOXES					20	1		0	0		1	20	MOTORIZED ROOF VENT					4	
5	LEVEL 8 VAV BOXES					20	1			0	0	1	20	MOTORIZED ROOF VENT					6	
7	LEVEL 8 VAV BOXES					20	1	0	0			1	20	MOTORIZED ROOF VENT					8	
9	LEVEL 8 VAV BOXES					20	1		0	0		1	20	UNIT HEATERS					10	
11	LEVEL 8 VAV BOXES					20	1			0	0	1	20	MOTORIZED DAMPERS					12	
13	LEVEL 8 VAV BOXES					20	1	0	0			1	20	MOTORIZED DAMPERS					14	
15	MOTORIZED DAMPERS					20	1		0	0		1	20	MOTORIZED DAMPERS					16	
17	MOTORIZED DAMPERS					20	1			0	0	1	20	MOTORIZED DAMPERS					18	
19	MOTORIZED DAMPERS					20	1	0	500			1	20	AHU-51 LIGHTS					20	
21	RECEPTACLES					20	1		0	500		1	20	AHU-51 UV LIGHTS					22	
23	SPARE					20	1			0	0	1	20						P-51	24
25	SPARE					20	1	0	0		1	20	SPARE						26	
27	SPARE					20	1				1	20	SPARE						28	
29	RECEPTACLES - ELE SHAFTS 54, 55					20	1			0	0	1	20						SPARE	
31	SPARE					20	1	0	0			1	20	SPARE					32	
33	SPARE					20	1		0	0		1	20	SPARE					34	
35	SPARE					20	1			0	0	1	20	SPARE					36	
37	SPARE					20	1	0	0			1	20	SPARE					38	
39	SPARE					20	1		0	0		1	20	SPARE					40	
41	SPARE					20	1			0	0	1	20	SPARE					42	
Notes:																				

Branch Panel: AE9B															
Location: MECHANICAL PENTHOUSE...					Volts: 480/277 Wye										
Supply From: AEDP-3					Phases: 3										
Mounting: SURFACE					Wires: 4										
Enclosure: NEMA 1					Frequency:										
					A.I.C. Rating:										
					Mains Type: MLO										
					Mains Rating: 225 A										
					Serves:										
CKT	Circuit Description			Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	Circuit Description			CKT	
1						0	0							2	
3	VFD - AHU-51 (SUPPLY)			20	3		0	0		3	20	VFD - AHU-51 (SUPPLY)			4
5															6
7	VFD - AHU-51 (SUPPLY)			20	3	0	0			3	20	VFD - AHU-51 (SUPPLY)			8
9							0	0							10
11															12
13	SPARE			20	1	0	0			1	20	SPARE			14
15	SPARE			20	1		0	0		1	20	SPARE			16
17	SPARE			20	1			0	0	1	20	SPARE			18
19	SPARE			20	1	0	0			1	20	SPARE			20
21	SPARE			20	1		0	0		1	20	SPARE			22
23	SPARE			20	1			0	0	1	20	SPARE			24
25	SPARE			20	1	0	0			1	20	SPARE			26
27	SPARE			20	1		0	0		1	20	SPARE			28
29	SPARE			20	1			0	0	1	20	SPARE			30
31	SPARE			20	1	0	0			1	20	SPARE			32
33	SPARE			20	1		0	0		1	20	SPARE			34
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37	SPARE			20	1	0	0			1	20	SPARE			38
39	SPARE			20	1		0	0		1	20	SPARE			40
41	SPARE			20	1			0	0	1	20	SPARE			42

Notes:





**ENLARGED PLAN - TYPICAL HEADWALL LAYOUT DEMOLITION**  
SCALE: NS

**GENERAL NOTES:**

1. REFERENCE ARCHITECTURAL PHASING PLAN FOR CONSTRUCTION COORDINATION
2. WORK ABOVE CEILINGS AND IN FINISHED SPACES SHALL BE PERFORMED IN A HEPA BOOTH. AN INFECTION CONTROL BARRIER SHALL BE INSTALLED IF A LARGER WORK SPACE IS REQUIRED TO PERFORM THE TASK
3. FOR A PORTION OF A CIRCUIT WHICH IS REMOVED OR ABANDONED, RE-ESTABLISH CIRCUIT CONTINUITY FOR THE PORTION OF THE CIRCUIT WHICH IS TO REMAIN.
4. PROVIDE AND INSTALL SUPPORTS FOR EXISTING CABLES AND CONDUITS ABOVE CEILING THAT ARE CURRENTLY UNSUPPORTED IN ALL AREAS WHERE CEILING IS BEING REMOVED.
5. ALL WALL MOUNTED DEVICES NOT CALLED OUT TO BE REMOVED WITHIN THE CONSTRUCTION ZONE MUST BE COVERED TO PROTECT FROM DUST OR OTHER CONSTRUCTION DEBRIS AND CLEANED AT THE COMPLETION OF THE CONSTRUCTION IN THAT AREA.

**KEYED NOTES:**

1. REMOVE DEVICE AND DEVICE COVER IN COORDINATION WITH ARCHITECTURE WALL WORK.
2. RELOCATE DOOR ACCESS CONTROL BOX. SEE SHEET E308 FOR NEW LOCATION.
3. DISCONNECT AND MAKE SAFE FOR MECHANICAL UNIT RELOCATION. EXISTING CONTROLS AND CIRCUITING TO REMAIN FOR REUSE.
4. REMOVE EXISTING DEVICE FOR RELOCATION. PRIOR TO REMOVAL, COORDINATE WITH OWNER.
5. REMOVE DATA DEVICE ABOVE DOOR FOR RELOCATION.
6. (2) ROWS OF EXISTING WIREMOLD SHALL BE SHORTENED TO ACCOMMODATE NEW DOOR INSTALL. COORDINATE ADDITIONAL REQUIREMENTS WITH ARCHITECTURAL DRAWINGS.
7. SEE TYPICAL HEADWALL LAYOUT DEMOLITION THIS SHEET FOR DEVICE DETAILS.
8. EXISTING CONDUIT SHALL BE REWORKED ONE AT A TIME TO ACCOMMODATE NEW MECHANICAL WORK. SEE SHEET E308 FOR ADDITIONAL INFORMATION.
9. INTERCEPT AND PULL BACK (10) EXISTING 3/4" CONDUITS, WITH (3) CIRCUITS IN EACH, ONE AT A TIME, TO EXISTING PULL BOX. SEE SHEET E308 FOR ADDITIONAL INFORMATION.
10. REMOVE EXISTING FIRE ALARM RELAY SERVING DOOR. FIRE ALARM RELAY SHALL BE REMOVED FROM THE FIRE ALARM PROGRAMMING. ALL WORK SHALL BE PERFORMED BY SIEMENS.
11. DISCONNECT AND REMOVE EXISTING HEPA FAN POWERED BOX. EXISTING CIRCUIT SHALL BE REUSED FOR RAY BOX POWER SUPPLY. REFER TO E308 FOR ADDITIONAL INFORMATION.
12. EXISTING SMOKE DETECTOR HEAD SHALL BE REPLACED WITH NEW DETECTOR HEAD.

**KEYED NOTES:**

13. EXISTING CEILING AND ALL ASSOCIATED DEVICES (SPEAKERS, WAPS, FIRE ALARM DEVICES, ETC.) SHALL BE TEMPORARILY REMOVED DURING CONSTRUCTION TO FACILITATE INSTALLATION OF NEW MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION COMPONENTS. ELECTRICAL CONTRACTOR SHALL COORDINATE CEILING RENOVATIONS WITH OTHER TRADES.
14. DISCONNECT AND REMOVE EXISTING NURSE CALL WALL MOUNTED DOME LIGHT. DOME LIGHT SHALL BE REPLACED WITH NEW CEILING MOUNTED LIGHT.

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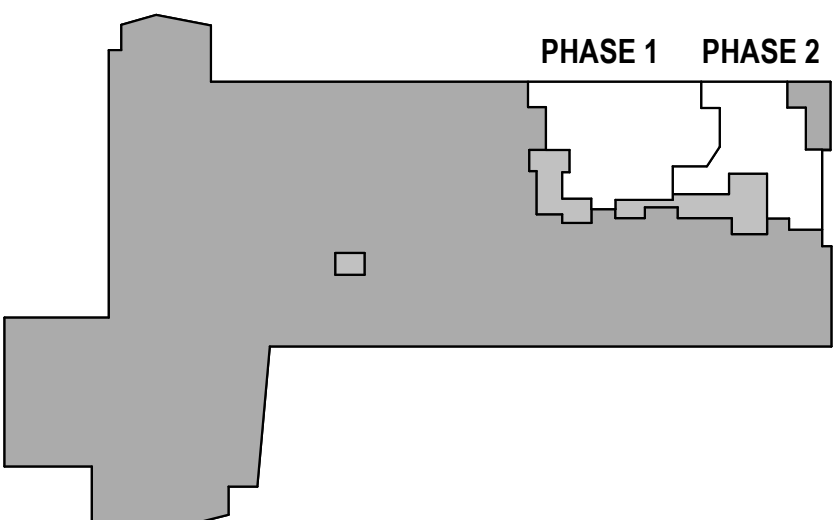
**University of Missouri**

MU PROJECT #: CP221933

**PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION**

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

**BID SET**



**KEYPLAN**

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



AUSTIN P. STRIEKER  
PE-2014032649

**8TH FLOOR PLAN -  
ELECTRICAL - DEMOLITION**

DATE 09 MAY, 2024  
MCCLURE PROJECT NO. 071671.000

**DE308**

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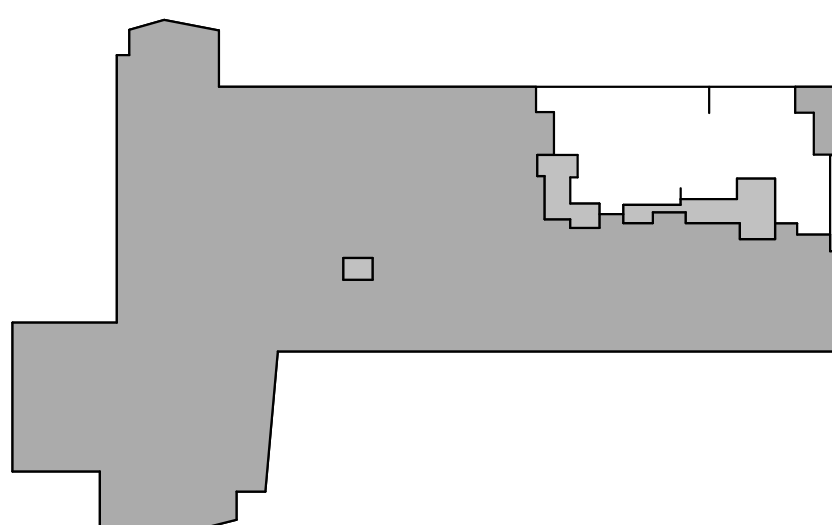
University of Missouri

MU PROJECT #: CP221933

PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION

COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF  
MISSOURI

BID SET



MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



AUSTIN P STRIEKER  
PE-2014032649

PENTHOUSE FLOOR PLAN -  
ELECTRICAL - DEMOLITION

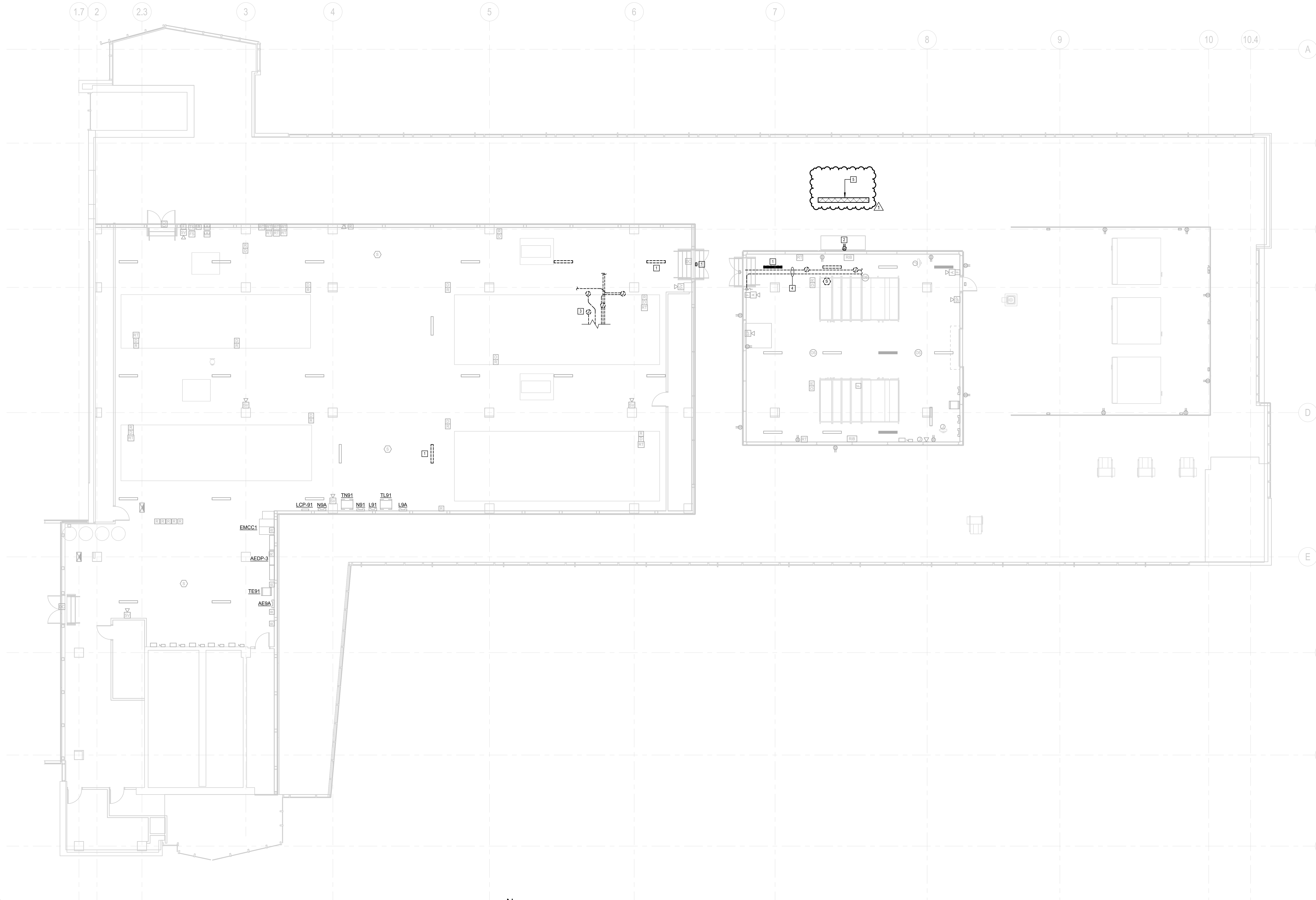
DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

DE309

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KEYED NOTES:

- 1 REMOVE AND STORE EXISTING LIGHT FIXTURE FOR RELOCATION AFTER NEW MECHANICAL WORK IS COMPLETE.
- 2 DISCONNECT EXISTING RECEPTACLE AND MAINTAIN CIRCUITRY FOR RELOCATION. SEE SHEET E309 FOR NEW LOCATION.
- 3 EXISTING FIRE ALARM AND BRANCH CIRCUIT CONDUIT AND JUNCTION BOXES SHALL BE RELOCATED TO ACCOMMODATE NEW DUCTWORK. COORDINATE WITH SIEMENS FOR RELOCATION OF ALL FIRE ALARM WIRING AND COMPONENTS.
- 4 EXISTING LIGHTING FIXTURE AND CONTROLS BRANCH CIRCUIT CONDUIT, JUNCTION BOXES AND FIRE ALARM DEVICES SHALL BE RELOCATED TO ACCOMMODATE NEW DUCTWORK.
- 5 DISCONNECT SECTION OF EXISTING ROOF MOUNTED FLOOD LIGHTS IN THIS AREA FOR RELOCATION. FIXTURES SHALL BE SHIFTED BACK TO ACCOMMODATE NEW MECHANICAL CHASE. FIELD VERIFY EXACT QUANTITY. SEE ARCHITECTURAL SHEETS AND SHEET E309 FOR ADDITIONAL INFORMATION.



PENTHOUSE FLOOR PLAN - ELECTRICAL -DEMOLITION  
SCALE: 1/8" = 1'-0"

0' 2' 4' 8' 16'  
1/8" = 1'

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CHECKED BY: [Signature]  
APPROVED BY: [Signature]





N  
ENLARGED PLAN - TYPICAL HEADWALL LAYOUT NEW  
SCALE: NS

GENERAL NOTES:

- REFERENCE ARCHITECTURAL PHASING PLAN FOR CONSTRUCTION COORDINATION
- WORK ABOVE CEILINGS AND IN FINISHED SPACES SHALL BE PERFORMED IN A HEPA BOOTH. AN INFECTION CONTROL BARRIER SHALL BE INSTALLED IF A LARGER WORK SPACE IS REQUIRED TO PERFORM THE TASK.
- REMOVE AND REINSTALL ALL CEILING TILES AND GRID TO REMAIN AS REQUIRED FOR INSTALLATION OF NEW WORK ON THIS SHEET. CONTRACTOR TO REPLACE ANY DAMAGED TILE TO THE SATISFACTION OF THE ENGINEER/ARCHITECT. MATCH EXISTING TYPE.
- TEMPORARILY SUPPORT, REMOVE AND REINSTALL, OR RELOCATE ALL CEILING DEVICES IN COORDINATION WITH CEILING REPLACEMENT WORK AND MECHANICAL DUCT ROUTING. REFER TO ARCHITECTURAL AND MECHANICAL SHEETS FOR COORDINATION OF THIS WORK.
- SALVAGE AND RETURN ALL DEMOLISHED ACCESS CONTROL DEVICES TO OWNER.
- SALVAGE AND RETURN ALL DEMOLISHED FIRE ALARM DEVICES TO OWNER.

KEYED NOTES:

- REINSTALL DEVICE AND DEVICE COVERPLATE. REPLACE ALL DAMAGED OR OVER PAINTED TRIM COVERPLATES WITH NEW ENGRAVED COVERPLATES AS REQUIRED.
- RELOCATED DOOR ACCESS CONTROL BOX.
- EXTEND EXISTING CIRCUIT AND CONTROLS TO NEW MECHANICAL UNIT AS REQUIRED.
- REPLACE EXISTING SMOKE DETECTOR WITH NEW DETECTOR HEAD.
- RELOCATED DEVICE.
- SEE TYPICAL HEADWALL LAYOUT NEW WORK THIS SHEET FOR DEVICE DETAILS.
- REWORK EXISTING CONDUIT TO NEW JUNCTION BOX. JUNCTION BOX AND CONDUIT SHALL BE INSTALLED BELOW NEW MECHANICAL DUCTWORK.
- TRANSITION CONDUITS DOWN BEFORE PENETRATING WALL.
- RELOCATED POWER FOR RELOCATED POWERED DOOR.
- FUNCTIONAL DEVICES PSH500A POWER SUPPLY FOR RAV BOX POWER. OUTPUTS SHALL BE LIMITED TO A MAXIMUM OF 3 BOXES.
- REINSTALL EXISTING CEILING MOUNTED DEVICE IN SAME LOCATION AFTER INSTALLATION OF NEW MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION COMPONENTS. ELECTRICAL CONTRACTOR SHALL COORDINATE CEILING RENOVATIONS WITH OTHER TRADES.
- EXTEND EXISTING WIRING AS NEEDED TO NEW NURSE CALL DOME LIGHT.
- REMOVE, REWIRE, RECONNECT EXISTING DOOR OPERATOR AND CONTROLS. DOOR SHALL BE PROGRAMMED TO NOT ALLOW OPERATOR TO BE HELD OPEN.

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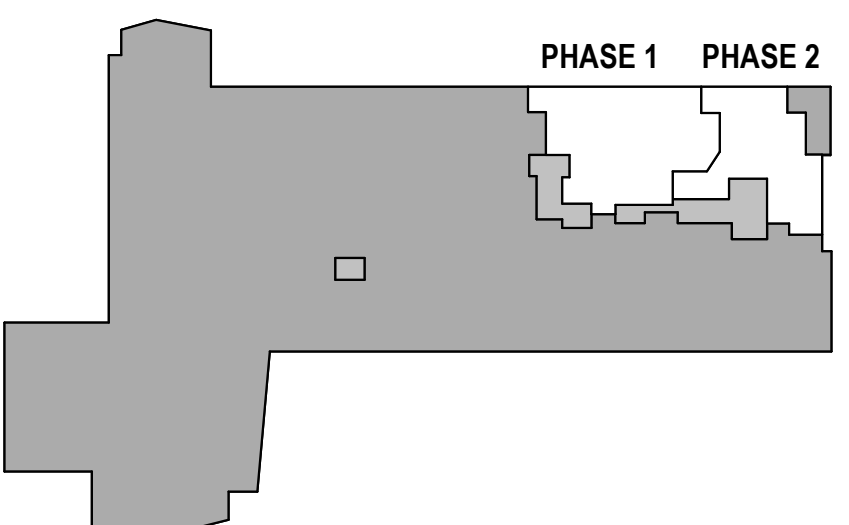
University of Missouri

MU PROJECT #: CP221933

PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATION

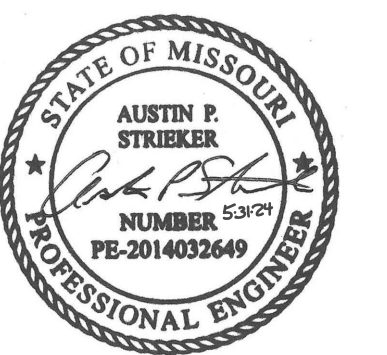
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KEYPLAN  
PLAN NORTH

MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1



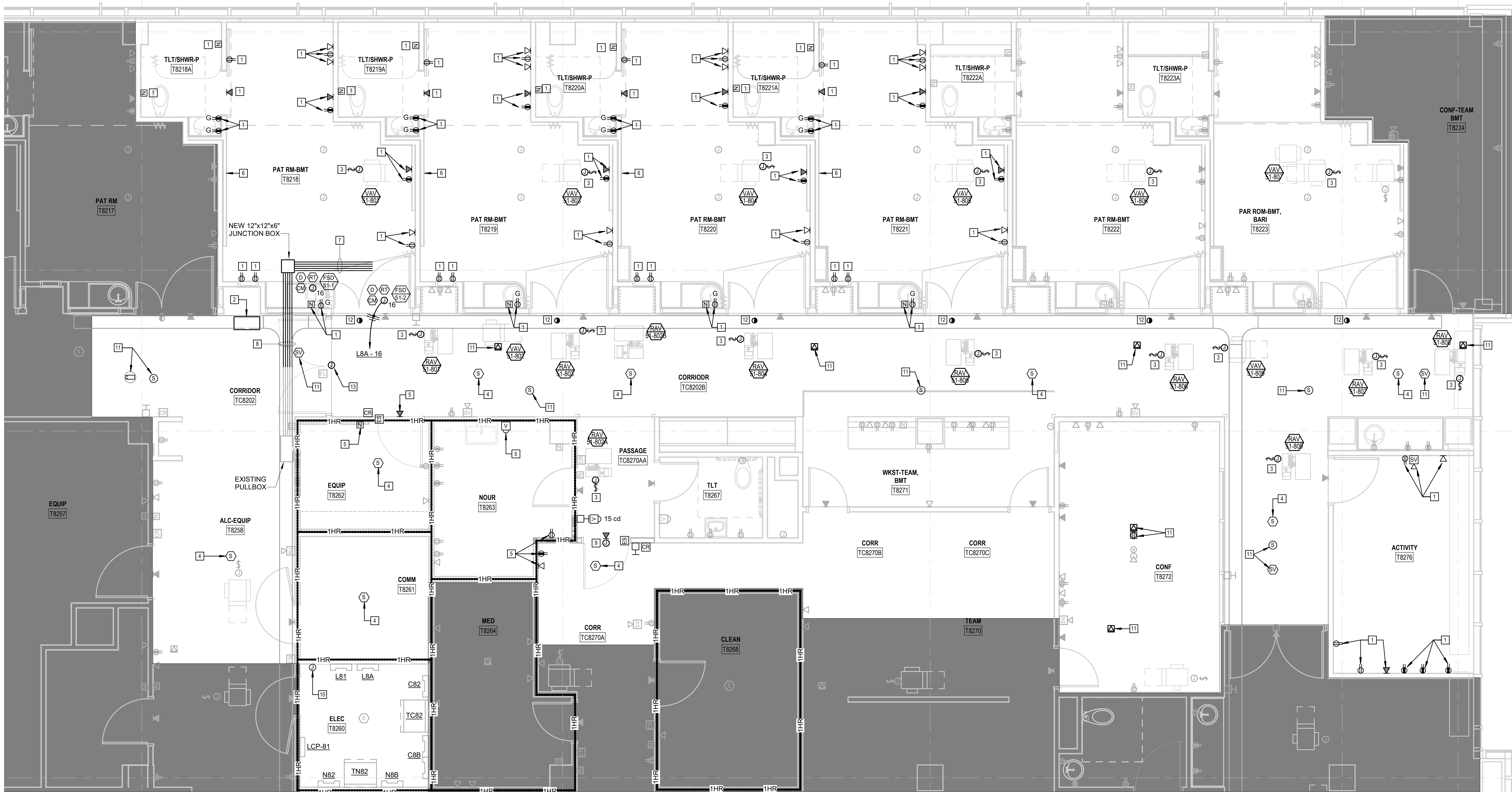
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8TH FLOOR PLAN -  
ELECTRICAL - NEW WORK

DATE 09 MAY, 2024  
McCLURE PROJECT NO. 071671.000

E308

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N  
8TH FLOOR PLAN - ELECTRICAL - NEW WORK  
SCALE: 1/4" = 1'-0"

0' 1' 2' 4' 8' 1/4" = 1'



PATIENT CARE  
TOWER - 8TH  
FLOOR BONE  
MARROW  
TRANSPLANT UNIT  
RENOVATIONCOLUMBIA, MO  
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MARK	DATE	DESCRIPTION
1	5/31/2024	ADDENDUM #1

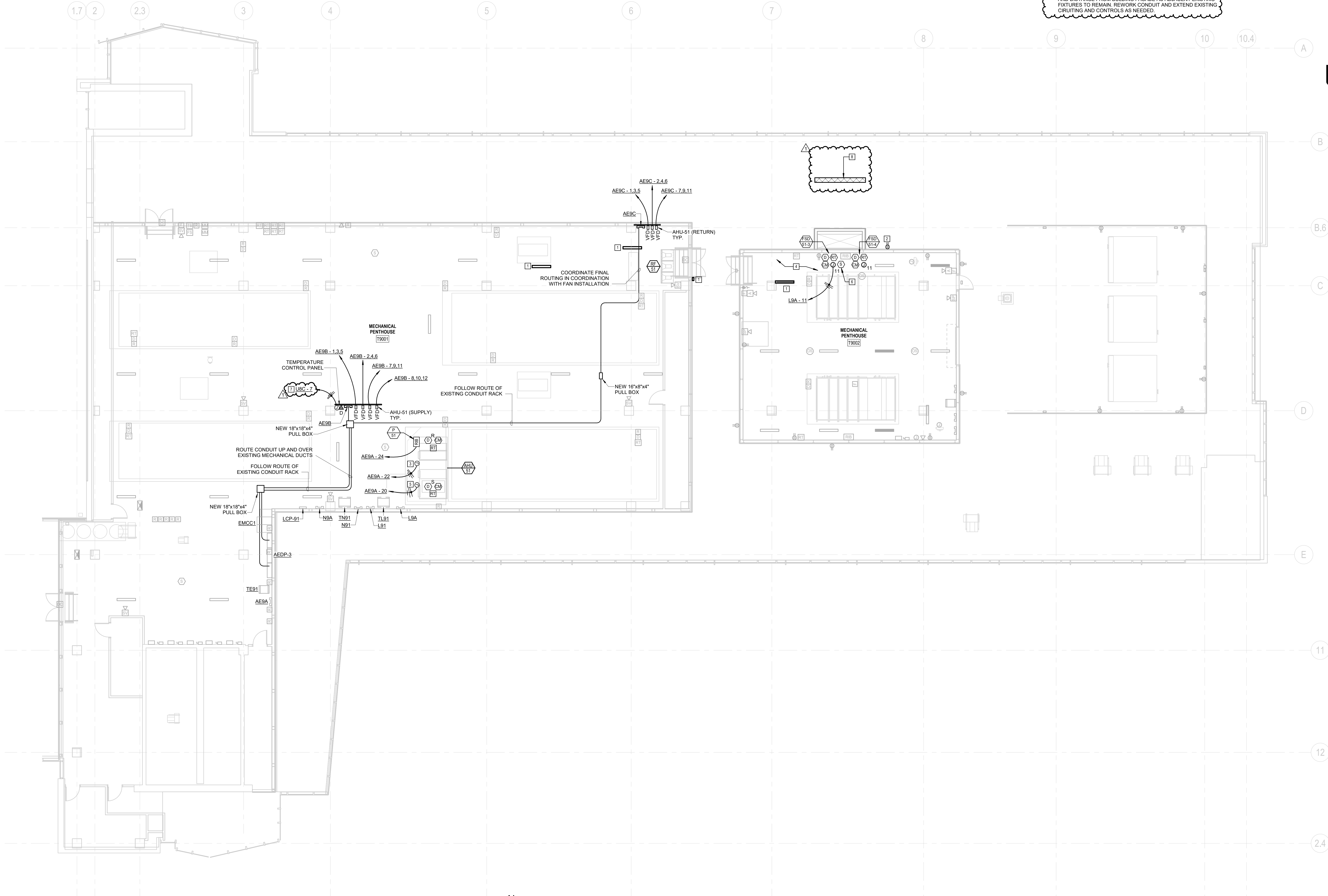
AUSTIN P STRIEKER  
PE-2014032649PENTHOUSE FLOOR PLAN -  
ELECTRICAL - NEW WORK

DATE	09 MAY, 2024
MCCLURE PROJECT NO.	071671.000

E309

## KEYED NOTES:

- 1 EXTEND EXISTING CIRCUIT AND CONTROLS TO NEW LUMINAIRE LOCATION AS REQUIRED. MATCH EXISTING CONDUIT AND CONDUCTORS. LIGHTING CONTROLS SHALL OPERATE AS THEY WERE PRIOR TO CONSTRUCTION.
- 2 REINSTALL DEVICE AND DEVICE COVERPLATE WITH NEW PANEL AND CIRCUIT NUMBER LABEL. EXTEND EXISTING CIRCUIT AS REQUIRED.
- 3 PROVIDE 20A, 120V CIRCUIT FOR UV LIGHTS.
- 4 RELOCATE ALL JUNCTION BOXES LOCATED ABOVE PROPOSED MECHANICAL DUCTWORK TO MAINTAIN ACCESS. SEE MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
- 5 PROVIDE 20A, 120V CIRCUIT FOR AHU LIGHTS.
- 6 RELOCATED SMOKE DETECTOR.
- 7 ROUTE POWER FOR TEMPERATURE CONTROL PANEL TO PANEL 'UBC' LOCATED ON 8TH FLOOR IN ROOM TR PT8209.
- 8 REINSTALL EXISTING ROOF MOUNTED FLOOD LIGHTS AFTER NEW MECHANICAL CHASE IS BUILT. MAINTAIN SAME SPACING AND DISTANCE FROM BUILDING FACADE AS ADJACENT EXISTING FIXTURES TO REMAIN. REWORK CONDUIT AND EXTEND EXISTING CIRCUITING AND CONTROLS AS NEEDED.



## PENTHOUSE FLOOR PLAN - ELECTRICAL - NEW WORK

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

0" 2' 4' 8' 16'  
1/8" = 1'