

COURTROOM RENOVATION PROJECT FOR:

CLARK COUNTY COURTHOUSE

BRANCH 2 - PHASE 1

517 COURT STREET, NEILLSVILLE WI 54456

PROJECT DIRECTORY:

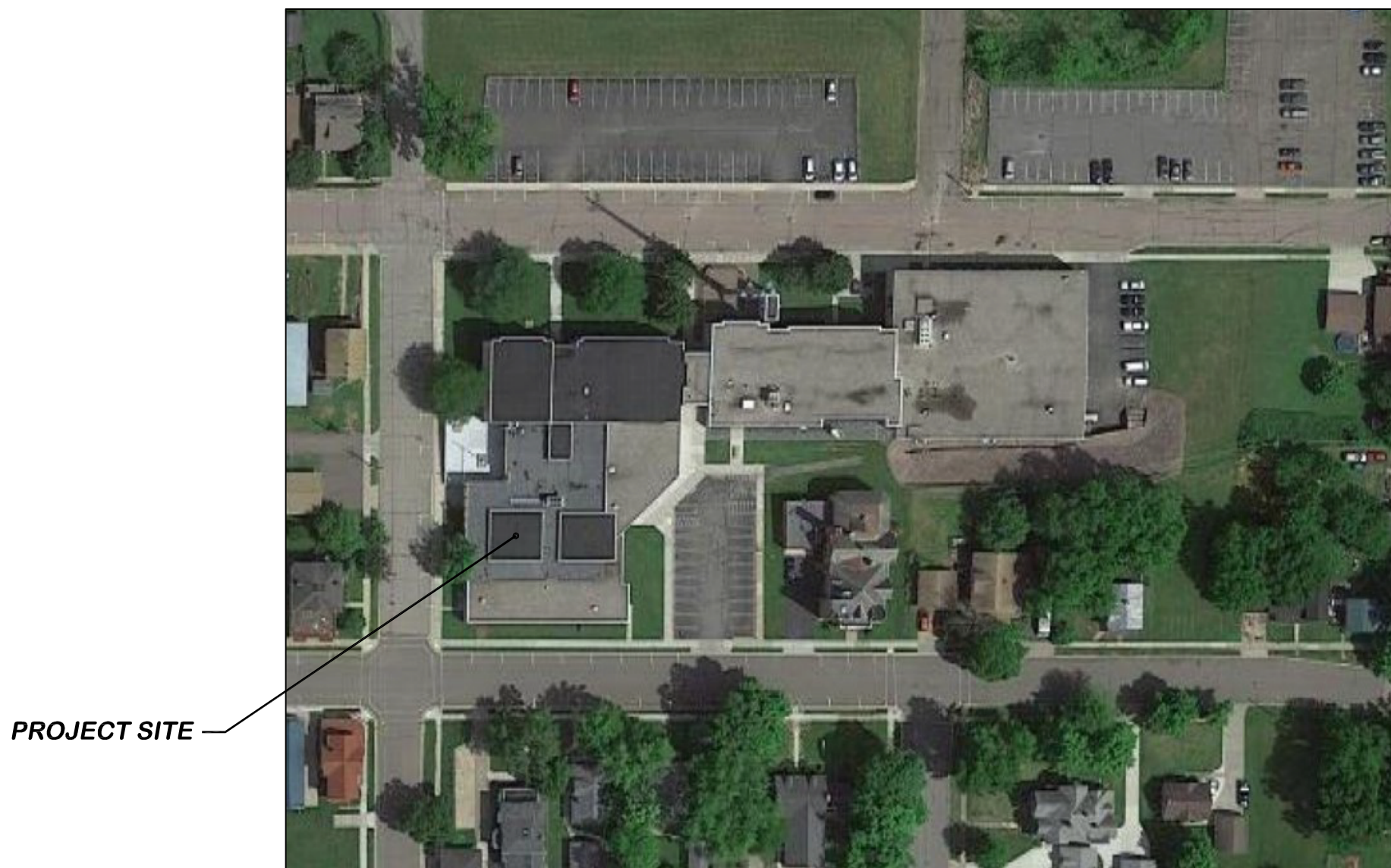
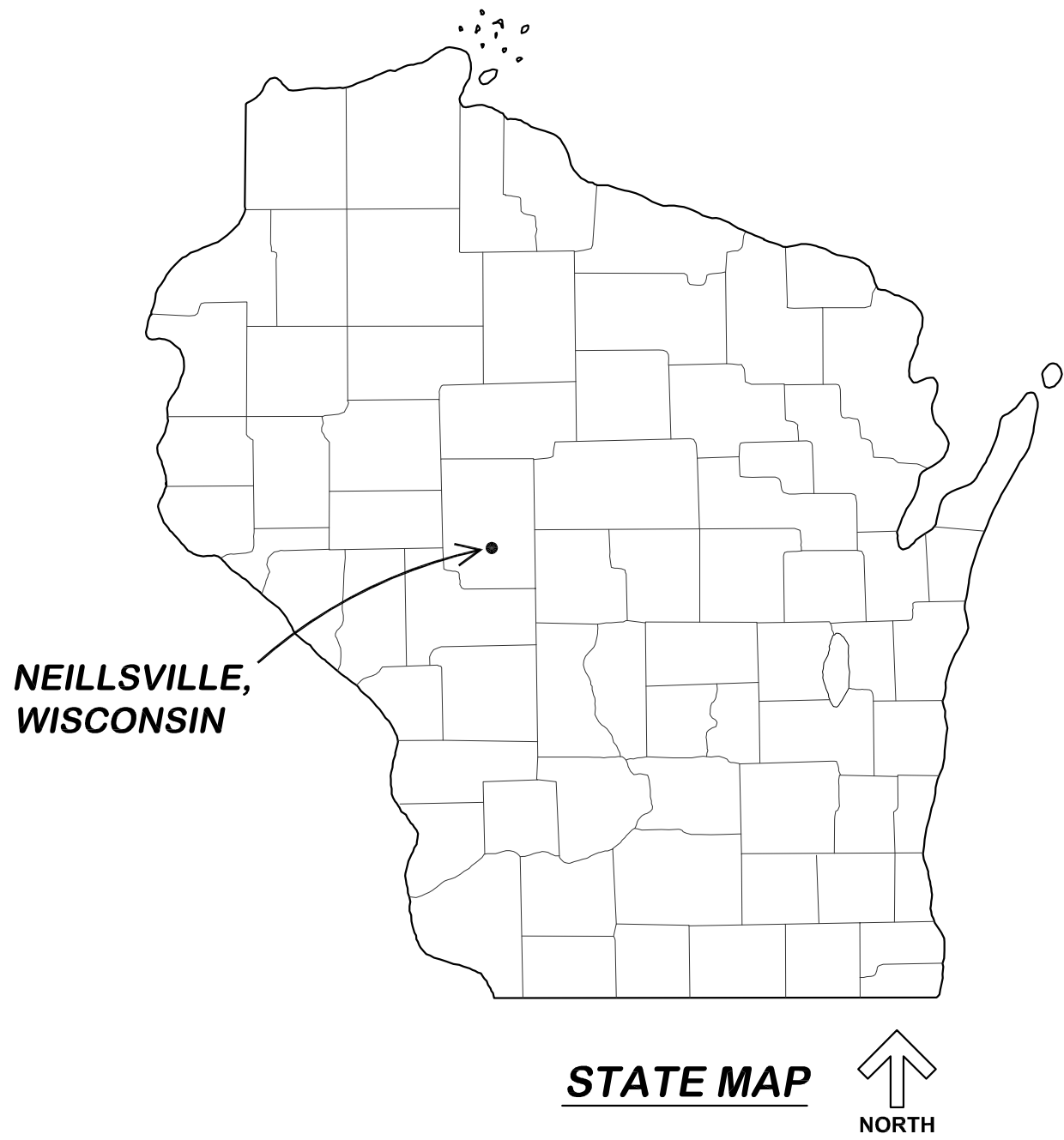
OWNER'S REPRESENTATIVE:
PHONE: 715-743-5521
DAN GILES, MAINTENANCE ENGINEER
Daniel.Giles@co.clark.wi.us

MECHANICAL DESIGNER:
APEX ENGINEERING
110A EAST GRAND AVENUE
EAU CLAIRE, WISCONSIN 54701
PHONE: 715-835-7736
LANDON J. JULSON, DES
landonj@apexengineering.biz

ELECTRICAL ENGINEER:
APEX ENGINEERING
110A EAST GRAND AVENUE
EAU CLAIRE, WISCONSIN 54701
PHONE: 715-835-7736
CARL KLINKENBERG, P.E.
carlk@apexengineering.biz

PLUMBING DESIGNER:
APEX ENGINEERING
110A EAST GRAND AVENUE
EAU CLAIRE, WISCONSIN 54701
PHONE: 715-835-7736
MIKE BELDEN, DES
mikeb@apexengineering.biz

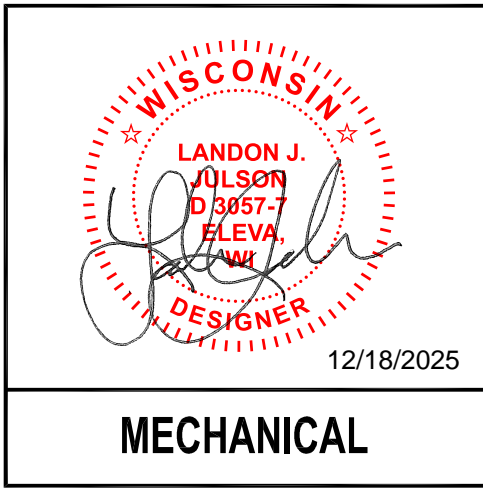
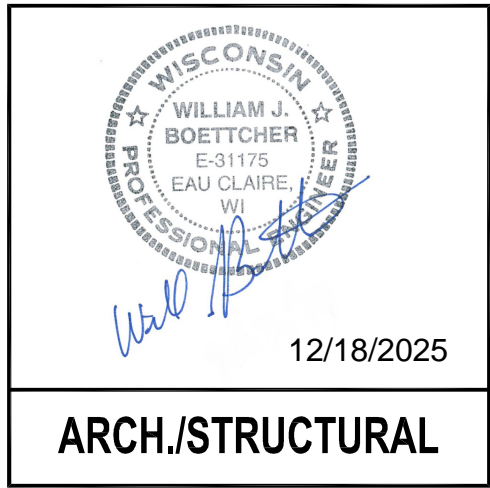
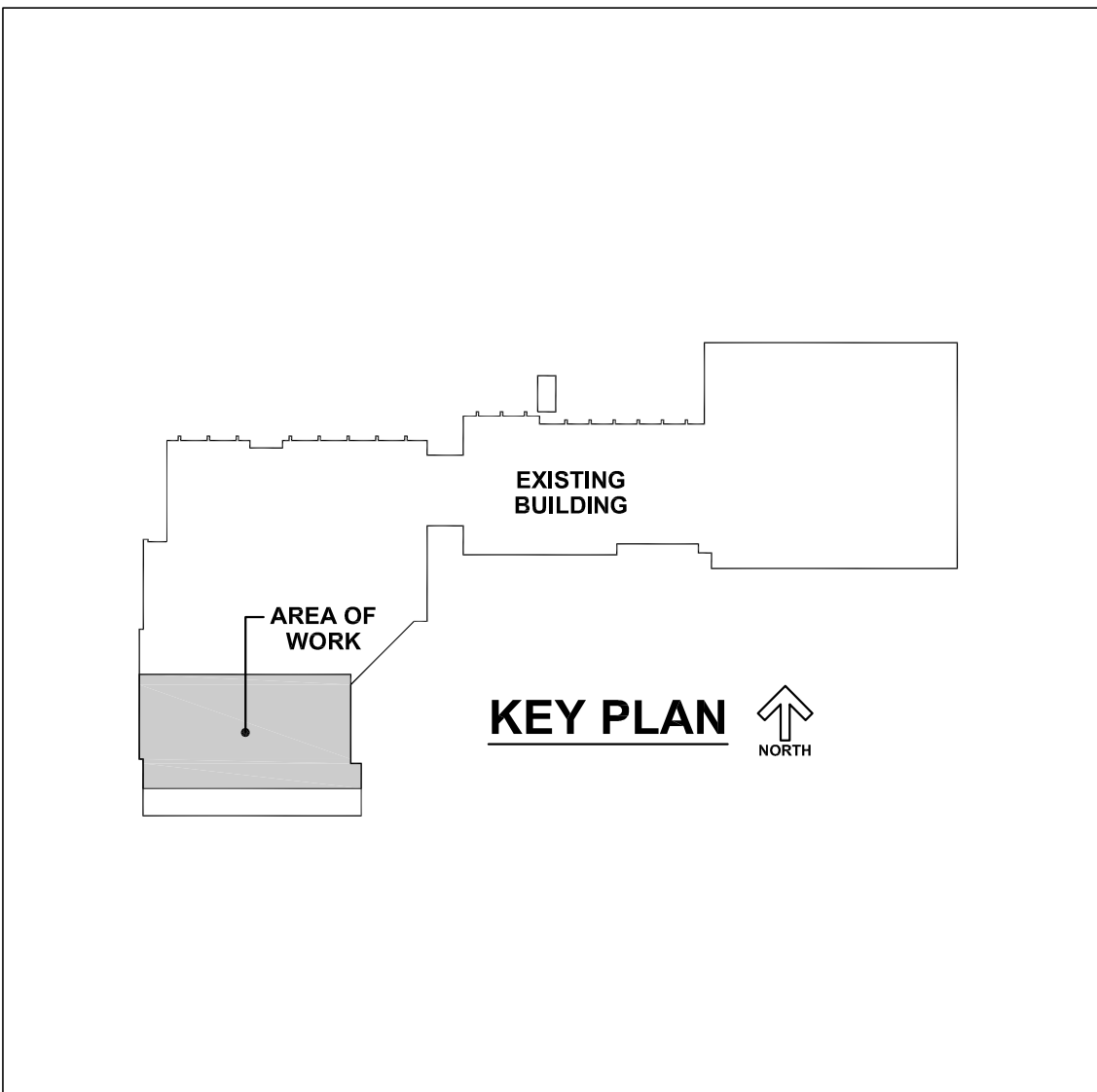
ARCHITECT/STRUCTURAL ENGINEER:
LIEN & PETERSON ARCHITECTS, INC.
4675 ROYAL DRIVE
EAU CLAIRE, WISCONSIN 54701
PHONE: 715-835-7500
BILL BOETTCHER, P.E.
admin@2dtp.com



LOCATION MAP

NORTH

SHEET INDEX	
SHEET #	SHEET NAME
T100	TITLE SHEET
A001	SITE PLAN, STAGING
A101	CODE ANALYSIS, EGRESS PLAN
A102	BUILDING CODE COMPONENTS
A301	ARCHITECTURAL DEMOLITION PLAN, RENOVATION PLAN
A302	ARCHITECTURAL DEMOLITION CEILING, RENOVATION CEILING
A601	ARCHITECTURAL INTERIOR ELEVATIONS
A701	ARCHITECTURAL FINISHES
S101	STRUCTURAL DESIGN NOTES
S301	STRUCTURAL FRAMING PLAN
M100	MECHANICAL GENERAL INFO. SHEET
M101	MECHANICAL FIFTH & SIXTH FLOOR PLAN – DEMOLITION
M102	MECHANICAL THIRD & FOURTH FLOOR PLAN – DEMOLITION & REMODEL
M201	MECHANICAL FIFTH & SIXTH FLOOR PLAN – REMODEL
M301	MECHANICAL SCHEDULES AND DETAILS
E101	ELECTRICAL FIFTH & SIXTH FLOOR PLAN – DEMOLITION
E102	ELECTRICAL THIRD & FOURTH FLOOR PLAN – DEMOLITION
E201	ELECTRICAL FIFTH & SIXTH FLOOR PLAN – REMODEL LIGHTING
E202	ELECTRICAL FIFTH & SIXTH FLOOR PLAN – REMODEL POWER
E203	ELECTRICAL THIRD & FOURTH FLOOR PLAN – REMODEL
E301	ELECTRICAL SCHEDULES
P100	PLUMBING GENERAL INFORMATION SHEET
P101	PLUMBING THIRD, FOURTH, FIFTH & SIXTH FLOOR PLANS – DEMOLITION
P201	PLUMBING THIRD, FOURTH, FIFTH & SIXTH FLOOR PLANS – REMODEL
P301	PLUMBING SCHEMATICS



PROJECT STAMPS

APEX

Engineering

Eau Claire, Wisconsin
Telephone: 715-835-7736
Web: apexengineering.biz

ARCHITECTS

L & P

ENGINEERS

Lien & Peterson Architects
Eau Claire, Wisconsin
715-835-7500
lienandpetersonarchitects.com

COURTROOM RENOVATION PROJECT FOR

CLARK COUNTY COURTHOUSE

BRANCH 2 - PHASE 1

517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:

TITLE SHEET

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
BIDDING
DOCUMENTS

PROJECT NO:
25001

DRAWN BY:
LJJ

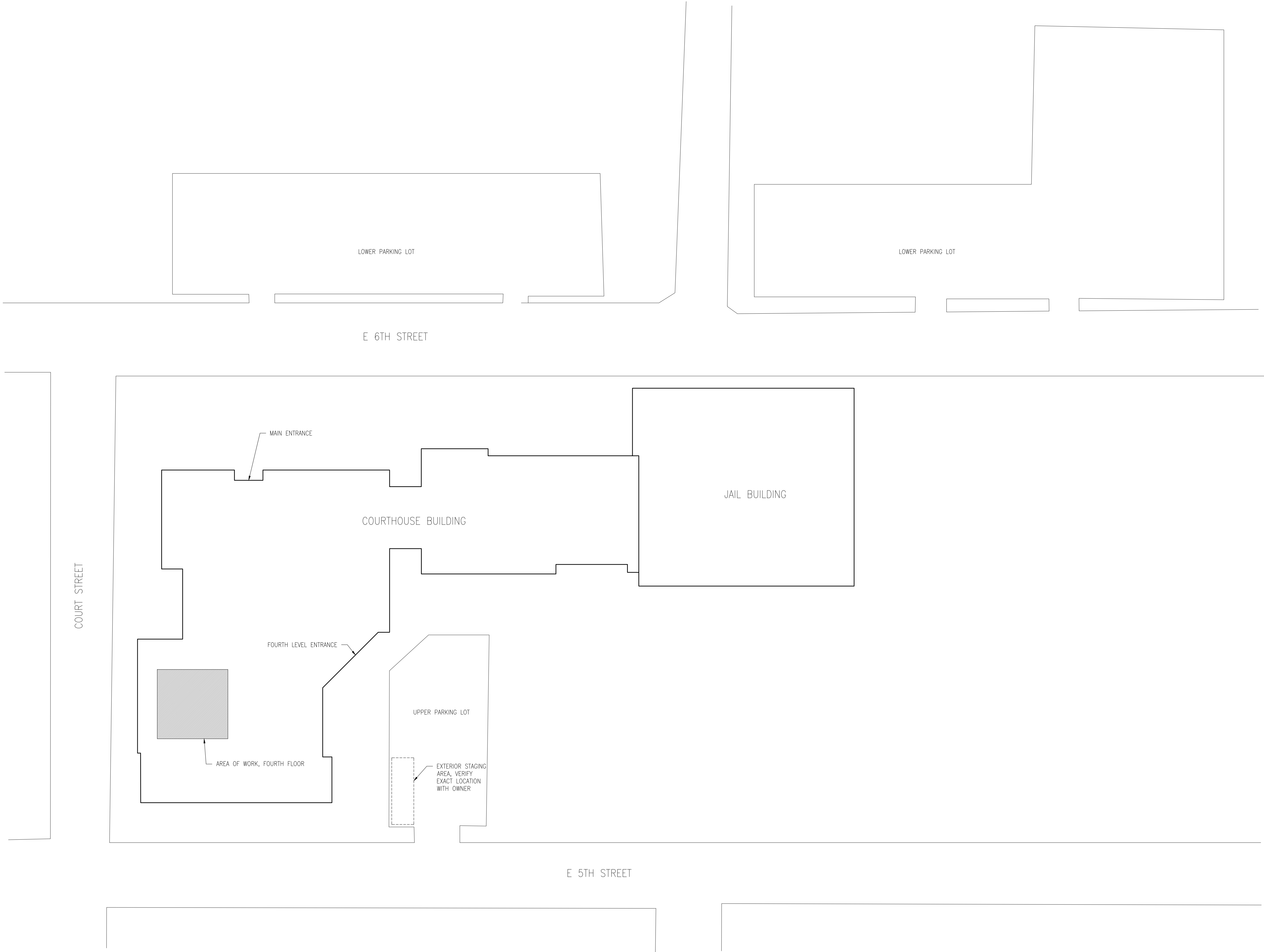
DESIGNED BY:
LJJ

DATE:
12/18/2025

REV.:	DATE:	REMARK:

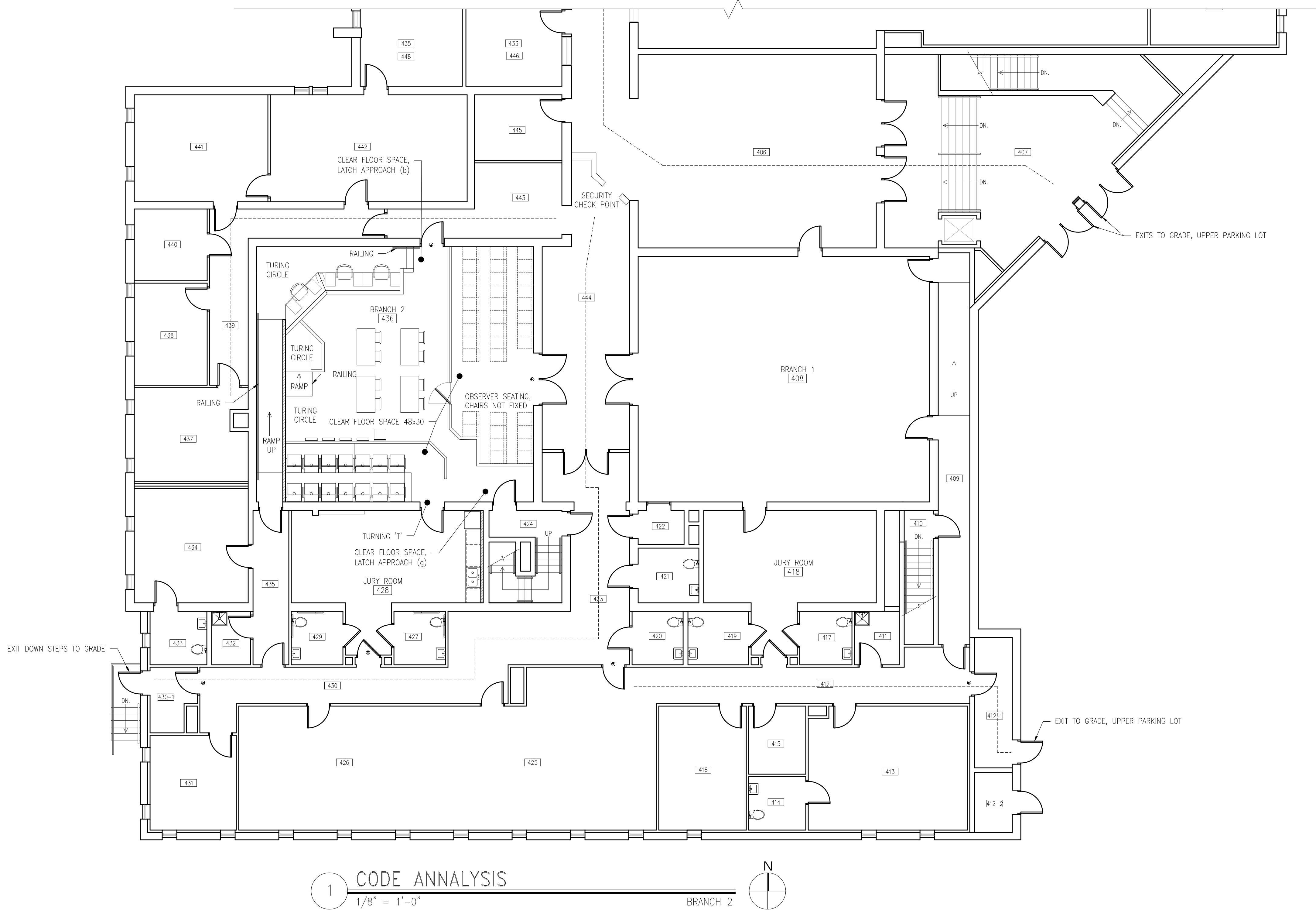
SHEET:

T100



1 SITE PLAN
1" = 30'-0"





CODE ANALYSIS		
BUILDING CODE	IEBC 2021	
ACCESSIBILITY CODE	ICC/ANSI A117.1-2017	
CONSTRUCTION TYPE	IIB	
OCCUPANCY GROUP	A-3	
OCCUPANT LOAD	UNCHANGED	
AREA INCREASE	NONE	
EXISTING BLDG HT & SF	5 STORIES	EXISTING
FIRE SUPPRESSION	NONE	
MAX. TRAVEL DISTANCE	200'	
EXITS (REQ'D/PROVIDED)	NO CHANGE	
WORK AREA	1874 S.F.	
TOILET ROOM (REQ'D/PROVIDED)	NO CHANGE	

EGRESS PLAN LEGEND

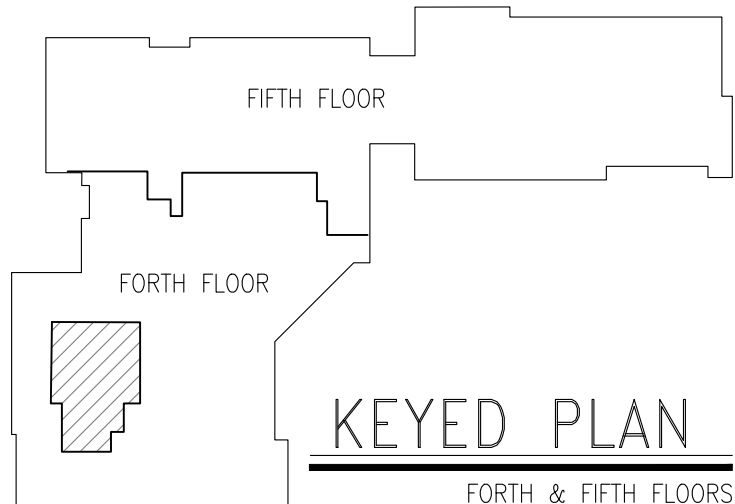
- F.E. Ø FIRE EXTINGUISHER
- FEC FIRE EXTINGUISHER CABINET
- EXIT LIGHT
- EGRESS PATH

PROJECT DESCRIPTION:

THIS PROJECTS WILL UPDATED COURTROOM, BRANCH 1, AND ITS ASSOCIATED JURY ROOM AT THE CLARK COUNTY COURTHOUSE. THE PROJECT WILL UPDATED FINISHES AND IMPROVE ACCESSIBILITY. THE EXISTING PLATFORMS FOR THE JUDGES BENCH AND JURY BOX WILL BE REMOVED AND NEW PLATFORMS BUILT. A NEW RAMP TO THE JUDGES BENCH WILL ALLOW THE JUDGE, CLERK, AND COURT REPORTER EASIER ACCESS TO THEIR WORK STATIONS. THE NEW WITNESS STAND WILL ALSO HAVE A RAMP FOR EASE OF ACCESS.

THE JURY ROOM WILL GET NEW FLOORING, CEILING, AND PAINT. A COUNTER WITH BASE CABINETS AND SINK WILL BE INSTALLED. A VERTICAL GRAB BAR WILL ALSO BE INSTALLED IN BOTH JURY TOILET ROOMS.

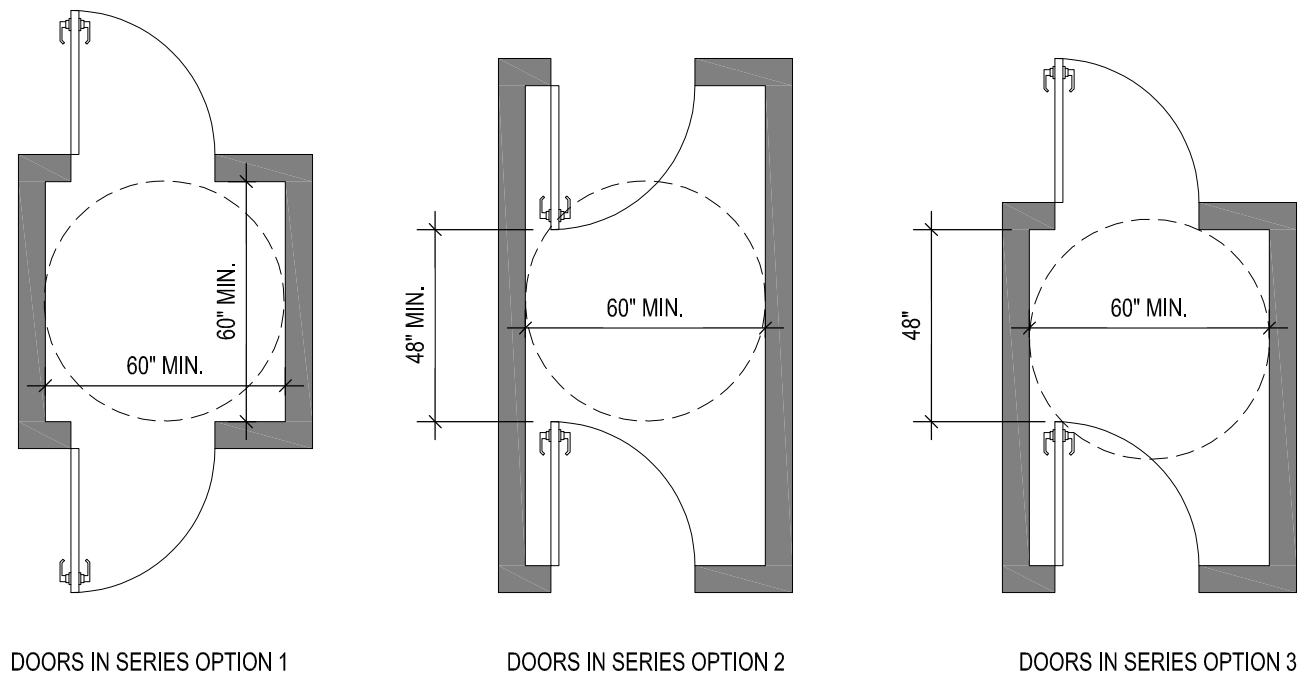
THERE WILL BE NOT CHANGE TO THE BUILDINGS OCCUPANCY LOAD OR EXITING.



ALL INFORMATION
ON THIS PAGE IN
ACCORDANCE WITH
ICC A117.1-2017

DOORS IN SERIES

- ISTANCE BETWEEN TWO HINGED OR PIVOTED GATES OR DOORS IN SERIES SHALL BE 48 INCHES MINIMUM PLUS THE WIDTH OF ANY DOOR OR GATE SWINGING INTO THE SPACE. THE SPACE BETWEEN THE DOORS SHALL PROVIDE A TURNING SPACE.



DOORS IN SERIES OPTION 1

DOORS IN SERIES OPTION 2

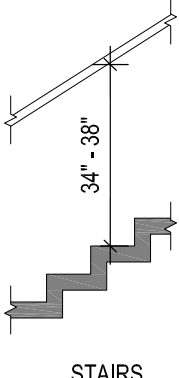
DOORS IN SERIES OPTION 3

10 EXISTING BUILDING DOORS IN SERIES

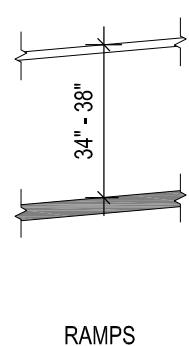
1/4" = 1'-0"

HANDRAILS

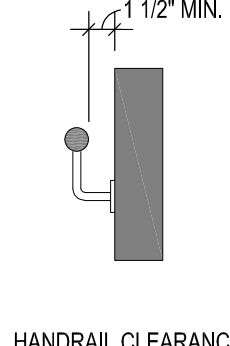
- ANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS. HANDRAILS ARE NOT REQUIRED IN ASSEMBLY SEATING AREAS ON BOTH SIDES ALONG AISLE STAIRS, PROVIDED WITH A HANDRAIL EITHER SIDE OR WITHIN THE AISLE NOR ON THE SIDES OF RAMPED AISLES SERVING SEATS IN ASSEMBLY SEATING AREAS.
- OP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES MINIMUM AND 38 INCHES MAXIMUM VERTICALLY ABOVE STAIR NOSING, RAMP SURFACES AND WALKING SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS, RAMP SURFACES AND WALKING SURFACES.
- LEARANCE BETWEEN HANDRAIL, GRIPPING SURFACE AND ADJACENT SURFACES SHALL BE 1 1/2 INCHES MINIMUM.
- RIPPING SURFACES SHALL BE CONTINUOUS, WITHOUT INTERRUPTION BY NEWEL POSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.



STAIRS



RAMPS



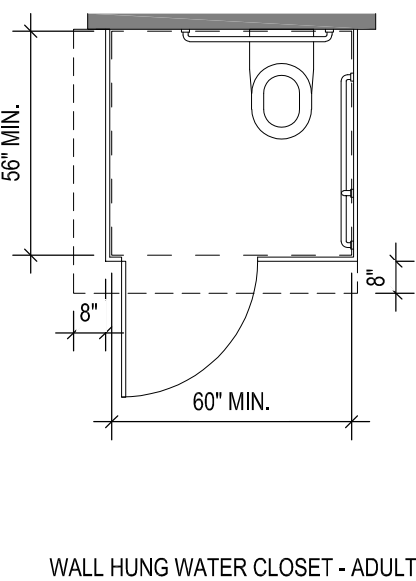
HANDRAIL CLEARANCE

9 EXISTING BUILDING HANDRAILS

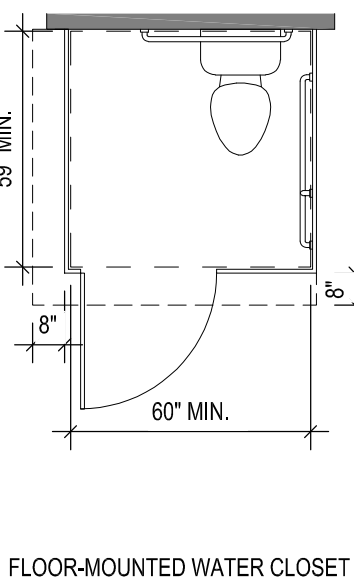
1/4" = 1'-0"

WHEELCHAIR ACCESSIBLE COMPARTMENTS

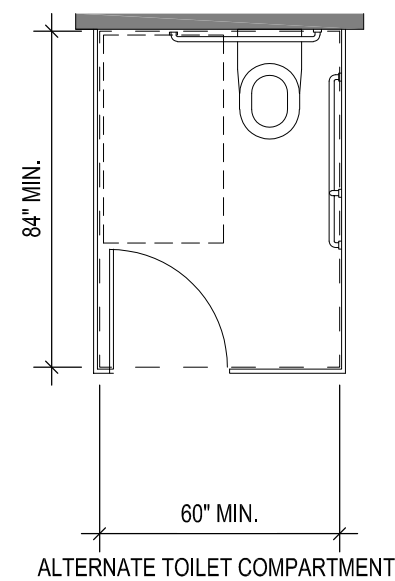
- HE MINIMUM AREA OF A WHEELCHAIR ACCESSIBLE COMPARTMENT SHALL BE 60 INCHES MINIMUM IN WIDTH MEASURED PERPENDICULAR TO THE SIDE WALL, AND 56 INCHES MINIMUM IN DEPTH FOR WALL HUNG WATER CLOSETS, AND 59 INCHES MINIMUM IN DEPTH FOR FLOOR MOUNTED WATER CLOSETS MEASURED PERPENDICULAR TO THE REAR WALL.
- AN ALTERNATE WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT, THE DOOR SHALL BE PERMITTED TO SWING INTO THE STALL WHERE A CLEAR FLOOR SPACE IS PROVIDED. THE COMPARTMENT SHALL BE 60 INCHES MINIMUM IN WIDTH MEASURED PERPENDICULAR TO THE SIDE WALL, AND 84 INCHES MINIMUM IN DEPTH, MEASURED PERPENDICULAR TO THE REAR WALL.
- OILET COMPARTMENT DOOR, INCLUDING DOOR HARDWARE, SHALL COMPLY WITH THE REQUIRED CLEARANCES EXCEPT IF THE APPROACH IS TO THE LATCH SIDE OF THE COMPARTMENT DOOR CLEARANCE BETWEEN THE DOOR SIDE OF THE STALL AND ANY OBSTRUCTION SHALL BE 42 INCHES MINIMUM. THE DOOR SHALL BE SELF-CLOSING. TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE REQUIRED MINIMUM AREA OF THE COMPARTMENT.
- HE FRONT PARTITION AND AT LEAST ONE SIDE PARTITION OF A WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT SHALL PROVIDE A TOE CLEARANCE 12" MINIMUM ABOVE THE FLOOR AND EXTENDING 6 INCHES BEYOND THE COMPARTMENT SIDE FACE OF THE PARTITION, EXCLUSIVE OF PARTITION SUPPORT MEMBERS



WALL HUNG WATER CLOSET - ADULT



FLOOR-MOUNTED WATER CLOSET



ALTERNATE TOILET COMPARTMENT

8 EXISTING BUILDING TOILET COMPARTMENTS

1/4" = 1'-0"

KNEE AND TOE CLEARANCES

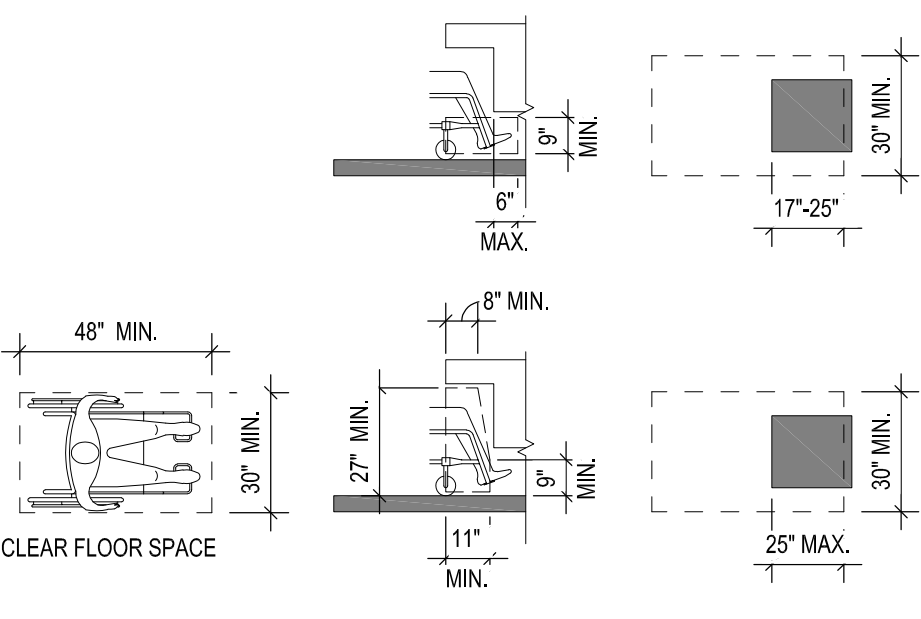
- TOE CLEARANCE:
 - SPACE BETWEEN AN ELEMENT BETWEEN THE FLOOR AND 9 INCHES ABOVE THE FLOOR SHALL BE CONSIDERED TOE CLEARANCE
 - TOE CLEARANCE SHALL BE PERMITTED TO EXTEND 25 INCHES MAXIMUM UNDER AN ELEMENT.
 - WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE COMPLYING WITH CLEAR FLOOR SPACE, THE TOE CLEARANCE SHALL EXTEND 17 INCHES MINIMUM BENEATH THE ELEMENT.
 - SPACE EXTENDING GREATER THAN 6 INCHES BEYOND THE AVAILABLE KNEE CLEARANCE AT 9 INCHES ABOVE THE FLOOR SHALL NOT BE CONSIDERED TOE CLEARANCE.
 - TOE CLEARANCE WIDTH SHALL BE 30 INCHES MINIMUM.

- KNEE CLEARANCE:
 - PACE BETWEEN AN ELEMENT BETWEEN 9 INCHES AND 27 INCHES ABOVE FLOOR SHALL BE CONSIDERED KNEE CLEARANCE.
 - NEE CLEARANCE DEPTH SHALL BE PERMITTED TO EXTEND 25 INCHES MAXIMUM UNDER AN ELEMENT AT 9 INCHES ABOVE THE FLOOR.
 - HERE KNEE CLEARANCE IS REQUIRED BENEATH AN ELEMENT AS PART OF A CLEAR FLOOR SPACE COMPLYING WITH CLEAR FLOOR SPACE, THE KNEE CLEARANCE SHALL BE 11 INCHES MINIMUM IN DEPTH AT 9 INCHES ABOVE THE FLOOR, AND 8 INCHES MINIMUM IN DEPTH AT 27 INCHES ABOVE THE FLOOR.
 - ETWEEN 9 INCHES AND 27 INCHES ABOVE THE FLOOR, THE KNEE CLEARANCES SHALL BE PERMITTED TO BE REDUCED AT A RATE OF 1 INCH IN DEPTH FOR EACH 6 INCHES.
 - KNEE CLEARANCE WIDTH SHALL BE 30 INCHES MINIMUM.

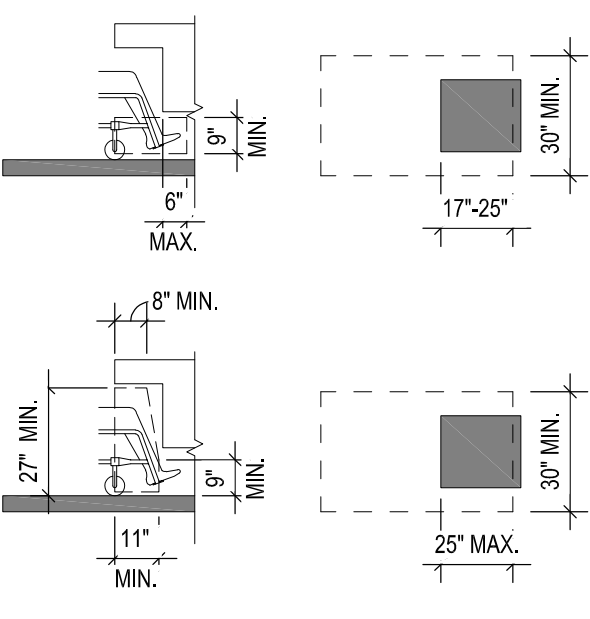
UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE.

7 EXISTING BUILDING KNEE AND TOE CLEARANCE

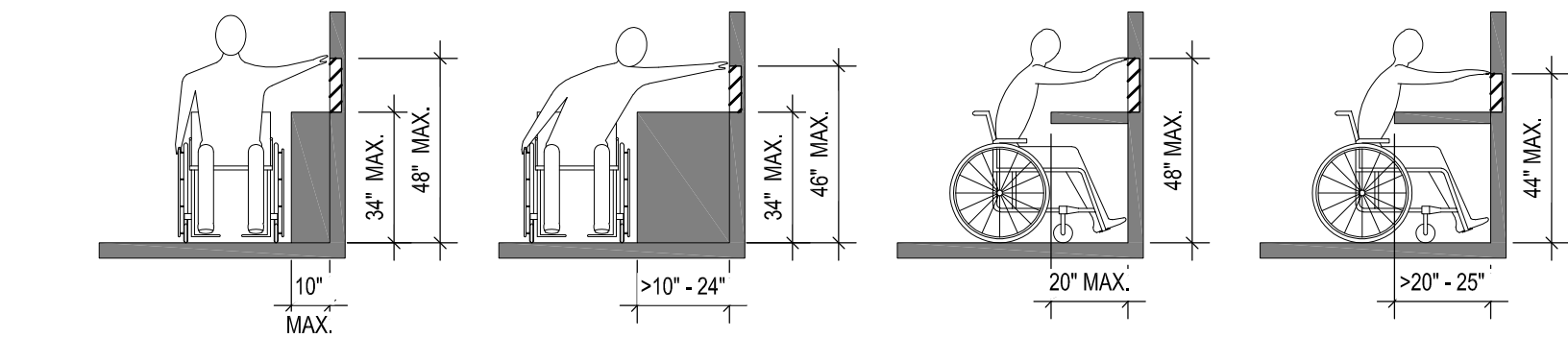
1/4" = 1'-0"



CLEAR FLOOR SPACE

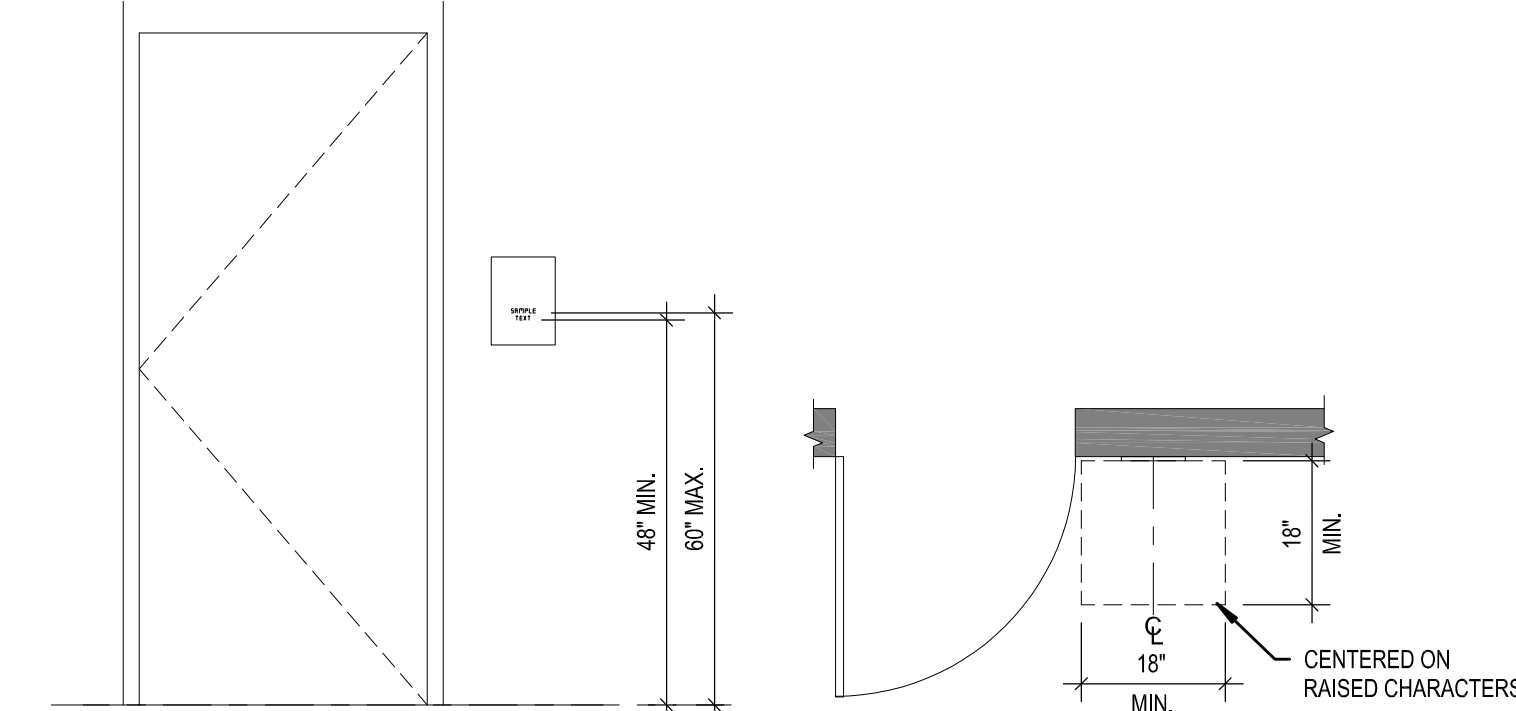


CLEAR FLOOR SPACE



6 EXISTING BUILDING UNOBSTRUCTED REACH RANGES

1/4" = 1'-0"



NOTE: SIGN AND SIGN INSTALLATION MUST COMPLY WITH CHAPTER 7 OF ANSI ICC A117.1-2017. SIGN TO MEET ALL ADA COMPLIANT REQUIREMENTS.

NOTE: *NOT NECESSARILY EXACT SING TYPE SHOWN. VERIFY ALL SIGNAGE WITH ARCHITECT PRIOR TO PURCHASE AND INSTALLATION.

4 EXISTING BUILDING ROOM SIGNAGE

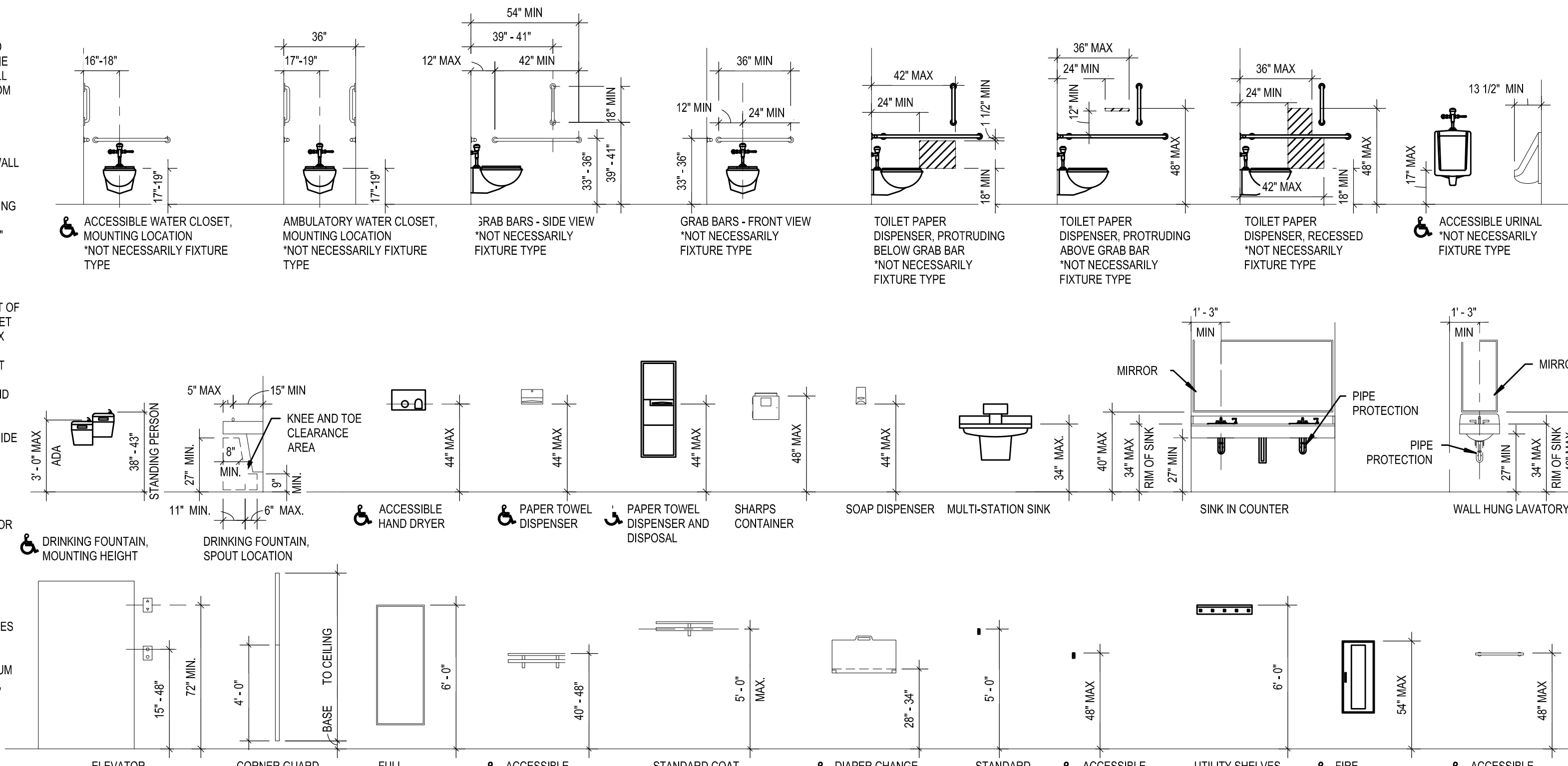
1/2" = 1'-0"

HANDICAP ACCESSIBLE TOILET ROOM NOTES:

- HE ACCESSIBLE WATER CLOSET SHALL BE LOCATED WITH A WALL OR PARTITION TO THE REAR AND TO ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 16 INCHES MINIMUM AND 18 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION.
- ATER CLOSETS LOCATED IN AMBULATORY ACCESSIBLE COMPARTMENTS SHALL HAVE THE CENTERLINE OF THE WATER CLOSET 17 INCHES MINIMUM AND 19 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION.
- RAB BAR @ REAR WALL 36" LONG, 6" FROM WALL; MOUNT 36" ABOVE FLOOR TO THE TOP OF THE GRIPPING SURFACE
- RAB BARS @ SIDE WALL, *HORIZONTAL-42" LONG, 12" FROM WALL; MOUNT 36" ABOVE FLOOR TO TOP OF GRIPPING SURFACE
- RAB BAR @ SIDE WALL VERTICAL: 16" LONG, 39-41" ABOVE FLOOR FROM BOTTOM OF BAR
- OILET PAPER DISPENSER ABOVE GRAB BAR; OUTLET OF DISPENSER SHALL BE 24-36" FROM REAR WALL. OUTLET SHALL BE 12" MINIMUM ABOVE GRAB BAR AND 18" MINIMUM ABOVE FINISHED FLOOR
- ANDICAPPED TOILET: INSTALL AT LEAST 17" FROM FLOOR TO TOP OF SEAT; FLUSH CONTROL TO OPEN SIDE OF ROOM
- OUNT RIM OF SINK 34" ABOVE FLOOR; PROVIDE CLEARANCE OF 27" TO BOTTOM OF SINK APRON; PROVIDE PIPE INSULATED PROTECTION
- OUNT MIRROR W/BOTTOM EDGE OF REFLECTING SURFACE NO HIGHER THAN 40" ABOVE FINISHED FLOOR

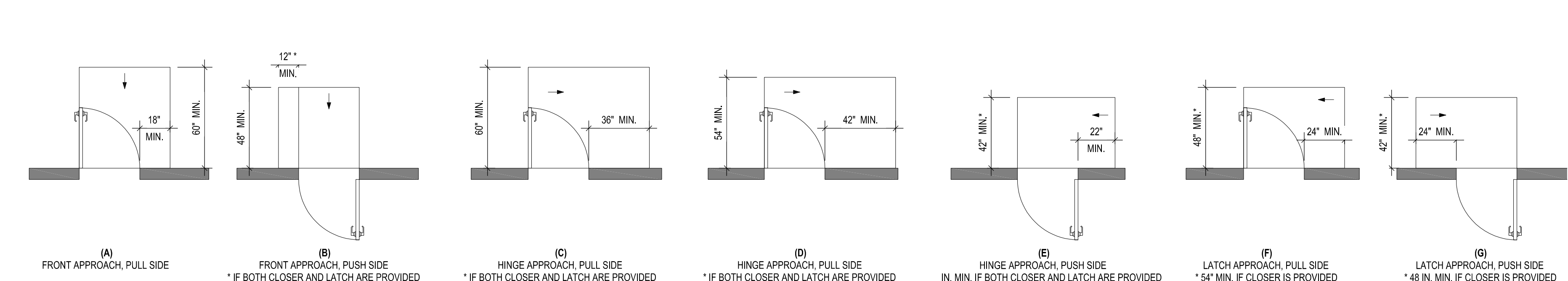
HANDICAP ACCESSIBLE DRINKING FOUNTAIN NOTES:

- OUT OUTLETS OF WHEELCHAIR ACCESSIBLE DRINKING FOUNTAINS SHALL BE 36 INCHES MAXIMUM ABOVE THE FLOOR. SPOUT OUTLETS FOR STANDING PERSONS SHALL BE 38 INCHES MINIMUM AND 43 INCHES MAXIMUM ABOVE THE FLOOR.
- HE SPOUT SHALL BE LOCATED 15 INCHES MINIMUM FROM THE VERTICAL SUPPORT AND 5 INCHES MAXIMUM FROM THE FRONT EDGE OF THE DRINKING FOUNTAIN, INCLUDING BUMPERS. WHERE ONLY A PARALLEL APPROACH IS PROVIDED, THE SPOUT SHALL BE LOCATED 3-1/2 INCHES MAXIMUM FROM THE FRONT EDGE OF THE DRINKING FOUNTAIN, INCLUDING BUMPERS.



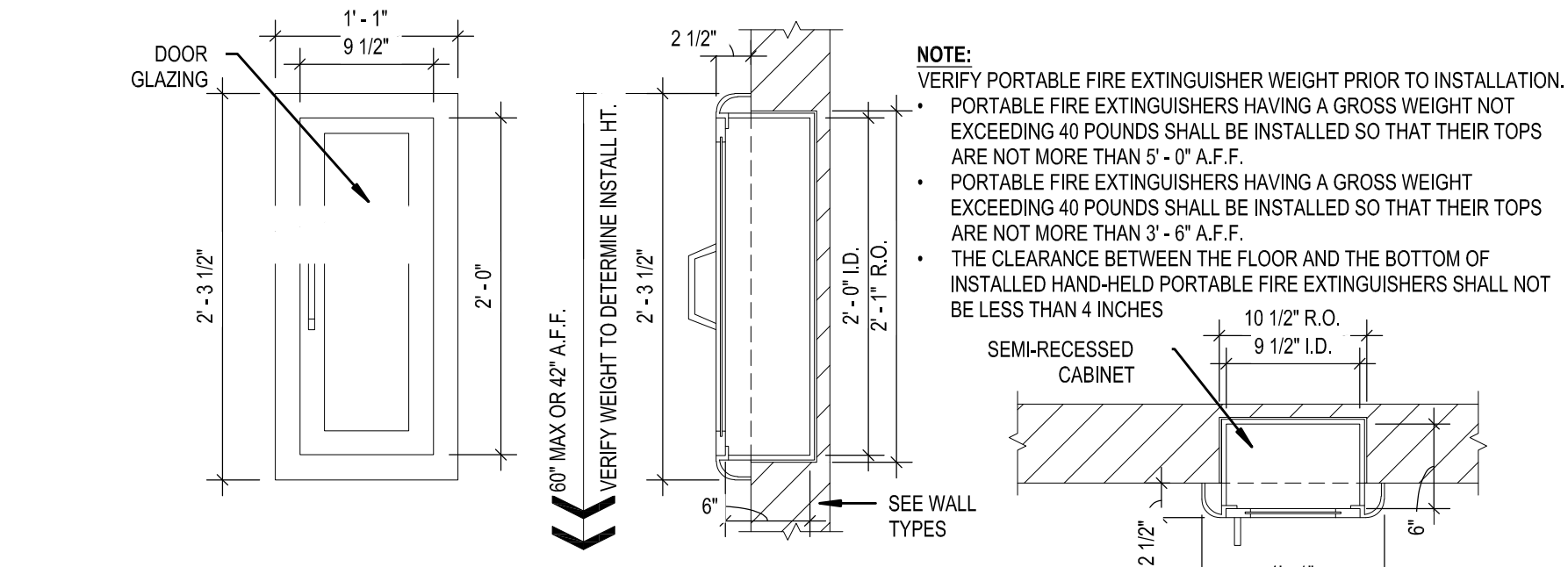
2 EXISTING BUILDING STANDARD MOUNTING HEIGHTS

1/4" = 1'-0"



1 EXISTING BUILDING MANUAL SWING DOOR MANEUVERING CLEARANCES

1/4" = 1'-0"

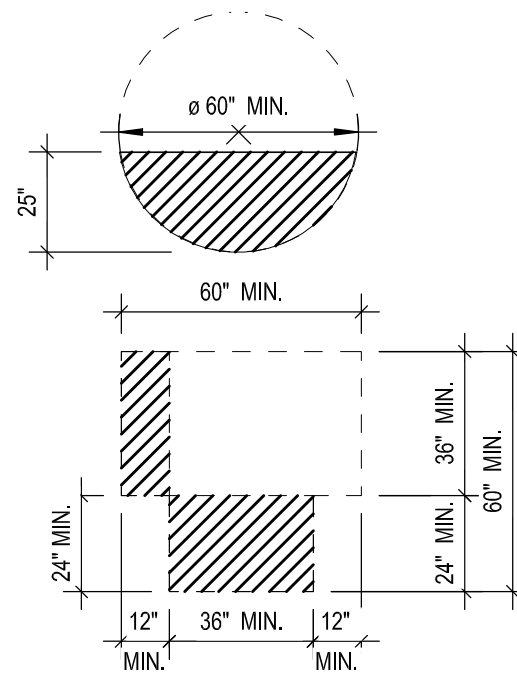


5 EXISTING BUILDING FIRE EXTINGUISHERS

1" = 1'-0"

CIRCULAR SPACE:

- URNING CIRCLES SHALL BE A CIRCULAR SPACE WITH A 60 INCH MINIMUM DIAMETER. A 25" OVERLAP IS ALLOWED FOR KNEE AND TOE CLEARANCE UNDER AN OBSTRUCTION.



T-SHAPED SPACE:

- HE TURNING SPACE SHALL BE A T-SHAPED SPACE WITHIN A 60 INCH MINIMUM SQUARE, WITH ARMS AND BASE 36 INCHES MINIMUM IN WIDTH. EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 24 INCHES MINIMUM. THE TURNING SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE OVERLAP AT ONE ARM AND THE BASE.

3 EXISTING BUILDING TURNING SPACES

1/4" = 1'-0"

TITLE:

BUILDING CODE COMPONENTS

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE: BIDDING DOCUMENTS

PROJECT NO:
25001

DRAWN BY:
AHW

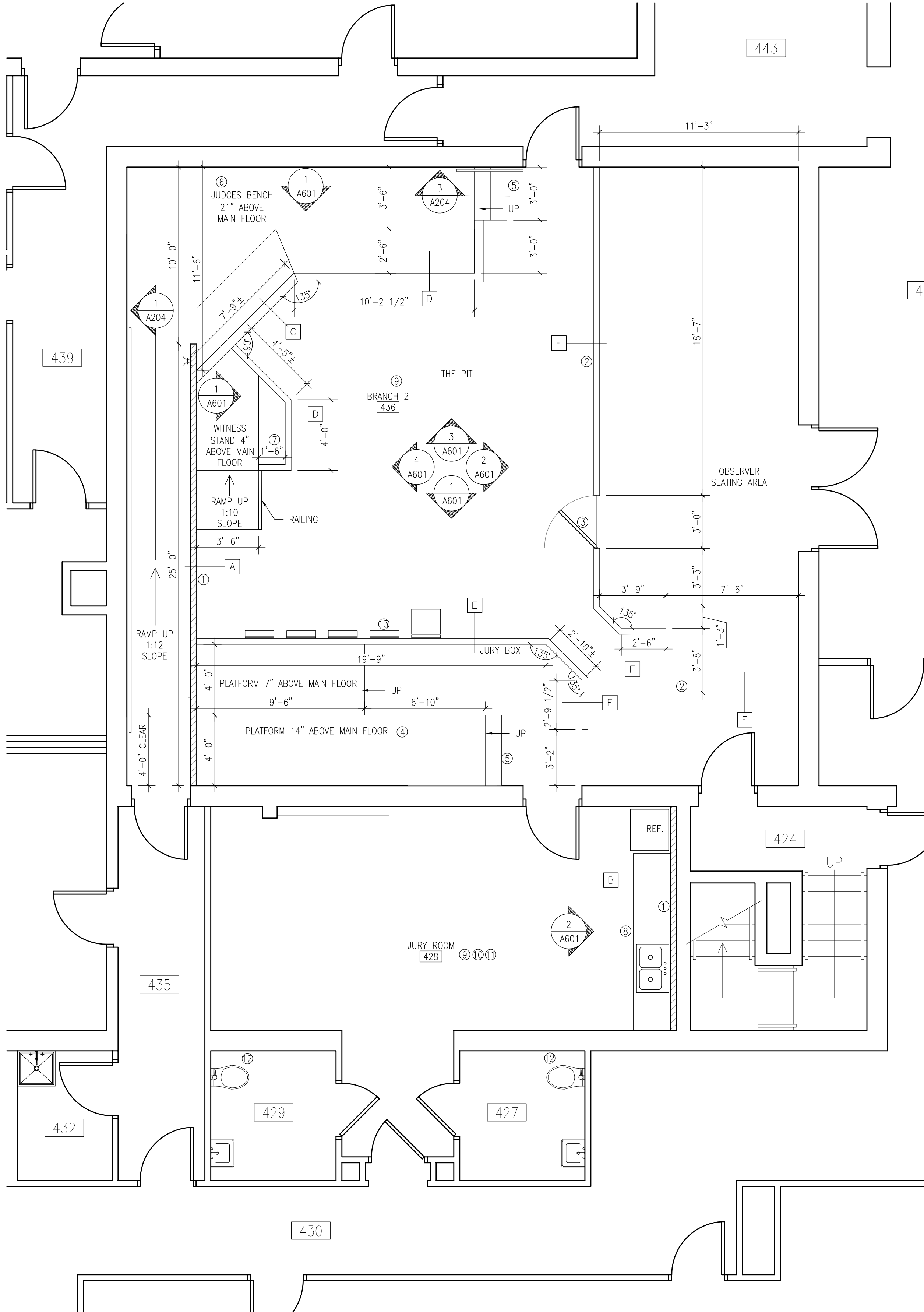
DESIGNED BY:

DATE:
12/18/2025

REV.: DATE: REMARK:

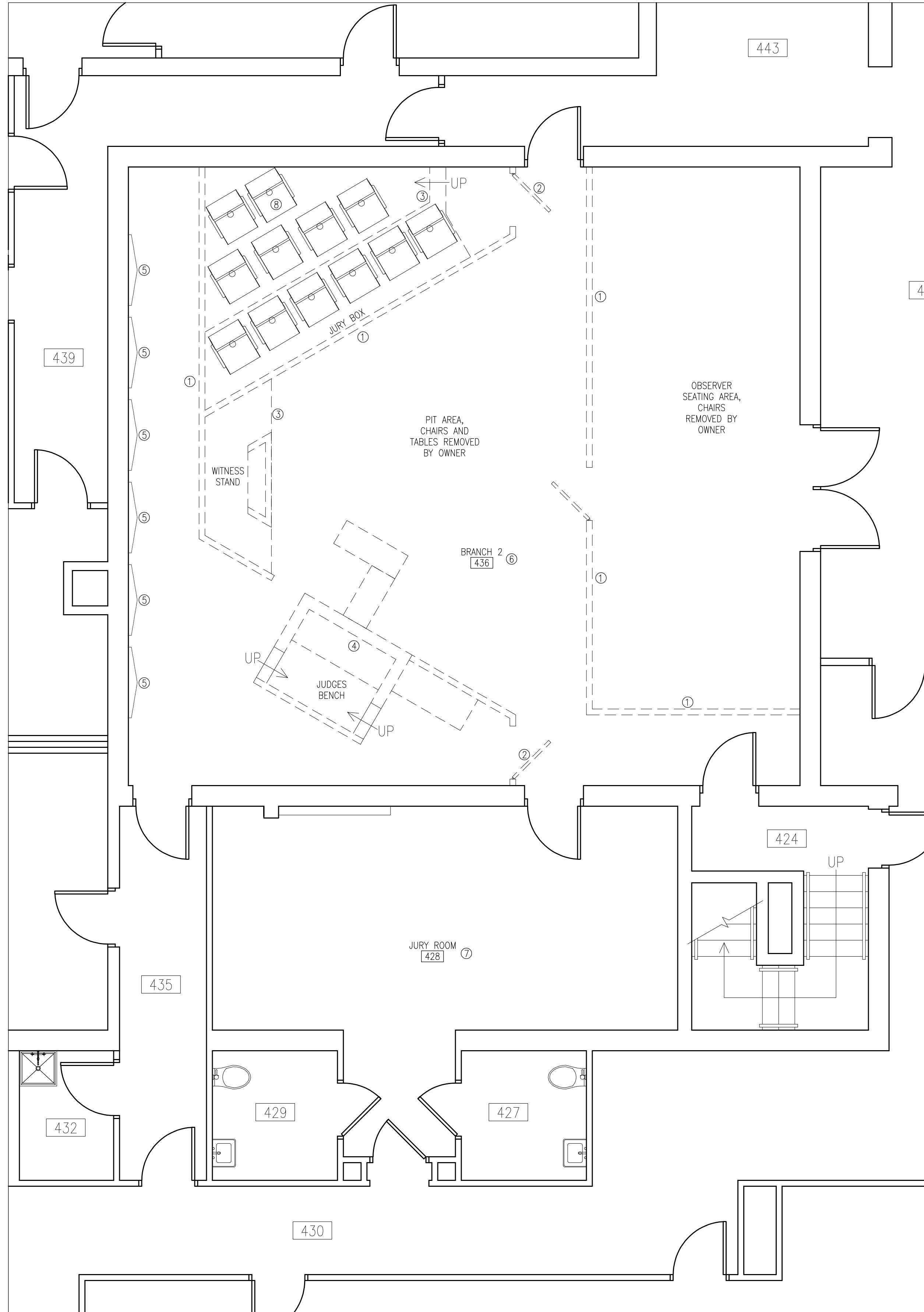
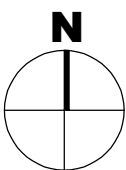
SHEET:

A102



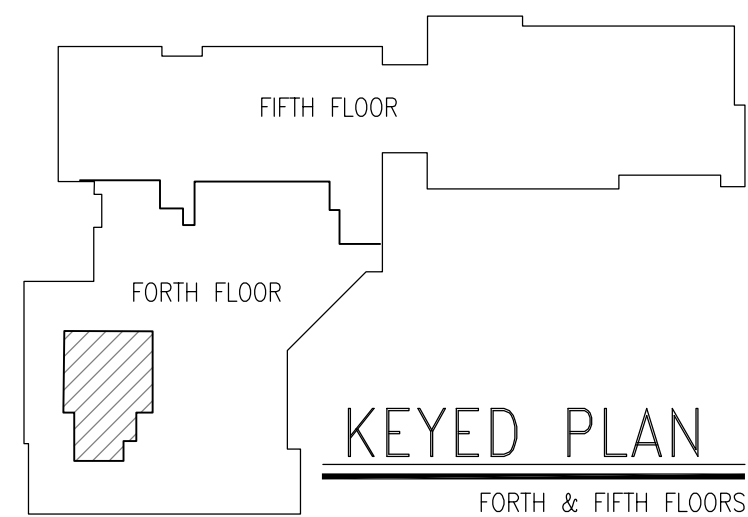
2 FLOOR PLAN - PROPOSED
1/4" = 1'-0"

BRANCH 2



1 FLOOR PLAN - DEMOLITION
1/4" = 1'-0"

BRANCH 2



FLOOR PLAN LEGEND

	WALL TYPE
	ROOM NAME
	ROOM NUMBER
	EXTERIOR ELEVATION DETAIL NUMBER
	EXTERIOR ELEVATION SHEET NUMBER
	INTERIOR ELEVATION DETAIL NUMBER
	INTERIOR ELEVATION SHEET NUMBER
	SECTION DETAIL NUMBER
	SECTION SHEET NUMBER
	DOOR TAG
	WINDOW TAG

KEYED FLOOR PLAN DEMOLITION NOTES:

1. REMOVE HALF WALLS.
2. REMOVE HALF HIGH SWING DOOR.
3. REMOVE CARPET AND RAISED FLOOR/PLATFORM.
4. REMOVE JUDGES BUILT-IN DESK AND PLATFORM.
5. REMOVE DECORATIVE WOOD PANELS. REPAIR TO PATCH WALL OPENINGS FROM MECHANICAL DUCTWORK.
6. REMOVE CARPET FLOORING FROM ENTIRE COURTROOM.
7. REMOVE LAMINATE TILE FLOORING AND VINYL BASE IN JURY ROOM. FLOORING AND WALL BASE IN TOILET ROOMS TO REMAIN.

- REMOVE AND SALVAGE FOR RE-INSTALLING
8. REMOVE JURY SEATING, STORE AND PREP TO INSTALL IN NEW JURY BOX.

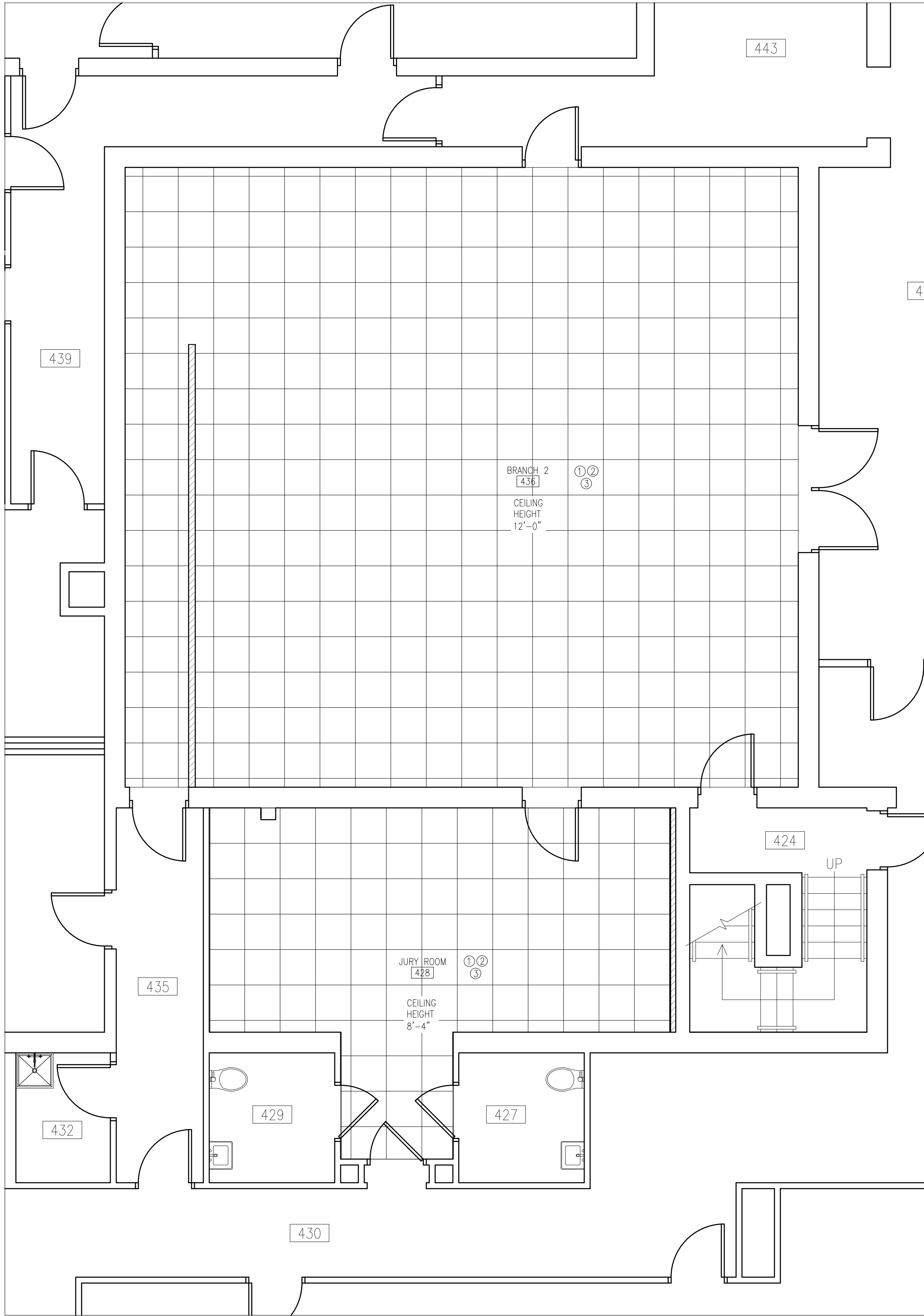
KEYED FLOOR PLAN RENOVATION NOTES:

1. BUILD NEW FULL HEIGHT WALL.
2. BUILD NEW HALF WALLS, SEE 4/A601 FOR WALL THAT RECEIVED BALLISTIC FIBERGLASS.
3. INSTALL NEW WOOD HALF HIGH SWING DOOR. (STAIN 1)
4. BUILD NEW RAISED FLOOR/PLATFORM, SEE STRUCTURAL SHEETS.
5. NEW STAIR, 7" RISE MAX PER TREAD.
6. BUILD NEW BENCH FOR JUDGE, CLERK, AND REPORTER, SEE DETAILS ON A601 AND FINISHES ON A701. REFER TO 4/A601 FOR WALL THAT RECEIVED BALLISTIC FIBERGLASS.
7. BUILD NEW WITNESS STAND, WITH RAMP AND RAILING.

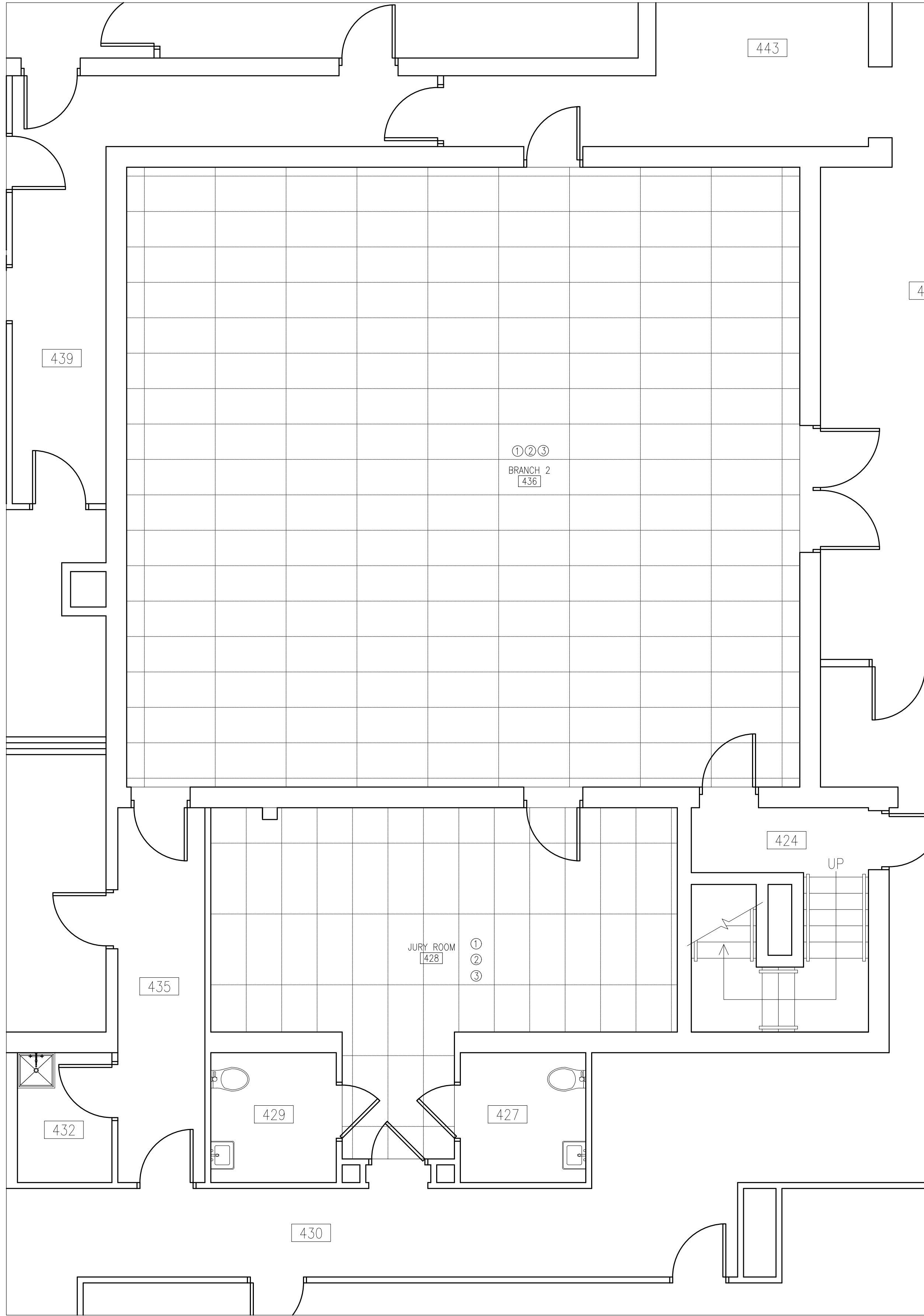
- JURY ROOM
8. NEW KITCHENETTE WITH, LOWER CABINETS, COUNTER TOP, SINK, AND REFRIGERATOR (REFRIGERATOR BY OWNER).
 9. INSTALL NEW CARPET FLOORING.
 10. INSTALL NEW VINYL WALL BASE.
 11. PAINT JURY ROOM WALLS, SEE A701 FOR FINISH SCHEDULE.
 12. INSTALL AN 18" VERTICAL GRAB BAR IN EACH TOILET ROOM.

- OWNER PROVIDED, CONTRACTOR INSTALLED
13. OVERFLOW JURY SEATING, PROVIDED BY OWNER, CONTRACTOR MAY NEED TO INSTALL IF OWNER PURCHASES JUMPSAT 90.
 14. JURY SEATING, INSTALL SALVAGED JURY PEDESTAL SEATS

- OWNER PROVIDED, OWNER INSTALLED
15. OBSERVER SEATING, NOT FIXED
 16. JUDGE, CLERK, REPORTER CHAIRS
 17. PIT TABLES AND CHAIRS



2 CEILING PLAN - PROPOSED
1/4" = 1'-0" BRANCH 2



1 CEILING PLAN - DEMOLITION
1/4" = 1'-0" BRANCH 2

KEYED CEILING DEMOLITION NOTES:

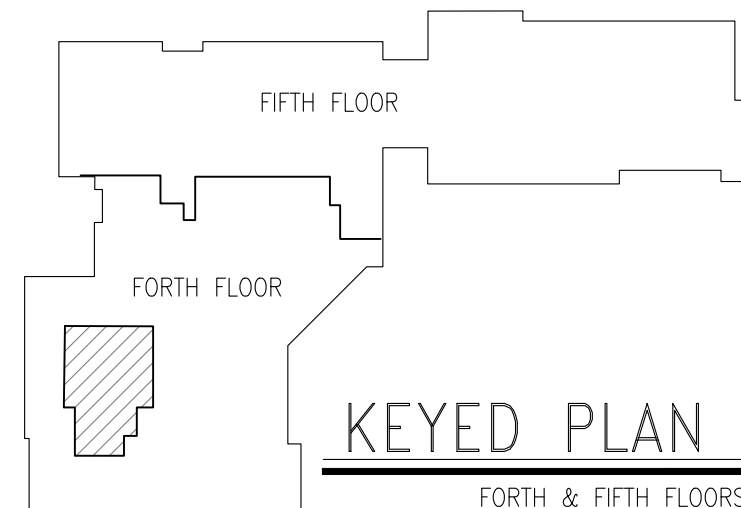
1. REMOVE CEILING TILES.
2. REMOVE CEILING GRID.
3. LIGHTS REMOVED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL SHEETS FOR COORDINATION.

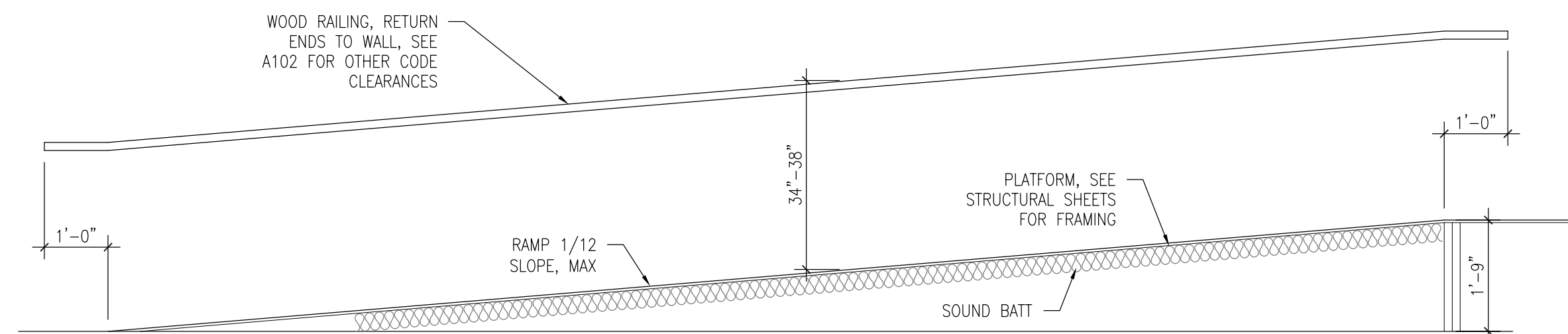
NOTE: OWNER SHALL REMOVE AND SALVAGE TV AND OTHER MONITOR EQUIPMENT.

KEYED CEILING RENOVATION NOTES:

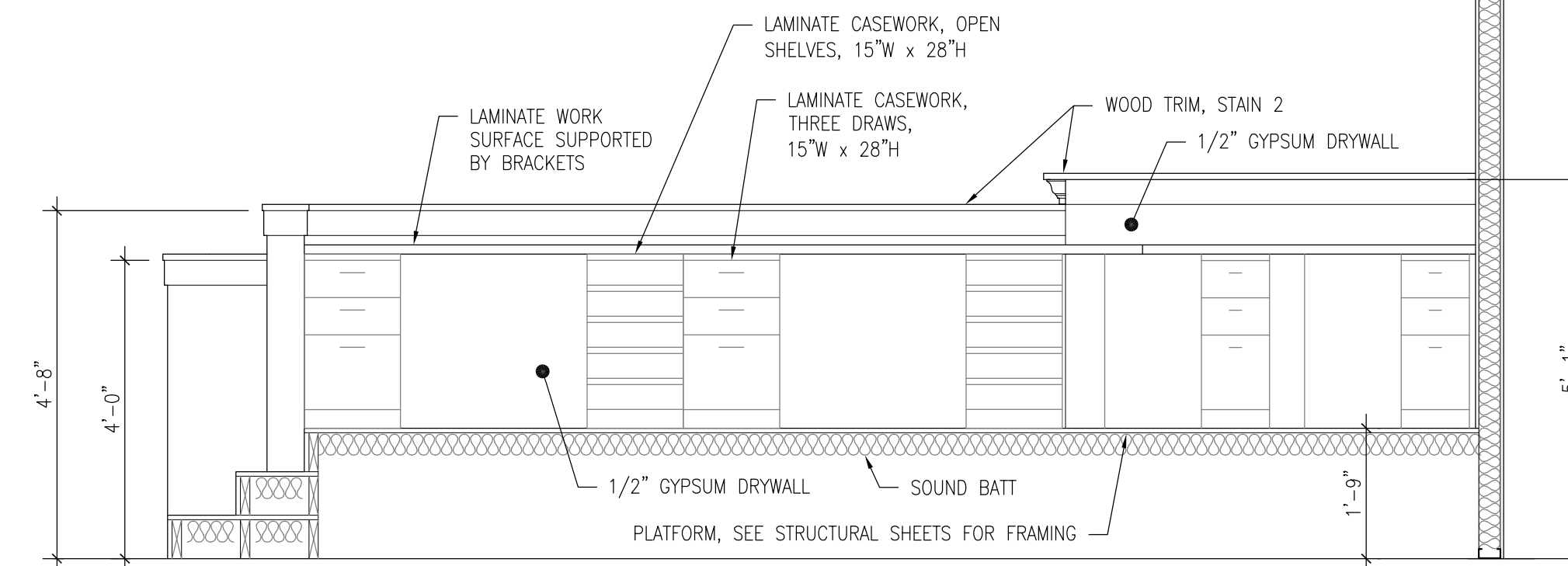
1. INSTALL NEW 2x2 CEILING TILES.
2. INSTALL NEW CEILING GRID.
3. LIGHTS BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL SHEETS FOR COORDINATION.

NOTE: OWNER TO INSTALL SALVAGED TV AND MONITOR EQUIPMENT

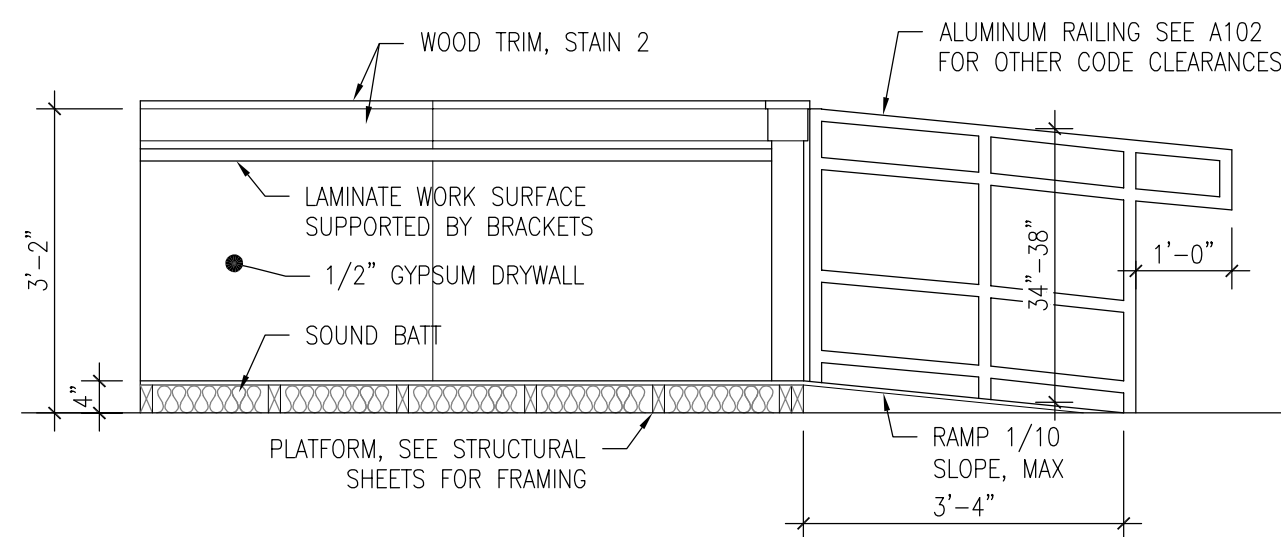




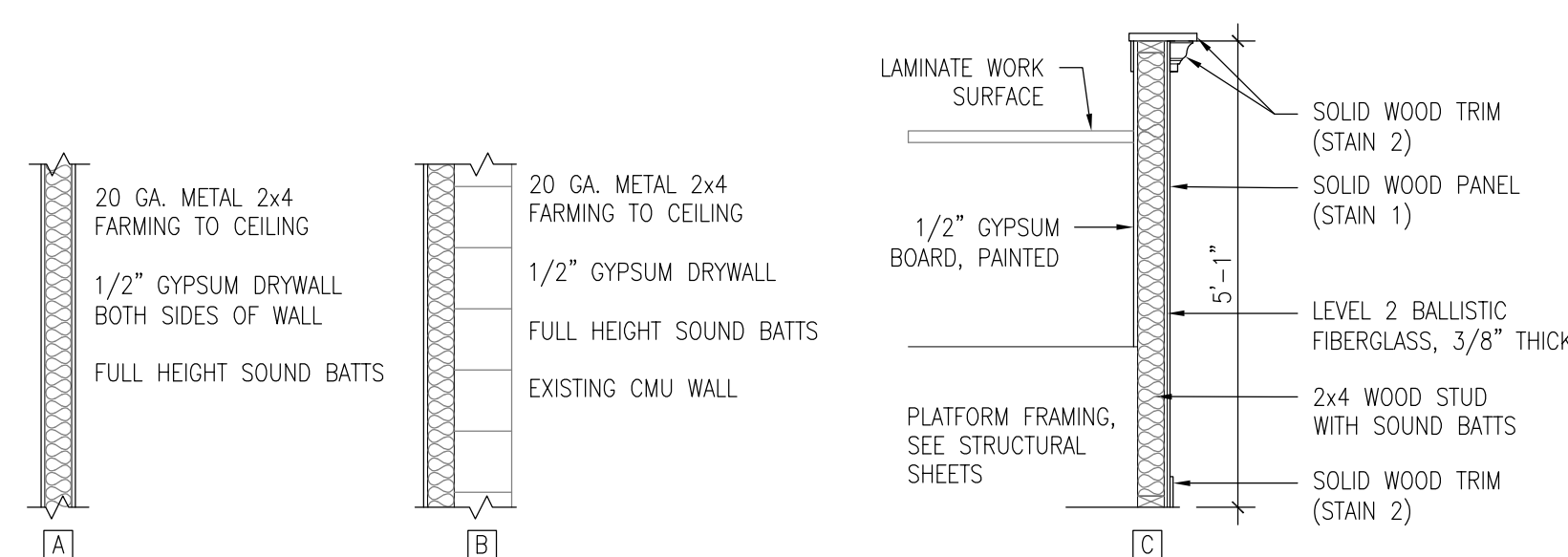
9 RAMP SECTION
1/2" = 1'-0" BRANCH 2



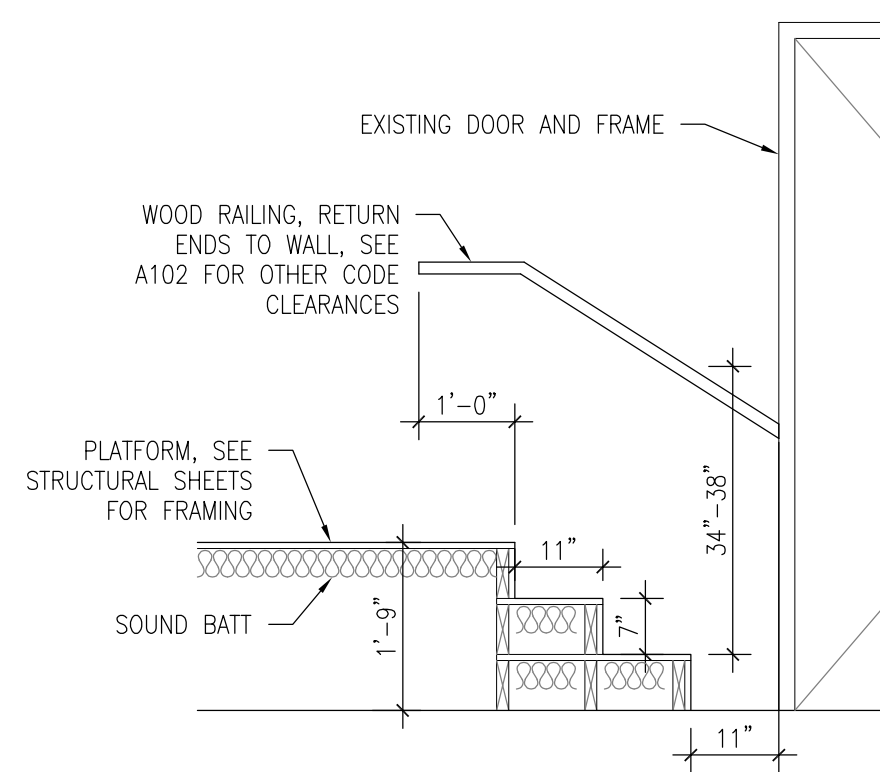
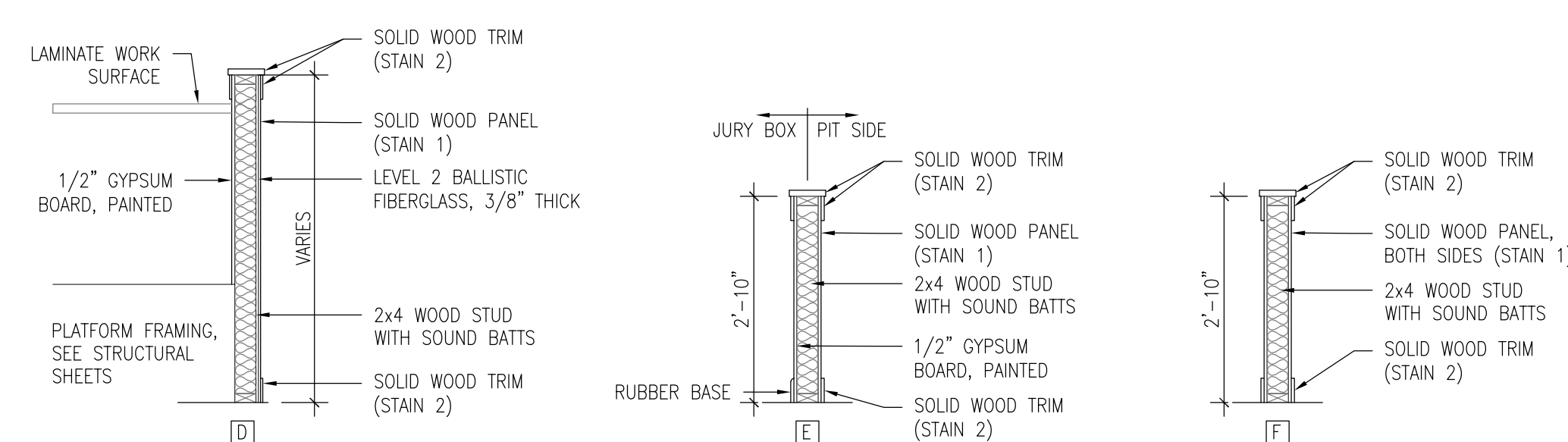
8 BENCH SOUTH VIEW
1/4" = 1'-0" BRANCH



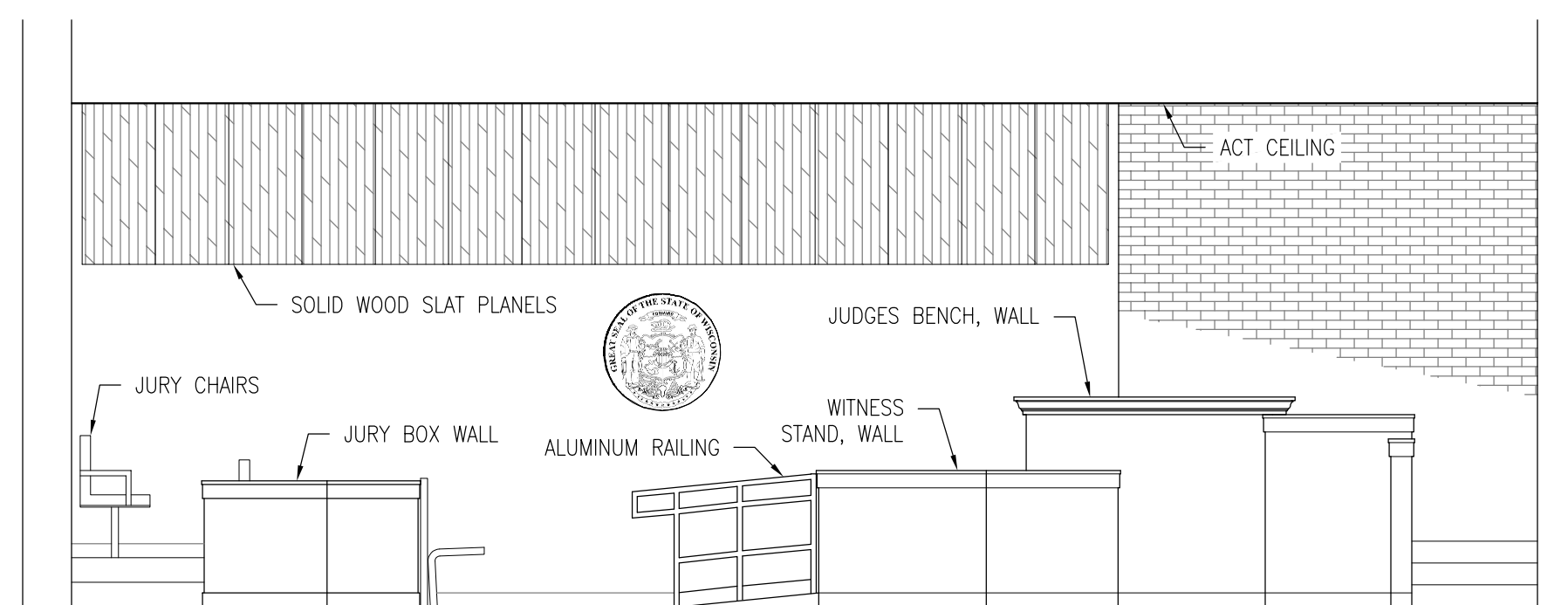
7 WITNESS STAND
1/2" = 1'-0" BRANCH 2



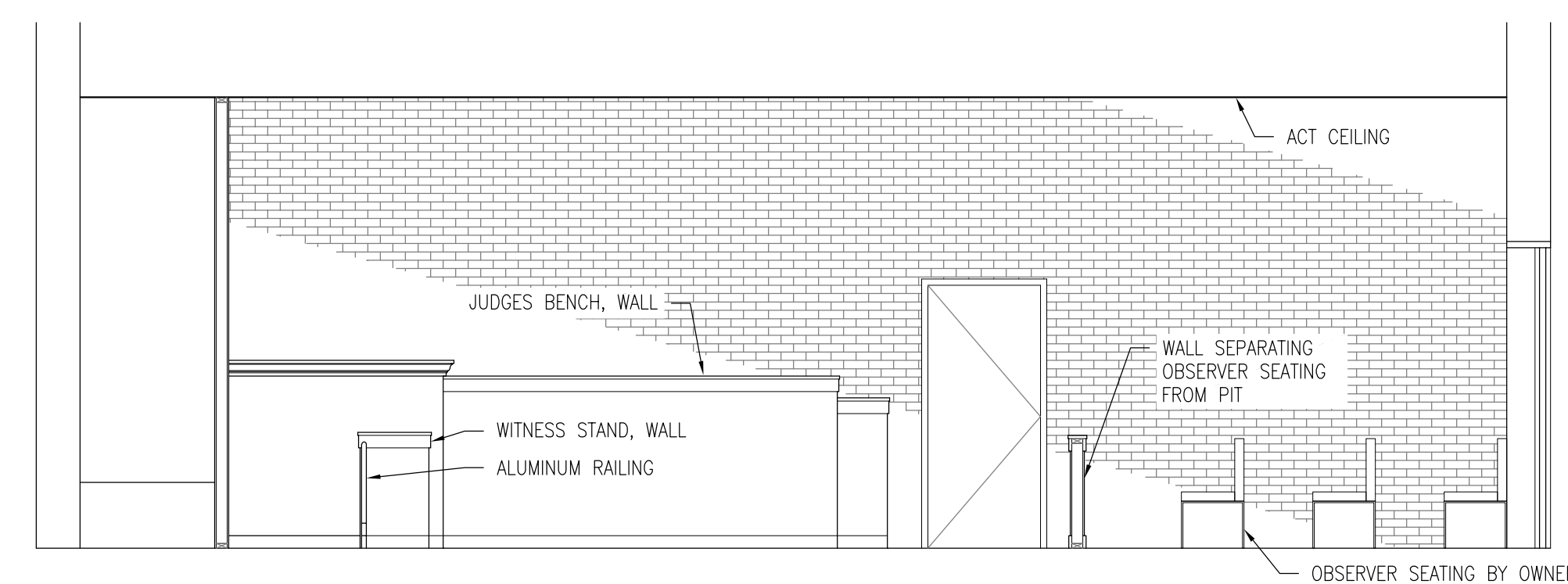
6 WALL TYPES BRANCH 2



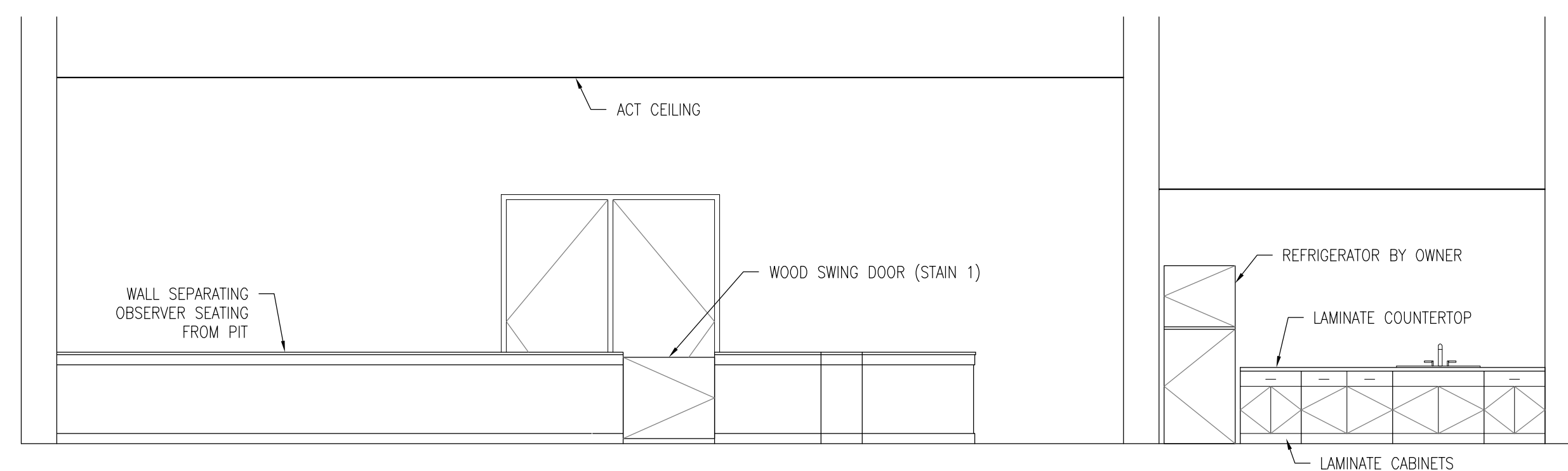
5 STAIR SECTION
1/2" = 1'-0" BRANCH 2



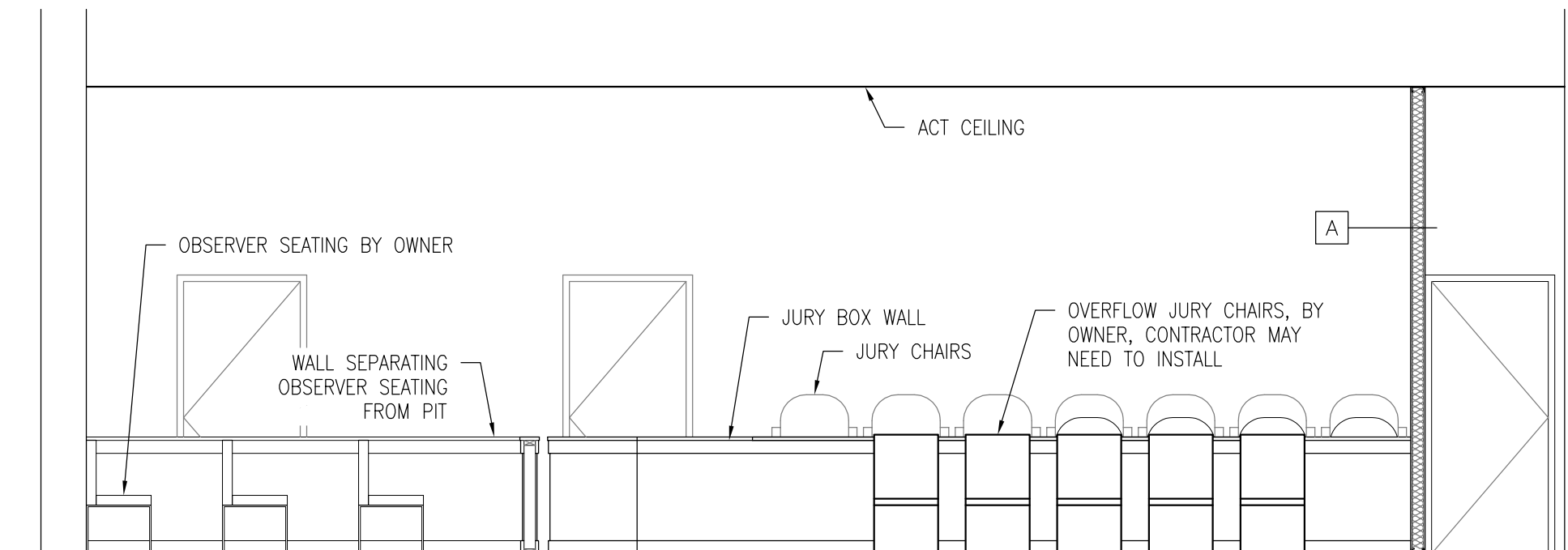
4 INTERIOR WEST VIEW
1/4" = 1'-0" BRANCH 2



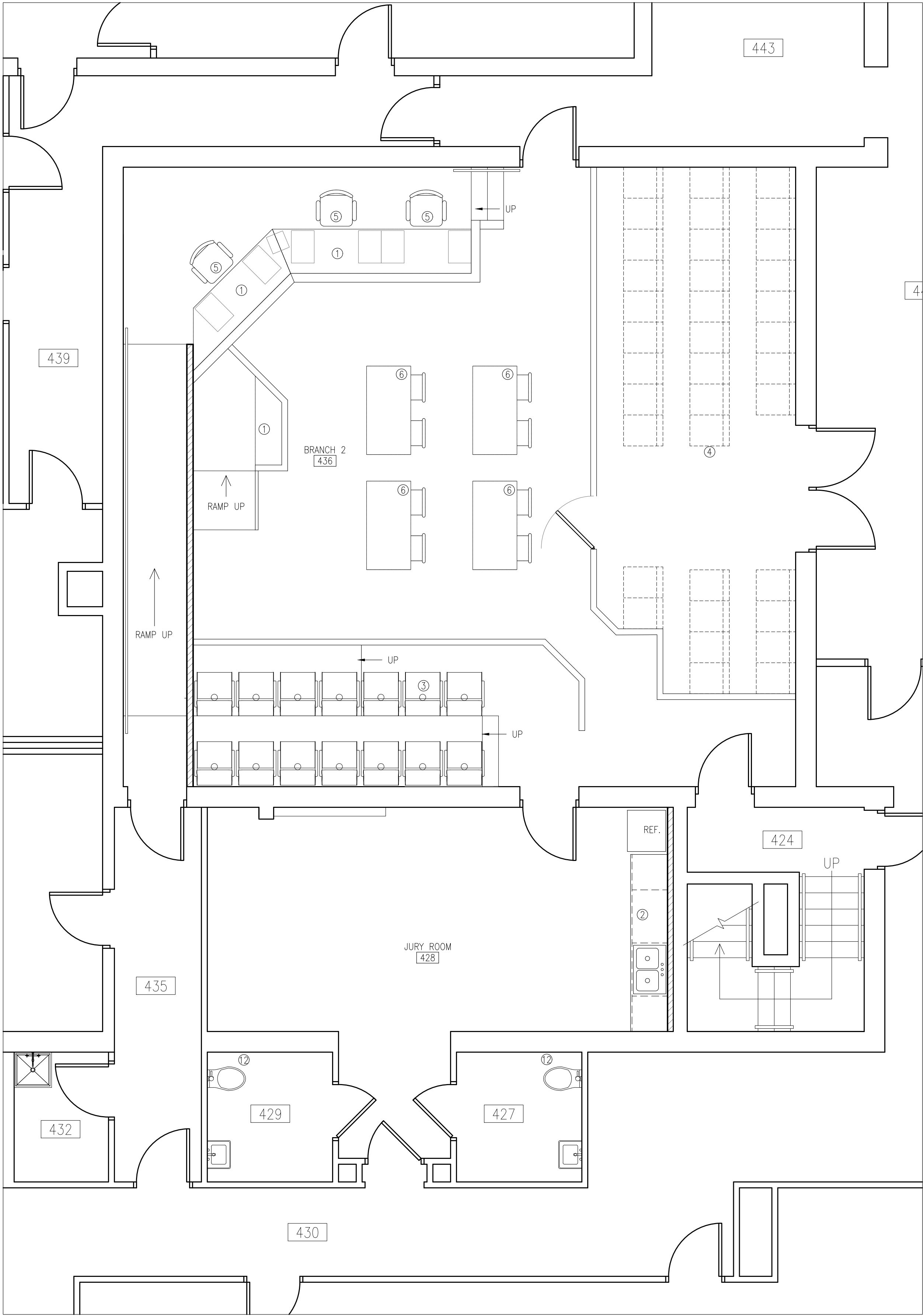
3 INTERIOR NORTH VIEW
1/4" = 1'-0" BRANCH 2



2 INTERIOR EAST VIEW
1/4" = 1'-0" BRANCH 2



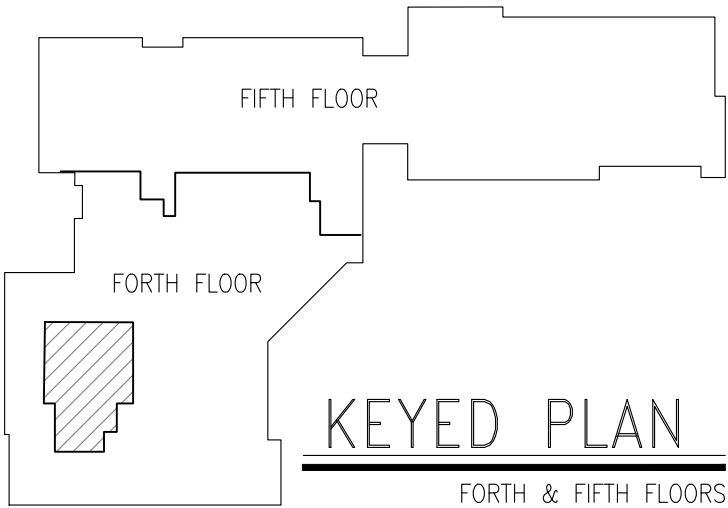
1 INTERIOR SOUTH VIEW
1/4" = 1'-0" BRANCH 2



1 FINISH FLOOR PLAN
1/4" = 1'-0" BRANCH 2

ROOM FINISH SCHEDULE							
NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING FINISH	CEILING HEIGHT	REMARKS
436	COURTROOM BRANCH 2	CPT-1	WOOD & RUBBER	PT-1 (ALL DRYWALL)	ACT-1	12'-0"	
428	JURY ROOM	CPT-1	RUBBER	PT-1	ACT-1	8'-4"	
ABBREVIATIONS:				GPDW	GYPSUM DRYWALL		
ACCS. ACCESSIBLE				N/A	NOT APPLICABLE		
ACT-1 ACOUSTIC CEILING TILE AND SUSPENDED CEILING GRID				PNT-1	PAINT		
AVFF ABOVE FINISHED FLOOR							
CPT-1 CARPET							
E.T.R EXISTING TO REMAIN							

- # KEYED FLOOR FINISH NOTES:
1. LAMINATE WORK SURFACE, WALL SUPPORTED WITH BRACKETS.
 2. LAMINATE COUNTER WITH LAMINATE CASEWORK BELOW.
 3. JURY SEATING, INSTALL SALVAGED JURY PEDESTAL SEATS.
 4. OBSERVER SEATING, NOT FIXED, PROVIDED BY OWNER.
 5. JUDGE, CLERK, REPORTER CHAIRS, PROVIDED BY OWNER.
 6. PIT TABLES AND CHAIRS, PROVIDED BY OWNER.

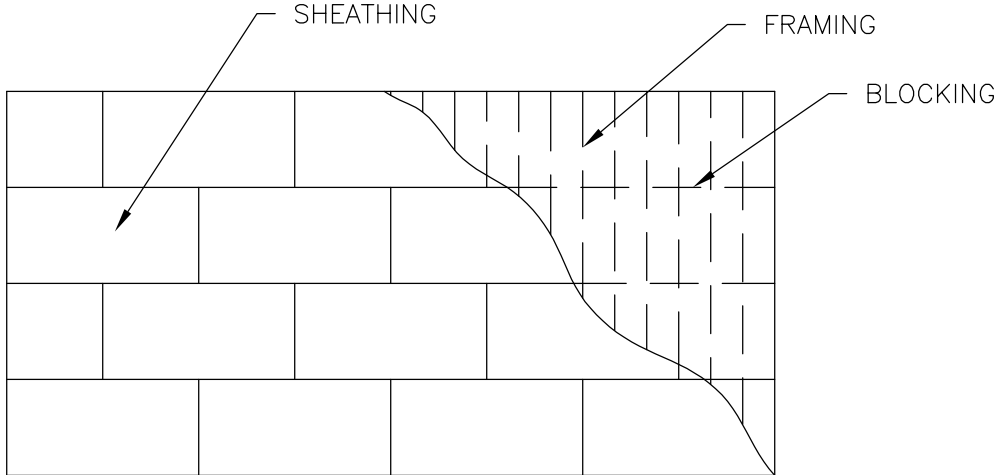


WOOD FRAME FASTENING SCHEDULE

CONNECTION	FASTENING	LOCATION
JOIST TO SILL OR GIRDER	3-8d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL
BRIDGING TO JOIST	2-8d COMMON 2-3"x0.131" NAIL 2-3" 14 GAGE STAPLE	TOE NAIL EACH END
1x6 SUBFLOOR OR LESS TO JOIST	2-8d COMMON	FACE NAIL
WIDER THAN 1X6 SUBFLOOR TO JOIST	2-8d COMMON	FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	BLIND AND FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING	16d @ 16" C-C 3"x0.131" NAIL @ 8" C-C 3" 14 GAGE STAPLE @ 12" C-C	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3-16d @ 16" C-C 3"x0.131" NAIL @ 16" C-C 3" 14 GAGE STAPLE @ 16" C-C	BRACED WALL PANELS
TOP PLATE TO STUD	2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	END NAIL
STUD TO SOLE PLATE	4-8d COMMON 4-3"x0.131" NAIL 3-3" 14 GAGE STAPLE 2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL END NAIL
DOUBLE STUDS	16d @ 24" C-C 3"x0.131" NAIL @ 8" C-C 3" 14 GAGE STAPLE @ 8" C-C	FACE NAIL
DOUBLE TOP PLATES (STAGGER JOINTS 4'-0")	16d @ 24" C-C 3"x0.131" NAIL @ 8" C-C 3" 14 GAGE STAPLE @ 8" C-C	TYPICAL FACE NAIL
DOUBLE TOP PLATES (STAGGER JOINTS 4'-0")	8-16d COMMON 12-3"x0.131" NAIL 12-3" 14 GAGE STAPLE	LAP SPLICE
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3-8d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL
RIM JOIST TO TOP PLATE	8d @ 6" C-C 3"x0.131" NAIL @ 6" C-C 3" 14 GAGE STAPLE @ 6" C-C	TOE NAIL
TOP PLATES, LAPS AND INTERSECTIONS	2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	FACE NAIL
CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" C-C ALONG EDGE
CEILING JOISTS TO PLATE	3-8d COMMON 5-3"x0.131" NAIL 5-3" 14 GAGE STAPLE	TOE NAIL
CONTINUOUS HEADER TO STUD	4-8d COMMON	TOE NAIL
CEILING JOISTS, LAPS OVER PARTITIONS	3-16d COMMON 4-3"x0.131" NAIL 4-3" 14 GAGE STAPLE	FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS	3-16d COMMON 4-3"x0.131" NAIL 4-3" 14 GAGE STAPLE	FACE NAIL
RAFTER TO PLATE	3-8d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL
1" DIAGONAL BRACE TO EACH STUD AND PLATE	2-8d COMMON 2-3"x0.131" NAIL 2-3" 14 GAGE STAPLE	FACE NAIL
1x8 SHEATHING TO EACH BEARING WALL	2-8d COMMON	FACE NAIL
WIDER THAN 1x8 SHEATHING TO EACH BEARING WALL	3-8d COMMON	FACE NAIL
BUILT-UP CORNER STUDS	16d COMMON 3"x0.131" NAIL 3" 14 GAGE STAPLE	24" C-C 16" C-C 16" C-C
BUILT-UP GIRDER AND BEAMS	20d COMMON @ 32" C-C 3"x0.131" NAIL AT 24" C-C 3" 14 GAGE STAPLE @ 24" C-C 2-20d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE
2" PLANKS	16d COMMON	AT EACH BEARING
COLLAR TIE TO RAFTER	3-10d COMMON 4-3"x0.131" NAIL 4-3" 14 GAGE STAPLE	FACE NAIL
JACK RAFTER TO HIP	3-10d COMMON 4-3"x0.131" NAIL 4-3" 14 GAGE STAPLE 2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL FACE NAIL
ROOF RAFTER TO 2x RIDGE BEAM	2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE 2-16d COMMON 3-3"x0.131" NAIL 3-3" 14 GAGE STAPLE	TOE NAIL FACE NAIL

WOOD FRAME FASTENING SCHEDULE

CONNECTION	FASTENING	LOCATION
JOIST TO BAND JOIST	3-16d COMMON 5-3"x0.131" NAIL 5-3" 14 GAGE STAPLE	FACE NAIL
LEDGER STRIP	3-16d COMMON 4-3"x0.131" NAIL 4-3" 14 GAGE STAPLE	FACE NAIL
WOOD STRUCTURAL PANELS AND PARTICLEBOARD: SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING	1/2" AND LESS 19/32" TO 3/4" 7/8" TO 1" 1 1/8" TO 1 1/4" 3/4" OR LESS 7/8" TO 1" 1 1/8" TO 1 1/4"	6d 2,375"x0.113" NAIL 1.75" 16 GAGE STAPLE 8d OR 6d 2,375"x0.113" NAIL 2" 16 GAGE STAPLE 8d 10d OR 8d 6d 8d 10d OR 8d
SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING)		
PANEL SIDING TO FRAMING	1/2" OR LESS 5/8"	6d 8d
FIBERBOARD SHEATHING	1/2"	#11 GAGE ROOFING NAIL 6d COMMON NAIL # 16 GAGE STAPLE #11 GAGE ROOFING NAIL 8d COMMON NAIL # 16 GAGE STAPLE
INTERIOR PANELING	1/4" 3/8"	4d 6d



SHEATHING ORIENTATION

DESIGN AND LOAD DATA

DESIGN SPECIFICATIONS

WISCONSIN ENROLLED COMMERCIAL BUILDING CODE
CURRENT EDITION WITH SUBSEQUENT REVISIONS

DESIGN LOAD INFORMATION

DEAD LOADS

FLOOR DEAD - 15 PSF

LIVE LOADS

FLOOR LIVE LOAD - 100 PSF

SNOW LOAD (CLARK COUNTY)

GROUND SNOW LOAD - 50 PSF
THERMAL FACTOR - 1.0
EXPOSURE FACTOR - 1.0
IMPORTANCE FACTOR - 1.2
ROOF SNOW LOAD - 42 PSF

WIND LOAD

NOT AFFECTING MWFRS - N/A

SEISMIC LOADS

SEISMIC DESIGN CATEGORY A

SOIL DESIGN INFORMATION

SOIL DATA (ASSUMED)

SOIL TYPE - SW
PRESUMED BEARING CAPACITY - 2000 PSF

MATERIAL REQUIREMENTS

MATERIALS

MAIN FRAMING MEMBERS - #2 SP-F
SECONDARY FRAMING MEMBERS - #2 SP-F
MICROLLAM BEAMS - 2.0E
FLOOR SHEATHING
3/4" 48/24 SPAN RATED SHEATHING
1 1/8" T&G STURDI FLOOR

FLOOR SHEATHING FASTENERS

UNBLOCKED W/ 8d @ 6" C-C

GENERAL NOTES

- THE CONTRACTOR SHALL CONDUCT ALL OPERATIONS IN STRICT ACCORDANCE WITH SAFETY REQUIREMENTS IMPOSED BY THE OWNER AND OSHA. THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE OWNER'S PROPERTY AND DISPOSE OF ACCORDING TO LOCAL REGULATIONS.
- THIS STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES; AND TO INSURE THE STABILITY OF THE STRUCTURE AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, OR TIE-DOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTORS PROPERTY.
- SAFETY: IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ENGINEERING DRAWINGS: ALL DEVIATIONS FROM THE ENGINEERING DRAWINGS SHALL BE SUBMITTED IN WRITTEN FORM TO THE OWNER OR THEIR REPRESENTATIVE FOR APPROVAL.
- EXISTING UTILITIES AND ALL OTHER OBSTRUCTIONS TO WORK SHALL BE TEMPORARILY REMOVED BY THE CONTRACTOR AND REINSTALLED (INCLUDING NECESSARY MODIFICATIONS) BY THE CONTRACTOR AFTER COMPLETION OF WORK.
- SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER OR THEIR REPRESENTATIVE BEFORE SHOP WORK IS PERMITTED TO COMMENCE. ALL DEVIATIONS FROM THE ENGINEERING DRAWINGS SHALL BE CIRCLED AND NOTED ON THE SHOP DRAWINGS.
- DIMENSIONS PERTAINING TO EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ANY FABRICATION, CONSTRUCTION, OR ERECTION.
- EXCAVATION SHALL PROCEED WITH CARE TO AVOID DAMAGE TO UNKNOWN UNDERGROUND SERVICES.
- BACKFILL SHALL BE GRANULAR MATERIAL, FREE FROM CLAY, LOAM, OR PERISHABLE MATERIALS. THE APPROVED GRANULAR FILL MATERIAL SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO 95% MODIFIED PROCTOR.

FOUNDATIONS

- FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.

STRUCTURAL STEEL

- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS", AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS.
- ROLLED WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992 WITH A MINIMUM YIELD STRESS (Fy) OF 50,000 PSI. ROLLED SHAPES, PLATES, AND BARS SHALL CONFORM TO ASTM A36 WITH A MINIMUM YIELD STRESS (Fy) OF 36,000 PSI. CIRCULAR PIPE SHALL CONFORM TO ASTM A53, GRADE B, WITH A MINIMUM YIELD STRESS (Fy) OF 35,000 PSI. SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500, GRADE B, WITH A MINIMUM YIELD STRESS (Fy) OF 46,000 PSI.
- SPLICING OF STRUCTURAL STEEL IS PROHIBITED EXCEPT AS DETAILED.
- STRUCTURAL STEEL SHALL BE NEW UNLESS OTHERWISE NOTED, AND SHALL BE PAINTED WITH ONE COAT OF APPROVED PRIMER AND APPROVED FINISH COAT AS DIRECTED BY THE OWNER.
- BOLTS SHALL CONFORM TO ASTM A325X WITH ASTM A563 NUTS. BOLTS SHALL BE TIGHTENED BY THE TURN-OFF-THE-NUT METHOD, AND SHALL HAVE A HARDENED STEEL WASHER, ASTM F436, UNDER THE TURNED ELEMENT.
- WELDING SHALL CONFORM TO THE CURRENT AWS D1.1 "STRUCTURAL WELDING CODE-STEEL". WELDING ELECTRODES SHALL BE E70XX.
- WELDS SHALL BE MADE ONLY BY CERTIFIED WELDERS AND WELDING OPERATORS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TESTS AS PRESCRIBED IN THE CURRENT AWS D1.1 "STRUCTURAL WELDING CODE-STEEL". PROOF OF CERTIFICATION SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL BEFORE ANY WELDING IS PERMITTED TO BEGIN.
- WELDING OF STAINLESS STEEL TO BE PERFORMED USING STAINLESS RODS AND WELDING PROCEDURES.
- ANCHOR BOLTS FOR COLUMNS SHALL CONFORM TO ASTM A307. ANCHOR BOLTS FOR MACHINES SHALL CONFORM TO ASTM A325. ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE METHOD, OR AN APPROVED EQUIVALENT METHOD.

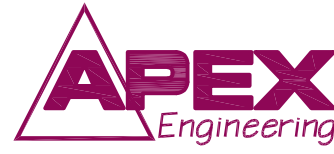
CONCRETE

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS:

- ALL CONCRETE TO BE NORMAL WEIGHT, WITH AGGREGATES CONFORMING TO ASTM C33.
- CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY COMPRESSIVE STRENGTH (F'c):

- FLOOR SLABS - 4000 PSI
FOUNDATIONS - 4000 PSI
- CHLORIDE BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE. OTHER ADMIXTURES SHALL CONFORM TO ASTM C494.
- REINFORCING STEEL SHALL BE DEFORMED AND CONFORM TO A615, A616, OR A617, GRADE 60, WITH MINIMUM YIELD STRESS (FY) OF 60,000 PSI. THE MINIMUM LAP FOR SPLICES SHALL BE 3'-6".
- CONCRETE COVER ON ALL REINFORCING SHALL BE 3" UNLESS OTHERWISE NOTED.
- MAXIMUM SLUMP SHALL BE 4"±1" AS DETERMINED IN ACCORDANCE WITH ASTM C143.
- CONCRETE FINISH:

FLOOR SLABS - HARD TROWELED FINISH
PAVING SLABS - FLOAT/BROOM FINISH
- ALL CONCRETE EXPOSED TO THE EXTERIOR SHALL BE AIR ENTRAINED WITH AN AIR CONTENT OF 6%±.
- CONTRACTOR TO ENGAGE A QUALIFIED TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS. TESTING AGENCY TO CONFIRM THAT NOTED MATERIAL REQUIREMENTS ARE MET.



Eau Claire, Wisconsin
Telephone: 715-835-7736
Web: apexengineering.biz



Lien & Peterson Architects
Eau Claire, Wisconsin
715-835-7500
lienandpetersonarchitects.com

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:

**STRUCTURAL DESIGN
NOTES**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
BTD

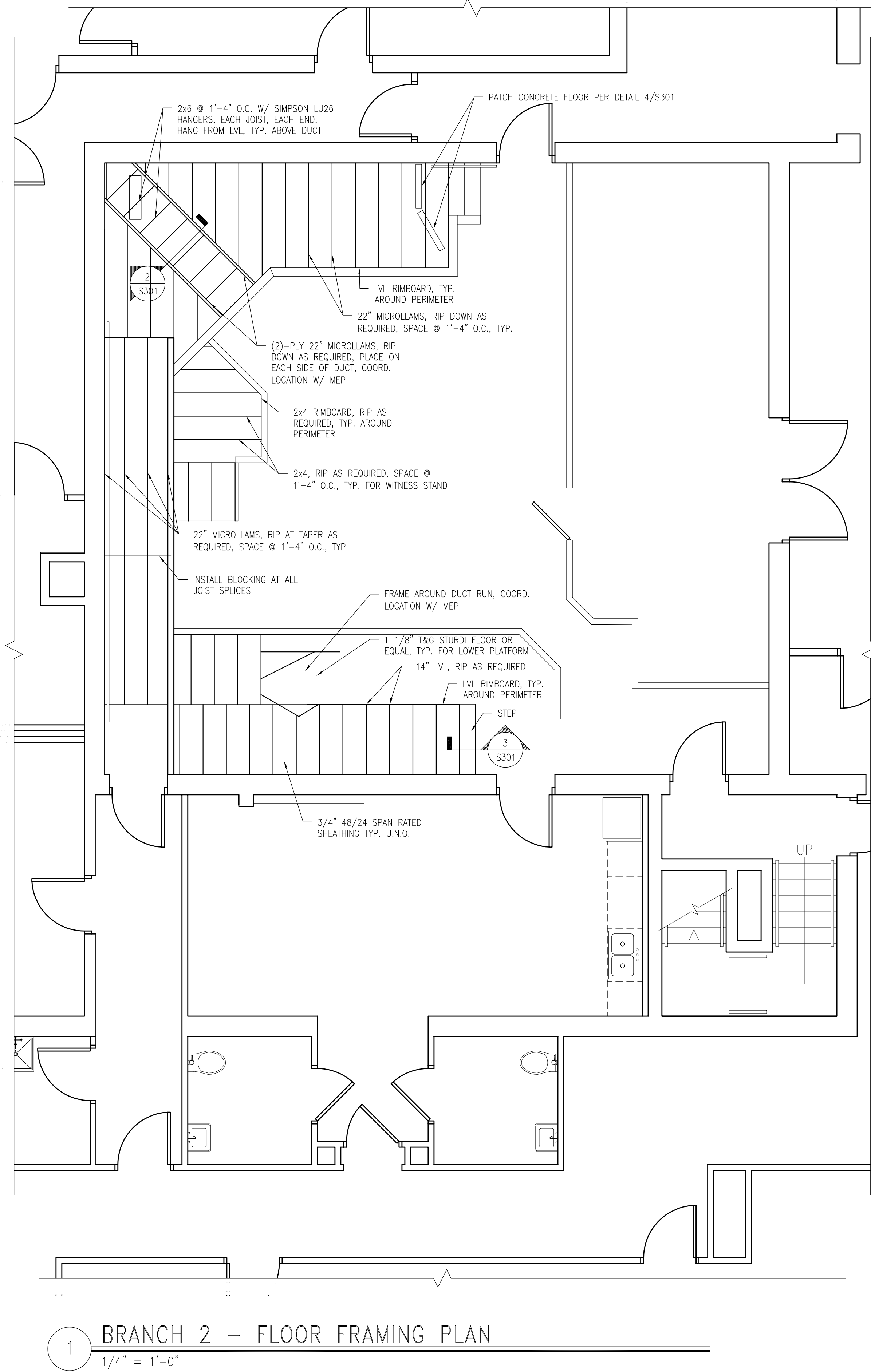
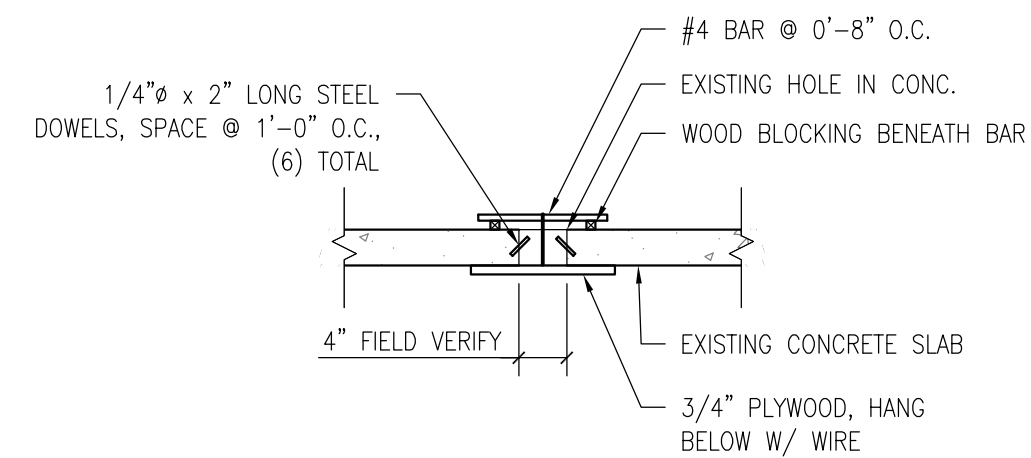
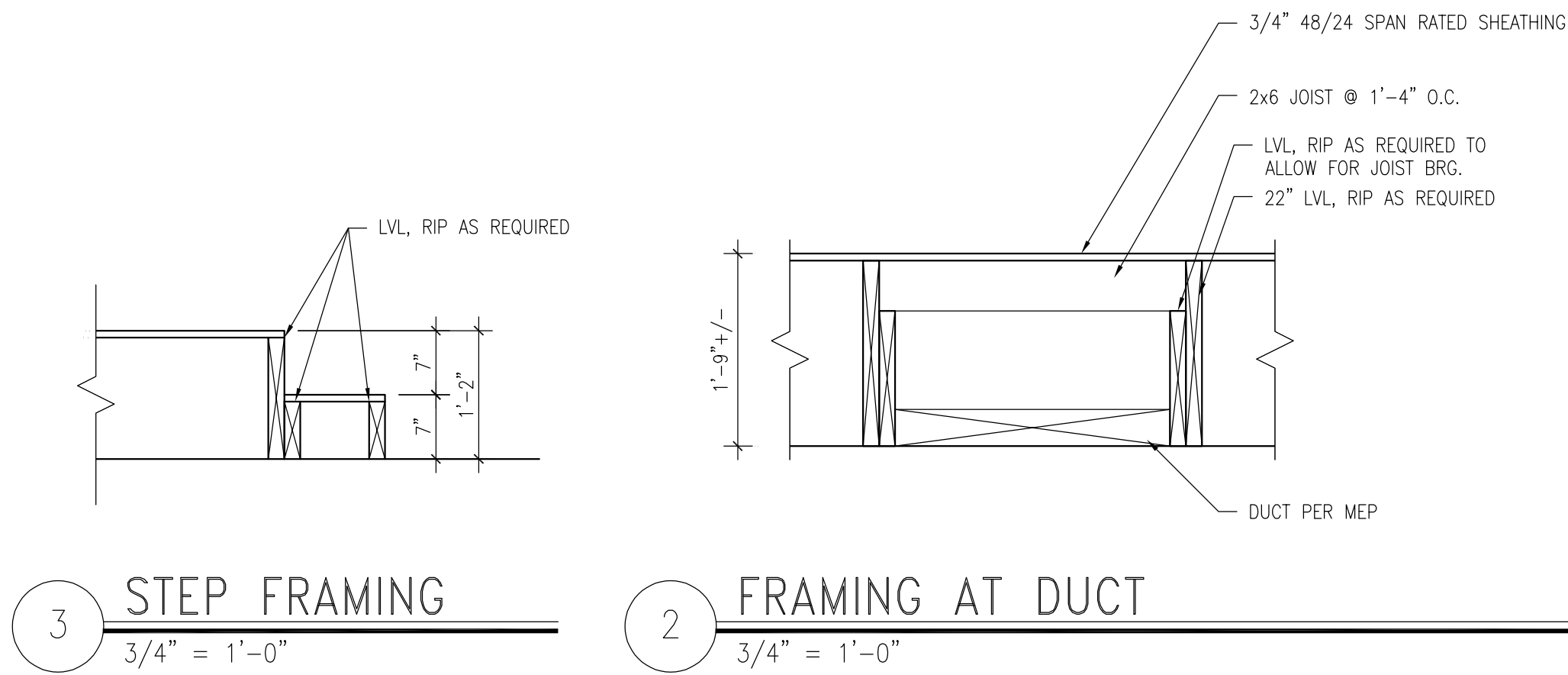
DESIGNED BY:
BTD

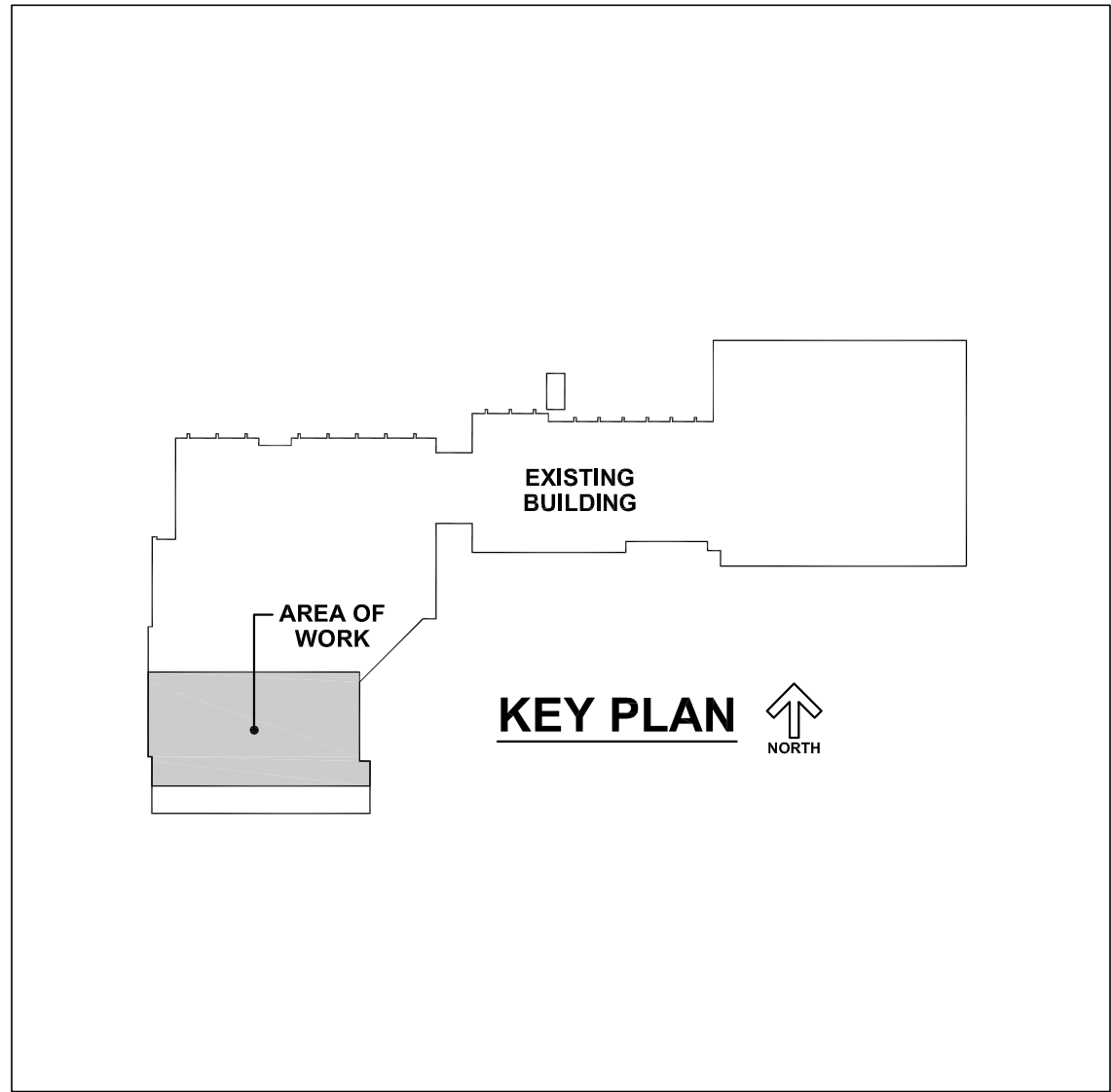
DATE:
12/18/2025

REV.: DATE: REMARK:

SHEET:

S101





LINE TYPE KEY	
	NEW WORK BY MECHANICAL CONTRACTOR (DARK SOLID LINE)
	NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
	EXISTING TO BE REMOVED BY MECHANICAL CONTRACTOR (DARK SHORT DASHED LINE)

CONTRACTOR ABBREVIATION KEY	
ABBR:	CONTRACTOR:
A.A.C.	ASBESTOS ABATEMENT CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
T.C.C.	TEMPERATURE CONTROL CONTRACTOR

MECHANICAL (HVAC) LEGEND

GENERAL SYMBOLS

	SPACE SENSOR (AS INDICATED)
	WALL SWITCH OR TIMER
	DEMOLITION KEYNOTES
	NEW OR REMODEL KEYNOTES
	MECHANICAL EQUIPMENT TAG
	MECHANICAL EQUIPMENT (NEW)
	MECHANICAL EQUIPMENT (DEMO)
	MECHANICAL EQUIPMENT (EXISTING)
	INDICATES DIRECTION OF AIR FLOW
	CEILING DIFFUSER
	CEILING DIFFUSER SIZE AND TYPE AIR VOLUME
	RETURN/EXHAUST/TRANSFER GRILLE
	SUPPLY GRILLE OR REGISTER
	SIDEWALL RETURN/EXHAUST/TRANSFER GRILLE
	SIDEWALL SUPPLY/TRANSFER GRILLE
	GRILLE SIZE AND TYPE AIR VOLUME
	DOOR GRILLE (BY GENERAL TRADE)
	DOOR UNDERCUT (BY GENERAL TRADE)
	INDICATES ROOM NAME INDICATES ROOM NUMBER
	SECTION CUT
	CALLOUT BUBBLE
	CALLOUT REFERENCE DETAIL NUMBER CALLOUT REFERENCE SHEET NUMBER
	REVISION NUMBER
	REVISION CLOUD

DUCTWORK SYMBOLS

	MITERED ELBOW W/ TURNING VANES
	SUPPLY/OUTSIDE/MIXED AIR DUCT DOWN
	SUPPLY/OUTSIDE/MIXED AIR DUCT UP
	RETURN/EXHAUST/TRANSFER AIR DUCT DOWN
	RETURN/EXHAUST/TRANSFER AIR DUCT UP
	ROUND DUCT DOWN
	ROUND DUCT UP
	DUCT OFFSET (AS INDICATED)
	ACOUSTIC DUCT LINER
	FLEXIBLE DUCT
	SQUARE/RECTANGULAR DUCT BREAK
	MANUAL BALANCING (VOLUME) DAMPER
	CONTROL DAMPER W/ ACTUATOR
	ROUND DUCT OR 2-LINE PIPE BREAK

DUCTWORK SYSTEM ABBREVIATIONS

EA	EXHAUST AIR
MA	MIXED AIR (OA + RA)
OA	OUTSIDE AIR
RA	RETURN AIR
RFA	RELIEF AIR
SA	SUPPLY AIR

GRD ABBREVIATIONS

CD	CEILING DIFFUSER
EG	EXHAUST GRILLE
RG	RETURN GRILLE
SG	SUPPLY GRILLE

PIPING SYSTEM ABBREVIATIONS

	CONDENSATE DRAIN
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	HOT WATER RETURN
	HOT WATER SUPPLY

PIPING SYMBOLS

	CHECK VALVE
	BALL VALVE
	BUTTERFLY VALVE
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	BALANCE VALVE (B.V.)
	FLOW MEASURING DEVICE (F.M.D.)
	STRAINER
	THERMOMETER
	TEMPERATURE SENSOR
	PRESSURE GAUGE
	UNION (OR FLANGE)
	CAPPED PIPING
	PIPE BREAK LINES FOR POINT OF DEMOLITION
	PIPE BREAK LINES FOR POINT OF RECONNECTION
	SINGLE LINE PIPE BREAK
	INDICATES DIRECTION OF WATER FLOW
	PIPE REDUCER
	PIPE DOWN
	PIPE UP
	TEE - BOTTOM CONNECTION
	TEE - TOP CONNECTION
	PIPE ELEVATION CHANGE
	CIRCULATING PUMP

EQUIPMENT ABBREVIATIONS

AF	AIR FILTER
AHU	AIR HANDLING UNIT
CC	COOLING COIL
EF	EXHAUST FAN
GRDs	GRILLES, REGISTERS, AND DIFFUSERS
HC	HEATING COIL
L	LOUVER
SF	SUPPLY FAN
VFD	VARIABLE FREQUENCY DRIVE

GENERAL ABBREVIATIONS

A	AMPERE	HP	HORSEPOWER
A/C	AIR CONDITIONING	HTG.	HEATING
A.D.	ACCESS DOOR	HVAC	HEATING, VENTILATION AND AIR CONDITIONING
A.F.F.	ABOVE FINISH FLOOR	HW	HOT WATER
A.F.G.	ABOVE FINISH GRADE	HZ	HERTZ (FREQUENCY)
A.F.R.	ABOVE FINISHED ROOF	ID	INSIDE DIAMETER
AMPS	AMPERES	IN.	INCH OR INCHES
AUX	AUXILIARY	KW	KILOWATT
AVG.	AVERAGE	LAT	LEAVING AIR TEMPERATURE
B.D.D.	BACKDRAFT DAMPER	LBS	POUNDS
BHP	BRAKE HORSEPOWER	LDB	LEAVING DRY BULB TEMPERATURE
BASMT	BASEMENT	LWB	LEAVING WET BULB TEMPERATURE
BTU	BRITISH THERMAL UNIT	LWT	LEAVING WATER TEMPERATURE
BTUH	BRITISH THERMAL UNIT PER HOUR	MAT	MIXED AIR TEMPERATURE
CAP.	CAPACITY	MAX.	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTUH
CL	CENTERLINE	MCA	MINIMUM CIRCUIT AMPS
CLG.	COOLING	MECH.	MECHANICAL
CEIL.	CEILING	MFG.	MANUFACTURER
C.O.	CLEANOUT	MOCP	MAXIMUM OVER CURRENT PROTECTION
CONT.	CONTINUE	M.O.D.	MOTOR OPERATED DAMPER
CU FT.	CUBIC FEET	MTD.	MOUNTED
CU IN.	CUBIC INCHES	NIC	NOT IN CONTRACT
IP	CHANGE IN PRESSURE	NOM.	NOMINAL
IT	CHANGE IN TEMPERATURE	NPS	NOMINAL PIPE SIZE
DEGREE	DEGREE	NTS	NOT TO SCALE
DB	DRY BULB	NTS	OUTSIDE AIR TEMPERATURE
DC	DIRECT CURRENT	OAT	OPPOSED BLADE DAMPER
DDC	DIRECT DIGITAL CONTROLS	O.B.D.	O.P.
DIA.	DIAMETER	O.C.	ON CENTER
DISC.	DISCONNECT	OD	OUTSIDE DIAMETER
DN.	DOWN	O.E.D.	OPEN ENDED DUCT
DP	DIFFERENTIAL PRESSURE	PD	PRESSURE DROP
DWG.	DRAWING	PSI	POUNDS PER SQUARE INCH
DWPT	DEWPOINT	PSIG	PSI GAUGE
DX	DIRECT EXPANSION (REFRIGERATION)	Ø	ROUND DIAMETER
EAT	ENTERING AIR TEMPERATURE	RAT	RETURN AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE	RM.	ROOM
EFF.	EFFICIENCY	RPM	REVOLUTIONS PER MINUTE
EL.	ELEVATION	SAT	SUPPLY AIR TEMPERATURE
EWB	ENTERING WET BULB TEMPERATURE	SD	SMOKE DAMPER
ESP	EXTERNAL STATIC PRESSURE	SQ. FT.	SQUARE FEET
ETR	EXISTING TO REMAIN	SHI.	SHEET
EWT	ENTERING WATER TEMPERATURE	SM	SMOKE DETECTOR
EX.	EXISTING	SP	STATIC PRESSURE
EXH.	EXHAUST	SPEC.	SPECIFICATION
F	DEGREES FAHRENHEIT	SPD.	SPEED
F.D.	FIRE DAMPER	S.S.	STAINLESS STEEL
FLA	FULL LOAD AMPS	STD.	STANDARD
FLR.	FLOOR	T.A.	THROW AWAY
FPT.	FINS PER INCH	TEMP.	TEMPERATURE
FPM	FEET PER MINUTE	TSP	TOTAL STATIC PRESSURE
FPS	FEET PER SECOND	TSTAT	THERMOSTAT
FT	FEET	TYP.	TYPICAL
GAL	GALLONS	V	VOLTS
GPH	GALLONS PER HOUR	V.D.	VOLUME (BALANCING) DAMPER
GPM	GALLONS PER MINUTE	VEL	VELOCITY
GRV	GRAVITY RELIEF VENT	WB	WET BULB
HD	HEAD (FEET)	W/	WITH
		Z.D.	ZONE DAMPER

MECHANICAL SHEET INDEX

SHEET #	SHEET NAME
M100	MECHANICAL GENERAL INFO. SHEET
M101	MECHANICAL FIFTH & SIXTH FLOOR PLAN - DEMOLITION
M102	MECHANICAL THIRD & FOURTH FLOOR PLAN - DEMOLITION & REMODEL
M201	MECHANICAL FIFTH & SIXTH FLOOR PLAN - REMODEL
M301	MECHANICAL SCHEDULES AND DETAILS

GENERAL MECHANICAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH NATIONAL, STATE, & LOCAL CODES; AS WELL AS THE NATIONALLY RECOGNIZED TESTING AND APPROVAL AGENCIES.
- AIR BALANCING SHALL BE DONE IN ACCORDANCE WITH THE SMACNA MANUAL FOR BALANCING AND ADJUSTMENT OF AIR HANDLING SYSTEMS. PROVIDE A FINAL REPORT TO ENGINEER FOR REVIEW.
- DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC. AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- PROVIDE THE OWNER WITH TRAINING AND WITH OPERATION AND MAINTENANCE MANUALS FOR THE FURNISHED EQUIPMENT PRIOR TO COMPLETION OF WORK.
- DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, EQUIPMENT SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY VERIFY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
- THE INSTALLING CONTRACTOR SHALL VERIFY REQUIREMENTS FOR SUPPORTED EQUIPMENT AND COMPONENTS OF ANY KIND WITH THE BUILDING AND/OR SUPPORT STRUCTURE DESIGNER PRIOR TO INSTALLATION. APEX ENGINEERING DOES NOT PROVIDE STRUCTURAL DESIGN SERVICES.
- COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES WITH ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OF EQUIPMENT ORDERS.
- ALL CONTROLS SHALL BE PROPERLY TESTED, ADJUSTED AND CALIBRATED BEFORE WORK IS COMPLETED. MOUNT THERMOSTATS AT 48" A.F.F. PROVIDE INSULATED BASE WHERE MOUNTED ON AN EXTERIOR WALL.
- EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PAIDS, PIPING, DUCTWORK, ETC.
- DO NOT BLOCK TUBE/COIL PULL OR EQUIPMENT SERVICE CLEARANCES.
- REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS.
- ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
- MAINTAIN WORKING CLEARANCES AT ELECTRICAL EQUIPMENT SUCH AS ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES AND DISCONNECTS PER NEC REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
- MAINTAIN A MINIMUM OF 10' BETWEEN ROOF EDGE AND ALL ROOFTOP EQUIPMENT, INCLUDING EXHAUST FANS. IF 10' IS NOT MAINTAINED, M.C. SHALL INSTALL GUARD RAIL AS REQUIRED BY IMC 304.11.
- ALL EQUIPMENT, DUCTWORK, & PIPING SHALL BE KEPT CLEAN FROM DIRT & DEBRIS. DO NOT ALLOW THE INSIDE OF DUCT & LINER TO BE EXPOSED DURING CONSTRUCTION.
- DUCTWORK SIZE LISTED ON PLANS ARE INTERNAL FREE AREA DIMENSIONS. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES.
- COORDINATE GRILLE/DIFFUSER & ACCESS PANEL LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHT FIXTURES, LIGHT FIXTURE SUPPORT RODS AND FIRE SPRINKLER HEADS FOR FREE INTERFERENCE.
- AIR VENTS SHALL BE INSTALLED AT ALL HIGH POINTS & DRAINS AT ALL LOW POINTS OF WATER PIPING SYSTEMS.
- PIPING CONNECTIONS WITH UNIONS OR FLANGES SHALL BE MADE TO COILS OR TUBE BUNDLES TO FACILITATE REMOVAL OF THAT ITEM WITHOUT DISTURBING THE BRANCH VALVES AND/OR PIPING.
- ALL ROOF CURBS SHALL BE 18" TALL UNLESS OTHERWISE NOTED ON PLANS. ALL ROOF CURBS FOR OUTSIDE AIR INTAKE SHALL BE 30" TALL UNLESS OTHERWISE NOTED ON PLANS.
- MANUAL VOLUME DAMPERS SHALL BE INSTALLED AT EACH BRANCH TAKE-OFF FROM MAIN SUPPLY, RETURN, & EXHAUST DUCTS. DAMPERS SHALL BE LOCATED AS CLOSE TO THE BRANCH TAKE-OFF AS POSSIBLE & INSTALLED TO ALLOW FOR EASY ACCESS.
- VOLUME DAMPERS INSTALLED IN EXTERNALLY INSULATED DUCTWORK SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION WITH SHEET METAL STANDOFF FOR SUPPORT.
- SHUT-OFF VALVES INSTALLED IN INSULATED PIPING SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION.
- DUCT SIZE TO DIFFUSERS, REGISTERS AND GRILLES SHALL BE SAME SIZE AS NECK SIZE UNLESS NOTED OR DETAILED OTHERWISE.
- ALL MITERED RECTANGULAR/SQUARE ELBOWS SHALL HAVE AIR TURNING VANES AS SPECIFIED.
- NO DUCTWORK OR PIPING SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT, UNLESS OTHERWISE NOTED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS. COORDINATE WITH ELECTRICAL TRADE FOR EXACT LOCATIONS.
- ALL SIDEWALL GRILLES SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY WHEREVER POSSIBLE, UNLESS OTHERWISE NOTED.
- OUTSIDE AIR INTAKES SHALL BE A MINIMUM DISTANCE OF 10'-0" FROM ANY EXHAUST/RELIEF OUTLET, FLUE, GAS OR PLUMBING VENT. COORDINATE WITH RESPECTIVE TRADES.
- SEAL ALL EXTERIOR OPENINGS WATER TIGHT.
- M.C. TO THOROUGHLY CLEAN ALL EXPOSED DUCTWORK FOR PAINTING AS SPECIFIED. PAINTING BY PAINTING CONTRACTOR.
- OPENINGS REQUIRED BY THE M.C. ARE BY THE M.C. UNLESS OTHERWISE INDICATED.
- CONTRACTOR TO REVIEW ARCHITECTURAL PLANS FOR LOCATIONS OF ALL RATED WALLS, CEILINGS AND ASSEMBLIES SO THAT ALL RATINGS ARE MAINTAINED.

MECHANICAL RENOVATION NOTES:

- THE DEMOLITION PLAN HAS BEEN PREPARED TO ASSIST THE M.C. IN DETERMINING THE SCOPE OF WORK TO BE INCLUDED IN THIS PROJECT. IT IS NOT INTENDED TO BE A COMPLETE INDICATION OF ALL WORK REQUIRED TO COMPLETE THE PROJECT. THE M.C. SHALL REVIEW DRAWINGS AND SPECIFICATIONS INCLUDING DEMOLITION SHOWN FOR OTHER TRADES, AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS, IN ORDER TO DETERMINE THE SCOPE OF DEMOLITION WORK.
- FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.
- REFER TO DIVISION 1, GENERAL REQUIREMENTS, CUTTING AND PATCHING FOR ALL CUTTING AND PATCHING.
- OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE INSTALLED.
- ALL REMOVED ITEMS THAT THE OWNER WANTS SHALL BE REMOVED AND TURNED OVER TO THE OWNER AT DESIGNATED STORAGE SPACE ON SITE. ALL REMAINING ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- THE INSTALLING CONTRACTOR SHALL VERIFY ALL STRUCTURAL REQUIREMENTS FOR SUPPORTED EQUIPMENT AND COMPONENTS OF ANY KIND WITH THE BUILDING AND/OR SUPPORT STRUCTURE DESIGNER PRIOR TO INSTALLATION. APEX ENGINEERING DOES NOT PROVIDE STRUCTURAL DESIGN SERVICES.

HYDRONIC PIPE SIZING CHART

REQUIRED PIPE SIZE	COPPER PIPE (GPM)	STEEL PIPE (GPM)
3/4"	0 - 3.0	0 - 3.5
1"	3.1 - 6.5	3.6 - 6.7
1 1/4"	6.6 - 11.0	6.8 - 14.0
1 1/2"	11.1 - 18.0	14.1 - 21.0
2"	18.1 - 38.0	21.1 - 42.0
2 1/2"	38.1 - 68.0	42.1 - 68.0
3"	68.1 - 110.0	68.1 - 120.0
4"		120.1 - 250.0
5"		250.1 - 450.0
6"		450.1 - 720.0

TITLE:

MECHANICAL
GENERAL INFO.
SHEET

DO NOT SCALE DRAWINGS.
USE FIGURED DIMENSIONS ONLY.

DOCUMENT PHASE:
BIDDING
DOCUMENTS

PROJECT NO:
25001

DRAWN BY:
NW/LJJ

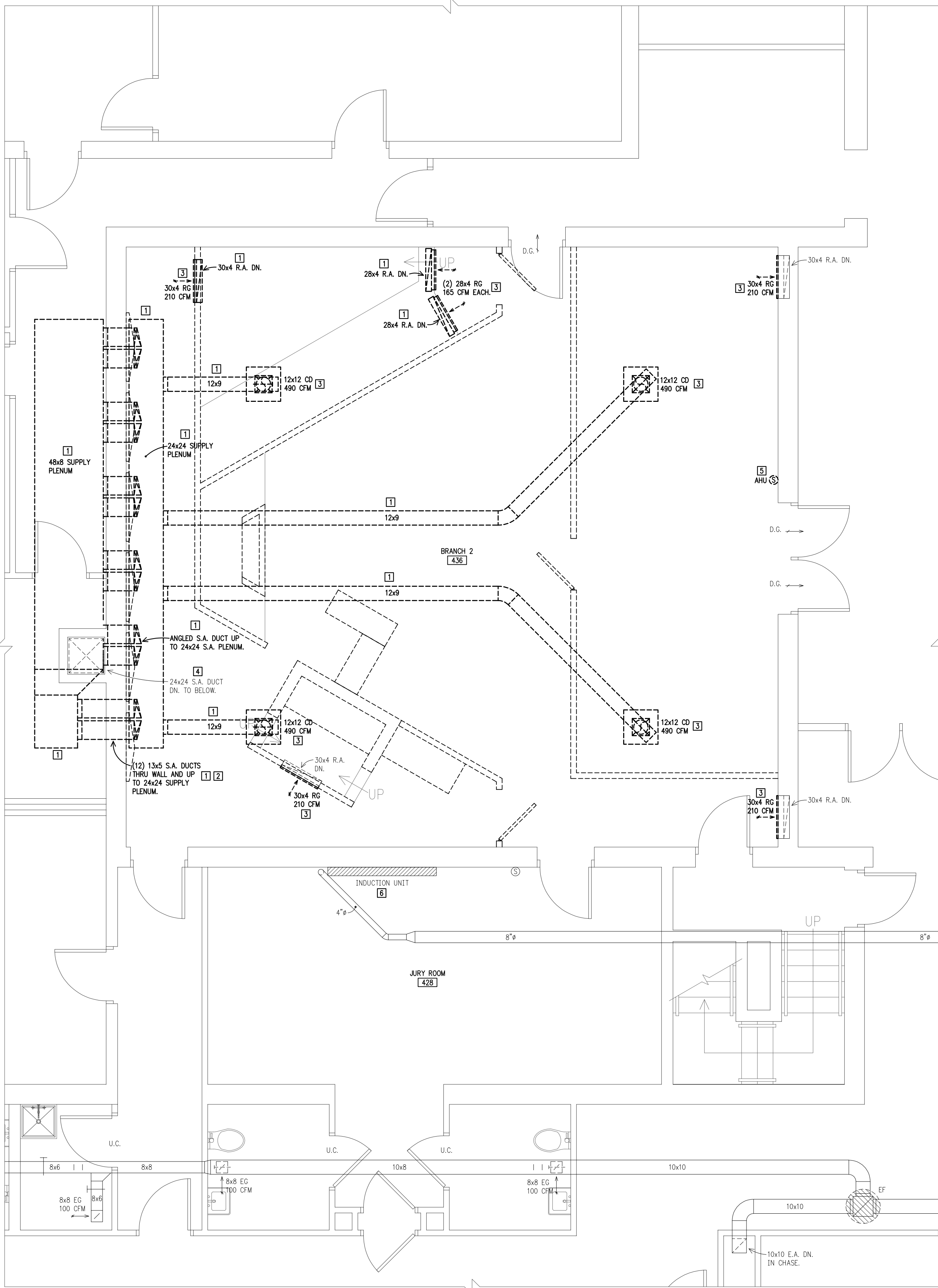
DESIGNED BY:
LJJ

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:

M100



1 MECHANICAL FIFTH AND SIXTH FLOOR PLAN
M101 1/4"= 1'-0" (DEMOLITION) NORTH

- MECHANICAL DEMOLITION NOTES:**
1. REMOVE DUCTWORK COMPLETE AS SHOWN.
 2. WALL PATCH AT UNUSED WALL OPENINGS BY G.C.
 3. REMOVE GRILLE/REGISTER/DIFFUSER COMPLETE AND TURN OVER TO OWNER.
 4. SUPPLY DUCT IN CHASE REMAINS.
 5. DISCONNECT AND REMOVE SENSOR. NEW SENSOR TO BE INSTALLED IN REMODEL WORK.
 6. G.C. TO PREP INDUCTION UNIT CABINET FOR REPAINTING IN REMODEL WORK.

APEX
Engineering
Eau Claire, Wisconsin
Telephone: 715-835-7736
Web: apexengineering.biz

ARCHITECTS
L & P
ENGINEERS
Lien & Peterson Architects
Eau Claire, Wisconsin
715-835-7500
lienandpetersonarchitects.com

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**MECHANICAL FIFTH
& SIXTH FLOOR
PLAN - DEMOLITION**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

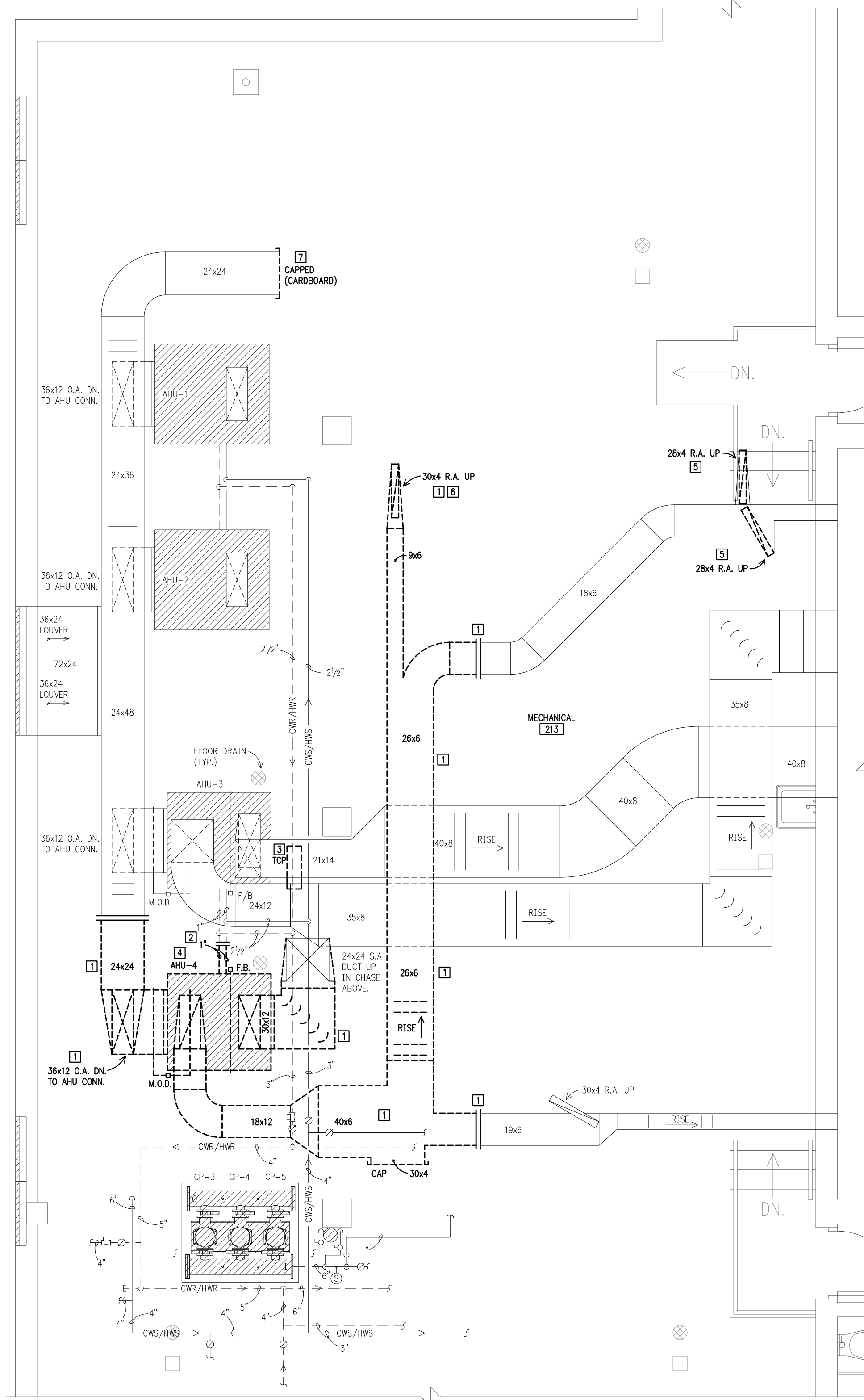
DRAWN BY:
NW/LJJ

DESIGNED BY:
LJJ

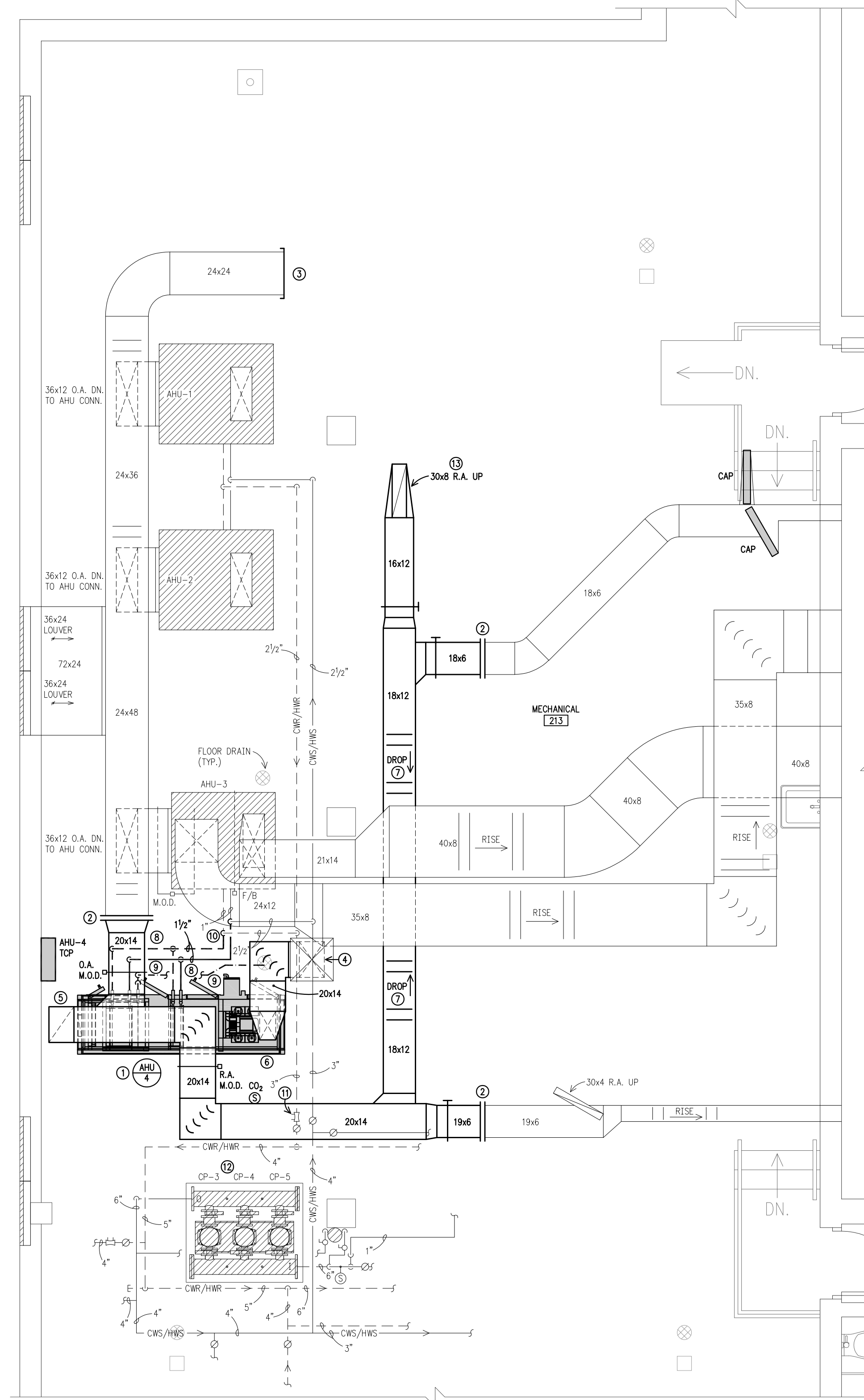
DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
M101



1
M102 **MECHANICAL THIRD AND FOURTH FLOOR PLAN**
1/4"= 1'-0" (DEMOLITION) **NORTH**



2
M102 **MECHANICAL THIRD AND FOURTH FLOOR PLAN**
1/4"= 1'-0" (REMODEL) **NORTH**

- MECHANICAL DEMOLITION NOTES:**
1. REMOVE DUCTWORK TO BREAK LINES OR AS SHOWN AND CAP WHERE INDICATED.
 2. REMOVE PIPING COMPLETE TO BREAK LINES AS SHOWN INCLUDING ACCESSORIES.
 3. T.C.C. TO REMOVE TCP COMPLETE.
 4. REMOVE AIR HANDLING UNIT COMPLETE INCLUDING: RETURN AIR, OUTSIDE AIR, AND FACE/BYPASS DAMPERS, HEATING/COOLING COIL, SUPPORTS, AND ACCESSORIES. CONTROL DISCONNECTION BY T.C.C.
 5. CAP DUCT NEAR MAIN FLOOR PATCH BY G.C.
 6. G.C. TO ENLARGE OPENING AS REQUIRED.
 7. REMOVE AND PREP FOR SHEET METAL CAP.

- MECHANICAL REMODEL NOTES:**
1. MOUNT AHU LEVEL ON CONCRETE PAD. PAD BY G.C.
 2. NEW CONNECTION TO EXISTING DUCT EXTEND AS SHOWN.
 3. CAP WITH SHEET METAL AND INSULATION. SEAL AIR TIGHT.
 4. 20x14 UP. TRANSITION/CONNECT TO EXISTING 24x24 DUCT UP IN CHASE.
 5. 20x14 R.A. DN. TO R.A. PLENUM. PLENUM TO BE FULL SIZE OF R.A. CONNECTION TO AHU-4.
 6. 20x14 S.A. DN. TO AHU-4 S.A. CONNECTION. TRANSITION AS REQUIRED.
 7. KEEP DUCT AS HIGH AS POSSIBLE BELOW EXISTING DUCT.
 8. SEE DETAILS FOR INDIVIDUAL CONNECTIONS AND PIPE SIZES TO HOT WATER AND CHILLED WATER COILS.
 9. PROVIDE CONDENSATE TRAP PER MFG. INSTRUCTIONS. SEE DETAILS FOR REFERENCE. PITCH CONDENSATE PIPING AS REQUIRED TO EXISTING FLOOR DRAIN. SIZE PER MFG. REQUIREMENTS.
 10. CONNECT NEW PIPING TO 2 1/2" BRANCH PIPING.
 11. REBALANCE EXISTING BALANCE VALVE TO 87.5 GPM.
 12. REBALANCE COOLING FLOW SETPOINT TO 470.9 GPM AND HEATING FLOW SETPOINT TO 420.5 GPM.
 13. G.C. TO MODIFY FLOOR OPENING AS REQUIRED.



COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
MECHANICAL THIRD & FOURTH FLOOR PLAN - DEMOLITION & REMODEL

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
BIDDING DOCUMENTS

PROJECT NO:
25001

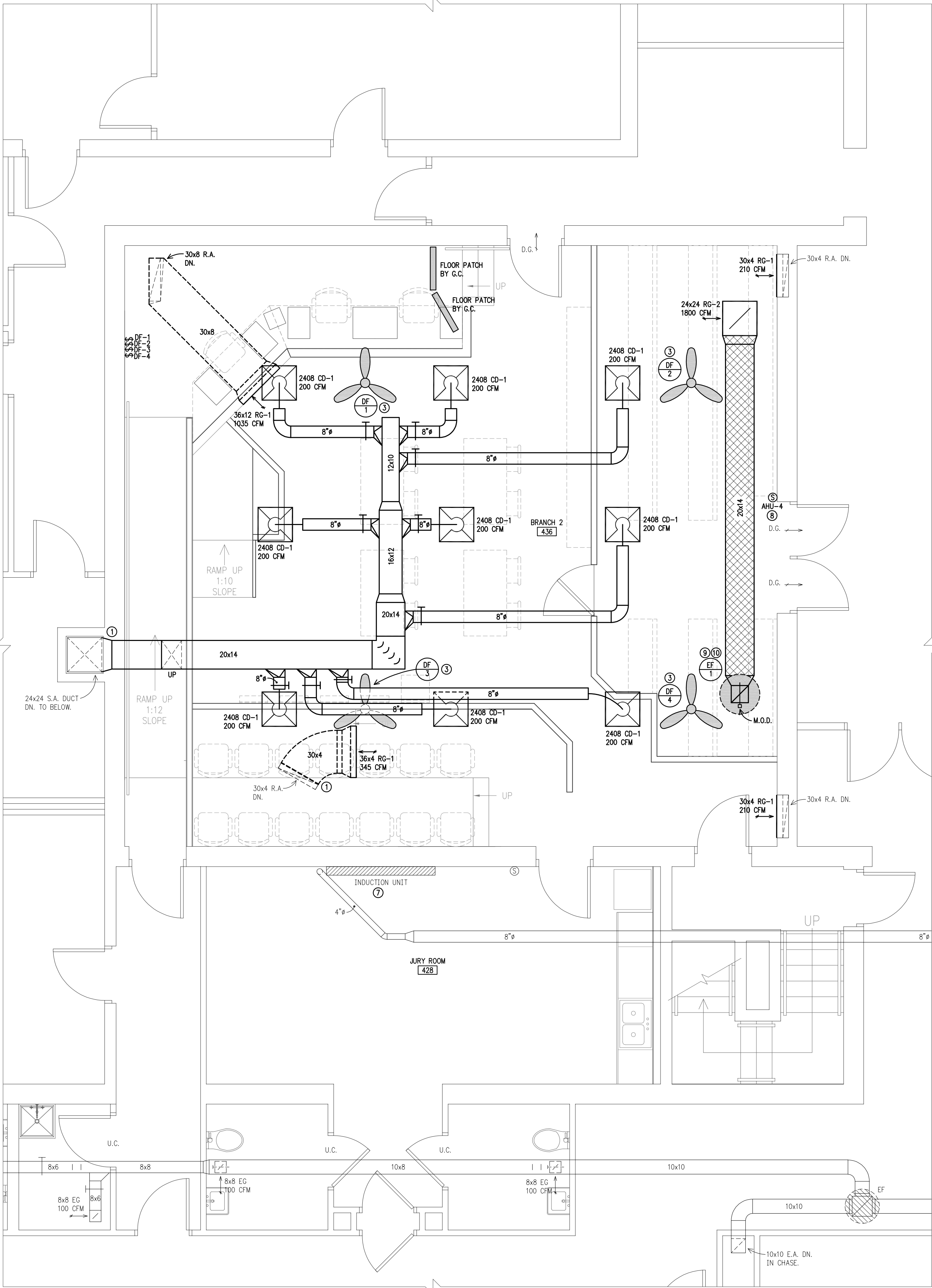
DRAWN BY:
NW/LJJ

DESIGNED BY:
LJJ

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
M102



- ① MECHANICAL REMODEL NOTES:
1. NEW CONNECTION TO EXISTING DUCT. EXTEND AS SHOWN.
 2. NOT USED.
 3. SUPPORT AS REQUIRED. MAINTAIN ALL REQUIRED CLEARANCES.
 4. NOT USED.
 5. NOT USED.
 6. NOT USED.
 7. G.C. TO PRIME AND PAINT INDUCTION UNIT COVER. COLOR CHOC BY ARCHITECT/OWNER.
 8. PROVIDE NEW TEMPERATURE SENSOR AS SHOWN.
 9. MOUNT EF LEVEL ON ROOF CURB. G.C. TO PROVIDE NEW ROOF OPENING. FLASH AND SEAL. WATER TIGHT. VERIFY AND MAINTAIN ANY EXISTING ROOF WARRANTIES. VERIFY WITH OWNER.
 10. EF IS FOR RELIEF AIR. SEE SCHEDULE AND SPECIFICATIONS.

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**MECHANICAL FIFTH
& SIXTH FLOOR
PLAN - REMODEL**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
NW/LJJ

DESIGNED BY:
LJJ

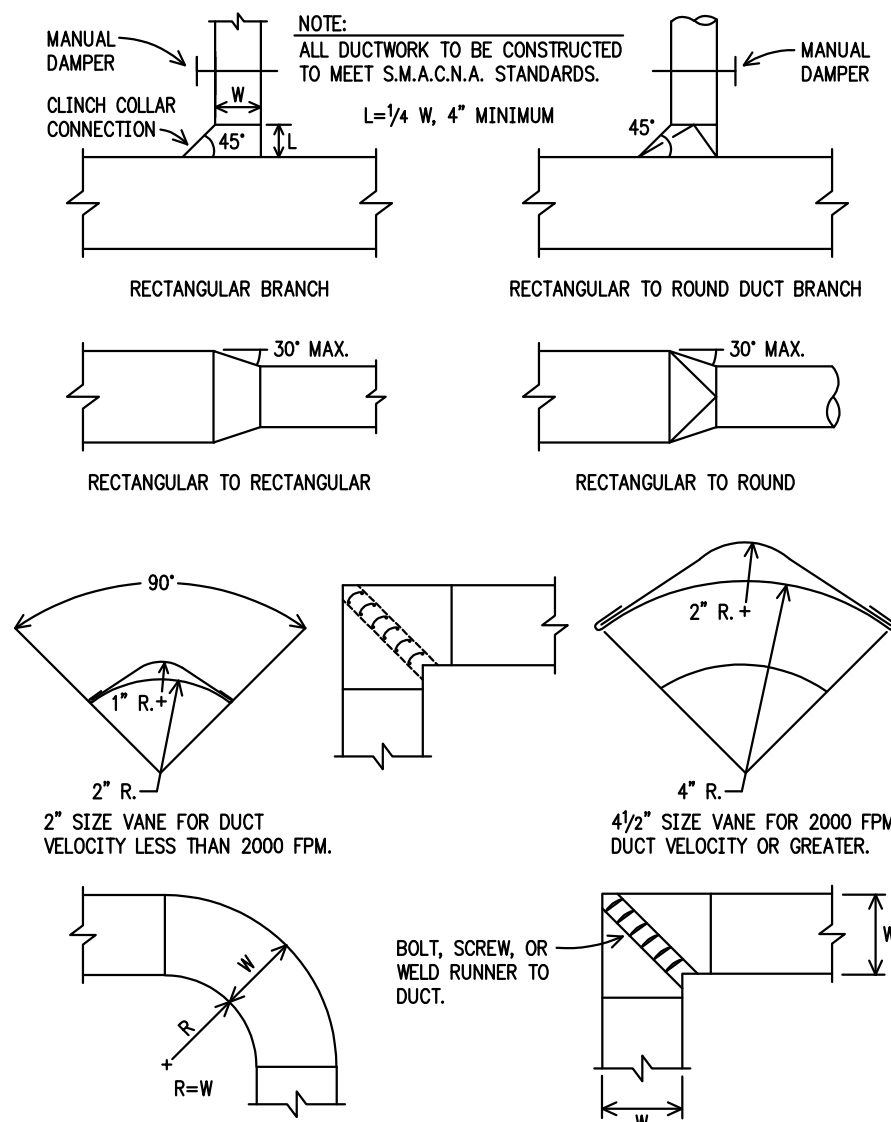
DATE:
12/18/2025

REV.:	DATE:	REMARK:

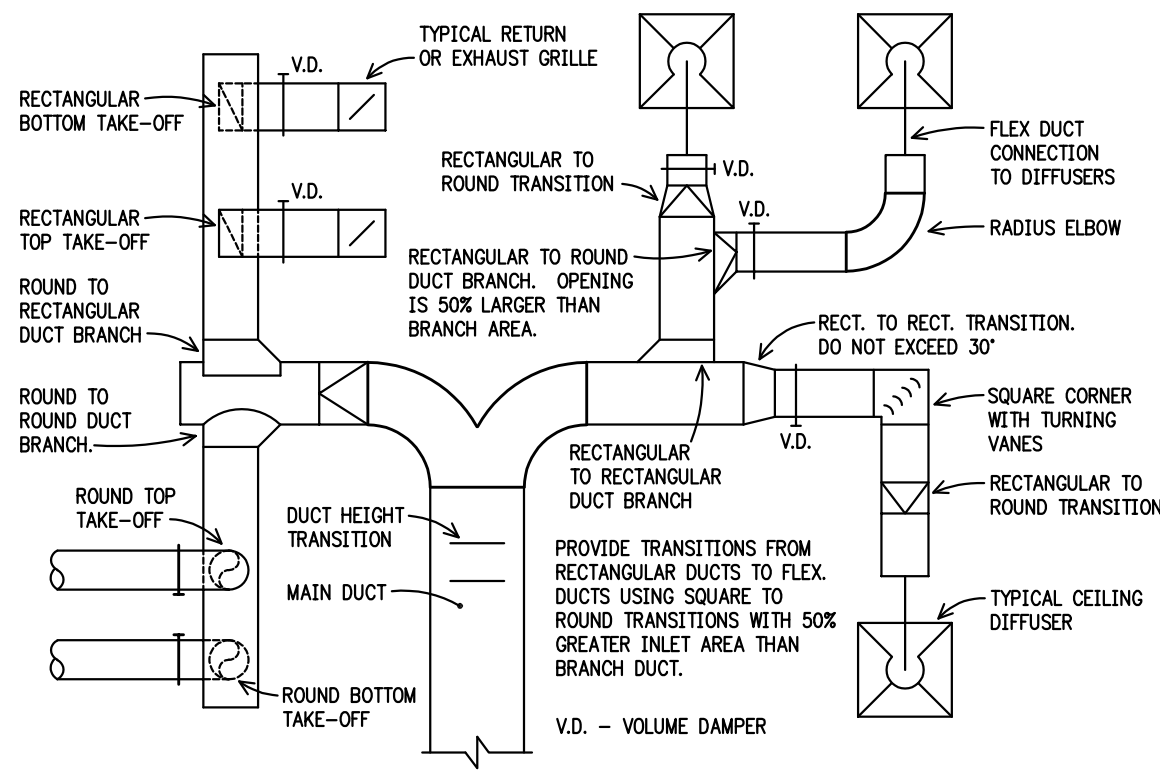
SHEET:
M201

1
M201 **MECHANICAL FIFTH AND SIXTH FLOOR PLAN**
1/4" = 1'-0" **(REMODEL)**

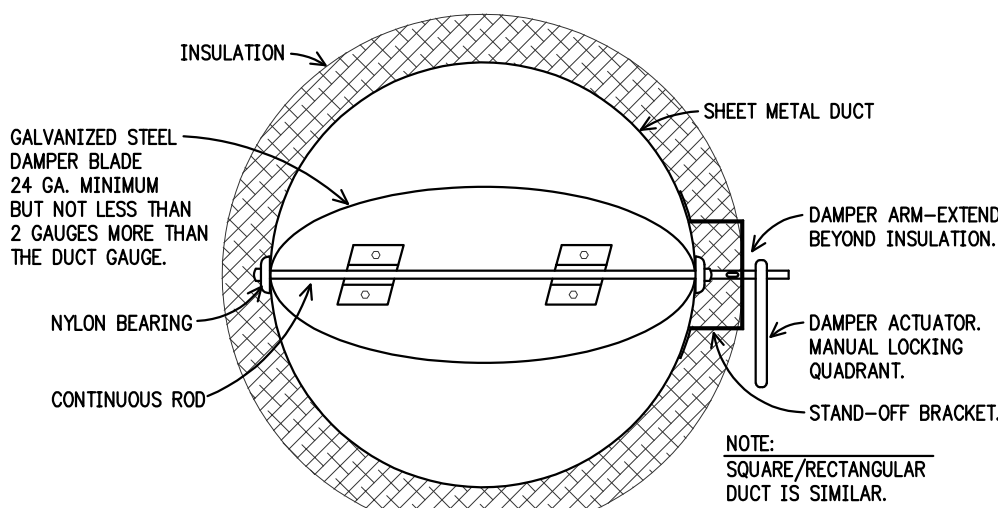




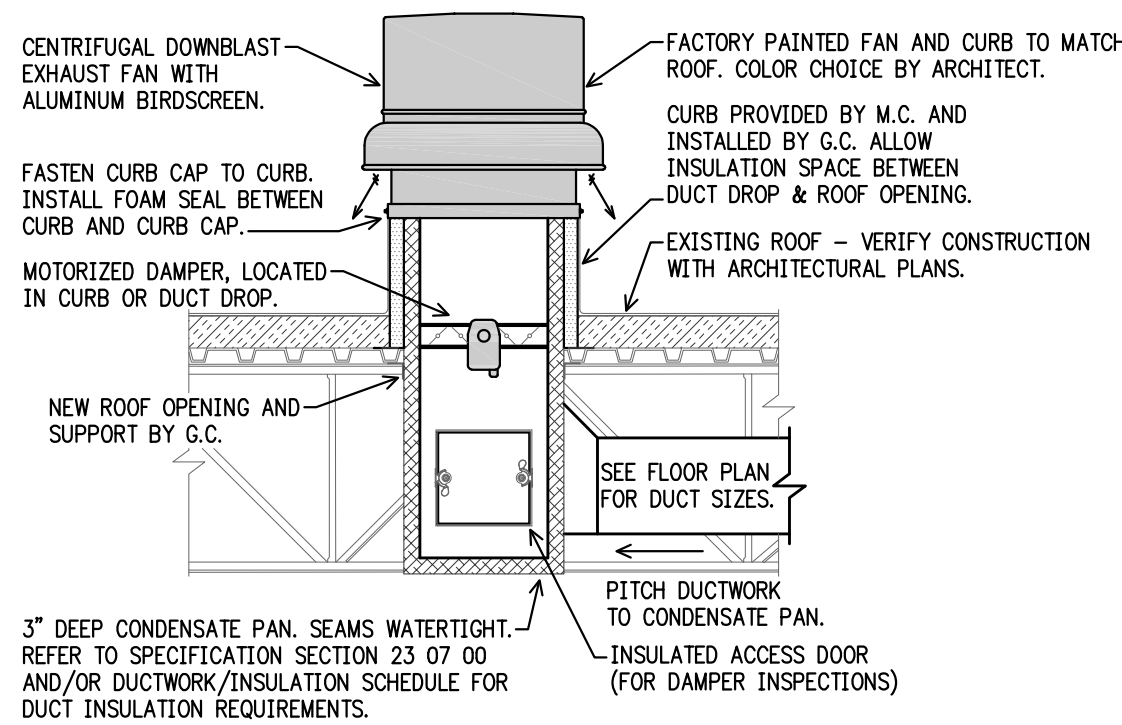
5 DUCTWORK DETAIL
M301 NO SCALE



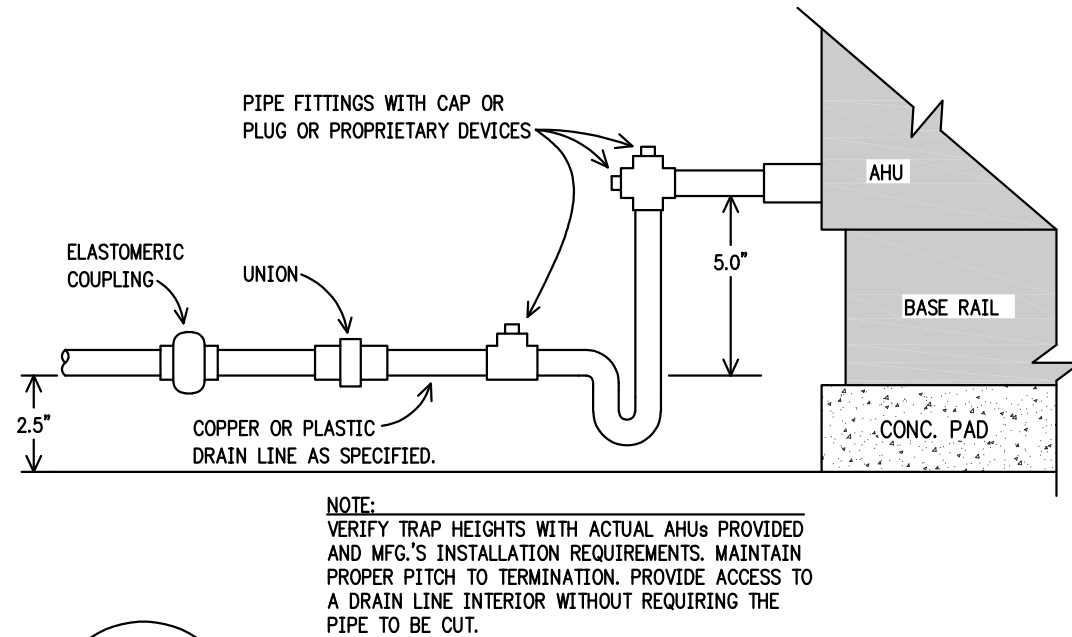
6 TYPICAL DUCT CONDITIONS
M301 NO SCALE



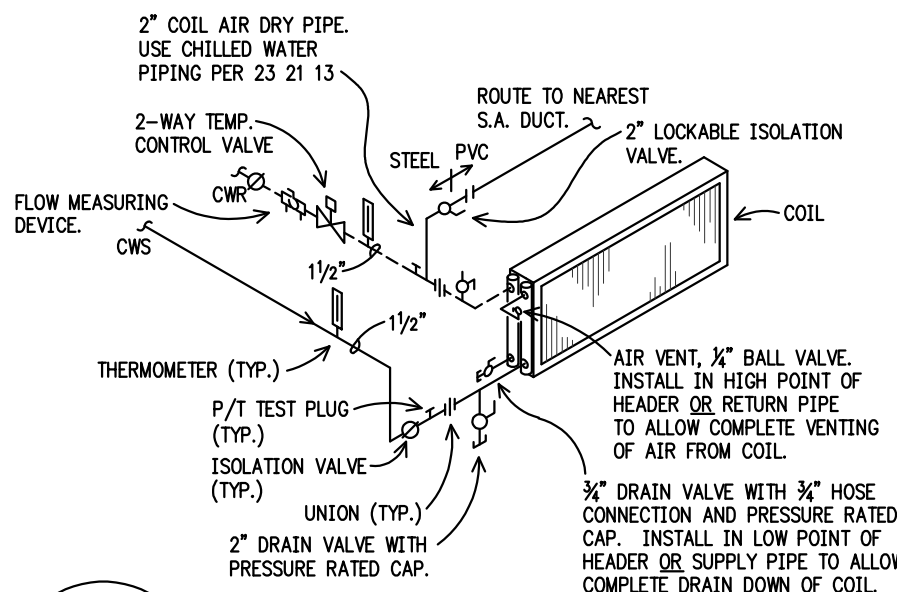
7 TYPICAL DAMPER DETAIL
M301 NO SCALE



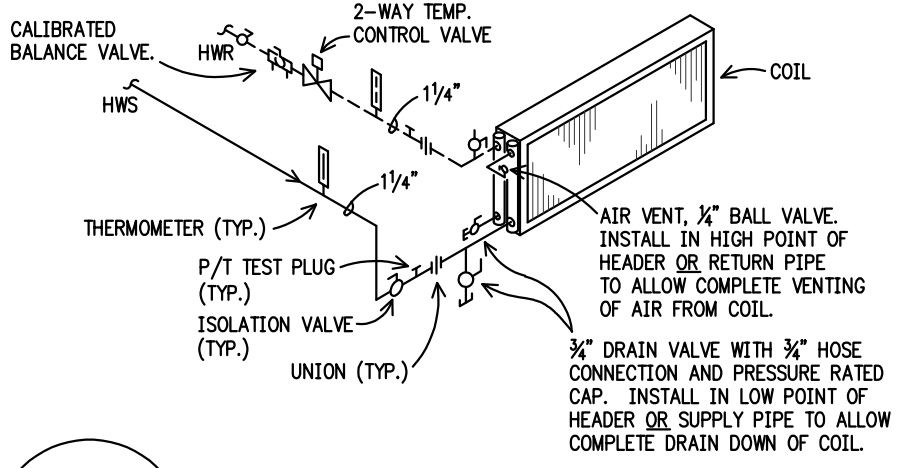
1 ROOF EXHAUST FAN DETAIL
M301 NO SCALE (CENTRIFUGAL DOWNBLAST)



2 CONDENSATE TRAP PIPING DETAIL
M301 NO SCALE



3 CW COIL PIPING DETAIL
M301 NO SCALE (2-WAY CW COIL) (AHU-4)



4 HW COIL PIPING DETAIL
M301 NO SCALE (2-WAY HW COIL) (AHU-4)

AIR HANDLING UNIT SCHEDULE

PLAN SYMBOL	ROOM NO.	SERVES	CFM	O.A. CFM	UNIT TYPE	SUPPLY AIR FAN										FACE & B.P.	MIX BOX	FILTERS	APPROX. WEIGHT (LBS)	MFGR. & MODEL NO.
						TYPE/ CLASS	SIZE	EXT. S.P.	TOTAL S.P.	RPM	BHP	HP	VFD	ELEC. CHAR.						
4	213	BRANCH 2	1800	③	C.V. HORIZ.	SWST II	PER MFG.	1.0"	3.10"	3450	1.33	2	①	480/3	NO	NO	2" MERV 8	1400	YORK JCI XT1-30x39 ②	

- ① VFD PROVIDED INTEGRAL TO AHU.
② PERFORMED LINER REQUIRED FOR FAN AND PLENUM SECTIONS.
③ MINIMUM O.A. = 250 CFM. BASED ON CO2 SENSOR MAXIMUM O.A. = 565 CFM. SEE 23 09 SPECIFICATIONS.

AIR HANDLING UNIT COIL SCHEDULE

PLAN SYMBOL	HOT WATER COIL (WATER)												CHILLED WATER COIL (WATER)											
	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	MBH	GPM	MAX W.P.D.	MAX A.P.D.	MAX FPI	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	MBH	GPM	MAX W.P.D.	MAX A.P.D.	MAX FPI		
AHU-4	1800	3.75 SQ. FT.	180	160	40	78.7	75	7.7	1.8'	0.05"	10 (1 ROW)	1800	3.75 SQ. FT.	45	55	79 66	50.4 48.8	79 T. 56 S.	13.1	6.7'	0.73"	9 (8 ROW)		

EXHAUST (RELIEF) FAN SCHEDULE

PLAN SYMBOL	ROOM NO.	SYSTEM	CFM	EXT. S.P.	WHEEL TYPE & SIZE	RPM	BHP	MOTOR (HP)	ELEC. CHAR.	DAMPER/ SIZE	DRIVE	FAN TYPE	MFGR. & MODEL NO.	CONTROL/NOTES
EF-1	436	RELIEF	1800	0.38"	B.I.-13J8"	1550	0.31	1/2	120/1	BACKDRAFT 12x12	①	DOWNBLAST CENTRIF.	GREENHECK G-130-VG	②

- ① DIRECT DRIVE ECM - POTENTIOMETER ON MOTOR FOR BALANCING.
② 18" TALL CURB. PROVIDE WITH 0-10V CONTROL SIGNAL FOR OPERATION BY BMS. SEE SPECIFICATIONS.

DESTRATIFICATION (CEILING) FAN SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	DIA. (IN.)	MAX. CFM	RPM	MOTOR (HP/W)	ELEC. CHAR.	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	CONTROL	ACCESSORIES/NOTES
DF-1	436	CEILING	48	3861	PER MFG.	45.1	120/1	PER MFG.	BERKO 48201C ①	VARIABLE SPEED WALL SWITCH.	PROVIDE 12" DOWNROD. VERIFY DIMENSIONS WITH OWNER.
DF-2	436	CEILING	48	3861	PER MFG.	45.1	120/1	PER MFG.	BERKO 48201C ①	VARIABLE SPEED WALL SWITCH.	PROVIDE 12" DOWNROD. VERIFY DIMENSIONS WITH OWNER.
DF-3	436	CEILING	48	3861	PER MFG.	45.1	120/1	PER MFG.	BERKO 48201C ①	VARIABLE SPEED WALL SWITCH.	PROVIDE 12" DOWNROD. VERIFY DIMENSIONS WITH OWNER.
DF-4	436	CEILING	48	3861	PER MFG.	45.1	120/1	PER MFG.	BERKO 48201C ①	VARIABLE SPEED WALL SWITCH.	PROVIDE 12" DOWNROD. VERIFY DIMENSIONS WITH OWNER.

- ① VERIFY COLOR AND MANUFACTURER WITH OWNER.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

PLAN SYMBOL	DESCRIPTION	MANUFACTURER & MODEL NO.	MATERIAL	ACCESSORIES
GD-1	24x24 SQUARE FACE, ROUND NECK, 360° HORIZONTAL THROW CEILING DIFFUSER FOR LAY-IN CEILING INSTALLATION.	PRICE ASPD	ALUMINUM	WHITE FINISH
RG-1	HEAVY DUTY SIDEWALL GRILLE, 30° DEFLECTION VANES, 1/2" O.C., 1/4" MARGIN, HORIZONTAL FRONT.	PRICE 99	ALUMINUM	WHITE FINISH
RG-2	SQUARE PATTERN GRILLE, FIXED CORE OF 1/2"x1/2"x1/2" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1/4" MARGIN, FOR SURFACE MOUNT INSTALLATION.	PRICE 80	ALUMINUM	WHITE FINISH

DUCTWORK/INSULATION SCHEDULE

SYSTEM ①	LOW PRESSURE				MED. PRESSURE	HIGH PRESSURE	INSULATION					
	MAX. PRES.	SEAL					MAX. PRES.	SEAL	MAX. PRES.	SEAL	INTERNAL/ THICKNESS	EXTERNAL/ THICKNESS
NEW SUPPLY/RETURN DUCTWORK IN MECH. ROOM	2"	X							YES	1"	NO	–
CONCEALED SUPPLY AIR DUCTWORK.	2"	X							NO	–	YES	2"
OUTSIDE AIR AND MIXED AIR DUCTWORK.	2"	X							NO	–	YES – RIGID WITH LAG AND MASTIC	2"
EXHAUST AIR (RELIEF)	2"	X							YES	1"	YES	2"

- ① THIS SCHEDULE IS INTENDED AS A GUIDE AND DOES NOT REPRESENT COMPLETE INSULATION REQUIREMENTS FOR THE PROJECT. REFER TO WRITTEN MECHANICAL SPECIFICATION SECTIONS AND DETAILS ON PLAN SHEET FOR FURTHER REQUIREMENTS.

TITLE:

MECHANICAL
SCHEDULES
& DETAILS

DO NOT SCALE DRAWINGS.
USE FIGURED DIMENSIONS ONLY.

DOCUMENT PHASE:
BIDDING
DOCUMENTS

PROJECT NO:
25001

DRAWN BY:
NW/LJJ

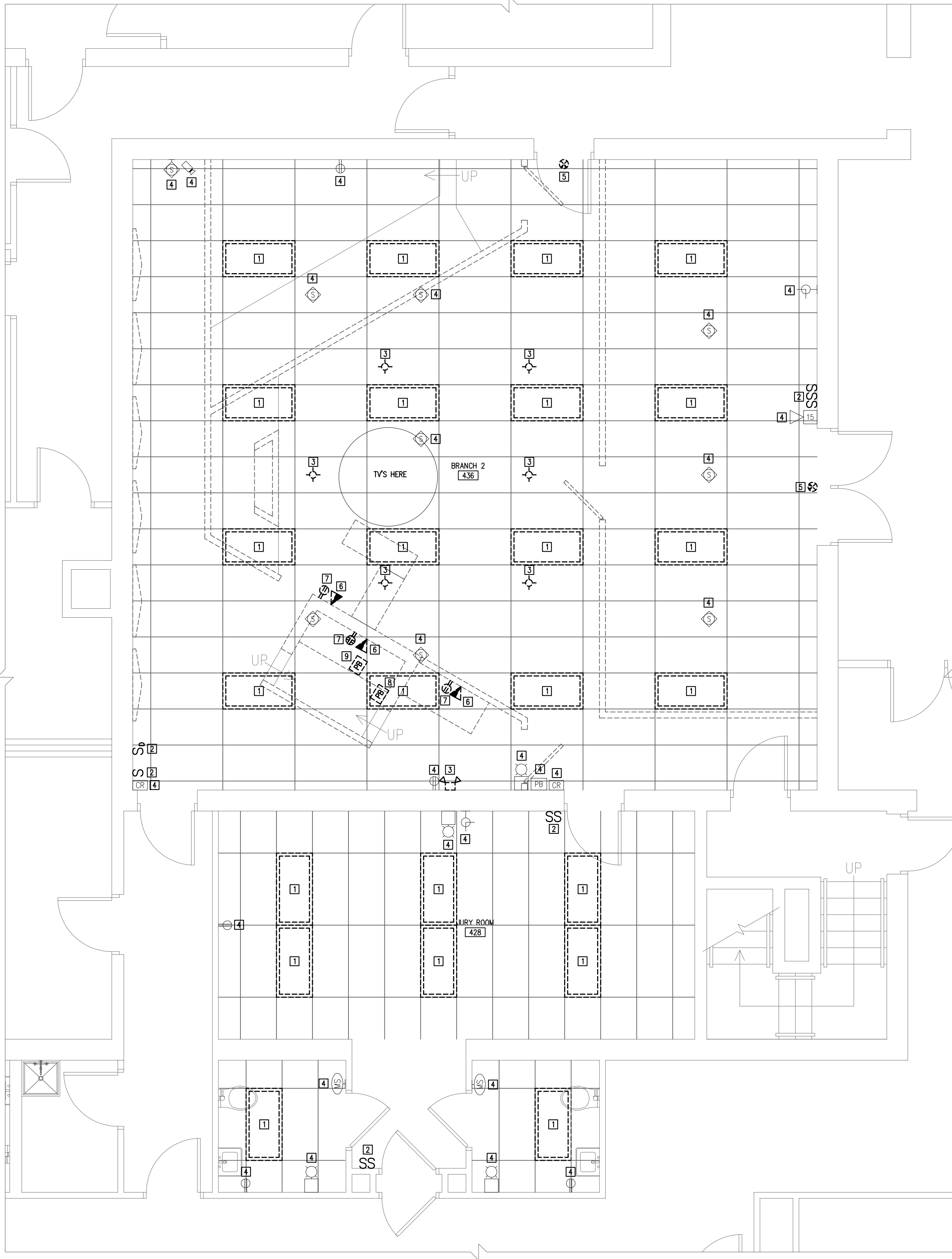
DESIGNED BY:
LJJ

DATE:
12/18/2025

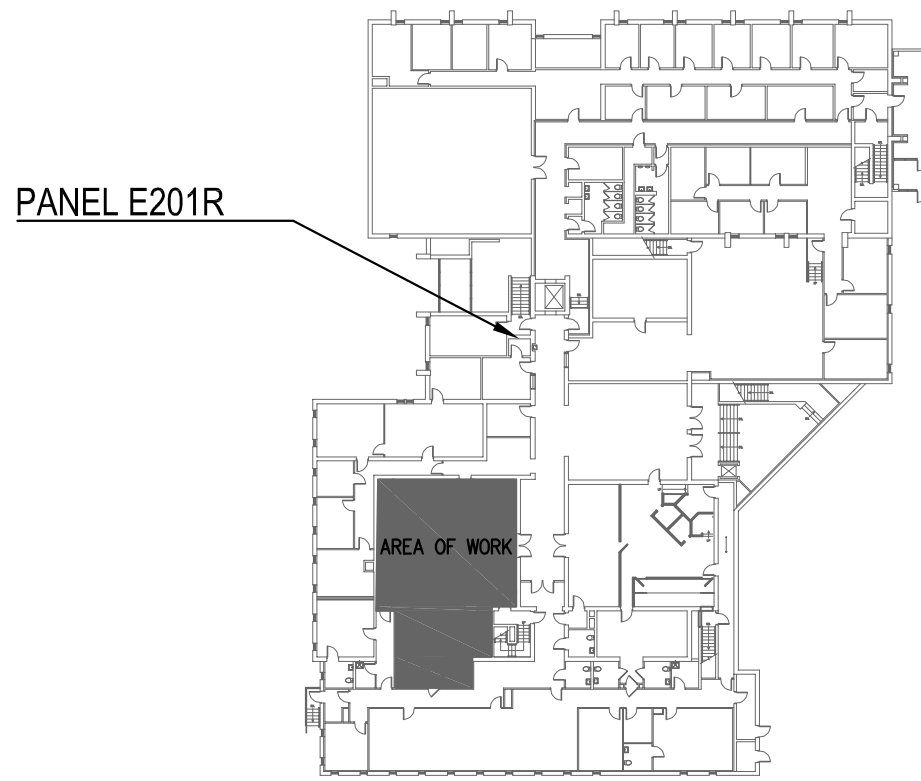
REV.: DATE: REMARK:

SHEET:

M301



1
E101 **ELECTRICAL FIFTH AND SIXTH FLOOR PLAN**
1/4"= 1'-0" (DEMOLITION) **NORTH**



KEYPLAN
NOT TO SCALE **NORTH**

- MECHANICAL DEMOLITION NOTES:**
1. REMOVE EXISTING LUMINAIRE. RETAIN BRANCH CIRCUITING FOR REUSE IN REMODEL WORK. DEMOLISH ANY UNUSED RACEWAYS AND CONDUCTORS BACK TO SOURCE.
 2. REMOVE EXISTING SWITCH(ES). DEMOLISH RACEWAY AND CONDUCTORS BACK TO SOURCE.
 3. REMOVE EXISTING LUMINAIRE. DEMOLISH RACEWAY AND CONDUCTORS BACK TO SOURCE.
 4. EXISTING DEVICE TO REMAIN. NO MODIFICATIONS REQUIRED.
 5. REMOVE EXISTING DEVICE. RETAIN CIRCUITING FOR REUSE IN REMODEL WORK. NEW EXIT SIGN TO REPLACE EXISTING AT SAME LOCATION.
 6. REMOVE EXISTING DEVICE. DEMOLISH RACEWAY AND CONDUCTORS BACK TO SOURCE.
 7. PUSHBUTTON SERVING BELL IN JURY ROOM. SALVAGE PUSHBUTTON AND CIRCUITING FOR REUSE IN REMODEL WORK.
 8. PANIC BUTTON. SALVAGE PUSHBUTTON AND CIRCUITING FOR REUSE IN REMODEL WORK.
 9. REMOVE EXISTING DESTRATIFICATION FAN CONTROLS. NEW CONTROLS TO REPLACE EXISTING AT SAME LOCATION. RETAIN EXISTING CIRCUITING.

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**ELECTRICAL FIFTH AND SIXTH FLOOR
PLAN - DEMOLITION**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
CRK

DESIGNED BY:
CRK

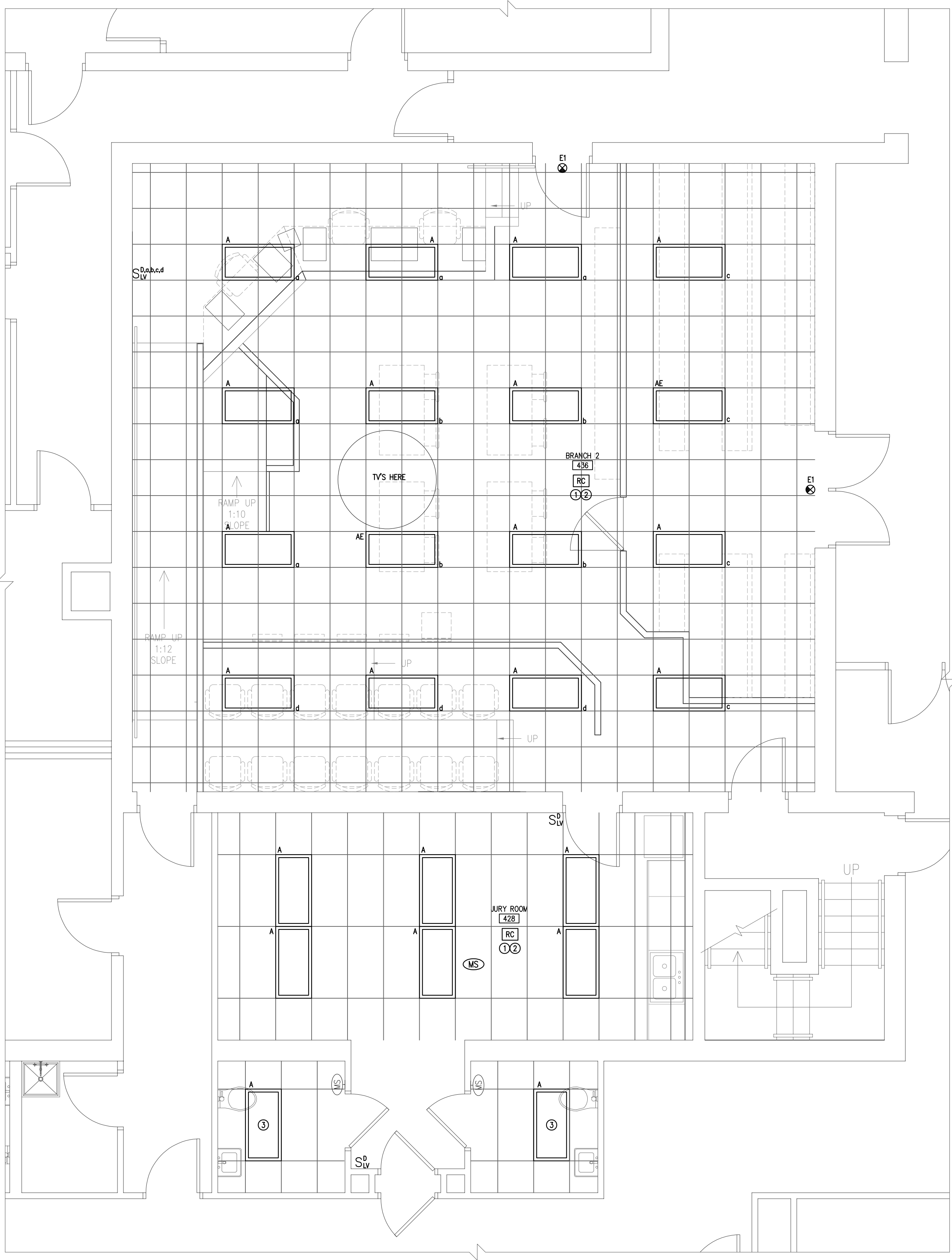
DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
E101

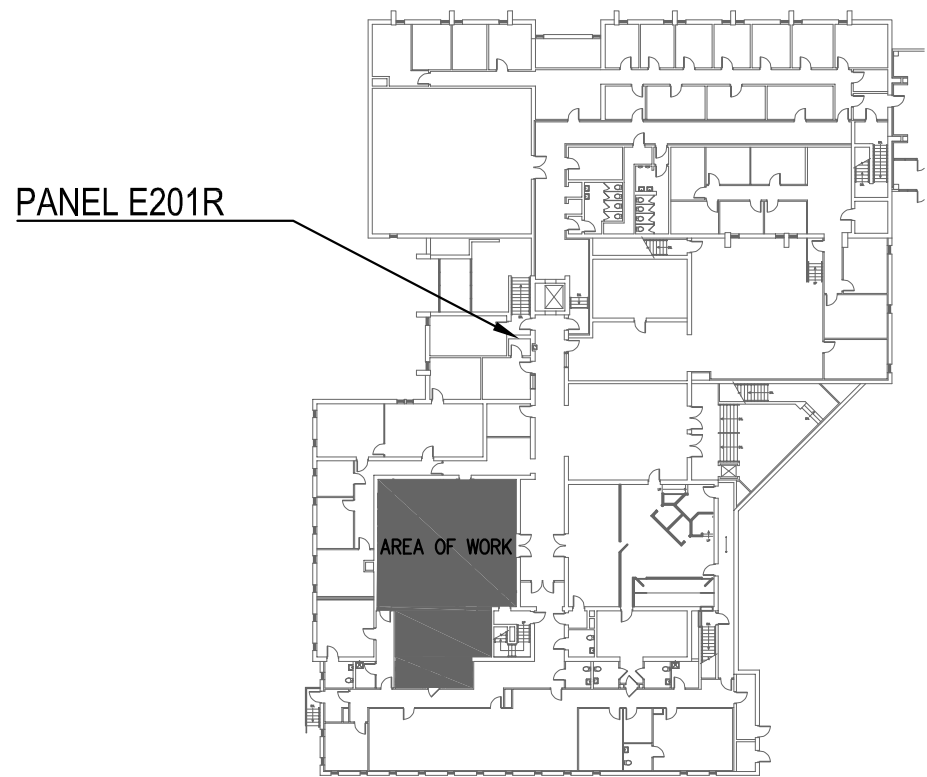


SHEET:
E102



1
E201 **ELECTRICAL FIFTH AND SIXTH FLOOR PLAN**
1/4" = 1'-0" (REMODEL - LIGHTING) **NORTH**

- ELECTRICAL REMODEL NOTES:**
1. PROVIDE ROOM CONTROLLER AND LOW VOLTAGE SWITCHES IN SPACE.
 2. CIRCUIT NEW LIGHTING AND LIGHTING CONTROLS TO EXISTING LIGHTING CIRCUIT(S) SERVING THE SPACE.
 3. CIRCUIT NEW LIGHT TO EXISTING CIRCUIT AND LIGHTING CONTROLS SERVING THE SPACE.



KEYPLAN
NOT TO SCALE **NORTH**

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**ELECTRICAL FIFTH AND SIXTH FLOOR
PLAN - REMODEL
LIGHTING**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

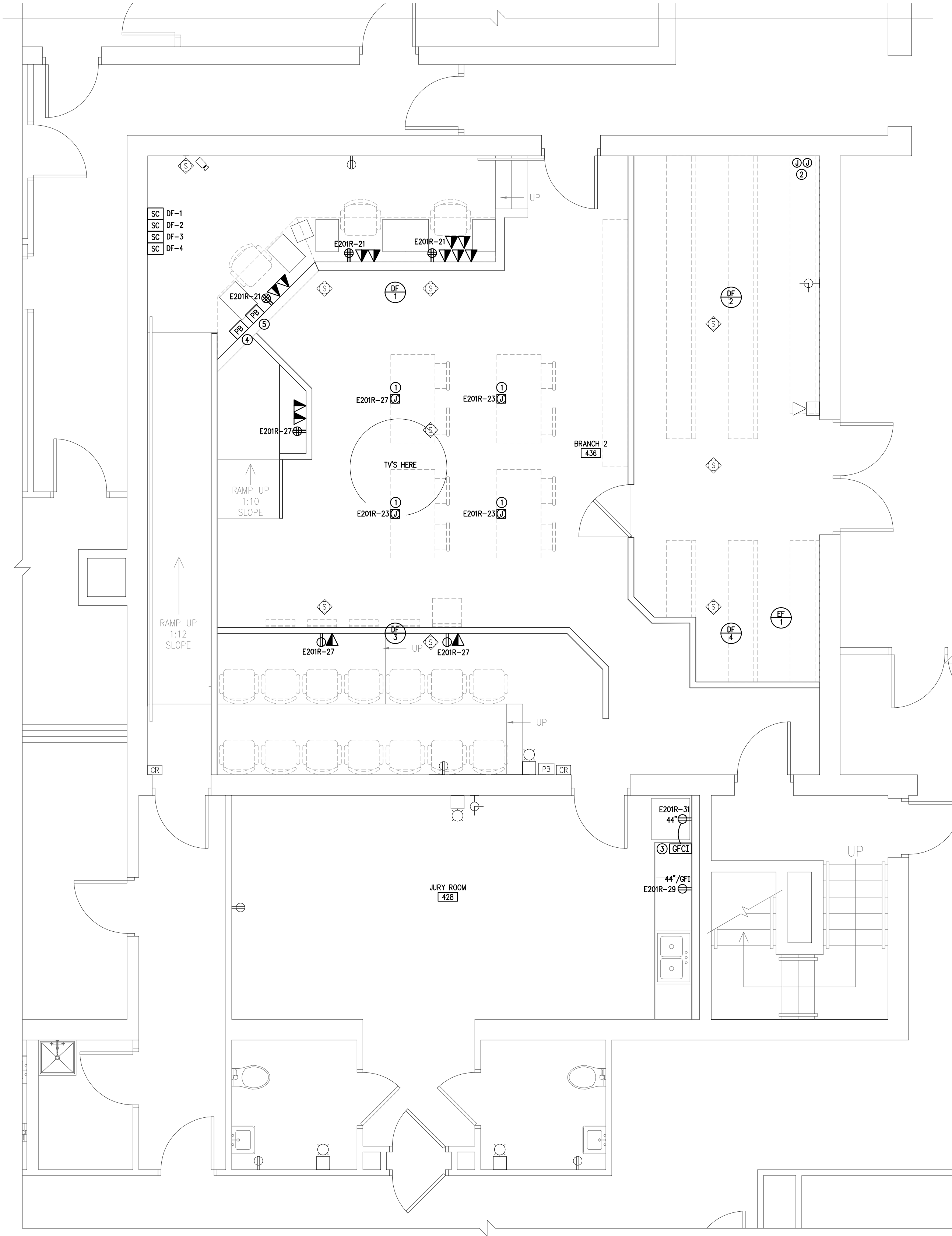
DRAWN BY:
CRK

DESIGNED BY:
CRK

DATE:
12/18/2025

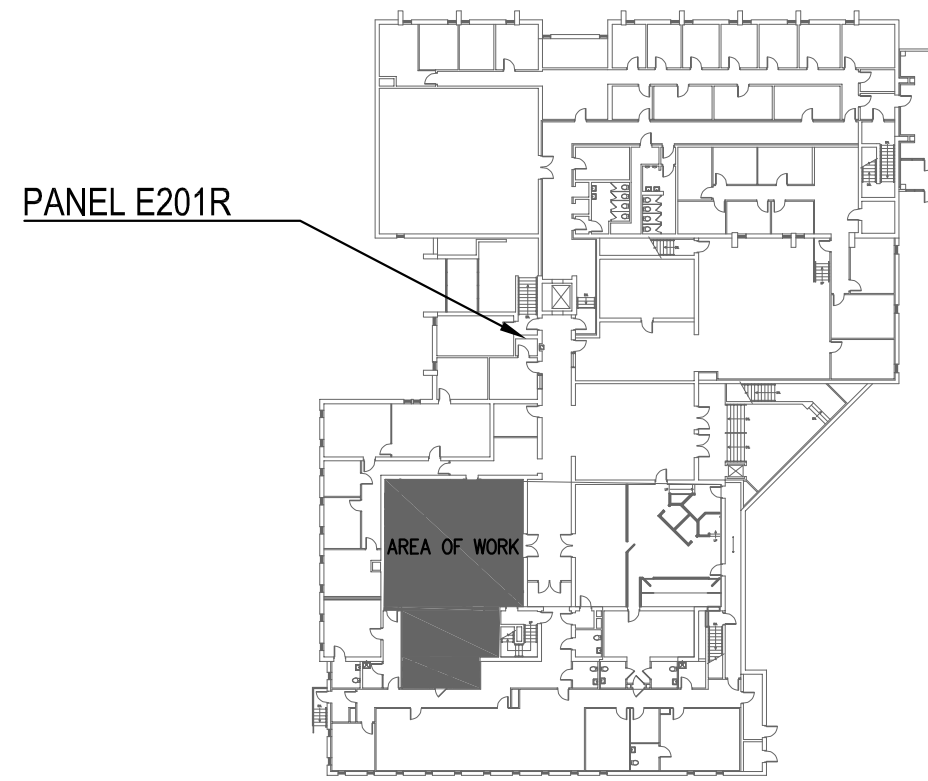
REV.:	DATE:	REMARK:

SHEET:
E201



1
E202 **ELECTRICAL FIFTH AND SIXTH FLOOR PLAN**
1/4" = 1'-0" (REMODEL - POWER) **NORTH**

- ELECTRICAL REMODEL NOTES:**
1. PROVIDE POKE-THRU EQUAL TO A WIREMOLD #STOPAN WITH (2) 1-1/4" C. TO ACCESSIBLE CEILING FOR AV AND TELECOM AND (1) FOR (2) INTEGRAL DUPLEX RECEPTACLES. COORDINATE LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. CORE DRILL FLOOR AS REQUIRED.
 2. PROVIDE (2) 1-1/2" CONDUITS FROM PANEL E201 TO ACCESSIBLE CEILING SPACE IN ROOM.
 3. PROVIDE BLANK FACE GFCI ABOVE COUNTER NEXT TO REFRIGERATOR TO SERVE REFRIGERATOR RECEPTACLE. PROVIDE DEVICE EQUAL TO A LEGRAND #2087.
 4. RELOCATED PUSHBUTTON SERVING BELL IN JURY ROOM. EXTEND/REUSE EXISTING RACEWAY AND CONDUCTORS TO NEW LOCATION.
 5. RELOCATED PANIC BUTTON. EXTEND/REUSE EXISTING RACEWAY AND CONDUCTORS TO NEW LOCATION.



KEYPLAN
NOT TO SCALE **NORTH**

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**ELECTRICAL FIFTH AND SIXTH FLOOR
PLAN - REMODEL
POWER**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
CRK

DESIGNED BY:
CRK

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
E202



1
E203 **ELECTRICAL THIRD AND FOURTH FLOOR PLAN**
1/4"= 1'-0" (REMODEL) **NORTH**

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**ELECTRICAL THIRD
AND FOURTH FLOOR
PLAN - REMODEL**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
CRK

DESIGNED BY:
CRK

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
E203

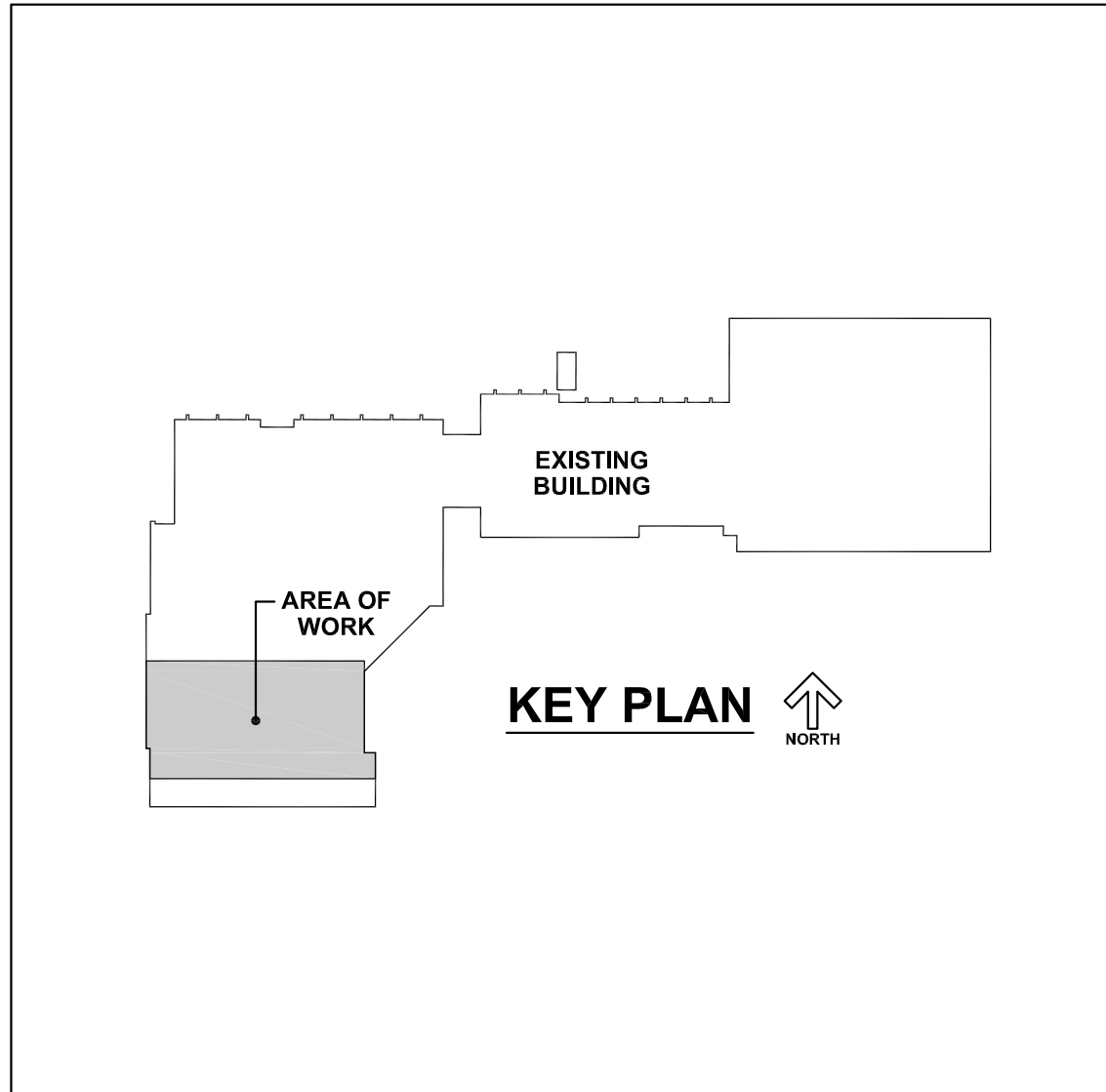
LIGHTING FIXTURE SCHEDULE

NOTE: SEE SPECIFICATIONS SECTIONS 26 51 00 FOR ADDITIONAL INFORMATION REGARDING LIGHTING FIXTURE AND INSTALLATION REQUIREMENTS. MANUFACTURERS NAMES AND CATALOG NUMBER ARE USED FOR ESTABLISHING THE QUALITY AND PERFORMANCE ONLY. EQUIPMENT MANUFACTURER BY OTHERS ARE EQUALLY ACCEPTABLE PROVIDED THEY MEET OR EXCEED QUALITY, DIMENSIONS AND PERFORMANCE. OWNER IS PLANNING ON SUBMITTING FOR FOCUS ON ENERGY REBATES. ALL FIXTURES SHALL BE DLC LISTED IF AVAILABLE.												
ABBREVIATIONS: DW = DRY WALL LG = LAY-IN GRID P = PENDANT R = RECESS W = WALL MOUNTED UNV = UNIVERSAL VOLTAGE 120-277V PO = POLE ES = EXPOSED STRUCTURE L = LED PL = PLASTER S = SURFACE V = VARIES CH = CHAIN HUNG LP = LINER PANEL												
DES.	DESCRIPTION	LIGHTING FIXTURE		LAMP DATA		VOLT	MNTG TYPE	CEILING TYPE	MNTG HEIGHT	FIXT. DEPTH	ACCEPTABLE MFG.	SEE NOTE
		MFG.	CATALOG SERIES	LUMEN	COLOR TEMP.							
A	2'X4' ARCHITECTURAL TROFFER	METALUX	24CZSB-SCT3-UNV	SELECTABLE	SELECTABLE	UNV	R	LG	V	3-1/4"	HUBBELL ACUTTY	1,2
AE	2'X4' ARCHITECTURAL TROFFER, BATTERY BACK-UP	METALUX	24CZSB-SCT3-UNV-EL14WSD	SELECTABLE	SELECTABLE	UNV	R	LG	V	3-1/4"	HUBBELL ACUTTY	1,2
E1	UNIVERSAL FACE EXIT LIGHT	SURE LITES	APX7-RG-BK	-	-	UNV	-	-	-	-	COOPER ACUTTY	1
LIGHTING FIXTURE SCHEDULE NOTES: 1. FIXTURE MODEL NUMBER MAY NOT REFLECT ALL MOUNTING HARDWARE. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MOUNTING EQUIPMENT, LENSES, STEMS, SAFETY CHAINS END PLATES AND ALL OTHER HARDWARE NECESSARY FOR A COMPLETE INSTALLATION. SEE MOUNTING DETAILS WHEN APPLICABLE. 2. SET TO LOW LUMEN OUTPUT AND 3500K UNLESS NOTED OTHERWISE.												

MOTORS, HVAC & EQUIPMENT CONNECTIONS																		
PLAN SYMBOL	CIRCUIT NUMBER	FEEDER SIZE	CHARACTERISTICS			DISCONNECT DEVICE			STARTER			CONTROLS/CONTROL WIRING			NOTES			
			KW HP-FLA	VOLTS/ PHASE	UNIT LOCATION	CHARACTERISTICS	NEMA TYPE	PROVIDED BY	LOCATION	CHARACTERISTICS	NEMA SIZE	NEMA TYPE	PROVIDED BY	LOCATION		CHARACTERISTICS	WIRE BY	PROVIDED BY
AHU-3	NOTE 2	NOTE 2	2.5MCA	480/3	213	HEAVY DUTY FUSED DISCONNECT	1	E.C.	AT UNIT	—	—	—	—	—	HVAC CONTROLS	M.C.	M.C.	SEE MECH 1,3
EF-1	E201R-24	2-#12+1-#12GND	1/2HP	120/1	436	FURNISHED WITH UNIT	—	M.C.	AT UNIT	—	—	—	—	—	HVAC CONTROLS	M.C.	M.C.	SEE MECH 1
DF-1	E201R-25	2-#12+1-#12GND	1/10HP	120/1	436	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	—	—	—	—	—	SPEED CONTROLLER	E.C.	M.C.	SEE MECH 1
DF-2	E201R-25	2-#12+1-#12GND	1/10HP	120/1	436	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	—	—	—	—	—	SPEED CONTROLLER	E.C.	M.C.	SEE MECH 1
DF-3	E201R-25	2-#12+1-#12GND	1/10HP	120/1	436	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	—	—	—	—	—	SPEED CONTROLLER	E.C.	M.C.	SEE MECH 1
DF-4	E201R-25	2-#12+1-#12GND	1/10HP	120/1	436	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	—	—	—	—	—	SPEED CONTROLLER	E.C.	M.C.	SEE MECH 1
1. SEE MECHANICAL SHEETS FOR LOCATION OF EQUIPMENT AND COORDINATION OF WORK. 2. EXTEND/REUSE EXISTING RACEWAY AND CONDUCTORS PREVIOUSLY SERVING DEMOLISHED AIR HANDLER AT SIMILAR LOCATION 3. PROVIDE 120V CIRCUIT FOR INTEGRAL LIGHTING. CIRCUIT TO NEAREST CIRCUIT SERVING RECEPTACLES IN THE AREA.																		

PANEL: E201R VOLTAGE: 208Y/120V-3P-4W MOUNTING: FLUSH FED FROM:										EXIST. GEN/LAB BUS RATING: 225A MAIN: MLO					
TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP			
	EX - 426, 431, PROBATE LTG	20A		1	1	0		2		20A	EX - 404 REC				
	EX - 412 A&B 413-416 LTG	20A		3			0	4		20A	EX - 404 REC				
	EX - 426 LTG	20A		5				6		20A	EX - 403, 404 LTG				
	EX - 411, 417, 419, 420	20A		7	0			8		20A	EX - 402 LTG				
	EX - 427, 429, 433, 439	20A		9			0	10		20A	EXISTING				
	EX - HALLWAYS 423, 412, 430 LTG	20A		11				12		20A	EX - 401, 523, 524				
	EX - CAN LTG FOR ENTRANCES 407	20A		13	0			14		20A	EX - 405 LTG				
	EX - 418, 422, 421 LTG	20A		15			0	16		20A	SPARE				
	EX - HANDICAP DOORS	20A		17				18		20A	EX - 409, 422 LTG				
	EX - BAILIFF DESK	20A		19	0			20		20A	EXISTING				
R	REC - JUDGES BENCH 436	20A	1080	21			1080	22		20A	EX - BAS POWER SUPPLY				
R	REC - FLOOR BOXES 436	20A	1080	23				2256	24	1176	20A	EF-1	M		
R	DF-1, DF-2, DF-3, DF-4	20A	1440	25		1440		26		20A	SPARE				
R	REC - FLOOR BOXES, REC'S 436	20A	1080	27			1080	28		20A	SPARE				
R	REC - COUNTER 428	20A	360	29				360	30	20A	SPARE				
R	REC - REFRIGERATOR 428	20A	1500	31		1500		32		20A	SPARE				
	SPACE			33			0	34		20A	SPARE				
	SPACE			35				36							
BUS TOTALS (KVA)						0	0	0	C - CONTINUOUS LOAD (*125%)						
CONNECTED					7.7		0	0	LM - LARGEST MOTOR LOAD (*125%)						
DEMAND					7.7		0	0	M - MOTOR LOAD						
							0	0	N - NON-CONTINUOUS LOAD						
BUS TOTALS (AMPS)							2940	2160	1440	R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)					
CONNECTED					21.4		0	0	K - KITCHEN LOAD (65% OF LOAD)						
DEMAND					21.4		2940	2160	2616	TOTAL DEMAND PER PHASE (VA)					

SYMBOL SCHEDULE	
LIGHTING	RECEPTACLES
<div><div><div><div></div><div>FIXTURE TYPE</div></div><div><div>SWITCH LEGS OR RELAY #</div><div>LAY-IN TROFFER DESIGNATIONS TYPICAL FOR ALL FIXTURE TYPES</div></div><div><div>X-XX - CIRCUIT #</div><div>PANEL DESIGNATION</div></div></div></div>	<div><div><div><div></div><div>DUPLEX RECEPTACLE</div><div>-18" TO CENTER AFF</div></div><div><div><div></div><div>GFI</div></div><div>PROTECTED DUPLEX RECEPTACLE</div><div>-18" TO CENTER AFF</div></div><div><div><div></div><div>DOUBLE DUPLEX RECEPTACLE</div><div>-18" TO CENTER AFF</div></div></div></div></div>
<div><div><div><div></div><div>CEILING FIXTURE</div></div></div></div>	<div><div><div><div></div><div>POWER</div></div></div></div>
<div><div><div><div></div><div>EXIT LIGHT</div><div>-UNIVERSAL MOUNT</div></div></div></div>	<div><div><div><div></div><div>JUNCTION BOX</div><div>-FLOOR MOUNT</div></div></div></div>
<div><div><div><div></div><div>EMERGENCY LIGHT</div><div>-WALL MOUNT</div></div></div></div>	<div><div><div><div></div><div>PUSHBUTTON</div><div>-44" TO CENTER AFF</div></div></div></div>
<div><div><div><div></div><div>SINGLE POLE WALL SWITCH</div><div>-44" TO CENTER AFF</div></div></div></div>	<div><div><div><div></div><div>SPEED CONTROL SWITCH</div><div>-44" TO CENTER AFF</div></div></div></div>
<div><div><div><div></div><div>DIMMING WALL SWITCH</div><div>-44" TO CENTER AFF</div></div></div></div>	<div><div><div><div></div><div>EQUIPMENT NAME PER SCHEDULE</div><div>EQUIPMENT # PER SCHEDULE</div></div></div></div>
<div><div><div><div></div><div>LOW VOLTAGE WALL SWITCH</div><div>-44" TO CENTER AFF</div></div></div></div>	<div><div><div><div></div><div>POWER PANELBOARD (FLUSH MOUNT)</div><div>-WALL MOUNT AT 74" AFF TO TOP</div></div></div></div>
<div><div><div><div></div><div>OCCUPANCY SENSOR</div><div>-CEILING MOUNT</div></div></div></div>	<div><div><div><div></div><div>POWER PANELBOARD (SURFACE MOUNT)</div><div>-WALL MOUNT AT 74" AFF TO TOP</div></div></div></div>
SECURITY	
<div><div><div><div></div><div>CARD READER</div><div>-44" TO CENTER AFF</div></div></div></div>	<div><div><div><div></div><div>FIRE ALARM</div></div></div></div>
<div><div><div><div></div><div>DOOR POSITION SWITCH</div></div></div></div>	<div><div><div><div></div><div>FIRE ALARM STROBE - 80" (COORD.) AFF</div><div>-NUMBER REPRESENTS CANDELA RATING</div></div></div></div>
<div><div><div><div></div><div>DOOR LOCK</div></div></div></div>	<div><div><div><div></div><div>FIRE ALARM HORN/STROBE - 80" (COORD.) AFF</div><div>-NUMBER REPRESENTS CANDELA RATING</div></div></div></div>
<div><div><div><div></div><div>CLOSED CIRCUIT CAMERA</div></div></div></div>	<div><div><div><div></div><div>SOUND/CLOCK/PAGING</div></div></div></div>
COMMUNICATION	
<div><div><div><div></div><div>INFORMATION OUTLET</div><div>-18" TO CENTER AFF</div></div></div></div>	<div><div><div><div></div><div>SPEAKER (*WP INDICATED WEATHER PROOF)</div><div>-96" AFF</div></div></div></div>
<div><div><div><div></div><div>INFORMATION OUTLET</div><div>-FLOOR MOUNT</div></div></div></div>	<div><div><div><div></div><div>SPEAKER (*WP INDICATED WEATHER PROOF)</div><div>-CEILING MOUNT</div></div></div></div>
	<div><div><div><div></div><div>CLOCK (SINGLE FACE)</div><div>-96" AFF (COORD. WITH TRADES)</div></div></div></div>
ABBREVIATIONS	
EC ELECTRICAL CONTRACTOR MC MECHANICAL CONTRACTOR PC PLUMBING CONTRACTOR	GC GENERAL CONTRACTOR AHU AIR HANDLING UNIT DF DESTRATIFICATION FAN



OVERALL KEY PLAN

PLUMBING SHEET INDEX	
SHEET #	SHEET NAME
P100	PLUMBING GENERAL INFORMATION SHEET
P101	PLUMBING THIRD, FOURTH, FIFTH AND SIXTH FLOOR PLANS DEMOLITION
P201	PLUMBING THIRD, FOURTH, FIFTH AND SIXTH FLOOR PLANS REMODEL
P301	PLUMBING SCHEMATICS

GENERAL NOTES:	
1.	PITCH ON HORIZONTAL SANITARY & STORM PIPING. A. 2" AND SMALLER, 1/4"/ft. MINIMUM B. 2-1/2" AND LARGER, 1/8"/ft. MINIMUM
2.	CLEANOUTS A. WALL - 28"/60" ABOVE FINISH FLOOR B. 2" - 1-1/2" OPENING MIN. FOR C.O. C. 2" WASTE B.F.G. C.O. - 40' INTERVALS MAX.

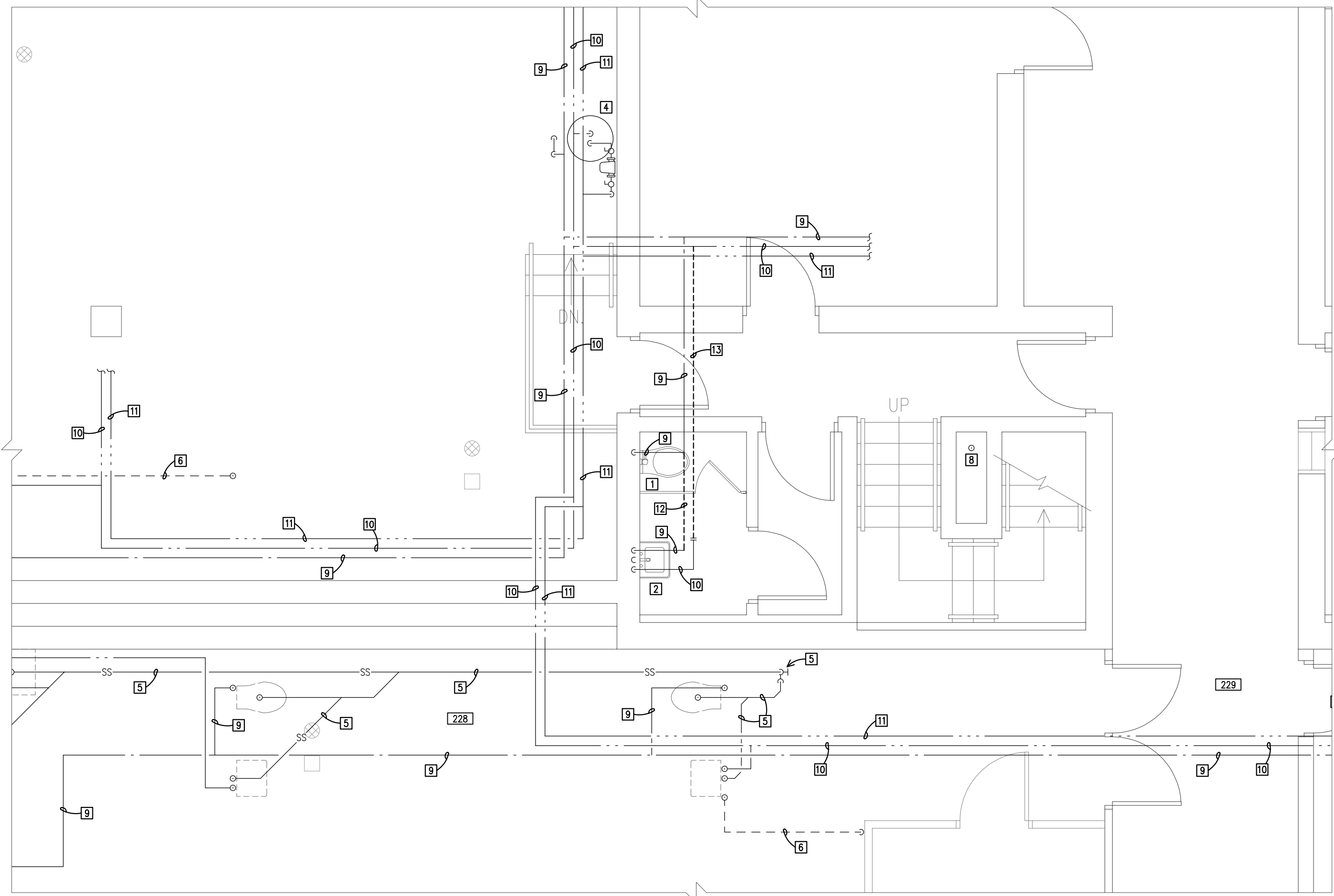
LINE TYPE KEY	
	NEW WORK BELOW IN GRADE BY PLUMBING CONTRACTOR (DARK THICK SOLID LINE)
	NEW WORK BY PLUMBING CONTRACTOR (DARK SOLID LINE)
	NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
	EXISTING TO BE REMOVED BY PLUMBING CONTRACTOR (DARK SHORT DASHED LINE)

CONTRACTOR ABBREVIATION KEY	
ABBR:	CONTRACTOR:
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR

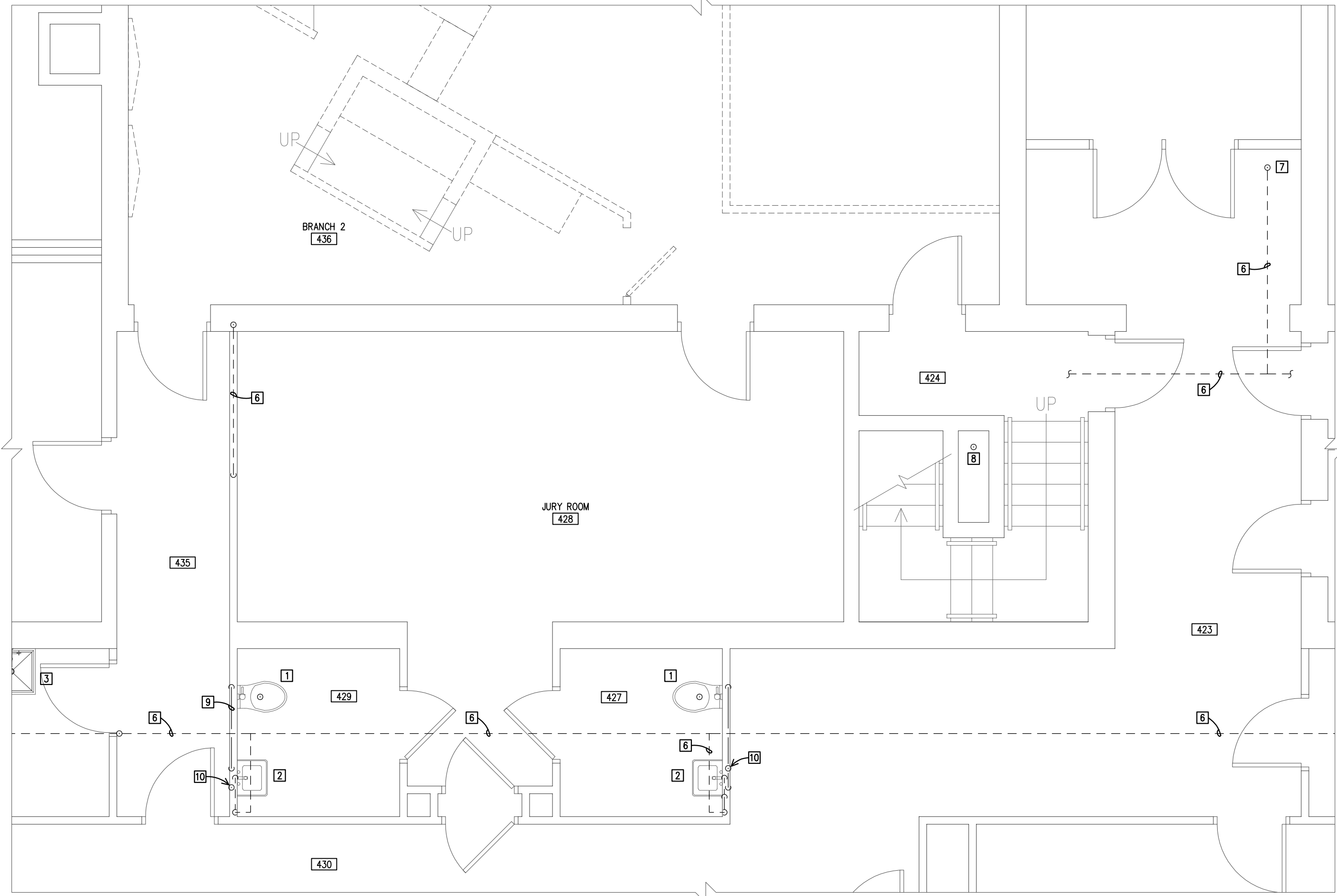
PLUMBING LEGEND	
GENERAL SYMBOLS	PIPING SYMBOLS ABBREVIATIONS
INVERT ELEVATION	BALL VALVE
KEYNOTES FIRE PROTECTION	CHECK VALVE
KEYNOTES NEW OR REMODEL	DOMESTIC WATER CIRCULATING PUMP
KEYNOTES NEW OR REMODEL	FIXTURE VALVE
KEYNOTES NEW OR REMODEL	GATE VALVE
FLOOR DRAIN	GLOBE VALVE
HOSE BIBB OR WALL HYDRANT	INDICATES DIRECTION OF WATER FLOW
ROOF DRAIN	PIPE CAP
PLUMBING FIXTURE/EQUIPMENT (NEW)	PIPE ELEVATION UP OR DOWN
PLUMBING FIXTURE/EQUIPMENT (DEMO)	PIPE RISER UP
PLUMBING FIXTURE/EQUIPMENT (EXISTING)	PIPE TEE - BOTTOM CONNECTION
ROOM NAME INDICATES ROOM NAME INDICATES ROOM NUMBER	PIPE TEE - TOP CONNECTION
SECTION CUT	PIPE UNION
CALLOUT BUBBLE	PIPE SIZE
CALLOUT REFERENCE DETAIL NUMBER	POINT OF CONNECTION/RECONNECTION
CALLOUT REFERENCE SHEET NUMBER	POINT OF DISCONNECTION FOR DEMOLITION
REVISION NUMBER	PIPING SYSTEM ABBREVIATIONS
REVISION CLOUD	COLD WATER (C.W.)
MATCH PIPE BREAK	HOT WATER (H.W.)
SEE SHEET P-.... CONTINUATION OF PIPE BREAK FOR CONTINUATION.	HOT WATER RETURN (H.W.R.)
	RAIN LEADER (R.L.)
	SANITARY SEWER, SANITARY WASTE (W.)
	STORM SEWER (ST.)
	VENT (V.)
	C.I. CAST IRON PIPING
	C.V. CIRCUIT VENT
	R.V. RELIEF VENT
	W. WASTE (SANITARY)
	V. VENT (SANITARY)
	V.T.R. VENT THRU ROOF
	EQUIPMENT ABBREVIATIONS
	C.O. CLEAN OUT
	D.W.C.P. DOMESTIC WATER CIRCULATING PUMP
	E.W.H. ELECTRIC WATER HEATER
	F.C.O. FLOOR CLEAN OUT
	W.C.O. WALL CLEAN OUT
	W.H.A. WATER HAMMER ARRESTOR
	FIXTURES ABBREVIATIONS
	L. LAVATORY SINK
	M.S. MOP SINK
	S. SINK
	W.C. WATER CLOSET
	CODE ABBREVIATIONS
	D.S.P.S. DEPT. SAFETY PROFESSIONAL SERVICES
	I.E.C.C. INTERNATIONAL ENERGY CONSERVATION CODE
	I.F.G.C. INTERNATIONAL FUEL GAS CODE
	N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION
	N.F.P.A. 54 NATIONAL FUEL GAS CODE
	GENERAL ABBREVIATIONS
	A.F.C. ABOVE FINISH CEILING
	A.F.F. ABOVE FINISH FLOOR
	A.F.G. ABOVE FINISH GRADE
	A.F.R. ABOVE FINISHED ROOF
	B.F.F. BELOW FINISH FLOOR
	B.F.G. BELOW FINISH GRADE
	B.T.U. BRITISH THERMAL UNIT
	B.T.U.H. BRITISH THERMAL UNIT PER HOUR
	CL. CENTERLINE
	CL.G. CEILING
	C.O. CLEAN OUT
	CONT. CONTINUE
	CU. FT. CUBIC FEET
	CU. IN. CUBIC INCHES
	DEGREE DEGREE
	D.D.C. DIRECT DIGITAL CONTROLS
	D.F.U. DRAINAGE FIXTURE UNITS
	DIA. or Ø DIAMETER
	DN. DOWN
	DWG. DRAWING
	ELEC. ELECTRICAL
	EXIST. EXISTING
	° F DEGREES FAHRENHEIT
	FIN. FL. FINISH FLOOR
	FLOOR FLOOR
	F.P.M. FEET PER MINUTE
	F.P.S. FOOT PER SECOND
	FL. FEET
	GAL. GALLONS
	G.P.H. GALLONS PER HOUR
	G.P.M. GALLONS PER MINUTE
	HD. HEAD (FEET)
	I.E. INVERT ELEVATION
	H.P. HORSEPOWER
	HTG. HEATING
	H.V.A.C. HEATING, VENTILATION AND AIR CONDITIONING
	I.D. INSIDE DIAMETER
	IN. INCH OR INCHES
	K.W. KILOWATT
	Lbs. POUNDS
	L.W.T. LEAVING WATER TEMPERATURE
	MAX. MAXIMUM
	M.B.H. THOUSAND B.T.U.H.
	MECH. MECHANICAL
	MFG. MANUFACTURER
	MIN. MINIMUM
	MOUNTED MOUNTED
	N.I.C. NOT IN CONTRACT
	N.P.S. NOMINAL PIPE SIZE
	N.T.S. NOT TO SCALE
	O.C. ON CENTER
	O.D. OUTSIDE DIAMETER
	psi POUNDS PER SQUARE INCH
	psig POUNDS PER SQUARE INCH GAUGE
	RM. ROOM
	R.P.M. REVOLUTIONS PER MINUTE
	sq.ft. SQUARE FEET
	S.P. STATIC PRESSURE
	SPEC. SPECIFICATION
	STD. STANDARD
	TEMP. TEMPERATURE
	TSTAT THERMOSTAT
	TYP. TYPICAL
	V. VOLTS
	W.C. WATER COLUMN (GAS)
	W.S.F.U. WATER SUPPLY FIXTURE UNITS
	W. WITH
	5th. FIFTH FLOOR
	4th. FOURTH FLOOR
	3rd. THIRD FLOOR
	2nd. SECOND FLOOR
	1st. FIRST FLOOR
	Base. BASEMENT FLOOR

GENERAL PLUMBING NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH NATIONAL, STATE, & LOCAL CODES; AS WELL AS THE NATIONALLY RECOGNIZED TESTING AND APPROVAL AGENCIES.
- PLUMBING, MECHANICAL/FIRE PROTECTION AND ELECTRICAL CONTRACTORS SHALL COORDINATE WITH ONE ANOTHER ALONG WITH OTHER TRADES BEFORE BEGINNING ANY INSTALLATION AND CONTINUING THROUGHOUT PROJECT.
- DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- PLUMBING CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, WALL HEIGHTS, DOOR SWINGS, WINDOW LOCATIONS, AND ANY OTHER INFORMATION CRITICAL TO THE PLACEMENT OF PIPING AND EQUIPMENT. COORDINATE ANY POSSIBLE CONFLICTS WITH GENERAL CONTRACTOR OR PROJECT MANAGER BEFORE PERFORMING ANY WORK.
- PLUMBING CONTRACTOR IS RESPONSIBLE TO FOLLOW/INSTALL AS PER COMMENTS/CORRECTIONS MADE ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICE'S CONDITIONALLY APPROVED PLUMBING PLANS.
- PROVIDE OWNER TRAINING AND OPERATION AND MAINTENANCE MANUALS FOR THE FURNISHED EQUIPMENT PRIOR TO COMPLETION OF WORK.
- DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, EQUIPMENT SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY VERIFY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
- THE INSTALLING CONTRACTOR SHALL VERIFY REQUIREMENTS FOR SUPPORTED EQUIPMENT AND COMPONENTS OF ANY KIND WITH THE BUILDING AND/OR SUPPORT STRUCTURE DESIGNER PRIOR TO INSTALLATION. APEX ENGINEERING DOES NOT PROVIDE STRUCTURAL DESIGN SERVICES.
- COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES WITH ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OF EQUIPMENT ORDERS.
- VERIFY ALL SANITARY PIPING INVERT ELEVATIONS BEFORE PERFORMING ANY WORK, AND COORDINATE INVERTS AT ALL FOOTINGS AND FOUNDATION WALLS WITH GENERAL CONTRACTOR.
- SANITARY WASTE AND STORM PIPING LOCATED IN CEILING SPACE, CHASES OF LIBRARY, OFFICES, CONFERENCE, TRAINING ROOMS ETC. WHERE SOUND NEEDS TO BE MINIMAL. ALL PIPING SHALL BE CAST IRON OR INSULATED PVC PIPING. COORDINATE WITH GENERAL CONTRACTOR.
- ALL MATERIALS INSTALLED IN PLENUM RATED CEILINGS SHALL BE PLENUM RATED. PLUMBING CONTRACTOR SHALL COORDINATE WITH MECHANICAL AND GENERAL CONTRACTOR ON LOCATION OF PLENUM RATED CEILINGS BEFORE PERFORMING ANY WORK.
- EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, ETC.
- REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS.
- ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
- MAINTAIN WORKING CLEARANCES AT ELECTRICAL EQUIPMENT SUCH AS ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES AND DISCONNECTS PER N.E.C. REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
- ALL EQUIPMENT, AND PIPING SHALL BE KEPT CLEAN FROM DIRT & DEBRIS. DO NOT ALLOW THE INSIDE OF PLUMBING PIPING TO BE EXPOSED DURING CONSTRUCTION.
- FOR ALL FIRE RATED PENETRATIONS, ONLY USE U.L. LISTED, TESTED, AND APPROVED MATERIALS AND METHODS THAT MEET DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES APPROVAL. COORDINATE WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR ON LOCATION AND RATING OF ALL FIRE RATED WALLS, CEILINGS, FLOORS, ETC. USE FIRE RATED MATERIALS AND METHODS THAT MEET DEPARTMENT OF COMMERCE APPROVAL.
- REFER TO ARCHITECTURAL ELEVATION PLAN FOR ALL LAVATORY, WATER COOLER, ETC. MOUNTING HEIGHTS.
- COORDINATE ACCESS PANEL IN HARD CEILINGS FOR CONTROL/ISOLATION VALVES WITH ARCHITECTURAL, REFLECTED CEILING PLAN, ELECTRICAL LIGHT FIXTURES, LIGHT FIXTURE SUPPORT ROOS, AND FIRE SPRINKLER HEADS FOR INTERFERENCE.
- PROVIDE AND INSTALL PIPE SLEEVE AT ALL BUILDING FOUNDATION PENETRATIONS. CORE DRILL THRU FOUNDATION WALL WHERE REQUIRED.
- PROVIDE AND INSTALL PIPE SLEEVE AND SEAL ALL FLOOR AND WALL PENETRATIONS AIR AND WATER TIGHT. CORE DRILL THRU FLOOR OR WALL AS REQUIRED COORDINATE WITH GENERAL CONTRACTOR BEFORE PERFORMING ANY CORE DRILLING.
- SHUT-OFF VALVES INSTALLED IN INSULATED PIPING SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION.
- PLUMBING CONTRACTOR SHALL VERIFY ALL SANITARY AND WATER PIPING LOCATION, INVERTS, AND CONDITION BEFORE PERFORMING ANY WORK.
- NO PIPING SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT UNLESS OTHERWISE NOTED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT LOCATIONS.
- PLUMBING CONTRACTOR TO THOROUGHLY CLEAN ALL EXPOSED PIPING FOR PAINTING AS SPECIFIED. PAINTING BY PAINTING CONTRACTOR.



1
P101
THIRD AND FOURTH FLOOR PLAN
1/4" = 1'-0"
DEMOLITION
NORTH



2
P101
FIFTH AND SIXTH FLOOR PLAN
1/4" = 1'-0"
DEMOLITION
NORTH

- PLUMBING DEMOLITION NOTES:
- EXISTING WATER CLOSET TO REMAIN.
 - EXISTING LAVATORY SINK TO REMAIN.
 - EXISTING MOP SINK TO REMAIN.
 - EXISTING ELECTRIC WATER HEATER AND HOT WATER RETURN PUMP TO REMAIN.
 - EXISTING SANITARY WASTE PIPING TO REMAIN.
 - EXISTING VENT PIPING TO REMAIN.
 - EXISTING VENT THRU ROOF TO REMAIN.
 - EXISTING STORM PIPING TO REMAIN.
 - EXISTING COLD WATER PIPING TO REMAIN.
 - EXISTING HOT WATER PIPING TO REMAIN.
 - EXISTING HOT WATER RETURN PIPING TO REMAIN.
 - REMOVE COLD WATER PIPING FROM BREAK LINES/MAIN TO BREAK LINES COMPLETE.
 - REMOVE HOT WATER PIPING FROM BREAK LINES/MAIN TO BREAK LINES COMPLETE.



COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**PLUMBING
THIRD, FOURTH,
FIFTH AND SIXTH
FLOOR PLANS
DEMOLITION**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

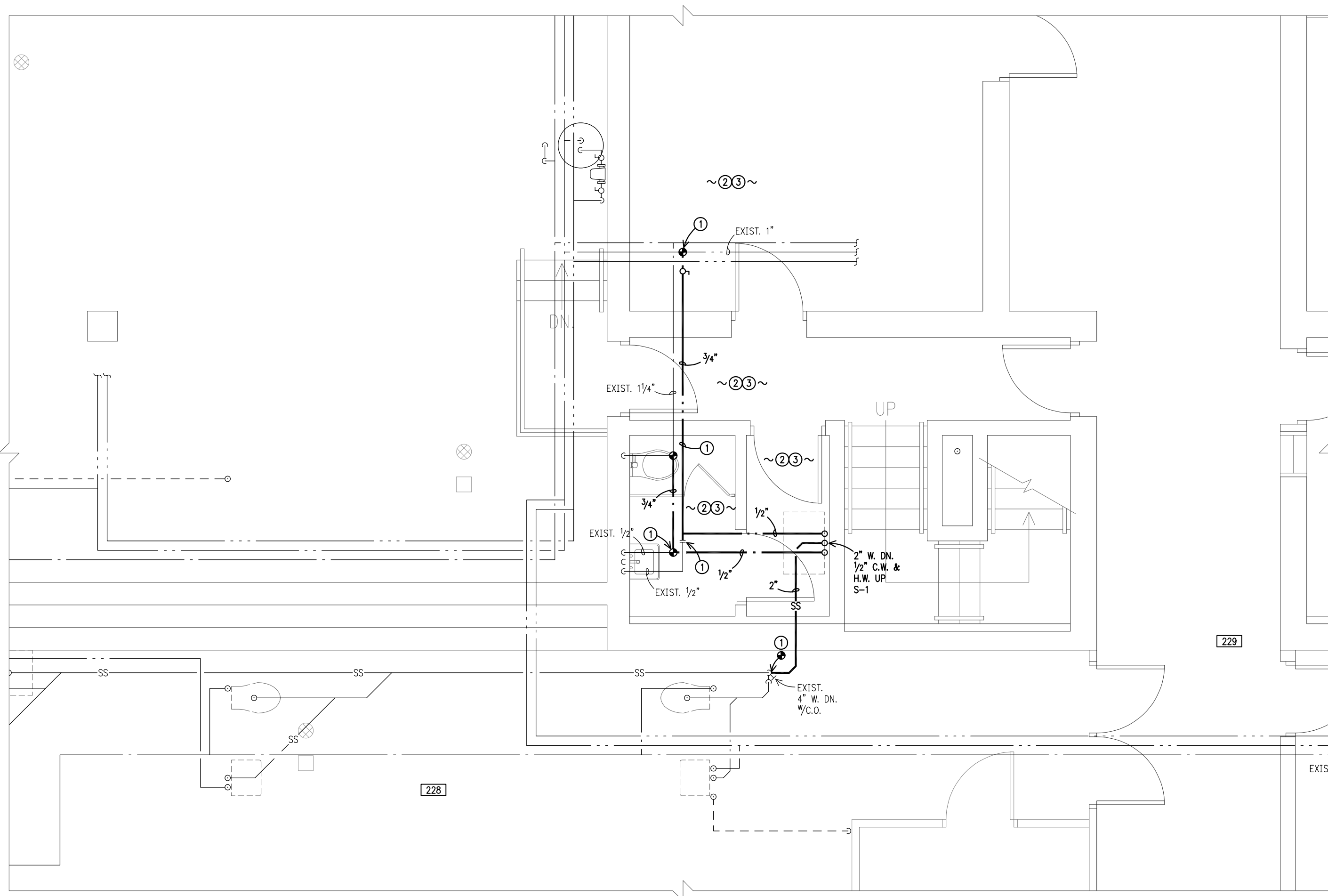
DRAWN BY:
HM

DESIGNED BY:
HM

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
P101

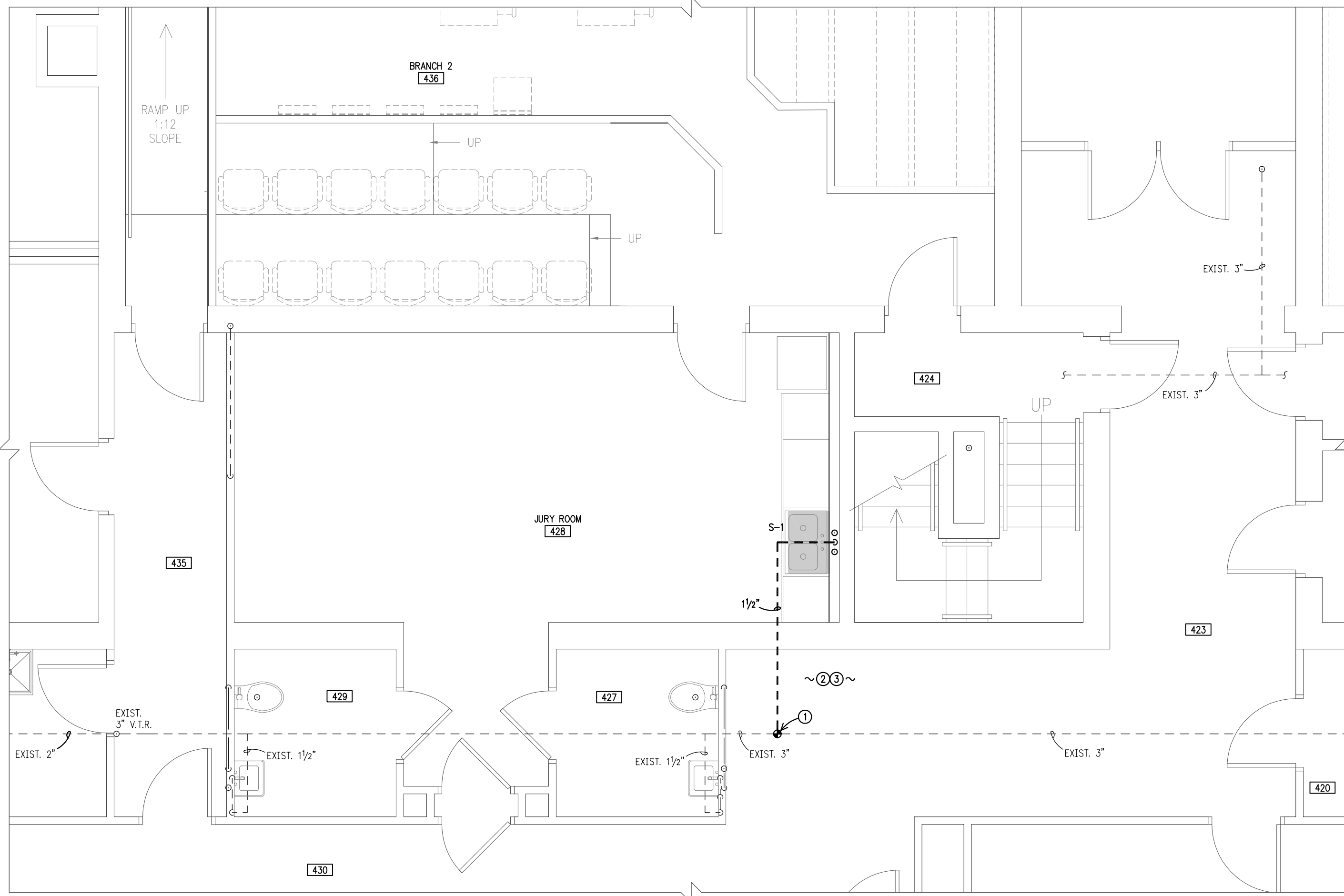


1
P201

THIRD AND FOURTH FLOOR PLAN
1/4"= 1'-0"

REMODEL

NORTH



2
P201

FIFTH AND SIXTH FLOOR PLAN
1/4"= 1'-0"

REMODEL

NORTH

- PLUMBING REMODEL NOTES:**
1. CONNECTION POINT OF PLUMBING PIPING. FIELD VERIFY EXISTING PIPE LOCATION, SIZE, INVERT ELEVATION, MATERIAL AND CONDITION OF PIPE BEFORE PROCEEDING WITH ANY WORK.
 2. REMOVAL OF EXISTING CEILINGS FOR REQUIRED PLUMBING WORK IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. COORDINATE WORK WITH OWNER AND GENERAL CONTRACTOR.
 3. COORDINATE WORK IN OCCUPIED AREAS WITH OWNER AND GENERAL CONTRACTOR, BEFORE PERFORMING ANY WORK.

TITLE:
**PLUMBING
THIRD, FOURTH,
FIFTH AND SIXTH
FLOOR PLANS
REMODEL**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
HM

DESIGNED BY:
HM

DATE:
12/18/2025

REV.:	DATE:	REMARK:

SHEET:
P201

COURTROOM RENOVATION PROJECT FOR
CLARK COUNTY COURTHOUSE
BRANCH 2 - PHASE 1
517 COURT STREET, NEILLSVILLE, WISCONSIN 54456

TITLE:
**PLUMBING
SCHEMATICS**

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

DOCUMENT PHASE:
**BIDDING
DOCUMENTS**

PROJECT NO:
25001

DRAWN BY:
HM

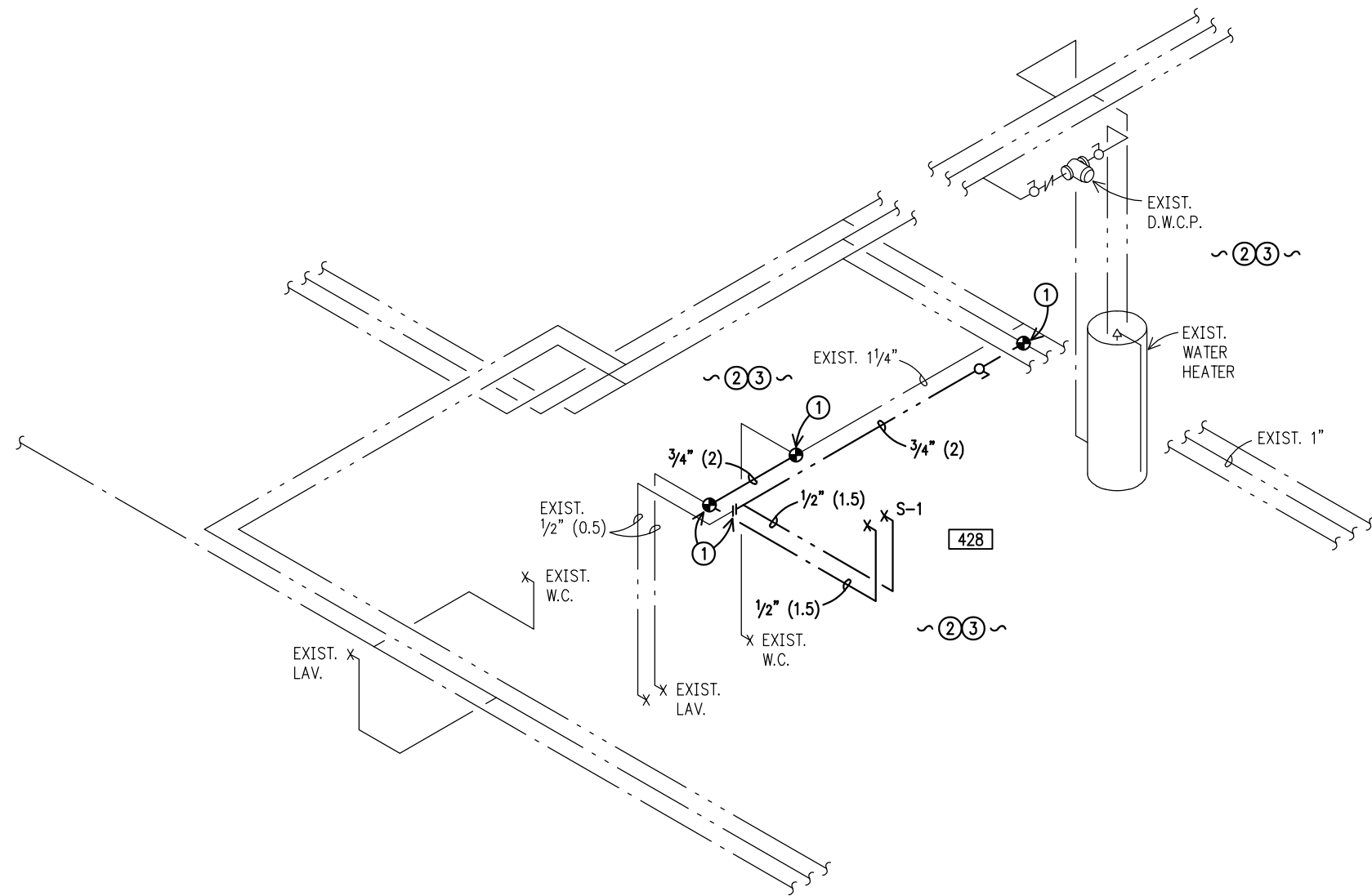
DESIGNED BY:
HM

DATE:
12/18/2025

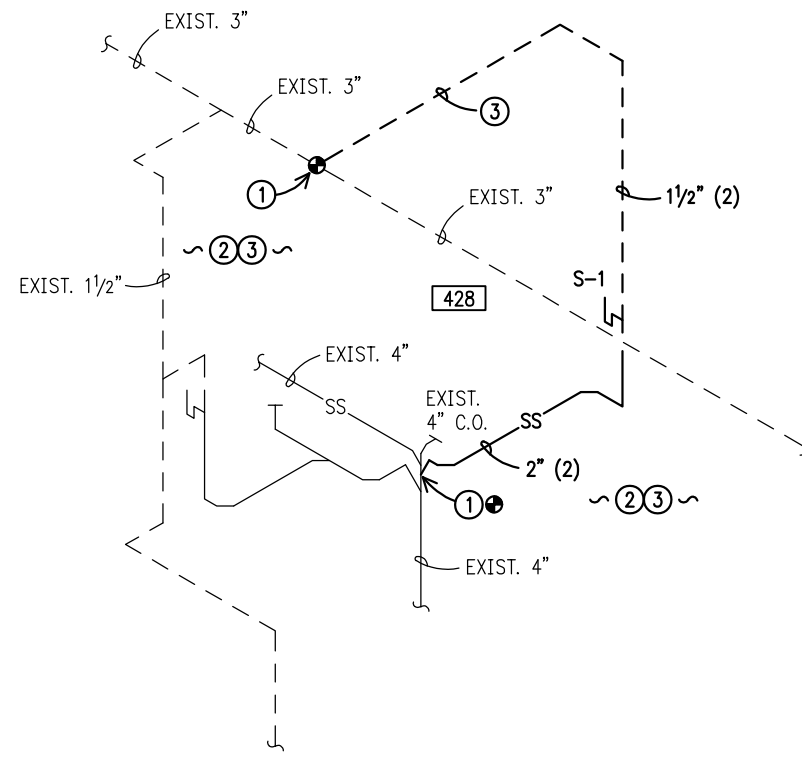
REV.:	DATE:	REMARK:

SHEET:
P301

- ④ PLUMBING REMODEL NOTES:
1. CONNECTION POINT OF PLUMBING PIPING. FIELD VERIFY EXISTING PIPE LOCATION, SIZE, INVERT ELEVATION, MATERIAL AND CONDITION OF PIPE BEFORE PROCEEDING WITH ANY WORK.
 2. REMOVAL OF EXISTING CEILINGS FOR REQUIRED PLUMBING WORK IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. COORDINATE WORK WITH OWNER AND GENERAL CONTRACTOR.
 3. COORDINATE WORK IN OCCUPIED AREAS WITH OWNER AND GENERAL CONTRACTOR, BEFORE PERFORMING ANY WORK.



2
P301 **WATER PIPING SCHEMATIC**
NO SCALE



1
P301 **WASTE & VENT SCHEMATIC**
NO SCALE