

MECHANICAL GENERAL NOTES

GENERAL

- GC/CONSTRUCTION MANAGER SHALL BE RESPONSIBLE TO CROSS COORDINATE THE MEP DRAWINGS WITH THE ARCHITECTURAL DRAWINGS FOR ALL MEP RELATED SYSTEMS – SPECIFICALLY, BUT NOT LIMITED TO, POWER AND DATA OUTLETS, LIGHT FIXTURES, LIGHT FIXTURE SWITCHING, SUPPLY OF WATER FOR COFFEE, REFRIGERATOR, DRINKING WATER DEVICES, ETC.

ALL MECHANICAL WORK SHALL BE GOVERNED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION AND APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:

- INTERNATIONAL BUILDING CODE
- INTERNATIONAL MECHANICAL CODE
- INTERNATIONAL PLUMBING CODE
- INTERNATIONAL ENERGY EFFICIENCY CODE
- INTERNATIONAL FUEL GAS CODE
- NATIONAL ELECTRICAL CODE (NEC)
- NFPA 90A – INSTALLATION OF AIR CONDITIONING & VENTILATING SYSTEMS
- NFPA 99 – HEALTH CARE FACILITY CODE
- NFPA 101 – LIFE SAFETY CODE
- ASHRAE STANDARDS (INCLUDING 15, 55, 62.1, 90.1, 129, & 170)
- SMACNA DUCTWORK STANDARDS
- AMERICANS WITH DISABILITIES ACT (ADA)
- ALL OTHER APPLICABLE FEDERAL, COUNTY AND CITY CODES REQUIRED BY LOCAL JURISDICTIONS

- CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE PROJECT SCOPE, UTILITY CONNECTIONS, AND ALL BUILDING SERVICES.
- COMPLETED INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND THE SPECIFICATIONS. IF ANY CONFLICTS OCCUR, THE MOST STRINGENT SHALL APPLY.
- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE SYSTEMS AS INDICATED AND AS REQUIRED BY CODE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL WARRANTIES ON THE EQUIPMENT INSTALLED.
- ENSURE THE EXECUTION OF ALL WARRANTIES FOR EQUIPMENT AND INSTALLATION IS AS PRESCRIBED BY OWNER.
- MECHANICAL LAYOUTS INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW RELATIVE POSITIONS AND ARRANGEMENT OF EQUIPMENT, DUCTWORK AND PIPING. COORDINATE MECHANICAL WORK WITH OTHER TRADES AND MEASUREMENTS OBTAINED AT THE JOB SITE, AS APPLICABLE, PRIOR TO INSTALLATION. GENERALLY INSTALL WORK IN LOCATIONS SHOWN ON THE DRAWINGS USING, AS NECESSARY, RISES, DROPS, OFFSETS AND TRANSITIONS TO FIT IN THE AVAILABLE SPACE UNLESS PREVENTED BY PROJECT CONDITIONS.
- IF PREVENTED BY PROJECT CONDITIONS, PREPARE DRAWINGS SHOWING PROPOSED REARRANGEMENT OF WORK INCLUDING CHANGES TO WORK OF OTHER TRADES. OBTAIN PERMISSION OF ARCHITECT BEFORE PROCEEDING.
- INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTALLATION INSTRUCTIONS, DRAWINGS AND APPLICABLE CODES AND REGULATIONS.
- LOCATE EQUIPMENT REQUIRING PERIODIC SERVICING SO THAT IT IS READILY ACCESSIBLE. PROVIDE MEANS OF SERVICE ACCESS, FOLLOWING MANUFACTURER'S WRITTEN RECOMMENDED SERVICE CLEARANCE SPACE OR, AS APPLICABLE, MEANS OF ACCESS USING DUCT, WALL OR CEILING ACCESS DOORS.
- COORDINATE ANY DEVICE REQUIRING AN ACCESS PANEL WITH THE ARCHITECT.
- STANDARD DETAILS ILLUSTRATED ON THE DRAWINGS SHALL BE APPLIED IN ALL CASES WHERE THE FEATURE OCCURS IN THE SYSTEM DESIGN.
- CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT PRIOR TO CUTTING ANY OPENING IN THE STRUCTURE.
- WHERE HVAC WORK AFFECTS SYSTEMS IN OTHER AREAS, THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE OWNER. THIS WORK SHALL BE DONE TO FIT OWNER'S OPERATIONAL SCHEDULE AND MINIMIZE DISRUPTION/DISCOMFORT TO OCCUPIED AREAS. PROVIDE 72-HOURS WRITTEN NOTICE WITH ANTICIPATED DURATION OF OUTAGE.
- ALL PENETRATIONS THROUGH RATED WALL, FLOORS AND PARTITIONS MUST BE INSTALLED AND FIRE-SAFED TO MEET UL FIRE RESISTIVE LISTING DETAILS FOR THE PENETRATION.
- INTERLOCK KITCHEN EXHAUST FAN, KITCHEN MAKE-UP AIR UNIT, AND RTU-11 TO RUN SIMULTANEOUSLY.
- ALL EQUIPMENT, PIPING AND DUCTWORK, ETC, SHALL BE SUPPORTED AS DETAILED AND AS REQUIRED TO PROVIDE A VIBRATION-FREE INSTALLATION.
- ALL DUCTWORK, PIPING AND EQUIPMENT SUPPORTED FROM WOODEN TRUSSES SHALL BE COORDINATED WITH THE CONTRACTOR.
- ALL MISCELLANEOUS STEEL REQUIRED ENSURING PROPER INSTALLATION AND AS SHOWN ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED BY THE HVAC SUB-CONTRACTOR.
- MECHANICAL EQUIPMENT, DUCTWORK OR PIPING SHALL NOT BE SUPPORTED FROM ROOF DECK.

EQUIPMENT

- PROVIDE VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.
- LOCATE ALL TEMPERATURE PRESSURE AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UP- AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR GOOD ACCURACY.
- LOCATE TEMPERATURE, PRESSURE AND FLOW MEASURING DEVICES FOR UNOBSTRUCTED ACCESS FOR VIEWING.
- CATALOG NUMBERS REFERENCED THROUGHOUT THE DRAWINGS ARE INTENDED TO CONVEY A GENERAL UNDERSTANDING OF THE TYPE AND QUALITY OF THE PRODUCT REQUIRED.

DUCTWORK

- DUCTWORK DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS IN INCHES, INCLUDING LINER, WHERE ALLOWED. INSTALLED DIMENSIONS SHALL NOT BE SMALLER.
- RUN ALL DUCTS LEVEL, ABOVE CEILING AND TIGHT TO BOTTOM OF STRUCTURE UNLESS OTHERWISE NOTED ON HVAC FLOOR PLAN.
- ELEVATIONS, WHERE SHOWN, ARE BOTTOM OF DUCT UNLESS OTHERWISE NOTED.
- OFFSET DUCTS INTO STRUCTURAL SPACE FOR ADDITIONAL CLEARANCE WHERE SPACE ABOVE CEILING IS NOT SUFFICIENT FOR DUCTS TO CROSS OTHER DUCTS OR WORK OF OTHER SUB-CONTRACTORS.
- RUN OUTS TO AIR DEVICES SHALL BE THE SAME SIZE AS THE AIR DEVICE NECK SIZE UNLESS OTHERWISE NOTED ON HVAC FLOOR PLAN. BALANCE DAMPERS ARE REQUIRED FOR ALL INDIVIDUAL DEVICE CONNECTIONS AND SHALL BE LOCATED AT THE ORIGIN OF THE INDIVIDUAL BRANCH CONNECTION.
- INSTALL BALANCING DAMPERS AS SHOWN IN MAIN DUCTS AND AS REQUIRED FOR PROPER AIR SYSTEM BALANCING.
- FLEXIBLE RUN OUTS TO AIR DEVICES AND TERMINAL UNITS SHALL BE A MAXIMUM OF 8- FEET IN LENGTH – STRETCHED STRAIGHT WITHOUT SAGS. PROVIDE HANGER AT MID-POINT.
- DUCT TAPE IS NOT ACCEPTABLE FOR VAPOR BARRIER SEAMS.
- LINEAR DIFFUSERS, REGISTERS, GRILLES, AND CEILING DIFFUSERS SHALL BE FURNISHED WITH MOUNTING FRAMES AND FEATURES IN ACCORDANCE WITH THE CEILING TYPE.
- FIRE/SMOKE DAMPERS SHALL BE INSTALLED IN ALL DUCTWORK PENETRATIONS THROUGH FIRE/SMOKE WALLS, FLOORS, CEILINGS AND MECHANICAL FIRE RATED CHASES. DAMPERS SHALL MEET THE REQUIREMENTS OF THE FIRE/SMOKE WALL RATING AND BE UL LABELED. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF FIRE AND SMOKE WALLS.
- LOCATIONS OF FIRE AND FIRE/SMOKE DAMPERS ARE PROVIDED AS REQUIRED FOR THE DUCTWORK LAYOUT SHOWN. PROVIDE ADDITIONAL DAMPERS AS REQUIRED BY GOVERNING AUTHORITY AND AS REQUIRED SHOULD LAYOUT CHANGE AS A RESULT OF ACTUAL FIELD CONDITIONS.
- PROVIDE AIRTIGHT ACCESS DOORS IN DUCTS ADJACENT TO ALL AUTOMATIC, FIRE AND FIRE/SMOKE DAMPERS, AND INTERNAL DUCT CONTROL DEVICES (SMOKE DETECTORS, CO2 SENSORS, ETC.).
- RIGID DUCTWORK SHALL BE SHEET METAL CONFORMING TO SMACNA STANDARDS.
- DUCT SMOKE DETECTORS ARE REQUIRED IN UNIT RETURN AIR PLENUM SHALL BE IONIZATION TYPE AND SHALL BE APPROVED AND LISTED BY UL OR FM FOR DUCT INSTALLATION. ACTIVATION OF A DUCT DETECTOR SHALL CAUSE SHUTDOWN OF ITS RESPECTIVE AIR CONDITIONING UNIT. CONTROL AND INTERLOCK WIRING SHALL RUN IN CONDUIT WHICH SHALL BE SIZED TO SUIT THE NUMBER, TYPE AND SIZE OF CONDUCTORS AND SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR. CONTROL AND INTERLOCK WIRING SHALL BE IN SEPARATE CONDUIT FROM POWER WIRING PER NEC. ALL WIRING SHALL BE IN ACCORDANCE WITH NEC. PROVIDE ALL APPROPRIATE ACCESS PANELS.
- PROVIDE ELECTRONIC PROGRAMMABLE THERMOSTAT WITH SUB-BASE AS NOTED ON PLAN. TRANSFORMER AND 24 VOLT CONTROL WIRING. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER WIRING. THERMOSTATS SHALL BE MOUNTED 48" A.F.F. AND SET POINT SHALL BE AS FOLLOWS: COOLING 74°F.; AND HEATING 68°F. VERIFY FINAL LOCATION WITH OWNER.
- BUILDING AIR SYSTEMS SHALL BE BALANCED PER DATA INCLUDED ON THE DRAWINGS TO ACHIEVE RELATIVE AIR VOLUMES AS INDICATED ON THE DRAWINGS AND SCHEDULED HEREIN.
- COORDINATE LOCATIONS OF EXHAUST FANS AND RTU'S WITH WOODEN TRUSSES. COORDINATE WITH STRUCTURAL ENGINEER.
- SUPPLY AIR DUCTS SHALL BE EXTERNALLY INSULATED TO MEET THE 2009 IECC ENERGY CODE.
- PROVIDE RADIATION DAMPERS AT SUPPLY, RETURN, EXHAUST AND COMBUSTION AIR PENETRATIONS IN RATED FLOOR/ CEILING AND ROOF/ CEILING ASSEMBLIES WHERE REQUIRED BY U.L. ASSEMBLY.

APE ENGINEERING

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HVAC LEGEND

(NOT ALL SYMBOLS MAY BE USED)

<p>⊕ ⊕ THERMOSTAT, HUMIDISTAT</p> <p>⊕ ⊕ TEMPERATURE, HUMIDITY SENSOR</p> <p>X-X-X EXISTING TO BE DEMOLISHED/RELOCATED</p> <p>— EXISTING TO REMAIN</p> <p>DUCTWORK</p> <p>PIPE OR ROUND DUCTWORK</p> <p>SMOKE DETECTOR</p> <p>RECTANGULAR DUCT (VERTICAL)</p> <p>ROUND DUCTWORK/OR PIPE (VERTICAL)</p> <p>DUCTWORK W/LINER</p> <p>RECTANGULAR ELBOW W/TURNING VANES</p> <p>FLEXIBLE DUCT</p> <p>MANUAL VOLUME DAMPER</p> <p>FLEXIBLE DUCT CONNECTION</p>	<p>FD FIRE DAMPER</p> <p>FIRE/SMOKE DAMPER</p> <p>MOTORIZED DAMPER</p> <p>EXHAUST AIR DEVICE</p> <p>SUPPLY DIFFUSER</p> <p>RETURN AIR DEVICE</p> <p>SIDEWALL GRILLE/REGISTER</p> <p>DISCHARGE AIR FLOW</p> <p>INTAKE AIR FLOW</p> <p>POINT OF CONNECTION TO EXISTING</p>	<p style="text-align: center;">AIR DEVICE DESIGNATOR</p> <p>MARK ——— A/200</p> <p>NECK SIZE ———</p> <p>CFM ———</p>
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ABBREVIATIONS LEGEND

AD ACCESS DOOR	ML MARINE LIGHT
AFF ABOVE FINISHED FLOOR	MVD MANUAL VOLUME DAMPER
ATC AUTOMATIC TEMPERATURE CONTROL PANEL	OA OUTSIDE AIR
BDD BACKDRAFT DAMPER	OBD OPPOSED BLADE DAMPER
BOD BOTTOM OF DUCT	RA RETURN AIR
BOP BOTTOM OF PIPE	SA SUPPLY AIR
CB CIRCUIT BREAKER	SWR SIDEWALL REGISTER
CCT CONTROL CIRCUIT TRANSFORMER	UNO UNLESS NOTED OTHERWISE
DDC DIRECT DIGITAL CONTROL	VFD VARIABLE FREQUENCY DRIVE
EXH EXHAUST	

ARCHITECTURE
PLANNING
INTERIOR DESIGN

GHLA

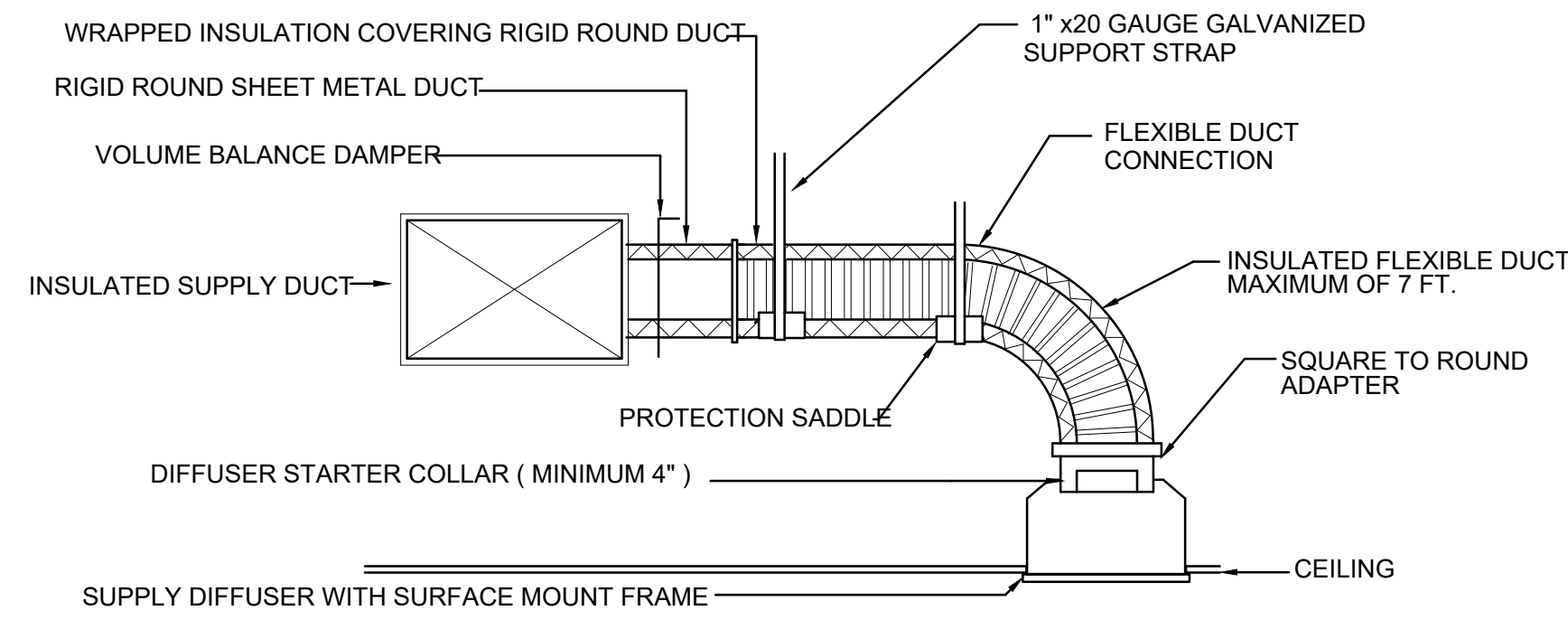
**NORTHWOOD CHURCH
RENOVATIONS**
1870 RUFÉ SNOW DR.
KELLER, TEXAS 76248



DATE: 02-14-25
ISSUE:
CITY PLAN REVIEW

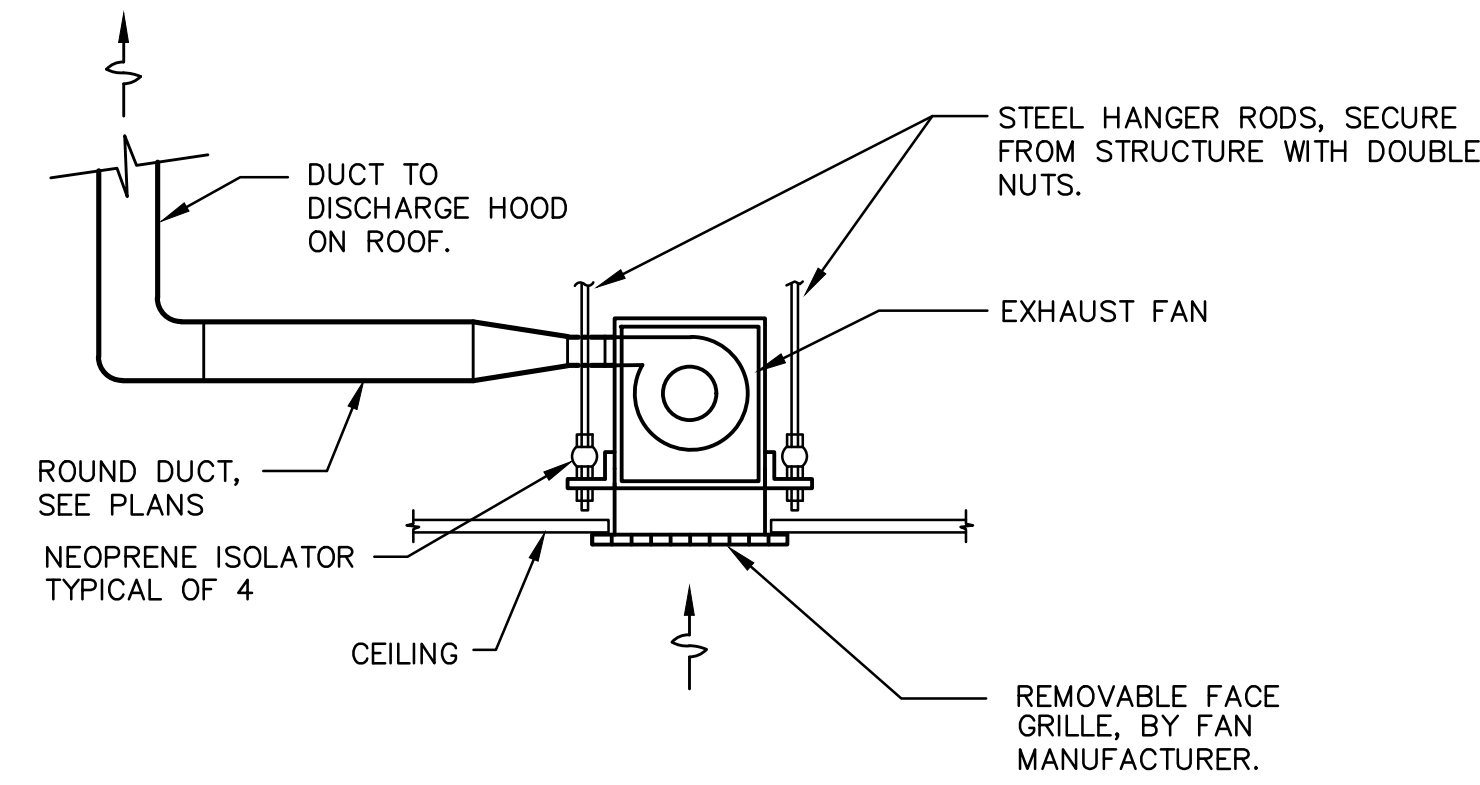
SHEET TITLE:
GENERAL MECH.
NOTES

M0.1



DIFFUSER DUCT DETAIL

SCALE: NOT TO SCALE



CEILING EXHAUST FAN DETAIL

SCALE: NOT TO SCALE

FAN SCHEDULE	
DESIGNATION	EF-A
SERVES	TOILET
TYPE	CEILING
TOTAL C.F.M.	100
TOTAL S.P.P. (IN. W.G.)	0.5"
MOTOR H.P.	50 WATT
DRIVE TYPE	DIRECT
VOLTPHASE	120/1Ø
SONES	-
MANUFACTURER	COOK
MODEL NO.	GC148
REMARKS	1
ACCESSORIES	
NOTES:	
1. PROVIDE DISCONNECT, BACKDRAFT DAMPERS, AND INTAKE GRILLE.	

AIR DEVICE SCHEDULE			
TYPE	S1	R1	
MODULE SIZE	24X24	12X24	
NECK SIZE	SEE PLANS	SEE PLANS	
FLOW RATE (C.F.M.)	SEE PLANS	SEE PLANS	
NECK VELOCITY (F.P.M.)	700	700	
N.C. LEVEL	30	35	
MANUFACTURER	TITUS	TITUS	
MODEL NO.	TMS-AA	PAR	
DESCRIPTION	LOUVERED SA DIFFUSER	PERFORATED RETURN AIR GRILLE	
REMARKS	1,3,5.	1,3.	
NOTES:			
1. MOUNTING FRAMES SHALL BE COMPATIBLE WITH CEILING TYPE.			
2. PROVIDE OPPOSED BLADE DAMPER.			
3. PROVIDE OFF-WHITE FINISH.			
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.			
5. ALL CEILING DIFFUSERS ARE 4-WAY DISCHARGE, UNLESS OTHERWISE INDICATED ON PLANS.			
6. PROVIDE SHEETMETAL PLENUM ON BACK OF DIFFUSER, ENCASED IN CONCRETE.			
7. PROVIDE ALUMINUM FINISH			
8. PROVIDE FINISH AS REQUIRED BY ARCHITECT.			

GENERAL NOTES:

- COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
- COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
- MODIFY DUCTWORK AS REQUIRED TO FIT BELOW STRUCTURE ABOVE.
- ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
- THE DUCTWORK PLANS ARE DIAGRAMMATIC, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
- LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.
- HOLD DUCTWORK AS HIGH AS POSSIBLE TO MAINTAIN SPECIFIED CEILING HEIGHTS.

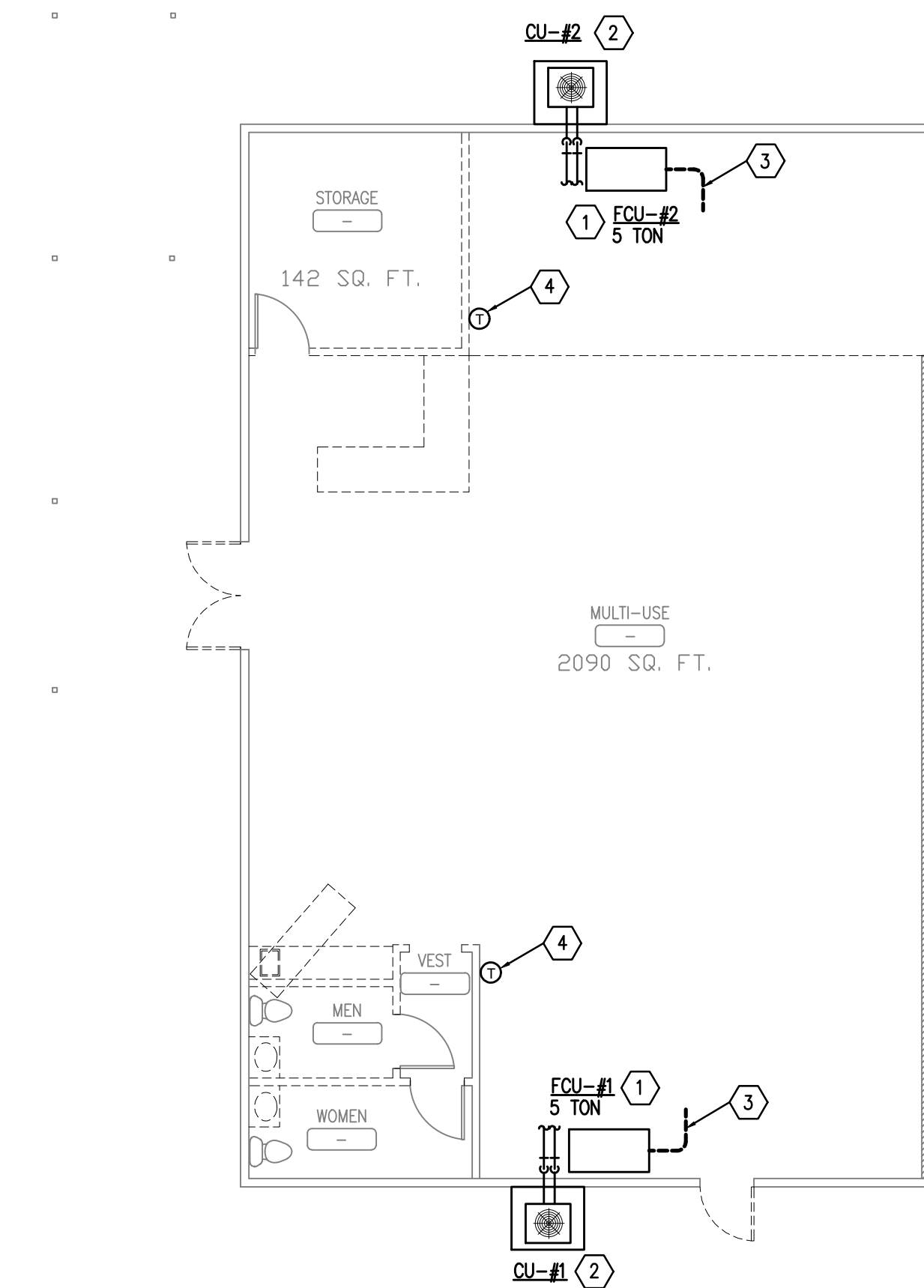
NOTES BY SYMBOL:

- NEW LOCATION OF EXISTING THERMOSTAT, EXTEND WIRE IF NEEDED.
- RUN NEW 6" EXHAUST DUCT UP FROM FAN THRU ROOF TO A WEATHERPROOF VENT CAP.

DEMOLITION NOTES BY SYMBOL:

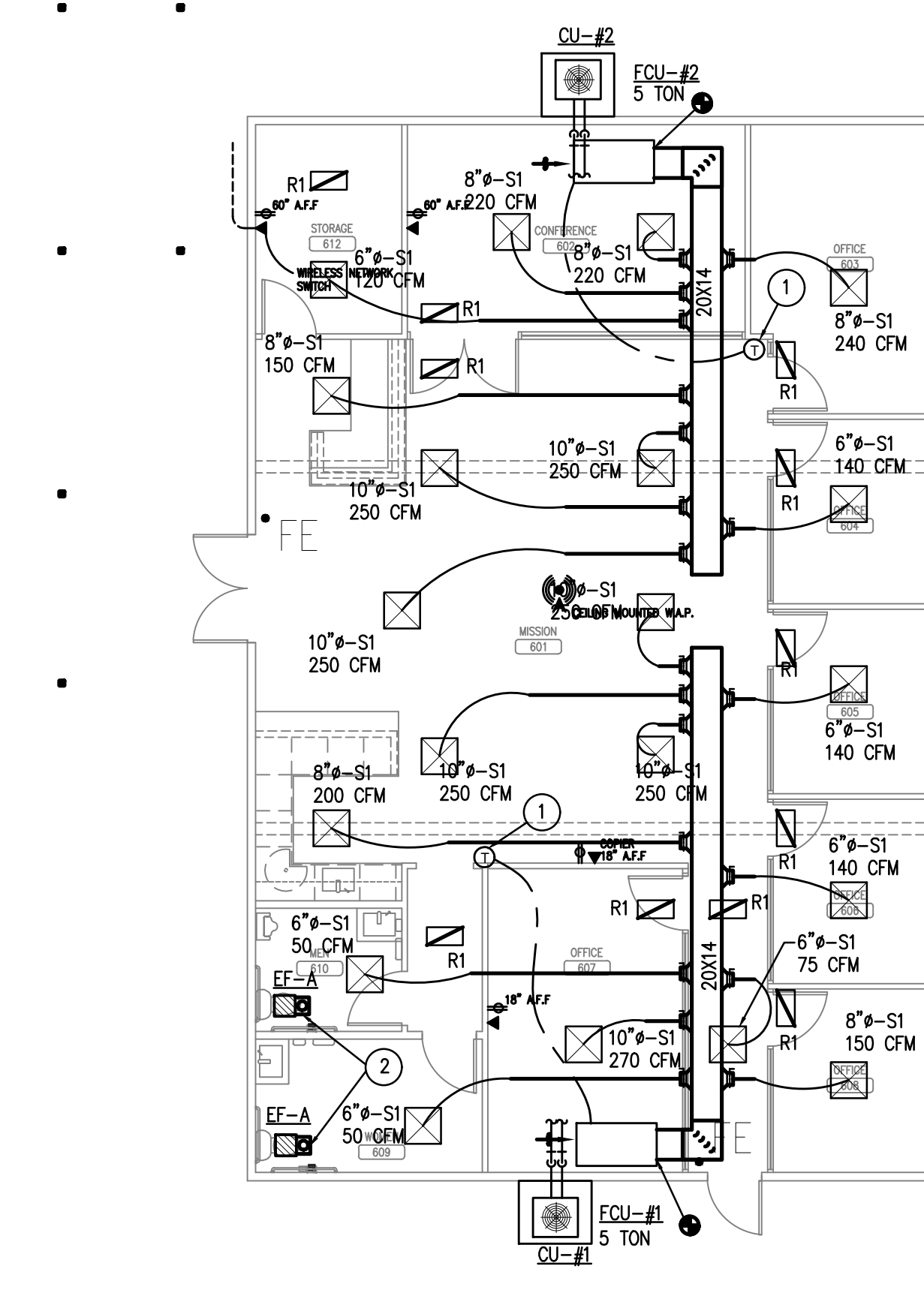
- EXISTING FAN COIL UNIT TO REMAIN AS IS, SERVICE AND FIX UNIT AS NEEDED.
- EXISTING CONDENSING UNIT TO REMAIN AS IS, SERVICE AND FIX UNIT AS NEEDED.
- DEMO THE EXISTING DUCTWORK AND GRILLES AS INDICATED.
- DEMO THE EXISTING THERMOSTAT, SAVE FOR RELOCATION ON NEW PLAN.

THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.



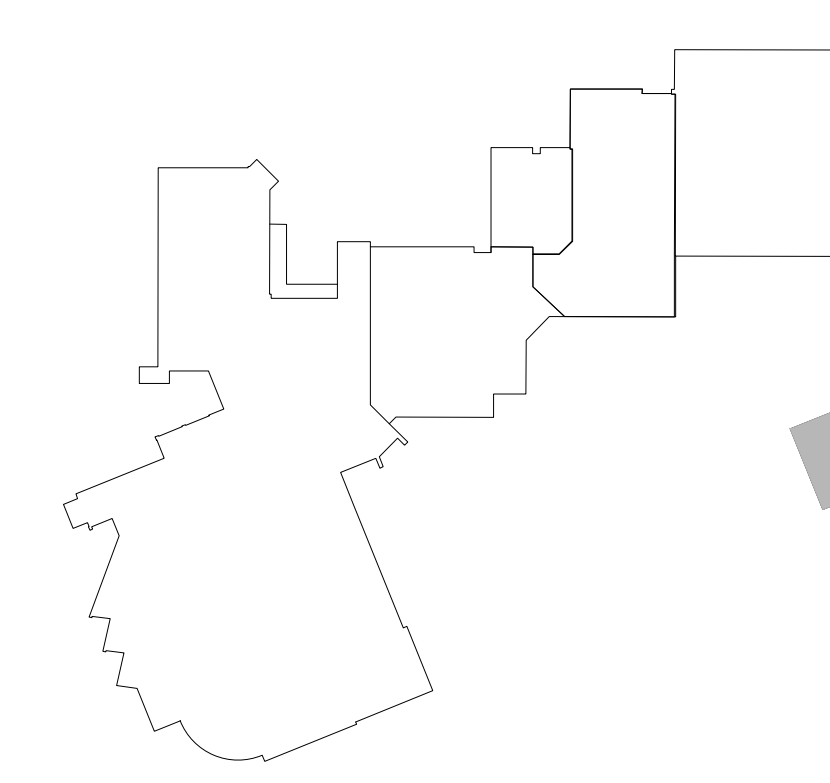
PHASE 1 FLOOR PLAN - MECHANICAL DEMOLITION

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



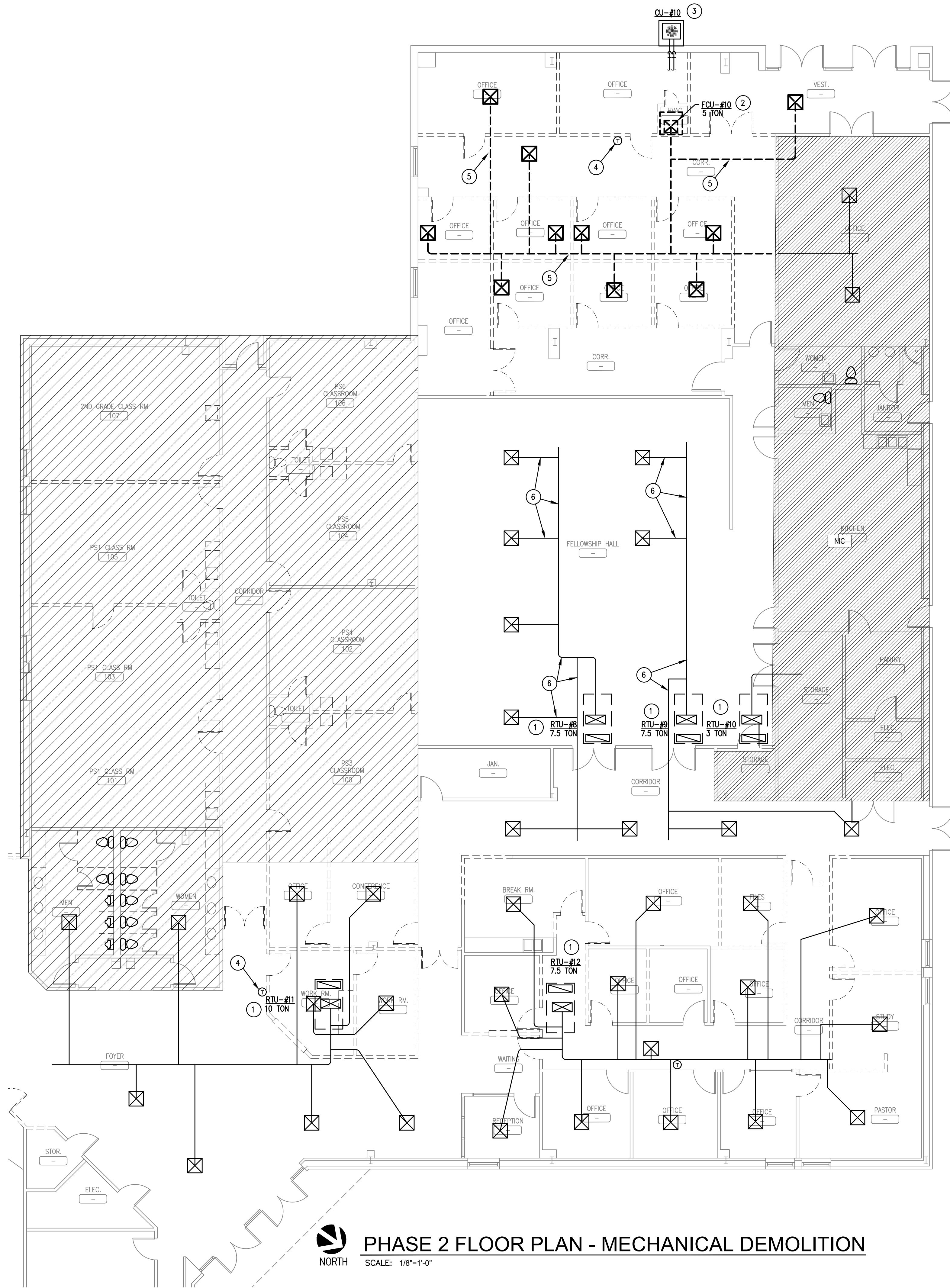
PHASE 1 FLOOR PLAN - MECHANICAL

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



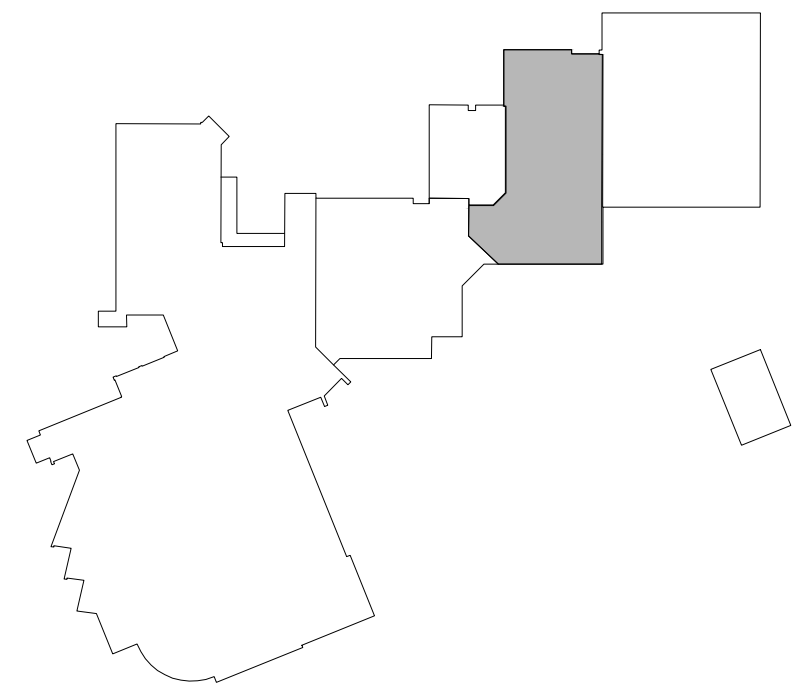
KEY PLAN

NORTH

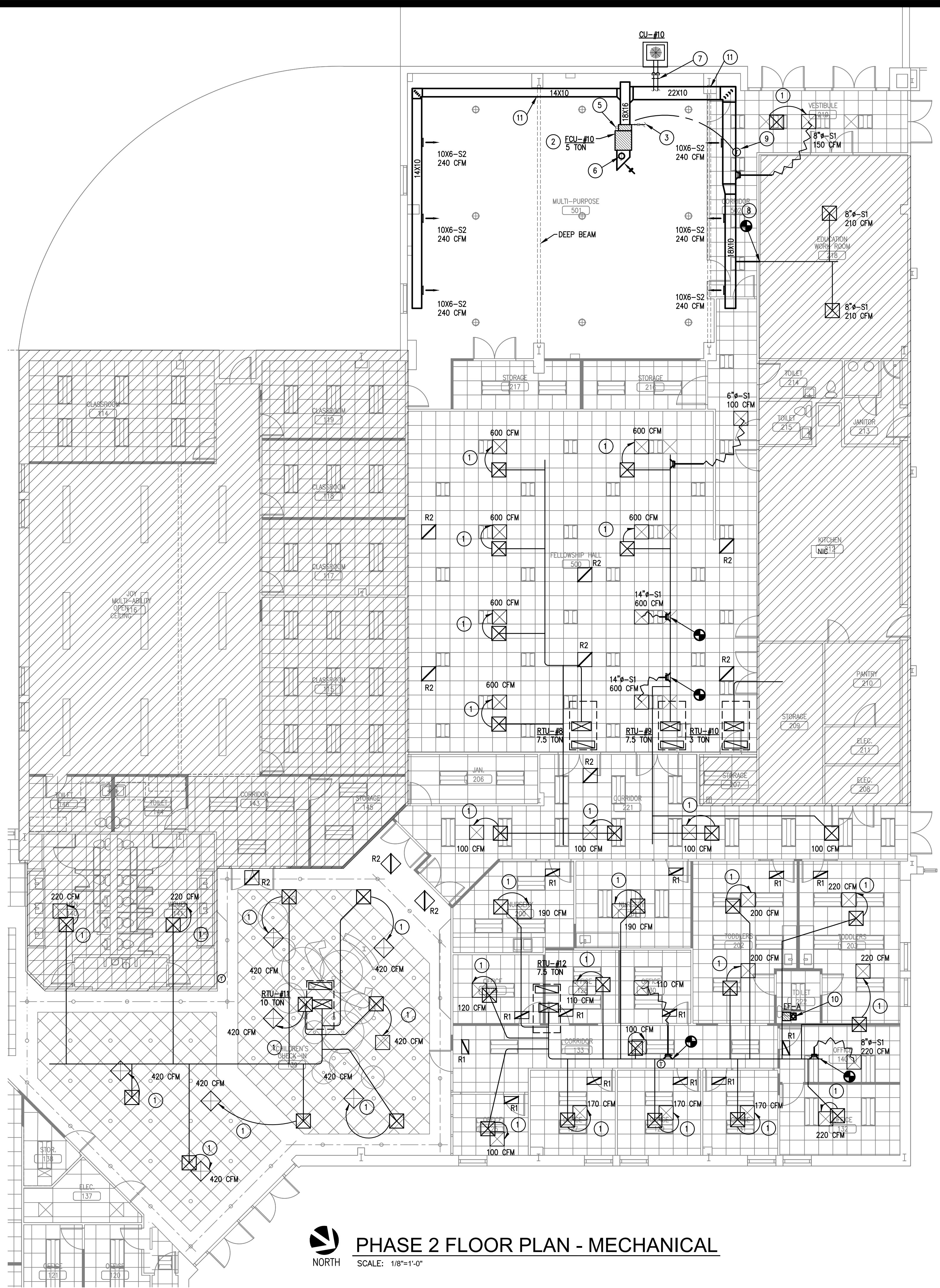


- NOTES BY SYMBOL:**
- ① EXISTING ROOF TOP UNIT TO REMAIN AS IS.
 - ② DEMO THE EXISTING FAN COIL UNIT. REMOVE EXISTING FLUE DUCT, AND COMBUSTION AIR DUCT, REUSE EXISTING ROOF PENETRATIONS FOR NEW WORK.
 - ③ EXISTING CONDENSING UNIT TO REMAIN AS IS.
 - ④ DEMO THE EXISTING THERMOSTAT, SAVE FOR RELOCATION ON NEW PLAN.
 - ⑤ DEMO THE EXISTING DUCTWORK AND DIFFUSERS AS INDICATED.
 - ⑥ RAISE THE EXISTING DUCTWORK AND AIR DIFFUSERS 12" HIGHER THAN EXISTING HEIGHT, OVER THE ENTIRE FELLOWSHIP HALL ROOM. MODIFY EXISTING DUCT BOARD SUPPLY PLENUM AS NEEDED TO RAISE TRUNK LINE UP TO NEW CEILING HEIGHT.

THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.



PHASE 2 FLOOR PLAN - MECHANICAL DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



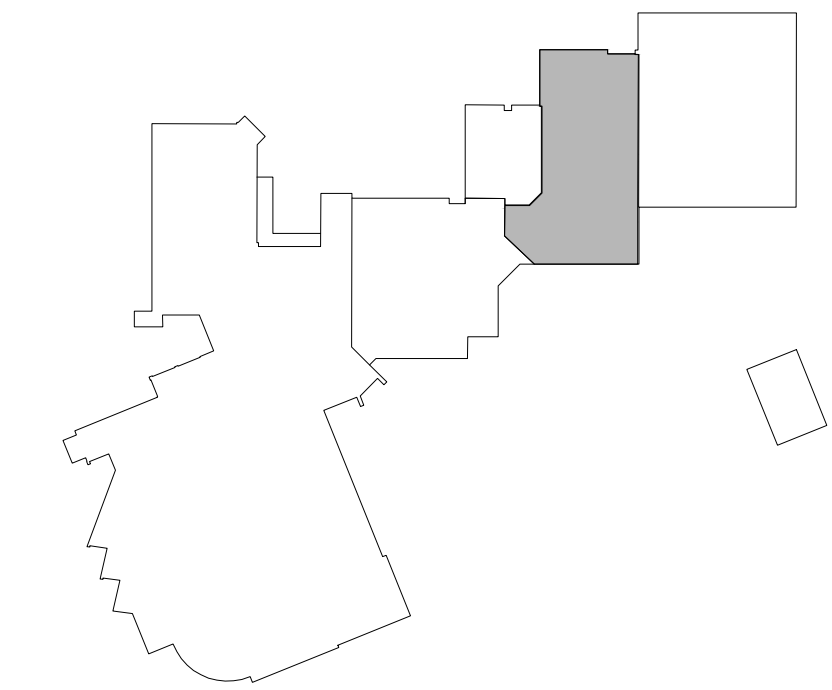
GENERAL NOTES:

1. COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
2. DASHED LINES INSIDE DUCTWORK INDICATES 1 1/2" THICK DUCTLINER, AS INDICATED ON PLANS. THE DUCT SIZES SHOWN ARE FREE AREA AND SHALL BE INCREASED TO ACCOMMODATE LINER THICKNESS.
3. COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
4. MODIFY DUCTWORK AS REQUIRED TO FIT THRU STRUCTURE ABOVE.
5. ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
6. THE DUCTWORK PLANS ARE DIAGRAMMATIC, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
7. LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.

NOTES BY SYMBOL:

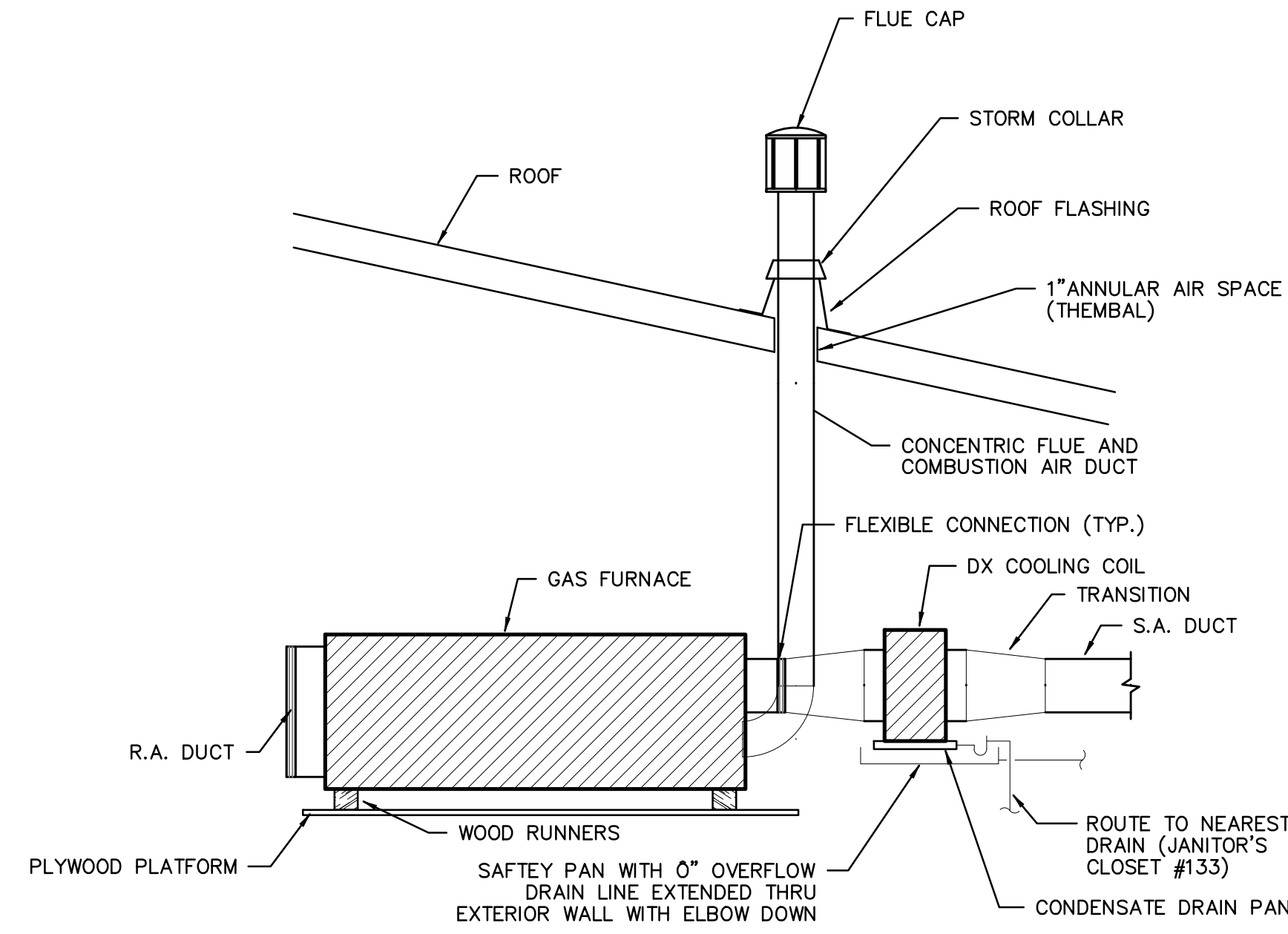
- ① RELOCATE EXISTING CEILING DIFFUSERS TO NEW LOCATION AS INDICATED, EXTEND AND MODIFY DUCTWORK AS NEEDED. REBALANCE EXISTING SYSTEM TO CFM'S AS INDICATED.
- ② MOUNT FAN COIL UNITS ABOVE CEILING IN ATTIC SPACE. PROVIDE ADEQUATE SPACE FOR SERVICING UNITS. MAINTAIN SPACE FROM COMBUSTIBLES PER CODE.
- ③ RUN 3/4" CONDENSATE DRAIN LINES FROM FAN COIL UNIT OVER AND DOWN TO MOP SINK IN JANITOR CLOSET, TERMINATE PER CODE.
- ④ RUN DUCTS IN JOIST SPACE, COORDINATE WITH STRUCTURAL PLANS AND ARCHITECTURAL PLANS.
- ⑤ RUN CONCENTRIC FLUE DUCT AND COMBUSTION AIR DUCT UP FROM GAS FIRED FURNACE THRU THE ROOF, WITH APPROVED VENT CAP, TERMINATE PER CODE. RUN UP THRU EXISTING VENT LOCATION.
- ⑥ RUN 10" Ø OUTSIDE AIR DUCT WITH VOLUME DAMPER, UP THRU ROOF TO WEATHERPROOF VENT CAP.
- ⑦ CONNECT EXISTING REFRIGERANT LINES TO NEW FAN COIL UNIT, MODIFY AS NEEDED.
- ⑧ CONNECT NEW SUPPLY DUCT TO EXISTING DUCTWORK, MODIFY AS NEEDED.
- ⑨ NEW LOCATION OF EXISTING THERMOSTAT, EXTEND WIRE IF NEEDED.
- ⑩ RUN NEW 6" Ø EXHAUST DUCT UP FROM FAN THRU ROOF TO A WEATHERPROOF VENT CAP.
- ⑪ RUN NEW DUCT AS HIGH AS POSSIBLE UNDER EXISTING BEAMS.

THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.



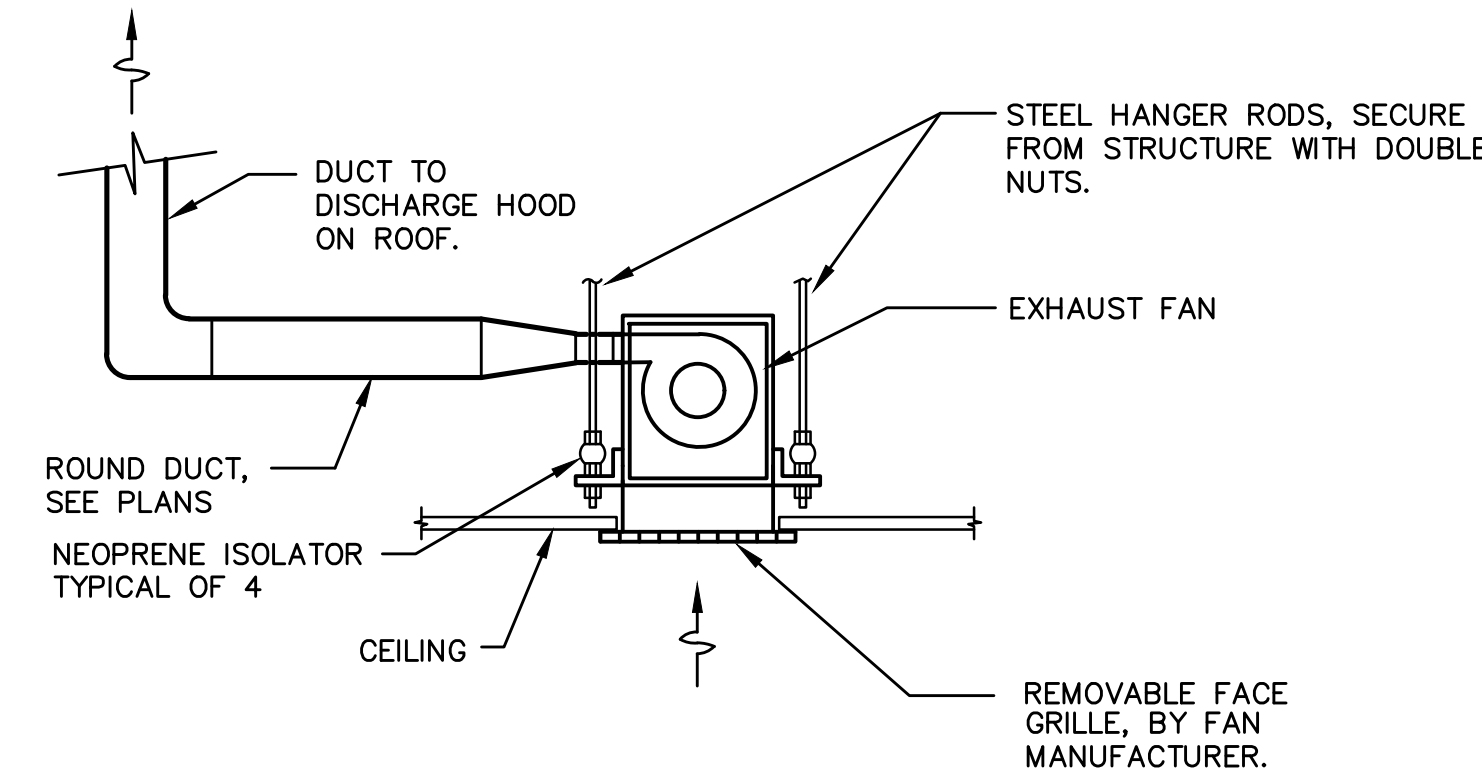
PHASE 2 FLOOR PLAN - MECHANICAL
 NORTH SCALE: 1/8"=1'-0"





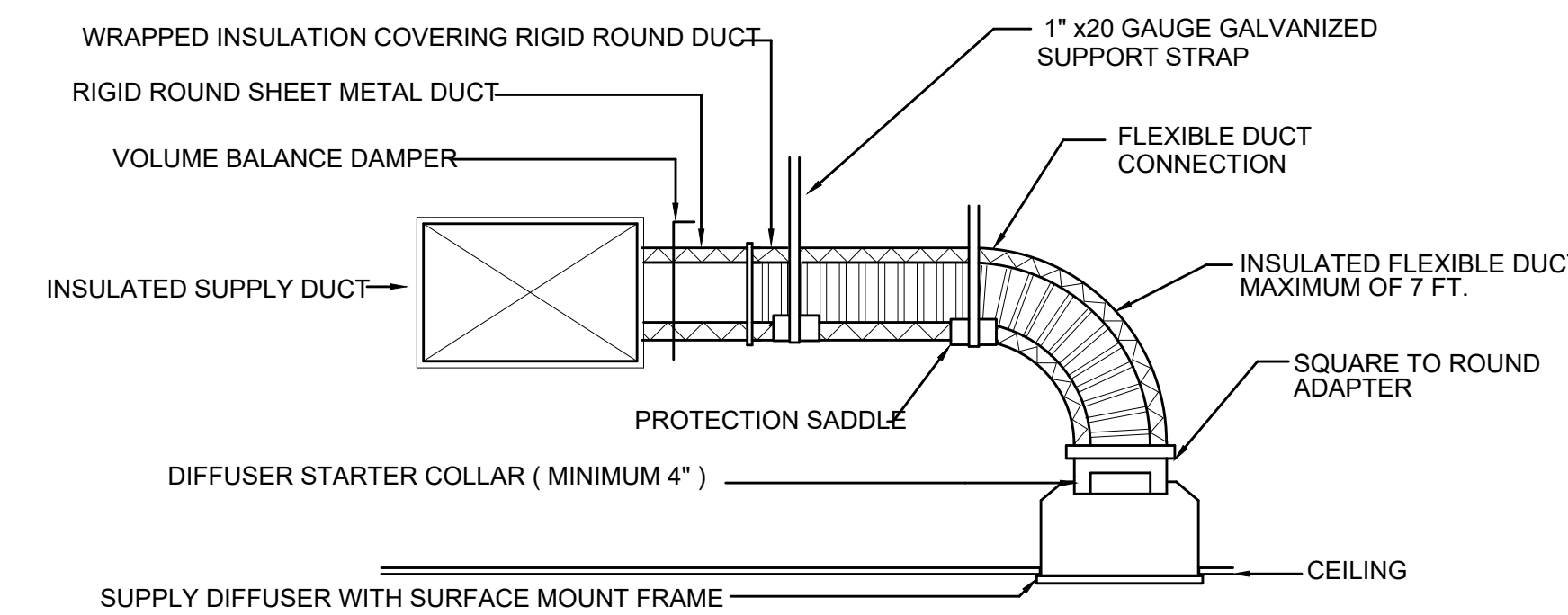
FAN AND COIL UNIT DETAIL

SCALE: NOT TO SCALE



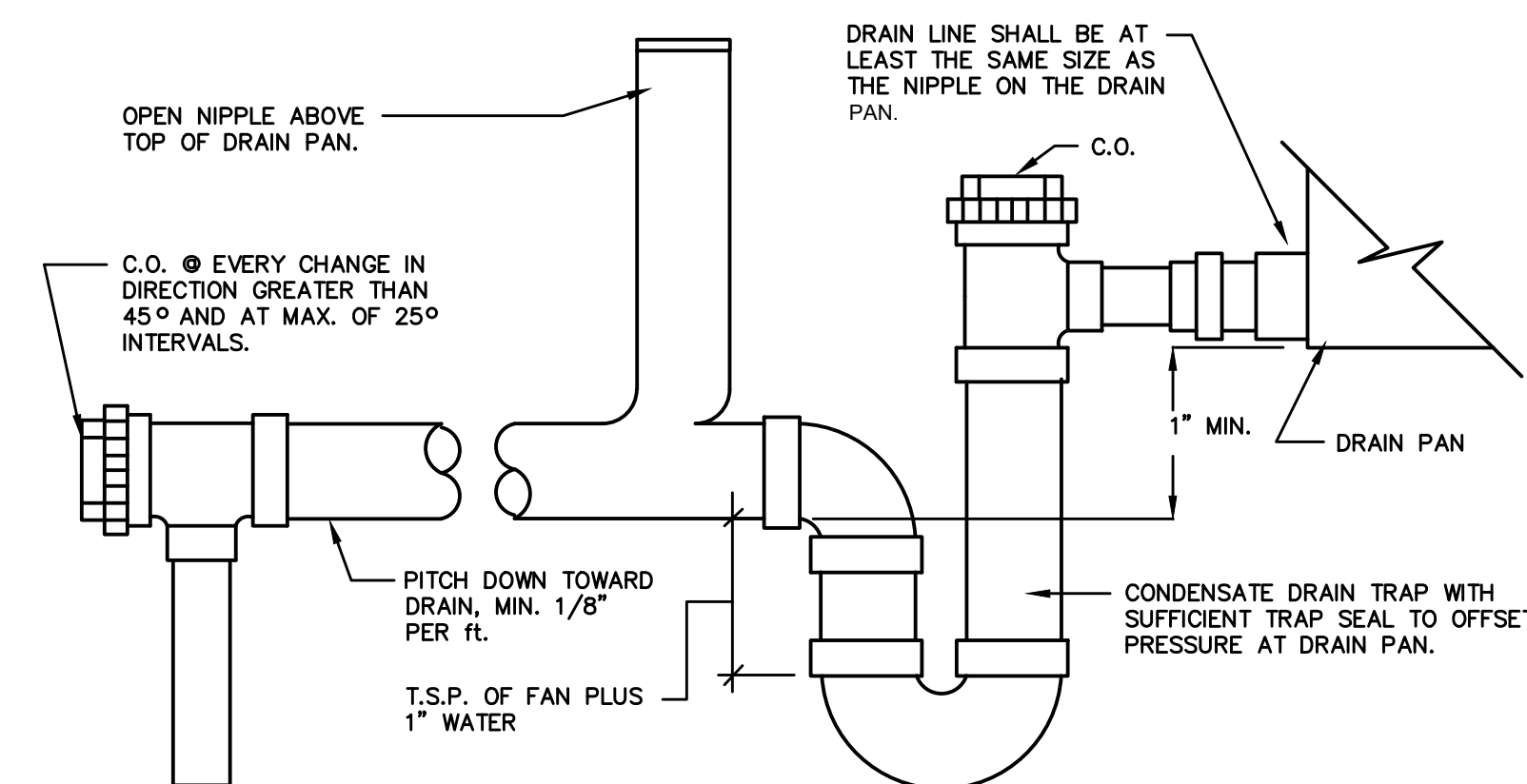
CEILING EXHAUST FAN DETAIL

SCALE: NOT TO SCALE



DIFFUSER DUCT DETAIL

SCALE: NOT TO SCALE



CONDENSATE DRAIN DETAIL

SCALE: NOT TO SCALE

FURNACE COIL UNIT SCHEDULE

DESIGNATION	FCU-#10		
SERVES	CLASSROOM		
TOTAL C.F.M.	2000		
O.A. C.F.M. (MIN.)	250		
O.A. C.F.M. (MAX.)	250		
FURNACE	TRANE		
MANUFACTURER	TRANE		
MODEL NO.	TUH1D100A9601C		
GAS INPUT (MBH)	100.0		
FAN H.P.	3/4		
TOTAL S.P. (IN. W.G.)	.7		
FILTER TYPE	30% TA		
FILTER THICKNESS	2"		
ELECTRICAL			
VOLT	120		
PHASE	1Ø		
COOLING COIL			
MANUFACTURER	TRANE		
MODEL NO.	4TXFB060BC3		
TOTAL CAPACITY (MBH)	59.2		
SENSIBLE CAPACITY (MBH)	45.4		
ENTERING AIR (DB/WB °F)	80/65		
REMARKS	1,2.		

NOTES:

1. PROVIDE UNITS WITH DISCONNECTS, SECONDARY DRAIN PANS, PROGRAMMABLE THERMOSTATS, AND FILTER RACKS.
2. PROVIDE UNITS 2000 CFM AND MORE WITH DUCT MOUNTED SMOKE DETECTORS, PER CODE.

AIR DEVICE SCHEDULE

TYPE	S1	S2	R1	R2
MODULE SIZE	24X24	SEE PLANS	24X12	24X24
NECK SIZE	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
FLOW RATE (C.F.M.)	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
NECK VELOCITY (F.P.M.)	700	700	700	700
N.C. LEVEL	30	30	30	30
MANUFACTURER	TITUS	TITUS	TITUS	TITUS
MODEL NO.	TMS	272RL	PAR	PAR
DESCRIPTION	SUPPLY DIFFUSER	SIDEWALL SUPPLY GRILLE	RETURN AIR GRILLE	RETURN AIR GRILLE
REMARKS	1.,3.,5.	3.,4.	1.,3.	1.,3.

NOTES:

1. MOUNTING FRAMES SHALL BE COMPATIBLE WITH CEILING TYPE.
2. PROVIDE OPPOSED BLADE DAMPER.
3. PROVIDE WHITE FINISH.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. ALL CEILING DIFFUSERS ARE 4-WAY DISCHARGE, UNLESS OTHERWISE INDICATED ON PLANS.

FAN SCHEDULE

DESIGNATION	EF-A
SERVES	TOILET
TYPE	CEILING
TOTAL C.F.M.	100
TOTAL S.P. (IN. W.G.)	0.5"
MOTOR H.P.	50 WATT
DRIVE TYPE	DIRECT
VOLT/PHASE	120/1Ø
SONES	-
MANUFACTURER	COOK
MODEL NO.	GC148
REMARKS	1
ACCESSORIES	

NOTES:

1. PROVIDE DISCONNECT, BACKDRAFT DAMPERS, AND INTAKE GRILLE.

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ARCHITECTURE
 PLANNING
 INTERIOR DESIGN

GHILA

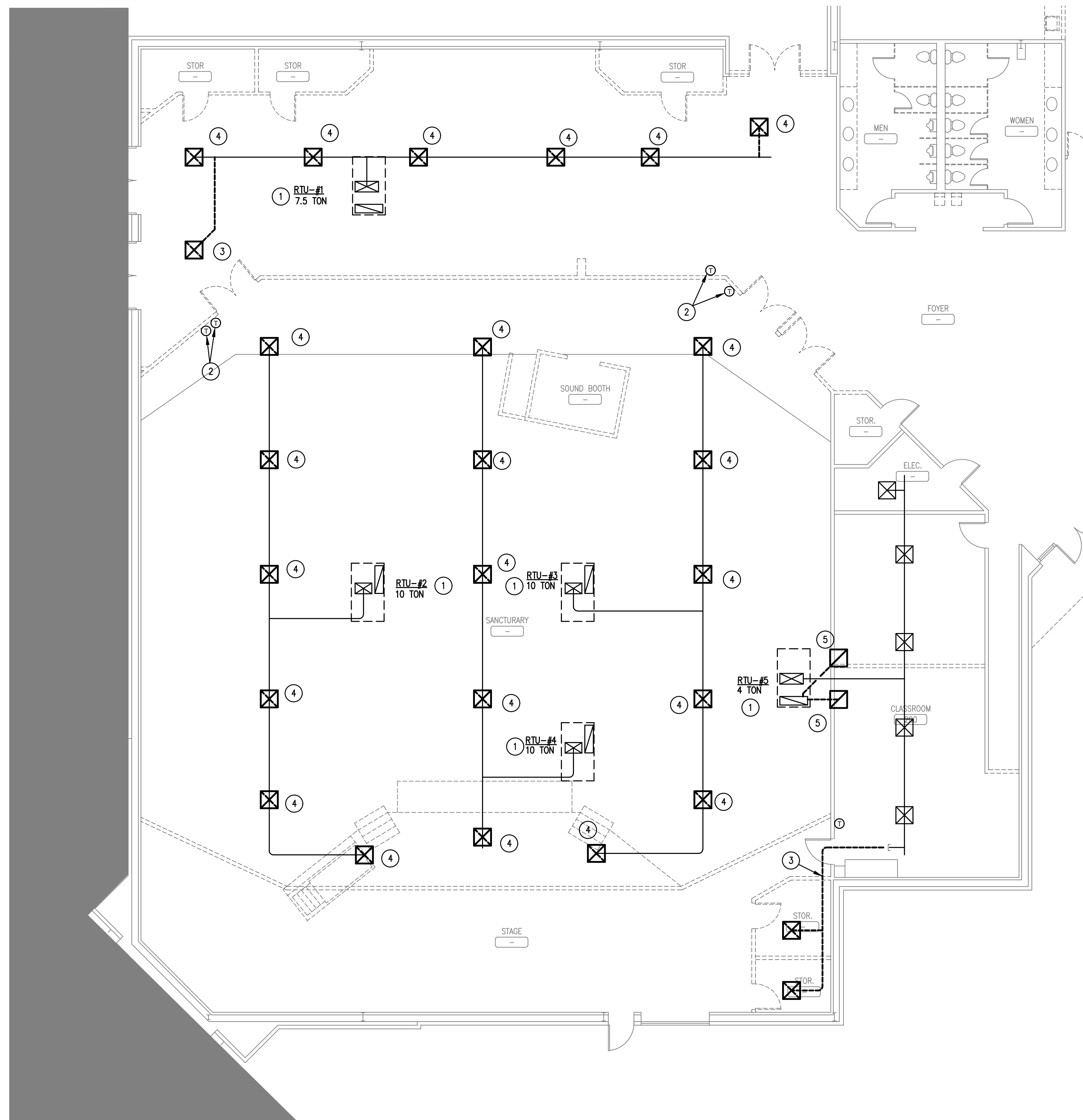
**NORTHWOOD CHURCH
 RENOVATIONS**
 1870 RUFÉ SNOW DR.
 KELLER, TEXAS 76248



DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 3 FLOOR
 PLAN - MECHANICAL
 DEMOLITION

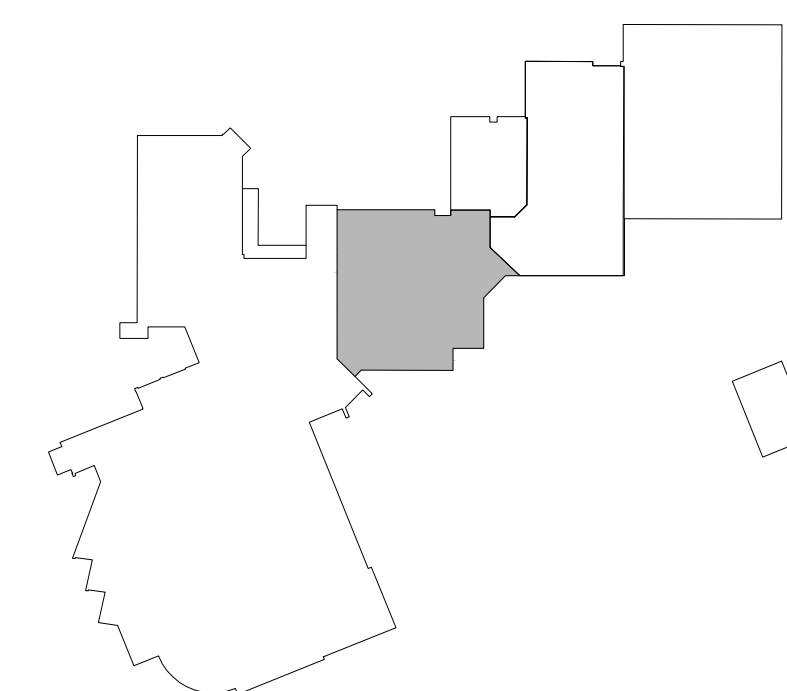
M3.1



NOTES BY SYMBOL:

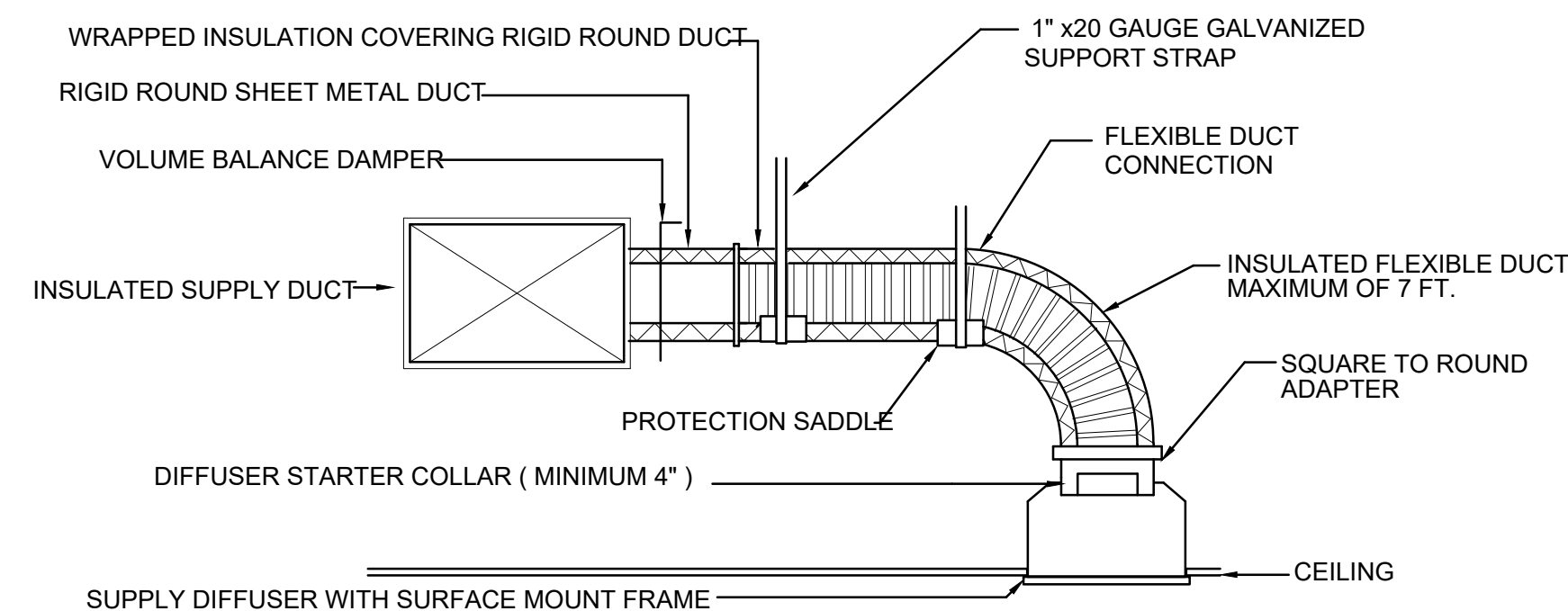
- ① EXISTING ROOF TOP UNIT TO REMAIN AS IS, SERVICE AND FIX UNIT AS NEEDED.
- ② DEMO THE EXISTING THERMOSTAT, SAVE FOR RELOCATION ON NEW PLAN.
- ③ DEMO THE EXISTING DUCTWORK AND DIFFUSERS AS INDICATED, CAP AND SEAL MAIN DUCT.
- ④ DEMO THE EXISTING DIFFUSERS AS INDICATED, CAP AND SEAL DUCTWORK.
- ⑤ DEMO THE EXISTING RETURN AIR DUCTWORK AND GRILLES AS INDICATED, LEAVE RETURN AIR DUCT OPEN.

THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.



PHASE 3 FLOOR PLAN - MECHANICAL DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

KEY PLAN
 NORTH



DIFFUSER DUCT DETAIL

SCALE: NOT TO SCALE

AIR DEVICE SCHEDULE				
TYPE	S1	S2	R1	R2
MODULE SIZE	24X24	SEE PLANS	24X12	48X18
NECK SIZE	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
FLOW RATE (C.F.M.)	700	700	700	700
NECK VELOCITY (F.P.M.)	30	30	30	30
MANUFACTURER	TITUS	TITUS	TITUS	TITUS
MODEL NO.	TMS	TMR	PAR	60RL
DESCRIPTION	SUPPLY DIFFUSER	ROUND SUPPLY GRILLE	RETURN AIR GRILLE	RETURN AIR GRILLE
REMARKS	1,3,5.	3,4.	1,3.	1,3.

NOTES:

1. MOUNTING FRAMES SHALL BE COMPATIBLE WITH CEILING TYPE.
2. PROVIDE OPPOSED BLADE DAMPER.
3. PROVIDE WHITE FINISH.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. ALL CEILING DIFFUSERS ARE 4-WAY DISCHARGE, UNLESS OTHERWISE INDICATED ON PLANS.

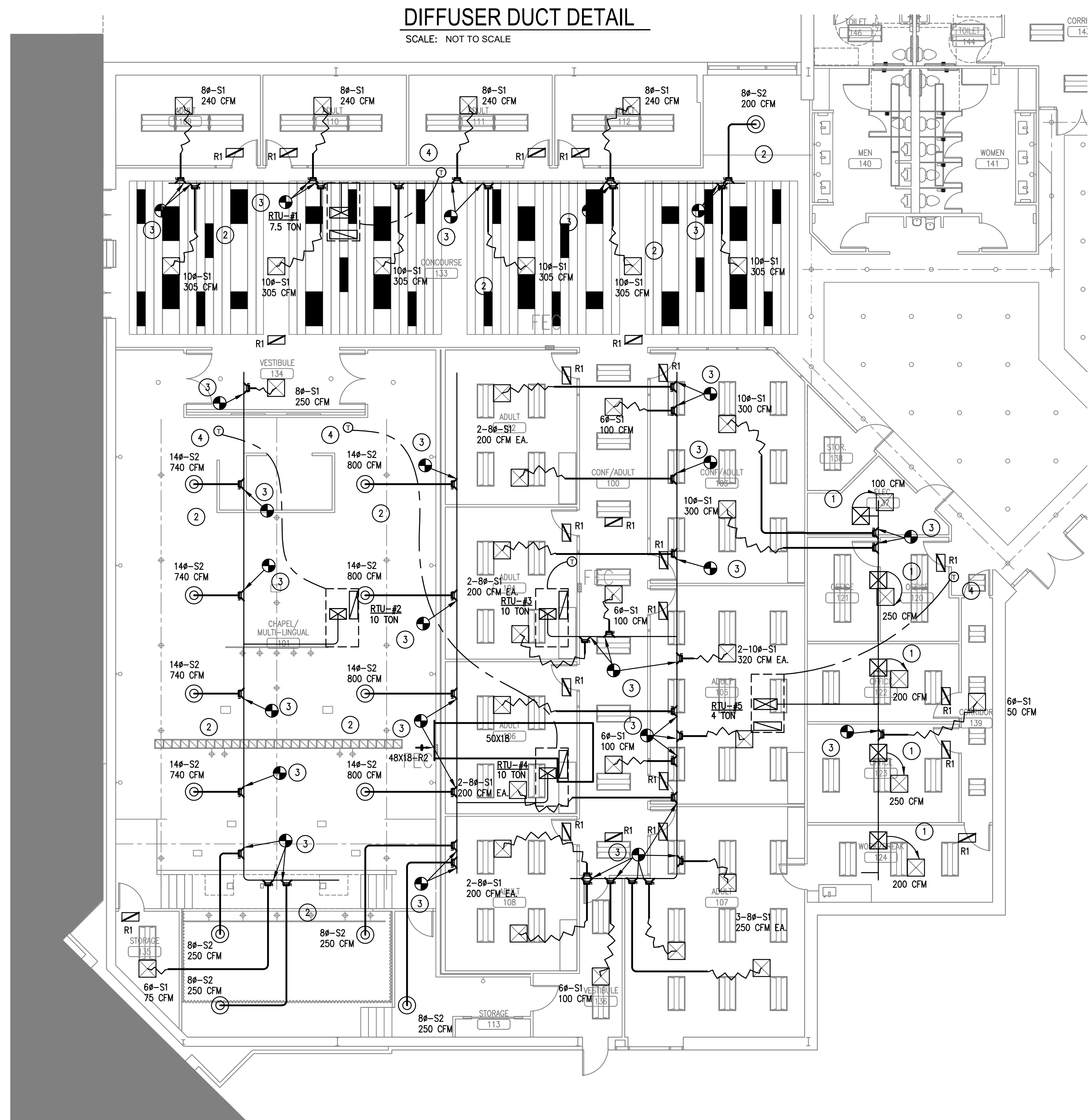
GENERAL NOTES:

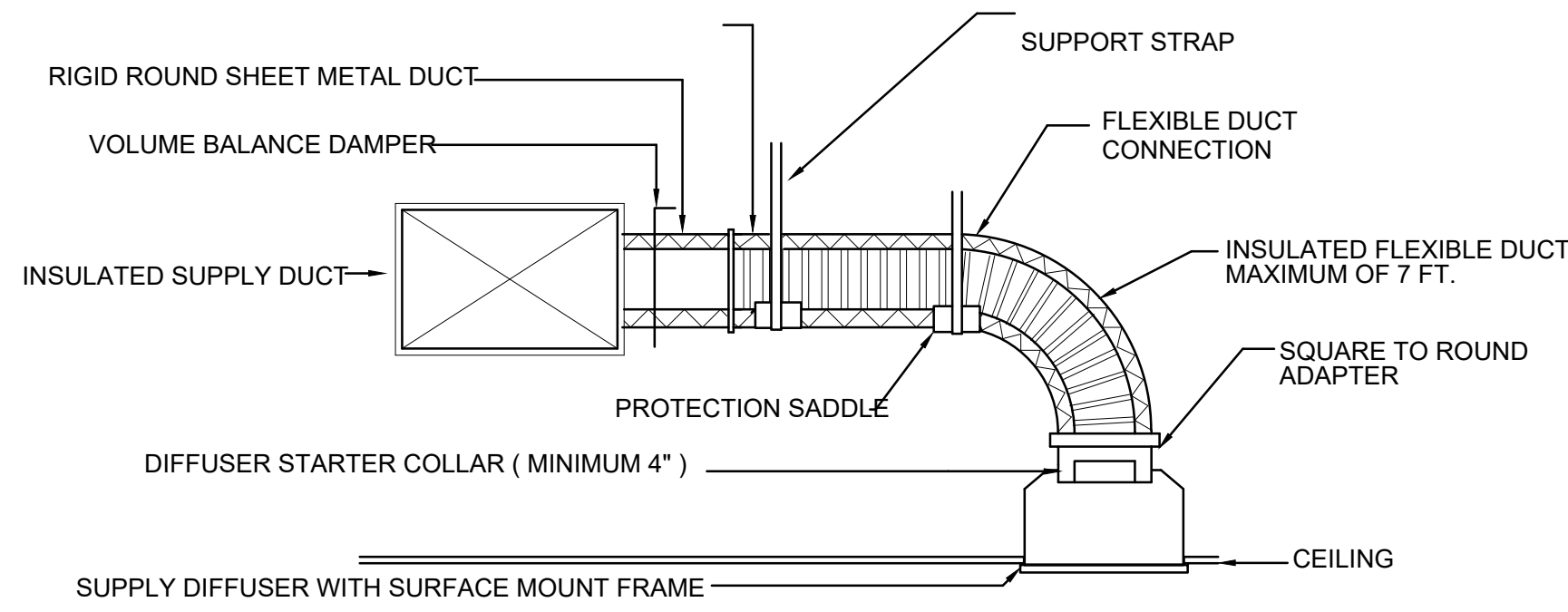
1. COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
2. DASHED LINES INSIDE DUCTWORK INDICATES 1/2" THICK DUCTLINER, AS INDICATED ON PLANS. THE DUCT SIZES SHOWN ARE FREE AREA AND SHALL BE INCREASED TO ACCOMMODATE LINER THICKNESS.
3. COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
4. MODIFY DUCTWORK AS REQUIRED TO FIT THRU STRUCTURE ABOVE.
5. ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
6. THE DUCTWORK PLANS ARE DIAGRAMMATIC, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
7. LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.

NOTES BY SYMBOL:

- ① RELOCATE EXISTING CEILING DIFFUSERS TO NEW LOCATION AS INDICATED, EXTEND AND MODIFY DUCTWORK AS NEEDED. REBALANCE EXISTING SYSTEM TO CFM'S AS INDICATED.
- ② RUN DUCTS IN JOIST SPACE, COORDINATE WITH STRUCTURAL PLANS AND ARCHITECTURAL PLANS.
- ③ CONNECT NEW SUPPLY DUCT TO EXISTING DUCTWORK, MODIFY AS NEEDED.
- ④ NEW LOCATION OF EXISTING THERMOSTAT, EXTEND WIRE IF NEEDED.

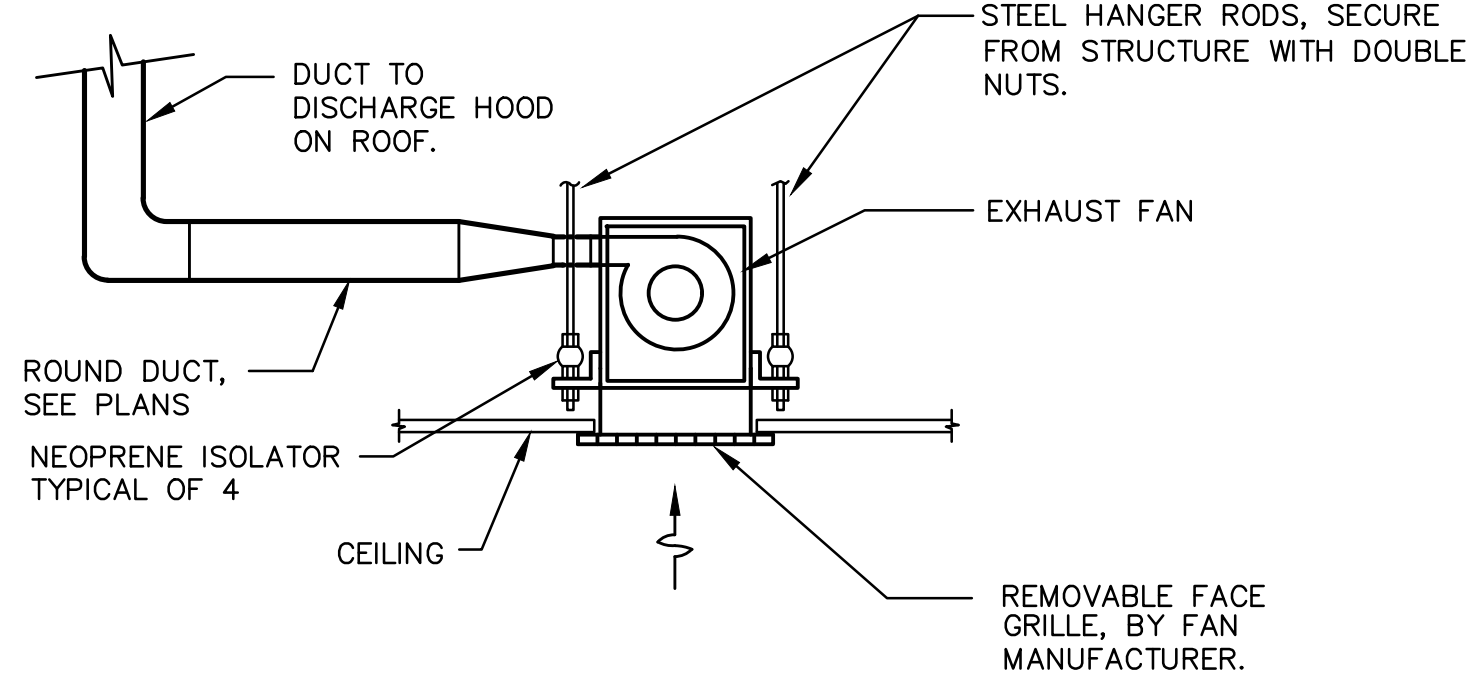
THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.





DIFFUSER DUCT DETAIL

SCALE: NOT TO SCALE



CEILING EXHAUST FAN DETAIL

SCALE: NOT TO SCALE

FAN SCHEDULE	
DESIGNATION	EF-A
SERVES	TOILET
TYPE	CEILING
TOTAL C.F.M.	100
TOTAL S.P. (IN. W.G.)	0.5"
MOTOR H.P.	50 WATT
DRIVE TYPE	DIRECT
VOLTPHASE	120/1Ø
SONES	-
MANUFACTURER	COOK
MODEL NO.	GCI48
REMARKS	1
ACCESSORIES	-

NOTES:
1. PROVIDE DISCONNECT, BACKDRAFT DAMPERS, AND INTAKE GRILLE.

AIR DEVICE SCHEDULE			
TYPE	S1	S2	R1
MODULE SIZE	24X24	SEE PLANS	12X24
NECK SIZE	SEE PLANS	SEE PLANS	SEE PLANS
FLOW RATE (C.F.M.)	SEE PLANS	SEE PLANS	SEE PLANS
NECK VELOCITY (F.P.M.)	700	700	700
N.C. LEVEL	30	30	35
MANUFACTURER	TITUS	TITUS	TITUS
MODEL NO.	TMS-AA	272-RL	PAR
DESCRIPTION	LOUVERED SA DIFFUSER	SURFACE SUPPLY GRILLE	PERFORATED RETURN AIR GRILLE
REMARKS	1,3,5.	1,2,3.	1,3.

NOTES:
1. MOUNTING FRAMES SHALL BE COMPATIBLE WITH CEILING/WALL TYPE.
2. PROVIDE OPPOSED BLADE DAMPER.
3. PROVIDE OFF-WHITE FINISH.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. ALL CEILING DIFFUSERS ARE 4-WAY DISCHARGE, UNLESS OTHERWISE INDICATED ON PLANS.
6. PROVIDE SHEETMETAL PLENUM ON BACK OF DIFFUSER, ENCASED IN CONCRETE.
7. PROVIDE ALUMINUM FINISH.
8. PROVIDE FINISH AS REQUIRED BY ARCHITECT.

GENERAL NOTES:

- COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
- DASHED LINES INSIDE DUCTWORK INDICATES 1 1/2" THICK DUCTLINER, AS INDICATED ON PLANS. THE DUCT SIZES SHOWN ARE FREE AREA AND SHALL BE INCREASED TO ACCOMMODATE LINER THICKNESS.
- COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
- MODIFY DUCTWORK AS REQUIRED TO FIT THRU STRUCTURE ABOVE.
- ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
- THE DUCTWORK PLANS ARE DIAGRAMMATIC, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
- LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.

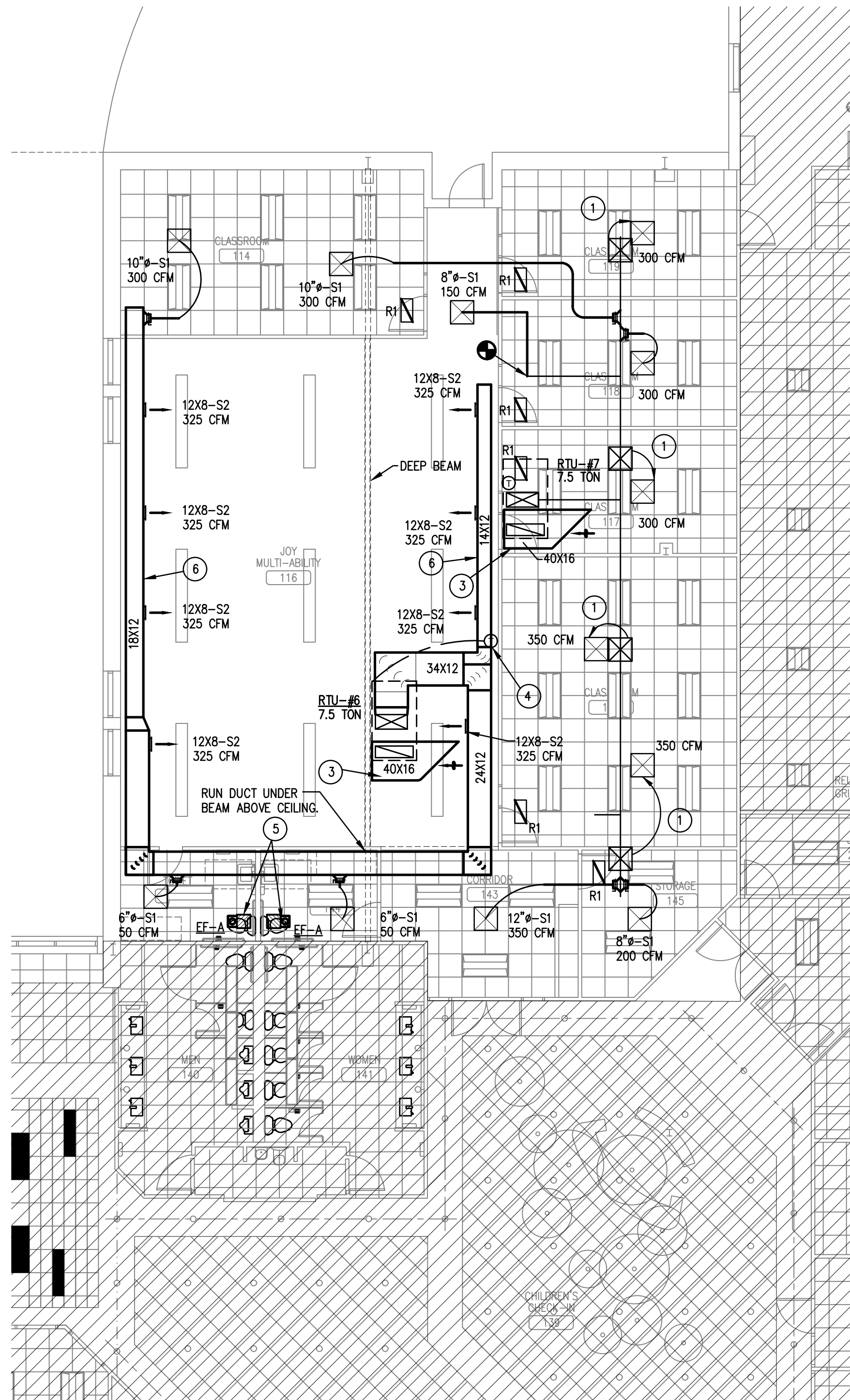
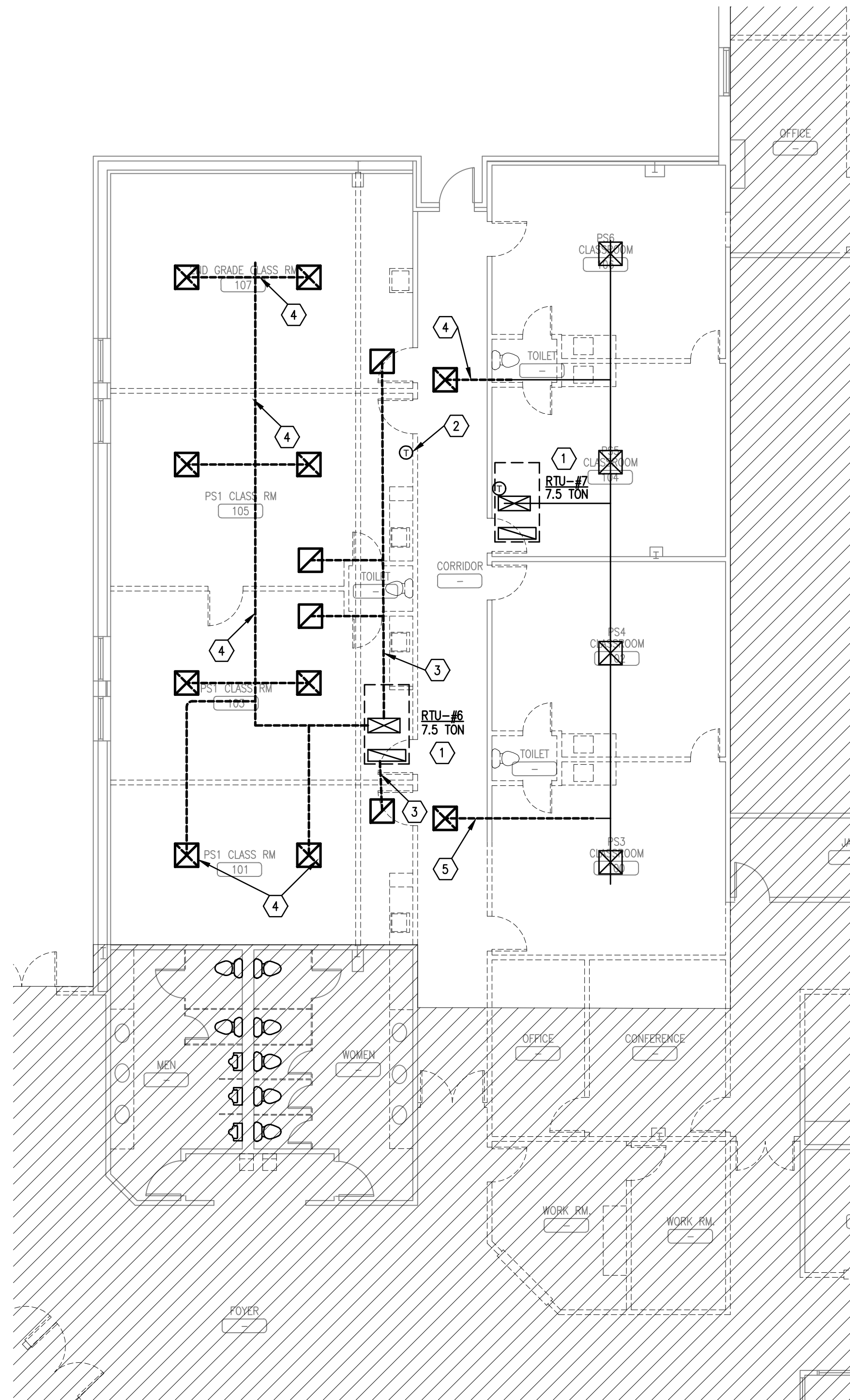
NOTES BY SYMBOL:

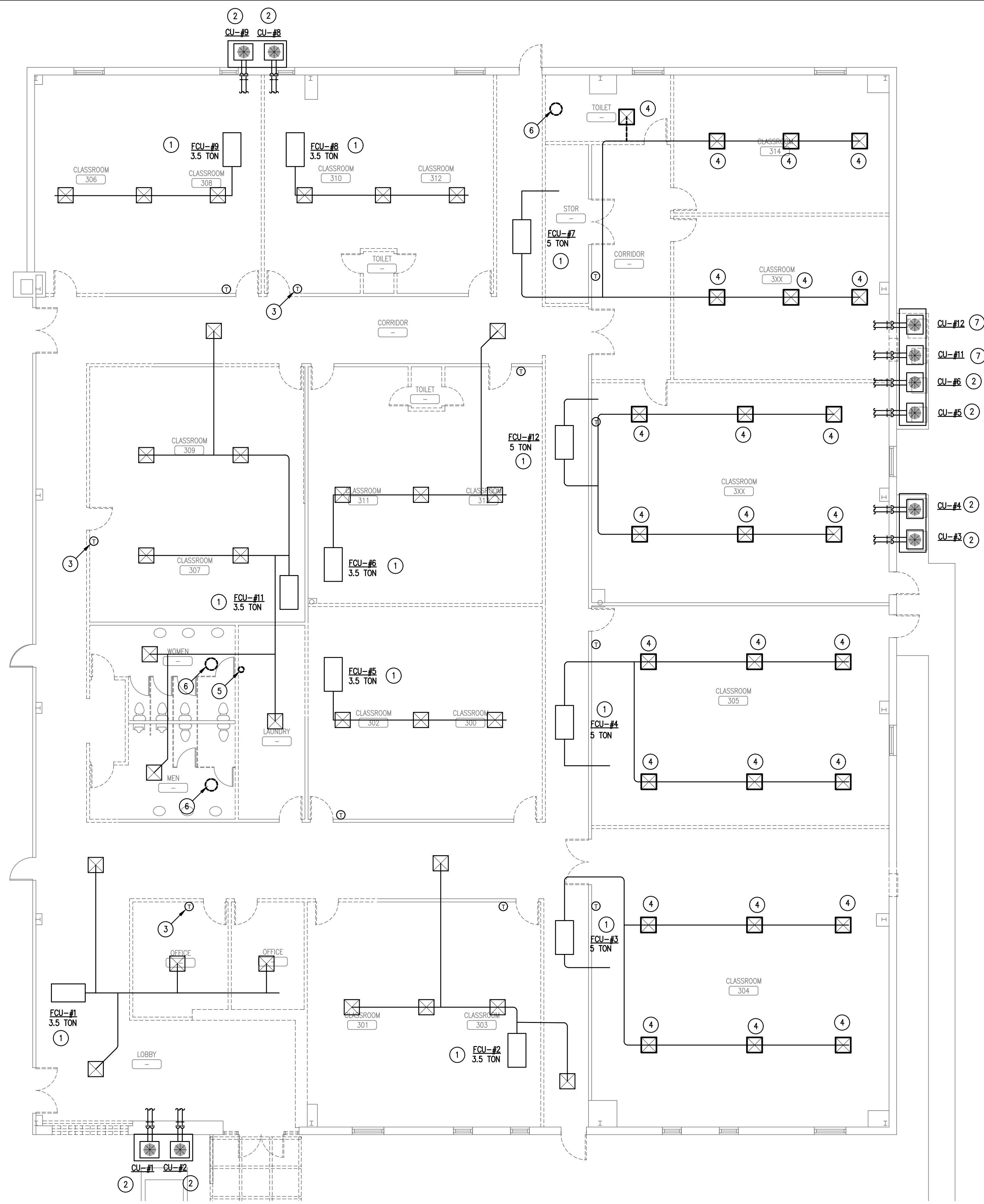
- RELOCATE EXISTING CEILING DIFFUSERS TO NEW LOCATION AS INDICATED. EXTEND AND MODIFY DUCTWORK AS NEEDED. REBALANCE EXISTING SYSTEM TO CFM'S AS INDICATED.
- RUN DUCTS IN JOIST SPACE, COORDINATE WITH STRUCTURAL PLANS AND ARCHITECTURAL PLANS.
- PROVIDE NEW RETURN AIR DUCT ON ROOF TOP UNIT AS INDICATED.
- NEW LOCATION OF EXISTING THERMOSTAT, EXTEND WIRE IF NEEDED.
- RUN NEW 6"Ø EXHAUST DUCT UP FROM FAN THRU ROOF TO A WEATHERPROOF VENT CAP.
- RUN NEW DUCT AS HIGH AS POSSIBLE.

DEMOLITION NOTES BY SYMBOL:

- EXISTING ROOF TOP UNIT TO REMAIN AS IS.
- DEMO THE EXISTING THERMOSTAT, SAVE FOR RELOCATION ON NEW PLAN.
- DEMO THE EXISTING DUCTWORK AND DIFFUSERS AS INDICATED.
- DEMO THE EXISTING DUCTWORK AND DIFFUSERS AS INDICATED.
- DEMO THE EXISTING DUCTWORK AND DIFFUSER AS INDICATED, CAP AND SEAL DUCT.

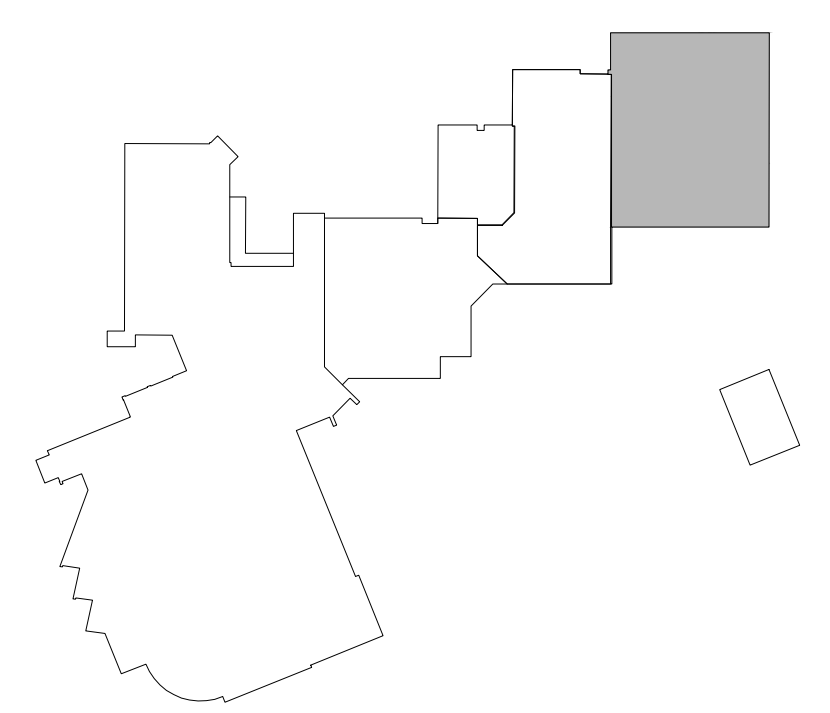
THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.





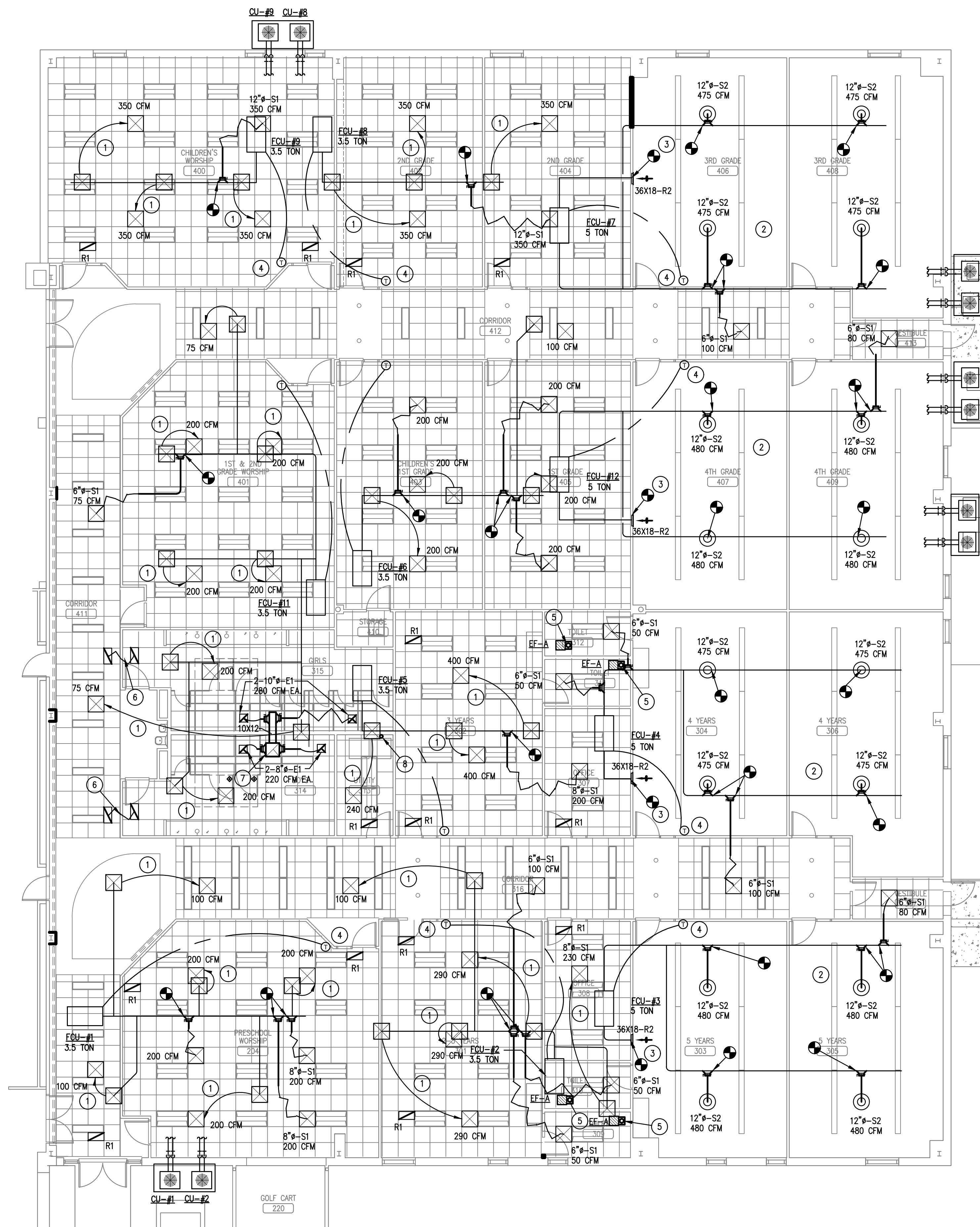
- NOTES BY SYMBOL:**
- ① EXISTING FAN COIL UNIT TO REMAIN AS IS, SERVICE AND FIX UNIT AS NEEDED.
 - ② EXISTING FAN COIL UNIT TO REMAIN AS IS, SERVICE AND FIX UNIT AS NEEDED.
 - ③ DEMO THE EXISTING THERMOSTAT, SAVE FOR RELOCATION ON NEW PLAN.
 - ④ DEMO DIFFUSER AS INDICATED, CAP AND SEAL DUCTWORK.
 - ⑤ DEMO EXISTING DRYER FLUE DUCT.
 - ⑥ DEMO EXISTING EXHAUST FAN AND DUCTWORK AS INDICATED.
 - ⑦ REMOVE EXISTING CONDENSING UNIT AND REFRIGERANT PIPING AS NEEDED FOR RELOCATION OF UNIT. REFER TO SHEET M5.2 FOR RELOCATION.

THE EXISTING DUCTWORK INDICATED IS DIAGRAMMATIC AND MAY BE VERY DIFFERENT FROM ACTUAL INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING DUCTWORK AND UNITS.



KEY PLAN
 NORTH

PHASE 5 FLOOR PLAN - MECHANICAL DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



PHASE 5 FLOOR PLAN - MECHANICAL
 NORTH SCALE: 1/8"=1'-0"

AIR DEVICE SCHEDULE

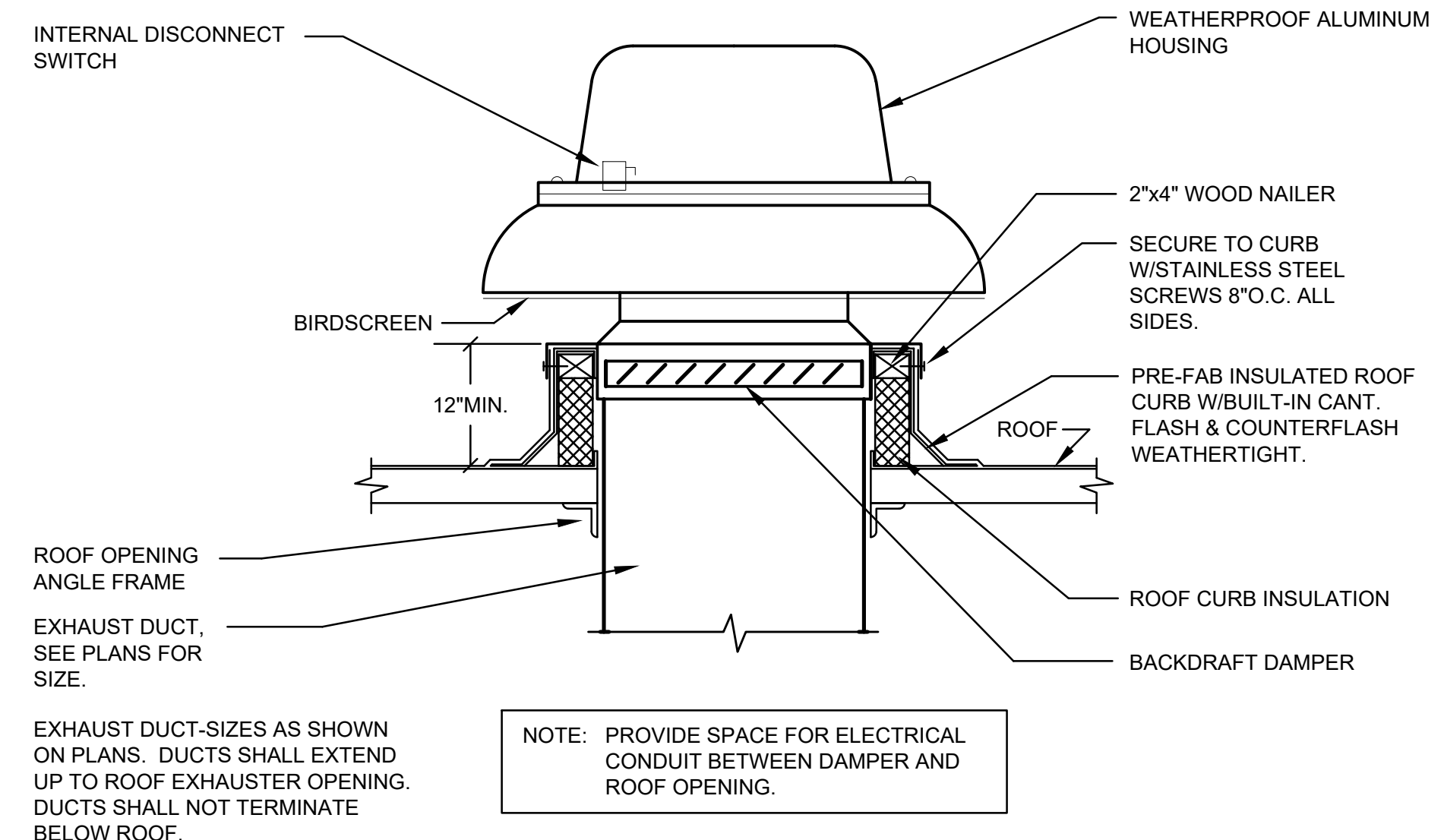
TYPE	S1	S2	R1
MODULE SIZE	24X24	SEE PLANS	12X24
NECK SIZE	SEE PLANS	SEE PLANS	SEE PLANS
FLOW RATE (C.F.M.)	SEE PLANS	SEE PLANS	SEE PLANS
NECK VELOCITY (F.P.M.)	700	700	700
N.C. LEVEL	30	35	35
MANUFACTURER	TITUS	TITUS	TITUS
MODEL NO.	TMS-AA	TMRA-AA	PAR
DESCRIPTION	LOUVERED SA	ROUND CEILING	PERFORATED
			RETURN AIR
			GRILLE
REMARKS	1,,3,,5,	1,,3,,5,	1,,3,

NOTES:
 1. MOUNTING FRAMES SHALL BE COMPATIBLE WITH CEILING TYPE.
 2. PROVIDE OPPOSED BLADE DAMPER.
 3. PROVIDE OFF-WHITE FINISH.
 4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 5. ALL CEILING DIFFUSERS ARE 4-WAY DISCHARGE, UNLESS OTHERWISE INDICATED ON PLANS.
 6. PROVIDE SHEETMETAL PLENUM ON BACK OF DIFFUSER, ENCASED IN CONCRETE.
 7. PROVIDE ALUMINUM FINISH
 8. PROVIDE FINISH AS REQUIRED BY ARCHITECT.

FAN SCHEDULE

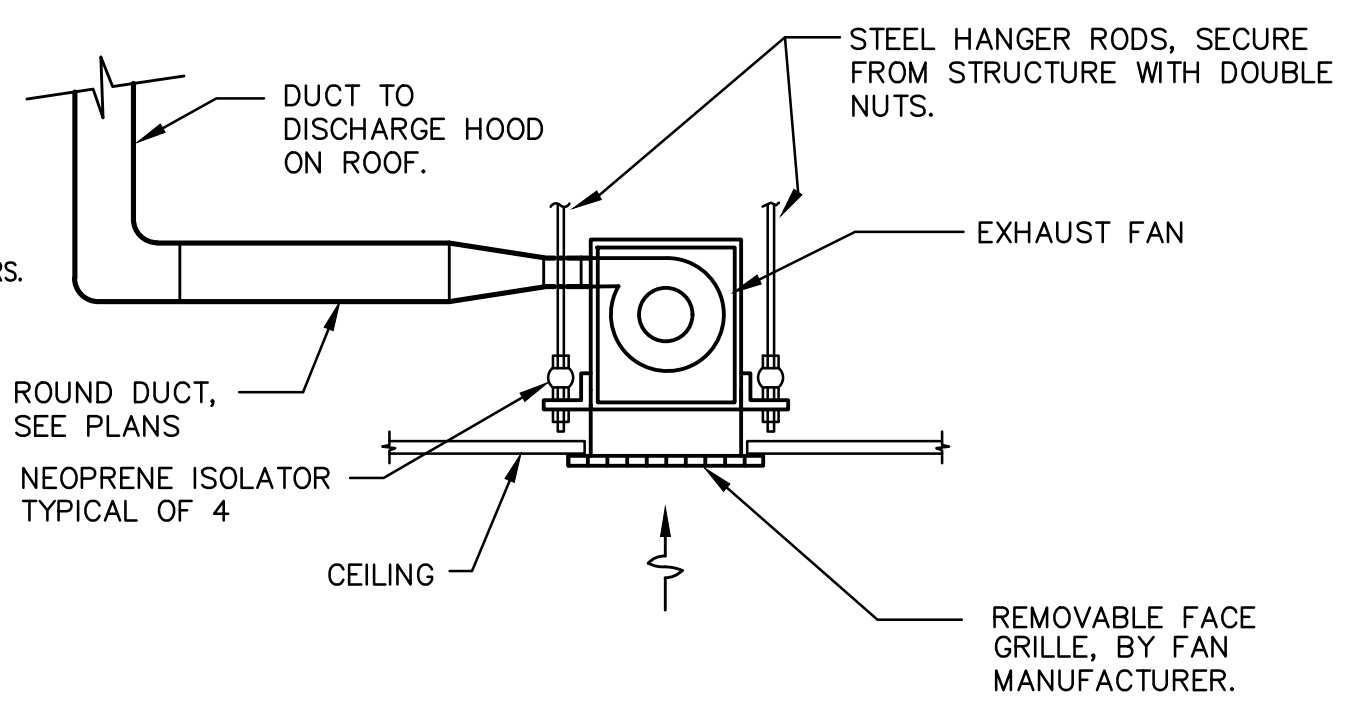
DESIGNATION	EF-A	EF-#1
SERVES	TOILET	TOILETS
TYPE	CEILING	ROOF CENTRIFUGAL
TOTAL C.F.M.	100	1000
TOTAL S.P. (IN. W.G.)	0.5"	0.5"
MOTOR H.P.	50 WATT	1/4
DRIVE TYPE	DIRECT	DIRECT
VOLT/PHASE	120/1Ø	120/1Ø
SONES	-	-
MANUFACTURER	COOK	COOK
MODEL NO.	GC14B	ACED120C13DH
REMARKS	1	2
ACCESSORIES		

NOTES:
 1. PROVIDE DISCONNECT, BACKDRAFT DAMPERS, AND INTAKE GRILLE.
 2. PROVIDE DISCONNECT, ROOF CURB, TIME CLOCK FOR CONTROL, VARIABLE SPEED CONTROLLER, AND BACKDRAFT DAMPER.



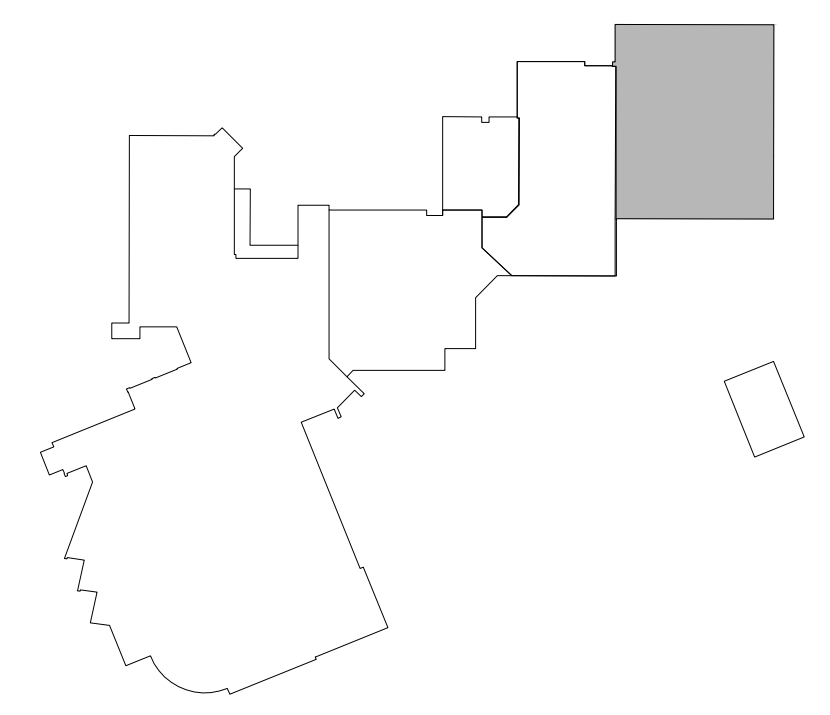
CEILING EXHAUST FAN DETAIL
 SCALE: NOT TO SCALE

- GENERAL NOTES:**
- COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
 - DASHED LINES INSIDE DUCTWORK INDICATES 1 1/2" THICK DUCTLINER, AS INDICATED ON PLANS. THE DUCT SIZES SHOWN ARE FREE AREA AND SHALL BE INCREASED TO ACCOMMODATE LINER THICKNESS.
 - COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
 - MODIFY DUCTWORK AS REQUIRED TO FIT THRU STRUCTURE ABOVE.
 - ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
 - THE DUCTWORK PLANS ARE DIAGRAMMATIC, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
 - LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.



CEILING EXHAUST FAN DETAIL
 SCALE: NOT TO SCALE

- NOTES BY SYMBOL:**
- RELOCATE EXISTING CEILING DIFFUSERS TO NEW LOCATION AS INDICATED, EXTEND AND MODIFY DUCTWORK AS NEEDED. REBALANCE EXISTING SYSTEM TO CFM'S AS INDICATED.
 - RUN DUCTS IN JOIST SPACE, COORDINATE WITH STRUCTURAL PLANS AND ARCHITECTURAL PLANS.
 - PROVIDE NEW RETURN AIR GRILLE IN WALL AS INDICATED, CONNECT TO EXISTING RETURN AIR DUCT, MODIFY AS NEEDED.
 - NEW LOCATION OF EXISTING THERMOSTAT, EXTEND WIRE IF NEEDED.
 - RUN NEW 6"Ø EXHAUST DUCT UP FROM FAN THRU ROOF TO A WEATHERPROOF VENT CAP. MAINTAIN 10' SEPARATION FROM OUTSIDE AIR INTAKES.
 - PROVIDE 10"Ø TRANSFER DUCT WITH TWO TYPE R1 GRILLES AND FLEX DUCT CONNECTED TO THEM.
 - RUN 14X14 EXHAUST DUCT UP THRU ROOF TO EF-1 ON ROOF.
 - RUN 4"Ø DRYER VENT UP THRU THE ROOF TO AN APPROVED WEATHERPROOF VENT CAP, TERMINATE PER CODE.
 - RELOCATE EXISTING CONDENSING UNIT AS INDICATED, MODIFY REFRIGERANT LINES TO NEW LOCATION, EXTEND AS NEEDED.



KEY PLAN
 NORTH



DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 5 FLOOR
 PLAN - MECHANICAL

M5.2

GENERAL NOTES:

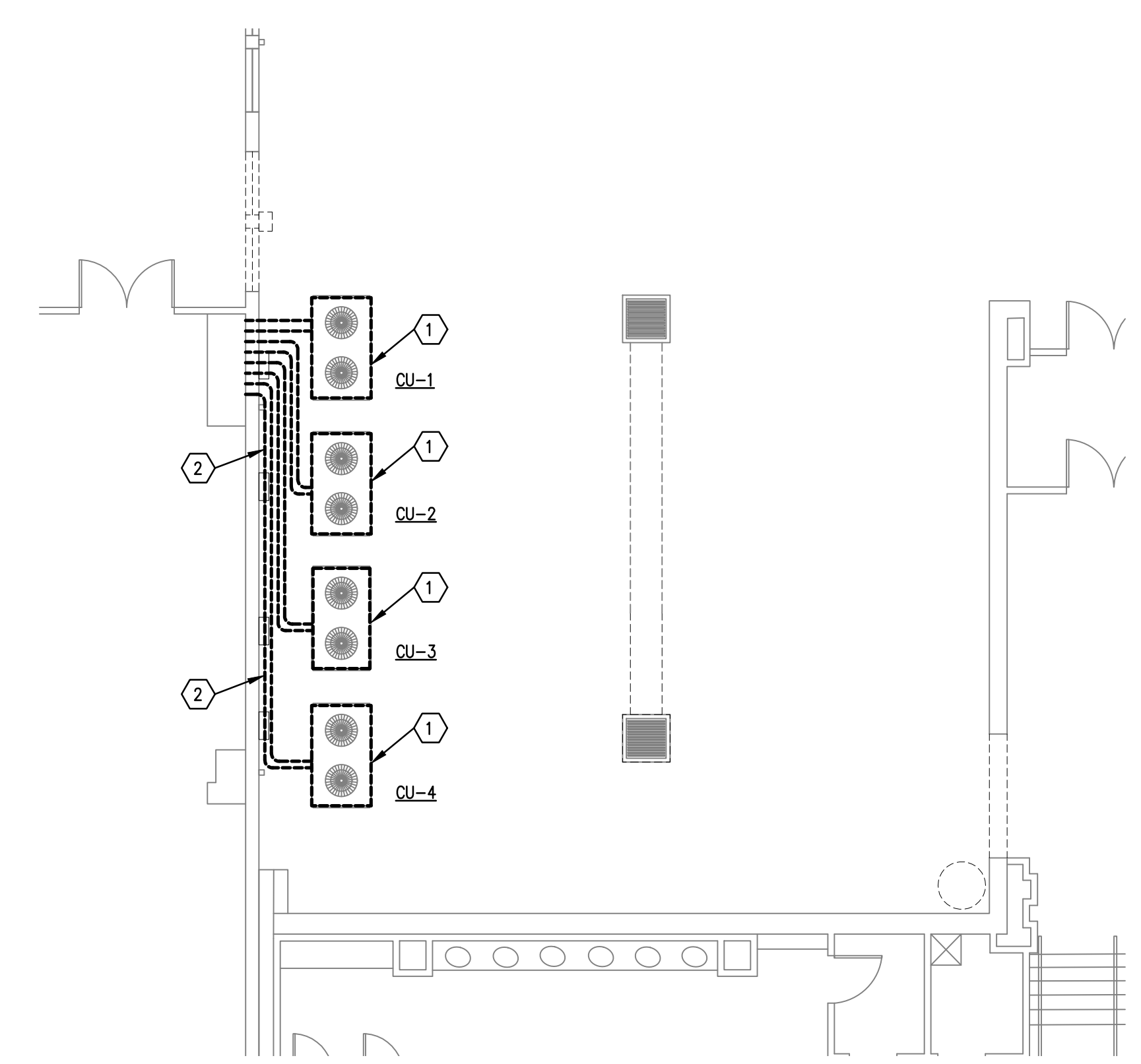
- COORDINATE CEILING DIFFUSERS WITH LIGHTS AND SMOKE DETECTORS. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS.
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- COORDINATE ALL PIPES AND DUCTWORK IN EXPOSED CEILING AREAS TO BE RUN NEATLY AND PERPENDICULAR OR PARALLEL TO JOISTS. PAINT AS DIRECTED BY ARCHITECT.
- MODIFY DUCTWORK AS REQUIRED TO FIT THRU STRUCTURE ABOVE.
- ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE INTERNALLY LINED. ALL ROUND EXPOSED DUCTWORK SHALL BE EXTERIOR INSULATED WITH A SMOOTH PAINTABLE JACKET ON IT.
- THE DUCTWORK PLANS ARE DIAGRAMMATIC. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO MAKE THE DUCTWORK FIT, MODIFY AS REQUIRED.
- LONGER RUNS OF FLEX DUCTWORK IS ALLOWED IN THE CLASSROOMS IF PROPERLY SUPPORTED.

NOTES BY SYMBOL:

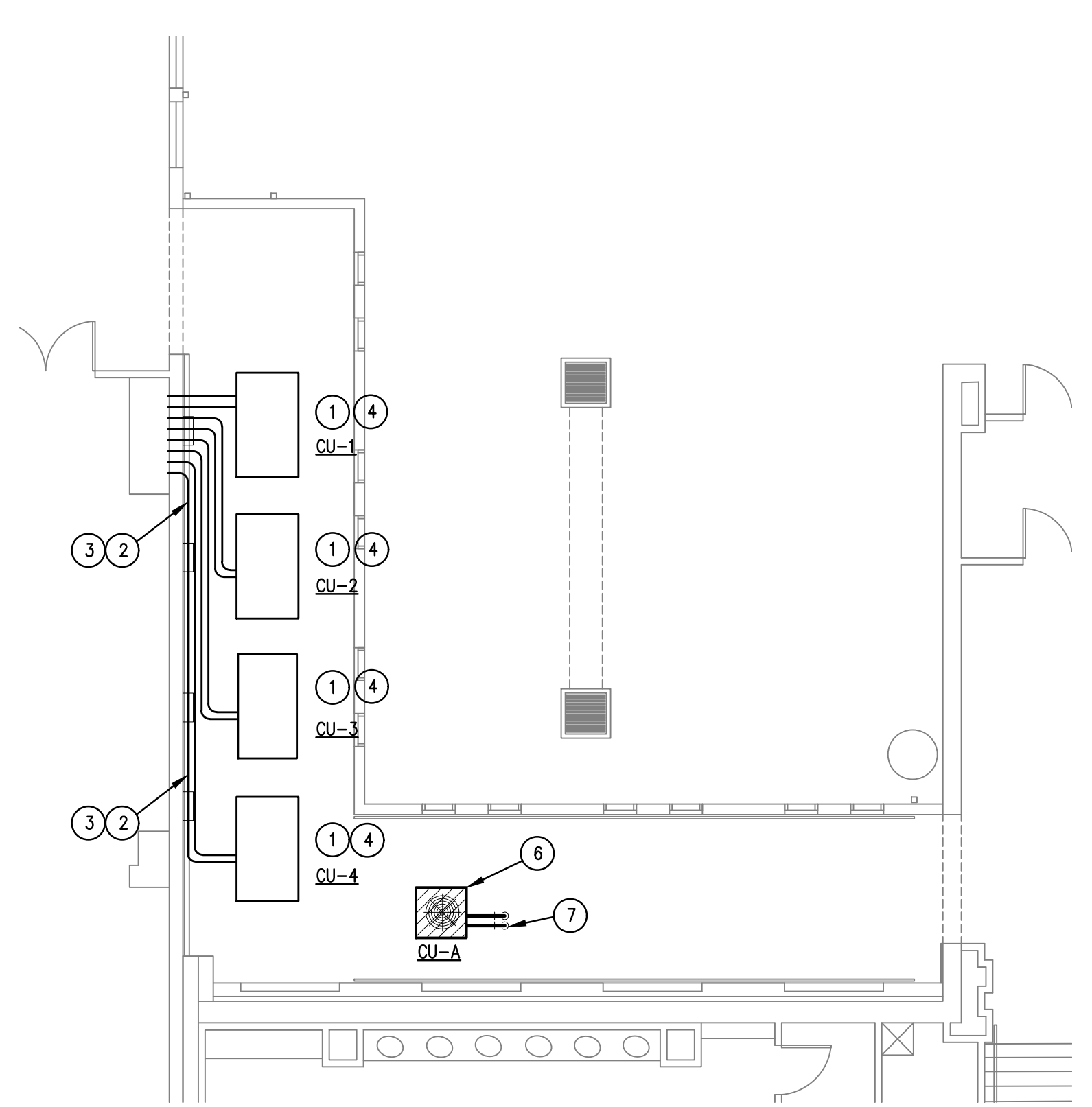
- INSTALL RELOCATED CONDENSING UNITS ON ROOF OF NEW CORRIDOR, PROVIDE ROOF CURB AND VIBRATION ISOLATION PADS UNDER UNITS.
- RUN NEW REFRIGERANT LINES OVER AND INTO CHASE, RECONNECT TO EXISTING LINES THAT WERE PREVIOUSLY CUT. PROVIDE NEW PIPE, FITTINGS AND INSULATION IF NEEDED. INSTALL AND SIZE PIPING PER MANUFACTURER REQUIREMENTS.
- PROVIDE NEW ROOF SUPPORTS FOR REFRIGERANT PIPING.
- PROVIDE NEW CONTROL WIRING AS REQUIRED FOR OPERATION.
- RUN FULL SIZE CONDENSATE LINE OVER AND DOWN, TERMINATE INTO MOP SINK.
- MOUNT CONDENSING UNIT ON ROOF WITH VIBRATION ISOLATORS.
- RUN REFRIGERANT LINES OVER AND DOWN THRU ROOF TO FAN COIL UNIT, SIZE PER MANUFACTURER REQUIREMENTS. PROVIDE SEALED ROOF PENETRATIONS.
- MOUNT FAN COIL UNIT FROM STRUCTURE ABOVE, MAINTAIN SERVICE CLEARANCE AROUND UNIT.

DEMOLITION NOTES BY SYMBOL:

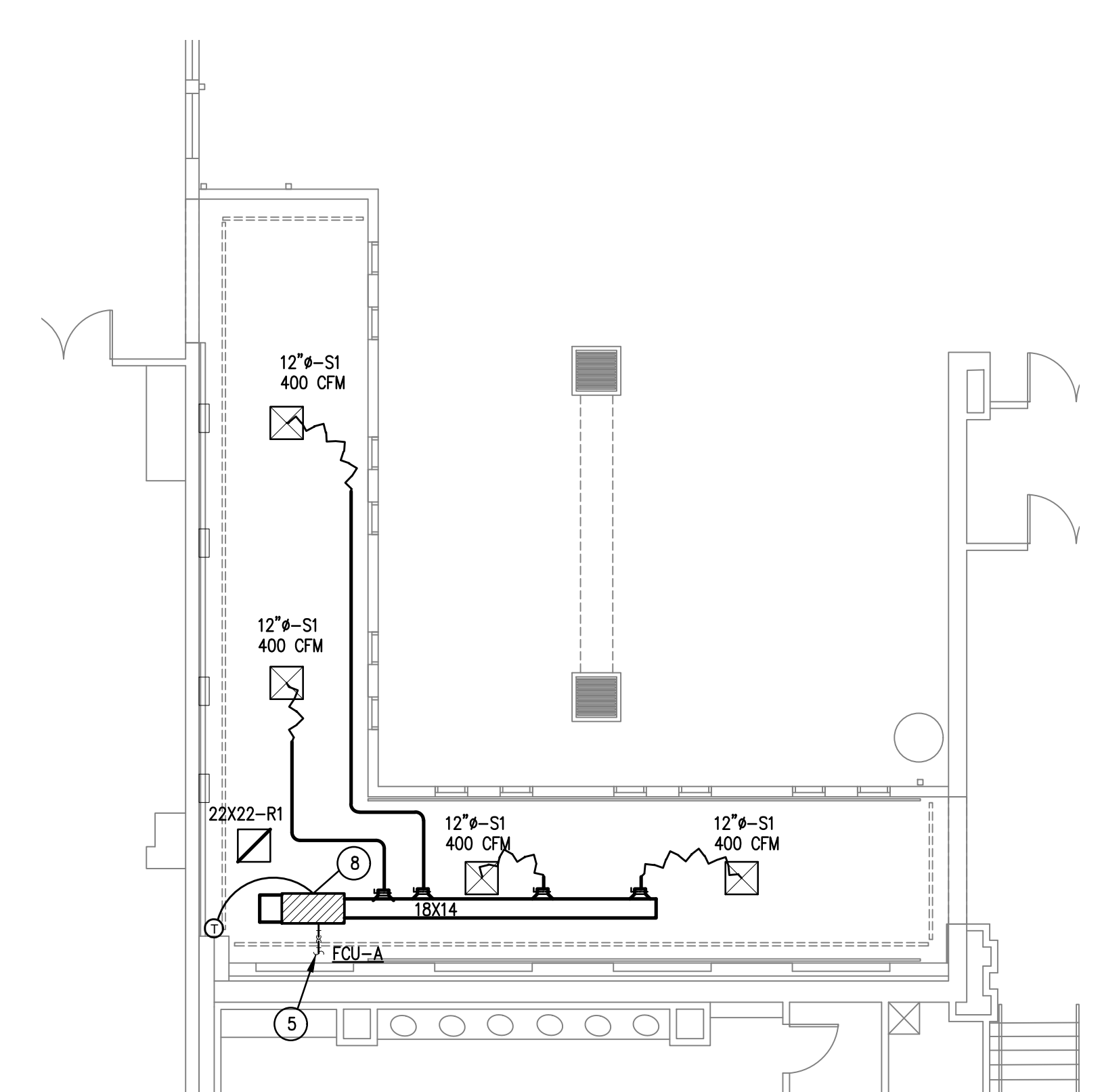
- REMOVE EXISTING CONDENSING UNITS AS INDICATED. SAVE UNIT FOR RELOCATING.
- DEMO THE EXISTING REFRIGERANT LINES ALONG WITH FITTINGS, CAP AND SEAL LINES FOR REUSE.



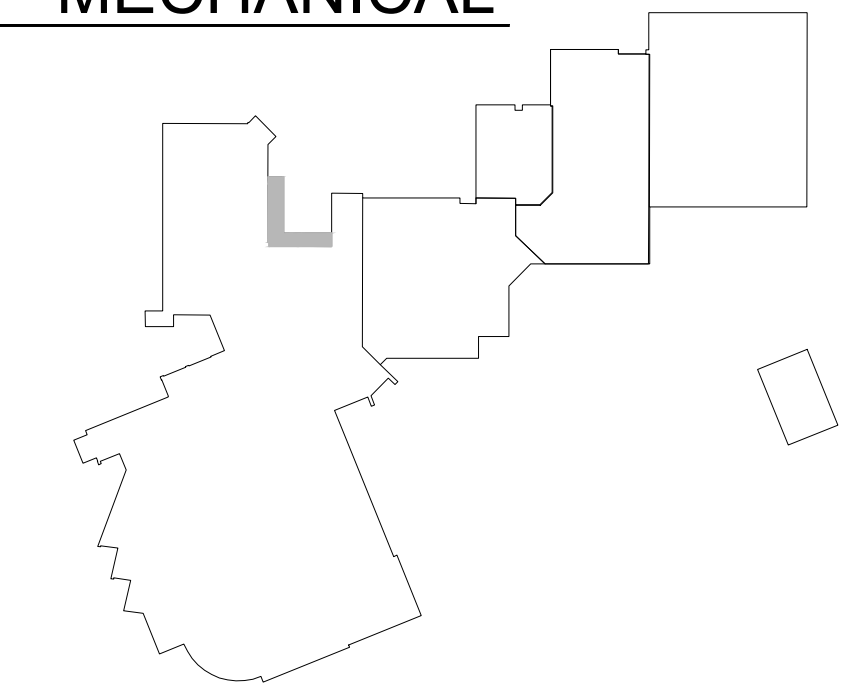
PHASE 6 FLOOR PLAN - MECHANICAL DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



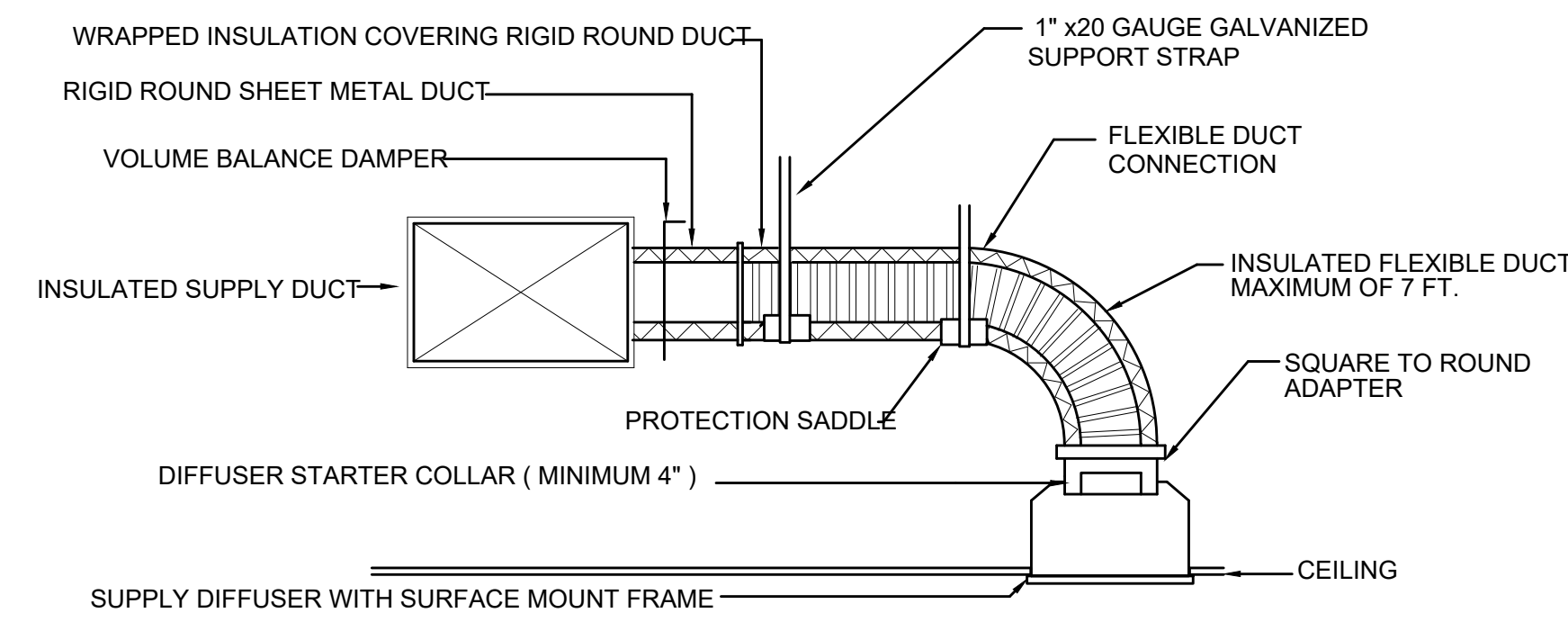
PHASE 6 ROOF PLAN - MECHANICAL
 NORTH SCALE: 1/8"=1'-0"



PHASE 6 FLOOR PLAN - MECHANICAL
 NORTH SCALE: 1/8"=1'-0"

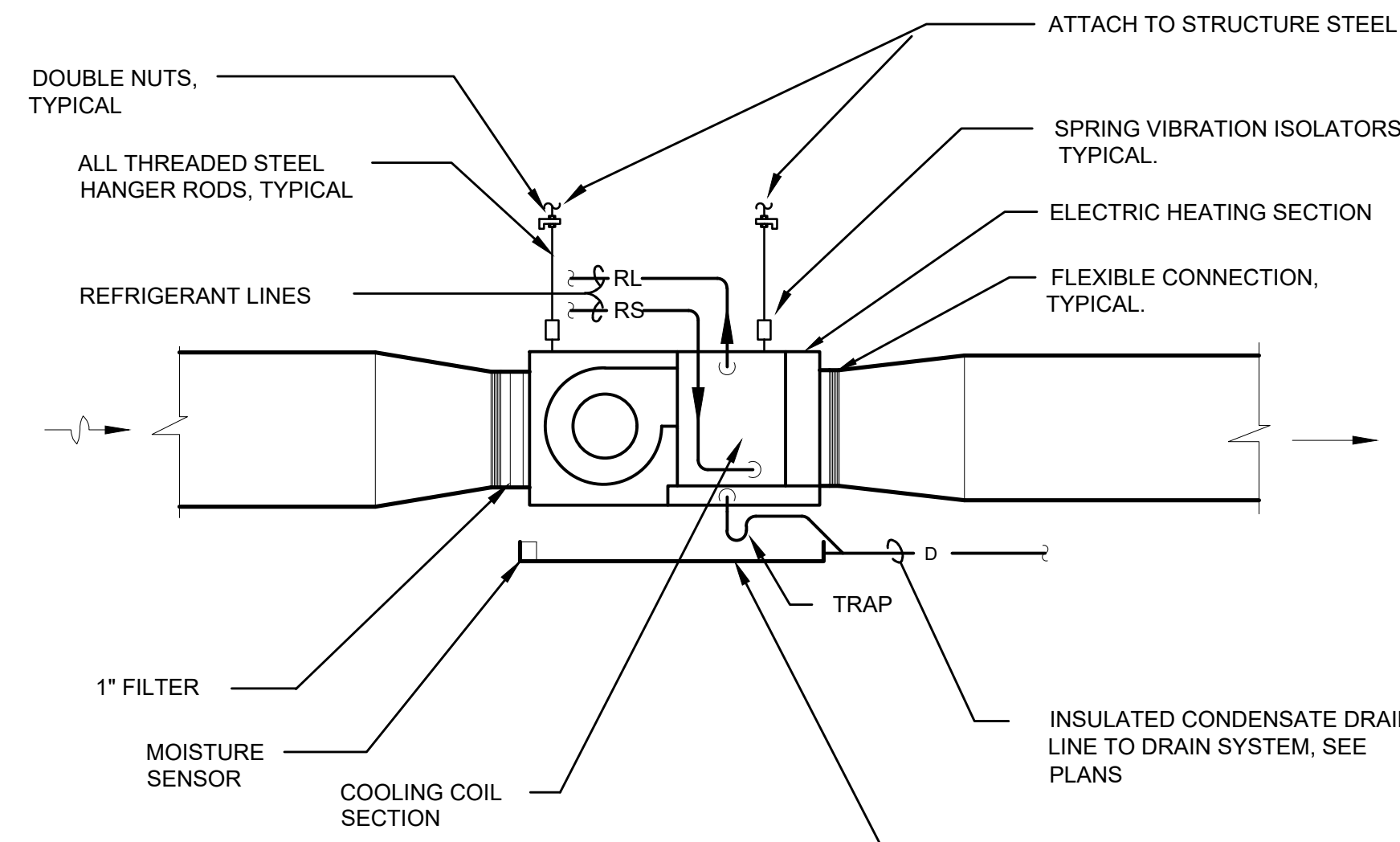


KEY PLAN
 NORTH



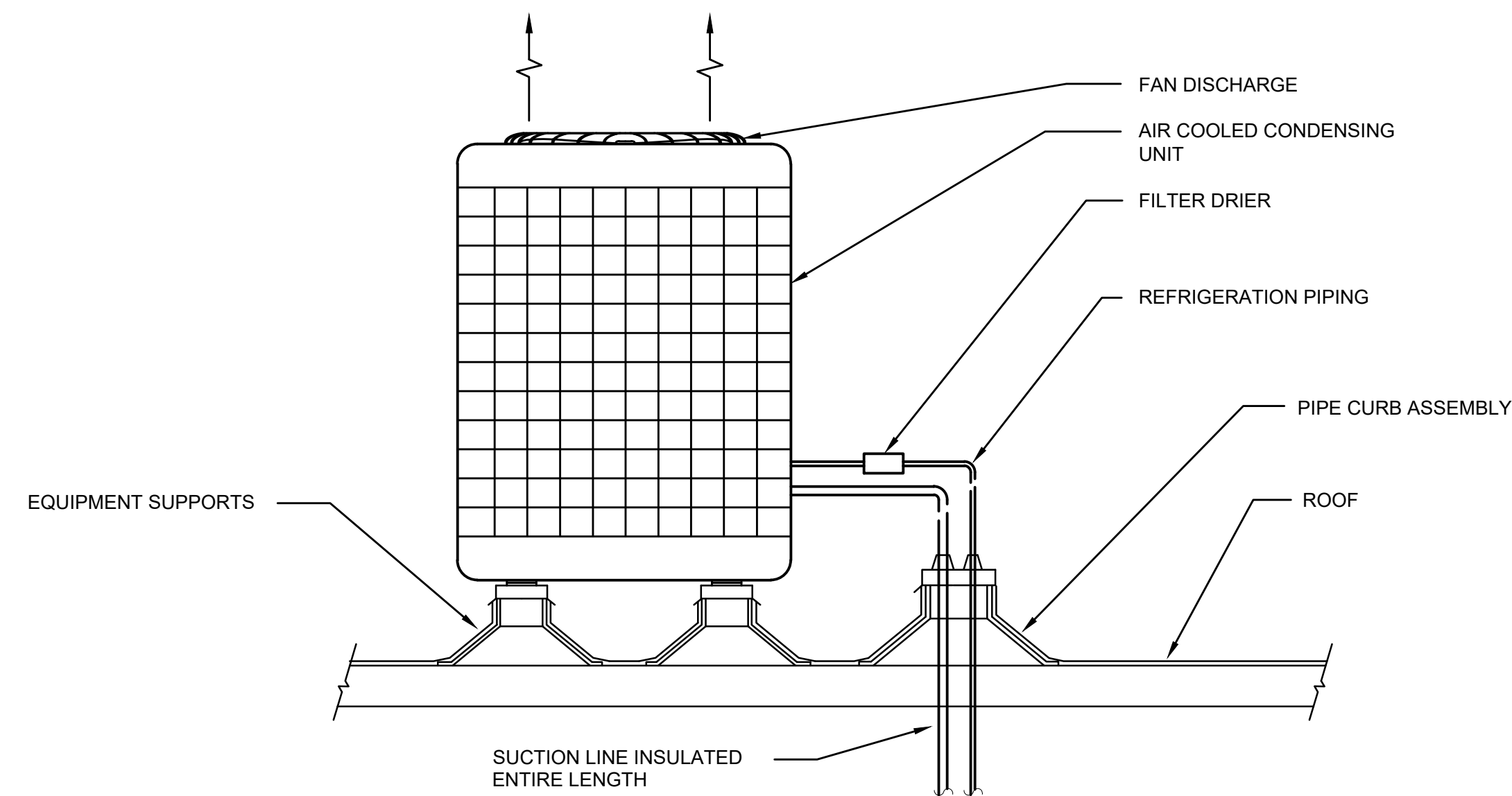
DIFFUSER DUCT DETAIL

SCALE: NOT TO SCALE



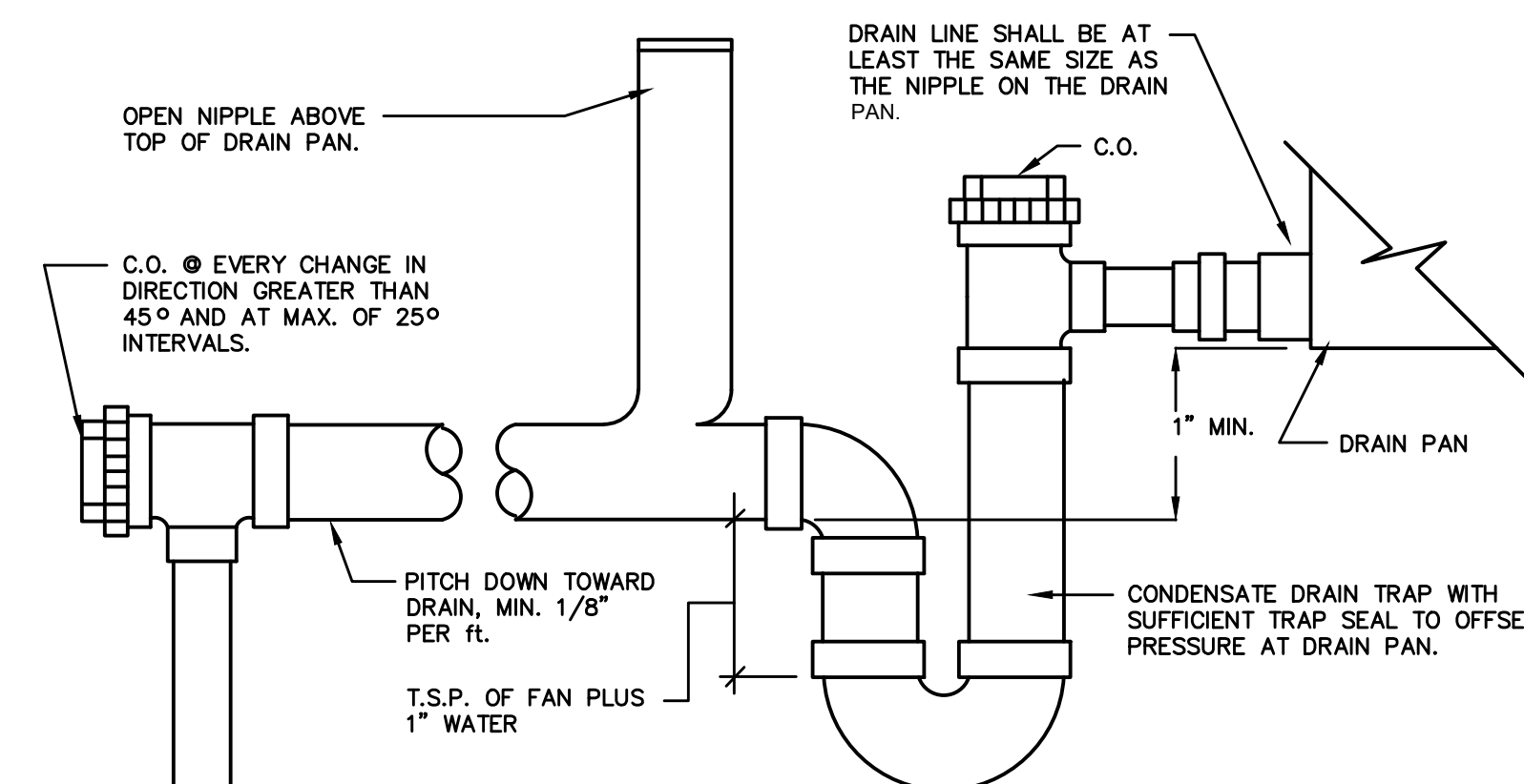
FAN & COIL UNIT DETAIL

SCALE: NOT TO SCALE



SPLIT SYSTEM CONDENSING UNIT DETAIL

SCALE: NOT TO SCALE



CONDENSATE DRAIN DETAIL

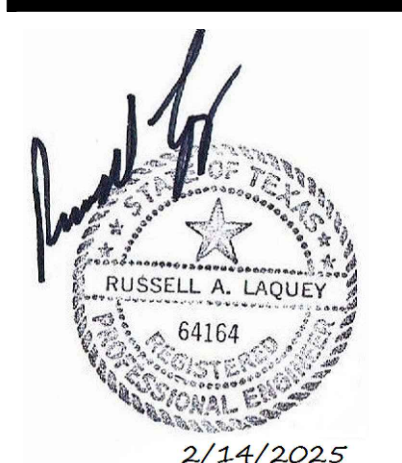
SCALE: NOT TO SCALE

FAN COIL HEATPUMP SCHEDULE

DESIGNATION	FCU-A	
TYPE	HORIZONTAL	
TOTAL C.F.M.	1600	
O.A. C.F.M. (MIN.)	0	
O.A. C.F.M. (MAX.)	0	
FAN		
SPEED (LO-MED-HI)	HIGH	
R.P.M.	-	
E.S.P. (IN. W.G.)	.4	
COOLING COIL		
ENT. AIR (DB/WB DEG. F)	80/65	
TOTAL CAPACITY (MBH)	47.8	
SENSIBLE CAPACITY (MBH)	34.1	
HEATING COIL		
TOTAL CAPACITY (MBH)	36.9	
KW	10.8	
TEMP. DIFFERENCE (DEG. F)	25	
ELECTRICAL		
H.P.	3/4	
VOLT	208	
PHASE	1Ø	
FILTERS		
THICKNESS	1"	
TYPE	THROWAWAY	
MAX. VEL. (F.P.M.)	500	
MANUFACTURER		
MODEL NO.	TEMA40C48S	
REMARKS	1	
	44/45	
NOTES:		
1. PROVIDE UNIT WITH FILTER BOX, PROGRAMMABLE THERMOSTAT, SECONDARY CONDENSATE DRAIN, AND DISCONNECT.		

DX HEATPUMP CONDENSING UNIT SCHEDULE

DESIGNATION	CU-A	
SERVES	FCU-A	
EFF. (E.E.R.)	14	
TOTAL COOLING CAP. (MBH)	47,800	
REFRIG. TEMP (°F)	45	
AMBIENT TEMP (°F)	102	
COMPRESSOR		
NO.	1	
RLA	18.5	
STEPS	1	
CONDENSER		
NO. FANS	1	
HP. EA.	1/5	
F.L.A.	.93	
ELECTRICAL		
VOLTS/PHASE	208V/1Ø	
MINIMUM CIRCUIT AMPS	24	
MAX. FUSE SIZE	40	
MANUFACTURER		
MODEL NO.	4TWA5048H1	
REMARKS	-	
NOTES:		
1. PROVIDE NEW DISCONNECTS AND CONTROL WIRING AS REQUIRED.		



DATE: 02-14-25
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CITY PLAN REVIEW

SHEET TITLE:

GENERAL ELECT
NOTES & SYMBO

POWER - RECEPTACLES		LIGHTING		MISCELLANEOUS		
⊖	120V. DUPLEX RECEPTACLE - (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	1'-6" AFF TO CL	5	DESIGNATES FIXTURE TYPE - SEE LIGHTING FIXTURE SCHEDULE	⊖	120V. PHOTOCELL
⊖ ^{42"}	120V. DUPLEX RECEPTACLE - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS	⊖	ALL FIXTURES IN THIS SPACE SHALL BE THE SAME TYPE INDICATED	⊖	NON-FUSIBLE SAFETY SWITCH, SIZE AS NOTED (A RATING/POLES)
⊖ ^{42"}	120V. QUADRUPLX RECEPTACLE - (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	1'-6" AFF TO CL	⊖	NORMAL BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	FUSIBLE SAFETY SWITCH, SIZE AS NOTED (AMP RATING/POLES)
⊖ ^{42"}	120V. QUADRUPLX RECEPTACLE - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS	⊖	CRITICAL BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	COMBINATION MOTOR STARTER
⊖	120V. DUPLEX RECEPTACLE - (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	PEDESTAL TYPE FLOOR BOX	⊖	LIFE-SAFETY BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	FACTORY WIRED CONTROLLER OR EQUIPMENT
⊖	120V. DUPLEX RECEPTACLE - (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	FLUSH TYPE FLOOR BOX	⊖	NORMAL BRANCH SURFACE OR RECESSED FIXTURE (TYPE DETERMINES MOUNTING)	⊖	MOTOR CONNECTION
⊖	240V., 2-POLE, SINGLE RECEPTACLE, RATINGS AS SHOWN ON PLANS	1'-4" AFF TO CL	⊖	CRITICAL BRANCH SURFACE OR RECESSED FIXTURE (TYPE DETERMINES MOUNTING)	⊖	UNIT HEATER CONNECTION
⊖	SPECIAL RECEPTACLE (TYPE AS NOTED)	AS NOTED OR SEE SPECS	⊖	NORMAL BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	DUCT HEATER CONNECTION
⊖	120V. GFI RECEPTACLE (SPECIAL MOUNTING HEIGHT)	AS NOTED OR SEE SPECS	⊖	CRITICAL BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	JUNCTION BOX
⊖	120V. GFI RECEPTACLE	1'-6" AFF TO CL	⊖	LIFE-SAFETY BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	⊖	PANELBOARD - FLUSH MOUNTED
⊖	CONNECTION FOR FILM ILLUMINATOR, COORDINATE ROUGH-IN PRIOR TO INSTALLATION	AS NOTED	⊖	NORMAL BRANCH WALL BRACKET FIXTURE	⊖	PANELBOARD - SURFACE MOUNTED
⊖	WIREMOLD - LENGTH AS REQUIRED - EMERGENCY POWER	ABOVE COUNTER	⊖	CRITICAL BRANCH WALL BRACKET FIXTURE	⊖	X-RAY ISOLATION PANEL LINE ISOLATION MONITOR
⊖	WIREMOLD - LENGTH AS REQUIRED - NORMAL POWER	ABOVE COUNTER	⊖	LIFE-SAFETY BRANCH WALL BRACKET FIXTURE	⊖	ISOLATION PANEL LINE ISOLATION MONITOR
⊖	GROUND JACK MODULE		⊖	EXIT LIGHT, PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS	⊖	CLOCK, SINGLE FACE - CLOCK AND RECEPTACLE AS SPECIFIED.
⊖	GROUNDING COLLECTION BUS		⊖	BATTERY POWERED EMERGENCY LIGHT	⊖	CLOCK, DOUBLE FACE - CLOCK AND RECEPTACLE AS SPECIFIED.
⊖	GROUND AND RECEPTACLE MODULE	AS NOTED	⊖	TRACK LIGHTING	⊖	KEY PAD
⊖	GROUND AND RECEPTACLE MODULE	AS NOTED	⊖	GROUND AND POLE MOUNTED SITE FIXTURES	⊖	MEDICAL GAS ALARM PANEL
TELEPHONE/DATA			SWITCHES		⊖	MEDICAL GAS LINE PRESSURE ALARM
⊖	TELEPHONE (BACKBOX WITH CONDUIT)	1'-6" AFF TO CL	⊖	SINGLE POLE SWITCH	⊖	MEDICAL GAS PRESSURE SWITCH
⊖	WALL TELEPHONE (BACKBOX WITH CONDUIT)	4'-6" AFF TO CL	⊖	DOUBLE POLE SWITCH - CENTER OFF	⊖	SECURITY SYSTEM CONTROL PANEL
⊖	TELEPHONE, SPECIAL MOUNTING HEIGHT (BACKBOX WITH CONDUIT)	AS NOTED SEE SPECS.	⊖	THREE WAY SWITCH	⊖	DOOR SWITCH MOUNTED IN DOOR JAMB
⊖	TELEPHONE FLOOR BOX		⊖	FOUR WAY SWITCH	⊖	DOOR RELEASE PUSH BUTTON
⊖	DATA/TELEPHONE (BACKBOX WITH CONDUIT)	1'-6" AFF TO CL	⊖	SINGLE POLE SWITCH - KEY OPERATED	⊖	CARD READER
⊖	COMBINATION DATA/TELEPHONE, SPECIAL MOUNTING HEIGHT (BACKBOX WITH CONDUIT)	AS NOTED SEE SPECS.	⊖	DIMMER SWITCH	⊖	MOTION DETECTOR
⊖	DATA (BACKBOX WITH CONDUIT)	1'-6" AFF TO CL	⊖	VARIABLE INTENSITY CONTROL	⊖	CIRCUIT HOMERUN - ARROWHEADS INDICATE QUANTITY OF CIRCUITS
⊖	DATA, SPECIAL MOUNTING HEIGHT (BACKBOX WITH CONDUIT)	AS NOTED SEE SPECS.	⊖	INTERVAL TIMER CONTROL SWITCH	⊖	CONCEALED CONDUIT
⊖	DATA FLOOR BOX		⊖	SINGLE POLE SWITCH WITH PILOT LIGHT	⊖	EXTERIOR CONDUIT BELOW GRADE OR CONCEALED CONDUIT IN SLAB
⊖	TELEPHONE SIGNAL LIGHT (BACKBOX WITH CONDUIT)		⊖	OCCUPANCY SENSOR SWITCH	⊖	CONDUIT TURNED UP OR DOWN
⊖	TELEPHONE SWITCHBOARD CONSOLE (BACKBOX WITH CONDUIT)		⊖	MOTOR RATED SWITCH WITH THERMAL OVERLOAD	⊖	
FIRE ALARM			⊖	PUSH BUTTON SWITCH (MUSHROOM BUTTON)	⊖	
⊖	FIREFIGHTER'S TELEPHONE JACK		TYPICAL MOUNTING HEIGHTS		⊖	
⊖	FIRE ALARM VISUAL STATION - LIGHT ONLY		THE CONTRACTOR SHALL COORDINATE THE MOUNTING HEIGHT OF ALL FIXTURES, DEVICES, AND OUTLETS WITH ARCHITECTURAL PLANS AND ELEVATIONS. SPECIAL MOUNTING HEIGHTS SHOWN ON THE PLANS SHALL TAKE PRECEDENCE OVER THOSE GIVEN BELOW. ALL MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTERLINE OF DEVICE, UNLESS NOTED OTHERWISE.		⊖	
⊖	FIRE ALARM MANUAL PULL STATION	3'-10" AFF TO CL	LIGHTING FIXTURES		⊖	
⊖	FIRE ALARM MANUAL PULL STATION - KEY OPERATED	3'-10" AFF TO CL	INTERIOR		⊖	
⊖	FIRE ALARM 10" BELL	7'-0" AFF TO CL	EXTERIOR		⊖	
⊖	FIRE ALARM CHIME WITH LIGHT		SWITCHES		⊖	
⊖	FIRE ALARM CHIME		RECEPTACLES		⊖	
⊖	FIRE ALARM HORN		WALL		⊖	
⊖	FIRE ALARM HORN/VISUAL		ABOVE COUNTER WITHOUT BACKSPASH		⊖	
⊖	FIRE ALARM SPEAKER		ABOVE COUNTER WITH BACKSPASH		⊖	
⊖	MAGNETIC DOOR HOLDER	1'-0" BELOW CLG	X-RAY FILM ILLUMINATORS		⊖	
⊖	FIRE ALARM SMOKE DETECTOR	CEILING	FOR TELEVISION		⊖	
⊖	HEAT DETECTOR		WALL HUNG SINKS (GFCI)		⊖	
⊖	DUCT SMOKE DETECTOR - SUPPLY DUCT		PHYSICAL THERAPY (GFCI)		⊖	
⊖	DUCT SMOKE DETECTOR - RETURN DUCT		CLOCK		⊖	
⊖	SMOKE DETECTOR REMOTE INDICATOR		MULTIOUTLET RACEWAY		⊖	
⊖	SMOKE DETECTOR ALARM REMOTE INDICATOR/TEST SWITCH		WALL		⊖	
⊖	SPRINKLER SYSTEM VALVE STATUS SWITCH		ABOVE COUNTER WITHOUT BACKSPASH		⊖	
⊖	SPRINKLER SYSTEM FLOW SWITCH		ABOVE COUNTER WITH BACKSPASH		⊖	
⊖	FIRE ALARM CONTROL PANEL		TELEPHONE		⊖	
⊖	FIRE ALARM EXTENDER PANEL		DESK/TABLE		⊖	
⊖	FIRE ALARM DIALER		WALL TELEPHONE		⊖	
⊖	FIRE ALARM RELAY		PAY TELEPHONE		⊖	
⊖	FIRE ALARM ZONE ADDRESSABLE MODULE		ABOVE COUNTER WITHOUT BACKSPASH		⊖	
⊖	FIRE ALARM REMOTE ANNUNCIATOR		ABOVE COUNTER WITH BACKSPASH		⊖	
			ELECTRICAL EQUIPMENT		⊖	
			SAFETY SWITCH		⊖	
			MOTOR STARTER		⊖	
			PANELBOARD		⊖	
			COMMUNICATIONS CABINET		⊖	
			TV CABLE OUTLET		⊖	
			WALL		⊖	
			ARMOIRS		⊖	
			WALL BRACKET		⊖	
			CONTROL/SECURITY		⊖	
			DOOR ALARM		⊖	
			PUSHBUTTON		⊖	
			DOOR ACCESS KEYPAD		⊖	
			CCTV CAMERA		⊖	
			CCTV MONITOR		⊖	
			FIRE ALARM		⊖	
			MANUAL PULL		⊖	
			CHIME, HORN AND/OR STROBE		⊖	
			SMOKE, HEAT DETECTORS		⊖	
			CONTROL PANEL, ANNUNCIATOR		⊖	
			MAGNETIC DOOR HOLDER		⊖	
			NURSE CALL		⊖	
			EMERGENCY PULL CORD STATION		⊖	
			TOILET		⊖	
			SHOWER		⊖	
			AT HEIGHT OF SHOWER HEAD		⊖	
			SINGLE OR DUAL PATIENT STATION		⊖	
			CODE BLUE		⊖	
			STAFF AND DUTY STATIONS		⊖	
			DOME AND ZONE LIGHTS		⊖	
			NURSE PRESENCE STATIONS		⊖	
			NURSE CALL MASTER STATION		⊖	
			NURSE CALL TERMINAL CABINET		⊖	
			MONITOR		⊖	
			WALL		⊖	
			ABOVE COUNTER		⊖	
			WALL BRACKET		⊖	
			SOFFIT		⊖	

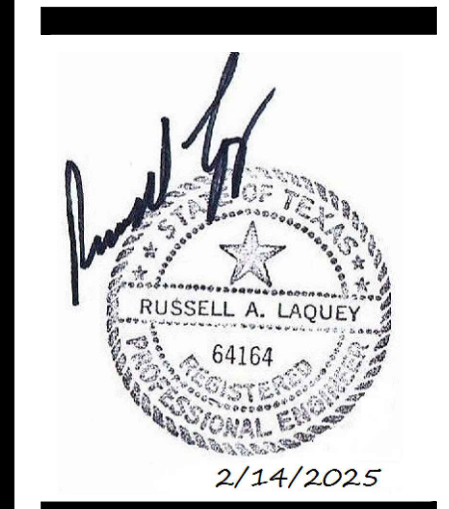
ELECTRICAL ABBREVIATIONS			
ABBR.	DEFINITION	ABBR.	DEFINITION
A	AMPERE	JB	JUNCTION BOX
ABC	ABOVE COUNTER	KV	KILOVOLT
AC	ALTERNATING CURRENT	KVA	KILOVOLT-AMPERE
AF	AMPERE FUSE	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
AHU	AIR HANDLING UNIT	MAX	MAXIMUM
KAIC	AMPS INTERRUPTING CAPACITY x1000	MCB	MAIN CIRCUIT BREAKER
AT	AMPERE TRIP	MCC	MOTOR CONTROL CENTER
ANN	ANNUNCIATOR	MCM	CIRCULAR MILS, THOUSANDS
APPROX	APPROXIMATE	MECH	MECHANICAL
ARCH	ARCHITECT	MFR	MANUFACTURER
ATS	AUTOMATIC TRANSFER SWITCH	MGAP	MEDICAL GAS ALARM PANEL
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUGS ONLY
BLDG	BUILDING	MTD	MOUNTED
BSMT	BASEMENT	MTG	MOUNTING
C	CONDUIT	NEC	NATIONAL ELECTRICAL CODE
CAB	CABINET	NTS	NOT TO SCALE
CB	CIRCUIT BREAKER	PNL	PANEL
CKT	CIRCUIT	PH	PHASE
CLG	CEILING	P	POLE
CL	CENTER LINE	PFB	PROVISIONS FOR BREAKER
CT	CURRENT TRANSFORMER	PA	PUBLIC ADDRESS
CU	COPPER	RECP	RECEPTACLE
DISC	DISCONNECT	REFRIG	REFRIGERATOR
DN	DOWN	REQD	REQUIRED
DWG	DRAWING	SN	SOLID NEUTRAL
EA	EACH	SPKR	SPEAKER
EDF	ELECTRIC DRINKING FOUNTAIN	SPEC	SPECIFICATION
EF	EXHAUST FAN	SWBD	SWITCHBOARD
ELEV	ELEVATOR	SWGR	SWITCHGEAR
EP	EXPLOSION-PROOF	TEL	TELEPHONE
EQPT	EQUIPMENT	TTB	TELEPHONE TERMINAL BOARD
EXTG	EXISTING	TV	TELEVISION
FA	FIRE ALARM	TVSS	TRANSIENT VOLT. SURGE SUPPRESSOR
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL
FCU	FAN COIL UNIT	UC	UNDER COUNTER
FLA	FULL LOAD AMPS	UH	UNIT HEATER
FLR	FLOOR	V	VOLT
GFI	GROUND FAULT INTERRUPTER	VA	VOLTAMPERE
GND	GROUND	W	WATT
HTR	HEATER	WH	WEATHER HEATER
HT	HEIGHT	WP	WEATHER-PROOF
HP	HORSE POWER	W/	WITH
HW	HOT WATER	W/O	WITHOUT
HWC	HOT WATER CIRCULATING	XFMR	TRANSFORMER
INCAND	INCANDESCENT	XFR	TRANSFER

ABBREVIATIONS	
ABC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
C	RED - EMERGENCY POWER
CLG	CEILING
FBO	FURNISHED BY OTHERS
IG	ISOLATED GROUND
S	SAFETY TYPE
SMH	SPECIAL MOUNTING HEIGHT - AS NOTED OR SEE SPECS
TV	TELEVISION
WP	WEATHERPROOF

ELECTRICAL GENERAL NOTES

- DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT BE DRAWN EXACTLY TO SCALE. ELECTRICIAN IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES AND EXACT LOCATION OF ALL FIXTURES. VERIFY CEILING TYPES WITH ARCHITECT PRIOR TO ORDERING LIGHT FIXTURES TO ENSURE COMPATIBLE FIXTURE TRIMS AND MOUNTING HARDWARE.
- ALL CIRCUITS SHALL INCLUDE A GREEN GROUND CONDUCTOR SIZED IN ACCORDANCE WITH 250-95, OR LARGER IF NOTED.
- WHERE NEW LIGHTS OR RECEPTACLES ARE DESIGNATED TO BE CONNECTED TO AN EXISTING CIRCUIT, ELECTRICIAN SHALL TRACE EXISTING CIRCUIT TO DETERMINE CIRCUIT LOADING. THE LOAD ON A 20 AMP CIRCUIT SHALL NOT EXCEED 16 AMPS. WHERE THIS CANNOT BE ACHIEVED, CONTRACTOR SHALL CONTACT THE ENGINEER FOR ALTERNATIVE CIRCUITING INSTRUCTIONS.
- IN ADDITION TO ALL WIRING, RACEWAY, AND DEVICES SHOWN HEREIN, ELECTRICIAN WILL FURNISH AND INSTALL ALL WIRING, RACEWAY, DEVICES, PULLBOXES, DUCTS, SWITCHES, CIRCUIT BREAKERS, AND OTHER ELECTRICAL ITEMS NOT SUPPLIED BY DIAGNOSTIC EQUIPMENT VENDOR. REFER TO ELECTRICAL DRAWINGS AND VENDOR DRAWINGS.
- ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE INSTALLATION OF ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR DUCT DETECTORS, SMOKE DAMPERS, TAMPER SWITCHES, FLOW SWITCHES, PRE-ACTION SYSTEMS, DRY PIPE SYSTEMS AND ANY OTHER INTERCONNECTIONS TO THE FIRE ALARM SYSTEM.



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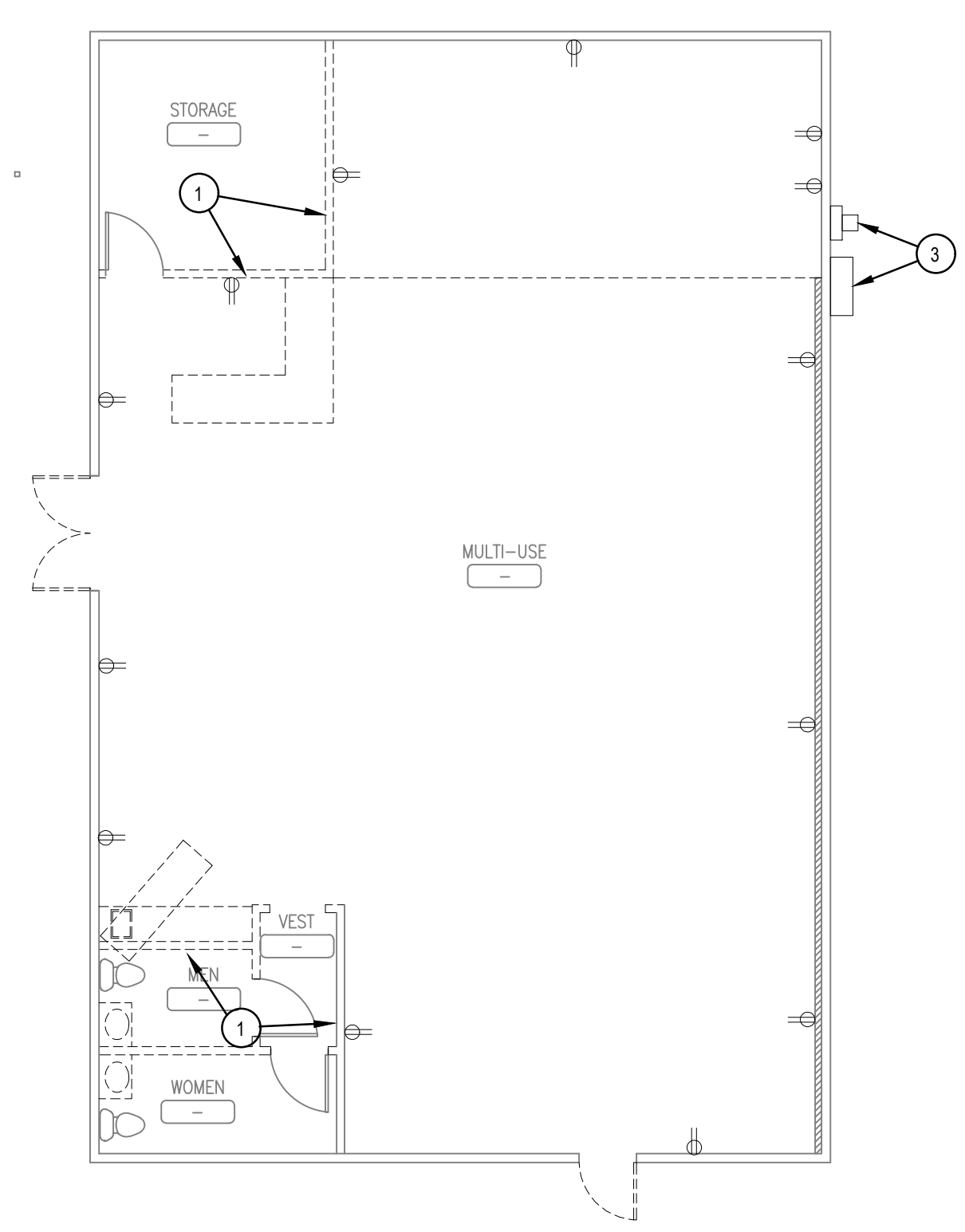
SHEET TITLE:
 PHASE 1 FLOOR
 PLAN - ELECTRICAL
 DEMOLITION

E1.1

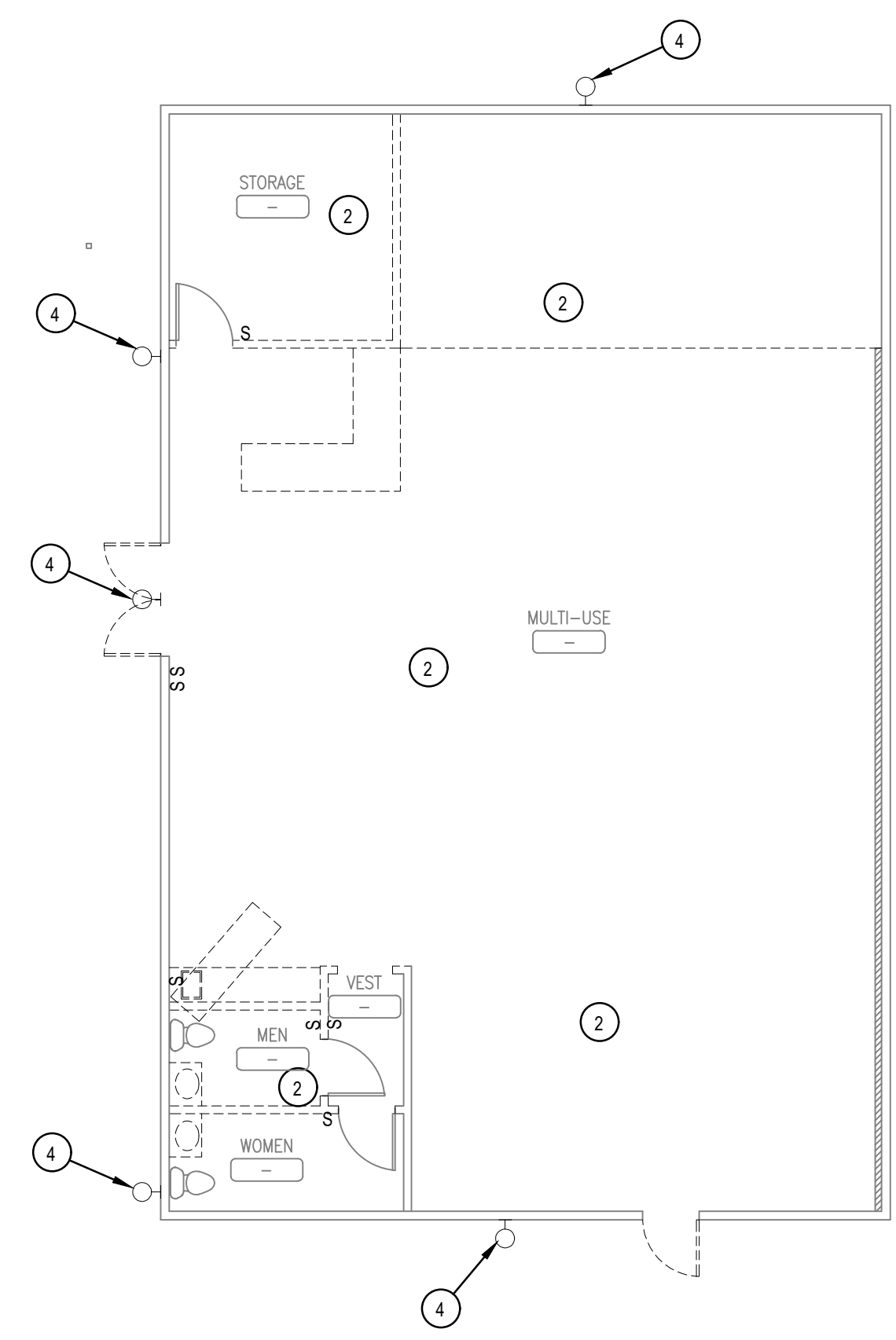
THE EXISTING OUTLETS AND SWITCHES INDICATED ARE
 DIAGRAMMATIC AND MAY VARY FROM ACTUAL INSTALLATION.
 THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION
 LOCATION OF EXISTING ELECTRICAL OUTLETS.

NOTES BY SYMBOL:

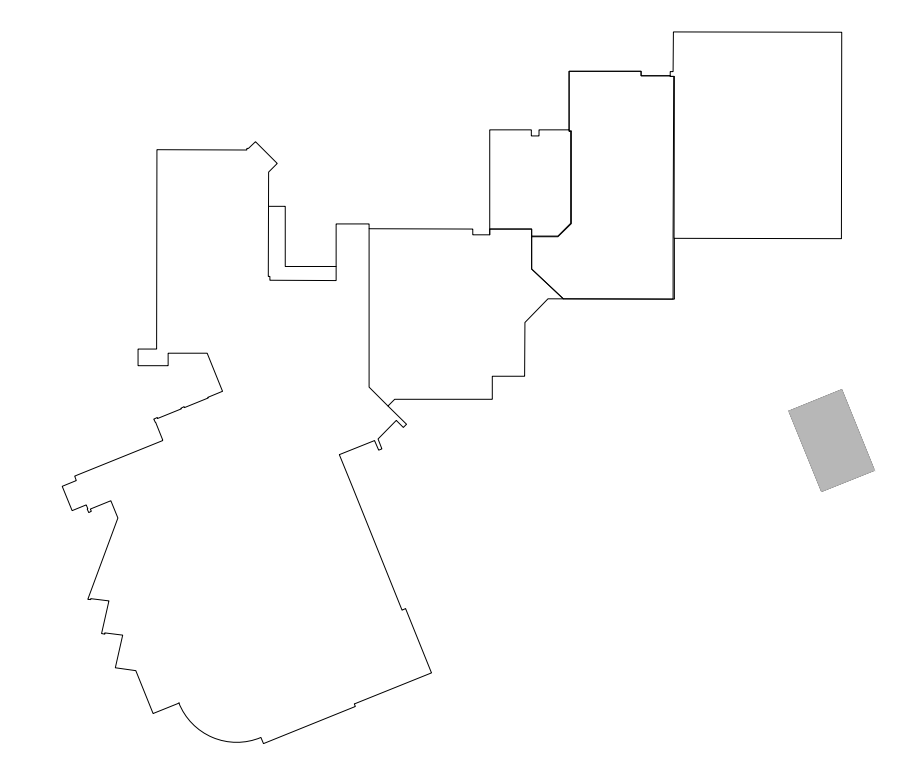
- ① DEMO EXISTING RECEPTACLES IN DEMOED WALL.
REMOVE WIRES BACK TO EXISTING J-BOX.
- ② DEMO EXISTING LIGHT FIXTURES, SWITCHES,
AND WIRE. REMOVE WIRES BACK TO EXISTING
J-BOX.
- ③ EXISTING ELECTRICAL METER AND PANEL TO
REMAIN AS IS.
- ④ EXISTING EXTERIOR LIGHTING TO REMAIN AS IS.



PHASE 1 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



PHASE 1 FLOOR PLAN - LIGHTING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



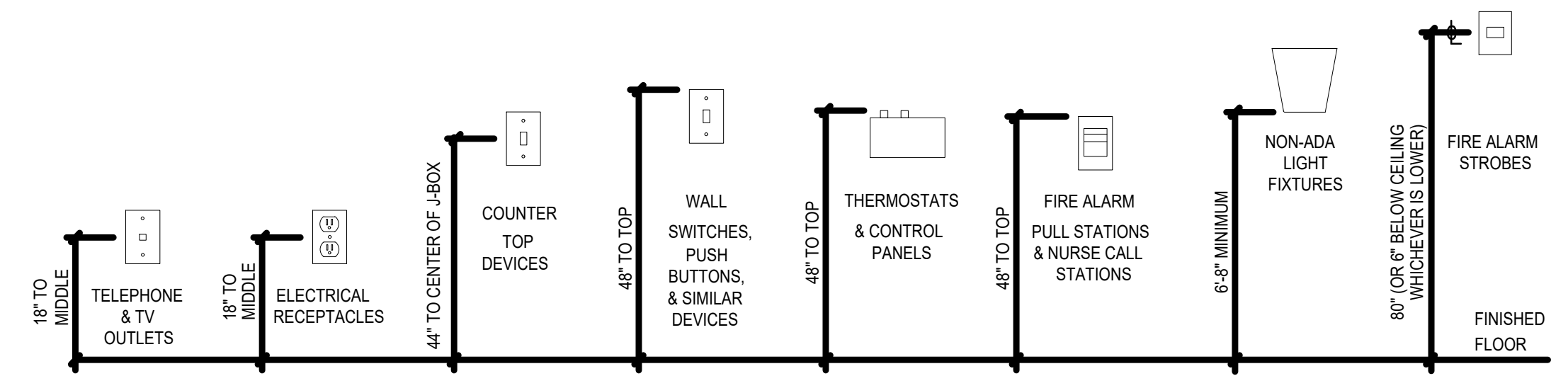
KEY PLAN
 NORTH



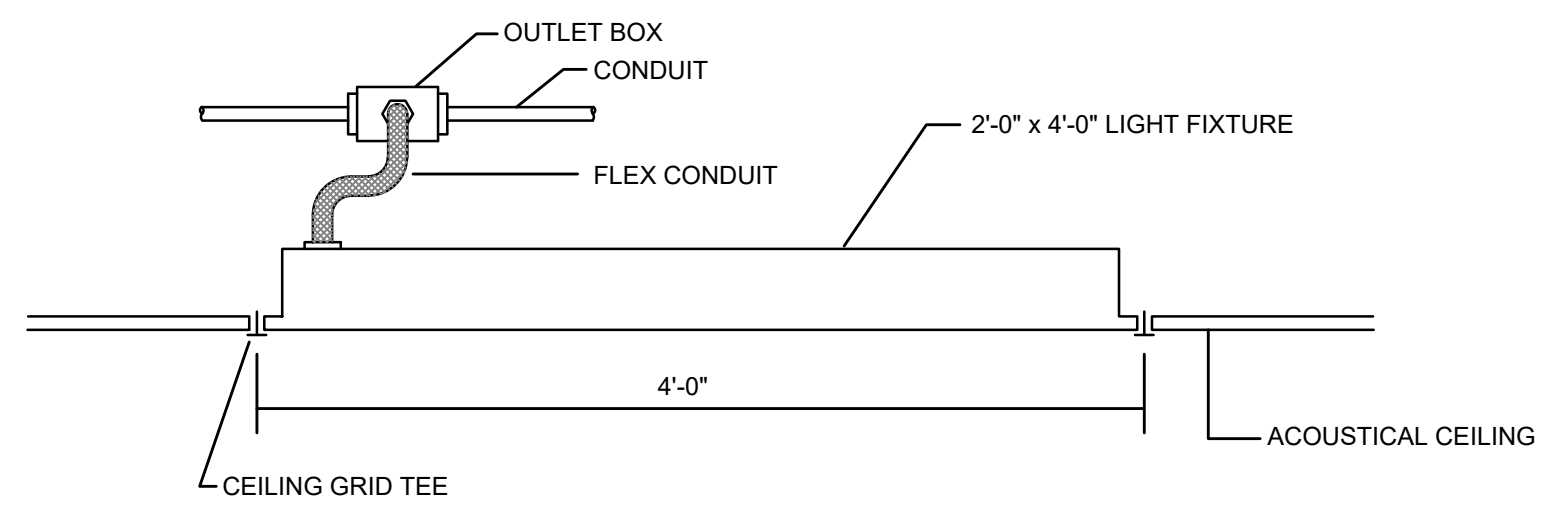
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SHEET TITLE:
 PHASE 1 FLOOR PLAN - ELECTRICAL

E1.2

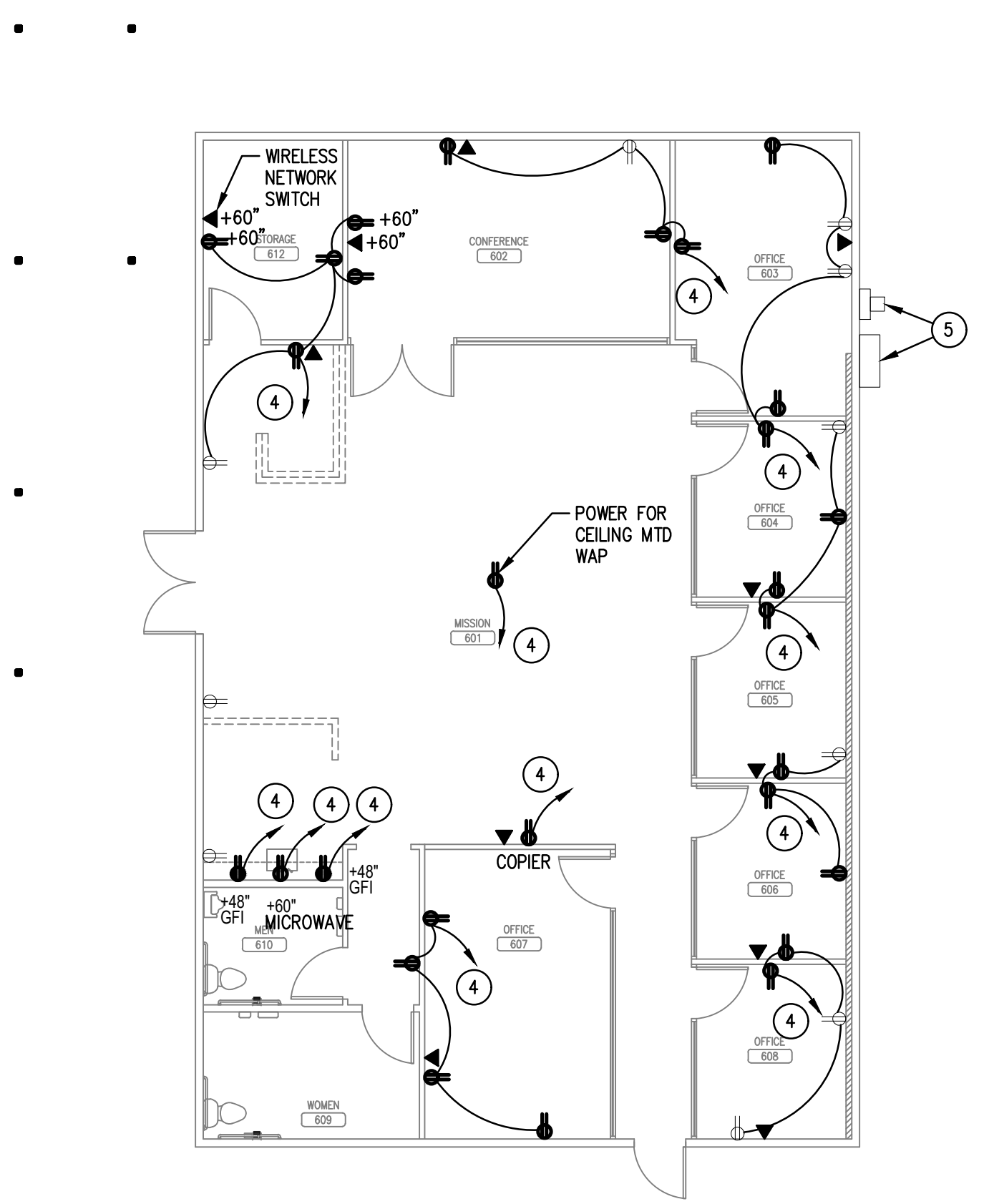


EXCEPTION: THESE REQUIREMENTS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL AND COMMUNICATIONS SYSTEMS RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.

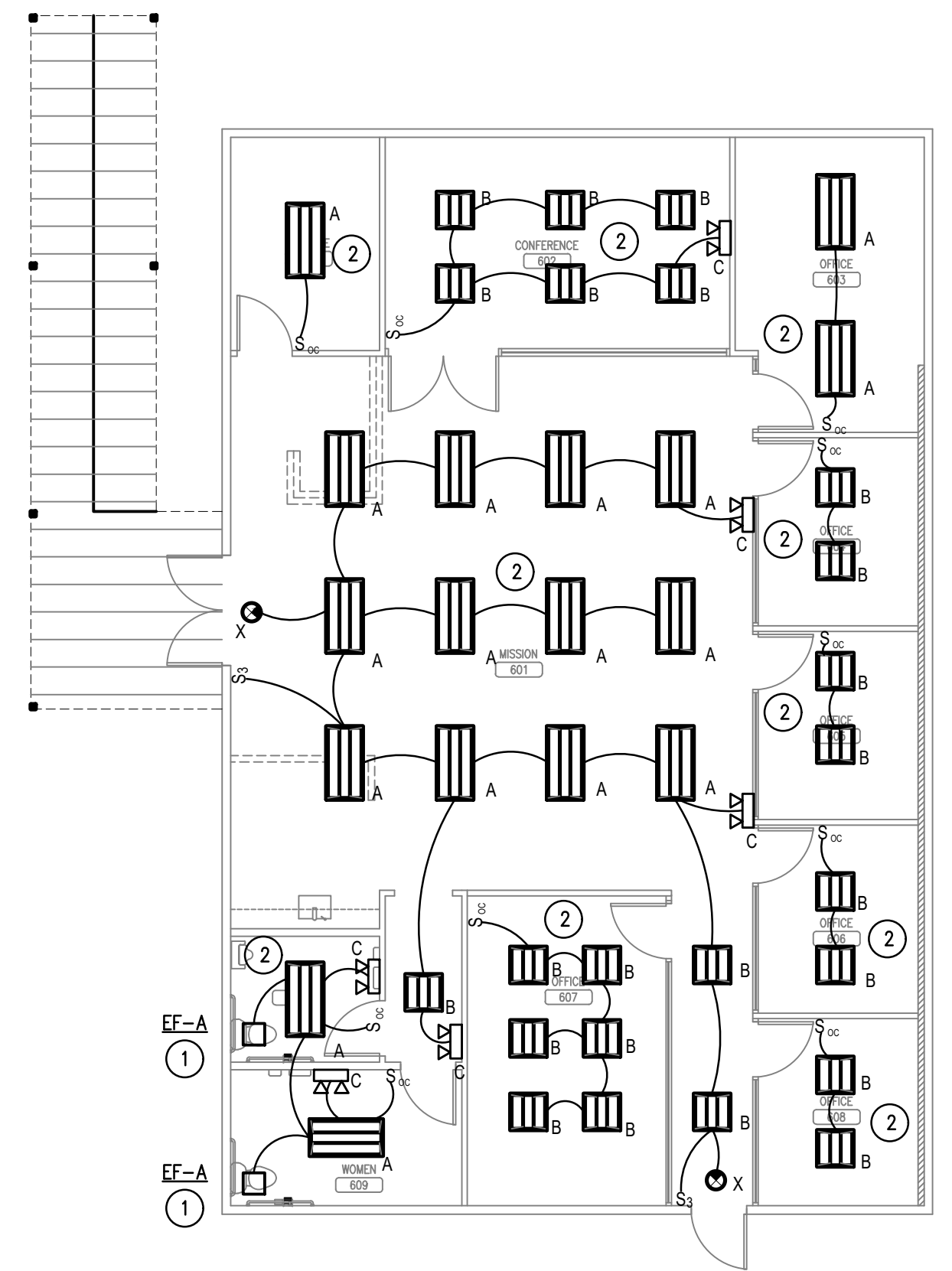


RECESSED LIGHT FIXTURE
 SCALE: N.T.S.

CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	2X4 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-UVOLT	(1)30.6W LED, 4000K	LED DRIVER	120V 1P 2W
B	2X2 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-UVOLT	(1)26.1W LED, 4000K	LED DRIVER	120V 1P 2W
C	EMERGENCY WALL PACK HEADS	WALL	SURE-LITES APEL	(2) 1.5W LED	LED DRIVER	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXIT SIGN, WHITE FACE, RED LED,	WALL/CEILING	SURE-LITES APXTRG	(1).99W LED	LED DRIVER	120V 1P 2W



PHASE 1 FLOOR PLAN - POWER
 NORTH SCALE: 1/8"=1'-0"



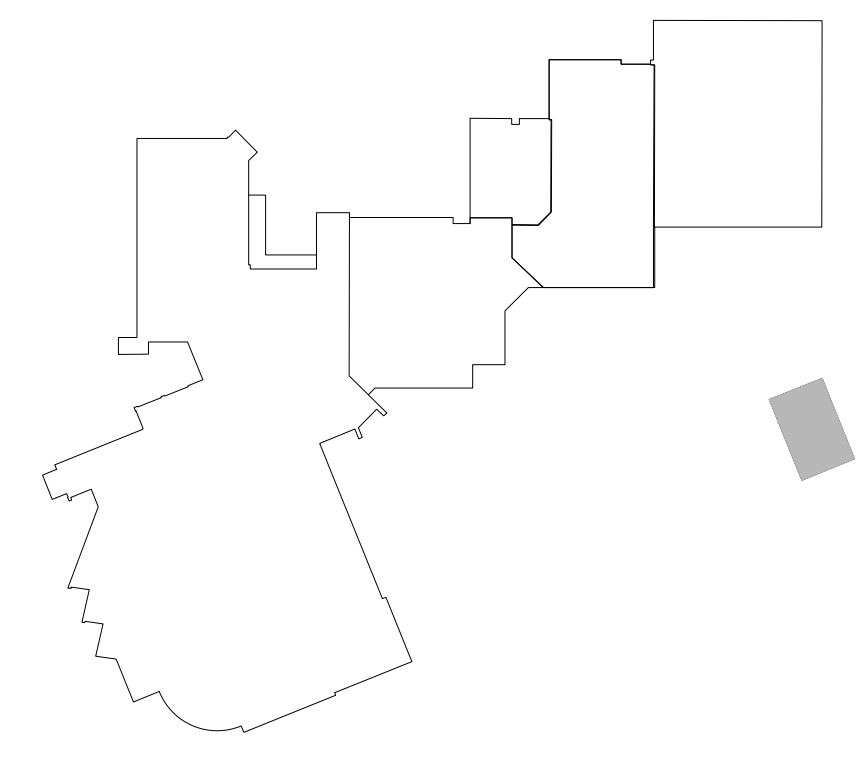
PHASE 1 FLOOR PLAN - LIGHTING
 NORTH SCALE: 1/8"=1'-0"

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

NOTES BY SYMBOL:

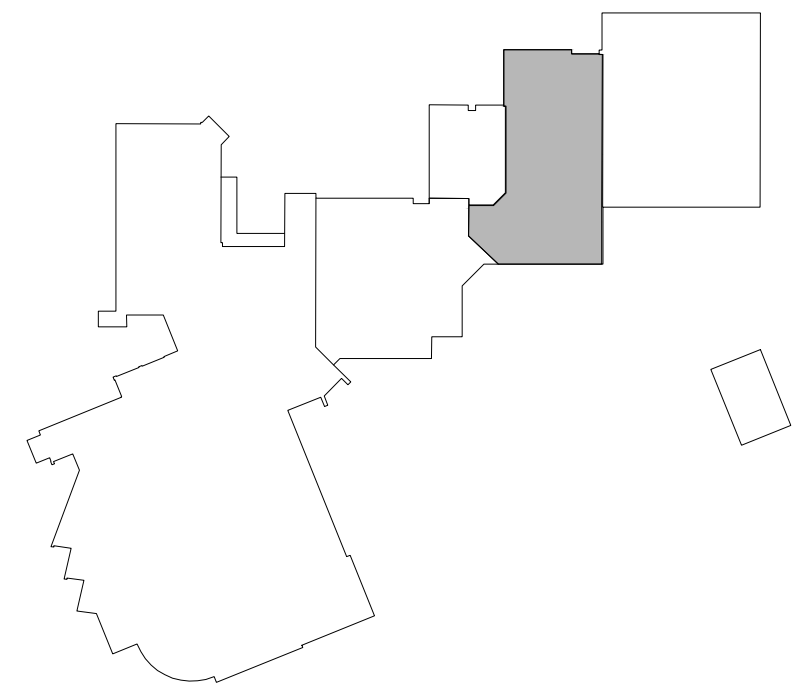
- ① CONNECT NEW CEILING MOUNTED EXHAUST FAN TO LIGHT FIXTURE TO ACTIVATE WHEN LIGHT IS TURNED ON.
- ② INSTALL NEW LIGHT FIXTURES AS INDICATED, RECONNECT TO EXISTING CIRCUIT IN EXISTING PANEL, PROVIDE NEW WIRE AND 20 AMP BREAKERS AS REQUIRED.
- ③ CONNECT NEW OUTLETS TO EXISTING CIRCUIT IN THE AREA, PROVIDE NEW WIRE, AND CONDUIT AS REQUIRED.
- ④ CONNECT NEW RECEPTACLES TO EXISTING CIRCUITS IN THE AREA. PROVIDE NEW WIRE AND 20 AMP BREAKERS AS NEEDED.
- ⑤ EXISTING ELECTRICAL METER AND PANEL TO REMAIN AS IS.



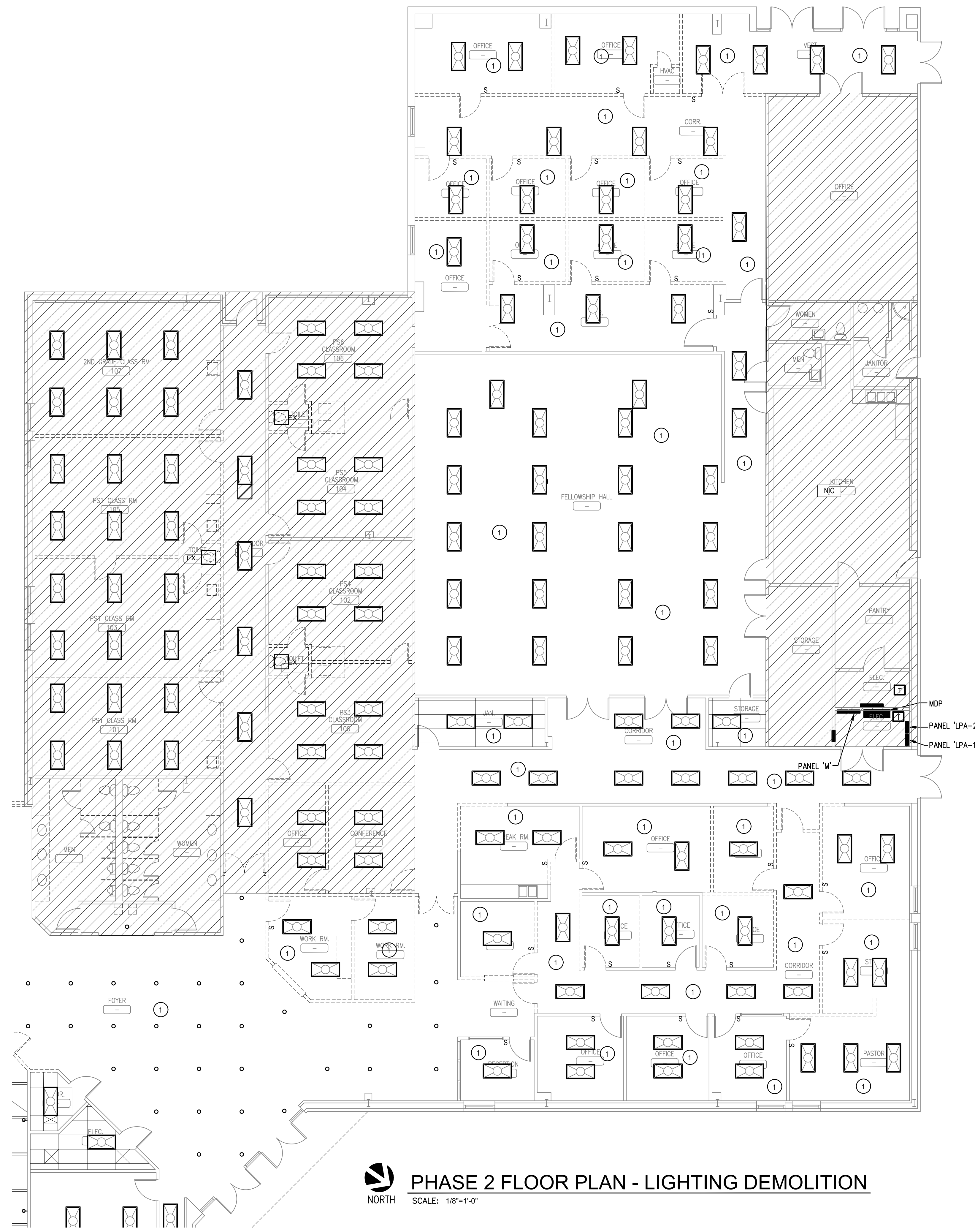
KEY PLAN
 NORTH



- NOTE BY SYMBOL: 'O'**
1. DEMO EXISTING RECEPTACLES AND DATA OUTLETS IN DEMOED WALL. REMOVE WIRES BACK TO EXISTING J-BOX.
 2. DEMO EXISTING ELECTRICAL SERVICE TO FCU-10, BACK TO POINT OF RE-USING FOR NEW UNIT.
 3. FIRE ALARM CONTRACTOR SHALL REMOVE FIRE ALARM COMPONENT IN AREAS THAT ARE BEING DEMOED, SAVE FOR RE-INSTALLATION.

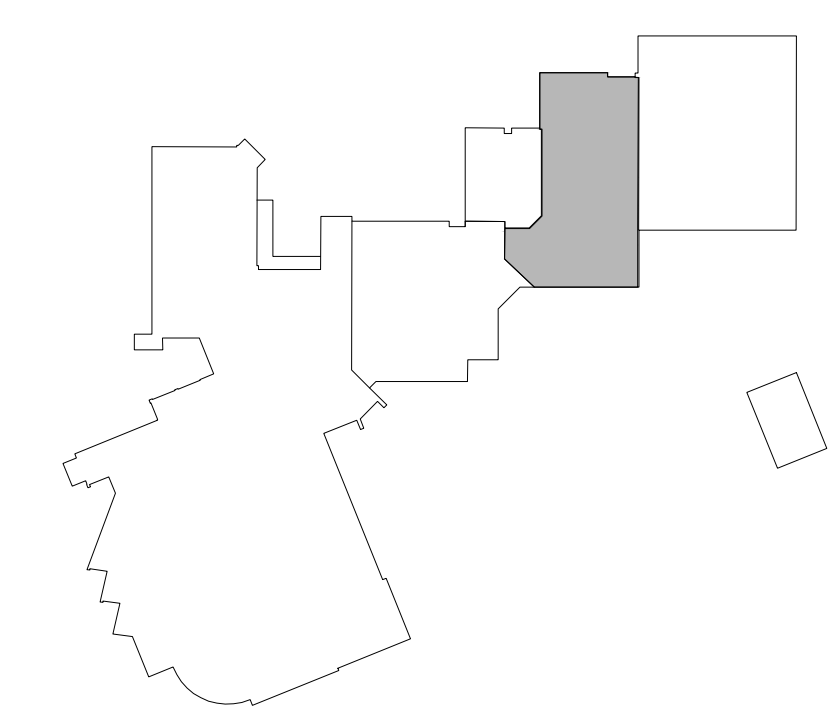


PHASE 2 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



NOTE BY SYMBOL: 'O'

- 1. DEMO EXISTING LIGHT FIXTURES, SWITCHES, AND WIRE. REMOVE WIRES BACK TO EXISTING J-BOX.

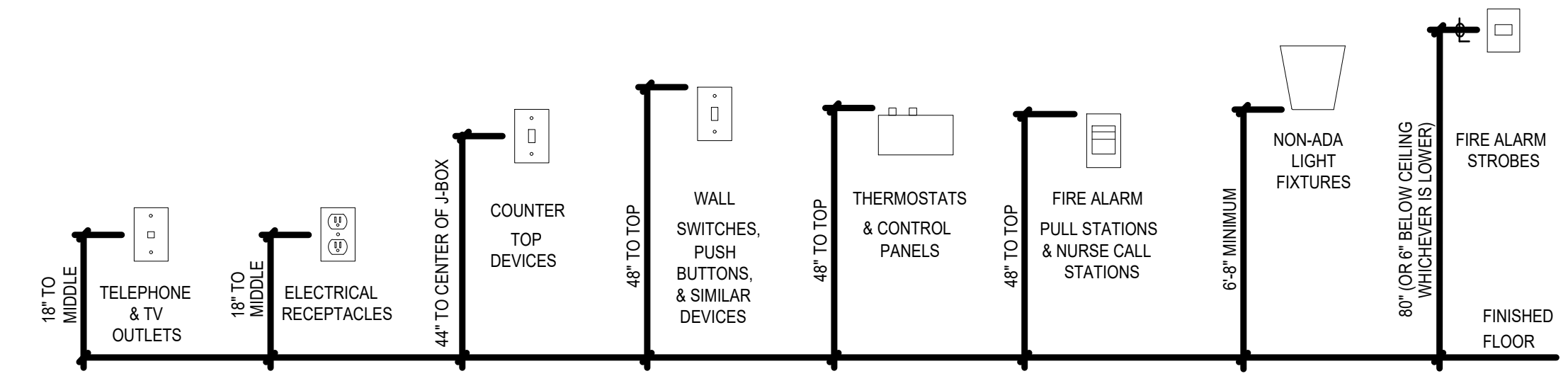


PHASE 2 FLOOR PLAN - LIGHTING DEMOLITION
 SCALE: 1/8"=1'-0"

KEY PLAN
 NORTH



APE ENGINEERING
 TBPE #F- 13391
 1340 Dove Drive
 Midlothian, Texas 76065
 P: 972.351.7550
 www.ruslaquy@yahoo.com



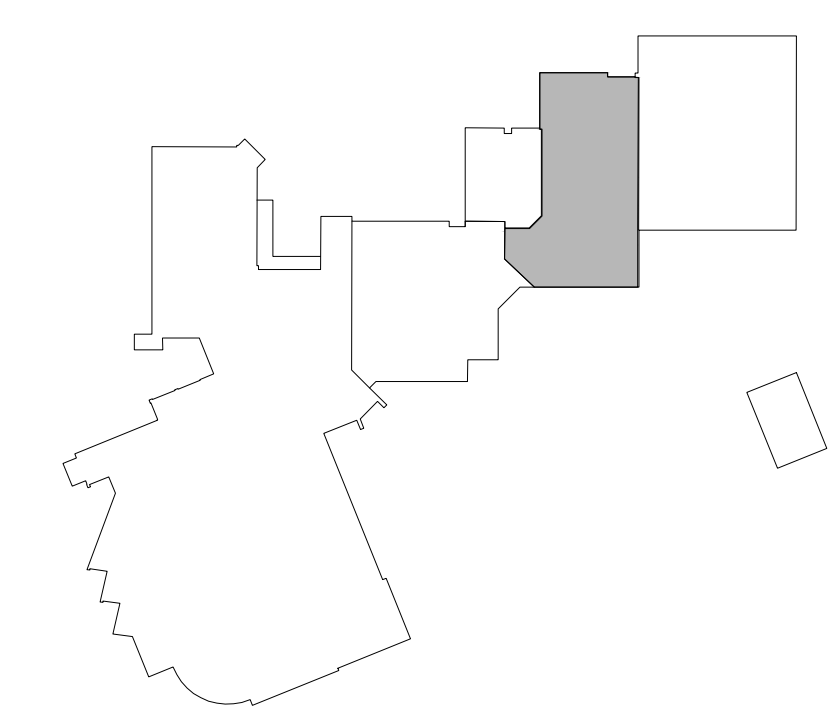
EXCEPTION: THESE REQUIREMENTS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL AND COMMUNICATIONS SYSTEMS RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

NOTES BY SYMBOL:

- 1 CONNECT NEW FAN COIL UNIT TO EXISTING ELECTRIC SERVICE FROM DEMOED FAN COIL UNIT.
- 2 CONNECT NEW OUTLETS TO EXISTING PANEL, PROVIDE NEW WIRE, CONDUIT AND 20 AMP CIRCUIT BREAKER.
- 3 CONNECT NEW OUTLETS TO EXISTING CIRCUIT IN THE AREA, PROVIDE NEW WIRE, AND CONDUIT AS REQUIRED.
- 4 FIRE ALARM CONTRACTOR SHALL RE-INSTALL FIRE ALARM DEVICES AND PROVIDE NEW ONES AS NEEDED FOR A FULL FUNCTIONING SYSTEM THAT MEETS CODE.
- 5 CONTRACTOR SHALL PROVIDE CAT5 CABLE RUNS FROM J-BOX AT CAMERA BACK TO NEW RACK IN KITCHEN ELECTRICAL ROOM.
- 6 CONTRACTOR SHALL PROVIDE J-BOX AND POWER FOR MAGNETIC HOLD OPENS, COORDINATE WITH OWNER FOR OPERATION.



KEY PLAN
 NORTH

PHASE 2 FLOOR PLAN - POWER
 NORTH SCALE: 1/8"=1'-0"

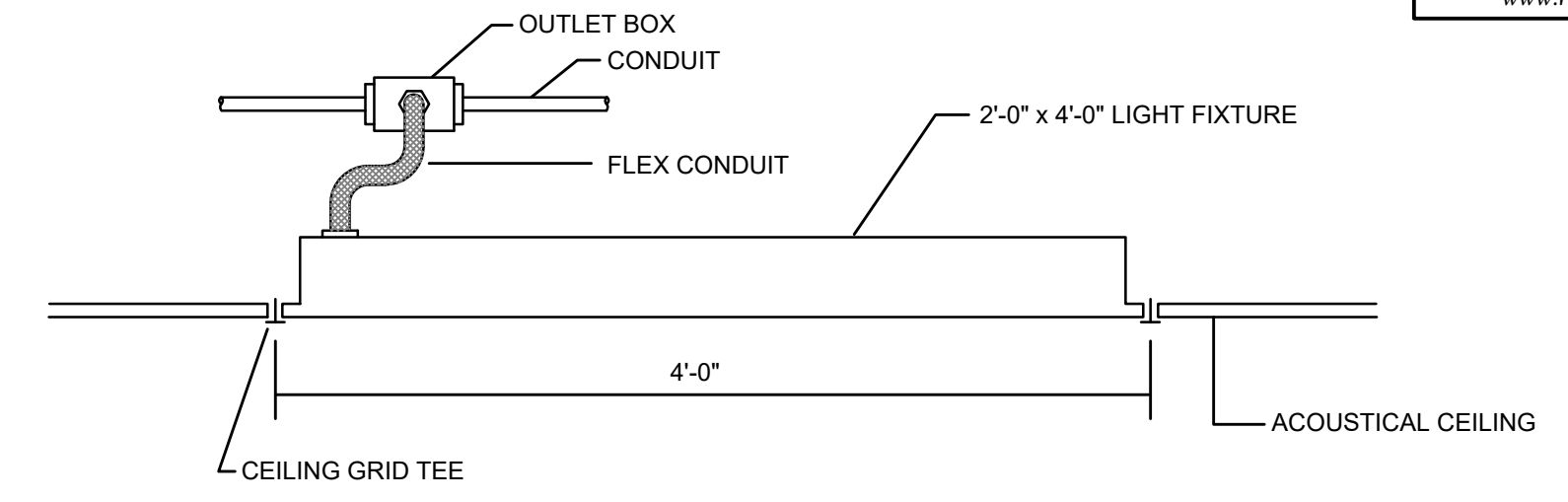


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 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 2 FLOOR
 PLAN - POWER

E2.3

APE ENGINEERING
 TBPE #F- 13391
 1340 Dove Drive
 Midlothian, Texas 76065
 P: 972-351-7530
 www.ruslaquy@yahoo.com

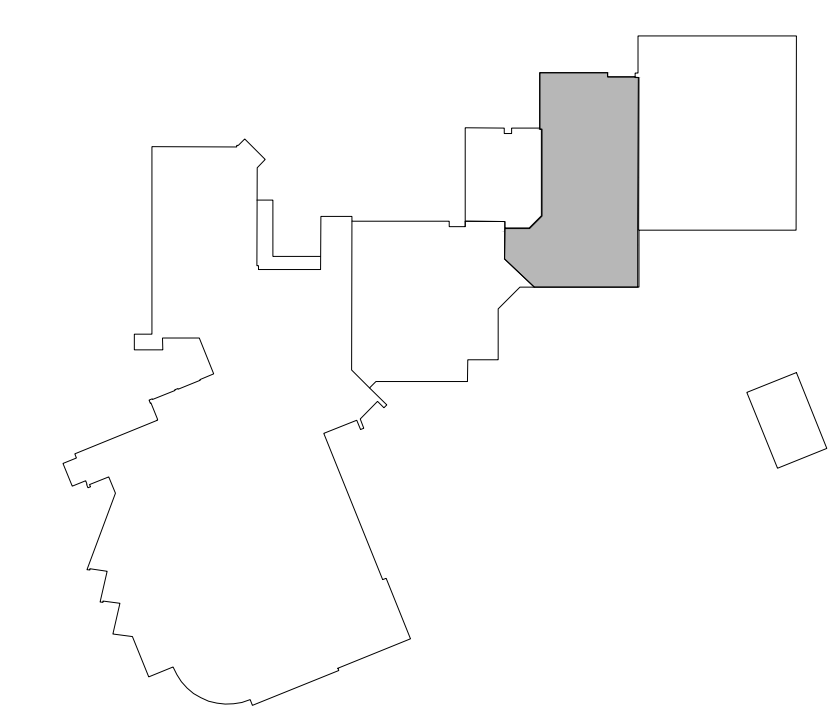


RECESSED LIGHT FIXTURE
 SCALE: N.T.S.

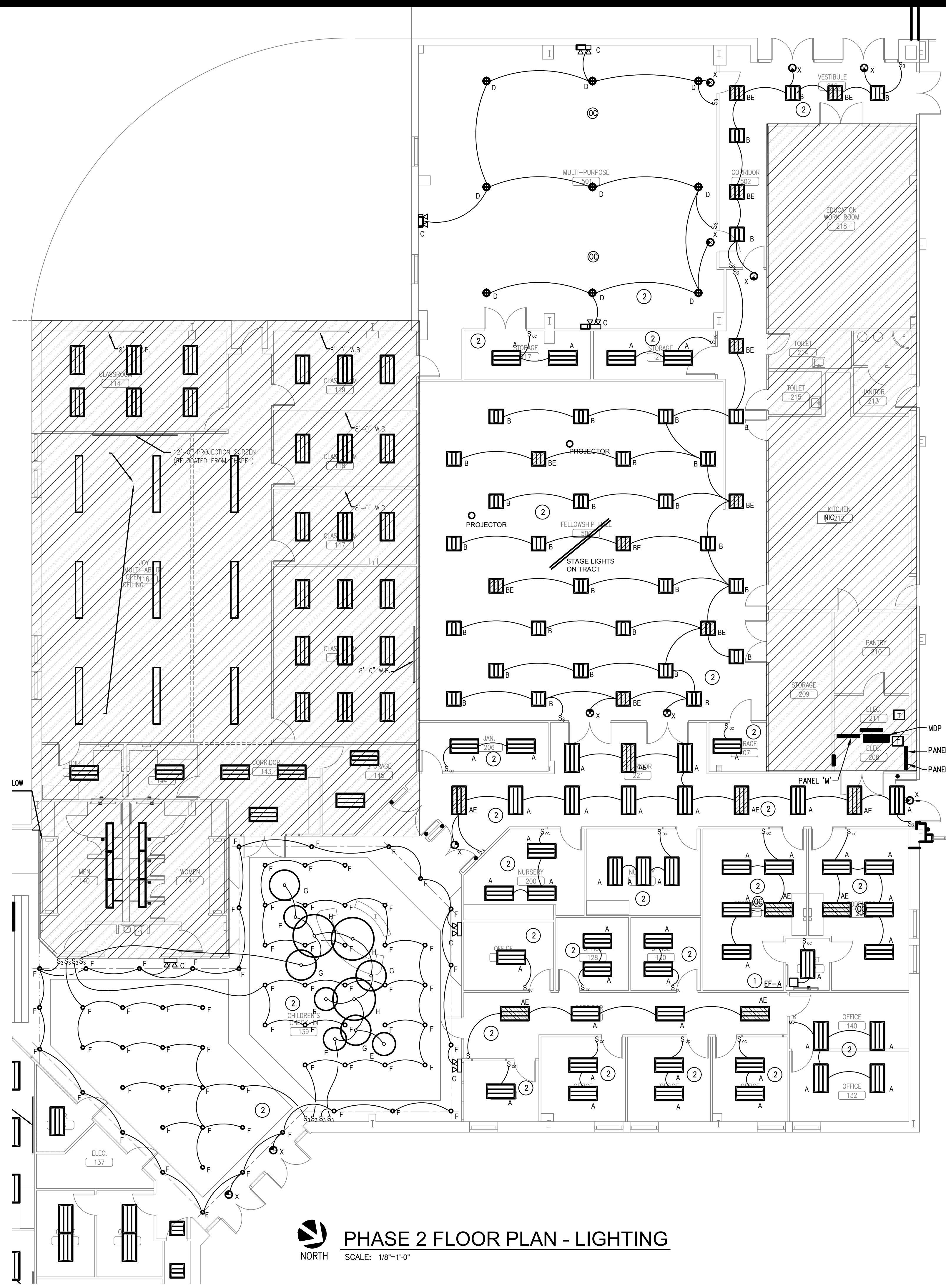
CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	2x4 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-LVOLT	(1)130.6W LED, 4000K	LED DRIVER	120V 1P 2W
AE	2x4 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-LVOLT-EM	(1)130.6W LED, 4000K	LED DRIVER	120V 1P 2W
B	2x2 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-LVOLT	(1)26.1W LED, 4000K	LED DRIVER	120V 1P 2W
BE	2x2 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-LVOLT-EM	(1)26.1W LED, 4000K	LED DRIVER	120V 1P 2W
C	EMERGENCY WALL PACK HEADS	WALL	SURE-LITES APEL	(2) 1.5W LED	LED DRIVER	120V 1P 2W
D	LED HIGH BAY FIXTURES	PENDANT	LED LIGHTING SUPPLY MLLG-LED-HB4-120-CC-120	(1)120W LED, 4000K	LED DRIVER	120V 1P 2W
E	39" ROUND LED CHANDELIER	CABLES	VONN TANIA VMC34911	(1) 52W LED 3000K	ELECTRONIC	120V 1P 2W
F	6" LED RECESSED DOWNLIGHT	RECESSED	COOPER HC6-20-D010	(1) 21W LED, 4000K	LED DRIVER	120V 1P 2W
G	51" ROUND LED CHANDELIER	CABLES	VONN TANIA VMC34912	(1) 63W LED 3000K	ELECTRONIC	120V 1P 2W
H	72" ROUND LED CHANDELIER	CABLES	VONN TANIA VMC34972	(1) 95W LED 3000K	ELECTRONIC	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXIT SIGN, WHITE FACE, RED LED,	WALL/CEILING	SURE-LITES APX7RG	(1) .99W LED	LED DRIVER	120V 1P 2W

- GENERAL NOTES:**
- ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
 - SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
 - COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
 - VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
 - ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
 - VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
 - FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

- NOTES BY SYMBOL:**
- CONNECT NEW CEILING MOUNTED EXHAUST FAN TO LIGHT FIXTURE TO ACTIVATE WHEN LIGHT IS TURNED ON.
 - INSTALL NEW LIGHT FIXTURES AS INDICATED, RECONNECT TO EXISTING CIRCUIT IN EXISTING PANEL. PROVIDE NEW WIRE AND 20 AMP BREAKERS AS REQUIRED.



KEY PLAN
 NORTH



PHASE 2 FLOOR PLAN - LIGHTING
 NORTH SCALE: 1/8"=1'-0"

ARCHITECTURE
 PLANNING
 INTERIOR DESIGN

GHILA

**NORTHWOOD CHURCH
 RENOVATIONS**
 1870 RUFÉ SNOW DR.
 KELLER, TEXAS 76248



DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 2 FLOOR
 PLAN - LIGHTING

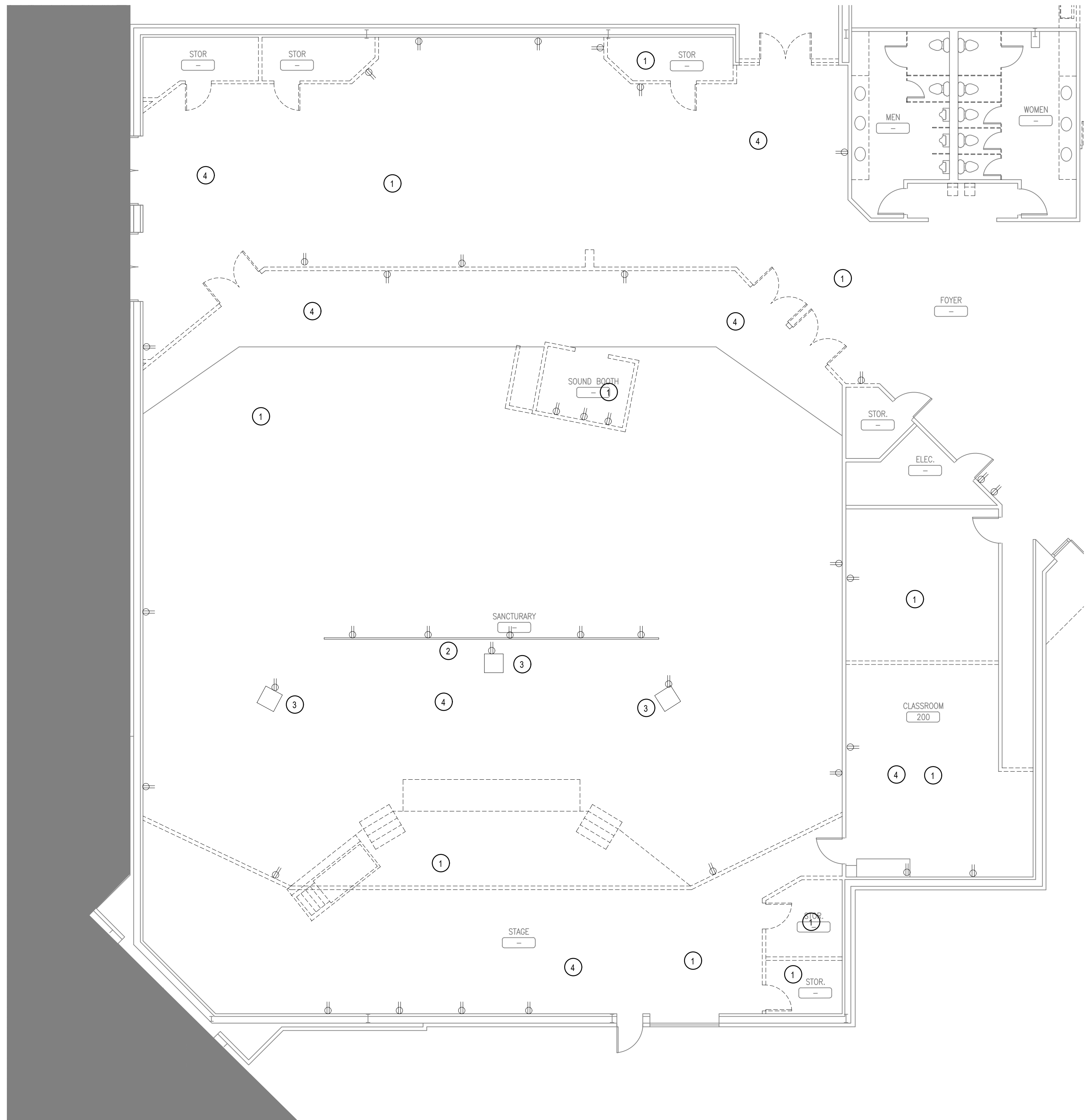
E2.4



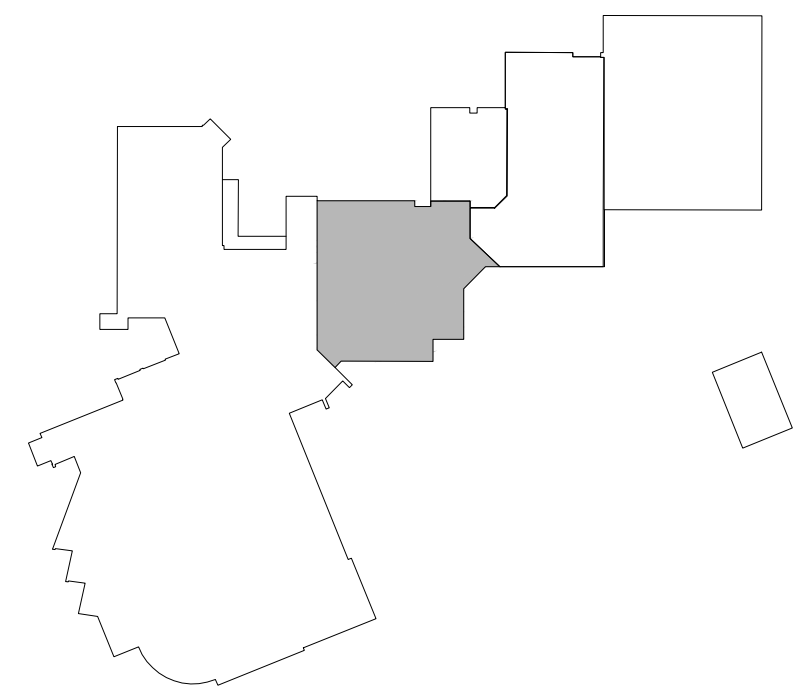
DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 3 FLOOR
 PLAN - POWER
 DEMOLITION

E3.1

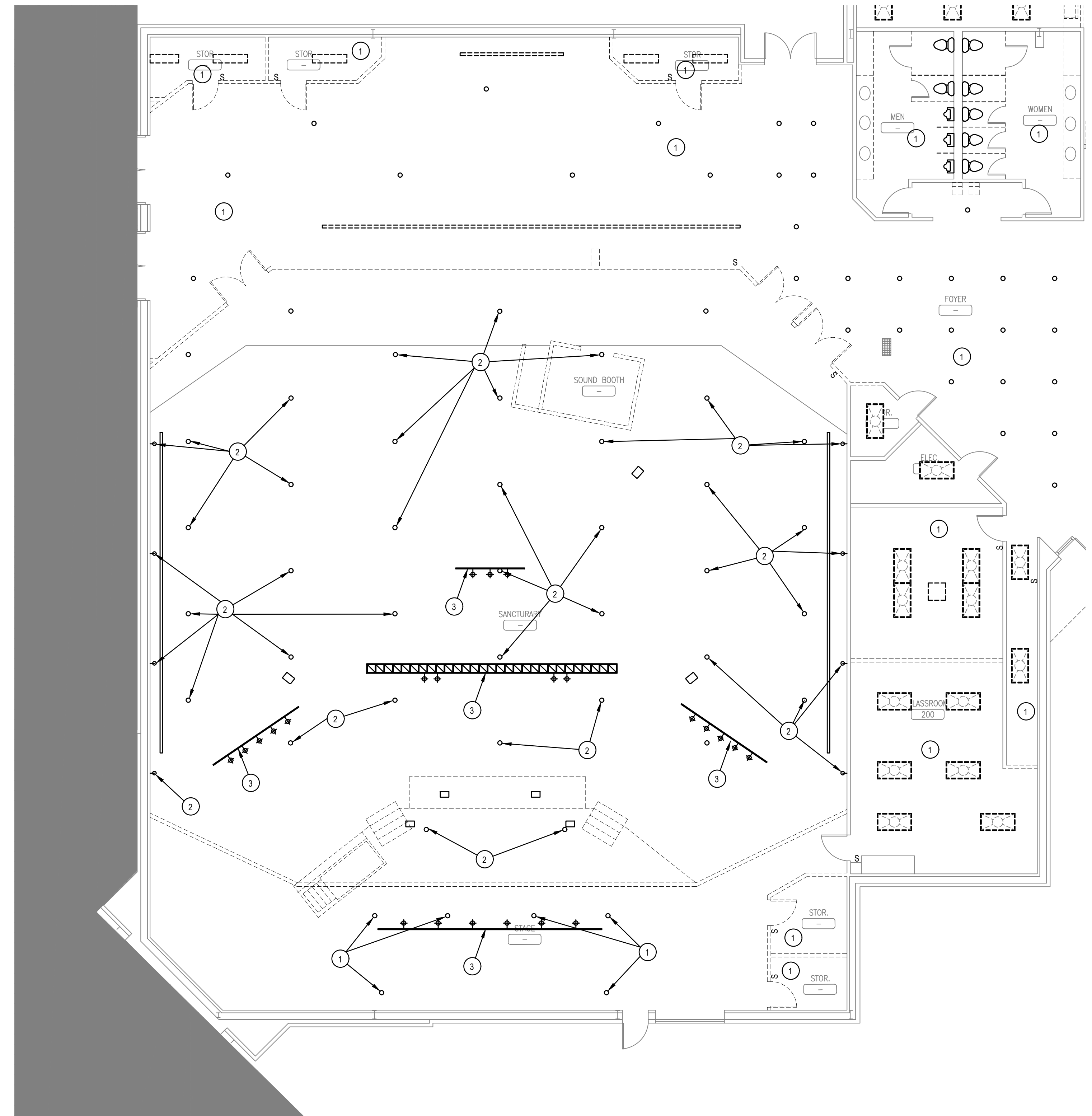


- NOTE BY SYMBOL: 'O'**
1. DEMO EXISTING RECEPTACLES IN DEMOED WALL. REMOVE WIRES BACK TO EXISTING J-BOX.
 2. DEMO EXISTING RECEPTACLES ON DEMOED LIGHT BAR. REMOVE WIRES BACK TO EXISTING J-BOX.
 3. DEMO EXISTING RECEPTACLES ON DEMOED VIDEO EQUIPMENT. REMOVE WIRES BACK TO EXISTING J-BOX.
 4. FIRE ALARM CONTRACTOR SHALL REMOVE FIRE ALARM COMPONENT IN AREAS THAT ARE BEING DEMOED, SAVE FOR RE-INSTALLATION.



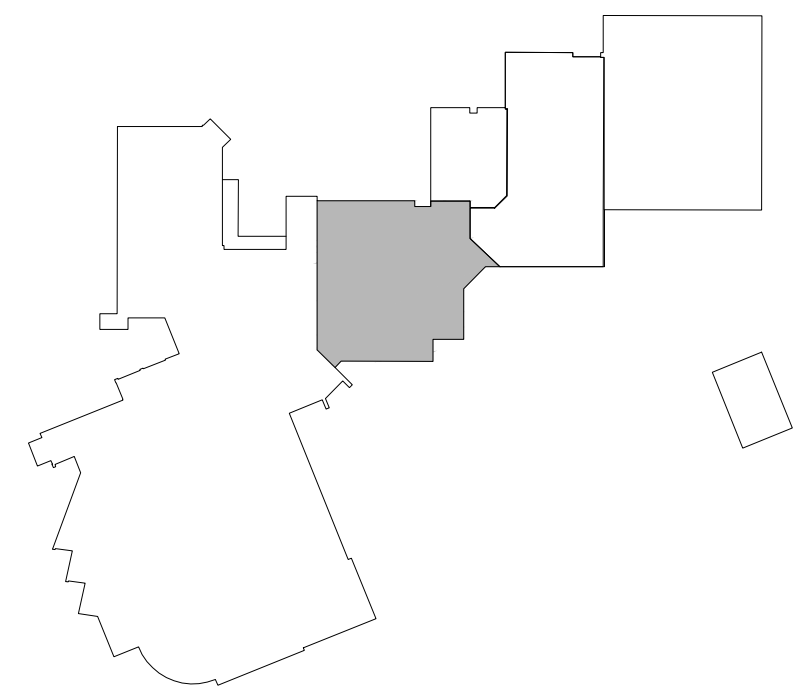
PHASE 3 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

KEY PLAN
 NORTH



NOTE BY SYMBOL: 'O'

1. DEMO EXISTING LIGHT FIXTURES, SWITCHES, AND WIRE. REMOVE WIRES BACK TO EXISTING J-BOX.
2. EXISTING LIGHT FIXTURE TO BE REMOVED AND SAVED FOR RE-INSTALLATION, SEE SHEET E3.4 FOR RECONNECTION.
3. EXISTING LIGHT BAR AND TRACK TO BE REMOVED AND SAVED FOR RE-INSTALLATION, SEE SHEET E3.4 FOR RECONNECTION.



PHASE 3 FLOOR PLAN - LIGHTING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

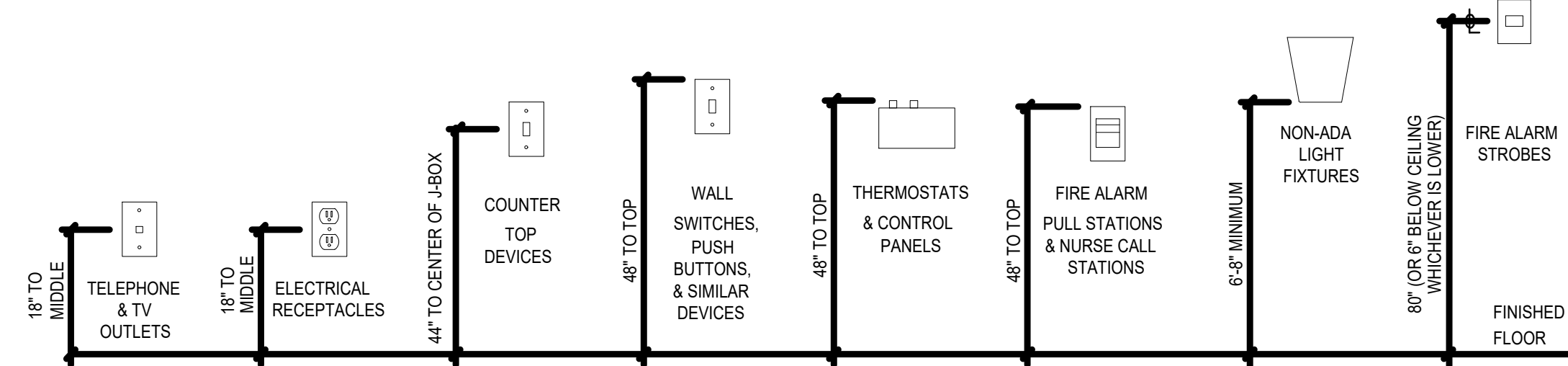
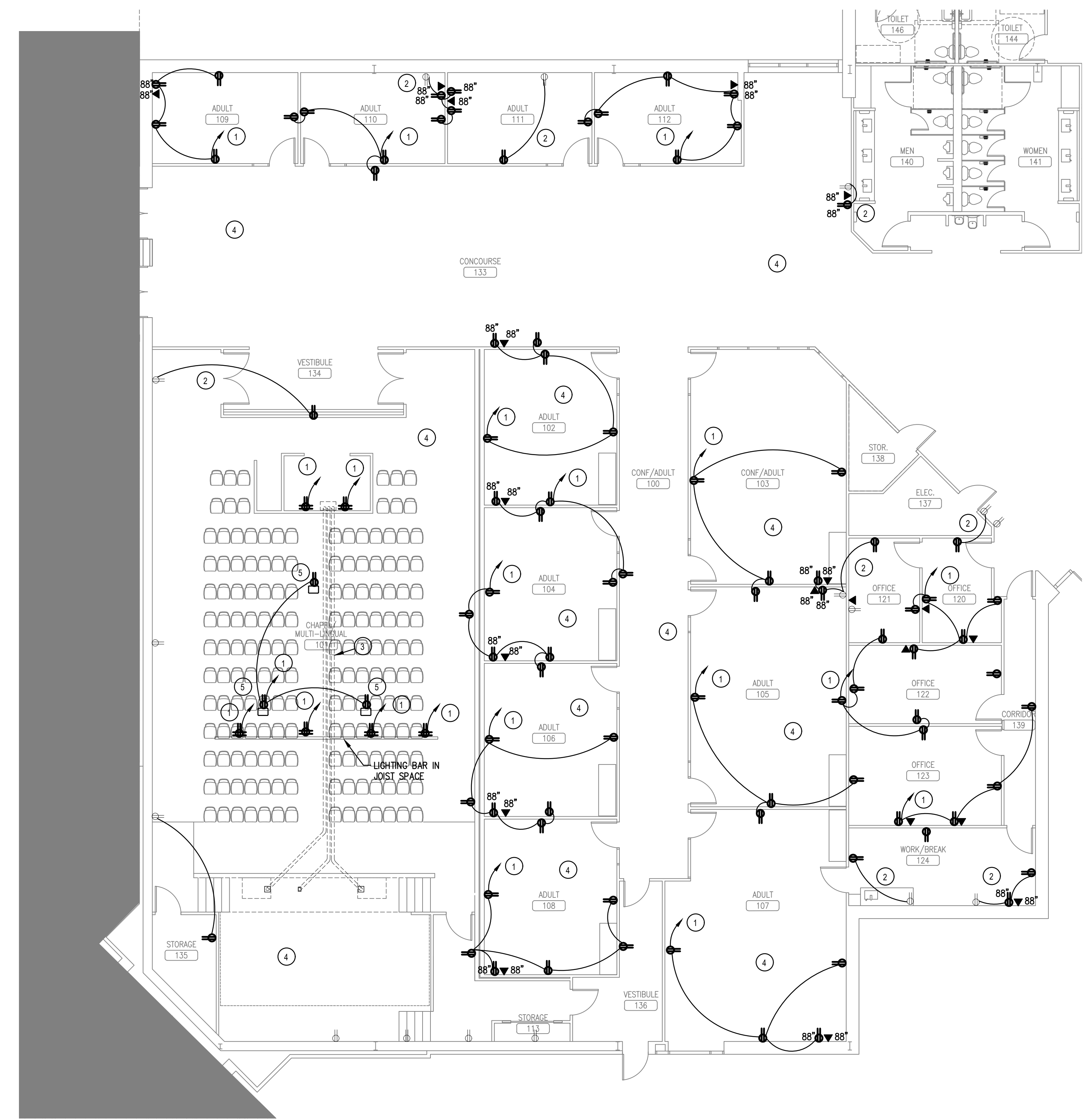
KEY PLAN
 NORTH



DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 3 FLOOR
 PLAN - POWER

E3.3



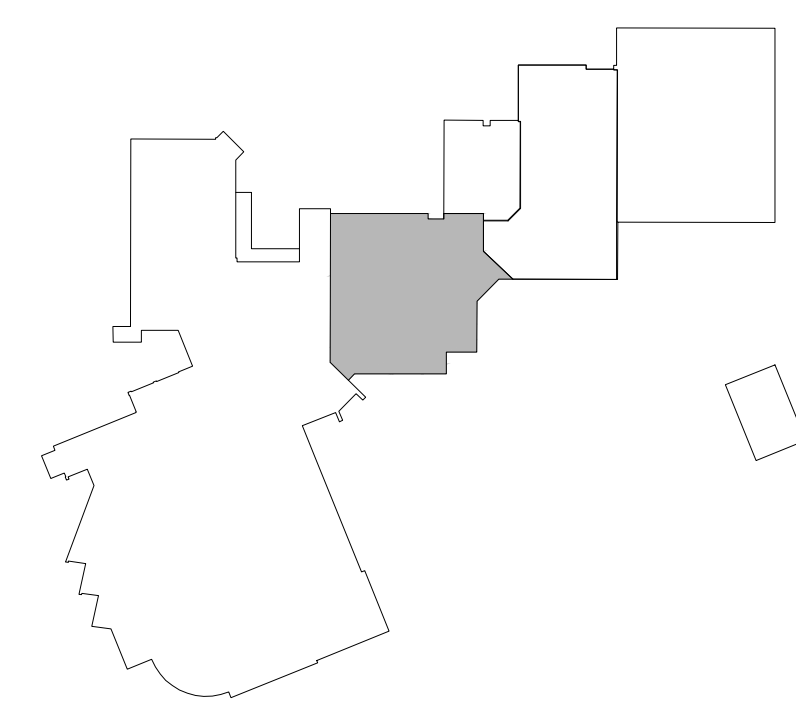
EXCEPTION: THESE REQUIREMENTS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL AND COMMUNICATIONS SYSTEMS RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

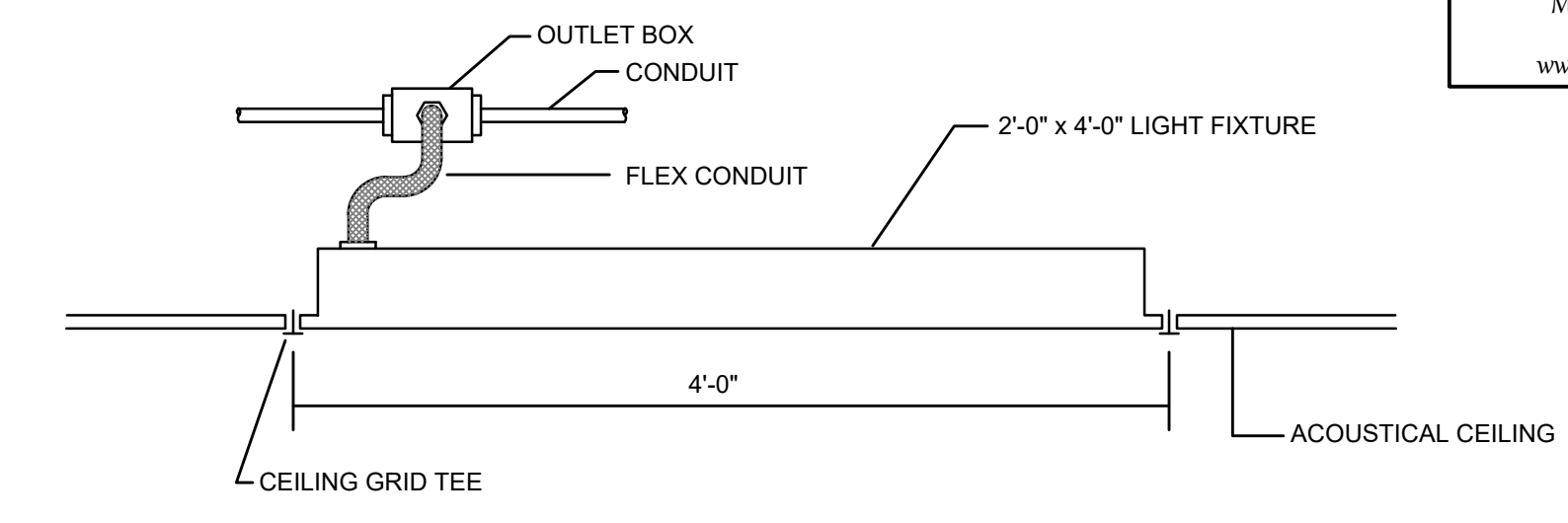
NOTES BY SYMBOL:

- ① CONNECT NEW OUTLETS TO EXISTING PANEL, PROVIDE NEW WIRE, CONDUIT AND 20 AMP CIRCUIT BREAKER.
- ② CONNECT NEW OUTLETS TO EXISTING CIRCUIT IN THE AREA, PROVIDE NEW WIRE, AND CONDUIT AS REQUIRED.
- ③ PROVIDE THREE 4" EMPTY CONDUITS FOR A/V SERVICES.
- ④ FIRE ALARM CONTRACTOR SHALL RE-INSTALL FIRE ALARM DEVICES AND PROVIDE NEW ONES AS NEEDED FOR A FULL FUNCTIONING SYSTEM THAT MEETS CODE.
- ⑤ PROVIDE POWER FOR OVERHEAD PROJECTORS, REFER TO ARCHITECTURAL PLANS FOR LOCATION.



PHASE 3 FLOOR PLAN - POWER
 NORTH SCALE: 1/8"=1'-0"

KEY PLAN
 NORTH



RECESSED LIGHT FIXTURE
 SCALE: N.T.S.

LUMINAIRE SCHEDULE

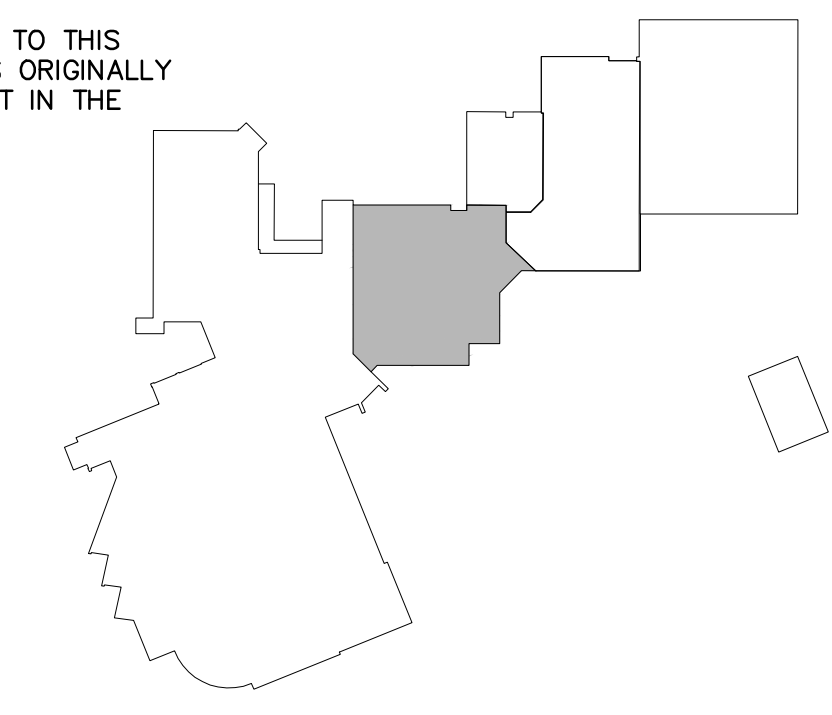
CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	2X4 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-UVOLT	(1) 30.6W LED, 4000K	LED DRIVER	120V 1P 2W
AE	2X4 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-UVOLT-EM	(1) 30.6W LED, 4000K	LED DRIVER	120V 1P 2W
B	2X2 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-UVOLT	(1) 26.1W LED, 4000K	LED DRIVER	120V 1P 2W
BE	2X2 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-UVOLT-EM	(1) 26.1W LED, 4000K	LED DRIVER	120V 1P 2W
C	6" LED RECESSED DOWNLIGHT	RECESSED	COOPER HC6-20-D010	(1) 21W LED, 4000K	LED DRIVER	120V 1P 2W
D	EXISTING PENANT LIGHT	PENDANT	EXISTING	EXISTING	EXISTING	120V 1P 2W
E	EXISTING WALL SCENCE	WALL	EXISTING	EXISTING	EXISTING	120V 1P 2W
F	EMERGENCY WALL PACK HEADS	WALL	SURE-LITES APEL	(2) 1.5W LED	LED DRIVER	120V 1P 2W
G	1X4 LED PANEL FIXTURE	RECESSED	LITHONIA CPX-1X4-3200LM-80CRI-3500K-SWL-MVOLT	(1) 29.3W LED, 4000K	LED DRIVER	120V 1P 2W
H	2X2 LED PANEL FIXTURE	RECESSED	LITHONIA CPX-2X2-3200LM-80CRI-3500K-SWL-MVOLT	(1) 30.1W LED, 4000K	LED DRIVER	120V 1P 2W
J	2X4 LED PANEL FIXTURE	RECESSED	LITHONIA CPX-2X4-4000LM-80CRI-3500K-SWL-MVOLT	(1) 36.7W LED, 4000K	LED DRIVER	120V 1P 2W
K	LED BACK LIGHT FLAT PANEL, SIZE TO BE DETERMINED	WALL	LAMPS PLUS #9022E	(1) 5W LED, 4000K	LED DRIVER	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXT SIGN, WHITE FACE, RED LED,	WALL/CEILING	SURE-LITES APX7RG	(1) .99W LED	LED DRIVER	120V 1P 2W

GENERAL NOTES:

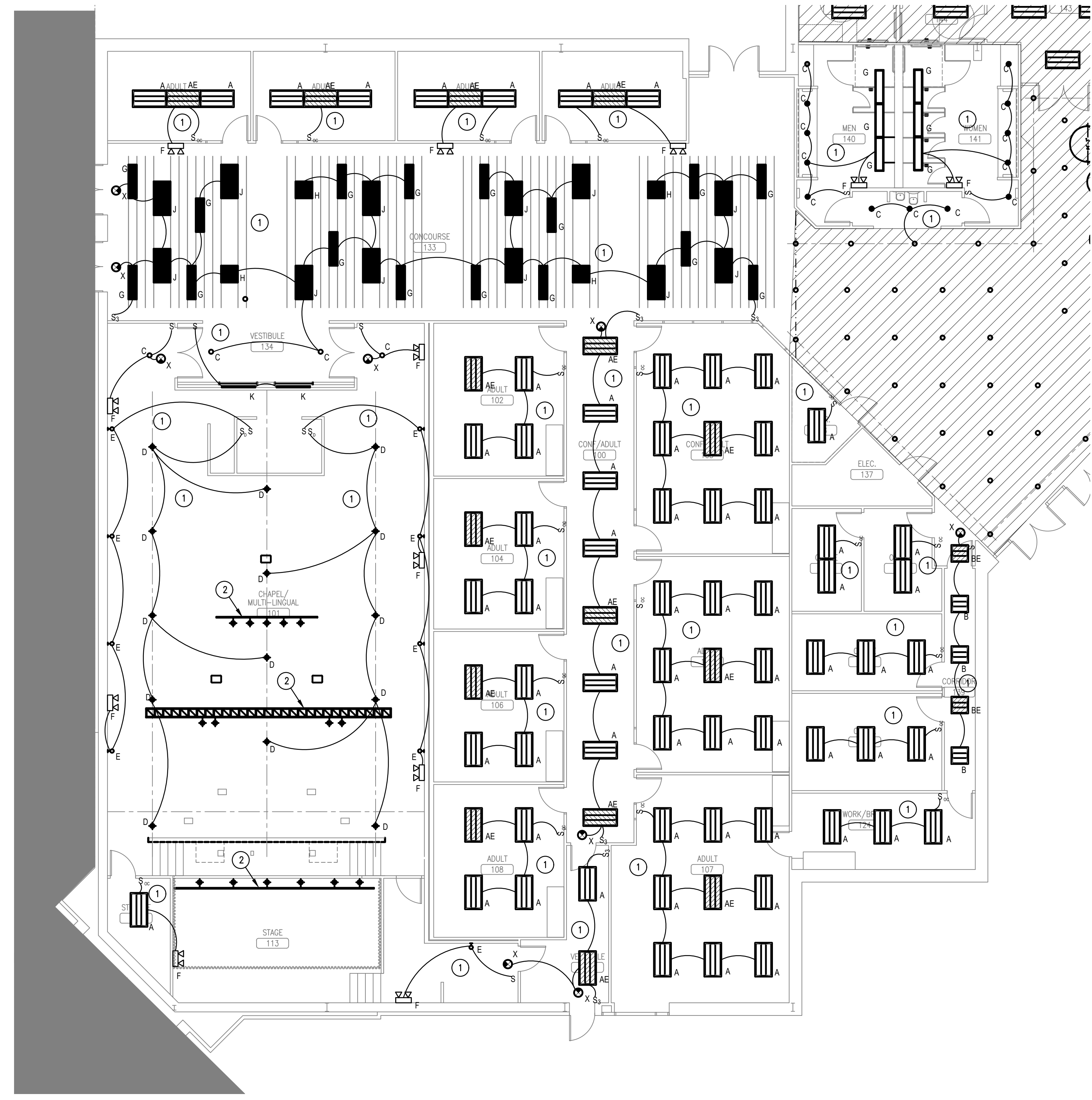
- ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

NOTES BY SYMBOL:

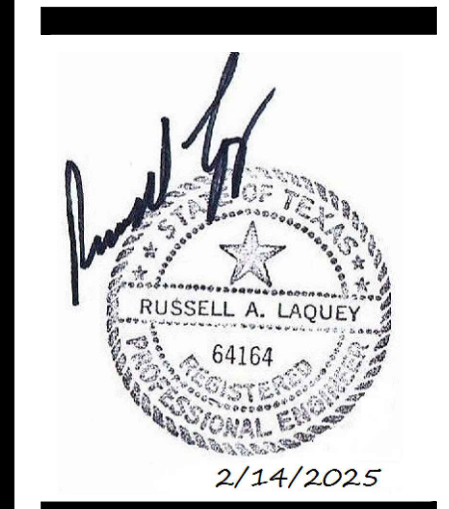
- INSTALL NEW LIGHT FIXTURES AS INDICATED, RECONNECT TO EXISTING CIRCUIT IN EXISTING PANEL, PROVIDE NEW WIRE AND 20 AMP BREAKERS AS REQUIRED.
- EXISTING STAGE LIGHTING TO BE RELOCATED TO THIS LOCATION, RECONNECT TO SOUND BOOTH AS ORIGINALLY INSTALLED. RECONNECT TO EXISTING CIRCUIT IN THE AREA AS BEFORE.



KEY PLAN
 NORTH



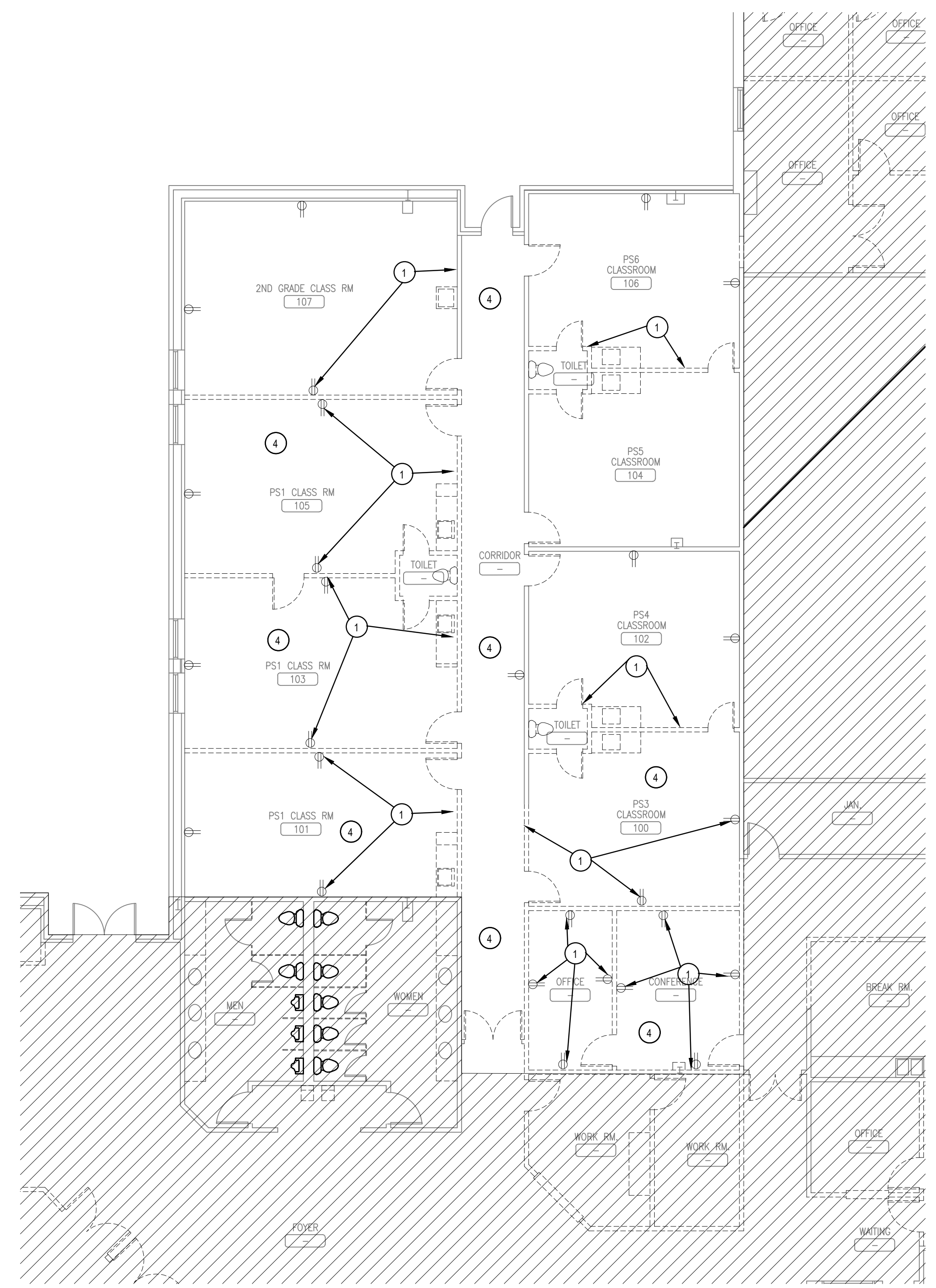
PHASE 3 FLOOR PLAN - LIGHTING
 NORTH SCALE: 1/8"=1'-0"



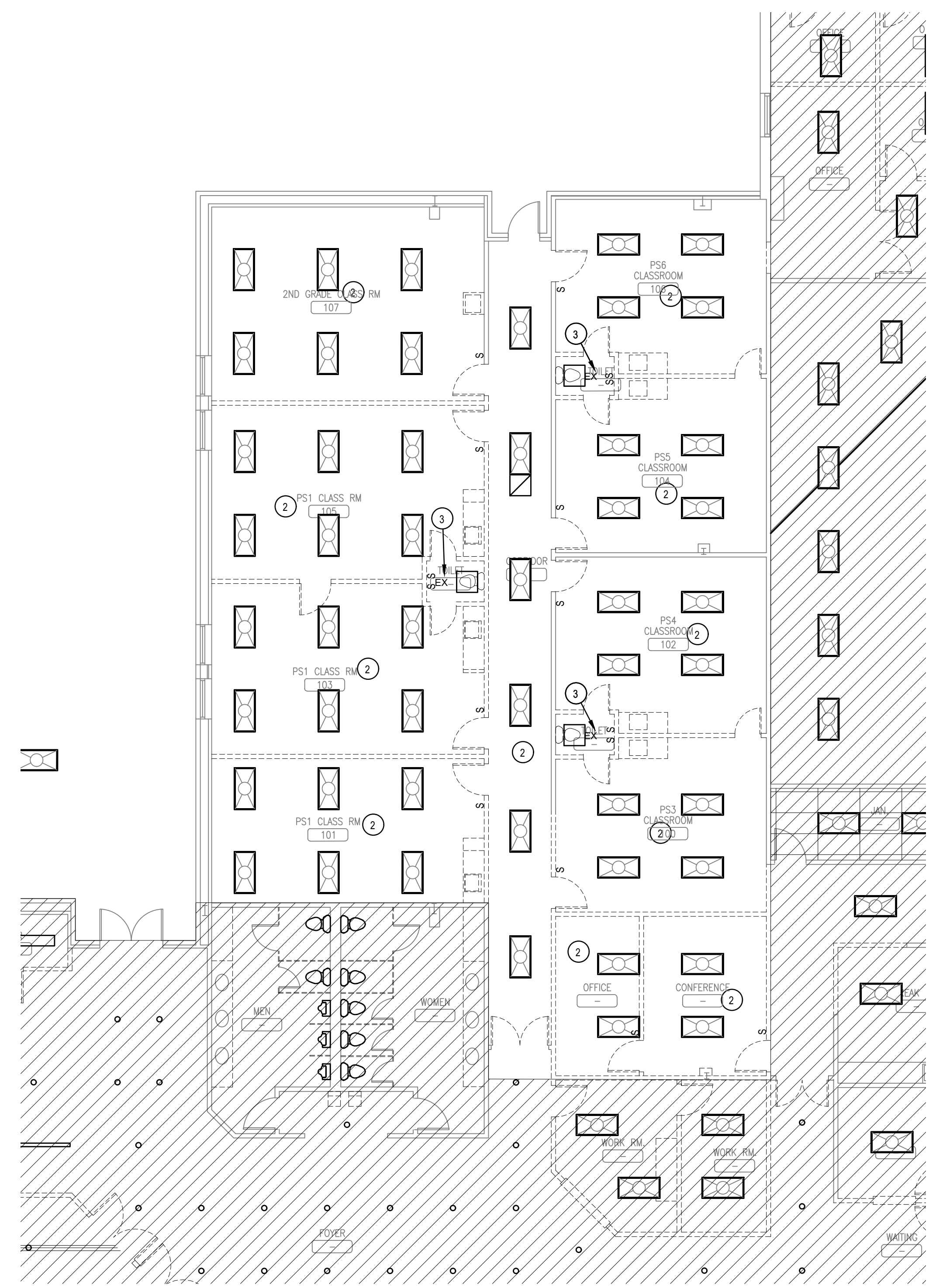
DATE: 02-14-25
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 CITY PLAN REVIEW

SHEET TITLE:
 PHASE 4 FLOOR
 PLAN - ELECTRICAL
 DEMOLITION

E4.1



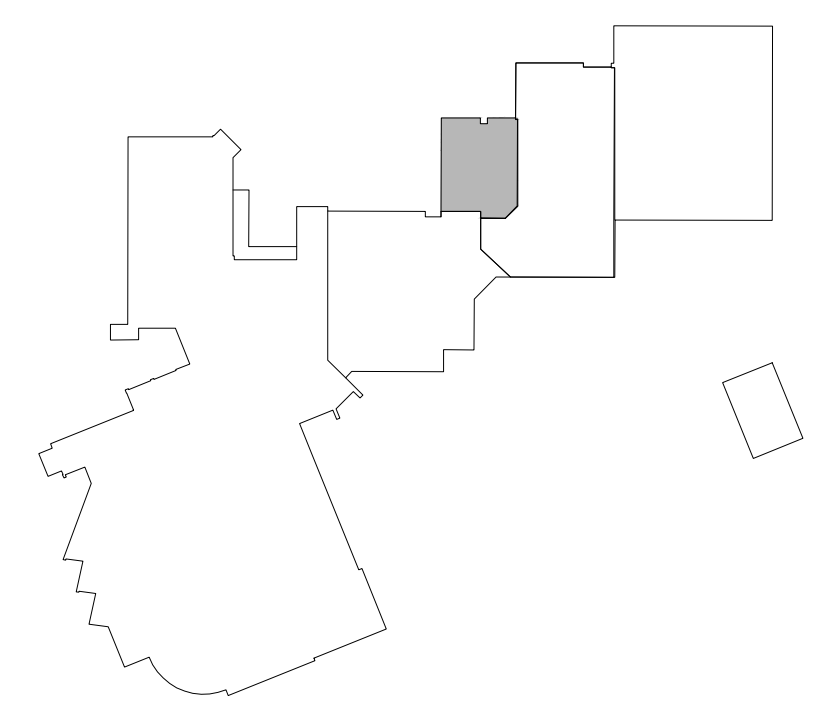
PHASE 4 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



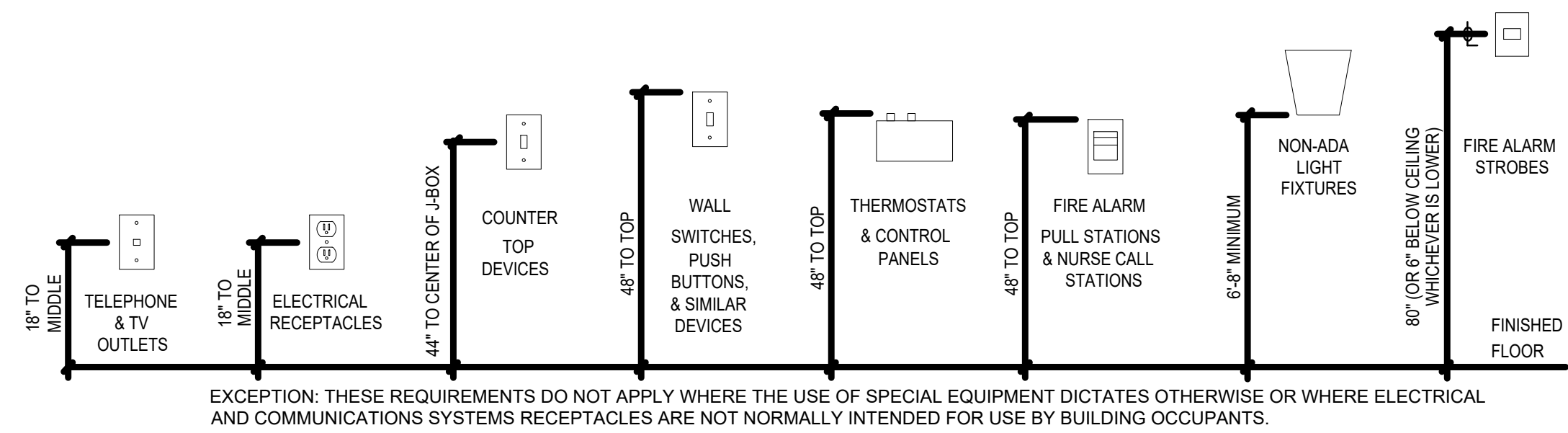
PHASE 4 FLOOR PLAN - LIGHTING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

NOTE BY SYMBOL: 'O'

1. DEMO EXISTING RECEPTACLES IN DEMOED WALL. REMOVE WIRES BACK TO EXISTING J-BOX.
2. DEMO EXISTING LIGHT FIXTURES, SWITCHES, AND WIRE. REMOVE WIRES BACK TO EXISTING J-BOX.
3. DEMO EXISTING EXHAUST FAN, SWITCH, AND WIRE. REMOVE WIRES BACK TO EXISTING J-BOX.
4. FIRE ALARM CONTRACTOR SHALL REMOVE FIRE ALARM COMPONENT IN AREAS THAT ARE BEING DEMOED, SAVE FOR RE-INSTALLATION.

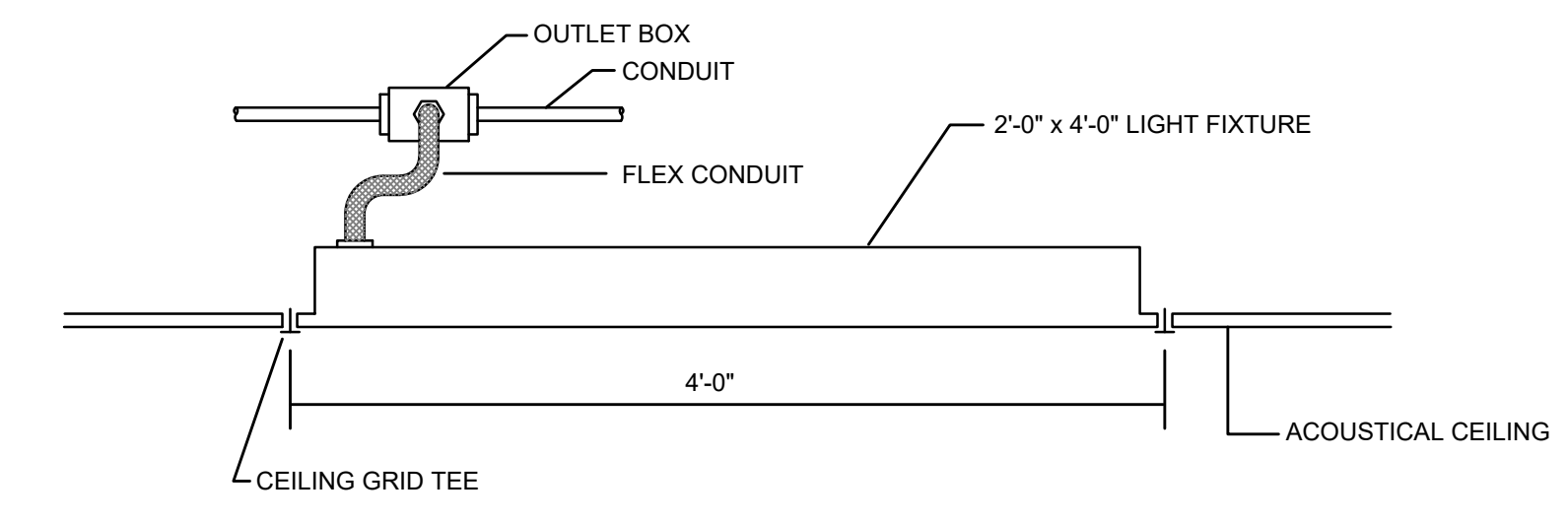


KEY PLAN
 NORTH

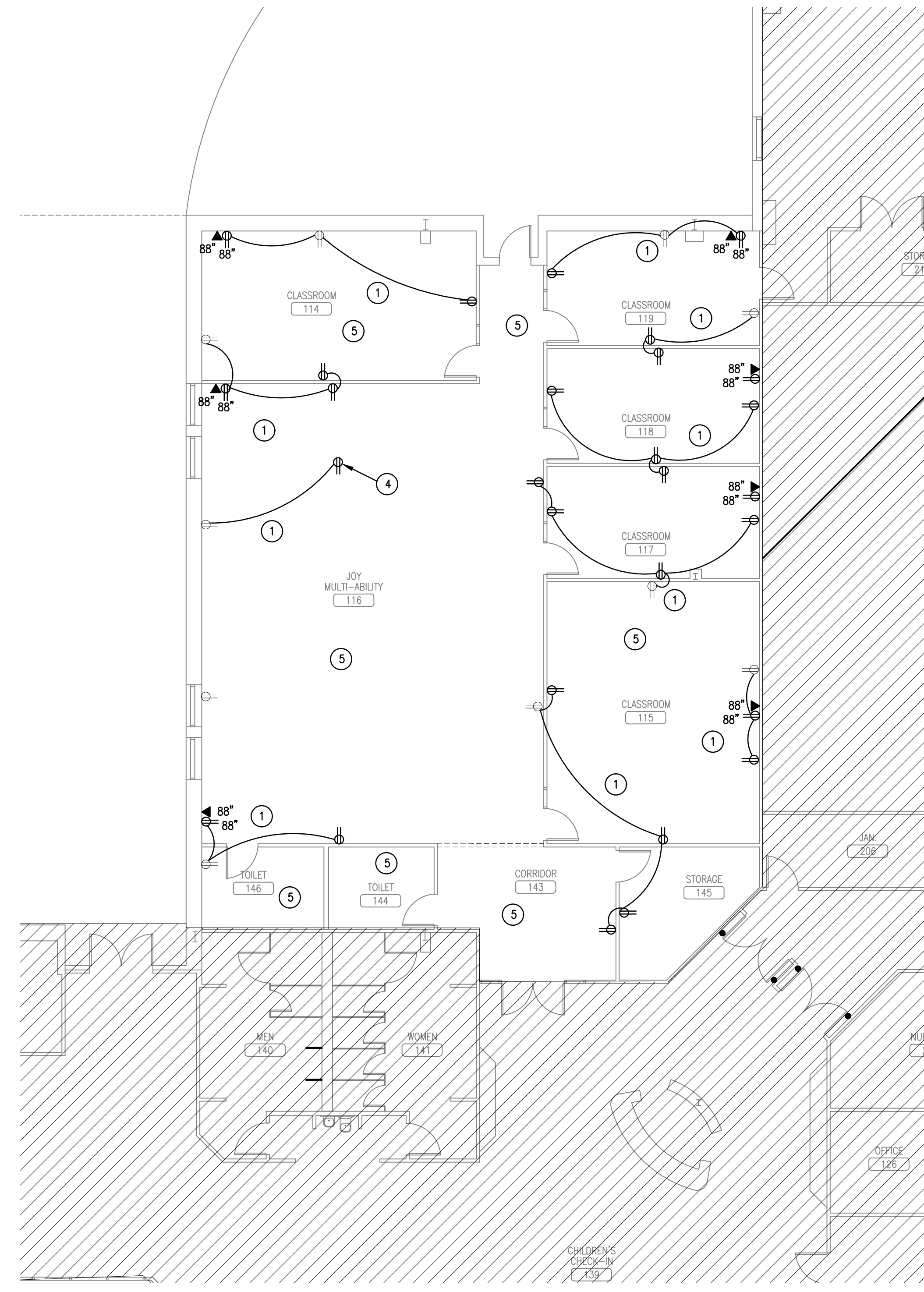


EXCEPTION: THESE REQUIREMENTS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL AND COMMUNICATIONS SYSTEMS RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.

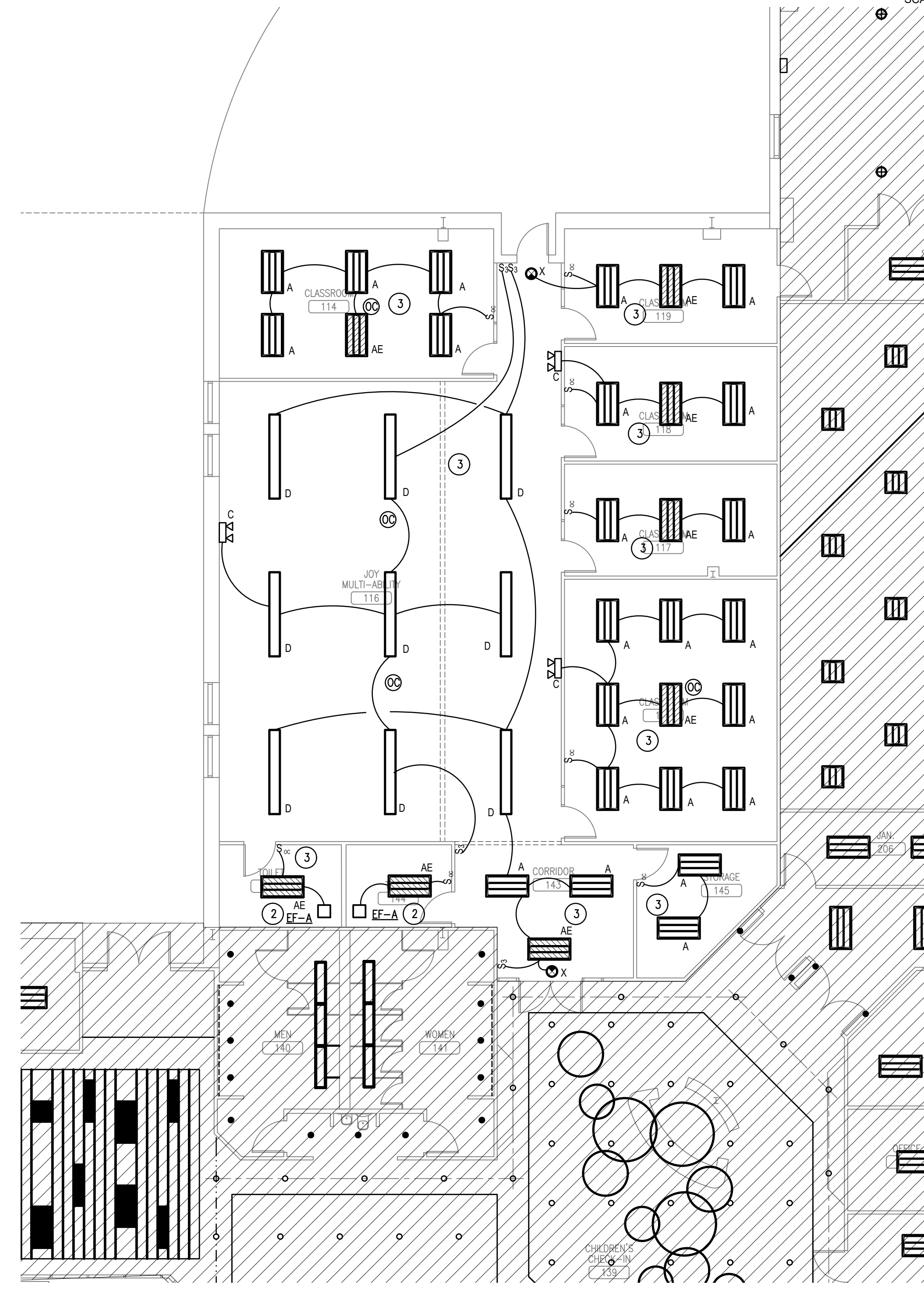
CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	2X4 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-JVOLT	(1)30.0W LED, 4000K	LED DRIVER	120V 1P 2W
AE	2X4 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-JVOLT-EM	(1)30.0W LED, 4000K	LED DRIVER	120V 1P 2W
B	LED FREEFORM TBAR STRIP LIGHTS	RECESSED	PURE EDGE LIGHTING CFMW-7W-TBA-XX-35K-WH	(1) 7W/FT LED, 3500K	LED DRIVER	120V 1P 2W
C	EMERGENCY WALL PACK HEADS	WALL	SURE-LITES APEL	(2) 1.5W LED	LED DRIVER	120V 1P 2W
D	8' LED STRIP LIGHT	PENDANT	LITHONIA PTNSL8-WD-MVOLT-41K	(1)81W LED, 4000K	LED DRIVER	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXIT SIGN, WHITE FACE, RED LED.	WALL/CEILING	SURE-LITES APXTRG	(1) .99W LED	LED DRIVER	120V 1P 2W



RECESSED LIGHT FIXTURE
 SCALE: N.T.S.



PHASE 4 FLOOR PLAN - POWER
 SCALE: 1/8"=1'-0"



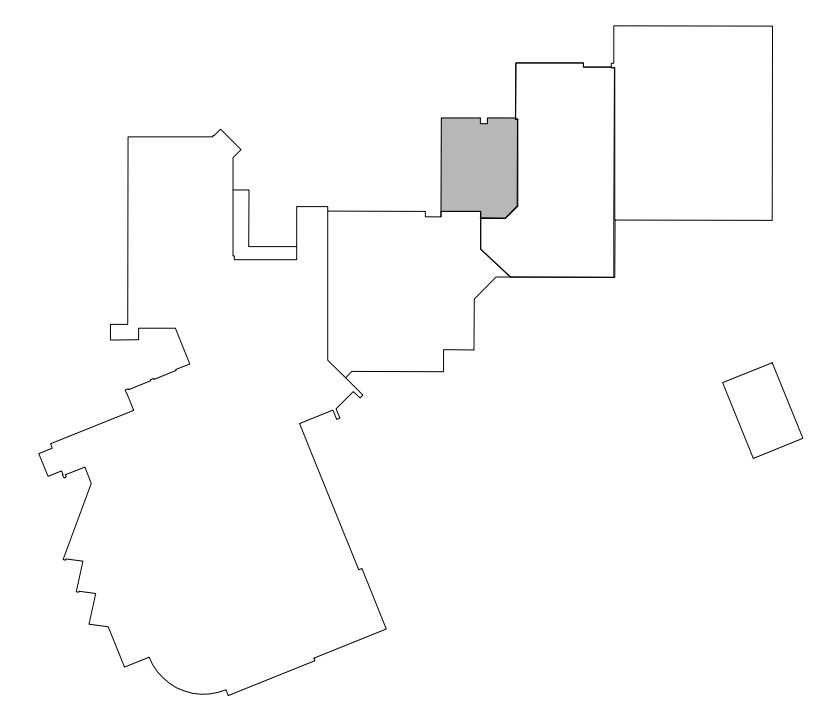
PHASE 4 FLOOR PLAN - LIGHTING
 SCALE: 1/8"=1'-0"

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

NOTES BY SYMBOL:

- ① CONNECT NEW OUTLETS TO EXISTING CIRCUIT IN THE AREA, PROVIDE NEW WIRE, AND CONDUIT AS REQUIRED.
- ② CONNECT NEW CEILING MOUNTED EXHAUST FAN TO LIGHT FIXTURE TO ACTIVATE WHEN LIGHT IS TURNED ON.
- ③ INSTALL NEW LIGHT FIXTURES AS INDICATED, RECONNECT TO EXISTING CIRCUIT IN EXISTING PANEL, PROVIDE NEW WIRE AND 20 AMP BREAKERS AS REQUIRED.
- ④ NEW POWER OUTLET FOR OVERHEAD PROJECTOR, COORDINATE LOCATION WITH ARCHITECTURAL PLANS.
- ⑤ FIRE ALARM CONTRACTOR SHALL RE-INSTALL FIRE ALARM DEVICES AND PROVIDE NEW ONES AS NEEDED FOR A FULL FUNCTIONING SYSTEM THAT MEETS CODE.

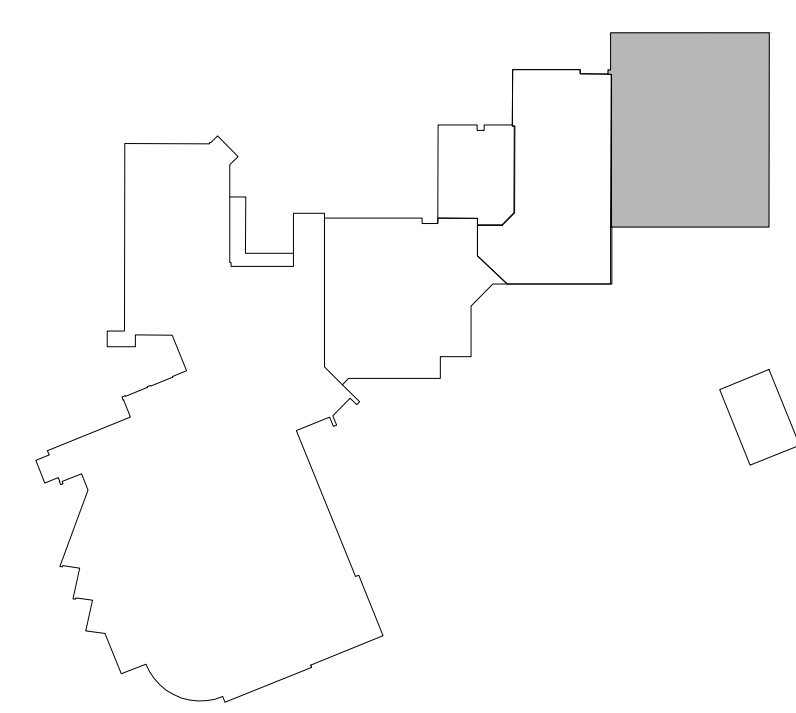


KEY PLAN
 NORTH



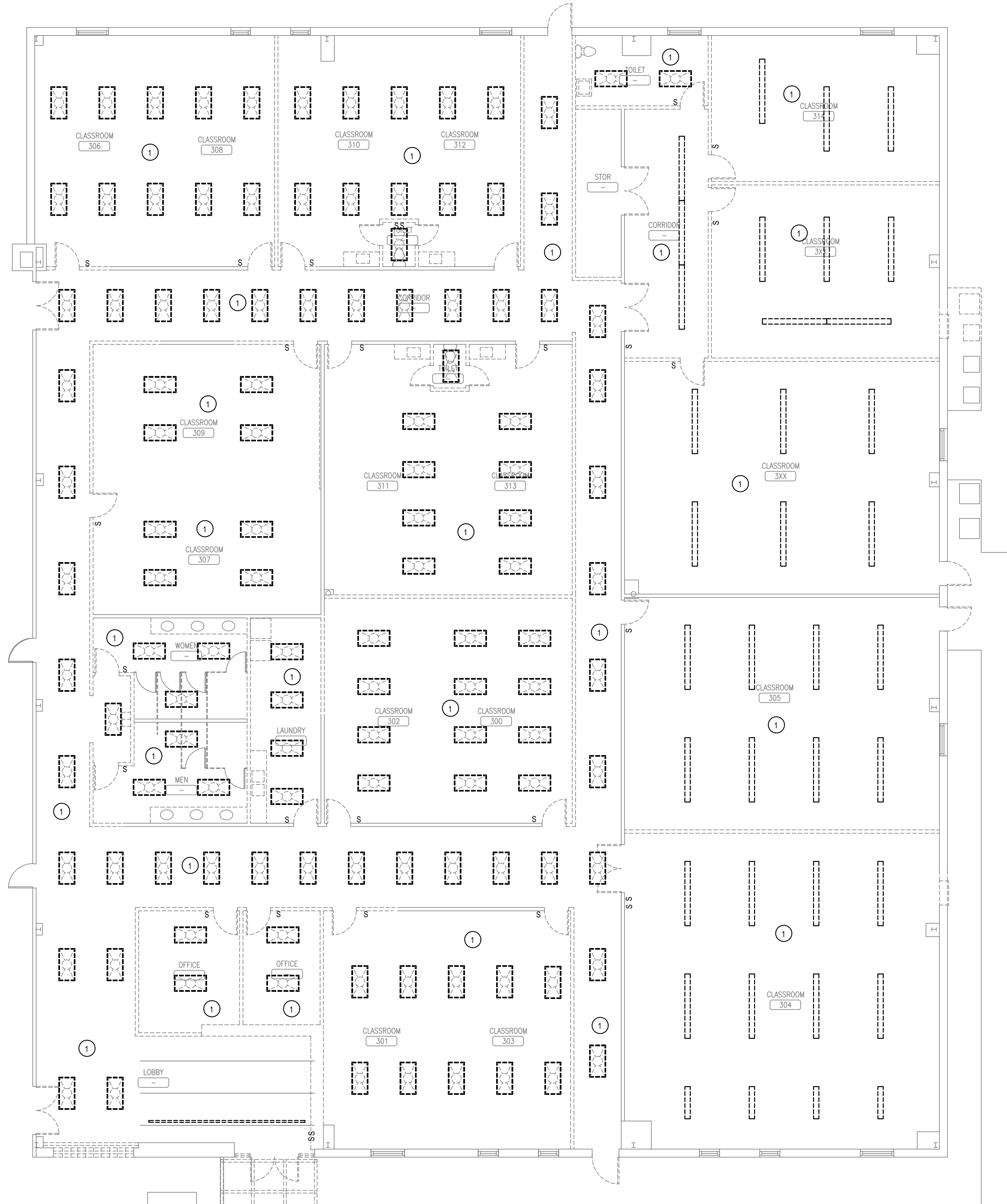
NOTE BY SYMBOL: 'O'

1. DEMO EXISTING RECEPTACLES IN DEMOED WALL. REMOVE WIRES BACK TO EXISTING J-BOX.
2. FIRE ALARM CONTRACTOR SHALL REMOVE FIRE ALARM COMPONENT IN AREAS THAT ARE BEING DEMOED. SAVE FOR RE-INSTALLATION.

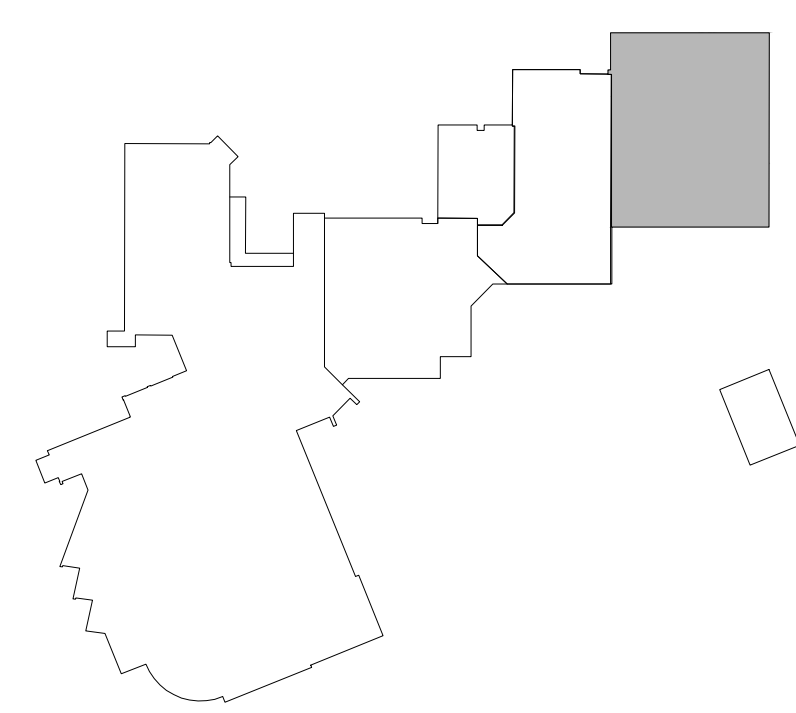


KEY PLAN
 NORTH

PHASE 5 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

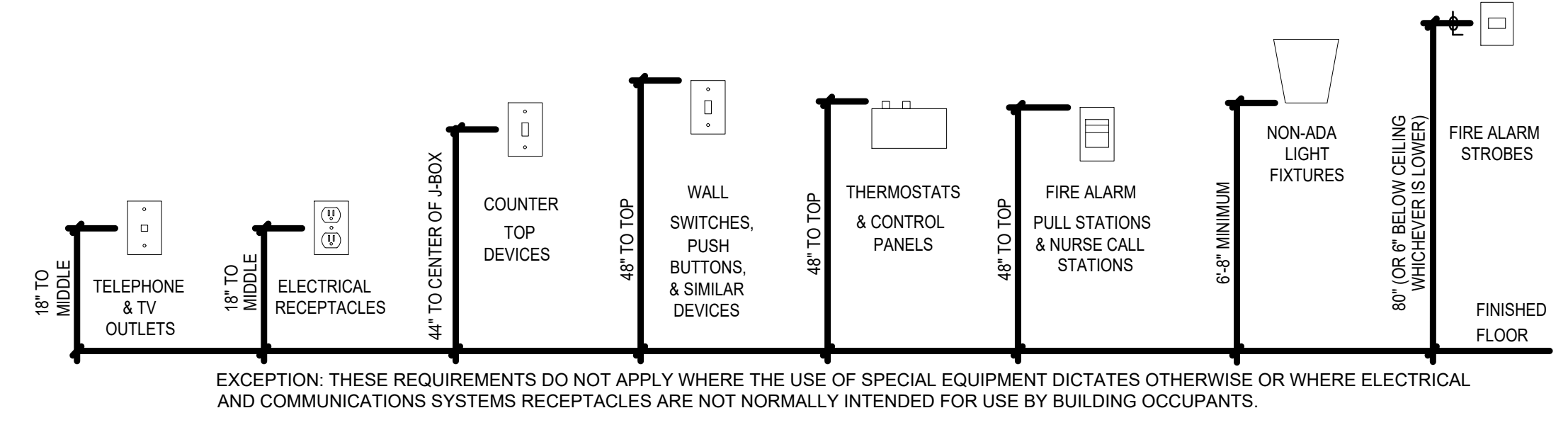
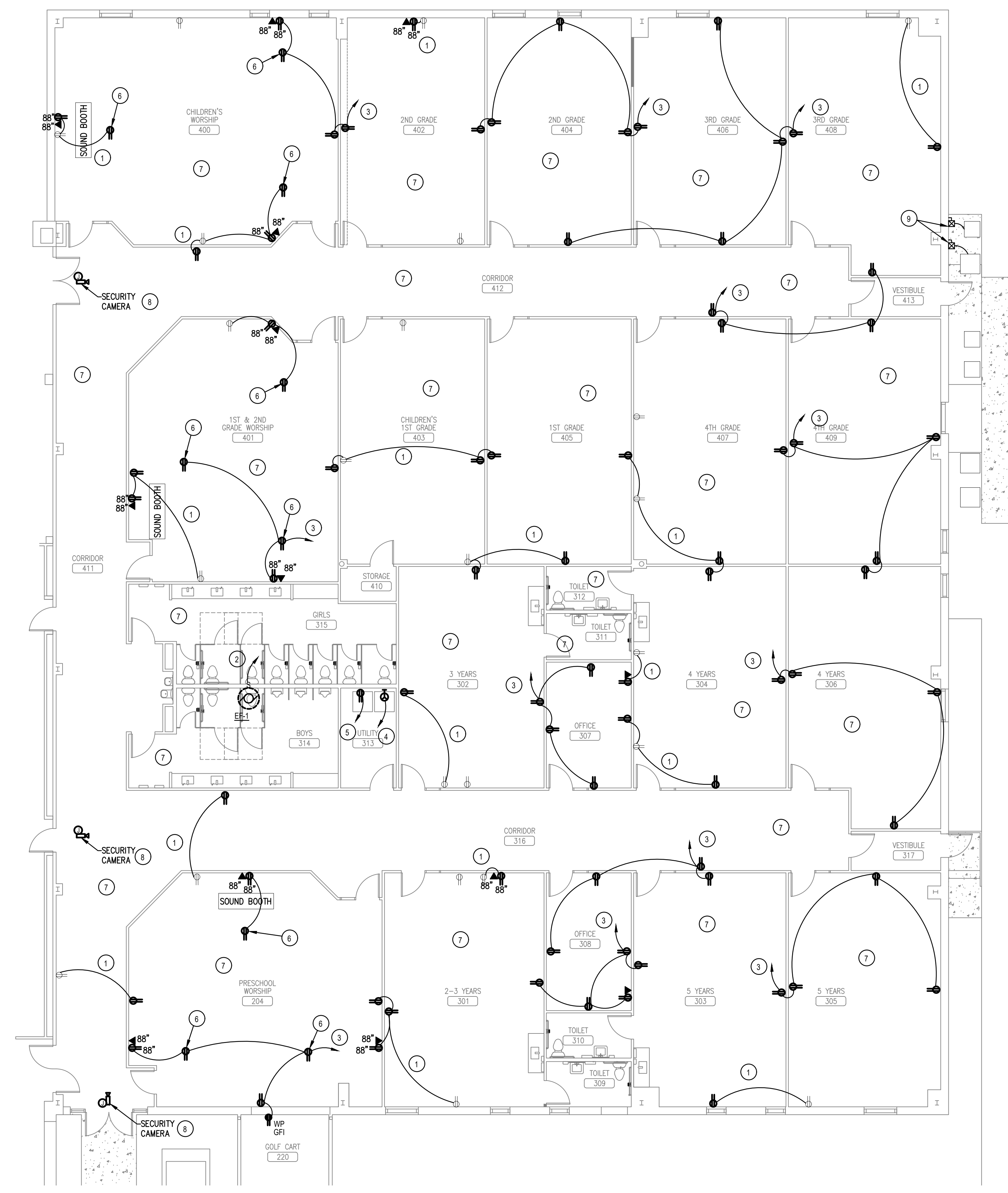


NOTE BY SYMBOL: "O"
 1. DEMO EXISTING LIGHT FIXTURES, SWITCHES,
 AND WIRE. REMOVE WIRES BACK TO EXISTING
 J-BOX.



KEY PLAN
 NORTH

PHASE 5 FLOOR PLAN - LIGHTING DEMOLITION
 SCALE: 1/8"=1'-0"

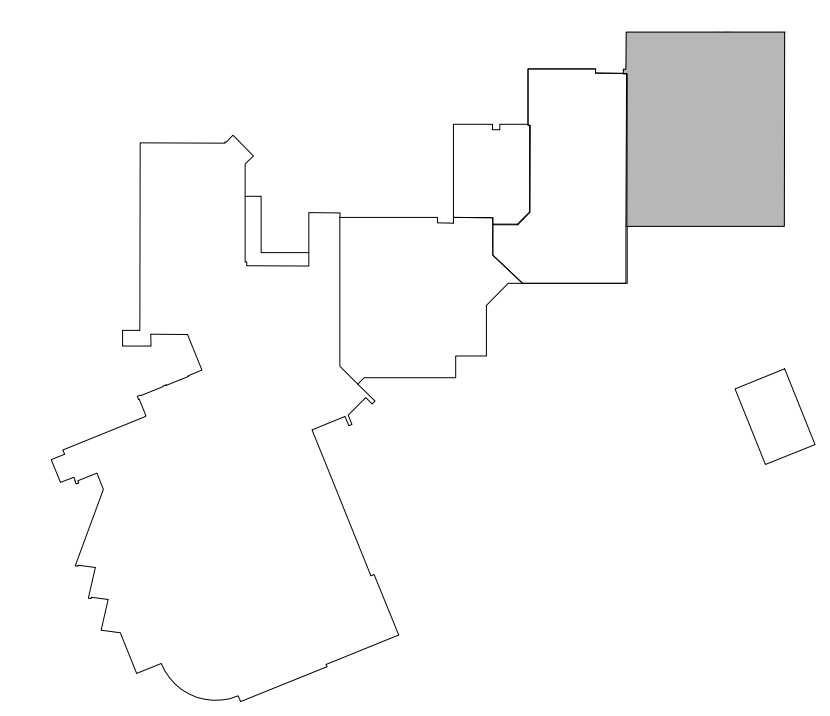


GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
- G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

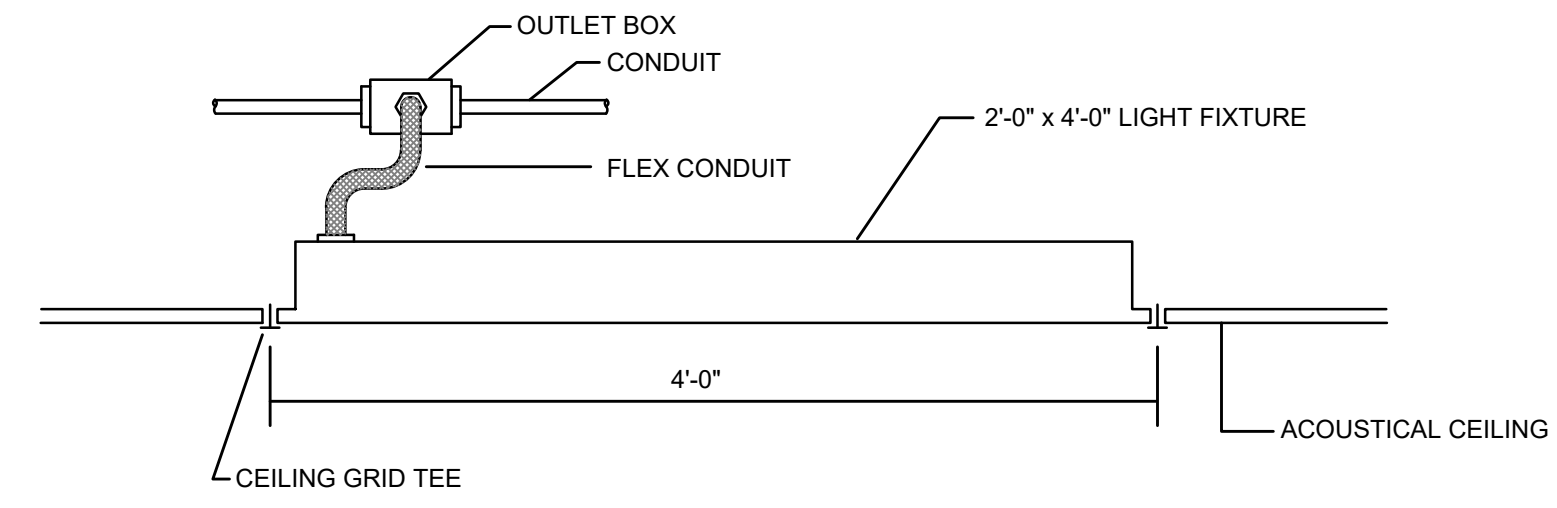
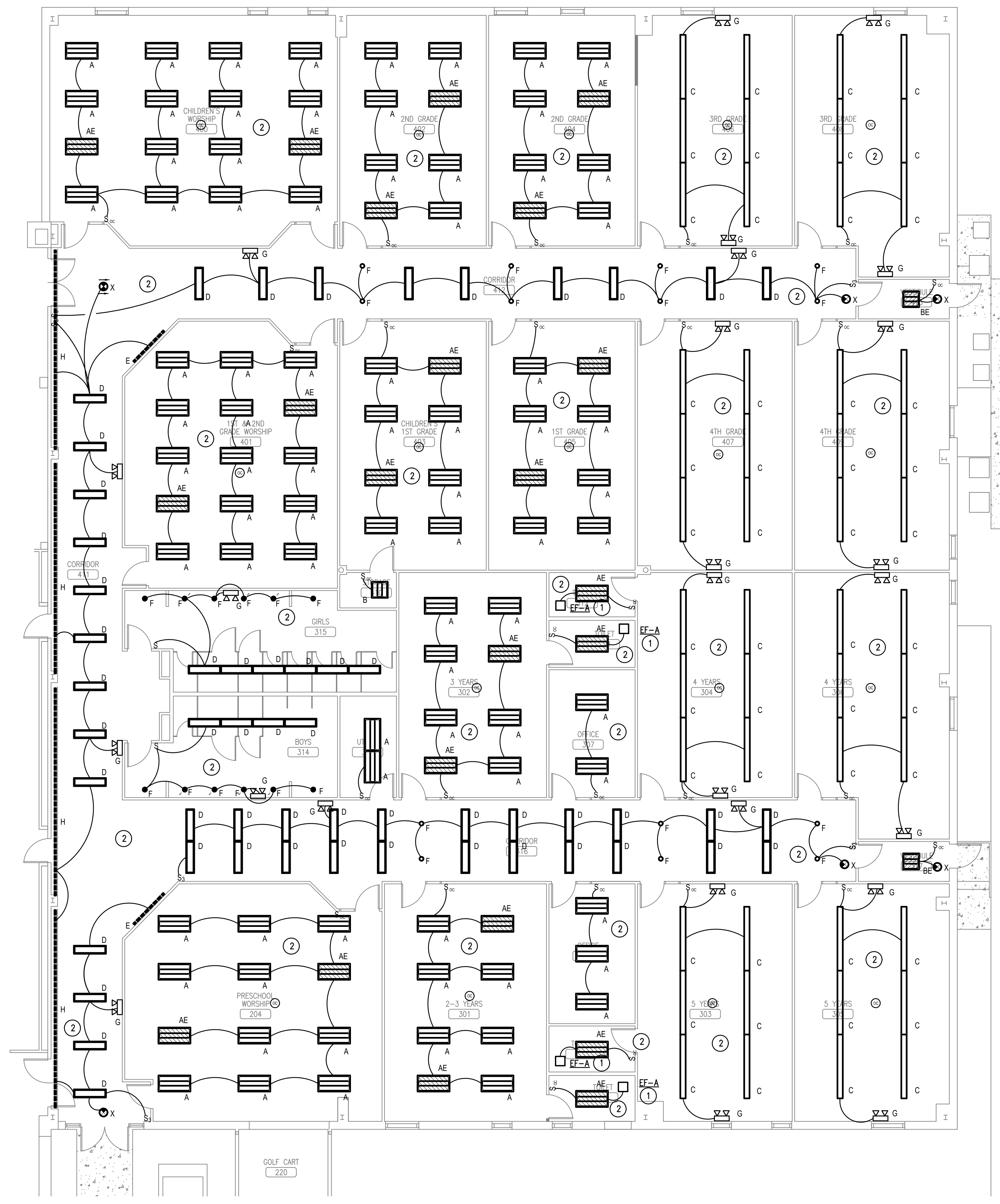
NOTES BY SYMBOL:

- ① CONNECT NEW OUTLETS TO EXISTING CIRCUIT IN THE AREA, PROVIDE NEW WIRE, AND CONDUIT AS REQUIRED.
- ② CONNECT NEW EXHAUST FAN TO EXISTING PANEL IN THE AREA, PROVIDE NEW WIRE, CONDUIT AND 20 AMP BREAKER AS REQUIRED. PROVIDE 24 HOUR TIMECLOCK TO CONTROL FAN.
- ③ CONNECT NEW OUTLETS TO EXISTING PANEL, PROVIDE NEW WIRE, CONDUIT AND 20 AMP CIRCUIT BREAKER.
- ④ CONNECT NEW DRYER OUTLET TO EXISTING DRYER CIRCUIT THAT WAS DEMOED. PROVIDE NEW WIRE, CONDUIT AND BREAKER AS REQUIRED.
- ⑤ CONNECT NEW CLOTHES WASHER OUTLET TO EXISTING WASHER CIRCUIT THAT WAS DEMOED. PROVIDE NEW WIRE, CONDUIT AND BREAKER AS REQUIRED.
- ⑥ NEW POWER OUTLET FOR OVERHEAD PROJECTOR, COORDINATE LOCATION WITH ARCHITECTURAL PLANS.
- ⑦ FIRE ALARM CONTRACTOR SHALL RE-INSTALL FIRE ALARM DEVICES AND PROVIDE NEW ONES AS NEEDED FOR A FULL FUNCTIONING SYSTEM THAT MEETS CODE.
- ⑧ CONTRACTOR SHALL PROVIDE CAT5 CABLE RUNS FROM J-BOX AT CAMERA BACK TO NEW RACK IN KITCHEN ELECTRICAL ROOM.
- ⑨ CONTRACTOR SHALL PROVIDE NEW DISCONNECT, WIRE AND CONDUIT TO CONNECT TO EXISTING CIRCUIT FOR RELOCATED CONDENSING UNITS.



PHASE 5 FLOOR PLAN - POWER
 NORTH SCALE: 1/8"=1'-0"

KEY PLAN
 NORTH



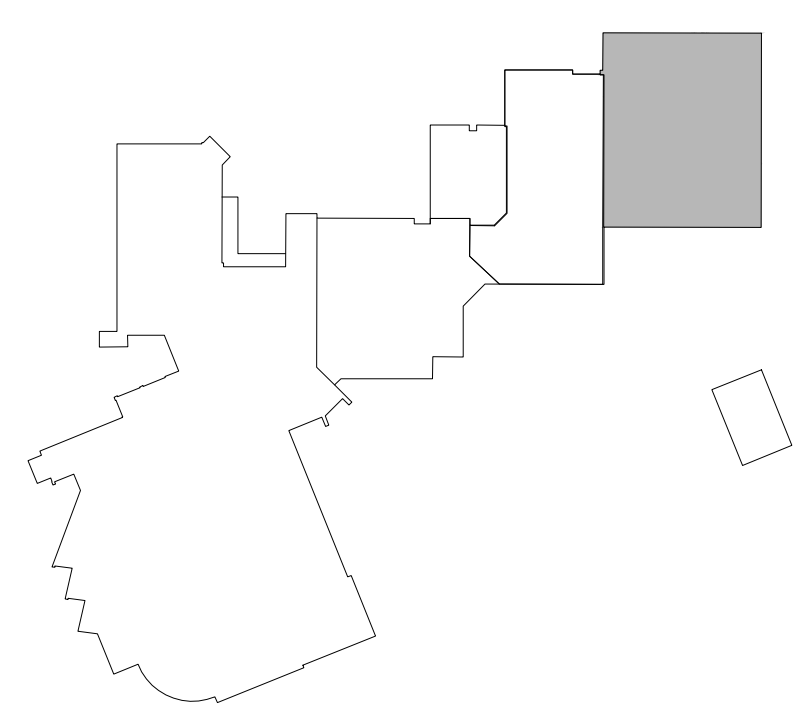
RECESSED LIGHT FIXTURE
 SCALE: N.T.S.

LUMINAIRE SCHEDULE

CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	2X4 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-UVOLT	(1)30.6W LED, 4000K	LED DRIVER	120V 1P 2W
AE	2X4 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X4 AL06-SWW7-UVOLT-EM	(1)30.6W LED, 4000K	LED DRIVER	120V 1P 2W
B	2X2 LED TROFFER FIXTURE	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-UVOLT	(1)26.1W LED, 4000K	LED DRIVER	120V 1P 2W
BE	2X2 LED TROFFER FIXTURE WITH BATTERY BACKUP	RECESSED	LITHONIA STAKS-2X2 AL06-SWW7-UVOLT-EM	(1)26.1W LED, 4000K	LED DRIVER	120V 1P 2W
C	8' LED STRIP LIGHT	PENDANT	LITHONIA PTNSL8-WD-MVOLT-41K	(1)81W LED, 4000K	LED DRIVER	120V 1P 2W
D	1X4 LED PANEL FIXTURE	RECESSED	LITHONIA CPX-1X4-3200LM-80CRI-3500K-SWL-MVOLT	(1)29.3W LED, 4000K	LED DRIVER	120V 1P 2W
E	4' LED COVE STRIP	COVE	LITHONIA MNLSL-L96-2LL-MVOLT-40K-80CRI	(1)9W/FT LED, 4000K	LED DRIVER	120V 1P 2W
F	6" LED RECESSED DOWNLIGHT	RECESSED	COOPER HC6-20-D010	(1) 21W LED, 4000K	LED DRIVER	120V 1P 2W
G	EMERGENCY WALL PACK HEADS	WALL	SURE-LITES APEL	(2) 1.5W LED	LED DRIVER	120V 1P 2W
H	8' LED COVE STRIP	COVE	LITHONIA MNLSL-L96-2LL-MVOLT-40K-80CRI	(1) 9W/FT LED, 4000K	LED DRIVER	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXIT SIGN, WHITE FACE, RED LED.	WALL/CEILING	SURE-LITES APX7RG	(1) .99W LED	LED DRIVER	120V 1P 2W

- GENERAL NOTES:**
- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
 - B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
 - C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO ROUGH-IN.
 - D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
 - E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
 - F. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER PLATES WITH OWNER.
 - G. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCH PACK AND ALL OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

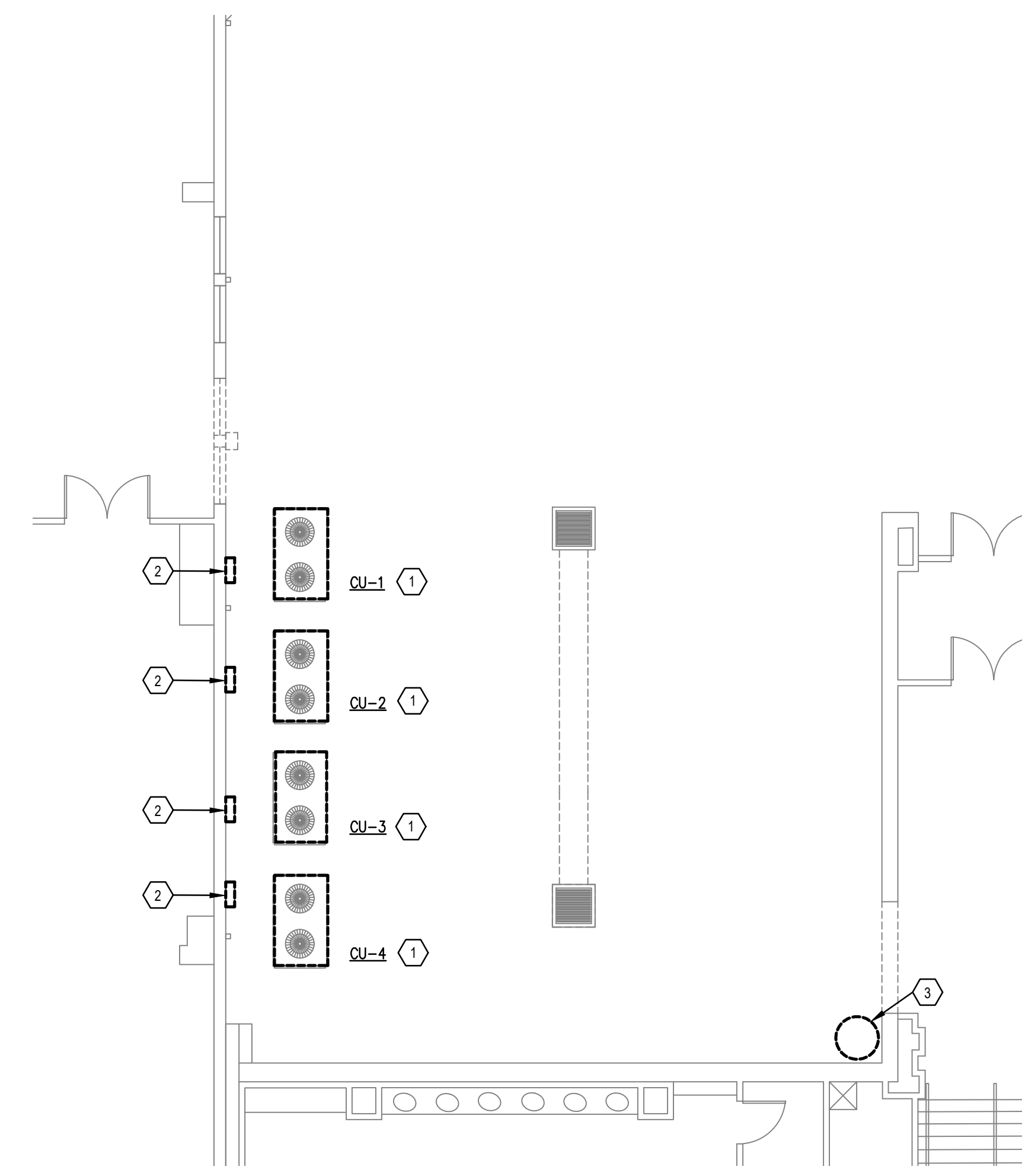
- NOTES BY SYMBOL:**
- ① CONNECT NEW CEILING MOUNTED EXHAUST FAN TO LIGHT FIXTURE TO ACTIVATE WHEN LIGHT IS TURNED ON.
 - ② INSTALL NEW LIGHT FIXTURES AS INDICATED, RECONNECT TO EXISTING CIRCUIT IN EXISTING PANEL, PROVIDE NEW WIRE AND 20 AMP BREAKERS IF REQUIRED.



PHASE 5 FLOOR PLAN - LIGHTING
 NORTH SCALE: 1/8"=1'-0"

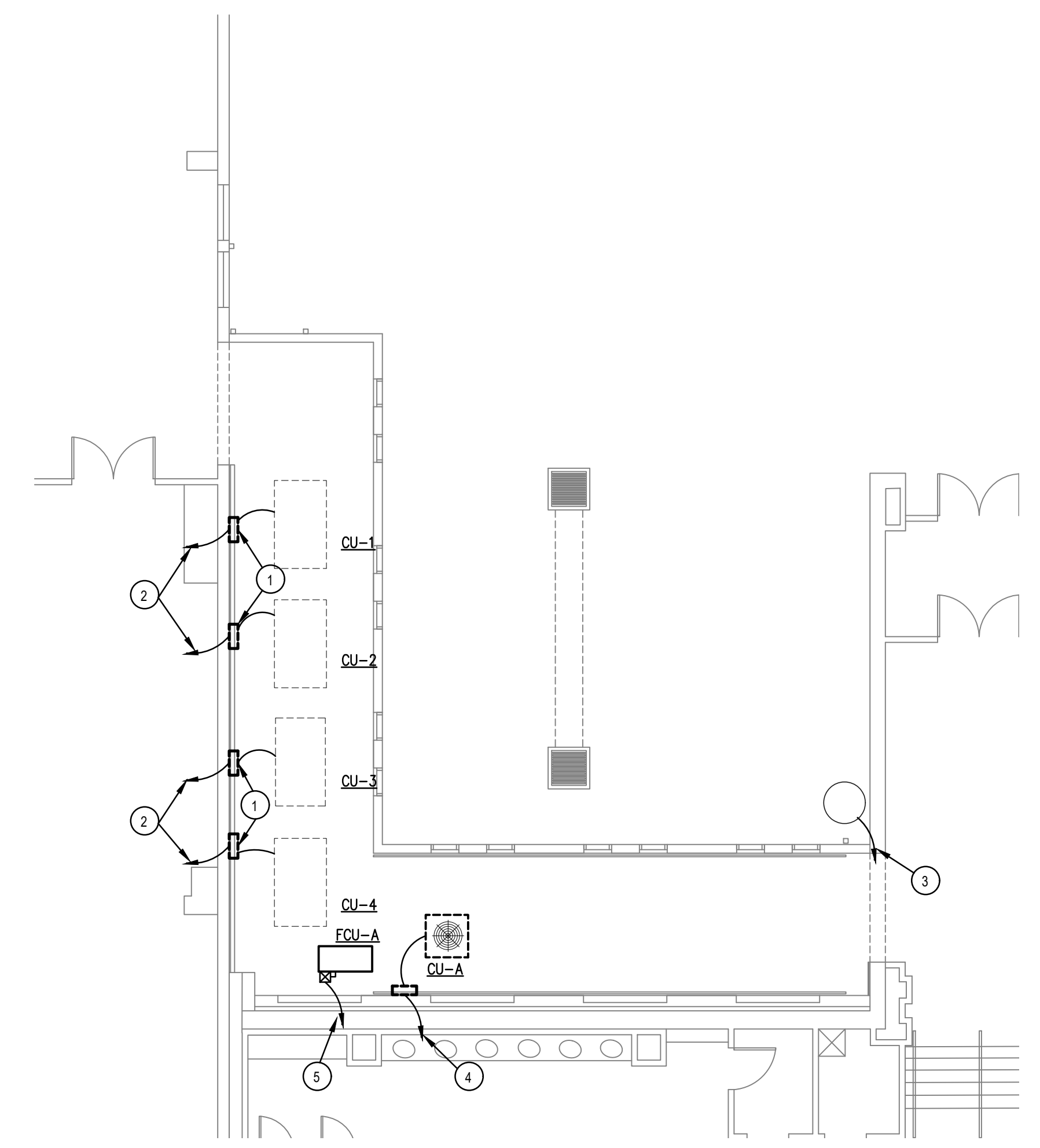
KEY PLAN
 NORTH

LUMINAIRE SCHEDULE						
CALLOUT	DESCRIPTION	MOUNTING	MODEL	LAMP	BALLAST	VOLTS
A	LED STRIP LIGHT, 24", 36", 48", AND 96" LENGTHS	COVE	LITHONIA MNSL-L96-2LL- MVOLT-40K-80CRI	(1) 9W/FT LED, 4000K	LED DRIVER	120V 1P 2W
X	UNIVERSAL FACE AC-ONLY, LED, UNIVERSAL MOUNT EXIT SIGN, WHITE FACE, RED LED,	WALL/CEILING	SURE-LITES APX7RG	(1) .99W LED	LED DRIVER	120V 1P 2W



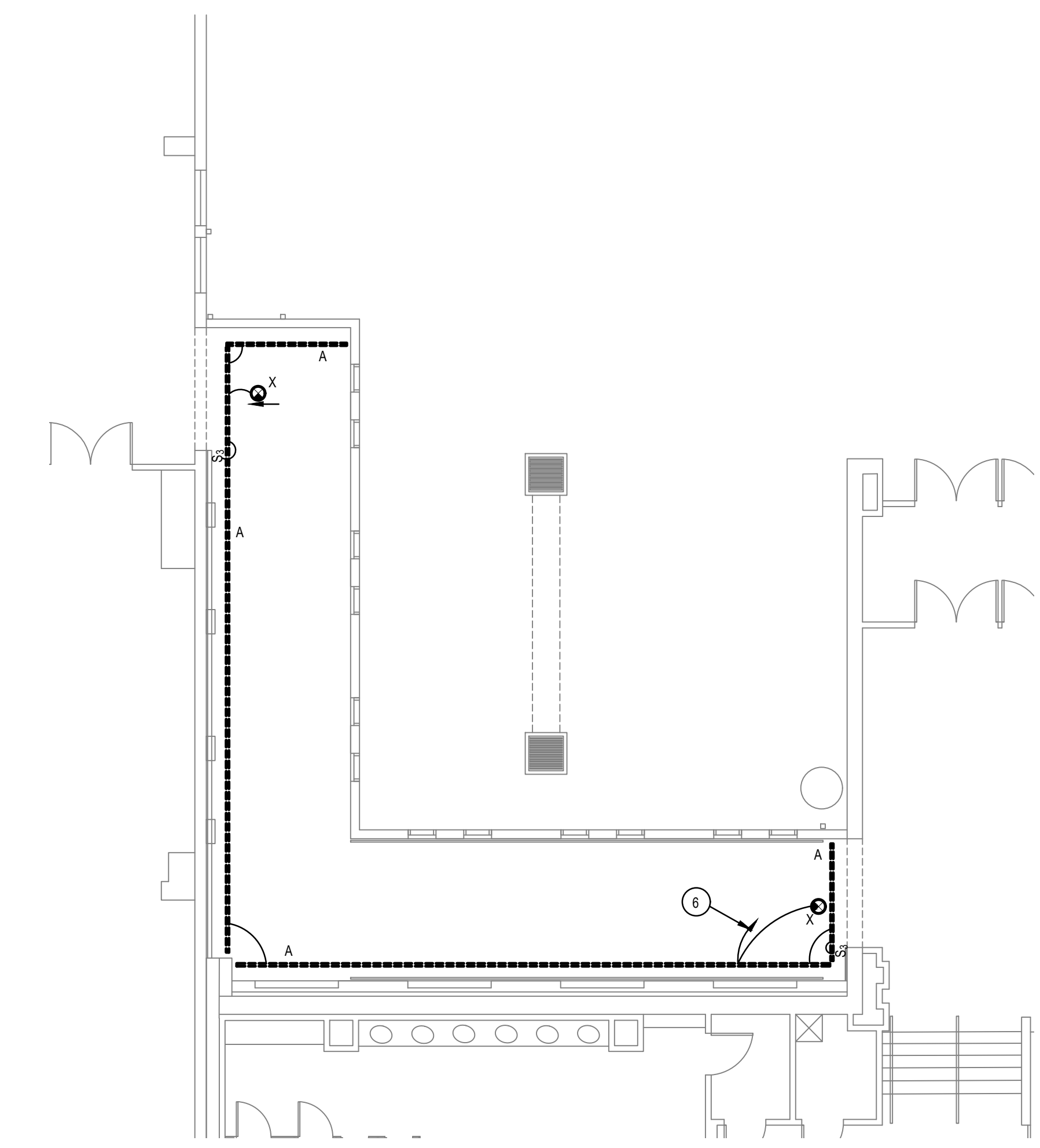
PHASE 6 FLOOR PLAN - POWER DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

- DEMOLITION NOTE BY SYMBOL:**
- ① EXISTING CONDENSING UNITS THAT WILL BE RELOCATED.
 - ② DEMO EXISTING DISCONNECTS AND WIRES CONNECTED TO UNITS, SAVE MAIN WIRE FOR RELOCATED DISCONNECTS.
 - ③ EXISTING SUMP PUMP TO BE RELOCATED, DISCONNECT ELECTRICAL SERVICE AND SAVE TO NEW LOCATION.



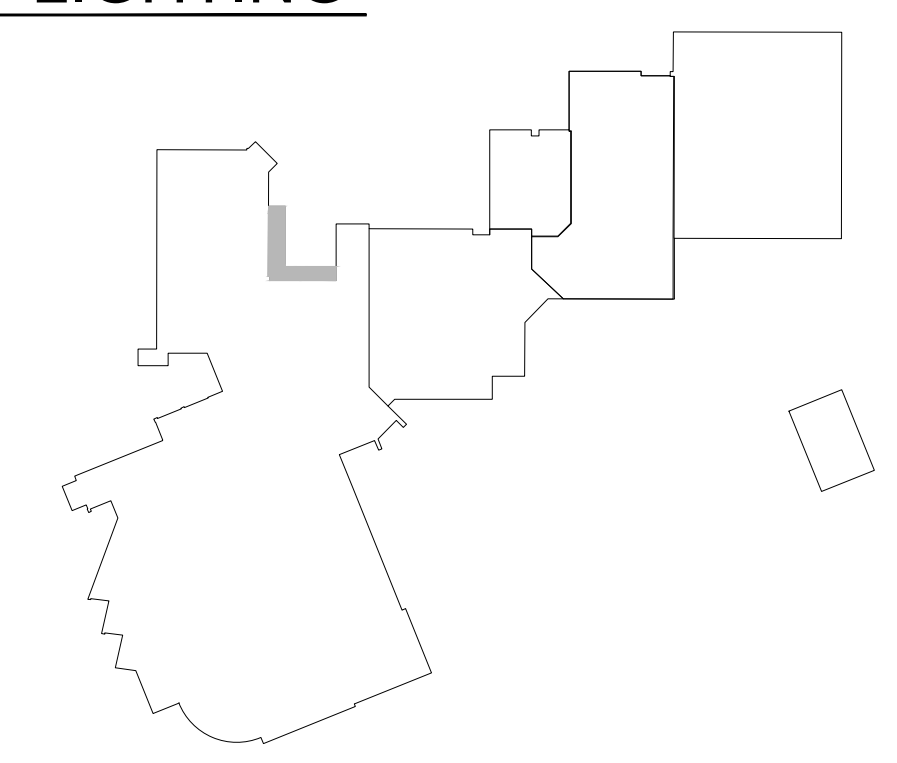
PHASE 6 FLOOR PLAN - POWER
 NORTH SCALE: 1/8"=1'-0"

- NOTES BY SYMBOL:**
- ① CONTRACTOR TO RELOCATE DISCONNECT TO NEW LOCATION ON ROOF, REUSE EXISTING NEMA 3R DISCONNECTS IF POSSIBLE AT NEW LOCATION, IF NOT, PROVIDE NEW ONE SAME SIZE. CONNECT DISCONNECT TO RELOCATED CONDENSING UNIT WITH NEW WIRE AND CONDUIT, SIZE SAME AS EXISTING.
 - ② CONTRACTOR TO RECONNECT ELECTRICAL SERVICE TO RELOCATED DISCONNECT WITH NEW WIRE AND CONDUIT, SIZE SAME AS EXISTING SERVICE.
 - ③ CONTRACTOR TO RECONNECT ELECTRICAL SERVICE TO RELOCATED SUMP PUMP, WITH NEW NEMA 3R DISCONNECT, NEW WIRE AND CONDUIT, SIZE SAME AS EXISTING SERVICE.
 - ④ CONTRACTOR TO PROVIDE NEW NEMA 3R DISCONNECT FOR CONDENSING UNIT, WITH (3) #8 CU AND #10 CU GND WIRE IN NEW 3/4" CONDUIT. RUN WIRE BACK INTO BUILDING AND CONNECT TO NEAREST ELECTRICAL PANEL WITH SPACE. PROVIDE A NEW 40 AMP BREAKER.



PHASE 6 FLOOR PLAN - LIGHTING
 NORTH SCALE: 1/8"=1'-0"

- ⑤ CONTRACTOR TO PROVIDE NEW DISCONNECT FOR FAN COIL UNIT, WITH (3) #6 CU AND #10 CU GND WIRE IN NEW 1" CONDUIT. RUN WIRE BACK INTO BUILDING AND CONNECT TO NEAREST ELECTRICAL PANEL WITH SPACE. PROVIDE A NEW 45 AMP BREAKER.
- ⑥ CONTRACTOR TO PROVIDE NEW WIRE AND CONDUIT FOR LIGHTS. RUN WIRE BACK INTO BUILDING AND CONNECT TO NEAREST ELECTRICAL PANEL WITH SPACE. PROVIDE A NEW 20 AMP BREAKER.



KEY PLAN
 NORTH

DIVISION 15 - PLUMBING SPECIFICATIONS

GENERAL

- A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.
- B. REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED UNDER THIS SECTION.

SCOPE

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CONSTRUCTION DETAILS, BEFORE SUBMITTING HIS BID AS NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

INSPECTION OF SITE

ALL PROPOSALS SHALL PRECLUDE THAT CONTRACTOR IS FAMILIAR WITH JOB SITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

PERMITS

ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

CODE REQUIREMENTS

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICATIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

MATERIALS AND WORKMANSHIP

- A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER, AND UNLESS OTHERWISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION, AND ON COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES, DO NOT JUST ABANDON.

CODES AND REGULATIONS

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE OWNER IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

PROTECTION OF WORK AND PROPERTY

- A. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK. HE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND NOT TO HIS FAULT OR NEGLIGENCE. HE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.
- B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE WORK AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSURANCE REQUIRED TO PROTECT HIMSELF, AND OWNER FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

CHANGES IN THE WORK

THE OWNER, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

COOPERATION

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. REFERENCE SHALL BE MADE TO THE OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE.

SUBSTITUTION OF MATERIALS

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

SHOP DRAWINGS

SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

DRAWINGS AND SPECIFICATIONS

- A. THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.
- B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DESCRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

RESPONSIBILITY

- A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.
- B. CONTRACTOR SHALL SUPPLY A CERTIFIED BALANCE REPORT AT COMPLETION OF PROJECT.

GENERAL PROVISIONS

- 1. SCOPE: PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS TO PROVIDE A COMPLETE AND PROPERLY OPERATING PLUMBING SYSTEM FOR THE BUILDING.
OBTAIN WATER, SEWER, AND ANY OTHER REQUIRED UTILITIES AND EXTEND SERVICE FROM SAME TO BUILDING AS SHOWN ON DRAWINGS. VISIT THE SITE FOR UNDERSTANDING OF THE WORK TO BE DONE BEFORE SUBMITTING BID.
COORDINATE THIS WORK WITH THE WORK OF THE OTHER TRADES ON THE PROJECT. ALL PLUMBING IS TO BE ROUGHED IN WHILE THE BUILDING IS BEING CONSTRUCTED AT SUCH TIMES AS NOT TO DELAY THE GENERAL CONTRACTOR ON THE BUILDING.
- 2. GENERAL REQUIREMENTS: COMPLY WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, ORDINANCES, RULES, AND ORDINANCES GOVERNING WORK OF THIS CHARACTER. PAY FOR AND OBTAIN NECESSARY CONSTRUCTION PERMITS AND CERTIFICATES OF INSPECTION.
A. DRAWINGS: THE LOCATION OF THE PIPING RUNS ARE APPROXIMATE AND THE CONTRACTOR MUST MAKE ANY NECESSARY CHANGES IN THE PIPING RUNS, ETC., AT NO ADDITIONAL COST TO THE OWNER. OUTLET LOCATIONS ARE CRITICAL AND MUST BE LOCATED EXACTLY ACCORDING TO THE PLUMBING PLAN. COORDINATE THIS WORK WITH THE INSTALLERS OF EQUIPMENT FURNISHED AND INSTALLED BY OTHERS; REFER TO THE OTHER DRAWINGS FOR DETAILS OF THE BUILDING CONSTRUCTION AND THE OTHER MECHANICAL, ELECTRICAL, AND EQUIPMENT FEATURES.
B. COORDINATION AND WORKMANSHIP: SCHEDULE THIS WORK SO THAT IT WILL BE PROPERLY COORDINATED WITH ALL OTHER TRADES. WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST PRACTICE FOR THE CLASS OF WORK INVOLVED. WORKMANSHIP SHALL ALLOW THE APPLIANCE TO OPERATE AS INTENDED AND BE INSTALLED TO BEST PROTECT THE PUBLIC AND OPERATORS FROM INJURY OR DAMAGE, AND TO PRESENT A NEAT, PLEASING, AND ORDERLY APPEARANCE.

MATERIALS AND PERFORMANCE

- 1. MATERIALS: ALL MATERIALS SHALL BE NEW AND OF THE QUALITY INDICATED BY THE DRAWINGS. SUBSTITUTIONS OF MATERIAL OF EQUAL QUALITY BY OTHER FIRST-LINE MANUFACTURERS WILL BE ACCEPTABLE PROVIDED LIST OF SUCH SUBSTITUTIONS IS APPROVED IN WRITING. A SUBSTITUTIONS LIST SHALL BE SUBMITTED IN TRIPPLICATE WITHIN FIVE (5) DAYS AFTER THE CONTRACT IS LET.
- 2. BACKFILLING: PERFORM ALL NECESSARY EXCAVATING AND BACKFILLING REQUIRED FOR THIS INSTALLATION. PREPARE A PROPER BED OF SAND OR GRAVEL OR EQUIVALENT IN ROCK SCREENING SO AS TO ELIMINATE SHIMMING AND VOID SPACES UNDER ANY OF THE UTILITY SERVICE PIPES. BENDING OF ANY HARD PIPE WILL NOT BE PERMITTED. WHERE A CHANGE IN DIRECTION IS NECESSARY ON PRESSURE PIPES, COMPATIBLE WITH THE MANUFACTURER'S RECOMMENDATIONS, SHALL BE USED. ALL EXCAVATION BELOW THE BOTTOM OF FOOTINGS SHALL BE BACKFILLED WITH 2000 PSI CONCRETE. OTHER BACKFILL SHALL CONSIST OF 2-3" OF SAND OR ROCK SCREENINGS AND EARTH TO WHICH EQUAL TO ITS ORIGINAL CONDITION. IN THE EVENT THE BACKFILL SHOULD SETTLE BEFORE THE FINAL TOP SURFACE IS APPLIED, APPLY ADDITIONAL BACKFILL TO SUSTAIN THE ORIGINAL LEVEL. CARE SHOULD BE TAKEN TO MINIMIZE THE LEVEL UNDER THE EXCAVATING AND BACKFILLING SO AS TO COMPLY WITH FEDERAL AND STATE E.P.A. REGULATIONS RELATING TO THIS TYPE OF WORK (FUGITIVE DUST).
- 4. PIPING INSTALLATION: CLEANOUTS MUST BE INSTALLED ON MINIMUM DROP LINES EVEN THOUGH NOT SHOWN ON THE BLUEPRINTS. USE REDUCING FITTINGS IN MAKING REDUCTIONS IN SIZE OF PIPE. REAM ALL PIPE AFTER CUTTING, THEN TURN PIPES ON END AND KNOCK OUT ALL LOOSE DIRT AND SCALE BEFORE INSTALLING. MAKE CHANGES IN HORIZONTAL DIRECTION OF SOIL AND WASTE PIPES WITH LONG RADIUS FITTINGS OR WITH 45° BRANCHES AND 1/8" OR 1/16" BENDS. CONNECT SOIL STACKS AT BASE TO HORIZONTAL RUNS WITH T CONNECTIONS.
WATER SUPPLY PIPES TO FIXTURES AND WASTE PIPES FROM FIXTURES SHALL BE CENTERED IN THE RELATIVE TO THE CENTER LINE OF THE FIXTURE. NO OFFSETS WILL BE ALLOWED. ALL PIPES SHALL BE RUN MECHANICALLY STRAIGHT AND SQUARE WITH BUILDING LINES, EXCEPT FOR REQUIRED PITCH ON HORIZONTAL LINES, AND ALL CHANGES IN DIRECTION SHALL BE MADE WITH FITTINGS. WATER PIPING TO BE ROUTED IN WALLS, UNDER THE FLOOR SLAB, AND ABOVE SUSPENDED CEILINGS AS NOTED. WHERE WATER LINES ARE ROUTED UNDER THE FLOOR SLAB, NO MECHANICAL JOINTS SHALL BE MADE UNDER THE SLAB EXCEPT AS LISTED BELOW. WATER PIPING SHALL BE INSTALLED NOT TO EXERT VERTICAL NOR HORIZONTAL STRESSES ON THE SEATING OF UNIONS. UNIONS SHALL BE COPPER TYPE NIBCO #733 OR EQUAL.
NO WAX, PUTTY, OR VARNISH WILL BE PERMITTED. CRACKED FITTINGS SHALL BE REMOVED AND REPLACED WITH NEW FITTINGS. MAKE THREADED JOINTS IN BRASS PIPE AND IN THE END OF THE PIPE. MAKE THREADED JOINTS IN BRASS PIPE AND IN THE END OF THE PIPE. MAKE THREADED JOINTS IN BRASS PIPE WILL BE PERMITTED, EXCEPT ON THE FIXTURE SIDE OF THE TRAP.
- 5. WATER PIPE: JOINTS SHALL BE CLEANED AND DEBURRED AS RECOMMENDED BY THE MANUFACTURER AND FEDERAL, STATE, AND LOCAL CODES AND SOLDERED AS LISTED BELOW. FLUX SHALL BE NON-CORROSIVE.
ABOVE GRADE - WHERE FITTINGS ARE SOLDERED BOTH FITTINGS AND TUBING SHALL BE CLEANED AS DESCRIBED ABOVE. UNDER NO CIRCUMSTANCES SHALL DISSIMILAR METALS COME INTO DIRECT CONTACT WITH COPPER TUBING; E.G., GALVANIZED STRAPPING, HANGERS, OR CLAMPS TO SECURE THE TUBING.
BELOW GRADE, OR FLOOR SLAB ON EARTH OR STONE FILL - HIGH TEMPERATURE, SOLDER, 1200 DEG. F OR GREATER MELTING POINT.
NOTE: WATER PIPE TO BE PROPERLY SECURED AND ALIGNED SO AS NOT TO EXERT VERTICAL OR HORIZONTAL STRESSES ON THE SEATING OF THE MATING (MALE AND FEMALE) SURFACES OF THE UNIONS.

- A. MATERIALS - UNDERGROUND: TYPE "L" COPPER TUBE, SOFT TEMPER
- B. MATERIALS - ABOVEGROUND: TYPE "L" COPPER TUBE, HARD DRAWN.
- C. INSULATION: INSULATION FOR HOT AND COLD WATER PIPING SHALL BE 1/2" (1" ON 1ST 8 FT. FROM TANK) THICK ARMAFLEX UL Labeled OR FIBERGLASS 25 WITH ASA/SSL FOIL/WINYL JACKET OR EQUAL. INSULATE ALL PIPING AND FITTINGS.

- 6. WASTE PIPING: INSTALL HORIZONTAL DRAIN AND WASTE PIPES WITH MIN. 1/8"/FT. SLOPE.
MATERIALS: PVC SCH. 40, CAST IRON - HUB TYPE WITH NEOPRENE JOINTS - WITH STAINLESS STEEL CONNECTORS WHEN PVC IS NOT ALLOWED PER LOCAL CODE.
- 7. PIPE SLEEVES/ESCUTCHEONS: PROVIDE CHROME-PLATED ESCUTCHEONS ON ALL PIPES PASSING THROUGH WALLS, FLOORS, OR CEILINGS OF FINISHED ROOMS. ESCUTCHEONS TO BE BEATON & CADWELL #10, 40, 6A OR EQUIVALENT WITH SET-SCREWS. PROVIDE ESCUTCHEONS ON ALL WASTE LINES FROM PLUMBING FIXTURES, WHETHER THROUGH WALLS, FLOORS, AND WHETHER CONCEALED BEHIND COUNTERS OR EXPOSED. PIPE SLEEVES SHALL BE PROVIDED WHEN PIPES PENETRATE FOUNDATION AND SHALL BE LARGER THAN PIPE, SEAL SLEEVE W/CAULKING.
- 8. PLUMBING FIXTURES: FURNISH AND INSTALL PLUMBING FIXTURES AS SHOWN ON DRAWINGS WITH ALL ACCESSORIES AND TRIM AS LISTED. ALL FIXTURES SHALL BE PROTECTED THROUGH THE COURSE OF THE CONSTRUCTION. ALL ANY FIXTURE DAMAGED SHALL BE REPLACED WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- 9. CONNECTION TO OTHER FIXTURES: CONNECT BUILDING SERVICE PIPING, INCLUDING BUT NOT LIMITED TO WATER, AND DRAIN PIPES TO EQUIPMENT AS INDICATED IN EQUIPMENT SPECIFICATIONS.
- 10. TESTS:
 - A. DRAINAGE AND VENT PIPING - DRAINAGE AND VENT PIPING SHALL BE TESTED BEFORE THE PLUMBING FIXTURES ARE INSTALLED BY CAPPING THE OPENINGS AND FILLING THE ENTIRE SYSTEM WITH WATER AND ALLOWING IT TO STAND THUS FILLED NOT LESS THAN ONE (1) HOUR. INSPECT WATER LEVEL TO DETERMINE IF PIPING IS TIGHT.
 - B. WATER PIPING - THE WATER SUPPLY PIPING LINES SHALL BE TESTED BEFORE THE PLUMBING FIXTURES ARE CONNECTED BY FILLING THE ENTIRE SYSTEM WITH POTABLE WATER AND APPLYING HYDROSTATIC PRESSURE OF 100 PSI AND ALLOWING TO STAND FOR NOT LESS THAN FOUR (4) HOURS AT THIS PRESSURE TO PROVE PLUMBING INTEGRITY.
- 11. DISINFECTION OF POTABLE WATER SYSTEM: UPON COMPLETION OF INSTALLATION DISINFECT THE WATER SYSTEM BY FILLING IT WITH SOLUTION CONTAINING 50 PARTS PER MILLION OF CHLORINE AND ALLOW IT TO STAND FOR NOT LESS THAN SIX (6) HOURS BEFORE FLUSHING THOROUGHLY AND RETURNING TO SERVICE. FURNISH CLEAN WATER SAMPLES TO THE LOCAL AUTHORITY FOR TESTING AFTER THE LINES HAVE BEEN DISINFECTED. THIS PROCEDURE TO BE IN ACCORDANCE WITH STATE PLUMBING CODE.
- 12. CLEANUP: CLEAN ALL PLUMBING FIXTURES AND EQUIPMENT THOROUGHLY BEFORE FINAL INSPECTION, LEAVING ALL READY FOR USE.
- 13. GUARANTEE: MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE. DEFECTIVE WORK AND ALL DAMAGES CAUSED THEREBY WHICH MAY OCCUR DURING THE TERM OF THE AFORESAID GUARANTEE WILL BE REPAIRED AND/OR REPLACED AT NO EXPENSE TO THE OWNER.
- 14. OWNER'S MANUAL: PROVIDE THE OWNER, AT THE COMPLETION OF THIS CONTRACT, WITH AN OWNER'S MANUAL SO LABELED. THE MANUAL SHALL CONSIST OF A THREE-RING LOOSE-LEAF BINDER CONTAINING ALL PRINTED MATTER SUCH AS: GUARANTEE CARDS, CLEANING INSTRUCTIONS, NOTICES TO OWNERS, OPERATING MANUALS, AND MAINTENANCE INSTRUCTIONS THAT MAY BE CONTAINED IN THE SHIPPING CARTONS OR EQUIPMENT HOUSINGS.

PLUMBING SYMBOLS

— — — COLD WATER (CW)	⊕ — RISER DOWN (ELBOW)
— · — · — HOT WATER (HW)	⊖ — RISER UP (ELBOW)
— · · · — HOT WATER RETURN (HWR)	+ ⊕ — HOSE BIBB (H.B.)
— G — GAS PIPE	⊗ — ROOF DRAIN (RD)
— — — SANITARY SEWER	VTR VENT THRU ROOF
— V — SANITARY VENT	EWC ELECTRIC WATER COOLER
— OF — OVERFLOW ROOF DRAIN	CO CLEANOUT
— RD — ROOF DRAIN	FCO FLOOR CLEANOUT
— SD — STORM DRAIN	GCO GRADE CLEANOUT
— GW — GREASE WASTE LINE	WCO WALL CLEANOUT
— D — CONDENSATE DRAIN	PCO PLUG CLEANOUT
— AW — ACID WASTE	RWC RAIN WATER CONDUCTOR
— AV — ACID VENT	NFWH NON-FREEZE WALL HYDRANT
→ DIRECTION OF FLOW	UF UNDERFLOOR
↘ DIRECTION OF SLOPE DOWN	UG UNDERGROUND
→ CAP ON END OF LINE	AFF ABOVE FINISHED FLOOR
— 0000 — FLEXIBLE CONNECTION (PIPE LINE)	WHA/SA WATER HAMMER ARRESTER/SHOCK ABSORBER
⊖ BALL VALVE	IE INVERT ELEVATION
⊗ GATE VALVE	⊕ NEW EXISTING CONNECTION
⊗ BALANCE VALVE	TP TRAP PRIMER
⊗ BUTTERFLY VALVE	
⊗ CHECK VALVE	Ⓟ 1 PLUMBING RISER DESIGNATION
⊗ PLUG VALVE	
⊗ GLOBE VALVE	
⊗ STRAINER	
⊗ UNION	
⊗ FLOOR DRAIN (FD)	
⊗ HUB DRAIN (HD)	

ALL SYMBOLS SHOWN IN SYMBOL LIST ARE NOT NECESSARILY USED.

PIPE MATERIAL SPECIFICATIONS

PIPING SERVICE	SIZE	PIPING MATERIAL	
		ABOVE GROUND	BELOW GROUND
COLD WATER HOT WATER	ALL SIZES	TYPE "L" COPPER WROUGHT FITTINGS	TYPE "K" COPPER FLARED FITTINGS
SANITARY DRAINAGE	2" AND SMALLER	GALVANIZED STEEL SCREW FITTINGS	SERVICE WEIGHT CAST IRON
SANITARY DRAINAGE	2-1/2" AND LARGER	SERVICE WEIGHT CAST IRON	SERVICE WEIGHT CAST IRON
CONDENSATE	2" AND SMALLER	TYPE "K" COPPER	NOT APPLICABLE
SANITARY VENT	2" AND SMALLER	GALVANIZED STEEL SCREW FITTINGS	SERVICE WEIGHT CAST IRON
SANITARY VENT	2-1/2" AND LARGER	SERVICE WEIGHT CAST IRON	SERVICE WEIGHT CAST IRON

PLUMBING NOTES

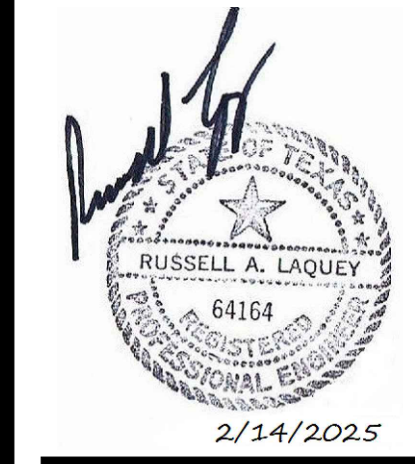
1. ALL PIPING SHOWN IS ABOVE CEILING IN AREAS WITH DROPPED CEILING OR AT BOTTOM OF SUPPORT STRUCTURE FOR FLOOR OR ROOF ABOVE IN EXPOSED STRUCTURE AREAS, UNLESS NOTED OTHERWISE.
2. SECURE AND VERIFY ALL MEASUREMENTS AND CONDITIONS AT JOB BEFORE PROCEEDING WITH FABRICATION OF WORK.
3. PROVIDE ALL ADDITIONAL STEEL, HANGER MATERIALS, RODS AND CLAMPS AS REQUIRED FOR COORDINATION WITH WORK OF OTHER TRADES.
4. THE CONTRACTOR IS RESPONSIBLE FOR FIRE STOPPING AT ALL PENETRATIONS OF FIRE AND SMOKE RATED STRUCTURES, FLOORS AND PARTITIONS. REFER TO ARCHITECTURAL FLOOR PLANS FOR LOCATIONS OF ALL RATED STRUCTURES.
5. PIPING LAYOUT IS ONLY SCHEMATIC, EXACT LOCATION OF PIPES TO BE COORDINATED WITH BUILDING STRUCTURE AND WORK OF OTHER CONTRACTORS.
6. CONCEAL PIPING WHENEVER POSSIBLE UNLESS NOTED OTHERWISE.
7. RUN ALL WATER LINES LEVEL.
8. SUPPORT CAST IRON SANITARY AND VENT PIPING, ON 5'-0" CENTERS, ALL STEEL PIPING ON 10'-0" CENTERS, COPPER PIPING ON 8'-0" CENTERS.
9. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL PLUMBING CODE.
10. SLOPE ALL SANITARY SEWER PIPING AT 1 PERCENT OR 1/8" PER FOOT.
11. PROVIDE CLEANOUTS AT NOT MORE THAN 50 FT. APART IN HORIZONTAL SANITARY DRAINAGE LINES 4" SIZE OR LESS, AND NOT MORE THAN 100 FT. APART FOR LARGER PIPES.
12. PROVIDE CLEANOUTS AT BASE OF ALL SANITARY STACKS.
13. PROVIDE CLEANOUTS AT EACH CHANGE OF DIRECTION GREATER THAN 45° IN SANITARY AND CONDENSATE DRAIN PIPES.
14. COLD WATER PIPE SERVING FLUSH VALVES SHALL EXTEND FULL SIZE TO THE END OF PIPE RUN AND A SHOCK ABSORBER SHALL BE INSTALLED.
15. ALL FIXTURES TO BE EQUIPPED WITH STOP VALVES IN ACCESSIBLE LOCATION. PROVIDE ACCESS DOOR WHERE REQUIRED.
16. NO PLUMBING PIPING SHALL RUN THROUGH OR ABOVE ELECTRICAL UTILITY, TELEPHONE EQUIPMENT OR ELEVATOR MACHINE ROOMS OR CLOSETS (INCLUDING ELEVATOR SHAFTS), EXCEPT FOR PIPING SERVING EQUIPMENT OR DEVICES FOR THAT SPECIFIC AREA. PROVIDE DRIP PANS BELOW ANY LIQUID TRANSMISSION PIPING THAT IS REQUIRED IN THESE AREAS.
17. PROVIDE SHUT-OFF VALVES AT ALL COLD AND HOT WATER PIPES SERVING SINGLE OR GROUP OF FIXTURES AT TAKE-OFF FROM WATER MAIN.
18. SANITARY WASTE AND VENT PIPING SHALL BE (NO HUB) CAST IRON.
19. WATER PIPING SHALL BE TYPE L, SCHEDULE 40, RIGID COPPER PIPE WITH "NO LEAD" SOLDER.

APE ENGINEERING
 TBPE #F- 13391
 1340 Dove Drive
 Midlothian, Texas 76065
 P: 972-351-7550
 www.ruslaquay@yahoo.com

ARCHITECTURE
 PLANNING
 INTERIOR DESIGN



**NORTHWOOD CHURCH
 RENOVATIONS**
 1870 RUFÉ SNOW DR.
 KELLER, TEXAS 76248

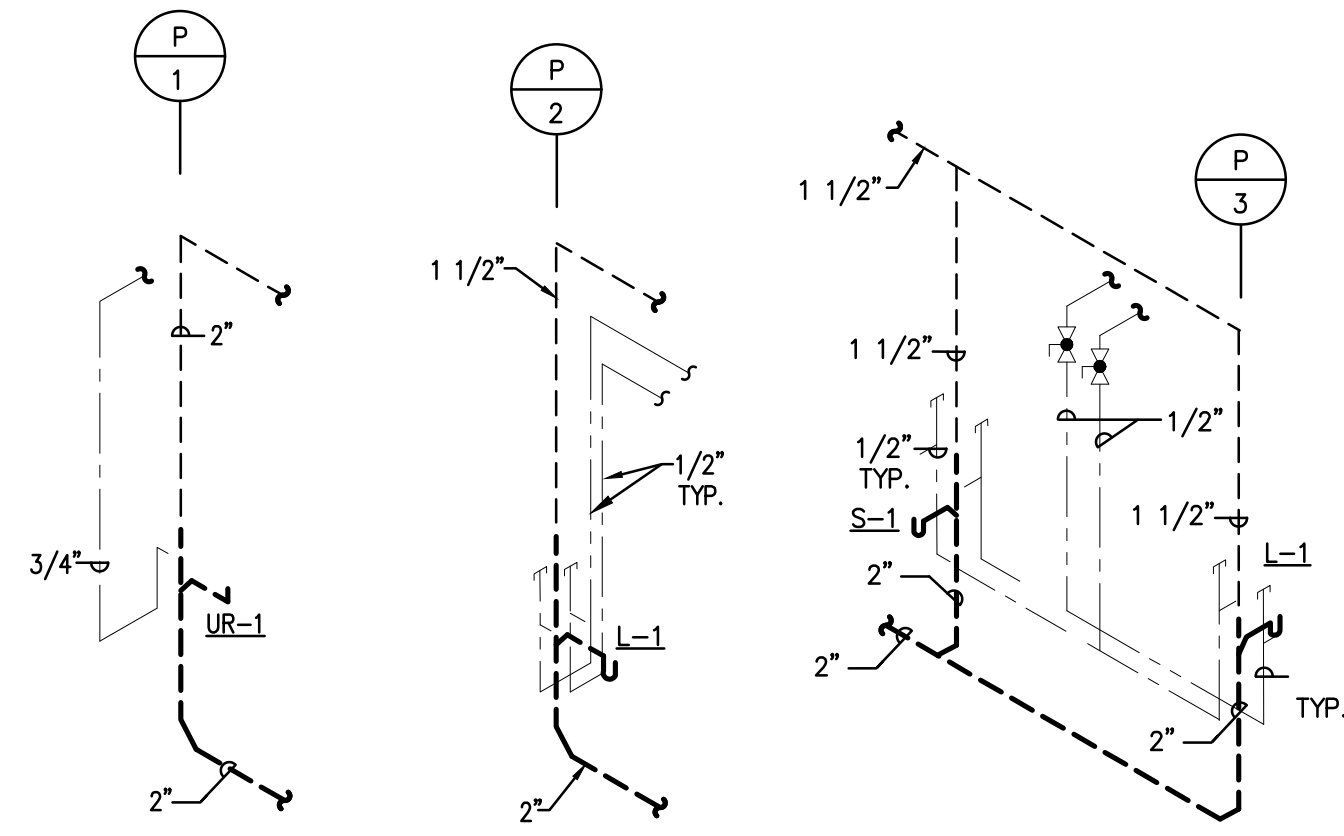


DATE: 02-14-25
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 CITY PLAN REVIEW

SHEET TITLE:
 GENERAL PLUMBING NOTES

P0.1

1300 WEST RANDOL MILL ROAD, ARLINGTON, TEXAS 76012
 817.801.7200
 www.gfila-inc.com



PLUMBING RISERS
 SCALE: NOT TO SCALE

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE											
ITEM ID	EQUIP. & FIXTURES	MFG./ MODEL #	CONNECTION DATA						REMARKS		
			S O I L	V E N T	T R A P	INDIRECT WASTE	WATER				
								CW	HW	TW	
TMV	THERMOSTATIC MIXING VALVE	LAWLER/ 570	-	-	-	-	-	1/2"	1/2"	1/2"	BRONZE BODY MIXING VALVE, TEMPERATURE SET FOR 110°F. MAX.
S-1	SINGLE COMPARTMENT ADA COUNTERTOP SINK	ELKAY/ LRAD181855	1 1/2"	1 1/2"	1 1/2"	-	-	1/2"	1/2"	-	20 GA 18"x18" X 5.5" DEEP 20 GAUGE STAINLESS SINK DUAL HANDLE DECK MOUNTED FAUCET, ELKAY #LK-2452BH 2 GPM. DRAIN: ELKAY LK35 ADJUSTABLE TRAP WITH CLEANOUT PLUG AND WALL FLANGE, MCGUIRE #8912.
L-1	LAVATORY ADATAS	AMERICAN STANDARD/ AQUALYN - 0476.028	2"	1 1/2"	1 1/2"	-	-	1/2"	-	1/2"	VITREOUS CHINA SELF RIMMING LAVATORY, FRONT OVERFLOW. FURNISH COMPLETE WITH AMERICAN STANDARD 5502.140 LAVATORY FAUCET, OFFSET TAILPIECE MCGUIRE CHROME SUPPLIES AND LOOSE KEY ANGLE STOPS. 1/2"x1/2" C.P. 17 GAUGE ADJUSTABLE P-TRAP WITH CLEANOUT AND CHROME SET SCREW ESCUTCHEONS THROUGH WALL. INSULATE ALL EXPOSED PIPING WITH "TRUBRO LAV-GAURD" INSULATION KIT NO. 101. INSTALLATION SHALL COMPLY WITH ALL ADA REQUIREMENTS FOR MOUNTING HEIGHTS AND CLEARANCES.
UR-1	URINAL	AMERICAN STANDARD/ ALLBROOK 6541.132	2"	2"	-	-	-	3/4"	-	-	VITREOUS CHINA WHITE WALL HUNG URINAL WITH SIPHON JET FLUSH, SLOAN OPTIMA 8186-10 BATTERY POWERED FLUSHOMETER, JOSAM SERIES 17560-UR URINAL CHAIR CARRIER.

- NOTES:
 1. PROVIDE 17 GA. 1 1/2" ADJUSTABLE P-TRAP & ANGLE STOPS.
 2. PROVIDE HANDI LAV-GUARD INSULATION KITS ON TRAP AND HOT AND COLD WATER PIPING TO MEET ADA REQUIREMENTS (WHERE REQUIRED) AT ALL HANDICAP LAVATORIES.
 3. WATER CLOSET HANDLES TO BE OPPOSITE SIDE FROM GRAB BARS.
 4. REFER TO ARCHITECTURAL SHEETS FOR FIXTURE MOUNTING HEIGHTS.

GENERAL NOTES:

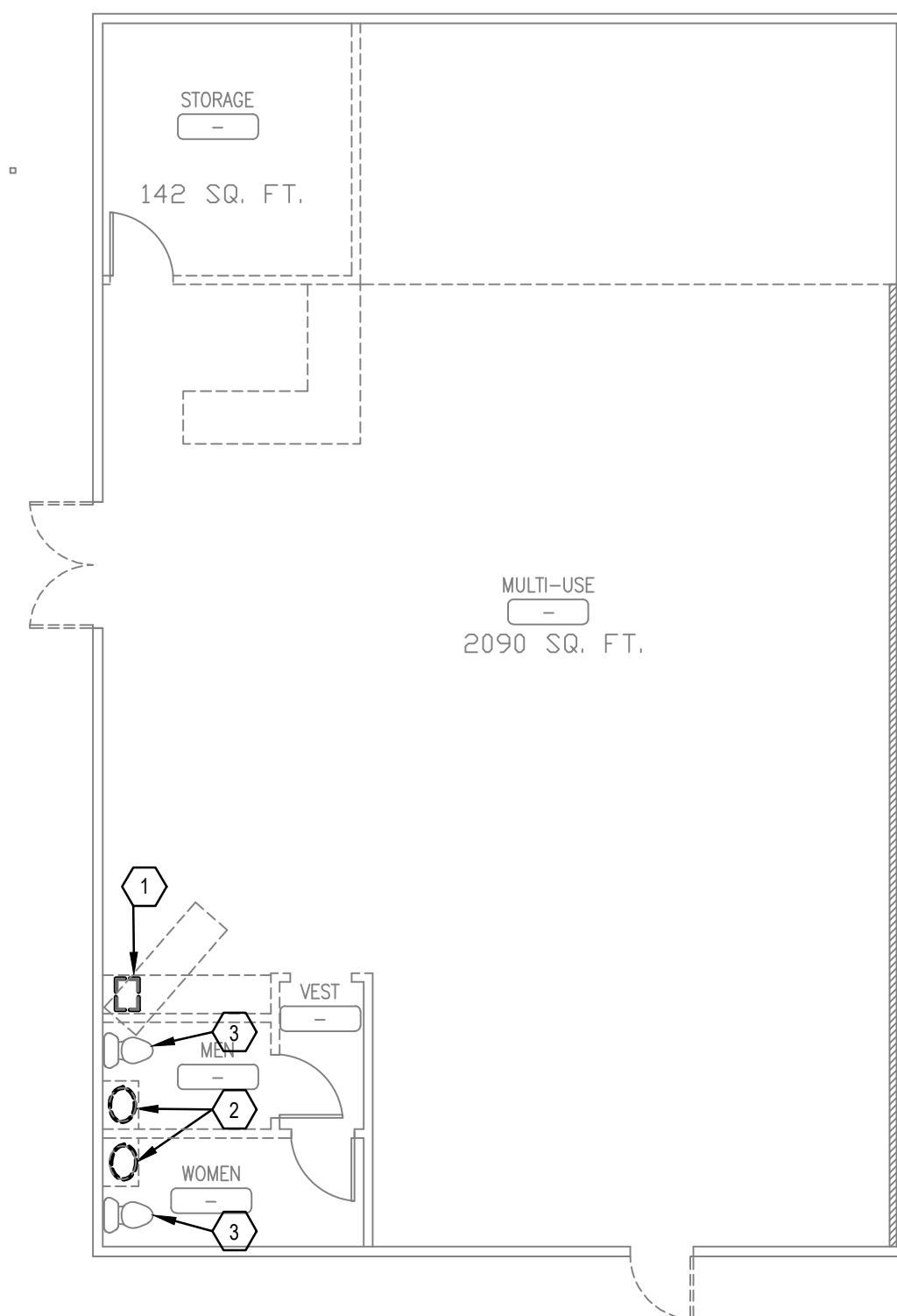
- ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
- ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
- ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
- ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
- REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.

NOTE BY SYMBOL:

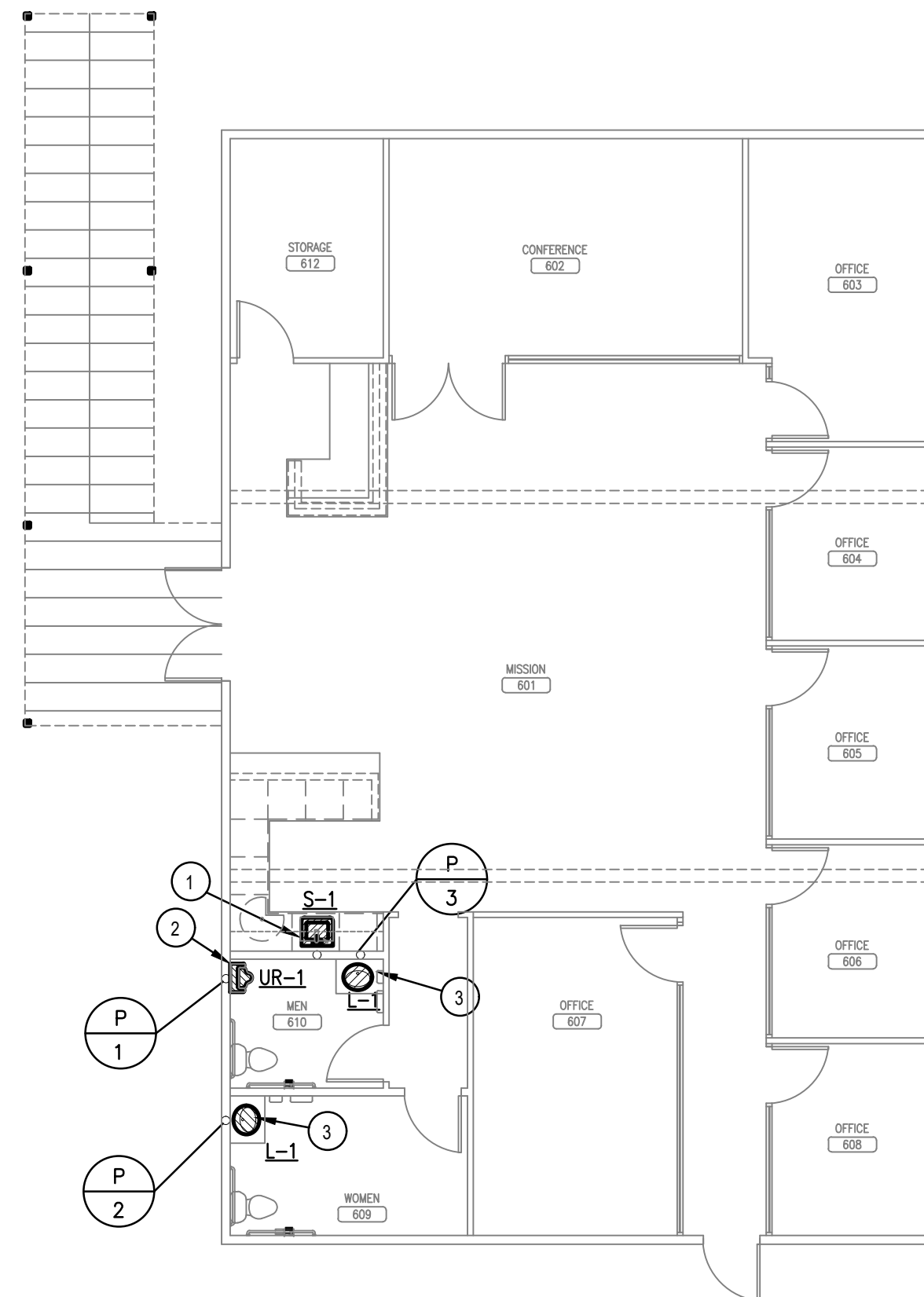
- RUN NEW 2" SEWER LINE FROM SINK OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN. SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 1/2" CW & HW LINES TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
- RUN NEW 2" SEWER LINE FROM URINAL OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN. SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 3/4" CW LINE TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
- RUN NEW 2" SEWER LINE FROM LAVATORY OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN. SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 1/2" CW & HW LINES TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.

DEMOLITION NOTE BY SYMBOL:

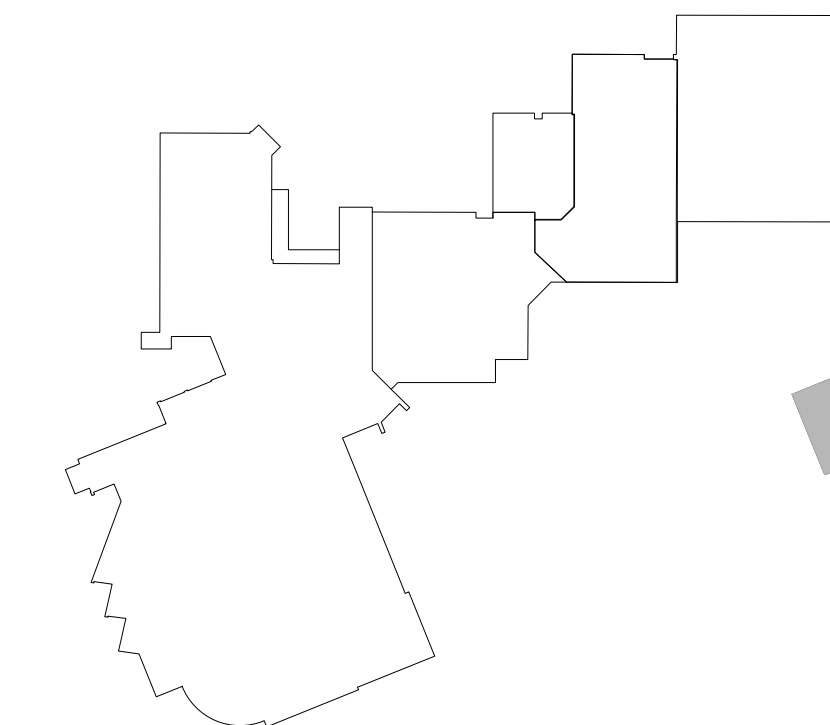
- DEMO EXISTING SINK, CAP AND SEAL CW, HW AND VENT PIPING FOR RE-USE.
- DEMO EXISTING LAVATORY, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE IN WALL.
- WATER CLOSET TO REMAIN AS IS.



PHASE 1 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



PHASE 1 FLOOR PLAN - PLUMBING
 NORTH SCALE: 1/8"=1'-0"



KEY PLAN
 NORTH



DATE: 02-14-25
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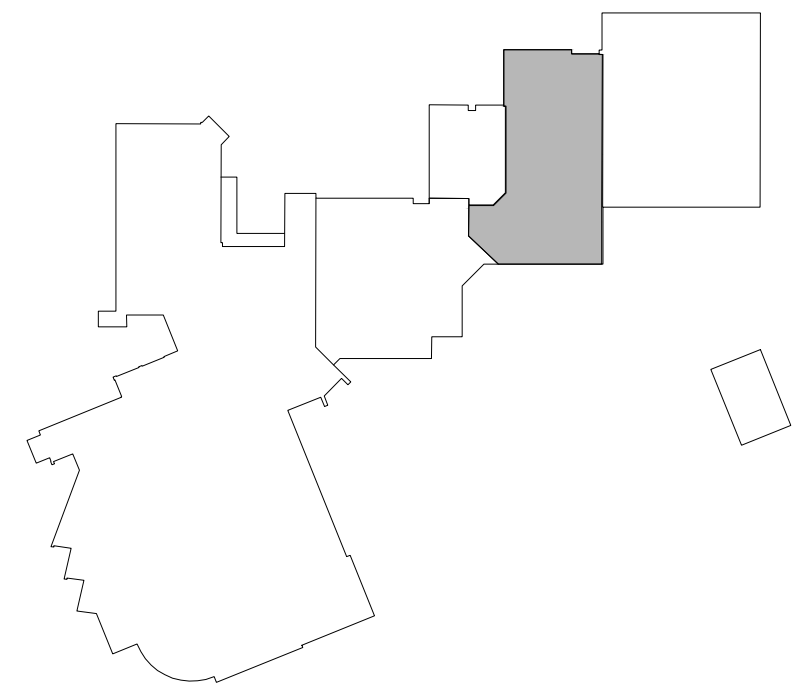
SHEET TITLE:
 PHASE 2 FLOOR PLAN - PLUMBING
 DEMOLITION

P2.1

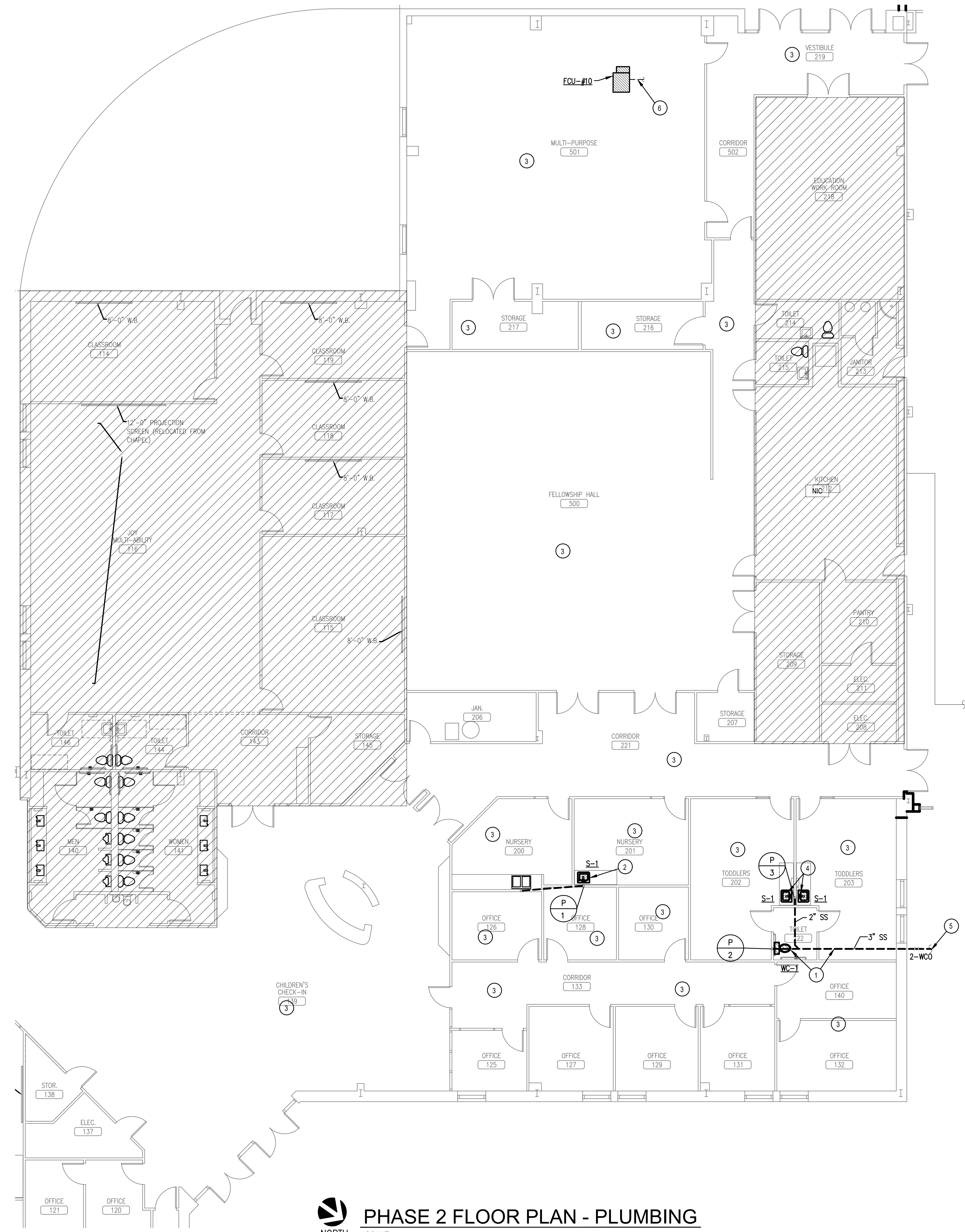


PHASE 2 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

NOTE BY SYMBOL: 'O'
 1. EXISTING SINK TO REMAIN AS IS.
 2. EXISTING MOP SINK TO REMAIN AS IS.
 3. EXISTING WATER HEATER TO REMAIN AS IS.

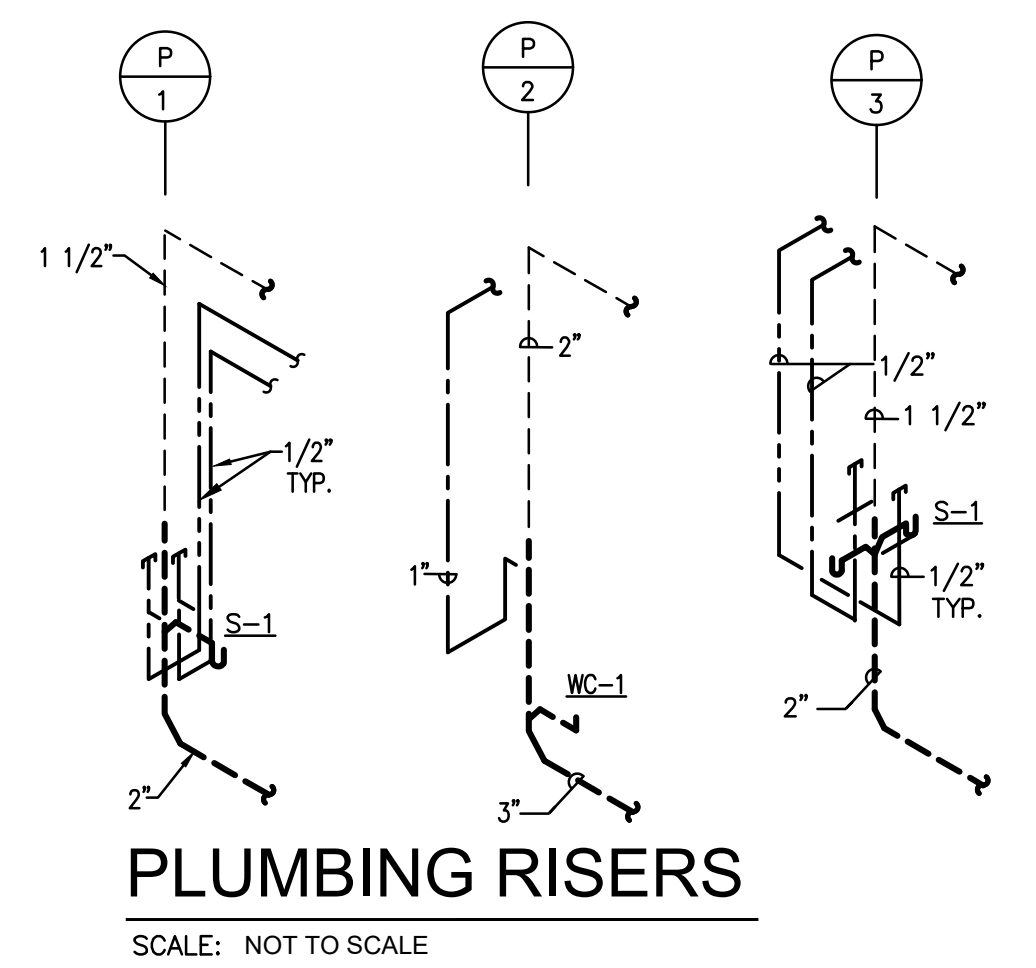


KEY PLAN
 NORTH



PLUMBING FIXTURE AND EQUIPMENT SCHEDULE									
FIXTURE DATA			CONNECTION DATA				REMARKS		
ITEM ID	EQUIP. & FIXTURES	MFG./ MODEL #	S O I L	V E N T	T R A P	INDIRECT WASTE		WATER	
							CW HW TW		
TMV	THERMOSTATIC MIXING VALVE	LAWLER/ 570	-	-	-	-	1/2" 1/2" 1/2"	BRONZE BODY MIXING VALVE, TEMPERATURE SET FOR 110°F. MAX.	
GCO	EXTERIOR GRADE CLEANOUT	JOSAM/ 58680-CO4	-	-	-	-	- - -	PROVIDE WITH 4" NO-HUB CLEANOUT. INSTALL IN 4" THICK CONCRETE PAD.	
FCO	FLOOR CLEANOUT	JOSAM/ 56003-22	-	-	-	-	- - -	CAST IRON FLOOR CLEANOUT WITH BRASS TOP.	
FD-1	FLOOR DRAIN	JOSAM/ 30003-5A	3"	2"	3"	-	- - -	REST ROOM FLOOR DRAIN, WITH CHROME STRAINER	
S-1	SINGLE COMPARTMENT ADA COUNTERTOP SINK	ELKAY/ LRAD181855	2"	1 1/2"	1 1/2"	-	1/2" 1/2" 1/2"	20 GA 18"x18" X 5.5" DEEP 20 GAUGE STAINLESS SINK DUAL HANDLE DECK MOUNTED FAUCET, ELKAY #LK2452B1/2 GPM DRAIN, ELKAY LK35 ADJUSTABLE TRAP WITH CLEANOUT PLUG AND WALL FLANGE, MCGUIRE #8912.	
WC-1	ADULT WATER CLOSET	AMERICAN STANDARD MADERA 2234.001	4"	2"	-	-	1" - -	VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHOMETER, WATER CLOSET WITH 15" HIGH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, COLOR WHITE.	

- NOTES:
 1. PROVIDE 17 GA. 11#4" ADJUSTABLE P-TRAP & ANGLE STOPS.
 2. PROVIDE HANDI LAV-GUARD INSULATION KITS ON TRAP AND HOT AND COLD WATER PIPING TO MEET ADA REQUIREMENTS (WHERE REQUIRED) AT ALL HANDICAP LAVATORIES.
 3. WATER CLOSET HANDLES TO BE OPPOSITE SIDE FROM GRAB BARS.
 4. REFER TO ARCHITECTURAL SHEETS FOR FIXTURE MOUNTING HEIGHTS.



- GENERAL NOTES:**
- ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
 - ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
 - ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
 - ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
 - REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
 - ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.

- FIRE SPRINKLER NOTES:**
- PROVIDE CLASSROOMS, LOBBIES, AND OTHER LIGHT HAZARD AREAS WITH A DENSITY OF 0.10 G.P.M./SQ. FT. OVER THE MOST REMOTE 1500 SQ. FT. A 250 G.P.M. HOSE ALLOWANCE IS TO BE ADDED TO THE HYDRAULIC CALCULATIONS. SPRINKLE PER NATIONAL FIRE CODE, NFPA 13 AND INTERNATIONAL FIRE CODE.
 - PROVIDE JANITOR'S CLOSETS AND MECHANICAL ROOMS AND OTHER ORDINARY GR.1 HAZARD AREAS WITH A DENSITY OF 0.16 G.P.M./SQ. FT.
 - FINAL LOCATION OF SPRINKLERS SHALL BE DETERMINED UPON SHOP DRAWING REVIEW.
 - PROVIDE INSPECTOR'S TEST CONNECTION AT MOST REMOTE AREA.
 - FIRE SPRINKLER WORK SHALL BE DONE BY LICENSED SPRINKLER CONTRACTOR, PER ALL LOCAL AND NFPA CODES.

- NOTE BY SYMBOL: 'O'
- RUN NEW 3" SEWER LINE FROM WATER CLOSET OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN, SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 1/2" CW LINE TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
 - RUN NEW 2" SEWER LINE FROM SINK OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN, SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 1/2" CW & HW LINES TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
 - MODIFY EXISTING FIRE SPRINKLER SYSTEM AS NEEDED FOR NEW WALL AND CEILING INSTALLATION.
 - RUN NEW 2" SEWER LINE FROM LAVATORIES OVER AND CONNECT TO EXISTING SEWER MAIN, SAW CUT AND REPLACE CONCRETE AS NEEDED. CONNECT 1/2" CW & HW LINES TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
 - RUN NEW 3" SEWER LINE OVER UNDERGROUND AND CONNECT TO EXISTING MAIN LINE, FIELD VERIFY FOR LOCATION AND DEPTH OF MAIN TO CONNECT TO.
 - RUN NEW 3/4" GAS LINE OVER AND CONNECT TO EXISTING MAIN, AS HIGH AS POSSIBLE. FIELD VERIFY FOR LOCATION OF EXISTING MAIN IN JOIST SPACE TO CONNECT TO.

PHASE 2 FLOOR PLAN - PLUMBING
 NORTH SCALE: 1/8"=1'-0"

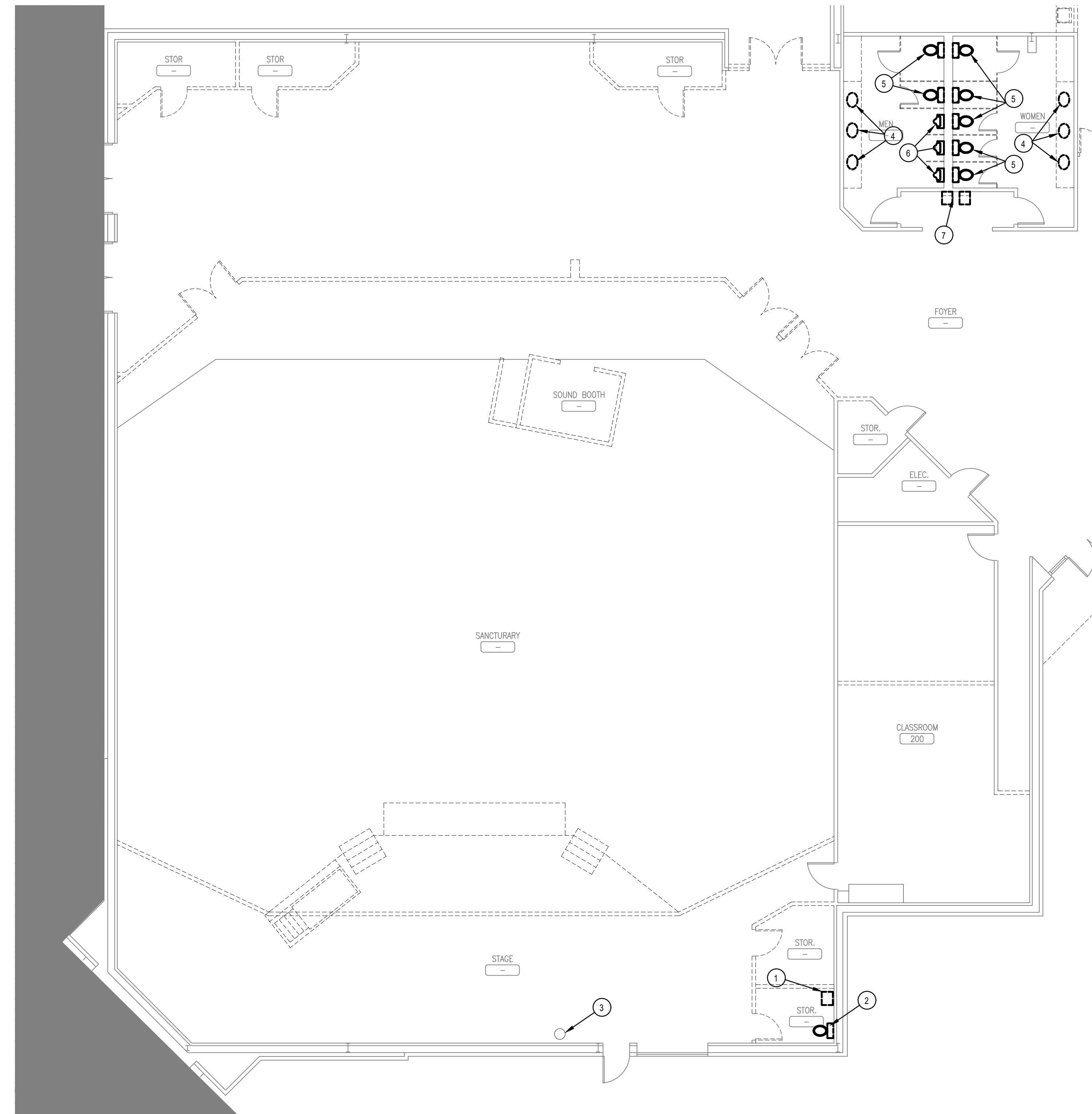
KEY PLAN
 NORTH



DATE: 02-14-25
 ISSUE:
 CITY PLAN REVIEW

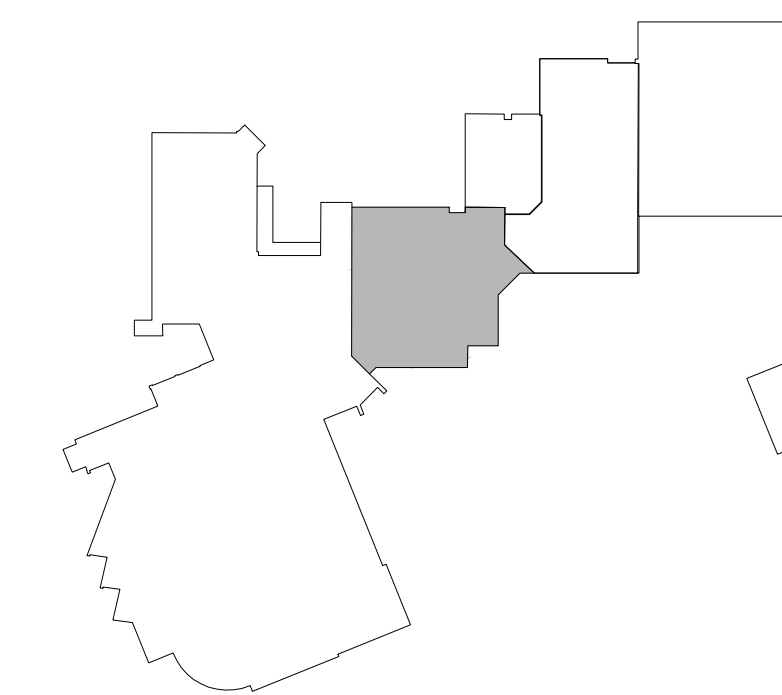
SHEET TITLE:
 PHASE 3 FLOOR
 PLAN - PLUMBING
 DEMOLITION

P3.1



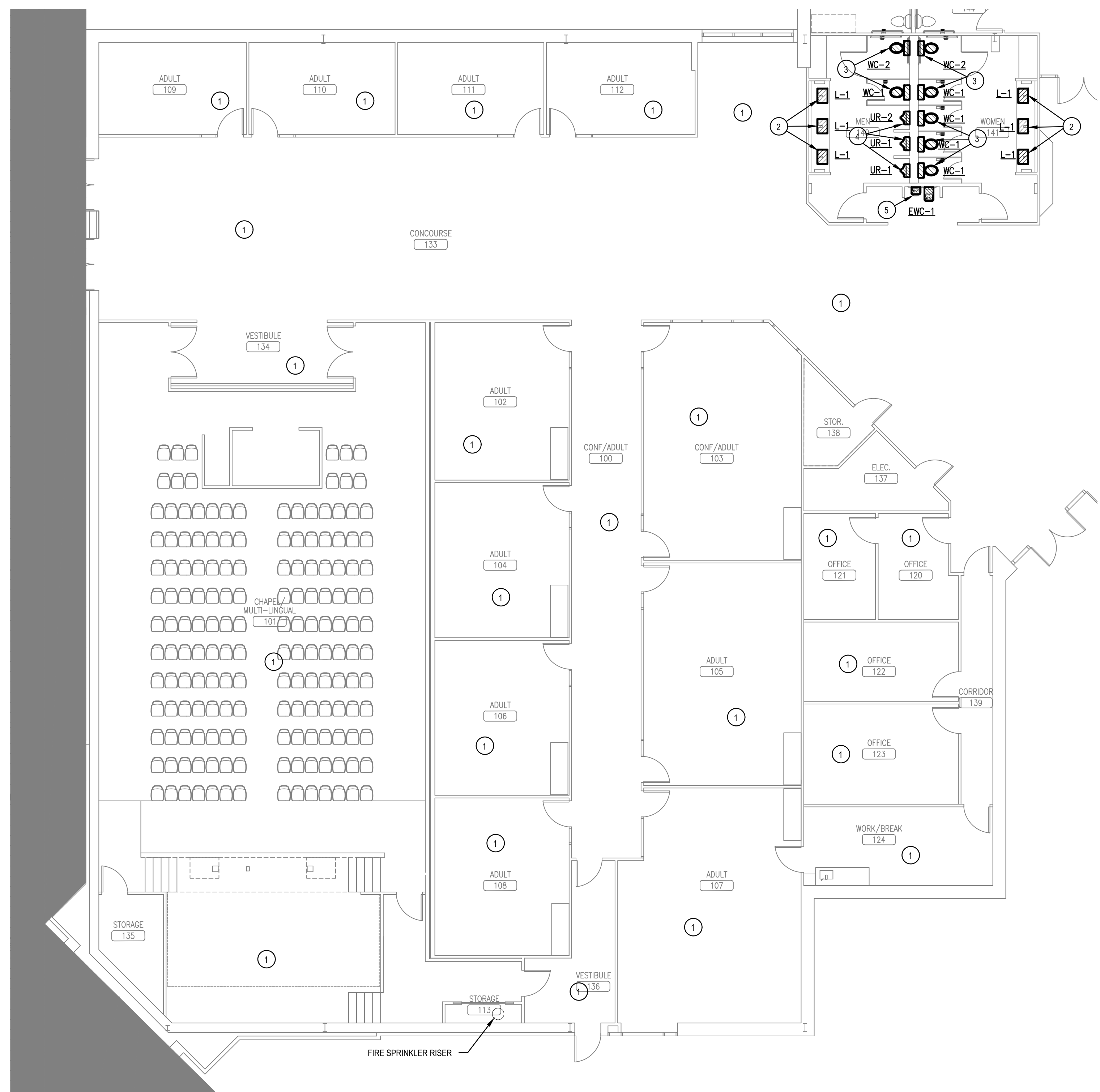
NOTE BY SYMBOL: 'O'

1. DEMO EXISTING SINK, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.
2. DEMO EXISTING WATER CLOSET, CAP AND SEAL CW, AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.
3. EXISTING FIRE SPRINKLER RISER TO REMAIN AS IS.
4. DEMO EXISTING LAVATORY, CAP AND SEAL CW, HW AND VENT PIPING FOR RE-USE. CAP AND SEAL SAN. SEWER LINE FOR RE-USE.
5. DEMO EXISTING WATER CLOSET, CAP AND SEAL CW, AND VENT PIPING FOR RE-USE. CAP AND SEAL SAN. SEWER LINE FOR RE-USE.
6. DEMO EXISTING URINAL, CAP AND SEAL CW AND VENT PIPING FOR RE-USE. CAP AND SEAL SAN. SEWER LINE FOR RE-USE.
7. DEMO EXISTING EWC, CAP AND SEAL CW, AND VENT PIPING FOR RE-USE. CAP AND SEAL SAN. SEWER LINE FOR RE-USE.



KEY PLAN
 NORTH

PHASE 3 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



PLUMBING FIXTURE AND EQUIPMENT SCHEDULE											
ITEM ID	FIXTURE DATA	EQUIP. & FIXTURES	MFG./ MODEL #	S O I L	V E N T	T R A P	INDIRECT WASTE	CONNECTION DATA			REMARKS
								CW	HW	TW	
TMV	THERMOSTATIC MIXING VALVE	LAWLER/ 570		-	-	-	-	1/2"	1/2"	1/2"	BRONZE BODY MIXING VALVE. TEMPERATURE SET FOR 110°F. MAX.
L-1	HANDICAPPED LAVATORY ADA/TAS	RUVA/TI RVH6110		2"	1 1/2"	1 1/4"	-	1/2"	-	1/2"	18 GAUGE STAINLESS STEEL, 21"x15"x6" UNDERMOUNT LAVATORY. KOHLER FAUCET K-13486, TOUCHLESS SENSOR, SINGLE HOLE, OFFSET TAILPIECE MCGUIRE CHROME SUPPLIES, LOOSE KEY ANGLE STOPS, 1/2"x2" C.P. 17 GAUGE ADJUSTABLE P-TRAP WITH CLEANOUT AND CHROME SET SCREW ESCUTCHEONS THROUGH WALL. TRUBRO LAV-GAURD* INSULATION KIT NO. 101. INSTALLATION SHALL COMPLY WITH ADA REQUIREMENTS
WC-1	ADULT WATER CLOSET	AMERICAN STANDARD MADERA 2234.001		4"	2"	-	-	1"	-	-	VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHOMETER, WATER CLOSET WITH 15" HIGH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, COLOR WHITE.
WC-2	WATER CLOSET ADA/TAS	AMERICAN STANDARD MADERA 3043.001		3"	2"	-	-	1"	-	-	HANDICAPPED VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHOMETER, WATER CLOSET WITH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, WITH HANDLE TO BE ON OPPOSITE SIDE FROM SIDE WALL GRAB BAR, COLOR WHITE.
UR-1	URINAL	AMERICAN STANDARD/ WASHBROOK 6590.001		2"	2"	-	-	3/4"	-	-	VITREOUS CHINA WHITE WALL HUNG URINAL WITH SIPHON JET FLUSH, BATTERY POWERED SELECTRONIC FLUSH VALVE, JOSAM SERIES 17560-UR URINAL CHAIR CARRIER, COLOR WHITE.
UR-2	URINAL ADA/TAS	AMERICAN STANDARD/ WASHBROOK 6590.001		2"	2"	-	-	3/4"	-	-	SAME AS UR-1, MOUNTED AT ADA HEIGHT.
EWC-1	ELEC. WATER COOLER	ELKAY/ LZSTLWSSP		2"	1 1/2"	2"	-	1/2"	-	-	BI-LEVEL ADA COMPLIANT SWIRL FLO WATER COOLER, BOTTLE FILLING STATION, WITH STAINLESS STEEL FINISH.

- NOTES:
1. PROVIDE 17 GA. 11#4" ADJUSTABLE P-TRAP & ANGLE STOPS.
 2. PROVIDE HANDI LAV-GUARD INSULATION KITS ON TRAP AND HOT AND COLD WATER PIPING TO MEET ADA REQUIREMENTS (WHERE REQUIRED) AT ALL HANDICAP LAVATORIES.
 3. WATER CLOSET HANDLES TO BE OPPOSITE SIDE FROM GRAB BARS.
 4. REFER TO ARCHITECTURAL SHEETS FOR FIXTURE MOUNTING HEIGHTS.

GENERAL NOTES:

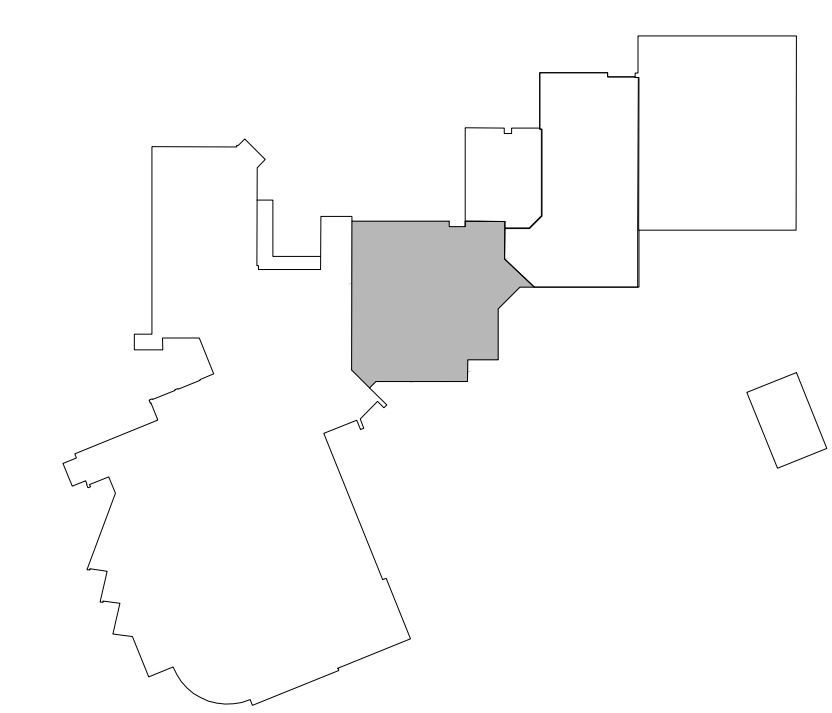
1. ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
2. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
3. ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
4. ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
5. REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
6. ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.

NOTE BY SYMBOL: 'O'

1. MODIFY EXISTING FIRE SPRINKLER SYSTEM AS NEEDED FOR NEW WALL AND CEILING INSTALLATION.
2. NEW LAVATORY SHALL CONNECT TO EXISTING CW, HW, SEWER AND VENT LINES IN THIS AREA, MODIFY PIPING AS REQUIRED FOR NEW FIXTURES.
3. NEW WATER CLOSET SHALL CONNECT TO EXISTING CW, SEWER AND VENT LINES IN THIS AREA, MODIFY PIPING AS REQUIRED FOR NEW FIXTURES.
4. NEW URINAL SHALL CONNECT TO EXISTING CW, SEWER AND VENT LINES IN THIS AREA, MODIFY PIPING AS REQUIRED FOR NEW FIXTURES.
5. NEW EWC SHALL CONNECT TO EXISTING CW, SEWER AND VENT LINES IN THIS AREA, MODIFY PIPING AS REQUIRED FOR NEW FIXTURES.

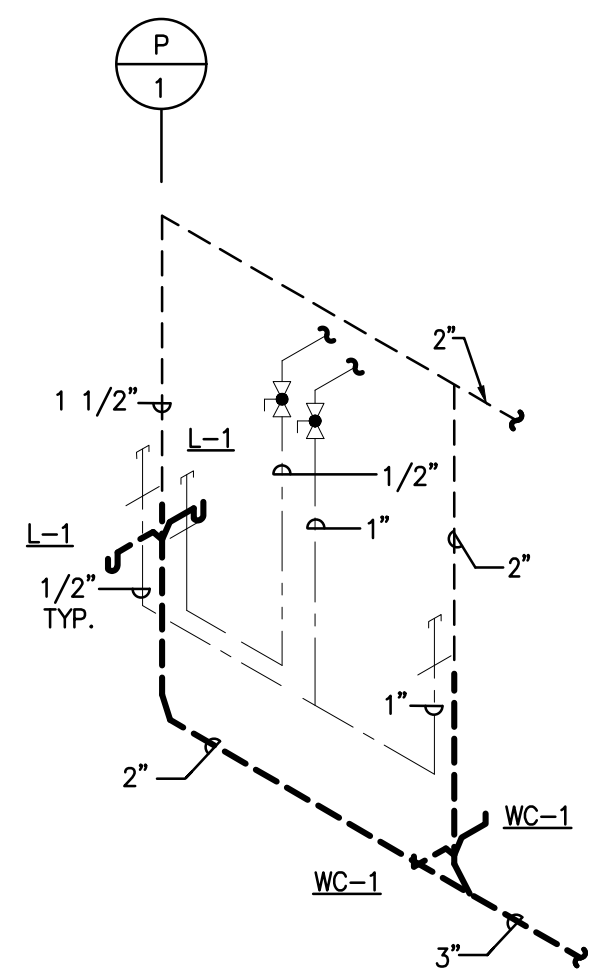
FIRE SPRINKLER NOTES:

1. PROVIDE CLASSROOMS, LOBBIES, AND OTHER LIGHT HAZARD AREAS WITH A DENSITY OF 0.10 G.P.M./SQ. FT. OVER THE MOST REMOTE 1500 SQ. FT. A 250 G.P.M. HOSE ALLOWANCE IS TO BE ADDED TO THE HYDRAULIC CALCULATIONS. SPRINKLE PER NATIONAL FIRE CODE, NFPA 13 AND INTERNATIONAL FIRE CODE.
2. PROVIDE JANITOR'S CLOSETS AND MECHANICAL ROOMS AND OTHER ORDINARY GR.1 HAZARD AREAS WITH A DENSITY OF 0.16 G.P.M./SQ. FT.
3. FINAL LOCATION OF SPRINKLERS SHALL BE DETERMINED UPON SHOP DRAWING REVIEW.
4. PROVIDE INSPECTOR'S TEST CONNECTION AT MOST REMOTE AREA.
5. FIRE SPRINKLER WORK SHALL BE DONE BY LICENSED SPRINKLER CONTRACTOR, PER ALL LOCAL AND NFPA CODES.



PHASE 3 FLOOR PLAN - PLUMBING
NORTH SCALE: 1/8"=1'-0"

KEY PLAN
NORTH



PLUMBING RISERS

SCALE: NOT TO SCALE

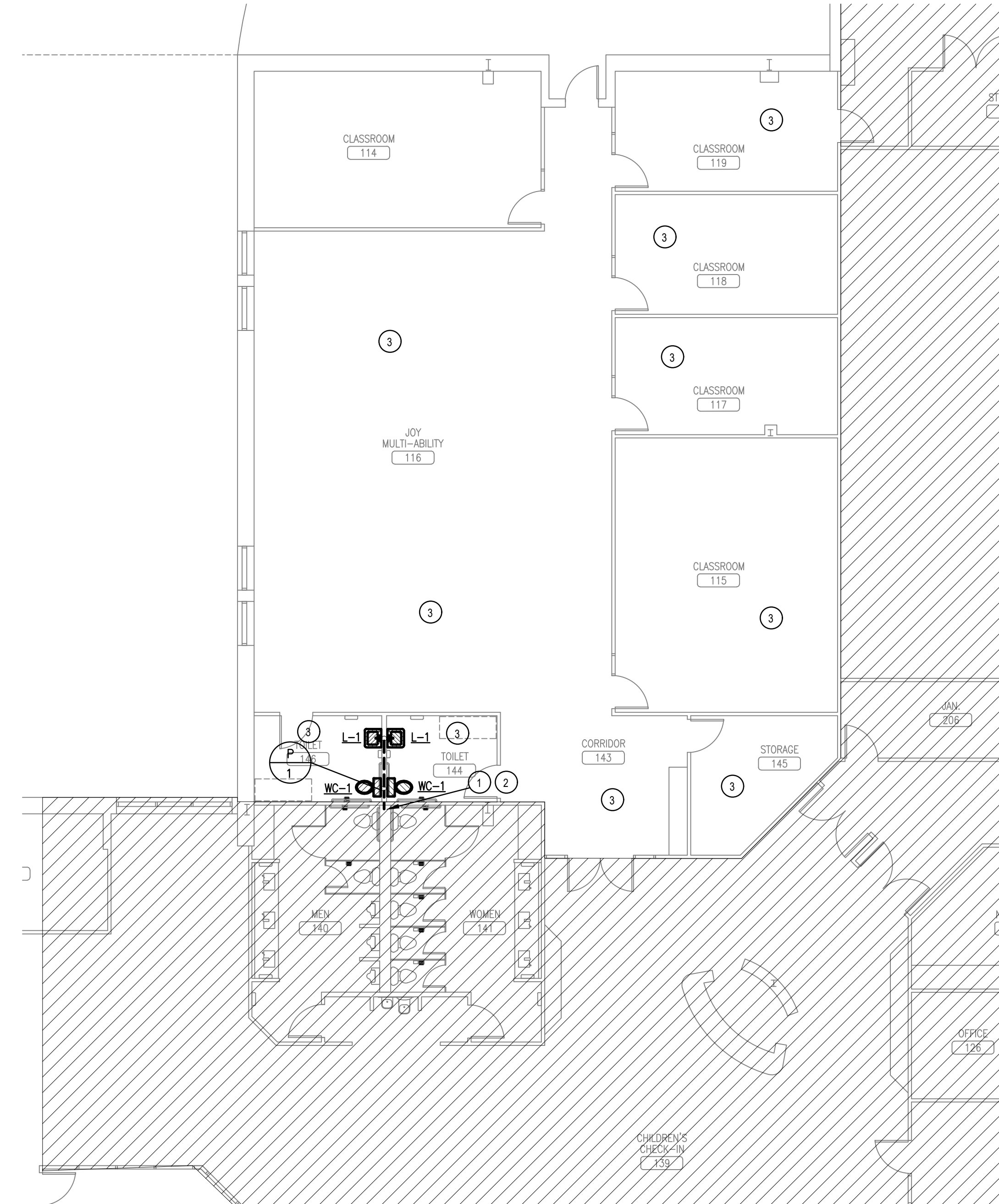
PLUMBING FIXTURE AND EQUIPMENT SCHEDULE										
ITEM ID	FIXTURE DATA		CONNECTION DATA					REMARKS		
	EQUIP. & FIXTURES	MFG./ MODEL #	S O I L	V E N T	T R A P	INDIRECT WASTE	WATER			
							CW	HW	TW	
TMV	THERMOSTATIC MIXING VALVE	LAWLER/ 570	-	-	-	-	1/2"	1/2"	1/2"	BRONZE BODY MIXING VALVE, TEMPERATURE SET FOR 110°F. MAX.
L-1	HANDICAPPED LAVATORY ADATAS	AMERICAN STANDARD/ LUCERNE 0356.921	2"	1 1/2"	1 1/2"	-	1/2"	-	1/2"	VITREOUS CHINA WALL HUNG, SINGLE HOLE LAVATORY FOR CONCEALED ARM SUPPORT (JOSAM 17100), KOHLER FAUCET K-13466, TOUCHLESS SENSOR, OFFSET TAILPIECE MCGUIRE CHROME SUPPLIES, LOOSE KEY ANGLE STOPS, 1/2" C.P. 17 GAUGE ADJUSTABLE P-TRAP WITH CLEANOUT AND CHROME SET SCREW ESCUTCHEONS THROUGH WALL, "TRUBRO LAV-GAURD" INSULATION KIT NO. 101. INSTALLATION SHALL COMPLY WITH ADA REQUIREMENTS
WC-1	WATER CLOSET ADATAS	AMERICAN STANDARD/ MADERA 3043.660	3"	2"	-	-	1"	-	-	HANDICAPPED VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHMETER, WATER CLOSET WITH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, WITH HANDLE TO BE ON OPPOSITE SIDE FROM SIDE WALL GRAB BAR, COLOR: WHITE.

- NOTES:
1. PROVIDE 17 GA. 1 1/4" ADJUSTABLE P-TRAP & ANGLE STOPS.
 2. PROVIDE HANDI LAV-GUARD INSULATION KITS ON TRAP AND HOT AND COLD WATER PIPING TO MEET ADA REQUIREMENTS (WHERE REQUIRED) AT ALL HANDICAP LAVATORIES.
 3. WATER CLOSET HANDLES TO BE OPPOSITE SIDE FROM GRAB BARS.
 4. REFER TO ARCHITECTURAL SHEETS FOR FIXTURE MOUNTING HEIGHTS.

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PHASE 4 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



PHASE 4 FLOOR PLAN - PLUMBING
 NORTH SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
2. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
3. ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
4. ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
5. REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
6. ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.

DEMOLITION NOTE BY SYMBOL:

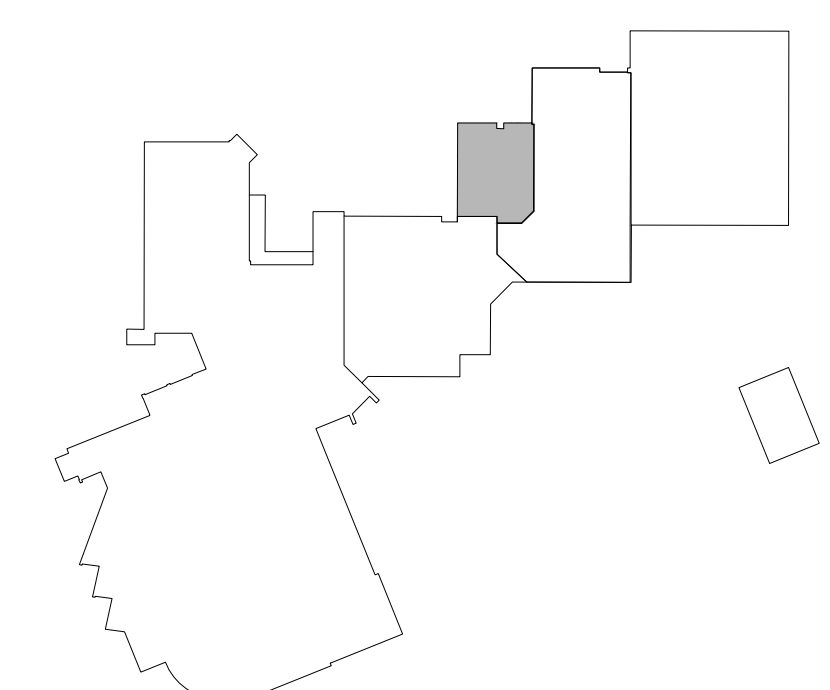
- 1 DEMO EXISTING SINK, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING, CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.
- 2 DEMO EXISTING WATER CLOSET, CAP AND SEAL CW, AND VENT PIPING ABOVE CEILING, CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.

NOTE BY SYMBOL:

- 1 RUN NEW 3" SEWER LINE FROM WATER CLOSET OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN. SAW CUT AND REPLACE CONCRETE AS NEEDED.
- 2 RUN NEW 1/2" CW & HW LINES OVER TO EXISTING LINES, FIELD VERIFY LOCATION OF CONNECTION.
- 3 MODIFY EXISTING FIRE SPRINKLER SYSTEM AS NEEDED FOR NEW WALL AND CEILING INSTALLATION.

FIRE SPRINKLER NOTES:

1. PROVIDE CLASSROOMS, LOBBIES, AND OTHER LIGHT HAZARD AREAS WITH A DENSITY OF 0.10 G.P.M./SQ. FT. OVER THE MOST REMOTE 1500 SQ. FT. A 250 G.P.M. HOSE ALLOWANCE IS TO BE ADDED TO THE HYDRAULIC CALCULATIONS. SPRINKLE PER NATIONAL FIRE CODE, NFPA 13 AND INTERNATIONAL FIRE CODE.
2. PROVIDE JANITOR'S CLOSETS AND MECHANICAL ROOMS AND OTHER ORDINARY GR.1 HAZARD AREAS WITH A DENSITY OF 0.16 G.P.M./SQ. FT.
3. FINAL LOCATION OF SPRINKLERS SHALL BE DETERMINED UPON SHOP DRAWING REVIEW.
4. PROVIDE INSPECTOR'S TEST CONNECTION AT MOST REMOTE AREA.
5. FIRE SPRINKLER WORK SHALL BE DONE BY LICENSED SPRINKLER CONTRACTOR, PER ALL LOCAL AND NFPA CODES.



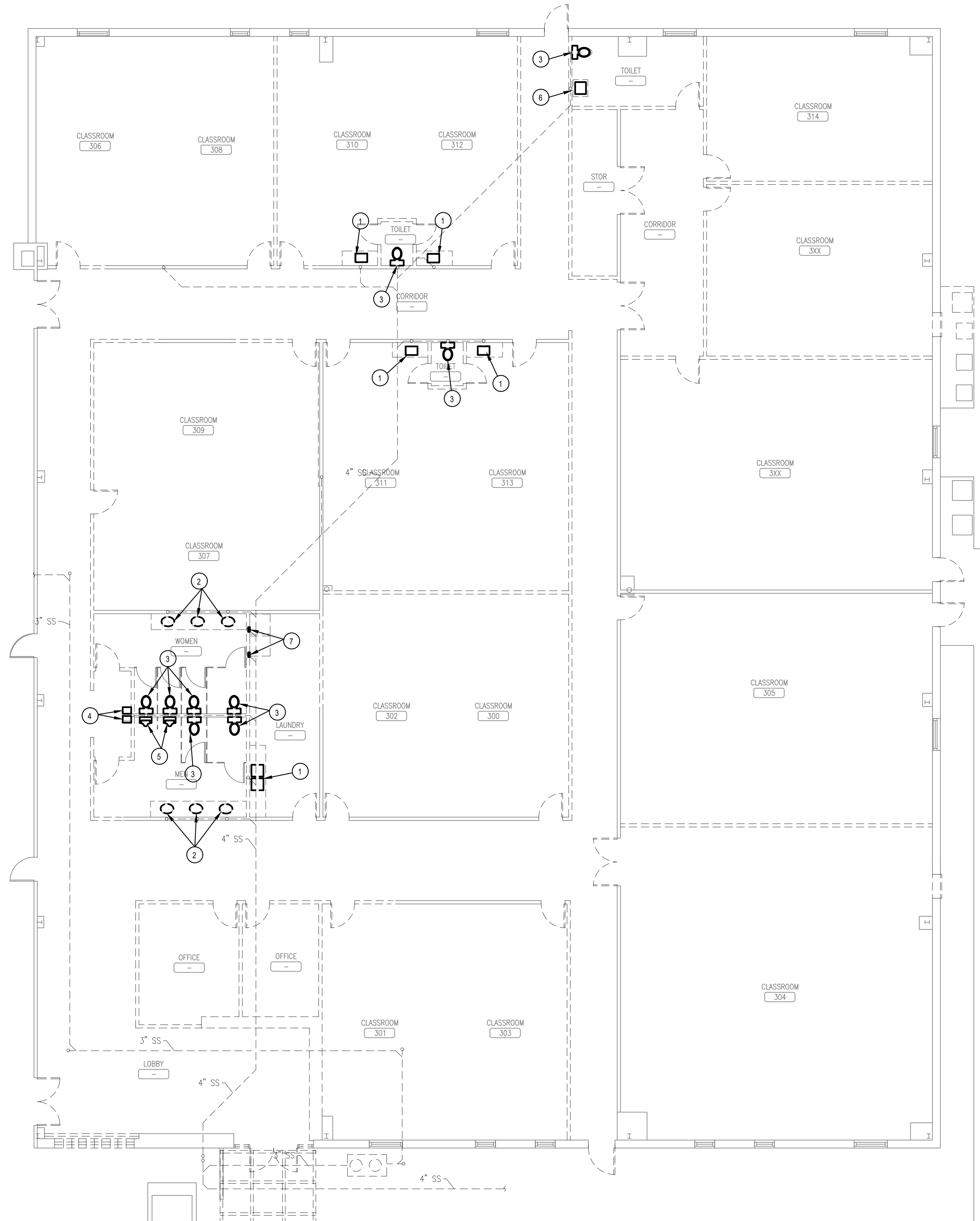
KEY PLAN
 NORTH

Russell A. Laquay

 2/14/2025

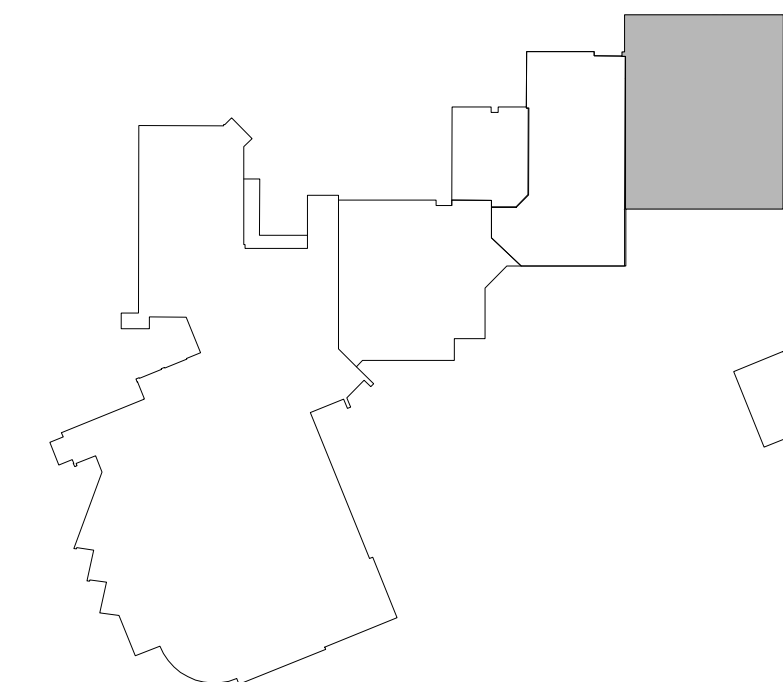
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SHEET TITLE:
 PHASE 4 FLOOR
 PLAN - PLUMBING
 DEMOLITION



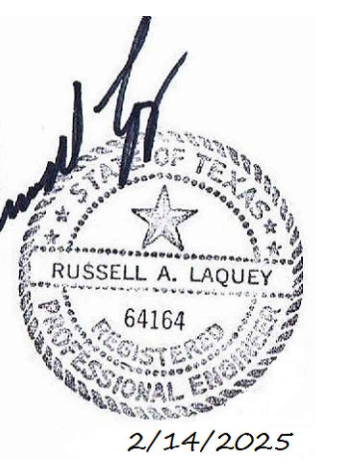
NOTE BY SYMBOL: 'O'

1. DEMO EXISTING SINK, CAP AND SEAL SEWER LINE, CW, HW AND VENT PIPING ABOVE CEILING AND BELOW FLOOR.
2. DEMO EXISTING LAVATORY, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE IN WALL.
3. DEMO EXISTING WATER CLOSET, CAP AND SEAL CW, AND VENT PIPING FOR RE-USE. CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.
4. DEMO EXISTING EWC, CAP AND SEAL CW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE IN WALL.
5. DEMO EXISTING URINAL, CAP AND SEAL CW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE IN WALL.
6. DEMO EXISTING LAVATORY, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.
7. DEMO EXISTING CLOTHES WASHER BOX, CAP AND SEAL CW, HW AND VENT PIPING ABOVE CEILING. CAP AND SEAL SAN. SEWER LINE BELOW FLOOR.



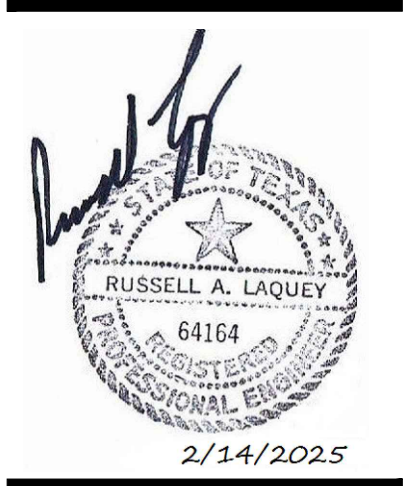
KEY PLAN
 NORTH

PHASE 5 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"



DATE: 02-14-25
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SHEET TITLE:
 PHASE 5 FLOOR
 PLAN - PLUMBING
 DEMOLITION



DATE: 02-14-25
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SHEET TITLE:
 PHASE 5 FLOOR
 PLAN - PLUMBING

P5.2



GENERAL NOTES:

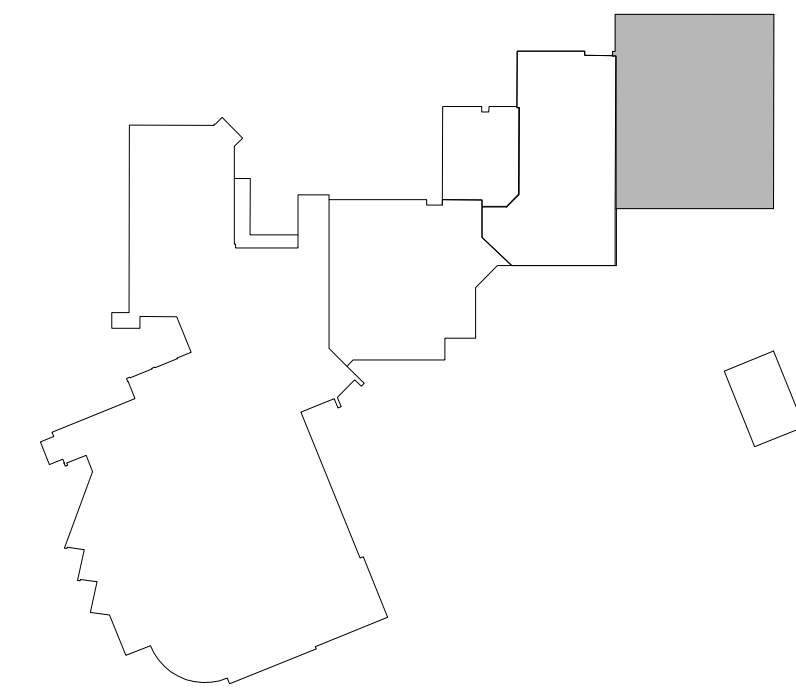
1. ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
2. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
3. ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
4. ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
5. REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
6. ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.

NOTE BY SYMBOL: 'O'

1. RUN NEW 3" SEWER LINE FROM WATER CLOSET OVER AND CONNECT TO EXISTING SEWER MAIN, FIELD VERIFY FOR EXACT LOCATION AND DEPTH OF MAIN. SAW CUT AND REPLACE CONCRETE AS NEEDED.
2. MODIFY EXISTING FIRE SPRINKLER SYSTEM AS NEEDED FOR NEW WALL AND CEILING INSTALLATION.
3. CONNECT CW, HW, & HWR LINES TO EXISTING MAINS, FIELD VERIFY LOCATION OF CONNECTION.
4. CONNECT CW LINE TO EXISTING MAIN, FIELD VERIFY LOCATION OF CONNECTION.
5. EXISTING FLOOR DRAIN TO REMAIN AS IS.
6. NEW FIXTURES SHALL CONNECT TO EXISTING SEWER AND VENT LINE IN THIS AREA, MODIFY AS REQUIRED FOR NEW FIXTURES.

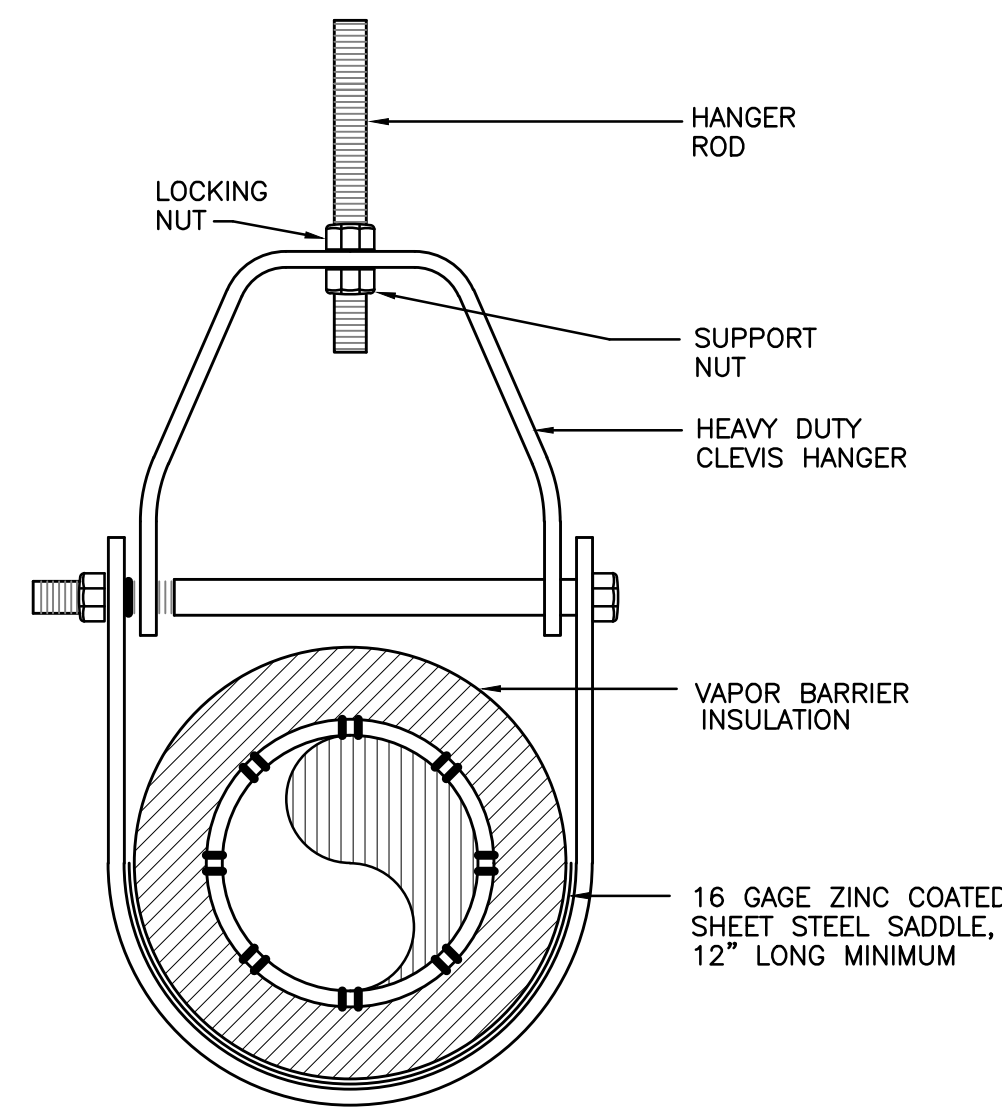
FIRE SPRINKLER NOTES:

1. PROVIDE CLASSROOMS, LOBBIES, AND OTHER LIGHT HAZARD AREAS WITH A DENSITY OF 0.10 G.P.M./SQ. FT. OVER THE MOST REMOTE 1500 SQ. FT. A 250 G.P.M. HOSE ALLOWANCE IS TO BE ADDED TO THE HYDRAULIC CALCULATIONS. SPRINKLE PER NATIONAL FIRE CODE, NFPA 13 AND INTERNATIONAL FIRE CODE.
2. PROVIDE JANITOR'S CLOSETS AND MECHANICAL ROOMS AND OTHER ORDINARY GR.1 HAZARD AREAS WITH A DENSITY OF 0.16 G.P.M./SQ. FT.
3. FINAL LOCATION OF SPRINKLERS SHALL BE DETERMINED UPON SHOP DRAWING REVIEW.
4. PROVIDE INSPECTOR'S TEST CONNECTION AT MOST REMOTE AREA.
5. FIRE SPRINKLER WORK SHALL BE DONE BY LICENSED SPRINKLER CONTRACTOR, PER ALL LOCAL AND NFPA CODES.



PHASE 5 FLOOR PLAN - PLUMBING
 NORTH SCALE: 1/8"=1'-0"

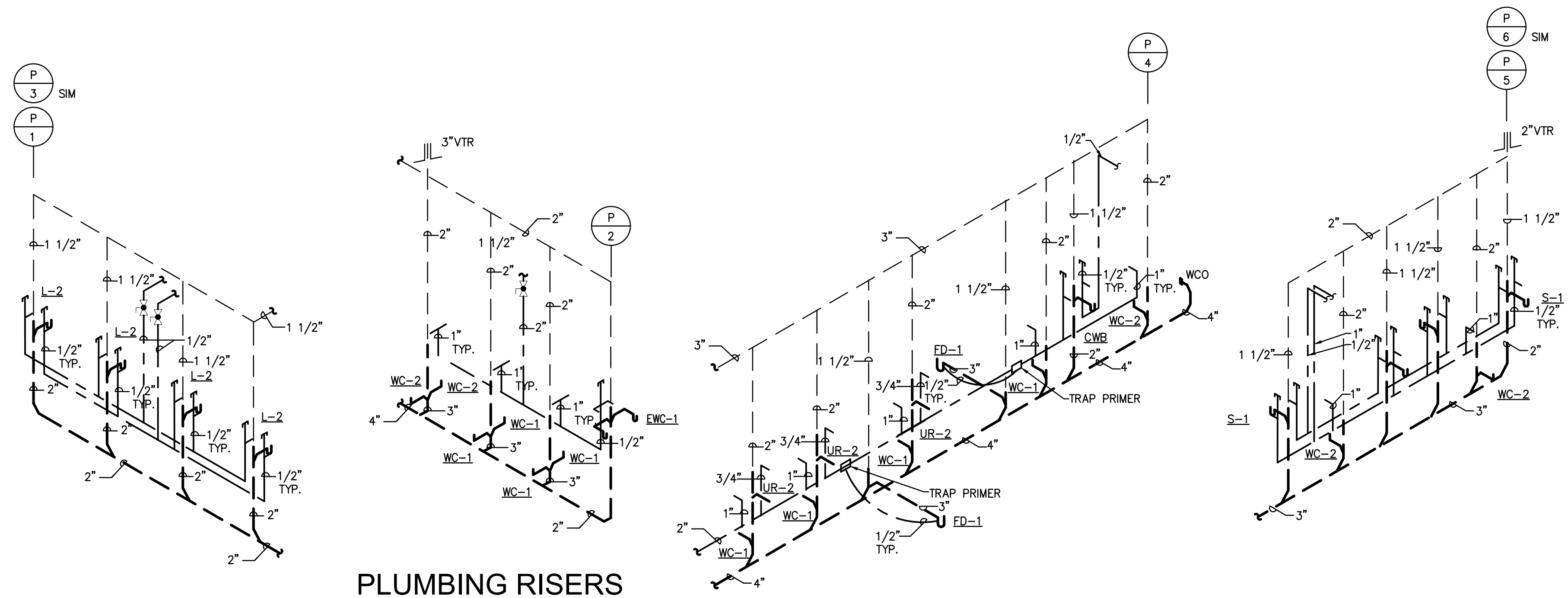
KEY PLAN
 NORTH



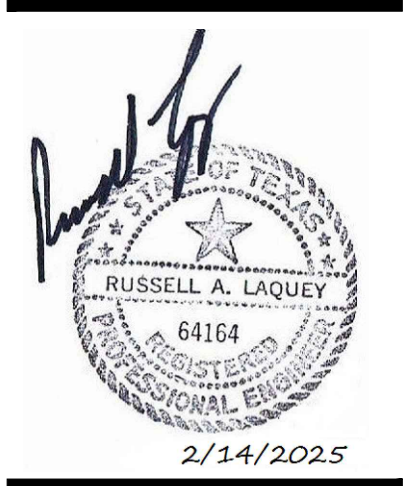
CLEVIS HANGER DETAIL
SCALE: NOT TO SCALE

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE											
FIXTURE DATA			CONNECTION DATA						REMARKS		
ITEM ID	EQUIP. & FIXTURES	MFG./ MODEL #	S O I L	V E N T	T R A P	INDIRECT WASTE	WATER			GAS (CFH)	
							CW	HW			TW
FD-1	FLOOR DRAIN	JOSAM/ 30003-7A	3"	2"	3"	-	-	-	-	-	CAST IRON WITH NICKEL TOP
TMV	THERMOSTATIC MIXING VALVE	LAWLER/ 570	-	-	-	-	1/2"	1/2"	1/2"	-	BRONZE BODY MIXING VALVE, TEMPERATURE SET FOR 110°F. MAX.
A.P.	ACCESS PANEL	ELMDOR/ PW SERIES	-	-	-	-	-	-	-	-	10"x10" SQUARE STAINLESS STEEL ACCESS PANEL.
WCO	WALL CLEANOUT	JOSAM/ 58910-19	-	-	-	-	-	-	-	-	WALL CLEANOUT WITH 58600 S.S. WALL ACCESS COVER AND SCREW.
T.P.	TRAP PRIMER	JOSAM/ 88250-10	-	-	-	-	1/2"	-	-	-	MOUNT UNDER CLOSEST SINK OR CLOSEST PIECE OF EQUIPMENT.
S-1	SINGLE COMPARTMENT ADA COUNTERTOP SINK	ELKAY/ LRAD181855	1 1/2"	1 1/2"	1 1/2"	-	1/2"	1/2"	-	-	20 GA 18"x18" X 5.5" DEEP 20 GAUGE STAINLESS SINK DUAL HANDLE DECK MOUNTED FAUCET, ELKAY #LK-2452BH 2 GPM, DRAIN, ELKAY LK35 ADJUSTABLE TRAP WITH CLEANOUT PLUG AND WALL FLANGE, MCGUIRE #8912.
L-1	HANDICAPPED LAVATORY ADA/TAS	AMERICAN STANDARD/ LUCERNE 0356.921	2"	1 1/2"	1 1/2"	-	1/2"	-	1/2"	-	VITREOUS CHINA WALL HUNG, SINGLE HOLE LAVATORY FOR CONCEALED ARM SUPPORT (JOSAM 17100), KOHLER FAUCET K-13466, TOUCHLESS SENSOR, OFFSET TAILPIECE MCGUIRE CHROME SUPPLIES, LOOSE KEY ANGLE STOPS, 1/2"x1/2" C.P. 17 GAUGE ADJUSTABLE P-TRAP WITH CLEANOUT AND CHROME SET SCREW ESCUTCHEONS THROUGH WALL, "TRUBRO LAV-GAURD" INSULATION KIT NO. 101. INSTALLATION SHALL COMPLY WITH ADA REQUIREMENTS
L-2	HANDICAPPED LAVATORY ADA/TAS	RUVATI/ RVH6110	2"	1 1/2"	1 1/2"	-	1/2"	-	1/2"	-	18 GAUGE STAINLESS STEEL, 21"x15"x6" UNDERMOUNT LAVATORY, KOHLER FAUCET K-13466, TOUCHLESS SENSOR, SINGLE HOLE, OFFSET TAILPIECE MCGUIRE CHROME SUPPLIES, LOOSE KEY ANGLE STOPS, 1/2"x1/2" C.P. 17 GAUGE ADJUSTABLE P-TRAP WITH CLEANOUT AND CHROME SET SCREW ESCUTCHEONS THROUGH WALL, "TRUBRO LAV-GAURD" INSULATION KIT NO. 101. INSTALLATION SHALL COMPLY WITH ADA REQUIREMENTS
WC-1	ADULT WATER CLOSET	AMERICAN STANDARD/ MADERA 2234.001	4"	2"	-	-	1"	-	-	-	VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHOMETER, WATER CLOSET WITH 15" HIGH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, COLOR: WHITE.
WC-2	WATER CLOSET ADA/TAS	AMERICAN STANDARD/ MADERA 3043.001	3"	2"	-	-	1"	-	-	-	HANDICAPPED VITREOUS CHINA FLOOR MOUNTED, SLOAN OPTIMA 8186-1.5 BATTERY POWERED FLUSHOMETER, WATER CLOSET WITH ELONGATED BOWL, SIPHON JET FLUSH ACTION, 1.6 GPF, FURNISHED COMPLETE WITH AMERICAN STANDARD 5901.100 OPEN FRONT TOILET SEAT, WITH HANDLE TO BE ON OPPOSITE SIDE FROM SIDE WALL GRAB BAR, COLOR: WHITE.
UR-1	URINAL	AMERICAN STANDARD/ WASHBROOK 6590.001	2"	2"	-	-	3/4"	-	-	-	VITREOUS CHINA WHITE WALL HUNG URINAL WITH SIPHON JET FLUSH, BATTERY POWERED ELECTRONIC FLUSH VALVE, JOSAM SERIES 17560-UR URINAL CHAIR CARRIER, COLOR: WHITE.
UR-2	URINAL ADA/TAS	AMERICAN STANDARD/ WASHBROOK 6590.001	2"	2"	-	-	3/4"	-	-	-	SAME AS UR-1, MOUNTED AT ADA HEIGHT.
EWC-1	ELEC. WATER COOLER	ELKAY/ LZSTLWSSP	2"	1 1/2"	2"	-	1/2"	-	-	-	BI-LEVEL ADA COMPLIANT SWIRL FLO WATER COOLER, BOTTLE FILLING STATION, WITH STAINLESS STEEL FINISH.
CWB	CLOTHES WASHER BOX	METAL FR-12	-	-	-	-	-	-	-	-	METAL WASHER OUTLET BOX

NOTES:
1. PROVIDE 17 GA. 11/4" ADJUSTABLE P-TRAP & ANGLE STOPS.
2. PROVIDE HANDI LAV-GUARD INSULATION KITS ON TRAP AND HOT AND COLD WATER PIPING TO MEET ADA REQUIREMENTS (WHERE REQUIRED) AT ALL HANDICAP LAVATORIES.
3. WATER CLOSET HANDLES TO BE OPPOSITE SIDE FROM GRAB BARS.
4. REFER TO ARCHITECTURAL SHEETS FOR FIXTURE MOUNTING HEIGHTS.



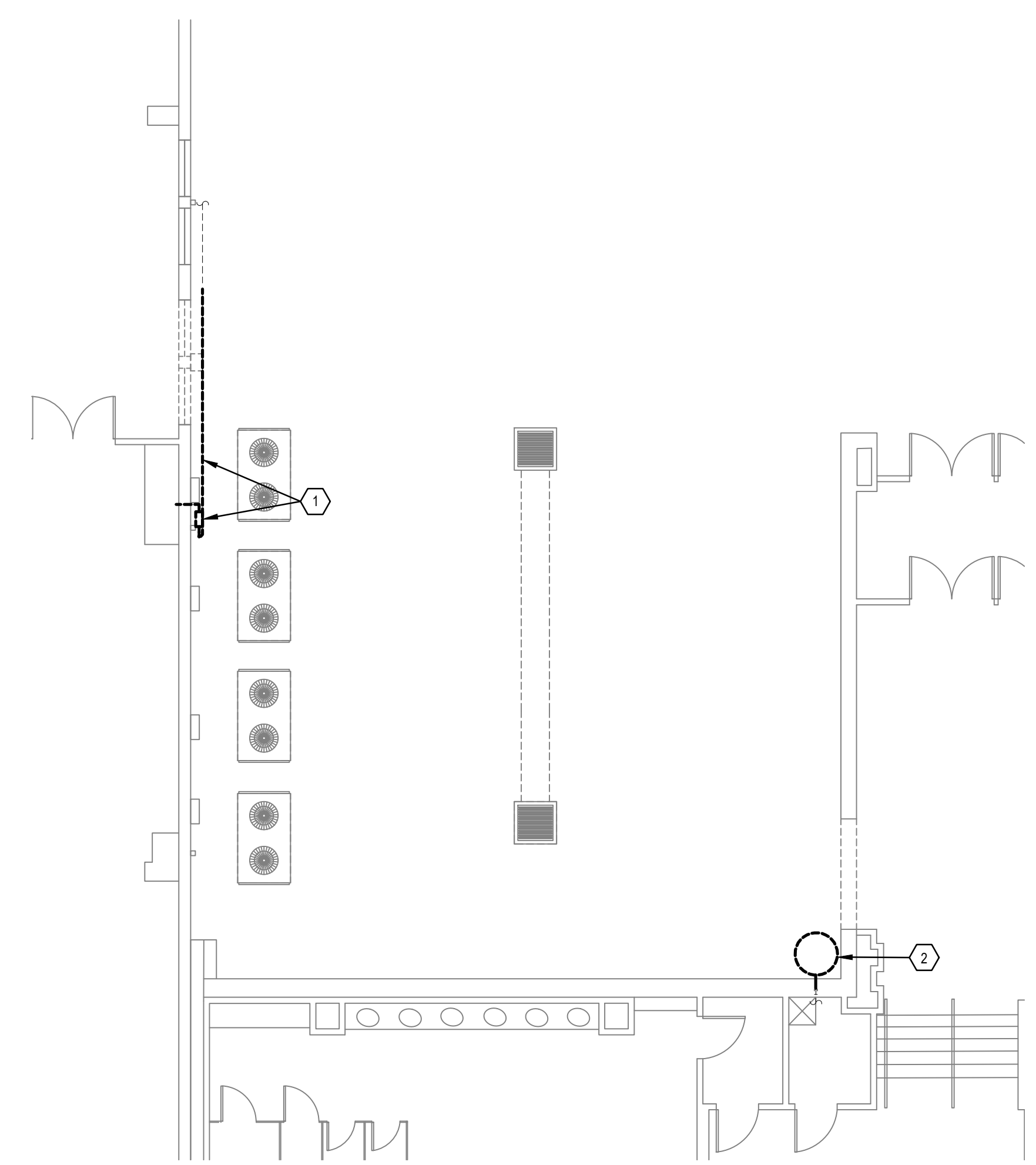
PLUMBING RISERS
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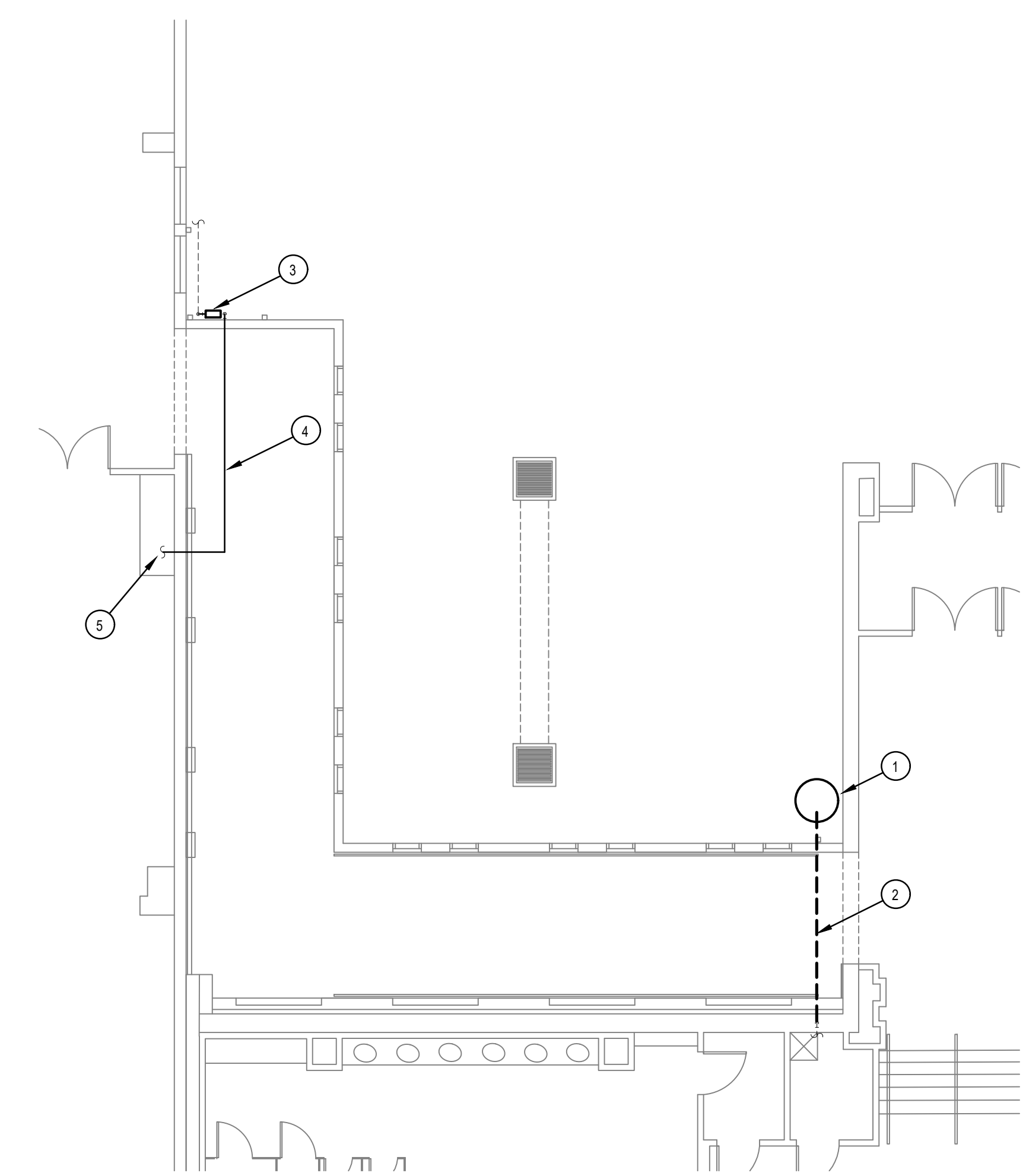
SHEET TITLE:
 PHASE 6 FLOOR
 PLAN - PLUMBING

P6.1



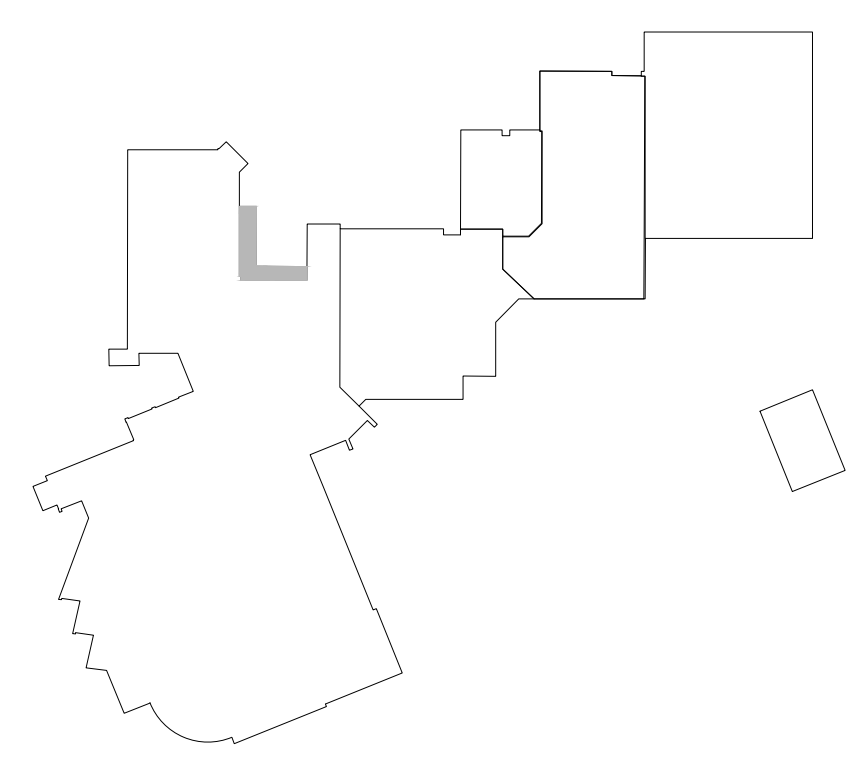
PHASE 1 FLOOR PLAN - PLUMBING DEMOLITION
 NORTH SCALE: 1/8"=1'-0"

- DEMOLITION NOTE BY SYMBOL:**
- ① DEMO EXISTING GAS LINE AND REGULATOR, CAP MAIN FOR RELOCATION.
 - ② DEMO EXISTING SUMP AND PUMP SYSTEM, SAVE FOR RELOCATION. DISCONNECT THE DRAIN PIPE AND SAVE FOR RE-ROUTING.



PHASE 1 FLOOR PLAN - PLUMBING
 NORTH SCALE: 1/8"=1'-0"

- NOTE BY SYMBOL:**
- ① RELOCATE SUMP PIT TO THIS LOCATION.
 - ② RUN EXISTING DRAIN LINE OVER TO NEW LOCATION. FIELD VERIFY PIPE LOCATION AND SIZE TO RE-ROUTE.
 - ③ INSTALL EXISTING GAS REGULATOR IN NEW LOCATION. MODIFY EXISTING GAS PIPE FOR NEW LOCATION.
 - ④ INSTALL NEW GAS LINE UP TO ROOF OF NEW WALKWAY. SIZE PIPE SAME SIZE AS EXISTING PIPE. SUPPORT PIPE ON NEW ROOF WITH NONE INTRUSIVE PIPE SUPPORTS.
 - ⑤ RUN NEW GAS LINE INTO EXISTING BUILDING, RECONNECT TO EXISTING GAS MAIN, FIELD VERIFY FOR LOCATION, MODIFY PIPE AS NEEDED.



KEY PLAN
 NORTH

- GENERAL NOTES:**
1. ALL DOMESTIC WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED. ANY PIPING EXPOSED TO FREEZING ELEMENTS SHALL BE HEAT TRACED.
 2. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS CONNECTED TO THEM.
 3. ALL BRANCH LINES SERVING MORE THAN ONE PLUMBING FIXTURE SHALL HAVE ISOLATION VALVES INSTALLED IN THEM.
 4. ALL HORIZONTAL STORM DRAIN PIPES SHALL BE INSULATED FROM STORM DRAIN BODY TO VERTICAL DROP.
 5. REFER TO ARCHITECTURAL PLANS FOR ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES.
 6. ALL SINKS AND LAVS SHALL HAVE WATER TEMPERING VALVES INSTALLED.