

RHODE ISLAND COLLEGE MURRAY CENTER



600 MOUNT PLEASANT AVENUE

50 Holden Street · Providence, Rhode Island 02908
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Architecture · Project Management · Interior Design



THE ROBINSON GREEN BERETTA CORPORATION

ARCHITECTURE, ENGINEERING & INTERIOR DESIGN

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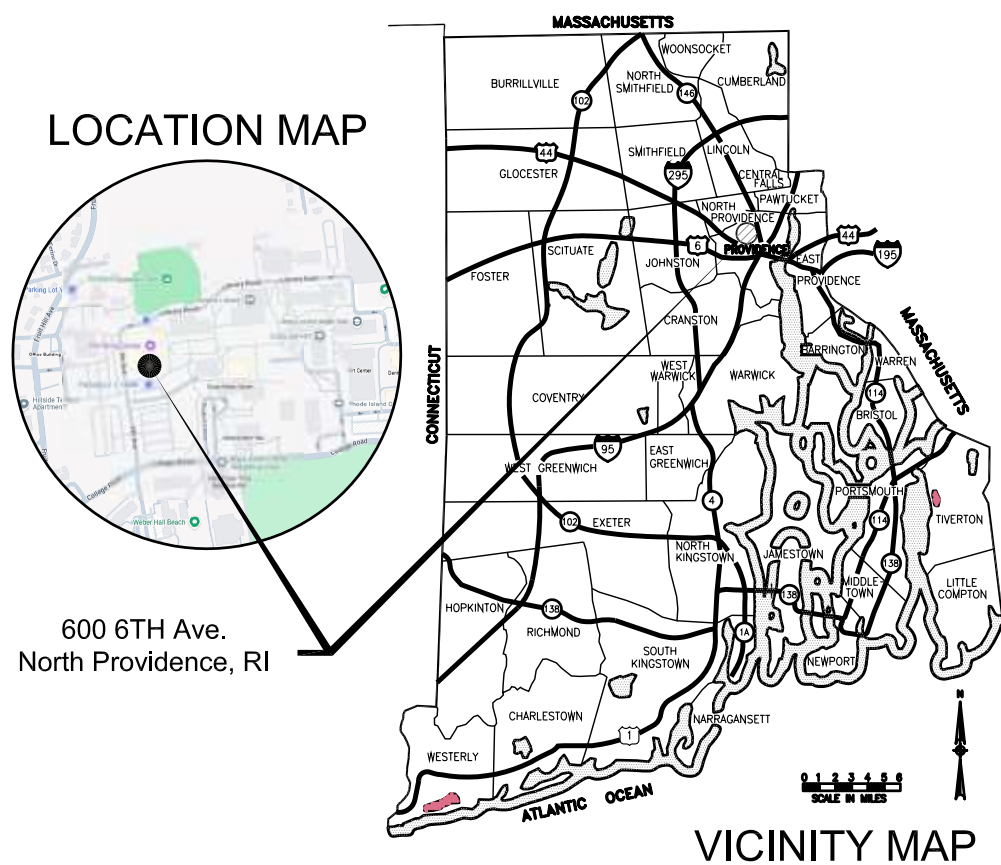
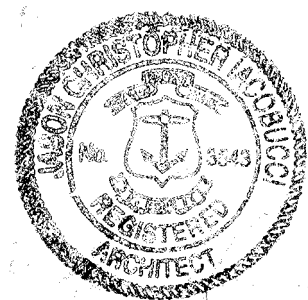
CA PRETZER ASSOCIATES

MECHANICAL, ELECTRICAL, PLUMBING
TECHNOLOGY
STRUCTURAL

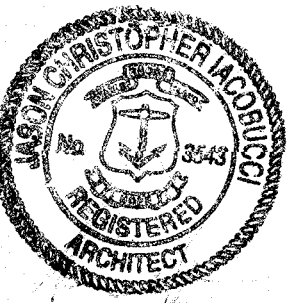
LIST OF DRAWINGS

REVISION	DATE	SHEET #	SHEET NAME
	3/18/2026	000	COVER
<u>ARCHITECTURAL</u>			
	3/18/2026	C100	SITE PLAN
<u>STRUCTURAL</u>			
	3/18/2026	S100	ENLARGED PLAN OF MECHANICAL ENCLOSURE PAD
<u>FIRE PROTECTION</u>			
	3/18/2026	FA001	FIRE ALARM COVER SHEET
	3/18/2026	FA100	FIRE ALARM PLANS
<u>MECHANICAL</u>			
	12/19/2025	M-001.00	MECHANICAL SYMBOLS, LEGENDS & NOTES
	12/19/2025	M-002.00	MECHANICAL EQUIPMENT SCHEDULE
	12/19/2025	MD-101.00	SECOND FLOOR - MECHANICAL DEMOLITION DUCTWORK/PIPING PLAN
	12/19/2025	M-101.00	LOWER FLOOR MECHANICAL DUCTWORK PLAN
	12/19/2025	M-102.00	FIRST FLOOR MECHANICAL DUCTWORK PLAN
	12/19/2025	M-103.00	SECOND FLOOR MECHANICAL DUCTWORK PLAN
	12/19/2025	M-201.00	SECOND FLOOR MECHANICAL PIPING PLAN
	12/19/2025	M-301.00	ELEVATION VIEWS
	12/19/2025	M-401.00	MECHANICAL CONTROLS
	12/19/2025	M-501.00	MECHANICAL DETAILS
<u>ELECTRICAL</u>			
	3/18/2026	E001	ELECTRICAL SYMBOLS AND NOTES
	3/18/2026	E100	ELECTRICAL PLANS
	3/18/2026	E200	ELECTRICAL RISER

RHODE ISLAND COLLEGE MURRAY CENTER - RIC MURRAY CENTER



STATUS: ISSUED FOR CONSTRUCTION
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Architecture - Project Management - Interior Design

Project

RHODE ISLAND
COLLEGE



MURRAY CENTER GYM
HVAC
IMPROVEMENTS

600 MOUNT PLEASANT AVE,
PROVIDENCE, RI 02908

Drawing Status

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Sheet Contents

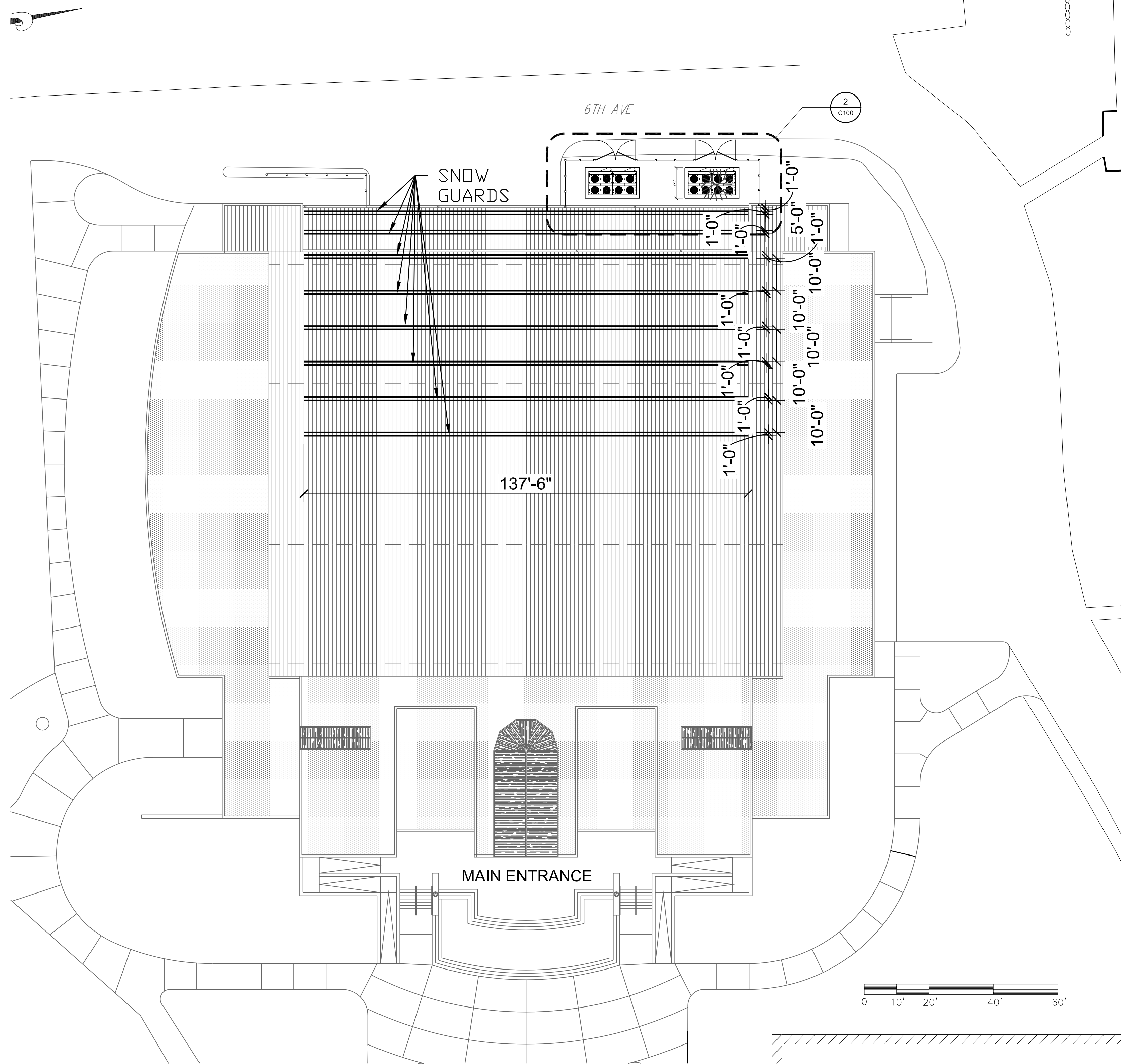
SITE PLAN

Project Number. 6963

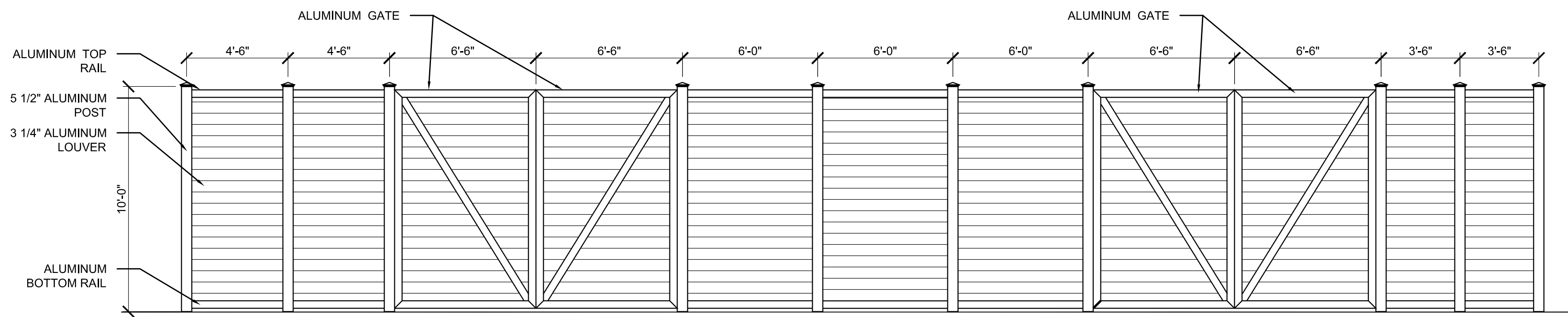
Drawing No.

C100

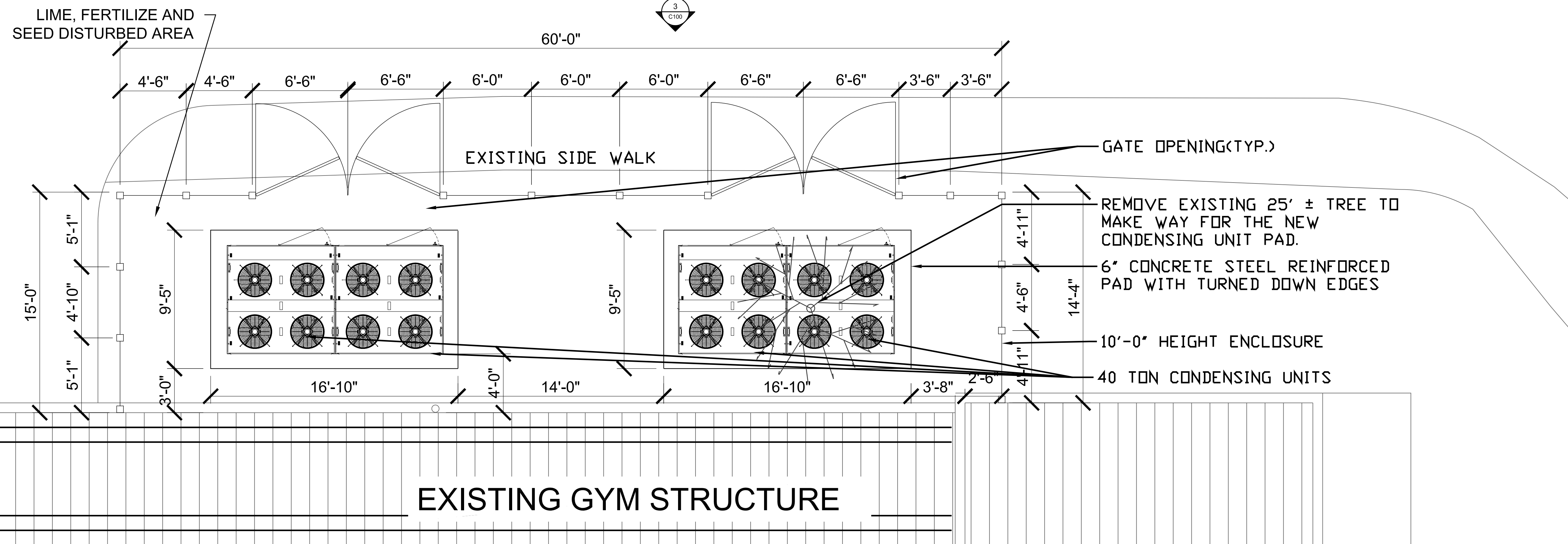
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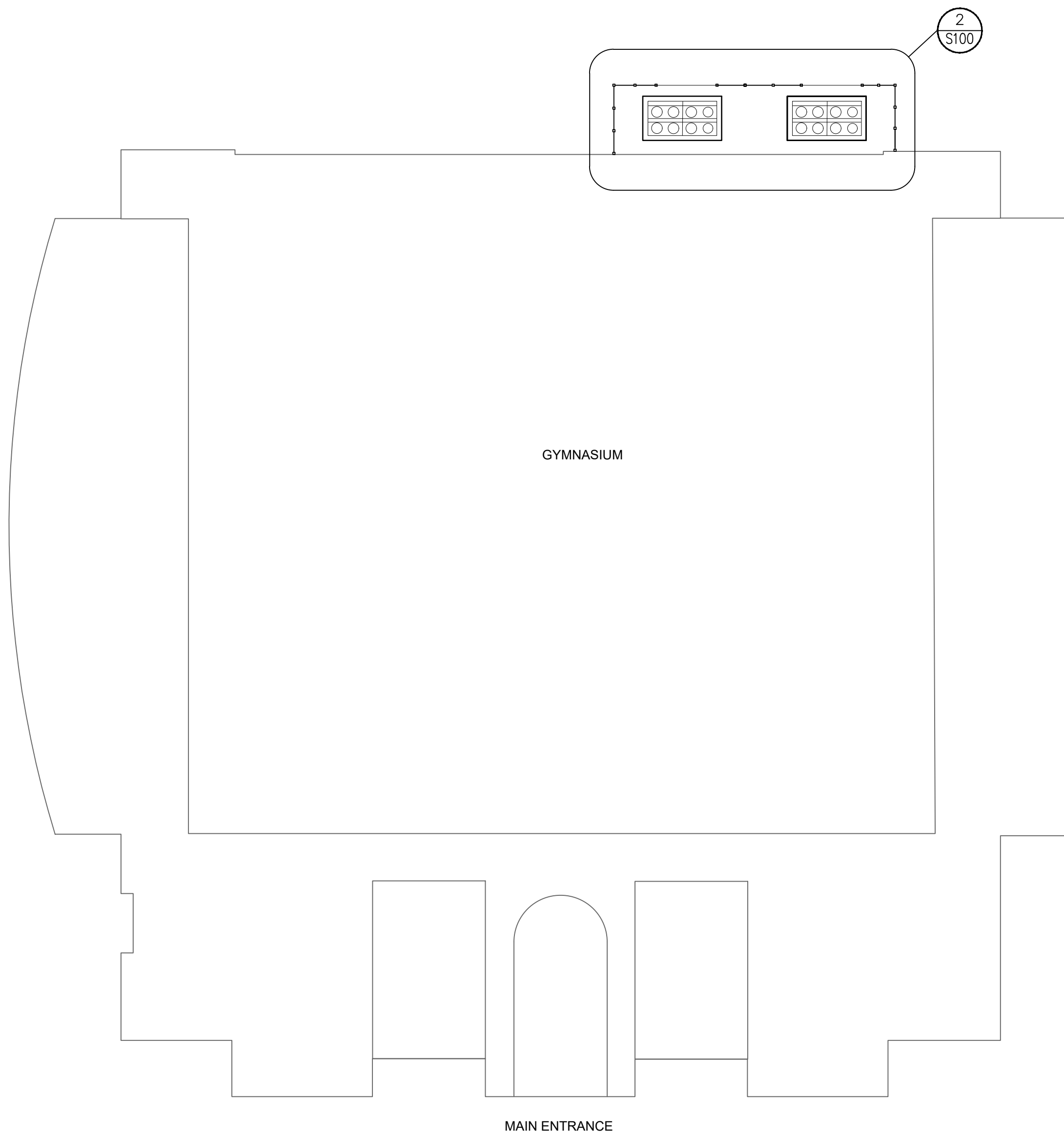
1 OVERALL SITE PLAN
C100 Scale: 1" = 20'-0"



3 SCREEN ENCLOSURE ELEVATIONS
C100 Scale: 1/4" = 1'-0"



2 ENLARGE SITE PLAN
C100 Scale: 1/4" = 1'-0"



1 KEY PLAN
SCALE: 1" = 20'-0"

GENERAL NOTES

DESIGN LOADS (EXCEPT AS NOTED):

BUILDING CODE: RHODE ISLAND STATE BUILDING CODE SBC-1
(2021 INTERNATIONAL BUILDING CODE WITH 2025 RI AMENDMENTS)

FOUNDATION CRITERIA:
GROUND SNOW: 30 PSF
FROST DEPTH: 4'-0"
SAFE SOIL BEARING CAPACITY: 3000 PSF (ASSUMED)

SEISMIC FACTORS:
GROUND ACCELERATIONS: S_a=199g, S₁=0.05g
DESIGN ACCELERATIONS: S_d=212g, S_{d1}=0.08g
SEISMIC IMPORTANCE FACTOR (I_e): 1.0
RISK CATEGORY: II
SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASS: D

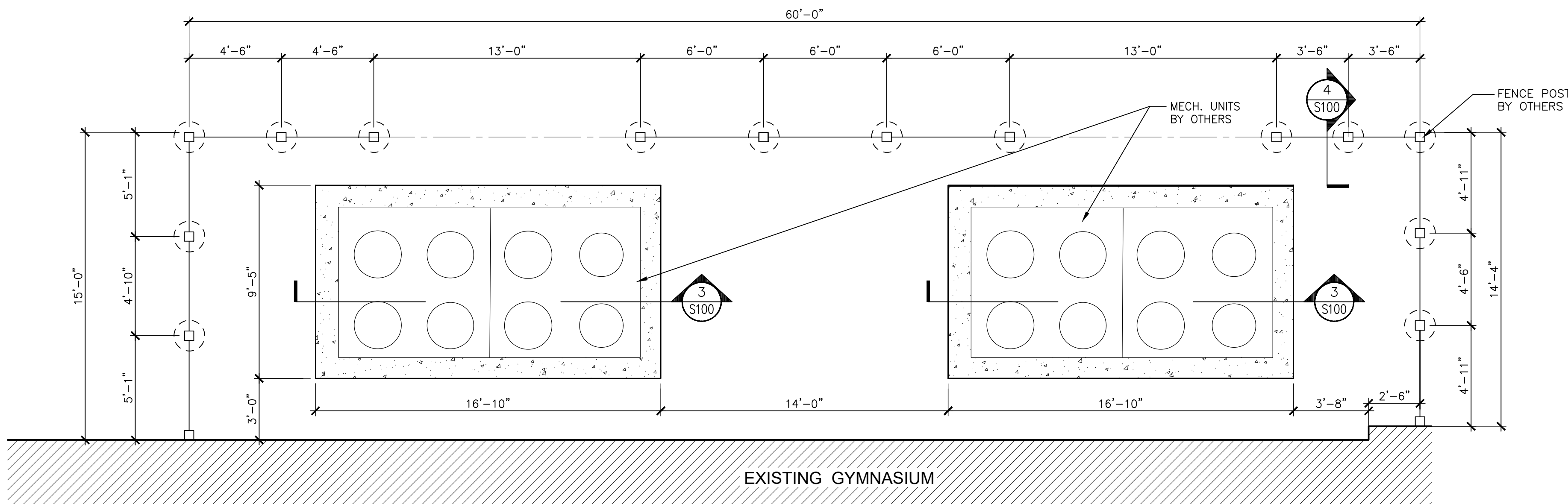
WIND CRITERIA:
ULTIMATE DESIGN WIND SPEED (V_{ULT}): 125 MPH
NOMINAL DESIGN WIND SPEED (V_{ASD}): 97 MPH

FOUNDATION NOTES:

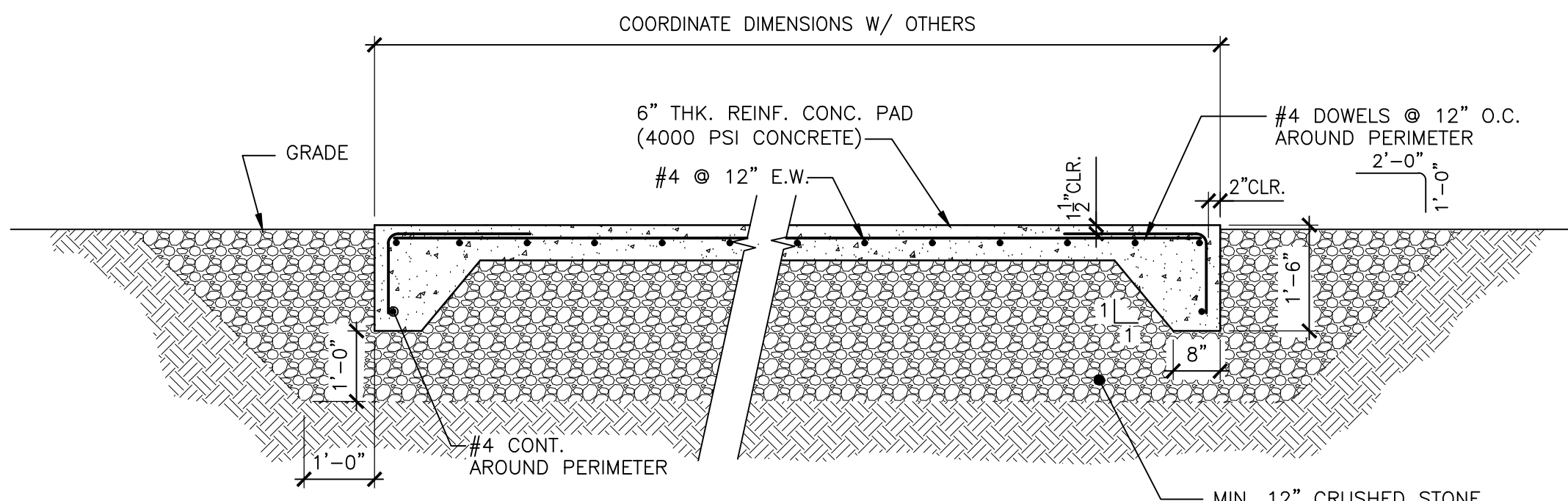
- ALL SOIL CONTAINING ORGANIC OR UNSUITABLE BEARING MATERIAL SHALL BE REMOVED FROM THE BUILDING FOOTPRINT.
- ALL SOIL SUPPORTED FOOTINGS SHALL BE FOUNDED UPON COMPACTED NATURAL SUBGRADE OR COMPACTED BANK RUN GRAVEL FILL WITH A SAFE BEARING CAPACITY OF NOT LESS THAN 3000 PSF. COORDINATE SITE SPECIFIC SUBGRADE PREPARATION REQUIREMENTS WITH GEOTECHNICAL REPORT. OWNER SHALL FURNISH GEOTECHNICAL REPORT.
- ROCK SHALL BE EXCAVATED A MINIMUM OF 6" BELOW BOTTOM OF FOOTING ELEVATION AND COVERED WITH A LAYER OF COMPACTED GRAVEL.
- A MODIFIED PROCTOR TEST SHALL BE PERFORMED BY A SOILS TESTING LAB ON EACH TYPE OF SOIL TO BE COMPACTED.
- SOIL SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY PER ASTM D1557 IN LIFTS NOT TO EXCEED 6" LOOSE DEPTH.
- FIELD DENSITY TESTS SHALL BE PERFORMED BY AN INDEPENDENT SOILS TESTING LAB TO VERIFY COMPACTION. A COPY OF ALL TEST REPORTS SHALL BE FILED WITH THE ARCHITECT.
- SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDER FLOOR SYSTEMS AND SPECIAL GRANULAR FILL MATERIAL REQUIREMENTS.
- NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER OR ICE.

CONCRETE NOTES:

- ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI AT 28 DAYS.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL CONTAIN AN APPROVED AIR ENTRAINING ADMIXTURE. AIR CONTENT SHALL BE 4 1/2% TO 7%.
- ALL CONCRETE SHALL CONTAIN AN APPROVED WATER-REDUCING ADMIXTURE.
- A SET OF FOUR (4) CONCRETE TEST CYLINDERS SHALL BE TAKEN BY AN INDEPENDENT CONCRETE TESTING LAB ON EACH DAY WHEN CONCRETE PLACEMENT EXCEEDS 5 CUBIC YARDS. ONE CYLINDER SHALL BE BROKEN AT 7 DAYS, TWO AT 28 DAYS, AND ONE AT 56 DAYS. A COPY OF ALL TEST REPORTS SHALL BE FILED WITH THE ARCHITECT.
- NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
- A MIX DESIGN SHALL BE SUBMITTED FOR APPROVAL FOR EACH TYPE OF CONCRETE.
- ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION, SHOWING REINFORCING DETAILS, STEEL SIZES, SPACING AND PLACEMENT OF REINFORCING.
- ALL REINFORCING BAR SPLICES SHALL CONFORM TO REQUIREMENTS OF ACI 318, BUT IN NO CASE SHALL THEY BE LESS THAN 2'-0".
- DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCING.
- SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES, FLOOR DEPRESSIONS AND CUT OUTS.
- COORDINATE ALL FOUNDATION PENETRATIONS WITH ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL, FIRE PROTECTION AND SITE/CIVIL DRAWINGS. ALL WORK MUST COMPLY WITH APPLICABLE LOCAL AND STATE AGENCIES.

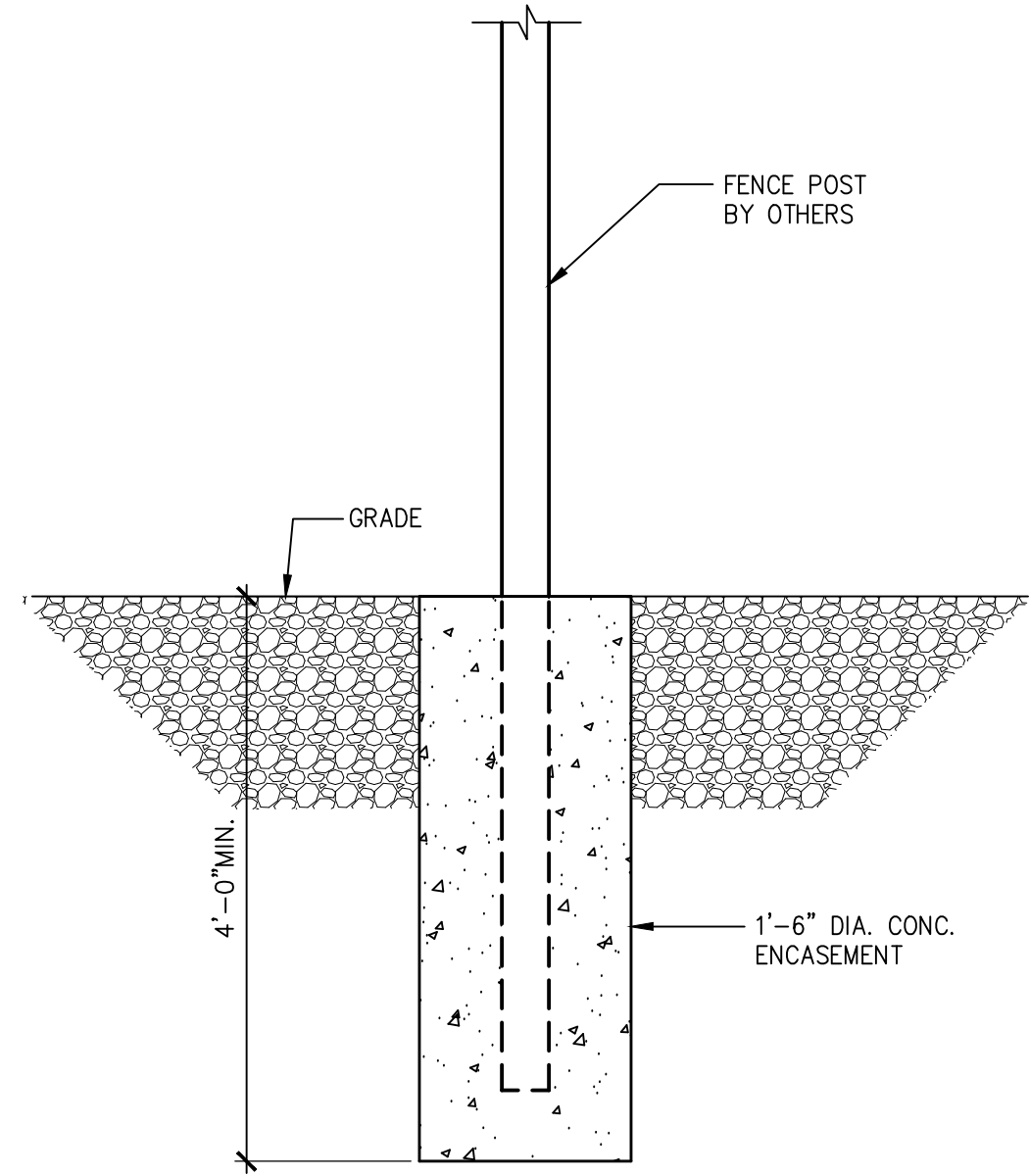


2 NEW MECHANICAL PADS PLAN
SCALE: 1/4" = 1'-0"



3 MECHANICAL PAD DETAIL
SCALE: 1/2" = 1'-0"

NOTE:
SEE UNIT MOUNTING GUIDELINES AND ANCHORING
REQUIREMENTS FOR LOCATION AND SPACING OF
ANCHORS AND FASTENERS



4 FENCE POST DETAIL
SCALE: 1/2" = 1'-0"

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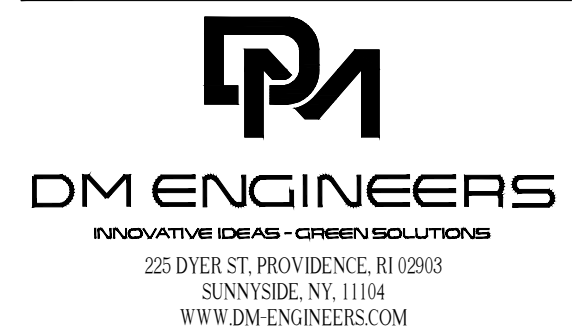
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Certification

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Checked by JI

Revised on



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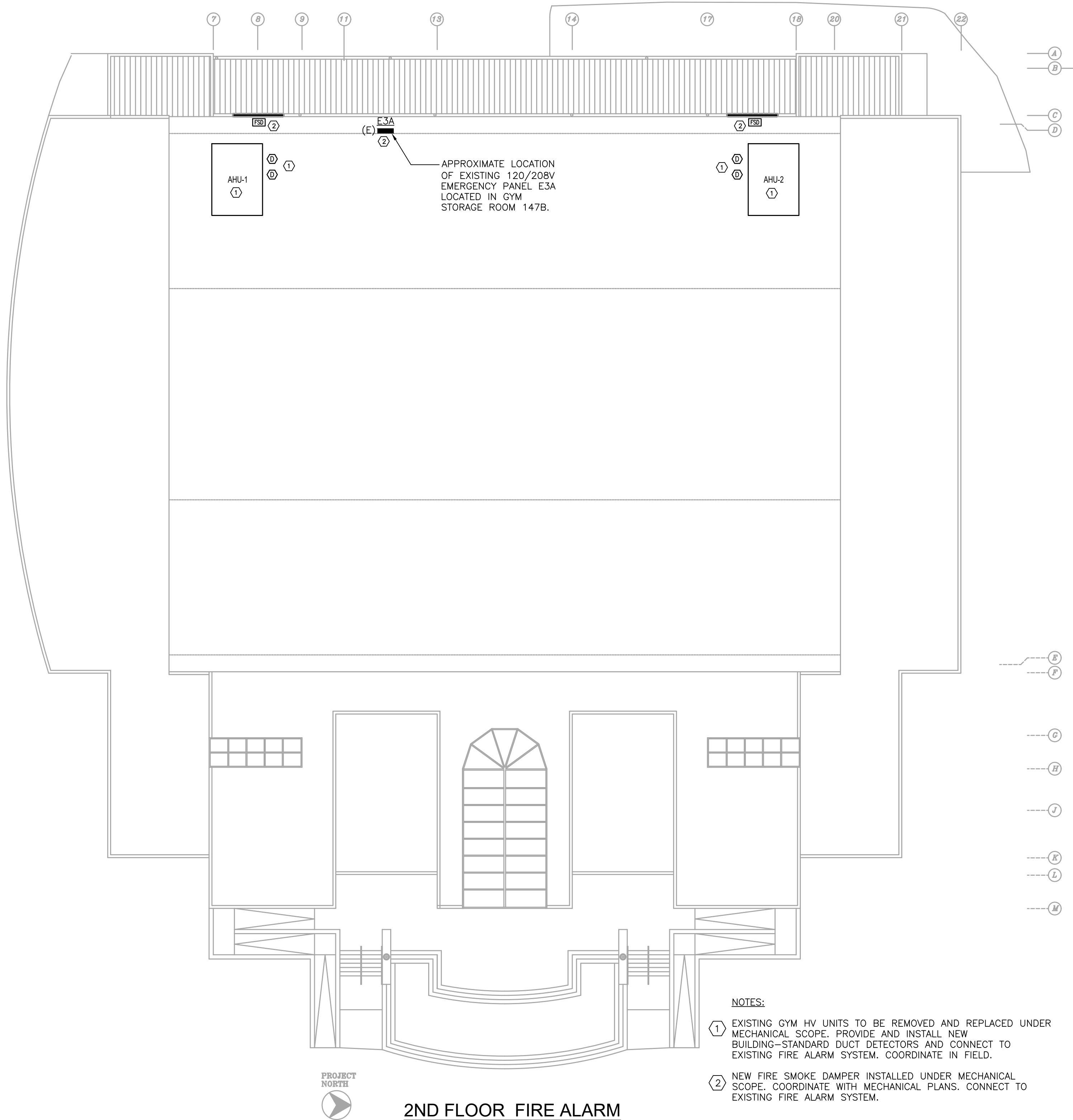
Sheet Contents
FIRE ALARM PLANS

Project Number. 6963

Drawing No.

FA100

Sheet 2 of 2

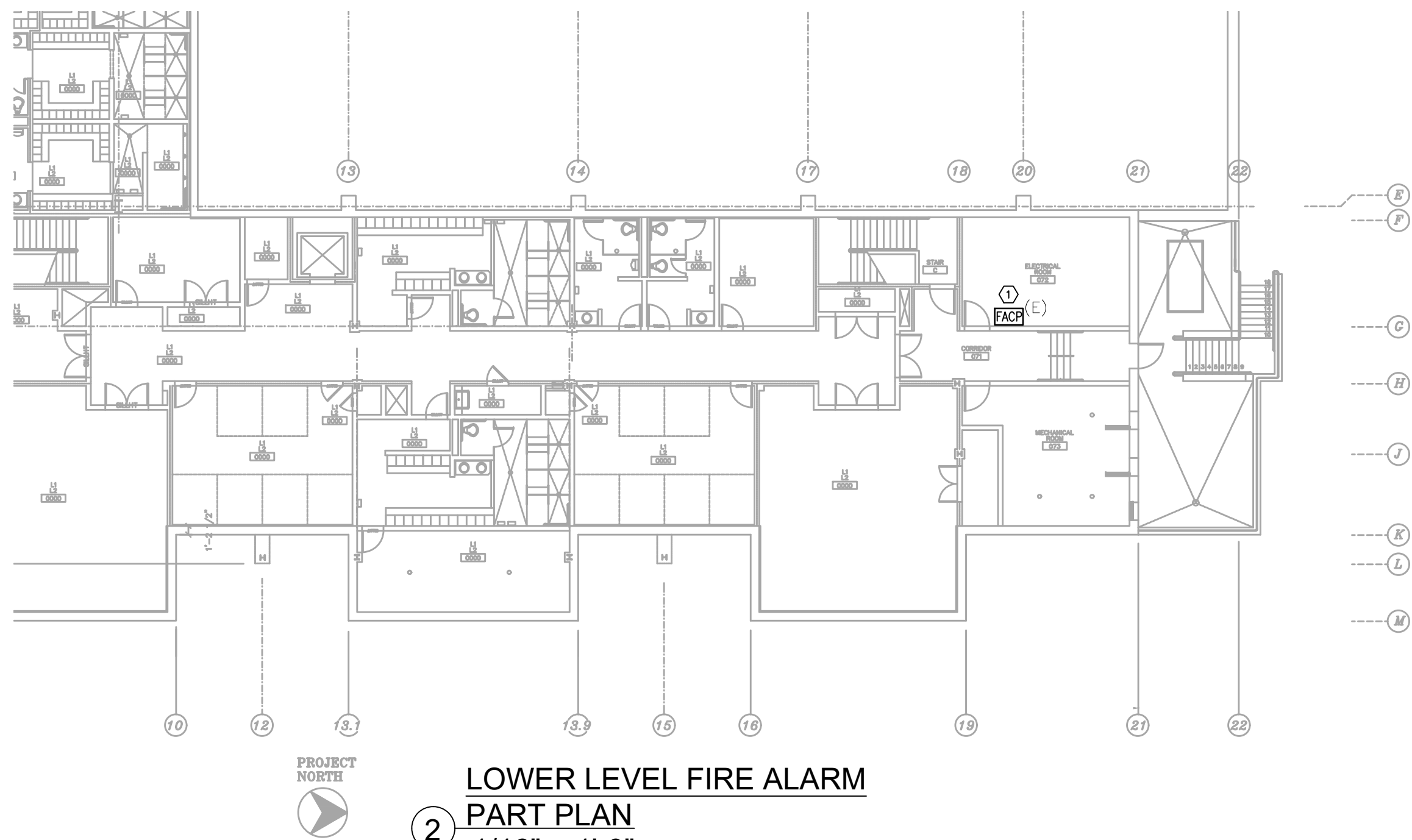


NOTES:

- EXISTING GYM HV UNITS TO BE REMOVED AND REPLACED UNDER MECHANICAL SCOPE. PROVIDE AND INSTALL NEW BUILDING-STANDARD DUCT DETECTORS AND CONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE IN FIELD.
- NEW FIRE SMOKE DAMPER INSTALLED UNDER MECHANICAL SCOPE. COORDINATE WITH MECHANICAL PLANS. CONNECT TO EXISTING FIRE ALARM SYSTEM.



2ND FLOOR FIRE ALARM
PART PLAN
1/16" = 1'-0"



NOTES:

- EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. COORDINATE EXACT LOCATION IN FIELD.

FIRE ALARM SYMBOLS LIST

SIGNAL INITIATING DEVICE
& ACTIVATION SWITCH

- Ⓢ BUILDING STANDARD DUCT SMOKE DETECTOR
- [FSD] BUILDING STANDARD FIRE SMOKE DAMPER
- [FACP] EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. BY GAMEWELL/HONEYWELL.

ABBREVIATIONS

- (E) EXISTING TO REMAIN
- (N) NEW BUILDING-STANDARD DEVICE

LIST OF DRAWINGS

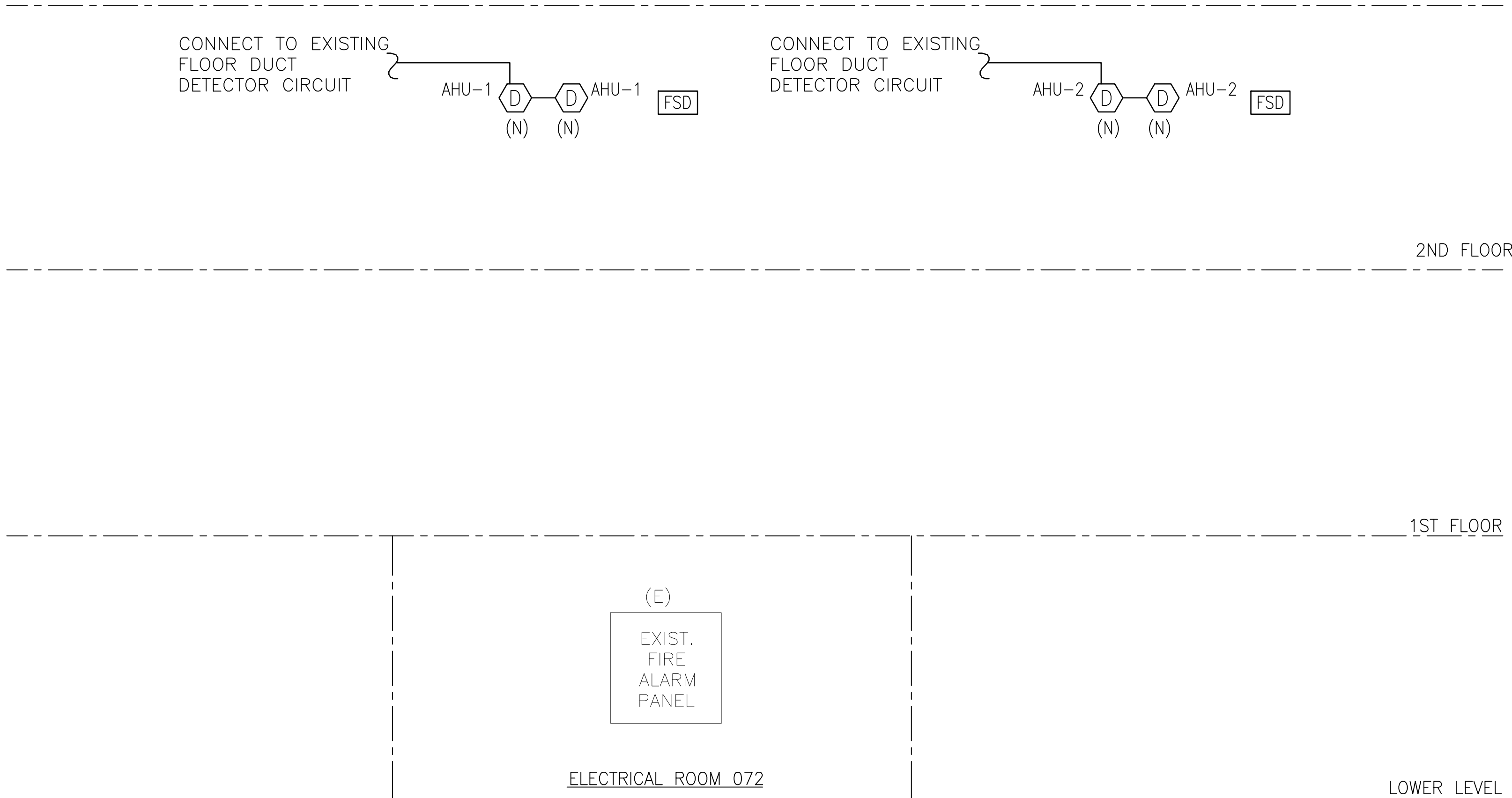
DWG NUMBER	DESCRIPTION
FA-001	FIRE ALARM COVER SHEET
FA-100	FIRE ALARM PLANS

DEMOLITION NOTES

1. ALL FIRE ALARM CIRCUITS IN AREAS NOT PART OF ALTERATIONS SHALL BE MAINTAINED ACTIVE. IF INTERRUPTED DURING DEMOLITION, CIRCUITS SHALL BE REACTIVATED TO RE-ESTABLISH SERVICE. PROVIDE AND INSTALL NEW WIRING AND CONDUIT AS REQUIRED TO RE-ESTABLISH CIRCUITS. COORDINATE IN FIELD.

FIRE ALARM NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE RHODE ISLAND BUILDING CODE AND IN ACCORDANCE WITH NFPA 72.
2. ALL NEW FIRE ALARM DEVICES SHALL BE FULLY COMPATIBLE WITH EXISTING SYSTEM.
3. CONTRACTOR SHALL PAY ALL FILING AND INSPECTION FEES.
4. SEE FLOOR PLANS FOR QUANTITY OF DEVICES. PROVIDE ZONING AS PER FIRE ALARM VENDOR.
5. PROVIDE ALL LIFE SAFETY DEVICES. WIRING AND CONNECTIONS AS PER FIRE ALARM VENDOR.
8. ALL FIRE ALARM WIRE SHALL BE CLEARLY LABELED IN JUNCTION BOXES AND CABINETS. ALL TERMINALS SHALL BE NUMBERED AND LABELED. ALL CONNECTIONS SHALL BE EITHER SOLDERED, APPROVED TERMINAL STRIPS, APPROVED WIRE NUTS (APPROVED TEMPERATURE), OR SCOTCH LOCKS.
9. ALL EXISTING LIFE SAFETY SHALL REMAIN IN WORKING CONDITIONS AT ALL TIMES.
10. ALL EXISTING LIFE SAFETY AND WIRING SHALL REMAIN IN SERVICE DURING DEMOLITION WORK. PROVIDE TEMPORARY SUPPORTS FOR EXISTING DEVICES AND WIRING IF SUPPORTING STRUCTURES (WALL, CEILING, ETC.) ARE TO BE DEMOLISHED. WHERE EXISTING DEVICES ARE REQUIRED TO REMAIN OR RELOCATED & IS REMOVED, THESE DEVICES SHALL BE STORED IN A DRY LOCATION TO BE REUSED.
11. WHERE DUCT SMOKE DETECTORS ARE INSTALLED IN HUNG CEILING PROVIDE REMOTE LED INDICATOR BELOW CEILING.
12. ALL CEILING MOUNT DEVICES MUST BE SECURELY FASTENED TO BUILDING CONSTRUCTION.
13. ALL NEW FIRE ALARM CABLES, INCLUDING EXISTING FIRE ALARM CABLES BEING REROUTED SHALL BE SUPPORTED AND INSTALLED TIGHT TO THE UNDERSIDE OF THE DECK AND INSTALLED STRAIGHT AS POSSIBLE, AND IS SUBJECT TO THE ARCHITECT & OWNER'S APPROVAL.
14. ALL FIRE ALARM CABLES SHALL BE INSTALLED IN EMT CONDUIT.
15. DEVICE LOCATIONS MUST BE READILY ACCESSIBLE TO ALLOW FOR MAINTENANCE AND REPAIR.
16. GENERAL CONTRACTOR TO COORDINATE PATHWAY OF ALL CABLING (DATA, FIRE ALARM, BASE BUILDING DEVICE CABLING, ETC.). ALL FIRE ALARM CABLING SHALL BE INSTALLED IN EMT CONDUIT.
17. WHERE EXISTING WIRING IS BEING REUSED, THE CONTRACTOR SHALL TEST INTEGRITY OF THE CABLE TO VERIFY CABLE IS FREE OF ALL DEFECTS. WHERE CABLES ARE DEFECTIVE, REPLACE WITH NEW.
18. WHERE WIRING IS INSTALLED IN AREAS WITH NO CEILING, NEW CABLES SHALL BE INSTALLED IN EMT CONDUIT. COORDINATE CONDUIT ROUTING WITH GENERAL CONTRACTOR, ARCHITECT & ENGINEER PRIOR TO INSTALLATION.
19. DISCONNECT & REMOVE ALL FIRE ALARM CABLE NO LONGER IN USE & ABANDON.
20. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, ALL ALARM NOTIFICATION DEVICES, SUPERVISORY SIGNALS POWER SUPPLIES, ETC SHALL BE TESTED IN ACCORDANCE WITH NFPA 72 STANDARDS.
21. SUBMIT A CERTIFIED RECORD OF COMPLETION IN ACCORDANCE WITH NFPA 72
22. ALL FIRE ALARM DEVICES ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.
23. ALL WORK ASSOCIATED WITH FIRE ALARM SYSTEM SHALL BE COORDINATED WITH FIRE ALARM VENDOR.
24. ALL FIRE ALARM WORK AND REPROGRAMMING OF FIRE ALARM PANEL SHALL BE PERFORMED BY THE BUILDING FIRE ALARM VENDOR.



FIRE ALARM MODIFICATION RISER DIAGRAM
(NOT TO SCALE)

NOTES:

1. NEW FIRE ALARM DEVICES SHALL BE PROGRAMMED TO CONFORM WITH THE BUILDING'S EXISTING FIRE ALARM SYSTEM MATRIX AND SEQUENCE OF OPERATIONS. ALL NEW WORK SHALL BE COORDINATED WITH THE BUILDING'S FIRE ALARM SYSTEM VENDOR.

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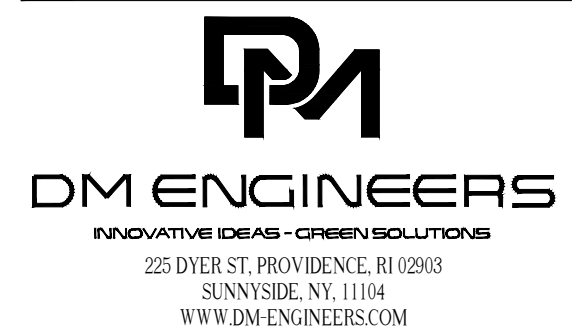
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Certification

Drawn by GJO

Checked by JJI

Revised on



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Sheet Contents

FIRE ALARM COVER SHEET

Project Number. 6963

Drawing No.

FA001

Sheet 1 of 2

SUMMARY OF WORK:	
THE WORK SHALL BE AS SHOWN AND CALLED FOR IN THE CONTRACT DOCUMENTS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING GENERAL ITEMS OF WORK:	
REPLACEMENT OF EXISTING HEATING & VENTILATION UNITS (H&V 2-1 AND H&V 2-2) WITH NEW AIR HANDLING UNITS.	
EXISTING DUCTWORK, PIPING, CONTROLS, AND ELECTRICAL CONNECTIONS ASSOCIATED WITH THE UNITS TO BE DEMOLISHED SHALL BE REMOVED AND REPLACED.	
NO CHANGE IN BULK, EGRESS, USE OR OCCUPANCY UNDER THIS APPLICATION.	
*SCOPE OF WORK IS NOT RELATED TO FLOOD MITIGATION OR DAMAGES DUE TO FLOOD.	

HVAC DESIGN CRITERIA	
HEATING AND COOLING SYSTEM CAPACITY IS BASED ON THE FOLLOWING DESIGN CONDITIONS (AS PER THE LATEST ASHRAE CODE).	
INSIDE AMBIENT DESIGN PARAMETERS:	
SUMMER:	78°F (DB) / 50% RH
WINTER:	72°F (DB)
OUTSIDE AMBIENT DESIGN PARAMETERS:	
SUMMER:	89°F (DB) / 73°F (WB)
WINTER:	13°F (DB)

GENERAL CONSTRUCTION NOTES:	
GENERAL CONTRACTOR SHALL OBTAIN ALL SIGNOFFS, PERMITS, AND FINAL C.O. FROM THE BUILDING DEPARTMENT:	
1.	ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL AND MUNICIPAL BUILDING CODES, AS WELL AS ANY AND ALL REGULATORY AGENCIES, INCLUDING BUT NOT LIMITED TO OSHA, ETC. GENERAL NOTES SHALL APPLY TO ALL DRAWINGS. • RHODE ISLAND BUILDING CODE 2021 (IBC 2021 AMENDED). • RHODE ISLAND MECHANICAL CODE 2021 (IBC 2021 AMENDED). • RHODE ISLAND ENERGY CODE 2024.
2.	ALL WORK, WHETHER SHOWN OR IMPLIED, UNLESS SPECIFICALLY QUESTIONED SHALL BE CONSIDERED FULLY UNDERSTOOD IN ALL RESPECTS BY THE GENERAL CONTRACTOR AND HE WILL BE RESPONSIBLE FOR ANY MISREPRESENTATIONS OR CONSEQUENCES THEREOF FOR ALL WORK ON ALL DRAWINGS.
3.	DRAWINGS ARE NOT TO BE SCALED. DIMENSIONS GOVERN.
4.	ALL WORK IS TO CONFORM TO THE ARCHITECT'S DRAWINGS AND SPECIFICATIONS AND SHALL BE NEW AND BEST QUALITY OF THE KINDS SPECIFIED.
5.	NO MATERIAL SUBSTITUTIONS SHALL BE MADE. THE ARCHITECT WILL CONSIDER MATERIAL CHANGE REQUESTS ON AN INDIVIDUAL BASIS. THE CONTRACTOR SHALL SUBMIT SAMPLES AND CUTS FOR WRITTEN APPROVAL FROM THE ARCHITECT PRIOR TO THE START OF ANY WORK.
6.	THE CLIENT AND/OR ARCHITECT RESERVES THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH THE WORK OF THE PROJECT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK AND ESTABLISHING SCHEDULES FOR ALL TRADES. HE/SHE SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE INTRODUCTION AND STORAGE OF THEIR MATERIALS, EQUIPMENT AND THE EXECUTION OF THEIR WORK.
7.	ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE SUPPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED AND CONDITIONED AS DIRECTED BY THE MANUFACTURER UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
8.	EACH SUBTRADE WILL BE RESPONSIBLE FOR REVIEWING THE ENTIRE SET OF DRAWINGS AND NOTING HIS/HER SCOPE OF WORK, WORK INDICATED OR INFERRED ON THE DRAWINGS IS TO BE INCLUDED IN THE SUBCONTRACTORS COST. THE SAME SHALL HOLD TRUE FOR THE GENERAL CONTRACTOR.
9.	ALL SURFACES OR FINISHES TO REMAIN, IF DAMAGED DURING DEMOLITION OR ANY STAGE OF THE WORK, SHALL BE REPAIRED BY THE GENERAL CONTRACTOR AT HIS/HER EXPENSE TO LIKE NEW CONDITION.
10.	THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ALL PROPOSALS FOR ADDITIONAL WORK TO THE CLIENT FOR REVIEW AND APPROVAL. NO WORK IS TO PROCEED UNTIL A SIGNED PROPOSAL IS RETURNED TO THE GENERAL CONTRACTOR.
11.	THE CONTRACTOR SHALL IN ALL RESPECTS COMPLY WITH ALL REGULATIONS OF THE BUILDING MANAGEMENT. THIS SHALL INCLUDE BUT NOT BE LIMITED TO DEMOLITION, CORE DRILLING, ALL NOISE-CREATING WORK, AND CARRYING RUBBISH THROUGHOUT THE BUILDING. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN SUCH REGULATIONS FROM THE BUILDING OWNER. IN THE EVENT OF CONFLICT BETWEEN BUILDING REGULATIONS AND OTHER CONTRACT DOCUMENTS THE ARCHITECT SHALL BE CONSULTED PRIOR TO PROCEEDING.
12.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING WITH THE BUILDING MANAGEMENT THE USE OF ELEVATORS OR OTHER HOSTING FACILITIES FOR HANDLING THE DELIVERY OF MATERIALS. ANY AND ALL FEES, WHETHER DURING NORMAL WORKING HOURS OR OVERTIME, FOR THE USE OF THE HOSTING FACILITIES WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
13.	THE CONTRACTOR SHALL HAVE HAD EXPERIENCE ON AT LEAST THREE PROJECTS INVOLVING QUALITIES AND COMPLEXITIES AT LEAST EQUAL TO THOSE REQUIRED UNDER ALL DIVISIONS DETAILED IN THESE DRAWINGS. ALL WORKMEN PERFORMING UNDER THIS WORK SHALL BE SKILLED WORKMEN IN THEIR RESPECTIVE TRADES.
14.	THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP AND PAYING FOR ALL PERMITS FROM THE BUILDING DEPARTMENT.
15.	UPON COMPLETION OF THE WORK THE GENERAL CONTRACTOR SHALL SUBMIT CERTIFICATES OF INSPECTION, CERTIFICATE OF OCCUPANCY AND A CERTIFICATE OF SUBSTANTIAL COMPLETION (A.I.A. DOCUMENT #5-704).
16.	THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE PREMISES ALL WASTE MATERIALS, RUBBISH, WRAPPINGS, AND SELVAGES AS GENERATED BY THE CONSTRUCTION, DEMOLITION AND/OR DELIVERY AND INSTALLATION OF CARPET, MILLWORK, FURNITURE, OR OTHER TRADES EMPLOYED BY THE OWNER.
17.	THE GENERAL CONTRACTOR SHALL MAINTAIN AN OPERATING ONSITE FIELD OFFICE TELEPHONE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION.
18.	CONTRACTOR SHALL SCHEDULE ALL WORK TO CONFORM TO THE GENERAL CONSTRUCTION SCHEDULE AND SHALL COOPERATE WITH OTHER CONTRACTORS IN THE REQUIRED SEQUENTIAL INSTALLATION SCHEDULE AS APPROVED BY THE ARCHITECT.
19.	THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND ASSUMING ALL COSTS ASSOCIATED WITH ALL CONTROLLED INSPECTIONS AND AMENDMENTS (AS REQUIRED) AT THE BUILDING DEPARTMENT.
20.	THE GENERAL CONTRACTOR MUST PROVIDE AND ASSUME ALL COST, INCLUDING ANY OVERTIME TO MEET THE REQUIREMENTS OF THE PROJECT AND ANY SCHEDULE WHICH IS SUBMITTED AS PART OF THE CONTRACT DOCUMENTS.
21.	THE GENERAL CONTRACTOR AND ALL APPROPRIATE SUB-CONTRACTORS MUST VISIT THE SITE PRIOR TO SUBMITTING A BID.
22.	THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH A.D.A. STANDARDS & MINIMUM CLEARANCES AND SHALL INFORM THE ARCHITECT OF ANY AND ALL CONFLICTS WITH COMPLYING WITH THOSE MINIMUM CLEARANCES AND STANDARDS.
23.	THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL REVIEW THE ENTIRE SET OF CONSTRUCTION DOCUMENT DRAWINGS TOGETHER WITH THE INVITATION TO BID AND ANY OTHER ITEMS WHICH CONSTITUTE THE CONTRACT DOCUMENTS.
24.	THE CLIENT SHALL NOT BE RESPONSIBLE FOR ANY DELAYS OR COSTS ASSOCIATED WITH DOWN TIME DUE TO FAILURES CAUSED BY THE CONTRACTOR.

MECHANICAL GENERAL NOTES	
1.	THE WORK TO BE DONE UNDER THESE SPECIFICATIONS AND THE DRAWINGS CONSISTS OF PROVIDING ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES AND PERFORMING ALL OPERATIONS TO COMPLETE THE MECHANICAL CONSTRUCTION WORK FOR THIS PROJECT. ANY WORK NOT SPECIFICALLY COVERED BY THESE SPECIFICATIONS OR INDICATED ON THE MECHANICAL/ELECTRICAL/PLUMBING PLANS, BUT NECESSARY TO COMPLETE OR PERFECT ANY PART OF THIS INSTALLATION IN A SUBSTANTIAL MANNER, SHALL BE PROVIDED WITHOUT EXTRA COST TO THE OWNER.
2.	THE TERM "FURNISH" SHALL MEAN TO OBTAIN AND SUPPLY TO THE JOB SITE. THE TERM "INSTALL" SHALL MEAN TO FIX IN POSITION AND CONNECT FOR USE. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. THE TERM "MECHANICAL WORK" OR "WORK" SHALL MEAN ALL LABOR, MATERIAL, EQUIPMENT, SCAFFOLDING, RIGGING, TOOLS, SUPERVISION, SERVICES AND OTHER INCIDENTALS NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
3.	THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT, MATERIALS AND LABOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM AS INDICATED ON THE DESIGN DOCUMENTS.
4.	ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER AND SHALL BE DONE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND IN CONFORMANCE WITH APPLICABLE MANUFACTURERS RECOMMENDATIONS.
5.	THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT, GENERAL CHARACTER, LOCATION AND ARRANGEMENT OF THE WORK UNDER THIS CONTRACT. WHERE JOB CONDITIONS REQUIRE MINOR CHANGES OR ADJUSTMENTS IN THE INDICATED LOCATIONS OR ARRANGEMENT OF THE WORK, SUCH CHANGES SHALL BE PROVIDED WITHOUT EXTRA COST. THE CONTRACTOR SHALL RE-INSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY.
6.	CONTRACTOR SHALL VERIFY FIELD CONDITIONS AT THE SITE AND NOTIFY THE OWNER/ENGINEER OF ANY DISCREPANCIES PRIOR TO AWARDOF BID.
7.	COORDINATE HVAC SYSTEM INSTALLATION WITH EXISTING CONDITIONS. VISIT SITE PRIOR TO BID AND INVESTIGATE REQUIREMENTS FOR HVAC SYSTEM INSTALLATION. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8.	ALL CHANGES MADE IN THE FIELD SHALL BE RECORDED ON AS-BUILT DRAWINGS, SHOP DRAWINGS, AND MAINTENANCE MANUALS. PROVIDE FINAL AS-BUILT CONDITIONS IN AUTOCAD FORMAT.
9.	CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PER SPEC PRIOR TO PURCHASING OR INSTALLING EQUIPMENT AND SYSTEMS INDICATED ON CONTRACT DOCUMENTS. PRIOR TO SUBMITTAL, CONTRACTOR SHALL VERIFY THAT ADEQUATE SPACE EXISTS FOR THE SUBMITTED EQUIPMENT. SHOP DRAWINGS MUST BE REVIEWED BY ARCHITECT/ENGINEER.
10.	CONTRACTOR SHALL OBTAIN ALL PERMITS, INSPECTIONS AND APPROVALS PRIOR TO CONSTRUCTION, AND PAY ALL RELATED FEES. OWNER WILL HIRE AND PAY FOR EXPEDITOR FEES. ALL PERMIT FEES ARE BY CONTRACTOR.
11.	ALL MATERIALS, EQUIPMENT AND INSTALLATIONS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE BUILDING AND MECHANICAL CODES, SMACNA, U.L. MANUFACTURERS' RECOMMENDATIONS, AND TO THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL REGULATORY AGENCIES AND AUTHORITIES HAVING JURISDICTION.
12.	IN THE ABSENCE OF OTHER SPECIFIC INSTRUCTIONS, ALL WORK AND MATERIALS SUPPLIED SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF THEIR ACCEPTANCE BY THE OWNER.
13.	CONTRACTOR SHALL NOT CONCEAL ANY WORK UNTIL INSPECTED BY MECHANICAL INSPECTOR AND/OR ARCHITECT /ENGINEER. CONTRACTOR SHALL NOTIFY A/E OF A SCHEDULED INSPECTION TIME WITHIN 72 HOURS.
14.	GENERAL CONTRACTOR SHALL NOT CONCEAL WORK UNTIL APPROVED, REGARDLESS OF SCHEDULE.
15.	REFER TO SPECIFICATIONS ON DRAWINGS, DETAILS AND EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
16.	ALL EQUIPMENT, PIPING AND VALVES SHALL HAVE SPECIFIED IDENTIFICATION LABELS AND AS INDICATED.
17.	CONTRACTOR AND HIS SUBCONTRACTORS SHALL WORK WITH A FULL SET OF LATEST MECHANICAL DRAWINGS. IT IS CONTRACTORS RESPONSIBILITY TO OBTAIN THESE DRAWINGS FROM GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
18.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY OTHER TRADES DUE TO SUBSTITUTION OF OTHER THAN SCHEDULED EQUIPMENT. WHEN EQUIPMENT FURNISHED IS DIFFERENT THAN INDICATED, THE COST OF ADDITIONAL ELECTRICAL SERVICE, STRUCTURAL AND RELATED WORK SHALL BE PAID BY THIS CONTRACTOR.
19.	EACH TRADE CONTRACTOR SHALL RECEIVE ALL DRAWINGS AND SPECIFICATION SECTIONS ISSUED AS PART OF THE OVERALL BID PACKAGE. ALL CONTRACTORS ARE TO RECEIVE, REVIEW, AND COORDINATE ALL OF THEIR WORK AS SHOWN OR REFERENCED ON THE OTHER TRADE DOCUMENTS. ALL WORK SHOWN OR REFERENCED ON THE OTHER TRADE DOCUMENTS SHALL BE INCLUDED AS PART OF THE OVERALL PROJECT SCOPE FOR THAT PARTICULAR DISCIPLINE AND TRADE.
20.	SCHEDULE THE WORK UNDER THIS CONTRACT WITH WORK OF OTHER TRADES AS NOT TO DELAY THE OVERALL PROGRESS OF THE PROJECT.
21.	PRIOR TO EQUIPMENT STARTUP, CONTRACTOR SHALL PERFORM THE SPECIFIED STARTUP AND COMMISSIONING PROCEDURES.
22.	NOTIFY ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO PURCHASING EQUIPMENT AND PRIOR TO CUTTING OPENINGS.
23.	REVIEW ALL DISCIPLINES DRAWINGS INCLUDING ARCHITECTURAL AND STRUCTURAL, AND COORDINATE IN FIELD ALL WORK WITH OTHER TRADES AND WITH EXISTING CONDITIONS PRIOR TO INSTALLATION OF ANY WORK. REPORT ALL CONFLICTS IMMEDIATELY TO ARCHITECT AND/OR ENGINEER.
24.	VERIFY THE ACTUAL LOCATIONS AND EXACT DIMENSIONS OF ALL EQUIPMENT, CASEWORK, DEVICES, FIXTURES, SWITCHES, SENSORS, ETC. DURING FIELD VISITS AND PRIOR TO PERFORMING ANY ROUGH-IN WORK FOR THE UTILITIES AND DUCTWORK. REPORT DISCREPANCIES IMMEDIATELY TO ARCHITECT AND/OR ENGINEER.
25.	ALL ADJUSTABLE THERMOSTATS AND TEMPERATURE SENSORS SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR.
26.	COORDINATE LOCATION OF ALL WALL, FLOOR AND ROOF OPENINGS WITH STRUCTURAL AND OTHER TRADES.
27.	COORDINATE THE LOCATIONS OF ALL EQUIPMENT AND REGISTERS WITH THE LATEST ARCHITECTURAL DRAWINGS PRIOR TO PERFORMING AND ROUGH-IN WORK FOR THE UTILITIES.
28.	SCHEDULE ALL WORK, CUTTING AND BUILDING SERVICE INTERRUPTIONS WITH BUILDING OWNER AND CONSTRUCTION MANAGER PRIOR TO COMMENCING WITH THE WORK.
29.	ANY CHANGES AND/OR MODIFICATIONS MUST BE REVIEWED AND APPROVED BY THE ENGINEER AND/OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
30.	PROVIDE ALL ROOFING OPENINGS AND FLASHINGS REQUIRED FOR THE INSTALLATION OF ROOF MOUNTED EQUIPMENT.
31.	ALL MATERIALS AND EQUIPMENT INSTALLED IN RETURN AIR PLENUMS SHALL BE NON-COMBUSTIBLE AND UL APPROVED FOR USE IN A RETURN AIR PLENUM SPACE. ALL WIRING SHALL BE NON-COMBUSTIBLE OR SHALL BE ENCLOSED IN METAL CONDUIT OR PROTECTED BY A SHEET METAL COVER SECURED WITH METAL FASTENERS.
32.	INSULATION, FITTINGS, COVERS AND FINISHES IN RETURN AIR PLENUM SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM
33.	SMOKE DEVELOPED RATING OF 50.
34.	PROVIDE ACCESS PANELS AS REQUIRED FOR ALL VALVES, DAMPERS, CONTROLS, OR OTHER EQUIPMENT.
35.	ALL ROOFING WORK SHALL BE PERFORMED BY AUTHORIZED ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY.
36.	SUPPORT ALL EQUIPMENT, PIPING AND DUCTWORK FROM BUILDING STRUCTURE TO PROVIDE A VIBRATION FREE INSTALLATION, OTHERWISE ADHERE TO THE DETAILS IN THE CONTRACT DOCUMENTS. NOTIFY ARCHITECT AND/OR STRUCTURAL ENGINEER OF ALL WEIGHTS AND METHODS OF SUPPORT. PROVIDE DETAILS TO COORDINATE CONCRETE PADS AND STEEL PLATFORMS REQUIRED FOR MECHANICAL WORK.
37.	CUTTING AND PATCHING AS REQUIRED AND WHERE NECESSARY TO ACCOMMODATE NEW WORK AND THE REPAIR OF EXISTING WORK.
38.	CONTRACTOR SHALL PROTECT ALL SURFACES DURING RIGGING AND CONSTRUCTION INCLUDING BUT NOT LIMITED TO THE LOBBY AND HALLWAY FLOORS AND WALLS. CONTRACTOR SHALL RESTORE ALL SURFACES (WALLS, CEILINGS, FLOORS AND ROOFS) THAT ARE DAMAGED BY THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER.
39.	REMOVE ALL TRASH, DEBRIS AND DEMOLITION MATERIAL FROM PREMISES AT THE END OF EACH DAY.
40.	PROVIDE ACCESS PANELS IN NON-LAY-IN CEILINGS FOR SERVICE AND MAINTENANCE OF ALL CONCEALED EQUIPMENT AND DEVICES, SUCH AS HEAT PUMPS, ELECTRIC DUCT HEATERS, COILS, SMOKE DETECTORS, BALANCING DAMPERS AND FIRE DAMPERS.
41.	ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.
42.	COORDINATE LOCATION OF NEW DUCTWORK, AIR DEVICES AND EQUIPMENT WITH LIGHT FIXTURES, SPRINKLER PIPING AND HYDRONIC PIPING.
43.	SHEET/METAL FITTINGS SHOWN SHALL BE PROVIDED. NO SUBSTITUTES WILL BE ALLOWED WITHOUT PRIOR CONSENT FROM ENGINEER.
44.	PROVIDE BALANCING DAMPERS IN ALL DUCT BRANCHES TO AIR DEVICES.
45.	EQUIPMENT INDICATED ON THE DRAWINGS, TOGETHER WITH ITS BASE AND /OR SUPPORT, DUCTWORK CONNECTIONS, SERVICE CLEARANCES, WALL, FLOOR AND ROOF PENETRATIONS, AND ELECTRICAL REQUIREMENTS IS BASED ON THE MODEL INDICATED IN THE SCHEDULES. IF CONTRACTOR FURNISHES AN EQUIVALENT SUBSTITUTION, THE CONTRACTOR SHALL MAKE THE REQUIRED MODIFICATIONS IN THE WORK WITHOUT THE CHANGE IN CONTRACT AMOUNT.
46.	DUCTWORK SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH ELECTRICAL CONTRACTOR. DUCTWORK SHALL NOT COVER OR LIMIT ACCESS TO EXISTING J-BOXES.
47.	INSTALLATION OF WORK SHALL PROVIDE REASONABLE ACCESSIBILITY FOR OPERATION, INSPECTION AND MAINTENANCE OF EQUIPMENT AND ACCESSORIES. PROVIDE CLEARANCES REQUIRED BY MANUFACTURERS AND APPLICABLE CODES.
48.	VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT AND PIPE TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
49.	PROVIDE VIBRATION ISOLATION FOR ROTATING, REVOLVING OR RECIPROCATING EQUIPMENT. INCLUDING DUCTWORK CONNECTIONS TO THIS EQUIPMENT TO PREVENT TRANSMISSION OF NOISE AND VIBRATION TO BUILDING STRUCTURE AND OCCUPIED SPACES. VIBRATION ISOLATION DEVICES SHALL INCLUDE SPRING VIBRATION ISOLATORS, NEOPRENE PADDING AND DUCT PIPE FLEXIBLE CONNECTIONS.
50.	PROVIDE FLEXIBLE CONNECTIONS AT ALL FANS INLET AND OUTLET CONNECTIONS.
51.	EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM DUST, DIRT AND DAMAGE UNTIL FINAL ACCEPTANCE CLOSE ALL DUCT AND EQUIPMENT OPENINGS DURING CONSTRUCTION WITH SUITABLE PROTECTIVE COVERING BEFORE, DURING AND FOLLOWING INSTALLATION.
52.	REMOVE TEMPORARY AIR FILTERS AND PROVIDE NEW FILTERS IN ALL AIR CONDITIONING EQUIPMENT WITHIN THE SCOPE OF WORK UPON COMPLETION OF CONSTRUCTION AND BEFORE BALANCING.
53.	CONTROL WIRE AND CONDUIT SHALL COMPLY WITH NEC AND ELECTRICAL SPECIFICATIONS.
54.	ALL SERVICES TO EXISTING BUILDINGS SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED.
55.	PROVIDE SELECTIVE CEILING DEMOLITION TO PLACE NEW DUCTWORK AND DIFFUSERS. REPLACE DAMAGED CEILING TILES AND GRIDS RESULTING FROM DEMOLITION. NEW CEILING TILES SHALL MATCH WITH EXISTING.
56.	MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS AND COORDINATION WITH ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO STRUCTURAL, LIGHTING, ELECTRICAL, PLUMBING, AND OTHER EXISTING AND NEW WORK. VERIFY ALL EXISTING CONDITIONS IN FIELD PRIOR TO PURCHASING EQUIPMENT. ALL DISCREPANCIES OR POTENTIAL PROBLEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO BIDDING. PROVIDE ADDITIONAL MATERIALS AND LABOR TO RELOCATE OR REPLACE MECHANICAL WORK AS REQUIRED TO ALLOW SPACE FOR THE WORK OF ALL TRADES.
57.	THE WORK INCLUDES CONNECTION TO AN EXISTING MECHANICAL, ELECTRICAL, FIRE ALARM, AND CONTROL SYSTEMS ON THE PROJECT. CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ANY LABOR AND MATERIALS NECESSARY TO UNCOVER, TRACE, TEST, FIELD VERIFY, AND MEASURE ANY EXISTING EQUIPMENT OR SYSTEMS THAT ARE AFFECTED BY THE WORK UNDER THIS CONTRACT.
58.	THE DRAWINGS INDICATE APPROXIMATE LOCATIONS BASED UPON INFORMATION OBTAINED WITHOUT REMOVING CEILING TILES OR WALLS. THEREFORE, THE CONTRACTOR SHALL INCLUDE IN THEIR BID CONTINGENCY COSTS TO ADDRESS CONFLICTS BETWEEN DESIGN AND EXISTING CONDITIONS.
59.	THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS RELATED TO REMOVING AND REPLACING ALL CEILINGS AS REQUIRED FOR THE MECHANICAL AND ELECTRICAL WORK ON THIS PROJECT.
60.	THE CONTRACTOR SHALL INCLUDE IN THE BID THE RELOCATION OF ANY EXISTING JUNCTION BOXES (OF ANY KIND) THAT WILL BE INACCESSIBLE DUE TO THE WORK IN THIS PROJECT.
61.	PRIOR TO DEMOLITION, THE CONTRACTOR SHALL LOG ALL EXISTING EQUIPMENT AND TRACE ELECTRICAL, FIRE ALARM, AND CONTROL CIRCUITS THAT SERVE SUCH EQUIPMENT.
62.	THE CONTRACTOR SHALL INCLUDE IN THEIR BID COSTS REQUIRED TO RELOCATE EXISTING CONDUITS OF ANY KIND IN ORDER TO INSTALL NEW EQUIPMENT, DUCTWORK, AND PIPING.
63.	SEISMIC REQUIREMENTS AS SPECIFICATIONS.

GENERAL NOTES:
GENERAL CONTRACTOR SHALL OBTAIN ALL SIGNOFFS, PERMITS, AND FINAL C.O. FROM THE BUILDING DEPARTMENT.

NOTE TO THE CONTRACTOR:		
THE CONTRACTOR IS RESPONSIBLE FOR FORWARDING ALL CONTRACT DOCUMENTS (ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, FIRE ALARM, FIRE PROTECTION, PLUMBING DRAWINGS AND SPECIFICATIONS) TO ALL OF ITS SUBCONTRACTORS. DURING THE BIDDING PROCESS THE SUB-CONTRACTORS SHALL ASSUME WHERE DIRECTED ON ANY DRAWINGS AS "CUSTOMER PROVIDED" OR "OWNER PROVIDED". THE SUB CONTRACTOR SHALL PROVIDE THE SPECIFIED ITEM NO ADDED PAYMENT ABOVE THE CONTRACT SUM WILL BE PAID TO THE CONTRACTOR FOR ANY WORK WHICH MAY BE REQUIRED AS A RESULT OF THE CONTRACTORS FAILURE TO COORDINATE THIS INFORMATION DURING THE BIDDING PROCESS.		

MECHANICAL DRAWING LIST		
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DUCT SYMBOLS	
	NEW WORK
	RETURN DUCTWORK
	REMOVE EXISTING DUCTWORK
	ACCESS DOOR (SIZES VARY AS SHOWN ON DRAWINGS)
	INDICATES SUPPLY AIR
	INDICATES EXHAUST AIR
	FIRE DAMPER
	COMBINATION FIRE-SMOKE DAMPER
	SMOKE DAMPER
	VOLUME DAMPER AND ACCESS DOOR
	MOTORIZED DAMPER AND ACCESS DOOR
	GRAVITY DAMPER
	DOOR UNDERCUT
CONTROL SYMBOLS	
	CONTROL VALVE
	PNEUMATIC THERMOSTAT
	ELECTRO-PNEUMATIC SWITCH
	MANUAL SWITCH
	DIGITAL THERMOSTAT
	CARBON DIOXIDE SENSOR
	DUCT SMOKE DETECTOR
ABBREVIATIONS	
A.D. - ACCESS DOOR	
A.A.D. - AUTOMATIC AIR OPERATED LOUVER DAMPER	
ACCU - AIR COOLED CONDENSING UNIT	
C.F.M. - CUBIC FEET PER MINUTE	
C.C. - COOLING COIL	
C.O.D. - CLEAN OUT DOOR	
C.P. - CONDENSATE PUMP	
D.N. - DRAIN	
(E) - EXISTING	
EA - EXHAUST AIR (CFM)	
EF - EXHAUST FAN	
F.D. - FIRE DAMPER	
GR - GRILLE (WITH VOLUME DAMPER)	
HMI - HUMAN MACHINE INTERFACE	
M.A.D. - MANUAL AIR OPERATED LOUVER DAMPER	
LDR - LINEAR DIFFUSER RETURN	
LDS - LINEAR DIFFUSER SUPPLY	
O.A.I. - OUTSIDE AIR INTAKE (FRESH AIR INLET)	
RA - RETURN AIR (CFM)	
SA - SUPPLY AIR (CFM)	
SF - SUPPLY FAN	
TEF - TOILET EXHAUST FAN	
VENT. - VENTILATION	
WMS - WIRE MESH SCREEN	
PIPING SYMBOLS	
	NEW WORK
	EXISTING PIPING, DUCTWORK, EQUIPMENT TO REMAIN
	REMOVE EXISTING PIPING
	REFRIGERANT GAS PIPE LINE
	REFRIGERANT LIQUID GAS LINE
	CONDENSATE PIPE LINE
	COMBUSTION VENT
	RISER, WATER, STEAM AND/OR RETURN
	FLOOR CONNECTION
	CEILING CONNECTION TO FLOOR ABOVE
	DROP
	RISE
	TEE TAKEOFF
	COMBINATION OF BALANCING AND SHUT OFF VALVE
	POINT OF DISCONNECTION
	POINT OF NEW CONNECTION

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Sheet Contents
MECHANICAL SYMBOLS, LEGENDS & NOTES

Project Number. 6963

Drawing No. M-001.00

Sheet 1 of 10

AIR COOLED CONDENSING OUTDOOR UNIT SCHEDULE														BASIS OF DESIGN: TRANE						
UNIT TAG	SERVICE	LOCATION	COOLING CAPACITY			ELECTRICAL DATA						IEER	EER	COP	SOUND POWER RATING (dB)	APPROX. PHYSICAL EXTERNAL DIMENSIONS (HxWxD)	NET WEIGHT (LBS)	MODEL No.	REMARKS	
			EAT (°F)		TOTAL BTU/HR	VOLTS	PHASE	Hz	TOTAL POWER (KW)	MCA	MOCP									
			DB	WB																
ACCU-1 ACCU-2	AHU-1/2	OUTDOOR	95	75	974,490	460	3	60	99.66	178	200	16.3	10.6	-	-	80x90x178	5351	RAU-C80	REFRIG. TYPE R-454B	

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ACTUAL LENGTHS AND NUMBER OF FITTINGS AND CONFIRM WITH UNIT MANUFACTURER.

2. PROVIDE UNIT WITH FACTORY MOUNTED DISCONNECT SWITCH.

3. PROVIDE SPRING NEOPRENE VIBRATOR ISOLATORS, SIMILAR TO MASON OR APPROVED EQUAL.

4. VERIFY THE FINAL LAYOUT AND SIZING OF REFRIGERANT PIPING WITH THE UNIT MANUFACTURER PRIOR TO INSTALLATION.

5. REFRIGERANT LINE SIZING TO BE CALCULATED BY APPROVED AIR CONDITIONING UNIT

MANUFACTURER IN ACCORDANCE WITH ACTUAL INSTALLATION AND LATEST COORDINATED SHOP DRAWINGS.

6. MOUNT AIR SOURCE ACCU UNITS ACCORDING TO UNIT MANUFACTURER'S SPECIFIC WRITTEN INSTRUCTIONS.

7. TESTS FOR REFRIGERANT LINES ARE TO BE COMPLETED PRIOR TO INSULATION AND ENCLOSURE.

8. VERIFY EXACT AMOUNT OF REFRIGERANT WITH UNIT MANUFACTURER BASED ON ACTUAL INSTALLED LENGTH OF PIPING.

9. PROVIDE UNITS WITH FACTORY CONTROLLERS FOR INTEGRATION INTO THE BUILDING MANAGEMENT SYSTEM (BMS). SYSTEM SHALL HAVE A TOUCH SCREEN USER INTERFACE.

AIR CONDITIONING UNIT SCHEDULE																													BASIS OF DESIGN: TRANE							
UNIT TAG	SERVICE	LOCATION	ASSOCIATED OUTDOOR UNIT	SUPPLY FAN DATA											COOLING COIL PERFORMANCE								HEATING COIL PERFORMANCE								SOUND POWER RATING (dB)	APPROX. PHYSICAL DIMENSIONS (WxHxD)	NET WEIGHT (LBS)	MODEL No.	REMARKS	
				CFM	CFM OA	TSP (IN WG)	ESP (IN WG)	QTY. OF FANS	RPM	INPUT POWER (kW)	BHP	MOP	MCA	FLA	ELECTRICAL SUPPLY (V/PH)	COOLING CAPACITY (MBTU/HR)	PD AIR (IN H2O)	No. OF COILS	SYSTEM TYPE	FLOW RATE (GPM)	EAT (dbFwbF)	LAT (dbFwbF)	HEATING CAPACITY (MBTU/HR)	EAT (dbF)	LAT (dbF)	PD AIR (IN H2O)	No. OF COILS	SYSTEM TYPE	FLOW RATE (GPM)	EWT (F)						LWT (F)
AHU-1 AHU-2	GYM	INDOOR	ACCU-1 ACCU-2	19,000	10,500	3.61	1.50	2	2,074	14.9	17.623	-	31.5	-	460/3/70	960	0.761	-	REFRIGERANT (R-454B)	-	82.40/68.98	54.03/52.76	1,225	34.25	93.70	0.129	2	HOT WATER	122.34	180	160	-	113x71x192	5448	CSAAA040	-
AHU-3	GYM	INDOOR	-	14,375	14,375	3.34	-	-	1,724	9.16	12.290	-	-	21.65	460/3/60	401.4	0.505	1	CHILLED WATER	80	82/67	60.07/58.74	461.04	45	74.57	0.170	1	HOT WATER	46.04	180	160	-	113x71x192	5448	CSAAA040	-
AHU-4	GYM	INDOOR	-	14,055	14,055	3.26	-	-	1,692	8.69	11.657	-	-	21.65	460/3/60	373.1	0.449	1	CHILLED WATER	74.36	82/67	60.89/59.29	455.67	45	74.89	0.163	1	HOT WATER	45.51	180	160	-	113x71x192	5448	CSAAA040	-

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ACTUAL LENGTHS AND NUMBER OF FITTINGS AND CONFIRM WITH UNIT MANUFACTURER.

2. PROVIDE UNIT WITH FILTER AS PER MANUF. RECOMMENDATIONS. INCLUDE TWO SPARE FILTERS PER UNIT.

3. VERIFY THE FINAL LAYOUT AND SIZING OF REFRIGERANT PIPING WITH THE UNIT MANUFACTURER PRIOR TO INSTALLATION.

4. REFRIGERANT LINE SIZING TO BE CALCULATED BY APPROVED AIR CONDITIONING UNIT MANUFACTURER IN ACCORDANCE WITH ACTUAL INSTALLATION AND LATEST COORDINATED SHOP DRAWINGS.
5. MOUNT AIR SOURCE AC INDOOR UNITS ACCORDING TO UNIT MANUFACTURER'S SPECIFIC WRITTEN INSTRUCTIONS.

6. TESTS FOR REFRIGERANT LINES ARE TO BE COMPLETED PRIOR TO INSULATION AND ENCLOSURE.

7. VERIFY EXACT AMOUNT OF REFRIGERANT WITH UNIT MANUFACTURER BASED ON ACTUAL INSTALLED LENGTH OF PIPING.

9. PROVIDE UNITS WITH FACTORY CONTROLLERS FOR FUTURE INTEGRATION INTO THE BUILDING MANAGEMENT SYSTEM (BMS).

SUPPLYAIR GRILLES SCHEDULE								
TAGS	CFM RANGE	CORE AREA SQ.FT.	NOMINAL DUCT SIZE INCHES	ANGLE OF DEFLECTION (DEGREES)	SPACING INCHES	MAX. NOISE RATING, NC	MANUFACTURER	MODEL NO.
SG-1	0-760	1.52	20x12	22.5°	0.75	20	ANEMOSTAT	10/L
SG-2	0-920	1.83	24x12	22.5°	0.75	20	ANEMOSTAT	10/L

RETURN AIR GRILLES SCHEDULE								
TAGS	CFM RANGE	CORE AREA SQ.FT.	NOMINAL DUCT SIZE INCHES	ANGLE OF DEFLECTION (DEGREES)	SPACING INCHES	MAX. NOISE RATING, NC	MANUFACTURER	MODEL NO.
RG-1	0-4,990	9.98	42X36	40°	-	20	-	E30
RG-2	0-5,280	10.57	40X40	40°	-	20	-	E30

- NOTES:
1. CONTRACTOR SHALL COORDINATE REGISTER'S BORDER TYPE WITH ARCHITECT AND/OR CLIENT.

2. CONTRACTOR SHALL COORDINATE REGISTER'S COLOR WITH ARCHITECT AND/OR CLIENT.

FLUID OPERATING TEMP. RANGE AND USAGE (°F)	INSULATION CONDUCTIVITY BTU IN/HRFT²°F	INSULATION CONDUCTIVITY MEAN RATING TEMPERATURE °F	NOM. DIA. <1"	NOM. DIA. 1" TO <1.5"	NOM. DIA. 1.5" TO <4"	NOM. DIA. 4" TO 8"	NOM. DIA. ≥8"
201-250	0.27-0.3	150	2.5	2.5	2.5	3.0	3.0
141-200	0.25-0.29	125	1.5	1.5	2.0	2.0	2.0
105-140	0.21-0.28	100	1.0	1.0	1.5	1.5	1.5
40-60	0.21-0.27	75	0.5	0.5	1.0	1.0	1.0

PIPING INSULATION

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SCHEMATIC DESIGN

Issued On 12/19/2025

Sheet Contents
MECHANICAL EQUIPMENT
SCHEDULES

Project Number. 6963

Drawing No. M-002.00

Sheet 2 of 10

NEW WORK NOTES

- PRIOR TO SUBMISSION OF BID, VISIT THE AND VERIFY AND BECOME FAMILIAR WITH RELATIVE LOCATIONS AND EXISTING CONDITIONS. SUBMITTED BIDS WILL BE INTERPRETED TO MEAN THE CONTRACTOR VISITED THE SITE, AND ALL COST AND CHARGES MADE NECESSARY BY THE EXISTING CONDITIONS ARE INCLUDED.
- PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, AND SERVICES FOR THE PROPER EXECUTION OF DEMOLITION WORK. ANY LABOR, MATERIAL, EQUIPMENT AND SERVICE NECESSARY SHALL BE PROVIDED AS IF CALLED FOR.
- PROVIDE LADDERS, TOOLS AND OTHER EQUIPMENT AND SERVICES FOR THE MECHANICAL WORK. REMOVE IT UPON COMPLETION OF WORK.
- WORK SHALL CONFORM TO THE LATEST EDITION OF ALL APPLICABLE LAWS, CODES AND REGULATIONS HAVING JURISDICTION.
- SECURE ALL PERMITS, INSPECTIONS AND CERTIFICATED REQUIRED, AND PAY ALL FEES OR CHARGES FOR THE SAME.
- WHEN WORK INVOLVES ASBESTOS, PCB OR OTHER TOXIC MATERIALS CONTRACTOR SHALL NOTIFY OWNER WHO WILL RETAIN AN INDUSTRIAL HYGIENIST TO ESTABLISH STANDARD PROCEDURES FOR WORKING WITHOR REMOVING TOXIC MATERIALS.
- PROVIDE SUITABLE WRAPPING AND OTHER PROTECTION NECESSARY TO PREVENT DAMAGE TO MECHANICAL EQUIPMENT AND MATERIAL. REMOVE ALL SUCH PROTECTIVE DEVICES WHEN THEIR USE BECOMES UNNECESSARY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF ALL EXISTING STRUCTURAL ELEMENTS DURING ALL PHASES OF HIS/HER WORK.
- PROVIDE WEATHER TIGHT AND SECURE CLOSURES FOR ANY BUILDING OPENING LEFT OVERNIGHT. THE CONTRACTOR IS RESPONSIBLE FOR ANY BREACHES OF SECURITY OR DAMAGE CAUSED AS A RESULT OF INSUFFICIENT PROTECTION.
- PROVIDE APPROPRIATE SEPARATION BETWEEN THE CONSTRUCTION AREA AND ADJACENT OCCUPIED SPACES TO PREVENT MIGRATION OF DUST, ODORS AND SUBSTANCES HAZARDOUS TO HUMAN HEALTH.
- AT ALL TIMES KEEP PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL AND RUBBISH CAUSED BY AGENTS AND EMPLOYEES OF THE CONTRACTOR. RUBBISH IS TO BE REMOVED FROM THE SITE BY THE GENERAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL ON A WEEKLY BASIS GATHER THE RUBBISH HE CREATED AND PILE IT AT THE LOCATION DESIGNATED BY THE GENERAL CONTRACTOR. IN THE EVENT OF DISPUTE OR REFUSAL TO COMPLY WITH REQUIREMENTS OF THE ABOVE PARAGRAPHS, THE OWNER SHALL HAVE THE OPTION OF REMOVING SUCH RUBBISH FROM THE PREMISES, AND BACK-CHARGING THE CONTRACTOR FOR DOING SUCH WORK.
- REMOVED EQUIPMENT AND MATERIAL NOT DESIRED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL PROMPTLY REMOVED FROM THE SITE. EQUIPMENT AND MATERIAL DESIRED BY THE OWNER SHALL BE DELIVERED BY THE CONTRACTOR TO LOCATION DESIGNATED BY THE OWNER. OWNER WILL TAG OR OTHERWISE INDICATE THE EQUIPMENT AND MATERIAL HE DESIRES TO KEEP.
- PROVIDE SUITABLE FIRE RATED PATCHING FOR MECHANICAL SYSTEMS AND EQUIPMENT OPENINGS CREATED BY DEMOLITION.
- EXISTING MECHANICAL WORK THAT IS TO REMAIN, WHEN EXISTING STRUCTURE IN WHICH IT IS INSTALLED IS TO BE REMOVED, SHALL BE TEMPORARY SUPPORTED IN PLACE.
- ALL EXISTING DEVICES AND CONTROLS INDICATED TO BE RELOCATED SHALL BE REMOVED WITH CARE AND STORED UNTIL RE-INSTALLATION.
- REMOVAL OF EQUIPMENT, DUCTWORK, AND PIPING SHALL INCLUDE REMOVAL OF ALL ASSOCIATED VALVES, FITTINGS, HANGERS, SUPPORTS, CONTROLS, AND APPURTENANCES.
- W/ALL ALL OPENINGS LEFT BY REMOVED DUCTWORK AND PIPING, COORDINATE THIS WORK WITH GENERAL CONTRACTOR.
- CAN AND SEAL AIR TIGHT, OPENINGS IN EXISTING DUCTWORK TO REMAIN LEFT BY REMOVAL OF DUCT BRANCHES. CAP FLUSH TO EDGE OF MAIN DUCT. REMOVAL OF ALL EXISTING DUCT COLLARS FROM EXISTING DUCTS TO REMAIN AND CAP FLUSH TO EDGE OF MAIN DUCT.
- PLUG ALL THIPS AT MAINS WHERE BRANCH PIPING HAS BEEN REMOVED. WHERE EXISTING VALES ARE TO REMAIN, THE VALVES SHALL BE CLOSED AND CAPPED.

KEY NOTES

- EXISTING H&V 2-1 TO BE REMOVED ALONG WITH ALL ASSOCIATED ACCESSORIES. REMOVE THE EXISTING SUPPORTS AND FRAMING AS REQUIRED FOR INSTALLATION FOR THE NEW UNITS.
- EXISTING H&V 2-2 TO BE REMOVED ALONG WITH ALL ASSOCIATED ACCESSORIES. REMOVE THE EXISTING SUPPORTS AND FRAMING AS REQUIRED FOR INSTALLATION FOR THE NEW UNITS.
- REMOVE EXISTING SA DUCT.
- REMOVE EXISTING OA/RA DUCT.
- REMOVE THE EXISTING HWS&R, DTS&R AND CONDENSATE DRAIN(CD) PIPING FROM THE UNIT UP TO DISCONNECTION POINT/CLOSEST SHUT-OFF VALVE.
- EXISTING LOUVER 72" x 120" TO REMAIN.
- EXISTING RETURN AIR GRILLES BELOW THE H&V UNIT TO BE REPLACED.
- EXHAUST FAN EXISTING TO REMAIN.



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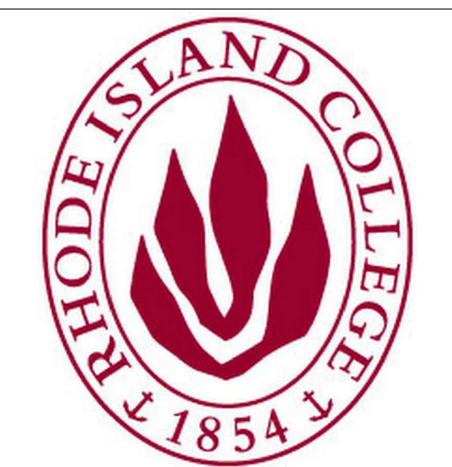
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600 MOUNT PLEASANT AVE,
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Drawing Status

SCHEMATIC DESIGN

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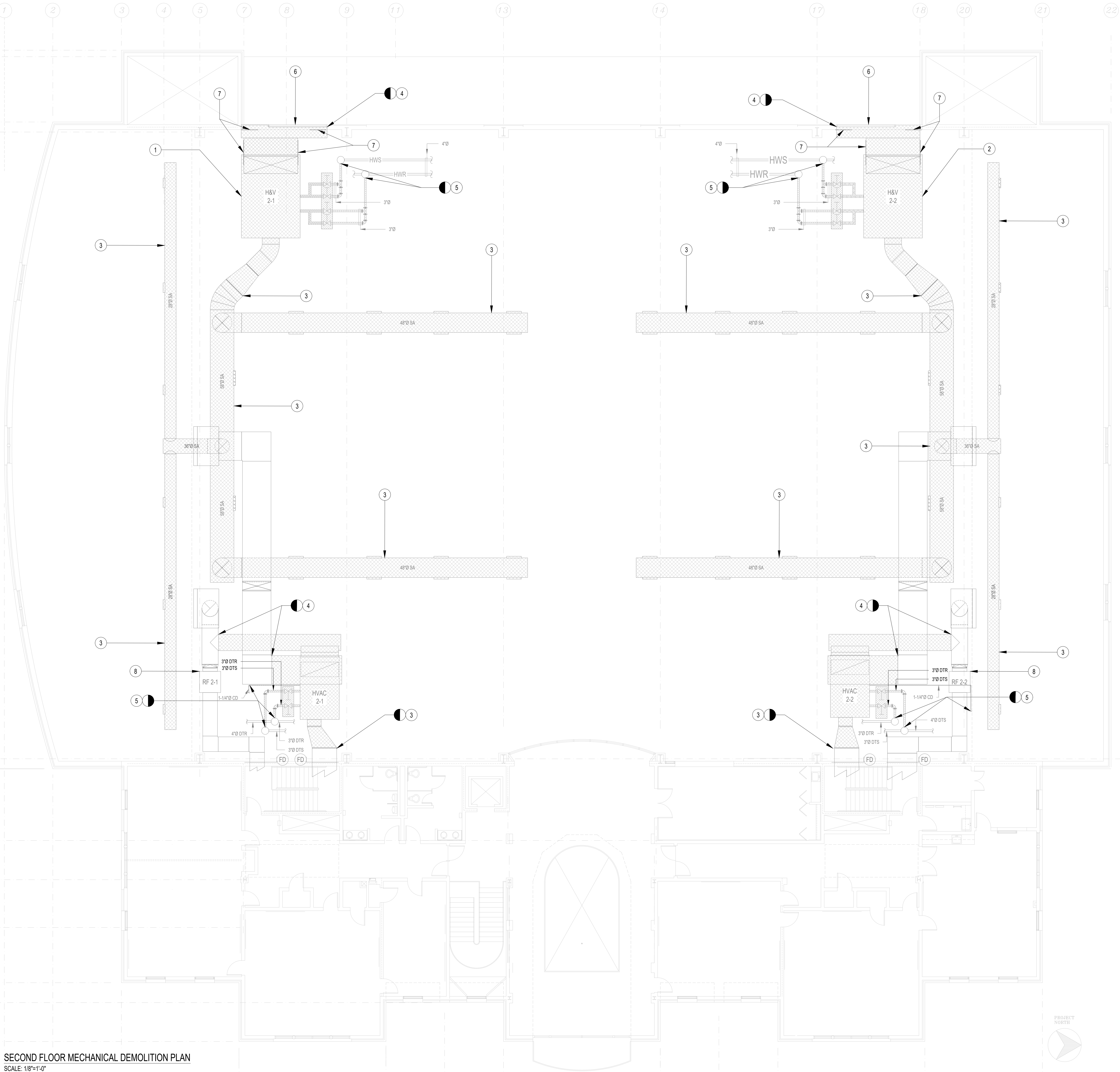
Sheet Contents

SECOND FLOOR
MECHANICAL DEMOLITION
DUCTWORK/PIPING PLAN

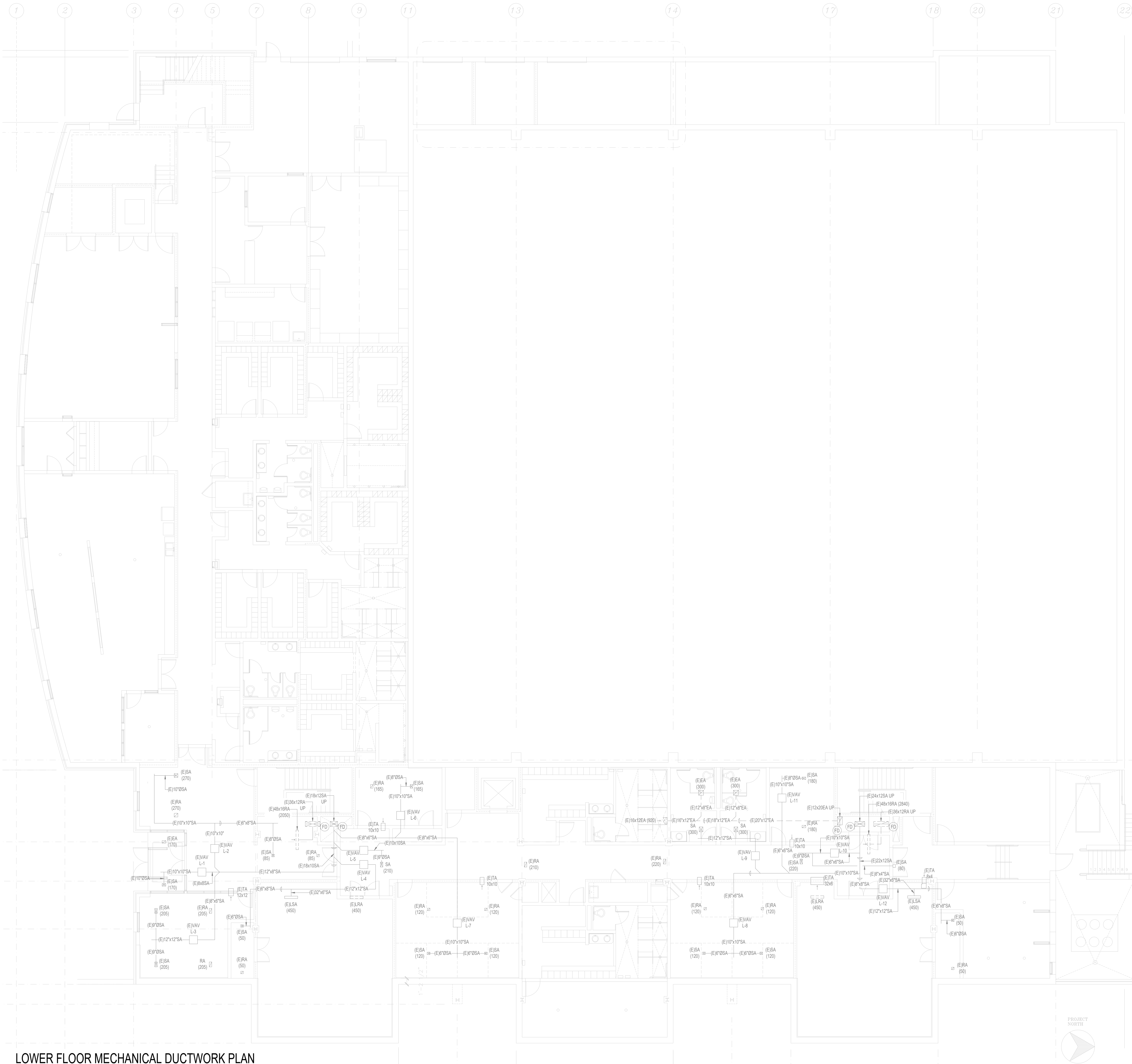
Project Number 6963

Drawing No. MD-101.00

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SECOND FLOOR MECHANICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"



LOWER FLOOR MECHANICAL DUCTWORK PLAN
SCALE: 1/8"=1'-0"

EXISTING AHU-3 & AHU-4 DUCTWORK DISTRIBUTION SYSTEMS
NOTES

- EXISTING DUCTWORK SYSTEM SHALL REMAIN AND BE REUSED.
- THE CONTRACTOR SHALL PERFORM A COMPLETE AIR BALANCE FOR THE EXISTING DUCTWORK SYSTEM SERVED BY AHU-3 AND AHU-4.
- THE CONTRACTOR MUST TAKE AIRFLOW READINGS (CFM) AT ALL EXISTING SUPPLY AND RETURN GRILLES, ADJUST DAMPERS, AND BALANCE THE SYSTEM TO MATCH THE ORIGINAL DESIGN FLOW RATES.

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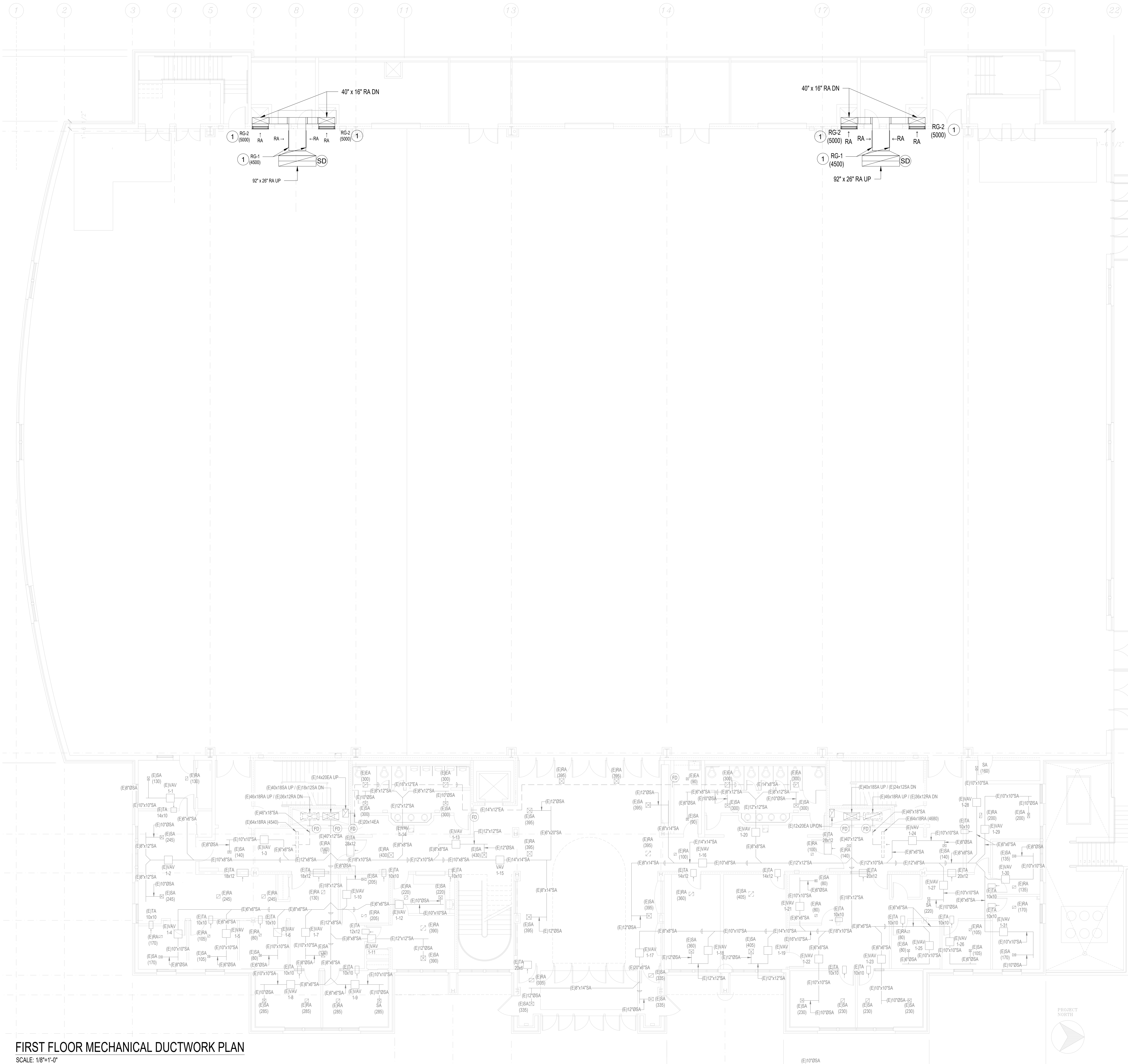
Sheet Contents

LOWER FLOOR MECHANICAL
DUCTWORK PLAN

Project Number. 6963

Drawing No. **M-101.00**

Sheet 4 of 10



FIRST FLOOR MECHANICAL DUCTWORK PLAN
SCALE: 1/8"=1'-0"

NEW WORK NOTES

1. PROVIDE COMPLETE AND PROPERLY FUNCTIONING HVAC SYSTEM FOR THIS PROJECT. VISIT THE PROJECT SITE. EXAMINE THESE PLANS AND ALL EXISTING DRAWINGS RELATING TO THE AREA OF WORK AND REPORT ANY DISCREPANCIES OR OMISSIONS IN THIS PLAN SET TO THE ENGINEER FOR A RESOLUTION AND CLARIFICATION PRIOR TO SUBMISSION FOR BIDS.
2. RISERS AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENT FOR THESE ITEMS.
3. ALL DUCT DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
4. PROVIDE ALL 90-DEGREE SQUARE ELBOW WITH DOUBLE RADIUS TURNING VANES UNLESS OTHERWISE INDICATED. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
5. LOCATE ALL MECHANICAL EQUIPMENT (RTU'S, RETURN/EXHAUST FANS, DUCTWORK) FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
6. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS, FANS, AND OTHER EQUIPMENT THAT REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
7. CONTROL WIRING OF SMOKE DETECTORS IS BY THE APPROVED CONTROLS CONTRACTOR.
8. SAFETY DEVICES SHALL BE HARDWIRED TO THE FAN STARTER CIRCUIT, IN ADDITION TO THE DDC SYSTEM.
9. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF AN EXISTING DUCTWORK OR STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.
10. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
11. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL SMOKE DETECTORS, FIRE DAMPERS, VOLUME DAMPERS, COILS AND OTHER ITEMS LOCATED IN THE DUCTWORK THAT REQUIRE SERVICE AND/OR INSPECTION.
12. PROVIDE ACCESS DOORS IN DUCTWORK FOR THE OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.
13. ALL DUCTS SHALL BE GROUNDED ACROSS FLEXIBLE CONNECTIONS WITH FLEXIBLE COPPER GROUNDING STRAPS.
14. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
15. SEE SPECIFICATIONS FOR DUCTWORK CAULKS, BRACING, HANGERS, AND OTHER REQUIREMENTS.
16. FIRE ALARM CONTRACTOR SHALL FURNISH FIRE ALARM COMPLIANT SMOKE DETECTOR TO THE SHEET METAL CONTRACTOR FOR FIELD DUCTWORK INSTALLATION, AS APPLICABLE. DIVISION 16 CONTRACTOR SHALL PROVIDE ALL SIGNAL AND CONTROL POWER WIRING.
17. SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4.
18. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. THOSE DOCUMENTS INCLUDE: DRAWINGS, MANUALS, AND SYSTEM BALANCING REPORTS.
19. HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS. AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN TOLERANCES PROVIDED IN PRODUCT SPECIFICATIONS. TEST AND BALANCING ACTIVITIES SHALL INCLUDE AIR SYSTEM BALANCING. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPY OF TESTING AND BALANCING OF AIR REPORT.

KEY NOTES

1. PROVIDE NEW RETURN AIR GRILLES.

EXISTING AHU-3 & AHU-4 DUCTWORK DISTRIBUTION SYSTEMS NOTES

12. EXISTING DUCTWORK SYSTEM SHALL REMAIN AND BE REUSED.
13. THE CONTRACTOR SHALL PERFORM A COMPLETE AIR BALANCE FOR THE EXISTING DUCTWORK SYSTEM SERVED BY AHU-3 AND AHU-4.
14. THE CONTRACTOR MUST TAKE AIRFLOW READINGS (CFM) AT ALL EXISTING SUPPLY AND RETURN GRILLES, ADJUST DAMPERS, AND BALANCE THE SYSTEM TO MATCH THE ORIGINAL DESIGN FLOW RATES.

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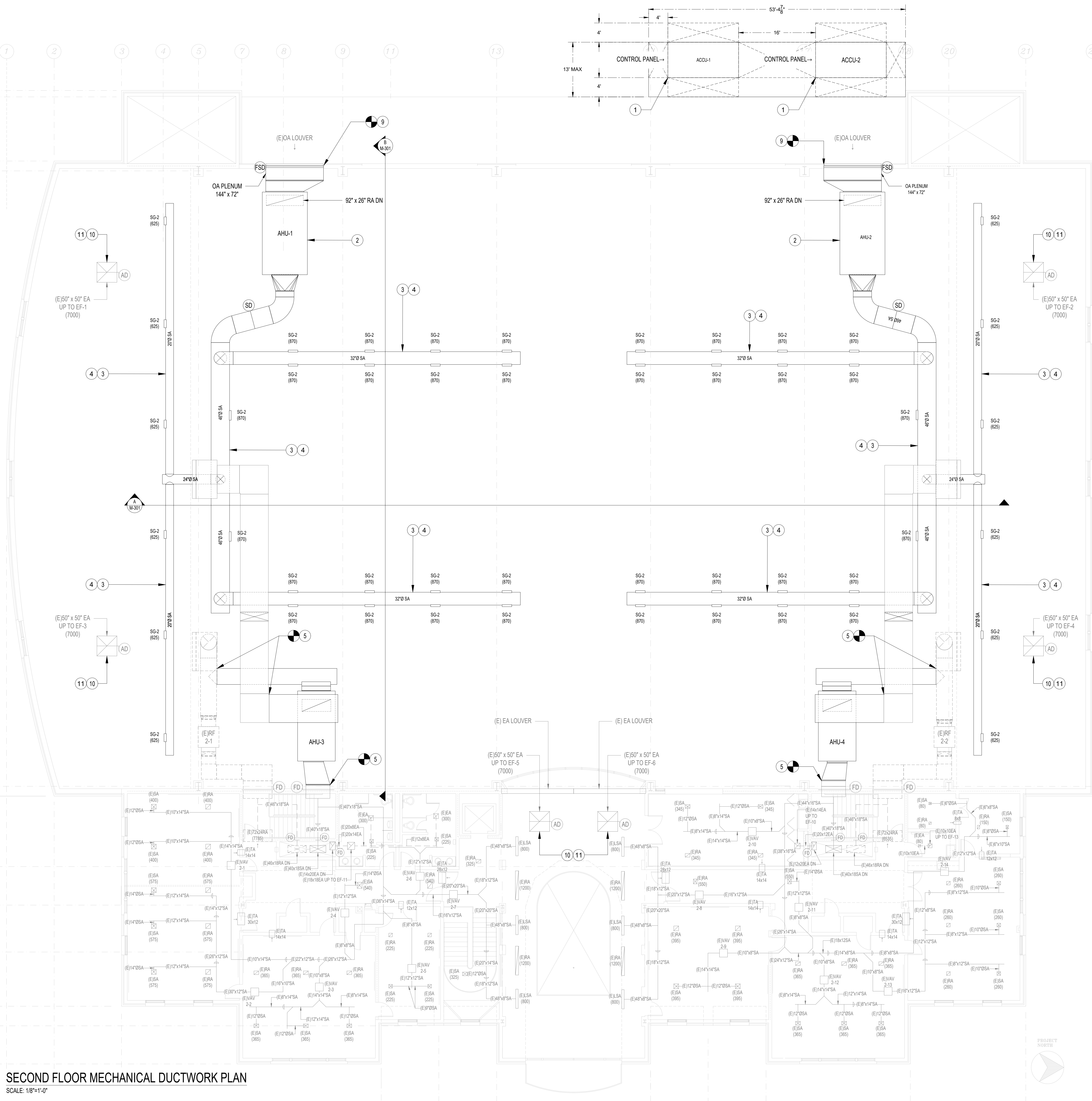
Sheet Contents

**FIRST FLOOR MECHANICAL
DUCTWORK PLAN**

Project Number. 6963

Drawing No. **M-102.00**

Sheet 5 of 10



SECOND FLOOR MECHANICAL DUCTWORK PLAN
SCALE: 1/8"=1'-0"

NEW WORK NOTES

1. PROVIDE COMPLETE AND PROPERLY FUNCTIONING HVAC SYSTEM FOR THIS PROJECT. VISIT THE PROJECT SITE, EXAMINE THESE PLANS AND ALL EXISTING DRAWINGS RELATING TO THE AREA OF WORK AND REPORT ANY DISCREPANCIES OR OMISSIONS IN THIS PLAN SET TO THE ENGINEER FOR A RESOLUTION AND CLARIFICATION PRIOR TO SUBMISSION FOR BIDS.
2. RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENT FOR THESE ITEMS.
3. ALL DUCT DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
4. PROVIDE ALL 90-DEGREE SQUARE ELBOW WITH DOUBLE RADIUS TURNING VANES UNLESS OTHERWISE INDICATED. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
5. LOCATE ALL MECHANICAL EQUIPMENT (RTU'S, RETURN/EXHAUST FANS, DUCTWORK) FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
6. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS, FANS, AND OTHER EQUIPMENT THAT REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
7. CONTROL WIRING OF SMOKE DETECTORS IS BY THE APPROVED CONTROLS CONTRACTOR.
8. SAFETY DEVICES SHALL BE HARDWIRED TO THE FAN STARTER CIRCUIT. IN ADDITION TO THE BDC SYSTEM.
9. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF AN EXISTING DUCTWORK OR STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.
10. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
11. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL SMOKE DETECTORS, FIRE DAMPERS, VOLUME DAMPERS, COILS AND OTHER ITEMS LOCATED IN THE DUCTWORK THAT REQUIRE SERVICE AND/OR INSPECTION.
12. PROVIDE ACCESS DOORS IN DUCTWORK FOR THE OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.
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15. SEE SPECIFICATIONS FOR DUCTWORK GAUGES, BRACING, HANGERS, AND OTHER REQUIREMENTS.
16. FIRE ALARM CONTRACTOR SHALL FURNISH FIRE ALARM COMPLIANT SMOKE DETECTOR TO THE SHEET METAL CONTRACTOR FOR FIELD DUCTWORK INSTALLATION, AS APPLICABLE. DIVISION 16 CONTRACTOR SHALL PROVIDE ALL SIGNAL AND CONTROL POWER WIRING.
17. SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4.
18. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. THOSE DOCUMENTS INCLUDE: DRAWINGS, MANUALS, AND SYSTEM BALANCING REPORTS.
19. HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS, AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN TOLERANCES PROVIDED IN PRODUCT SPECIFICATIONS. TEST AND BALANCING ACTIVITIES SHALL INCLUDE AIR SYSTEM BALANCING. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPY OF TESTING AND BALANCING OF AIR REPORT.

KEY NOTES

1. PROVIDE NEW CONDENSING UNIT AS SPECIFIED IN EQUIPMENT SCHEDULE ON DRAWING M002. UNIT TO BE MOUNTED ON A NEW CONCRETE PAD (6" MI. HIGH).
2. PROVIDE AIR HANDLING UNIT AS PER EQUIPMENT SCHEDULE ON DWG M002.
3. NEW DUCTWORK SHALL FOLLOW THE SAME ROUTING AS DUCTWORK REMOVED, AS SHOWN ON DEMOLITION PLAN.
4. PROVIDE INTERNAL DUCT LINER INSULATION FOR ALL SA AND OA DUCTWORK.
5. RECONNECT THE OA/RA/SA DUCTWORK.
6. PROVIDE NEW RETURN AIR GRILLES.
7. ALL NEW AND EXISTING DUCTWORK IN THE GYM AREA SHALL BE PAINTED. THE COLOR SELECTION AS PER THE ARCHITECT'S DIRECTION.
8. PROVIDE AIR VOLUME DAMPERS AS REQUIRED TO ALLOW FOR PROPER TESTING, ADJUSTING, AND BALANCING OF THE AIR SYSTEMS SERVING AHU-1 AND AHU-2.
9. RECONNECT THE OA DUCTWORK TO THE EXISTING OA LOUVER. CLEAN THE EXISTING OA LOUVER PRIOR TO RECONNECTION.
10. THE CONTRACTOR SHALL ADJUST AND RE-BALANCE THE EXISTING GYMNASIUM EXHAUST FANS TO COORDINATE WITH THE NEW LOWER AIRFLOW (CFM) CAPACITIES OF AHU-1 AND AHU-2.
11. CONTRACTOR MUST ADJUST FAN SPEEDS, PULLEYS, OR DAMPERS TO MAINTAIN A CONSTANT 10% NEGATIVE BUILDING PRESSURE WITHIN THE GYMNASIUM SPACE RELATIVE TO ADJACENT AREAS.

EXISTING AHU-3 & AHU-4 DUCTWORK DISTRIBUTION SYSTEMS NOTES

12. EXISTING DUCTWORK SYSTEM SHALL REMAIN AND BE REUSED.
13. THE CONTRACTOR SHALL PERFORM A COMPLETE AIR BALANCE FOR THE EXISTING DUCTWORK SYSTEM SERVED BY AHU-3 AND AHU-4.
14. THE CONTRACTOR MUST TAKE AIRFLOW READINGS (CFM) AT ALL EXISTING SUPPLY AND RETURN GRILLES, ADJUST DAMPERS, AND BALANCE THE SYSTEM TO MATCH THE ORIGINAL DESIGN FLOW RATES.

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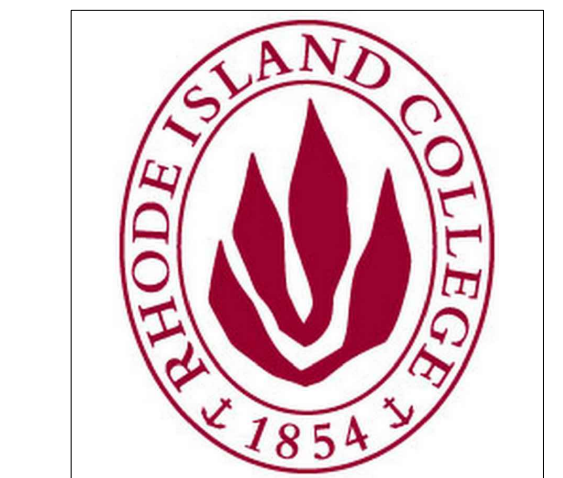
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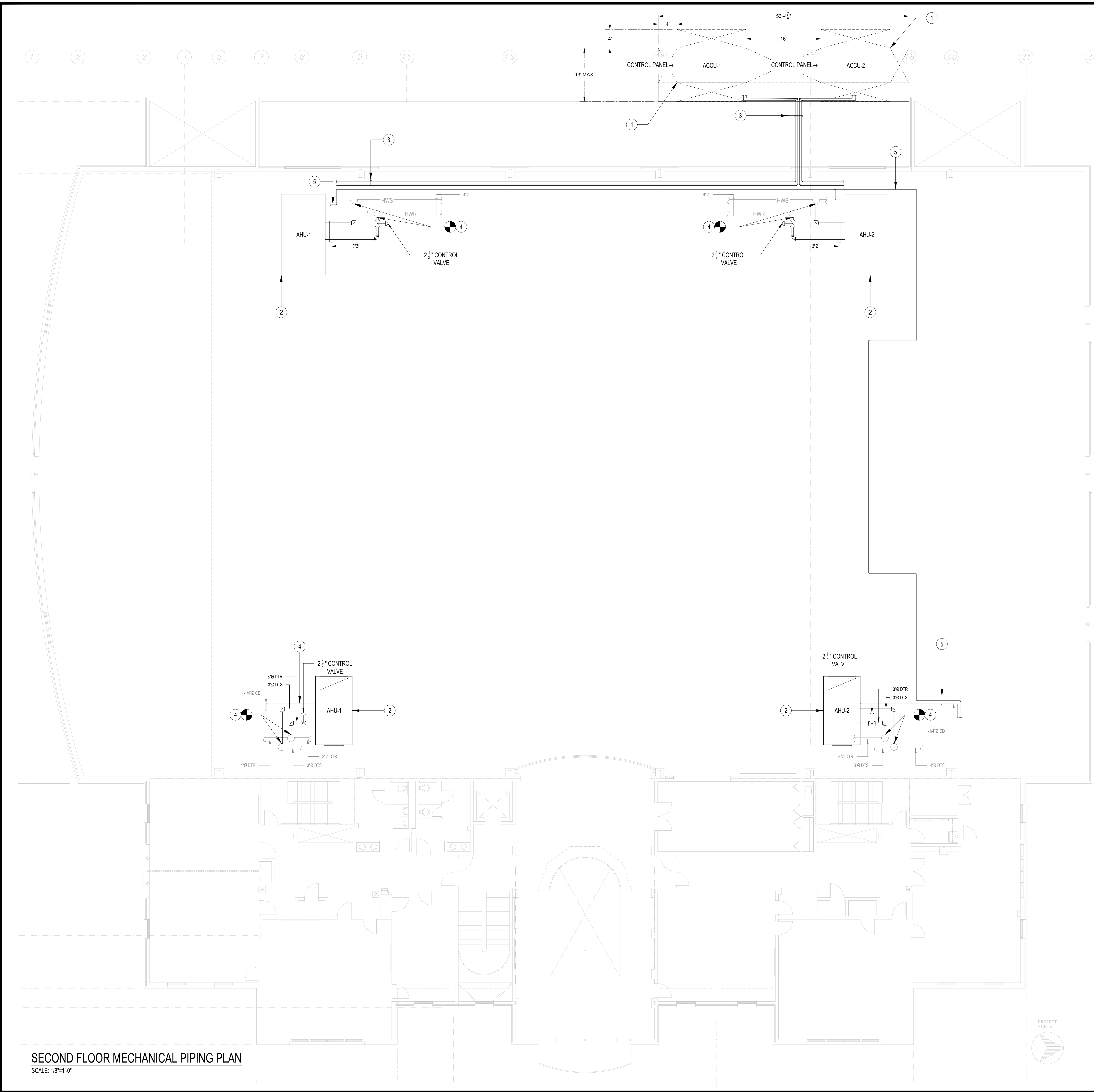
Sheet Contents

**SECOND FLOOR MECHANICAL
DUCTWORK PLAN**

Project Number. 6963

Drawing No. **M-103.00**

Sheet 6 of 10



SECOND FLOOR MECHANICAL PIPING PLAN
SCALE: 1/8"=1'-0"

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NEW WORK NOTES

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2. RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENT FOR THESE ITEMS.
3. ALL DUCT DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL, CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
4. PROVIDE ALL 90 DEGREE SQUARE ELBOW WITH DOUBLE RADIUS TURNING VANES UNLESS OTHERWISE INDICATED. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
5. LOCATE ALL MECHANICAL EQUIPMENT (RTUS, RETURN/EXHAUST FANS, DUCTWORK) FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
6. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS, FANS, AND OTHER EQUIPMENT THAT REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
7. CONTROL WIRING OF SMOKE DETECTORS IS BY THE APPROVED CONTROLS CONTRACTOR.
8. SAFETY DEVICES SHALL BE HARDWIRED TO THE FAN STARTER CIRCUIT, IN ADDITION TO THE DDC SYSTEM.
9. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF AN EXISTING DUCTWORK OR STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.
10. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED, OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
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12. PROVIDE ACCESS DOORS IN DUCTWORK FOR THE OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.
13. ALL DUCTS SHALL BE GROUNDED ACROSS FLEXIBLE CONNECTIONS WITH FLEXIBLE COPPER GROUNDING STRAPS.
14. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
15. SEE SPECIFICATIONS FOR DUCTWORK GAUGES, BRACING, HANGERS, AND OTHER REQUIREMENTS.
16. FIRE ALARM CONTRACTOR SHALL FURNISH FIRE ALARM COMPLIANT SMOKE DETECTOR TO THE SHEET METAL CONTRACTOR FOR FIELD DUCTWORK INSTALLATION, AS APPLICABLE. DIVISION 16 CONTRACTOR SHALL PROVIDE ALL SIGNAL AND CONTROL POWER WIRING.
17. SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4.
18. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. THOSE DOCUMENTS INCLUDE: DRAWINGS, MANUALS, AND SYSTEM BALANCING REPORTS.
19. HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS, AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN TOLERANCES PROVIDED IN PRODUCT SPECIFICATIONS. TEST AND BALANCING ACTIVITIES SHALL INCLUDE AIR SYSTEM BALANCING. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPY OF TESTING AND BALANCING OF AIR REPORT.

KEY NOTES

1. PROVIDE CONDENSING UNIT AS SPECIFIED IN EQUIPMENT SCHEDULE ON DRAWING M002. UNIT TO BE MOUNTED ON A NEW CONCRETE PAD (6" MIN. HIGH).
2. PROVIDE AIR HANDLING UNIT AS PER EQUIPMENT SCHEDULE ON DWG M002.
3. PROVIDE NEW REFRIGERANT PIPING RS/RL, SIZE AS PER MANUFACTURER'S RECOMMENDATIONS.
4. RECONNECT TO EXISTING HWS&R, DTS&R PIPING AND PROVIDE NEW CONTROL VALVES AND APPURTENANCES.
5. PROVIDE NEW CONDENSATE PIPING. CONNECT TO THE EXISTING DRAIN PIPE.

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Architecture - Project Management - Interior Design

Project

**RHODE ISLAND
COLLEGE
RECREATION
CENTER
RENOVATION**



600 MOUNT PLEASANT AVE,
PROVIDENCE, RI 02908

Drawing Status

SCHEMATIC DESIGN

Issued On 12/19/2025

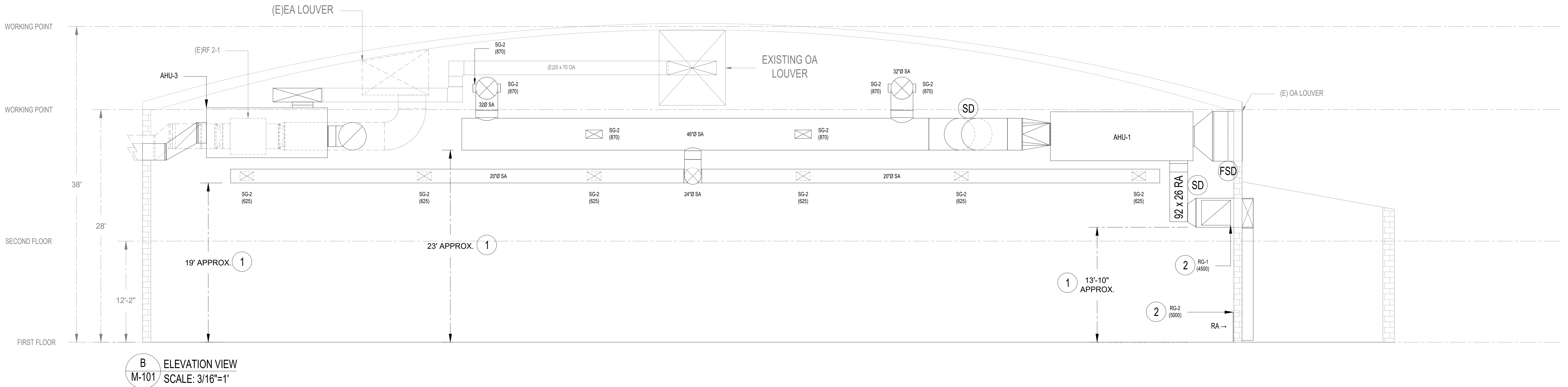
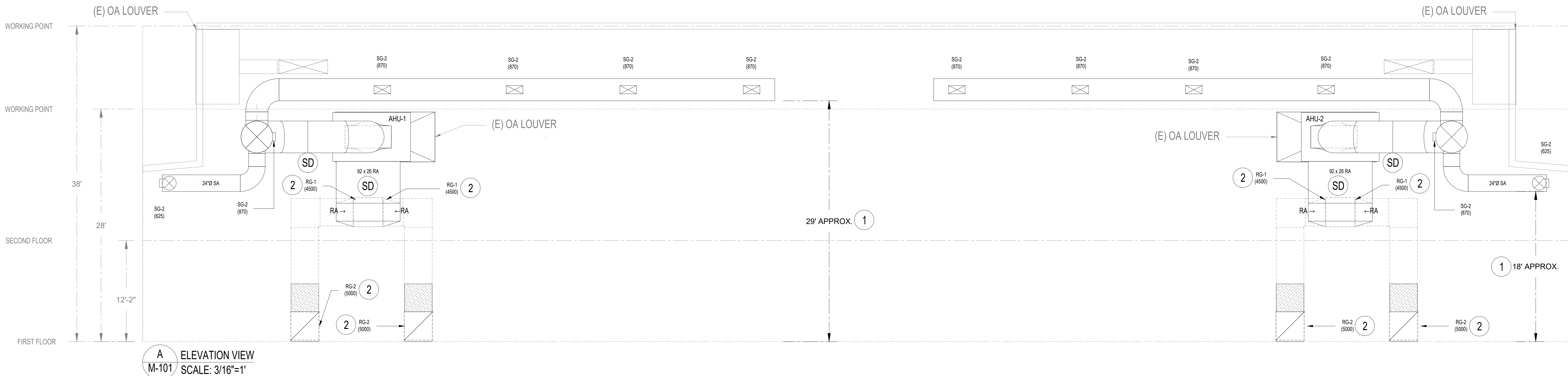
Sheet Contents

**SECOND FLOOR MECHANICAL
PIPING PLAN**

Project Number: 6963

Drawing No. **M-201.00**

Sheet 7 of 10



NEW WORK NOTES

1. PROVIDE COMPLETE AND PROPERLY FUNCTIONING HVAC SYSTEM FOR THIS PROJECT. VISIT THE PROJECT SITE, EXAMINE THESE PLANS AND ALL EXISTING DRAWINGS RELATING TO THE AREA OF WORK AND REPORT ANY DISCREPANCIES OR OMISSIONS IN THIS PLAN SET TO THE ENGINEER FOR A RESOLUTION AND CLARIFICATION PRIOR TO SUBMISSION FOR BIDS.
2. RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENT FOR THESE ITEMS.
3. ALL DUCT DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL. CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
4. PROVIDE ALL 90-DEGREE SQUARE ELBOW WITH DOUBLE RADIUS TURNING VANES UNLESS OTHERWISE INDICATED. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
5. LOCATE ALL MECHANICAL EQUIPMENT (RTUS, RETURN/EXHAUST FANS, DUCTWORK) FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
6. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS, FANS, AND OTHER EQUIPMENT THAT REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
7. CONTROL WIRING OF SMOKE DETECTORS IS BY THE APPROVED CONTROLS CONTRACTOR.
8. SAFETY DEVICES SHALL BE HARDWIRED TO THE PAN STARTER CIRCUIT, IN ADDITION TO THE DDC SYSTEM.
9. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF AN EXISTING DUCTWORK OR STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.
10. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
11. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL SMOKE DETECTORS, FIRE DAMPERS, VOLUME DAMPERS, COILS AND OTHER ITEMS LOCATED IN THE DUCTWORK THAT REQUIRE SERVICE AND/OR INSPECTION.
12. PROVIDE ACCESS DOORS IN DUCTWORK FOR THE OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.
13. ALL DUCTS SHALL BE GROUNDED ACROSS FLEXIBLE CONNECTIONS WITH FLEXIBLE COPPER GROUNDING STRAPS.
14. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
15. SEE SPECIFICATIONS FOR DUCTWORK GAUGES, BRACING, HANGERS, AND OTHER REQUIREMENTS.
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18. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. THOSE DOCUMENTS INCLUDE: DRAWINGS, MANUALS, AND SYSTEM BALANCING REPORTS.
19. HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS. AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN TOLERANCES PROVIDED IN PRODUCT SPECIFICATIONS. TEST AND BALANCING ACTIVITIES SHALL INCLUDE AIR SYSTEM BALANCING. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPY OF TESTING AND BALANCING OF AIR REPORT.

KEY NOTES

1. THE BOTTOM ELEVATION OF THE NEW DUCTWORK SHALL MATCH THE BOTTOM ELEVATION OF THE EXISTING (TO BE DEMOLISHED) DUCTWORK.
2. PROVIDE NEW RETURN AIR GRILLES.

Sequence of Operation: AIR HANDLER UNIT

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied Bypass, Pre-Cool, Occupied/Unoccupied and Heat/Cool modes. The BAS shall also send the discharge air temperature setpoint and the duct static pressure setpoint. If a BAS is not present, or communication is lost with the BAS the controller shall operate using default modes and setpoints.

Occupied:

During occupied periods, the supply fan shall run continuously and the mixed air dampers shall open to maintain minimum ventilation requirements. In the cooling mode the DX coil shall stage the compressors to control the discharge air setpoint. In the heating mode the hot water valve shall modulate to control the discharge air setpoint. If the discharge air temperature sensor fails, the supply fan shall be disabled, the DX cooling should be disabled, the heating valve should close, the outdoor air should close, and an alarm should annunciate at the BAS.

Unoccupied:

During the unoccupied periods, the supply fan shall be disabled, the outside air damper shall close, the mechanical cooling shall be disabled, the mechanical heating shall be disabled, to conserve energy. the outdoor damper shall modulate if economizing is enabled and remain closed if not economizing,

Optimal Stop:

Outside air damper shall remain enabled to provide minimum ventilation.

Heat/Cool Mode:

When the average space temperature rises above the occupied cooling setpoint the mode shall transition to cooling. When the average space temperature falls below the occupied heating setpoint the mode shall transition to heating. When the average space temperature is below the occupied cooling setpoint and above the occupied heating setpoint the mode shall remain in its last state. If the average space temperature sensor fails, the mode shall default to heating and an alarm shall annunciate at the BAS.

Morning Warm-Up Mode:

During optimal start, if the average space temperature is below the occupied heating setpoint a morning warm-up mode shall be activated. The outside air damper shall remain closed.

Daytime Warm-Up Control:

During Occupied periods, when the space temperature is below the Daytime Warm-up Initiate setpoint, a daytime warm-up sequence shall be activated. The outside air damper shall modulate to maintain minimum ventilation requirements, and the heating shall enable to maintain the discharge air temperature heating setpoint. Daytime Warm-up shall terminate when the average space temperature reaches the Occupied heating setpoint.

Pre-Cool Mode:

During optimal start, if the average space temperature is above the occupied cooling setpoint, pre-cool mode shall be activated. When pre-cool is initiated the unit shall enable the fan and cooling or economizer. The outside air damper shall remain closed, unless economizing. When the space temperature reaches occupied cooling setpoint (adj.), the unit shall transition to the occupied mode.

Supply Fan:

The supply fan shall be off in the unoccupied mode. The supply fan shall be on if the control is heating or cooling in the unoccupied mode. When the controller is in the occupied mode, the supply fan shall operate continuously. The supply fan speed shall be modulated to maintain the duct static pressure setpoint. The duct static pressure setpoint shall be sent by the BAS and is reset between the minimum and maximum static pressure limits to maintain the critical zone VAV air damper in a position between 65% and 75% open. If the supply fan fails to prove status for 30 seconds (adj.), the fan shall remain commanded on, the outside air damper shall close, cooling shall be disabled, all heating shall be disabled, and an alarm shall annunciate at the BAS. Once the fan status is proven on, the alarm on the supply fan shall clear. A hardwired, high static pressure cut-off switch shall be electrically interlocked with the variable speed drive. If the high static pressure cut-off switch is tripped the fan shall be commanded off, heating shall be disabled, cooling should be disabled, and an alarm shall annunciate at the BAS. A manual reset of the high static pressure

cut-off switch shall be required to restart the fan.

Preheat Control:

When the fan is off, if the outdoor air temperature is below 40.0 deg. F (adj.) or the outdoor air temperature sensor is failed, the preheat valve shall modulate to maintain a preheat leaving coil temperature of 45.0 deg. F (adj.).

If the preheat temperature sensor fails and the mixed air temperature is below 45.0 deg. F (adj.) the preheat valve shall be 100% open (adj.). If the preheat temperature sensor fails and the mixed air temperature is above 50.0 deg. F (adj.) the preheat valve shall be commanded closed. An alarm shall annunciate at the BAS if the leaving preheat temperature sensor, the mixed air temperature sensor or the outside air temperature sensor are failed.

Low Limit Temperature Control:

The initial damper opening rate shall be limited to 2% per minute (adj.) until the damper has reached its minimum ventilation position. The outside air damper shall modulate to a position less than the minimum damper position if the mixed air temperature drops below 45.0 deg. F (adj.). If the mixed air temperature sensor fails an alarm shall annunciate at the BAS and the outside air damper shall close.

Discharge Air Temperature Control:

The discharge air temperature shall be controlled to a fixed setpoint of 55 deg F (adj.).

If the discharge air temperature rises above the maximum limit, a high temperature alarm shall annunciate to the BAS. If the discharge air temperature drops below the minimum limit, a low temperature alarm shall annunciate to the BAS.

Refrigerant Mitigation Mode

The unit controller shall monitor the leak detection system, when a leak is detected, an alarm shall promptly alert the BAS via BACnet Change-of-Value (COV) and mitigation shall be activated. In occupied mode, the supply fan shall remain operational, and the compressor(s) shall be disabled for the duration of the mitigation process plus an additional 5 minutes. In unoccupied mode, the supply fan shall activate within 15 seconds while the compressor(s) shall be disabled for the duration of the mitigation process plus an additional 5 minutes.

Economizer Mode:

The outside air (OA) temperature shall be compared with space temperature. The economizer shall enable when OA temperature is less than space temperature - 2.0 deg. F. The economizer shall disable when OA temperature is greater than space temperature.

When economizing is enabled and the unit is operating in the cooling mode, the economizer damper shall be modulated between its minimum position and 100% open to maintain the discharge temperature setpoint. The economizer damper shall modulate toward minimum position in the event the mixed air temperature falls below the low temperature limit setting.

Condensate Overflow Monitoring:

If the condensate level reaches the trip point, a condensate overflow diagnostic shall annunciate at the BAS. To prevent the condensate drain pan from overflowing and causing water damage to the building the fan shall be disabled and the DX cooling shall be disabled.

Filter Status:

A differential pressure transmitter shall monitor the differential pressure across the filter(s) when the fan is running. If the differential pressure across the filter is higher than the filter alarm setpoint, a dirty filter alarm shall annunciate at the BAS.

Points List: AIR HANDLER UNIT

Point Name	POINTS										ALARMS				
	GRAPHIC	ANALOG HARDWARE INPUT (AI)	BINARY HARDWARE INPUT (BI)	ANALOG HARDWARE OUTPUT (AO)	BINARY HARDWARE OUTPUT (BO)	SOFTWARE POINT (SFT)	HARDWARE INTERLOCK (HDW)	WIRELESS (WLS)	NETWORK (NET)	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMMUNICATION FAIL
COMPRESSOR 1 COMMAND CMP1	X			X											
COMPRESSOR 2 COMMAND CMP2	X			X											
COMPRESSOR 3 COMMAND CMP3	X			X											
COMPRESSOR 4 COMMAND CMP4	X			X											
CONDENSATE OVERFLOW DETECTION LOCAL CND OVRFL	X	X										X	X		
COOLING COIL LEAVING TEMPERATURE CC LAT	X	X								X	X			X	
DISCHARGE AIR TEMPERATURE DAT	X	X								X	X			X	
DISCHARGE AIR STATIC PRESSURE LOCAL DA SP	X	X								X			X	X	
ENERGY WHEEL SPEED COMMAND EW SPD	X			X											
FILTER ALARM FIL ALM		X								X					
HIGH STATIC ALARM HSP ALM	X	X										X	X		
HIGH STATIC ALARM INTERLOCK HSP INTLK						X									
MIXED AIR DAMPER COMMAND MAD	X			X											
MIXED AIR TEMPERATURE LOCAL MAT	X	X								X				X	
OUTDOOR AIR DAMPER COMMAND OAD	X			X											
OUTDOOR AIR FLOW OA FLW	X	X													
OUTDOOR AIR TEMPERATURE LOCAL OAT	X	X													
PREHEAT LEAVING COIL TEMPERATURE LOCAL PH LAT	X	X												X	
PREHEAT OUTPUT COMMAND PH	X			X											
REFRIGERANT LEAK DETECTION SYSTEM INPUT RLDS ALM			X									X			
RETURN AIR DAMPER COMMAND RAD	X			X											
RETURN AIR TEMPERATURE LOCAL RAT	X	X													
SUPPLY FAN SPEED COMMAND SAF	X			X											
SUPPLY FAN START STOP COMMAND SAF	X				X										
SUPPLY FAN STATUS SAF	X			X											
SUPPLY FAN 2 SPEED COMMAND SAF	X			X											
SUPPLY FAN 2 START STOP COMMAND SAF	X				X										
SUPPLY FAN 2 STATUS SAF	X			X											
BAS COMMUNICATION STATE BAS COM						X									X
DISCHARGE AIR COOLING SETPOINT DA CL SP						X									
DISCHARGE AIR HEATING SETPOINT DA HT SP						X									
MAINTENANCE REQUIRED MNT REQ						X						X			
MIXED AIR TEMPERATURE LOW LIMIT SETPOINT MA LLT STPT						X									
OCCUPIED COOLING SETPOINT OCC CLG STPT	X				X										
OCCUPIED HEATING SETPOINT OCC HTG STPT	X				X										
SUPPLY FAN FAILURE SF FAIL	X				X							X			
UNOCCUPIED COOLING SETPOINT UNOCC CLG STPT	X				X										
UNOCCUPIED HEATING SETPOINT UNOCC HTG STPT	X				X										

COMBINATION INTAKE LOUVER / FIORE-SMOKE DAMPER, SEQUENCE OF OPERATION:

Normal Mode:
When the associated air-handling unit is enabled, the outside air intake louver shall be open and the combination fire-smoke damper shall open. Proof of damper position shall be provided by end switch where applicable. The AHU shall be permitted to operate only after the damper is proven open, if required by the controls design.

Fire Alarm / Smoke Mode:
Upon receipt of a fire alarm signal, smoke detector signal, or other life-safety shutdown command, the associated AHU shall shut down and the combination fire-smoke damper shall close. If the intake louver is motorized, it shall also close. Damper status shall be reported to the BAS and/or fire alarm system where monitored.

Power Failure Mode:
Upon loss of power, the fire-smoke damper shall fail to its safe position, typically closed, unless noted otherwise by the manufacturer or life-safety design.

System Reset:
After the alarm condition has been cleared and the fire alarm system has been reset, the damper shall return to normal position upon command, and the AHU shall be allowed to restart in accordance with the control sequence.

CONTROLS SCOPE COORDINATION NOTE:

Per coordination with building's control valve vendor (Siemens):

Scope for AHU-1 and AHU-2 has been clarified and confirmed as follows: the selected air-handling units include factory-installed Symbio 500 controllers as part of the equipment package. From a controls standpoint, the Symbio 500 shall be capable of integration with the Siemens APOGEE Building Automation System via BACnet. Once configured for BACnet MSTP or BACnet/IP, Siemens shall be able to interface with the Symbio controller and map all exposed points in the same manner as any standard BACnet device made available by the AHU manufacturer.

Siemens shall provide low-voltage controls demolition at existing HV 2-1 and HV 2-2; provide low-voltage control wiring for all loose-shipped end devices furnished as part of the AHU manufacturer's factory controls package, including room sensors, static pressure sensors, and similar devices; provide one (1) new BACnet controller to serve both AHU-1 and AHU-2; and connect to the factory-installed Symbio 500 controllers for BAS integration. Siemens shall have the ability to read from and write to all BMS points made available by the AHU manufacturer and shall provide BAS graphic updates, at minimum, consistent with the approved points list.

The AHU manufacturer shall furnish all factory-mounted and unit-mounted controls, end devices, and actuators required for proper unit operation, including but not limited to control valves, automatic control dampers and associated actuators, variable frequency drives, and all DDC sensors such as temperature, humidity, and pressure sensors, unless specifically identified as loose-shipped for field wiring by Siemens. In the event of BAS communication loss, the AHU manufacturer's controller shall maintain standalone operation using its default operating modes and setpoints, and the BAS shall annunciate a communication failure alarm. Coordinate final exposed BACnet points, graphics, and integration requirements with Siemens, the AHU manufacturer, and the project controls subcontractor prior to installation and startup.

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Certification

Drawn by CA

Checked by MM, PE

Revised on



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SCHEMATIC DESIGN

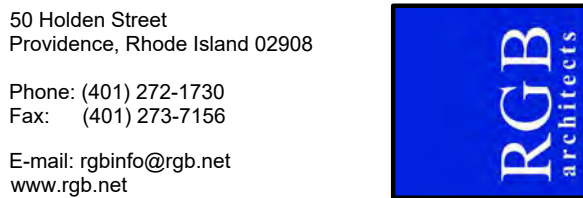
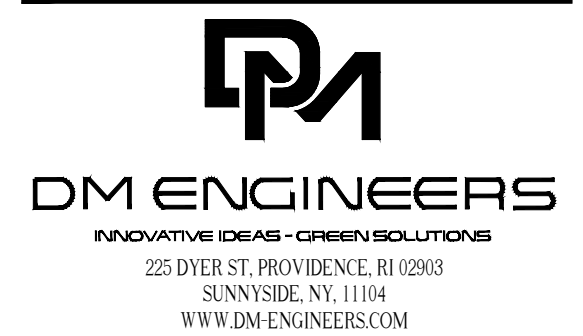
Issued On 12/19/2025

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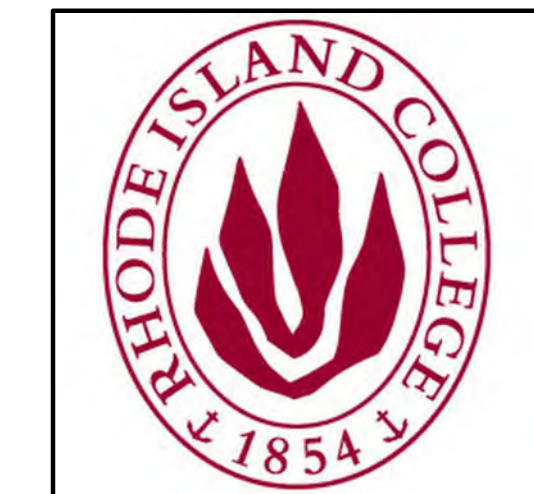
MECHANICAL CONTROLS

Project Number: 6963

Drawing No. M-401.00



RHODE ISLAND COLLEGE



MURRAY CENTER GYM
HVAC
IMPROVEMENTS
600 MOUNT PLEASANT AVE,
PROVIDENCE, RI 02908

ISSUED FOR
CONSTRUCTION

ELECTRICAL SYMBOLS AND
NOTES

E001

ELECTRICAL SYMBOLS LIST

5, 3, 1

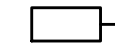


HOMERUN—NUMERAL WHERE USED INDICATES CIRCUIT NUMBER FOR REFERENCE ONLY. PROVIDE SEPARATE NEUTRALS FOR EACH CIRCUIT.
2#12+1#12G—3/4°C FOR ONE CKT. HOMERUN, U.O.N.
4#12+1#12G—3/4°C FOR TWO CKT. HOMERUN, U.O.N.
6#12+1#12G—3/4°C FOR THREE CKT. HOMERUN, U.O.N.

EXISTING CONDUIT/EQUIPMENT TO REMAIN

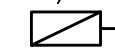
NEW CONDUIT

30/3



UNFUSED DISCONNECT SWITCH
SWITCH AMPS/# OF POLES, VOLTAGE RATING AS REQUIRED

100/60/3



FUSED DISCONNECT SWITCH; SWITCH AMPS/FUSE AMPS/
OF POLES, VOLTAGE RATING AS REQUIRED



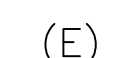
SURFACE MOUNTED PANELBOARD



SURFACE MOUNTED POWER PANELBOARD



JUNCTION BOX



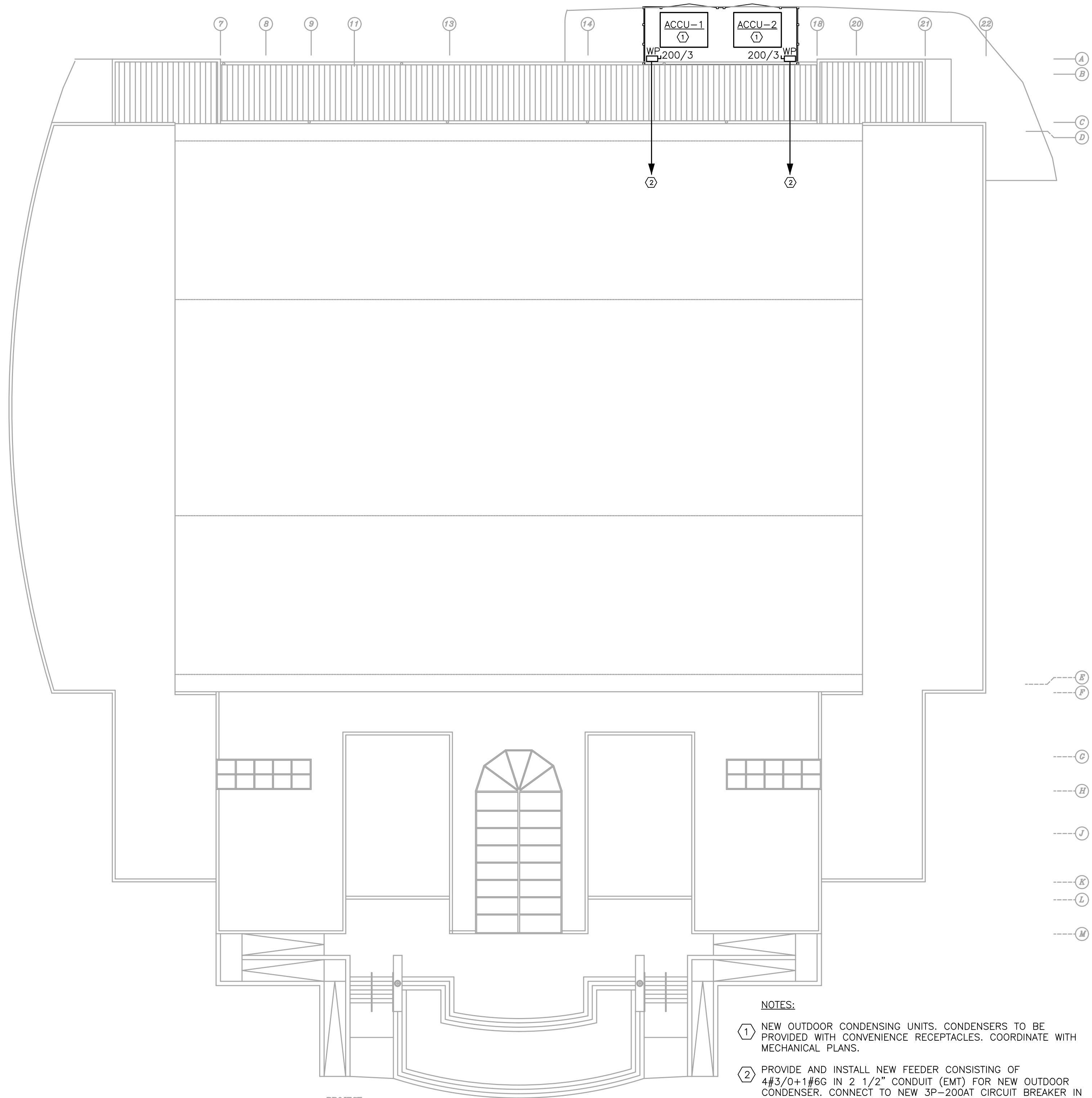
EXISTING TO REMAIN

ELECTRICAL DEMOLITION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF ELECTRICAL WORK AS DESCRIBED IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT.
2. THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL AND ELECTRICAL LAYOUTS IN FULL COORDINATION WITH THE ARCHITECT'S DEMOLITION PLANS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
3. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING ELECTRICAL SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
4. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
5. ALL RACEWAYS WHICH BECOME EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
6. ALL UNUSED OUTLET BOXES OR CAPPED FLOOR OUTLETS SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
7. EXISTING PANEL DIRECTORIES AFFECTED BY THE ALTERATION WORK SHALL BE MODIFIED TO REFLECT THE BRANCH CIRCUIT WIRING CHANGES.
8. PORTIONS OF FEEDER RUNS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CABLE TYPE, CONDUCTOR AMPACITY, CONDUIT SIZES, ETC.
9. THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS. THE CONTRACTOR SHALL FOLLOW CLOSELY THE ARCHITECT'S DEMOLITION AND PHASING SCHEDULE AND PROCEED IN THE SPECIFIED SEQUENCE.
10. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR, AS DIRECTED BY THE OWNER.
11. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
12. THE SHUTDOWN OF EXISTING BUILDING ELECTRICAL SERVICES SHALL BE COORDINATED WITH THE OWNER. MAKE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN.

ELECTRICAL GENERAL NOTES

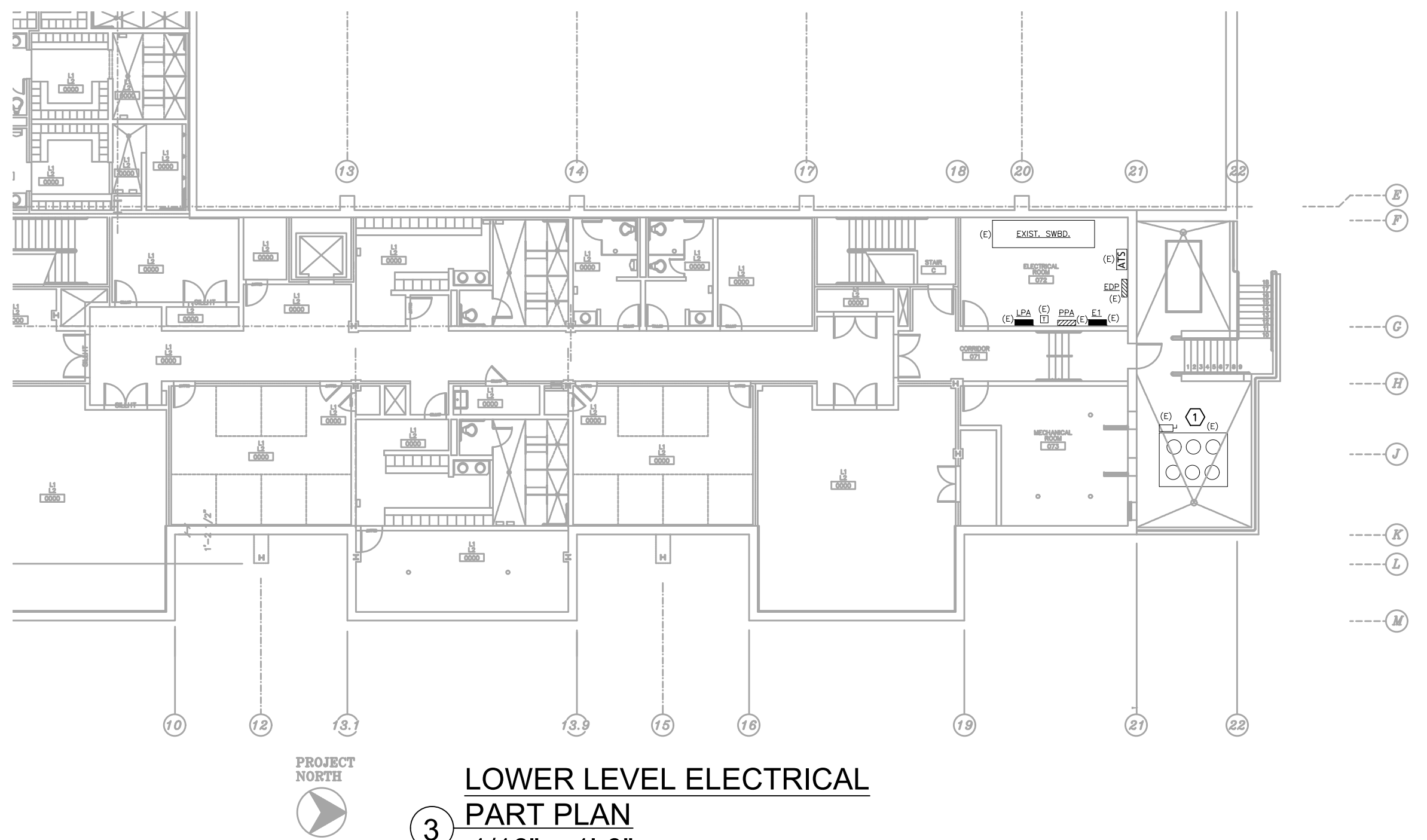
1. GENERAL NOTES, SYMBOL LIST AND DETAILS ARE APPLICABLE TO ALL ELECTRICAL DRAWINGS.
2. ALL WORK IS NEW UNLESS OTHERWISE NOTED.
3. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM AND SPACE CONDITIONS.
4. SECURE ALL SUPPORTS TO BUILDING STRUCTURE UTILIZING TOGGLE BOLTS (HOLLOW MASONRY), EXPANSION SHIELDS OR INSERTS (CONCRETE AND BRICK), MACHINE SCREWS (METAL), BEAM CLAMPS (FRAMEWORK), WOOD SCREWS (WOOD) OR PAN THRU STRAPS (METAL DECK). NAILS, RAWL PLUGS AND WOOD PLUGS ARE NOT PERMITTED. WHERE REQUIRED BY STRUCTURE, PROVIDE THRU BOLTS AND FISH PLATES. SUPPORT HORIZONTAL RUNS OF METALLIC RACEWAYS NOT MORE THAN 10 FT APART. SUPPORT RACEWAY RISERS AT EACH FLOOR LEVEL. RUN EXPOSED RACEWAYS PARALLEL WITH OR AT RIGHT ANGLES TO WALLS.
5. PASS RACEWAYS OVER WATER, STEAM OR OTHER PIPING WHEN PULL BOXES ARE NOT REQUIRED. NO RACEWAY WITHIN 3 INCHES OF STEAM OR HOT WATER PIPES OR APPLIANCES (EXCEPT PIPE CROSSINGS WHERE RACEWAY SHALL BE AT LEAST 1 INCH FROM PIPE COVERS).
6. CUT CONDUIT ENDS SQUARE. REAM SMOOTH. PAINT MALE THREAD OF FIELD THREADED RACEWAYS WITH GRAPHITE BASE PIPE COMPOUND. DRAW UP TIGHT WITH RACEWAY COUPLING.
7. HORIZONTAL OR CROSS RUNS IN PARTITIONS AND WALLS ARE NOT PERMITTED. DO NOT RUN CONDUIT IN PRECAST ROOF SLABS, IN 2 INCH SLABS OR IN TERRAZZO FLOOR FINISH.
8. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS. RACEWAYS OVER 10 FT LONG IN WHICH WIRING IS NOT INSTALLED; FURNISH FISH WIRE.
9. SET BOXES SQUARE AND TRUE WITH BUILDING FINISH. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRONS.
10. COVERS OF JUNCTION AND PULLBOXES SHALL BE READILY ACCESSIBLE.
11. PROVIDE PULLBOXES WHERE INDICATED, WHERE REQUIRED BY CODE AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE. COORDINATE PULLBOX LOCATIONS WITH OTHER TRADES.
12. EMPTY RACEWAY RUNS: PROVIDE PULLBOXES EVERY 100 FT AND AS INDICATED. COORDINATE LOCATIONS WITH OTHER TRADES.
13. JUNCTION AND PULLBOXES: LOCATE GENERALLY NOT EXPOSED IN FINISHED SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT.
14. SUPPORT PANEL, JUNCTION AND PULLBOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON RACEWAYS.
15. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.
16. CONNECT CONDUIT TO MOTOR CONDUIT TERMINAL BOXES WITH FLEXIBLE CONDUIT (MINIMUM 18 IN. LENGTH AND 50% SLACK). DO NOT TERMINATE IN OR FASTEN RACEWAYS TO MOTOR FOUNDATION.
17. PULL NO THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32°F (0°C). PROVIDE CABLE SUPPORTS FOR WIRE IN RISER CONDUITS AS REQUIRED BY CODE.
18. WIRE COLOR CODING: AS PER CODE. WHERE COLOR-CODED CABLE IS NOT AVAILABLE, CERTIFY IN WRITING AND REQUEST PERMISSION FOR OVERLAP COLOR TAPING OF CONDUCTORS (MINIMUM LENGTH 6") IN ACCESSIBLE LOCATIONS. COLOR CODING, ONCE SELECTED, MUST BE USED CONSISTENTLY FOR THE ENTIRE PROJECT.
19. INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS: ONLY WITH WRITTEN CONSENT OF OWNER. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES. ALARM AND EMERGENCY SYSTEMS ARE NOT TO BE INTERRUPTED.
20. FIRESTOPPING SHALL BE INSTALLED WHENEVER WIRING OR RACEWAYS CROSS FIRE RATED CONSTRUCTION.
21. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONTROL WIRING REQUIREMENTS WITH THE MECHANICAL CONTRACTOR TO ENSURE A COMPLETE WORKING SYSTEM. WHERE REQUIRED, ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONTROL WIRING NOT IN MECHANICAL CONTRACTOR'S SCOPE.
22. ALL EXPOSED CONDUITS, RACEWAYS, BOXES, ETC. SHALL BE PAINTED TO MATCH THE SURROUNDING CONDITIONS. COORDINATE IN FIELD.
23. COORDINATE FIRESTOPPING WITH ARCHITECT'S DRAWINGS FOR THE ASSEMBLY PENETRATION REQUIREMENTS.



PROJECT NORTH

**FIRST FLOOR ELECTRICAL
PART PLAN**
1/16" = 1'-0"

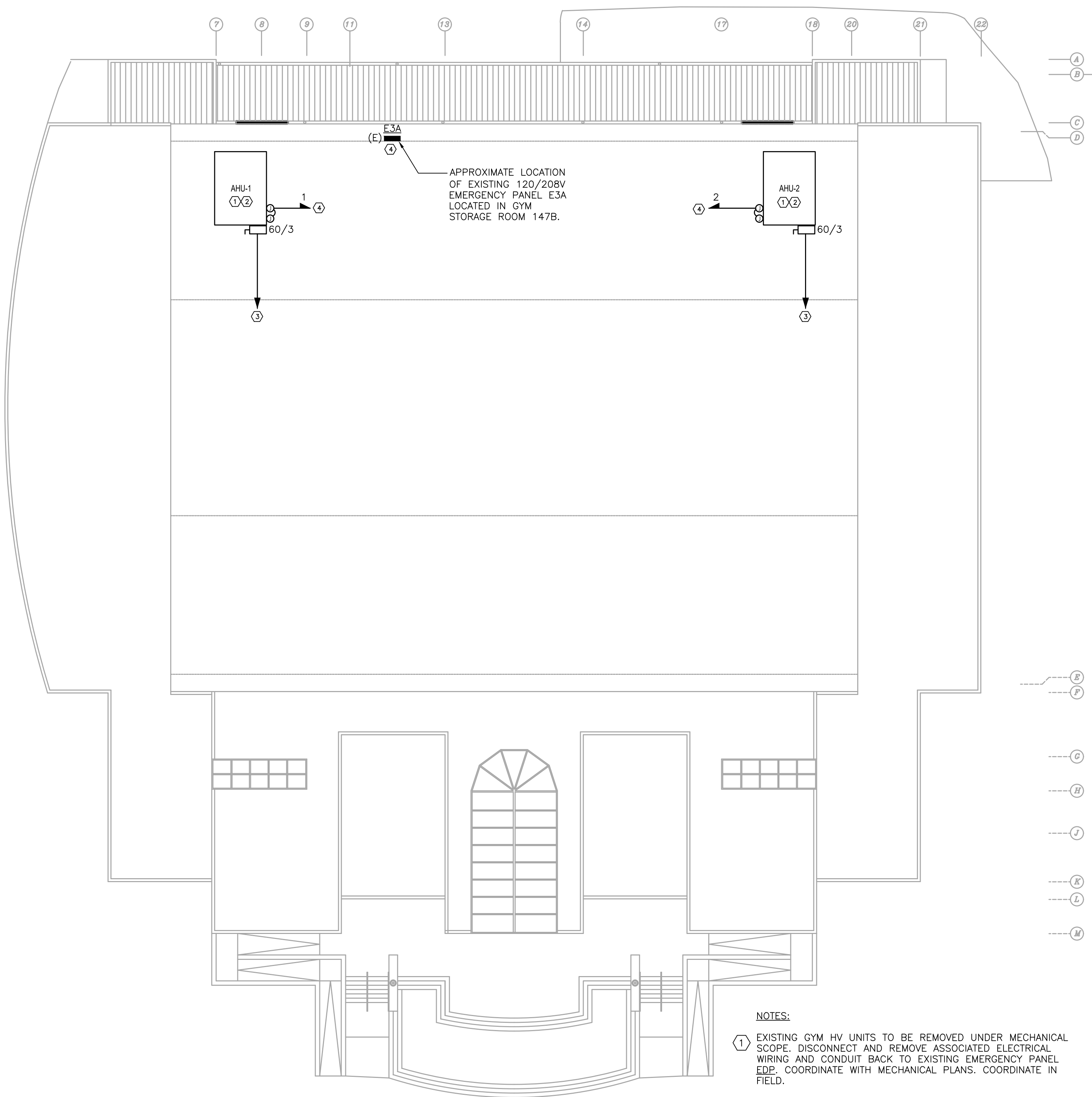
- NOTES:
- 1 NEW OUTDOOR CONDENSING UNITS. CONDENSERS TO BE PROVIDED WITH CONVENIENCE RECEPTACLES. COORDINATE WITH MECHANICAL PLANS.
 - 2 PROVIDE AND INSTALL NEW FEEDER CONSISTING OF 4#3/0+1#6G IN 2 1/2" CONDUIT (EMT) FOR NEW OUTDOOR CONDENSER. CONNECT TO NEW 3P-200AT CIRCUIT BREAKER IN EXISTING MAIN SWITCHBOARD IN LOWER LEVEL ELECTRICAL ROOM 072. COORDINATE EXACT FEEDER ROUTING IN FIELD. PROVIDE WEATHERTIGHT LINK SEAL FITTING AT EXTERIOR WALL PENETRATION.



PROJECT NORTH

**LOWER LEVEL ELECTRICAL
PART PLAN**
1/16" = 1'-0"

- NOTES:
- 1 EXISTING ELECTRICAL EQUIPMENT AND OUTDOOR CONDENSER TO REMAIN. COORDINATE IN FIELD.



PROJECT NORTH

**2ND FLOOR ELECTRICAL
PART PLAN**
1/16" = 1'-0"

- NOTES:
- 1 EXISTING GYM HV UNITS TO BE REMOVED UNDER MECHANICAL SCOPE. DISCONNECT AND REMOVE ASSOCIATED ELECTRICAL WIRING AND CONDUIT BACK TO EXISTING EMERGENCY PANEL EDP. COORDINATE WITH MECHANICAL PLANS. COORDINATE IN FIELD.
 - 2 NEW GYM AIR HANDLING UNITS TO BE PROVIDED AND INSTALLED UNDER MECHANICAL SCOPE. COORDINATE WITH MECHANICAL PLANS.
 - 3 PROVIDE AND INSTALL NEW FEEDER CONSISTING OF 4#8+1#10G IN 3/4" CONDUIT (EMT) FOR NEW GYM AHU. CONNECT TO NEW 3P-40AT CIRCUIT BREAKER IN EXISTING EMERGENCY PANEL EDP IN LOWER LEVEL ELECTRICAL ROOM 072. REPLACE EXISTING 3P-20AT CIRCUIT BREAKER WHICH SERVED EXISTING HV UNIT BEING REMOVED, WITH NEW CIRCUIT BREAKER. COORDINATE EXACT FEEDER ROUTING IN FIELD.
 - 4 ROUTE 2#12+1#12G IN 3/4" CONDUIT (EMT) FOR ONE (1) AHU 120V CIRCUIT. CIRCUIT SHALL SERVE INTEGRAL CONVENIENCE RECEPTACLE. CONNECT TO EXISTING SPARE 1P-20AT CIRCUIT BREAKER IN EXISTING EMERGENCY PANEL E3A IN GYM STORAGE ROOM 147B. COORDINATE LOCATION OF PANEL IN FIELD.

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Certification

Drawn by GJO

Checked by JI

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Architecture - Project Management - Interior Design

Project

RHODE ISLAND
COLLEGE



MURRAY CENTER GYM
HVAC
IMPROVEMENTS
600 MOUNT PLEASANT AVE,
PROVIDENCE, RI 02908

Drawing Status

ISSUED FOR
CONSTRUCTION

Issued On 03/18/2026

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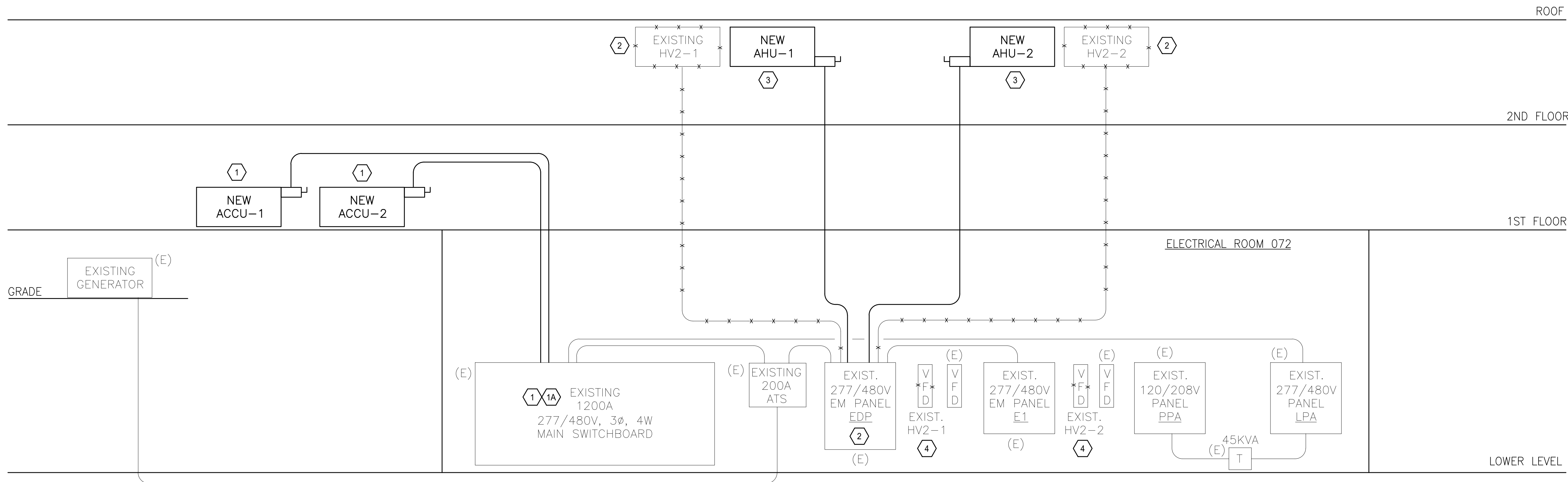
ELECTRICAL PLANS

Project Number. 6963

Drawing No.

E100

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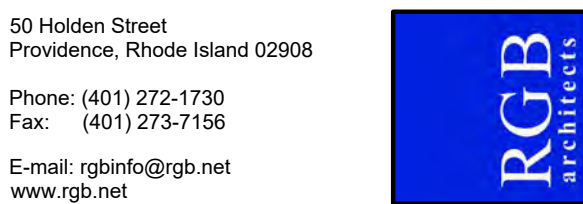


ELECTRIC MODIFICATION RISER DIAGRAM

(NOT TO SCALE)

RISER NOTES

- 1 PROVIDE AND INSTALL TWO (2) NEW 3-POLE, 200AT CIRCUIT BREAKERS IN EXISTING SQUARE D QED 277/480V,1200A MAIN SWITCHBOARD FOR NEW OUTDOOR CONDENSERS. UTILIZE EXISTING SPACES FOR NEW CIRCUIT BREAKERS. COORDINATE WITH SWITCHBOARD MANUFACTURER AND BUILDING ENGINEER. COORDINATE ALL REQUIRED SHUTDOWNS WITH BUILDING ENGINEER AND GYM DIRECTOR. COORDINATE IN FIELD.
- 1A PRIOR TO ANY SWITCHBOARD MODIFICATIONS, BUILDING ENGINEER TO TAKE LOAD READINGS TO CONFIRM AVAILABLE SPARE CAPACITY TO ACCOMMODATE NEW CONDENSERS. COORDINATE IN FIELD.
- 2 EXISTING GYM HV UNITS TO BE REMOVED.
- 3 NEW GYM AHU INSTALLED UNDER MECHANICAL SCOPE. PROVIDE AND INSTALL NEW FEEDER CONSISTING OF 4#8+1#10G IN 3/4" CONDUIT (EMT) FOR NEW GYM AHU. CONNECT TO NEW 3P-40AT CIRCUIT BREAKER IN EXISTING EMERGENCY PANEL EDP IN LOWER LEVEL ELECTRICAL ROOM 072. REPLACE EXISTING 3P-70AT CIRCUIT BREAKER WHICH SERVED EXISTING HV UNIT BEING REMOVED, WITH NEW CIRCUIT BREAKER. COORDINATE EXACT FEEDER ROUTING IN FIELD.
- 4 EXISTING HV VFDs TO BE DISCONNECTED AND REMOVED ALONG WITH ALL ASSOCIATED WIRING AND CONDUIT. COORDINATE IN FIELD.



Architecture - Project Management - Interior Design

Project

RHODE ISLAND
COLLEGE



MURRAY CENTER GYM
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600 MOUNT PLEASANT AVE,
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ELECTRICAL RISER

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