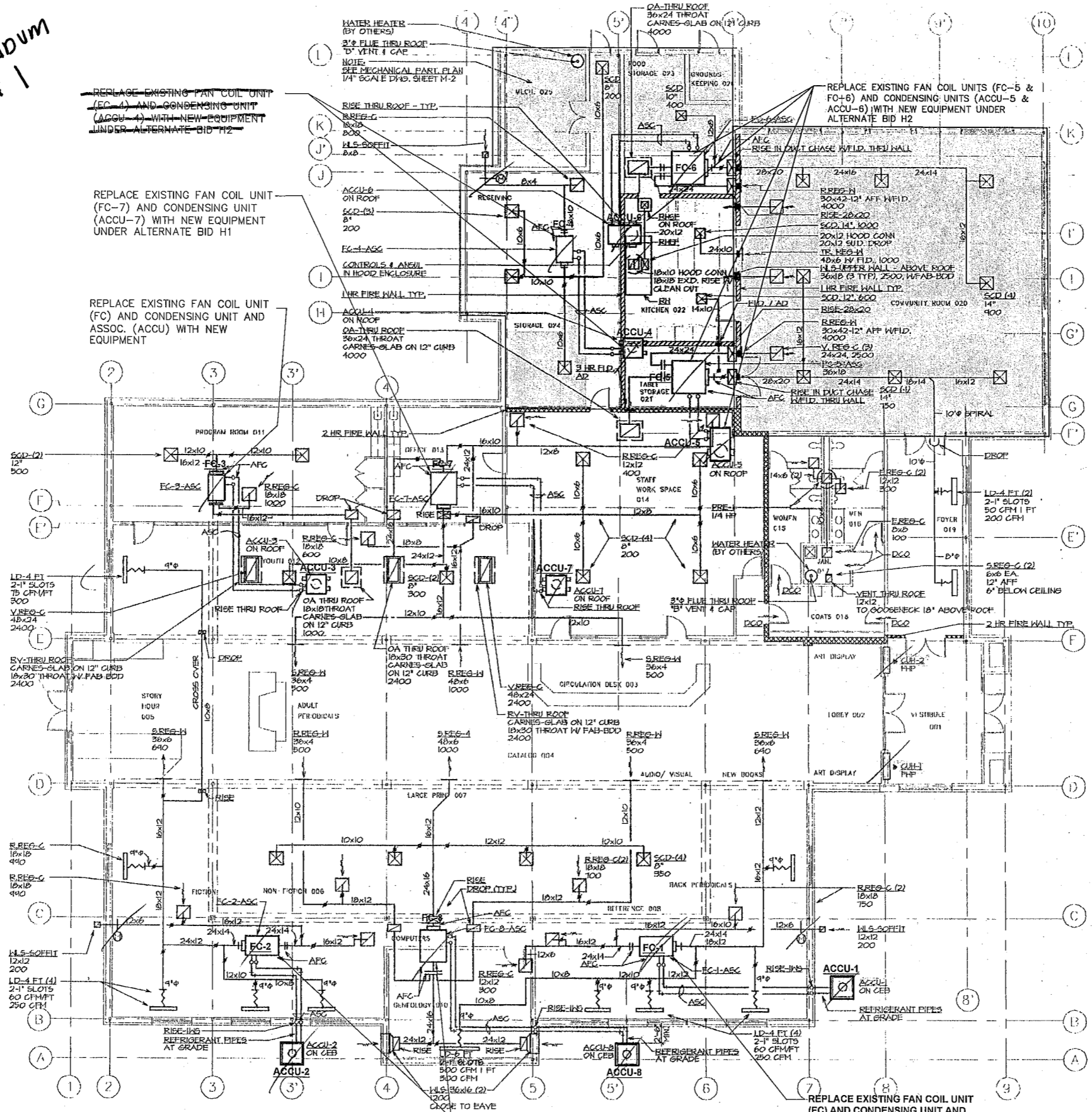


**ADDENDUM
1**



REPLACE EXISTING FAN COIL UNIT (FC-4) AND CONDENSING UNIT (ACCU-4) WITH NEW EQUIPMENT UNDER ALTERNATE BID #2

REPLACE EXISTING FAN COIL UNIT (FC-7) AND CONDENSING UNIT (ACCU-7) WITH NEW EQUIPMENT UNDER ALTERNATE BID #1

REPLACE EXISTING FAN COIL UNIT (FC) AND CONDENSING UNIT AND ASSOC. (ACCU) WITH NEW EQUIPMENT

REPLACE EXISTING FAN COIL UNIT (FC) AND CONDENSING UNIT AND ASSOC. (ACCU) WITH NEW EQUIPMENT

REPLACE EXISTING FAN COIL UNIT (FC) AND CONDENSING UNIT AND ASSOC. (ACCU) WITH NEW EQUIPMENT

HVAC FLOOR PLAN
SCALE: 1/8" = 1'-0"



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**HVAC RENOVATIONS FOR
ODELL PUBLIC LIBRARY**
307 SOUTH MADISON STREET
Morrison, Illinois 61270

REVISIONS

COMMISSION NUMBER
223132

EXISTING HVAC
MECHANICAL PLANS
DATE
September 11, 2023

SHEET NO.

M1
OF 3 SHEETS

EXISTING SPLIT SYSTEM FAN COIL SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	AREA SERVED	LOCATION	CAPACITIES			SUPPLY				ELECTRICAL			UNIT SIZE (L"xW"xH")	OPER WT. (LBS)	NOTES
					TOTAL (MBH)	SENSIBLE (MBH)	HEATING	AIRFLOW (CFM)	EAT (F)	LAT (F)	ESP (H.W.D.)	VOLTS	PH	EMERG POWER			
FC-1	TRANE	TWH060	LOBBY 002/ REFERENCE 008	REFERENCE 008	80	45	75	1990	80	95	0.6	208	3	-	-	300	1-3
FC-2	TRANE	TWH060	STORY HOUR 005/ FICTION	NON-FICTION 006	80	45	75	1990	80	95	0.6	208	3	-	-	300	1-3
FC-3	TRANE	TWH030	PROGRAM ROOM 011	PROGRAM ROOM 011	30	23	40	1000	80	95	0.5	208	3	-	-	200	1-3
FC-4	TRANE	TWH024	COMMUNITY ROOM 020	FOOD STORAGE 023	24	88	200	4000	80	95	0.6	208	3	-	-	150	1-5
FC-5	TRANE	TWE120B3	COMMUNITY ROOM 020	TABLE STORAGE 021	120	88	200	4000	80	95	0.7	208	3	-	-	600	1-3
FC-6	TRANE	TWE120B3	COMMUNITY ROOM 020	FOOD STORAGE 023	120	88	200	4000	80	95	0.7	208	3	-	-	600	1-3
FC-7	TRANE	TWE00A3	ORCULATION DESK	OFFICE 013	72	88	100	2400	80	95	0.7	208	3	-	-	600	1-3
FC-8	TRANE	TWE00A3	CATALOG 004/ LARGE PRINT 007	GENEALOGY 010	72	88	100	2400	80	95	0.7	208	3	-	-	600	1-3

NOTES:
1. COOLING CAPACITY BASED ON 87F ENTERING WET BULB AND 45F COIL TEMPERATURES.
2. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECT AS REQUIRED.
3. UNITS WITH DUAL REFRIGERATION CIRCUITS FOR CAPACITY CONTROL.

EXISTING SPLIT CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	AREA SERVED	LOCATION	COOLING			HEATING		ELECTRICAL							UNIT SIZE (L"xW"xH")	OPER WT. (LBS)	NOTES		
					NOM CAP. (MBH)	EER	SEER	NOM CAP. (MBH)	REFRIG TYPE	REFRIG (LBS)	VOLTS	PH	MCA (A)	MOCP (A)	EMERG POWER	MCA (A)				MOCP (A)	EMERG POWER
ACCU-1	TRANE	TTA06043D	LOBBY 002/ REFERENCE 008	ON GRADE	80	-	-	-	R-22	-	208	3	21	35	-	-	300	1-3,5			
ACCU-2	TRANE	TTA06043D	STORY HOUR 005/ FICTION	ON GRADE	80	-	-	-	R-22	-	208	3	21	35	-	-	300	1-3,5			
ACCU-3	TRANE	TTA03043D	PROGRAM ROOM 011	ROOF	30	-	-	-	R-22	-	208	3	41	50	-	-	200	1-3			
ACCU-4	TRANE	TTA03043D	PROGRAM ROOM 011	ROOF	24	-	-	-	R-22	-	208	3	41	50	-	-	200	1-3			
ACCU-5	TRANE	TTA12043D	COMMUNITY ROOM 020	ROOF	120	-	-	-	R-22	-	208	3	41	50	-	-	550	1-4			
ACCU-6	TRANE	TTA12043D	COMMUNITY ROOM 020	ROOF	120	-	-	-	R-22	-	208	3	41	50	-	-	550	1-4			
ACCU-7	TRANE	TTA12043D	COMMUNITY ROOM 020	ROOF	72	-	-	-	R-22	-	208	3	41	50	-	-	550	1-4			
ACCU-8	TRANE	TTA12043D	CATALOG 004/ LARGE PRINT 007	ON GRADE	72	-	-	-	R-22	-	208	3	41	50	-	-	350	1-5			

NOTES:
1. PROVIDED UNITS WITH LOW AMBIENT CONTROL TO DF, WITH CRANKCASE HEATER COORDINATE.
2. PROVIDED HARD START KIT.
3. REFRIGERANT LINES SIZED AS RECOMMENDED BY MANUFACTURER.
4. PROVIDED UNITS WITH 2 COMPRESSORS FOR CAPACITY CONTROL.
5. MOUNTED AND ANCHORED ON CONCRETE BASES ON GRADE.

PROPOSED SPLIT SYSTEM FAN COIL SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	AREA SERVED	LOCATION	CAPACITIES			SUPPLY				ELECTRICAL			UNIT SIZE (L"xW"xH")	OPER WT. (LBS)	NOTES	
					TOTAL (MBH)	SENSIBLE (MBH)	HEATING	AIRFLOW (CFM)	EAT (F)	LAT (F)	ESP (H.W.D.)	VOLTS	PH	EMERG POWER				
FC-1	TRANE	GA15B0060M51	LOBBY 002/ REFERENCE 008	TBD	80	45	-	1990	80	95	0.6	208	1	-	-	22"x23"x12"	200	1,2
FC-2	TRANE	GA15B0060M51	STORY HOUR 005/ FICTION	TBD	80	45	-	1990	80	95	0.6	208	1	-	-	22"x23"x12"	200	1,2
FC-3	TRANE	GA15B0030M21	PROGRAM ROOM 011	TBD	30	23	-	1000	80	95	0.5	208	1	-	-	22"x22"x12"	180	1,2
FC-4	TRANE	GA15B0045M2H	COMMUNITY ROOM 020	TBD	120	88	-	4000	80	95	0.6	208	1	-	-	18"x22"x10"	180	1,2
FC-5*	TRANE	TWE12043BAA	COMMUNITY ROOM 020	TBD	120	88	-	4000	80	95	0.7	208	3	-	-	26"x35"x12"	600	1,2,3
FC-6*	TRANE	TWE12043BAA	COMMUNITY ROOM 020	TBD	120	88	-	4000	80	95	0.7	208	3	-	-	26"x35"x12"	600	1,2,3
FC-7*	TRANE	TWE12043BAA	COMMUNITY ROOM 020	TBD	120	88	-	4000	80	95	0.7	208	3	-	-	26"x46"x10"	380	1,2,3
FC-8	TRANE	TWE07243BAA	CATALOG 004/ LARGE PRINT 007	TBD	72	88	-	2400	80	95	0.7	208	3	-	-	26"x46"x10"	380	1,2,3

PROVIDE ALT-H2*
PROVIDE ALT-H3*
PROVIDE ALT-H1*

NOTES:
1. COOLING CAPACITY BASED ON 87F ENTERING WET BULB AND 45F COIL TEMPERATURES.
2. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECT AS REQUIRED.
3. UNITS WITH DUAL REFRIGERATION CIRCUITS FOR CAPACITY CONTROL.
4. PROVIDE NEW DRP PANS FOR ALL UNITS, 1/2".
5. PROVIDE INTERFACING TO NEW BAS CONTROL SYSTEM.

PROPOSED SPLIT CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	AREA SERVED	LOCATION	COOLING			HEATING		ELECTRICAL							UNIT SIZE (L"xW"xH")	OPER WT. (LBS)	NOTES		
					NOM CAP. (MBH)	EER	SEER	NOM CAP. (MBH)	REFRIG TYPE	REFRIG (LBS)	VOLTS	PH	MCA (A)	MOCP (A)	EMERG POWER	MCA (A)				MOCP (A)	EMERG POWER
ACCU-1	TRANE	4TTA060A3	LOBBY 002/ REFERENCE 008	TBD	80	11.7	13.4	-	R-410A	7.8	208	3	21	35	-	-	35"x36"x36"	300	1,2		
ACCU-2	TRANE	4TTA060A3	STORY HOUR 005/ FICTION	TBD	80	11.7	13.4	-	R-410A	7.8	208	3	21	35	-	-	35"x36"x36"	300	1,2		
ACCU-3	TRANE	4TTR3030H1	PROGRAM ROOM 011	TBD	30	12.0	13.7	-	R-410A	4.8	208	1	10	25	-	-	26"x29"x20"	200	1,2		
ACCU-4	TRANE	4TTR3030H1	PROGRAM ROOM 011	TBD	24	12.0	14.3	-	R-410A	5.1	208	1	10	25	-	-	26"x29"x20"	200	1,2		
ACCU-5	TRANE	TTA12043AA	COMMUNITY ROOM 020	TBD	120	12.5	14.3	-	R-410A	18.6	208	3	41	50	-	-	40"x52"x40"	450	1,2,3		
ACCU-6	TRANE	TTA12043AA	COMMUNITY ROOM 020	TBD	120	12.7	14.5	-	R-410A	18.5	208	3	41	50	-	-	40"x52"x40"	450	1,2,3		
ACCU-7*	TRANE	TTA07243DAA	COMMUNITY ROOM 020	TBD	72	12.7	14.5	-	R-410A	14	208	3	22	30	-	-	32"x40"x34"	300	1,2,3		
ACCU-8	TRANE	TTA07243DAA	CATALOG 004/ LARGE PRINT 007	TBD	72	12.0	13.7	-	R-410A	14	208	3	22	30	-	-	32"x40"x34"	300	1,2,3		

PROVIDE ALT-H2*
PROVIDE ALT-H3*
PROVIDE ALT-H1*

NOTES:
1. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECTS AS REQUIRED.
2. PROVIDE REFRIGERANT PIPING PER MANUFACTURER'S REQUIREMENTS.
3. UNITS WITH DUAL COMPRESSORS AND DUAL CIRCUITS FOR CAPACITY CONTROL.
4. PROVIDE INTERFACING TO NEW BAS CONTROL SYSTEM.

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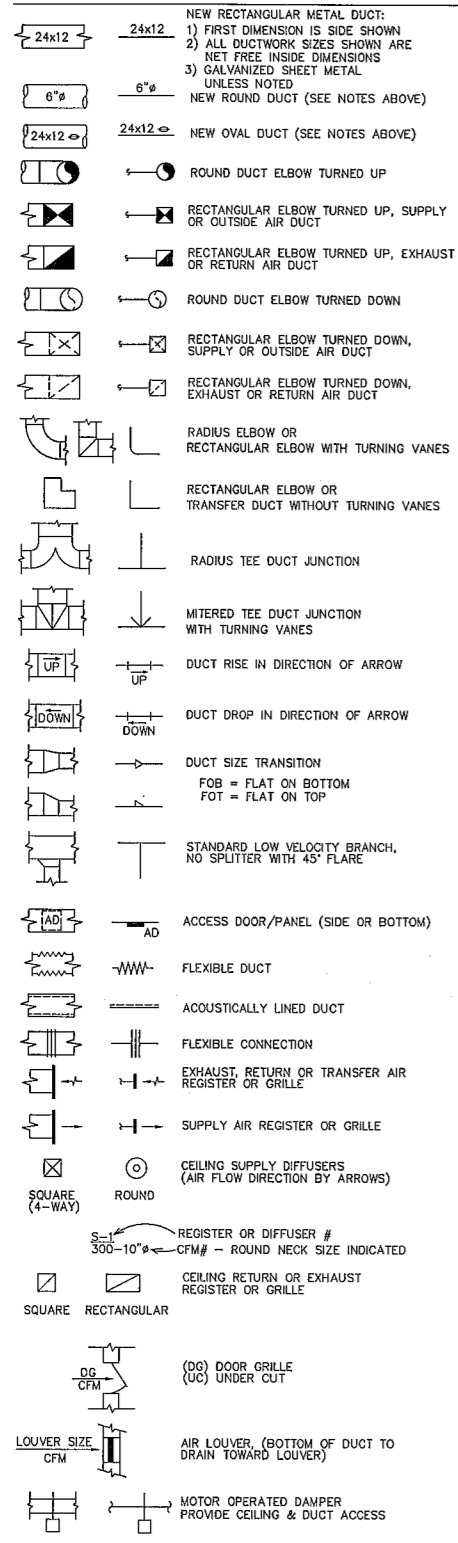
MECHANICAL
SCHEDULES

DATE
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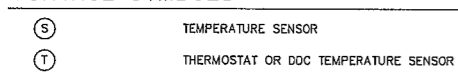
SHEET NO.
M2

OF 3 SHEETS

DUCT AND EQUIPMENT SYMBOLS



CONTROL SYMBOLS



GENERAL NOTES

- DRAWINGS ARE GENERALLY DIAGRAMMATIC. EACH CONTRACTOR SHALL MAKE REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS SUCH AS OFF SETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND THE BUILDING CONSTRUCTION. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER FOR PRESENT CONSTRUCTION. VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING TO AVOID CONFLICT. IT IS INTENDED THAT ALL EQUIPMENT, MATERIAL, DEVICES, ETC., SHALL BE LOCATED SYMMETRICALLY WITH THE ARCHITECTURAL ELEMENTS, NOTWITHSTANDING THE FACT THAT LOCATIONS INDICATED BY THESE DRAWINGS MAY BE DISTORTED FOR CLARITY OF PRESENTATION.
- EACH CONTRACTOR SHALL CHECK DRAWINGS OF THE OTHER TRADES TO VERIFY THEIR WORK WILL BE INSTALLED CLEAR OF OBSTRUCTIONS, MAINTAIN MAXIMUM HEADROOM AT ALL POINTS IN THE BUILDING, WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY ARCHITECT BEFORE PROCEEDING WITH THE INSTALLATION.
- FURNISH ALL TRADES ADVANCE INFORMATION ON LOCATIONS AND SIZES OF PIPING, DUCTWORK, EQUIPMENT, FRAMES, BOXES, SLEEVES AND OPENINGS NEEDED FOR WORK. FURNISH INFORMATION AND SHOP DRAWINGS TO PERMIT OTHER TRADES TO COORDINATE THEIR WORK.
- WHERE WORK OF ONE TRADE WILL INTERFERE WITH WORK OF ANOTHER TRADE, ALL TRADES SHALL ASSIST TO WORK COORDINATE THEIR WORK.
- PRIOR TO BIDDING THE HVAC CONTRACTOR SHALL REVIEW ALL DRAWINGS AND COORDINATE WORK. CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ARCHITECT ANY INCONSISTENCIES OR INTERFERENCE WITH HIS WORK.
- CONTRACTOR SHALL COORDINATE ALL CEILING DIFFUSERS, REGISTERS, AND/OR GRILLES WITH SUSPENDED CEILING AND LIGHT PATTERNS. OPENINGS SHALL BE IN CENTER OF TILES.
- SHEETMETAL DUCT SIZES MAY BE ALTERED TO FIT JOB CONDITIONS, BUT NET FREE AREAS MUST BE MAINTAINED. INCREASE SHEETMETAL DUCT SIZE TO ALLOW FOR DUCT LINING WHERE USED. WRAP ALL DUCTWORK EXCEPT AS NOTED. MAXIMUM DUCT ASPECT RATIO 1:5
- ALL DUCTWORK TO BE HELD TIGHT TO STRUCTURAL ROOF JOISTS, BEAMS, ETC., AS CLEARANCE IS MINIMAL. COORDINATE WITH OTHER CONTRACTORS TO AVOID CONFLICT.
- CONTRACTOR SHALL INCLUDE IN HIS WORK THE RELOCATION OF ALL CROSS BRACING, AS REQUIRED TO FIT DUCTS BETWEEN JOISTS. THIS WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR WITH ARCHITECTURAL APPROVAL.
- CONTRACTOR SHALL PROVIDE ALL DUCT DROPS AND OFFSETS TO AVOID INTERFERENCES WITH JOISTS, OTHER DUCTS, LIGHTS, PIPES, ETC.
- ALL THERMOSTATS LOCATED UP 4"-6" TO 8"-9" TO MATCH ADJACENT LIGHT SWITCHES AND WITH PLASTIC OR CAST GUARDS AS SPECIFIED. ALL THERMOSTATS LOCATED ON EXTERIOR WALLS OR COLUMNS MUST BE MOUNTED ON THERMAL INSULATING BLOCKS.
- CONTRACTOR SHALL PROVIDE COOLING COIL CONDENSATE DRAIN LINES FROM AIR HANDLING UNIT TO DRAIN.
- HEATING, VENTILATING, AIR CONDITIONING AND ELECTRICAL DESIGNS ARE BASED ON THE REQUIREMENTS FOR THE SPECIFIED EQUIPMENT MANUFACTURER. CONDUITS, DISCONNECTS, BREAKERS, FUSES AND WIRE SIZES ARE SELECTED ON THE BASIS OF SPECIFIED EQUIPMENT MANUFACTURER, INCREASED CURRENT REQUIREMENTS NECESSITATING LARGER WIRE, BREAKERS, FUSES, SWITCHES, ETC., TO ACCOMMODATE ANY ALTERNATE OR SUBSTITUTE MANUFACTURER'S EQUIPMENT OTHER THAN AS SHOWN ON DRAWINGS OR SCHEDULES SHALL BE PROVIDED WITHOUT INCREASE IN CONTRACT PRICE BY THE CONTRACTOR FURNISHING EQUIPMENT.
- INSTALL 1" OF NON-SHRINK GROUT AROUND DUCTWORK AND PIPING ON EACH WALL FACE TO SEAL OPENINGS AND ELIMINATE SOUND TRANSFER WITH AIR-TIGHT CONNECTIONS.
- EXTEND RTU EXHAUST TO MAINTAIN 10 FT SEPARATION TO ANY AIR INTAKES. VERIFY LOCATION. CONFIRM WITH LOCAL INSPECTORS AS TO REQUIREMENTS.
- GUARDS SHALL BE PROVIDED WHERE APPLIANCES EQUIPMENT, FANS OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE LOCATED WITHIN 10 FT OF ROOF EDGE OR OPEN SIDE OF A WALKING SURFACE AND SUCH EDGE OR OPEN SIDE IS LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR, ROOF OR GRADE BELOW. THE GUARD SHALL BE EXTEND NOT LESS THAN 30 INCHES BEYOND EACH END OF EQUIPMENT AND THE TOP OF THE GUARD SHALL BE LOCATED NOT LESS THAN 42 INCHES ABOVE ELEVATED SURFACE.
- INSULATION**
DUCT INSULATION SHALL CONFORM TO THE REQUIREMENTS OF 2015 IMC SECTION 604 AND 2015 IECC SECTION C403.2.9 FOR COMMERCIAL BUILDINGS AND R303.3.1 FOR RESIDENTIAL BUILDINGS.
A. COMMERCIAL BUILDINGS
SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH A MINIMUM OF R-8 INSULATION IN CLIMATE ZONES 1-4 AND A MINIMUM OF R-12 INSULATION IN CLIMATE ZONES 5-8, WHERE LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY A MINIMUM OF R-8 INSULATION IN CLIMATE ZONES 1-4 AND A MINIMUM OF R-12 INSULATION IN CLIMATE ZONES 5-8. EXCEPTION: WHERE THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM IS NOT GREATER THAN 15 DEG. F.
- SUPPORTS AND ANCHORS**
A. MANUFACTURERS: GRINNELL, B-LINE, O.Z. CEDNEY, MICHIGAN HANGER, BERGEN/CARPENTER AND PATERSON.
B. USE MATERIALS COMPATIBLE WITH PIPING SYSTEMS AVOIDING ELECTROLYTIC ACTION AND CONFORM TO ANSI/ASME B31, NFPA, MSS SP-58, 89, 88.
C. WIRE ARE NOT ALLOWED TO BE USED AS A HANGER SUPPORT.
- TESTING AND BALANCING**
A. AIR BALANCING SHALL BE ACCOMPLISHED BY ADJUSTMENT OF ADJUSTABLE FAN SHEAVES. BRANCH DAMPERS ARE TO BE USED FOR ANY REQUIRED TRIM ADJUSTMENT.
B. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND EQUIPMENT INCLUDING SHEAVES AS REQUIRED TO BALANCE ALL AIR SYSTEMS IN ACCORDANCE WITH QUANTITIES SHOWN.
C. BALANCING SHALL BE PERFORMED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER AND REPORT SHALL BE PROVIDED ON AABC TYPE FORMS.
- AIR DISTRIBUTION SYSTEMS**
A. AIR TERMINALS
1. PROVIDE SUPPLY AND RETURN AIR DIFFUSERS/REGISTERS AS SHOWN ON SCHEDULES.
B. SHEET METAL WORK
1. EXCEPT AS OTHERWISE SHOWN OR NOTED, ALL DUCTWORK AND OTHER SHEET METAL WORK SHALL BE GALVANIZED SHEET STEEL AND SHALL BE INSTALLED IN ACCORDANCE WITH SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC. (SMACNA) DUCT CONSTRUCTION STANDARDS. DUCT SYSTEMS TO BE 2" PRESSURE CLASS.
2. ALL DUCT DIMENSIONS INDICATED ON THE PLANS ARE INSIDE CLEAR DIMENSIONS.
3. SUPPLY DUCTWORK TO BE RECTANGULAR WITH HEMMED "S" LONGITUDINAL SEAMS AND DUCTMATE TRANSVERSE JOINTS.
4. MANUAL VOLUME DAMPERS: GALVANIZED STEEL, PER SMACNA EXCEPT PROVIDE BEARING AT ONE END OF DAMPER ROD AND QUADRANT, WITH LEVER AND LOCKSCREW AT THE OPPOSITE END. FOR INSULATED DUCTS, QUADRANTS MOUNTED ON COLLAR TO CLEAR INSULATION. LEVERS MUST BE ACCESSIBLE.
5. EXHAUST DUCTWORK ELBOWS TO BE LONG RADIUS TYPE.
6. ACCESS DOORS SHALL BE PROVIDED IN DUCTWORK WHEREVER CONTROLS, CONTROL DAMPERS, COILS, & INSTRUMENTS ARE INSTALLED.
7. THE PLENUM CHAMBER THAT IS USED FOR RECIRCULATION OF AIR SHALL BE OF TIGHT CONSTRUCTION AND ALL SOURCES OF AIR CONTAMINATION FROM TRAPS, SOIL STACKS, DOWNSPOUTS, VENTS, EXHAUST DISCHARGE AND OTHER SOURCES WILL BE ENCLOSED SO THAT NO CONTAMINATED AIR WILL BE RECIRCULATED.
- CONTROL SYSTEM WIRING**
A. HVAC CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL CONTROL WIRING FOR HVAC EQUIPMENT TO BE INTERFACED WITH NEW BAS DIGITAL CONTROL SYSTEM.

HVAC SPECIFICATIONS

15050 BASIC MECHANICAL MATERIALS AND METHODS
Provide complete systems as called for, and/or shown, and/or specified. HVAC contractor to furnish and completely install the system, service, equipment, or material named, together with other associated devices, equipment, materials, wiring, piping, etc., as required to perform work called for, shall be responsible to the HVAC Contractor. Secure all permits for work as required. Where "furnish and install", "provide", "furnish", "install" or equivalent words are used, they mean that the contractor shall furnish and completely install the system, service, equipment or material named, together with other associated devices, equipment, material, wiring, piping, etc., as required for a complete operating installation.

STANDARDS, CODES AND REGULATIONS
Equipment, devices and installations to be in full compliance with applicable standards, requirements, rules, regulations, codes, statutes, ordinances, etc., local, city, county, state government, Illinois Administrative Code, Owner's insurance company, local gas and electric utilities, labor regulations. Changes required to conform to requirements shall be made without increase in contract price as approved by the Architect.

Electrical equipment, wiring, gas burning equipment, handling and storage equipment, all hydronic piping, refrigeration piping, insulating materials, etc., shall comply with requirements of NFPA, NEC, UL, ADA, OSHA, EPA, BOCA, local and all applicable state and federal safety codes; for a particular type installation and shall be so labeled where applicable.

MATERIALS
Materials to be of new grade, U.S. make and quality specified.

WIRING
Wiring to be in compliance with latest N.E.C. and all applicable codes. Line wires, of proper size, shall be furnished by Electrical Contractor, with final power connections made by Electrical Contractor. Heating Contractor, within his contract, shall be responsible for all control wiring of equipment, provide devices, panels, disconnect switches, starters, interlocks, controls, etc., to give a complete/satisfactory operating system.

COORDINATION
Before any work is installed and before any equipment is purchased, contractor shall carefully check specifications and drawings for every trade and job conditions and any lack of coordination between his work and the specifications and drawings or job conditions shall be immediately reported to the Architect, in writing. The Architect will work out conflicts and adjustments in contract prices. Changes in equipment shall be incorporated in the shop drawings.
If contractor fails to call such lack of coordination between specifications, drawings and job conditions to the Architect's attention, in writing, before any work is done or before equipment is purchased, it will be assumed that no conflicts exist. If conflicts arise during the construction period, they shall be immediately reported to the Architect in writing and they will be worked out by the Architect, but no increase in contract price will be allowed. The Architect's decisions shall be final.
When heating and cooling equipment is operated by the Heating contractor, the Heating contractor shall be solely responsible for the operation and safety of such equipment. When heating and cooling equipment is operated by the HVAC contractor (or other contractors), the owner (or other contractors) shall be solely responsible for the operation and safety of such equipment.

WARRANTY
HVAC Contractor shall guarantee all equipment, apparatus, materials and workmanship entering into this contract and shall replace all parts at his own expense which have proven defective within one (1) year from formal acceptance. Individual items shall be guaranteed as called for in addition to the above.

SUBMITTALS
Each respective contractor shall submit to the Architect for approval, before construction is started, seven (7) copies of shop drawings for equipment, devices, material, controls, accessories, wiring diagrams, etc., for respective installation.

SPECIAL SUPERVISION AND INSTRUCTIONS
Each specialized installation shall be made under the supervision of a factory trained engineer or contractor's superintendent who shall (a) submit a written report that the installation has been installed in keeping with the specified requirements and the manufacturer's standards; (b) instruct the Owner's operating personnel before final acceptance; (c) prepare permanent form operating instructions, parts lists, wiring diagrams and control diagrams, in booklet form, in triplicate, turned over to Owner and (d) certify that the installation is operating satisfactorily under the Owner's personnel and certify that the Owner's personnel are trained on systems and equipment per manufacturer's guidelines.

CUTTING AND PATCHING
Contractor shall set sleeves and inserts required for intakes, piping, hangers, louvers, ventilators, ductwork, etc., in construction. Supply General Contractor with complete information as to size and location of openings, through walls, floors, roofs, etc., for installation of this work if this information is not supplied before new walls or floors are built, HVAC contractor shall cut all openings as approved by the Architect.
Patching and rebuilding required to patch openings, and to restore construction to its original condition before cutting, using skilled craftsmen, as approved by the Architect. Shall be performed by others.
Openings shall be accurately located, as small as possible, and neatly and cleanly cut.
Wall openings shall be neatly cemented and wall frames grouted in place by Heating contractor.

15815 METAL DUCTS
Sheet metal ductwork to be installed, constructed, fabricated, etc., in accordance with the latest SMACNA manual, all local codes; galvanized sheet steel or 24 or 30 aluminum sheets. Furnish volume dampers with external locking quadrants. Provide sealed hinged-removable access doors where called for and/or required for access to controls, operators, sensors, filters, dampers, etc..

FLEXIBLE DUCTWORK
Flexible ducts shall be of Wiremold, Flexmaster, Thermaflex, Genflex or approved make, Wiremold type WS constructed of high temperature, vinyl organole coated glass fabric, 14 oz. and cold rolled corrosion-resistant coated steel spiral. Duct shall be factory pre-insulated with minimum of 1" of 3/4 lb. density glass fiber blanket, sheathed with an exterior flame-resistant vinyl vapor barrier. Strap clamps shall be plastic trap or stainless steel draw-up clamps for securing flexible air duct. Prior to clamping, duct shall be sealed as per manufacturer's recommendations. Flexible duct to be suitable for use with system pressure rating and design. FLEXIBLE DUCT RUNS SHALL NOT EXCEED MAXIMUM LENGTH DICTATED BY LOCAL CODE.

15820 DUCT ACCESSORIES
Flexible connections, as called for on drawings, to be fire-water-weather-resistant fabric as manufactured by Ventflow or approved make.

SECTION 15855 - DIFFUSERS, REGISTERS, AND GRILLES
GENERAL
Submittals: Product Data for each model indicated.

PRODUCTS
Diffusers, registers, and grilles are scheduled on Drawings.

EXECUTION
Install diffusers, registers, and grilles level and plumb, according to manufacturer's written instructions, Coordination Drawings, original design, and referenced standards.
Ceiling-Mounted Outlets and Inlets: Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet and inlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. Make final locations where indicated, as much as practicable. For units installed in lay-in ceiling panels, locate units in the center of the panel. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.
Install diffusers, registers, and grilles with airtight connection to ducts and to allow service and maintenance of dampers, air extractors, and fire dampers.
Install diffusers, registers, and grilles according to NFPA 90A, "Standard for the Installation of Air-Conditioning and Ventilating Systems."
After installation of diffusers, registers, and grilles, inspect exposed finish. Clean exposed surfaces to remove burrs, dirt, and smudges. Replace diffusers, registers, and grilles that have damaged finishes.
END OF SECTION 15855

OPENINGS, SLEEVES AND CHASES
Contractor shall set sleeves and inserts required for piping, hangers, intakes, louvers, ventilators, ductwork, curbs, etc., in construction. Contractor to furnish General Contractor with complete information as to size and location of openings through walls, floors, roofs, etc., for installing this work. If this information is not supplied before new walls, floors, roofs, etc., are built, respective Contractor shall furnish, cut and patch all required openings for installation of equipment, material, devices, etc., as required and approved by the Architect. For new construction; General Contractor will cut holes through roof and Roofing Contractor will do all flashing, roof patching, etc., unless otherwise noted. Roof openings 18" and larger shall be framed with headers connected to roof joists with steel members framed between. All roofing work and equipment to meet requirements of National Association of Roofing Contractors.

ABBREVIATIONS

ACCU	AIR COOLED CONDENSING UNIT	KW	KILOWATT
AFF	ABOVE FINISH FLOOR	MBH	THOUSAND BTU'S PER HOUR
BDD	BACKDRAFT DAMPER	MCA	MINIMUM CIRCUIT AMPACITY
BTU	BRITISH THERMAL UNIT	MECH	MECHANICAL
CA	COMBUSTION AIR	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MNT	MOUNTED
CLG	CEILING	NTS	NOT TO SCALE
DB	DRY BULB	OA	OUTSIDE AIR
DWG(S)	DRAWING, DRAWINGS	R	RETURN
EA	EXHAUST AIR	RF	RETURN AIR FAN
EF	EXHAUST FAN	RLA	RUNNING LOAD AMPS
EH	ELECTRIC HEATER	RPM	REVOLUTIONS PER MINUTE
ERC	ELECTRIC REHEAT COIL	S	SUPPLY
FL	FIRE DAMPER	TD	AIR TRANSFER DUCT
FLA	FULL LOAD AMPS	TV	TURNING VANE
GF	GAS FURNACE	TYP	TYPICAL
HP	HORSEPOWER	VPD	AIR VOLUME DAMPER
HVAC	HEATING VENTILATING AIR CONDITIONING	VTR	VENT THRU ROOF

The Mechanical Contractor shall be responsible to cut and patch necessary wall or floor openings and provide materials and hardware for complete installation.

THIS PROJECT HAS BEEN DESIGNED TO MEET ALL THE APPLICABLE CODES PERTAINING TO HEATING, VENTILATING AND AIR CONDITIONING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE SYSTEMS AS DESIGNED AND IN A MANNER THAT MEETS THE APPROPRIATE CODE REQUIREMENTS AND MANUFACTURER RECOMMENDATIONS.



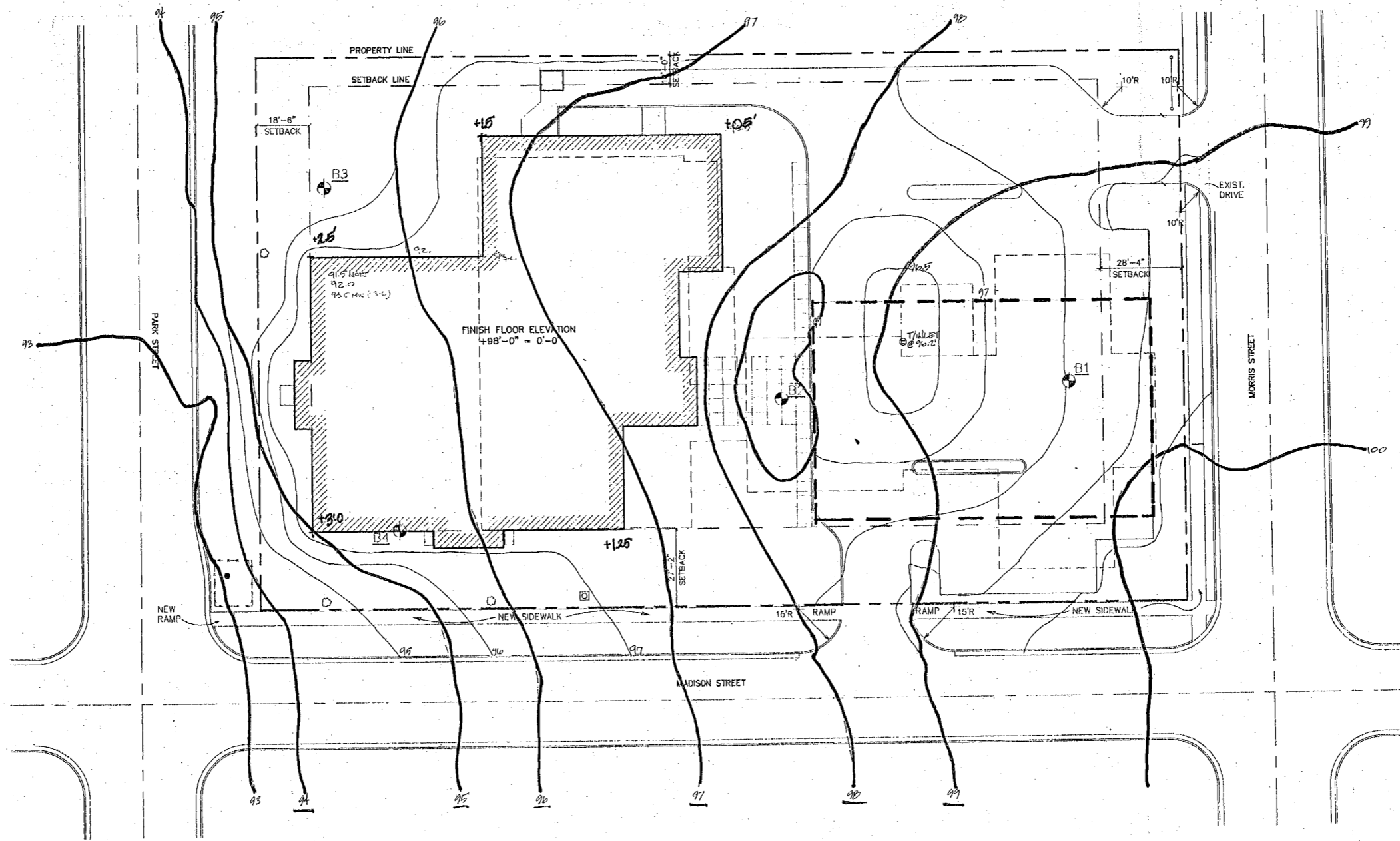
Legacy Designs, Inc.
6116 Mulford Village Drive
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1-815-484-4710 fax
PROFESSIONAL DESIGN FIRM NO. 184-003483

**HVAC RENOVATIONS FOR
ODELL PUBLIC LIBRARY**
307 SOUTH MADISON STREET
Morrison, Illinois 61270

REVISIONS

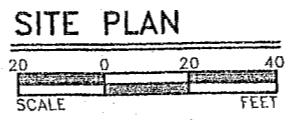
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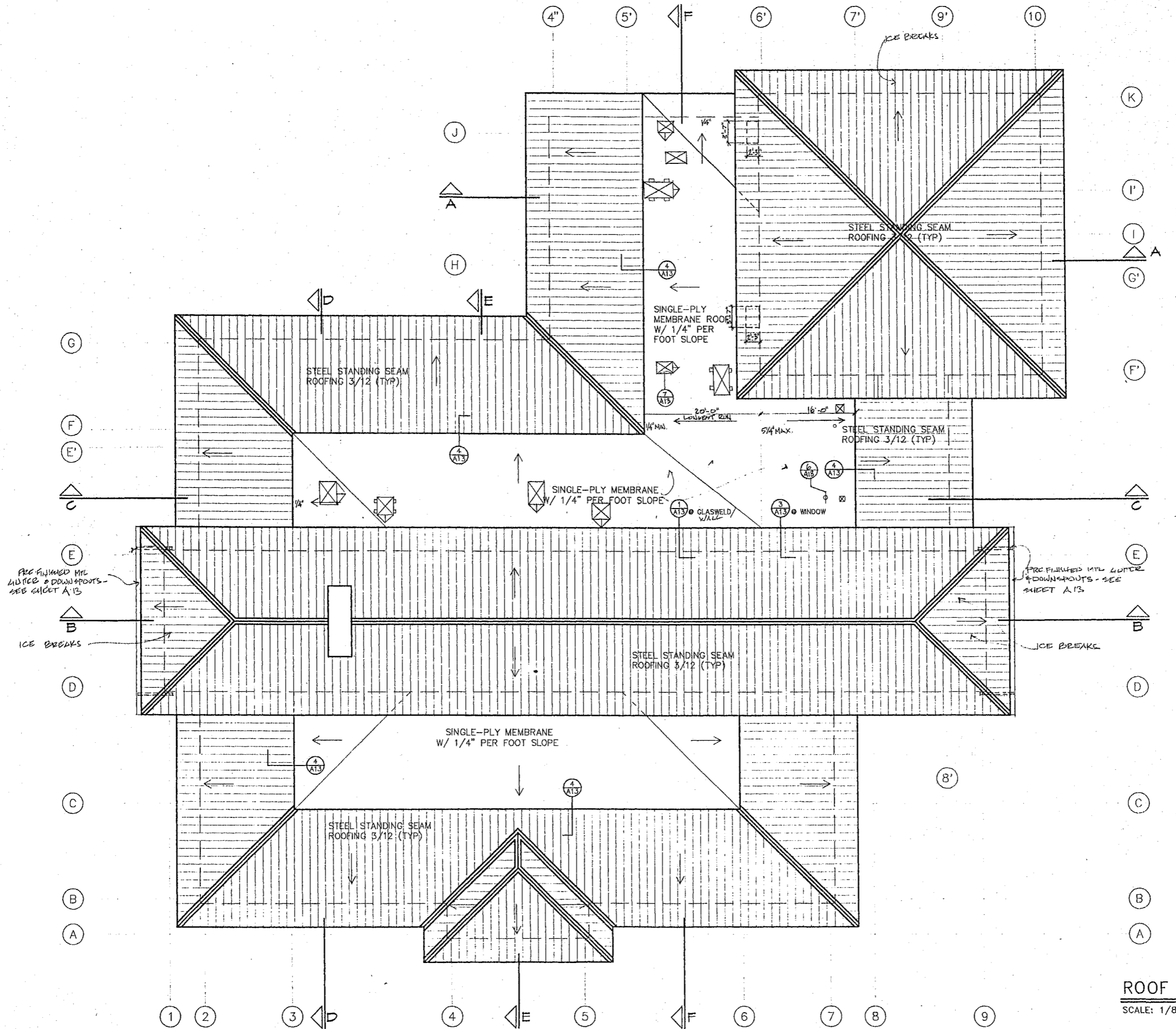
MECHANICAL SPEC
DATE
September 11, 2023
SHEET NO.
M3
OF 3 SHEETS



LEGEND

- NEW CONTOUR
- EXISTING CONTOUR
- 98.5 SPOT ELEVATION
- NEW CONCRETE





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



REVISED
11-28-94

DRAWN
CHECKED

DATE
7-28-94
PROJECT
9324-1
SHEET NO.
A-2R

