

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2006	National Electrical Code	2005
International Mechanical Code	2006	Uniform Code for Building Conservation	
International Plumbing Code	2006	ADA Accessibility Guidelines	
International Fire Code	2006		
International Energy Conservation Code	2006		

A. Occupancy and Group: _____
 Change in Use: Yes _____ No _____ Mixed Occupancy: Yes _____ No _____
 Special Use and Occupancy (e.g. High Rise, Covered Mall): _____

B. Seismic Design Category: _____ Design Wind Speed: _____ mph

C. Type of Construction (circle one):

I I II II III III IV V V
 A B A B A B HT A B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: _____ South: _____ East: _____ West: _____

E. Mixed Occupancies: _____ Nonseparated Uses: _____

F. Sprinklers:

Required: _____ Provided: _____ Type of Sprinkler System: _____

G. Number of Stories: _____ Building Height: _____

H. Actual Area per Floor (square feet): _____

I. Tabular Area: _____

J. Area Modifications:

$$a) A_a = A_t + \left[\frac{A_t I_f}{100} \right] + \left[\frac{A_t I_s}{100} \right] \quad I_f = 100 \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$$

c) Total Allowable Area for:

- 1) One Story: _____
- 2) Two Story: $A_a(2)$ _____
- 3) Three Story: $A_a(3)$ _____

d) Unlimited Area Building: Yes _____ No _____ Code Section: _____

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls			Floors - Ceiling Floors		
Interior Bearing Walls			Roofs - Ceiling Roofs		
Exterior Non-Bearing Walls			Exterior Doors and Windows		
Structural Frame			Shaft Enclosures		
Partitions - Permanent			Fire Walls		
Fire Barriers			Fire Partitions		
			Smoke Partitions		

L. Design Occupant Load: _____

Exit Width Required: _____ Exit Width Provided: _____

M. Minimum Number of Required Plumbing Facilities:

- a) Water Closets - Required (m) _____ (f) _____ Provided (m) _____ (f) _____
- b) Lavatories - Required (m) _____ (f) _____ Provided (m) _____ (f) _____
- c) Bath Tubs or Showers: _____
- d) Drinking Fountains: _____ Service Sinks: _____

FOOTNOTES:

- 1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.
- 2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
 - a) High Rise Requirements.
 - b) Atriums.
 - c) Performance Based Criteria.
 - d) Means or Egress Analysis.
 - e) Fire Assembly Locator Sheet.
 - f) Exterior and Interior Accessibility Route.
 - g) Fire Stopping, Including Tested Design Number.

STATE DEVELOPMENTAL CENTER HVAC AUTOMATIC TEMPERATURE CONTROLS DFCM #07179410



State of Utah—Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

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- ME501- MECHANICAL DETAILS AND SCHEDULES



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CONSULTANTS



PROJECT NAME & ADDRESS

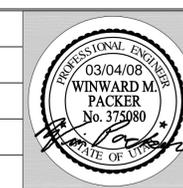
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MECHANICAL GENERAL
NOTES AND LEGEND

SHEET NO.

MG001

GENERAL NOTES:

G-1 MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS BY OTHER DISCIPLINES AND SPECIFICATIONS.

A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES. ITEMS IN SPECIFICATIONS OR DRAWINGS LISTED WHICH ARE DIFFERING IN EFFICIENCY OR QUALITY SHALL BE HELD TO THE GREATEST OF: EFFICIENCY, QUALITY OR GOVERNING CODE.

B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.

C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.

D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES, AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.

E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY MAKING APPLICATION TO THE ENGINEER IN WRITING.

G-2 ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO CHANGES FOR APPROVAL. CONTRACTOR SHALL NOT START ANY CHANGES UNTIL NOTIFIED IN WRITING. IF CHANGES ARE MADE PRIOR TO APPROVAL CONTRACTOR SHALL TAKE ALL RESPONSIBILITY FOR THE CHANGES MADE AND ALL COSTS RELATING TO FAILURE OR REPLACEMENT OF ALTERATIONS.

G-3 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.

G-4 THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS. THE CONTRACTOR SHALL PROVIDE OR COORDINATE WITH THE GENERAL CONTRACTOR PROVISIONS FOR BLOCKOUTS OR CORE DRILLS THROUGH STRUCTURE.

G-5 THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.

G-6 MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE AND FIRE DAMPERS AS REQUIRED BY LOCAL CODES AND AUTHORITIES.

G-7 SHEET METAL DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.

G-8 PROVIDE AND INSTALL BALANCING DAMPERS IN ALL SUPPLY AND EXHAUST AIR BRANCH DUCTS. BALANCE TO CFM SHOWN ON PLAN.

G-9 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF DIFFUSERS AND GRILLES.

G-10 PROVIDE TURNING VANES IN ALL ELBOWS OF RECTANGULAR DUCT.

G-11 THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

G-12 THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWING BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.

G-13 C.F.M. LISTED IS ACTUAL AIR.

G-14 SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.

G-15 CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS, CAPACITIES, OR DESIGN INTENT.

G-16 ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2006 EDITION OF THE IMC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

G-17 THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE DRAINING DOWN AND RE-FILLING OF ALL SYSTEMS NECESSARY TO COMPLETE THE WORK OUTLINED BY THIS PROJECT. THIS INCLUDES PROVIDING THE REQUIRED CHEMICAL TREATMENT WHEN RE-FILLING THE SYSTEM.

G-18 ALL PIPING, MATERIALS, ETC. SHALL BE NEW AND DOMESTIC MADE UNLESS SPECIFICALLY AUTHORIZED IN WRITING PRIOR TO BID.

MECHANICAL LEGEND

SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION
GENERAL TERMINOLOGY											
		SECTION LETTER DESIGNATION			EXISTING AIR DUCT TO BE REMOVED			PUMP			ELBOW UP
		SECTION DRAWN ON THIS SHEET			EXISTING AIR DUCT TO REMAIN			UNION			ELBOW DOWN
		DETAIL NUMBER DESIGNATION CORRESPONDING WITH GRID LOCATION			NEW AIR DUCT			MANUAL ACTUATOR (BALL, BUTTERFLY, NEEDLE, ETC. VALVES)			TEE UP
		MECHANICAL EQUIPMENT DESIGNATION			RECT. TO RECT. AIR DUCT TAKE-OFF			MANUAL ACTUATOR (GATE, GLOBE, S&D, OS&Y, ETC. VALVES)			TEE DOWN
		EQUIPMENT ITEM DESIGNATION			RECT. TO RND. AIR DUCT TAKE-OFF			PNEUMATIC DIAPHRAGM ACTUATOR			EXISTING PIPING TO BE REMOVED
		REGISTER, GRILL OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW			RND. TO RND. AIR DUCT TAKE-OFF			ELECTRIC MOTOR ACTUATOR			EXISTING PIPING TO REMAIN
		GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRE			RECT. TAKE-OFF AT END OF MAIN			SOLENOID ACTUATOR			NEW PIPING
		REVISION DESIGNATOR AND NUMBER			FLEXIBLE AIR DUCT			THREADED OR SWEAT VALVE CONNECTION			PIPE CAP OR PLUG
		KEY NOTE DESIGNATOR AND NUMBER			LINED DUCT			FLANGED VALVE CONNECTION			CONCENTRIC REDUCER
	POC	POINT OF CONNECTION			VANED ELBOW			BUTTERFLY VALVE			ECCENTRIC REDUCER
	POR	POINT OF REMOVAL			RADIUS ELBOW			GATE VALVE			FLEXIBLE CONNECTION
	AFF	ABOVE FINISHED FLOOR			CONCENTRIC DUCT TRANSITION			MOTORIZED 2-WAY CONTROL VALVE			CONDENSATE DRAIN
	AP	ACCESS PANEL			ECCENTRIC DUCT TRANSITION			MOTORIZED 3-WAY CONTROL VALVE			NATURAL GAS PIPING
	CL	CENTER LINE ELEVATION			RETURN AIR, FRESH AIR, AND TRANSFER AIR			CHECK VALVE			MAKE-UP WATER LINE
	INV. ELEV.	INVERT ELEVATION			CEILING MOUNTED EXHAUST FAN OR EXHAUST GRILLE			CIRCUIT BALANCING VALVE			CULINARY COLD WATER
	GC	GENERAL CONTRACTOR			RETURN OR OUTSIDE AIR DUCT UP		CBV	BALL VALVE			CULINARY HOT WATER
	MC	MECHANICAL CONTRACTOR			SUPPLY DUCT UP		BV	AUTOMATIC AIR VENT			RECIRCULATED CULINARY HOT WATER
	ATC	CONTROL CONTRACTOR			EXHAUST AIR INTAKE UP			MANUAL AIR VENT			EQUIPMENT DRAIN
	EC	ELECTRICAL CONTRACTOR			RETURN OR OUTSIDE AIR DUCT DOWN			STRAINER			HEATING WATER SUPPLY
	FPC	FIRE PROTECTION CONTROL			SUPPLY DUCT DOWN			STRAINER W/ PLUGGED BLOW OFF			HEATING WATER RETURN
	NIC	NOT IN CONTRACT			EXHAUST DUCT DOWN		VTI	VENTURI			CHILLED WATER SUPPLY
	NTS	NOT TO SCALE			ROUND DUCT UP			PRESSURE GAUGE AND GAUGE COCK - WATER			CHILLED WATER RETURN
	C	COMMON			LOWER DUCT DOWN			PRESSURE GAUGE AND GAUGE COCK - STEAM			LOW PRESSURE STEAM
	NC	NORMALLY CLOSED			COIL			THERMOMETER AND THERMOWELL			LOW PRESSURE STEAM RETURN
	NO	NORMALLY OPEN		AP	ACCESS PANEL			WATER TEMPERATURE SENSOR AND THERMOWELL			MEDIUM PRESSURE STEAM
					EXISTING EQUIPMENT TO BE REMOVED			FLOW SWITCH			HIGH PRESSURE STEAM
					EXISTING EQUIPMENT TO REMAIN						CONDENSER SUPPLY
					NEW EQUIPMENT						CONDENSER RETURN
	M	MVD			MOTORIZED VOLUME DAMPER						PUMPED CONDENSATE
	BD	BD			BACKDRAFT DAMPER						
	RTU-1	T-STAT			WALL MOUNTED THERMOSTAT MECHANICAL EQUIPMENT CONTROLLED		PS	PS			
					WALL MOUNTED TEMP. SENSOR						
	F	F-STAT			WALL MOUNTED FIRESTAT						
	SA				SUPPLY AIR						
	RA				RETURN AIR						
	EA				EXHAUST AIR						
	OA				OUTSIDE AIR						
	MA				MIXED AIR						
	FA				FRESH AIR						
	RF				RELIEF AIR						

CONSULTANTS



PROJECT NAME & ADDRESS

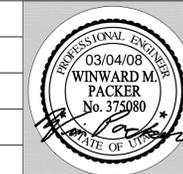
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:	WP
DRAWN BY:	LGD
CHECKED BY:	SLW
DATE:	03/04/08
WHW JOB NO.:	07013



SHEET TITLE
**T.L.C. BASEMENT
MECHANICAL DEMOLITION
PLAN**

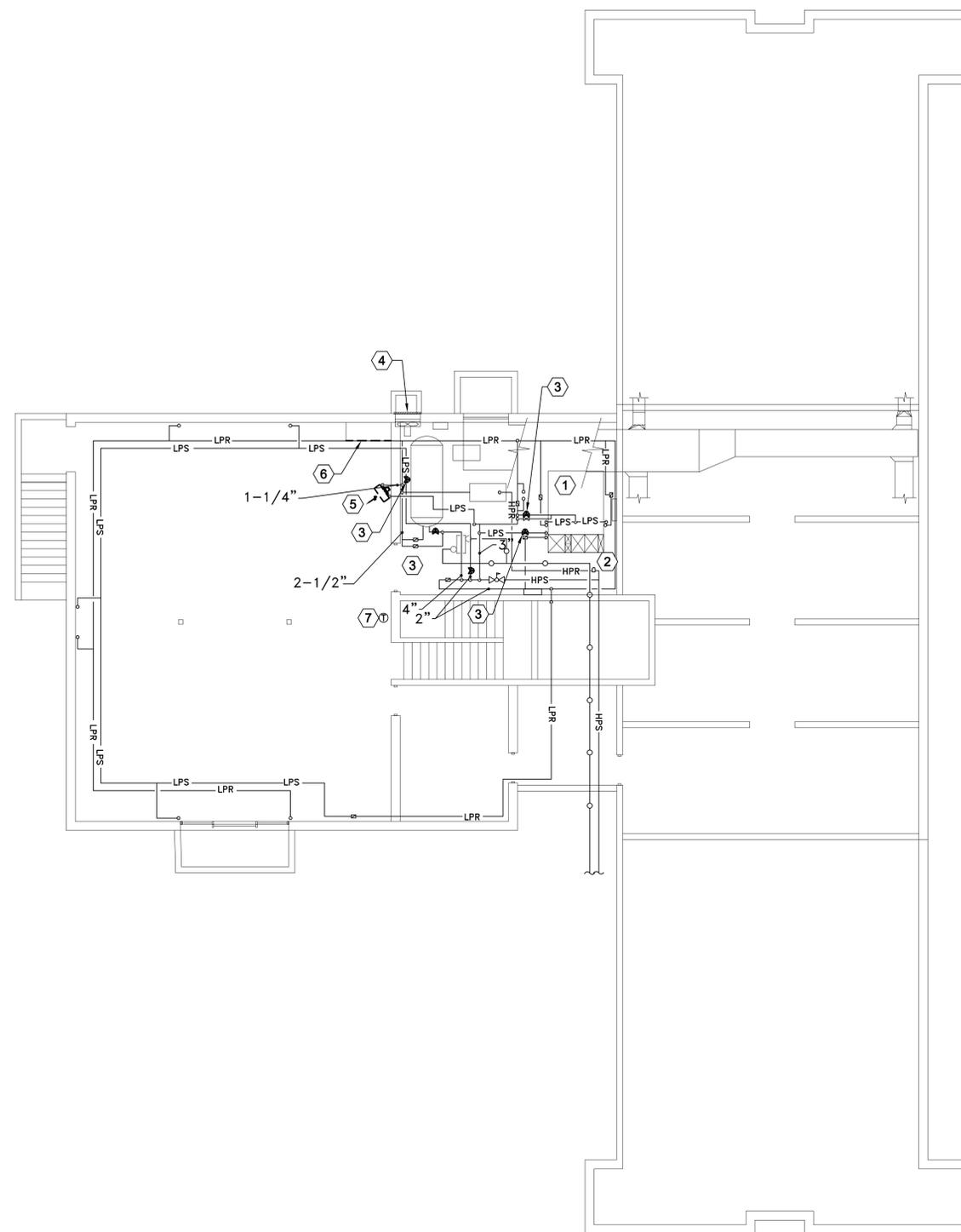
SHEET NO.
MD101

SHEET NOTES:

- ① EXISTING MULTIZONE AIR HANDLING UNIT SHALL REMAIN.
- ② REMOVE AND REPLACE ALL 6 MULTIZONE DAMPERS AND ACTUATORS. FIELD VERIFY SIZE BEFORE ORDERING.
- ③ REMOVE AND REPLACE EXISTING STEAM CONTROL VALVES. FIELD VERIFY EXACT SIZE AND LOCATION.
- ④ EXISTING EXHAUST FAN SHALL REMAIN.
- ⑤ REMOVE EXISTING UNIT HEATER AND ASSOCIATED CONTROLS, ELECTRICAL, SUPPORTS, ETC.
- ⑥ EXTEND EXISTING SECURITY CAGE AROUND FAN COIL AND FIRE RISER.
- ⑦ REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.

GENERAL NOTES:

1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



T.L.C. BASEMENT MECHANICAL DEMOLITION PLAN

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



CONSULTANTS



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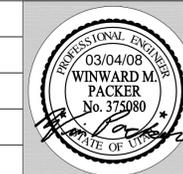
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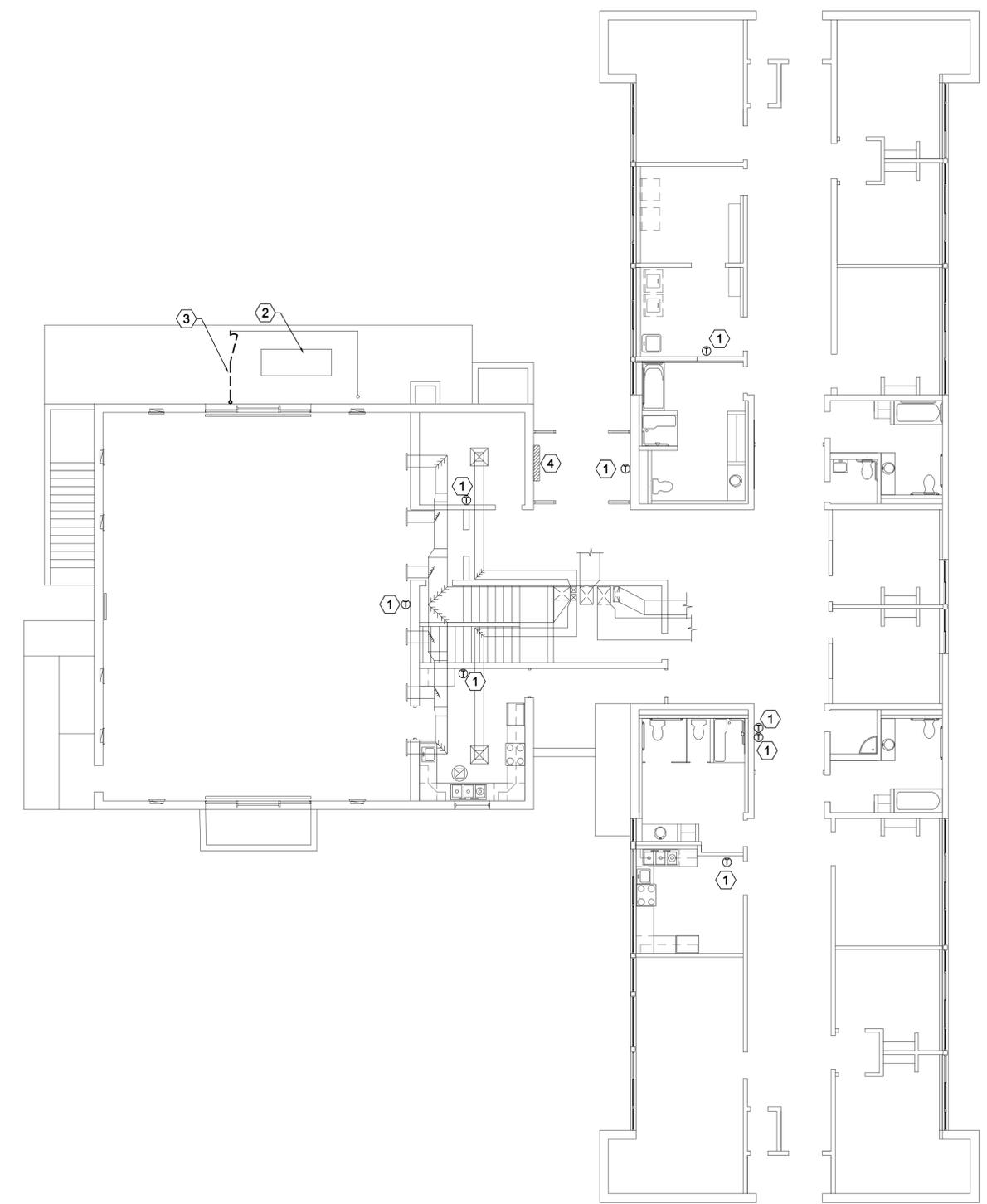


**MAIN FLOOR MECHANICAL
DEMOLITION FLOOR PLAN**

SHEET NO. **MD102**

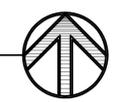
- SHEET NOTES:
- ① REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.
 - ② EXISTING CONDENSING UNIT SHALL REMAIN.
 - ③ EXTEND EXISTING FENCE AND GATE TO ACCOMMODATE NEW CONDENSER.
 - ④ REPLACE EXISTING PNEUMATIC CONTROL VALVE IN EXISTING CONVECTOR.

- GENERAL NOTES:
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TLC MAIN FLOOR MECHANICAL DEMOLITION FLOOR PLAN

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

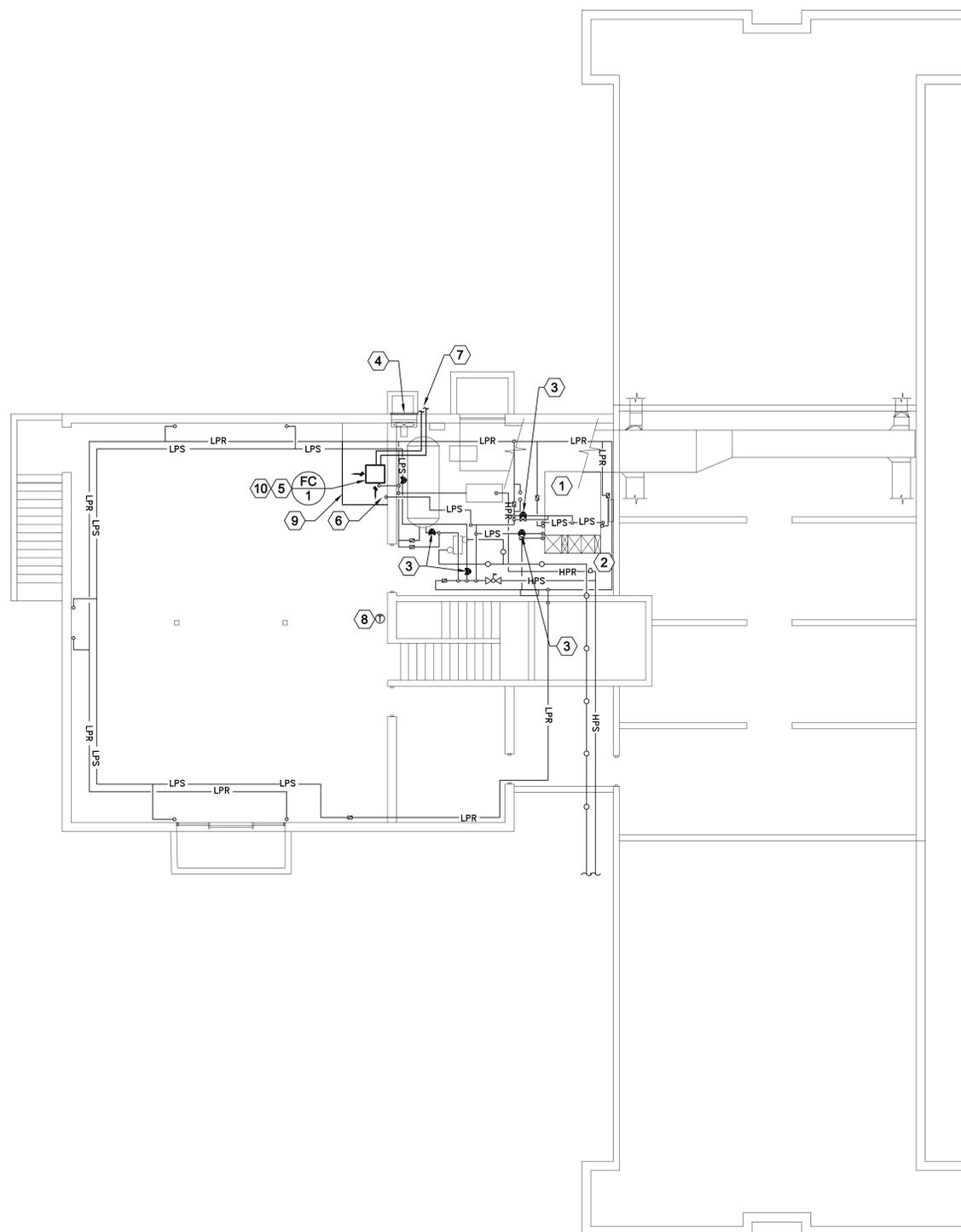


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SHEET NOTES:

- ① PROVIDE NEW CONTROLS FOR EXISTING MULTIZONE AIR HANDLING UNIT.
- ② REPLACE ALL 6 MULTIZONE DAMPERS AND ACTUATORS. FIELD VERIFY SIZE BEFORE ORDERING.
- ③ REPLACE EXISTING STEAM CONTROL VALVES. FIELD VERIFY EXACT SIZE AND LOCATION.
- ④ TIE EXISTING EXHAUST FAN INTO BMS. PROVIDE TEMP SENSOR AND USE FAN TO MAINTAIN COOLING SET POINT.
- ⑤ PROVIDE NEW FLOOR MOUNTED VERTICAL FAN COIL UNIT WITH TOP DISCHARGE PLENUM.
- ⑥ CONNECT STEAM COIL TO EXISTING STEAM AND CONDENSATE PIPING.
- ⑦ ROUTE REFRIGERANT PIPING TO NEW OUTDOOR CONDENSING UNIT. SEE SHEET ME102 FOR CONTINUATION.
- ⑧ PROVIDE NEW DDC SENSOR FOR NEW FAN COIL UNIT.
- ⑨ EXTEND EXISTING SECURITY CAGE AROUND FAN COIL AND FIRE RISER.
- ⑩ ELECTRICAL SHALL BE DONE BY A DESIGN BUILD LICENSED ELECTRICIAN. PROVIDE POWER FOR NEW SPLIT SYSTEM. TIE INTO EXISTING PANEL. PROVIDE NEW DISCONNECT. FIELD VERIFY EXACT SIZE, LOCATION, AND CAPACITY OF EXISTING PANEL.



GENERAL NOTES:

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T.L.C. BASEMENT MECHANICAL FLOOR PLAN

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



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T.L.C. BASEMENT
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SHEET NO.

ME101



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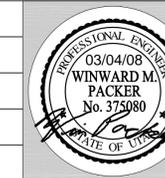
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**MAIN FLOOR MECHANICAL
FLOOR PLAN**

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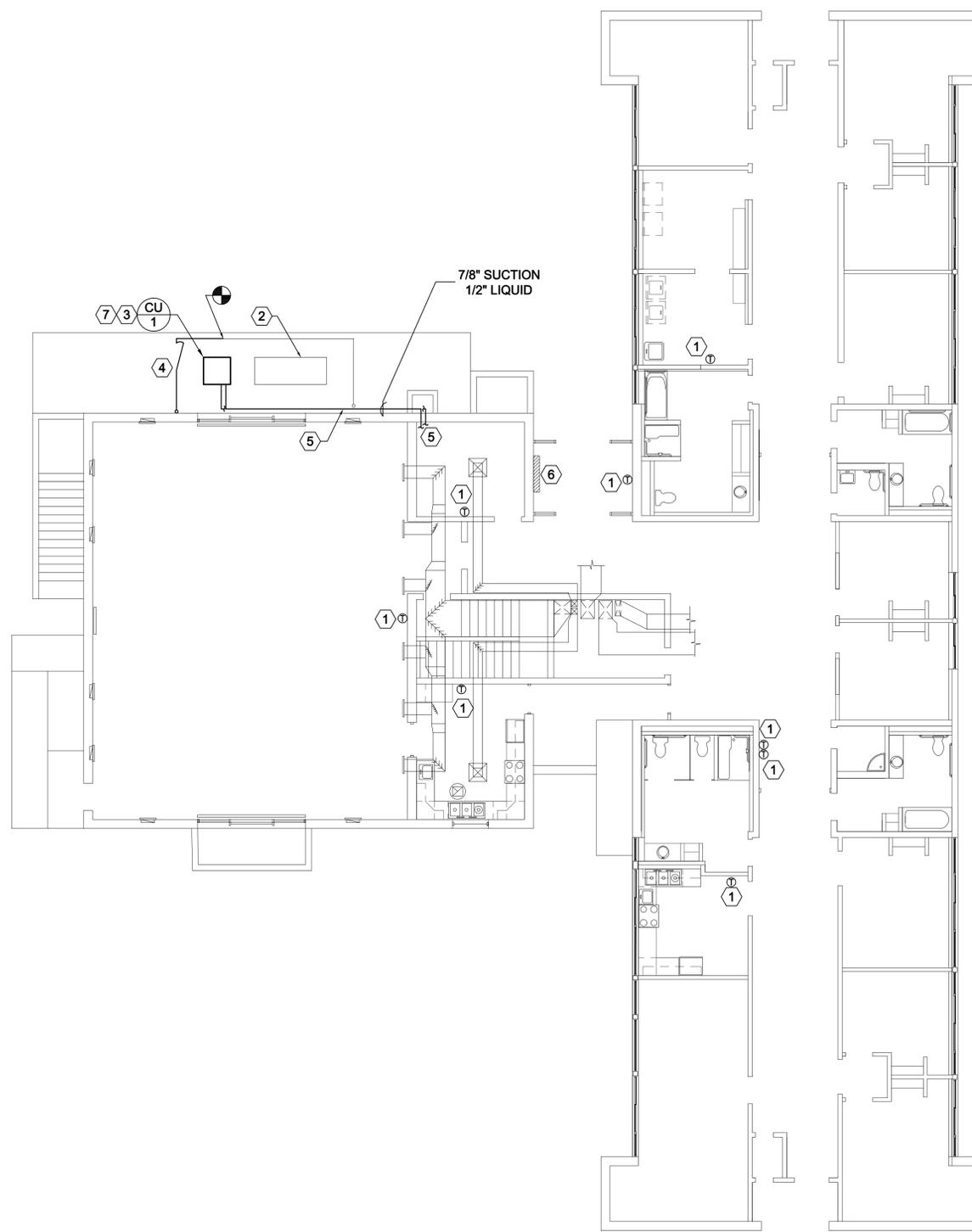
ME102

SHEET NOTES:

- ① PROVIDE NEW THERMOSTAT WITH NEW DDC SENSOR.
- ② EXISTING CONDENSER SHALL REMAIN.
- ③ PROVIDE NEW OUTDOOR AIR COOLED CONDENSING UNIT. MOUNT ON NEOPRENE ISOLATORS INCLUDE EXTRA AS NECESSARY TO LEVEL EQUIPMENT. INCLUDE SEISMIC CLIPS.
- ④ EXTEND EXISTING CHAIN LINK FENCE FOR NEW CONDENSING UNIT.
- ⑤ PROVIDE NEW REFRIGERANT PIPING. ROUTE TO INDOOR FAN COIL UNIT. SEE ME101 FOR CONTINUATION. PROVIDE SHEET METAL COVER OVER NEW AND EXISTING EXTERIOR REFRIGERANT PIPING. COORDINATE EXACT SIZES WITH MANUFACTURER'S GUIDELINES.
- ⑥ REPLACE EXISTING PNEUMATIC CONTROL VALVE IN EXISTING CONVECTOR.
- ⑦ ELECTRICAL SHALL BE DONE BY A DESIGN BUILD LICENSED ELECTRICIAN. PROVIDE POWER FOR NEW SPLIT SYSTEM. TIE INTO EXISTING PANEL. PROVIDE NEW DISCONNECT. FIELD VERIFY EXACT SIZE, LOCATION, AND CAPACITY OF EXISTING PANEL.

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TLC MAIN FLOOR MECHANICAL FLOOR PLAN

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



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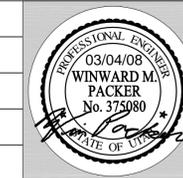
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WHW JOB NO.:
07013



**EVERGREEN MAIN FLOOR
MECHANICAL PLAN**

SHEET NO.

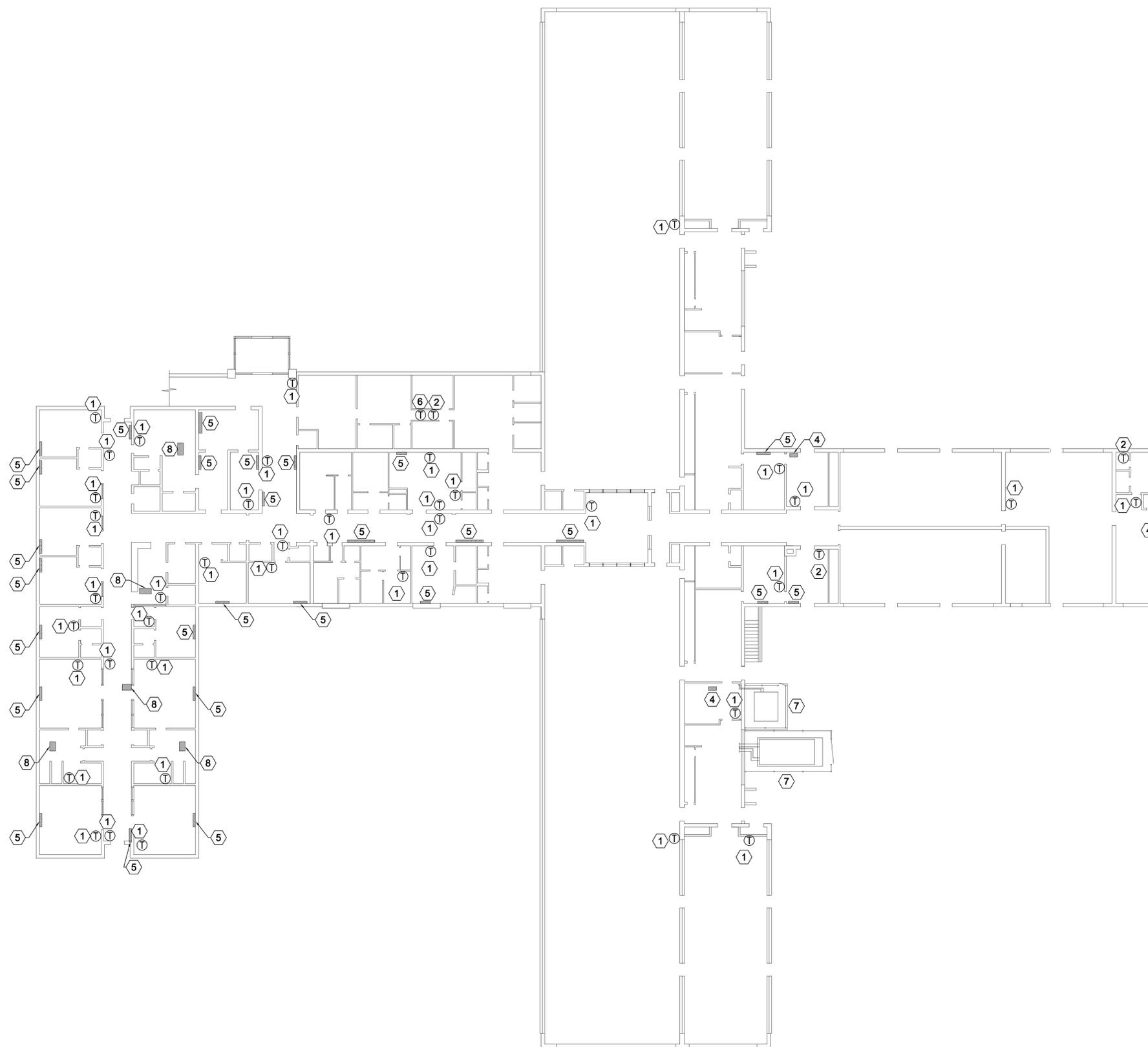
ME104

SHEET NOTES:

- ① REPLACE EXISTING THERMOSTAT WITH NEW DDC THERMOSTAT. FIELD VERIFY EXACT LOCATION.
- ② REMOVE THERMOMETER AND PROVIDE WALL PLATE COVER.
- ③ EXISTING CONVECTOR ABANDONED.
- ④ TIE EXISTING CABINET UNIT HEATER INTO NEW BMS. REPLACE STEAM CONTROL VALVE.
- ⑤ TIE EXISTING CONVECTOR UNIT INTO NEW BMS. REPLACE STEAM OR HOT WATER VALVE.
- ⑥ TIE EXISTING ROOFTOP UNIT WITH ELECTRONIC CONTROLS INTO NEW BMS.
- ⑦ TIE EXISTING AIR COOLED SPLIT CHILLER INTO NEW BMS.
- ⑧ TIE EXISTING FAN COIL UNIT INTO NEW BMS. REPLACE EXISTING CHILLED WATER AND HEATING WATER CONTROL VALVES. FIELD VERIFY EXACT SIZE AND LOCATION.

GENERAL NOTES:

1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



EVERGREEN MAIN FLOOR MECHANICAL PLAN

SCALE: 1/16" = 1'-0"



CONSULTANTS



PROJECT NAME & ADDRESS

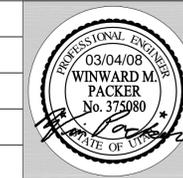
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
LGD
CHECKED BY:
SLW
DATE:
03/04/08
WHW JOB NO.:
07013



**SUNSET MECHANICAL
PLAN**

SHEET NO.

ME105

GENERAL NOTES:

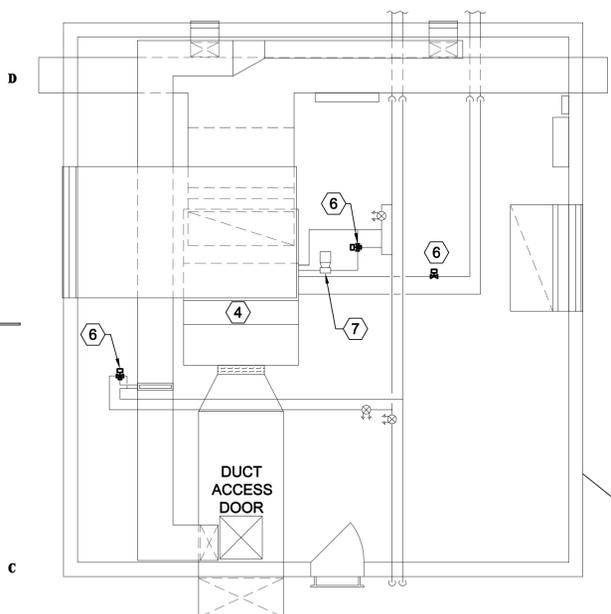
1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.

SHEET NOTES CONT:

- 11 TIE EXISTING ELECTRIC BASEHEATER INTO NEW BMS.
- 12 TIE EXISTING DUCT MTD. BOOSTER HEATER INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.
- 13 REPLACE STEAM CONTROL VALVES AT 2 EXISTING DOMESTIC WATER HEATERS, AND 1 EXISTING LAUNDRY HEATER.
- 14 PROVIDE NEW DDC THERMOSTAT AND ACTUATOR AT EXISTING OUTSIDE AIR VENT.
- 15 TIE 2 EXISTING DOMESTIC WATER RE-CIRC. PUMPS INTO NEW BMS.
- 16 REPLACE 2 EXISTING STEAM CONTROL VALVES AT EXISTING HEAT EXCHANGER IN MECHANICAL LOFT.
- 17 TIE 2 EXISTING HEATING WATER MAIN PUMPS IN LOFT INTO NEW BMS.
- 18 PROVIDE NEW SPACE TEMP. SENSOR.

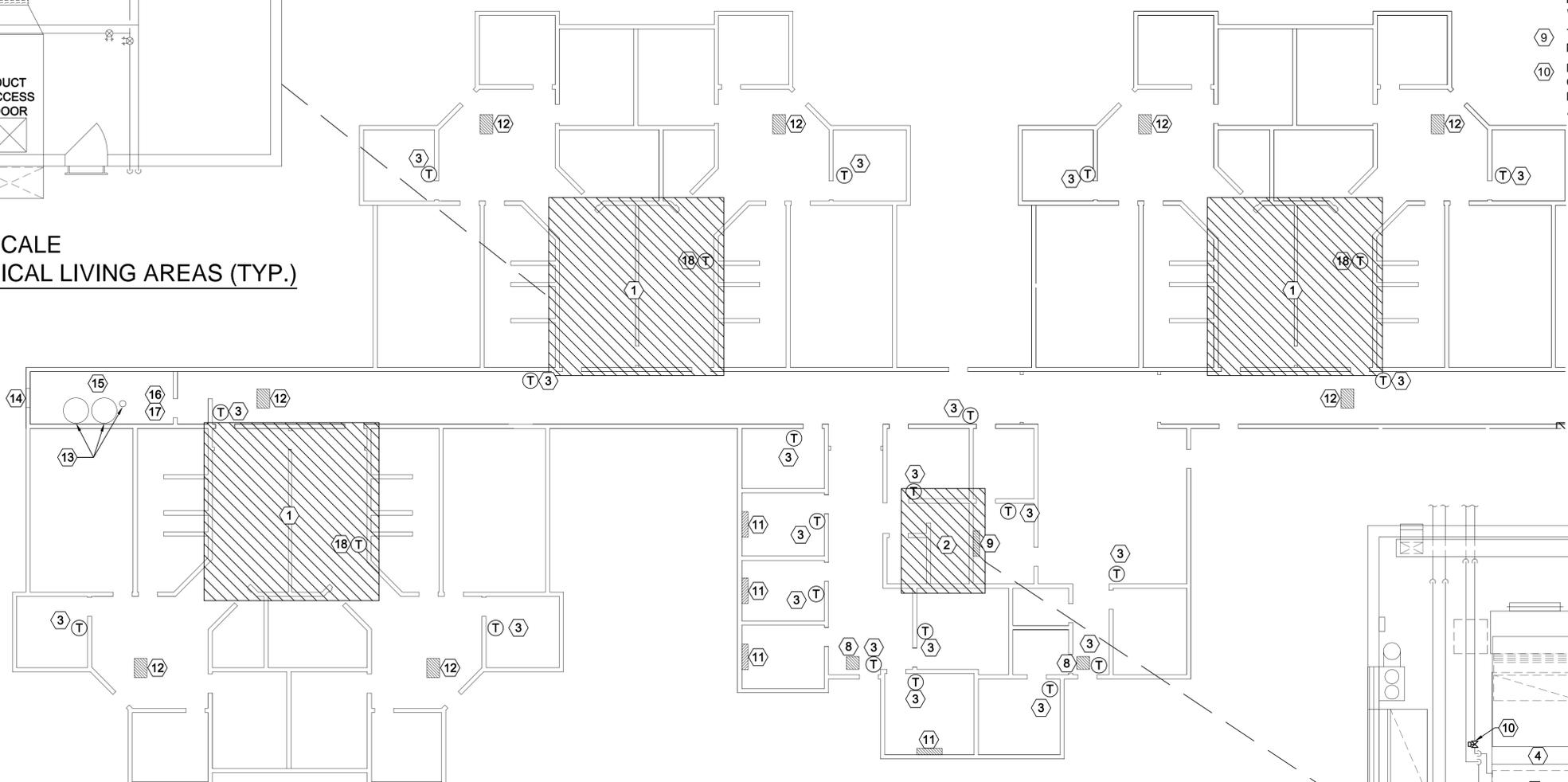
SHEET NOTES:

- 1 SEE LARGE SCALE DRAWING C1/ME105 THIS SHEET FOR THIS AREA.
- 2 SEE LARGE SCALE DRAWING A4/ME105 THIS SHEET FOR THIS AREA.
- 3 REPLACE EXISTING THERMOSTAT WITH NEW DDC THERMOSTAT. FIELD VERIFY EXACT SIZE AND LOCATION.
- 4 TIE EXISTING AIR HANDLING UNIT INTO NEW BMS. REPLACE EXISTING DAMPER ACTUATORS AT AIR HANDLER. INCLUDE MIXED AIR TEMP SENSOR AND HOT AND COLD DECK TEMP. SENSOR.
- 5 REPLACE EXISTING ZONE DAMPERS AND ACTUATORS AND TIE INTO NEW BMS. FIELD VERIFY EXACT SIZE AND LOCATION.
- 6 REPLACE EXISTING HOT WATER CONTROL VALVE WITH NEW DDC VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.
- 7 TIE EXISTING PUMP INTO NEW BMS.
- 8 TIE EXISTING CABINET HEATER AND FAN INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE.
- 9 TIE EXISTING WALL MOUNTED MITSUBISHI UNIT INTO NEW BMS.
- 10 PROVIDE NEW HOT WATER AND CHILLED WATER CONTROL VALVES IN EXISTING PIPING AT THIS APPROXIMATE LOCATION.



**LARGE SCALE
MECHANICAL LIVING AREAS (TYP.)**

C1 SCALE: 1/4" = 1'-0"



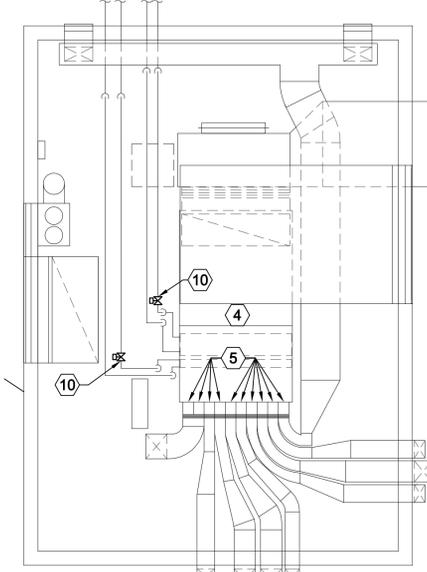
SUNSET MECHANICAL PLAN

SCALE: 3/32" = 1'-0"



**LARGE SCALE
MECHANICAL ADMINISTRATION AREA (TYP.)**

A4 SCALE: 1/4" = 1'-0"



CONSULTANTS



PROJECT NAME & ADDRESS

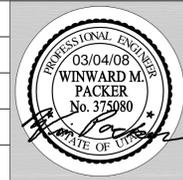
STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
LGD
CHECKED BY:
SLW
DATE:
03/04/08
WHW JOB NO.:
07013



QUAILRUN MECHANICAL
PLAN-ADDITIVE
ALTERNATE #1

SHEET NO.

ME106

SHEET NOTES CONT:

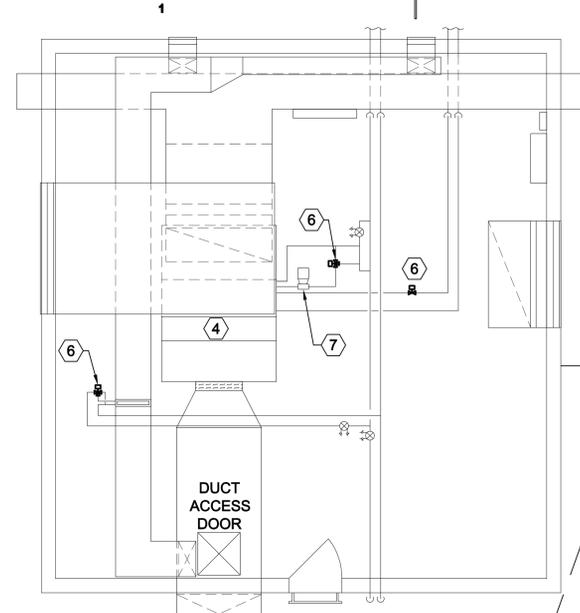
- (13) REPLACE STEAM CONTROL VALVES AT 2 EXISTING DOMESTIC WATER HEATERS, AND 1 EXISTING LAUNDRY HEATER.
- (14) PROVIDE NEW DDC THERMOSTAT AND ACTUATOR AT EXISTING OUTSIDE AIR VENT.
- (15) TIE 2 EXISTING DOMESTIC WATER RE-CIRC. PUMPS INTO NEW BMS.
- (16) REPLACE 2 EXISTING STEAM CONTROL VALVES AT EXISTING HEAT EXCHANGER IN MECHANICAL LOFT.
- (17) TIE 2 EXISTING HEATING WATER MAIN PUMPS IN LOFT INTO NEW BMS.
- (18) PROVIDE NEW SPACE TEMP. SENSOR.

SHEET NOTES:

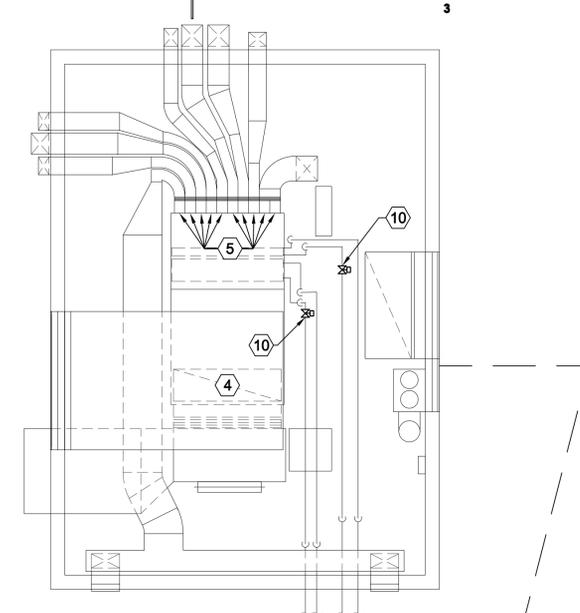
- (1) SEE LARGE SCALE DRAWING C1/ME106 THIS SHEET FOR THIS AREA.
- (2) SEE LARGE SCALE DRAWING C2/ME106 THIS SHEET FOR THIS AREA.
- (3) REPLACE EXISTING THERMOSTAT WITH NEW DDC THERMOSTAT. FIELD VERIFY EXACT SIZE AND LOCATION.
- (4) TIE EXISTING AIR HANDLING UNIT INTO NEW BMS. REPLACE EXISTING DAMPER ACTUATORS AT AIR HANDLER. INCLUDE MIXED AIR TEMP SENSOR AND HOT AND COLD DECK TEMP. SENSOR.
- (5) REPLACE EXISTING ZONE DAMPERS AND ACTUATORS AND TIE INTO NEW BMS. FIELD VERIFY EXACT SIZE AND LOCATION.
- (6) REPLACE EXISTING HOT WATER CONTROL VALVE WITH NEW DDC VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.
- (7) TIE EXISTING PUMP INTO NEW BMS.
- (8) TIE EXISTING CABINET HEATER AND FAN INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE.
- (9) TIE EXISTING WALL MOUNTED MITSUBISHI UNIT INTO NEW BMS.
- (10) PROVIDE NEW HOT WATER AND CHILLED WATER CONTROL VALVES IN EXISTING PIPING AT THIS APPROXIMATE LOCATION.
- (11) TIE EXISTING ELECTRIC BASEHEATER INTO NEW BMS.
- (12) TIE EXISTING DUCT MTD. BOOSTER HEATER INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.

GENERAL NOTES:

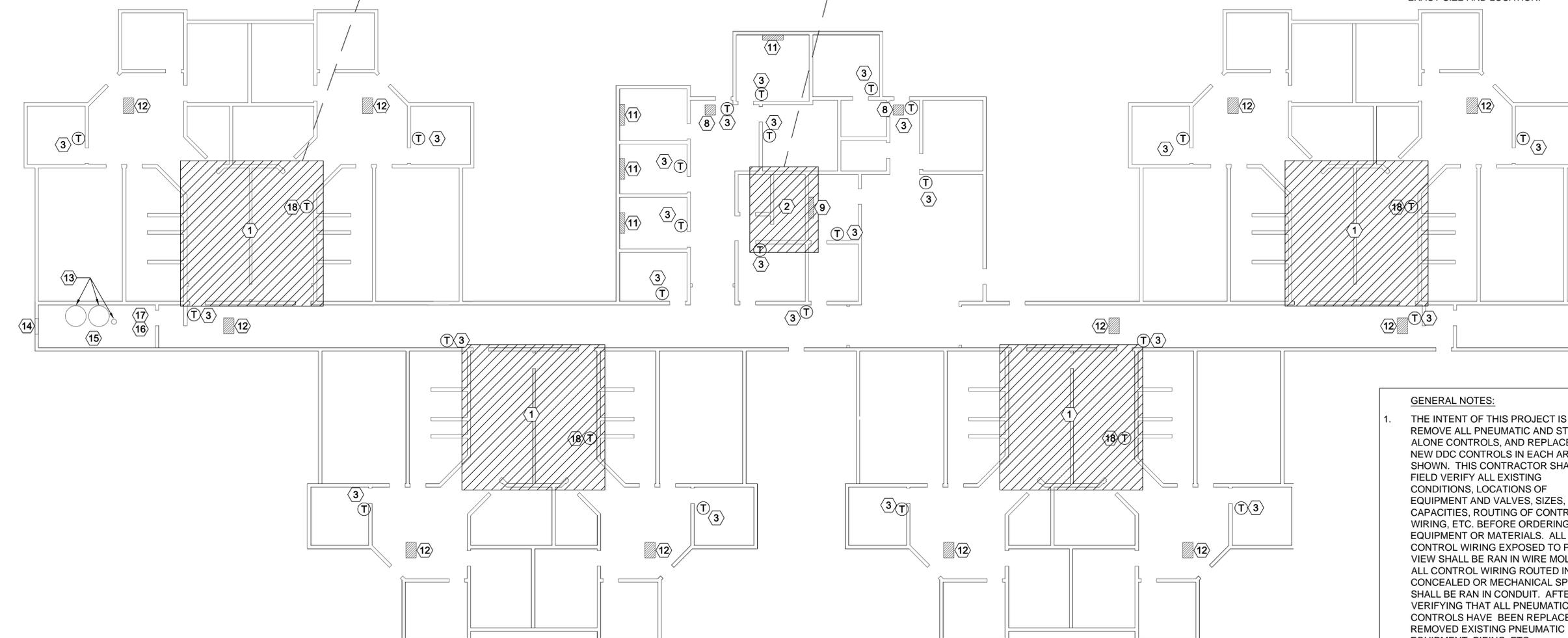
1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



LARGE SCALE MECHANICAL
LIVING AREAS (TYP.)
C1 SCALE: 1/4" = 1'-0"



LARGE SCALE MECHANICAL
ADMINISTRATION AREA (TYP.)
C2 SCALE: 1/4" = 1'-0"



QUAILRUN MECHANICAL PLAN-ADDITIVE ALTERNATE #1

SCALE: 3/32" = 1'-0"



CONSULTANTS



PROJECT NAME & ADDRESS

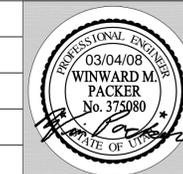
STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
LGD
CHECKED BY:
SLW
DATE:
03/04/08
WHW JOB NO.:
07013



OAKRIDGE MECHANICAL
PLAN-ADDITIVE
ALTERNATE #2

SHEET NO.

ME107

SHEET NOTES CONT:

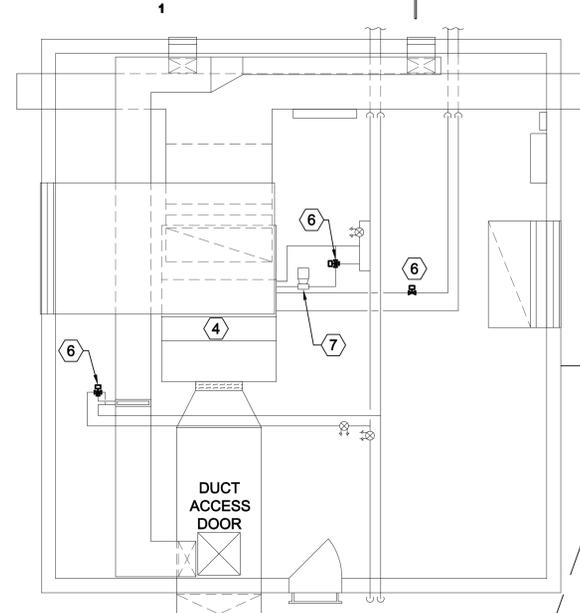
- 13 REPLACE STEAM CONTROL VALVES AT 2 EXISTING DOMESTIC WATER HEATERS, AND 1 EXISTING LAUNDRY HEATER.
- 14 PROVIDE NEW DDC THERMOSTAT AND ACTUATOR AT EXISTING OUTSIDE AIR VENT.
- 15 TIE 2 EXISTING DOMESTIC WATER RE-CIRC. PUMPS INTO NEW BMS.
- 16 REPLACE 2 EXISTING STEAM CONTROL VALVES AT EXISTING HEAT EXCHANGER IN MECHANICAL LOFT.
- 17 TIE 2 EXISTING HEATING WATER MAIN PUMPS IN LOFT INTO NEW BMS.
- 18 PROVIDE NEW SPACE TEMP. SENSOR.

SHEET NOTES:

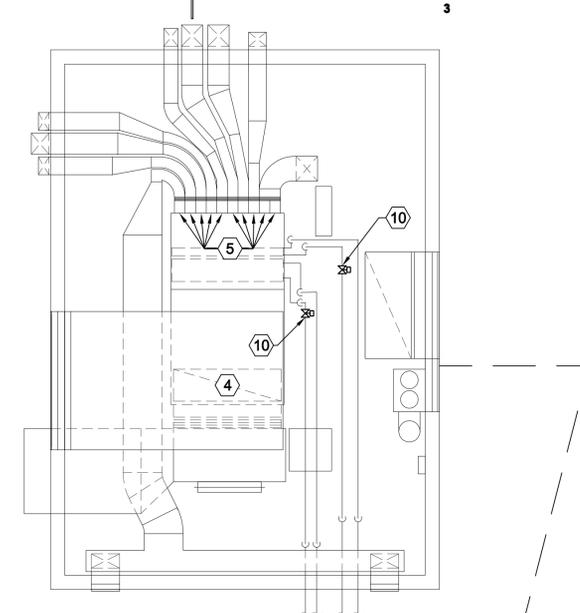
- 1 SEE LARGE SCALE DRAWING C1/ME107 THIS SHEET FOR THIS AREA.
- 2 SEE LARGE SCALE DRAWING C2/ME107 THIS SHEET FOR THIS AREA.
- 3 REPLACE EXISTING THERMOSTAT WITH NEW DDC THERMOSTAT. FIELD VERIFY EXACT SIZE AND LOCATION.
- 4 TIE EXISTING AIR HANDLING UNIT INTO NEW BMS. REPLACE EXISTING DAMPER ACTUATORS AT AIR HANDLER. INCLUDE MIXED AIR TEMP SENSOR AND HOT AND COLD DECK TEMP. SENSOR.
- 5 REPLACE EXISTING ZONE DAMPERS AND ACTUATORS AND TIE INTO NEW BMS. FIELD VERIFY EXACT SIZE AND LOCATION.
- 6 REPLACE EXISTING HOT WATER CONTROL VALVE WITH NEW DDC VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.
- 7 TIE EXISTING PUMP INTO NEW BMS.
- 8 TIE EXISTING CABINET HEATER AND FAN INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE.
- 9 TIE EXISTING WALL MOUNTED MITSUBISHI UNIT INTO NEW BMS.
- 10 PROVIDE NEW HOT WATER AND CHILLED WATER CONTROL VALVES IN EXISTING PIPING AT THIS APPROXIMATE LOCATION.
- 11 TIE EXISTING ELECTRIC BASEHEATER INTO NEW BMS.
- 12 TIE EXISTING DUCT MTD. BOOSTER HEATER INTO NEW BMS. REPLACE HOT WATER CONTROL VALVE. FIELD VERIFY EXACT SIZE AND LOCATION.

GENERAL NOTES:

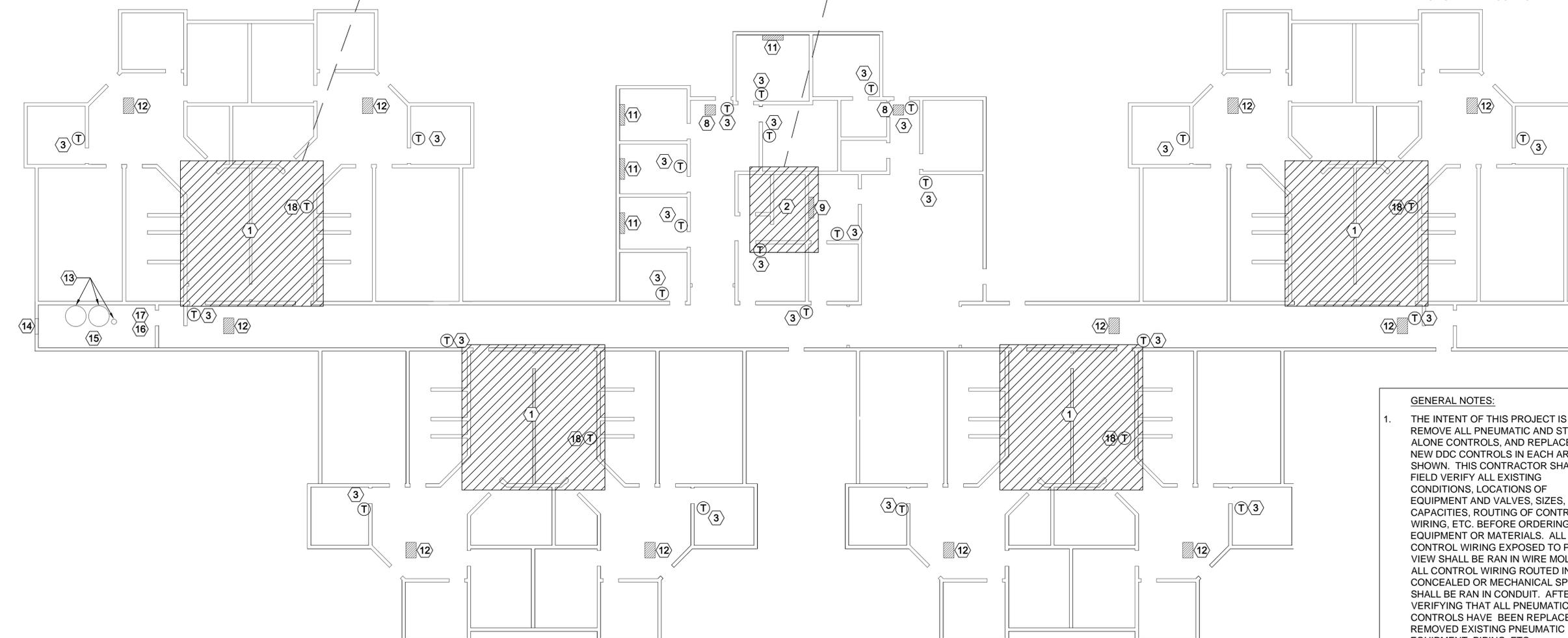
1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



LARGE SCALE MECHANICAL
LIVING AREAS (TYP.)
C1 SCALE: 1/4" = 1'-0"



LARGE SCALE MECHANICAL
ADMINISTRATION AREA (TYP.)
C2 SCALE: 1/4" = 1'-0"



CONSULTANTS



PROJECT NAME & ADDRESS

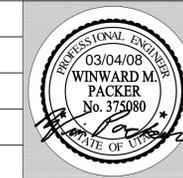
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
LGD
CHECKED BY:
SLW
DATE:
03/04/08
WHW JOB NO.:
07013



**WOODLAND BASEMENT
MECHANICAL
PLAN-ADDITIVE
ALTERNATE #3**

SHEET NO.

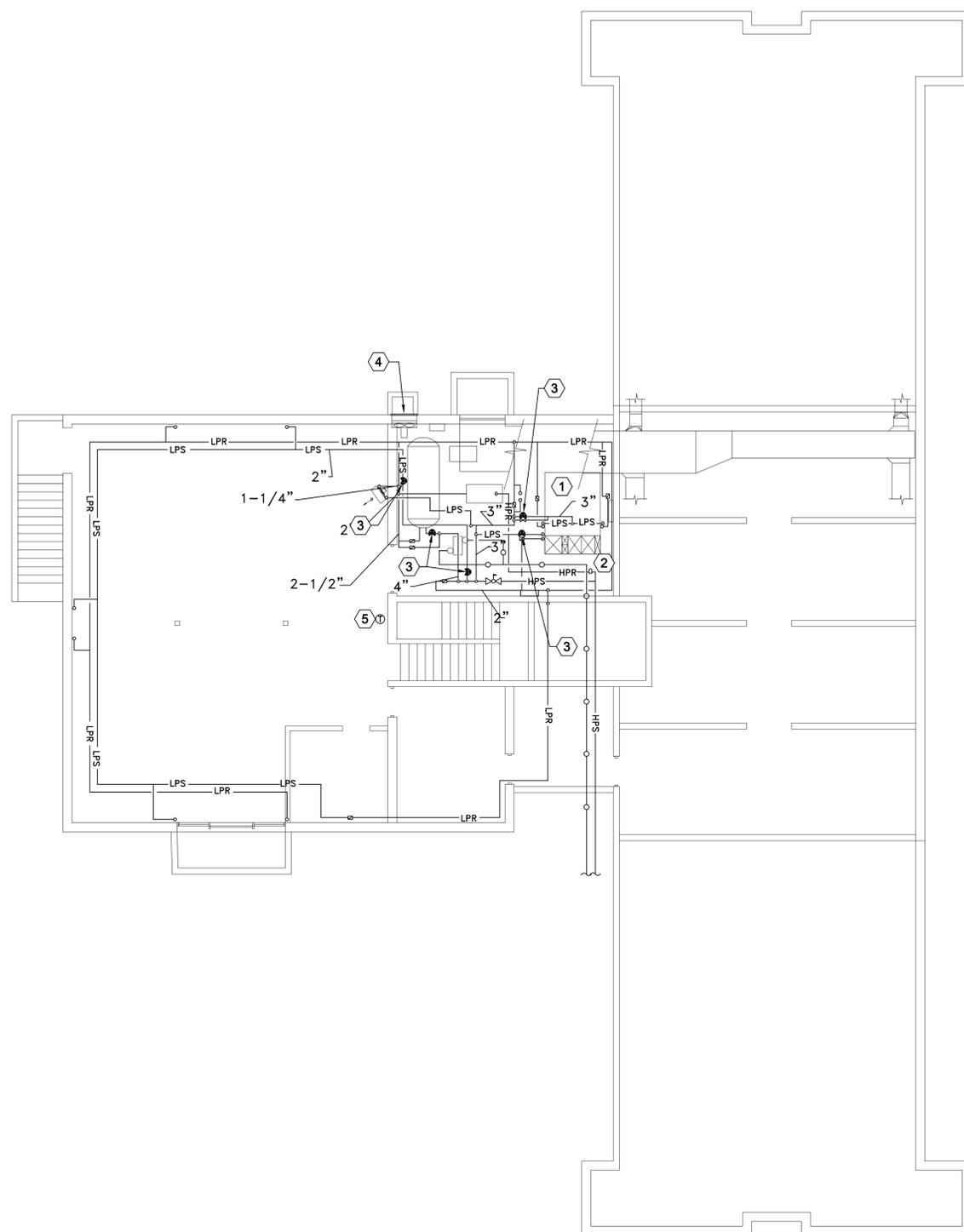
ME108

SHEET NOTES:

- ① PROVIDE NEW CONTROLS FOR EXISTING MULTIZONE AIR HANDLING UNIT.
- ② REPLACE ALL 6 MULTIZONE DAMPERS AND ACTUATORS. FIELD VERIFY SIZE BEFORE ORDERING.
- ③ REPLACE EXISTING STEAM CONTROL VALVES. FIELD VERIFY EXACT SIZE AND LOCATION.
- ④ TIE EXISTING EXHAUST FAN INTO BMS. PROVIDE TEMP SENSOR AND USE FAN TO MAINTAIN COOLING SET POINT.
- ⑤ REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.

GENERAL NOTES:

1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVE EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



WOODLAND BASEMENT MECHANICAL PLAN-ADDITIVE ALTERNATE #3

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



CONSULTANTS



PROJECT NAME & ADDRESS

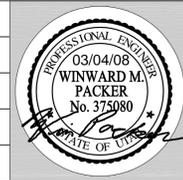
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
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DATE:
03/04/08
WHW JOB NO.:
07013



**WOODLAND MAIN FLOOR
MECHANICAL
PLAN-ADDITIVE
ALTERNATE #3**

SHEET NO.

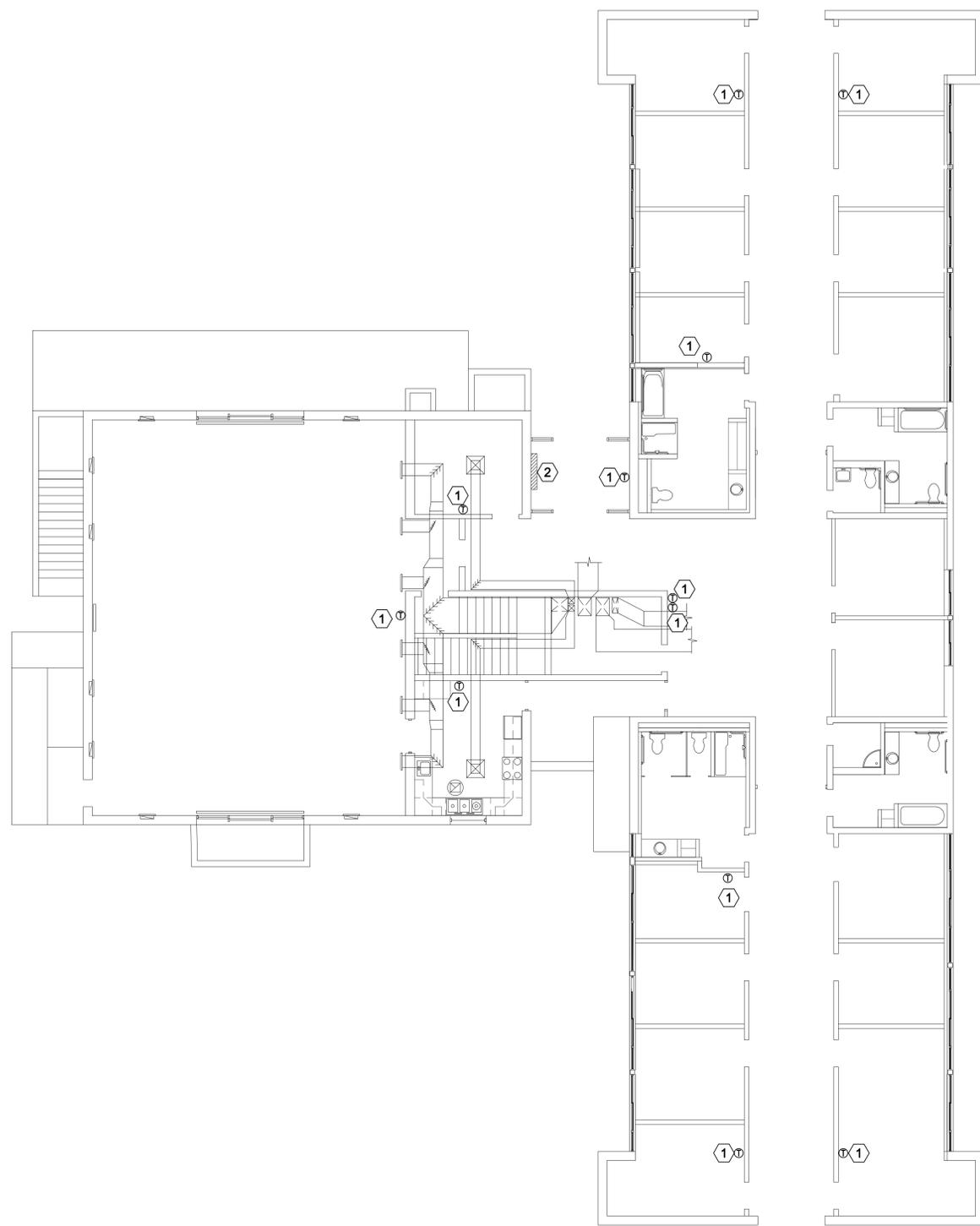
ME109

SHEET NOTES:

- ① REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.
- ② REPLACE EXISTING PNEUMATIC CONTROL VALVE IN EXISTING CONVECTOR.

GENERAL NOTES:

1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



WOODLAND MAIN FLOOR MECHANICAL PLAN-ADDITIVE ALTERNATE #3

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



CONSULTANTS



PROJECT NAME & ADDRESS

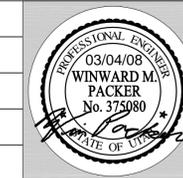
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

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**HEATHER BASEMENT
MECHANICAL
PLAN-ADDITIVE
ALTERNATE #4**

SHEET NO.

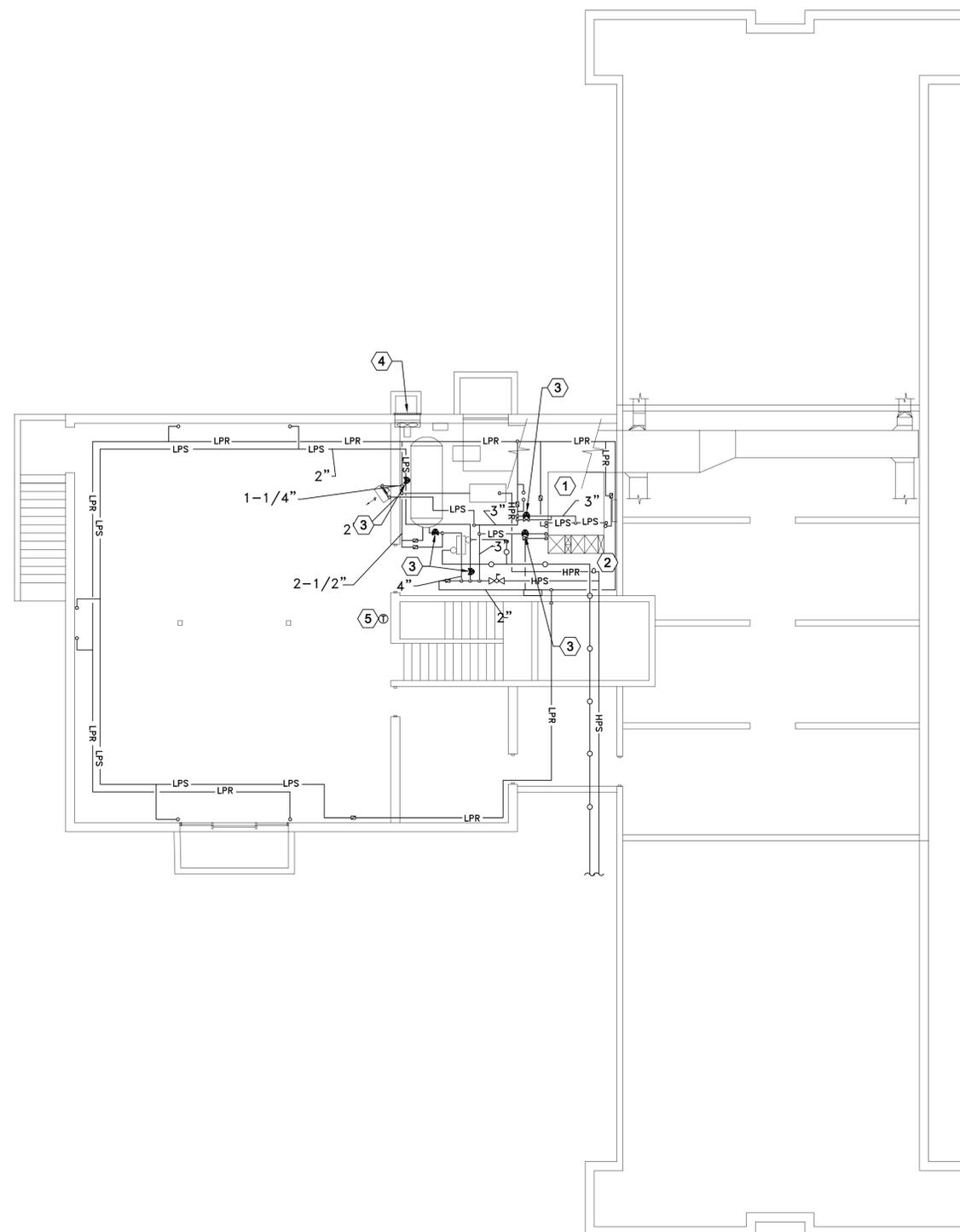
ME110

SHEET NOTES:

- ① PROVIDE NEW CONTROLS FOR EXISTING MULTIZONE AIR HANDLING UNIT.
- ② REPLACE ALL 6 MULTIZONE DAMPERS AND ACTUATORS. FIELD VERIFY SIZE BEFORE ORDERING.
- ③ REPLACE EXISTING STEAM CONTROL VALVES. FIELD VERIFY EXACT SIZE AND LOCATION.
- ④ TIE EXISTING EXHAUST FAN INTO BMS. PROVIDE TEMP SENSOR AND USE FAN TO MAINTAIN COOLING SET POINT.
- ⑤ REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.

GENERAL NOTES:

1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



HEATHER BASEMENT MECHANICAL PLAN-ADDITIVE ALTERNATE #4

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



CONSULTANTS



PROJECT NAME & ADDRESS

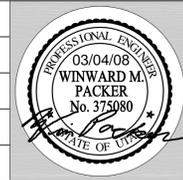
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

PROJECT MANAGER:	WP
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DATE:	03/04/08
WHW JOB NO.:	07013

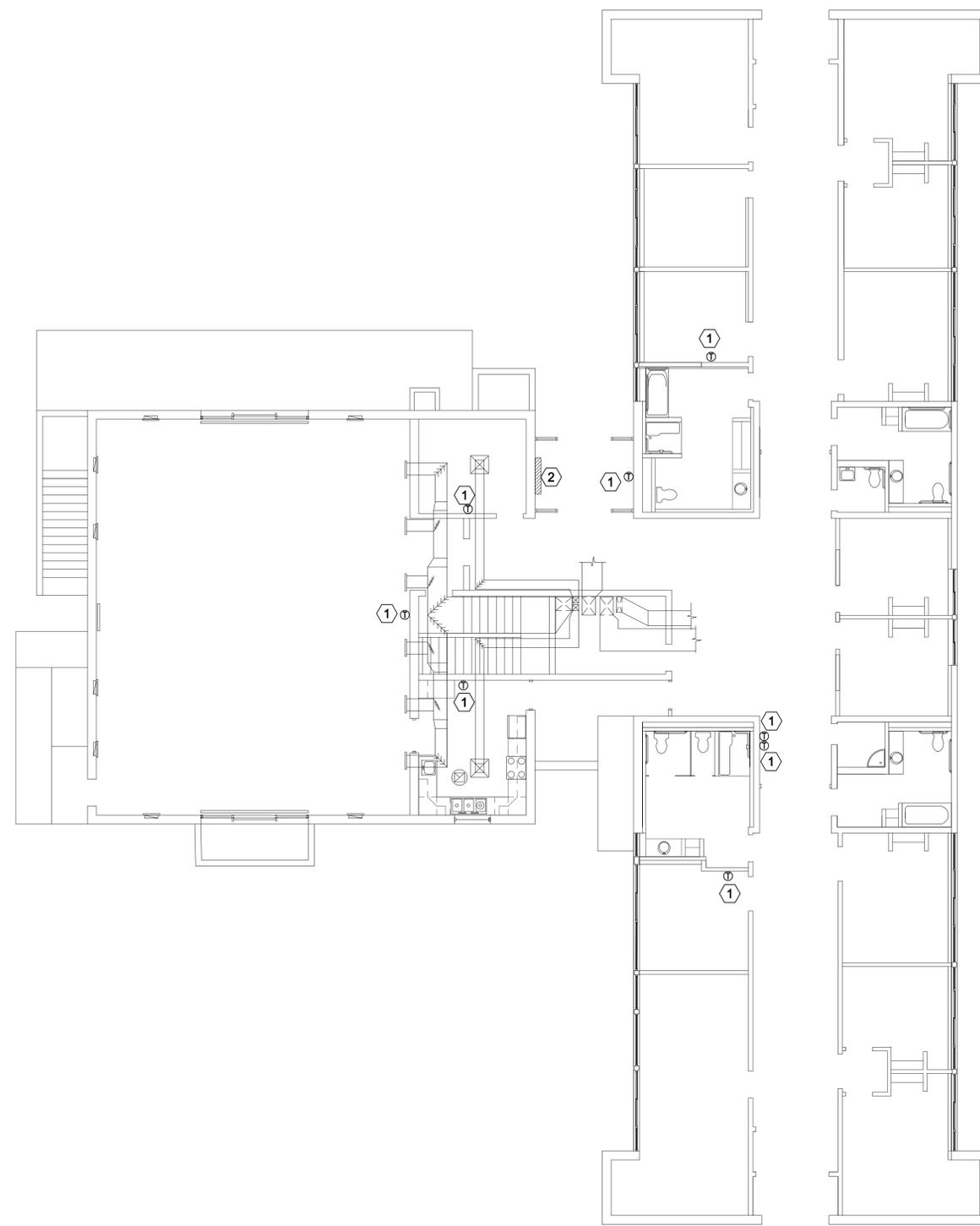


**HEATHER MAIN FLOOR
MECHANICAL
PLAN-ADDITIVE
ALTERNATE #4**

SHEET NO.
ME111

- SHEET NOTES:**
- ① REPLACE EXISTING THERMOSTAT WITH NEW DDC SENSOR.
 - ② REPLACE EXISTING PNEUMATIC CONTROL VALVE IN EXISTING CONVECTOR.

- GENERAL NOTES:**
1. THE INTENT OF THIS PROJECT IS TO REMOVE ALL PNEUMATIC AND STAND ALONE CONTROLS, AND REPLACE WITH NEW DDC CONTROLS IN EACH AREA SHOWN. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS OF EQUIPMENT AND VALVES, SIZES, CAPACITIES, ROUTING OF CONTROL WIRING, ETC. BEFORE ORDERING EQUIPMENT OR MATERIALS. ALL CONTROL WIRING EXPOSED TO PUBLIC VIEW SHALL BE RAN IN WIRE MOLD. ALL CONTROL WIRING ROUTED IN CONCEALED OR MECHANICAL SPACES SHALL BE RAN IN CONDUIT. AFTER VERIFYING THAT ALL PNEUMATIC CONTROLS HAVE BEEN REPLACED, REMOVED EXISTING PNEUMATIC EQUIPMENT, PIPING, ETC.



HEATHER MAIN FLOOR MECHANICAL PLAN-ADDITIVE ALTERNATE #4

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



CONSULTANTS



PROJECT NAME & ADDRESS

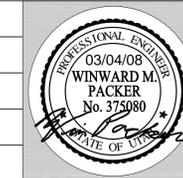
**STATE DEVELOPMENTAL
CENTER HVAC AUTOMATIC
TEMPERATURE CONTROLS**

DFCM # 07179410

AMERICAN FORK, UTAH 84003

MARK	DATE	REVISION

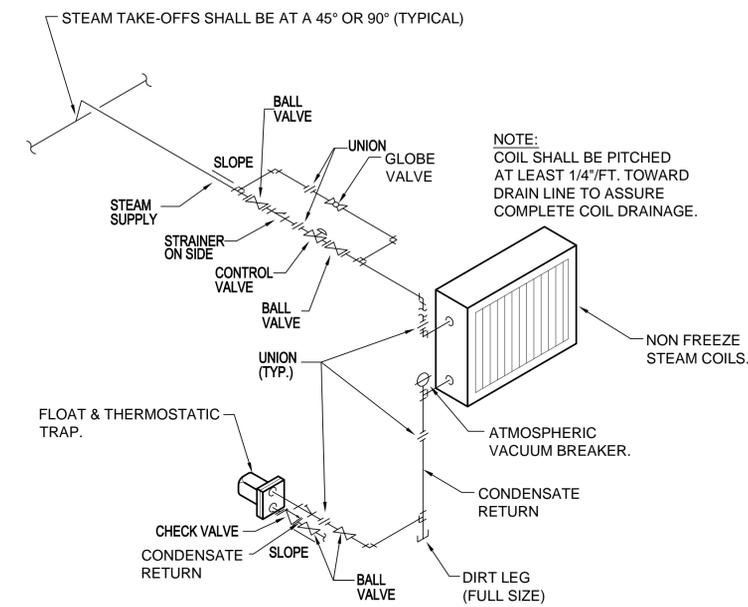
PROJECT MANAGER:
WP
DRAWN BY:
LGD
CHECKED BY:
SLW
DATE:
03/04/08
WHW JOB NO.:
07013



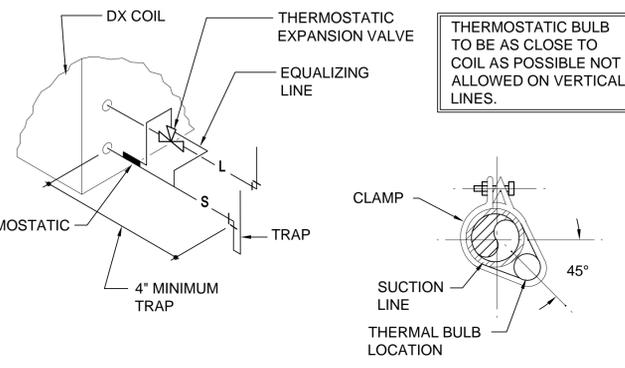
**MECHANICAL DETAILS
AND SCHEDULES**

SHEET NO.

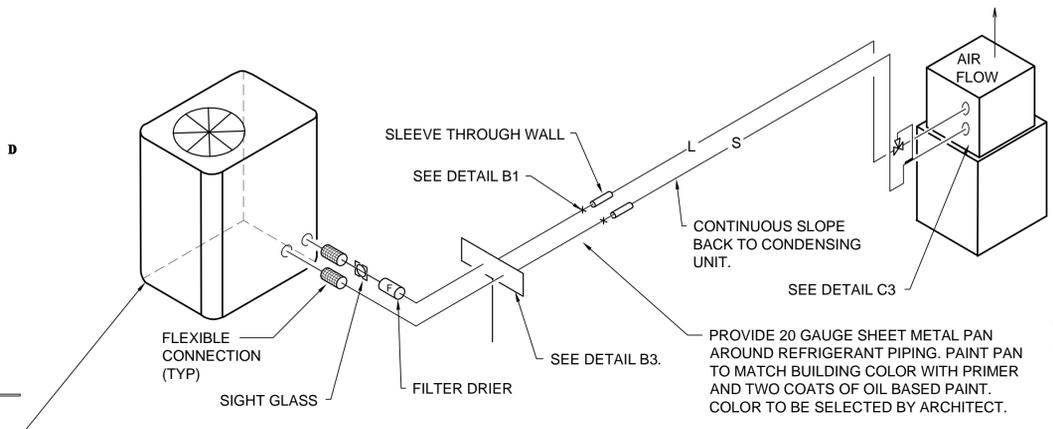
ME501



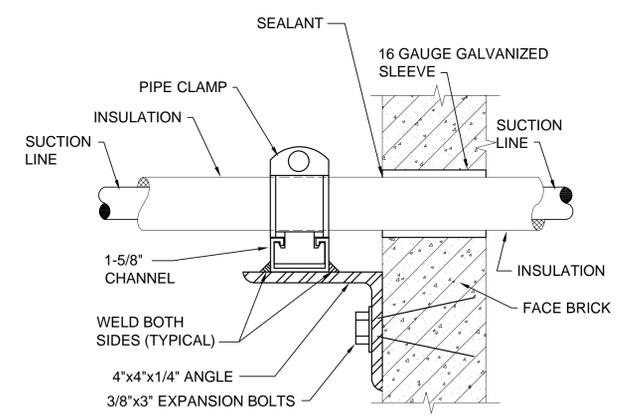
C4 STEAM COIL CONNECTION DETAIL
SCALE: NONE



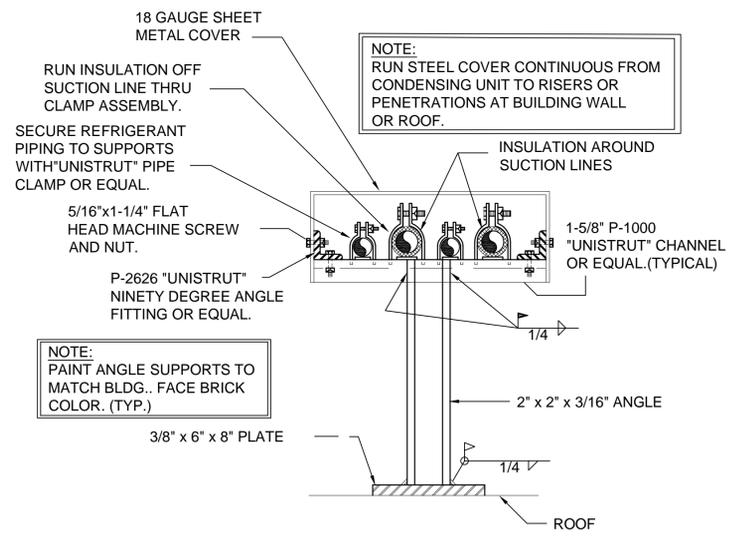
**C3 SINGLE REFRIGERANT COIL
CONNECTION DETAIL**
SCALE: NONE



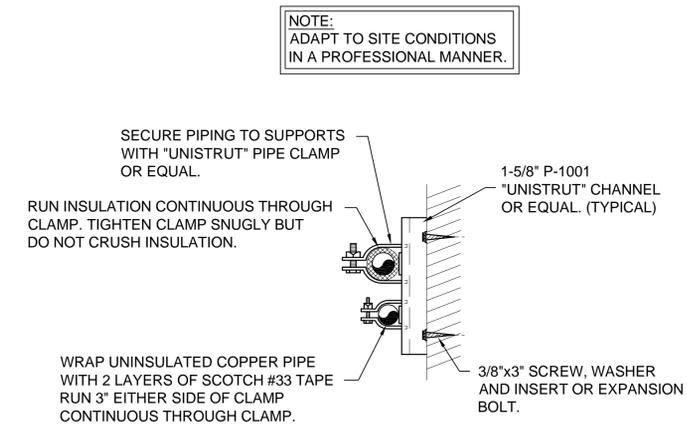
C1 TYPICAL REFRIGERANT SCHEME
SCALE: NONE



B1 REFRIGERANT PIPE SUPPORT AT WALL
SCALE: NONE



**B3 EXTERIOR REFRIGERANT PIPE
SUPPORT (ON ROOF)**
SCALE: NONE



**B4 SUSPENDED REFRIGERANT
PIPE SUPPORT AT WALL**
SCALE: NONE

FAN COIL UNIT SCHEDULE											
SYMBOL	FAN (2 SPEED)			DX COOLING COIL				STEAM HEATING COIL		MANUF. & MODEL #	SCHEDULE NOTES
	SCFM COOLING / HEATING	ESP	H.P.	MIN. REQ'D CAP. TOTAL MBH	LEAVING AIR DB °F	COND. ENT. EVAP. DB° F	CND. ENT. EVAP. WB° F	MBH	EAT / LAT		
FC 1	1600/1055	0.3"	3/4"	48	55	80	65	45	65/105	MAGICAIRE 48-BVX-STM	1,2,3

1. PROVIDE WITH SUPPLY DISCHARGE PLENUM, AND RETURN PLENUM.
2. VOLTAGE 120/1/60.
3. SIZE FOR STEAM PRESSURE OF 2 PSIG.

AIR COOLED CONDENSING UNIT SCHEDULE										
SYMBOL	AREA SERVED	MIN SIZE (TONS)	COMPRESSOR MOTOR			MCA	SEER	MOCP	MANUF. & MODEL #	SCHEDULE NOTES
			No.	RLA (EACH)	LRA (EACH)					
CU 1	FC-1	4	1	19.9	109.0	26.2	13.0	40	CARRIER 24ABA-48	1,2,3,4,5

1. REFRIGERANT R-410A.
2. AT DESIGN CONDITIONS AND 95° F EAT.
3. CONDENSING UNIT SYMBOLS CORRESPOND WITH FURNACE SYMBOLS, EXCEPT AS NOTED.
4. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
5. ELECTRIC SERVICE: 208/1Ø/60HZ