Project No. 505-0871-17020101

CHAPEL HVAC UPGRADE

555 South Averett Avenue Springville, Utah

> Springville UT FM Group 1672 West 700 South, Suite K Springville, Utah (385)-201-8308

Project For

THE CHURCH OF

OF LATTER-DAY SAINTS

ARCHITECTURAL CONSULTANT

KNELL ARCHITECTS, P.C. (ROGER KNELL) 45 EAST 300 NORTH PROVO, UTAH 84606 (801) 373-6134 FAX (801) 377-1061

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MECHANICAL ENGINEER

VBFA CONSULTING ENGINEERS (JOHN ALEXANDER) 330 SOUTH 300 EAST SALT LAKE CITY, UTAH 84111

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DEMOLITION PLAN

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STAIR LAYOUT AND STAIR DETAILS

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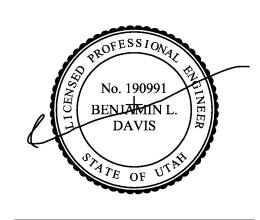
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Salt Lake City, UT 84111



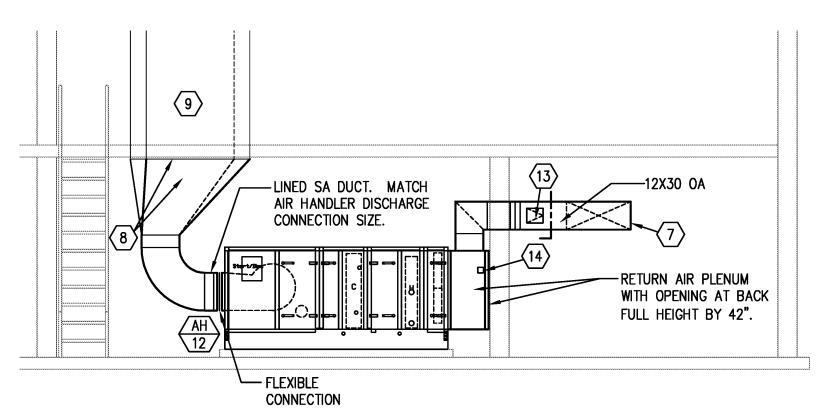
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Hobble REVISIONS

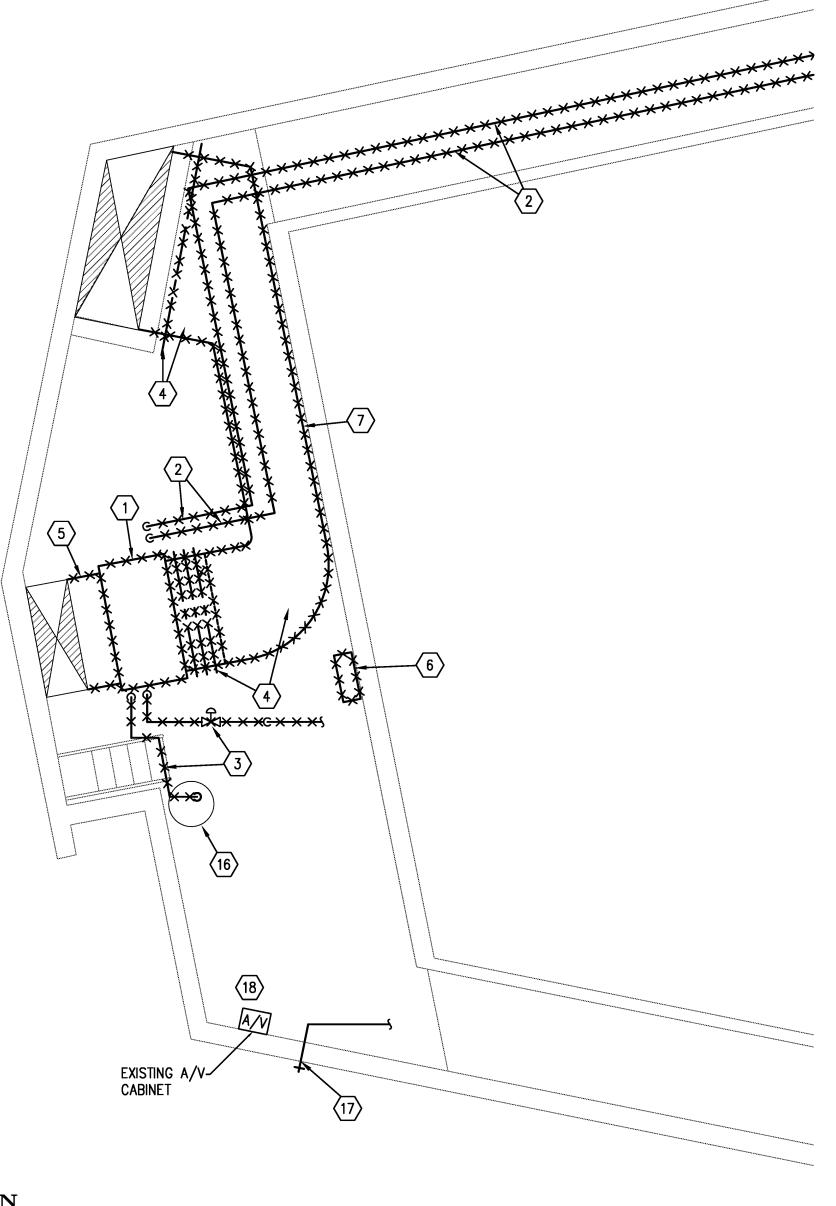
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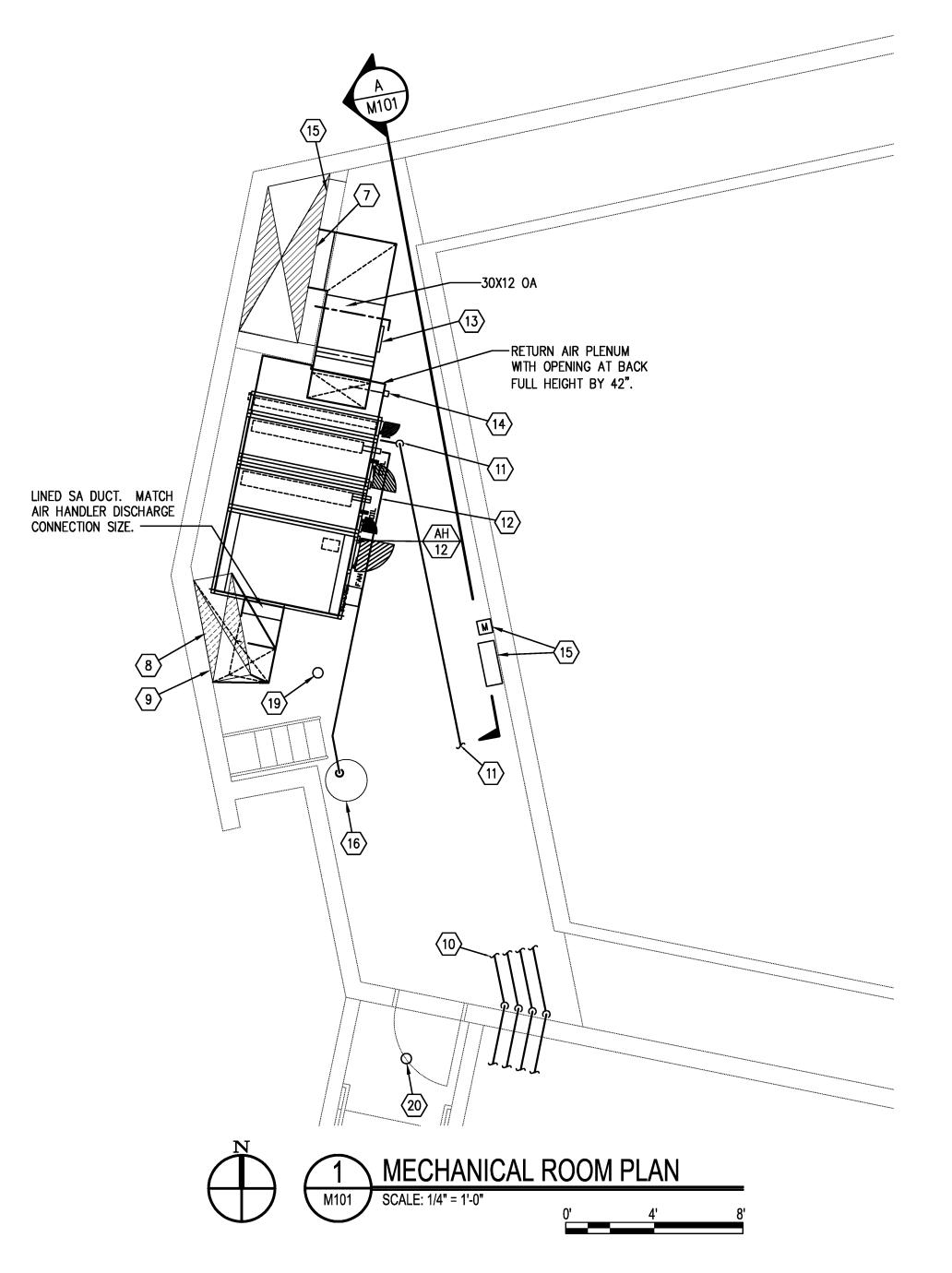
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MECHANICAL SECTION







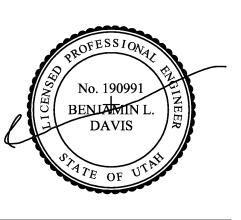
GENERAL NOTES

- 1. EXISTING DUCTWORK AND EQUIPMENT SHOWN FOR CONTRACTOR'S REFERENCE. FIELD DETERMINE EXACT SIZE, ELEVATION, AND LOCATION OF EXISTING ITEMS, INCLUDING THEIR RELATIONSHIP WITH INTENDED WORK PRIOR TO STARTING ANY WORK.
 - DRAWINGS SHOW GENERAL ARRANGEMENT OF PIPING, DUCTWORK, EQUIPMENT, ETC. FOLLOW AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AFFECTING THIS WORK AND ARRANGE WORK ACCORDINGLY. PROVIDE SUCH FITTINGS, VALVES, AND ACCESSORIES REQUIRED TO MEET CONDITIONS.
- 3. PATCH AND REPAIR ALL EXISTING SURFACES DAMAGED BY NEW CONSTRUCTION TO MATCH EXISTING.
- SAW CUT OR CORE DRILL ALL NEW PENETRATIONS THROUGH EXISTING MASONARY CONSTRUCTION.
- IF CONTRACTOR ENCOUNTERS MATERIAL THAT MAY CONTAIN ASBESTOS, HE SHALL IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE OWNER.
- 6. DEMOLITION GENREAL:
 - a. REMOVAL OF EQUIPMENT, PIPING, OR DUCTWORK TO INCLUDE REMOVAL OF ALL RELATED APPURTENANCES SUCH AS WIRING, CONDUIT, SUPPORTS, ETC. AND MODIFICATIONS REQUIRED FOR A COMPLETE OPERATING SYSTEM.
 - b. REMOVE BRANCH CONDUIT AND WIRING COMPLETELY. TERMINATE AT JUNCTION BOX. c. PATCH AND REPAIR ALL EXISTING SURFACES (WALL, ROOF, FLOOR, CEILING, ETC.) TO MATCH EXISTING.
 - REMODEL GENERAL:
 - a. ALL NEW CONDUIT, PIPING, DUCT, EQUIPMENT, AND APPURTENANCES TO BE CONCEALED UNLESS OTHERWISE NOTED.
 - b. EXISTING SURFACES (WALL, ROOF, FLOOR, CEILING, ETC.) TO BE REMOVED AS REQUIRED AND REPLACE TO MATCH EXISTING.

- REMOVE EXISTING AIR HANDLER IN ITS ENTIRETY INCLUDING
- 2. REMOVE EXISTING DOMESTIC WATER COOLING PIPING BACK TO
- 3. REMOVE EXISTING STEAM AND STEAM CONDENSATE PIPING BACK TO LOCATION SHOWN FOR RE-ROUTING TO NEW AH
- 4. REMOVE EXISTING RA/OA DUCTWORK, DAMPER AND
- 5. REMOVE EXISTING MAIN SUPPLY DUCT TO MECHANICAL ROOM CEILING FOR REPLACEMENT AND RECONNECTION.
- 6. REMOVE EXISTING RP PANEL AND THERMOSTAT FOR
- 7. CONNECT NEW OUTSIDE AIR DUCT TO EXISTING OUTSIDE AIR AREA-WELL. PROVIDE CAP OVER OPENING.
- 8. CONNECT NEW SUPPLY DUCT TO EXISTING MAIN SUPPLY.
- 9. SEE SHEET M102 FOR CONTINUATION.
- 10. ROUTE NEW REFRIGERANT PIPING FROM NEW AIR-COOLED
- 11. 2" STEAM TO AH-12 STEAM HEATING COIL. REFER TO DETAIL
- 12. ROUTE 1" CONDENSATE RETURN PIPE BACK TO EXISTING
- 13. OUTSIDE AIR DAMPERS, ACTUATOR, AND ACCESS DOOR. REFER TO DETAIL D/M601.
- 14. DUCT SMOKE DETECTOR. MOUNT IN MAIN RETURN AIR DUCT UPSTREAM OF OUTSIDE AIR DUCT CONNECTION.
- 15. NEW RP PANEL AND EQUIPMENT INTERFACE MODULE. REFER
- 16. EXISTING CONDENSATE RETURN TANK AND PUMP, INCLUDING
- 17. RELOCATE EXISTING HOSE BIBB TO THE EAST. COORDINATE EXACT LOCATION WITH NEW CONDENSING UNIT'S AND
- 20. PROVIDE FLOOR DRAIN FOR DRAINAGE INTO SUMP. ZURN Z505

VAN BOERUM & FRANK associates, inc. CONSULTING ENGINEERS

330 South 300 East Salt Lake City, UT 84111 801.530.3148 T 801.530.3150 F



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Van Boerum & Frank Assoc., 2014

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KEYED NOTES

- DUCTS, CONTROLS AND ACCESSORIES FOR REPLACEMENT.
- MAINS AND CAP.
- STEAM COIL. INCLUDES ALL TRAPS AND CONTROLS.
- ASSOCIATED ACTUATORS, INCLUDING ALL RELATED PNEUMATIC TUBING BACK TO MAINS.
- REPLACEMENT.
- TRANSITION AS REQUIRED.
- CONDENSING UNITS TO NEW DX COOLING COIL AT AH-12.
- C/M601 FOR STEAM AND CONDENSATE CONNECTIONS TO COIL.
- CONDENSATE PUMP.
- TO ATC PLANS.
- CONTROLS, TO REMAIN.

ASSOCIATED DISCONNECTS.

- 18. SEE SHEET EP101 FOR RELOCATION OF EXISTING A/V CABINET.
- 19. EXISTING FLOOR DRAIN. CLEAN OUT DRAIN BODY AND VERIFY PROPER DRAINAGE.

SHEET CONTENTS

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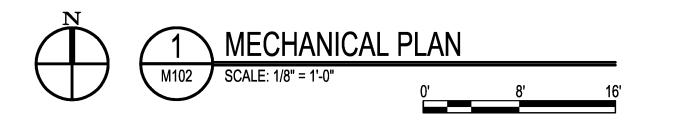
MECHANICAL ROOM **FLOOR PLANS**

17329

JA

GGS

JAN 2018



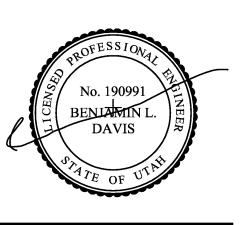
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KEYED NOTES

- LOCATION OF NEW THERMOSTAT. REMOVE EXISTING REMOTE SENSOR.
- 2. RE-BALANCE EXISTING SUPPLY OUTLET TO VOLUME NOTED.
- 3. INSTALL NEW 4" CONCRETE SLAB ON COMPACTED BASE FOR NEW MECHANICAL EQUIPMENT REFER TO ARCHITECTURAL PLAN. PROVIDE EXPANSION JOINT AGAINST BUILDING AND AS REQUIRED IN SLAB. REMOVE/REVISE EXISTING LANDSCAPING, IRRIGATION, AND OTHER EXISTING WORK AS REQUIRED TO ACCOMMODATE NEW WORK. SLOPE CONCRETE TO DRAIN AWAY FROM BUILDING 1/4" PER FOOT.
- 4. NEW AIR COOLED CONDENSING UNIT AND REFRIGERANT PIPING. FIELD VERIFY EXACT LOCATION TO MAINTAIN MANUFACTURERS RECOMMENDED CLEARANCES. REFER TO SHEET M501 FOR REFRIGERANT PIPING SCHEME AND DETAILS.
- 5. EXISTING PERIMETER STEAM RADIATION TO REMAIN. REPLACE EXISTING PNEUMATIC CONTROL VALVE WITH NEW HONEYWELL V80431 CONTROL VALVE. PROVIDE 120V/24V TRANSFORMER IN TUNNEL BELOW AS REQUIRED.
- 6. REMOVE EXISTING PNEUMATIC THERMOSTAT AND REPLACE WITH ELECTRIC THERMOSTAT (HONEYWELL 187F).
- EXISTING PERIMETER STEAM HEAT TO REMAIN AND BE ABANDONED. CLOSE SHUT-OFF VALVE AND REMOVE EXISTING PNEUMATIC CONTROL.
- 8. REMOVE EXISTING PNEUMATIC CONTROL THERMOSTAT. PATCH AND REPAIR WALL.
- 9. EXISTING REMOTE SENSOR SERVING CLASSROOM FAN COIL UNIT TO REMAIN.
- 10. EXISTING CHAPEL CONVECTOR TO REMAIN. INTEGRATE EXISTING CONTROL VALVES INTO NEW CONTROLS. FIELD VERIFY EXACT WIRING AND PROVIDE RELAYS AS REQUIRED.
- 11. SEE 1/M101 FOR CONTINUATION.
- 12. RE-INSTALL EXISTING HOSE BIBB. COORDINATE EXACT LOCATION WITH NEW EQUIPMENT DISCONNECTS.

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consulting engineers

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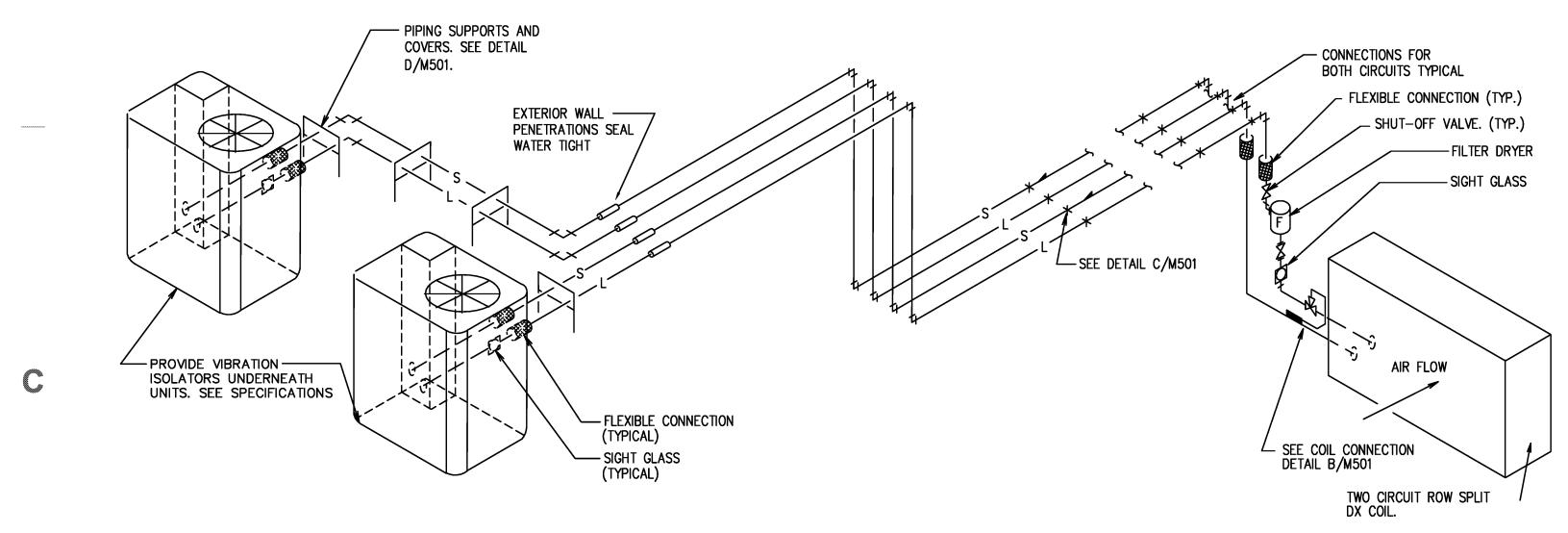
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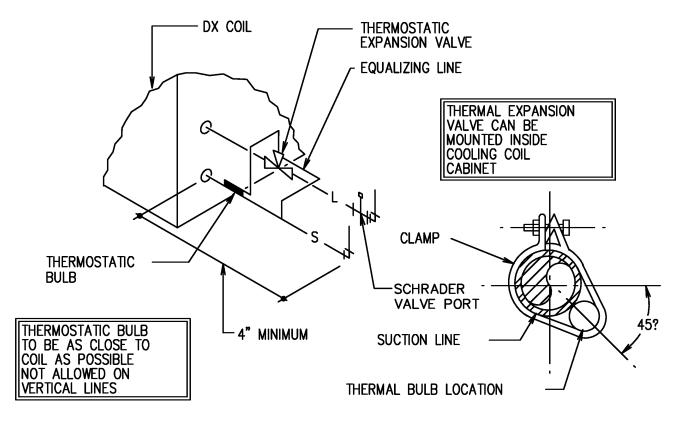
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SHEET CONTENTS

MAIN FLOOR MECHANICAL PLANS 

REFRIGERANT SCHEME



REFRIGERANT COIL CONNECTION DETAIL NO SCALE

		STRUCTURE
3/8"X3" LAG SCREW WITH WASHER INSULATION ON SUCTION LINES (INSULATE LIQU LINES LOCATED VENTILATED AT HANGER RODS TYPICAL REFRICATION ROOM	JID D IN ITTIC) GERANT	— 1" CHANNEL — BUTT INSULATION OF SUCTION LINE AGAINST CLAMP ASSEMBLY — SECURE REFRIGERANT PIPING TO SUPPORTS WITH "HYDRA—ZORB", "CUSH—A—CLAMP" OR EQUAL (TYPICAL) — 1—5/8" P—1000 "UNISTRUT" CHANNEL
	NOTE UNISTRUT SUPPORT MAY ALSO BE MOUNTED DIRECT TO ROOF OR WALL STRUCT	OR EQUAL. (TYPICAL)

SUSPENDED REFRIGERANT PIPE SUPPORT AT CEILING M501 NO SCALE

REFRIGERANT PIPI	ING LEGEND
SYMBOL	DESCRIPTION
A .	EXPANSION VALVE. SEE DETAIL B/M501.
0	MOISTURE INDICATING SIGHT GLASS
SE	FILTER DRIER
*	PIPE SUPPORT. SEE DETAIL C/M501.
	EXTERIOR PIPE SUPPORT. SEE DETAIL D/M501.
	DIRECTION OF SLOPE DOWN
_s	SUCTION LINE
	LIQUID LINE
	FLEXIBLE CONNECTION

REFR	RIGERANT LINE SIZES		
UNIT	LIQUID	SUCTION	REMARKS
(CU) 12a	1/2"	1 3/8"	7.5 TON
CU 12b	1/2"	1 3/8"	7.5 TON

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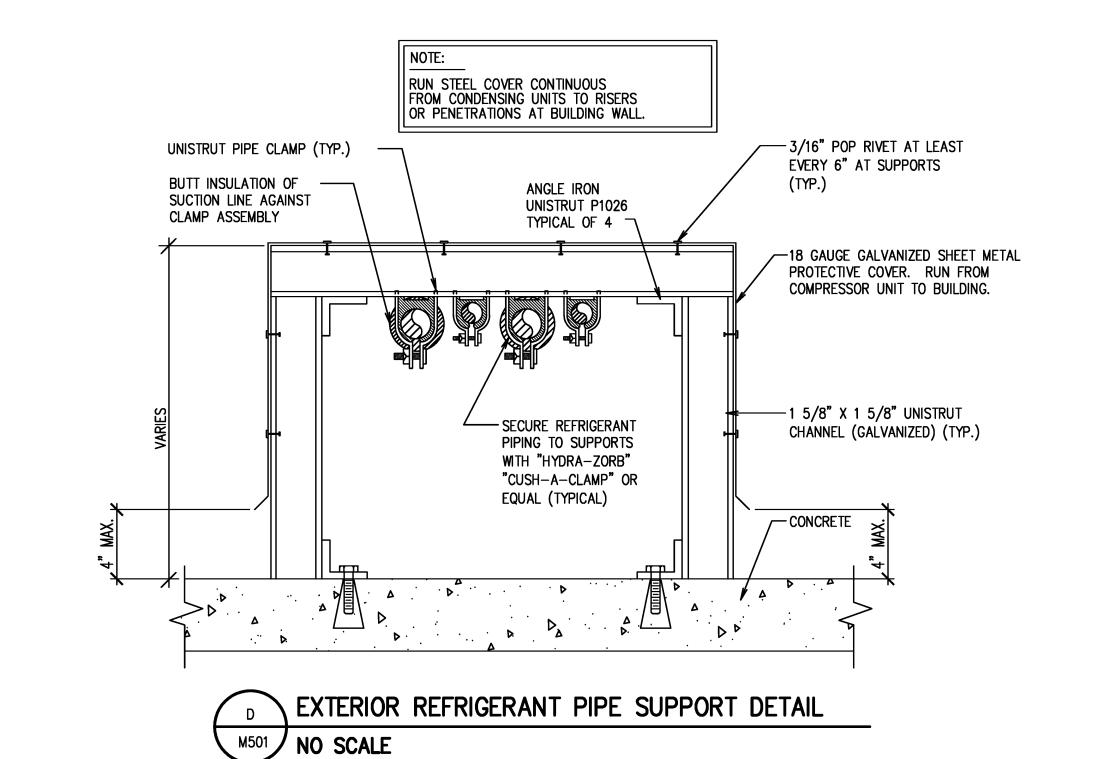
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SHEET CONTENTS **MECHANICAL DETAILS**



W.G.

FAN

ELECTRICAL

2.7 | 3.0 | 208 | 3

MAXIMUM

OVERALL

DIMENSIONS

LxWxH

111"x 79"x 51"

CDIL

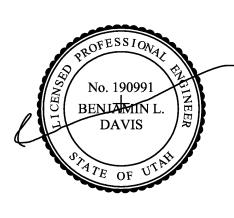
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COMMENTS

(1)(2)(3)(4)(5)(6)(7)

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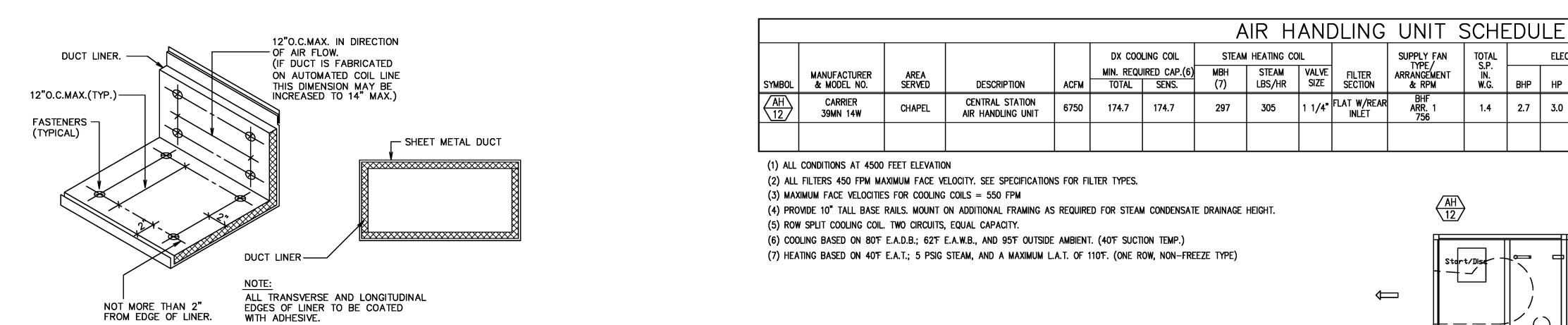
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MECHANICAL SCHEDULES AND DETAILS

M601



				TRANSVER	SE REINFO	RCING (1)				
			AT JOINTS							
DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	MIN. H. IN.	DRIVE SLIP PLAIN S SLIP RECOM- MENDED GAGE	HEMMED S SLIP RECOM- MENDED GAGE	ALTER'NT BAR SLIP RECOM- MENDED GAGE	REIN- FORCED BAR SLIP RECOM- MENDED GAGE			
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24			
13 – 18	24	NONE REQUIRED	1	24	24	24	24			
19 - 30	24	1"X1"X1/8" @ 60 IN	1	_	24	24	24			
31 – 36	22	1"X1"X1/8" @ 60 IN	1	_	_	22	22			

DUCT LINER DETAIL

NO SCALE

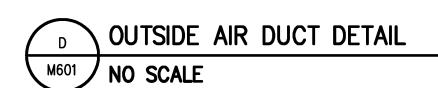
(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

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(2) LONGITUDINAL JOINTS TO BE PITTSBURG OR SNAP LOCK TYPE.



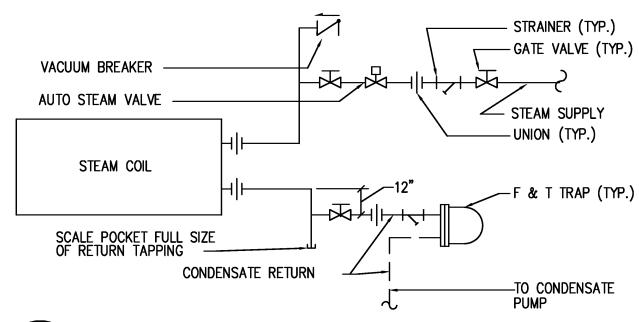
FROM OA INTAKE MOTORIZED OA DAMPER. (2-POSITION-OPEN/CLOSE)	
MANUAL OA DAMPER. I OUTSIDE AIR TO 2025 C	
6X6	
DUCT ACCESS TO MAIN RA	DUCT



STEAM VALVE SCHEDULE										
MARK	AREA SERVED MODEL SIZE CONTROL TYPE Cv STEAM FLOW RATE (LBS/HR)									
SV-2	CHAPEL AH-12	V5011N 2071	1 1/4"	MODULATING	15.3	305				

1) MODEL NUMBER SHOWN IS HONEYWELL.

2 Cv Values based on 5 PSig supply pressure and a 2 PSig differential pressure.



STEAM COIL PIPING DETAIL M601 NO SCALE

1 CAPACITIES BASED ON 1/2 PSI PRESSURE DIFFERENTIAL.

STEAM VALVE SCHEDULE									
MARK	AREA SERVED	STEAM FLOW RATE (LBS/HR)							
SV-2	CHAPEL AH-12	V5011N 2071	1 1/4"	MODULATING	15.3	305			

A	IR-COOL	LED CO	NDEN:	SING	UNIT SCHEDU	JLE
MAR	MIN. 3 NOMINAL SIZE (TONS)	MINIMUM CIRCUIT AMPACITY	(б) моср	POWER SUPPLY	REMARKS	
(CU) 12a	7.5	34.3	50	⑤	38AUZ 008	12
(CU) 12b	7.5	34.3	50	⑤	38AUZ 008	1)2

COIL

- 1 CARRIER MODEL LISTED. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- ② REFRIGERANT R-410a; 40 DEGREE SUCTION TEMPERATURE.
- 3 AT DESIGN CONDITIONS AND 95°F ENTERING AIR TEMPERATURE TO CONDENSER.
- 4) CONDENSING UNIT MARKS CORRESPOND WITH AIR HANDLER SYSTEM MARKS.
- (5) ELECTRICAL CHARACTERISTICS—COMPRESSOR: 208/230V/3 PHASE/60HZ
- 6 ELECTRICAL RATING FOR SCHEDULED CARRIER UNIT. COORDINATE ACTUAL RATING OF UNIT PROVIDED WITH DIVISION 26.

STE	EAM TR	AP SCHE	DULE _①
SERVING	MAXIMUM #s/HR.	PSIG STEAM	CONNECTION SIZE
AH-12	600	5	1 1/4"
END OF MAIN	100	2	3/4"

NOTE: ALL DEVICES MUST BE INSTALLED AT LEAST 2'-0" APART (TYPICAL) CONSULTING ENGINEERS

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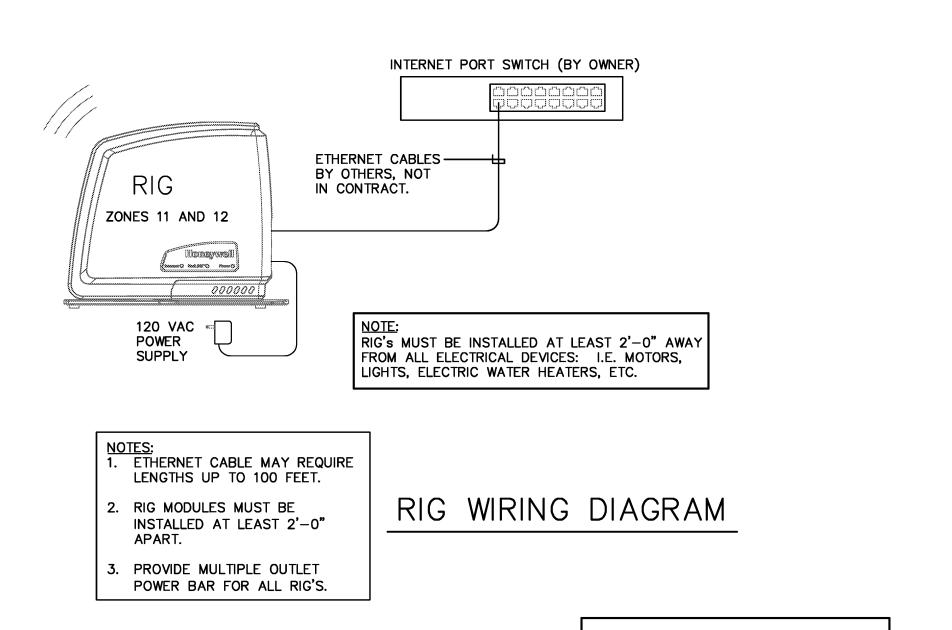
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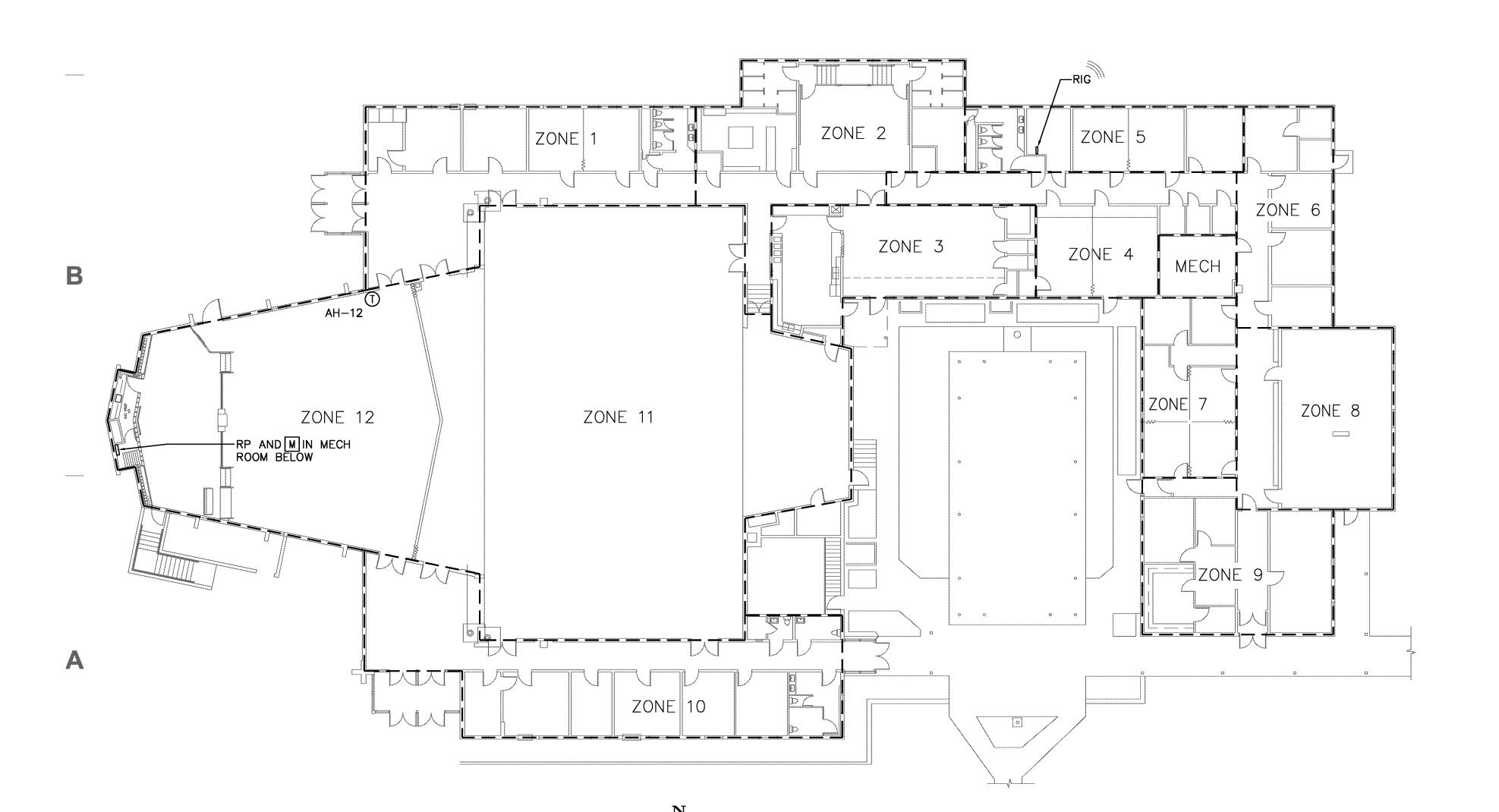
JAN 2018

CURRENT/ISSUE DATE:
SHEET CONTENTS

ATC - FLOOR PLAN AND SCHEDULE

ME101





ATC - ZONE FLOOR PLAN

TO SECOND

V8043J ZONE VALVE

Q Q Q

NEW T87 THERMOSTAT AT EXISTING PERIMETER HEAT

NO SCALE

VALVE WHERE REQUIRED.

	CC	NTROL	EQ	UIPMENT	
MARK	DESCRIPTION	CAT. NO.(1)	MARK	DESCRIPTION	CAT. NO.(1)
RIG	REDLINK INTERNET GATEWAY	THM6000R1002	RP	RELAY PANEL 24X18X6W/COVER	24
Т	THERMOSTAT KIT	YTHX9421R5085WW	VFD	HONEYWELL SMART DRIVE W/O BYPASS	(5)
	THERMOSTAT COVER PLATE ASSEMBLY	THP2400A1027W	DM-1	DAMPER MOTOR TWO POSITION	MS8105A1030
М	EQUIPMENT INTERFACE MODULE	INCLUDED WITH THERMOSTAT KIT			
			X-1	TRANSFORMER 120V/24V 75VA	AT175F1023
G-1	THERMOSTAT GUARD	2	X-2	TRANSFORMER 120V/24V 50VA	AT150F1022
DS	DUCT AIR SENSOR	INCLUDED WITH THERMOSTAT KIT	SD-1	DUCT SMOKE DETECTOR	2
	DUCT AIR SENSOR MOUNTING BRACKET	50053060-001	SR	SMOKE RELAY 30 AMP 120V COIL	(3) DP2030B5003
CO ₂	CO₂ SENSOR	C7232B1006	RIB	TWO POLE RELAY	RIBU1C 2
			СМ	VALVE CONTROL MODULE	AEI-TSCM 7
LL-1	LOW LIMIT SENSOR	T675A1508	V-1	2-WAY MODULATING CONTROL VALVE	V5011N 6
			VM-1	VALVE MOTOR	ML7984A

- 1) ALL CATALOG NUMBERS SHOWN ARE HONEYWELL UNLESS NOTED OTHERWISE.
- 2 SEE SPECIFICATIONS
- 3 PROVIDE ENCLOSURE
- (4) TO BE PURCHASED FROM AN APPROVED PANEL BUILDER SEE SPECIFICATION.
- (5) TO BE SELECTED BY EQUIPMENT PROVIDER. TO MATCH SUPPLIED FAN MOTOR.
- 6 REFER TO VALVE SCHEDULE SHEET M-601
- (7) ATKINSON ELECTRONICS

NOTES:

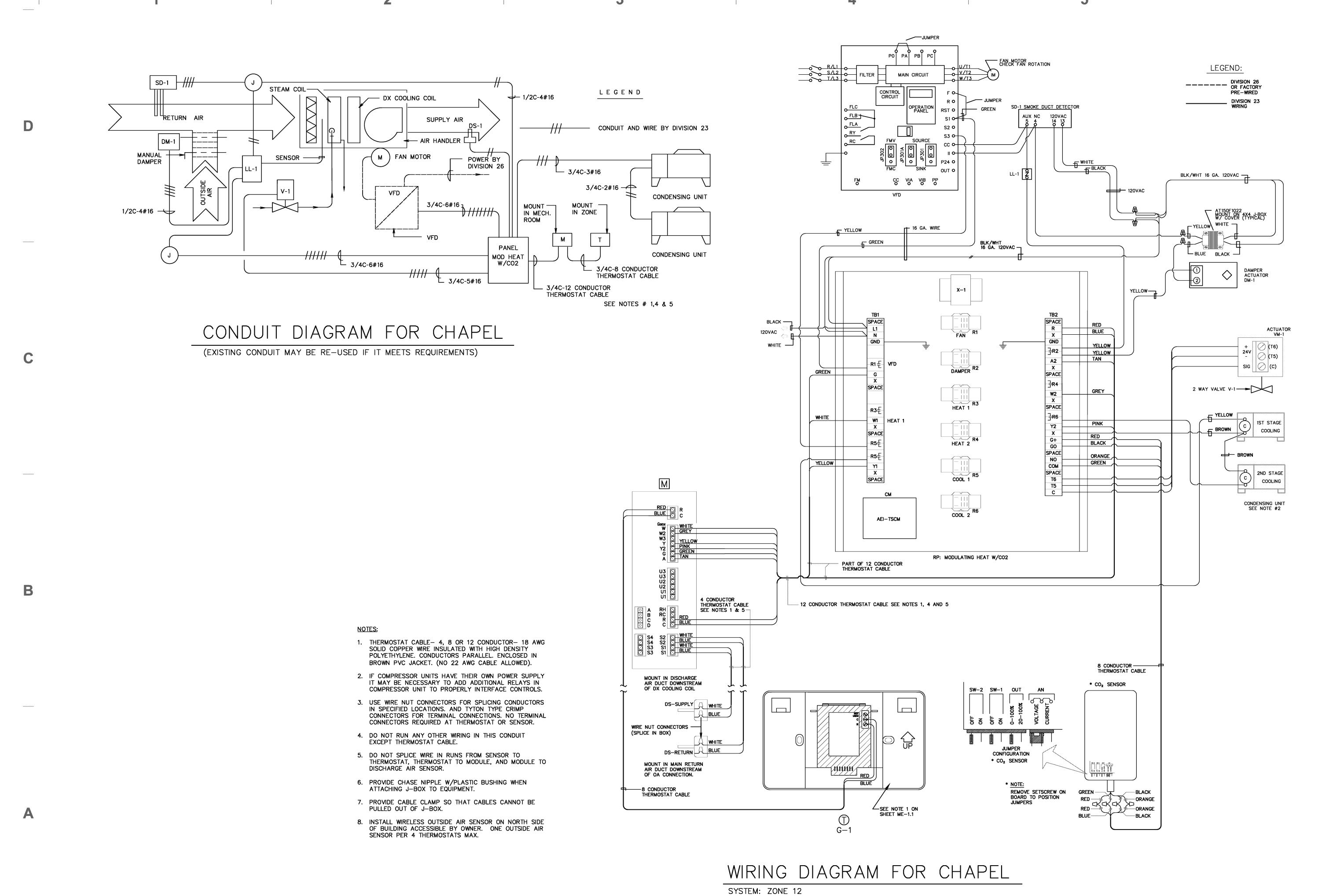
- 1. BOXES FOR THERMOSTAT ① OUTLETS SHALL BE 2"X4" WITH LONG DIMENSION VERTICAL. USE METAL BRACKET OF COVER PLATE ASSEMBLY TO MOUNT THERMOSTAT HORIZONTAL. MOUNT ON INSULATED WOOD PANEL. REFER TO DETAIL A/ME202.
- 2. CONDUIT TO BE 1/2" UNLESS NOTED OTHERWISE.
- TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING CONSTRUCTION LINES. SEE SPECIFICATIONS FOR ACCEPTABLE FASTENING METHODS AND MAXIMUM ALLOWABLE SPACING BETWEEN FASTENERS.
- 4. TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE LABELED. PROVIDE A LABEL AT ALL POINTS WHERE TEMPERATURE CONTROL WIRING ENTERS CONDUIT AND AT CONNECTIONS TO DEVICES.
- 5. SEAL OPEN END OF CONDUIT AIR—TIGHT AROUND THERMOSTAT WIRE WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
- 6. SEAL ANNULAR SPACE BETWEEN CONDUIT AND OPENING IN FLOOR OR WALL WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
- 7. SEAL OPEN END OF CONDUIT AT J-BOX AIR TIGHT AROUND THERMOSTAT WIRE. SEAL ALL AIR GAPS AROUND J-BOX TO ISOLATE J-BOX FROM WALL CAVITY. SEAL BACK OF THERMOSTAT AROUND WIRES. PACK J-BOX TIGHT WITH GLASS FIBER BATT INSULATION. USE SEALING COMPOUND SPECIFICALLY MADE FOR REFRIGERATION AND AIR CONDITIONING APPLICATIONS. SEE SPECIFICATIONS FOR APPROVED PRODUCTS.

SYMBOLS (SEE FLOOR PLANS FOR LOCATIONS)

- EQUIPMENT INTERFACE MODULE (DIV 23). MOUNT MODULE IN ACCESSIBLE LOCATION NEAR ASSOCIATED EQUIPMENT.
- T) THERMOSTAT OUTLET (DIV 23)

RIG MODULE (DIV 23)

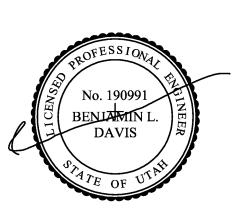
- RP RELAY PANEL (DIV 23) MOUNT 5'-0" TO BOTTOM OF CABINET
- O_2 CO₂ SENSOR (DIV 23) INSTALL UPSTREAM OF OUTSIDE AIR CONNECTION.





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& FRANK ASSOCIATES, INC.
CONSULTING ENGINEERS

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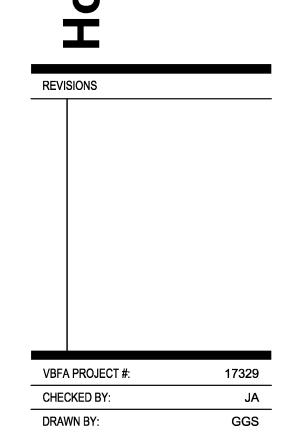


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Hobble Creek 1, 3, 13 & Springville UT Hobble Creek Stk.



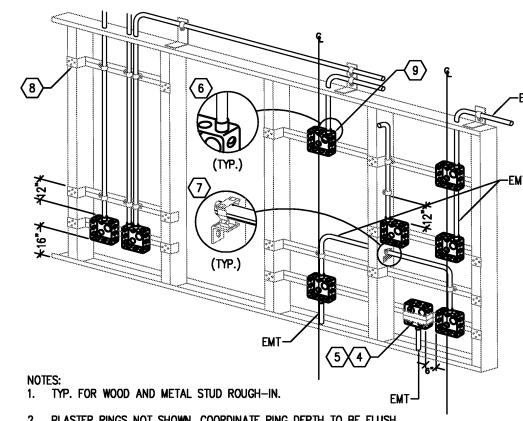
AUTOMATIC
TEMPERATURE
CONTROLS

CURRENT/ISSUE DATE:

ME701

SYMBOL DEVICE/FIXTURE DESCRIPTION

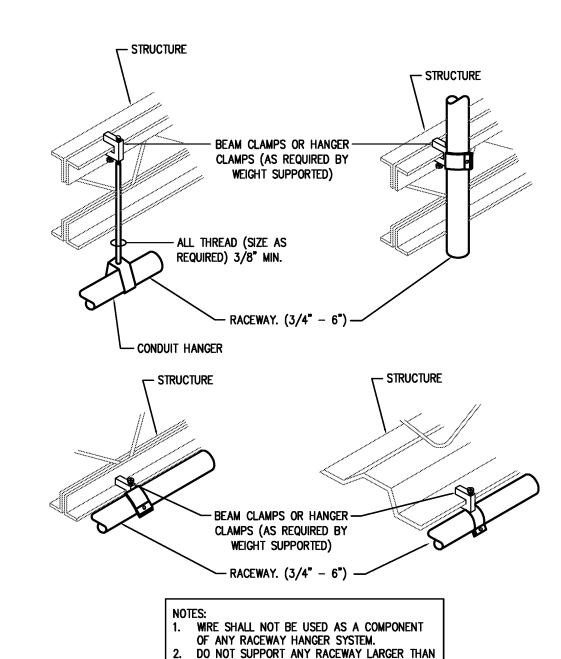
MOUNTING HEIGHTS DETAIL MT02 NO SCALE



- 2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINISHED SURFACE, UNLESS NOTED OTHERWISE.
- 3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCH. AND MECH. DRAWNGS, AND WITH ALL APPLICABLE SHOP DRAWNGS.
- 4. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
- 5. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.3.2.
- 6. INSULATED THROAT EMT CONNECTOR.
- 7. CADDY FASTENER, THROUGH STUD CABLE/CONDUIT SUPPORT 'FB12P'.
- 8. ADJUSTABLE BAR HANGER.

9. TYPICAL DEVICE JUNCTION BOX.

TYPICAL ROUGH-IN DETAIL



BEAM CLAMPS OR--3/8" ALL THREAD. HANGER CLAMPS AS MINIMUM. INCREASE REQUIRED BY WEIGHT ROD SIZE IF WEIGHT SUPPORTED REQUIRES PER ROD MANUFACTURERS RECOMMENDATIONS. SUPPORT CONDUIT -WITH KINDORF STRAP OR APPROVED - WASHER Substitute. WASHER REFER TO SECTION FOR -ATTACHMENT OF ALL - PROVIDE 25% SPACE CAPACITY THREAD ROD TO KINDORF CHANNEL -1 1/2"x1 1/2"-12GA. KINDORF CHANNEL OR APPROVED

1" FROM BOTTOM CORD OF STEEL TRUSSES.

CN03 RACEWAY SUPPORT METHODS DIAGRAM

TRAPEZE SUPPORT DETAIL NO SCALE

SIMDUL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	COMMENTS
	(S) SIMPLEX (D) DUPLEX (Q) QUADPLEX OR DOUBLE D	OUPLEX	.
Φ Φ	STANDARD CONVENIENCE OUTLET	18"	
P P	CONVENIENCE OUTLET, GFCI	18"	
0	JUNCTION BOX	AS NOTED	(12)
\$ [™]	MANUAL SWITCH WITH THERMAL OVERLOAD		
ď	NON-FUSED DISCONNECT SWITCH		(13) (14)
œ	FUSED DISCONNECT SWITCH		(13) (14)
×	MAGNETIC STARTER		(13) (14)
ď	MAGNETIC STARTER WITH FUSED DISCONNECT		(13) (14)
⊠ '	MAGNETIC STARTER WITH BREAKER DISCONNECT		(13) (14)
R	POWER RELAY		(13) (14)
4	MOTOR OUTLET		
I	TRANSFORMER	SEE PLANS	
WWW.	MAIN DISTRIBUTION POWER PANEL		
	PANEL BOARD, SURFACE	6'-6" TO TOP	(15)
	PANEL BOARD, RECESSED	6'-6" TO TOP	(15)
(XX)	MECHANICAL/PLUMBING EQUIPMENT CALLOUT		
(X-1)	KITCHEN EQUIP. CALLOUT, OR AS NOTED BY ARCH.		
X	KITCHEN EQUIP. CALLOUT, OR AS NOTED BY ARCH.		
\otimes	LUMINAIRE TYPE		
a	DIAGRAM/DETAIL CALLOUT		
	CONDUIT RUN CONCEALED IN WALL OR CEILING		
—UG—	CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
	SURFACE RACEWAY/WREMOLD		
	LOW VOLTAGE CONDUIT RUN		
	DEMOLITION		
	EXISTING		
	HOME RUN TO PANEL		
	CONDUIT STUB		
	CONDUIT BREAK/CONTINUATION		
	CONDUIT STUB DOWN		
o	CONDUIT STUB UP		
-ш-	FUSE		
+	GROUND/GROUND ROD		
$\overline{}$	CIRCUIT BREAKER		

ELECTRICAL SYMBOL SCHEDULE

MOUNTING COMMENTS

ABBREVIATIONS ENT ELEC. NON-METAL. TUBING NL NIGHT LIGHT, BYPASS AVAILABLE FAULT CURRENT ER EXISTING TO BE RELOCATED LOCAL SWITCHING ABOVE FINISHED FLOOR EX EXISTING TO REMAIN PC PLUMBING CONTRACTOR FMC FLEXIBLE METAL CONDUIT POC POINT OF CONNECTION ABOVE FINISHED GRADE AMPS INTERR. CAPACITY GC GENERAL CONTRACTOR POS POINT OF SALE AWG AMERICAN WIRE GAUGE GEC GRND. ELEC. COND. AT SES R RELOCATE BARE COPPER GFCI GRND. FLT. CURR. INTERR. RM ROOF MOUNTED BELOW FINISHED CEILING GND GROUND RMC RIGID METALLIC CONDUIT BFG BELOW FINISHED GRADE IMC INTER. METAL CONDUIT RNC RIGID NON-METALLIC COND. IG ISOLATED GROUND SBJ SYSTEM BONDING JUMPER CONDUIT KCMIL 1000 CIRCULAR MILS (MCM) SCA SHORT CIRCUIT AMPERES CONDUIT ONLY LFMC LIQUID-TIGHT FLEX. TRANSMITTER **CURRENT TRANSDUCER** TEMP. CONTROL CONTR. METAL. COND. COPPER MATERIAL LFNC LIQUID-TIGHT FLEX. UNDFRGROUND DED DEDICATED UNO UNLESS NOTED OTHERWISE NON-METAL. COND. DFA DROP FROM ABOVE MC MECHANICAL CONTRACTOR VA VOLT/AMPS ELECTRICAL CONTRACTOR MCA MINIMUM CIRCUIT AMPS VIF VERIFY IN FIELD

WP WEATHERPROOF/NEMA 3R

XR EXISTING TO BE REMOVED

XP EXPLOSION PROOF

SEE LUMINAIRE SCHEDULE FOR FIXTURE TYPES AND DETAILS. SEE LUMINAIRE SCHEDULE FOR MOUNTING REQUIREMENTS. WIRE LIGHT FIXTURE FROM ADJACENT J-BOX

EMER./EGRESS BATTERY N3R NEMA 3R

EMT ELEC. METALLIC TUBING N NEW

EXHAUST FAN

CONNECT NEAREST UN-SWITCHED HOT CONDUCTOR TO EMERGENCY BALLAST DIRECTIONAL ARROWS INDICATE REQUIRED CHEVRONS. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL INTERIOR ELEVATIONS USE WITH POWER PACK.

N1 NEMA 1

"X" IN SYMBOL IS INCHES BETWEEN RECEPTACLE ALONG WIREWAY. SEE DRAWINGS. PROVIDE UL LISTED DEVICE COMPATIBLE WITH THE FIRE ALARM PANEL/SYSTEM. MATCH THE VOLTAGE OF THE RELAY WITH THAT OF THE CONTROLLING CIRCUIT. USE A 4" X 4" BOX WITH A MUD RING TO MATCH THE DEVICE AND INSTALLATION. PROVIDE MUD RING AND/OR BOX COVER APPROPRIATE FOR DEVICE/FIXTURE SERVED.

USE HEAVY DUTY DEVICE FOR 480 VOLT. SIZE TO THE EQUIPMENT BEING CONTROLLED

15) FIRE ALARM PANELS: FACP: FIRE ALARM CONTROL PANEL, NAC: NOTIFICATION APPLIANCE CIRCUIT PANEL, ANNUN: GRAPHIC ANNUNCIATOR PANEL, AND SES: SMOKE EVACUATION SYSTEM

(16) LIGHT FIXTURES ARE SCALED WITHIN THE DRAWINGS BASED ON ACTUAL DIMENSIONS.

GENERAL NOTES

- THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL THE RELEVANT DOCUMENTS AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING HIS BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIER SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS AT THEIR OWN EXPENSE. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM IT'S PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE.
- THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.
- NO ADDITIONS TO THE CONTRACTOR BID WILL BE ALLOWED FOR CHANGES MADE NECESSARY BY INTERFERENCE WITH
- 4. THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS AND LABOR FOR THE CONNECTIONS OF ALL EQUIPMENT SHOWN ON THE PLANS - ARCHITECTURAL, MECHANICAL, ETC.
- . This project is to be installed in strict accordance with local and state codes and the Nec. If at any TIME DURING CONSTRUCTION, OR AFTER, SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THE CODES LISTED ABOVE, IT SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- 6. ALL EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, AND BE PROPERLY INSTALLED FOR

WHICH NEW CIRCUITS ARE BEING FED FROM. VERIFY EXISTING BRANCH CIRCUIT BREAKERS AND PROVIDE NEW BREAKERS

- THE CONDITIONS AND SPACE THAT EQUIPMENT IS BEING INSTALLED WITHIN. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND CONFIRM THE EXACT LOCATION OF THE POWER PANELS FROM
- AS NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM. 8. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND CONFIRM THE EXACT LOCATION OF THE TELE/DATA ROOM FROM WHICH NEW TELE/DATA OUTLETS WILL BE FED FROM. VERIFY EXISTING PATCH PANEL SPACES AND PROVIDE NEW PATCH
- PANELS AS NECESSARY TO LAND ALL NEW TELE/DATA CABLING. 3. THE ELECTRICAL CONTRACTOR SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN.
- CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE ELECTRICAL CONTRACTOR SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES. THE ELECTRICAL CONTRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING ANY
- CLEARANCE IS NOT POSSIBLE, THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY IN WRITING. 11. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMATIC, NOT INDICATING THE ROUTING REQUIRED. THE EC SHALL
- ROUTE THE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION AND SHALL COORDINATE WITH DUCTWORK, PIPING, EQUIPMENT, BUILDING STRUCTURE AND OTHER POTENTIAL OBSTRUCTIONS.

12. THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC.

ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS AT HIS EXPENSE IF REJECTED BY AN INSPECTOR. IF

- A DISTANCE OF 10 FEET WITHOUT REQUIRING ADDITIONAL COST TO THE PROJECT. 13. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY
- STANDARD METHODS AND PRACTICES.
- 14. MINIMUM SIZE CONDUIT SHALL BE 3/4". ABOVE GROUND CONDUIT SHALL BE EMT WITH STEEL SET SCREW FITTINGS. UNDERGROUND CONDUIT SHALL BE PVC (SCH40) WITH GRC ELBOWS AND RISERS WRAPPED IN CORROSION RESISTANT MATERIALS WHERE IN DIRECT CONTACT WITH THE SOIL.
- 15. FLEXIBLE CONDUIT SHALL BE LIMITED TO CONNECTIONS TO LIGHT FIXTURES AND FINAL CONNECTIONS TO MOTORS OR OTHER EQUIPMENT SUBJECT TO VIBRATION ONLY. LENGTHS OF FLEXIBLE OR SEALTITE CONDUIT SHALL NOT BE GREATER THAN 72" INCHES.
- 16. WRING DEVICES SHALL MATCH EXISTING COLOR AND FACEPLATE TYPE.
- 17. TO ASSURE ALL DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION. ANY DEVICE BOXES NOT SECURED WILL BE MADE SECURE AT THE CONTRACTORS EXPENSE.
- 18. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL EMPTY CONDUITS WITH 200LB RATED NYLON PULL CORD.

THE INSPECTION PURPOSES WILL BE AT THE COST OF THE ELECTRICAL CONTRACTOR.

- 19. BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL BE APPROVED BY THE INSPECTING OFFICER (INSPECTOR). THE UNCOVERING AND REPLACEMENT OF ELECTRICAL WORK FOR
- 20. WHERE WIRE SIZE IS NOT SHOWN ON THE DRAWINGS FOR 20A, 120 OR 277VAC BRANCH CIRCUITS, THE CIRCUIT SHALL CONSIST OF 2#12(CU,THHN)+1#12(CU,THHN)GND IN 3/4" EMT CONDUIT. THIS WIRE SIZE SHALL BE INCREASED TO #10(CU,THHN) FOR 120VAC BRANCH CIRCUITS WITH OVERALL LENGTHS EXCEEDING 125' TO ACCOMMODATE FOR VOLTAGE DROP. REFER TO EQUIPMENT SCHEDULES, FEEDER SCHEDULES AND NOTES ON DRAWINGS FOR ALL OTHER BRANCH CIRCUIT AND FEEDER WIRE/CONDUIT SIZING.
- 21. CONDUCTORS SHALL BE COPPER, 600VAC RATED, TYPE THHN/THWN-2 UNLESS OTHERWISE NOTED. CONDUCTORS SIZES UP TO #10AWG SHALL BE SOLID AND #8AWG AND LARGER SHALL BE STRANDED.
- 22. METAL CLAD CABLING MAY BE USED BETWEEN DEVICES SUCH AS LIGHTING, RECEPTACLES, SWITCHES, ETC... UNLESS OTHERWISE REQUIRED BY THE NEC. HOME RUNS SHALL BE INSTALLED IN CONDUIT. MC CABLE SHALL NOT BE INSTALLED
- 23. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH EQUIPMENT SUPPLIERS ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN. THE ELECTRICAL CONTRACTOR SHALL MAKE THE FINAL CONNECTION TO ALL EQUIPMENT UNLESS OTHERWISE DIRECTED BY THE EQUIPMENT SUPPLIER.
- 24. The electrical contractor shall clean the entire electrical system after completion of the installation. REMOVE ALL FINGER PRINTS, FOREIGN MATTER, PAINT, DIRT, GREASE, UN-NEEDED LABELS OR STICKERS FROM FIXTURES AND EQUIPMENT. REMOVE ALL RUBBISH AND DEBRIS ACCUMULATED DURING INSTALLATION FROM THE PREMISIS.
- 25. OBTAIN FROM SUPPLIERS ALL WIRING DIAGRAMS FOR EQUIPMENT PRIOR TO ANY ROUGH-IN. TO ASSURE THAT PROPER CHARACTERISTICS ARE PROVIDED, ANY INCORRECT WIRING OR DEVICES INSTALLED BY THE ELECTRICAL CONTRACTOR WITHOUT THE WIRING DIAGRAM SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. PROVIDE COPIES OF WIRING
- 26. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR TO PROVIDE CONDUIT AND DEVICE

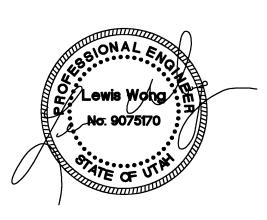
DIAGRAMS WITHIN EACH PIECE OF EQUIPMENT AND ADDITIONAL COPIES WITH THE OPERATION AND MAINTENANCE MANUALS.

MOUNTING BOXES FOR THERMOSTATS AND OTHER MECHANICAL CONTROLS.

27. IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS FOR ALL DEVICES TO BE FLUSH MOUNTED AND CONDUIT/CABLING INSTALLED CONCEALED WITHIN WALLS/CEILINGS. IN AREAS WHERE CONDUIT MUST BE INSTALLED EXPOSED IT SHALL BE COORDINATED WITH THE ARCHITECT AND/OR ENGINEER. ALL EFFORTS SHALL BE MADE TO CONCEAL WIRING METHODS.

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REVISIONS

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JAN 2018

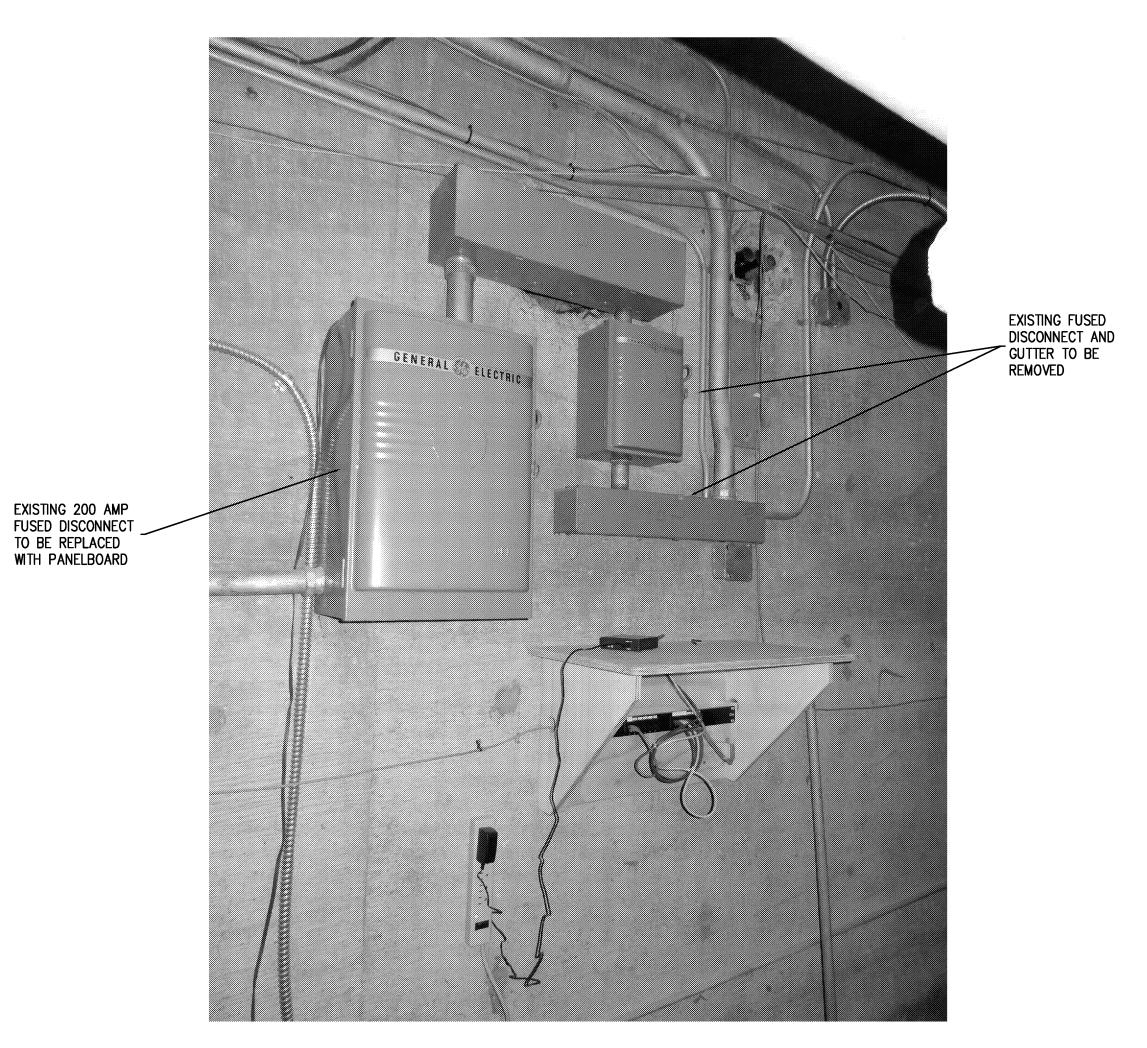
SHEET CONTENTS **ELECTRICAL**

GENERAL

CURRENT/ISSUE DATE:

					ELECTR	ICAL				OVI	ER CURREN	NT PROTECT	ION	STR	
TYPE	DESCRIPTION					WI	RE		COND	OCPD/		DISC	FUSE	NEMA	REMARK
		V/PH	LOAD	FLA	SETS	QTY	SIZE	GND	SIZE	МОСР	TYPE	SIZE/PL	SIZE	SIZE	
AH-12	AIR HANDLER	208/3	3 HP	11.0	1	3	12	12	3/4"	20	C1	-	-	-	13A
CU-12A	CONDENSING UNIT	208/3	34.3 MCA	27.4	1	3	8	10	3/4"	50	C1	60/3	50	-	9A
CU-12B	CONDENSING UNIT	208/3	34.3 MCA	27.4	1	3	8	10	3/4"	50	C1	60/3	50	-	9A
ABBREVIA	TIONS:	•													
V/PH = VOI	LTAGE/PHASE	KVA = KILC	VOLT AMPERES	3		GND = GRO	DUND				COND = C	ONDUIT			
KW = KILO	WATTS	VA = VOLT	AMPERES			DISC = DIS	CONNECT				OCPD = O	VERCURREN	NT PROTEC	TIVE DEVIC	Ε
W = WATTS MCA = MINIMUM CIRCUIT AMPACITY				STR = STA	RTER				PL = POLE	.					
HP = HORSEPOWER FLA = FULL LOAD AMPERES			s		MOCP = MA	XIMUM OC	PD (LISTED	BY THE MA	NUFACTUR	ER)					
REMARKS:	:				REMARKS	:									
1. NEMA 1 I	FUSED DISCONNECT SWITCH				A. FURNISHED, INSTALLED AND CONNECTED UNDER DIVISION 26.										
2. NEMA 1	NON-FUSED DISCONNECT SWITCH				B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTION UNDER DIV 26.										
3. BREAKE	R IN ENCLOSURE				C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIV 26.										
4. MANUAL	STARTER WITH THERMAL OVERLOAD				D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION.										
5. MANUAL	. MOTOR CONTROLLER W/OUT THERMAI	. OVERLOAD			E. FURNISI	HED AND IN	STALLED U	NDER DIV 2	6 REQUIRIN	G CONNEC	TION UNDE	R ANOTHER	DIVISION.		
6. MAGNET	FIC STARTER														
7. MAGNET	FIC STR/NON-FUSED DISCONNECT COME	BINATION			OCPD TYP	ES:									
8. MAGNET	FIC STR/FUSED DISCONNECT COMBINAT	ION			C1 = THERMAL MAGNETIC CIRCUIT BREAKER F1 = INDUCTIVE FUSE (CLASS RK5)						5)				
9. NEMA 3F	R FUSED DISCONNECT SWITCH				C2 = MAGNETIC ONLY CIRCUIT BREAKER F2 = NON-INDUCTIVE FUSE (CLASS RK1)										
10. NEMA 3	BR NON-FUSED DISCONNECT SWITCH														
11. VARIAB	BLE FREQUENCY DRIVE				NOTES:										
12. RECEP	TACLE/SPECIAL PURPOSE OUTLET/ETC.				- THE DIVISION 26 CONTRACTOR MAY INCREASE THE CONDUIT SIZE BY ONE INCREMENTAL										
13. DIRECT	CONNECTION				SIZE TO FACILITATE INSTALLATION OR TO HELP WITH MATERIAL AVAILABILITY/COST.										
14. DUCT DETECTOR IN RETURN AIR DUCT			- THE DIVISION 26 CONTRACTOR MAY INCREASE THE CONDUCTOR SIZE OR OCPD SIZE BY ONE												
15. CONTR	OLLED WITH LIGHTS				INCREME	NTAL SIZE	TO HELP WI	TH MATERI	AL AVAILAB	ILITY/COST.	. WIRE MUS	ST MATCH B	KR.		
16. LM-EB [DISCONNECT W/CNTRL WIRING TO VFD														

CHB PANEL							M	OUNTING		FEED		MAIN	S	D	IMS.	SPECIAL	EQUIPMENT	
		VOLTAGE		208Y/120									AMP		w	X GROUND BUS		
	NQOD														SU	JB-FEED BRKR		
TYP	TYPE		PHASE 3		WIRES 4			FLUSH	X	TOP	Х	LUGS		5.7	'5" D	NE	EMA 3R	
CHAPEL MECH								-		•		-				SURGE PROTECTOR		
LOCATION		AIC	10K	AMPS		3	X	SURFACE		BOTTOM		BREAKER		35'	" Н			
CIR	CIRCUIT DESCRIPTION			BRKR WI		WIRE	CIRCUIT	COMBINED PH		IASES	CIRCUIT	WIRE	WIRE BRK		2225		CII	
NO.			CODE	P AMP	SIZE	LOAD	Α	В	С	LOAD	SIZE	AMF	P CODE	CIRCUIT DESCRIPTION	NC			
1	AIR HANDLER AH-12			3	20	12	1320	1320		1			60	3		EXISTING		2
3	-			-	-	12	1320		1320	7			-	-				4
5	-			-	-	12	1320	1		1320			-	-				6
7	CONDENSING UNIT CU-12A			3	50	8	3295	3475]		180		20	1		EXTERIOR O	UTLET	8
9	-			-	-	8	3295		3295	7			30	1		SPARE		10
11	-			-	-	8	3295	1		3295			20	1		SPARE		12
13	CONDENSING UNIT CU-12B			3	50	8	3295	3295]				25	1		SPARE		14
15	-			-	-	8	3295		3295	7			20	1		SPARE		16
17	-			-	-	8	3295	1		3295			20	1		SPARE		18
19	SPACE							0]				20	1		SPARE		20
21	SPACE								0	7			20	1		SPARE		22
23	SPACE							1		0			20	1		SPARE		24
25	SPACE							0]				20	1		SPARE		26
27	SPACE								0	7			20	1		SPARE		28
29	SPACE							1		0			20	1		SPARE		30
31	SPACE							0]				20	1		SPARE		32
33	SPACE								0	7			20	1		SPARE		34
35	SPACE									0						SPACE		36
37	SPACE							0]							SPACE		38
39	SPACE			T					0	7						SPACE		40
41	SPACE									0						SPACE		42
							VA	8090	7910	7910	24	KVA	1 = S	EE DR	AWINGS	FOR CONDUIT & C	CONDUCTOR SIZE	
							DIV	8090	7910	7910	AV. AMP	S	2 = S	HUNT	TRIP BRE	AKER 5=	GFCI BREAKER	
			AMPS	67	66	66	66	A	3 = S	UBFEI	ED BREAK	KER 6=	GFEP BREAKER					
													4 = P	ROVIE	E LOCK (OFF DEVICE		
													THIS PA	NEL. 4	LL OF ITS	LUGS. BREAKERS	ETC. SHALL BE RATED F	OR 75° (

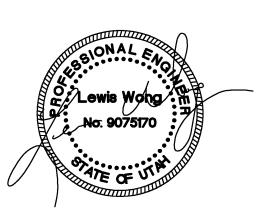






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CURRENT/ISSUE DATE:	JAN 2018

SHEET CONTENTS

ELECTRICAL SCHEDULES

- 1. EXISTING MECHANICAL EQUIPMENT TO BE REMOVED. BACK TO NEAREST REMAINING DEVICE/EQUIPMENT. MAINTAIN CIRCUIT INTEGRITY. IF NO DÉVICES OR NEW UPDATED TYPED PANEL SCHEDULE INDEX. IF STRUCTURAL SURFACE.
 - CONDUCTORS TO NEW PANEL.
- EXISTING DISCONNECT FEEDING THE EXISTING AIR HANDLER TO BE REMOVED AND REPLACED WITH NEW 200 AMP PANELBOARD 'CHB'. REMOVE DOWNSTREAM GUTTER AND EXTEND EXISTING CONDUIT AND CONDUCTORS TO NEW PANEL. LAND EACH CIRCUIT ON A DEDICATED BREAKER. TRACE CIRCUIT AND PROVIDE BREAKER SIZE AS REQUIRED FOR EACH CIRCUIT.
- 5. PROVIDE NEW LED A21, 1700 LUMEN, 4000K LAMPS, EQUAL TO GREEN CREATIVE 17A21G4DIM/840/R, FOR THE EXISTING CERAMIC BASE LIGHT SOCKETS IN THE SPACE. TROUBLESHOOT AND REPAIR LIGHTS AS NEEDED.

KEYED NOTES

- REMOVE CONDUIT, WIRE, AND ASSOCIATED DISCONNECTS EQUIPMENT REMAIN, REMOVE CONDUIT AND WIRE BACK TO SOURCE AND MARK BREAKER AS SPARE. PROVIDE CONDUIT IS INACCESSIBLE, CUT CONDUIT FLUSH WITH
- 2. REFEED EXISTING CIRCUITS FED FROM DISCONNECT TO NEW PANEL 'CHB'. REMOVE EXISTING DISCONNECT AND GUTTER RACEWAY AND EXTEND CONDUIT AND
- 4. RELOCATE EXISTING A/V CABINET TO NEW LOCATION SHOWN. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED. A/V CABLES SHALL BE CONTINUOUS. RERUN A/V CONDUCTORS AS NEEDED.
- FIELD VERIFY FOR QUANTITY.

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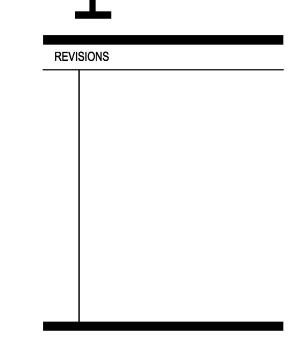
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- A. EC SHALL COORDINATE WITH ALL OTHER TRADES DURING DEMOLITION AND CONSTRUCTION TO FACILITATE TIMELY
- B. ALL AREAS ARE TO BE KEPT CLEAN AND CLEAR OF
- D. ROUTE ALL CONDUIT IN A NEAT AND ORDERLY FASHION.
- E. DEVICES SHOWN ON DEMOLITION SHEETS ARE GATHERED FROM AS-BUILT DRAWINGS AND FIELD INVESTIGATION.
- CONTRACTOR TO COORDINATE WITH OWNER FOR ITEMS TO BE SALVAGED PRIOR TO DEMOLITION. CONTRACTOR RESPONSIBLE FOR DISPOSING OF ANY MATERIAL THAT THE OWNER DOES NOT WANT TO KEEP.
- G. CAP AND LABEL ALL EMPTY CONDUIT TO REMAIN.
- ALL NEW BREAKERS SHALL MATCH EXISTING AIC RATINGS OF ITS CORRESPONDING PANEL WHERE IT IS INSTALLED.

GENERAL NOTES

- DEBRIS AT ALL TIMES.
- C. CONTRACTOR SHALL PATCH AND REPAIR ALL WALLS, CEILINGS ETC. TO MATCH EXISTING CONDITIONS. PENETRATIONS SHALL BE SEALED WITH FIRE RATED
- ALL CONDUIT SHALL BE CONCEALED ABOVE CEILINGS OR IN WALLS OR FINISHED SPACES UNLESS OTHERWISE INDICATED ON THE PLANS.
- NOT ALL DEVICES ARE SHOWN. DEVICE PLACEMENT IS SCHEMATIC AND NOT EXACT. CONTRACTOR TO FIELD VERIFY FOR EXACT LOCATIONS AND COORDINATE WORK WITH ALL OTHER DEVICES, EQUIPMENT, CONDUIT, ETC. WHETHER OR NOT SHOWN TO COMPLETE PROJECT.

- H. PROVIDE UPDATED TYPED PANEL SCHEDULES FOR PANELS AFFECTED BY THE SCOPE OF THIS WORK.

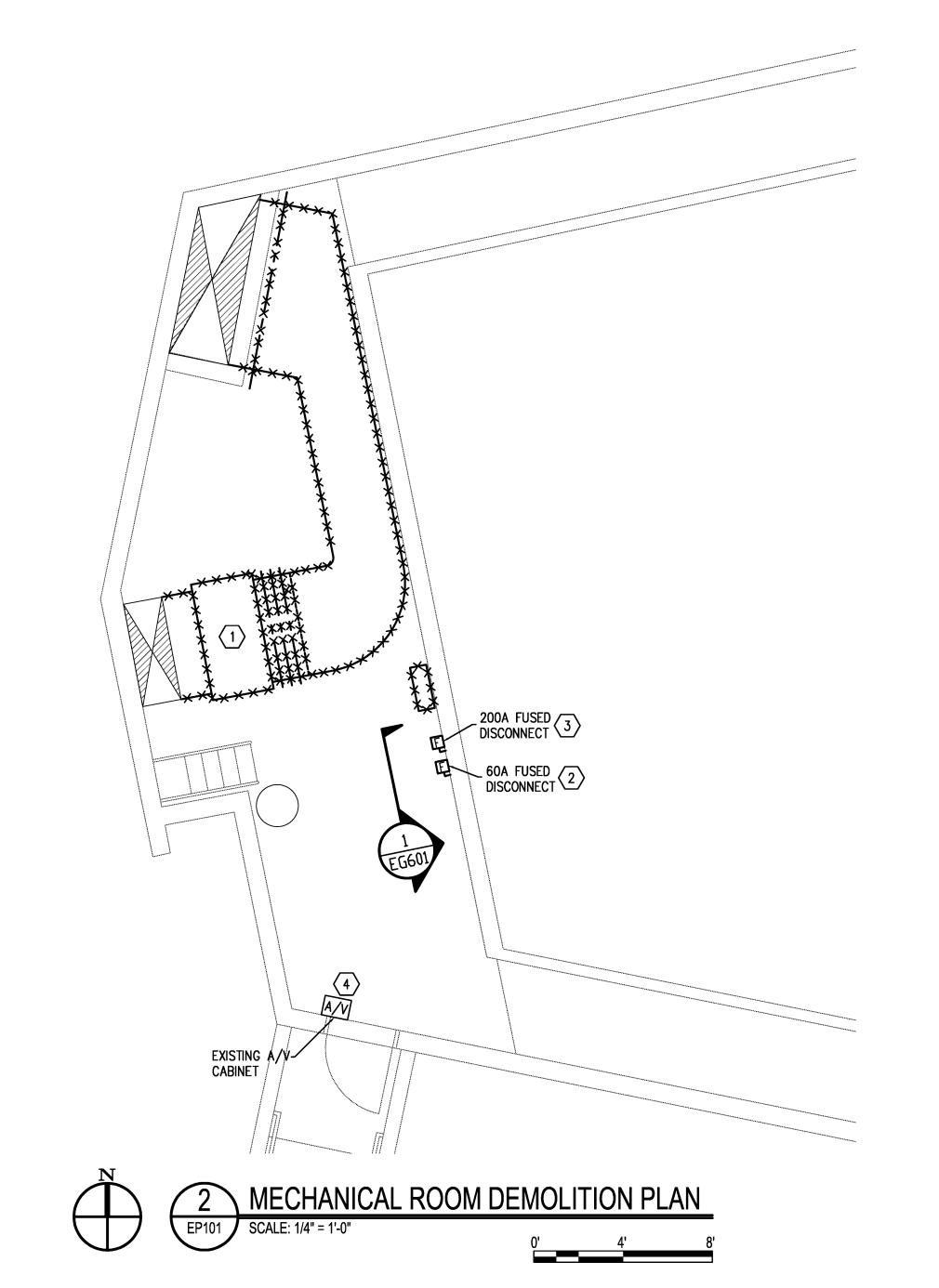


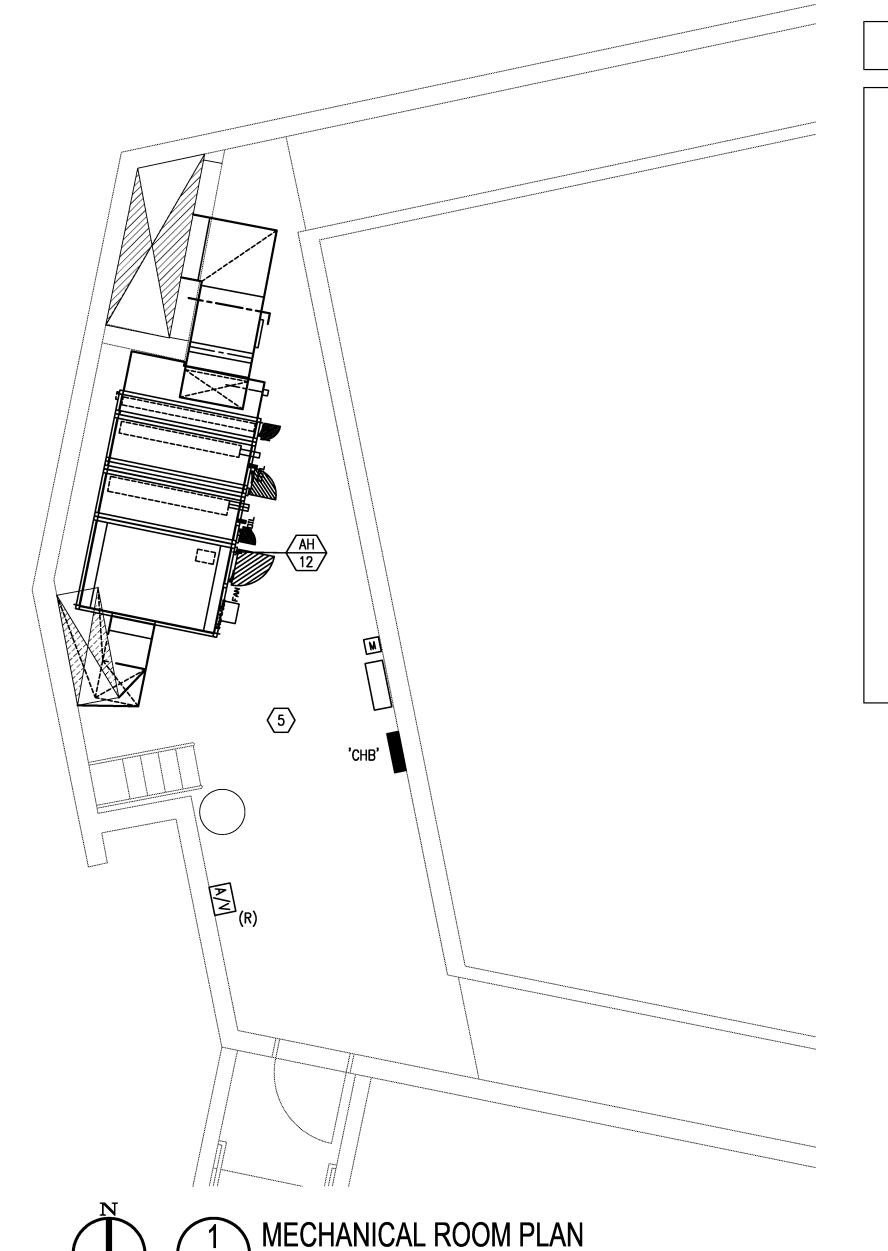
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DRAWN BY:	EW
CURRENT/ISSUE DATE:	JAN 2018

DEMOLITION AND POWER PLAN

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EP101





ELECTRICAL PLAN

A

KEYED NOTES

- 1. PROVIDE 120V POWER IN CRAWL SPACE TO POWER ELECTRIC THERMOSTAT.
- 2. LOCATE FUSED DISCONNECTS TO MEET NEC CLEARANCE

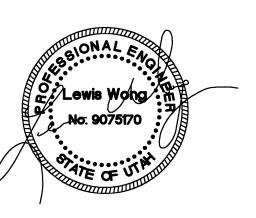
GENERAL NOTES

- A. EC SHALL COORDINATE WITH ALL OTHER TRADES DURING DEMOLITION AND CONSTRUCTION TO FACILITATE TIMELY
- B. ALL AREAS ARE TO BE KEPT CLEAN AND CLEAR OF DEBRIS AT ALL TIMES.
- C. CONTRACTOR SHALL PATCH AND REPAIR ALL WALLS, CEILINGS ETC. TO MATCH EXISTING CONDITIONS. PENETRATIONS SHALL BE SEALED WITH FIRE RATED
- D. ROUTE ALL CONDUIT IN A NEAT AND ORDERLY FASHION. ALL CONDUIT SHALL BE CONCEALED ABOVE CEILINGS OR IN WALLS OR FINISHED SPACES UNLESS OTHERWISE INDICATED ON THE PLANS.
- DEVICES SHOWN ON DEMOLITION SHEETS ARE GATHERED FROM AS-BUILT DRAWINGS AND FIELD INVESTIGATION. NOT ALL DEVICES ARE SHOWN. DEVICE PLACEMENT IS SCHEMATIC AND NOT EXACT. CONTRACTOR TO FIELD VERIFY FOR EXACT LOCATIONS AND COORDINATE WORK WITH ALL OTHER DEVICES, EQUIPMENT, CONDUIT, ETC. WHETHER OR NOT SHOWN TO COMPLETE PROJECT.
- CONTRACTOR TO COORDINATE WITH OWNER FOR ITEMS TO BE SALVAGED PRIOR TO DEMOLITION. CONTRACTOR RESPONSIBLE FOR DISPOSING OF ANY MATERIAL THAT THE OWNER DOES NOT WANT TO KEEP.

- RATINGS OF ITS CORRESPONDING PANEL WHERE IT IS INSTALLED.

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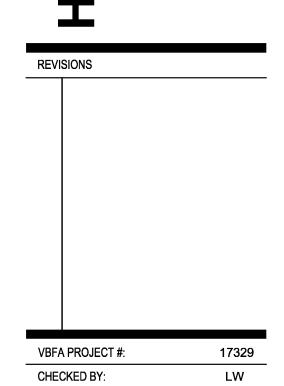
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G. CAP AND LABEL ALL EMPTY CONDUIT TO REMAIN.

H. PROVIDE UPDATED TYPED PANEL SCHEDULES FOR PANELS AFFECTED BY THE SCOPE OF THIS WORK.

I. ALL NEW BREAKERS SHALL MATCH EXISTING AIC

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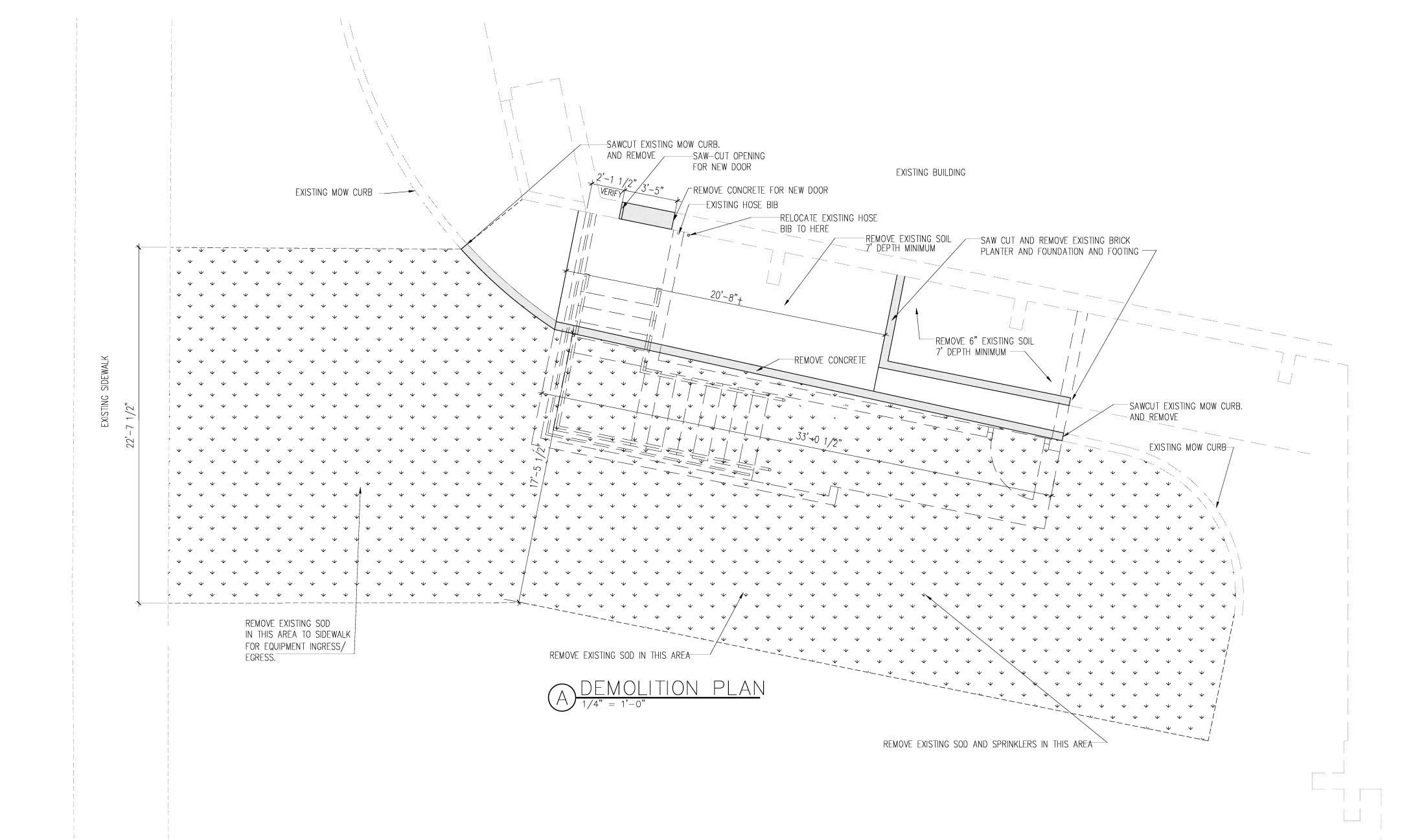
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> DEMOLITION PLAN



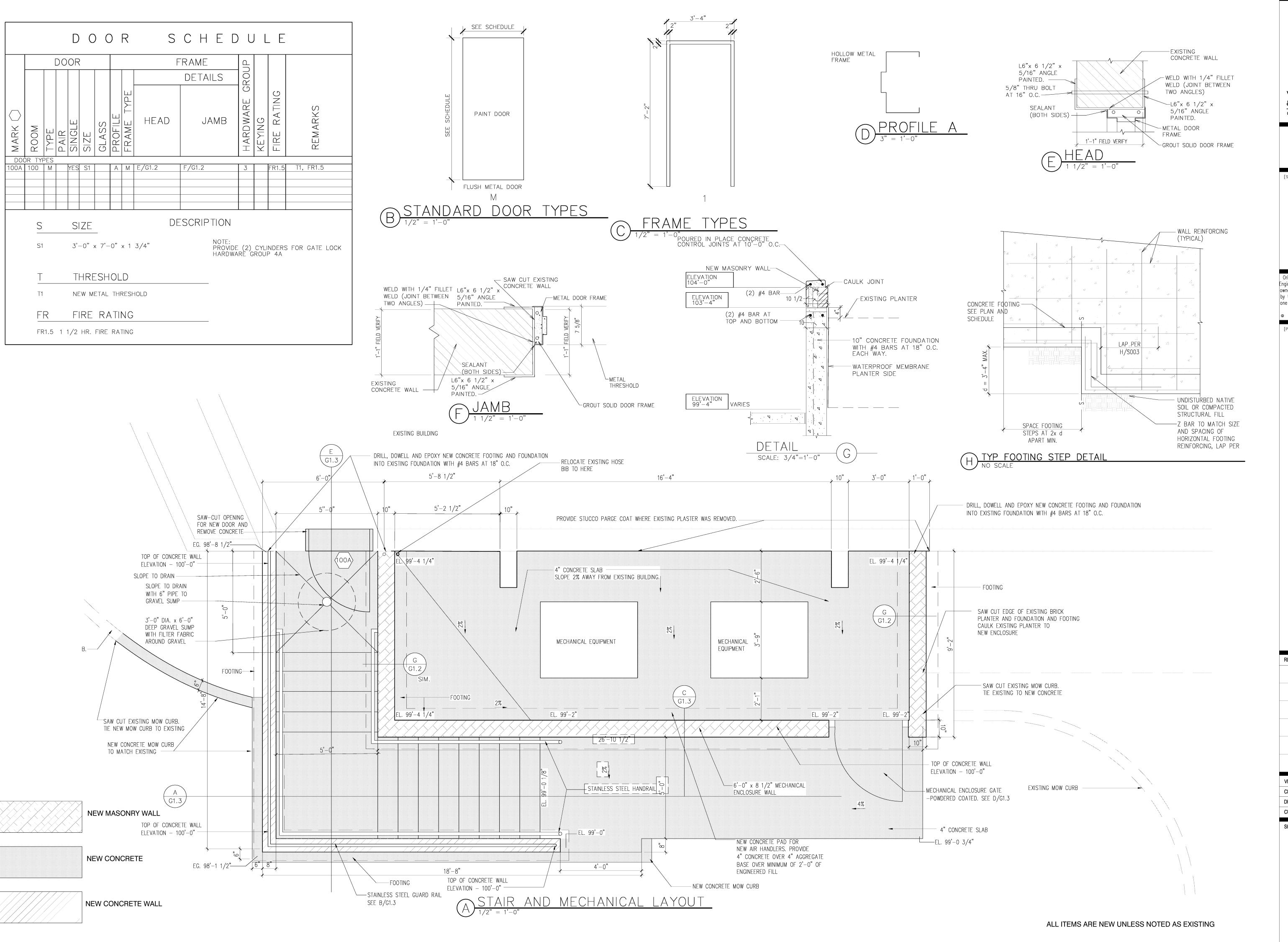
NOTE:
LOCATE EXISTING IRRIGATION MAIN LINE AND LATERALS

PRIOR TO DEMOLITION.

AREA OF NEW IMPROVEMENTS

CONCRETE TO BE REMOVED

REMOVE EXISTING SOD





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[PROJECT TITLE]

obble Creek 1, 2, 3 & ral Center HVAC Upgra

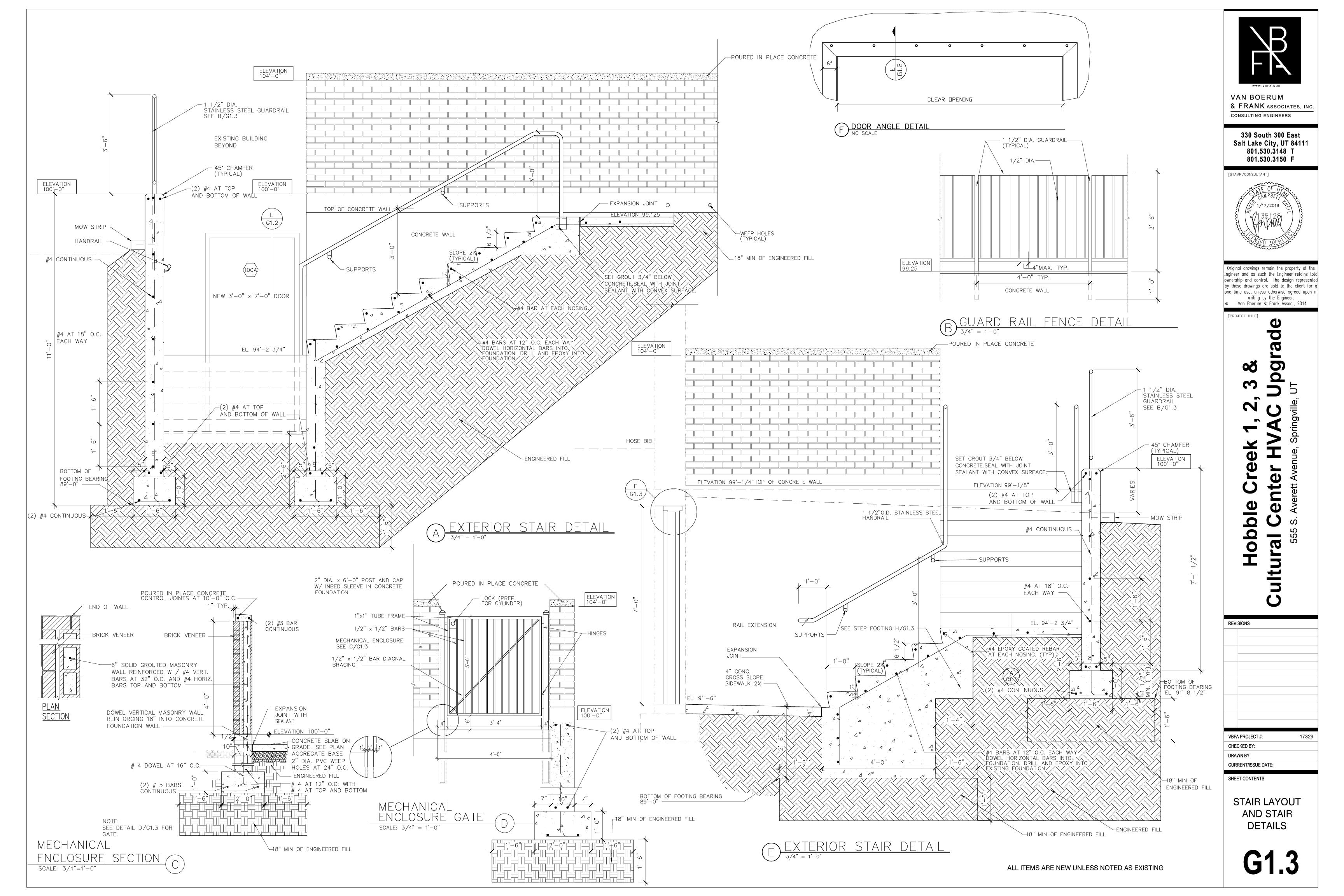
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STAIR LAYOUT AND DETAILS

G1.2



NEW MASONRY WALL NEW CONCRETE NEW CONCRETE WALL NEW SOD, SPRINKLER HEADS AND LATERALS

NOTE:

- 1. PROVIDE NEW 1" DIA. LATERAL LINE TO FEED NEW HEADS.
- 2. LANDSCAPE CONTRACTOR TO PROVIDE NEW IRRIGATION PIPE AND HEADS.
 DESIGN LAYOUT ACCOMMODATE NEW CONSTRUCTION LAYOUT. MODIFY
 EXISTING SPRINKLER SYSTEM TO ACCOMPLISH THIS
- 3. CONTRACTOR TO MAINTAIN WATER/LANDSCAPE DURING CONSTRUCTION
- 4. LANDSCAPE CONTRACTOR TO PROVIDE 4" WOOD BARK MULCH AREAS AS

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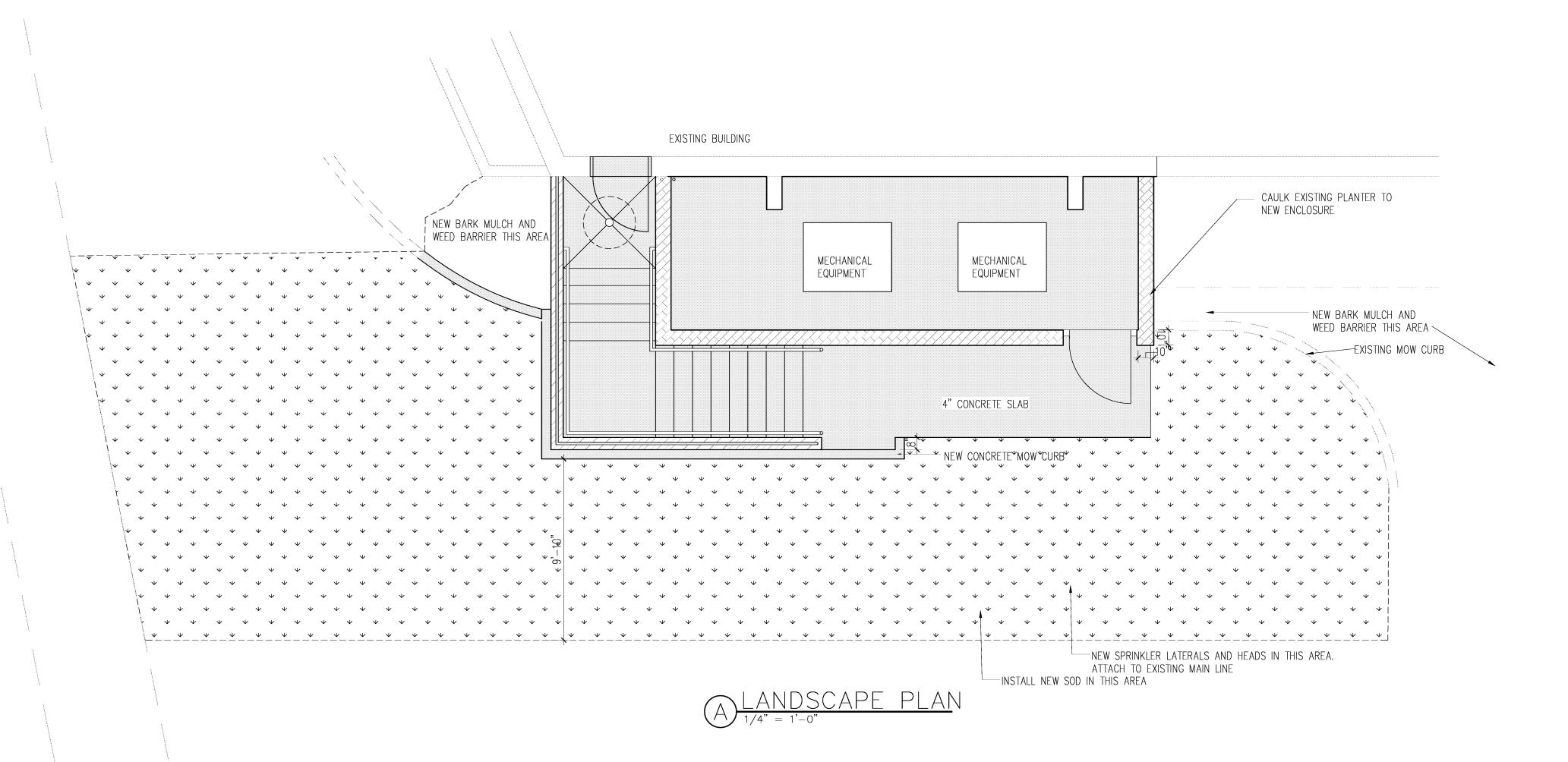
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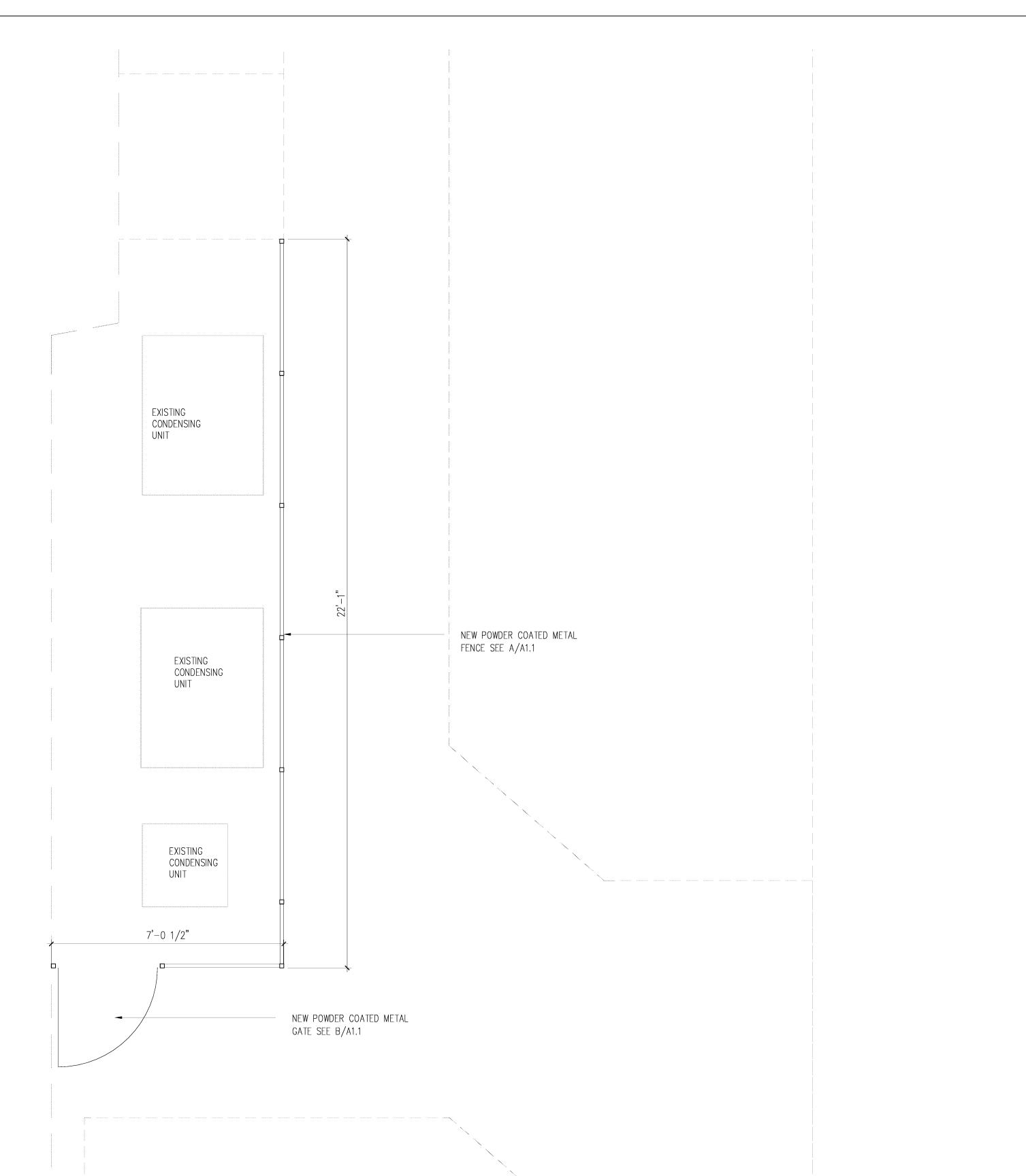
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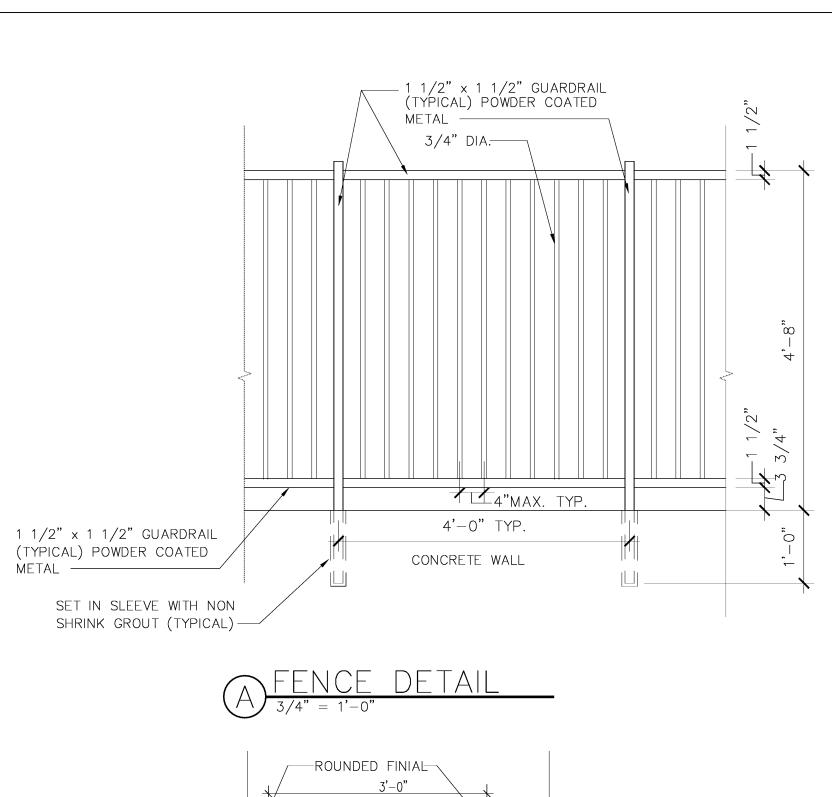
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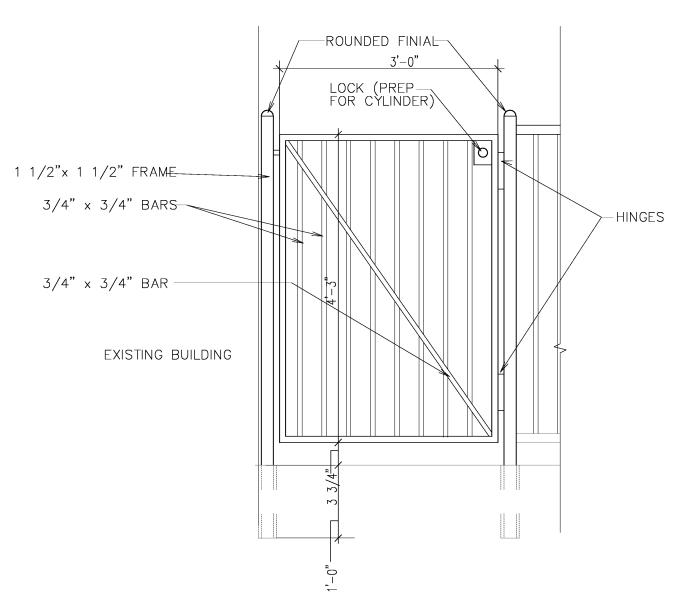
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LANDSCAPE PLAN









NOTE: LOCATE EXISTING IRRIGATION MAIN LINE AND LATERALS PRIOR TO DEMOLITION.

A1.1

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FENCE PLAN