PANEL "CU1"

☐ MAIN BRKR. ____ AMPS ☑ FEED BOTTOM ☑ SURFACE
CLASS 120/208V 3Ø 4W ☑ MAIN LUGS ONLY 125 ☐ FEED TOP ☐ FLUSH
LOCATION - ☐ MAIN SW. ____ AMPS DIMENSIONS 20"x39"x5 3/4"
MAKE/MODEL SQ D NQOD (NEMA 3R)

LOAD NAME	CIR NO.	LOAD WATTS	BRK AMP	Ø	LOAD/POLE A	B	C	Ø	BRK AMP	LOAD WATTS	CIR NO.	LOAD NAME
RECEPTACLES	1	200	20	1	1700			2	20	1500	2	CU/17
SPARE	3					1500		-	-	1500	4	-
SPARE	5						1500	2	20	1500	6	CU/18
PREPARED SPACE	7				3000			-	-	1500	8	-
	9					4500		2	40	3000	10	CU/19
	11						4500	-	-	3000	12	-
	13				4500			2	40	3000	14	CU/20
CU/16	15	1500	20	2		4500		-	-	3000	16	-
-	17	1500	-	-			1500				18	PREPARED SPACE
PREPARED SPACE	19										20	
	21										22	
	23										24	
	25										26	
	27										28	
	29										30	
	31										32	
	33										34	
	35										36	
	37										38	
	39										40	
	41										42	

TOTAL LOAD/PHASE WATTS 6200 9000 6000
AMPS 52 75 50
S.C. INT CAP/BKR. 10K AMPS.
FEEDER CONDUCTOR SIZE: 4-#1+ GROUND CONDUIT SIZE 1 1/2"
REMARKS: CONNECT TO 125A 3P BREAKER IN EXISTING PANEL-"H".

PANEL "CU2"

☐ MAIN BRKR. ____ AMPS ☑ FEED BOTTOM ☑ SURFACE
CLASS 120/208V 3Ø 4W ☑ MAIN LUGS ONLY 125 ☐ FEED TOP ☐ FLUSH
LOCATION - ☐ MAIN SW. ____ AMPS DIMENSIONS 20"x39"x5 3/4"
MAKE/MODEL SQ D NQOD (NEMA 3R)

LOAD NAME	CIR NO.	LOAD WATTS	BRK AMP	Ø	LOAD/POLE A	B	C	Ø	BRK AMP	LOAD WATTS	CIR NO.	LOAD NAME
RECEPTACLES	1	200	20	1	1700			2	20	1500	2	CU/15
SPARE	3					1500		-	-	1500	4	-
SPARE	5										6	PREPARED SPACE
CU/13	7	1500	20	2	1500						8	
-	9	1500	-	-		1500					10	
CU/14	11	1500	20	2			1500				12	
-	13	1500	-	-	1500						14	
PREPARED SPACE	15										16	
	17										18	
	19										20	
	21										22	
	23										24	
	25										26	
	27										28	
	29										30	
	31										32	
	33										34	
	35										36	
	37										38	
	39										40	
	41										42	

TOTAL LOAD/PHASE WATTS 4700 3000 1500
AMPS 40 25 12
S.C. INT CAP/BKR. 10K AMPS.
FEEDER CONDUCTOR SIZE: 4-#4 + GROUND CONDUIT SIZE 1 1/4"
REMARKS: CONNECT TO SPARE 60A 3P BREAKER IN EXISTING PANEL-"H4".

PANEL "CU3"

☐ MAIN BRKR. ____ AMPS ☑ FEED BOTTOM ☑ SURFACE
CLASS 120/208V 3Ø 4W ☑ MAIN LUGS ONLY 125 ☐ FEED TOP ☐ FLUSH
LOCATION - ☐ MAIN SW. ____ AMPS DIMENSIONS 20"x39"x5 3/4"
MAKE/MODEL SQ D NQOD (NEMA 3R)

LOAD NAME	CIR NO.	LOAD WATTS	BRK AMP	Ø	LOAD/POLE A	B	C	Ø	BRK AMP	LOAD WATTS	CIR NO.	LOAD NAME
RECEPTACLES	1	200	20	1	1700			2	20	1500	2	CU/4
SPARE	3					1500		-	-	1500	4	-
SPARE	5						1500	2	20	1500	6	CU/5
CU/1	7	1500	20	2	3000			-	-	1500	8	-
-	9	1500	-	-		3000		2	20	1500	10	CU/6
CU/2	11	1500	20	2			3000	-	-	1500	12	-
-	13	1500	-	-	1500						14	PREPARED SPACE
CU/3	15	1500	20	2		1500					16	
-	17	1500	-	-			1500				18	
PREPARED SPACE	19										20	
	21										22	
	23										24	
	25										26	
	27										28	
	29										30	
	31										32	
	33										34	
	35										36	
	37										38	
	39										40	
	41										42	

TOTAL LOAD/PHASE WATTS 6200 6000 6000
AMPS 52 50 50
S.C. INT CAP/BKR. 10K AMPS.
FEEDER CONDUCTOR SIZE: 4-#4 + GROUND CONDUIT SIZE 1 1/4"
REMARKS: CONNECT TO SPARE 70A 3P BREAKER IN EXISTING PANEL-"H4".

PANEL "CU4"

☐ MAIN BRKR. ____ AMPS ☑ FEED BOTTOM ☑ SURFACE
CLASS 120/208V 3Ø 4W ☑ MAIN LUGS ONLY 125 ☐ FEED TOP ☐ FLUSH
LOCATION - ☐ MAIN SW. ____ AMPS DIMENSIONS 20"x39"x5 3/4"
MAKE/MODEL SQ D NQOD (NEMA 3R)

LOAD NAME	CIR NO.	LOAD WATTS	BRK AMP	Ø	LOAD/POLE A	B	C	Ø	BRK AMP	LOAD WATTS	CIR NO.	LOAD NAME
RECEPTACLES	1	200	20	1	1700			2	20	1500	2	CU/11
SPARE	3					1500		-	-	1500	4	-
SPARE	5						1500	2	20	1500	6	CU/12
CU/7	7	1500	20	2	3000			-	-	1500	8	-
-	9	1500	-	-		1500					10	PREPARED SPACE
CU/8	11	1500	20	2			1500				12	
-	13	1500	-	-	1500						14	
CU/9	15	1500	20	2		1500					16	
-	17	1500	-	-			1500				18	
CU/10	19	1500	20	2	1500						20	
-	21	1500	-	-		1500					22	
PREPARED SPACE	23										24	
	25										26	
	27										28	
	29										30	
	31										32	
	33										34	
	35										36	
	37										38	
	39										40	
	41										42	

TOTAL LOAD/PHASE WATTS 7700 6000 4500
AMPS 64 50 38
S.C. INT CAP/BKR. 10K AMPS.
FEEDER CONDUCTOR SIZE: 4-#4 + GROUND CONDUIT SIZE 1 1/4"
REMARKS: CONNECT TO SPARE 80A 3P BREAKER IN EXISTING PANEL-"H1".

GENERAL NOTES: (ALL SHEETS)

A. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL LAMP TYPES WITH FIXTURE TYPE BEFORE ORDERING.

B. ELECTRICAL CONTRACTOR SHALL REFER TO THE MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT AND ELECTRICAL CONNECTIONS.

C. ELECTRICAL CONTRACTOR SHALL PROVIDE MINIMUM WORKING CLEARANCE AS PER NEC BEFORE INSTALLING ANY ELECTRICAL PANELS FOR CABINETS.

D. INSTALL ALL LIGHT FIXTURES IN MECHANICAL ROOM AFTER THE MECHANICAL EQUIPMENT IS IN PLACE. ADJUST AS NECESSARY. PROVIDE CHAIN SUSPENSION KITS AS REQUIRED.

E. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS, CEILING TYPES, ETC.

F. ALL FLUORESCENT FIXTURES SHALL BE SUPPLIED WITH T8 (35K) LAMPS AND ELECTRONIC BALLASTS WITH -20% THD. UNLESS INDICATED OTHERWISE.

G. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONCRETE PADS AS REQUIRED ON ALL ELECTRICAL EQUIPMENT.

H. CONFIRM EXACT LOCATIONS OF ALL TELEPHONE / DATA OUTLETS WITH OWNER PRIOR TO ROUGH - IN.

I. ELECTRICAL CONTRACTOR SHALL MOUNT SWITCHES AT 48" AND MOUNT CONVENIENCE OUTLETS AT 18" OR AS SHOWN ON PLANS TO MEET HANDICAPPED REQUIREMENTS.

J. LOCATE SWITCHES, OUTLETS, ETC., SHOWN AT ROOM ENTRY DOORWAYS, AS CLOSE TO DOOR FRAME AS POSSIBLE, SO AS NOT TO INTERFERE WITH ROOM CABINETS, ETC.

K. SUPPORT ALL LIGHT FIXTURES INDEPENDENT OF CEILING.

L. ELECTRICAL CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS FOR THIS WORK AND PAY ASSOCIATED FEES.

M. MAINTAIN 24" MIN. CLEARANCE FROM ALL COMMUNICATIONS CABLES AND ELECTRONIC BALLASTS.

N. ALL BATTERY EXIT AND EMERGENCY LIGHTING TO BE CONNECTED TO THE UNSWITCHED LEG OF THE LIGHTING CIRCUIT IN THE AREA AS PER CODE.

O. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE ELECTRICAL CONTRACTOR TO COORDINATE WITH ANY SPECIAL SYSTEMS SUPPLIER /CONTR., EX. DENTAL, MEDICAL, KITCHEN EQUIPMENT ETC. THE EXACT ROUGH-IN REQUIREMENTS FOR THERE EQUIPMENT. ALSO UNLESS INDICATED OTHERWISE, THE ELECTRICAL CONTR. TO BE RESPONSIBLE FOR FINAL CONNECTIONS TO ALL SPECIAL EQUIPMENT.

P. ALL CONDUIT /RACEWAY /CABLES, TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. IF ANY SURFACE WORK IS NECESSARY, IT SHALL BE APPROVED BY THE ARCHITECT /ENGINEER PRIOR TO DOING ANY WORK.

Q. E.C. SHALL VISIT THE SITE PRIOR TO BID AND THOROUGHLY INVESTIGATE THE EXISTING CONDITIONS, AS THEY RELATE TO THE SCOPE OF WORK DESCRIBED. MAKE NECESSARY PROVISIONS IN THE BASE BID TO ADEQUATELY ACCOMMODATE THESE CONDITIONS.

R. JUNCTION BOXES FOR LIGHTING CIRCUITING ARE NOT SHOWN FOR CLARITY. THE E.C. IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL JUNCTION BOXES REQUIRED FOR CIRCUITING OF ALL LIGHT FIXTURES THAT ARE NOT LISTED FOR "THROUGH-BRANCH CIRCUIT WIRING".

CONDENSING UNIT SCHEDULE

SYM.	CHAR.	MCA	CIRCUIT	FEEDER	REMARKS
CU 1	208/60/1	16.6	CU3-7	1/2"C., 2-#12 + GROUND	PROVIDE AND INSTALL LOCAL DISCONNECT. INSTALL A 1/2" CONDUIT TO FURNACE FOR CONTROL.
CU 2	208/60/1	16.6	CU3-11	1/2"C., 2-#12 + GROUND	
CU 3	208/60/1	16.6	CU3-15	1/2"C., 2-#12 + GROUND	
CU 4	208/60/1	16.6	CU3-2	1/2"C., 2-#12 + GROUND	
CU 5	208/60/1	16.6	CU3-6	1/2"C., 2-#12 + GROUND	
CU 6	208/60/1	16.6	CU3-10	1/2"C., 2-#12 + GROUND	
CU 7	208/60/1	16.6	CU4-7	1/2"C., 2-#12 + GROUND	
CU 8	208/60/1	28.8	CU4-11	1/2"C., 2-#12 + GROUND	
CU 9	208/60/1	16.6	CU4-15	1/2"C., 2-#12 + GROUND	
CU 10	208/60/1	16.6	CU4-19	1/2"C., 2-#12 + GROUND	
CU 11	208/60/1	16.6	CU4-2	1/2"C., 2-#12 + GROUND	
CU 12	208/60/1	16.6	CU4-6	1/2"C., 2-#12 + GROUND	
CU 13	208/60/1	16.6	CU2-7	1/2"C., 2-#12 + GROUND	
CU 14	208/60/1	16.6	CU2-11	1/2"C., 2-#12 + GROUND	
CU 15	208/60/1	16.6	CU2-2	1/2"C., 2-#12 + GROUND	
CU 16	208/60/1	16.6	CU1-15	1/2"C., 2-#12 + GROUND	
CU 17	208/60/1	16.6	CU1-2	1/2"C., 2-#12 + GROUND	
CU 18	208/60/1	16.6	CU1-6	1/2"C., 2-#12 + GROUND	
CU 19	208/60/1	28.8	CU1-10	3/4"C., 2-#8 + GROUND	
CU 20	208/60/1	28.8	CU1-14	3/4"C., 2-#8 + GROUND	

FURNACE SCHEDULE (GAS)

SYM.	H.P.	CHAR.	CIRCUIT	FEEDER	REMARKS
F 1	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	PROVIDE AND INSTALL LOCAL 20A SINGLE POLE TOGGLE SWITCH FOR DISCONNECT. CONNECT TO 20A 1P BREAKER.
F 7	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	
F 3	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	
F 4	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	
F 5	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	
F 6	1/3*	120/60/1	PANEL-"H4"	1/2"C., 2-#12 + GROUND	
F 7	1/3*	120/60/1	PANEL-"H1"	1/2"C., 2-#12 + GROUND	
F 8	1/3*	120/60/1	PANEL-"H1"	1/2"C., 2-#12 + GROUND	
F 9	1/3*	120/60/1	PANEL-"H1"	1/2"C., 2-#12 + GROUND	
F 10	1/3*	120/60/1	PANEL-"H1"	1/2"C., 2-#12 + GROUND	
F 11	1/3*	120/60/1	PANEL-"H2"	1/2"C., 2-#12 + GROUND	
F 12	1/3*	120/60/1	PANEL-"H2"	1/2"C., 2-#12 + GROUND	
F 13	1/3*	120/60/1	PANEL-"H1"	1/2"C., 2-#12 + GROUND	
F 14	1/3*	120/60/1	PANEL-"B"	1/2"C., 2-#12 + GROUND	
F 15	1/3*	120/60/1	PANEL-"B"	1/2"C., 2-#12 + GROUND	
F 16	1/3*	120/60/1	PANEL-"H"	1/2"C., 2-#12 + GROUND	
F 17	1/3*	120/60/1	PANEL-"H"	1/2"C., 2-#12 + GROUND	
F 18	1/3*	120/60/1	PANEL-"H"	1/2"C., 2-#12 + GROUND	
F 19	1/3*	120/60/1	PANEL-"H3"	1/2"C., 2-#12 + GROUND	
F 20	1/3*	120/60/1	PANEL-"H3"	1/2"C., 2-#12 + GROUND	
F 21	1/3*	120/60/1	PANEL-"H2"	1/2"C., 2-#12 + GROUND	

DUCT FURNACE SCHEDULE (GAS)

SYM.	CHAR.	MCA	CIRCUIT	FEEDER	REMARKS
DF 1	120/60/1	-	PANEL-"H2"	1/2"C., 2-#12 + GROUND	PROVIDE AND INSTALL LOCAL 20A SINGLE POLE TOGGLE SWITCH FOR DISCONNECT. CONNECT TO 20A 1P BREAKER.
DF 2	120/60/1	-	PANEL-"H2"	1/2"C., 2-#12 + GROUND	

ORIGINAL SIGNED BY:
TODD E. PAYNE
DATED ORIGINAL SIGNED:
5-10-2019
ON FILE AT:
PAYNE ENGINEERING INC.

P.E. JOB #1934

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PROJECT:
2019 HVAC RETROFIT FOR:
KERSHAW MIDDLE SCHOOL
SUGAR-SALEM SCHOOL DITRICT #322
SUGAR CITY, IDAHO

SHEET TITLE:
NOTES AND SCHEDULES

PROFESSIONAL ENGINEER REGISTERED 8270 STATE OF IDAHO TODD PAYNE

DRWN. BY:	CKD. BY:
MMP	TEP
JOB NO.	DATE:
17081	MAY 2019

SHEET: E-1.0
OF: NINE