

OWNER PROVIDED EQUIPMENT SCHEDULE											
KEY	DESCRIPTION	VOLTS	PH	LOAD HP,KW,FLA	CONNECTION			MOCP	FEEDER	CIRCUIT	NOTES
					RECEPT.	DISC.	OTHER				
E5	DENTAL CHAIR	120	1	7 A FLA	NEMA 5-20R			20 A	2#12, 1#12G, 3/4" C	SEE PLANS	1,2
E6	DENTAL LIGHTS	120	1	150 W			J-BOX	20 A	2#12, 1#12G, 3/4" C	L3-45	1,2
E7	ICAT X RAY	120	1	10 A MCA	NEMA 5-20R			20A	2#12, 1#12G, 3/4" C	L3-58	1,2
E8	STERILIZER SINGLE CASSETTE	120	1	1000W	NEMA 5-20R			20 A	2#12, 1#12G, 3/4" C	L3-20	1,2
E9	STERILIZER AUTOCLAVE	120	1	1000W	NEMA 5-20R			20A	2#12, 1#12G, 3/4" C	L3-18	1,2
E10	ULTRASONIC CLEANER	120	1	1000W	NEMA 5-20R			20A	2#12, 1#12G, 3/4" C	L3-16	1,2
E11	3D PRINTER	120	1	500W	NEMA 5-20R			20A	2#12, 1#12G, 3/4" C	L3-24 L3-26	1,2
E13	AIR COMPRESSOR	208-230	1	7 A FLA			J-BOX	20 A	3#12, 1#12G, 3/4" C	L3-28,30	1,2
E14	VACUUM PUMP	208-230	1	30 A MCA		30 A/2P		30 A	3#10, 1#10G, 3/4" C	L3-32,34	1,2
E16	PANORAMIC X RAY	230	2	20 A MCA			J-BOX	25 A	3#10, 1#10G, 3/4" C	L3-36,38	1,2
	PANORAMIC X RAY	120	1	10 A MCA	NRMA 5-20R			20 A	2#12, 1#12G, 3/4" C	L3-56	1,2
GENERAL NOTES: A. PROVIDE ALL REQUIRED J-BOXES, OUTLETS, AND DISCONNECTS REQUIRED FOR A COMPLETE INSTALLATION. B. DEVICE FACEPLATES ARE TO BE STAINLESS STEEL. C. ALL EQUIPMENT SPECIFICATIONS IN THIS SCHEDULE ARE <u>BASIS OF DESIGN ONLY</u> . EC TO CONFIRM ALL EQUIPMENT SPECIFICATIONS, ELECTRICAL LOADS, AND ELECTRICAL CONNECTIONS WITH ARCHITECT, GENERAL CONTRACTOR, AND OWNER PRIOR TO ROUGH-IN.											
SPECIFIC NOTES: 1. EC TO CONFIRM EXACT EQUIPMENT SPECIFICATIONS WITH OWNER AND SURGEON PRIOR TO ROUGH-IN. 2. MODEL NAMES AND NUMBERS FOUND IN THIS SCHEDULE ARE BASIS OF DESIGN ONLY. EC TO CONFIRM EXACT EQUIPMENT SPECIFICATIONS WITH OWNER, ARCHITECT, AND SURGEON PRIOR TO BID, ROUGH-IN, AND INSTALL.											

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MFR	MODEL	DIMMING	VOLTS	CCT	LUMENS	WATTS	MOUNTING	NOTES
D1	4IN CAN LIGHT	ALPHABET	NJ4-RDDR-SW-15LM-35K-80-50D-DL-WH-WH-NC-UNV-DIM10	0-10V	MVOLT	3500K	1505	12W	CEILING	1,2,3,4,5
D1E	4IN CAN LIGHT EM	ALPHABET	NJ4-RDDR-SW-15LM-35K-80-50D-DL-WH-WH-NC-UNV-DIM10-EM12	0-10V	MVOLT	3500K	1505	12W	CEILING	1,2,3,4,5
D2	4IN TRIMLESS CAN LIGHT	ALPHABET	NJ4-RDTR-SW-15LM-35K-80-50D-DL-NC-UNV-DIM10	0-10V	MVOLT	3500K	1505	12W	CEILING	1,2,3,4,5
D3	SQUARE TRIMLESS CAN LIGHT. HOUSING WITH LIGHT/BAFFLE	LUMENWERX	AE4SR-TLMP-SW-IC-NA-UNV-14W-D1-NA AE4SRB-SW-14W-50DEG-2STP-80CRI-35K-NA-TLMP-SDL-FCHP-NA-NA	0-10V	MVOLT	3500K	1481	14W	CEILING	1,2,3,4,5
H1	LED 2X2 TROFFER	COOPER	22EN-LD2-25-UNV-L935-CD1	0-10V	MVOLT	3500K	2500	20W	CEILING	1,2,3,4,5
L1	2IN LINEAR FIXTURE 6FT LONG	COOPER	S122-DR-S-290D-8-35-FTT-6FO-1-U-DD-F-W	0-10V	MVOLT	3500K	1740	18W	RECESSED	1,2,3,4,5
L2	2IN LINEAR FIXTURE 7FT LONG	COOPER	S122-DR-S-290D-8-35-FTT-7FO-1-U-DD-F-W	0-10V	MVOLT	3500K	2030	21W	RECESSED	1,2,3,4,5
L3	2IN LINEAR FIXTURE CUSTOM LENGTH	COOPER	S122-DR-S-290D-8-35-FTT-15FT6IN-1-U-DD-F-W-FC	0-10V	MVOLT	3500K	4640	47W	RECESSED	1,2,3,4,5,7
L4	2IN LINEAR FIXTURE CUSTOM LENGTH	COOPER	S122-DR-S-290D-8-35-FTT-17FT10IN-1-U-DD-F-W-FC	0-10V	MVOLT	3500K	4640	54W	RECESSED	1,2,3,4,5,7
P1	LED PENDANT W/ 5 E26 BULBS	ALORA MOOD	PD550545WHAG	-	120V	3500K	4000	40W	PENDANT	1,2,3,4,5
P2	LINEAR PENDANT	KUZCO	LP10356-BG	ELV	120V	3000K	2990	38W	PENDANT	1,2,3,4,5
P3	CHANDELIER PENDANT	KUZCO	CH10356-BG	TRIAC, ELV	MVOLT	3000K	7560	72W	PENDANT	1,2,3,4,5
R1	ROPE LIGHT	LUMINII	KBS-W-VB-XX-44SQ-35K-R80-SF-NA-WH-XXX-XXX PS-UNI-30-24	0-10V	MVOLT	3500K	85LM/FT	1.37W/FT	RECESSED	1,2,3,4,5,6,8
S1	LED SCONCE 19 INCH W/ 2 E12 BULBS	ALORA	ABBOTT - VV327019VBAR	-	120V	3500K	1200	14W	WALL	
S2	LED SCONCE 15 INCH W/ 2 E12 BULBS	ALORA	ABBOTT - VV327015VBAR	-	120V	3500K	1200	14W	WALL	
S3	LED SCONCE 10 INCH W/ 2 E12 BULBS	ALORA	ABBOTT - VV327010VBAR	-	120V	3500K	1200	14W	WALL	
T1	RECESSED STRIP LIGHT WITH CHANNEL	ACOLYTE	CHAR1-F-SV-RB-90-SWS220-1-5-35-1-F1-XFT	0-10V	24V	3500K	164.5LM/FT	1.5W/FT	RECESSED	1,2,3,4,5
T2	SURFACE STRIP LIGHT WITH CHANNEL	ACOLYTE	CHAS2-F-SV-RB-90-SWS220-1-5-35-1-F1-XFT	0-10V	24V	3500K	164.5LM/FT	1.5W/FT	SURFACE	1,2,3,4,5
T3	SURFACE STRIP LIGHT WITH CHANNEL	ACOLYTE	CHAS2-F-SV-RB-90-SWS220-14-4-35-1-F1-XFT	0-10V	24V	3500K	493.7LM/FT	4.4W/FT	SURFACE	1,2,3,4,5
U1	LED 2' UTILITY LIGHT	LITHONIA	WL2-12L-EZ1-LP835-SC	0-10V	MVOLT	3500K	1249	12.2W	SURFACE	1,2,3,4,5
X1	EXT SIGN	LITHONIA	EDG-W-1-G	-	-	-	-	-	SURFACE	

- GENERAL NOTES:
- PROVIDE LED LAMP WITH WATTAGE NO GREATER THAN LISTED WATTAGE IN LAMPING COLUMN.
 - ALL LAMPS SHALL BE LED TO COMPLY WITH CURRENT ENERGY CODE.
 - PROVIDE IC RATED FIXTURE IF REQUIRED AT MOUNTING LOCATION.
 - REFERENCE ARCHITECTUAL PLANS FOR EXACT MOUNTING HEIGHTS FOR ALL PENDANTS, SUSPENDED FIXTURES, POLE LUMINAIRES AND WALL SCONCES.
 - REFER TO ARCHITECT OR OWNER FOR FINISH.
 - EC TO COORDINATE INJECTION MOLD FOR FEED POSITION LEFT AND RIGHT FOR ROPE LIGHT.
 - EC TO FIELD VERIFY EXACT FIXTURE LENGTH.
 - REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS AND DETAILS FOR LOCATIONS AND SHAPE.
 - REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS AND DETAILS FOR QUANTITIES AND LOCATIONS.

FAULT CURRENT AND VOLTAGE DROP CALCULATION TABLE

POINT	LOCATION DESCRIPTION	LENGTH (L) (ft)	LOAD ON FEEDER (Amps)	POWER FACTOR (%)	VOLTAGE (E-1)	PHASE	WIRE SIZE	CONDUCTOR MATERIAL	CONDUCTOR TYPE	CONDUIT MATERIAL	VOLTAGE CLASS	INDUCTIVE VOLT LOSS (I ² R)	C VALUE	# OF PARALLEL RUNS	ISC AVAILABLE UPSTREAM (SEE NOTE 5)	ISC AT EQUIP (I ² R)	% OF VOLTAGE DROP	VOLTAGE AT START (V _L)	VOLTAGE AT END (V _L)	TOTAL % VD	POINT
F0	XFMR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60,000	--	480	--	--	F0
F1	CT & METER	100	1000	90%	480	3	400	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	81	24298	3	80,000	48,259	0.8%	480	477	0.8%	F1
F2	PB H1	100	1000	90%	480	3	400	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	91	20585	3	48,259	36,409	0.6%	477	474	1.2%	F2
F3	PANEL H3	30	200	90%	480	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	162	12843	1	36,409	27,859	0.2%	474	473	1.4%	F3
F4	T3 TRANSFORMER IN	5	90	90%	480	3	1	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	292	7292	1	27,859	26,063	0.0%	473	473	1.4%	F4
F5	T3 TRANSFORMER OUT	5	200	90%	208	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	162	12843	1	5,854	5,745	0.1%	208	208	0.1%	F5
F6	200A DISCONNECT	5	200	90%	208	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	162	12843	1	5,745	5,640	0.1%	208	208	0.2%	F6
F7	PANEL L3	40	200	90%	208	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	162	12843	1	5,840	4,920	0.6%	208	206	0.8%	F7

NOTES:

- ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD.
- REFER TO PLANS FOR ASSUMED UTILITY TRANSFORMER SIZE UTILIZED FOR CALCULATIONS.
- TRANSFORMER IMPEDANCES USED IN THE CALCULATIONS WERE TAKEN FROM EATON'S PUBLISHED IMPEDANCES FOR DOE 2016 DRY-TYPE TRANSFORMERS.
- CONDUCTOR LENGTHS INDICATED IN THIS SCHEDULE ARE FOR THE PURPOSES OF FAULT CURRENT CALCULATIONS ONLY. THESE LENGTHS ASSUME WORST CASE SHORTEST DISTANCE CONDITIONS AND SHOULD NOT BE UTILIZED BY THE ELECTRICAL CONTRACTOR FOR BIDDING PURPOSES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ESTIMATING AND MEASURING ACTUAL FIELD CONDITION LENGTHS AS PART OF THE BID PROCESS.

GENERAL NOTES:

- ALL CONDUCTORS SIZING IS BASED ON COPPER ONLY.
- EC TO COORDINATE WITH LOCAL UTILITY TO VERIFY SIZE AND AVAILABLE FAULT CURRENT FOR THE UTILITY TRANSFORMER PRIOR TO PURCHASE AND INSTALLATION OF ANY AND ALL ELECTRICAL EQUIPMENT. IF ANY VALUES EXCEED THE ONES LISTED ON THE SHORT CIRCUIT TABLE, CONTACT ENGINEER IMMEDIATELY TO REVISE DESIGN AND CALCULATIONS. FOR DESIGN PURPOSES ONLY THIS SYSTEM WAS DESIGNED UNDER THE ASSUMPTION THAT THE EXISTING TRANSFORMER IS:
 - (1)120/208V, 3 PHASE, 4 WIRE, PAD MOUNTED UNIT CREATING A FAULT CURRENT OF 60,000 AIC.
- FOR DESIGN PURPOSES, (3) RUNS OF 4#300 UTILITY FEEDER ASSUMED. EC TO VERIFY AND CONTACT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY EACH HVAC EQUIPMENT LOAD NUMBER AND TYPE OF CONNECTIONS WITH THE ARCH AND OWNER PRIOR TO BID AND PURCHASE. IF THERE ARE ANY DISCREPANCIES, EC TO NOTIFY ENGINEER IMMEDIATELY FOR REVISION AND REISSUE.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY DISTANCES BETWEEN EQUIPMENT WITH THE ARCH AND OWNER PRIOR TO BID AND PURCHASE. IF THERE ARE ANY DISCREPANCIES, EC TO NOTIFY ENGINEER IMMEDIATELY FOR REVISION AND REISSUE.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY DISTANCES AND CONDUCTOR LENGTHS AND CALCULATE VOLTAGE DROP BETWEEN PIECES OF EQUIPMENT AND UPSIDE CABLE AND CONDUIT AS NECESSARY. THE MAXIMUM COMBINED VOLTAGE DROP ON BOTH INSTALLED FEEDER CONDUCTORS AND BRANCH CIRCUIT CONDUCTOR TO THE FARTHEST CONNECTED LOAD OF OUTLET SHALL NOT EXCEED 5%.
- ALL EXTERIOR EQUIPMENT TO BE WEATHERPROOF.
- THE E.C. SHALL PROVIDE LABELING OF ALL DISCONNECTING MEANS IN ACCORDANCE WITH NEC 110.22:
- PROVIDE LABEL ON EACH DISCONNECTING MEANS PER NEC 110.22(A).
- SERVICE EQUIPMENT SHALL BE LABELED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AND DATE PER NEC 110.24(A).
- CONTRACTOR TO VERIFY THE ELECTRICAL SERVICE DISTRIBUTION TO ENSURE THE EXISTING SINGLE LINE DIAGRAM ACCURATELY REFLECTS THE CURRENT FIELD INSTALLATION.

MECHANICAL EQUIPMENT SCHEDULE

KEY	DESCRIPTION	VOLTS	PH	LOAD HP,W,A	MOCP/ MFS	BRANCH CIRCUIT (WIRE AND CONDUIT)	DISCONNECT	CIRCUIT NUMBER	NOTES
EW-H1	ELECTRIC WATER HEATER	208V	1	4.5KW	25A	2#12, 1#12G, 3/4" C	25A/1/2P 30AF/2P	L3-40,42	
DOP-1	RECIRC PUMP	120	1	52A	20A	2#12, 1#12G, 3/4" C	\$	L3-44	
GD-1	GARBAGE DISPOSAL	120	1	3/4 HP	20A	2#12, 1#12G, 3/4" C	\$	L3-8	
EW-C1	ELECTRIC WATER COOLER	120	1	370W	20A	2#12, 1#12G, 3/4" C	\$	L3-2	
RO-1	RO TANKLESS SYSTEM	120	1	100W	20A	2#12, 1#12G, 3/4" C	\$	L3-8	
EF-1	BATHROOM EXHAUST	115	1	0.3 A MCA	15A	2#12, 1#12G, 3/4" C	\$	L3-47	SEE E2.1
EF-2	BATHROOM EXHAUST	115	1	0.3 A MCA	15A	2#12, 1#12G, 3/4" C	\$	L3-47	SEE E2.1
EF-3	MECH EXHAUST	115	1	5.1 A MCA	15A	2#12, 1#12G, 3/4" C	\$	L3-48	
EF-4	BATHROOM EXHAUST	115	1	0.3 A MCA	15A	2#12, 1#12G, 3/4" C	\$	L3-47	SEE E2.1
EF-5	BATHROOM EXHAUST	115	1	0.3 A MCA	15A	2#12, 1#12G, 3/4" C	\$	L3-47	SEE E2.1
EF-6	LAB EXHAUST	115	1	2.2A	15A	2#12, 1#12G, 3/4" C	\$	L3-46	
EF-7	BREAK ROOM EXHAUST	115	1	2.2A	15A	2#12, 1#12G, 3/4" C	\$	L3-46	

- GENERAL NOTES:
- ALL CONDUCTORS ARE COPPER THHN, UNLESS OTHERWISE NOTED.
 - REFER TO MECHANICAL PLANS FOR SPECIFIC EQUIPMENT LOCATIONS AND REQUIREMENTS.
 - PRIOR TO ROUGH-IN, COORDINATE ALL MECHANICAL EQUIPMENT POWER AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR'S FINAL SHOP DRAWINGS.
 - PROVIDE ALL 120V CONTROL WIRING. REFER TO SPECIFICATIONS FOR FURTHER CONTROL WIRING CLARIFICATION.
 - FOR ANY VAV SYSTEM COORDINATE POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR AND PROVIDE 120V CONNECTIONS AT EACH VAV BOX, OR AT CENTRAL CONTROL PANEL LOCATION(S) AS REQUIRED. IF EXACT QUANTITIES AND LOCATIONS FOR CONTROL PANELS ARE NOT KNOWN AT BID TIME, E.C. IS TO INCLUDE ONE 120V CONNECTION AT EACH VAV DEVICE IN THE BASE BID PRICE AND PROVIDE A CREDIT DURING CONSTRUCTION IF LESS CONNECTIONS ARE REQUIRED.
 - EXTERIOR DISCONNECT SWITCHES ARE TO BE PROVIDED AS NEMA 3R EQUIPMENT UNLESS OTHERWISE NOTED.
 - PROVIDE WEATHERPROOF 120 VOLT GFCI RECEPTACLES WITHIN 25' OF ALL ROOFTOP HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT. CIRCUIT TO SPARE CIRCUIT ON NEAREST 120V PANELBOARD OR AS INDICATED ON PLANS.
 - PROVIDE DUCT DETECTION ON ALL RETURN AIR SYSTEMS OF 2,000 CFM OR GREATER, AND FOR ALL SUPPLY AIR SYSTEMS 15,000 CFM OR GREATER, INCLUDING THOSE SYSTEMS SERVING MULTIPLE FLOORS. PROVIDE ADDITIONAL DUCT DETECTORS AND INSTALL REMOTE INDICATOR LIGHTS AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
 - FOR ANY BOILER MECHANICAL SYSTEM, E.C. IS TO PROVIDE AN EMERGENCY PUSHBUTTON OFF AND ANY CONTROL WIRING REQUIRED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR AND EQUIPMENT PRIOR TO INSTALLATION.
 - EC TO PROVIDE HAND/OFF/AUTO STARTERS FOR ALL MOTORS WHEN NOT INDICATED AS TO BE PROVIDED BY THE MECHANICAL CONTRACTOR ON THE MECHANICAL PLANS. SIZE OF STARTER TO BE BASED UPON SIZE OF MOTOR HORSEPOWER INDICATED.

TRANSFORMER SCHEDULE - COPPER WINDINGS (2016 DOE EFFICIENCY STANDARDS)

KVA RATING	PRIMARY FLA	SECONDARY FLA	PRIMARY PROTECTION	PRIMARY FEEDER	SECONDARY PROTECTION	SECONDARY FEEDER	DERIVED GROUND CONDUCTOR	TRANSFORMER IMPEDANCE	APPROX DIMENSIONS HIGH WIDE DEEP	APPROX WEIGHT	SPECIFIC NOTES
75	90.3	208.3	125A/3P	3#1, 1#6G, 1-1/2" C	250A/3P	4#250MCM, 1#4G, 2-1/2" C	1#2G, 3/4" C	3.21%	43 30.54 24	676LBS	

GENERAL NOTES:

- ALL TRANSFORMERS ARE 480V, 3PHASE, DELTA PRIMARY AND 208Y/120V, 3PHASE SECONDARY.
- ALL CONDUCTORS ARE THWN COPPER. SEE PLANS FOR INCREASED CONDUCTOR SIZE DUE TO VOLTAGE DROP.
- BONDING AND GROUNDING CONDUCTORS ARE TO BE INSTALLED PER NEC 250.30 - GROUNDING SEPERATELY DERIVED ALTERNATING CURRENT SYSTEMS.
- WEIGHT SHOWN FOR REFERENCE ONLY, AND MAY VARY BY MANUFACTURER.

SPECIFIC NOTES:

- TRANSFORMER IMPEDANCE IS THE ASSUMED VALUE AND IS USED FOR FAULT-CURRENT CALCULATIONS. IF SUBMITTED TRANSFORMER IS OF A DIFFERENT VALUE, REVISED CALCULATIONS MAY BE REQUIRED.
- EC TO FIELD VERIFY WEIGHTS OF NON DOE 2016 AS THEY MAY VARY BY MANUFACTURER.

1 ELECTRICAL ONELINE DIAGRAM

SCALE: NTS

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REVISIONS

#	Date	Description
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DATE: 18 Aug 2026

PROJECT NO: 26085

DRAWN BY: JG / MAB

ISSUED FOR: Permit Set

SINGLE LINE & SCHEDULES

E1.1

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