PANEL NAME: LP1

PHASE: Existing
SUPPLY FROM: WIREWAY | MAINS RATING (A): 225 | FAULT CURRENT (A): 8432 | SURGE SUPRESSION:
LOCATION: PRE-SALES 106 | MAINS TYPE: MAIN LUGS ONLY | SHORT CIRCUIT RATING (A): EXISTING | ULSE:
DISTRIBUTION SYSTEM: 208/120V 3PH 4W | FEEDER ID: X225 | LUGS TYPE: | 200% NEUTRAL:
FEEDER: EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE | ENCLOSURE TYPE: NEMA 1 | ISOLATED GROUND:

CKT	CIRCUIT DESCRIPTION	VD%	AWG	GND	TRIP	FRAME	POLE	A		B		C		POLE	FRAME	TRIP	GND	AWG	VD%	CIRCUIT DESCRIPTION	CKT
1	(#) LTG 102,101A	1.577	#12	#12	20 A	20 A	1	0.58	1.08					1	20 A	20 A	#12	#12	1.008	(#) RCPT 101B,101A	2
3	(#) LTG SALES 101A	1.397	#12	#12	20 A	20 A	1			0.58	0.36			1	20 A	20 A	#12	#12	0.219	(IG) TTB | RCPT PRE-SALES 106	4
5	(#) LTG SALES 101A	0.905	#12	#12	20 A	20 A	1					0.58	0.18	1	20 A	20 A	#12	#12	0.514	(IG) | RCPT OFFICE 102	6
7	(#) LTG SALES 101A	0.741	#12	#12	20 A	20 A	1	0.58	0.18					1	20 A	20 A	#12	#12	0.547	(IG) | RCPT OFFICE 102	8
9	(#) LTG 101A,101B	0.25	#12	#12	20 A	20 A	1			0.58	0.18			1	20 A	20 A	#12	#12	0.543	(IG) | RCPT OFFICE 102	10
11	(#) LTG SALES 101B	0.272	#12	#12	20 A	20 A	1					0.58	0.00	1	--	20 A	--	--	--	(#) SPARE	12
13	(#) LTG SALES 101B	0.218	#12	#12	20 A	20 A	1	0.29	0.00					1	--	20 A	--	--	--	(#) SPARE	14
15	(#) LTG SALES 101B	0.275	#12	#12	20 A	20 A	1			0.29	0.00			1	--	20 A	--	--	--	(#) SPARE	16
17	(#) LTG 101A,101B	0.161	#12	#12	20 A	20 A	1					0.58	0.00	1	--	20 A	--	--	--	(#) SPARE	18
19	(#) LTG 101A,101B	1.275	#12	#12	20 A	20 A	1	0.58	0.00					1	--	20 A	--	--	--	SPARE	20
21	(#) EF-1-A | LTG 106,103,105,104,107	0.491	*#10	*#10	20 A	20 A	1			1.25	0.00			1	--	20 A	--	--	--	SPARE	22
23	(#) SIGNAGE	2.951	*#10	*#10	20 A	20 A	1					1.20	0.00	1	--	20 A	--	--	--	SPARE	24
25	(IG) CHECK LANE | NON-CONT.	0.389	#12	#12	20 A	20 A	2	0.20	0.00					1	--	20 A	--	--	--	SPARE	26
27										0.20	0.00			1	--	20 A	--	--	--	SPARE	28
29	(IG) CHECK LANE | NON-CONT.	0.43	#12	#12	20 A	20 A	2					0.20	0.00	1	--	20 A	--	--	--	(#) SPARE	30
31								0.20	0.00					1	--	20 A	--	--	--	(#) SPARE	32
33	(IG) CHECK LANE | NON-CONT.	0.459	#12	#12	20 A	20 A	2			0.20	0.00			1	--	20 A	--	--	--	SPARE	34
35												0.20	0.00	1	--	20 A	--	--	--	SPARE	36
37	(IG) CHECK LANE | NON-CONT.	0.487	#12	#12	20 A	20 A	2	0.20	0.00					1	--	20 A	--	--	--	SPARE	38
39										0.20	0.00			1	--	20 A	--	--	--	SPARE	40
41	(L) NON-CONT. PRE-SALES 106	0.066	#12	#12	20 A	20 A	1					0.20	0.00	1	--	20 A	--	--	--	SPARE	42
							TOTAL CONNECTED LOAD:	3.9 kVA		3.8 kVA		3.7 kVA									

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Continuous	1200 VA	125.00%	1500 VA	EXISTING CONNECTED LOAD:	
Cooling	0 VA	0.00%	0 VA	EXISTING LOAD DEMAND FACTOR:	
Elevator	0 VA	0.00%	0 VA	ADDED CONNECTED LOAD:	11424 VA
Heating	0 VA	0.00%	0 VA	DEMAND CALCULATION NOTES:	
Kitchen Equipment	0 VA	0.00%	0 VA		
Lighting	5748 VA	125.00%	7185 VA	TOTAL DEMAND:	13335.0 VA
Motor	696 VA	125.00%	870 VA	TOTAL DEMAND AMPS:	37 A
Non-Continuous	1800 VA	100.00%	1800 VA		
Receptacle	1980 VA	100.00%	1980 VA		

NOTES:

BREAKER QUANTITIES (NEW ONLY)
(14) 20A / 1P, (1) 20A / 1P(L), (4) 20A / 2P

PANEL NAME: LP2

PHASE: Existing
SUPPLY FROM: WIREWAY | MAINS RATING (A): 225 | FAULT CURRENT (A): 8432 | SURGE SUPRESSION:
LOCATION: PRE-SALES 106 | MAINS TYPE: MAIN LUGS ONLY | SHORT CIRCUIT RATING (A): EXISTING | ULSE:
DISTRIBUTION SYSTEM: 208/120V 3PH 4W | FEEDER ID: X225 | LUGS TYPE: | 200% NEUTRAL:
FEEDER: EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE | ENCLOSURE TYPE: NEMA 1 | ISOLATED GROUND:

CKT	CIRCUIT DESCRIPTION	VD%	AWG	GND	TRIP	FRAME	POLE	A		B		C		POLE	FRAME	TRIP	GND	AWG	VD%	CIRCUIT DESCRIPTION	CKT
1	(#) RCPT 101A,101B	0.142	#12	#12	20 A	20 A	1	0.36	1.08					1	20 A	20 A	#12	#12	0.271	(#) RCPT 101B,101A	2
3	(G)(LT) HAND DRYER | NON-CONT. TOILET 105	1.405	#12	#12	20 A	20 A	1			1.80	0.90			1	20 A	20 A	#12	#12	2.408	(#) RCPT 101A,101B	4
5	(G)(LT) HAND DRYER | NON-CONT. TOILET 104	1.163	#12	#12	20 A	20 A	1					1.80	0.44	1	20 A	20 A	#12	#12	0.529	(#) DOORBELL | RCPT, NON-CONT. PRE-SALES 106	6
7	(#) WH-2-A | HEATING TOILET 104	1.074	#12	#12	20 A	20 A	1	1.50	0.40					1	20 A	20 A	#12	#12	1.237	(#) EMPLOYEE AREA PLUGMOLD | NON-CONT....	8
9	(#) WH-1-A | HEATING TOILET 105	1.931	#12	#12	20 A	20 A	1			1.50	0.18			1	20 A	20 A	#12	#12	0.5	(#) RCPT PRE-SALES 106	10
11	(#) RCPT HALL 103	0.066	#12	#12	20 A	20 A	1					0.18	0.18	1	20 A	20 A	#12	#12	0.5	(#) RCPT PRE-SALES 106	12
13	(#) AC-1-A | MOTOR SALES 101A	2.956	*#8	*#8	20 A	20 A	1	1.73	0.18					1	20 A	20 A	#12	#12	0.033	(#) RCPT PRE-SALES 106	14
15	(#) WALK-IN COOLER | NON-CONT. PRE-SALES 106	2.126	*#10	*#10	20 A	20 A	1			1.55	0.54			1	20 A	20 A	#12	#12	1.93	(#) RCPT SALES 101A	16
17	WALK-IN FREEZER | NON-CONT. PRE-SALES 106	2.816	#10	#10	30 A	30 A	2					2.86	0.18	1	20 A	20 A	#12	#12	0.665	(#) ICE CREAM BUNKER | RCPT	18
19								2.86	0.20					1	20 A	20 A	#12	#12	0.528	(#) SNACK ZONE | NON-CONT.	20
21	REACH-IN 2-DR COOLER | NON-CONT. SALES 101B	1.05	#12	#12	20 A	20 A	2			1.70	0.20			1	20 A	20 A	#12	#12	0.528	(#) SNACK ZONE | NON-CONT. SALES 101A	22
23												1.70	0.20	1	20 A	20 A	#12	#12	0.528	(#) SNACK ZONE | NON-CONT. SALES 101A	24
25	REACH-IN 5-DR FREEZER | NON-CONT. SALES 101B	1.039	#8	#10	30 A	30 A	2	3.12	0.52					1	20 A	20 A	#12	#12	0.224	(#) CP1 | MOTOR PRE-SALES 106	26
27										3.12	2.00			1	20 A	20 A	#12	#12	1.044	(#) WH1 | CONTINUOUS PRE-SALES 106	28
29	REACH-IN 5-DR FREEZER | NON-CONT. SALES 101B	1.343	#8	#10	30 A	30 A	2					3.12	0.72	1	20 A	20 A	#12	#12	1.444	RCPT SALES 101B	30
31								3.12	0.00					1	--	20 A	--	--	--	(#) SPARE	32
33	PLUG MOLD | NON-CONT. OFFICE 102	0.412	#12	#12	20 A	20 A	2			0.20	0.00			1	--	20 A	--	--	--	(#) SPARE	34
35												0.20	0.00	1	--	20 A	--	--	--	(#) SPARE	36
37	(#) SPARE	--	--	--	20 A	--	1	0.00	0.00					1	--	20 A	--	--	--	(#) SPARE	38
39	(#) SPARE	--	--	--	20 A	--	1			0.00	0.00			1	--	20 A	--	--	--	(#) SPARE	40
41	(#) SPARE	--	--	--	20 A	--	1					0.00	0.00	1	--	20 A	--	--	--	(#) SPARE	42
							TOTAL CONNECTED LOAD:	15.1 kVA		13.7 kVA		11.6 kVA									

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Continuous	2000 VA	125.00%	2500 VA	EXISTING CONNECTED LOAD:	
Cooling	0 VA	0.00%	0 VA	EXISTING LOAD DEMAND FACTOR:	
Elevator	0 VA	0.00%	0 VA	ADDED CONNECTED LOAD:	40326 VA
Heating	3000 VA	100.00%	3000 VA	DEMAND CALCULATION NOTES:	
Kitchen Equipment	0 VA	0.00%	0 VA		
Lighting	0 VA	0.00%	0 VA	TOTAL DEMAND:	41258.0 VA
Motor	2248 VA	119.22%	2680 VA	TOTAL DEMAND AMPS:	115 A
Non-Continuous	28218 VA	100.00%	28218 VA		
Receptacle	4860 VA	100.00%	4860 VA		

NOTES:

BREAKER QUANTITIES (NEW ONLY)
(1) 20A / 1P, (2) 20A / 1P(G) (LT), (2) 20A / 2P, (3) 30A / 2P

PANEL NAME: MDP

PHASE: Existing
SUPPLY FROM: D1 | MAINS RATING (A): 400 | FAULT CURRENT (A): 15472 | SURGE SUPRESSION:
LOCATION: PRE-SALES 106 | MAINS TYPE: MAIN LUGS ONLY | SHORT CIRCUIT RATING (A): EXISTING | ULSE:
DISTRIBUTION SYSTEM: 208/120V 3PH 4W | FEEDER ID: X400 | LUGS TYPE: | 200% NEUTRAL:
FEEDER: EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE | ENCLOSURE TYPE: NEMA 1 | ISOLATED GROUND:

CKT	CIRCUIT DESCRIPTION	VD%	AWG	GND	TRIP	FRAME	POLE	A		B		C		POLE	FRAME	TRIP	GND	AWG	VD%	CIRCUIT DESCRIPTION	CKT
1								5.76	0.02												2
3	BALER | MOTOR PRE-SALES 106	0.543	#4	#10	60 A	60 A	3			5.76	0.02			3	20 A	20 A	#12	#12	0.001	PHASE LOSS MONITOR | NON-CONT. PRE-SALES 106	4
5												5.76	0.02								6
7								0.00	0.00												8
9	(#) SPARE	--	--	--	70 A	--	3			0.00	0.00			3	--	100 A	--	--	--	(#) SPARE	10
11												0.00	0.00								12
13								13.40	13.40												14
15	(EX) RTU-2-A | MOTOR SALES 101B	--	--	--	150 A	150 A	3			13.40	13.40			3	150 A	150 A	--	--	--	(EX) RTU-1-A | MOTOR SALES 101A	16
17												13.40	13.40								18
							TOTAL CONNECTED LOAD:	32.6 kVA		32.6 kVA		32.6 kVA									

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Continuous	0 VA	0.00%	0 VA	EXISTING CONNECTED LOAD:	
Cooling	0 VA	0.00%	0 VA	EXISTING LOAD DEMAND FACTOR:	
Elevator	0 VA	0.00%	0 VA	ADDED CONNECTED LOAD:	97740 VA
Heating	0 VA	0.00%	0 VA	DEMAND CALCULATION NOTES:	
Kitchen Equipment	0 VA	0.00%	0 VA		
Lighting	0 VA	0.00%	0 VA	TOTAL DEMAND:	107791.2 VA
Motor	97690 VA	110.29%	107741 VA	TOTAL DEMAND AMPS:	299 A
Non-Continuous	50 VA	100.00%	50 VA		
Receptacle	0 VA	0.00%	0 VA		

NOTES:

BREAKER QUANTITIES (NEW ONLY)
(1) 20A / 3P, (1) 60A / 3P

PANEL SCHEDULE LEGEND

(EX) = EXISTING CIRCUIT TO REMAIN
(#) = NEW CIRCUIT TO EXISTING CIRCUIT BREAKER
(G) = PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) CIRCUIT BREAKER
(GE) = PROVIDE GROUND-FAULT EQUIPMENT PROTECTION (GFEP) CIRCUIT BREAKER
(ST) = PROVIDE SHUNT TRIP CIRCUIT BREAKER
(A) = PROVIDE ARC FAULT CIRCUIT INTERRUPTER (AFCI) CIRCUIT BREAKER
(L) = PROVIDE LOCK-ON DEVICE
(LT) = PROVIDE LOCK-OUT/TAG-OUT DEVICE
(->) = CONNECT BRANCH CIRCUIT, WHICH WAS DISCONNECTED FROM ANOTHER SOURCE AS PART OF SELECTIVE DEMOLITION, TO POLE SPACE(S) INDICATED, DETERMINE EXACT POLE ASSIGNMENT(S) BASED ON EXISTING COLOR-CODING OF THE BRANCH CIRCUIT CONDUCTOR INSULATION. PROVIDE NEW BREAKER IF REQUIRED.
* = WIRE SIZED TO COMPENSATE FOR VOLTAGE DROP
** = REFER TO DRAWINGS FOR SPECIFICATIONS
SL = SEE THE SINGLE LINE DIAGRAM / SCHEDULE FOR WIRE SIZE AND VOLTAGE DROP

PANEL SCHEDULE GENERAL NOTES

A. PROVIDE HACR RATED BREAKERS ON ALL MOTOR LOADS.
B. ALL CONDUCTORS SHOWN ARE COPPER.
C. ALL VOLTAGE DROP CALCULATIONS AND COMPENSATED WIRE SIZES ARE BASED ON RIGHT ANGLE CIRCUIT LENGTHS. ACTUAL VOLTAGE DROP MAY VARY BASED ON INSTALLED WIRE LENGTH.
D. VOLTAGE DROP CALCULATIONS AND WIRE SIZES SHOWN IN THE PANEL SCHEDULES ARE FOR HOMERUN CONDUCTORS ONLY. FOR CIRCUITS WITH MORE THAN 1 DEVICE, THESE SIZES ASSUME THE CONDUCTORS DOWNSTREAM OF THE HOMERUN DEVICE ARE THE MINIMUM SIZE REQUIRED BY THE NEC BASED ON THE RATING OF THE CIRCUIT. WHERE THIS IS NOT THE CASE, IT HAS BEEN INDICATED ON THE DRAWINGS. VOLTAGE DROP TO THE FARTHEST DEVICE HAS BEEN CALCULATED TO NEVER EXCEED 5%.
E. RECEPTACLE LOADS CALCULATED AT 100% OF FIRST 10kVA, 50% OF REMAINDER. MOTOR LOADS CALCULATED AT 125% OF THE LARGEST MOTOR, 100% OF ALL OTHER MOTORS.

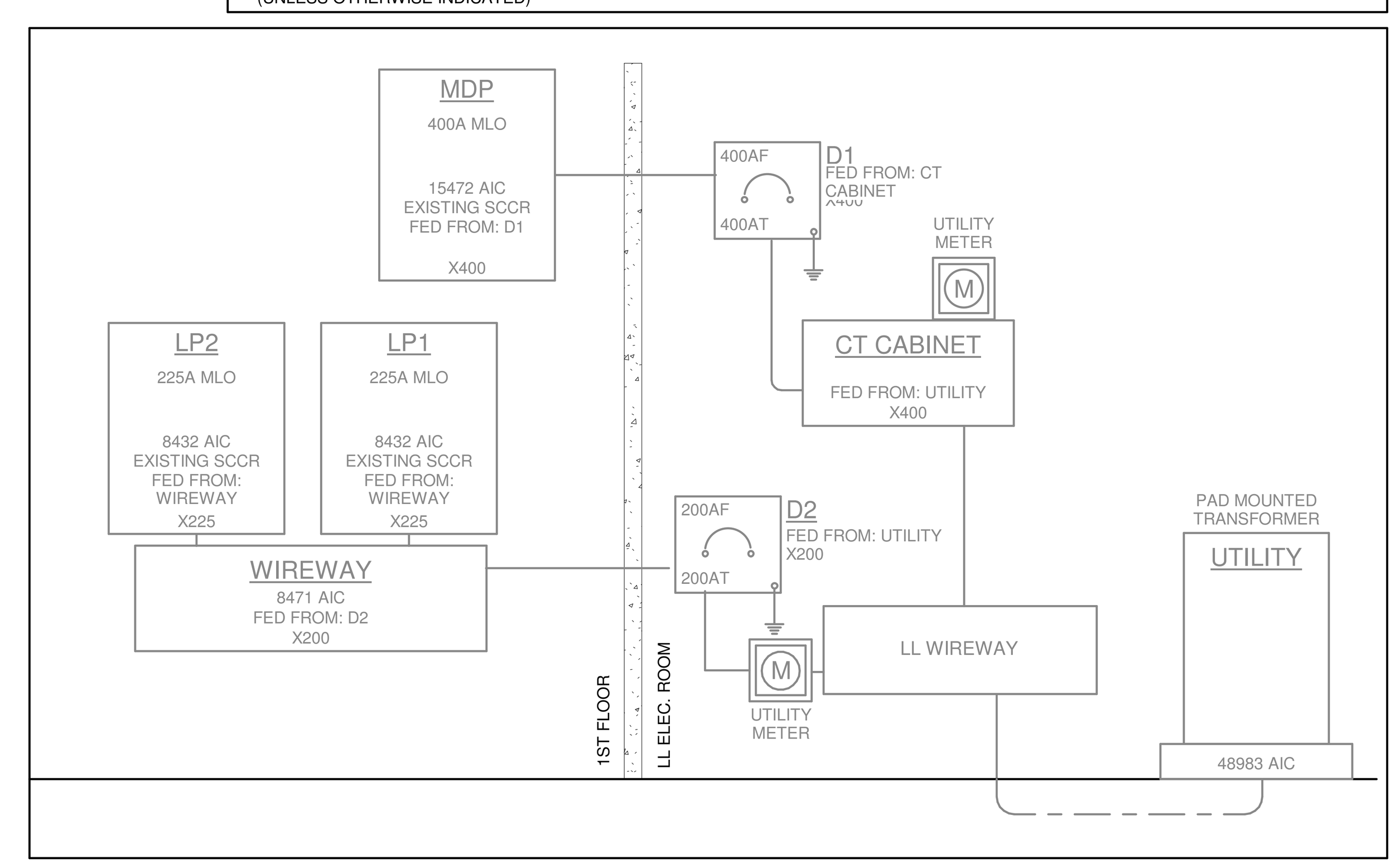
GENERAL ELECTRICAL POWER DISTRIBUTION NOTES

A. PARALLEL CONDUCTOR SETS: CUT PARALLEL SERVICE/FEEDER CONDUCTORS TO EXACTLY THE SAME LENGTHS AND USE CONDUCTORS FROM THE SAME FACTORY RUN. TORQUE ALL CONNECTIONS FOR PARALLEL SERVICE/FEEDER CONDUCTORS TO IDENTICAL VALUES.
B. OVERCURRENT PROTECTION RATINGS: UNLESS INDICATED OTHERWISE, PROVIDE FULLY-RATED OR SERIES-RATED OVERCURRENT PROTECTION (OCP) AS REQUIRED TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF NFPA 70. PROVIDE EQUIPMENT AND OCP RATED TO MEET OR EXCEED THE AVAILABLE SERIES-RATED FAULT CURRENT AT THE RESPECTIVE NODE IN THE POWER DISTRIBUTION SYSTEM. SERIES-RATED BREAKERS/SYSTEMS ARE NOT PERMITTED WHERE PROHIBITED BY PREVAILING CODES AND STANDARDS, INCLUDING APPLICATIONS INVOLVING MOTOR CONTRIBUTION AS ADDRESSED IN ARTICLE 240.86(C) OF NFPA 70. FURNISH ELECTRONIC COPIES OF THE ELECTRICAL DOCUMENTS TO THE MANUFACTURER'S REPRESENTATIVE AND/OR EQUIPMENT SUPPLIER SO THAT PROPERLY RATED AND BRACED EQUIPMENT IS PROVIDED UNDER BASE BID. IF FAULT CURRENT VALUES ARE NOT INDICATED ON PLANS, ALSO PROVIDE FAULT CURRENT CALCULATIONS AND FURNISH RESULTS WITH EQUIPMENT SUBMITTALS.
C. GROUNDING ELECTRODE CONDUCTOR SYSTEM: PROVIDE GROUNDING ELECTRODE CONDUCTOR SYSTEM IN STRICT COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), INCLUDING ARTICLE 250 AND TABLE 250.66. THESE CONDUCTORS MAY OR MAY NOT BE INDICATED ON SINGLE-LINE DIAGRAMS, BUT SHALL BE PROVIDED UNDER BASE BID NEVERTHELESS.
D. FLUSH MOUNTED EQUIPMENT: PROVIDE FLUSH MOUNTED POWER DISTRIBUTION AND RELATED EQUIPMENT FOR APPLICATIONS IN FINISHED AREAS AND COORDINATE THESE LOCATIONS AND INSTALLATIONS WITH ARCHITECT, OWNER AND AFFECTED TRADES. ELSEWHERE PROVIDE SURFACE MOUNTED EQUIPMENT UNLESS FLUSH MOUNTED EQUIPMENT IS SHOWN ON DRAWINGS OR UNLESS NEEDED TO ACCOMMODATE UNUSUAL CONDITIONS.
E. POWER DISTRIBUTION EQUIPMENT LABELS: IN ADDITION TO LABELS REQUIRED WITHIN THE SPECIFICATIONS, INCLUDE CORRESPONDING MAXIMUM AIC (AVAILABLE INRUSH CURRENT) AND SHORT-CIRCUIT CURRENT RATING (SCCR) FOR EACH PIECE OF POWER DISTRIBUTION EQUIPMENT, ALONG WITH ARC FLASH LABELS COMPLIANT WITH ARTICLE 110.16 OF NFPA 70. ALSO INCLUDE CONDUCTOR COLOR CODING FOR THE BUILDING AND PHASE ROTATION AS APPLICABLE.
F. CONDUCTOR TERMINATIONS: IN CASES WHERE CONDUCTOR SIZES ARE TOO LARGE TO FIT INTO LUGS/TERMINALS, PROVIDE APPROPRIATE FACTORY LUG KITS FOR AFFECTED EQUIPMENT IF AVAILABLE. ELSEWHERE, PROVIDE INSULATED BUTT-SPLICES OR EQUIVALENT METHOD, WITH TAILS SIZED TO FIT LUGS/TERMINALS. PROVIDE SPLICES IN SEPARATE BOXES IF REQUIRED BASED ON FIELD CONDITIONS, BOX SIZE LIMITATIONS, ETC. CONCEAL BOXES IN ACCESSIBLE OVERHEAD JOIST SPACES IN FINISHED REGULARLY OCCUPIED AREAS.
G. ALUMINUM CONDUCTORS: PROVIDE THE FOLLOWING SUPPLEMENTAL WORK FOR ALUMINUM-CONDUCTOR ELECTRICAL EQUIPMENT CONNECTIONS, REGARDLESS OF WHO FURNISHES THE EQUIPMENT: REVIEW EQUIPMENT SUBMITTALS, INSTALLATION DOCUMENTS AND NAMEPLATES TO DETERMINE IF THERE ARE ANY WARRANTY OR UL LIMITATIONS REGARDING COPPER VERSUS ALUMINUM WIRING CONNECTIONS AT EQUIPMENT; IF THERE ARE ANY LIMITATIONS, PROVIDE LOCAL DISCONNECT AT OR NEAR EQUIPMENT (EXTERNAL TO THE EQUIPMENT) AND TERMINATE ALUMINUM CONDUCTORS TO THE LINE-SIDE LUGS/TERMINALS OF THE DISCONNECT SWITCH; PROVIDE COPPER CONDUCTORS FROM LOAD-SIDE LUGS/TERMINALS OF THE DISCONNECT SWITCH TO THE RESPECTIVE EQUIPMENT FACTORY DISCONNECT OR LUG/TERMINALS AS APPLICABLE; COORDINATE ALL RELATED WORK WITH ALL AFFECTED INSTALLERS.
H. BREAKER FRAME SIZES: AMPERE RATINGS INDICATED ON DRAWINGS FOR CIRCUIT BREAKERS ARE SHOWN TO DEFINE OVERCURRENT REQUIREMENTS/TRIP RATINGS. PROVIDE BREAKER FRAMES IN SIZES AND TYPES GREATER THAN THE DESIGNATED OVERCURRENT TRIP RATINGS WHERE NECESSARY TO ACHIEVE THE REQUIRED SELECTIVE COORDINATION, AND/OR AS NECESSARY FOR OTHER APPLICABLE REASONS.
I. PLYWOOD EQUIPMENT BOARDS: SEE SPECIFICATION SECTION 260529.00 FOR REQUIREMENTS ASSOCIATED WITH PLYWOOD EQUIPMENT BOARDS.
J. FIELD ADJUSTMENTS OF CIRCUIT BREAKERS: SET FIELD-ADJUSTABLE OVERCURRENT TRIP VALUES AS INDICATED ON DRAWINGS (UNLESS OTHERWISE SPECIFIED IN OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY). UNLESS INDICATED OTHERWISE ON DRAWINGS, OR DIRECTED OTHERWISE BY AHJ OR PREVAILING CODES, MANUFACTURER SHALL FURNISH SETTING INFORMATION BASED ON PROJECT REQUIREMENTS AND PREVAILING CODES, WHILE MINIMIZING THE POSSIBILITY OF NUISANCE TRIPPING. MANUFACTURER SHALL PROVIDE REMOVABLE AND SEALABLE COVERS OVER ALL ADJUSTABLE CIRCUIT BREAKER SETTINGS PER NEC 240.6(C).
K. ELECTRIC UTILITY SERVICE WORK: PROVIDE ALL ELECTRIC UTILITY SERVICE WORK IN STRICT COMPLIANCE WITH PREVAILING REQUIREMENTS OF THE UTILITY COMPANY. THE DRAWINGS INDICATE RELATED REQUIREMENTS AT A SCHEMATIC LEVEL. IT IS NOT THE INTENT OF THESE DRAWINGS TO DETAIL ANY SUCH WORK. UTILITY COMPANY WILL PROVIDE (FURNISH AND INSTALL) UTILITY TRANSFORMER(S). PROVIDE METER SOCKET(S) AND EMPTY CONDUIT (WITH DRAG LINE) FROM METER TO CURRENT TRANSFORMER LOCATION. UNLESS METERING OCCURS AT A PAD-MOUNTED UTILITY TRANSFORMER, PROVIDE CURRENT TRANSFORMER (CT) CABINET COMPLIANT WITH UTILITY COMPANY STANDARDS. PROVIDE CONCRETE PAD OR VAULT FOR PAD-MOUNTED UTILITY TRANSFORMER(S), AS DIRECTED BY UTILITY COMPANY AND COMPLIANT WITH UTILITY COMPANY STANDARDS. COORDINATE WITH UTILITY COMPANY AS REQUIRED TO PROVIDE COMPLETE OPERATIONAL ELECTRIC SERVICE(S)
L. NATIONAL ACCOUNT VENDOR: FOR INTERIOR PANELS CONTRACTOR SHALL CONTACT NATIONAL ACCOUNT VENDOR FOR EQUIPMENT TO BE FURNISHED BY TENANT FOR THE PROJECT. CONTRACTOR SHALL PROVIDE ALL OTHER EQUIPMENT INCLUDING EXTERIOR CABINETS, DISCONNECTS, METERS, WIREWAYS, CONDUIT AND WIRE NEEDED FOR COMPLETE SYSTEM.
M. PROVIDED BY CONTRACTOR: ALL CONDUIT, WIRE, MISCELLANEOUS ITEMS AND HARDWARE, ETC..., FOR A COMPLETE AND OPERATIONAL SYSTEM.
N. EMS UPDATES: CONTRACTOR IS TO COORDINATE ANY EMS UPDATES AND CHANGES FOR LIGHTING CONTROL AND HVAC SYSTEMS INCLUDING ANY CONTRACTOR LABOR AND MATERIALS NEEDED TO COMPLETE SYSTEM REVISIONS.
O. DESIGN DRAWINGS ARE SCHEMATIC. THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING OR AWARD OF CONTRACT TO INSPECT EXISTING FIELD CONDITIONS. THIS CONTRACT SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR FIELD MODIFICATIONS DUE TO EXISTING CONDITIONS.
P. THE CONTRACTOR SHALL CONTACT THE ARCHITECT, ENGINEER OR OWNER PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT. CLARIFICATIONS MADE BY THE ARCHITECT, ENGINEER OR OWNER AFTER BIDDING WILL BE FINAL AND SHALL BE IMPLEMENTED AT CONTRACTORS COST.
Q. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS NOT WITHSTANDING. THE CONTRACTOR SHALL ALERT ARCHITECT, ENGINEER OR OWNER OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT.
R. REFER TO LANDLORD DRAWINGS FOR AIC RATINGS FOR ALL ELECTRICAL EQUIPMENT

PLAN-VIEW AND GRAPHIC LINE TYPES

WORK SHOWN BOLD-CONTINUOUS INDICATES NEW WORK (UNLESS OTHERWISE INDICATED)

WORK SHOWN FADED INDICATES EXISTING WORK TO REMAIN OR NEW WORK BY OTHERS AS APPLICABLE (UNLESS OTHERWISE INDICATED)



FAULT CURRENT CALCULATIONS

FAULT CURRENT CALCULATIONS ARE BASED ON A 300 KVA UTILITY TRANSFORMER AT 1.7% IMPEDANCE. VERIFY THE AVAILABLE FAULT CURRENT AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

DOLLAR TREE ELECTRIC SINGLE LINE EQUIPMENT SCHEDULE

NOTES:
ALL CONDUIT SIZES INDICATED ARE MINIMUM SIZES. INCREASE SIZES AS REQUIRED TO ACCOMMODATE CONDUCTOR PULLING EASE, FIELD CONDITIONS, ETC.

"CU" = COPPER CONDUCTOR, "AL" = ALUMINUM CONDUCTOR

TYPICAL EQUIPMENT NAME NOMENCLATURE:
1 - POWER DISTRIBUTION SYSTEM (BLANK - NORMAL, E - EMERGENCY, S - STANDBY, L - LIFE SAFETY)
2 - DESCRIPTION (H - 480Y/277V, L - 208Y/120V)
3 - FLOOR / LEVEL
4 - SEQUENCE

FEEDER ID NOMENCLATURE:
* - INDICATES FEEDER SIZED TO COMPENSATE FOR VOLTAGE DROP
1 - GROUND TYPE (MAY BE BLANK)
U = EQUIPMENT GROUND CONDUCTOR REMOVED FOR SERVICE ENTRANCE FROM UTILITY
P = PARITY-SIZED EQUIPMENT GROUND CONDUCTOR
X = EXISTING FEEDER TO REMAIN UNLESS OTHERWISE NOTED
T = UPSIZED GROUND CONDUCTORS FOR TRANSFORMER SECONDARY
2 - CONDUCTOR AMPACITY
3 - TOTAL NUMBER OF PHASE AND GROUNDED ("NEUTRAL") CONDUCTORS
4 - CONDUCTOR MATERIAL: C = COPPER, A = ALUMINUM
5 - SPECIAL (MAY BE BLANK)
I = ISOLATED GROUND (PROVIDE CONTINUOUS INSULATED ISOLATED EQUIPMENT GROUNDING CONDUCTOR(S) FROM INSULATED ISOLATED GROUND BAR(S) TO RESPECTIVE UPSTREAM SERVICE ENTRANCE OR DERIVED SYSTEM GROUNDING ELECTRODE CONDUCTOR AS APPLICABLE.

EQUIPMENT	PHASE	EQUIPMENT TYPE	SUPPLY FROM	SPACE NUMBER	SPACE NAME	VOLTAGE	POLES	WIRES	DEMAND (kVA)	DEMAND (A)	MAINS RATING (A)	MAINS FRAME RATING (A)	MAINS TYPE	FEEDER ID	FEEDER	VD %	LUGS TYPE	SPD	ULSE	GEC	ENCLOSURE TYPE	200% NEUTRAL	K-RATING	FAULT CURRENT (A)	SHORT CIRCUIT RATING (A)	NOTES
UTILITY	Existing	Pad Mounted				208	3														NEMA 3R			48983		
-- CT CABINET	Existing	32 x 24 x 10	UTILITY			208	3	4	107.8 kVA	299 A	400	400		X400	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	0.464					NEMA 1			31838	EXISTING	
---- D1	Existing	Enclosed Circuit Breaker	CT CABINET			208	3	4	107.8 kVA	299 A	400	400	FUSED	X400	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	0.538			Yes	Yes	NEMA 1			29900	EXISTING	
------ MDP	Existing	Distribution Panelboard	D1	106	PRE-SALES	208	3	4	107.8 kVA	299 A	400	400	MAIN LUGS ONLY	X400	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	1.678					NEMA 1			15472	EXISTING	
-- D2	Existing	Enclosed Circuit Breaker	UTILITY			208	3	4	54.4 kVA	151 A	200	200	FUSED	X200	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	0.594			Yes	Yes	NEMA 1			18718	EXISTING	
---- WIREWAY	Existing	WireWay	D2	106	PRE-SALES	208	3	4	54.4 kVA	151 A	200	200	THERMAL MAGNETIC	X200	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	1.752					NEMA 1			8471	EXISTING	
------ LP1	Existing	Branch Panelboard	WIREWAY	106	PRE-SALES	208	3	4	13.3 kVA	37 A	225	225	MAIN LUGS ONLY	X225	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	1.754					NEMA 1			8432	EXISTING	
------ LP2	Existing	Branch Panelboard	WIREWAY	106	PRE-SALES	208	3	4	41.3 kVA	115 A	225	225	MAIN LUGS ONLY	X225	EXISTING FEEDER, AT RATING INDICATED, TO REMAIN UNLESS NOTED OTHERWISE	1.759					NEMA 1			8432	EXISTING	

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