FIRE ALARM

SYMBOL	DESCRIPTION	MTG HT
FACP	FIRE ALARM CONTROL PANEL	
FAA	FIRE ALARM ANNUNCIATOR PANEL	
DH	MAGNETIC DOOR HOLD OPEN	
	FIRE ALARM BELL	
	FIRE ALARM HORN	90"
	FIRE ALARM SPEAKER	90"
	FIRE ALARM STROBE	90"
	FIRE ALARM HORN/STROBE	90"
	FIRE ALARM SPEAKER/STROBE	90"
	FIRE ALARM CEILING HORN	CEILING
	FIRE ALARM CEILING SPEAKER	CEILING
	FIRE ALARM CEILING STROBE	CEILING
	FIRE ALARM CEILING HORN/STROBE	CEILING
	FIRE ALARM CEILING SPEAKER/STROBE	CEILING
FS	FIRE/SMOKE DAMPER	
Z	FIRE ALARM ADDRESSABLE MODULE	
F	FIRE ALARM PULL STATION	42"
	FIRE ALARM SMOKE DETECTOR – PHOTOELECTRIC	CEILING
	FIRE ALARM SMOKE DETECTOR – IONIZATION	CEILING
	FIRE ALARM DUCT DECTECTOR	
H 135 200 R CR	FIRE ALARM HEAT DETECTOR 135 INDICATES 135 FXD HEAT DETECTOR 200 INDICATES 200 FXD HEAT DETECTOR R INDICATES 135 ROR HEAT DETECTOR CR INDICATES 200 ROR HEAT DETECTOR	CEILING
BT	FIRE ALARM BEAM DETECTOR – TRANSMITTER	
BR	FIRE ALARM BEAM DETECTOR – RECEIVER	
TS	FIRE SPRINKLER TAMPER SWITCH	
PIV	FIRE SPRINKLER POST INDICATOR VALVE (PIV)	
FF	FIREFIGHTER TELEPHONE	
FS	FIRE ALARM FLOW SWITCH	

NOTES:
1. THESE SYMBOLS COMPRISE A STANDARD LIST; ALL SYMBOLS MAY NOT APPEAR ON THIS PROJECT.
2. MOUNTING HEIGHTS SHOWN ARE STANDARD AND SHALL BE USED UNLESS INDICATED OTHERWISE. MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE, UNLESS INDICATED OTHERWISE.

POWER

SYMBOL	DESCRIPTION	MTG HT
WP SS CP GFCI	DUPLEX RECEPTACLE WP INDICATES WEATHER-RESISTANT RECEPT W/ NEMA-3R IN-USE COVER SS INDICATES STAINLESS STEEL FACEPLATE CP INDICATES CHILDPROOF RECEPTACLE GFCI INDICATES GROUND FAULT CIRCUIT INTERRUPTER	18"
	FOURPLEX RECEPTACLE	18"
	SIMPLEX RECEPTACLE	18"
C	CEILING MOUNT DUPLEX RECEPTACLE	
	SPECIAL PURPOSE RECEPTACLE TYPE AS NOTED	18"
	SPECIAL PURPOSE RECEPTACLE TYPE AS NOTED	CEILING
J	RECESSED JUNCTION BOX	CEILING
J	SURFACE MOUNTED JUNCTION BOX	CEILING
J	RECESSED JUNCTION BOX	WALL
J	SURFACE MOUNTED JUNCTION BOX	WALL
	FLOOR BOX WITH DEVICES INDICATED	FLOOR
PB	PULLBOX SIZE AS REQUIRED OR NOTED	

MOTORS

SYMBOL	DESCRIPTION	MTG HT
	PUSHBUTTON – SINGLE	
	PUSHBUTTON – DOUBLE	
	PUSHBUTTON – TRIPLE	
M $	TOGGLE SWITCH – MOTOR RATED	
F $	SWITCH / FUSE ASSEMBLY	
T $	SWITCH / THERMAL OVERLOAD	
T	THERMOSTAT	60"
	COMBO MOTOR STARTER/DISCONNECT SWITCH	
MC	MAGNETIC CONTACT	
	MOTOR	
XX ##	MOTOR WITH ELECTRICAL CONNECTION; REFER TO MOTOR SCHEDULE (MECHANICAL EQUIPMENT CROSS REFERENCE)	
NF	NON-FUSED DISCONNECT SWITCH	
	FUSED DISCONNECT SWITCH	
	MOTOR STARTER	
H	HAND/HAIR DRYER CONNECTION	VERIFY
	MUSHROOM HEAD PUSHBUTTON	
	FAN FORCED HEATER	
	BASEBOARD HEATER	
	EQUIPMENT CONNECTION	
J	HEAT TAPE	

LIGHTING

SYMBOL	DESCRIPTION	MTG HT
	FIXTURE RECESSED MOUNTED	CEILING
	FIXTURE SURFACE MOUNTED	CEILING
	STRIP TYPE FIXTURE	
	STRIP TYPE FIXTURE	
	WALL MOUNTED STRIP TYPE FIXTURE	WALL
	WALL MOUNT FIXTURE	WALL
	EXIT LIGHT FACE/DIRECTIONAL ARROWS AS INDICATED	WALL
	EXIT LIGHT FACE/DIRECTIONAL ARROWS AS INDICATED	CEILING
	EXIT LIGHT WITH EMERGENCY HEADS DIRECTION ARROWS AS INDICATED	WALL
	EXIT LIGHT WITH EMERGENCY HEADS DIRECTION ARROWS AS INDICATED	CEILING
	LIGHT FIXTURE ON EMERGENCY CIRCUIT	CEILING
	SELF CONTAINED EMERGENCY LIGHT UNIT	

LIGHTING CONTROL

SYMBOL	DESCRIPTION	MTG HT
x $	SINGLE POLE SWITCH – LETTER INDICATES SWITCH LEG	46"
2 $ 3 $ 4 $	DOUBLE POLE, 3-WAY AND 4-WAY SWITCHES	46"
K $	KEY OPERATED SWITCH	46"
R	LINE VOLTAGE RELAY	
OS x	OCCUPANCY SENSOR "X" DENOTES TYPE – SEE SPECIFICATIONS	CEILING
OS $	OCCUPANCY SENSOR WALL SWITCH BOX MOUNTED	46"
	PHOTOSENSOR	

COMMUNICATIONS

SYMBOL	DESCRIPTION	MTG HT
	TELEPHONE	18"
	TELEPHONE – WALL HUNG	
	TELEPHONE – CABINET SIZE AS INDICATED	
	COMMUNICATIONS BOARD SIZE AS INDICATED	
	DATA OUTLET	
	DATA – CEILING MOUNTED	
	COMBINATION PHONE/DATA OUTLET	
	WALL MOUNTED CLOCK	
	DOUBLE FACE CLOCK	
	MASTER CLOCK	
	CLOCK OUTLET	
	HANDSET	
	CALL STATION	
	WALL MOUNTED HORN	
	SPEAKER – WALL MOUNTED	
	SPEAKER – CEILING MOUNTED	
	VOLUME CONTROL	
	MICROPHONE OUTLET – WALL MOUNTED	
	MICROPHONE OUTLET – FLOOR MOUNTED	
	BUZZER	
	BELL	
	CHIME	
TV	AUDIO/VISUAL OUTLET 4SQ BOX WITH BLANK PLATE – WALL MOUNT	
TV	AUDIO/VISUAL OUTLET 4SQ BOX WITH BLANK PLATE – CEILING MOUNT	

POWER DISTRIBUTION

SYMBOL	DESCRIPTION	MTG HT
	GROUND	
	METER	
	MANHOLE	
	HANDHOLE	
	PANELBOARD	
	DISTRIBUTION PANELBOARD SURFACE MOUNTED	WALL OR FLOOR
	SWITCHBOARD SURFACE MOUNTED	WALL OR FLOOR
CT	CT CABINET	
T	UTILITY CO. TRANSFORMER	GRADE
T	TRANSFORMER	

TEMPERATURE CONTROLS

SYMBOL	DESCRIPTION	MTG HT
	TEMPERATURE CONTROL WALL MOUNT SENSOR	44"
	TEMPERATURE CONTROL CEILING SENSOR	
	TEMPERATURE CONTROL HEAD END EQUIPMENT	

CABLING

SYMBOL	DESCRIPTION	MTG HT
	CONDUIT RUN EXPOSED	
	CONDUIT RUN IN OR BELOW FLOOR, OR UNDERGROUND (UG)	
	WIRE COUNTS SHOWN WHEN MORE THAN 2 IN CONDUIT (NOT INCLUDING GROUND)	
	HOME RUN TO PANELBOARD	
	CONDUIT SLEEVE	
	CONDUIT STUB	
D	DATA	
F	FIRE	
I	INTERCOM	
S	SOUND	
T	TELEPHONE	
XX	CUSTOM	

CASE
Engineering Inc.
796 Merus Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 32500

UTILITY TRANSFORMER FAULT CALCULATION

SERVICE ENTRANCE		CALCULATION	
VOLTAGE (L-L):	208V	I-FLA=[RATED KVA * 1000]/	
PHASE (PH):	3	[V-LL*SQRT(PHASE)]	
AMPS:	600A	I-FLA=	625A
FULL LOAD KVA:	216KVA		
TRANSFORMER:	225KVA	M=100/%Z=	89.3
IMPEDANCE (%Z):	1.12	I-SC=I-FLA*M=	56 KA

CALCULATION IS BASED ON ESTIMATED TRANSFORMER SIZE WITH %Z FROM BUSSMANN SPD. CONTRACTOR SHALL CONTACT UTILITY AND VERIFY I-SC AVAILABLE AT SECONDARY OF TRANSFORMER. CONTACT ENGINEER FOR RE-CALCULATION IF LARGER THAN CALCULATED.

SES FEEDER FAULT CALCULATION

STARTING I-SC:	55.762 KA	ALL IMPEDANCES BASED ON 3 SINGLE CONDUCTORS IN NON-MAGNETIC CONDUIT	
VOLTAGE (L-L):	208V		
PHASE (PH):	3		
FEEDER SIZE:	350	CALCULATION	
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C]/	
PARALLEL SETS (Q):	2	[Q*C*V-LL]	
FEEDER LENGTH (L):	200FT	f=	2.042
FEET PER OHMS (C):	22,737 FT/OHMS	M=1/(1+f)=	0.329
		I-SC=I-SC*M=	18.33 KA

NOTE: CALCULATION BASED ON BUSSMANN SPD

MOTOR LOAD FAULT CALCULATION

STARTING I-SC:	18.33 KA	CALCULATION	
MOTOR LOAD (KVA):	67KVA	I-SC(ML)=I-ML*6=	1,116A
MOTOR LOAD (A):	186A	I-SC=I-SC+I-SC(ML)=	19.45 KA

MDP FEEDER FAULT CALCULATION

STARTING I-SC:	19.45 KA	ALL IMPEDANCES BASED ON 3 SINGLE CONDUCTORS IN NON-MAGNETIC CONDUIT	
VOLTAGE (L-L):	208V		
PHASE (PH):	3		
FEEDER SIZE:	350	CALCULATION	
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C]/	
PARALLEL SETS (Q):	2	[Q*C*V-LL]	
FEEDER LENGTH (L):	10FT	f=	0.036
FEET PER OHMS (C):	22,737 FT/OHMS	M=1/(1+f)=	0.966
		I-SC=I-SC*M=	18.78 KA

NOTE: CALCULATION BASED ON BUSSMANN SPD

PANEL A FEEDER FAULT CALCULATION

STARTING I-SC:	18.78 KA	IMPEDANCE BASED ON 3 SINGLE CONDUCTORS IN NON-MAGNETIC CONDUIT	
VOLTAGE (L-L):	208V		
PHASE (PH):	3		
FEEDER SIZE:	3/0	CALCULATION	
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C]/	
PARALLEL SETS (Q):	1	[Q*C*V-LL]	
FEEDER LENGTH (L):	10FT	f=	0.112
FEET PER OHMS (C):	13,923 FT/OHMS	M=1/(1+f)=	0.899
		I-SC=I-SC*M=	16.88 KA

NOTE: CALCULATION BASED ON BUSSMANN SPD

EQUIPMENT SCHEDULE

PLAN MARK	EQUIPMENT SERVED	LOAD	VOLT/PHASE	FED BY	DISC BY	MCA	MOCPD	FEEDER	REMARKS
WB	(2) WHEEL BALANCER	1.96KVA	208/1	MDP	PLUG	9.4A	20A	(2)#12,#12G 3/4"C	COORDINATE WITH MANUFACTURER
LIFT	(2) TWO POSTLIFT	2.75KVA	208/1	A	BUILT-IN	13.2A	30A	(2)#10,#10G 3/4"C	COORDINATE WITH MANUFACTURER
A-LIFT	ALIGNMENT LIFT	5.41KVA	208/1	A	BUILT-IN	26.0A	40A	(2)#8,#10G 3/4"C	COORDINATE WITH MANUFACTURER
TC	(2) TIRE CHANGER	1.25KVA	208/1	MDP	PLUG	6.0A	20A	(2)#12,#12G 3/4"C	COORDINATE WITH MANUFACTURER
AIR COMP	(2) AIR COMPRESSOR	11.38KVA	208/3	MDP	SWITCH	31.6A	50A	(3)#6,#8G 3/4"C	COORDINATE WITH MANUFACTURER
RTU-1	ROOF TOP UNIT	19.81KVA	208/3	MDP	BUILT-IN	55A	60A	(3)#4,#8G 1"C	COORDINATE WITH MC
EF-1	EXHAUST FAN 1	1.55KVA	208/3	A	SWITCH	4.3A	20A	(3)#12,#12G 3/4"C	INTERLOCK WITH IH-1
EF-2	EXHAUST FAN 2	0.31KVA	120/1	A	SWITCH	2.9A	20A	(2)#12,#12G 3/4"C	CONNECT TO LINE THERMOSTAT
EF-3	EXHAUST FAN 3	0.31KVA	120/1	A	SWITCH	2.9A	20A	(2)#12,#12G 3/4"C	CONNECT TO LIGHTS IN RESTROOMS
EF-4	EXHAUST FAN 4	2.40KVA	120/1	A	SWITCH	20.0A	35A	(2)#8,#10G 3/4"C	INTERLOCK WITH IH-2
WH-1	WATER HEATER	24.00KVA	208/3	MDP	SWITCH	67A	70A	(3)#4,#8G 1"C	COORDINATE WITH MANUFACTURER

VOLTAGE DROP CALCULATIONS

PANEL	FEEDER AWG	FEEDER SETS	OHMS/K-FT NEC T9	LENGTH	Z	LOAD	V-DROP	V	%V-DROP
SES	#350	2	0.060 OHM/K-FT	200 FT	0.0060 OHM	325 A	1.96 V	120 V	1.63%
MDP	#350	2	0.060 OHM/K-FT	10 FT	0.0003 OHM	325 A	0.10 V	120 V	0.08%
PANEL A	3/0	1	0.094 OHM/K-FT	10 FT	0.0009 OHM	149 A	0.14 V	120 V	0.12%
RTU-1	#4	1	0.300 OHM/K-FT	60 FT	0.0180 OHM	55 A	0.99 V	120 V	0.83%
WH-1	#4	1	0.300 OHM/K-FT	40 FT	0.0120 OHM	67 A	0.80 V	120 V	0.67%

NOTES:
VOLTAGE DROP CALCULATIONS ARE BASED ON TABLE 9 OF THE NEC FOR EFFECTIVE Z AT 0.85 PF, UNCOATED COPPER WIRES IN STEEL CONDUIT (WORST CASE).
LOAD IS THE DEMAND LOAD OF THE PANEL OR TRANSFORMER.
EQUATION:
Z = (OHMS/K-FT) * (K-FT/1000') * (LENGTH) / (SETS)
V-DROP = Z * LOAD

PANEL MDP

MOUNT: SURFACE — 120/208 — 3-PHASE, 4W — PANEL MDP — CAPACITY: 600A — INT CAP: 35KA
LOCATION: ELEC ROOM — LUGS: MCB — DEMAND LOAD: 325A — AV. FAULT: 19 KA

NOTES	CKT	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	CKT	NOTES
	1	3.6	8.2	0.4	6.2	0.0	PANEL A	200	3	A	60	3	RTU-1			6.6			2	
	3	1.0	8.3	0.4	13.5	0.0				B						6.6			4	
	5	4.2	6.6	1.6	4.1	0.0				C						6.6			6	
	7				0.62		TC	20	2	A	20	1	SITE LIGHTING POLES	0.5					8	
	9				0.62					B	20	1	SITE LIGHTING POLES	0.5					10	
	11				0.98		WB	20	2	C	20	1	STORE MONUMENT SIGN	0.5					12	
	13				0.98					A	20	1	STORE MONUMENT SIGN	0.5					14	
	15						SPACE	20	1	B	20	1	SPACE						16	
	17						SPACE	20	1	C	20	1	SPACE						18	
	19				4.0		WH-1	20	3	A	20	1	SPACE						20	
	21				4.0					B	20	1	SPACE						22	
	23				4.0					C	20	2	TC				0.62		24	
	25						SPACE	20	1	A							0.62		26	
	27						SPACE	20	1	B	20	1	SPACE						28	
	29				0.98		WB	20	2	C	20	1	SPACE						30	
	31				0.98					A	50	3	AIR COMP				3.8		32	
	33						SPACE	20	1	B							3.8		34	
	35						SPACE	20	1	C							3.8		36	
A	37						TVSS	20	3	A	50	3	AIR COMP				3.8		38	
A	39									B							3.8		40	
A	41									C							3.8		42	
	43						SPACE	20	1	A	1	20	SPACE						44	
	45						SPACE	20	1	B	1	20	SPACE						46	
	47						SPACE	20	1	C	1	20	SPACE						48	
	49						SPACE	20	1	A	1	20	SPACE						50	
	51						SPACE	20	1	B	1	20	SPACE						52	
	53						SPACE	20	1	C	1	20	SPACE						54	

PHASE BALANCE Φ	LOAD	%	LOAD TYPE	CONNECTED	DEMAND	DEMAND FORMULA	TOTAL LOAD CONNECTED	TOTAL LOAD DEMAND
			LIGHTING	10.8 KVA	13.5 KVA	LOAD X 125% NEC 210.19 CONTINUOUS		
			RECEPTACLE	23.1 KVA	16.6 KVA	10KVA + 50% REMAINDER NEC 220.44	121.0 KVA	117.2KVA
A	40.8 KVA	34%	HVAC	22.2 KVA	22.2 KVA	LOAD X 100% (USED MCA IN CALCULATION)	336.0A	325.2A
B	42.6 KVA	35%	MISC	64.9 KVA	64.9 KVA	LOAD X 100% NEC 210.19 NON-CONT.		
C	37.7 KVA	31%	NP	0.0 KVA	0.0 KVA	0 NONCOINCIDENTAL LOADS NEC 220.60		

NOTES:
A. MANUFACTURER'S RECOMMENDED CIRCUIT BREAKER
B.
C.

PANEL A

MOUNT: SURFACE — 120/208 — 3-PHASE, 4W — PANEL A — CAPACITY: 200A — INT CAP: 22KA
LOCATION: ELEC ROOM — LUGS: MLO — DEMAND LOAD: 149A — AV. FAULT: 16.9KA

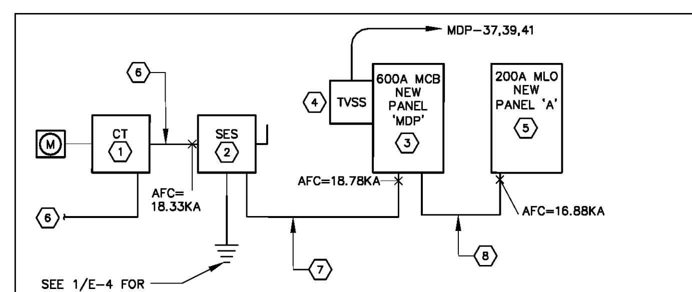
NOTES	CKT	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	CKT	NOTES
B	1	0.7					LIGHTING LOBBY/OFFICE/TOILET/EF-3	20	1	A	20	1	SHOW WINDOW		0.5				2	
B	3	1.0					LIGHTING SERVICE AREA	20	1	B	20	1	REFRESHMENT CONTR.		0.9				4	
B	5	0.8					LIGHTING, TIRE STORAGE	20	1	C	20	1	SALES MONITORS		0.7				6	C
B	7	0.53					CANOPY LIGHTS	20	1	A	20	1	SALES MONITOR		0.4				8	C
	9		0.5				SHOP RECEPTACLES	20	1	B	20	1	TV WALL		0.4				10	
	11	1.20					STORE FRONT SIGN	20	1	C	20	1	REFRESHMENT CONTR.		1.0				12	C
	13		0.20				MANAGERS OFFICE	20	1	A	20	1	SALES DESK		1.2				14	C
	15				0.50		COFFEE MACHINE	20	1	B	20	1	SALES MONITOR		0.5				16	
	17	1.00					PARTS WASHER	20	1	C	20	1	ALINMENT CONSOLE		1.0				18	C
B	19		0.50				STORE FRONT SIGN	20	1	A	20	1	SALES RECEPTACLES		0.8				20	
	21		0.20				SERVICE DESK	20	1	B	20	1	FURNITURE USB		0.5				22	
	23		1.0				STORAGE RACK	20	1	C	20	1	REC. BREAKROOM		0.4				24	
	25		0.5				ALIGMENT COMPUTER	20	1	A	20	1	REC. REFRIGERATOR		1.0				26	A
	27		0.5				SLAES MONITOR	20	1	B	20	1	REC. MICROWAVE		1.5				28	
	29		0.8				PARTS WASHER	20	1	C	20	1	MANAGERS OFFICE REC.		0.4				30	C
B	31				0.50		AIR DRYER	20	1	A	20	1	REC. EWC		0.5				32	
	33				0.8		PORTABLE CARTS	20	1	B	20	1	REC. OFFICE CR		0.2				34	
	35				0.8		UC REFRIGERATOR	20	1	C	20	1	SITE LIGHTING POLES	0.3					36	B
	37	2.4					FUTURE MONUMENT SIGN	20	2	A	20	1	REC. FANS		0.4				38	
	39									B	20	1	REC. FANS		0.4				40	
B	41			1.20			EF-1	20	3	C	20	1	SPARE						42	
B	43									A	20	1	EF-2		0.3				44	
B	45									B	20	1	REC. SECURITY		0.2				46	
	47		0.2				FACP	20	1	C	20	1	IRRIGATION CONTROLLER				0.5		48	
C	49		0.2				CCTV EQUIP CAB REC.	20	1	A	20	1	SERVICE DESK TV		0.5				50	
C	51		1.1				MANAGERS OFFICE	20	1	B	20	2	ALINMENT LIFT				2.8		52	
	53	0.5					TIMECLOCK	20	1	C									54	
	55				2.8		LIFT POWER	30	2	A	30	2	LIFT POWER				2.8		56	
	57									B									58	
	59				2.8		LIFT POWER	30	2	C	20	1	ALINMENT CNTRL BOX		0.5				60	
	61									A	20	1	SITE LIGHTING POLES	0.3					62	
	63				5.4		A-ALIGMENT LIFT	40	2	B	20	2	LIFT POWER				1.0		64	
	65									C									66	
	67				0.2		RTU-1 SMOKE	20	1	A	20	1	MONITROS		0.2				68	
	69		0.5				BATTERY CHARGER	20	1	B	20	1	GRINDER		0.2				70	
	71		0.5				SALES MONITORS	20	1	C	20	1	PARTS WASHER		0.2				72	
	73		0.5				SALES MONITORS	20	1	A	20	1	SALES MONITOR		0.5				74	
	75				2.8		LIFT POWER	30	2	B	20	1	ON CAR LATHE		0.8				76	
	77									C	20	1	SPACE						78	
	79			0.4			EF-4	20	3	A	20	1	SPACE						80	
	81			0.4						B	20	1	SPACE						82	
	83			0.4						C	20	1	SPACE						84	

PHASE BALANCE Φ	LOAD	%	LOAD TYPE	CONNECTED	DEMAND	DEMAND FORMULA	TOTAL LOAD CONNECTED	TOTAL LOAD DEMAND
			LIGHTING	8.7 KVA	10.9 KVA	LOAD X 125% NEC 210.19 CONTINUOUS		
			RECEPTACLE	23.1 KVA	16.6 KVA	10KVA + 50% REMAINDER NEC 220.44	58.0 KVA	53.6KVA
A	18.7 KVA	32%	HVAC	2.4 KVA	2.4 KVA	LOAD X 100% (USED MCA IN CALCULATION)	160.9A	148.7A
B	23.3 KVA	40%	MISC	23.8 KVA	23.8 KVA	LOAD X 100% NEC 210.19 NON-CONT.		
C	16.0 KVA	28%	NP	0.0 KVA	0.0 KVA	0 NONCOINCIDENTAL LOADS NEC 220.60		

NOTES:
A. PROVIDE GFCI BREAKER
B. VIA EMS RELAY
C. PROVIDE ISOLATED GROUND PER NEC 250.146(D)

ELECTRICAL KEYED NOTES

1. METER & CT BY UTILITY, 600A NEMA 3R CT CABINET & METER SOCKET BY ELECTRICAL CONTRACTOR.
2. EC SHALL PROVIDE 600AS/600AF, NEMA 3R, SERVICE ENTRANCE RATED DISCONNECT SWITCH.
3. EC SHALL PROVIDE A 600A, 120/208V, 3ϕ, 4W MCB PANEL 'MDP'.
4. EC SHALL PROVIDE SQUARE D TVSS UNIT, OR EQUIVALENT. SIZE & TYPE APPROPRIATE TO PANEL.
5. EC SHALL PROVIDE A 200A 120/208V 3ϕ, 4W MLO PANEL 'A' WITH AN ISOLATED GROUND BUS. ISOLATED GROUND BUS TO HAVE A DIRECT CONNECTION TO SERVICE GROUND.
6. EC SHALL PROVIDE (2 SETS) 4#350MCM,3"C COORDINATE WITH LOCAL UTILITY COMPANY
7. EC SHALL PROVIDE (2 SETS) 4#350MCM, 1#1GND.,1#6 ISO GND.,3"C COORDINATE WITH LOCAL UTILITY COMPANY
8. EC SHALL PROVIDE 4#3/0, 1#6GND. 1#6 ISO GND.,2"C



1 **ONE LINE RISER DIAGRAM**
NO SCALE

PROTOTYPE TEMPLATE:
NORTHLAKE
v.2020.1.08.TKD

PROJECT INFORMATION:
TIRE KINGDOM.
STORE # 945
10520 COLONIAL BLVD
FT MEYERS, LEE COUNTY, FLORIDA

SEAL:
95% REVIEW SET
18 AUGUST 2020
DARRELL A. CASE P.E.

PROJECT NO.: 2020-0095
DRAWN BY: DVC
CHECKED BY:

ISSUE	DATE
PERMIT PLAN REVIEW	11-AUG-2020

REVISION	DATE

SHEET TITLE:
ELECTRICAL SCHEDULES

SHEET NUMBER:
E-5

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