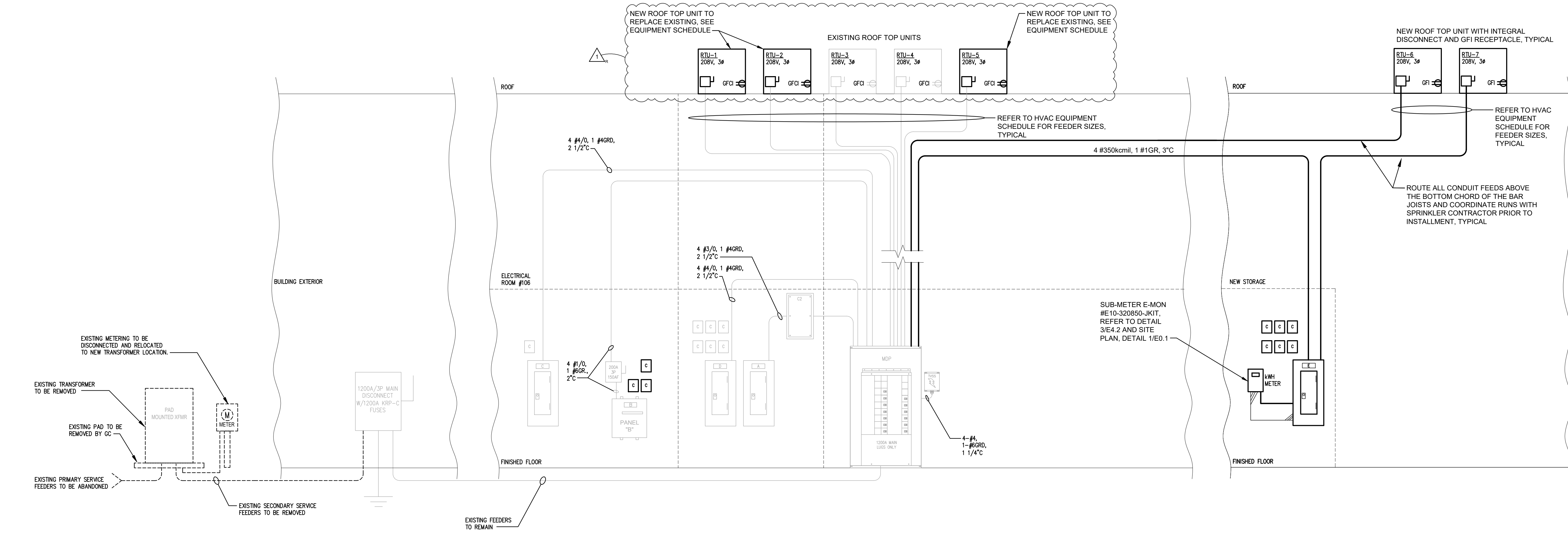


**1 RISER DIAGRAM**
E4.0

SCALE: NOT TO SCALE

COORDINATE METERING AND
SERVICE REQUIREMENTS
WITH UTILITY COMPANYCT'S INSIDE
TRANSFORMER
ENCLOSUREPROVIDE PAD PER UTILITY
COMPANY REQUIREMENTS3 SETS OF 4" PVC CONDUITS,
EACH WITH (4) 600 kcmil
COPPER CONDUCTORSWALL MOUNTED METER OR
PROVIDE CONCRETE PEDESTAL
PER SPECIFICATIONS
COORDINATE LOCATION WITH
OCALA ELECTRIC UTILITY**2 NEW SERVICE**
E4.0

SCALE: NOT TO SCALE

RISER DIAGRAM LINETYPE LEGEND:

- EXISTING ELECTRICAL EQUIPMENT AND
WIRING TO REMAIN, UNLESS NOTED
OTHERWISE
- EXISTING ELECTRICAL EQUIPMENT AND
WIRING TO BE REMOVED
- NEW ELECTRICAL EQUIPMENT AND WIRING
PROVIDED BY THE CONTRACTOR

EQUIPMENT SCHEDULE									
FILE: 2100630 LOAD.xlsm									
PLAN MARK	EQUIPMENT SERVED	LOAD	VOL./PHASE	FED BY	TON	FLA	OCPD	FEEDER	REMARKS
RTU 1	ROOF TOP UNIT	38.19KVA	208/3	MDR	25	106.0A	175A	(3)#2/0,#6G 2" C	NEW UNIT, 36kW HEATER (RATED AT 230V), 7.5HP SUPPLY FAN, PROVIDE NEW 200A/150AF WP FUSED DISCONNECT WITH BUSSMANN TYPE LPJ FUSES (150A FUSES PER MOCPD DATA)
RTU 2	ROOF TOP UNIT	38.19KVA	208/3	MDP	25	106.0A	175A	(3)#2/0,#6G 2" C	NEW UNIT, 36kW HEATER (RATED AT 230V), 7.5HP SUPPLY FAN, PROVIDE NEW 200A/150AF WP FUSED DISCONNECT WITH BUSSMANN TYPE LPJ FUSES (150A FUSES PER MOCPD DATA)
RTU 3	ROOF TOP UNIT	36.39KVA	208/3	MDP	25	101.0A	175A	(3)#2/0,#6G 2" C	EXISTING TO REMAIN, 45kW HEATER
RTU 4	ROOF TOP UNIT	36.39KVA	208/3	MDP	25	101.0A	175A	(3)#2/0,#6G 2" C	EXISTING TO REMAIN, 45kW HEATER
RTU 5	ROOF TOP UNIT	13.19KVA	208/3	MDP	5	36.6A	70A	(3)#4,#6G 1" C	NEW UNIT, 12kW HEATER (RATED AT 230V), 1HP SUPPLY FAN, PROVIDE NEW 60A/45AF WP FUSED DISCONNECT WITH BUSSMANN TYPE LPJ FUSES (45A FUSES PER MOCPD DATA)
RTU 6	ROOF TOP UNIT	47.23KVA	208/3	MDP	20	131.1A	175A	(3)#2/0,#6G 2" C	NEW UNIT, 54kW HEATER (RATED AT 230V), 5HP SUPPLY FAN, SERVICE DISCONNECT AND WP/GFI RECEPTACLE FURNISHED WITH UNIT
RTU 7	ROOF TOP UNIT	47.23KVA	208/3	E	20	131.1A	175A	(3)#2/0,#6G 2" C	NEW UNIT, 54kW HEATER (RATED AT 230V), 5HP SUPPLY FAN, SERVICE DISCONNECT AND WP/GFI RECEPTACLE FURNISHED WITH UNIT

3 SCHEDULES
E4.0

SCALE: NOT TO SCALE

UT. XFMR FAULT CALC		2100630 LOAD.xlsm
SERVICE ENTRANCE		CALCULATION
VOLTAGE (L-L):	208V	I-FLA=[RATED KVA * 1000]/[V-L*SQRT(3)]
PHASE (PH):	3	
AMPS:	1200A	I-FLA= 833A
FULL LOAD KVA:	432KVA	
TRANSFORMER:	300KVA	M=100%/Z= 36.4
IMPEDANCE (%Z):	2.75%Z	I-SC=I-FLA*M= 30.3 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.

FEEDER FAULT CALC		2100630 LOAD.xlsm
STARTING I-SC:		30.3 KA
VOLTAGE (L-L):		208V
PHASE (PH):		3
FEEDER SIZE:		600
FEEDER MATERIAL:		CU
PARALLEL SETS (Q):		3 SETS
FEEDER LENGTH (L):		90FT
FEET PER OHMS (C):		28.033 FT/OHMS
NOTE: CALCULATION BASED ON BUSSMANN SPD		

MOTOR LOAD FAULT CALC		2100630 LOAD.xlsm
STARTING I-SC:		23.8 KA
MOTOR LOAD (KVA):		257KVA
MOTOR LOAD (A):		715A
NOTE: CALCULATION FOR MDP WITH MOTOR CONTRIBUTION.		

PANEL E FEEDER FAULT CALC		2100630 LOAD.xlsm
STARTING I-SC:		28.1 KA
VOLTAGE (L-L):		208V
PHASE (PH):		3
FEEDER SIZE:		350
FEEDER MATERIAL:		CU
PARALLEL SETS (Q):		1 SETS
FEEDER LENGTH (L):		190FT
FEET PER OHMS (C):		22.737 FT/OHMS
NOTE: CALCULATION BASED ON BUSSMANN SPD		

RTU-6 FEEDER FAULT CALC		2100630 LOAD.xlsm
STARTING I-SC:		9.5 KA
VOLTAGE (L-L):		208V
PHASE (PH):		3
FEEDER SIZE:		2/0
FEEDER MATERIAL:		CU
PARALLEL SETS (Q):		1 SETS
FEEDER LENGTH (L):		290FT
FEET PER OHMS (C):		11.424 FT/OHMS
NOTE: RTU IS RATED FOR 5KA.		

RTU-7 FEEDER FAULT CALC		2100630 LOAD.xlsm
STARTING I-SC:		22.5 KA
VOLTAGE (L-L):		208V
PHASE (PH):		3
FEEDER SIZE:		2/0
FEEDER MATERIAL:		CU
PARALLEL SETS (Q):		1 SETS
FEEDER LENGTH (L):		340FT
FEET PER OHMS (C):		11.424 FT/OHMS
NOTE: BUSSMANN 1200A KRP-C FUSE LET-THROUGH 22.5KA WITH POTENTIAL LINE SIDE SCC OF 50KA. RTU IS RATED FOR 5KA.		

GENERAL NOTES:

- ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL NAMEPLATE DATA ON DIVISION 15 EQUIPMENT AND NOTIFY THE ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE WITH HVAC CONTRACTOR TO DETERMINE INSTALLATION REQUIREMENTS IF ALTERNATE ROOF TOP UNITS ARE TO BE PROVIDED WITH NO ADDITIONAL COST TO OWNER.
- ALL CONDUCTORS SHALL BE SOFT DRAWN, ANNEALED COPPER HAVING A CONDUCTIVITY OF NOT LESS THAN 98% OF THAT OF PURE COPPER. REFER TO SPECIFICATIONS FOR MORE INFORMATION ON WIRING METHODS, CONDUCTORS, INSULATION TYPES AND CONDUIT TYPES.
- NO HAZARDOUS MATERIALS ARE STORED OR USED ON PREMISES AND NO AREA IS DEEMED A HAZARDOUS AREA PER NEC DEFINITIONS.
- BRACING OF THE EQUIPMENT IS BASED ON AVAILABLE FAULT CURRENT PER BUSSMANN LOW PEAK YELLOW DUAL-ELEMENT TIME-DELAY FUSES.
- IF BRANCH PANELS ARE SERIES RATED, OVERCURRENT DEVICE ENCLOSURES SHALL BE IDENTIFIED AS SERIES RATED IN ACCORDANCE WITH NEC 110.22 THE OVERCURRENT DEVICES SHALL BE AIC RATED PER MANUFACTURER'S LABELING OF THE ELECTRICAL EQUIPMENT.
- THE OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING RATING OF NOT LESS THAN 10000 AMPS RMS SYMMETRICAL, OR AS SPECIFIED OTHERWISE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE RECORD DRAWINGS AND MANUALS TO THE OWNER PER SPECIFICATIONS.
- ELECTRICAL SERVICE EQUIPMENT SHALL BE MARKED TO IDENTIFY IT AS BEING SUITABLE FOR USE AS SERVICE EQUIPMENT.
- ALL ELECTRICAL EQUIPMENT SHALL BEAR THE STAMP OF APPROVAL FROM A NATIONALLY RECOGNIZED TESTING LABORATORY OR CARRY THE NECESSARY LISTING AND CERTIFICATION FROM A STATE REGISTERED ELECTRICAL ENGINEER.
- TRACK HAS BEEN CIRCUITED TO SUPPORT INSTALLED TRACK HEADS (LUMINAIRES). CONNECTED LOAD ON TRACK SHALL NOT EXCEED THE RATING OF TRACK PER NEC ARTICLE 410.101(B). TENANT (ROOMS TO GO) INSTALLS NUMBER OF TRACK HEADS PER CASCO'S DRAWINGS AND REALIZES THEY CANNOT LOAD TRACK TO EXCEED BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE RATING.
- PROVIDE SIGNAGE TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS AS PER NEC ARTICLE 110.16.

GENERAL DEMO NOTES:

- BEFORE SUBMITTING THE PROPOSAL FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK AND THE GENERAL CONDITIONS. HE SHALL HAVE FULL KNOWLEDGE AS TO TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, AVAILABILITY OF WATER, ELECTRIC POWER AND ALL OTHER FACILITIES IN THE AREA WHICH WILL HAVE A BEARING ON THE PERFORMANCE OF HIS WORK AND THE CONTRACTOR FOR WHICH HE SUBMITS A PROPOSAL. FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF WITH ALL AVAILABLE INFORMATION SHALL NOT RELIEVE HIM OF ANY RESPONSIBILITY FOR PERFORMING HIS WORK PROPERLY. ADDITIONAL COMPENSATION SHALL NOT BE ALLOWED FOR CONDITIONS INCREASING THE CONTRACTOR'S COST WHICH WERE NOT KNOWN TO OR ANTICIPATED BY HIM WHEN SUBMITTING HIS PROPOSAL. IF THE CONDITION WAS OBVIOUS AND COULD HAVE BEEN DISCOVERED BY HIM IF HE HAD VISITED THE PROJECT AND HAD THOROUGHLY INFORMED HIMSELF OF ALL EXISTING CONDITIONS WHICH WOULD AFFECT HIS WORK.
- THE EXISTING STORE WILL BE OPERABLE THROUGHOUT THE DEMOLITION AND CONSTRUCTION ACTIVITY (POWER TO EXISTING ROOMS TO GO STORE SHALL REMAIN INTACT THROUGHOUT THE CONSTRUCTION PROJECT DURING WORK HOURS). PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION ACTIVITY, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER, AND POWER AND TELEPHONE COMPANY AS REQUIRED, REGARDING ALL CONSTRUCTION ISSUES THAT MAY HAVE ANY IMPACT ON OPERATION OF EXISTING STORE.
- VERIFY LOCATIONS OF UTILITIES PRIOR TO THE INITIATION OF SITE CONSTRUCTION AND COORDINATE ALL SERVICE ISSUES THAT MAY TAKE PLACE DURING THE CONSTRUCTION. COORDINATE POWER SHUT OFF AND SWITCH-OVER WITH OWNER AND Ocala ELECTRIC UTILITY COMPANY.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL REQUIREMENTS IF EQUIVALENT ROOF TOP UNITS ARE USED THAN SPECIFIED IN PLANS, WITH DIFFERENT MCAMCOP THAN FOR TRANS UNITS. CONTRACTOR SHALL ENSURE THAT ROOF TOP UNITS ARE PROTECTED WITH HACR BREAKER OR FUSED DISCONNECT SWITCH MEETING THE MOCP REQUIREMENTS OF THE ROOF TOP UNIT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER IF EQUIVALENT UNITS WITH DIFFERENT MCAMCOP ARE USED.