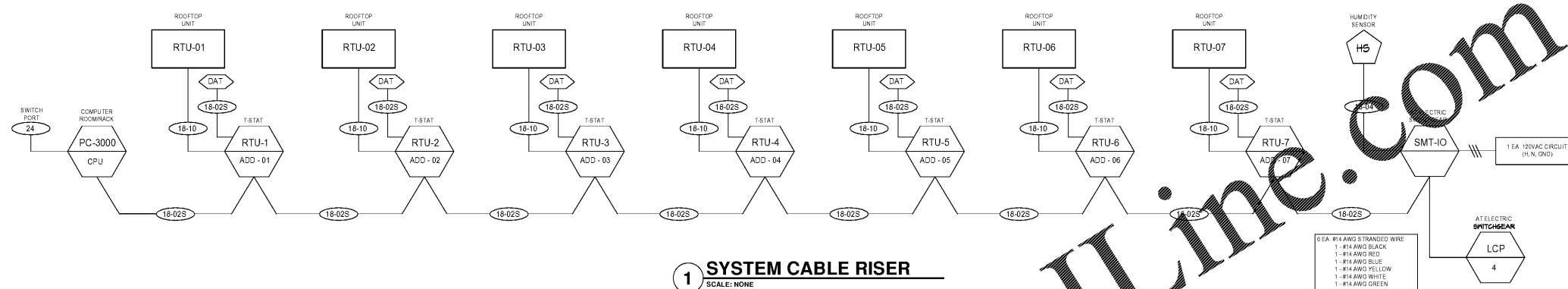


Design and construction documents are instruments of service and shall remain the property of Michael Crislip Architect. The use of these documents for purposes other than the specific project mentioned herein without the written consent of Michael Crislip Architect is prohibited.



GENERAL NOTES

- CMS MECHANICAL IS THE DESIGNATED VENDOR OF CHOICE FOR THE 'CLIENT' ENERGY MANAGEMENT SYSTEM. EMS WILL BE FURNISHED AND INSTALLED BY CMS.
- FOR QUOTES OR OTHER INFORMATION PLEASE CONTACT:
 CMS MECHANICAL SERVICE
 (221) 473-1759
 SUPPORT@CLIENTFIS.COM
- ELECTRICAL CONTRACTOR AND MECHANICAL CONTRACTOR SHALL HAVE ALL RESPECTIVE TRADE WORK / SYSTEMS COMPLETE AND FULLY OPERATIONAL PRIOR TO CMS MECHANICAL ARRIVAL TO PROJECT SITE. CMS MECHANICAL TYPICALLY IS SCHEDULED BY THE GENERAL CONTRACTOR / TO ARRIVE JUST PRIOR TO SCHEDULED CONSTRUCTION COMPLETION DATE. E.C. AND M.C. SHALL VERIFY CMS MECHANICAL'S EXACT SCHEDULED ARRIVAL DATE WITH THE GENERAL CONTRACTOR.
- ALL NETWORK EQUIPMENT AND CONNECTIVITY TO THE CORPORATE FACILITY SHALL BE COMPLETE PRIOR TO CMS COMPLETING THE CLIENT SYSTEM INSTALLATION. SEE SPECIFIC PROJECT PLANS FOR EXACT QUANTITY OF RTUS.

ELECTRICAL CONTRACTOR (E.C.):

- E.C. SHALL COMPLETE ALL WORK ASSOCIATED WITH 'CLIENT' ENERGY MANAGEMENT SYSTEM IN A NEAT AND WORKMANLIKE MANNER. ALL WORK SHALL COMPLY WITH LOCAL AND NATIONAL CODES GOVERNING WORK PERFORMED.
- E.C. SHALL PROVIDE ALL CONDUIT, JUNCTION BOXES, MUD RINGS, HIGH VOLTAGE WIRE, ETC. REQUIRED FOR A COMPLETE SYSTEM INSTALLATION.
- THE MINIMUM SIZE CONDUIT USED SHALL BE 3/4" EMT. ALL MOUNTING BOXES FOR THERMOSTATS SHALL BE 4" SQUARE BOX WITH A SINGLE GANG MUD RING. REFER TO MECHANICAL SHEETS FOR LOCATIONS AND MOUNTING HEIGHTS.
- E.C. SHALL INSTALL ALL THERMOSTAT CABLE AND LOW VOLTAGE CABLE AS SHOWN ON THE DRAWINGS. REFER TO MECHANICAL SHEET FOR THERMOSTAT LOCATIONS. DIBBY CHANGING OF LOW VOLTAGE WIRING IS TO OCCUR IN SEQUENCE (i.e. RTU-1, RTU-2, RTU-3, etc.) CMS SHALL PROVIDE ALL LOW VOLTAGE CABLE FOR THE SYSTEM INSTALLATION.
- CMS MECHANICAL HIRED BY G.C. SHALL PROVIDE THE LIGHTING CONTROL PANEL (LCP) COMPLETE WITH INTEGRAL / PRE-MOUNTED LIGHTING CONTACTORS. E.C. SHALL INSTALL THE LIGHTING CONTROL PANEL (LCP), INCLUDING LINE / LOAD WIRING, CONNECTIONS, TERMINATIONS, ETC. WITHIN THE LCP AS DIRECTED BY CMS MECHANICAL.
- CONTRACTOR SHALL PROVIDE ONE (1) 120V/25A CIRCUIT TO THE LIGHTING CONTROL PANEL (LCP).
- UPON RECEIPT / NOTICE BY ELECTRICAL CONTRACTOR TO CMS MECHANICAL, CMS MECHANICAL SHALL SHIP SYSTEM COMPONENTS (i.e. LOW VOLTAGE WIRING / LIGHTING CONTROL PANEL (LCP), etc.) TO THE ELECTRICAL CONTRACTOR FOR TIMELY INSTALLATION. PER THE PROJECTS SCHEDULE, CONTRACTOR SHALL BE RESPONSIBLE FOR INVENTORYING, SECURING / STORAGE OF RECEIVED MATERIALS / EQUIPMENT. CONTRACTOR SHALL PAY FOR ANY DAMAGED OR LOST EQUIPMENT / MATERIALS RECEIVED. CMS MECHANICAL SHALL NOT BE RESPONSIBLE FOR RECEIVING DAMAGED OR LOST EQUIPMENT / MATERIALS SHIPPED.
- CONTRACTOR SHALL HAVE A QUALIFIED TECHNICIAN ON SITE WHEN CMS MECHANICAL IS INSTALLING / COMMISSIONING CLIENT SYSTEM TO CORRECT ANY DEFICIENCIES.

MECHANICAL CONTRACTOR (M.C.):

- M.C. SHALL HAVE ALL RTUS / HVAC SYSTEMS COMPLETE, TESTED AND CAPABLE OF COMPLETE / FULL OPERATION PRIOR TO CMS MECHANICAL ARRIVAL. M.C. SHALL VERIFY / COORDINATE WITH THE GENERAL CONTRACTOR REGARDING DATE OF CMS MECHANICAL ARRIVAL TO THE PROJECT. UPON ARRIVAL, CMS MECHANICAL SHALL MAKE ALL NECESSARY FINAL CONNECTIONS, ETC. FOR COMPLETION / OPERATION OF THE 'CLIENT' ENERGY MANAGEMENT SYSTEM UPON ARRIVAL.
- M.C. SHALL PROVIDE AND INSTALL ANY TEMPORARY THERMOSTATS FOR HVAC DURING THE CONSTRUCTION PHASE FOR HEATING / COOLING PRIOR TO CLIENT SYSTEM INSTALLATION. CLIENT THERMOSTATS SHALL NOT BE USED FOR TEMPORARY CONTROL OF HVAC EQUIPMENT.
- M.C. SHALL PROVIDE AND INSTALL ANY REQUIRED INTERFACES, BOARDS, AND/OR PROVIDE WIRING IN ORDER THAT ALL HVAC EQUIPMENT CAN BE OPERATED WITH A 'STANDARD' 24VAC THERMOSTAT CONSISTING OF NOT LESS THAN R/G/Y/W/B/W2 WIRING TERMINALS.
- M.C. SHALL HAVE A QUALIFIED TECHNICIAN ON SITE WHEN CMS MECHANICAL IS INSTALLING / COMMISSIONING CLIENT SYSTEM TO CORRECT ANY DEFICIENCIES.

CONTROLS CONTRACTOR (C.C.) HIRED BY G.C.:

- C.C. FOR NORTHERN TOOL + EQUIPMENT SHALL BE THE MECHANICAL CONTRACTOR'S COMPANY.
- CMS SHALL PROVIDE, INSTALL, AND PROGRAM ALL REQUIRED THERMOSTATS.
- C.C. SHALL PROVIDE AND DELIVER TO THE CLIENT SYSTEM WIRING AND SOFTWARE TO COMPLY WITH ESTABLISHED SEQUENCE OF OPERATION (S.O.P.). SEE EMS 1 SCHEMATIC AND ELECTRICAL CONTRACTOR NOTES / FURTHER DETAILS.
- C.C. PROVIDES INTEGRATED LIGHTING CONTROL PANEL (LCP) WITH INTEGRAL LIGHTING CONTACTORS. E.C. SHALL INSTALL THE LIGHTING CONTROL PANEL (LCP) AS DIRECTED BY CMS MECHANICAL. CONTRACTOR SHALL PROVIDE ONE (1) 120V/25A CIRCUIT TO THE LIGHTING CONTROL PANEL (LCP).
- C.C. PROVIDES HUMIDITY SENSOR (H5) W/ PIPING / BOX / WIRE / SENSOR.

DEVICE ID	DESCRIPTION	PART #	PROVIDED BY	INSTALLED BY	NOTES
PC-3000	Client CPU	CLIENT-PC3000	CMS/Nextech	CMS/Nextech	PC3000 equipment typically installed in NTE server cage located within offices.
18-02S	18-02 Shield Cable, Plenum	18-02C PLUJ WHT	CMS/Nextech	Electrical Contractor	Route exactly as shown. Runs in bar/joint square with building and wire lead as required.
18-04	18-04 Non-Shielded Cable	18-04C NIS PLUJ WHT	CMS/Nextech	Electrical Contractor	Route from Client I/O Panel at electrical switchgear to humidity sensor on center sales floor column.
18-10	18-10 TSTAT Cable PVC	18-10C TSTAT BRD PVC	CMS/Nextech	Electrical Contractor	Route from thermostat location to rooftop unit control section where thermostat connections are located. Leave enough slack to install/uninstall conductors.
TH-1	Client Thermostat	T32P-CLIENT	CMS/Nextech	CMS/Nextech	Mount at 84" F.F. on sales area columns as shown on Mechanical sheets. Install 4" square box with 1/2" rise - 1 gang mud ring in horizontal orientation. Stub 3/4" E.M.T. to bar post level.
DAT	Client Thermostat	Discharge Air Sensor	CMS/Nextech	CMS/Nextech	Pull 18-02S cable to supply duct and coil up 15 ft. for use by CMS/Nextech installation.
H5	Humidity Sensor	HEW2V5X	CMS/Nextech	CMS/Nextech	Mount at 84" F.F. on sales area columns as shown on Mechanical sheets. Install 4" square box with 1/2" rise - 1 gang mud ring in horizontal orientation. Stub 3/4" E.M.T. to bar post level.
INT-IO	Client I/O Panel	CLIENT-IO-NTE	CMS/Nextech	CMS/Nextech	Field installed by CMS/Nextech. Physical dimensions are 15 1/2" x 14 1/2" x 3 1/2". Requires one (1) 120V 15 circuit for power provided by the electrical contractor.
LCP	Client Lighting Contactor Panel	CLIENT-LCP4	CMS/Nextech	Electrical Contractor	Lighting Contactor Panel includes 4 N.C. - 4 Pole lighting contactors, 2 ea. for Sales/Warehouse Lights, 1 ea. for Signs and 1 ea. for Wall Park Lights. Requires 4 conductors by electrical contractor to SMT-I/O Panel (3 colors and 1 neutral). Electrical contractor to connect all Line/Load circuit connections.

LEAD	CONTROL VARIABLE	CLIENT EMS PROGRAMMING SCHEDULE														NOTES
		SUNDAY		MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY		
		ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
SALES FLOOR LIGHTS	SCHEDULE	8:00:00 AM	5:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	SCHEDULE ONLY. SCHEDULE CHANGES ACTIVATED LOCALLY SET 60 MINUTES PRIOR TO STORE OPENING + 30 MINUTES AFTER CLOSING.
WAREHOUSE LIGHTS	SCHEDULE	8:00:00 AM	5:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	SCHEDULE ONLY. SCHEDULE CHANGES ACTIVATED LOCALLY SET 60 MINUTES PRIOR TO STORE OPENING + 30 MINUTES AFTER CLOSING.
PARKING LOT LIGHTS	SCHEDULE/SUNSET	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	SUNSET - 30 MIN	11:00:00 PM	LIGHTS TURN ON AT SUNSET - 30 MINUTES AND TURN OFF AT 8:00 PM.
EXTERIOR SIGNS/PARK LIGHTS (SECURITY)	SUNRISE/SUNSET	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	SUNSET - 30 MIN	SUNRISE	LIGHTS TURN ON AT SUNSET - 30 MINUTES AND TURN OFF AT 8:00 PM.
HVAC	SCHEDULE/SETPOINT	8:00:00 AM	5:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	7:00:00 AM	8:30:00 PM	
*OCCUPIED COOL SETPOINT	78F															NOT ADJUSTABLE LOCALLY.
*UNOCCUPIED COOL SETPOINT	78F															NOT ADJUSTABLE LOCALLY.
*OCCUPIED HEAT SETPOINT	68F															NOT ADJUSTABLE LOCALLY.
*UNOCCUPIED HEAT SETPOINT	62F															NOT ADJUSTABLE LOCALLY.
*OCCUPIED FAN MODE	AUTO															CYCLES WITH CALL FOR HEATING OR COOLING.
*UNOCCUPIED FAN MODE	AUTO															CYCLES WITH CALL FOR HEATING OR COOLING.

Order Plans @