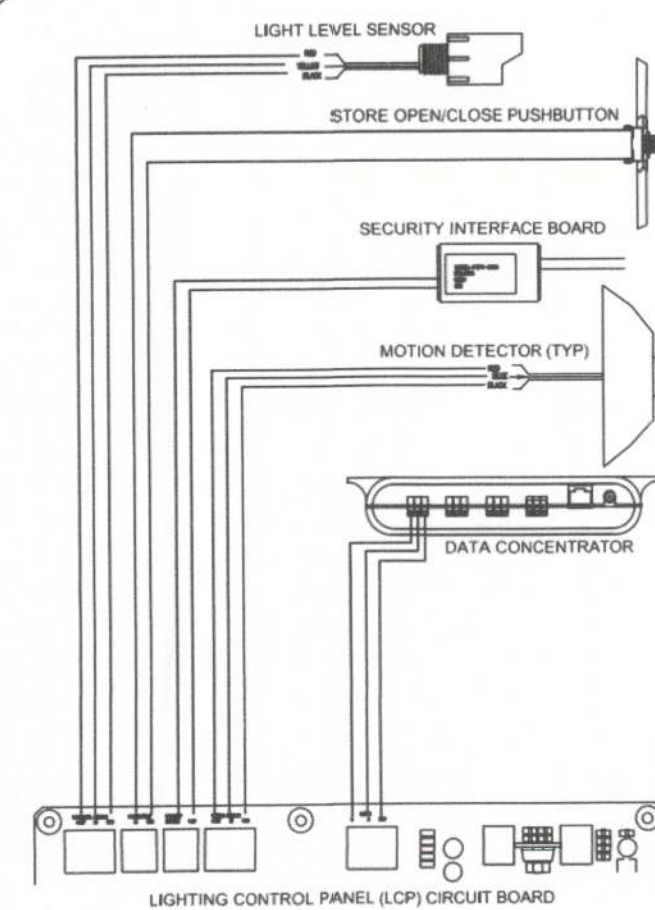
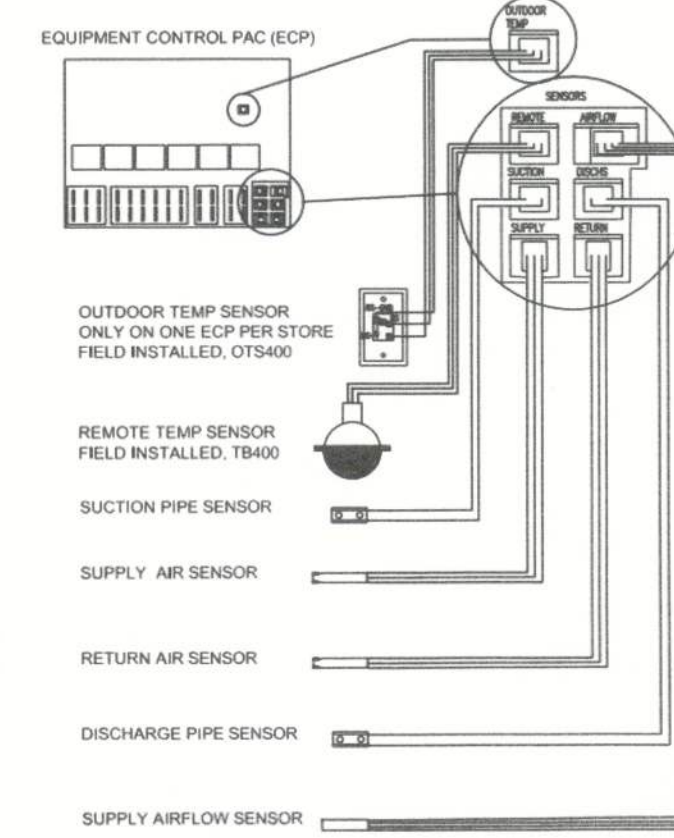


2 LIGHTING CONTROL PANEL  
SCALE: N.T.S.

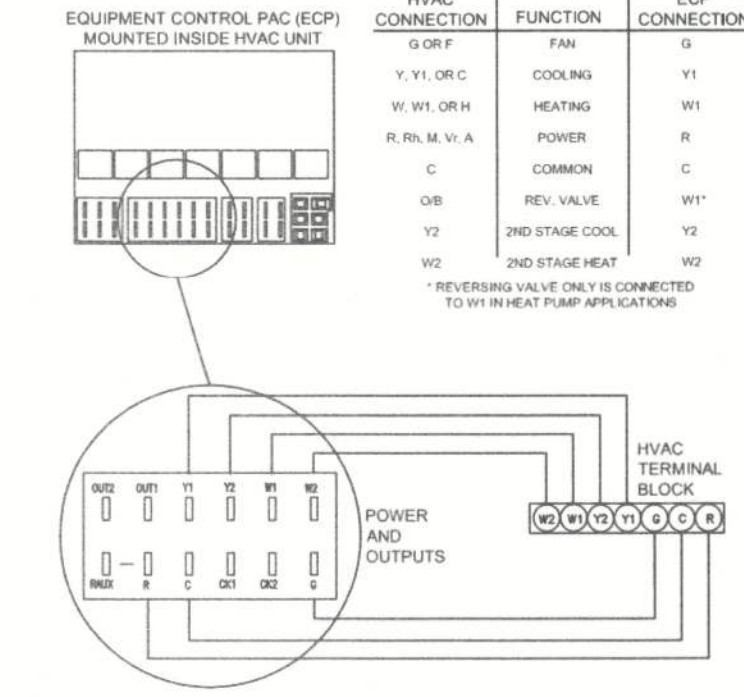


3 LIGHTING CONTROL SENSORS  
SCALE: N.T.S.

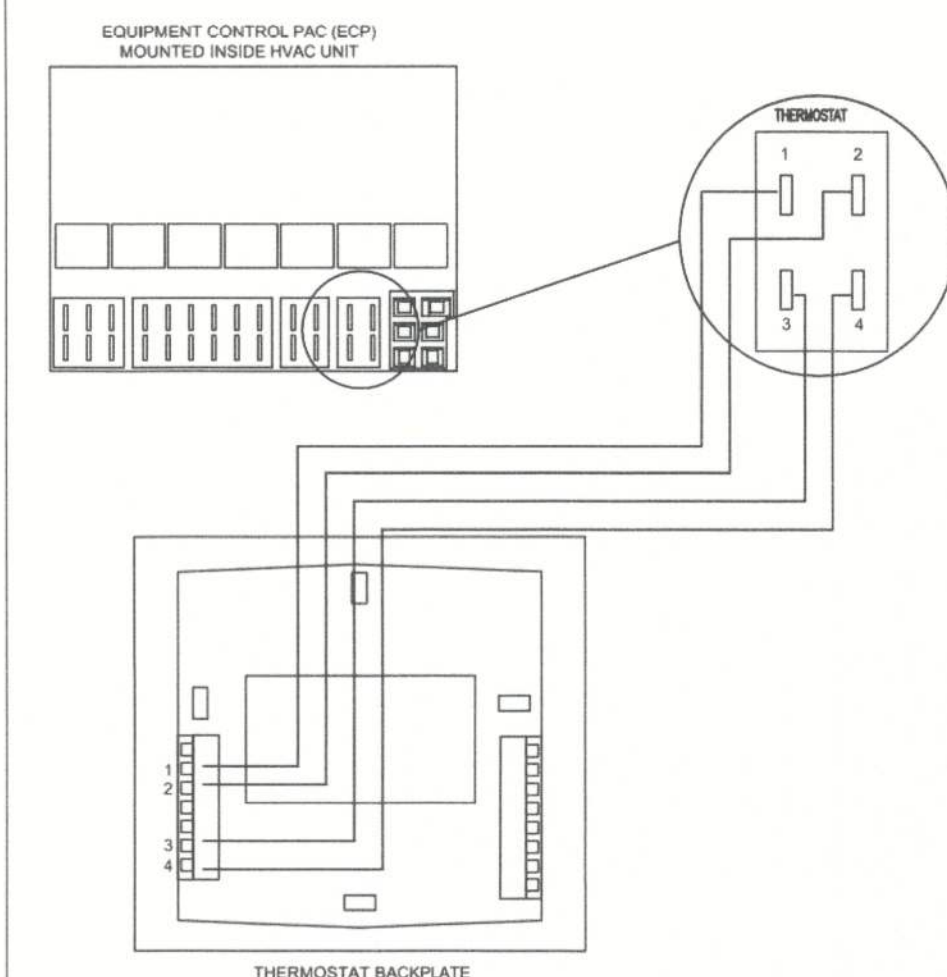
PROVIDE ONE EQUIPMENT CONTROL PAC (ECP) PER HVAC SYSTEM.



4 EQUIPMENT CONTROL PAC (ECP) SENSORS  
SCALE: N.T.S.



5 HVAC CONTROL WIRING  
SCALE: N.T.S.



6 THERMOSTAT WIRING  
SCALE: N.T.S.

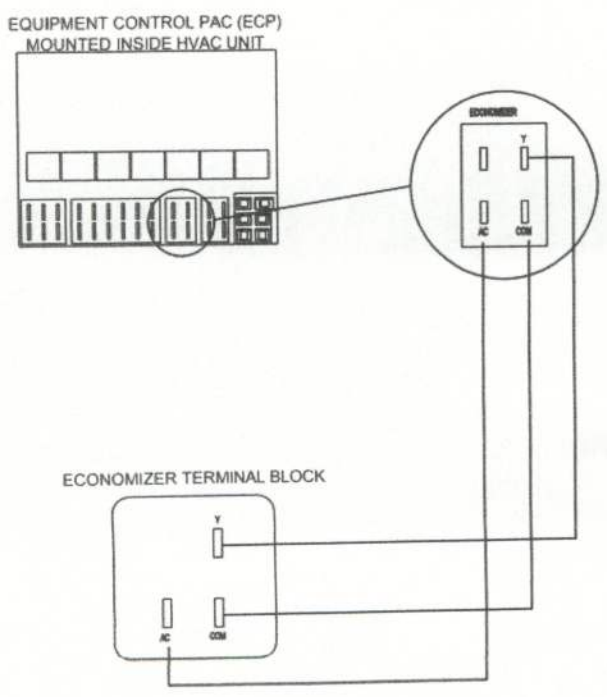
**NOTES:**

- DRAWINGS ARE FOR GENERAL INFORMATION ONLY. LOCAL BUILDING CODES, BUILDING PLANS AND STORE OWNER STATEMENT OF WORK TAKE PRECEDENCE OVER THIS DOCUMENT.
- REFER TO THE SURVEYOR MANUAL AND INSTALLATION INSTRUCTIONS FOR EACH COMPONENT FOR ADDITIONAL CRITICAL INFORMATION.
- SOME HVAC UNITS ARE AVAILABLE WITH THE SURVEYOR ECP AND SENSORS PRE-INSTALLED. THE REMOTE TEMPERATURE SENSOR AND ONE OUTDOOR TEMPERATURE SENSOR PER STORE WILL NEED TO BE CONNECTED IN THE FIELD TO THE ECP.
- ALL ECP'S REQUIRE SETTING OF THE EQUIPMENT NUMBER DIP SWITCHES AND HEAT PUMP JUMPERS AS APPROPRIATE. REFER TO THE EQUIPMENT CONTROL PAC INSTALLATION INSTRUCTIONS FOR FURTHER INFORMATION.
- ALL WIRING IS GA, UNSHIELDED, UNLESS OTHERWISE NOTED.
- WIRING MAY BE RUN IN CONDUIT OR WIRE TIED IN BUNDLES, AS SPECIFIED BY THE CUSTOMER IN THE STATEMENT OF WORK.
- DO NOT RUN COMMUNICATION AND SENSOR WIRES IN THE SAME CONDUIT OR BUNDLE WITH CONTROL AND LINE VOLTAGE WIRING.
- CAUTION: INSTALLATION REQUIRES REMOVAL OF SAFETY COVERS AND EXPOSE THE INSTALLER TO ELECTRICAL HAZARDS. USE OF A LICENSED ELECTRICIAN IS REQUIRED. FOLLOW ALL APPROPRIATE SAFETY PRECAUTIONS. ADDITIONAL SAFETY INFORMATION IS IN THE SURVEYOR INSTALLATION MANUALS.

**VENSTAR ORDERING NOTES:**

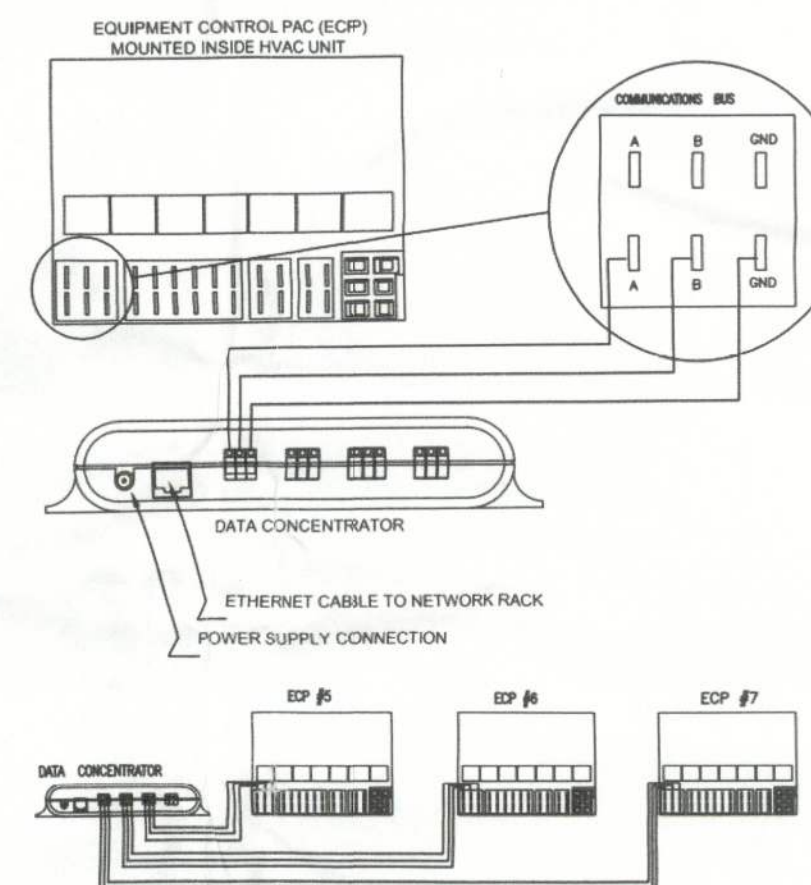
- E.C. SHALL FURNISH AND INSTALL VENSTAR SYSTEM. E.C. RESPONSIBLE TO CONTACT VENSTAR TECHNICAL SUPPORT @ 800-812-9812 OR EMAIL [ORDERS@VENSTAR.COM](mailto:ORDERS@VENSTAR.COM) FOR QUOTATION, EQUIPMENT CUT SHEETS AND SUBMITTAL DRAWING.
- ELECTRICAL CONTRACTOR SHALL CONTACT VENSTAR AT LEAST 4 WEEKS BEFORE PRODUCT IS REQUIRED ON SITE. E.C. SHALL PROVIDE PANEL SCHEDULE TO VENSTAR FOR QUOTATION, CONFIGURATION AND AMPERAGE.
- E.C. RESPONSIBLE TO RE-TORQUE ALL FACTORY WIRING TERMINATIONS UPON DELIVERY OF VENSTAR SURVEYOR EQUIPMENT.
- E.C. SHALL CONTACT VENSTAR WITH EXACT BREAKER QUANTITIES AND SIZES FOR ALL HVAC UNITS/UNIT HEATER.
- ALL WIRING TO THE THERMOSTATS BY HVAC CONTRACTOR.
- THE VENSTAR SURVEYOR EQUIPMENT IS FACTORY PREWIRED. THE CONTRACTOR IS RESPONSIBLE TO MAKE ANY MINOR ADJUSTMENTS DUE TO CHANGES MADE IN THE FIELD.
- THE INTERIOR MOTION SENSORS, LIGHT LEVEL SENSORS, STORE OPEN/CLOSE PUSHBUTTON, OUTDOOR TEMPERATURE SENSOR, REMOTE TEMPERATURE SENSOR(S), THERMOSTAT(S), EQUIPMENT CONTROL PAC(S) AND DATA CONCENTRATOR WILL BE FURNISHED WITH THE VENSTAR SYSTEM AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL DEVICES WILL WIRE BACK TO THE VENSTAR SURVEYOR EQUIPMENT. ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE FINAL LOCATION OF VENSTAR SENSORS AND EQUIPMENT WITH FAMILY DOLLAR PRIOR TO INSTALLATION.
- PROVIDE NUMBER OF T-STATS AS REQUIRED PER STORE HVAC SYSTEM TO VENSTAR.

WHEN EQUIPPED, CONNECT 0-10VDC MODULATING ECONOMIZER DAMPER MOTOR AS SHOWN. HVAC UNITS WITH SURVEYOR FACTORY INSTALLED WILL HAVE THIS WIRING PRE-CONNECTED, DEPENDING ON THE ECONOMIZER OPTIONS.



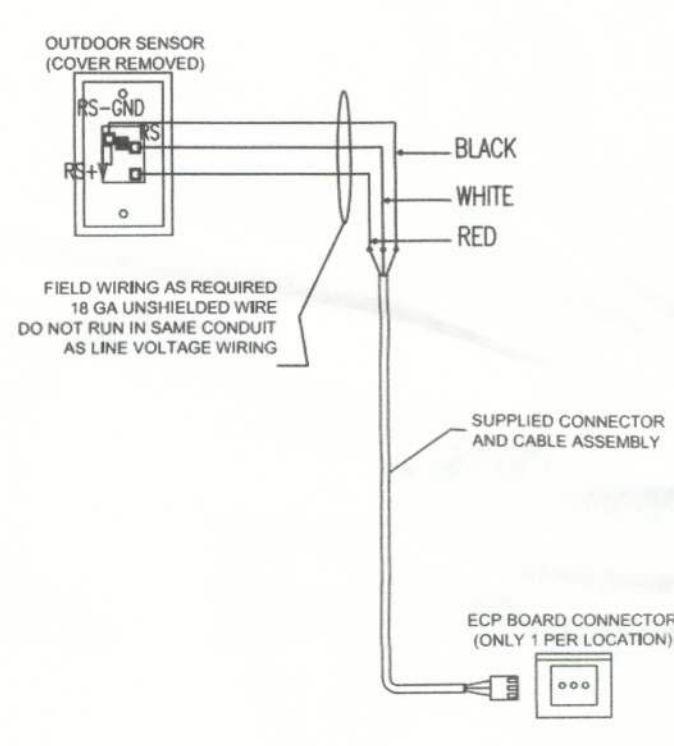
7 ECONOMIZER WIRING  
SCALE: N.T.S.

WIRE EACH ECP WITH INDIVIDUAL HOME RUN COMMUNICATION WIRING TO THE DATA CONCENTRATOR. TO A SEPARATE CONNECTOR WHEN POSSIBLE. WHEN MORE THAN THREE ECP'S ARE USED (3 PORTS FOR ECP'S PLUS ONE FOR THE LIGHTING CONTROL PANEL) ADDITIONAL UNITS CAN BE WIRED TO A PORT ON THE DATA CONCENTRATOR THAT ALREADY HAS COMMUNICATION WIRES CONNECTED.



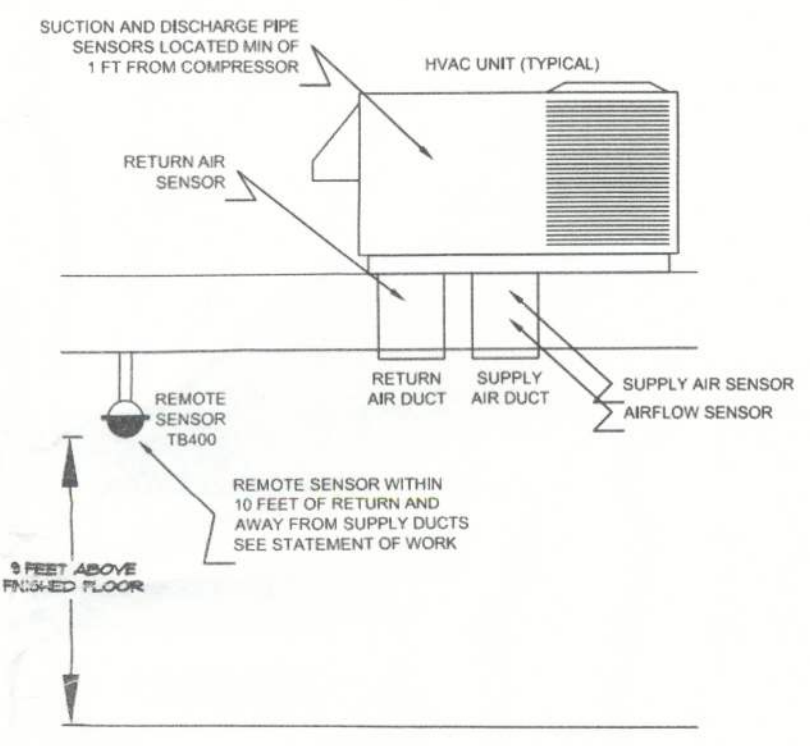
8 COMMUNICATION WIRING  
SCALE: N.T.S.

MOUNT THE OUTDOOR SENSOR (OTS400) ON A NORTH FACING, VERTICAL SURFACE, NEAR THE TOP OF ONE HVAC UNIT PER STORE. ASSURE THE SENSOR IS NOT LOCATED WHERE IT WILL NOT BE AFFECTED BY HEATED CONDENSER AIRFLOW.



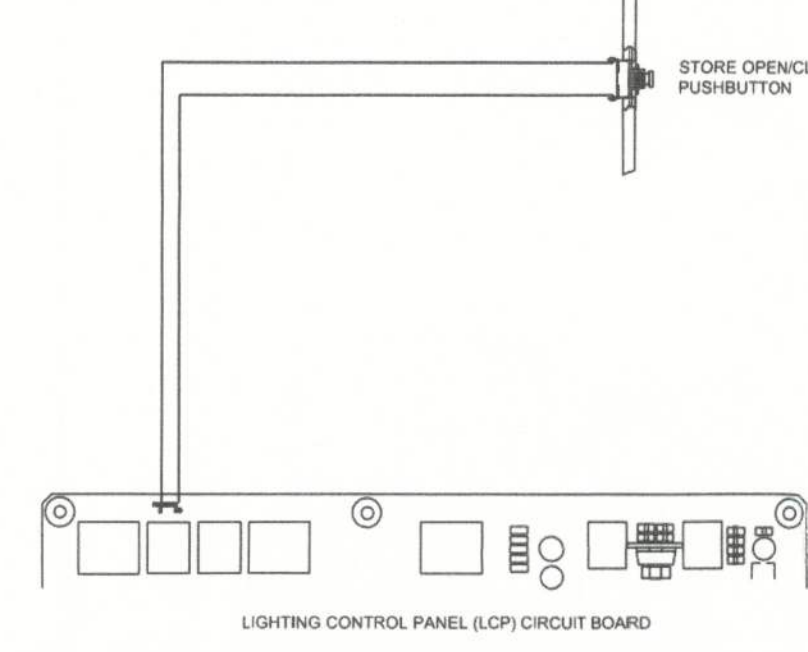
9 OUTDOOR SENSOR DETAILS  
SCALE: N.T.S.

THE HVAC UNIT MAY COME WITH THE SURVEYOR ECP AND SENSORS FACTORY INSTALLED. FACTORY INSTALLED UNITS STILL REQUIRE FIELD CONNECTION OF THE REMOTE SENSORS, OUTSIDE SENSOR (ONE ONE HVAC UNIT PER STORE), THERMOSTAT WIRING, AND COMMUNICATION WIRING. FOR NONFACTORY INSTALLED ECP'S, THE ECP MUST BE MOUNTED INSIDE THE HVAC UNIT. ALL ECP'S REQUIRE FIELD SETTING OF THE EQUIPMENT NUMBER SWITCHES (SEE INSTALLATION MANUAL).



10 ECP SENSOR POSITIONS  
SCALE: N.T.S.

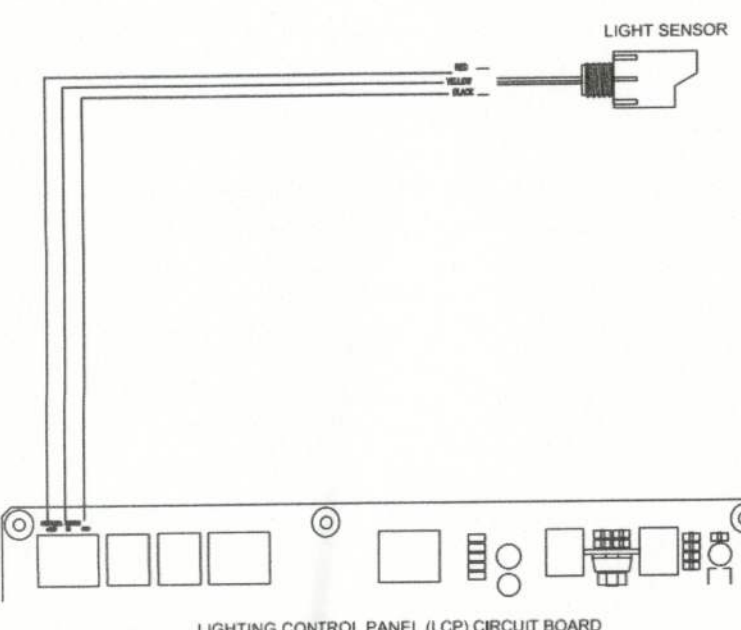
PUSH BUTTON MOUNTED IN 2X4 JUNCTION BOX LOCATED 48" AFF OR ADA ACCESSIBLE. TYPICALLY IN MANAGER'S OFFICE. SEE STATEMENT OF WORK FOR SPECIFIC POSITION. WIRING POLARITY IS NOT IMPORTANT.



11 STORE OPEN/CLOSE PUSHBUTTON  
SCALE: N.T.S.

**NOTE:**  
EXACT LOCATION OF MOTION SENSORS IS TO BE CONFIRMED WITH FAMILY DOLLAR REPRESENTATIVE PRIOR TO INSTALLATION.  
MOUNTING HEIGHTS FOR MOTION SENSORS IS TO BE 11'-6" AFF

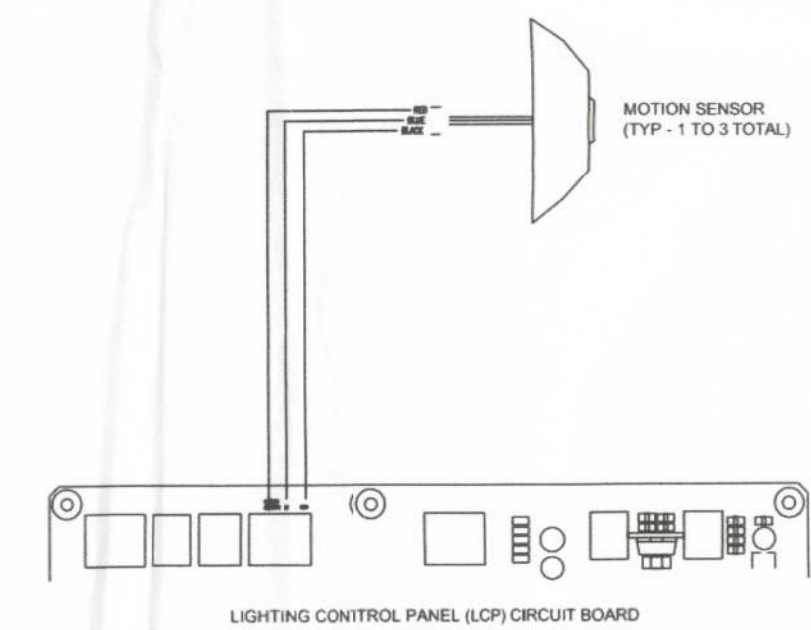
MOUNT THE LIGHT SENSOR NEAR THE TOP OF ONE OF THE VERTICAL, NORTH FACING SIDES OF ONE OF THE HVAC UNITS. THE LIGHT SENSOR MUST MOUNT HORIZONTAL, FACING NORTH. ASSURE THE SENSOR WILL NOT BE AFFECTED BY LIGHTING OR BRIGHT REFLECTIONS.



12 OUTDOOR LIGHT SENSOR  
SCALE: N.T.S.

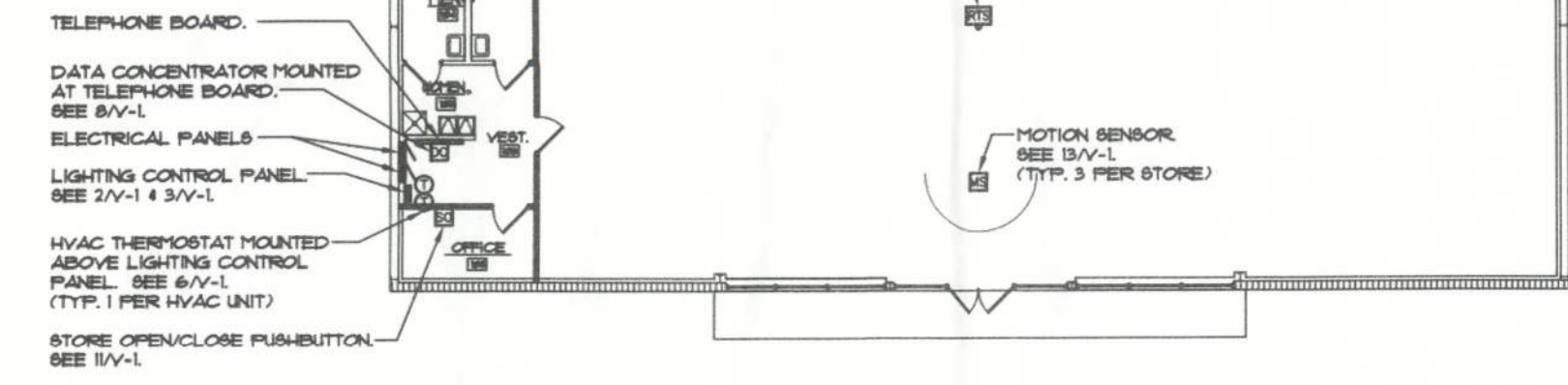
MOUNT MOTION SENSOR 11'6" A.F.F. AVOID PLACEMENT NEAR MOVING ITEMS SUCH AS HANGING BANNERS. POSITION SENSORS TO PROVIDE BEST COVERAGE OF EMPLOYEES ENTERING THE STORE AND WORKING DATE. DETAILS OF THE NUMBER OF MOTION DETECTORS AND POSITION GUIDELINES CAN BE FOUND IN THE STATEMENT OF WORK.

WHEN WIRING MULTIPLE MOTION DETECTORS, RUN SEPARATE WIRES FROM EACH DETECTOR AND COMBINE THEM AT THE LCP TERMINAL BLOCK.

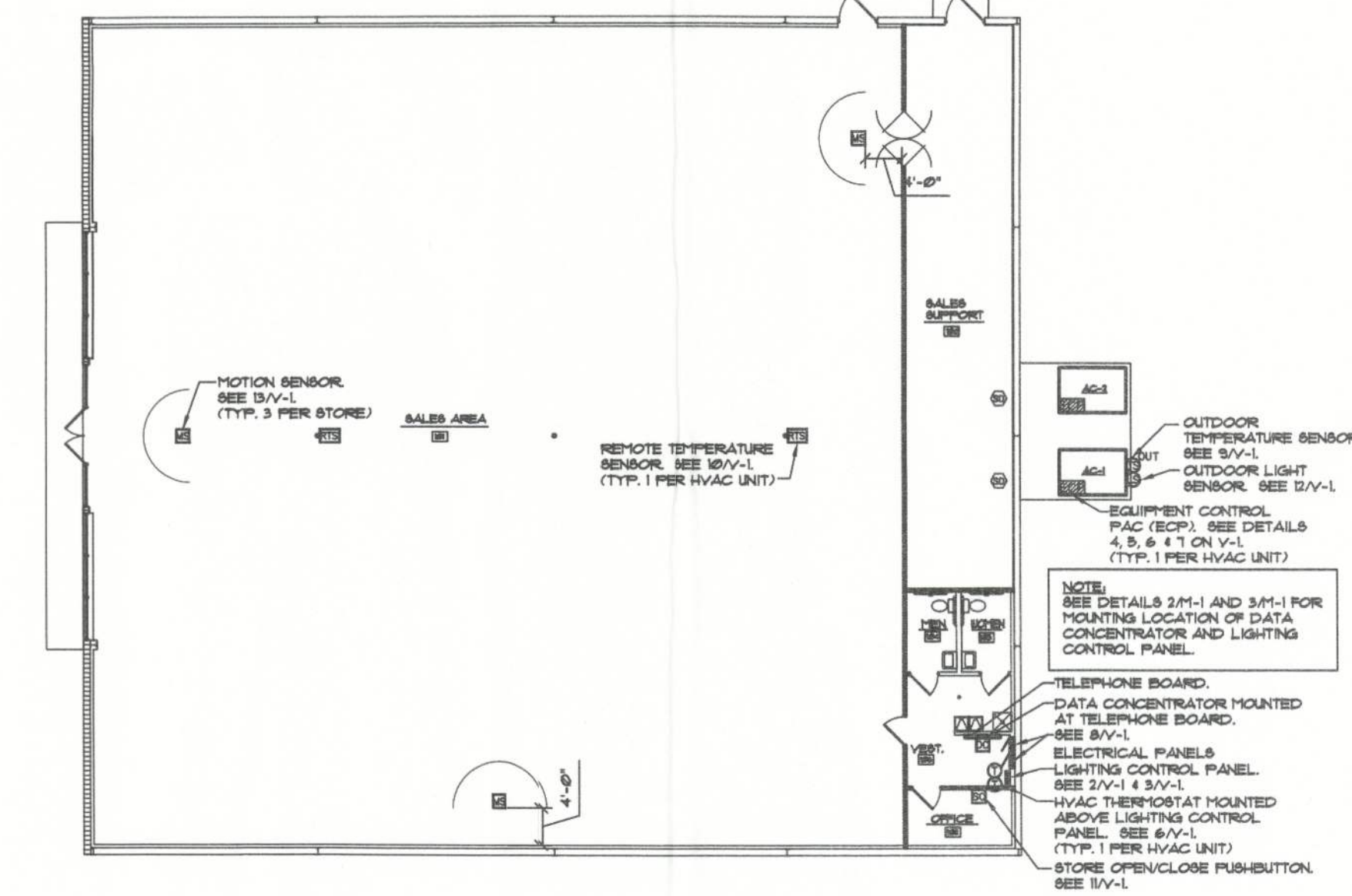


13 MOTION SENSORS  
SCALE: N.T.S.

**NOTE:**  
SEE DETAILS 2M-1 AND 3M-1 FOR MOUNTING LOCATION OF DATA CONCENTRATOR AND LIGHTING CONTROL PANEL.



1 SIDE STOCK ROOM STORE LAYOUT OVERVIEW  
SCALE: 1/8" = 1'-0"



2 REAR STOCK ROOM STORE LAYOUT OVERVIEW  
SCALE: 1/8" = 1'-0"

**GETTING STARTED**

**PROGRAM SCHEDULES - PRESS THE PROGRAM BUTTON.**  
USE THE MODE BUTTON TO ADVANCE THROUGH THE PROGRAMMING SCREENS. USE THE UP AND DOWN ARROWS TO ADJUST THE FLASHING ITEMS IN EACH SCREEN.

**TO VIEW SENSORS - PRESS THE OUTSIDE BUTTON.**  
USE THE UP OR DOWN BUTTONS TO ADVANCE TO THE NEXT SENSOR READING.

1. OUTSIDE TEMP.
2. OUTSIDE HUMIDITY
3. INSIDE HUMIDITY
4. REMOTE TEMP.
5. SUCTION PIPE TEMP.
6. SUPPLY AIR TEMP.
7. DISCHARGE PIPE TEMP.
8. RETURN AIR TEMP.
9. AIR VELOCITY (FPM)
10. SECONDARY VOLTAGE

ARCHITECTURE  
ENGINEERING  
LAND SURVEYING

**LIS**

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CLIENT NAME  
**STEPHENS BARRIOS**  
823 IRMA AVENUE  
ORLANDO, FLORIDA, 32803

PROJECT NAME  
**FAMILY DOLLAR STORE**  
PLAN # 2011-04 / 104x80  
FORT WHITE, FL

SHEET TITLE  
**Venstar System Plans and Details**

STATE OF FLORIDA  
REGISTERED PROFESSIONAL ENGINEER  
ROBERT W. CHASE  
FLORIDA PE #44643

RELEASE DATE

PROJECT NO.  
2012-001

ISSUE DATE  
03/08/2012

DRAWN CHECKED  
JC CS

V1