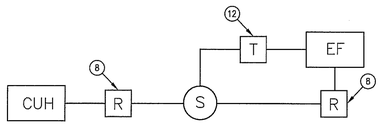
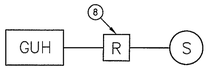
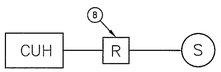
- CONTRACTOR(S) SHALL VERIFY EXISTING CONDITIONS AND CORRELATE DIMENSIONS PRIOR TO PROVIDING THE WORK DETAILED IN THESE DRAWINGS, AND SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- COPYRIGHT SBLM, ARCHITECTS PC. UNAUTHORIZED REPRODUCTION OR OTHER USE OF THIS DRAWING IS PROHIBITED.



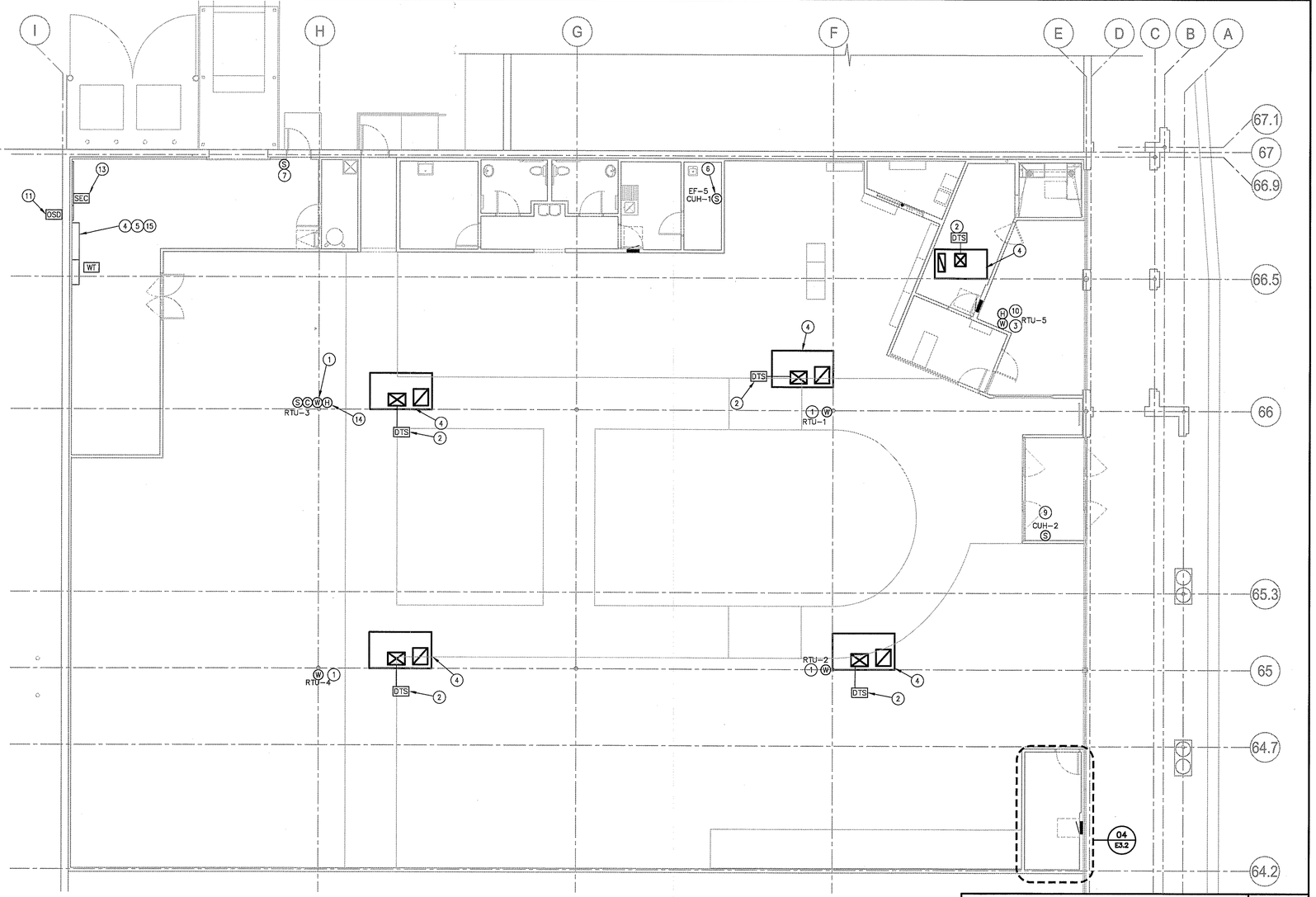
SCHEMATIC WIRING DIAGRAM 1



SCHEMATIC WIRING DIAGRAM 2



SCHEMATIC WIRING DIAGRAM 3



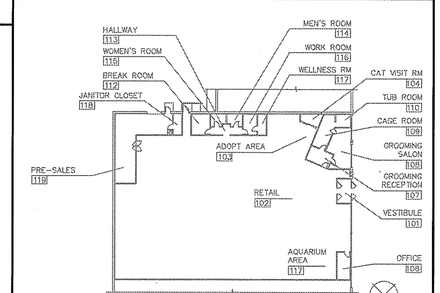
NOTES FOR THIS DRAWING

1. Refer to sheet EMS1.1 for additional control system information. Refer to sheet E1.3 for Contactor Schedule.
2. Refer to EMS Vendor installation wiring diagrams for wire types and point-to-point terminations.
3. No sensor wiring shall be installed unsupported by tie-wraps, or conduit.
4. All sensor wiring installed exposed below the bottom of the chord of bar joist shall be installed in EMT conduit or shall be concealed behind walls or ceilings or installed through hollow mullions.
5. All junction boxes installed exposed on sales floor and mounted below the bottom of the roof structure shall be surface-mounted style, no visible knockouts.
6. E.C. to verify local requirements for low voltage systems wiring and provide conduit(s) where required.

KEYNOTES (SYMBOLS ①,② ETC.)

1. Locate 4"x4"x2"D junction box with single gang plaster ring in Retail Area at 72" AFF. Where possible do not locate controller directly in air stream of any RTU. Install 4"x4" junction box below RTU (below ceiling where applicable). Install ¾" conduit from sensor junction box to junction box below RTU, and from that junction box to RTU. Install 22/2 cable from this location to the respective roof top unit's control section. Label wire "Zone" and coil 6' in the unit's control section.
2. Supply air Duct Temperature Sensor (RTS-UVC) supplied and factory installed and wired by RTU manufacturer.
3. Temperature controller and humidity sensor junction boxes at 54" AFF.
4. Provide 22/2 shielded cable in accordance with EMS1.1 notes, in a daisy chain style, from the Savvy location to each roof top unit's control section finishing at the Grooming Unit. Leave 6' at the Savvy location. Leave 3' in each roof top unit control section and label wires with unit number they are run to. These wires are to be run from the ceiling space to the roof top unit in their own raceway. Do not run low voltage wires inside the power conduit.
5. Leave at least six feet (6') of cable coiled up for each cable run to Savvy.
6. Wellness room temperature sensor (WTS-10) mounted at 54" AFF. Install 22/8 cable from this location to Savvy Controller. See Wiring Diagram 1.
7. Unit heater temperature sensor (WTS-10) mounted at 54" AFF. Install 22/8 cable from this location to Savvy Controller. See Wiring Diagram 2.
8. 10A, DPDT Idec relay, 24VAC coil.
9. Unit heater temperature sensor (WTS-10) mounted at 54" AFF. Install 22/8 cable from this location to Savvy Controller. See Wiring Diagram 3.
10. Provide 2"x4"x2"D junction box with single gang plaster ring adjacent to the Grooming Area RTU temperature sensor junction box for humidity sensor (HUM). Connect the two junction boxes with a ½" chase nipple. 22/2 Cable from this location to Savvy.
11. Penetrate outside wall of building and install a weathertight LB conduit body on the exterior and a 4"x4" junction box on the interior. Provide a ½" rigid conduit to 3' above roofline for the Outside Sensor Device (OSD) provided by the EMS vendor. Install a 22/8 cable from this j-box to the Savvy Controller. Terminate wires at the OSD only as shown on the EMS vendor prints. OSD to face north.
12. UL listed Class 2 40VA control transformer with 24V secondary.
13. Provide ½" conduit from Security Alarm System Monitor (SEC) in the Pre-Sales area to the Savvy in or adjacent to the IP&CA.
14. Provide one (1) 4"x4"x2" junction box with single gang plaster ring for each of the following devices below one (1) RTU temperature sensor junction box serving the central sales area (typically RTU#3); Sales Area CO2 sensor, Sales Area humidity sensor, Sales Area enthalpy sensor. Connect the junction boxes with ½" chase nipples. 22/8 Cable from devices in this location to Savvy. Refer to 04/E3.1.
15. Novar Savvy baseplate and MinIO input-cutput boards provided by EMS vendorto Power Wall manufacturer. Hil Phoenix to factory mount and wire thesedevices. Savvy baseplate will arrive on site pre-wired to the lighting relays, 8-button override switch, Veris Meter and control transformer.

EMS PLAN	06
REF.:	1/8" = 1'-0"



KEY PLAN	01
REF.:	NO SCALE

MEP Engineer of Record
Randall A. Nielson, P.E.
14817 West 95th Street
Lenexa, Kansas 66215
Phone 913 322 5150

PETCO ANIMAL SUPPLIES STORES, INC.
PETCO "CARY, NC"
213 CROSSROADS BOULEVARD
CARY, NC 27518

PETCO
9125 RESEARCH ROAD
SAN DIEGO, CALIFORNIA 92121

DISTRIBUTION:	DATE:
25% SUBMISSION	01-15-10
75% SUBMISSION	01-29-10
98% SUBMISSION	02-25-10
ISSUED FOR CONSTRUCTION	02-26-10

SBLM JOB#	PETCO P.M. JOB #
09147	09277
DRAWN:	CHECKED:
MTH/JCC/JMM	BJT

DRAWING TITLE:
ENERGY MANAGEMENT SYSTEM PLAN

E2.5

0 1/4" 1/2" 1" 2" 3" 4" 5"