

## **ITEMS REQUIRED FOR ALL COMMERCIAL ELECTRICAL PLANS**

- 1. Specifications that are applicable to the project, having the correct voltage, circuit, elements, products, and wiring methods for the particular work at hand.
- 2. Calculations performed to obtain load analysis, service size, panel, and transformer capacities, available fault currents and voltage drop, as well as the coordination study and resulting sizing of equipment made per the above.
- 3. Single line diagram with all primary and secondary distribution equipment and loads, including feeder identification with conductor and raceway size and type.
- 4. Primary distribution equipment and other loads located in plain view, with initial spatial coordination done by the design professional.
- 5. Service entrance arrangements with the serving utility made, confirmed, and noted by the design professional.
- 6. Branch circuiting, with voltage drop considerations, for both power and lighting, including switching, dimming, special controls, and homerun designations.
- 7. Mechanical equipment power requirements and physical locations including special information as the who mounts equipment, connects, tests, etc.
- 8. Control Diagrams and schematics revealing interactive relationship as well as operating logic for all systems. Information should be adequate to understand and install appropriate wiring.
- 9. Schedule of fixtures, panelboards, switchgear, and other equipment including sizes, types, styles, catalog numbers, and other pertinent characteristics.
- 10. Transformer selection Due to high electronic equipment use in commercial office buildings, "K" rated transformers are required.

