7.714 Any oil filled padmounted equipment shall be located a minimum of 10' from combustible buildings, windows, doors and stairwells.

7.715 **Before digging contact Miss Utility of Delmarva at 1-800-282-8555 for utility markouts**. If digging in the public right of way contact the City of Newark Public Works Department to obtain a permit.

7.716 A site meeting is required to verify compliance with these standards and to locate all padmounted equipment. Conduit locations at poles, orientation of padmounted gear and firewall requirements will also be verified.

8. COMMERCIAL SECONDARY SERVICE REQUIREMENTS

8.1 PLANNING

8.11 Before work can began for a new commercial secondary service, a City of Newark service and meter location form (See figure 1) shall be filed describing completely as possible the equipment to be served and the **size of the load** to be supplied so that adequate capacity may be provided. **Before proceeding with any wiring the point of delivery and meter location shall be determined by a City of Newark representative.** Site and design plans are required including a single line diagram, switchgear specifications, other service equipment and proposed locations of all equipment.

8.2. POINT OF DELIVERY

8.21 The City of Newark will designate in writing, upon request, a satisfactory point of delivery where the customer shall terminate wiring and facilities for connection to the supply lines of the City of Newark. The failure to request and obtain such location may result in refusal of service pending relocation of the customer facilities. However, the designation of a point of delivery does not constitute an agreement or obligation on the part of the City of Newark to furnish service.

8.3 EASEMENTS

8.31 Easements may be required to install City owned facilities. Easements shall be shown on the development prints.

8.4 INSTALLATION

8.41 All new wiring and equipment shall be installed in accordance with the latest edition of the National Electric Code and the City of Newark requirements in order to be approved for connection.

8.5 INSPECTION AGENCY APPROVAL

8.51 The City will connect its distribution system only after receipt by the City of a notice of approval issued by a duly recognized inspection agency. In order to receive an inspection, the customer shall have a valid City of Newark Building Permit.

8.6 SERVICE ENERGIZING

8.61 The City of Newark Electric Department will set the meter and energize the service after the customer meets all commercial electric service requirements including:

1. Paying all connections fees
2. Paying any applicable construction and material fees
3. Paying a meter deposit
4. Receiving a notice of approval from a duly recognized inspection agency
5. Applying for a service for billing purposes with the City of Newark Customer Service Department
6. If required by the City, a customer representative shall be present to energize the service

8.62 **Not all service voltages are available in all areas. Before purchasing electrical equipment or proceeding with any wiring, information regarding the types of service available shall be obtained from the City of Newark Electric Department.**

8.63 **The City shall provide one service per occupancy unless the customer load or customer service requirement warrants otherwise.**

8.7 SUPPLY VOLTAGES	MINIMUM	MAXIMUM
Single phase 120/240 volt 3 wire	-	100 kVA
Single phase 120/208 volt 3 wire	-	50 kVA
Three phase 120/208 volt 4 wire	75kVA	500 kVA u.g. service 300 kVA aerial service
Three phase 120/240 volt, 4 wire	75kVA	300kVA aerial only
Three phase 277/480 volt, 4 wire	75kVA	1500kVA u.g. service 300kVA aerial service

8.71 If maximum demand exceeds 1500kVA, the customer shall receive electric service at the primary voltage or special arrangements shall be made. Contact the City Electric Department to discuss such requirements.

8.72 All switch board, service entrance and metering compartment designs shall be approved before installation.

8.73 Owners of a building and residential, commercial and industrial developers shall contact the City during the planning stage of their projects whether or not City facilities already exist at the construction site. Existing facilities may not be adequate to support the proposed project. Customers will be required to pay a portion or all costs for extensions or upgrades of City facilities.

8.8 COMMERCIAL SECONDARY SERVICE UNDERGROUND

8.81 **Before digging contact Miss Utility of Delmarva at 1-800-282-8555 for utility markouts**. If digging in the public right of way contact the City of Newark Public Works Department to obtain a permit.

8.82 COMMERCIAL SECONDARY SERVICE UNDERGROUND FROM A SERVICE POLE

8.821 The customer shall install conduit and adequately sized underground secondary conductors a minimum of 30" deep. A rigid galvanized steel or schedule 80 PVC elbow and 10' of rigid galvanized steel or schedule 80 PVC conduit is required at any service pole. The rigid steel galvanized conduit shall be bonded to a pole ground with a conduit ground clamp. The remainder of the conduit may be PVC schedule 40. Customer shall furnish such PVC conduit and standoffs to the City for installation by City crews if existing energized conductors are located on the service pole. Pull string shall be installed prior to building conduit up pole. Customer is responsible for PVC conduit and standoff installation if no existing energized conductors are located on the pole. All conduits shall be stood off the pole a minimum of 1 + 5/8".

8.822 The customer shall provide a 5/8" x 10' copper clad ground rod at the pole if none exists.

8.823 Adequate secondary cable shall be installed to make connections to the City distribution system

8.824 The customer shall supply approved connectors for attachment to the City distribution system. (See figure 13).

8.83 COMMERICAL SECONDARY SERVICE UNDERGROUND FROM A PADMOUNT TRANSFORMER

8.831 See section 7.73 - 7.76 and 7.79 - 7.710 and 7.712 - 7.716 for primary underground conduit and cable installation.

8.832 The customer shall install conduit and secondary cable from the padmount transformer to the building. **A maximum of six conductors per phase is allowed on secondary bushings. If more than six conductors per phase are**

required, the customer shall supply and install a transition cabinet and pay any additional City costs related thereto.

8.84 TRANSFORMER PAD

8.841 If within a lawn, customer to excavate a 10' x 10' x 2' deep hole. The City will install foundation anchors, and then the contractor shall fill hole with 3/4" stone. The City will then provide a precast transformer pad (See figure 3). Customer shall ensure proper placement of primary and secondary conduit and accurately mark locations before foundation anchors are installed. The City assumes no responsibility if conduits are damaged in this process.

8.842 Customer shall furnish approved secondary lugs for installation by City crews in transformer cabinet. (See figure 13).

8.843 Customer shall install 1 1/4" rigid steel conduit from transformer secondary compartment to the meter location if current transformers will be installed in the transformer compartment.

8.9 COMMERCIAL SECONDARY SERVICE OVERHEAD

8.91 The City will install aerial conductors for commercial overhead service up to a maximum of 100 feet depending on location. The customer may be required to install a mast and guy to maintain proper clearances above ground. (See figure 6 and 15).

8.92 Aerial service drop conductors shall not cross over property owned by others.

8.93 The aerial service drop shall have a clearance of 3' from any building exit, window, door or other opening.

8.94 The customer shall install a suitable point of attachment at a location approved by the City.

8.95 The service entrance conductor shall have a weatherhead installed higher than the point of attachment and within 24" of the point of attachment.

8.96 Allow a minimum of 36" conductors outside of the weatherhead for connection to the service drop.

8.97 Customer shall supply approved aerial commercial service entrance connectors as listed in Figure 13. City will review number of conductors, size and number of conduits for approval at each service location.