



# City of Grand Island

Tuesday, July 26, 2005

Council Session

## Item F5

**#8990 - Consideration of Amending Chapter 15 of the Grand Island City Code Relative to Electrical Regulations**

Staff Contact: Craig Lewis

# Council Agenda Memo

**From:** Craig A. Lewis, Building Department Director

**Meeting:** July 26, 2005

**Subject:** Ordinance to Amend Chapter 15 of the City Code  
Pertaining to the Adoption of the 2005 National  
Electrical Code

**Item #'s:** F-5

**Presenter(s):** Craig Lewis, Building Department Director

## Background

The Grand Island Electrical Board has recently completed a review of the 2005 National Electrical Code and is forwarding a recommendation to the City Council for adoption with the revisions as specified in the proposed ordinance. Adoption of the 2005 NEC is required by State of Nebraska Statutes to maintain the Cities certified inspection program.

## Discussion

The Electrical Board and Staff have reviewed the proposed National Electrical Code and forwarded amendments to the City Council to adopt the latest edition of the National Electrical Code, and make revisions to the City Code. Of the revisions suggested the following are notable:

- 1). Adoption of the 2005 NEC.
- 2). Amend provisions for electrical metering, refer to City Utility Dept for standards.
- 3). Revise commercial building listing.
- 4). Revise language to specifically state and begin enforcement of owner occupied wiring permits, and electrical services and panels. This revision basically prohibits a home owner from wiring a proposed new dwelling as no one including himself would be living in the structure at the time of construction. New or replacement electrical services and main distribution panels would also be required to be installed by licensed electricians.
- 5). Revise the time period for existing 60 day temporary electrical services to 90 days, as the proposal will allow temporary electrical power to be connected to structures before the installation of interior wall finishes. Prior to this revision the dwelling was required to be at minimum enclosed, weather-tight, secured, and the dry wall installed.

This proposal will allow for the temporary power to be connected to the structure once the structure is framed, secured, and weather-tight, requiring additional time in which to complete the project.

Of the proposed revisions the most significant is not allowing a proposed home owner to install the wiring in a proposed new dwelling. The Electrical Board and the Staff strongly recommend this revision as countless hours of staff time have been involved in the enforcement and inspection of dwellings in which the owner claims to have installed the wiring and it has become very obvious he has not, electrical services and panel are much the same. A home owner living in his residence would still be able to complete an addition or remodel project to his home.

### **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Approve the request.
2. Disapprove or /Deny the request.
3. Modify the request to meet the wishes of the Council
4. Table the issue

### **Recommendation**

City Administration recommends that the Council approve the ordinance as proposed.

### **Sample Motion**

A motion to approve Ordinance #8990.

ORDINANCE NO. 8990

An ordinance to amend Chapter 15 of the Grand Island City Code; to amend Section 15-2 to adopt the 2005 National Electrical Code; to amend Section 15-3 pertaining to amendments to the National Electrical Code; to amend Section 15-6 pertaining to provisions for metering; to amend Section 15-7 pertaining to wiring in commercial buildings; to amend Section 15-15 pertaining to permits by owner-occupied structures; to amend Section 15-22 pertaining to required inspections; to repeal Sections 15-2, 15-3, 15-6, 15-7, 15-15, and 15-22 as now existing, and any ordinance or parts of ordinances in conflict herewith; and to provide for publication and the effective date of this ordinance.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA:

SECTION 1. Section 15-2 of the Grand Island City Code is hereby amended to read as follows:

**§15-2. National Electrical Code Adopted**

(A) There is hereby adopted by the City of Grand Island for the purpose of safeguarding persons and buildings from hazards arising from the use of electricity for light, heat, power, radio, signaling, and other purposes, that certain code known as the National Electrical Code, 2005 ~~2002~~-Edition, recommended by the National Fire Protection Association, except as modified by this section.

(B) The National Electrical Code adopted by subsection (A) above is modified by deleting Article 210.12, Article 362, Article 320, Article 210-52C Subsection 2 and 3, which are not adopted and shall have no force or effect. Articles 330, 334, 348, and 352 are amended by §15-3 of the Grand Island City Code.

(C) One copy of the National Electrical Code, 2005 ~~2002~~-Edition, shall be on file in the city clerk's office for public use and inspection as provided by law.

SECTION 1. Section 15-3 of the Grand Island City Code is hereby amended to read as follows:

**§15-3. Amendments to National Electrical Code, 2005 ~~2002~~-Edition**

The following sections are adopted as amendments to the same numbered sections of the National Electrical Code, 2005 ~~2002~~-Edition:

Article 330 - Metal-Clad Cable (Type MC)

330.10. Uses Permitted. Metal-clad cable may be used for indoor branch circuit use only when installed with a grounding conductor.

Approved as to Form	☐ _____
July 21, 2005	☐ City Attorney

## ORDINANCE NO. 8990 (Cont.)

330.12. Uses Not Permitted. Metal-clad cable shall not be used in hazardous locations where subject to physical damage, buried in direct contact with the earth, concrete, cinder fill, or where exposed to chemicals or acids.

### Article 334 – Nonmetallic -Sheathed Cable (Types NM, NMC, and NMS)

334.12. Uses Not Permitted. In any multifamily dwelling or structure exceeding three floors above grade. For the purpose of this article, the floor of a building shall be that floor that has fifty percent (50%) or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and only for vehicle parking, storage or similar use shall be permitted.

### Article 352 - Rigid Nonmetallic Conduit (PVC)

#### 352.10. Uses Permitted

- (A) Where encased in concrete
- (B) Underground installations
- (C) For service entrances on the outside of buildings where not subject to physical damage
- (D) For raceways to feed subpanels
- (E) In wet locations where used with proper connections and fittings
- (F) For physical protection of ground wires

#### 352.12. Uses Not Permitted

- (A) In hazardous (classified) locations (except as provided in National Electrical Code Sections 503.3, 504.20, 514.8)
- (B) For support of fixtures or other equipment
- (C) Where subject to physical damage
- (D) Where subject to ambient temperatures exceeding those for which the conduit is approved
- (E) In alleys or utility easements, the first section of conduit out of the ground
- (F) For branch circuits

### Article 348 - Flexible Metal Conduit

#### 348.10. Uses Permitted.

Flexible metal conduit may be used for fish work in old buildings or other places where rigid conduit is impractical to install. A special permit shall be obtained from the electrical inspector before it is used in any installations.

## SECTION 1. Section 15-6 of the Grand Island City Code is hereby amended to

read as follows:

### **§15-6. Service Entrances**

(A) Each service entrance with 2,000 amperes capacity or less shall be provided with a readily accessible main disconnecting device with appropriate overcurrent protection; provided, each service entrance larger than 2,000 amperes capacity shall comply with the provisions of the National Electric Code. The device shall disconnect all ungrounded conductors from the source of supply in one motion or operation of the hand. For overhead services, said overcurrent protection shall be installed within twenty-five (25) feet from the weatherhead, but within ten (10) feet from where the conductors enter the building. For underground services, said overcurrent protection shall be installed within ten (10) feet from where the conductors enter the building. No service entrance conductors shall be installed within the hollow spaces of a frame wall unless provided with overcurrent protection at their outer end. Attachment devices or insulators for the service drop shall be installed by the electrical contractor on the alley or easement side of the building in such a manner so that the clearances as required by this Code can be maintained by the utility company.

(B) *Manufactured Homes.* Pedestals shall be required for power to manufactured homes on private lots, unless (1) the manufactured home comes with the service equipment factory installed or (2) the manufactured home is secured to a permanent foundation that complies with applicable building codes. This pedestal shall have proper overcurrent protection and provisions for metering. The meter height shall be between 3-1/2 to 6-1/2 feet from grade to the center of the meter.

ORDINANCE NO. 8990 (Cont.)

(C) *Provisions for Metering.* Provisions for metering shall be in accordance with standards set out by the Grand Island Utilities Department, ~~installed on the exterior surface of the building by the contractor using metering equipment by the utility company. The height of said meter shall be not less than five feet, nor more than six and one-half feet from finished grade; provided, that deviations may be made from the provisions of this section in the event of unusual circumstances if written approval is given by the utilities department prior to installation of the work.~~

(D) *Electrical Service Panels for Dwellings.* The minimum size of electrical panel that can be installed in a dwelling shall be 20 circuit for 100 amp, 30 circuit for a 150 amp, and 40 circuit for a 200 amp.

(E) *Number of Services.* One electrical service shall be provided for each tract or parcel of land, except upon written request and approval by the Utilities Director and Building Department Director, and/or their respective designee.

(F) *Multiple Occupancy Building.* Each tenant shall have access to their disconnecting means and overcurrent protection. This disconnecting means and overcurrent protection shall not be guarded by locked doors.

Exceptions:

- (1) The disconnecting means and overcurrent protection are located in the tenant space.
- (2) All electrical equipment is located in a common area with access to all tenants.
- (3) Electrical equipment is located outside.

SECTION 1. Section 15-7 of the Grand Island City Code is hereby amended to

read as follows:

**§15-7. Wiring In Commercial Buildings**

(A) Metallic conduit wiring will be required for the installation of all wiring for lights, heat, air conditioning, or power in all commercial buildings. These include, but are not limited to, asylums, hospitals, hotels, motels, theaters, schools, factories, churches, warehouses, mills, grain elevators, food stores, office buildings, retail sales, stables ~~built to accommodate more than six horses~~, garages ~~capable of storing more than three automobiles~~, meeting halls, buildings of fireproof or mill construction.

(B) All dwelling units located within any commercial type building shall have electrical wiring installed in electrical metallic conduit.

(C) For uses of metal-clad cable (MC), refer to §15-3. For uses of rigid nonmetallic conduit (PVC), refer to §15-3.

SECTION 1. Section 15-15 of the Grand Island City Code is hereby amended to

read as follows:

**§15-15. Permit; Application**

(A) No permit shall be issued to any person to do or cause to be done any work regulated by this Code, except to a person holding a valid unexpired and unrevoked license as required by this chapter, except when and as otherwise hereinafter provided in this section.

(B) A permit may be issued to a properly licensed person not acting in violation of any current contractor licensing law.

(C) Any permit by this Code may be issued to any person to do any work regulated by this Code in a single family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters in connection with such buildings in the event that any such person is the bona fide owner of any such dwelling and accessory buildings and quarters, and that the same is currently ~~are~~ occupied by said owner, provided, that said owner shall personally purchase all material and shall personally perform all labor in connection therein. No permit shall be issued to said owner for the installation of a new electrical service and panel.

(D) If work is done by other than said owner the permit will be voided and said owner will be subject to possible legal action.

ORDINANCE NO. 8990 (Cont.)

SECTION 1. Section 15-22 of the Grand Island City Code is hereby amended to read as follows:

**§15-22. Inspections; Required**

Upon the completion of the wiring of any building it shall be the duty of the person installing same to notify the electrical inspector, who shall inspect such installation within twenty-four hours of the time such notice is given, and if it is found to be in full compliance with this article, and does not constitute a hazard to life or property, he shall issue to such person for delivery to the owner of such building, a certificate of inspection, authorizing connection to the electrical service and the turning on of current, provided, that upon application to the chief building official, a temporary permit may be issued by the chief building official to energize a portion of the electrical wiring in a building for uses specified by the chief building official for a period of time not to exceed ninety six days. All electric apparatus, wires or conduits that are to be hidden from view shall be inspected before concealment, and any person installing such wires shall notify the electrical inspector, giving him twenty-four hours in which to make the required inspection before such wires are concealed.

SECTION 2. Sections 15-2, 15-3, 15-6, 15-7, 15-15, and 15-22 as now existing, and any ordinances or parts of ordinances in conflict herewith be, and hereby are, repealed.

SECTION 3. That this ordinance shall be in force and take effect from and after its passage and publication, within fifteen days in one issue of the Grand Island Independent as provided by law.

Enacted: July 26, 2005.

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Jay Vavricek, Mayor

Attest:

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RaNae Edwards, City Clerk