



City of Grand Island

Tuesday, November 24, 2020

Council Session

Item F-2

#9804 - Consideration of Approving City Code Amendments to Chapter 15, Electricity Adoption of the 2020 National Electrical Code

Staff Contact: Craig Lewis

Council Agenda Memo

From: Craig A. Lewis, Building Department Director

Meeting: November 24, 2020

Subject: City Code Amendments to Chapter 15, Electricity Adoptions of the 2020 National Electrical Code

Presenter(s): Craig Lewis, Building Department Director

Background

This request is for City Council approval to modify the City Code by adopting the 2020 edition of the National Electric Code. The City has for several decades adopted and enforced electrical codes to safeguard persons and property from the hazards arising from the use of electricity. The 2020 National Electric Code (NEC) is the current edition of the national standard for the installation of electrical wiring systems. Typically the State of Nebraska adopts the current edition of the NEC and requires local inspection programs to adopt and enforce the current regulations as part of the State approval of local programs.

Discussion

The proposed amendment to chapter 15 of the Grand Island City code will adopt the current edition of the National Electric Code. The City's electrical board has reviewed the 2020 NEC and recommends approval with the local amendments as outlined in the proposed ordinance.

Alternatives

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

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

Recommendation

The City Electrical Board and City Staff recommends that the City Council approve adopting the 2020 NEC, with the local amendments and begin enforcement on January 1, 2021.

Sample Motion

Move to approve.

ORDINANCE NO. 9804

An ordinance to amend Chapter 15 of the Grand Island City code; to amend Sections 15-2, 15-3, 15-5, 15-6, 15-8, 15-11, and 15-14; to clarify and/or make general corrections to various code sections, to repeal any ordinance or parts of ordinances in conflict herewith; and to provide for publication and effective date of this ordinance.

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

SECTION 1. Sections 15-2, 15-3, 15-5, 15-6, 15-8, 15-11, and 15-14 of the Grand Island City Code Chapter 15 are 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, ~~2017~~ 2020 Edition, recommended by the National Fire Protection Association, except as modified by this section.

(B) The National Electrical Code is modified by deleting Article 210-52C Subsection 2 and 3-(a), Articles 320 and 330 are amended by §15-3 of the Grand Island City Code.

(C) One copy of the National Electrical Code, ~~2017~~ 2020 Edition, shall be on file in the City Clerk's office for public use and inspection as provided by law.

§15-3. Amendments to National Electrical Code, ~~2017~~ 2020 Edition

The following sections are adopted as amendments to the same numbered sections of the National Electrical Code ~~2017~~ 2020 Edition:

Article 210.11(C)(3) Shall be limited to two bathrooms.

Article 320 – Armored cable (type AC)

Anti- short bushings shall be used.

Article 330 - Metal-Clad Cable (Type MC)

Anti- short bushings shall be used.

§15-5. Installation of Service Conductors

All electrical service conductors shall be installed according to the National Electrical Code with the following additional requirements. The point of entrance in all cases shall be determined by the Grand Island Utilities Department:

Overhead Service

~~The service mast must be Rigid or Intermediate metal conduit.~~ Where the service mast is used for the sole support of the service drop, the minimum size shall be two-inch ~~intermediate or galvanized rigid metal conduit.~~ The service mast shall be continuous with no interruptions. The point of attachment shall be a minimum height of twelve (12) feet.

Underground Service

Approved as to Form	☐ _____
November 23, 2020	☐ City Attorney

ORDINANCE NO. 9804 (Cont.)

The service conductors shall be installed in a continuous approved conduit system from the service head, transformer or secondary tap box to the main meter socket or service disconnect. The first ten feet of conduit out of the ground attaching to a utility pole shall be schedule 40 G.R.C. conduit.

§15-6. Service Entrances

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, and 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, and within 25' of where the conduit emerges from grade.

(A) *Provisions for Metering.* The meter socket shall be the “ring type” meter socket for 200 amp services and below. Meter sockets shall be mounted on the outside of a principal building with the centerline located between five (5) and six (6) feet above finished grade. With prior approval given by the Utilities Department and Building Department, meter sockets may be located on UL listed pedestals, accessory buildings greater than 625 square feet constructed on perimeter foundations extended below frost depth, or alternate locations approved by the Departments. Additional provisions for metering can be found in the Metering Standards set out by the Grand Island Utilities Department.

(B) Single family switches shall be grouped to disconnect them with one motion of the hand.

(C) *Multiple Family Units.* New multiple family units constructed in compliance with Chapter 8 of the Grand Island Code may be allowed up to 6 switches, one switch per unit. All switches shall be grouped together in one listed and approved assembly.

(D) *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, and in conformance with this Code.

(E) *Electric Meter Location.* The electric meter shall be located on the property that it is supplying power to, unless prior approval by the Utilities Department and Building Department.

(F) *Meter Tampering.* Pursuant to Nebraska Revised Statute 25-21,275, tampering or bypassing a meter is strictly prohibited and will result in immediate disconnection.

(G) *Grade Changes.* The property owner shall be responsible for any repairs or modifications to City owned equipment damaged or deemed unsafe due to grade changes, settlement or erosion.

Amended by Ordinance No. 9712, effective 11-13-2018

§15-8. Wiring In Single and Multiple-Family Units

(A) Multiple family units may have branch circuits in individual units wired with nonmetallic sheathed cable if construction complies with Chapter 8 of the Grand Island City Code.

(B) Existing residential buildings containing more than six family units not having a two-hour fire wall rating separation as provided in Chapter 8 of the Grand Island City Code shall not be wired with nonmetallic cable.

(C) No wiring in basements below the floor joist on exterior walls shall be wired with unprotected nonmetallic cable.

(D) Smoke alarms shall be installed to comply with Section R314 of the ~~2015~~ 2018 International Residential Code.

(E) Carbon monoxide alarms shall be installed to comply with Section R315 of the ~~2015~~ 2018 International Residential Code.

§15-11. Requirements for Electrical Installations

(A) Aluminum Conductors – aluminum conductors may be used for service entrance and feeders only.

ORDINANCE NO. 9804 (Cont.)

(B) Equipment grounding conductors – an equipment grounding conductor will be required in all conduit systems except for rigid metal conduit systems with threaded hubs, couplings or fittings.

~~(C) CSST gas piping shall be bonded to comply with section 1312.2 of the 2015 Uniform Mechanical Code.~~

~~(D)~~ (C) Non-grounding receptacles shall not be installed, either in new work or for replacement, after December 31, 2014.

§15-14. Permit for Work; Required

No electrical wiring work, unless excepted in this section, shall be undertaken prior to the issuance of a permit therefor by the Building Department. Such permit shall be issued only to a registered contracting electrician.

No permit shall be required for minor repair work such as ~~repairing flush and snap switches, replacing fuses, changing lamp sockets and receptacles, taping bare wires and joints, and repairing drop cords~~ **replacing a switch.**

SECTION 2. Any ordinance or parts of ordinances in conflict herewith be, and hereby are, repealed.

SECTION 3. This ordinance shall be in force and take effect from and after its passage and publication pursuant to law beginning January 1, 2021.

Enacted: November 24, 2020.

Roger G. Steele, Mayor

Attest:

RaNae Edwards, City Clerk