



City Council Agenda Item Summary Report

Meeting Date: April 21, 2020			
Submitted by: P. Morgan			
Consent	Discussion Only	Public Hearing	Action/Discussion X
Item Title: Discuss and consider approval of an Ordinance amending the Code of Ordinances by adopting the 2017 Edition of the National Electrical Code.			
Attachments: Ordinance			

Item Summary:

The City of Forney currently requires construction under the 2015 International Code Series, including the Fire Code, and the 2014 National Electrical Code. Staff has prepared the Ordinances to adopt the 2018 International Code Series, including the Fire Code, and the 2017 National Electrical Code. The amending ordinances include the following:

1. 2018 International Building Code
2. 2018 International Residential Code
3. 2018 International Existing Building Code
4. 2018 International Plumbing Code
5. 2018 International Mechanical Code
6. 2018 International Fuel Gas Code
7. 2018 International Fire Code
8. 2018 International Property Maintenance Code
9. 2018 International Energy Conservation Code
10. 2017 National Electrical Code

The codes are adopted together as a series since the codes are fully compatible with each other and provide many cross references. The purpose of the code series is to provide an international model code forum and to provide consistency across the region.

The main purpose of updating codes is to maintain up-to-date codes that address design and installation of building systems through requirements which emphasize performance and safety. In addition, updating the codes is an important factor in securing a higher rating with the Insurance Service Organization (ISO). ISO is an advisory organization which provides ratings for each City's building and fire departments. A higher rating may provide insurance benefits and cost savings for citizens. The City of Forney currently has earned the highest achievable fire rating and an above average building rating. Updated codes are necessary to maintain those ratings.

The Ordinance proposes to adopt the Codes with the inclusion of recommendations made by the North Central Texas Council of Governments (NCTCOG). Since 1967, the NCTCOG has promoted the standardization of model construction codes in an effort to simplify the construction process, advance the safety of building systems, promote common code interpretation, and reduce training and construction costs. The recommendations are made by a committee comprising of local public and private code professionals. The City of Forney's current 2015 codes include previous NCTCOG recommendations.

2017 National Electrical Code:

The purpose of this specific item is to adopt the 2017 Edition of the National Electrical Code. The Code is the benchmark for safe electrical design, installation, and inspection to protect people and property from electrical hazards in residential, commercial, industrial, and other markets.

Key changes to the 2017 Edition of the National Electrical Code include the following:

- Increased Shock Protection – The 2017 NEC expands requirements for protection from shock hazards through application of panelboard barriers, tamper-resistant receptacles, and ground-fault circuit-interrupters (GFCIs).
- Product Listing and Suitability – Products are tested to standards compatible with the NEC, raising awareness on the importance of UL and similar agency standards. (Installs are not treated as separate structures, and solutions like electric vehicle chargers and marina pedestals are considered equipment and not structures.)
- Arc Flash Awareness – To continue raising awareness of incident energy hazards, service entrance equipment rated 1200 A or more must now be clearly labeled for fuse and circuit breaker selections. Reduction requirements continue to reduce incident energy at service entrance panels.
- Short Circuit Current Ratings (SCCR) – The NEC 2017 edition increases awareness of the proper application of electrical distribution equipment with regard to SCCR and expands the types of equipment that require SCCR marking.
- Available Short-Circuit Current – The proper application of electrical equipment includes rating the equipment to handle available short-circuit current levels and marking that level on the equipment after installation.
- Surge Protection – For increased protection and reliability, the NEC 2017 expands requirements for safety-related circuits. Surge protection is required for fire pump controllers, critical operations data systems, industrial control panels, including machinery with safety interlock circuits, and disconnects that supply emergency system loads.
- Maintenance – Maintenance requirements are expanding for emergency systems to ensure the entire system is maintained in accordance with manufacturer's instructions and industry standards. Provisions ensure backup power is available during maintenance or repairs when the emergency system relies on a single alternate power source.

Recommendation:

Staff recommends approval, with an effective date of June 1, 2020. The Ordinance was drafted by the Community Development Director and the Building Official. The City Attorney reviewed the Ordinance.