CONSTRUCTION COMMISSION MEETING

OFFICIAL PROCEEDINGS:

OF THE CITY OF PEORIA, ILLINOIS:

A Regular Meeting of the Construction Commission was held on Wednesday, April 15, 2015, at 2:00 p.m., City Hall, 419 Fulton Street, Room 404.

ROLL CALL

The following Commissioners were present: DeJarld, Goad, Huber, Scott, Shoemaker, Snyder - 6. Absent: Cicciarelli, Dillon, Hall - 3.

City Staff Present: Kay Burroughs, Joe Dulin, Phillip Maclain, Dan McGann, Brian McGrath, ShamRa Robinson, Jim Stevens, Scot Wolf

MINUTES

Commissioner Snyder moved to approve the minutes of the Construction Commission meeting held on March 11, 2015; seconded by Commissioner Huber.

The motion was approved unanimously by viva voce vote 6 to 0.

REGULAR BUSINESS

Chairman Shoemaker said City staff had done an admirable job of putting together presentations to help Commissioners understand differences in the two previous and proposed codes as it concerned the 2012 International Building Code, 2014 National Electrical Code, 2012 International Fuel Gas Code, and 2012 International Mechanical Code. He said today’s meeting would address report backs on follow-up questions from those presentations.

Adoption of the 2012 International Building Code

• Section 403.6.1 – This section will now require an increase in fire service elevators (minimum two or more) in buildings with occupied floors more than 120 feet above level of fire department vehicle access. Previously only one was required.

In response to questions regarding the addition of another fire service elevator in high-rise buildings and what constitutes a fire service access elevator, Senior Building Inspector Scot Wolf said those requirements are covered in Section 3007 of the International Building Code (IBC) and ASME A17.1. Inspector Wolf said he believed some requirements are for all elevators and some requirements are for fire service elevators. He directed Commissioners to Section 3007 for specific questions.

Inspector Wolf said with the limited number of existing or future buildings that have been or will be built in Peoria meeting those requirements, City staff would take a look at individual projects. He said if a design professional decided to use the existing building code versus the IBC there may be some relief in those sections, but it would be on a case-by-case basis. Commission Huber said there isn't anything in any code that addresses a case-by-case basis, and that's not the way situations have been handled previously; it was either “that is the code” or “that is not the code”.

Inspector Wolf said he thinks there is a lack of understanding in the industry of the existing building codes, stating staff rarely sees a set of plans submitted using the existing building codes as a guide.

Commission Huber said this is the first time he has come up against this case-by-case basis and asked the other Commission members if they had run into a case-by-case basis when it comes to something stated in the code. Commission Snyder that although he could not recall a case-by-case basis in the past, there was a communication in the minutes from the last City Council meeting that discussed post-code adoption and the authority to provide waivers on a case-by-case basis.

Chairman Shoemaker stated the Construction Commission can hear appeals. Commissioner Huber said the problem is that the Commission has to judge an appeal strictly based on the code or a better option. Chairperson Shoemaker agreed and said an option has to be equal to or better than, to which Commissioner Huber asked how can there be an equal or better option if the code states there has to be an additional elevator when there is only one existing shaft.

Inspector Wolf said the existing building code applies to a change of use situation so a design professional could actually work within that code, which is laid out in levels. He said if a level three alteration is a change in occupancy, to which many buildings in the warehouse district would be, the design professional is required to look into Chapters 7 and 9 which addresses fire suppression, fire barriers, and things of that nature, but it is his understanding that it would not relate back to Section 3007.

Inspector Wolf said he will seek clarification on whether or not an additional fire service elevator is required and research, in more depth, the existing building code as it concerns a change of use.

Commission Goad came into the meeting at 2:14 p.m.

•Section 714.4.1.2 – Membrane penetrations have new exception 7 which allows the ceiling membrane of fire rated floor/ceiling or roof/ceiling assembly to be interrupted by a double wood top plate as long as all penetrating items are fire stopped and the fire rating of the wall is no less than that of the horizontal assembly.

Inspector Wolf said one of the concerns from the last meeting was the interruption of a fire assembly with a double top plate and resulting additional hardship to builders. Two sections were added in Section 17.4.1.2.

6. Noncombustible items that are cast into concrete building elements and that do not penetrate both top and bottom surfaces of the element.

7. The ceiling membrane of one and two-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fire-resistance rating of the wall shall not be less than the rating of the horizontal assembly.

Inspector Wolf said there has been some question on how to deal with a horizontal assembly penetrated by a wall or top plate. He thinks these two sections clarify that a double top plate can be put in and still maintain the horizontal assembly. The new exception allows the ceiling membrane of a one-hour or two-hour fire resistant rated floor, ceiling, or roof ceiling assembly to be interrupted by a double top plate of the fire-resistant rated wall. In practice, that has always been the case; that's how builders build, but it wasn't specifically covered in the code. The new exception allows for practical application of the code where wood-framed walls extend up and attach directly to the underside of wood floor joists and
trusses/ joists for structural requirements. Inspector Wolf said he does not think these two exceptions represent a more restrictive situation within the code.

Chairman Shoemaker said the trickier relationship is actually the reverse when there is a vertical radial assembly intersection floor system. He imagines that is going to be a big issue in the warehouse district and any area where a two-hour stair shaft is required. He asked if that same section has similar language about the reverse situation. Inspector Wolf said he does not believe it does but thinks the intent of the code would be met in that instance, stating he does not see why turning it vertically on edge in a stair tower would be any different.

- Amendments

Assistant Community Development Director Joe Dulin referenced a report back on previous code amendments that was passed out at the beginning of the meeting. He said a majority of the sections in relation to the IBC were administrative, e.g., identifying the electrical and plumbing codes as adopted codes, etc., with the major code change being an amendment to Section 109.3 - Stair Treads and Risers. He asked for direction from the Commission as it regards amendments, adding that staff will work with the Legal Department on new codes and code sections to update those administratively.

Chairman Shoemaker said, as an architect, he wouldn't want the liability of an amendment to the stair riser. Inspector Wolf said staff sees hundreds of residential plans every year, the majority of those plans are laid out for that provision, and it makes a big difference when an extra foot is added because builders have to modify existing plans. Commissioner Snyder noted it was amended both in the IRC and the IBC. Chairperson Shoemaker said as an architect you make judgements all of the time, but there was a painful amount of discussion at the national level on stair risers, and he feels it would be risky as a design professional to do a local exception.

Inspector Wolf said he would again remind the Commission that one of the tasks they are charged with is relief from sections of the code on a case-by-case basis. If a builder comes in and he can't physically follow the code, the Construction Commission could hear an appeal and offer relief. Commissioner Huber said that sounds great in an ideal world, but he would like this Commission to undertake a look at these codes and come back with a package of suggestions for the warehouse district. Chairman Shoemaker said one of the things they have to be careful about is deviating from the Life Safety Code, which would supersede a local amendment for nonresidential structures.

Inspector Wolf said the standard procedure is that most communities adopt the IBC along with the IRC, but he would survey some of the larger communities on the IRC.

2014 National Electrical Code

Commissioner Snyder said that, in the past, the National Electrical Code has been adopted without any exceptions.

2012 International Fuel Gas Code

- 401.9 Identification, Testing, and Certification

Each section of pipe and fitting utilized in a gas system requires the identification of the manufacturer
Building Inspector Jim Stevens referred to the following code section.

401.9 Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Commissioner Goad said he's not objecting to it, but he feels it's going to be problematic, and it would be nice to give some kind of allowance so suppliers have a chance to push inventory through and get something in that's labeled.

308.1 Clearance to Combustible Materials
That gypsum board is to be considered a combustible material for the purpose of required clearances.

Inspector Stevens said gypsum board as a combustible material is addressed in two different places, Section 308.1 in the Fuel Gas Code and Section 602.201 in the Mechanical Gas Code, and they appear to conflict. Inspector Stevens stated he is seeking a formal interpretation by the International Code Council, but he did not have a suitable answer at that time. Building Inspector Jim Stevens referred to the following code sections.

2012 Fuel Gas Code, Section 308.1 Scope.
This section shall govern the reduction in required clearances to combustible materials, including gypsum board and combustible assemblies for chimneys, vents, appliances, devices, and equipment. Clearance requirements for air conditioning equipment, heating, and central heating, boilers and furnaces shall comply with Sections 308.3 and 308.4."

2012 Mechanical Code, Section 602.2.1 Materials within plenums.
Except as required by Sections 602.2.1.1 through 602.2.1.6, materials within plenums shall be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E 84 or UL 723.

Exceptions:
1. Rigid and flexible ducts and connectors shall conform to Section 603.
2. Duct coverings, linings, tape and connectors shall conform to Sections 603 and 604.
3. This section shall not apply to materials exposed within plenums in one and two-family dwellings.
4. This section shall not apply to smoke detectors.
5. Combustible materials fully enclosed within continuous noncombustible raceways or enclosures, approved gypsum board assemblies or within materials listed and labeled for such application.

Chairman Shoemaker asked Inspector Stevens what the most common situation he might find himself in as it relates to this code section. Inspector Stevens said, per the Energy Code, a return air plenum ceiling has to be insulated. Depending on the insulation, it might also have to be covered, and it could be covered with gypsum board. PVC pipe could also be contained in a plenum ceiling. This has been allowed if the pipe has been wrapped with UL181 rated material for the purposes of containment. Commissioner Goad said another situation would be a vent going between a stud wall, and he would like clarification because that could contribute to an increased cost if a design professional has to find an extra four inches for a wall.
Inspector Stevens said the other discussion would be about certain Type I hoods with zero clearance that might be installed to an assembly consisting of a metal stud and gypsum board.

2012 International Mechanical Code

- **507.2.1 Type I Hoods**
  
  Type I hoods no longer being required if complying electric appliances are being used.

Inspector Stevens said this section is a bit misleading because it is for very specifically rated down draft type of appliances. He referred to the following code sections.

**Section 507.2.1 Type I hoods.**

Type I hoods shall be installed where cooking appliances produce grease or smoke. Type I hoods shall be installed over medium-duty, heavy-duty and extra-heavy-duty cooking appliances. Type I hoods shall be installed over light-duty cooking appliances that produce grease or smoke.

**507.2 Where required.**

A Type I or Type II hood shall be installed at or above all commercial cooking appliances in accordance with Sections 507.2.1 and 507.2.2. Where any cooking appliance under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed.

**Exception:** Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are listed and labeled for the application in accordance with NFPA 96, a hood shall not be required at or above them.

Inspector Stevens said in the commentary it addresses the problem of a restaurant (if it is or is not a restaurant) and church or fellowship halls that hold fundraising events such as spaghetti dinners, fish frys, or pancake breakfasts. It also states that a Type I hood must always be installed above cooking appliances that produce grease or smoke. Inspector Stevens said it seems this section was to fill a hole that had a valid requirement. In response to Chairman Shoemaker’s question if a residential type stove for heating potluck items at a church or fellowship hall requires a commercial hood, Inspector Stevens said that in some cases it did.

Commission Huber asked if an electric convection oven would be considered smoke producing because if something burns, it’s going to create smoke. Inspector Stevens it could be, but that is not generally the case, and hoods are not generally required for convection ovens. To stay consistent, Inspector Stevens said what he has done in the past is to tell businesses that they can heat food items however they like, but he gets a copy of their menu so there is something in the files about the food that is supposed to be cooked.

Chairman Shoemaker asked Inspector Stevens if he was running a risky situation by not being able to have a real positive statement in the code that backed him up, stating he hated to see Inspector Stevens in that position. Commissioner Huber said the law would not hold an inspector or the City liable. Inspector Stevens said none of us can do anything knowing it’s intentionally wrong. If he makes a decision, the litmus test is he can make a case that the intent of the code is being delivered, and he is equal with the application. Inspector Stevens said it was equally important to keep himself and the City out of litigation.
Chairman Shoemaker said it seems like there may be a proposed code amendment the City could choose to offer when there is an opportunity for clarification. Commissioner Goad agreed with Chairman Shoemaker, stating it's a slippery slope because you put your thumb print on it and don't know where it's going; it could be as simple as a hood has been there ten years, steam rusts the fasteners, and it falls on someone and kills them.

Chairman Shoemaker said he hates to see the City be in a position not to have the ability to point to a code section and say that's the code section versus an inspector's interpretation. Inspector Stevens said the problem is that it leaves open the opportunity to mistake what is being installed or how it's going to be used. Commissioner Goad said the problem is that people come in and change the use of the business. Assistant Director Dulin said that while this has not occurred, a business does have the ability to lose their Certificate of Occupancy. Chairman Shoemaker said the fire service performs inspections of commercial establishments so if a situation doesn't look right, they could make an inquiry with Building inspections.

Chairman Shoemaker said he doesn't like the fact that the City is making decisions that aren't in some way based on the code, and he hated to see a staff person take on that level of possible liability. He said that's not right and suggested it be pushed up to the national level if the code has that kind of a glitch.

Inspector Wolf acknowledged Chairman Shoemaker's concern and said the practical application of the building code does allow some flexibility by the inspector at times. He said if he doesn't have a specific code section that tells him what to enforce, he doesn't enforce it, but if there's another section that gives some flexibility to the builder or developer, he takes that into consideration. He said there are sections in the building code that allow flexibility while maintaining the integrity and intent of the code.

Chairman Shoemaker said he thinks there is a difference when an inspector walks into an existing range hood situation versus a new restaurant with a new range hood because there is more flexibility in the existing situation to use some cleverness and judgement. If it's a new installation, he said it scares him to see a decision based on a menu that was handed to an inspector.

Commissioner Huber said he comes with a different perspective than most of the other Commissioners because as a developer and end user he pays for the building and installations, so the more restrictions, the more it cost. Inspector Stevens said if an incorrect decision is made, there could be potential life safety issues. Commissioner Huber said with the exception of the Energy Code, everything could be turned into a life safety issue.

Commissioner Shoemaker said the part he picked up on is the fact that safety decisions are being made that are not code based and that can easily change with a menu, and that's scary. He said staff should feel free to offer suggestions and, in the process, the Commission could look at them.

- **805.3 Factory-Built Chimney Offsets**

  The maximum offsets in a factory-built chimney is now specified and the number of offsets has been limited.

Inspector Stevens said there is something called factory-built vents that have zero clearance. The code doesn’t state how the hood has to be vented; it just says it has to be vented. A section has been added in 805 that limits offsets to 30°.
Inspector Stevens said the vents cannot go horizontal. Chairman Shoemaker said he thinks the problem with going horizontal is there isn't a reliable twist lock venting system that is completely sealed. If a Type I hood is being vented, traditionally, it's bolted. A snap box system cannot be ran horizontally. Inspector Stevens said when these systems are maintained you can put your hand on them. When they're not maintained, more often than not, they get to that flash point instantaneously.

Inspector Stevens said his particular issue with this code addition is that he sees opportunity for misstated application. Chairman Shoemaker said he is certain the Commission would positively consider staff suggestions for an amendment in this particular area.

**OTHER BUSINESS**

Assistant Director Dulin said staff will bring back reports from this meeting and begin presenting significant changes for the Property Maintenance Code and IRC at the next meeting. After that process is completed, it is staff's intent to review the fire code/existing building, and give an overall summary of the Life Safety Code.

Assistant Director Dulin told the Commission it was staff's recommendation to keep the regularly scheduled meeting date (third Wednesday of the month) so they can adequately prepare for the upcoming IRC discussions. He asked the Commission to e-mail staff if there are specific issues they want addressed or researched before the next meeting.

**OPPORTUNITY FOR CITIZENS TO ADDRESS THE COMMISSION**

There was no public discussion.

**ADJOURNMENT**

Commissioner Snyder moved to adjourn the Construction Commission Meeting; seconded by Commissioner Scott.

The motion was approved unanimously by viva voce vote 6 to 0.

The Construction Commission Regular Meeting adjourned at approximately 3:48 p.m.

Kay Burroughs,
Staff Liaison