## **Building Commission Meeting**

Wednesday, October 15, 2014 at 6:30 PM Village Hall

- 1. Call to Order, Chairman Heaney opened the meeting

#### 2. Roll call and declaration of a quorum – 7:00 pm

- a. In attendance: Jeff Heaney, Chair; Kent Brown; Eric Means; Greg Wozniak; Tom Lindsay
- b. Absent: None
- c. Also present: Fire Chief Globerger, Village Attorney Mike Castellano, Joe Kenney, Joe Footlik, Helen Wiseman

# 3. Minutes: Pending

- 4. Pending business: None
- 5. Old Business: None

#### 6. New Business

#### a. Sprinkler Code

Ms. Wiseman showed a movie produced by the Orange County, California Fire Service. It was made in 2005 so figures for a single family residence no longer apply. The movie illustrated a side-by-side comparison of a multi-family townhome where one unit had existing sprinklers and the other did not. Furnishings and unit layouts were the same. A fire set in a trashcan was monitored, timed and documented.

Fire Chief Wayne Globerger addressed various questions from the Building Commission members. He said there is more concern about density related to multi-family structures. Single family structures have other challenges mostly due to modern construction. Homes used to be better built allowing firefighters to remain in a building for an hour, but new homes have trusses and joists so the burn time is only 15 minutes. Deducting the few minutes for firefighters to get to the site and assess the fire, there are about five minutes left to actually address the fire before a potential structure collapse. Single family homes tend to have more serious fires and most are caused by human error that happens during the night.

Sprinklers are instantaneous, controllable and reassuring to residents. Glenview averages 100 fires a year: 30-35 relate to structure fires. Glenview has not had many fire-related deaths or huge fire incidents. This reduces the opportunity for well-trained firefighters to get actual firefighting experience. Fires are better contained now and smoke detectors alert people of a situation giving them more time to exit the building. Chief Globerger suggested that consideration should be given not to "why have sprinklers" but "why not." Many citizens don't think a fire would happen in Glenview, but they can happen anywhere.

With more ridged building codes, particularly from an electrical perspective, people still overload electrical outlets or the homeowner or others do the electrical work. Fire from candle use is huge, so is smoking, code violations and faulty electronics. Insurance companies often identify electrical causes for a fire if the cause isn't otherwise identified. He talked about his experiences with car fires and garages and reiterated that most fires are caused by building issues, human error and a delay in calling the Fire Department. He doesn't like retrofitting existing homes with sprinklers but does support sprinklers in new construction. He promotes education as the best way to prevent fires. Education about fire prevention occurs at schools and it helps when children bring the information home to their parents. Firefighters aggressively address interior fires since the time inside the structure is limited.

There was discussion about the requirements related to one hour rating of fire materials and how newer furnishings are plastic or petroleum-based including fabrics and rugs. These materials create quick flames, intense heat and deadly smoke. Schools must have flame resistant furniture. He pointed out that sprinklers help to reduce fire activity. Smoke detectors only help people exit the building.

In response to a question about requiring sprinklers in Glenview to potentially save Village resources, he felt sprinklers could save minimal dollars over time but that was not the point. The Village doesn't change codes often but if one life is saved from requiring sprinklers it would be worthwhile. The cost of sprinklers is manageable and they are quality made. Adding a sprinkler system to new home construction is not much compared to the total cost of building a home. Although sprinklers won't save much money related to the Village or Fire Department, but he is more interested in the fact that sprinklers could save a life.

The downside of Glenview's current smoke detector code is that many homeowners have them but don't maintain them, such as removing batteries to avoid hearing the low battery alert, not enough detectors or they are located in the wrong location. New construction requires detectors but thousands of existing homes don't have even the most basic ones. Detectors have proven their value by getting people out of the house in time but detectors don't extinguish fires. Also, many people don't have a plan of what to do in case of fire, such as how would they get down from the second floor, prepare for power outages, etc. Education prevents fires. He said having sprinkler systems monitored is useful since they could go off when a homeowner is out of town or not at home.

There was discussion about fire experiences, the benefits of emergency preparedness and the use of generators, smoke detectors, sprinklers and so forth. He clarified that sprinklers would not significantly reduce water pressure and larger water service is not needed to accommodate sprinkler systems.

There are many codes to follow when building a house. The Building Commission wants to address ways to improve fire safety for residents and firefighters. Chief Globerger talked about national codes and challenges in defending Glenview's code amendment. The Fire Department adapted procedures and tactics over the years to fight fires in modern-built homes. The goal is to save lives and save property when possible.

There was discussion that GFI and natural gas generator requirements to exercise these products was typically not done. The fire safety performance of building construction materials was considered.

Chief Globerger understood the difficult decision faced by the Building Commission regarding sprinklers.

Village Attorney Mike Castellano responded to a question of whether the Village and residents would benefit if sprinklers were required. He didn't see a Village benefit but residents may or may not get a benefit from their homeowners insurance. If a resident's home burned down and the Village was sued because there was no sprinkler code, the Village would incur costs to defend the case. However he noted that lawsuits can't be avoided.

Director of Community Development, Joe Kenney, will contact the risk manager tomorrow to ask if the Village insurance cost would be reduced by having a sprinkler code. He expects the cost would be negligible.

Chief Globerger added that the Village has tort immunity. A citizen would defend his or her lawsuit by bringing in industry experts and/or reports on nationwide standards about sprinklers.

This discussion was continued until the next Building Commission meeting.

### b. Opening Limit on Operable Window

Mr. Lindsay said the building code specifies that a second floor egress window must have a clear opening of 20" wide, 24" high and a net clear square opening of 5.7 SF within 44" of the floor. The first floor window measures to the ground with an opening of 5 SF. The second floor window opening is larger due to an assumption that there is a ladder in the way of the window and that the window design would accommodate a firefighter with fully loaded gear to get through the opening.

The standard size of an egress double hung window for a second floor is currently too low to the ground so child guards are required per the latest code amendment. The Building Commission amended the code so the window could be lower but Mr. Lindsay changed his mind. First it was allowed only at an eight foot ceiling height across the board.

Ms. Wiseman clarified that it doesn't apply to new construction.

Mr. Lindsay proposed an amendment to allow a higher window resulting in a dimension change as opposed to having a lower window. He previously suggested that the Building Commission should allow the second floor window to be 22" off the floor rather than 24" which would result in a shorter window to be compliant. He

recognized that there are far fewer fires than there are kids on second floors in Glenview, which is a constant situation and fires are much less of a hazard. That height of a window allows the sill to get closer to the floor.

In response to comments about windows purchased from a catalog, Mr. Lindsay said the next size up for most companies goes is from 5 ft. 1 inch high is 4 ft. 9 inches high. There are a number of companies that will meet the 5.0 SF rule at 4 ft. 9 inches high and they can meet the width rule depending on how wide of a window is chosen. In some catalogues it will consist of 5.0 SF with a secondary number that identifies it as being one that is possible to use at grade. There are two possible egress windows, 5.7 SF, and some companies will identify some at 5.0 SF.

Ms. Wiseman said 5.7 SF is a second floor window size or a basement window. There is an exception of 5.0 minimum on a first floor

Mr. Lindsay wanted to define it as 5.0 SF and the opening height of 22" or something smaller than the required 24". He believes most people will find a way to escape a fire out of an opening that is two inches less in height than required. Egress windows used to be designed smaller, but around 1970 the size requirement changed. Egress windows are now called escape and rescue windows. The definition of size is mostly based on a fully outfitted firefighter getting into the building through the window. He felt in that kind of emergency the window would be cracked open to get the full size opening.

Mr. Lindsay's opinion was that allowing windows to get lower to the floor was the wrong way to go. He supported raising the window to allow for a shorter window and therefore a taller sill height. The official code is a 5.7 SF opening and 24" height clearance so his suggestion is a compromise to provide greater safety for children without interfering with the rare event of a house fire. His recommendation relates only to additions and remodeling. Windows lower than 22" creates a potential for leaning or a child falling out. The goal is to make it harder for a person to fall out.

Mr. Lindsay's recommendation allows the window to come up 4" because the next window size is typically 4 ft. 9 inches high. A double hung window is split in half so it actually only encroaches by 2" on the actual opening.

Chief Globerger felt the recommendation was sensible. The code doesn't indicate, short of a porch or canopy, that a firefighter goes to the bottom of the sill when entering a building to rescue rather than up and in. To open the window the firefighter goes alongside and then comes across. Even leaving the windows where they are at, if a firefighter is 2 or 3 rungs above it the ladder would block the window so that would only be done if access is quick. In most cases the ladder is at the base of the sill and the firefighters are trained on how to properly exit onto the ladder. Width is the issue when getting into a building. He agreed with tonight's comments but raised a concern about lowering kids and some adults out the window.

Ms. Wiseman thought the sill height didn't need to be raised.

Mr. Lindsay said if the clear height is 22" instead of 24" it sounds like a 2" change but because it is a double hung window, both windows change by 2" so the window sill is actually being raised by 4".

Ms. Wiseman understood the amendment to be the reduction of the minimum clear height of a double hung egress window in an addition or remodeling only at an 8 foot high wall to 22" in lieu of 24" and allow a 5.0 SF clear opening.

Mr. Lindsay noted that the 5.0 SF would guarantee that the width remains the same. The width is 20" by code but the total SF measurement is what increased the window opening. By saying 5.0 SF, only the required .7 SF would be reduced. There would be a 22" clear height instead of a 24" clear height. The window would be 20" wide due to the 5.0 SF minimal clearance rule.

Mr. Lindsay said he would be happy to write out the amendment. There are four components to an escape window, that is, clear width, clear height, total square footage of the opening and the height of the sill. There was further discussion to clarify and justify the reasons for Mr. Lindsay's proposed amendment.

Mr. Heaney asked that this matter be continued until the next meeting of the Building Commission scheduled for November 29th. He also asked that each Commissioner consider what was discussed tonight related to

the sprinkler code which will also be addressed at the next meeting. He concluded by sharing his appreciation for the time and effort spent by the Building Commission on these matters.

Close Meeting at 8:37 PM - 1<sup>st</sup> – Chairman Heaney. 2<sup>nd</sup> – Commissioner Lindsay.