

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL WORKSHOP
OCTOBER 6, 2009 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Adoption of Updated Building Codes and a Locally Administered Elevator Safety Program.	✓ Resolution ✓ Ordinance Motion Discussion Only	Tom Dabareiner, AICP Community Development Director

SYNOPSIS

Ordinances have been prepared adopting the International Code Council's (ICC) 2006 series of building and fire codes, the 2008 National Electrical Code, and updated amendments to the 2004 State of Illinois Plumbing Code. Additionally, a resolution has been prepared entering the Village into an agreement with the State of Illinois for locally administering an Elevator Safety Program.

STRATEGIC PLAN ALIGNMENT

The Five Year Plan and Goals for 2008-2013 identified *Exceptional Municipal Organization* with a supporting objective of *Providing Top Quality Core Services Responsive to Current and Future Community and Citizen Needs*. Also identified was the goal of *Preservation of Our Residential and Neighborhood Character* with a supporting objective of *Homes and Rental Units Up to Code*.

FISCAL IMPACT

N/A

UPDATE & RECOMMENDATION

This item was discussed at the September 22, 2009 workshop. During that meeting, the Village Council requested additional information pertaining to several items. These items are summarized below:

- Whether the use of panning and ductless returns is permitted by the 2009 Energy Conservation Code.
- When the proposed building code updates would go into effect.
- Whether the proposed building codes are more or less restrictive regarding veneer vapor barriers

Regarding the use of panning and ductless returns, a new state law mandates the use of the 2009 Energy Conservation Code. Section 403.2 deals with ducts. Under 403.2.3, "[b]uilding framing cavities shall not be used as supply ducts." However, panning may support return air flow only where the building cavity is completely sealed (403.2.2). This would require additional inspections and observation by Village inspectors.

In addition, the IRC 2006 code further restricts the practice of panning to single floor use. While an HVAC unit would be allowed return air flow via panning from the first floor, a second HVAC unit would be needed to serve a second floor. Based on this, it is likely less expensive and problematic to provide for ducted return air flow to a single HVAC unit. This concern, along with other potential issues indicated in staff's research (centering on mold, fire and cleanliness concerns) was and remains the basis for the recommended amendment. While the recommendation to allow the use of building cavities for heating or cooling non-habitable areas remains part of staff's proposed code amendments, the 2009 Energy Conservation Code now limits this to return air flow only.

Regarding the effective date of the proposed updates to the building codes, upon approval by the Village Council, the updated codes would be effective after 30 days.

Regarding veneer vapor barriers, in the 2007 update to the IRC's 2006 codes, several definitions were changed. Two of these dealt with "Adhered Stone or Masonry Veneer" and "Vapor Retarder Class." In both cases, the new definitions reflect advancements in the materials or installation process, or improvements in the industry's understanding of moisture removal. In both cases the new definitions mean new or refined steps are available to achieve an equal or superior outcome, compared with earlier versions of the building code.

Staff recommends approval on the October 6, 2009 active agenda.

BACKGROUND

The Village's current building code was adopted in April, 2005. The building code that was adopted at that time was the 2000 edition of the ICC codes. Staff is proposing that the Village update to the 2006 edition of the ICC's building and fire codes, and the *2008 National Electrical Code*. These codes would apply to all commercial and residential buildings throughout the community. The 2006 editions are the most widely adopted codes in the western suburbs. Adoption of these codes would be consistent with comparable communities.

Additionally, since 1985, the Village has operated a local elevator safety program with Elevator Inspection Services, Inc. (EIS). This program has consisted of performing plan reviews and inspections for new and existing elevators and other types of vertical conveyances such as escalators, hoists, and platform lifts through a building permit process and annual inspections. The State of Illinois has more recently passed legislation requiring a municipality to enter into an agreement by resolution with The Office of the State Fire Marshall (OSFM) of Illinois to continue to operate a locally administered program and indicate compliance with standards at least as stringent as those of the State. The legislation was prompted by elevator accidents that had occurred in rural areas of the State that had no program in place. Currently, 166 jurisdictions, primarily in the Chicagoland area, have opted to enter into this agreement. If a municipality chose not to operate a local program, the State would directly regulate vertical conveyances within a municipality. Agreeing to the resolution would mean no change to the Village's elevator inspection program and would maintain greater scrutiny than afforded through the state program.

The specific codes targeted for adoption are:

- *2006 International Residential Code* – governs construction of one and two-family residential buildings
- *2006 International Building Code* – governs construction of all other use types
- *2006 Property Maintenance Code* – governs maintenance of all existing buildings and properties.
- *2006 International Fire Code*- governs construction and maintenance of life safety systems in commercial and multi-family buildings
- *2009 Energy Conservation Code*,
- *2006 Fuel Gas Code*,
- *2006 Mechanical Code*,
- *2008 National Electrical Code* - govern new construction in all building types
- (Note: Additional Codes already in place are the *2004 State of Illinois Plumbing Code* and the *2003 NFPA Life Safety Code*)
- Nine industry standards for vertical conveyances from ANSI, ASME, and ASCE, consistent with State requirements – governs the installation and inspection of new and existing elevators, escalators, platform lifts, hoists, and dumbwaiters

Staff emphasized the following key concepts and strategies with the code adoption proposals:

- Align all regulations with specific Strategic Plan goals.
- Produce code books that are as clear and user friendly as possible.
- Reduce the number of local amendments.
- Maintain consistency with existing ordinance provisions of the Municipal Code and provide cross references.
- Enhance clarification of the code books as written.
- Maintain and provide code provisions that address local construction practices.
- Only include amendments that measure up favorably to a benefit/cost analysis.
- Align the Village's regulations with comparable communities.
- Obtain buy-in from the area builders, developers and property managers.

The following list highlights some of the specific key components and that will be accomplished with the proposed updates:

- Several residential construction existing local amendments have been eliminated in order to follow the baseline codes representing recognized industry standards.
- Sections have been reorganized and enhanced to increase the ability to locate and understand regulations for commonly reoccurring questions.
- Several cross references to State regulations, other code book sections, and the Municipal Code have been incorporated to increase usability of all documents.
- Conflicting provisions between various code books have been eliminated as well as provisions that do not apply to this geographic area of the country.
- One overall updated administrative section will exist in the Municipal Code that applies to all the various code books being adopted.
- Some updated definitions and code provisions from the 2007 ICC code development supplement have been incorporated to increase accuracy, add clarity, and assist with code enforcement activities.
- Long standing and recognized enhanced fire safety regulations have been maintained.
- Updates and clarifications have been provided for the pre-occupancy ordinance compliance approval procedure.
- Clarification on materials that can be used for construction in certain zoning districts such as the downtown area has been added.
- State authorized standards have been incorporated that assist with sizing water service supply lines for existing residences that are being remodeled.

Staff requested input on the proposed update from the Downers Grove Chamber of Commerce, contractors, builders, developers, architects and property managers. Staff representatives met with these individuals on three occasions at the Downers Grove Chamber of Commerce. The IRC proposed amendments were presented on May 14, 2009. The Mechanical, Fuel Gas, Energy Conservation, and Property Maintenance Codes were presented on May 21, 2009. The International Building Code, Electrical, Plumbing, and Fire Code were presented on July 16, 2009.

Based on input from this group of stakeholders, some modifications were made to the proposed codes. The adjustments centered on clarifying proposed language. There were helpful dialogues and no unaddressed or significant objections to the updates or the proposed amendments. Staff recommends approval of the building codes as proposed.

ATTACHMENT
Ordinance

ORDINANCE NO. _____

**AN ORDINANCE ADOPTING THE 2006 INTERNATIONAL BUILDING CODE
AND AMENDMENTS THERETO**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County,
Illinois, as follows: (Additions are indicated by **shading/underline**; deletions by ~~strikeout~~):

Section 1. That Section 7.1000.ART. is hereby added to read as follows:

7.1000.ART. Article X. INTERNATIONAL BUILDING CODE

Section 2. Section 7.7. is hereby renumbered to be Section 7.1001.

7.7. 2006 International Building Code Adoption

The International Code Council International Building Code, as promulgated by International Code Council ("ICC"), being particularly the ~~2000~~2006 edition thereof, is hereby adopted for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of buildings and structures, including permits and penalties required for such purposes. The same is adopted in its entirety, save and except such portions as are hereinafter deleted, modified or amended, and is, together with such amendments, incorporated as fully as if set out at length herein, and shall control in the construction of all buildings and structures therein regulated within the Village. Said Building Code, as modified and amended, may be referred to for all purposes as the "Downers Grove Building Code" or the "Building Code". At least one copy of said Code, including such amendments to it as shall be enacted, shall be filed in the office of the Village Clerk, and additional copies shall be available in the Community Development Department of the Village. (Ord. No. 1281, § 1; Ord. No. 1586, § 1; Ord. No. 2143, § 2; Ord. No. 2584, § 2; Ord. No. 2857, § 2; Ord. No. 3184, § 2; Ord. No. 3391, § 2.)

Section 3. Section 7.9. is hereby renumbered to be Section 7.1002.

7.9. International Building Code - Amendments.

The deletions from and modifications and amendments to the ~~2000~~2006 International Building Code as referred to in ~~Section 7.7~~this Article are the following:

CHAPTER 1

~~(1)~~ **Section 101.1** is amended by deleting the same in its entirety **and by substituting in lieu thereof the following:**

101.1 Title. These regulations shall be known as the Building Code of the Village of Downers Grove, hereinafter referred to as "this code".

~~(2)~~ **Section 101.4.1** is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

101.4.1 Electrical. The provisions of the National Electrical Code, as adopted and amended by the Village, shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, luminaries, fittings and appurtenances thereto, and shall be referenced any time this

~~Code refers to electrical fixtures fittings and appurtenances thereto.~~

~~(3) Section 101.4.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~**101.4.4 Plumbing.** The provisions of the State of Illinois State Plumbing Code, as adopted and amended by the Village, shall apply to the installation, alteration, repairs, and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water sewage system and all aspects of a medical gas system. The provisions of the Village of Downers Grove Municipal Code shall apply to private sewage disposal systems.~~

~~(4) Section 101.4.6 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~**101.4.6 Fire Prevention.**~~

~~The provisions of the International Fire Code as adopted and amended by the Village shall apply to matters affecting or relating to structures, processes and premises regarding: (a) hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; (b) conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and (c) construction, extension, repair, alteration or removal of fire hazards in the structure or on the premises from occupancy or operation.~~

~~(5)~~

~~Section 102 is amended by deleting the same in its entirety and addressed in Chapter 7, Article I of the Downers Grove Municipal Code.~~

~~Section 103 is amended by deleting the same it in its entirety and addressed in Chapter 7, Article II of the Downers Grove Municipal Code.~~

~~Section 104.1 through Section 104.8 are amended by deleting the same in their entirety and addressed in Chapter 7 Article II of the Downers Grove Municipal Code.~~

~~Section 104.9.1 is amended by deleting the first sentence.~~

~~Section 105.1.1 is amended by deleting the same it in its entirety.~~

~~Section 105.1.2 is amended by deleting the same it in its entirety.~~

~~(6) Section 105.2 is amended by deleting building conditions 1 through 13 in their the same in its entirety and by substituting in lieu thereof the following:~~

~~**105.2 Work exempt from permit.** Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:~~

~~**Building:**~~

- ~~1. One-story detached accessory structures used as tool, storage sheds, and similar uses with a floor area not exceeding one hundred (100) square feet.~~
- ~~2. Retaining walls that are not over three (3) feet in height measured from grade to the top of the wall.~~
- ~~3. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.~~
- ~~4. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.~~
- ~~5. Nonfixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches in height.~~

Section 105.3 through Section 105.7 are amended by deleting the same in their entirety and addressed in Chapter 7 Article III of the Downers Grove Municipal Code.

Section 106.1 through Section 106.5 are amended by deleting the same in their entirety and addressed in Chapter 7, Article IV of the Downers Grove Municipal Code.

(7) ~~Section 105.7 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~—105.7 Placement of Permit. The building permit or copy shall be kept on the site and shall be visible from the street until the completion of the project.~~

(8) ~~Section 106.1 is amended by deleting the same in its entirety, leaving the exception and by substituting in lieu thereof the following:~~

~~—106.1 Submittal Documents. Construction documents shall be submitted in one or more sets with each application for permit. The construction documents shall be prepared by an Illinois registered Architect or Structural Engineer.~~

(9) ~~Section 106.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~—106.2 Site Plan. The construction documents submitted with the application for permit shall be accompanied by a site plan drawn and stamped by the Illinois State registered Architect or Structural Engineer of record. The drawing will show the size and location of the new construction, the existing structures on the site and the distances from the lot lines. A plat of survey must accompany the site plan. In the case of demolition, the site plan or survey shall show the construction to be demolished. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.~~

Section 108.1 through Section 108.6 are amended by deleting the same in their entirety and addressed in Chapter 7, Article VII of the Downers Grove Municipal Code.

Section 109.1 through Section 109.2 are amended by deleting the same in their entirety and addressed in Chapter 7, Article V of the Downers Grove Municipal Code.

(10) ~~Section 107.3 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:~~

~~—107.3 Temporary Power. The National Electrical Code as adopted and amended by the Village.~~

(11) ~~Section 107.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~—107.4 Termination of Approval. The building official is authorized to terminate a permit for temporary structure or use and to order the temporary structure or use to be discontinued and to be removed.~~

(12) ~~Section 108.6 is amended by deleting the same in its entirety and substituting in lieu thereof the following:~~

~~—108.6 Refunds. The code official shall authorize the refunding of fees as follows:~~

~~——— a. The full amount of any fees erroneously paid or collected hereunder, except that review fees and twenty five percent (25%) of the administrative fee will not be refunded.~~

~~——— b. Not more than fifty percent (50%) of the permit fee will be refunded in the event that work has not commenced within sixty (60) days of issuance of the permit.~~

~~——— c. There shall be no refund of any fees more than 60 days after the issuance of the permit or if any~~

work pertaining to the permit has started.

(13) Section 109.3 is amended by deleting the following in their entirety: 109.3, 109.3.1, 109.3.2, 109.3.3, 109.3.4, 109.3.5, 109.3.7, 109.3.9, 109.3.10 and by substituting in lieu thereof the following:

~~109.3 Required Inspections.~~

~~For on site construction, from time to time the building official, upon a 24 hour notification from the permit holder or his/her agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his/her agent wherein the same fails to comply with this code. The required inspections are as follows:~~

- ~~a. Footing, prior to installation of concrete. (Contractor or representative are required to be present for this inspection.)~~
- ~~b. Foundation, prior to backfill.~~
- ~~c. New construction, a spot survey is to be provided, checked and approved prior to any additional work being done.~~
- ~~d. Plumbing, a stack test is required with water from the highest drain. (Contractor or representative is required to be present for this inspection.)~~
- ~~e. Rough Framing and Electrical. (Contractor or representative is required to be present for this inspection.)~~
- ~~f. Insulation. (Contractor or representative is required to be present for this inspection.)~~
- ~~g. Electrical certification.~~
- ~~h. Commercial Ceiling. (Contractor or representative is required to be present for this inspection.)~~
- ~~i. Garage Floor. (Contractor or representative is required to be present for this inspection.)~~
- ~~j. Basement Floor~~
- ~~k. Floors on Grade~~

~~Before concrete is poured in/on basement floors, slabs on grade or any concrete floor within a structure, an inspection will be required on all of the building service equipment, conduit, piping, and any other ancillary equipment placed in the floor/slab.~~

~~l. Final. (Contractor or representative are required to be present for this inspection.) A spot survey will be required by the Director of Community Development or the Chief Building Inspector when it is apparent the need for further clarification is required for the proper placement of a structure on a zoning lot.~~

Section 109.3.8 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

109.3.8 Other Inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the Village. Additional inspections may include the following as applicable to the project:

1. Foundation and draitile prior to backfill.
2. Underground and rough utilities
3. Plumbing stack test
4. Insulation
5. Electrical services prior to activation
6. Rough ceilings
7. All fire and life safety systems as required by the code official.

Section 110 is amended by deleting the same in its entirety and addressed in Chapter 7, Article VII of the Downers Grove Municipal Code.

Section 112 is amended by deleting the same in its entirety and addressed in Chapter 7, Article IX of the Downers Grove Municipal Code.

Section 113 is amended by deleting the same in its entirety and addressed in Chapter 7, Article X of the Downers Grove Municipal Code.

(14) ~~Section 112 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:~~

~~**Section 112.0 Board of Appeals**~~

~~112.1 *Appointment.*~~

~~There is hereby established in the municipality a board to be called the Board of Appeals, consisting of seven members who are qualified by experience and training to pass upon matters pertaining to building construction and who shall be appointed by the Village Manager, subject to the approval of the Village Council. Members shall hold office for their designated terms and until their successors have been appointed. The Village Manager shall designate one of the members to serve as chairman.~~

~~112.2 *Term of office.*~~

~~The Village Manager shall appoint seven members for staggered terms of three years. Vacancies shall be filled for an unexpired term in the manner in which the original appointments are required to be made. Continued absence of any member from regular meetings of the board shall, at the discretion of the Village Manager, render any such member liable to immediate removal from office by the Village Manager.~~

~~112.3 *Affirmative votes.*~~

~~In varying the application of any provision of this Code or in modifying an order of the building official, affirmative votes of four members shall be required. No member of the board shall vote upon any question in which he, or any corporation in which he is a shareholder, is interested.~~

~~112.4 *Meetings and records.*~~

~~Meetings of the board shall be held at the call of the chairman and at such other times as the board may determine. All hearings before the board shall be open to the public. The board shall keep minutes of its proceedings, showing the vote of each member upon every question, or if absent or failing to vote, indicating such facts, and shall also keep records of its examinations and other official action. Such minutes and such records shall be public records.~~

~~112.5 *Procedure.*~~

~~The board shall establish rules and regulations for its own procedure not inconsistent with the provisions of this Code.~~

~~112.6 *Appeals.*~~

~~a. Any person aggrieved or the head of any agency of the municipality may take an appeal to the Board of Appeals from any decision of the building official.~~

~~b. An appeal may be taken within thirty days from the date of the decision appealed, by filing with the building official and with the Board of Appeals a notice of appeal, specifying the grounds thereof, except that in the case of a building or structure which in the opinion of the building official, is unsafe or dangerous, the building official may in his/her order limit the time for such appeal to a shorter period. The building official shall forthwith transmit to the Board of Appeals all the papers upon which the action appealed from was taken.~~

~~112.7 *Modifications and variations by the Board of Appeals.*~~

~~a. The Board of Appeals, when so appealed to and after a public hearing, may vary the application of any provision of this Code to any particular case when, in its opinion, the enforcement thereof would do manifest injustice, and would be contrary to the spirit and purpose of this Code or public interest, or when, in its opinion, the interpretation of the building official should be modified or reversed.~~

~~b. A decision of the Board of Appeals to vary the application of any provision of this Code, or to modify an order of the building official, shall specify in what manner such variation or modification is made, the conditions upon which it is made, and the reasons therefor.~~

~~112.8 *Decisions of the Board of Appeals.*~~

~~a. The Board of Appeals shall in every case reach a decision without unreasonable or~~

~~unnecessary delay. Every decision of the Board of Appeals shall be in writing and shall indicate the vote upon the decision. Every decision shall be promptly filed in the office of the building official and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant and a copy shall be kept publicly posted in the office of the building official for 2 weeks after filing.~~

~~b. If a decision of the Board of Appeals reverses or modifies a refusal, order, or disallowance of the building official, or varies the application of any provision of this Code, the building official shall take action immediately in accordance with such decision.~~

~~112.9 Appeals from decisions of the Board of Appeals.~~

~~A person aggrieved by a decision of said board, whether previously a party to the proceeding or not, may, within 15 days after the filing of the decision in the office of the building official, appeal to the appropriate court to correct errors of law in such decisions.~~

Section 115 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

115 Unsafe structures and equipment. The provisions of the International Property Maintenance Code as adopted and amended by the Village shall apply.

CHAPTER 2

(15) ~~Section 201.3 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:~~

~~Illinois State Plumbing Code as adopted and amended by the Village.~~

Section 202 is amended as follows:

202 Definitions.

The definition of **Vapor Retarder** is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

Vapor Retarder Class. A measure of a material or assembly's ability to limit the amount of moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method of ASTM E-96 as follows:

Class I: 0.1 perm or less

Class II: perm is greater than .1 and less than or equal to 1.0 perm

Class III: perm is greater than 1.0 and less than or equal to 10 perm

CHAPTER 4

(16) ~~Section 403.1 is amended by deleting the second exception~~ first paragraph in its entirety and by substituting in lieu thereof the following:

403.1 Applicability. The provisions of this section shall apply to buildings with an occupied floor located more than fifty-five (55) feet above the lowest level of Fire Department vehicle access as measured from grade to the floor elevation of the top occupied floor.

All exceptions shall remain, however, Exception #2 shall be deleted in its entirety.

(17) ~~Section 403.2~~ is amended by deleting the exceptions thereto in their entirety.

(18) ~~Section 403.7 is amended by deleting the same in its entirety, and substituting in lieu thereof the following:~~

~~403.7 Fire Department Communication System.~~

~~A two way Fire Department communication system shall be provided for Fire Department use. The communication station shall operate between the central control system and every elevator cab, enclosed~~

~~stairway landing, emergency generator room, building engineer's office, fire pump room, remote alarm panel and remote sprinkler riser locations.~~

~~— The two way communications system shall consist of a telephone system with plug in handsets capable of use in the designated jacks. Location of the jacks, zoning of the two way communication system, and the number of handsets required, will all be determined by the Fire Department.~~

Section 403.12.1 shall be amended by deleting the same in its entirety and by substituting in lieu thereof the following:

403.12.1 Stairway communications system. See Section 907.2.12.3 for requirements.

Section 403.13 shall be amended by deleting the same in its entirety and by substituting in lieu thereof the following:

403.13 Smokeproof exit enclosures. Every required stairway serving floors more than fifty-five (55) feet above the lowest level of fire department vehicle access measured from grade to the floor elevation of the top occupied floor shall comply with Sections 909.20 and 1020.1.7.

Section 406.5.2 shall be amended by deleting the first paragraph in its entirety and by substituting in lieu thereof the following:

406.5.2 Canopies. Canopies under which fuels are dispensed shall have a clear, unobstructed height of not less than thirteen (13) feet six (6) inches to the lowest projecting element in the vehicle drive-through area. Canopy structures and their supports over pumps shall be of noncombustible materials. Plastic facing material shall comply with the following:

All exceptions shall remain, however, Exception #1 shall be deleted in its entirety.

Section 414.5.4 shall be amended by deleting the "ICC Electrical Code" and by substituting in lieu thereof the following:

"National Electric Code as adopted and amended by the Village.

Section 415.6.4 shall be amended by deleting the "International Plumbing Code" and by substituting in lieu thereof the following:

"State of Illinois Plumbing Code as adopted and amended by the Village"

(19) ~~Section 415.7.4~~ is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

~~— Illinois State Plumbing Code as adopted and amended by the Village~~

(20) ~~Section 415.9.2.8.18.2.8.1~~ is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

The "National Electrical Code as adopted and amended by the Village".

CHAPTER 5

(21) ~~Table 503~~ is amended ~~as follows:~~ by deleting therefrom all height limitations under the columns jointly labeled "Types III and IV" and by substituting in lieu thereof a height limitation of thirty five feet for all uses under such columns.

~~— Tables 503, 601 and 602 are further amended by deleting the columns jointly labeled "Type V" in their entirety.~~

1. Type V-A and V-B is not permitted for all use groups governed by this code in all zoning districts.

2. Type III-A, III-B, and IV shall be limited to no more than thirty-five (35) feet in story height as defined by this code above the lowest level of Fire Department vehicle access for all use groups.
3. Type III-A, III-B, shall not be permitted in the downtown business (DB) and downtown transition (DT) zoning districts.

Exception: Restoration or remodeling for existing non-conforming structures of type V-A, V-B, III-A, III-B shall be permitted when the project area does not exceed thirty-five percent (35%) of the total building square footage.

Section 504.2 shall be amended by adding the following provision at the end of the first paragraph:
"This section shall not be applied to Type III-B construction."

Section 506.1 shall be amended by deleting the first paragraph in its entirety and substituting in lieu thereof the following paragraph:

506.1 General. With the exception of Type III-B construction, the areas limited by Table 503 shall be permitted to be increased due to frontage and automatic sprinkler system protection in accordance with the following:

Section 507.2 is amended by deleting the same in its entirety.

Section 507.3 shall be amended by deleting the first paragraph in its entirety and substituting in lieu thereof the following paragraph:

507.3 Sprinklered one story. The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V and Type III-B construction, shall not be limited when the building is provided with an automatic sprinkler system throughout it in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than sixty (60) feet (18 288mm) in width.

Exception #2 is deleted in its entirety.

The first sentence of Exception #3 is amended to read as follows:

Group A-1 and A-2 occupancies of other than a Type III-B or Type V construction shall be permitted, provided:

Section 507.4 shall be deleted in its entirety and substituting in lieu thereof the following:

507.4. Two story. The area of a two-story, Group B, F, M or S building of other than a Type III-B or Type V construction shall not be limited when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, and is surrounded and adjoined by public ways or yards not less than sixty (60) feet (18 288 mm) in width.

Section 509.4 is amended to add the following exception:

Exceptions:

1. See Table 503 as amended.

Section 509.5 is amended by deleting the same in its entirety.

Section 509.7 is amended to add the words "as amended" following the phrase "limitations in Section 503" in the second sentence of the first paragraph.

CHAPTER 6

Table 601 is hereby amended to read as follows:

Table 601 Fire-Resistance Rating Requirements for Building Elements (hours).

See Table 503, as amended, for construction type restrictions.

Table 602 is hereby amended to read as follows:

Table 602 Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance.

See Table 503, as amended, for construction type restrictions.

Section 603.1.2 is amended by deleting the words “International Plumbing Code” and substituting in lieu thereof the following:

"the State of Illinois Plumbing Code as adopted and amended by the Village"

Section 603.1.3 is amended by deleting the words “ICC Electrical Code” and substituting in lieu thereof the following:

"the National Electrical Code as adopted and amended by the Village"

CHAPTER 7

~~(22)~~ **Section 7167.5** **Exception #5** is amended by deleting the words “International Plumbing Code” and substituting in lieu thereof the following:

Illinois "State of Illinois Plumbing Code as adopted and amended by the Village"

CHAPTER 9

~~(23)~~ **Section 901.6** is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

901.6 Supervisory Services.

All ~~Alarm and Detection Systems as described in Section 907 of this code~~ fire protection systems shall be supervised by a connection to the Village Operations Center in the manner specified by Section 17.58 of the Municipal Code. All alarm and detection services ~~and~~ shall transmit alarm, supervisory, and trouble signals.

Section 901.6.2 is amended by deleting Exception #1 and Exception #2 in their entirety.

Section 901.6.3 is amended by deleting the Exception in its entirety.

Section 901.8 is hereby added as follows:

901.8 NFPA Standard editions. The following NFPA standards editions including all appendices and hereby adopted:

NFPA 13, 2007

NFPA 13-D, 2002

NFPA 13-R, 2002

NFPA 14, 2007

NFPA 20, 2007

NFPA 25, 2008

NFPA 96, 2008

NFPA 30B, 2007

NFPA 72, 2007

~~(24)~~ ~~Sections 903.1 through 903.2.12 are~~ **903.2** is amended by deleting the same in ~~their~~ its entirety and by substituting in lieu thereof the following:

903.12 Where Required. Automatic sprinkler systems shall be installed and maintained in full operating condition, as specified in this code, in all buildings and structures, including open parking structures, ~~regardless of street frontage or fire walls,~~ which exceed two stories or ~~twenty-five (25)~~ feet in height or which have a total area in excess of the applicable square footage listed in Table 903.

TABLE 903

Total area square footages above which installation of automatic sprinkler systems is required:

Types of Construction					
<u>Use Group</u>	<u>Type 1A, 1B, 2A and 2B</u>	<u>Type 2CA, 2B</u>	<u>Type 3A, 3B</u>	<u>Type 43B</u>	<u>Type 5A, 5B4</u>
A-1 Assembly, theaters	0	0	0	0	0
A-2 Assembly, nightclubs and similar uses	0	0	0	0	0
A-3 Assembly (lecture halls, recreation centers, terminals, restaurants other than night clubs)	0	0	0	0	0
A-4 Assembly, churches	0	0	0	0	0
A-5 Assembly	0	0	0	0	0
B Business	1,500	1,500	1,500	1,500	1,500
E Educational	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>1,500</u>	5,000 <u>0</u>
F-1 Factory and industrial, moderate	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>1,500</u>	5,000 <u>0</u>
F-2 Factory and industrial, low	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>2,500</u>	5,000 <u>1,500</u>	5,000 <u>0</u>
H-1 High hazard, detonation hazards	Automatic Sprinkler System Required In All	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
H-2 High hazard, deflagration hazards	Automatic Sprinkler System Required In All	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
H-3 High hazard, physical hazards	Automatic Sprinkler System Required In All	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

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H-4 High hazard, health hazards	Automatic Sprinkler System Required In All	0	0	0	0
I-1 Institutional, residential care	Automatic Sprinkler System Required In All	0	0	0	0
I-2 Institutional, incapacitated	Automatic Sprinkler System Required In All	0	0	0	0
I-3 Institutional, restrained	Automatic Sprinkler System Required In All	0	0	0	0
I-4 Institutional,	0	0	0	0	0
M Merchantile	2,500	2,500	2,500	2,500	1,500
R-1, 2, 3, 4 (except detached one and two-family) Residential, hotels	Automatic Sprinkler System Required In All	0	0	0	0
R-2 Residential, multiple family	Automatic Sprinkler System Required In All				
S-1 Storage, moderate	5,000	2,500	5,000	2,500	5,000
S-2 Storage, low	5,000	2,500	5,000	2,500	5,000
U Utility, misc.	1,500	1,500	1,500	1,500	0
U Utility, misc.	For accessory structures, the sprinkling requirements for the corresponding principal use shall be used				

Section 903.2.1 through Section 903.2.9.1 are hereby deleted in their entirety.

Section 903.2.10.1 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

903.2.10.1 Stories and basements without openings. An automatic sprinkler system shall be installed throughout every story and basement of all buildings in accordance with Table 903.

Section 903.2.10.1.2 is hereby deleted in its entirety.

Section 903.2.10.1.3 is hereby deleted in its entirety.

Section 903.2.10.3 is amended by deleting Exception #2 and Exception #3.

Section 903.3 shall be deleted in its entirety and substituting in lieu thereof the following:

903.3 Installation requirements. Automatic sprinkler systems shall be designed and installed in accordance with Section 903.3.1 through Section 903.3.7. In addition, a check valve shall be provided in all sprinkler risers.

Section 903.3.1 is amended by adding the following at the end of the paragraph:

The use of XL thin-wall pipe is prohibited.

(25) ~~Section 903.3.1.1.1~~ is amended by omitting Condition #4 and adding in lieu of the following exception at the conclusion thereof:

"4. Sprinklers may be omitted from not be required in attics, crawl spaces, floor ceiling spaces, and other concealed spaces that are not used or intended for living purposes or storage if approved by the code official."

Section 903.3.2 is amended by adding the following condition:

"4. All business and assembly occupancies.

(26) ~~Section 903.3.5~~ is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

"Illinois State of Illinois Plumbing Code as adopted and amended by the Village"

(27) ~~Section 903.3.5.3~~ is amended by adding the following section:

903.3.5.3 Post Indication Valve Prohibited. The use of post indicator valves and wall post indicator valves are prohibited.

Section 903.4 is amended by deleting Exception #2 through Exception #7.

Section 903.6 is hereby added as follows:

903.6 Hydraulic information and nameplate. For sprinkler drawing review and approval, a copy of the hydraulic calculations sealed by the fire protection engineer, shall be submitted for each calculated area. For full approval of the system, a copy of each hydraulic nameplate must be submitted.

(28) ~~Section 903.4.2 is amended by adding the following section:~~

~~**903.4.2.1. Alarm Indicating Appliances.** Audio/visual devices shall be provided, seen and heard in all areas of every building. All sprinkled buildings shall be provided with audio/visual devices. At least one exterior audio/visual device shall be mounted over the fire department connection.~~

(29) ~~Section 903.4.3 is amended by deleting the word "high rise" and replacing it with "multiple story buildings".~~

(30) ~~Section 903.6 is hereby added as follows:~~

~~**903.6 PSI Safety Factor.** Provide a minimum 10% or 5 psi minimum safety factor in the fire protection system hydraulic calculation. The system demand shall be 5 psi minimum below the seasonal low water flow test supply.~~

(31) ~~Section 903.7 is hereby added as follows:~~

~~903.7 Hydraulic Nameplate.~~ By each hydraulically calculated area, on each drawing provide a copy of the hydraulic nameplate.

(32) Section 903.7.1 is hereby added as follows:

~~903.7.1 Industrial Occupancy Connections.~~ For industrial occupancy buildings that have large sprinkler systems or fire protection water demands, provide a minimum 5" inch fire department STORTZ connection.

(33) Section 903.8 is hereby added as follows:

~~903.8 NFPA Standard Appendices.~~ The appendices of all NFPA standards are to be considered as part of each standard and are mandatory requirements.

(34) Section 903.9 is hereby added as follows:

~~903.9 NFPA Standards Adopted.~~

———— The following NFPA standards are hereby adopted:

- a. NFPA 14, Standpipe and Hose Systems, 2000 Edition
- b. NFPA 20, Installation of Centrifugal Fire Pumps, 1999 edition
- c. NFPA 25, Inspection, Testing and Maintenance of Water-based Fire Protection System, 1998 edition.
- d. NFPA 96, Installation of Equipment for Removal of Smoke and Grease-Laden Vapors for Commercial Cooking Equipment, 1998 edition.
- e. NFPA 231, General Storage, 1998, edition.
- f. NFPA 231C, Rack Storage, 1998 edition.
- g. NFPA 231D, Storage of Rubber Tires, 1998 edition.
- h. NFPA 30B, Manufacturer and Storage of Aerosol Products, 1998 edition.

(35) Section 903.10 is hereby added as follows:

~~903.10 Fire Sprinkler System; Fire pump test header.~~

- a. Add provide an OS&Y control valve on fire pump installations.
- b. Provide an outside test header on the fire pump installation.

(36) Section 903.11, is hereby added as follows:

~~903.11. Yard Hydrants.~~ Fire hydrants shall be provided around the perimeter of the building in 300' foot increments. A municipal fire hydrant shall be located within 100' feet of the fire department connection on the fire protection water supply to the building. Yard Hydrants shall be tested annually and inspection reports submitted to the Downers Grove Fire Department.

(37) Section 903.12 is hereby added as follows:

~~903.12 Separate Zones Required.~~ Manual Pulls, A/V and detectors to be on separate zones per floor.

(38) Section 903.13 is hereby added as follows:

~~903.13 Access.~~ Provide an outside and inside access door to the sprinkler riser valve room and fire pump room.

(39) Section 903.14 is hereby added as follows:

~~903.14 Separate Valve Room/Fire Pump Room.~~

———— Provide a minimum 2-hour separate sprinkler valve room and/or fire pump room.

(40) Section 903.15 is hereby added as follows:

~~903.15 Check Valve Required.~~ Provide a check valve in each sprinkler riser.

(41) Section 903.16 is hereby added as follows:

~~903.16 Residential/Quick Response Sprinklers.~~ All offices, assembly and residential building and areas shall be provided with residential and/or quick response sprinklers.

Exception: detached single family

(42) Section 903.17 is hereby added as follows:

~~903.17 Warehouse Valves.~~ In all warehouse storage areas where storage exceeds 12' feet height, provide inside 2 1/2" fire hose valves with 1 1/2" reducer to a 1 1/2" connection. Locate the valves at each door entrance to the warehouse and/or storage area. Provide additional 2 1/2" fire hose valves so that no portion of the warehouse and/or storage area is more than 120' feet maximum travel distance to a fire hose valve. Show the location of all obstructions and/or racks on the drawing.

(43) Section 903.17.1 is hereby added as follows:

~~903.17.1 Fire Hose Valve System.~~ The fire hose valve system piping shall be:

a. A separate riser piping system.

b. Hydraulically calculated for a minimum of 250 gpm at 75 psi to the most hydraulically remote fire hose valve.

c. Where system pressures exceed 100 psi provide Potter reduced pressure field adjustable type valve.

(44) Section 903.18 is hereby added as follows:

~~903.18 Single Family Home Sprinkler Systems.~~ Provide a minimum NFPA 13 D sprinkler system in all single family homes.

Exception: detached single family homes

(45) Section 903.19 is hereby added as follows:

~~903.19 Addressable Fire Alarm Systems.~~ All fire alarm systems shall be of the addressable type.

(46) Section 903.20 is hereby added as follows:

~~903.20 Computer Code Analysis Prohibited.~~ Performance based computer code analysis are prohibited.

(47) Section 903.21 is hereby added as follows:

~~903.21 XL Thin Wall Pipe Prohibited.~~ The use of XL thin wall pipe is prohibited.

(48) Section 904.3.1 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"The National Electrical Code as adopted and amended by the Village".

(49) Section 904.3.4 is amended by adding the following:

Kitchen hood suppression systems shall be connected to the building fire alarm system.

Section 905.2.1 is hereby added as follows:

905.2.1 Fire hose valve system. The fire hose valve piping system shall be:

1. A separate riser piping system from the domestic water service.

2. Hydraulically calculated for a minimum of 250 gpm at 75 psi at the most hydraulically remote fire hose valve.

3. Where system pressures exceed 100 psi, provide Potter reduced pressure field adjustable type valves.

(50) Section 905.3.1 is amended by deleting "30 feet (9144 mm)" and by substituting in lieu thereof the

following;
"22 feet"

(51)Section 905.3.2 is amended by deleting the exceptions in their entirety.

(52)Section 905.4 is amended by adding the following:

7. The number of risers for multi-story buildings shall be such that all parts of every floor area can be reached by a 30-foot hose stream from a nozzle attached to not more than 100 feet of hose connected to a riser outlet. Standpipe hose connections shall be required to be located in enclosed stairways at each level in multi-story buildings.

8. In all warehouse storage areas where storage exceeds twelve (12) feet in height, provide 2-1/2" fire hose valves with 1-1/2" reducer to a 1-1/2" connection. Locate the valves at each door entrance to the warehouse and /or storage area. Provide additional 2-1/2" fire hose valves throughout the space so that no portion of the warehouse/storage area is more than one hundred twenty (120) feet maximum travel distance to a fire hose valve.

(53)Section 905.7.3 is amended by adding a new section as follows:

905.7.3 Hose connection within the cabinet—Equipment Specifications. The hose connection shall be not more than 5 feet above the floor and consist of a 2 1/2" size, inch hose connection with valves and threads conforming to Fire Department in conformance with Village standards. ~~If deemed necessary by the Fire Department, a 1 1/2 inch hose connection equipped with not more than 100 feet of 1 1/2 inch approved fire hose, an approved shut off valve, nozzle, and couplings, and an approved rack or cabinet for storing the hose shall be required.~~

Section 905.7.3.1 is hereby added as follows:

905.7.3.1 Additional/alternate hose requirement. An additional or alternate hose connection consisting of one hundred (100) feet of 1-1/2" fire hose, shut-off valve, nozzle, couplings, rack or cabinet may be required as determined by the code official.

(54)Section 907.1.2 is amended by adding the following at the conclusion thereof:

~~All Alarm and Detection Systems as described in Section 907 of this code shall be supervised by a connection to the Village Operations Center in the manner specified by the Municipal Code and shall transmit alarm, supervisory, and trouble signals.~~

Section 907.1.2.1 is hereby added as follows:

907.1.2.1 Addressable fire alarm systems. All fire alarm systems shall be of the addressable type.

Section 907.1.2.2 is hereby added as follows:

907.1.2.2 Separate zones required. Manual fire alarm pulls, audio visuals, and other detection devices shall be on separate zones per floor of a multi-story building.

(55)Section 907.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

907.2 Where Required. ~~(a) An approved manual and automatic fire alarm system shall be installed and maintained in all Use Groups except in single family homes and as provided in Section 907.2.6.~~

~~(b) An approved automatic fire detection system shall be installed and maintained in all Use Groups, not provided with an automatic sprinkler system, and in accordance with NFPA 72 shall be provided in all new buildings, structures, and additions governed by this code. For existing buildings, the requirements of the International Fire Code, Section 907.3, as amended, shall apply. Devices, combination of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke~~

detectors. Where ambient conditions prohibit installation of automatic smoke detection, other automatic fire detection shall be allowed, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms where during normal operation, products of combustion are present in sufficient quantity to activate a smoke detector.

(56) Section 907.2.1 through Section 907.2.10.4 are amended by deleting the same in its their entirety.

(57) Section 907.2.1.1 is hereby renumbered to 907.2.1.

(58) Sections 907.2.2, 907.2.3, 907.2.4, 907.2.5, 907.2.6 and 907.2.6.1 are amended by deleting the same in their entirety.

(59) Section 907.2.6.2 is hereby renumbered to 907.2.6.

(60) Section 907.2.8 is amended by deleting the same in its entirety.

(61) Section 907.2.9 is amended by deleting the same in its entirety.

(62) Section 907.2.12 is amended by deleting "75 feet (22 860 mm)" and substituting the following in lieu thereof:

"45 feet"

Section 907.2.12 is further amended by deleting Exception #2 through Exception #5 in their entirety.

(63) Section 907.2.12.3 is amended by deleting the first and second sentence of the first paragraph in their entirety and by substituting in lieu thereof the following:

907.2.12.3 Fire department communication system. An approved two-way hard-wired and radio fire department communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 911 and elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, building engineer's office, remote alarm panel and remote sprinkler riser locations, areas of refuge and inside enclosed exit stairways.

Section 907.2.12.3 is further amended by deleting the exception.

(64) Section 907.2.12 is amended by adding the following new section:-

907.2.12.4 High Rise Communications System. In all buildings defined as high rise, suitable fire department radio communications in addition to hard-wired systems shall be approved prior to construction. Suitable repeats or antenna systems shall be approved by the fire department.

Section 907.2.12.3.1 is hereby added as follows:

907.2.12.3.1 Communication system equipment. The two-way hard-wired communications system shall consist of a telephone system with plug-in handsets capable of use in the designated jacks. Location of the jacks, zoning of the two-way system, and the number of handsets required is subject to review and approval by the Fire Department for site specific conditions.

Section 907.2.12.3.2 is hereby added as follows:

907.2.12.3.2 High rise wireless communication system standards and testing. Minimum standards for wireless radio communication systems design and testing shall be obtained from the Fire Prevention Bureau and consist of the following:

1. A professionally engineered system shall be capable of transmitting at a minimum of -90 decibel

milliwatt (dBm) for over 90% of in-building coverage. The owner shall furnish a test report upon completion of the system installation verifying compliance with this requirement.

2. The system shall be capable of operating on an independent battery and/or generator system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of external power input. There shall be no connectivity between the radio system and fire alarm system.

3. Proof of maintenance and an annual inspection by a qualified radio technician shall be provided to the fire department through a certificate of annual inspection.

4. Village personnel shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio coverage is present.

5. The property owner shall be responsible for repairs, replacement, or upgrades to the system as directed by the Village should the system fail or no longer function.

~~(65)~~Section 907.2.18.1 is amended by deleting the phrase "or similar rooms" and adding the following to #1 after the word "machine": "fire alarm room and sprinkler room".

~~(66)~~Section 907.2.19 is amended by adding the words "and automatic fire detection system" after the words "manual fire alarm system".

~~(67)~~Section 907.3.1 is amended by deleting the exception.

~~(68)~~Section 907.5 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

~~(69)~~Section 907.8.2 is amended by deleting "75 feet (22 860 mm)" and substituting the following in lieu thereof:

"40~~5~~ feet"

~~(70)~~Section 907.9.1 is amended by deleting the exceptions.

~~(71)~~Section 907.14 is amended by adding the following at the end of the first paragraph by deleting the same in its entirety are substituting in lieu thereof the following:

— All fire alarm systems shall be supervised by connection to the Village fire alarm receiving panel in the manner specified by the Municipal Code and shall transmit alarm, trouble and supervisory signals.**907.14 Monitoring.** All alarm and detection systems as described in Section 907 of this code shall be supervised by a connection to the Village Operations Center per the requirements of Section 17.58 of the Municipal Code and shall transmit alarm, supervisory, and trouble signals.

Exceptions:

1. Supervisory service is not required for automatic sprinkler systems in one- and two-family dwellings.
2. Any property within the municipal limits of the Village which is under the jurisdiction of a fire protection district organized pursuant to state law shall connect to the alarm receiving panels of the fire protection district and must be approved by the Village.

~~(72)~~Section 907.14 is further amended by deleting the exceptions and substituting in lieu thereof the following:—

— Exceptions:

— 1) Supervisory service is not required for automatic sprinkler systems in one and two family dwellings.

— 2) In lieu of connecting to the Village's alarm receiving panels as set fourth in Section 907.14 any

property within the municipal limits of Downers Grove which is under the jurisdiction of a fire protection district organized pursuant to state law shall instead connect to the alarm receiving panels of the fire protection district. Such alternative connection shall be according to the fire protection district's rules and regulations for connection.

(73)Section 909.11 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

(74)Section 909.12.1 is amended by deleting the same in its entirety the words "ICC Electrical Code" and by substituting in lieu thereof the following:

909.12.1 Wiring.

In addition to meeting requirements of the National Electrical Code, as adopted and amended by the Village, all conductors with a voltage over 50v will need to be fully enclosed within a continuous raceway."National Electrical Code as adopted and amended by the Village"

(75)Section 909.16.3 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

(76)Section 909.20.3 is amended by deleting the same in its entirety:

(77)Section 911.1 is amended by deleting 12 and 13 in their entirety and by substituting in lieu thereof the following:

911.1 Fire Command Center Features.

12. A complete set of building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, firefighting equipment, fire department access a complete set of as built fire alarm system prints along with the alarm system instruction manual and specifications. A complete set of fire alarm plans, specifications, instruction manual, and building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire fighting equipment, and fire department access.

13. A table large enough to spread out the plans that were indicated above and one chair.

(78)Section 911.1 is further amended by adding the following:

16. Handsets for fire department the communications system, properly labeled, and in locked box(es). The quantity must be as specified by the fire department.

17. A current list of key personnel with phone numbers.

18. A number of complete sets of keys as specified by the fire department for the building, elevators, alarm system, and any other keys needed for access or control of system, all inside locked cabinets. Keys are to be clearly marked for identification other locked systems as specified by the Fire Department.

19. A High-rise equipment box as specified by the Fire Department with equipment also as specified by the Fire Department. The box shall be secured within close proximity to the fire command room. Box and content per the Fire Department's specifications.

Section 912.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

9.12.1 Installation. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with all applicable requirements of the Municipal Code

(79)A new Section 912.1.1 is hereby added as follows:

912.1 Fire Pump.

~~When a fire pump is installed to meet the hydraulic needs of an automatic sprinkler system, it shall operate automatically at all times by connection to an automatically switched emergency power generator of sufficient capacity per the National Electric Code (NFPA 90) as adopted by the Village."~~

912.1.1 Yard hydrants. Fire hydrants shall be provided around the perimeter of the building in three hundred (300) feet increments. A municipal fire hydrant shall be located within one hundred (100) feet of the fire department connection on the fire protection water supply to the building. All locations are subject to review and approval by the code official for site specific conditions.

Section 912.1.1.1 is hereby added as follows:

912.1.1.1 Hydrant testing. Yard hydrants shall be tested annually and a report must be submitted to the Fire Department for review and approval.

Section 912.1.1.1.1 is hereby added as follows:

912.1.1.1.1 Stortz connections. For buildings with large sprinkler systems or water demands as determined by the code official, a minimum of a five (5) inch STORTZ connection is required.

Section 912.5 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

"State of Illinois Plumbing Code as adopted and amended by the Village"

Section 913 FIRE PUMPS is hereby added

Section 913.1 is hereby added as follows:

913.1 Fire pump. When a fire pump is installed, it shall operate automatically at all times by connection to an automatically switched emergency power generator sized per the requirements of the National Electrical Code.

Section 913.2 is hereby added as follows:

913.2 Fire pump test headers and valves. Where fire pumps are installed, an outside test header and an OS & Y control valve is required.

Section 913.3 is hereby added as follows:

913.3 Fire rating for valve room and fire pump rom. All rooms containing sprinkler valve equipment and fire pumps shall be separated from adjoining spaces with a minimum of 2-hour rated assemblies.

Section 913.4 is hereby added as follows:

913.4 Access for valve room and fire pump room. A minimum of two-3 foot wide, 1-hour rated doors shall provide access to the valve and fire pump room, located at an interior and exterior wall of the building.

(80) **Section 924** is amended by adding the following **Section 924.3**:

924.3. Exemption.

~~In lieu of connecting to the Village alarm receiving panels as set forth above, any property within the municipal limits of Downers Grove which is under the jurisdiction of a fire protection district organized pursuant to state law shall instead connect to the alarm receiving panels of the fire protection district. Such alternative connection shall be according to the fire protection district's rules and regulations for such connection."~~

CHAPTER 10

Section 1001.3 is amended by adding the the words "and the International Property Maintenance Code, as amended and adopted by the Village", at the end of the sentence.

~~(81) Section 1003.2.10.5 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:~~

~~—— National Electric Code as adopted and amended by the Village~~

~~(82) Section 1003.2.11.2 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:~~

~~—— National Electric Code as adopted and amended by the Village~~

Section 1003.5 is amended by deleting the exceptions therein and substituting in lieu thereof the following:

Exceptions:

1. A single step with a maximum riser height of seven (7) inches is permitted at exterior doors not required to be accessible by the State of Illinois Accessibility Code.
2. Steps and stairs are permitted at locations as permitted by the State of Illinois Accessibility Code.

Section 1006.3 is amended by adding the following at the end of the section:

"Where emergency lighting is powered by a generator, a minimum of twenty percent (20%) of the emergency light fixtures shall be provided with battery back-up. For multi-story buildings, batter powered units shall be provided in enclosed stairways for proper illumination of each story. "

Section 1007.1 is amended by adding at the end of the first sentence "and all applicable provisions of the State of Illinois Accessibility Code".

Section 1007.1 is further amended by deleting the exceptions.

Section 1007.2 is amended by deleting Condition #1 ini its entirety and substituting in lieu thereof the following:

1. Accessible routes complying with the State of Illinois Accessibility Code.

Section 1007.2.1 is deleted in its entirety and substituting in lieu thereof the following:

1007.2.1 Elevators required. In buildings where a required accessible floor is above or below a level of exit discharge, an elevator shall be provided per the State of Illinois Accessibility Code.

Section 107.2.1 is further amended by deleting the exceptions.

Section 1008.1.1 is amended by is amended by deleting "28 inches (711 mm)" in Exception #2 only and substituting the following in lieu thereof:

"32 inches"

CHAPTER 11

~~(83) Chapter 11 is amended by deleting the same in its entirety; see State of Illinois Accessibility Code.~~

CHAPTER 12

~~(84)Section 12045.4.1 is amended by deleting the words "ICC Electrical Code" and substituting in lieu~~

thereof the following:

"National Electrical Code as adopted and amended by the Village"

(85)Section 1205.3.3 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

Illinois "State of Illinois Plumbing Code as adopted and amended by the Village".

CHAPTER 13

(86)Section 1301.2 is hereby added as follows:

1301.2 ComCheck/Inspection List Required Computer software programs. A ComCheck report and inspection list will need to accompany plans for new commercial construction and common-additions of over 250 square feet. The ComCheck report will need to be stamped by an Illinois State-Registered Architect of record and the plans will need to reflect the conditions as spelled out in the ComCheck report and the inspection report. Compliance with the code provisions described therein may be demonstrated with the use of COMcheck software for all building types governed by this code. For projects with documents prepared by a State of Illinois licensed design professional, the submittal shall be sealed by the design professional of record.

CHAPTER 14

(87)Section 1405.10.4 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

CHAPTER 15

Section 1502.1 is amended by adding the following definitions:

AGGREGATE. In roofing, crushed stone, crushed slag or water-worn gravel used for surfacing for roof coverings.

BALLAST. Ballast is any item having weight that is used to hold or steady an object. In roofing, ballast comes in the form of large stones or paver systems or light-weight interlocking paver systems and is used to provide uplift resistance for roofing systems that are not adhered or mechanically attached to the roof deck.

(88)Section 1503.4 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

Illinois "State of Illinois Plumbing Code as adopted and amended by the Village"

CHAPTER 16

Section 1603.1.6 is amended by deleting the words "in Section 1612.3" and substituting in lieu thereof the following:

"by local flooding data"

TABLE 1608.2 is hereby deleted in its entirety.

Section 1612.3 shall be deleted in its entirety and substituting in lieu thereof the following:

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, local flooding data shall apply.

Section 1612.5 shall be amended by deleting Condition 2 and subsections thereof in their entirety.

Figure 1613.5(3) through Figure 1613.5(14) are hereby deleted in their entirety.

CHAPTER 17

Section 1701.3 is hereby deleted in its entirety.

Section 1704.1 is amended by deleting Exception #2 and Exception #3 in their entirety.

Section 1704.1.1 is amended by deleting Exception #1 in its entirety.

Section 1704.4 is amended by deleting the exceptions.

Section 1704.5 is amended by deleting the exceptions.

Section 1705.3 through Section 1705.4.2 are hereby deleted in their entirety.

Section 1707 through Section 1709 are hereby deleted in their entirety.

CHAPTER 18

Section 1802.2 is amended by deleting the exception.

Section 1802.2.3 is amended by deleting the exception.

Section 1802.2.6 is hereby deleted in its entirety.

Section 1802.2.7 is hereby deleted in its entirety.

Section 1803.4 shall be amended by deleting Condition 3 in its entirety.

Section 1805.2.1 shall be amended by deleting Condition 2 and Condition 3 in their entirety.

Section 1805.2.1 shall further be amended by deleting the exceptions.

Section 1805.5.1.3 is hereby deleted in its entirety.

Section 1805.5.5.1 shall be amended by deleting Condition 2 in its entirety.

Section 1805.5.5.2 shall be amended by deleting Condition 2, Condition 3 and Condition 4 in their entirety.

Section 1805.9 is hereby deleted in its entirety.

~~(89) Section 1806.4.3 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:~~

~~———— Illinois State Plumbing Code as adopted and amended by the Village~~

Section 1807.1 is amended by deleting the first paragraph in its entirety and substituting in lieu thereof the

following:

1807.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floor below grade shall be waterproofed and dampproofed in accordance with this section.

Section 1807.1.2.1 is hereby deleted in its entirety and substituting in lieu thereof the following:

1807.1.2.1 Flood hazard areas. For buildings and structures in flood hazard areas as established by local flooding data, the finished ground level of an under-floor space shall be determined by the provisions of the Municipal Code.

Section 1807.2.1 is hereby deleted in its entirety and substituting in lieu thereof the following:

1807.2.1 Floors. Dampproofing materials for floors shall be installed between the floor and the base course required by Section 1807.4.1.

Section 1807.4.3 is amended by deleting the "International Plumbing Code" and substituting in lieu thereof the following:

"State of Illinois Plumbing Code as adopted and amended by the Village and the Municipal Code."

Section 1807.4.3 is further amended by deleting the exception.

Section 1808.2.23 through 1808.2.23.2.3 are hereby deleted in their entirety.

Section 1809.2.2.2.1 is hereby deleted in its entirety.

Section 1809.2.2.2.2 is hereby deleted in its entirety.

Section 1809.2.3.2.1 is hereby deleted in its entirety.

Section 1809.2.3.2.2 is hereby deleted in its entirety.

Section 1810.1.2.1 is hereby deleted in its entirety.

Section 1810.1.2.2 is hereby deleted in its entirety.

Section 1810.3.5 is hereby deleted in its entirety.

Section 1810.5.4.1 is hereby deleted in its entirety.

Section 1810.6.4.1 is hereby deleted in its entirety.

Section 1810.8.4.1 is hereby deleted in its entirety.

Section 1811.5 is hereby deleted in its entirety.

CHAPTER 19

Section 1904.4 is amended by deleting Condition 11.

Section 1908.1.4 is amended by deleting Section 21.2.1.3 and Section 21.2.1.4

Section 1908.1.6 is hereby deleted in its entirety.

Section 1908.1.15 through Section 1908.1.16 are hereby deleted in their entirety.

CHAPTER 21

Section 2106.4 through Section 2106.6 are hereby deleted in their entirety.

Section 2109.8 through Section 2109.8.4.7 are hereby deleted in their entirety.

Section 2111.4 is hereby deleted in its entirety.

Section 2111.4.1 is hereby deleted in its entirety.

Section 2112.4 is hereby deleted in its entirety.

Section 2113.4 is hereby deleted in its entirety.

CHAPTER 22

Section 2205.2.2 is hereby deleted in its entirety.

Section 2205.3.1 is hereby deleted in its entirety.

CHAPTER 23

Section 2305.2.4.1 is hereby deleted in its entirety.

Section 2305.3.11 is hereby deleted in its entirety.

Section 2307.1.1 is hereby deleted in its entirety.

Section 2308.12 is hereby deleted in its entirety.

Section 2308.12.1 is hereby deleted in its entirety.

Section 2308.12.2 is hereby amended to delete the exceptions.

Table 2308.12.4 is hereby deleted in its entirety.

Section 2308.12.6 is hereby deleted in its entirety.

Section 2308.12.9 is hereby deleted in its entirety.

CHAPTER 27

(90) **Chapter 27** is amended by deleting the **chapter in its entirety** words "ICC Electrical Code" and substituting in lieu thereof the following:

See the National Electrical Code as adopted and amended by the Village.

CHAPTER 29

(91) **Chapter 29** is amended by deleting the same in its entirety and substituting in lieu thereof the following:

See the State of Illinois Plumbing Code as adopted and amended by the Village.

CHAPTER 30

Section 3001.2 is hereby deleted in its entirety and substituting in lieu thereof the following:

3001.2 Referenced standards. The design, construction, installation, alteration, repair, and maintenance of elevators and conveying systems and their components shall conform to the State of Illinois Elevator Safety and Regulation Act and to the following state mandated elevator codes as determined by the office of the state fire marshal, division of elevator safety:

Safety Code for Elevators and Escalators (ASME A17.1-2007/CSA, B44-07);

Performance-Based Safety Code for Elevators and Escalators (ASME A17.1-2007/CSA-B44.7-07);

Guide for Inspection of Elevators, Escalators and Moving Walks (ASME A17.2-2004);

Safety Code for Existing Elevators and Escalators (ASME A17.3-2005);

Safety Standard for Platform Lifts and Stairway Chairlifts (ASME A18.1-2005);

Standards for the Qualification of Elevator Inspectors (ASME QEI-1-2007);

Safety Requirements for Personnel Hoists and Employee Elevators (ANSI A10.4-2004);

Automated People Mover Standard (ASCE 21-05) Part 1, 2006;

Automated People Mover Standards (ANSI/ASCE/T & DI 21.2-08) Parts 2, 3, and 4, 2008.

Section 3001.3 is hereby deleted in its entirety and substituting in lieu thereof the following:

3001.3 Accessibility. Passenger elevators shall conform to the requirements of the State of Illinois Accessibility Code.

(92) **Section 3002.4** is amended by deleting the word "four or more stories above grade plane or four or more stories below grade plane" and by substituting in lieu thereof the following:

"three or more stories, including stories below grade"

~~— **3002.4 Elevator Car Size.** In buildings three stories in height or more, the elevators shall provide for fire department emergency access to all floors. Such elevator cars shall be 30 inches (762 mm) by 76 inches (1930 mm) in the horizontal open position without any adjustment or lifting of the cot.~~

CHAPTER 31

(93) Section 3105 is amended by deleting the same in its entirety.

(94) Section 3106 is amended by deleting the same in its entirety.

(95) Section 3107 is amended by deleting the same in its entirety.

(96) Section 3109.4.1.8 is amended by adding the words "for an in-ground pool" before the words "one of the following shall apply".

Section 3109.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3109.1 General. Swimming pools shall comply with the all applicable sections of this code, the Municipal Code and the State of Illinois Swimming Pool Code.

Section 3109.5.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3109.5.1 Suction fittings. All pool and spa suction outlets shall be provided with a cover that conforms to ASME A112.19 8M-2007 on every drain/gate.

CHAPTER 32

(97) Chapter 32 is amended by deleting the same in its entirety.

CHAPTER 33

(98) Section 3305 is amended by deleting the words "International Plumbing Code" and substituting in lieu thereof the following:

— Illinois State Plumbing Code as adopted and amended by the Village

Section 3305.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3305.1 Facilities required. Sanitary facilities shall be provided during construction, remodeling, or demolition activities in accordance with the Municipal Code and the State of Illinois Plumbing Code.

Section 3306.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3306.1 Protection required. Pedestrians shall be protected during construction, remodeling, and demolition activities as required by this chapter and Section 7.11.1 of the Municipal Code.

Section 3306.2 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3306.2 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless permission has been granted for the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, provide a durable walking surface, and shall be designed to support all imposed loads.

Section 3306.6 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

3306.6 Barrier design. Barriers shall be designed to resist loads required in Chapter 16.

Section 3306.7 is amended by deleting the exceptions and conditions and substituting in lieu thereof the following:

Exception:

Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories in height are permitted to be designed for a live load of 75 psf or the loads imposed on them, whichever is greater.

Section 3311 and its subsections are amended by deleting the same in its entirety and substituting in lieu thereof the following:

3311 Standpipes. For requirements during construction, the provisions of the International Fire Code shall apply.

CHAPTER 34

(99) Section 3401.3 is amended by deleting the same in its entirety and substituting in lieu thereof the following: words "ICC Electrical Code", "International Plumbing Code" and substituting in lieu thereof the following:

— National Electrical Code as adopted and amended by the Village, Illinois State Plumbing Code as adopted and amended by the Village

3401.3. Compliance with other codes. Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the International Fire Code, International Fuel Gas Code, International Mechanical Code, State of Illinois Plumbing Code, International Property Maintenance Code, and the National Electrical Code.

Section 3402.1 is amended by deleting the words "and which are necessary to provide accessibility" from the last sentence of the paragraph for the definition of Technically Infeasible.

Section 3403.1 is amended by adding the following exception:

Exception:

The provisions of the codes listed in Section 3401.3 shall apply.

Section 3403.1.1 is amended by deleting the words "in Section 1612.3" and substituting in lieu thereof the words:

"by local flooding data".

Section 3403.2.1 is deleted in its entirety.

Section 3403.2.2 is deleted in its entirety.

Section 3403.2.3.1 shall be amended by deleting Condition 2 and Condition 3 in their entirety.

Section 3403.3 is amended by adding the following at the end of the first paragraph:

"and meet the requirements of all sections of this code and those listed in Section 3401.3"

Section 3404.1.3 through Section 3404.4 are deleted in their entirety.

Section 3406.1 is amended by deleting the last sentence of the paragraph and substituting in lieu thereof the following:

"Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other use groups. The provisions of this code and all codes listed in Section 3401.3 shall apply."

Section 3407.2 is deleted in its entirety.

Section 3408.1 is amended by adding the following at the end of the first paragraph:

"for those portions of the structure that are new or rebuilt."

Section 3409 is deleted in its entirety and substituting in lieu thereof the following:

3409 Accessibility for existing buildings. The provisions of the State of Illinois Accessibility Code shall apply.

Section 3410 is deleted in its entirety.

(100) Section 3408 is amended by deleting the same in its entirety.

(101) Section 3409 is amended by deleting the same in its entirety.

(102) Chapter 35 is amended by deleting the words "ICC Electrical Code" and "International Plumbing Code" and substituting in lieu thereof the following:

Illinois State Plumbing Code as amended from time to time, National Electrical Code as amended from time to time

(103) Appendices A, B, C, D, E, G, H, I and J are hereby deleted in their entirety.

APPENDIX H

Section H 101.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

H 101.1 General. For any provisions not covered by this code the provisions of Chapter 28, Article XV of the Municipal Code shall apply.

Section H 101.2 is deleted in its entirety.

Section H 102 is deleted in its entirety.

Section H 106.1 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

Section H 106.2 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

Section H 108 through Section H 110 are deleted in their entirety.

Section H 112.1 is amended by deleting the following words from the first sentence:

"constructed entirely of metal or other noncombustible material and"

Section H 112.4 is deleted in its entirety.

Section H 114 is deleted in its entirety.

Section H 115 is amended by deleting the words "ICC Electrical Code" and substituting in lieu thereof the following:

"National Electrical Code as adopted and amended by the Village"

APPENDIX I

Section I101.1.1 is hereby added as follows:

I101.1.1 Construction Standards. Patio covers shall be constructed of materials and installations as approved by the provisions of this code.

(Ord. No. 1281, § 15; Ord. No. 1370, § 1; Ord. No. 1586, §§ 2, 3, 6; Ord. No. 1747, § 1; Ord. No. 1846, § 1; Ord. No. 2020, § 1; Ord. No. 2089, §§ 1, 2; Ord. No. 2116, § 2; Ord. No. 2122, § 1; Ord. No. 2143, § 4; Ord. No. 2151, §§ 1, 2; Ord. No. 2208, § 1; Ord. No. 2209, § 1; Ord. No. 2397, § 1; Ord. No. 2547, § 2; Ord. No. 2563, § 1; Ord. No. 2584, § 3; Ord. No. 2608, § 2; Ord. No. 2709, § 1; Ord. No. 2768, §1; Ord. No. 2857, § 3; Ord. No. 3118, § 2; Ord. No. 3184, § 3; Ord. No. 3193, § 1; Ord. No. 3391, § 3.)

Section 3. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 4. That this ordinance shall be in full force and effect November 6, 2009.

2006 IBC Code

Mayor

Passed:

Published:

Attest: _____

Village Clerk