

A G E N D A

COMMITTEE OF THE WHOLE MEETING OF THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF WILLOWBROOK TO BE HELD ON MONDAY, NOVEMBER 24, 2025, AT 5:30 P.M. AT THE COMMUNITY RESOURCE CENTER (CRC), 825 MIDWAY DRIVE, WILLOWBROOK, IL, DUPAGE COUNTY, ILLINOIS

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. VISITORS' BUSINESS - Public Comment is Limited to Three Minutes Per Person
5. OMNIBUS VOTE AGENDA
 - a. WAIVE READING OF THE MINUTES (APPROVE)
 - b. MINUTES - BOARD OF TRUSTEES COMMITTEE OF THE WHOLE MEETING, NOVEMBER 10, 2025 (APPROVE)
6. ITEMS FOR DISCUSSION:
 - a. DISCUSSION OF THE ICC CODE SERIES UPDATES
 - b. PRESENTATION OF THE VILLAGE OF WILLOWBROOK WATER MASTER PLAN
 - c. PRESENTATION OF THE 2025-2026 SNOW OPERATIONS MANUAL
7. ADJOURNMENT

MINUTES OF THE COMMITTEE OF THE WHOLE OF THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF WILLOWBROOK HELD ON MONDAY, NOVEMBER 10, 2025 AT 5:30 P.M. AT THE COMMUNITY RESOURCE CENTER, 825 MIDWAY DRIVE, WILLOWBROOK, DUPAGE COUNTY, ILLINOIS.

1. CALL TO ORDER

The meeting was called to order at 5:30 p.m. by Mayor Frank Trilla.

2. ROLL CALL

Those physically present at roll call were Mayor Frank Trilla, Trustees Mark Astrella, Sue Berglund, Umberto Davi, Michael Mistele, and Gayle Neal, Village Administrator Sean Halloran, Assistant Village Administrator Alex Arteaga, Director of Community Development Michael Krol, Director of Public Works Rick Valent, Chief Lauren Kaspar, Deputy Chief Gerard Wodka, and Deputy Clerk Christine Mardegan.

ABSENT: Village Clerk Gretchen Boerwinkle, Trustee Gregory Ruffolo, Director of Parks and Recreation Dustin Kleefisch, and Deputy Chief Benjamin Kadolph.

A QUORUM WAS DECLARED

3. PLEDGE OF ALLEGIANCE

Mayor Trilla asked Chief Kaspar to lead everyone in saying the pledge of allegiance.

4. VISITORS' BUSINESS

None present.

5. OMNIBUS VOTE AGENDA

- a. WAIVE READING OF THE MINUTES (APPROVE)
- b. MINUTES – BOARD OF TRUSTEES COMMITTEE OF THE WHOLE MEETING, OCTOBER 27, 2025 (APPROVE)

Mayor Trilla asked the Board if there were any items to be removed from the Omnibus Vote Agenda.

MOTION: Made by Trustee Davi and seconded by Trustee Mistele to approve the Omnibus Vote Agenda as presented.

ROLL CALL VOTE: AYES: Trustees Astrella, Berglund, Davi, Mistele, and Neal. NAYS: None. ABSENT: Trustee Ruffolo.

MOTION DECLARED CARRIED

6. ITEMS FOR DISCUSSION:

- a. PRESENTATION OF A CONCEPTUAL REDEVELOPMENT PROPOSAL FOR THE PROPERTIES AT THE SOUTHWEST CORNER OF 79TH STREET AND JOLIET ROAD

Administrator Halloran opened the discussion by indicating that this is a conceptual presentation of a concept the Board has discussed in the past for this area of the Village. The applicant in this instance is interested in developing a cantina and cigar lounge.

The information being presented tonight is to determine the Board's level of interest in the concept. The applicant would like the Board's input prior to proceeding further with the project. Administrator Halloran then turned the presentation over to Mr. Ron Vari, the project architect.

Mr. Vari indicated that the project location is the site across from Del Rhea's Chicken Basket on Joliet Road, the former site of the Kerry Piper restaurant and bar. The proposed cigar lounge would be built on the foundation of the Kerry Piper building. The developer also owns the adjacent property on 79th Street, former a landscape materials lot and will use that property for the proposed cantina.

Each building will be two-stories, each approximately 30 feet in height. The cigar lounge will have a first-floor square footage of approximately 2,700 square feet, second floor outdoor patio area of 950 square feet and the second-floor interior space at about 1,900 square feet. The square footage for the proposed cantina is approximately 1,800 square feet on the first floor and 1,600 square feet on the second floor.

The developer intends to have the cigar lounge become a members' only private club, although the ground-floor retail shop would be open to the public.

The plans for the cantina include a limited menu with drive-thru service. The cantina would also be seeking a video poker license and would include two golf simulators on the first floor and two on the second.

The Mayor offered his compliments on the look and design of the new project layout, particularly given the condition of the properties for the last 30 years.

The Mayor was also curious to know why the plan was to keep the building facing 79th Street, with a view of the self-storage facility rather than facing Joliet Road. Mr. Vari indicated that the plan was to maintain

the foundation of the Kerry Piper building in an effort to reduce civil engineering costs.

The Mayor also asked about age restrictions for entrance to the cigar lounge. Mr. Vari indicated that the restriction would be based on state legal requirements for tobacco purchase. Chief Kaspar added that Illinois State Law is age 21 for any tobacco product purchase.

The Mayor wanted to know if there was a plan for video gaming to which Mr. Vari indicated that the developer would like to add gaming to both the cigar lounge and the cantina. The Mayor also asked about a liquor license, whether it would be sales or simply storage for personal supply. Mr. Vari indicated that there was still discussion about the liquor license. The Mayor noted that state law would dictate some of the allowable uses and that a liquor license would be required in order to obtain the gaming license. He also indicated that the gaming area would also need to be screened from the general public.

Trustee Davi asked if there were other properties like this proposed project elsewhere in Illinois. Mr. Vari felt that it was a unique combination of businesses for the proposed site. He thought the closest example might be in Naperville where the Topgolf and WhirlyBall businesses are adjacent to each other. (*transcriber's note: The WhirlyBall Naperville is closed and is now occupied by Chasers Laser Tag.*) Mr. Vari also noted any type of entertainment district would be similar and cited Rosemont as an additional example. The Mayor added that cigar clubs are located around the world and it is something the developer would like to see established in Willowbrook.

Trustee Neal asked if the drive-thru would be providing food from Compass. Mr. Vari indicated that the cantina would be providing its own food for the drive-thru service. Food at the cigar lounge would be provided either by the cantina or Compass with an on-demand or catering request. The drive-thru would be food only, no cigar sales.

The Trustees asked about a time frame for the project. Mr. Vari indicated they would like to break ground in the spring of 2026, knowing they would need to submit plans to the building department and go before the Plan Commission. Trustee Mistele noted that he would encourage this type of development, and it was a step up from the existing property use.

Director Krol noted that there were a number of zoning items that would need to be approved by the Plan Commission. Additionally, language would need to be added to the Village Code of Ordinances, specifically in the UDO (Unified Development Ordinance) to allow for a smoking lounge or

tobacco retail establishment. Director Krol also identified additional items to Mr. Vari that would need to be considered before going before the Plan Commission.

Overall, the Board appeared to have a positive impression of the proposed development of the sites.

7. ADJOURNMENT

MOTION: Made by Trustee Davi and seconded by Trustee Berglund to adjourn the Committee of the Whole meeting at the hour of 5:50 p.m.

ROLL CALL VOTE: AYES: Trustees Astrella, Berglund, Davi, Mistele, and Neal. NAYS: None. ABSENT: Trustee Ruffolo.

MOTION DECLARED CARRIED

PRESENTED, READ, and APPROVED.

November 24, 2025.

Frank A. Trilla, Mayor

Minutes transcribed by Administrative Assistant Jody Wegrzynski.



COMMITTEE OF THE WHOLE

AGENDA ITEM NO: 6.a.

DATE: November 24, 2025

SUBJECT:

Discussion of the ICC Code Series Update.

STAFF REPORT

TO: Mayor Trilla and Board of Trustees
FROM: Michael Krol, Director of Community Development
THROUGH: Sean Halloran, Village Administrator

PURPOSE AND ACTION REQUESTED

The purpose of this item is to present and discuss the proposed Village Code update adopting the 2024 International Building Codes and related local amendments. Staff seeks direction from the Village Board prior to final consideration of an adopting ordinance.

BACKGROUND/SUMMARY

The Village of Willowbrook currently operates under the 2018 International Code Council (ICC) Building Codes, adopted by the Village Board in 2019 under ordinance 19-O-10. These codes provide the regulatory framework for building safety, structural integrity, and energy efficiency across all development in the Village.

The proposed update would bring the Village into alignment with the **2024 ICC Code series**, including the Building, Residential, Mechanical, Plumbing, Fuel Gas, Fire, Existing Building, Property Maintenance, and Energy Conservation Codes. We will also be adopting the 2023 NEC (National Electric Code) and keeping the 2014 Illinois State Plumbing Code. These updates improve consistency with regional standards and simplify administration for both Village staff and residents.

The International Code Council (ICC) releases new model code editions every three years to reflect advancements in construction technology, modern safety practices, and updated energy standards. While municipalities are not required to adopt each new edition, it is recommended that local governments update their codes every 6 to 8 years to remain consistent with national best practices, neighboring jurisdictions, and evolving industry standards. Regular updates also reduce potential liability and ensure that design professionals are working with current, well-understood codes.

A major focus of this code update is removing numerous local amendments that have accumulated over time. The proposed ordinance reduces the number of Village-specific amendments from over 40 to only a few essential provisions addressing unique local conditions.

By reverting closer to the base model codes, the Village will:

- Simplify code interpretation for contractors, design professionals, and homeowners;
- Reduce staff time spent navigating outdated or unnecessary local amendments; and
- Eliminate the need for frequent “minor amendments” and variances that increase costs and project delays for residents.



This streamlined approach aligns Willowbrook with surrounding communities, including Darien, Burr Ridge, and Hinsdale, which are all on the 2021 ICC code edition, and enhances regional consistency and efficiency in development review.

If there are no additional comments or adjustments, staff will have the final document ready for the Village Board on December 15, 2025, ready to begin enforcement on January 1, 2026.

AGREEMENT SUMMARY AND CONSULTANT QUALIFICATIONS

The Village of Willowbrook entered into an Amendment to the Professional Services Agreement with SAFEbuilt Illinois, LLC to provide assistance with the adoption and amendment of Village Codes and Ordinances. The scope of work includes a six-month code transition process to review adopted codes, local amendments, and state regulations, and to prepare the necessary ordinances for Village adoption.

Under this amendment, SAFEbuilt will:

- Review current Village codes, amendments, and state-adopted regulations;
- Identify potential additional codes for adoption;
- Coordinate with the Village Attorney on ordinance format;
- Prepare and submit a draft ordinance for review; and
- Attend public meetings and hearings to assist with code adoption presentations.

The total fee for these services is \$10,000, as outlined in the signed amendment, with no other changes to the existing contract terms.

CONSULTANT TEAM – SAFEbuilt

The Village's code update project is being managed by SAFEbuilt Illinois, LLC, the Village's current consultant for large plan review projects, inspections, and code consulting. The project is being led by Don Wilkins. Andrew Bevis and Jake Doub have also contributed to the code update recommendations and amendment review. Combined, they collectively bring over 50 years of experience in code administration, plan review, and municipal operations.

Don Wilkins

Mr. Wilkins serves as National Plan Review Regional Manager and Regional Fire Marshal for SAFEbuilt. He has more than 25 years of experience in the building and fire code industry, having served as Chief Building Official, Fire Marshal, and Plans Examiner for multiple jurisdictions across the United States.

His credentials include:

- Certified Building Official (CBO)
- Certified Fire Marshal (CFM)
- Master Code Professional (MCP)
- Over two dozen ICC certifications in Building, Electrical, Mechanical, Plumbing, and Fire Codes



Mr. Wilkins has provided consultation and plan review services for more than 40 municipalities, including major jurisdictions such as Atlanta, Johns Creek, Macon-Bibb County, and Peachtree Corners, Georgia, and has led numerous municipal code transition projects

Don Wilkins SAFEbuilt Resume is included in the packet.

Andrew Bevis

Mr. Bevis holds the ICC Master Code Professional designation and 31 additional ICC certifications, demonstrating expertise across nearly every discipline of code enforcement.

He has served as both Chief Building Official and Deputy Chief Building Official for the City of Atlanta and previously as a Codes and Standards Specialist for the National Fire Sprinkler Association (NFSA). Mr. Bevis also serves on and chairs several ICC technical committees and plays an active role in model code development.

Jake Doub

Mr. Doub is a Senior Building Official with SAFEbuilt and brings significant experience managing building department operations for multiple municipalities. Over his career, he has earned 39 International Code Council (ICC) certifications and served as a Building Official and Plans Examiner in several jurisdictions.

Mr. Doub's broad certification portfolio and extensive municipal experience ensures a balanced, practical, and efficient approach to code adoption and implementation.

FINANCIAL IMPACT:

The total fee for these services is \$10,000, as outlined in the signed agreement. A budget amendment will be presented at a future date to allocate this amount as a special project. No new or additional funding is being requested. The amendment will simply reallocate previously approved funds from another project, as specific project budgets do not carry over between fiscal years.

RECOMMENDED ACTION:

Provide staff with any feedback.

Don Wilkins – CBO, CFI-III, CFPE-II, CFM, MCP

Employment History

January 3, 2022 to Present

**National Plan Review Regional Manager
SAFEbuilt, 4005 Nine McFarland Drive, Alpharetta, GA**

- Assigned to the National Plan Review team within SAFEbuilt, which reviews projects for clients in multiple states and municipalities.
- Performed plan reviews for projects from one-and two- family dwellings to high rise construction to determine compliance with adopted codes, amendments, state laws, and/or local ordinances.
- Managed plan review teams for large projects.
- Managed client relationships with municipalities and individual clients for third-party plan reviews.
- Assisted with SAFEbuilt's Internal Quality Control program where I performed peer-to-peer audits of other Building and Fire Plans Examiners.

April 16, 2018 to Present

**Regional Fire Marshal
SAFEbuilt Fire Prevention Services, 4005 Nine McFarland Drive, Alpharetta, GA**

- In the capacity of contract Fire Marshal for multiple jurisdictions, I supervise staff providing fire prevention services to various local governmental entities within multiple states and municipalities.
- Rendered interpretation of the adopted codes and standards for fire code issues
- Worked with local governments and their Chief Building Officials to ensure safe communities.
- Performed fire plan reviews for accessibility (ADA), life safety and fire protection systems, as needed.
- Performed fire inspections, as needed.

March 1, 2020 to January 3, 2022

**Chief Building Official
Macon-Bibb County Building & Fire Safety, 200 Cherry Street, Suite 202, Macon, GA
Employed through SAFEbuilt Fire Prevention Services Georgia, 4005 Nine McFarland Drive, Alpharetta, GA**

- Functioning as the sworn Chief Building Official for Macon-Bibb County under contract with SAFEbuilt
- Supervised the Permit Section, with two full time Permit Technicians
- Supervised the Building Section, with four full time Building Inspector positions
- Supervised the Plan Review Section, with one full time Plans Examiner position
- Functioned as both a Building Plans Examiner, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Functioned as both a Fire Plans Examiner, as needed to verify compliance with the adopted fire code and the Rules and Regulations of State Fire Safety Commissioner
- Functioned as the point of contact for the Macon-Bibb County Fire Department / Fire Chief for fire permits
- Functioned as a Building Inspector, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Worked to establish the Board of Appeals processes and procedures for code hearings
- Assisted the County Manager with process realignment for the Building & Fire Safety Section

- Worked closely with the Fire Chief from the Macon-Bibb County Fire Department (MBCFD) for fire prevention during construction. Assisted with in-service training of MBCFD staff.

March 14, 2016 to July 5, 2022

Fire Marshal

City of Stone Mountain, 875 Main St., Stone Mountain, GA

Employed through SAFEbuilt Fire Prevention Services Georgia, 4005 Nine McFarland Drive, Alpharetta, GA

- In the capacity of the contract Fire Marshal for the City of Stone Mountain, Georgia, I supervise staff providing fire prevention services within the city
- Render code interpretation of the adopted codes and standards for fire code issues
- Worked with the city government and Chief Building Official to ensure a safe community
- Performed fire plan reviews for accessibility (ADA), life safety and fire protection systems, as needed
- Performed fire inspections, as needed

November 19, 2018 to May 31, 2019

Interim Chief Building Official

City of Johns Creek, 10700 Abbotts Bridge Rd, Johns Creek, GA

Employed through SAFEbuilt Georgia, 4005 Nine McFarland Drive, Alpharetta, GA

- Functioning as the sworn Chief Building Official for the City of Johns Creek under contract with SAFEbuilt
- Supervised the Permit Center of the Community Development Department, with two full time Permit Technicians
- Supervised the Building Division of the Community Development Department, with two full time Building Inspector positions
- Functioned as a plans examiner, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Functioned as a building inspector, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Worked to establish the Board of Appeals processes and procedures for code hearings
- Assisted the Community Development Director with process realignment within department

January 13, 2016 to March 1, 2018

Chief Building Official / Fire Code Official

City of Atlanta, 55 Trinity St., Atlanta, GA

Employed through SAFEbuilt Georgia, 4005 Nine McFarland Drive, Suite 150, Alpharetta, GA

- Acting in the capacity of management and technical consultant to the City of Atlanta's Office of Buildings.
- Functioning as Chief Building Official for SAFEbuilt staff, which includes oversight of supplemental Permit Technicians, Plans Examiners, Arborist Inspectors, Building Inspectors and Fire Inspectors employed as contracted employees within the City of Atlanta's Office of Buildings.
- As requested by the City of Atlanta, functioned as the contract Interim Chief Building Official and Fire Code Official. In this capacity, I rendered binding formal code interpretations for the city and approved alternate methods of construction and design for projects involving both the adopted fire and construction codes.

- Created the Fire Life Safety Group within the Office of Buildings to perform fire code reviews and fire inspections for projects during construction. Authority to regulated under the International Fire Code was transferred to the City Fire Marshal upon project completion
- Assisted with the drafting of work stream Standard Operating Procedures and the overall agency process realignment, with the goal to decrease customer wait times, while increasing the customer service experience.

June 29, 2015 to January 12, 2016

Deputy Building Official / Plans Examiner

City of Johns Creek, 12000 Findley Rd, Suite 400, Johns Creek, GA

Employed through SAFEbuilt Georgia, 4005 Nine McFarland Drive, Suite 150, Alpharetta, GA

- Supervised Johns Creek Building Division staff during the Chief Building Official's absence.
- Performed building, electrical, fuel gas, mechanical and plumbing plan reviews of residential, commercial and industrial projects within the City of Johns Creek. These projects were comprised of everything from single family dwelling to high rise construction.
- Represented the Johns Creek Building Division during pre-development meetings with design professionals, contractors and property owners.
- Performed building, electrical, fire code, fuel gas, mechanical and plumbing plan review and code consultations for other SAFEbuilt client jurisdictions.

June 9, 2014 to June 26, 2015

Chief Building Official

City of Peachtree Corners, 147 Technology Pkwy, Suite 200, Peachtree Corners, GA

Employed through Charles Abbott Associates, Inc., Two Ravinia, Suite 500, Atlanta, GA

- Supervised Peachtree Corners Building Division staff and directed the activities of this agency.
- Functioned as a plans examiner, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Functioned as a building inspector, as needed to verify compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes
- Functioned as a permit technician, as needed.
- Sworn by the appointing authority to issue misdemeanor citations.

July 11, 2011 – May 30, 2014

Bureau Chief – Fire Protection Engineering Bureau

Nevada State Fire Marshal Division – 107 Jacobson Way, Carson City, NV

- Supervised the statewide fire plan review & fire inspection program of the Nevada State Fire Marshal Division of the Department of Public Safety
- Functioned as a fire plans examiner, as needed.
- Functioned as a fire inspector, as needed.
- Managed the Nevada State Fire Marshal Division interlocal agreement program with rural jurisdictions statewide.
- Testified as an expert witness on behalf of the Nevada State Fire Marshal Division during criminal citation proceedings.
- Created and taught classes on plan review and inspection of assisted living facilities throughout the State of Nevada for local fire agencies and building departments.

April 10, 2006 – Jan. 12, 2010

Plan Review Supervisor (Plans Examiner III)

Carson City Building Division – 108 E. Proctor Street, Carson City, NV

- Reviewed and approved plans for projects covering minor residential to commercial / industrial. The scope of these projects ranged in complexity from residential patio covers to large assembly occupancies (Casinos, Theaters, Churches, etc.) for compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes.
- Supervised and assigned plan review workloads to Plans Examiners I / Plans Examiner II positions and oversaw all plan reviews for projects within Carson City
- Acted in the capacity of Building Official during time periods when the Chief Building Official was unavailable.
- Sat on interview boards, with input to hire new Plans Examiners for the Carson City Building Division
- Conducted weekly staff meetings with Plans Examiners and Chief Building Official to discuss workloads and staffing assignments.
- Tracked all permits from application through permit issuance.
- Drafted most of the Carson City Building Division handouts for use by the public.
- Drafted internal procedures for processing and reviewing plans.
- Chaired regional electrical subcommittee that drafted amendments to the 2005 National Electrical Code, which were eventually adopted by multiple jurisdictions as the 2007 Northern Nevada Amendments.
- Testified before the Carson City Historic Resource Commission (HRC) for construction involving historic buildings.
- Testified as an expert witness on behalf of the Carson City Building Division during criminal citation proceedings.

July 23, 2001– March 24, 2006

Building Inspector / Plans Examiner

Douglas County Building Division – 1594 Esmeralda Ave, Minden, NV

- Performed duties as Combination Building Inspector (Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes)
- Reviewed plans for compliance with adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes.
- Duties as Building Inspector / Plans Examiner were split, with the percentage of time devoted to these duties as: 20% onsite inspecting projects; 80% plan review.
- Functioned as the Permit Technician for the intake of permit applications and the issuances of permits, as needed.
- Conducted public workshops for adoption of future editions of the National Electrical Code
- Drafting Douglas County amendments to the 2002 National Electrical Code
- Trained new Building Inspectors, as assigned.

1999–2001

Building Inspector III

Humboldt County Building Dept. – 50 West 5th Street, Winnemucca, NV

- Performed inspections on residential, commercial, and industrial projects for compliance with the adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes.

- Performed Uniform Fire Code (UFC) inspections on new commercial and industrial projects
- Performed code enforcement under the Humboldt County Planning Code
- Performed plan reviews of residential projects for compliance with the adopted Building, Electrical, Fuel Gas, Mechanical and Plumbing Codes.
- Processed and approved over the counter residential construction permit applications, as needed
- Functioned as the Counter Technician for the intake of permit applications and the issuances of permits, as needed.
- Oversaw office while Building Official was not available (Vacation, sick leave, etc.)

Professional Certifications

International Code Council (ICC) Certifications

- Certified Building Official (CBO)
- Certified Fire Marshal (CFM)
- Master Code Professional (MCP)
- Certified Building Inspector
- Certified Building Inspector – UBC
- Certified Building Plans Examiner
- Certified Building Code Specialist
- Certified Electrical Inspector
- Certified Electrical Plans Examiner
- Certified Electrical Code Specialist
- Certified Mechanical Inspector
- Certified Mechanical Inspector – UMC
- Certified Plumbing Inspector
- Certified Plumbing Inspector – UPC
- Certified Plumbing Plans Examiner
- Certified Plumbing Code Specialist
- Certified Combination Inspector
- Certified Combination Inspector – Legacy
- Certified Fire Inspector I
- Certified Fire Inspector II
- Certified Fire Plans Examiner
- Certified Code Fire Specialist
- Certified Accessibility Inspector / Plans Examiner
- Certified Residential Energy Inspector / Plans Examiner

International Association of Electrical Inspectors (IAEI) Certifications

- Certified One & Two-Family Dwelling Electrical Inspector
- Certified General Electrical Inspector
- Certified Electrical Plans Examiner

Nevada State Fire Marshal Division Certifications (NFPA 1031 Compliant Certifications)

- Certified Fire Inspector I (CFI-I)
- Certified Fire Inspector II (CFI-II)
- Certified Fire Inspector III (CFI-III)
- Certified Fire Plans Examiner I (CFPE-I)
- Certified Fire Plans Examiner II (CFPE-II)
- Certified Hazardous Material – Awareness Level

National Association of State Fire Marshals / Fire Marshal Support Service

- Certified Crowd Manager

Professional Licenses

- **State of Colorado**
 - Registered Fire Inspector III – Plans Examiner
State of Colorado Division of Fire Prevention & Control / Registration # [REDACTED] / Exp. June 1, 2025
- **State of Oregon**
 - Oregon Inspector Certification (OIC)
Dept. of Consumer and Building Services / Building Codes Division License # [REDACTED] / Exp. June 1, 2026
 - PEA – Plans Examiner A-Level Certification
Dept. of Consumer and Building Services / Building Codes Division License # [REDACTED]
 - PEF – Fire and Life Safety Plans Examiner Certification
Dept. of Consumer and Building Services / Building Codes Division License # [REDACTED]
- **State of Utah**
 - Combination Inspector
Utah Div. of Occupational & Professional Licensing / License # [REDACTED] / Inactive

Professional Achievement

- 2013 Supervisor of the Year – Nevada State Department of Public Safety / State Fire Marshal Division

Professional Affiliations

- Government Member – International Code Council (ICC)
- Government Member – Metro-Atlanta Chapter of the Society of Fire Protection Engineers (SFPE)
- Member – International Association of Electrical Inspectors (IAEI)
- Member – National Fire Protection Association (NFPA)

CHAPTER 2
BUILDING CODE

SECTION:

- 4-2-1: Title
- 4-2-2: Purpose
- 4-2-3: Chapter As Remedial
- 4-2-4: Definitions
- 4-2-5: Applicability, Exemptions, More Restrictive Regulations
- 4-2-6: Structures Existing On Date Of Adoption Of Chapter, Structures Moved Into Village
- 4-2-7: Public Safety, Insurance, Bonds
- 4-2-8: Approved Materials, Modifications
- 4-2-9: Building Official, Duties And Powers
- 4-2-10: Building Permits
- 4-2-11: Permit Fees
- 4-2-12: Inspections
- 4-2-13: Stop Work Orders
- 4-2-14: Certificates And Inspections
- 4-2-15: Emergency Measures
- 4-2-16: Off Street Parking
- 4-2-17: Load And Capacity Placard
- 4-2-18: Hours For Construction Work
- 4-2-19: Rules Adopted By Reference
- 4-2-20: Violation Penalties
- 4-2-21: Building Code Adopted
- 4-2-22: Mechanical Code Adopted
- 4-2-23: Reserved
- 4-2-24: Plumbing Code Adopted

4-2-25: Water Well Codes Adopted

4-2-26: Private Sewage Disposal Code Adopted

4-2-27: Electrical Code Adopted

4-2-28: Fire Code Adopted

4-2-29: DuPage County Countywide Stormwater And Floodplain Ordinance Adopted

4-2-30: Minimum Security Regulations

4-2-31: Minimum Housing Regulations

4-2-32: Swimming Pool Regulations Adopted

4-2-33: Residential Code Adopted

4-2-34: Fuel Gas Code Adopted

4-2-35: Existing Building Code Adopted

4-2-1: TITLE:

This chapter will be known as the BUILDING CODE OF THE VILLAGE OF WILLOWBROOK.
(Ord. 19-O-10, 6-24-2019)

4-2-2: PURPOSE:

The purpose of this chapter is to provide for the safety, health and public welfare through structural strength and stability, means of egress, adequate light and ventilation and protection to life and property from fire and hazards incidental to the design, construction, alteration, removal or demolition of buildings or structures. This chapter sets forth requirements which are considered reasonable and are held in every instance to be the minimum for the promotion of public health, safety and the general welfare. (Ord. 19-O-10, 6-24-2019)

4-2-3: CHAPTER AS REMEDIAL:

This chapter shall be construed to secure its expressed intent, which is to ensure public safety, health and welfare insofar as they are affected by building construction, through structural strength, adequate egress facilities, sanitary equipment, light and ventilation, and fire safety; and, in general, to secure safety to life and property from all hazards incident to the design, erection, construction, alteration, removal or demolition of all buildings and structures. (Ord. 19-O-10, 6-24-2019)

4-2-4: DEFINITIONS:

The following words and phrases as used in this title shall have the following meanings unless a different meaning is required by the context. Where terms are not defined herein and are defined elsewhere in this Code, they shall have the meanings as so defined.

ACCEPTED ENGINEERING PRACTICE: That which conforms to accepted principles, tests or standards of nationally recognized technical or scientific authorities.

ACCESSIBLE: Refers to any opening in the exterior of a building larger than eight inches by twelve inches (8" x 12"); (e.g., door, window, transom, vent, duct, skylight, etc.) that is within either: a) eighteen feet (18') of the ground or the roof of an adjoining structure; b) fourteen feet (14') of any window, fire escape or ledge; or c) four feet (4') of another opening larger than eight inches by twelve inches (8" x 12"), a fire escape or a ledge in or projecting from the same wall as such opening or an adjacent wall, and leading to another building or structure.

ALCOVE: A recess adjoining and connecting with a larger room, with an unobstructed opening into such room.

ALTERATION: A change in size, shape, character or use of a structure or a change or rearrangement in the structural, mechanical, electrical, plumbing or egress systems of a building or structure.

APPROVED: "Approved", as applied to a material, device or method of construction, shall mean ~~approved by the acceptable to the~~ building official under the provisions of this chapter, or ~~approved as deemed acceptable~~ by some other authority designated by law to give approval in the matter in question.

APPROVED RULES: The legally adopted rules of the building official or of a recognized authoritative agency.

AREA: The maximum horizontal projected area of the building or structure at or above grade.

AREAWAY: An uncovered subsurface space adjacent to a building.

ATTIC: The space between the ceiling joists of the top habitable story and the roof rafters.

ATTIC, HABITABLE: ~~An attic that has a stairway as a means of access and egress and in which at least fifty percent (50%) of the required area has a ceiling height of at least seven feet six inches (7'6"). A finished or unfinished habitable space within a dwelling attic constructed to comply with the current edition of the International Residential Code, and with a minimum room area of not less than 70 square feet. The floor area of the room shall have a ceiling height of not less than 5 feet and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet.~~

AUTOMATIC SPRINKLER: Equipment, comprising a system of pipes with orifices, all adequately sized, to apply water automatically to fire.

Commented [DW1]: Some of these definitions do not align with those within the IBC / IRC. Discuss with Village on alignment, since I am not sure if these will affect zoning regulation.

BASE FLOOD: The flood having a one percent (1%) probability of being equaled or exceeded in a given year.

BASEMENT: ~~A portion of a building located partly underground, but having not less than one-half (1/2) its clear floor to ceiling height below the average grade of the adjoining ground. A story that is not a story above grade plane (see "Story above grade plane").~~

BASEMENT ROOM: Any room in a building where the average finished grade along the outside wall of said room is more than three feet (3') above the floor of said room.

BEST MANAGEMENT PRACTICES: Design, construction and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volume, prevent erosion and capture pollutants.

BUILDING: Anything constructed for shelter or enclosure of persons, animals or chattels of any kind and which is permanently affixed to the land.

BUILDING, ACCESSORY: ~~A subordinate building or portion of a principal building, the use of which is incidental to that of the principal building and customary in connection with that use. A building or structure that is subordinate to the principal or primary building on the same parcel. The subordinate building or structure is incidental to the use of the principal or primary building. Examples of which may include but are not limited to detached garages, sheds, gazebos, or playhouses. The placement of the subordinate building or structure in relationship to the principal or primary building and the property or boundary lines shall comply with the adopted codes.~~

BUILDING, COMPLETELY ENCLOSED: A building separated on all sides from the adjacent open space or from other buildings or other structures, by a permanent roof and behind exterior walls or party walls, pierced only by windows and normal entrance or exit doors.

BUILDING, EXISTING: A building erected prior to the adoption of this chapter, or one for which a legal building permit has been issued.

BUILDING HEIGHT: The height in feet shall be taken as the vertical distance from the average grade adjacent to the building to the highest point of the building. In determining height, parapet walls not exceeding three feet (3') in height from the roof surface, penthouse, attics, roof tanks, bulkheads, chimneys and similar roof structures shall not be included unless the aggregate area of such structures exceeds one-third (1/3) of the area of the roof of the building.

BUILDING LINE: The setback or yard line, established by law, beyond which a building shall not be built or extend.

BUILDING OFFICIAL: The officer which is hereby authorized and it is his duty to administer and enforce the provisions of the Building Code, making such determinations, interpretations and orders as are necessary therefor, and requiring such plats, plans and other descriptive material in connection with applications for permits as are necessary for him to judge compliance with this title. The building official of the Village of Willowbrook, DuPage County, Illinois.

BUILDING PERMIT: A permit issued by the Village for construction, erection or alteration of a structure or building.

BUILDING, PRINCIPAL: A nonaccessory building in which the principal use of the lot on which it is located is conducted.

BUILDING SERVICE EQUIPMENT: The mechanical, electrical or elevator equipment, including piping, wiring, fixtures and other accessories which provide sanitation, lighting, heating, ventilation, firefighting and transportation facilities essential for the habitable occupancy of the building or structure for its designated use and occupancy.

BURGLARY RESISTANT GLAZING MATERIAL: Glass and glasslike materials which comply with or exceed the Underwriters Laboratories, Inc., or another approved testing agency, standard for burglary resistant glazing materials as follows: withstand the impact of a five (5) pound steel ball dropped from a height of ten feet (10') concentrated within a five inch (5") diameter area of the surface without release from the frame.

CLOMA: A conditional letter of map amendment. A FEMA comment letter on a development proposed to be located in, and affecting only that portion of the area of a floodplain outside the regulatory floodway and having no impact on the existing regulatory floodway or base flood elevations.

CLOMR: A conditional letter of map revision. A letter that indicates that FEMA will revise base flood elevations, flood insurance rate zones, flood boundaries, or floodways as shown on an effective FIRM or FBFM, after the record drawings are submitted and approved.

CEILING: The overhead inside finish of a room; the surface of the room opposite the floor.

CEILING HEIGHT: The clear vertical distance from the finished floor to the finished ceiling.

CELLAR: The portion of a building located partly or wholly underground and having half or more than half of its clear floor to ceiling height below the average grade of the adjoining ground. In dwellings, it shall not be used as sleeping quarters or for the preparation of food, except in single-family detached residences which meet the emergency egress, ceiling height, light and ventilation requirements of the Building Code.

CENTRAL HEATING SYSTEM: A system supplying heat to one or more dwelling units or more than one room.

CERTIFICATE OF ELEVATION: The Federal Emergency Management Agency National Floodplain Insurance Program Certificate of Elevation.

CERTIFICATE OF OCCUPANCY: The certificate issued by the Village permitting the occupation and use of a building in accordance with the approved plans and specifications which certifies compliance with the provisions of law for the use and occupancy of the building in its several parts together with any special stipulations or conditions of the building permit. (Also referred to in this code as an "occupancy permit".)

CHANGE OF ~~USE~~OCCUPANCY: ~~The alteration of the use of a building or structure to a new use which imposes other special provisions of law governing building construction,~~

equipment or exits. Either of the following shall be considered as a change of occupancy where this code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

1. Any change in the occupancy classification of a building or structure.
2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

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CHASE: A vertical penetration in a wall provided to accommodate piping, conduit or ducts.

CHIMNEY: A primarily vertical enclosure containing one or more flues.

COMBINATION DEAD LATCH AND DEAD BOLT: A device combining a dead latch operable by knobs from inside and outside by a key, both of which can be retracted from the inside by turning the knob from the outside by a key.

COMBUSTIBLE MATERIAL: A combustible material is a material which cannot be classified as noncombustible in accordance with that definition.

COMMERCIAL BUILDINGS: Any building which is not defined as a dwelling.

COMPENSATORY STORAGE: An excavated hydrologically and hydraulically equivalent volume of storage created to offset the loss of existing flood storage.

CONTRACTOR: A person, firm or corporation engaged in the business of construction, altering, moving, demolishing buildings, structures and/or parts thereof, or in work incidental to the above operations, either for himself or for others.

CORPORATE COUNSEL: Whenever used in this code, it shall mean the legal counsel for the Village of Willowbrook.

COURT: An open unoccupied space, other than a yard, on the same lot with a building or group of buildings, and which is bounded on two (2) or more sides by such building or buildings.

COURT, INNER: Any court enclosed wholly by buildings, walls or other enclosing devices.

COURT, OUTER: A court extending to and opening upon a street, public alley, or other approved open space, not less than fifteen feet (15') (4572 mm) wide, or upon a required yard.

CRITICAL WETLANDS: Wetlands of the highest value by virtue of one or more high ranking characteristics that result in a uniquely valuable environment.

CYLINDER GUARD: A hardened steel ring or plate surrounding the otherwise exposed portion of a cylinder lock to prevent cutting, prying, pulling or wrenching with common tools.

DEAD BOLT: A bolt which has no automatic spring action and which is operated by a key, thumb turn or lever and is positively held fast in the protected position.

DEAD LATCH: A latch which is positively held in latched position with a strike by an added integral bolt-type mechanism and is released by a key from the outside and a knob or similar actuator from the inside.

DEPRESSIONAL STORAGE: The existing volume of storage available under the base flood elevation that may be contained in low lying areas that have no drainage outlet.

DEVELOPMENT: Any manmade change to improved or unimproved real estate, including, but not limited to, construction of or substantial improvements to buildings or other structures, the placement of mobile homes, mining, dredging, filling, grading, paving, excavation or drilling operations.

DILAPIDATED: Fallen into ruin, decay or disrepair.

DOOR SCOPE: A system of lenses encased for convenient installation in entrance doors permitting an inside viewer to observe a one hundred eighty degree (180°) area of the outside with the door closed.

DORMITORY: A room occupied by more than two (2) guests.

DOUBLE CYLINDER DEAD BOLT: A dead bolt lock actuated by a key from the inside and outside.

DWELLING: ~~A building or portion thereof designed or used for residential purposes, including single and multiple family uses, but not including house trailers, mobile homes or lodging rooms in hotels, motels or lodging houses, dormitories, or any facility where people are being detained involuntarily or for medical or other care or treatment.~~ A building that contains one or two dwelling units used, intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes. Dwellings are buildings intended to serve as residences for one or two families, but does not include house trailers, mobile homes or lodging rooms in hotels, motels or lodging houses, dormitories, or any facility where people are being detained involuntarily or for medical or other care or treatment.

DWELLING, MULTIPLE DWELLING: ~~A residential building designed and built as a group of individual dwelling units, each for a single family, but which units may touch each other by virtue of common or party walls and/or floors and ceilings, and which contain two (2) or more dwelling units.~~ A residential building containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature.

DWELLING, SINGLE-FAMILY ATTACHED: ~~A residential building designed and built as a dwelling unit for one family, but which may touch another single-family dwelling on one or more sides, with or without party walls, but which is located as the only dwelling unit on a single specific lot or parcel of ground.~~ See TOWNHOUSE.

DWELLING, SINGLE-FAMILY DETACHED: A residential building which is entirely surrounded by open space on the same lot.

DWELLING UNIT: ~~A group of rooms constituting all or part of a dwelling, which are arranged, designed, used or intended for use exclusively as living quarters for one family, and which includes cooking facilities. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. This excludes temporary structures (campers, RVs, trailers) used for dwelling purposes.~~

EFFICIENCY LIVING-DWELLING UNIT: ~~Any room having cooking facilities used for combined living, dining and sleeping purposes. A dwelling unit where all permanent provisions for living, sleeping, eating and cooking are contained in a single room.~~

ELEVATION CERTIFICATES: A form published by FEMA, or its equivalent, that is used to certify the base flood elevation and the lowest elevation of usable space to which a building has been constructed.

EXIT: ~~That portion of a means of egress system between the exit access and the exit discharge or public way. Exit components include exterior exit doors at the level of exit discharge, interior exit stairways and ramps, exit passageways, exterior exit stairways and ramps and horizontal exits. That portion of a means of egress which is separated from all other spaces of a building or structure by construction or equipment as required in this chapter to provide a protected way of travel to the exit discharge.~~

EXTERIOR PROPERTY AREA: The open space on the premises and on adjoining property under the control of owners or operators of such premises.

EXTERMINATION: The control and elimination of insects, rodents, or other pests by eliminating their harborage places; by removing or making inaccessible materials that may serve as their food; by poison, spraying, fumigating, trapping or by any other approved pest elimination methods.

FBFM: A flood boundary and floodway map. A floodplain management map issued by FEMA that depicts, based on detailed analysis, the boundaries of the base flood, the two-tenths percent (0.2%) probability flood, and the floodway.

FEMA: The Federal Emergency Management Agency.

FHBM: A flood hazard boundary map. An official map of a community issued by FEMA, on which the boundaries of the flood, mudslide or mudflow, or related erosion areas having special hazards have been designated as Zones A, M, and/or E.

FIRM: A flood insurance rate map. A map issued by FEMA that is an official community map, in which map FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. This map may or may not depict floodways.

FACTORY BUILT FIREPLACE: Prefabricated unit and all parts used to assemble the unit, including the fire box and flue.

FAMILY: One or more persons as related to the other by blood, marriage, guardianship or adoption, or a group of not more than three (3) persons not so related, together with his or her domestic servants, maintaining a common household in a dwelling unit, or a group of

not more than six (6) handicapped individuals, as defined in title VIII of the United States Civil Rights Act of 1968, as amended, together with their domestic servants and attendants, maintaining a common nonprofit household in a dwelling unit.

FIRE RETARDANT TREATED WOOD (FRTW): ~~Wood treated to be fire retardant and approved by a certified testing laboratory as meeting the requirements of ASTM E-84. Wood products that, when impregnated with chemicals by a pressure process or other means during manufacture, exhibit reduced surface-burning characteristics and resist propagation of fire. Fire Retardant Treated Wood (FRTW) when impregnated with chemicals by a pressure process or other means during manufacture, shall have, when tested in accordance with ASTM E84 or UL 723, a listed flame spread index of 25 or less. Additionally, the ASTM E84 or UL 723 test shall be continued for a 20-minute period and the flame front shall not progress more than 10 1/2 feet (3200 mm) beyond the centerline of the burners at any time during the test.~~

FLOOD: Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from the unusual and rapid accumulation of runoff of surface waters from any source.

FLOOD DAMAGE-RESISTANT MATERIALS: Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair.

FLOOD PROTECTION ELEVATION: The elevation to which uses regulated in this title are required to be elevated or floodproofed.

FLOODPLAIN: The area typically adjacent to and including a body of water where ground surface elevations are at or below a specified flood elevation.

FLOODPROOF: Additions, changes, or adjustments to structures or property that prevent the entry of floodwater in order to protect property from flood damage.

FLOODPROOFING CERTIFICATE: A form published by FEMA that is used to certify that a structure is floodproofed to one foot (1') above the base flood elevation.

FLOODWAY: The channel and that portion of the floodplain adjacent to a stream or watercourse that is needed to convey the base flood.

FLOOR: The inside bottom finish of a room.

FLOOR AREA: The "floor area" of a building or buildings shall be the sum of the gross horizontal areas of the several floors of such building or buildings measured from the exterior face of exterior walls, or from the centerline of party walls separating two (2) buildings, without deduction for hallways, stairs, closets, thickness of walls or columns. In particular, "floor area" shall include:

(A) A basement or cellar having more than four feet (4') in height above adjacent grade around fifty percent (50%) or more of the basement or cellar perimeter.

(B) In the case of a basement or cellar not fitting the description of subsection (A) of this definition, but having normal direct access to the outside not through another floor (walk-out basements), one-half (1/2) of the basement or cellar area shall be included.

(C) An attic, the space between the ceiling beams of the top story and the roof rafters, which has a fixed stairway as a means of access and a height of seven feet (7') or more above the attic floor.

(D) Interior balconies and mezzanines.

(E) Enclosed porches and sun rooms.

(F) Roofed-over decks, patios, porches, carports and stairs.

(G) Elevator shafts and stairwells at each floor.

(H) Floor space used for mechanical equipment; except equipment, open or enclosed located on the roof (i.e., bulkheads, water tanks and cooling towers).

FLOOR AREA RATIO: The numerical value obtained by dividing the floor area within a building or buildings by the area of such lot or parcel of land on which the building or buildings are located. (The floor area ratio as designated for each district, when multiplied by the lot or parcel area in square feet, shall determine the maximum permissible floor area for the building or buildings on the lot or parcel of land on which the building or buildings are located.)

FLUE: An approved enclosed passageway used for the removal of the products of combustion.

GARAGE, PRIVATE: An accessory building or an accessory portion of the principal building, including a carport, which is intended for and used to store the private vehicles of the family resident upon the premises, and in which no business, service or industry connected directly or indirectly with automotive vehicles is carried on.

GARAGE, PUBLIC: A building or structure for the storage or parking of more than four (4) passenger motor vehicles or motor powered boats, or more than one commercial motor vehicle.

GARBAGE: The animal or vegetable waste resulting from the handling, preparation, cooking and consumption of food.

GRADE: (A) For buildings adjoining one street only, the elevation of the established curb at the center of the wall adjoining the street.

(B) For buildings adjoining more than one street, the average of the elevations of the established curbs at the center of all walls adjoining streets.

(C) For buildings having no wall adjoining the street, the average level of the ground adjacent to the exterior walls of the building at exit locations. All walls approximately parallel to and not more than fifty feet (50') from a street are to be considered as adjoining the street.

GRADE HALLWAY, GRADE LOBBY, GRADE PASSAGEWAY: An enclosed hallway, exitway, or corridor connecting a required exit to a street or to an open space or court communicating with a street.

GRADING PLAN: A grading plan shall be submitted for all new construction showing in sufficient detail all elevations, contour lines, etc. Grading plans for single-family detached residences shall have a minimum scale of one inch equals twenty feet (1" = 20').

GUEST: Any person having the right to occupy a room for living or sleeping purposes.

GUEST ROOM: Any room or rooms used, or intended to be used by a guest for sleeping purposes.

HABITABLE FLOOR: Any floor used for living purposes, including a basement.

HABITABLE ~~ROOMSPACE~~: ~~A room used for living, sleeping, eating or cooking purposes, but excluding baths, toilet rooms, storage spaces, utility rooms and corridors. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.~~

HIGH WATER ELEVATION: The elevation of flood waters of the base flood at any given point.

HOME OCCUPATION: Any gainful occupation engaged in by the occupant of a dwelling at or from the dwelling.

HORIZONTAL SEPARATION: A permanent open space between the building wall under consideration and the nearest line to which a building is or may be legally built. Cornices and eaves projecting less than twelve inches (12"), belt courses, bay windows and window sills projecting less than four inches (4") and drop awnings shall not be considered in determining horizontal separation.

HOT WATER: Water at a temperature of not less than one hundred ten degrees Fahrenheit (110°F).

HOTEL (MOTEL): Any building containing fifty (50) or more guest rooms intended or designed to be used, or which are used, rented or hired out to be occupied, or which are occupied for sleeping purposes by guests, whether rent is paid in money, goods, labor or otherwise. It does not include any jail, hospital, asylum, sanitarium, orphanage, prison, detention home or other institution in which human beings are housed and detained under legal restraint.

INFESTATION: The presence within or around a dwelling, of any insects, rodents or other pests of such kind or in such numbers to cause a hazard to health or to be a nuisance.

INSERT: A hardened steel roller inside unhardened bolts to prevent bolt cutting with common tools.

KITCHEN: A room used, or designed to be used, for the preparation of foods.

LOMA: A Letter of Map Amendment. The official determination by FEMA that a specific structure is not in a regulatory floodplain. An LOMA amends the effective FHBM, FBFM or FIRM.

LOMR: A Letter of Map Revision. A letter from FEMA that revises base flood elevations, flood insurance rate zones, flood boundaries or floodways as shown on an effective FHBM, FBFM or FIRM.

LATCH: A spring-loaded device which automatically holds a swinging door shut upon closing by engaging a strike and which is released by turning a knob, lever or similar actuator from inside or outside.

LOAD, DEAD: The weight of all permanent structural and nonstructural components of a building, such as walls, floors, roofs, ceilings, stairways and fixed service equipment. Dead loads consist of the weight of all materials of construction incorporated into the building including, but not limited to, walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding, and other similarly incorporated architectural and structural items and fixed service equipment, including the weight of cranes and material handling systems.

LOAD, LIVE: The weight superimposed by the use and occupancy of the building or structure not including the wind load, or dead load. A load produced by the use and occupancy of the building or other structure that does not include construction or environmental loads such as wind load, snow load, rain load, earthquake load, flood load or dead load.

LOUVERS: A series of removable fixed, slated or movable slats. (Glass louvers is descriptive of jalousies. Glass, wood or metal jalousies are considered to be louvers. Awning windows having sections more than 12 inches in depth are not considered to be louvers.)

MASONRY: A built-up construction or combination of building units of such materials as clay, shale, concrete, glass, gypsum or stone set in mortar or plain concrete.

Hollow Masonry Unit: A masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is not less than sixty percent (60%) of the gross cross-sectional area measured in the same place.

Masonry Of Hollow Units: Masonry consisting wholly or in part of hollow masonry units laid contiguously in mortar.

Solid Masonry: Masonry consisting of solid masonry units laid continuously in mortar, or consisting of plain concrete.

Solid Masonry Unit: A masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is seventy five percent (75%) or more of its gross cross-sectional area measured in the same plane.

MEZZANINE: An intermediate level or levels between the floor and ceiling of any story.

MINIMUM HABITABLE ROOM HEIGHT: A clear height from finished floor to finished ceiling of not less than seven feet (7') in the basement, cellar, upper stories, attic rooms and top

half- stories over not less than one-half (1/2) the floor area when used for sleeping, study or similar activity.

MINIMUM HABITABLE ROOM SIZE: A room with a minimum dimension of ten feet (10') and minimum area of eighty (80) square feet between enclosing walls or partitions, exclusive of closet and storage spaces.

MOTOR FUEL SERVICE STATIONS: A structure, building, or premises or any portion thereof where a flammable fluid is stored, housed or sold for supply to motor vehicles.

MOTOR VEHICLE REPAIR SHOP: A building, structure or enclosure in which the general business of repairing motor vehicles is conducted, including a public garage.

MULTIPLE POINT LOCKS: A system of lever-operated bolts that engage a door opening, at least at the head and sill, operated by a single knob or handled from the inside and optionally a cylinder locked handle from the outside.

MUNICIPALITY: Whenever used in this Code, it shall mean the Village of Willowbrook.

NFIP: The National Flood Insurance Program. The requirements of the NFIP are codified in title 44 of the Code of Federal Regulations.

NONCOMBUSTIBLE MATERIAL: Materials that are ~~approved by Underwriters Laboratories, Inc., or another approved testing agency, for their noncombustible nature and do not serve as a source of contribution to a fire.~~ tested using procedures set forth in ASTM E119 or UL 263.

NONCONFORMING STRUCTURE: A structure lawfully established which:

(A) Does not comply with all the regulations of this title governing the bulk of structures located within any given district; or

(B) Is designed or intended for a nonconforming use.

See Willowbrook Code of Ordinances Title 9 Unified Development Ordinance.

NONCONFORMING USE: A structure and the use thereof or the use of land that does not comply with the regulations of this title or title 9 of this Code governing use in the district in which it is located, but which conformed with all of the codes, ordinances and other legal requirements applicable at the time such structure was erected, enlarged or altered, and the use thereof or the use of land was established.

OCCUPANT: Any person in an area or room, for purposes of living, sleeping, working, visiting, entertainment, schooling, health or otherwise.

OCCUPANT LOAD: ~~The total number of persons that are permitted to occupy a building, or portion thereof, at any one time. The number of persons for which the means of egress of a building or portion thereof is designed.~~

Commented [DW2]: This definition depends on the code (IBC vs. IRC)

For IRC requirements see 2021 IRC Sec. R305.1

For IBC requirements see 2021 IBC Sec. 1208.2.

Having two separate definitions based on the code approach would be confusing. I recommend that we delete this definition if it does not create a conflict within the zoning provisions of the ordinances.

Commented [DW3]: This definition also conflicts with the requirements of the 2021 IBC and 2021 IRC.

IRC - 2021 IRC Sec. R304.1 has min. room size of 70-sf

IBC - 2021 IBC Sec. 1208.1 has a min. room size of 70-sf

Recommend changing this definition or deleting it altogether, unless this is required for zoning ordinance purposes.

OCCUPIED SPACE: The total area of all buildings or structures on any lot or parcel of ground projected on a horizontal plane excluding permitted projections as allowed by this chapter.

OPERABLE AREA: The part of a window or door which is available for unobstructed ventilation and which opens directly to the outdoors.

OPERATOR: Any person having charge, care, management, or control of any dwelling or part of it, in which dwelling units or rooming units are let.

OWNER: Any person who, alone, jointly or severally with others, holds legal or equitable title to any dwelling, rooming house, dwelling unit or rooming unit.

PARTITION: A vertical separating construction between rooms or spaces.

PARTITION, BEARING: A partition used to support loads other than its own weight.

PERSON: Any person, firm or corporation, public or private, the State of Illinois and its agencies or political subdivision and the United States of America, its agencies and instrumentalities, any agent, servant, officer or employee of any of the foregoing.

PLAN COMMISSION: The Plan Commission of the Village of Willowbrook, DuPage County, Illinois.

PLAT OF SURVEY: Plat of survey sealed by a registered land surveyor from the State of Illinois showing all existing structures, etc., drawn within six (6) months of the permit request.

PLUMBING (PLUMBING FIXTURES): Water heating facilities, water pipes, garbage disposal units, waste pipes, water closets, sinks, installed dishwashers, lavatories, bath tubs, shower baths, installed clothes washing machines, catch basins, drains, vents, and other similar supplied fixtures, together with all connections to water or sewer lines.

PREMISES: A lot, plot or parcel of land including the buildings and structures thereon.

PROFESSIONAL ENGINEER: A person licensed under the laws of the State of Illinois to practice professional engineering.

PROFESSIONAL ENGINEERING: The application of science to the design of engineering systems and facilities, using the knowledge, skills, ability and professional judgment developed through professional engineering education, training and experience.

PROFESSIONAL ENGINEERING PRACTICE: The consultation on, conception, investigation, evaluation, planning and design of, and selection of materials and methods to be used in, administration of construction contracts for on site observation of an engineering system or facility, when such consultation, conception, investigation, evaluation, planning, design, selection, administration or observation requires extensive knowledge of engineering laws, formula, materials, practice and construction methods.

PUBLIC CORRIDOR: An enclosed public passageway with access to and from individual apartments, offices or rooms leading to a public hallway or to the exitways.

PUBLIC HALLWAY: A public corridor or space separately enclosed for providing common access to all the exitways of a building on any story.

PUBLIC PARKING DECK: An unenclosed or partially enclosed structure for the parking of motor vehicles, with no provision for the repairing or servicing of such vehicles.

RAT HARBORAGE: Any place where rats can live, nest or seek shelter.

RATED: Whenever used in this code, it shall mean as listed by the Underwriters Laboratories, Inc., or another approved testing agency.

RATED ASSEMBLY: All parts and components when assembled will provide a fire rated assembly.

RATPROOF: A form of construction which will prevent the entrance and exit of rats to and from a given space or building.

RECORD DRAWINGS: Drawings prepared, signed and sealed by a professional engineer or land surveyor representing the final as-built record of the actual in-place elevations, location of structures and topography.

REFUSE: Garbage, rubbish, ashes and dead animals.

REGULATORY FLOODPLAIN: The floodplain as determined by the base flood elevation used as the basis for regulation in this title.

REGULATORY FLOODWAY: The floodway that is used as the basis for regulation in this title.

REGULATORY WETLANDS: All wetlands other than critical wetlands.

REMODEL, BATHROOM: An interior renovation of a bathroom that includes but is not limited to the removal and replacement of a water closet, lavatory, bathtub, shower, associated enclosures, cabinet, or fixture.

REMODEL, KITCHEN: An interior renovation of a kitchen that shall include but is not limited to the removal and replacement of cabinets, countertops, plumbing fixtures, appliances, or finishes.

REMODEL, HALF BATHROOM: An interior renovation of a half bathroom that includes but is not limited to the removal and replacement of a water closet, lavatory, associated enclosures, cabinet, or fixture.

REPAIR: The replacement of existing work with equivalent materials for the purpose of its maintenance, but not including additional work that would affect safety, or affect required exit facilities, or a vital element of an elevator, plumbing, gas piping, wiring, ventilating or heating installation or any work that would be in violation of a provision of this chapter or any other law governing building construction.

RESIDENCE BUILDING: A building in which sleeping accommodations or sleeping accommodations and cooking facilities as a unit are provided, except when classified as an institution under this Code.

RIPARIAN ENVIRONMENT: Land bordering a waterway or wetland that provides habitat or amenities dependent on the proximity to water.

ROOF COVERING: The covering applied to the roof for weather resistance, fire resistance or appearance.

ROOF LINE: Either the peak line of the roof or the top of the parapet, whichever forms the top line of the building silhouettes.

ROOF STRUCTURE: A structure above the roof or any part of a building enclosing a stairway, tank, elevator machinery or service equipment, or such part of a shaft as extends above the roof; and not housing living or recreational accommodations.

RUBBISH: Combustible and noncombustible waste materials, except garbage; and the term shall include the residue from the burning of wood, coal, coke, and other combustible materials, paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, yard trimmings, tin cans, metals, mineral matter, glass, crockery and dust.

RUNOFF: The waters derived from melting snow or rain falling within a tributary drainage basin that exceed the infiltration capacity of the soils of that basin.

SCS: The United States Department of Agriculture, Soil Conservation Service.

SATELLITE EARTH STATION: Any antenna which includes a reflector element, whether flat, concave or parabolic, which is designed for receiving television, radio, data or other signals from satellites or other sources, or for transmitting such signals to a receiving station.

SERVICE ROOMS: Any room used for storage, bath or utility purposes, and not included in the definition of habitable rooms.

SHAFT: A space enclosed with side walls and extending through two (2) or more stories.

SHALL: As used in this Code, means mandatory.

SINGLE CYLINDER DEAD BOLT: A dead bolt activated from the outside by a key and from the inside by a knob, thumb turn, lever or similar actuator.

SLEEPING UNIT: A single unit that provides rooms or spaces for one or more persons, includes permanent provisions for sleeping and can include provisions for living, eating and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units.

SLIDING DOOR DEAD BOLT: A single dead bolt which after penetration of the strike, expands or is pivoted hook type to resist sliding of the door by force.

SLOW BURNING: This is a general relative term. Its precise meaning is defined in this chapter for specific applications.

Commented [DW4]: This definition is included to coordinate the *Fair Housing Act* guidelines with the IBC. The definition for "Sleeping unit" clarifies the differences between sleeping units and dwelling units. In addition, using the term "sleeping unit" for spaces where people sleep will replace a multitude of other terms (e.g., patient room, cell, guestroom) so that there is consistent application across occupancies. Some examples of sleeping units are hotel guest rooms; bedrooms in different types of congregate living facilities; patient sleeping rooms in hospitals, nursing homes or assisted living facilities; or housing cells in a jail. Another example would be a studio apartment with a kitchenette (i.e., countertop microwave, sink, refrigerator). Since the cooking arrangements are not the traditional permanent appliances (i.e., a range), this configuration would be considered a sleeping unit and not a dwelling unit. As defined in the IBC, a "Dwelling unit" must contain permanent facilities for living, sleeping, eating, cooking and sanitation.

SOIL SCIENTIST: A person with a four (4) year degree in which the core curriculum included course work in two (2) of the following fields: soil science, pedology, edaphology, and geomorphology, and which person has a minimum of two (2) years of field experience in classifying soils.

SPECIAL FLOOD HAZARD AREA: An area having special flood, mudslide, or mud flow, or flood related erosion hazards, and which area is shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

SPECIAL MANAGEMENT AREAS: Regulatory floodplains or wetlands.

SPRINKLED: Equipped with an approved automatic sprinkler system.

STAIRWAY: One or more flights of stairs and the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one floor level to another in a building or structure.

STORMWATER FACILITY: All ditches, channels, conduits, bridges, culverts, levees, ponds, natural and manmade impoundments, wetlands, tile, swales, sewers or other natural or artificial structures or measures which serve as a means of draining surface and subsurface water from land.

~~STORY: That portion of a building included between the floor surface and the surface of the next floor or roof above and having a height of not less than seven feet (7'), except that space used exclusively for the housing of mechanical services for the building and having access limited to maintenance purposes only, shall not be construed as a story. A basement shall be construed if the level of the finished floor is four feet (4') or less from the average finished grade adjacent to that floor. A story may have differing or "split" levels, in which case, the floor levels which have the least difference in floor level (5 feet or less) shall be construed as being of the same story. A mezzanine shall be construed as a story if its area exceeds one-third (1/3) of the floor area of the room in which the mezzanine is located.~~
That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.

STORY ABOVE GRADE PLANE: Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is either of the following:

1. More than 6 feet (1829 mm) above grade plane.
2. More than 12 feet (3658 mm) above the finished ground level at any point.

STORY, HALF: A space under a sloping roof which has the line of intersection of roof decking and wall not more than three feet (3') above the top floor level, and in which space not more than sixty percent (60%) of the floor area is completed for the principal or accessory uses.

STRIKE: A stationary metal plate designed to momentarily depress a moving latch for final secure engagement requiring a separate operation for disengagement.

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STRUCTURE: Anything erected, the use of which requires more or less permanent location on the ground; or attached to something having a permanent location on the ground. An advertising or business sign or other advertising device, if detached or projecting, shall be construed to be a separate structure.

SUPPLIED: Installed, furnished, or provided by the owner or operator at his expense.

TEMPORARY HOUSING: Any tent, trailer, or other structure used for human shelter which is not affixed to the ground, to another structure or to any utilities system on the same premises for more than thirty (30) consecutive days.

TOWNHOUSE: A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

TRAILER: Any vehicle or similar portable structure originally designed or converted so as to provide living quarters, storage, business activities or sales.

USE: The purpose or activity for which the land or building thereon is designed, arranged or intended, or for which it is occupied or maintained. (See OCCUPANCY CLASSIFICATION within Section 202 of the adopted edition of the International Fire Code)

USE GROUP: The classification of a building or structure based on the purposes for which the building or structure is designed or used. (See OCCUPANCY CLASSIFICATION within Section 202 of the adopted edition of the International Fire Code)

USED: Used or designed or intended to be used.

VENT SHAFT: A court used only to ventilate or light a water closet, bath, toilet, or utility room or other service room.

VENTILATION: The process of supplying and removing air by natural or mechanical means to or from any space. Mechanical ventilation is ventilation by power-driven devices. Natural ventilation is ventilation by opening to outer air through windows, skylights, doors, louvers or stacks without wind-driven devices.

VILLAGE BOARD: The President and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois.

WALLS: When used outside of a structure it shall mean an artificially constructed barrier made of masonry materials, including but not limited to brick and poured concrete, resting on or partially buried in the ground and rising above ground level, erected for the purpose of providing protection, facilitating abrupt grade transitions, preventing uncontrolled access, or for decorative purposes, or to screen from viewers in or on adjoining properties and streets the property on which the wall is erected. All exterior screening "walls" must bear directly on a footing or foundation wall. Other types of walls may include, but are not limited to:

(A) Bearing Walls: A wall which supports any load other than its own weight.

(B) Cavity Wall: A wall built of masonry units or of plain concrete, or a combination which the inner and outer widths of the wall are tied together with metal ties.

(C) Curtain Walls: ~~An exterior nonbearing wall between columns or piers which is not supported by beams or girders at each story. The non-structural exterior wall that protects the building from the elements. It is an exterior "skin" that transfers its own weight and other loads, like wind pressure, to the building's main structure, rather than carrying the building's structural load~~

(D) Division Wall: An interior wall which divides a building into the required floor area and shall be constructed as a "fire wall".

(E) Exterior Or Enclosure Wall: An outside wall or vertical enclosure of a building, other than a party wall.

(F) Fire Wall: ~~A wall having adequate fire resistance and structural stability under fire conditions to accomplish the purpose of completely subdividing a building or of completely separating adjoining buildings to resist the spread of fire. A fire-resistance-rated wall having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall.~~

(G) Foundation Wall: That portion of an enclosing wall below the first tier of floor joists or beams nearest and above the grade line.

(H) Panel Wall: An exterior, nonbearing wall in a skeleton structure built between columns or piers and supported at each story.

(I) Parapet Wall: That portion of a wall which extends above the roof line and bears no load except as it may serve to support a roof structure.

(J) Party Wall: ~~A wall on an interior lot line used or adapted for joint service between two (2) buildings. A wall located on a lot line between adjacent buildings, which is used or adapted for joint service between the two buildings, shall be constructed as a fire wall in accordance with the adopted edition of the International Building Code. Party walls shall be constructed without openings and shall create separate buildings~~

(K) Retaining Wall: A wall constructed to support a body of earth or to resist lateral thrust.

WATERSHED: All land area drained by, or contributing to, the same stream, lake, or stormwater facility.

WATERSHED BENEFIT: A decrease in flood elevations and flood damages upstream or downstream of the development site.

WATERSHED PLAN MODEL: A hydrologic and hydraulic model used in developing a watershed plan.

WETLANDS: Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

WINDOW: A glazed opening, including glazed doors, which open upon a yard, court, or recess from a court, or a vent shaft open and unobstructed to the sky.

WORKMANLIKE: Whenever the words "workmanlike state of maintenance and repair" are used in this chapter, they shall mean that such maintenance and repair shall be made in a reasonably skillful manner.

WRITING: The term shall be construed to include handwriting, typewriting, printing, photo offset or any other form of reproduction in legible symbols or characters.

WRITTEN NOTICE: A notification in writing delivered in person to the individual or to the parties intended or delivered at or sent by certified mail to the last known address the individual or parties intended.

YARD: Areas required on any lot or parcel which are unoccupied and unobstructed from their lowest level upward, except for permitted obstructions as otherwise provided for in this code, and which extend along a lot line and at right angles thereto to a depth or width as specified by the bulk regulations for the district in which the lot or parcel is located. [\(See adopted edition of the International Building Code\)](#)

ZONING: The reservation of certain specified areas within a community or city for buildings and structures, or use of land, for certain purposes with other limitations such as height, lot coverage and other stipulated requirements.

ZONING ORDINANCE: The Zoning Ordinance of the Village of Willowbrook, DuPage County, Illinois. (Ord. 19-O-10, 6-24-2019)

4-2-5: APPLICABILITY, EXEMPTIONS, MORE RESTRICTIVE REGULATIONS:

(A) This chapter shall control all matters concerning the construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of all buildings and structures, and shall apply to existing or proposed buildings and structures; except as such matters are otherwise provided for in other ordinances or statutes, or in the rules and regulations authorized for promulgation under the provisions of this chapter.

(B) All buildings and structures, and parts and appurtenances thereof, both existing and hereafter erected or installed shall be so maintained that the occupants and users thereof and others are reasonably safe from the hazards of fire, explosion, collapse, contagion and spread of infectious disease. If found by the building official or his/her designee not so maintained, he may order necessary corrective work, repair, replacement or removal.

(C) No building or structure shall be constructed, extended, repaired, removed or altered in violation of these provisions, except for repairs as defined in subsection (D) of this section and except further that the raising, lowering or moving of a building or structure as

Commented [DW5]: Recommend that this definition is deleted, since it is vague and leaves the definition open for interpretation that is difficult to regulate.

a unit necessitated by a change in legal grade or widening of a street shall be permitted, provided the building or structure is not otherwise altered or its use or occupancy changed.

(D) Ordinary repairs to structures may be made without application or notice to the Village, but such repairs shall not include the cutting away of any wall, partition, or portion thereof, the removal or cutting of any structural beam or bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the exit requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

(E) When the provisions contained in this chapter conflict with any other provisions contained in this Code or in any County, State or Federal Statute, the most restrictive or rigid provisions shall control. (Ord. 19-O-10, 6-24-2019)

4-2-6: STRUCTURES EXISTING ON DATE OF ADOPTION OF CHAPTER, STRUCTURES MOVED INTO VILLAGE:

(A) It shall be unlawful to use or occupy any building or structure, or part thereof, in violation of the provisions of this chapter, except as otherwise provided for in this chapter.

(B) The legal use and occupancy of any structure existing on the date of adoption of this chapter which has been heretofore approved, may be continued without change, except as may be specifically provided for in this chapter.

(C) Alterations or repairs may be made to any structure without requiring the existing structure to comply with all the requirements of this chapter, provided such work conforms to that required of a new structure. Alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

(D) Alterations or repairs to an existing structure which are nonstructural and do not adversely affect any structural member of any part of the structure having a required fire resistance rating may be made with the same materials of which the structure is constructed.

(E) ~~In the event a building or structure is altered or repaired in excess of thirty five percent (35%) of its present replacement value or altered in excess of thirty five percent (35%) of its cubical content, exclusive of foundation, the Village may require that the entire building or portions thereof be brought into compliance with all provisions of this chapter. Buildings or structures undergoing alterations, repairs, or renovations shall comply with the adopted edition of the International Existing Building Code.~~

(F) ~~If the structure is increased in floor area or number of stories, the entire structure shall be made to conform with the requirements of this chapter in respect to means of egress, fire protection, fire suppression, light and ventilation and life safety. Additions and~~

Commented [DW6]: This conflicts with the adoption of the 2021 International Existing Building Code.

Recommend that section is rewritten to require compliance with the 2021 IEBC for alterations and Changes of Occupancy.

Commented [DW7]: Recommend that this section be amended to clarify that additions are required to comply with the codes for new construction. (See 2021 IEBC Chpt 11)

new stories to existing buildings shall comply with the adopted edition of the International Existing Building Code.

(G) Buildings and structures moved into or within the Village shall comply with the provisions of this chapter for new buildings and structures and shall not be used or occupied in whole or in part until the Certificates of Occupancy shall have been issued by the Village. (Ord. 19-0-10, 6-24-2019)

4-2-7: PUBLIC SAFETY, INSURANCE, BONDS:

(A) Insurance: All general contractors who use the streets or other public property shall file with the Village, prior to the issuance of a building permit, a Certificate of Insurance with coverages as follows:

1. Public liability insurance for each person in the sum of one hundred thousand dollars (\$100,000.00) and for each accident in the sum of three hundred thousand dollars (\$300,000.00).
2. Property damage insurance in the amount of fifty thousand dollars (\$50,000.00) limited to not less than ten thousand dollars (\$10,000.00) for each accident.

(B) Occupation Of Streets, Sidewalks And Parkways: Streets, parkways or sidewalks shall not be occupied with building materials prior to the issuance of a building permit unless permission is obtained from the building official of his/her designee. In no event shall public property other than that immediately in front of the lot or land upon which the work is being done be occupied, nor shall more than one-third (1/3) of the streets, from curb line to curb line, be occupied unless permission is obtained from the building official of his/her designee. No materials shall be so placed as to render inaccessible any fire hydrant, valve chamber, manhole or catch basin, or obstruct the gutter or waterway of any street.

(C) Bypass Walk: Before any sidewalk is obstructed by scaffolding or other material, or is removed, a safe hard surfaced temporary bypass walk shall be constructed and maintained. Pedestrians shall be protected from vehicular traffic by a barricade or fence. During overhead construction, pedestrians shall further be protected from falling debris by solid overhead planking.

(D) Barricades Or Fencing Required: Any person, using public property for temporary storage of construction materials shall provide substantial and suitable barricades or fencing and shall provide, place and maintain proper and sufficient amber lights or flares to guard and protect all traffic and passersby.

(E) Damage To Barricading: It shall be unlawful to move, remove, turn off, extinguish, diminish or disturb any light or barricade required by subsection (D) of this section.

(F) Mortar Beds: Mortar beds or boxes shall be so placed and guarded as to protect the clothing of persons passing, and shall not be located upon any street or public way unless enclosed with a tight fence. Mortar beds or boxes shall not be placed upon any public walk, and no mortar shall be mixed upon any pavement surface or sidewalk surface.

(G) Material On Public Property: As soon as construction work is completed, all remaining material shall be promptly removed from public property and the streets and sidewalks shall be cleared and put in the same condition as before the construction work was started. Overnight storage on the streets or sidewalks shall be subject to the specific approval of the building official or his/her designee.

(H) Removal Of Rubbish, Public Property: Rubbish or excavated material which is deposited on the sidewalks or streets shall be removed from day to day, as rapidly as produced. When materials or rubbish causing dust are handled, they must be well wetted down. The person to whom the permit has been issued is responsible for the removal of all rubbish and debris.

(I) Removal Of Rubbish, Private Property: Rubbish or materials shall not be thrown, dropped or swept from any floor above the ground or from any roof, but shall either be carried or lowered in such a manner as not to cause dust, or a nuisance.

(J) Public Inconvenience: All building operations shall be conducted in a manner that least inconveniences the public and abutting property owners.

(K) Protection Of Passersby: Where during construction an excavation or other hazard exists, the contractor shall provide and maintain a barricade or fence for the protection of passersby.

(L) Protection Of Construction Site: During construction, excavation or when other work-related hazards exist, the contractor shall provide and maintain barricades and fencing around the entire site for the protection of pedestrians throughout the entire construction period.

(M) Construction Site Maintenance: The person to whom the permit has been issued will be required to install on all new construction sites a gravel or other suitable access road to and from the project or construction site prior to the initiation of any excavation work. The location and construction specifications of this access road shall be approved by the ~~Municipal Services~~ [Community Development](#) Department prior to the initiation of any excavation work.

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(N) Portable Toilet Facilities Required: All new construction sites will be required to provide temporary washroom facilities during construction. Said temporary washroom facilities shall be located entirely on the construction site and are not permitted to be located on adjoining private property or within any public right-of-way or easement.

(O) Performance Bond: Prior to the issuance of any building permit (including permits required elsewhere in this Code for work performed in conjunction with the water system of the Village), a cash bond shall be deposited with the Village to indemnify the Village against damage to, secure the proper installation of and/or secure the restoration of any and all public property and/or improvements, including, but not by way of limitation, streets, curbs, sidewalks and/or parkways. Said cash bond shall be in the following amounts:

Type Of Excavation

Bond Amount

| Type Of Excavation | Bond Amount |
|---|--|
| Water tap - short side (single excavation) | \$1,500.00 |
| Water tap - long side (double excavation) | 3,000.00 |
| Sanitary tap (single excavation) | 1,500.00 |
| Sanitary tap - long side (double excavation) | 3,000.00 |
| Water main project (excavation within entire right-of-way) | \$3,500.00 per property fronting the excavation |
| Sewer main project (excavation within entire right-of-way) | \$3,500.00 per property fronting the excavation |
| Open cut road crossing (requires trench backfill - 6 inches bituminous aggregate mix (BAM) - 1 1/2 inches bituminous surface) | \$3,500.00 |
| Culvert replacement (for new construction and additions, replacement of damaged culverts) | 1,500.00 |
| Right-of-way landscaping (for new construction areas and/or additions) | 1,000.00 |

All installation, repair and/or restoration of public property and/or improvements shall be in accordance with the instructions of and within the time period(s) established by the building official or his/her designee. In the event that installation, repair and/or restoration is not satisfactorily completed as directed by the building official or his/her designee, the Village shall have the right, but not the obligation, to forfeit said cash bond to cause such installation, repair and/or restoration.

(P) Bond Refund: Upon the final completion of all the work under the permit, so much of such deposit as is necessary to reimburse the Village for the repair and/or restoration of the damaged streets, curbs, sidewalks or parkways shall be retained by the Village and the remainder shall be returned to the depositor; provided, however, that nothing herein contained shall preclude the Village from maintaining an action against any person or persons to recover for damage done to any street, sidewalk or parkway.

(Q) Sewer And Plumbing Contractors:

1. Every person, firm or corporation desiring to engage in the business of completing any sewer and/or plumbing installation in the Village shall execute and file with the Village a surety company bond payable to the Village in the penal sum of ten thousand dollars (\$10,000.00), conditioned that the applicant shall faithfully observe all of the ordinances and other regulations of the Village relating to sewer and/or plumbing installations.

2. Each plumbing contractor, and sewer contractor, shall be subject to the insurance requirements previously set forth in subsection (A) of this section.

3. Each plumbing contractor must be licensed in accordance with State Statute.

(R) Electrical Contractors: Every person, firm or corporation desiring to engage in the business of making electrical installations in the Village shall execute and file with the Village a surety company bond, payable to the Village in the penal sum of ten thousand dollars (\$10,000.00) conditioned that the applicant shall faithfully observe all the ordinances and other regulations of the Village relating to electrical installations. All electrical contractors must be licensed in a municipality in Illinois and provide evidence that such registration is in good standing.

(S) Contractors, Existing Violations: The Village shall not be required to issue a building permit to any contractor or subcontractor responsible for existing Code violations until such work has been corrected. (Ord. 19-O-10, 6-24-2019)

4-2-8: APPROVED MATERIALS, MODIFICATIONS:

(A) Construction Method: All materials, equipment and devices approved for use by the provisions of this chapter shall be constructed and installed only in accordance with such approval.

(B) Modifications: ~~When there are practical difficulties involved in carrying out structural or mechanical provisions of this chapter or of an approved rule, the Village may vary or modify such provision upon application by the owner or the owner's representative; provided, that the spirit and intent of this chapter shall be observed and public welfare and safety be assured. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or the owner's authorized agent, provided that the building official shall first find that special individual reason makes the strict letter of this code impractical, the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department of building safety~~

(C) Records: The application for modification and the final decision of the Village shall be in writing and shall be officially recorded with the application for the permit in the permanent records of the ~~Municipal Services~~ Community Development Department.

(D) Used Materials And Equipment: ~~Used materials, equipment and devices may be utilized provided they have been reconditioned, tested and placed in good and proper working condition and approved for use by the Village. Materials that are reused shall comply with the requirements of the applicable adopted code for new materials. Used equipment and devices shall not be reused unless approved by the building official.~~

(E) ~~Alternative Materials And Equipment~~ Alternative materials, design and methods of construction and equipment: The provisions of this chapter are not intended to prevent the use of any material or method of construction not specifically prescribed by this chapter, provided any such alternative has been approved. The Village may approve any such

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alternative provided the Village finds that the proposed design is satisfactory and complies with the intent of the provisions of this chapter, and that the material, method or work offered is, for the purposes intended, at least the equivalent of that prescribed in this chapter, in quality, strength, effectiveness, fire resistance, durability and safety. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code.
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. Fire resistance.
 - 2.5. Durability.
 - 2.6. Safety.

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

(F) Research And Investigations Reports: The Village shall require that sufficient technical data be submitted to substantiate the proposed use of any material or assembly and if it is determined that the evidence submitted is satisfactory proof of performance for the use intended, the Village may approve its use subject to the requirements of this chapter. The costs of all tests, reports and investigations required under these provisions shall be paid by the applicant. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code or applicable adopted construction code, shall consist of valid research reports from approved sources.

(G) Research Reports: The Village may accept as supporting data to assist in the determination duly authenticated research reports from approved sources for all materials or assemblies proposed for use which are not specifically provided for in this chapter. Whenever there is insufficient evidence of compliance with the provisions of the applicable adopted construction code, or evidence that a material or method does not conform to the requirements of the applicable adopted construction code, or in order to substantiate claims for alternative materials or methods, the building official shall have the

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authority to require tests as evidence of compliance to be made without expense to the Village of Willowbrook. Test methods shall be as specified in the applicable construction code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

(H) Review Fees: The costs for all testing, evaluation and expert consultation required by the Village when reviewing an application will be the responsibility of the applicant. In the event that during construction, more testing, evaluation or expert consultation is required, the costs for said testing and consultation will also be the responsibility of the applicant. (Ord. 19-O-10, 6-24-2019)

4-2-9: BUILDING OFFICIAL, DUTIES AND POWERS:

(A) Authority: It shall be the duty of the building official or his/her designee to see to the enforcement of all the provisions of this chapter and all other regulations relating to building or zoning and to inspect all buildings and structures and parts and appurtenances thereof regulated by this chapter being erected, installed or altered as frequently as may be necessary to ensure compliance with the provisions of this chapter. The building official or his/her designee is hereby authorized and it is his duty to administer and enforce the provisions of this chapter, making such determinations, interpretations, and orders as are necessary therefor, and requiring such plats, plans and other descriptive material in connection with applications for permits as are necessary for him to judge compliance with this chapter.

(B) General: The building official or his/her designee shall enforce all the provisions of this chapter and shall act on any questions relative to the mode or manner of construction and the materials to be used in the erection, addition to, alteration, repair, removal, demolition, installation of service equipment and the location, use, occupancy and maintenance of all buildings and structures.

(C) Inspections: The building official or his/her designee shall make all required inspections, or he/she may accept reports of inspections by other approved agencies or individuals; and all reports of such inspections shall be in writing and certified by a responsible officer of such approved agency or by the responsible individual. The building official or his/her designee may engage such experts as may be deemed necessary to report upon unusual technical issues that may arise during the course of construction.

(D) Credentials: The building official or his/her designee and authorized representatives shall carry proper credentials for their respective office for the purpose of inspecting any and all buildings and premises in the performance of duties under this chapter.

(E) Rule Making Authority: The building official or his/her designee shall have power as may be necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations, to interpret and implement the provisions of this

chapter, to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions; but such rules shall not have the effect of waiving working stresses or fire resistance requirements specifically provided in this chapter, or violating accepted engineering practice involving public safety.

(F) Records: The building official or his/her designee shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections and notices and orders issued. Such records shall be retained in the official records so long as the building or structure to which they relate remains in existence unless otherwise provided by other regulations. Plans and specifications of houses and accessories structures, except survey plats and building plot plans, may be destroyed after five (5) years. Those parts of plans for other buildings which may be useful for future periodic inspections shall be kept.

(G) Supervision: The building official or his/her designee shall have the power to order all work stopped on construction, installation, alteration or repair of buildings and structures, and parts and appurtenances thereof, regulated by this chapter, in the Village when such work is being done in violation of any provision relating thereto, or in violation of the zoning provisions of this Code. (Ord. 19-O-10, 6-24-2019)

4-2-10: BUILDING PERMITS:

(A) Permit Required: No person shall begin the erection, construction, alteration or repair, demolition or movement of any building or structure in the Village or begin the clearing or excavating of the site of any proposed building or structure, or construct or maintain any driveway in or across any public walk, parkway or curb, without first having applied for and obtained a permit in writing to do so from the Village. All permits will be signed by the building official or his duly appointed assistant or his/her designee.

(B) Application Form: An application for a permit shall be submitted in such form as the building official or his/her designee may prescribe. Such application shall contain the full names and addresses of the applicant and of the property owner, and if the owner is a corporate body, of its responsible officer. In addition, said application shall be executed by the property owner or his duly authorized agent. The application shall also describe briefly the proposed work and shall give such additional information as may be required by the building official or his/her designee for an intelligent understanding of the work proposed. No plan review may commence prior to the receipt of all required fully completed permit applications.

(C) Plot Required: At the time of applying for a permit, the applicant shall submit to the building official or his/her designee a minimum of four (4) copies of a plat of survey of the lot prepared by an Illinois registered land surveyor, showing the dimensions of the same and the position to be occupied by the proposed building, by the building to be altered or added to, or by the building to be moved thereon, and the position of any other building or buildings that may be on the lot, including swimming pools, decks, patios, sheds, etc., and the dimensions from all lot lines to the existing and proposed structures, and landscaping

required by the Zoning Ordinance. Topographical data shall be included showing existing contours at vertical intervals of not less than one foot (1') and the proposed changes in contours and showing the elevation of the proposed foundation to USGS elevation datum.

(D) Plans Required: Plans, drawings, specifications and calculations meeting the architectural, mechanical, structural and electrical requirements of this chapter shall be presented to the building official or his/her designee for his approval before a permit will be granted. Plans shall specifically show design live loads and occupant capacities for all spaces and floors and shall be sealed by an Illinois registered architect or structural engineer as required.

(E) Proof Of Compliance: Permits shall not be issued until satisfactory proof has been submitted verifying that an adequate and approved water supply and sewerage facilities are available; that surface and roof drainage will not damage adjoining properties; that, to maintain the public safety because of the activity on and adjacent to the property, public pedestrian walks and curbs are provided and that access for police and fire equipment is provided on a satisfactory all weather roadway.

(F) Construction Plans: In all construction work for which a permit is required, the approved permit and stamped drawings and plans shall be kept on file at the construction site while the work is in progress. The permit placard shall be posted on the site at all times.

(G) Alteration Of Plans: It shall be unlawful to erase, alter or modify any lines, figures or coloring contained upon drawings or plans bearing the approval stamp of the building official or his/her designee or his duly appointed assistant or filed with him for reference. If during the progress of the execution of such work, it is desired to deviate in any manner affecting the construction or other essentials of the building from the terms of the application or drawing, notice of such intention to alter or deviate shall be given to the building official or his/her designee and an amended plan showing such alteration or deviation shall be submitted and approved before such alteration or deviation shall be made.

(H) Sanitary Sewer Permit Required: A permit issued by either the Flagg Creek Water Reclamation District or the DuPage County Department of Environmental Concerns with respect of those portions of the Village under the jurisdiction of these respective entities will be required prior to the issuance of a building permit for new subdivisions, new planned unit developments, new nonresidential construction, new residential construction, the demolition of any buildings or structures, both single- and multi-family, and projects that involve the expansion of an existing residential or nonresidential building.

(I) Impact Fee Required: Prior to the issuance of a building permit, proof of payment of any and all required impact fees must be provided.

(J) Demolition Of Buildings Or Structures:

1. Before a building or structure may be demolished, the owner or agent shall notify all utilities having service connections within the structure such as water, electric, gas, sewer,

etc. A permit to demolish a building or structure shall not be issued until a release is obtained from the utilities, stating that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

2. The plot plan shall show the buildings or structures to be demolished and the buildings or structures on the same lot that are to remain. After the demolition, the premises will be placed in a satisfactory condition, free from all unsafe or hazardous conditions.

3. Before a building or structure may be demolished, the owner or agent shall schedule a "pre-demolition inspection" immediately prior to demolition.

(K) Action On Application/Plan Review: Examination of permit applications and plans will be made within a reasonable time after a complete application is filed. If, after examination, the building official or his/her designee finds no objections to the same and it appears that the proposed work will be in compliance with the laws and ordinances applicable thereto, and the proposed construction or work will be safe, he shall approve such application and issue a permit for the proposed work as soon as practicable. If his examination reveals otherwise, he shall reject such application and notify the applicant of the reasons for said rejection.

(L) Revocation Of Permit: The building official or his/her designee may revoke a permit issued in case there has been any false statement or misrepresentation as to a material fact in the application or plans on which the permit or approval was based.

(M) Approval Of Permit In Part: Nothing in this chapter shall be construed to prevent the building official or his/her designee from issuing a permit for the construction of part of a building or structure before the entire plans and detailed statements of said building or structure have been submitted or approved, provided adequate information and detailed statements have been submitted for the same and have been found to comply with this chapter. However, the building official or his/her designee are not required to approve a permit in part if doing so would unduly complicate or necessitate the approval of building systems still under review of the remainder of the building or structure.

(N) Payment Of Fees: A permit shall not be issued until all required fees have been paid.

(O) Compliance With Chapter: The permit shall be a license to proceed with the work and shall not be construed as authority to violate any of the provisions of this chapter, except as stipulated by such modification or variation as specifically approved by the building official or his/her designee.

(P) Compliance With Permit: All work shall conform to the approved application and plans for which the permit has been issued and any approved amendments thereto.

(Q) Compliance With Plot Plan: All new work shall be located strictly in accordance with the approved plot plan. Three (3) copies of a spotted survey, prepared by a registered land surveyor of the State of Illinois, will be required within fourteen (14) days after foundation

is placed on the lot. Said spotted survey shall as a minimum include the following information:

1. Exact location and measurements of foundation.
2. Front, rear and side yard measurements.
3. True USGS elevation of top of foundation wall and existing grade of curb, sidewalk, or existing grade of street or roadway.

In addition, the registered land surveyor shall submit a certificate of elevation with respect to the structure or structures depicted on the spotted survey. No construction will be permitted past the decking over the foundation except for water, sewage and related items unless the spotted survey and the certificate of elevation have been filed with and approved by the building official or his/her designee. This requirement may be waived for additions to single-family residential buildings having a floor area of less than five hundred (500) square feet and for accessory structures.

(R) Extension And Expiration Of Building Permit: If after a building permit required by this chapter shall have been granted, if the operation called for by such permit shall not have been started within six (6) months after the date thereof, such permit shall be void and no operation thereunder shall be begun. Where, under authority of a permit, work has begun and has not been prosecuted for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and a Certificate of Occupancy or Certificate of Completion issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The new permit shall only be issued for a period in which to expediently complete the work originally permitted. The completion period of the extended permit shall be approved by the building official or his/her designee. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained. Failure to complete the originally permitted work prior to the expiration date of the extended permit shall be a violation of this code and punishable in accordance with the provisions of title 1, chapter 4 of this Code. (Ord. 19-O-10, 6-24-2019)

4-2-11: PERMIT FEES:

The permit fees applicable to all development, building or construction within the village shall be those fees and charges as set forth herein.

(A) Building Permit Fees:

1. Single-Family Residential Structures and Multi-Family Townhouse, Condominium Unit, and Apartment Unit:

- (a) Building Architectural Plan Examination and review fee (In-House):

(1) Initial: Four hundred fifty dollars (\$450.00)

(2) In situations where the building plans are required to be subjected to additional reviews, an additional examination and review fee of two hundred seventy-five dollars (\$275.00) shall be charged for each additional examination and review.

(b) Grading plan examination and review fee:

(1) Five hundred dollars (\$500.00).

(2) Grading plan examination and review fee: In situations where the grading plan plans are required to be subjected to additional reviews, an additional examination and review fee of two hundred fifty dollars (\$250.00) shall be charged for each additional examination and review.

(c) Building Permit Fee, Residential:

(1) Interior habitable areas, including, but not limited to, all floors including basement, crawl space, attic, etc. All residential building permit fees shall be incorporated within a cubical content fee calculated as follows: Ten cents (\$0.10) per cubic foot.

(2) Exterior roofed over and open areas that are contiguous with the SFR structure, including, but not limited to, porches, entry ways, etc.: All residential building permit fees shall be incorporated within a cubical content fee calculated as follows: Four cents (\$0.04) per cubic foot.

(d) Alterations, remodeling and repairs not requiring architectural plans or detailed drawings: One hundred twenty-five dollar (\$125.00) minimum.

(e) Foundation Only Permit Fee:

(1) A fee of sixty cents (\$0.60) per square foot based on foundation lot coverage dimensions (in conjunction with a new single-family residence building permit).

(2) Plan examination and review fee: Three hundred dollars (\$300.00)

(3) In situations where the 'foundation only' plans are required to be subjected to additional reviews, an additional examination and review fee of one hundred seventy-five dollars (\$175.00) shall be charged for each additional examination and review.

(f) Outside Agency Reviews: The plan review for Single-Family Residential structures, including additions thereto, may be performed by a third party plan review agency. All fees and charges related to the performance of this service shall be borne by the permittee.

(g) Permit Applications: All New Single-Family Residential Structure permit applications shall be accompanied by a cash deposit of one thousand dollars (\$1,000.00).

(h) Should a permit be issued, the deposit shall be credited to the entire building permit fee. Should the Building Official or his/her designee determine not to issue the requested permit, or should the permit not be issued for any other reason, the entire deposit shall be retained by the Village as liquidated damages for the purpose of

compensating the Village for costs incurred in the examination and review of the building permit application.

2. Multi-Family/Non-Residential Buildings, Including Parking Garages and Parking Decks:

(a) Permit Applications: All permit applications shall be accompanied by a cash deposit of an amount in accordance with the following table to secure the payment of all costs incurred by the village in processing and reviewing such applications:

| Gross Floor Area Of Proposed Structure (In Square Feet): | Required Plan Review Cash Deposit Amount: |
|--|---|
| (1) 1 to 1000 | \$1,000.00 |
| (2) 1,001 to 5,000 | \$2,500.00 |
| (3) 5,001 to 20,000 | \$5,000.00 |
| (4) 20,001 to 100,000 | \$7,5000.00 |
| (5) 100,001 to 200,000 | \$10,000.00 |
| (6) Over 200,000 | \$12,500.00 |

Should a permit be issued, the deposit shall be credited to the entire building permit fee. Should the Building Official or his/her designee determine not to issue the requested permit, or should the permit not be issued for any other reason, the entire deposit shall be retained by the village as liquidated damages for the purpose of compensating the village for costs incurred in the examination and review of the building permit application.

(b) Multi-Family/Nonresidential Buildings Building plan examination and review fee shall be determined based on the project. Minimum fees apply (In-House):

| (Square Feet): | Review Fee: |
|------------------------|-------------|
| (1) 1 to 1000 | \$750.00 |
| (2) 1,001 to 5,000 | \$1,750.00 |
| (3) 5,001 to 20,000 | \$3,500.00 |
| (4) 20,001 to 100,000 | \$7,0000.00 |
| (5) 100,001 to 200,000 | \$9,000.00 |
| (6) Over 200,000 | \$11,000.00 |

(c) Additional [In-House] Reviews: In situations where plans are required to be subjected to additional reviews, an additional examination and review fee of one half (1/2) of the amount listed in (A)(2)(b)(1) shall be charged for each additional examination and review.

(d) Outside Agency Reviews: The plan review for multi-family and nonresidential buildings, including additions thereto, may be performed by a third party plan review agency. All fees and charges related to the performance of this service shall be borne by the permittee.

(e) Building Permit Fees, Cubical Content: All Non-Residential building permit fees shall be incorporated within a cubical content fee calculated as follows:

(1) First one hundred thousand (100,000) cubic feet: eleven cents (\$0.11) per cubic foot.

(2) Each cubic foot in excess of one hundred thousand (100,000) cubic feet up to and including two hundred thousand (200,000) cubic feet: \$0.09 per cubic foot.

(3) Each cubic foot in excess of two hundred thousand (200,000) cubic feet up to and including five hundred thousand (500,000) cubic feet: \$0.065 per cubic foot.

(4) Each cubic foot in excess of five hundred thousand (500,000) cubic feet: \$0.045 per cubic foot.

(f) Building Permit Fees, Mechanical Content (where Applicable):

(1) Electrical permit fee add \$0.25 x building permit fee calculated in Section (A)(2)(e).

(2) Plumbing permit fee add \$0.25 x building permit fee calculated in Section (A)(2)(e).

(3) Mechanical permit fee add \$0.25 x building permit fee calculated in Section (A)(2)(e).

(g) Multi-Family Uses: For new construction, a minimum building permit and inspection fee of three thousand dollars (\$3,000.00) shall apply.

(h) Foundation Only Permit:

(1) A fee of eighty cents (\$0.80) per square foot based on foundation lot coverage dimensions (in conjunction with a building permit).

(2) Plan examination and review fee: Four hundred dollars (\$400.00).

(3) In situations where the foundation only plans are required to be subjected to additional reviews, an additional examination and review fee of two hundred dollars (\$200.00) shall be charged for each additional examination and review.

(i) Multi-Family and Non-Residential Uses:

(1) Multi-Family Building Permit fees for common area alterations, conversions, remodeling, structural repairs, Build-Outs, etc., (Whereas a "Certificate of Occupancy" Issued after Final Construction Inspection is Approved by all Parties, shall be charged as follows: shall be charged as follows: Each cubic foot: (\$0.060) per cubic foot

(2) Non-Residential Building Permit fees for Vanilla Boxes (No Build-out Plan(s)): Whereas a "Certificate of Completion" Issued after Final Construction Inspection is Approved by all Parties, shall be charged as follows: Each cubic foot: (\$0.045) per cubic foot.

3. Off Street Parking, Parking Lots and Driveways:

(a) Resurfacing or Reconstruction: The resurfacing or reconstruction of any private roadway, parking area, driveway, etc., or the modification of the surface of any watercourse or ponding area shall require a permit.

(b) Multi-Family and Non-Residential Uses:

(1) Newly Constructed: A permit fee of one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

(2) All permit applications for an existing parking lot overlay or reconstruction shall be accompanied by a proposed striping plan which indicates the size, layout and number of regular and disabled/accessible parking spaces and the location of all required above grade signs designating parking spaces which are reserved for disabled individuals and the indicated fines signage. The fee for such permit shall be in accordance with the following: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

(3) Sealcoating and Restriping Parking Lots: The sealcoating and restriping of any parking area shall require a permit. The fee for such permit shall be two hundred fifty dollars (\$250.00), includes review, inspection, and cert. of completion. The permit application for sealcoating shall be accompanied by a proposed striping plan which indicates the size, layout and number of both regular and disabled accessible/handicapped parking spaces and the location of all required above grade signs designating parking spaces which are reserved for disabled individuals.

(c) Residential (Single Family, Attached and Detached):

(1) Driveways:

(a) Without a Culvert: One hundred fifty dollars (\$150.00), includes review, inspection, and cert. of completion.

(b) With a Culvert: One hundred seventy-five dollars (\$175.00), includes review, inspection, and cert. of completion.

(c) Reserve.

4. Accessory Structures:

(a) In Single-Family Residential, building permit fee:

(1) Sheds: One hundred fifty dollars (\$150.00), includes review, inspection, and certificate of compliance.

(2) Structures including but not limited to: Detached Garages, Pergolas, Gazebos, Awnings, Canopies, Greenhouses, Outdoor Kitchens, etc.: Two hundred fifty dollars (\$250.00) + review and inspections.

(b) In Non-Residential and Multi-Family, building permit fee:

(1) Per Section 4-2-11(a)(2)

(a) One percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

5. Decks:

(a) Single-Family, Attached/Detached, Multi-Family Townhouse, Condominium Unit, and Apartment Unit: Two hundred fifty dollars (\$250.00), includes review, inspection, and cert. of completion.

(b) Non-Residential: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

6. Miscellaneous Flatwork (Concrete, paver, etc.), Patios, Service Walks, Stoops/Steps, etc.:

(a) Single-Family, Attached/Detached, Multi-Family Townhouse, Condominium Unit, and Apartment Unit: Patios, Walkways, Stoops, etc. (Public or Private/Service): one hundred fifty dollars (\$150.00), includes review, inspection, and cert. of completion.

(b) Non-Residential, Patios, Walkways, Stoops, etc. (Public or Private/Service): one percent (1%) of construction value + review and inspections, minimum two hundred fifty dollars (\$250.00).

7. Private Street Re-Construction:

(a) Single Family Residential: one percent (1%) of construction value + review and inspections, minimum two hundred fifty dollars (\$250.00).

(b) Multi-Family Residential: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

(c) Non- Residential: one percent (1%) of construction value + review and inspections, or minimum of three hundred fifty dollars (\$350.00).

8. Exterior Structural Alterations:

(a) Residential districts: A permit fee of six cents (\$0.06) per cubic foot of cubical content of the area which is the subject of the alteration.

(1) A minimum fee of two hundred fifty dollars (\$250.00) shall apply.

(b) Nonresidential districts: A permit fee of eight cents (\$0.08) per cubic foot of cubical content of the area which is the subject of the alteration.

(1) A minimum fee of five hundred dollars (\$500.00) shall apply.

9. Existing Structure Moving:

(a) Single-Family Residential "House" Moving: One thousand dollars (\$1,000.00) shall apply.

(b) Single-Family Residential "Garage" Moving: One hundred dollars (\$100.00) (New Section) shall apply.

(c) Single-Family Residential "Shed" Moving: Twenty-five dollars (\$25.00) (New Section) shall apply.

10. Fences:

(a) Single-Family Residential Districts (R-1, R-2, R-3): One hundred fifty dollars (\$150.00), includes review, inspection, and certificate of compliance.

(b) Multi-Family Districts (R-4 and R-5): one percent (1%) of construction value + review and inspections, or minimum of two hundred fifty dollars (\$250.00).

(c) Non-Residential Districts: one percent (1%) of construction value + review and inspections, or minimum of two hundred fifty dollars (\$250.00).

11. Satellite Earth Stations:

(a) Residential R1-R4 districts: One hundred dollars (\$100.00).

(b) Residential R5 districts: One hundred fifty dollars (\$150.00).

(c) Commercial Districts: Two hundred dollars (\$200.00). (No Change)

12. Personal Communication Services (PCS) Antennas:

(a) Freestanding Tower Mounted Devices:

(1) Residential, Amateur Radio Antenna/Equipment: Two hundred dollars (\$200.00).

(2) Non-Residential/Commercial Installations: Four thousand five hundred dollars (\$4,500.00).

(b) Building Mounted Devices:

(1) Residential, Amateur Radio Antenna/Equipment: One hundred fifty dollars (\$150.00).

(2) Non-Residential/Commercial Installations: Three thousand seven hundred fifty dollars (\$3,750.00).

(c) Alterations, modifications, additions to existing PCS equipment:

(1) Residential, Amateur Radio Antenna/Equipment: One hundred dollars (\$100.00).

(2) Non-Residential/Commercial Installations: Six hundred twenty-five dollars (\$625.00).

13. Swimming Pools:

(a) Swimming pools, above ground: Three hundred dollars (\$300.00), includes review, inspection, and certificate of compliance.

(b) Swimming pools, in ground:

(1) All Residential Districts: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

(2) Non-Residential Districts: one percent (1%) of construction value + review and inspections, minimum five hundred fifty dollars (\$550.00).

(c) Mechanical Installations related to a Pool:

(1) Electric w/pool (Single-Family Residential): One hundred twenty five dollars (\$125.00).

(2) Electric w/pool (Multi-Family/Non-Residential): One hundred fifty dollars (\$150.00).

(3) Plumbing w/pool (Single-Family Residential): One hundred twenty five dollars (\$125.00).

(4) Plumbing w/ pool (Multi-Family/Non-Residential): One hundred fifty dollars (\$150.00).

(5) Fuel Gas w/pool (Single-Family Residential): One hundred twenty five dollars (\$125.00).

(6) Fuel Gas w/pool (Multi-Family/Non-Residential): One hundred fifty dollars \$150.00.

(d) Temporary Inflatable Pool: Fifty dollars (\$50.00).

14. Roof Fees:

(a) All permit applications shall be accompanied by an affidavit indicating the exact number of roofing layers that are currently on the residence. Alternately, the proposal can indicate "Tear-off All Existing".

(b) Roof Fees:

(1) Single-Family Residential (Detached/Attached), per residence: one percent (1%) of construction value, minimum one hundred fifty dollars (\$150.00).

(2) Single-Family Residential, Accessory Structure: Twenty-five dollars (\$25.00).

(3) Multi-Family Residential: One percent (1%) of construction value + review and inspections, or minimum of three hundred fifty dollars (\$350.00).

(4) Non-Residential: One percent (1%) of construction value + review and inspections, or minimum of three hundred fifty dollars (\$350.00).

15. Remove and Replace Fenestration (windows, doors, skylights, etc.) Fees:

(a) Single-Family Residential (Detached/Attached), Multi-Family Townhouse, Condominium Unit, and Apartment Unit:

(1) One percent (1%) of construction value, includes review, inspection, and cert. of completion, minimum one hundred fifty dollars (\$150.00).

(b) Multi-Family Residential Common Area:

(1) One (1) to ten (10) openings: one percent (1%) of construction value + review and inspections, or minimum of two hundred fifty dollars \$250.00.

(2) Eleven (11) or more openings: one percent (1%) of construction value + review and inspections, or minimum of three hundred fifty dollars (\$350.00).

(c) Non-Residential:

(1) One (1) to ten (10) openings: one percent (1%) of construction value + review and inspections, or minimum of two hundred fifty dollars (\$250.00).

(2) Eleven (11) or more openings: one percent (1%) of construction value + review and inspections, or minimum of three hundred fifty dollars (\$350.00).

16. Plus, all applicable Review and Inspection Fees, one hundred dollars (\$100.00) minimum unless otherwise included above.

(B) Plumbing Permit Fees:

1. Residential; Single-Family (Attached/detached), Multi-Family Townhouse, Condominium Unit, and Apartment Unit:

(a) Fourteen dollars (\$14.00) per fixture.

(b) One hundred twenty-five dollars (\$125.00) minimum.

2. Non-Residential, Multi-Family (Building/Common Area):

(a) Twenty-four dollars (\$24.00) per fixture.

(b) Two hundred fifty dollars (\$250.00) minimum.

3. Minor Plumbing Alterations:

(a) Residential: Seventy-five dollars (\$75.00).

(b) Commercial: One hundred twenty-five dollars (\$125.00)

4. Lawn Sprinkling Systems:

(a) Residential: Two hundred dollars (\$200.00), includes review, inspection, and cert. of completion.

(b) Multi-Family Residential: one percent (1%) of construction value + review and inspections, or minimum of five hundred dollars (\$500.00).

(c) Non-Residential: one percent (1%) of construction value + review and inspections, or minimum of five hundred dollars (\$500.00).

5. Water Heater/Boiler, New, Each:

(a) Residential; Single-Family (Attached/detached), Multi-Family Townhouse, Condominium Unit, and Apartment Unit: One hundred fifty dollars (\$150.00) Includes review, inspection, and cert. of completion.

(b) Non-Residential/Multi-Family Building/Common Area: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

6. Water Heater/Boiler, Replacement, Each:

(a) Residential Single-Family (Attached/detached), Multi-Family Townhouse, Condominium Unit, and Apartment Unit: One hundred fifty dollars (\$150.00), includes review, inspection, and cert. of completion.

(b) Non-Residential/Multi-Family Building/Common Area: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

7. Water Service Connection (Per Building, each) Fee: See Section 6-8-2 for applicable fee schedule.

8. Water Service Disconnection (Per Building, each):

(a) Residential, Single-family attached/detached: One hundred twenty-five dollars (\$125.00).

(b) Multi-Family Residential: One hundred fifty dollars (\$150.00)

(c) Commercial: Two hundred dollars (\$200.00)

9. Plus, all applicable Review and Inspection Fees, one hundred dollars (\$100.00) minimum unless otherwise included above.

(C) Electrical Permit Fees:

1. Residential (Single-Family, Duplex, Townhouse, Condominium (per unit))

(a) New Service:

(1) Each two hundred amperes (200 Amps): One hundred seventy-five dollars (\$175.00).

(2) Plus twelve dollars (\$12.00) per Circuit.

(3) Plus seventeen dollars (\$17.00) per Motor/Fan.

(b) Existing Service Upgrade:

(1) From under two hundred amperes (200 Amps) up to two hundred (200 Amps): One hundred dollars (\$100.00).

(2) From two hundred amperes (200 Amps) up to four hundred amperes (400 Amps): One hundred twenty-five dollars (\$125.00).

(3) From under two hundred amperes (200 Amps) up to four hundred amperes (400 Amps): One hundred fifty dollars (\$150.00).

(c) Remodels, Alterations, etc.:

(1) Minimum Fee: One hundred twenty-five dollars (\$125.00).

2. Commercial, Multi-Family Residential:

(a) New Service:

(1) Each two hundred amperes (200 Amps) Amp, up to one thousand amperes (1,000 Amps): Two hundred fifty dollars (\$250.00).

(2) Excess Services: Fees for services in excess of one thousand (1,000) amperes shall be computed on the basis of the rating of the service disconnects installed prorated according to the schedule above and shall include feeders, risers and all wiring and equipment up to the branch circuit distribution panels or motor power panels or control centers.

(3) Plus eighteen dollars (\$18.00) per Circuit.

(4) Plus twenty dollars (\$20.00) per Motor/Fan.

(b) Existing Service Upgrade

(1) Each 200 Amps: One hundred seventy-five dollars (\$175.00).

(2) Plus eighteen dollars (\$18.00) per Circuit.

(c) Remodels, Alterations, Build-Outs, etc. (Non-Residential and Multi-Family Common Area): Minimum Fee: Two hundred fifty dollars (\$250.00).

3. Back-up Generators:

(a) Residential: One hundred twenty-five dollars (\$125.00).

(b) Commercial: Two hundred fifty dollars (\$250.00).

4. Electric Vehicle Charging Stations:

(a) Residential/Multi-Family: One hundred twenty-five dollars (\$125.00).

(b) Non-Residential:

(1) Per Charging Post: One hundred twenty-five dollars (\$125.00).

5. Temporary Electrical Services:

(a) Residential: Seventy-five dollars (\$75.00).

(b) Commercial: One hundred twenty-five dollars (\$125.00).

6. Low Voltage Electrical Systems: Fee for the installation of low voltage electrical systems, including but not limited to, burglar alarms, fire alarms, camera, computer systems shall be:

(a) Residential (Single-Family, Duplex, Townhouse, Condominium (per unit): Sixty dollars (\$60.00).

(b) Multi-Family Residential, Common Area: Seventy-five dollars (\$75.00).

(c) Commercial:

(1) Single Condominium Unit: One hundred dollars (\$100.00).

(2) Entire Building and/or Common Areas: One hundred twenty-five dollars (\$125.00).

7. Solar Photovoltaic Systems:

(a) Residential (Single-Family, Duplex, Townhouse, Condominium (per unit): Fifty dollars (\$50.00).

(b) Multi-Family Residential - Common Area: One Hundred fifty dollars (\$150.00).

(c) Commercial, Multi-Family Residential - Common Area: Two-Hundred fifty dollars (\$250.00).

8. Plus, all applicable Review and Inspection Fees, one hundred dollars (\$100.00) minimum unless otherwise included above.

(D) Heating, Ventilation, Air Conditioning (HVAC) Permit Fees:

1. Residential; Single-Family, (Attached/detached), Multi-Family Townhouse, Condominium Unit, and Apartment Unit:

(a) Each Air conditioner condenser unit: One hundred fifty dollars (\$150.00), includes review, inspection, and certificate of compliance.

(b) Each forced air furnace/boiler unit: One hundred fifty dollars (\$150.00), includes review, inspection, and certificate of compliance.

2. Non-Residential Tenant Unit:

(a) Each Air conditioner condenser: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

(b) Each forced air furnace/boiler: one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

3. Non-Residential/Multi-Family (Building/Common Area):

(a) Each Roof Top Unit (RTU): one percent (1%) of construction value + review and inspections, minimum three hundred fifty dollars (\$350.00).

4. Plus, all applicable Review and Inspection Fees, one hundred dollars (\$100.00) minimum unless otherwise included above.

(E) Sign Permit Fees: The fee to be charged for permits issued for the erection, construction or alteration of any sign, or advertising structure, marquee, canopy or awning, as defined in this subsection:

1. Non-Illuminated Signs:

(a) Flat fee, per sign: Ninety dollars (\$90.00).

(b) Plus, one dollar seventy-five cents (\$1.75) per square foot of gross surface area of each face thereof.

2. Illuminated Signs:

(a) Flat fee, per sign: One hundred seventy-five dollars (\$175.00).

(b) Plus, six dollars (\$6.00) per square foot of gross surface area of each face thereof.

3. Marquees, Canopies and Awnings:

(a) Flat fee, per sign: Ninety dollars (\$90.00).

(b) Plus, one dollar and seventy-five cents (\$1.75) per square foot of gross surface area of each face thereof.

4. Existing Freestanding Sign Panel Change:

(a) Non-Illuminated:

(1) Flat fee, per sign: Fifty dollars (\$50.00).

(2) Plus, fifty cents (\$0.50) per square foot of gross surface area of each face thereof.

(3) Illuminated:

(4) Flat fee, per sign: Seventy-five dollars (\$75.00).

(5) Plus, one dollar fifty cents (\$1.50) per square foot of gross surface area of each face thereof.

5. Temporary Signs, as regulated under the provisions of the Zoning Ordinance: Sixty dollars (\$60.00) per each two (2) week period, (eight (8) weeks maximum per calendar year).

6. Plus, all applicable Review Fees:

- (a) Building Mounted: Ninety dollars (\$90.00).
- (b) Free-Standing: One hundred eighty dollars (\$180.00).
- (c) Temporary, per application: Twenty-five dollars (\$25.00).
- (d) Each subsequent re-review fee shall be fifty percent (50%) of the initial review.

7. Plus, all applicable Inspection Fees, one hundred dollars (\$100.00) minimum unless otherwise included above.

(F) Conveyance Systems Permit Fees:

1. Review fee:

- (a) Five (5) floors or less: Four hundred fifty dollars (\$450.00).
- (b) Over five (5) floors: Six hundred dollars (\$600.00).

2. Initial Inspection/Re-Inspection fees, newly Installed:

- (a) Initial (immediately after installation) one hundred fifty dollars (\$150.00).
- (b) Re-Inspection, each: One hundred dollars (\$100.00).

3. Elevator, Escalators, Lifts (moves personnel):

- (a) Five (5) floors or less: Five hundred dollars (\$500.00).
- (b) Each additional floor over five (5): One hundred dollars (\$100.00).
- (c) Hand operated, five (5) floors or less: One hundred fifty dollars (\$150.00).
- (d) Semiannual Inspection (per conveyance):
 - (1) First: One hundred seventy-five dollars (\$175.00).
 - (2) Re-inspection: One hundred seventy-five dollars (\$175.00), per re-inspection.

4. Dumbwaiter, conveyor, miscellaneous conveyance system fees (moves material):

- (a) Five (5) floors or less: Five hundred dollars (\$500.00).
- (b) Each additional floor over five (5): Fifty dollars (\$50.00).
- (c) Hand operated, five (5) floors or less: Forty dollars (\$40.00).

(d) Semiannual Inspection (per conveyance):

(1) First: One hundred twenty-five dollars (\$125.00).

(2) Re-inspection: One hundred dollars (\$100.00), per re-inspection.

5. Modernization, modification: One hundred fifty dollars (\$150.00).

6. Plus, all applicable Review and Inspection Fees: One hundred dollars (\$100.00) minimum unless otherwise included above.

(G) Miscellaneous Permit Fees:

1. Final Inspections for "Certificate of Occupancy" (CO):

(a) Single-Family Residential:

(1) Architectural (Construction Final): Two hundred dollars (\$200.00).

(2) Civil Engineering (As-Built/Final Topography Review and Site Visit): One hundred seventy-five dollars (\$175.00).

(b) Multi-Family Architectural (Construction Final): One hundred dollars (\$100.00) Per dwelling unit.

(c) Commercial/Nonresidential:

(1) Architectural (Construction Final):

(d) Individual Unit/Tenant Build-out: Two hundred dollars (\$200.00).

(e) New Building: Three hundred dollars (\$300.00).

(1) Civil Engineering (As-Built/Final Topography Review and Site Visit): Two hundred fifty dollars (\$250.00).

2. Commercial Re-Occupancy Final Inspection for Certificate of Occupancy (CO):

(a) Equal to or under one thousand (1,000) square feet: Two hundred dollars (\$200.00).

(b) Over one thousand (1,000) square feet: Two hundred fifty dollars (\$250.00).

3. Final Inspections for Certificate of Completion (CC) (including but not limited to: remodel, rehab, flatwork, windows, accessory structures, fences, etc.):

(a) Single-family Residential and Multi Family Residential (Condo Unit): Forty dollars (\$40.00).

(b) Commercial/Nonresidential and Multi Family Res. (Common Area): Sixty dollars (\$60.00).

4. Temporary Occupancy Permits (TCO), fee per certificate issuance (predetermined time limits will apply, one-month term typical, six (6) months maximum (weather based)):

(a) Residential, Per Dwelling Unit: One hundred twenty-five dollars (\$125.00).

(b) Nonresidential: ~~Two hundred fifty dollars (\$250.00).~~ Five hundred dollars (\$500.00)

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(c) It shall be the Temporary Occupancy Permit holder's responsibility to renew permit prior to expiration.

5. Operational Permit Inspections:

(a) Annual Inspection: One hundred dollars (\$100.00).

(b) Re-inspection: Seventy-five dollars (\$75.00), per re-inspection.

6. National Pollutant Discharge Elimination System (NPDES) Inspections:

(a) Two hundred fifty dollars (\$250.00) each.

(b) Inspections may be performed by a third party agency. All fees and charges related to the performance of this service shall be borne by the permittee.

7. Reinspection Fees:

(a) If an inspection is scheduled and the Inspector determines that the job has not progressed to a point where an inspection can be made properly and is deemed "Not Approved", or access is not possible to perform the inspection, a one hundred dollar (\$100.00) reinspection fee, per discipline (including but not limited to: Rough/Final, Building/Framing, Electrical, Plumbing, Civil Engineering, Right-of-Way, Water, etc.), will be charged. No further inspections shall be made until such time as the reinspection fee has been paid.

(b) It shall be the "Permit Holder's" responsibility to pay all outstanding fees prior to the rescheduling of all subsequent inspections.

8. Work without benefit of a Permit:

(a) A penalty fee in the amount of two (2) times the regularly established permit fee plus up to ten percent (10%) of the value of the construction project for which the permit is being applied shall be assessed in all cases where construction has commenced prior to the issuance of a building permit. The determination by the Director of Community Development as to whether the construction has commenced prior to the issuance of the permit and the value of the construction involved shall be deemed final. The minimum penalty fee shall be not less than:

(b) Residential districts: Two hundred fifty dollars (\$250.00).

(c) Non-Residential districts, Commercial projects associated with Multifamily Residential properties: Seven hundred fifty dollars (\$750.00).

(d) Up to ten percent (10%) of the construction value, as determined by the Director of Community Development.

9. Change of Contractor: There shall be a charge of thirty-five dollars (\$35.00), along with the resubmittal of all necessary applications, bonds, and certificates, etc. for approval whenever a contractor is changed after the building permit has been issued.

10. Demolition/Wrecking:

(a) Residential:

(1) Principal Dwellings: One thousand five hundred dollars (\$1,500.00).

(2) Detached Garage Structures: One hundred seventy-five dollars (\$175.00).

(3) Other Accessory Structures: Fifty dollars (\$50.00).

(b) Non-Residential/Multi-Family:

(1) Principal Structures: Three thousand dollars (\$3,000.00).

(2) Detached Garage Structures: One hundred seventy-five dollars (\$175.00).

(3) Other Accessory Structures: Fifty dollars (\$50.00).

(c) Interior Demolition:

(1) Residential districts: Three hundred dollars (\$300.00), in conjunction with a building permit.

(2) Non-Residential districts: Six hundred dollars (\$600.00), in conjunction with a building permit.

(d) In-Ground Pools:

(1) Residential districts: One hundred dollars (\$100.00).

(2) Non-Residential districts: One hundred fifty dollars (\$150.00).

(e) Underground storage tanks/vessels (Not gasoline/service station related):

(1) Residential districts: One hundred dollars (\$100.00).

(2) Non-Residential districts: One hundred fifty dollars (\$150.00).

11. Accessory Structure/Temp Use (Commercial/Nonresidential) Review Fee:

(a) Outdoor sales/tents, etc.: One hundred fifty dollars (\$150.00).

(b) Outdoor seating, per year: Fifty dollars (\$50.00).

12. Foundation Stabilization:

(a) Residential districts: One hundred dollars (\$100.00).

(b) Non-Residential districts: One hundred fifty dollars (\$150.00).

13. Grading/Fill Permits:

(a) Residential districts: One hundred dollars (\$100.00).

(b) Non-Residential districts: One hundred fifty dollars (\$150.00).

(c) Pond/Stream Bank Stabilization: One hundred dollars (\$100.00).

14. Minimum Permit Fee for any Permit (Not Otherwise Specified Above):

(a) Residential districts, Attached/Detached (Townhouses, Duplexes, Condo Unit): One hundred twenty-five dollars (\$125.00).

(b) Residential districts, Including Multi-Family Residential Common Areas: Two hundred fifty dollars (\$250.00).

(c) Non-Residential districts: Two hundred fifty dollars (\$250.00).

15. Construction Water:

(a) Residential: Two hundred dollars (\$200.00).

(b) Commercial: Three hundred dollars (\$300.00).

16. Water Tap Final Inspection:

(a) Residential:

(1) Initial: One hundred twenty-five dollars (\$125.00).

(2) Re-inspection: Seventy-five dollars (\$75.00).

(b) Commercial/Non-Residential:

(1) Initial: Two hundred fifty dollars (\$250.00).

(2) Re-inspection: One hundred fifty dollars (\$150.00).

17. Public Right-of-Way and/or Easement Work: One hundred twenty-five dollars (\$125.00).

18. Photometric Plan review:

(a) Residential: One hundred dollars (\$100.00).

(b) Commercial: One hundred fifty dollars (\$150.00).

19. Site Development Plans:

(a) An examination and review fee for the following categories of plans to be determined as follows:

(1) Site Plans:

- a. Six hundred dollars (\$600.00) per acre.
- b. With a minimum fee of one thousand two hundred fifty dollars (\$1,250.00).

(2) Landscape Plans, Including Tree Preservation Plans, Screening Plans, Etc.:

- a. Six hundred dollars (\$600.00) per acre.
- b. With a minimum fee of one thousand two hundred fifty dollars (\$1,250.00).

(3) Photometric Plans, Including Site Lighting Plans:

- a. Three hundred dollars (\$300.00) per acre.
- b. With a minimum fee of six hundred dollars (\$600.00).

(4) Grading Plans, Not Including the Installation of Utilities or Any Other Site Improvements:

- a. Three hundred dollars (\$300.00) per acre.
- b. With a minimum fee of six hundred dollars (\$600.00) per acre.

(5) Utility Extension Plans, Including Water Mains, Sanitary Sewers or Storm Sewers:

- a. Two dollars and fifty cents (\$2.50) per lineal foot of pipe.
- b. With a minimum fee of six hundred dollars (\$600.00).

(6) Site Engineering Plans:

- a. One thousand two hundred fifty dollars (\$1,250.00) per acre.
- b. With a minimum fee of two thousand five hundred dollars (\$2,500.00).
- c. Second and subsequent plan reviews shall be assessed based upon fifty percent (50%) of the initial fee.
- d. All site development plan review submittals shall be accompanied by a fee calculated under the assumption that two (2) reviews will be performed.

20. Commercial Underground Gasoline Pumps:

- (a) Install New U/G Tanks, Per tank: Six hundred dollars (\$600.00).
- (b) Install New Gasoline Disp. Pumps, per: Three hundred dollars (\$300.00).
- (c) Alterations to Existing Gasoline Disp. Pumps, per: Two hundred dollars (\$200.00).
- (d) Alterations to Existing Gasoline Disp. Pump Base, per Island: Two hundred dollars (\$200.00).
- (e) Alteration or replacement of underground gasoline pump lines: Two hundred fifty dollars (\$250.00).

(f) Removal and Replacement of Existing U/G Tanks: Two thousand dollars (\$2,000.00).

(g) Removal of U/G Tanks, per: Three hundred dollars (\$300.00).

21. Plus, all Applicable Bonds (See Section 4-2-7 for Fees Schedule).

22. Plus, all applicable Review and Inspection Fees, one hundred dollar (\$100.00) minimum unless otherwise included above. (Ord. 19-O-14, 8-12-2019; amd. Ord. 23-O-35, 12-18-2023)

4-2-12: INSPECTIONS:

(A) Preliminary Inspection: Before issuing a permit, the building official or his/her designee may examine or cause to be examined all buildings, structures and sites for which an application has been filed for a permit to construct, enlarge, alter, repair, remove or demolish.

(B) Required Inspections:

1. Inspections required under the provisions of this chapter shall be made by the building official or his/her designee. If an inspection has been scheduled and, in the opinion of the inspector, after arrival on the inspection site, the job is not ready or has not progressed to a point where an inspection can be made properly or proper access has not been provided to perform the inspection, a reinspection fee may be charged. No further inspections shall be made until such time as the reinspection fee has been paid.

2. Owner or contractor is required to contact the ~~Municipal Services~~ [Community Development](#) Department, Building and Zoning Division, Building Department a minimum of forty-eight (48) hours in advance to schedule the following required construction inspections:

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(a) Silt And Construction Fence: The proper installation of the required erosion control and construction fencing.

(b) (Pre)Demolition: Before any building or structure may be demolished, the owner or agent shall schedule a "pre- demolition inspection" immediately prior to demolition.

(c) Footing, Pre-Pour Concrete: Before concrete is poured and after footing excavation has been completed, and after forms are set in place and the access drive and culvert is installed. A written soil report by a licensed geotechnical engineer is required prior to or at the time of this inspection.

(d) Foundation Wall, Pre-Pour Concrete: Prior to the pouring of concrete and after forms are set in place.

(e) Backfill: Before backfilling and after footing drain tile and gravel has been placed, window wells are in place and secured and walls have been dampproofed and waterproofed.

(f) Water Connection:

(1) Commercial:

A. Fire Suppression System Piping: After installation of the fire suppression system service pipe that leads to the building, before the trench is backfilled.

B. Through Wall B-Box/Shutoff Piping: After the through wall B-box/shutoff is installed (to verify assembly is "keyable" by Village staff and the location on the utility easement is accurate), prior to the final water service final inspection.

(2) Residential: After connecting water service piping, before water service trench backfill and after installation of water service pipe on the house side of the curb cock.

(g) Underground/Slab, Plumbing: After under slab plumbing is installed and before concrete floor slabs are poured. Please note that this inspection includes a "Stack Test" of all installed underground piping.

(h) Underground/Slab, Electric: After under slab electric is installed and before concrete floor slabs are poured.

(i) Pre-Pour Concrete Slab (Flatwork), Stone Base: Before any concrete flatwork; floor slabs, garage slab, driveway, service walks, walkways, patios, stoops, steps, etc., are poured and after insulation and vapor barriers and applicable reinforcing are installed and, if applicable, all underground mechanical inspections have been approved.

(j) Pre-Pour Asphalt Slab, Stone Base: Before any asphalt driveway is poured and, if applicable, all underground mechanical inspections have been approved.

(k) Permeable Paver Stone Sub-Base:

(1) After area is excavated, but prior to the placement of any additional materials (i.e., fabric, open graded stone, leveling stone cap stone, pavers bricks, etc.)

(2) After fabric, open graded stone, leveling stone cap stone are installed, but prior to the placing of pavers bricks.

(l) Dry Well (Residential Onsite Stormwater Storage): After area is excavated, and all applicable underground piping is in place; but prior to the placement of any additional materials (i.e., fabric, open graded stone, leveling stone cap stone, top soil, etc.)

(m) Rough Plumbing: Before any insulation, vapor barrier or wall finish is applied and after the rough plumbing is completed.

(n) Rough Electrical: Before any insulation, vapor barrier or wall finish is applied and after the rough electrical is completed.

(o) Rough Mechanical (HVAC): Before any insulation, vapor barrier or wall finish is applied and after the rough mechanical is completed.

(p) Rough Framing: Before any insulation, vapor barrier or wall finish is applied and after the framing is completed and all wall utilities are installed and inspected.

(q) Commercial Type I Hood: Drop light test, prior to wrapping of duct insulation.

(r) Fireplace Firebox/Flue: Before a flue is constructed on any given floor.

(s) Fireplace, Pre-Fabricated: Prior to drywalling any surface surrounding the fireplace.

(t) Electrical Service: After electrical service (exterior pedestal, service panel, associated piping, grounding equipment, etc.) is roughed in, prior to the time the electrical service is to be energized or re-energized by the applicable utility company.

(u) Insulation: Before any interior wall finish is applied and after insulation, vapor barriers and firestopping are completed.

(v) Above Ceiling Inspection: Prior to placement of suspended, or permanent, ceiling panels/materials.

(w) Well/Septic:

(1) Septic systems: Before any backfilling and after the septic tank and seepage system have been installed.

(2) Well locations: Before drilling well.

(3) Well final: After well pump is installed and connected.

(x) Final inspections:

(1) Final plumbing.

(2) Final electric.

(3) Final mechanical (HVAC).

(4) Final water service (Village meter reader install).

(5) Final right-of-way.

(6) Final engineering. (The submittal of an As-Built Topographical Survey shall be required to be submitted prior to the scheduling of this inspection.)

(7) (Residential) construction final: After all work is completed and building is ready for issuance of a "Certificate of Occupancy" or "Certificate of Completion". (If a Temporary Certificate of Occupancy (TCO) is issued, TCO fees apply.)

(8) (Commercial) construction final, vanilla box: After all work is completed and building and/or unit/space is ready for issuance of a "Certificate of Completion".

(9) (Commercial) construction final to stock and train: After all work is completed and building is ready for issuance of a Temporary Certificate of Occupancy (TCO).

(10) (Commercial) construction final to open for business: After all work is completed and building is ready for issuance of a "Certificate of Occupancy" or "Certificate of Completion". (If a Temporary Certificate of Occupancy (TCO) is issued, TCO fees apply.)

(11) (Commercial) sign final: After all work is completed and prior to the sign being put into service.

(12) Commercial and residential: If applicable, all other jurisdiction's final inspection approval is required (e.g., Tri-State Fire Protection District, Pleasantview Fire Protection District, DuPage County Health Department, Applicable Sanitary System, etc.).

(13) The Village reserves the right to add any inspections as it seems fit.

3. No work shall be done which will cover or obstruct from view construction work, scheduled for inspection, which is not yet approved by the building official or his/her designee.

4. As each state or item of construction is approved, the approval shall be recorded by the inspector at the Village offices, thereby authorizing the continuation of the project.

(C) Approved Inspection Agencies: The building official or his/her designee may accept reports of approved inspection agencies at his discretion.

(D) Plant Inspection: When required by the provisions of this chapter or by the approved rules of the building official or his/her designee materials or assemblies shall be inspected at the point of manufacture or fabrication in accordance with subsection (E) of this section.

(E) Inspection Reports: All inspection reports shall be in writing and shall be certified by the approved inspection agency or its authorized agent when expert inspection services are accepted. An identifying label or stamp permanently affixed to the product indicating that factory inspection has been made shall be accepted in lieu of the aforesaid inspection report in writing if the intent or meaning of such identifying label or stamp is properly substantiated.

(F) Final Inspection: Upon completion of the building or structure, and before issuance of the Certificate of Use and Occupancy, a final inspection shall be made. All violations of the approved plans and permit shall be noted and the holder of the permit notified of the discrepancies.

(G) Commercial Re-Occupancy: Upon the change of occupancy of any given commercial property, the owner and/or tenant shall be responsible to obtain a re-occupancy permit and furthermore obtain an approved re-occupancy inspection prior to the opening of the business. If applicable, all other jurisdictions' final inspection approval is required (e.g., Tri-State Fire Protection District, Pleasantview Fire Protection District, DuPage County Health Department, applicable sanitary system, etc.).

(H) Right Of Entry: In the discharge of duties, the building official or his/her designee shall have the authority to enter at any reasonable hour any building, structure or premises in the jurisdiction to enforce the provisions of this chapter. (Ord. 19-0-10, 6-24-2019)

4-2-13: STOP WORK ORDERS:

(A) Authority: The building official or his/her designee shall have the power to order all work stopped on construction, installation, alteration or repair of buildings and structures, and parts and appurtenances thereof, regulated by this chapter, in the Village when such work is being done in violation of any provision relating thereto, or in violation of the zoning provisions of this Code, or when such work is being performed in an unsafe and dangerous manner. Work shall not be resumed after the issuance of such an order except on the written permission of the Director; provided, that if the stop work order is an oral one, it shall be followed by a written stop order within twenty four (24) hours. Such written stop work order may be served by any police officer or by the building official or his/her designee.

(B) Unlawful Continuance: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than seventy five dollars (\$75.00) or more than seven hundred fifty dollars (\$750.00). (Ord. 19-O-10, 6-24-2019)

4-2-14: CERTIFICATES AND INSPECTIONS:

(A) Occupancy Permits: No structures or additions thereto constructed, moved, remodeled or reconstructed after the effective date of this chapter shall be occupied and used for any purpose, and no land vacant on the effective date of this chapter shall be used for any other use, unless an occupancy permit shall first have been obtained from the Village certifying that the proposed use or occupancy complies with all provisions of this chapter.

1. Application For Occupancy Permit: Every application for a building permit shall be deemed an application for an occupancy permit. Every application for an occupancy permit for a new or changed use of land or structures where no building permit is required shall be filed with the building official or his/her designee and be in such a form and contain such information as the building official or his/her designee shall provide by general rule.

2. Application For Occupancy Permits For Industrial Uses: All applications for an occupancy permit for any use to be located in an Industrial District, whether or not a building permit is required, shall be accompanied by sufficient information to enable the building official or his/her designee to determine that all the applicable performance standards of title 9, chapter 9 of this Code can and will be complied with at all times.

3. Issuance Of Occupancy Permit: No occupancy permit for a structure or addition thereto constructed, moved, remodeled or reconstructed after the effective date of this chapter shall be issued until such work has been completed, including off street parking spaces and site landscaping, and the premises having been inspected by the building official or his/her designee and determined to be in full compliance with the plans and

specifications upon which the issuance of the building permit was based. No occupancy permit for a new use of any structure or land shall be issued until the premises have been inspected by the building official or his/her designee and determined to be in full and complete compliance with all the applicable regulations for the zoning district in which it is located. Pending the issuance of a permanent occupancy permit, a temporary occupancy permit may be issued to be valid for a period of time not to exceed six (6) months from its date of issuance pending the completion of any addition or partial occupancy of the premises. A cash bond in an amount equal to one hundred fifty percent (150%) of the Village's estimate of completion costs and an executed cash deposit agreement in a form acceptable to the building official or his/her designee shall be submitted with any application for a temporary occupancy certificate. A Temporary Occupancy Certificate shall contain such conditions as the Village deems appropriate. In the event that any construction or building as to which a temporary occupancy permit has been issued has not been fully completed so as to comply with all applicable Village ordinances at the end of the six (6) month period, the building official or his/her designee may cause said premises to be vacated and to remain vacated until full compliance with all applicable ordinances of the Village has been obtained. An occupancy permit shall be issued or written notice shall be given to the applicant stating the reasons why a certificate cannot be issued within twenty one (21) days after the receipt of an application therefor; or after the building official or his/her designee is notified in writing that the structure or premises are ready for occupancy. All Certificate of Occupancy permits shall be executed by the building official and the Village Administrator; or in the absence of the building official and/or the Village Administrator, his/her designee(s).

The building official or his/her designee shall be free to note any deficiency in the plans, specifications or construction of improvements for which building permits are required hereunder, irrespective of whether plans and/or specifications have been approved and regardless of whether building or occupancy permits have been issued.

(B) Yielding Of Occupancy By Contractor: A contractor shall not yield occupancy of a building to the owner or tenant, nor shall the builder or owner yield occupancy to a tenant until a certificate of occupancy has been issued by the Village and posted on the premises.

(C) Reinspection: If a building or any part thereof fails approval in its final inspection, the violations of this chapter or other ordinances shall be corrected by the contractor and notice given the Village that the building is ready for reinspection. When the Village finds that the building is substantially completed after one or more reinspections, it shall issue a Certificate of Occupancy.

(D) Supplemental Requirements: Notwithstanding any provision contained within this chapter to the contrary, the following improvements and supplemental documentation shall be required prior to the issuance of a final occupancy certificate:

1. All fees and charges due and payable to the Village shall be remitted.
2. The water meter and raceway (conduit) for the remote water meter reader shall be installed and in service.

3. The buffalo box (water shutoff) shall be adjusted to grade, accessible and operable.
4. All public and private sidewalks on and adjacent to the lot shall be completed.
5. Driveway and approach paving shall be completed.
6. Any replacement or repair to damaged curbs and gutters, streets, sidewalk, driveway and street lighting shall be completed.
7. All final grading within the lot and parkway areas shall be completed and a final topographical survey shall be submitted indicating that all grading does not deviate by more than plus or minus two inches ($\pm 2"$) from the approved subdivision or site grading plan and that all overland stormwater flow conforms with said grading plan.
8. All required yards and parkway areas shall be sodded or seeded established, i.e., substantial germination.
9. Trees of an approved species shall be planted in all parkway areas. The species, number and spacing of such trees shall be in conformance with the regulations set forth in the Willowbrook subdivision regulations.
10. All other required landscaping shall be installed.
11. Address numbers shall be affixed to the building, and if applicable to all dwelling units.
12. A final plot plan shall be submitted showing all final as built dimensions of all buildings and/or structures erected.
13. The submittal of a cash deposit to guarantee the completion of all unfinished items contingent upon the building official or his/her designee's determination as to the appropriate amount of said deposit and the signing of the required cash deposit agreement form by the applicant. (Ord. 19-0-10, 6-24-2019)

4-2-15: EMERGENCY MEASURES:

(A) Vacating Structures: When, in the opinion of the building official or his/her designee, there is actual and immediate danger of failure or collapse of a building or structure or any part thereof, which would endanger life or when any structure or part of a structure has fallen and life is endangered by the occupation of the building or structure, the building official or his/her designee, is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The building official shall cause to be posted at each entrance to such building a notice reading as follows:

This structure is unsafe and its use or occupancy has been prohibited by the Village Building Official.

It shall be unlawful for any person to enter such building or structure except for the purpose of making the required repairs or demolishing the same.

(B) Temporary Safeguards: When, in the opinion of the building official or his/her designee, there is actual and immediate danger of collapse or failure of a building or structure or any part thereof, which would endanger life, the building official or his/her designee shall cause the necessary work to be done to render such building or structure or part thereof temporarily safe, whether or not the legal procedure herein described has been instituted.

(C) Hazardous Building Or Construction Condition: A building or structure or part or appurtenance thereof or a construction condition found to be hazardous to life, limb or health, upon order of the building official or his/her designee, shall be corrected, repaired, replaced, vacated, demolished, or removed and the premises or work restored to, or put in, a safe condition within a reasonable period of time as may be appropriate in each case, when such a finding has been made in writing, written notice of the findings and order has been given the owner or his agent or the contractor, and except in emergencies, a hearing on the order has been held before the building official or his/her designee.

(D) Closing Streets: When necessary for the public safety, the building official or his/her designee may temporarily close sidewalks, streets, buildings and structures, and places adjacent to such unsafe structures and prohibit the same from being used. (Ord. 19-O-10, 6-24-2019)

4-2-16: OFF STREET PARKING:

All off street parking and loading facilities, including driveways and pavement, shall be constructed in accordance with all provisions contained in the Zoning Ordinance of the Village and such provisions are hereby incorporated into this chapter by reference, as if fully set forth herein. (Ord. 19-O-10, 6-24-2019)

4-2-17: LOAD AND CAPACITY PLACARD:

The owner shall post and maintain a sign, placard or plate in approved form after making application to do so, showing safe loading for each floor, and safe capacity in persons at entrances of each room, floor, or building built, or used for any of the following purposes: school, church, public assembly, residential institution; a place for harboring or housing persons for correctional, medical, other care or treatment, storing materials, dance or recreation hall and establishments serving drinks or food. (Ord. 19-O-10, 6-24-2019)

4-2-18: HOURS FOR CONSTRUCTION WORK:

It shall be unlawful to engage in or conduct any activity in the construction of any building or structure, or the laying of any pavement, including, but not limited to, the making of an excavation, clearing of surface lane, and loading or unloading material, equipment or supplies, anywhere in the Village except between the hours of seven o'clock (7:00) A.M. and

seven thirty o'clock (7:30) P.M. on weekdays, other than Saturday, and except between the hours of seven o'clock (7:00) A.M. and five thirty o'clock (5:30) P.M. on Saturday.

It shall be unlawful to engage in any such work or activity on a Sunday unless a permit for such Sunday work has first been granted. Application for such approval shall be made in writing to the building official or his/her designee and shall state the name of the applicant, his business address, the location of the proposed work, and the reason for seeking an approval to do such work on Sunday, as well as the estimated time of the proposed operations. No such special approval shall be issued excepting where the public welfare will be enhanced by such issuance, or will be harmed by failure to perform the work at the time indicated. Nothing in this section shall be construed to prevent any work necessary to prevent injury to persons or property at any time. (Ord. 19-O-10, 6-24-2019)

4-2-19: RULES ADOPTED BY REFERENCE:

The several published books or pamphlets described and referred to in this title and the regulations and standards contained therein or in the described portions thereof, modified in some cases as noted herein, are hereby adopted by reference and made a part of this title. In the event of a conflict between this title or any part thereof and such regulations and standards adopted by reference, the provisions of this title shall govern and prevail. (Ord. 19-O-10, 6-24-2019)

4-2-20: VIOLATION PENALTIES:

Any person who shall violate a provision of this chapter or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or directive of the building official or his/her designee or of a permit or certificate issued under the provisions of this chapter shall, if found guilty, be fined in accordance with title 1, chapter 4 of this Code. (Ord. 19-O-10, 6-24-2019)

4-2-21: BUILDING CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein governing the construction of all nonresidential and multifamily structures, that certain code known as the ~~2018~~ 2024 International Building Code, first printing, as prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been for a period of more than thirty (30) days prior to the effective date hereof and now is on file in the Office of the Village Clerk.

(B) Amendments To Code: The following additions, insertions, deletions and changes are hereby made to the ~~2018~~ 2024 International Building Code, first printing:

1. Section 101.1 Title: Amend by deleting the words and punctuation marks, "(Name of Jurisdiction)" and insert the words "The Village of Willowbrook".

2. Section 101.4.3 Plumbing. Delete in its entirety and in lieu thereof substitute with the following new Section 101.4.3:

Section 101.4.3 Plumbing. All references within this code to the International Plumbing Code shall be changed to read, "The Illinois Plumbing Code, prepared and published by the State of Illinois Department of Public Health along with Section 405.3, Section 607.2, Chapter 11 and Chapter 12 of the ~~2018-2024~~²⁰²⁴ International Plumbing Code". The provisions of the Illinois Plumbing Code prepared and published by the State of Illinois Department of Public Health, along with Section 405.3, Section 607.2, Chapter 11 and Chapter 12 of the ~~2018-2024~~²⁰²⁴ International Plumbing Code shall apply to the installation, alteration, repair and replacement of plumbing systems, including appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

3. Section 105.2 Work exempt from permit. Delete in its entirety.

4. Section 105.5 Expirations. Delete in its entirety and in lieu thereof substitute with the following new Section 105.5:

Section 105.5 Extension and expiration of building permit. If after a building permit required by this chapter shall have been granted, if the operation called for by such permit shall not have been started within six (6) months after the date thereof, such permit shall be void and no operation thereunder shall be begun. Where, under authority of a permit, work has begun and has not been prosecuted for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy certificate or certificate of completion issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The new permit shall only be issued for a period in which to expediently complete the work originally permitted. The completion period of the extended permit shall be approved by the Building Official or his/her designee. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained. Failure to complete the originally permitted work prior to the expiration date of the extended permit shall be a violation of this code and punishable in accordance with the provisions of title 1, chapter 4 of the Village Code.

5. Section 109.1 Payment of fees. Delete this section in its entirety and in lieu thereof substitute the following new Section 109.1:

Section 109.1 Payment of fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

6. Section 110.3 Required inspections. Amend by adding the following new Sections 110.3.12 and 110.3.13:

Section 110.3.12 Masonry firebox inspection. Masonry firebox inspections shall be made before flue/chimney installation and after the fireplace firebox and smoke shelf is completed.

Section 110.3.13 Stocking and training inspection. Stocking and training inspection shall be made after the completion of construction and prior to the installation of any stock, merchandise and non-permanent/movable tenant fixtures and furniture, and prior to the allowance of tenant employee occupancy and/or training.

7. Section 113 BOARD OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 113:

Section 113 BOARD OF APPEALS.

Section 113.1 Application for Appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section 113.2 Membership of the Board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section 113.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section 113.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section 113.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section 113.6 Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. ~~The board shall not have authority to waive requirements of this code or interpret the administration of this code.~~ ~~The board shall have no authority to waive requirements of this code.~~

Section 113.7 Board review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

8. Section 114.4 Violation penalties: Delete this section in its entirety and in lieu thereof substitute the following new Section 114.4:

Section 114.4 Violation penalties. Any person who shall violate a provision of this section or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or a directive of the Building Official or his/her designee, or of a permit or certificate issued under the provisions of this section shall be punishable by a fine of not less than seventy five dollars (\$75.00) nor more than seven hundred fifty dollars (\$750.00). Each day that a violation continues shall be deemed a separate offense.

9. Section 115.3 Unlawful continuance: Delete this section in its entirety and in lieu thereof substitute the following new Section 115.3:

Section 115.3 Unlawful continuance: Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the Building Official or his/her designee to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code.

10. Section 202 DEFINITIONS. Amend by adding the following new Definition:

FIRE OFFICIAL/FIRE MARSHAL. The Building Official or his/her designee.

~~11. Section 306.3 Factory Industrial F-2 Low Hazard Occupancy. Amend by adding the following new Section 306.3.1:~~

~~Section 306.3.1 Classification to F-1 Moderate Hazard Occupancy. The designation "Group F-2" shall be deleted. All factory industrial uses and occupancies classified as Group F-2 shall be classified as Group F-1. Requirements of this code specified for factory industrial Group F-1 shall apply to all factory industrial use and occupancies.~~

~~1211.~~ Section 307.1 High-hazard Group H. Amend by adding the following at the end of the section:

"The maximum allowed quantity of Ethylene Oxide in any building and/or structure, regardless of control areas or occupancy classification, shall not exceed 100 lbs. Legal conforming or legal non-conforming uses in effect as of July 10, 2019, which are lawfully permitted to store and/or use Ethylene Oxide in any process, shall not increase the amount of Ethylene Oxide currently utilized and/or stored within the premises. Provided, however, if any such storage and/or use is reduced, after July 10, 2019, then the reduced storage amounts and/or usage amounts shall apply as the then current maximum permissible amount. In the event the storage and/or use of Ethylene Oxide voluntarily ceases for a period in excess of 180 days at any time after July 10, 2019, then the storage and/or use of Ethylene Oxide shall thereafter be prohibited. Outside storage of Ethylene Oxide shall at all times be prohibited."

~~13. Section 310.1 Residential Group R. Amend by adding the following new Section 310.1.1:~~

~~Section 310.1.1 Special Requirements for Use Groups R-1 & R-2: All structures wherein a separate dwelling unit or apartment is located on the second floor or above shall have exterior and load bearing walls constructed of solid masonry. All interior walls thereof separating dwelling units, corridor walls and stairway enclosures, shall be of masonry construction having at least a two (2) hour fire resistance rating. All floors thereof shall be constructed of the precast concrete type, poured concrete type, or similar noncombustible construction having at least a two (2) hour fire resistance rating.~~

~~14. Section 311.3 Low hazard storage, Group S-2. Amend by adding the following new Section 311.3.1:~~

~~Section 311.3.1 Classification to Moderate hazard storage, Group S-1. The designation "Group S-2" shall be deleted. All storage uses and occupancies classified as Group S-2 shall be classified as Group S-1. Requirements of this code for storage Group S-1 shall apply to all storage use and occupancies.~~

~~15. Section 406.3.2.1 Dwelling Unit Separation. Delete in its entirety and in lieu thereof substitute with the following new Section 406.3.2.1:~~

~~Section 406.3.2.1 Dwelling Unit Separation. The private garage shall be separated from the dwelling unit and its attic area by a minimum 1-hour rated fire barrier, horizontal or vertical, using minimum five eighths inch (5/8") Type X or equivalent gypsum wallboard. Door openings between a private garage and a dwelling unit shall be equipped with a fire door in compliance with Section 715. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.~~

~~16. Section 406.3.2.2 Ducts. Delete in its entirety and in lieu thereof substitute with the following new Section 406.3.2.2.~~

Commented [DW8]: Discuss with Village
The same concern reflected with the elimination of Group
F-2 occupancies apply.

~~Section 406.3.2.2 Ducts. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be encapsulated in construction equal to that of those walls and ceilings, and shall have no openings into the garage.~~

Commented [DW9]: Discuss with Village
It is unclear if the intent is to construct a 1-hour rated chase.

~~17. Section 415.6.1 Combustible dusts, grain processing and storage: Delete this section in its entirety and in lieu thereof substitute the following new Section 415.6.1:~~

~~Section 415.6.1 Combustible dusts, grain processing and storage: Buildings intended for the purpose of housing combustible dusts or grain are prohibited.~~

~~18. Section 503 GENERAL BUILDING HEIGHT AND AREA LIMITATIONS. Amend by adding the following new sections:~~

~~Section 503.1.5.1 Type VB Construction. Buildings of Type VB construction shall be limited to Townhouse and One- and Two-Family Dwellings as regulated by the International Residential Code.~~

~~Section 503.1.5.2 Type VA Construction. Buildings of Type VA construction shall be prohibited in all Occupancy and Use classifications of Group I, Institutional and Group R-4.~~

~~19. Section 507.3 Non-sprinklered, one story. Delete in its entirety.~~

~~20. Section 508.3 Non-separated occupancies: Delete this section in its entirety. (All mixed occupancies shall be separated in accordance with Table 508.4)~~

~~21. 508.4.4 Separation. Revise the Section by adding the following to the end of the first sentence:~~

~~... "However, in all cases Group B Occupancies within fully sprinklered buildings shall be separated from Group F-1 and S-1 Occupancies with 1-hour Fire Barriers. Group B Occupancies within non-sprinklered buildings shall be separated from Group F-1 and S-1 Occupancies with 2-hour Fire Barriers.~~

~~22. 508.4.4 Separation. Add the following exceptions.~~

~~Exception 1. Buildings of Type VA construction shall be separated from other occupancies by a fire barrier complying with Section 707 or horizontal assemblies constructed in accordance with Section 711 or both so as to separate adjacent occupancies.~~

~~Exception 2. Group H-1, H-2, H-3, H-4 and H-5 shall be separated from all other occupancies in accordance with Table 508.4~~

~~23. Table 508.4. Add the footnote to the table.~~

~~1.~~

~~g. The 1-hour substitution for fire resistance rating in occupancies protected with an automatic fire sprinkler system shall not be permitted for buildings of Type VA construction.~~

~~—24. Table 601. Delete footnote b in its entirety and in lieu thereof substitute with the following new footnote b:~~

~~—b. Except in Group F-1, H, M, S-1, occupancies and all occupancies within buildings of Type VA construction, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire retardant treated wood members shall be allowed to be used for such unprotected members.~~

~~—25. Section 602.1 General. Amend by adding the following new sentence to the end of the paragraph:~~

~~—... "For use groups R-1 and R-2 construction see Section 310.1.1 as amended."~~

~~—26. Section 602.3 Type III. Delete in its entirety and in lieu thereof substitute with the following new Section 602.3:~~

~~—Section 602.3 Type III. Type III construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire retardant treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies with a 2-hour rating or less. Type III construction shall be permitted for Use Group R-3 structures only.~~

~~—27. Section 603.1 Allowable materials. Amend this section by deleting application number 13 in its entirety. (All blocking and backing shall be non-combustible or pressure impregnated fire retardant treated wood.)~~

~~—28. Section 703.2 Fire resistance ratings. Delete the first sentence in its entirety contained therein and in lieu thereof substitute with the following new sentence:~~

~~—"The fire resistance rating of building elements shall be determined in accordance with the test procedures set forth in ASTM E 119 and in accordance with Section 703.3."~~

~~—29. Section 703.3 Alternative methods for determining fire resistance. Delete in its entirety and in lieu thereof substitute with the following new Section 703.3:~~

~~—Section 703.3 Submittal documents. In addition to the permit submittal requirements specified in Section 106, copies of the system design from Underwriters Laboratories (UL) or other approved, independent testing agency shall be submitted to the Village, or be made a part of the construction plans submitted to the Village, for all required fire-resistance rated assemblies and firestop systems. Sections 721 and 722 shall only be used to verify compliance of the fire resistance rated assemblies when permitted in writing by the Building Official or his/her designee.~~

~~—30. Section 704 FIRE RESISTANCE RATING OF STRUCTURAL MEMBERS. Amend by adding the following new sections:~~

~~704.1.1. All lightweight and engineered wood floor/ceiling assemblies in Type VA construction shall require a UL fire resistance design or equivalent to achieve a one-hour fire resistance rating.~~

~~704.1.2. All lightweight and engineered wood roof ceiling assemblies in Type VA construction shall require a UL fire resistance design or equivalent to achieve a one-hour fire resistance rating.~~

~~31. Section 706.3 Materials. Delete in its entirety and in lieu thereof substitute with the following new Section 706.3 Materials:~~

~~Section 706.3 Materials. Fire walls shall be of any approved noncombustible materials.~~

~~Exceptions:~~

~~1. Buildings of type V construction.~~

~~2. Use Group R-3: Fire walls shall be constructed of minimum eight inch (8") concrete masonry units when separating all multiple single family attached dwellings in side-by-side construction.~~

~~32. Section 708.1 General. Delete Item 2 in its entirety and in lieu thereof substitute the following new Item 2:~~

~~2. Walls separating tenant spaces.~~

~~33. Section 708.1 General. Add the following exception at the end of the section:~~

~~"Exception: Group B tenants located in buildings used primarily for office uses may be separated from each other with walls designed as smoke partitions."~~

~~34. Section 708.3 Fire-resistance rating. Delete in its entirety and in lieu thereof substitute with the following new Section 708.3:~~

~~Section 708.3 Fire-resistance rating. Fire partitions shall have a fire-resistance rating of not less than 1 hour.~~

~~Exception: Walls and floors separating dwelling units or sleeping units in the same building shall be of masonry, poured concrete, precast concrete or similar non-combustible construction having at least a two (2) hour fire resistance rating.~~

~~35. 718.3 Draft stopping in floors shall be amended by adding exception 2.~~

~~Exception 2. Draft stopping materials shall be installed to subdivide floor/ceiling assemblies in all occupancies and buildings of Type VA construction.~~

~~36. 718.4 Draft stopping in Attics. Delete current exception and insert the following exception in lieu thereof.~~

~~Exception: Draft stopping materials shall be installed to subdivide attic spaces in all occupancies and buildings of Type VA construction.~~

~~37. Section 718.4. Draft stopping in Attics. Amend by adding the following new Section 718.4.2:~~

~~Section 718.4.2 Draft stopping of Overhangs and Soffits. Regardless of requirements elsewhere, overhangs, canopies, exterior soffits and similar structures shall be draft stopped in buildings of all use groups and construction types at intervals not exceeding twenty feet (20') horizontal spacing.~~

~~38. Section 721 PRESCRIPTIVE FIRE RESISTANCE. Delete in its entirety. Except when permitted in writing by the Building Official or his/her designee.~~

~~39. Section 722 CALCULATED FIRE RESISTANCE. Delete in its entirety. Except when permitted in writing by the Building Official or his/her designee.~~

~~4020. For amendments to Chapter 9 (Fire Protection and Life Safety Systems) see the Tri-State Fire Protection District adoption the 2024 International Fire Code, with amendments. Section 903.2.1 Group A. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.1:~~

~~Section 903.2.1 Group A. An automatic sprinkler system shall be provided throughout all buildings containing a Group A occupancy of 2,000 square feet or greater.~~

~~Exceptions:~~

~~1. Areas used exclusively as participant sport areas where the main floor areas located at the same level as the level of exit discharge of the main entrance and exit.~~

~~2. Only concession stands, retail areas, press boxes and other accessory use areas in Group A 5 with an area greater than 1,000 square feet shall be required to be provided with an automatic sprinkler system.~~

~~3. Where the Group A fire area is located on a floor other than a level of exit discharge serving such occupancies.~~

~~41. Section 903.2.1.1 Group A 1. Delete in its entirety.~~

~~42. Section 903.2.1.2 Group A 2. Delete in its entirety.~~

~~43. Section 903.2.1.3 Group A 3. Delete in its entirety.~~

~~44. Section 903.2.1.4 Group A 4. Delete in its entirety.~~

~~45. Section 903.2.1.5 Group A 5. Delete in its entirety.~~

~~46. Section 903.2.1.6 Assembly occupancies on roofs. Delete in its entirety.~~

~~47. Section 903.2.2 Ambulatory Care facilities. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.2:~~

~~Section 903.2.2 Group B. An automatic sprinkler system shall be provided throughout all buildings containing a Group B occupancy of 2,000 square feet or greater.~~

Commented [DW10]: Recommend deleting Exception 1, and modifying the language of Exception 2.

Discuss Exception 3. Not sure what is being accomplished

Commented [DW11]: Recommend changing to: 903.2.2 Group B. All buildings greater than 2,000 square feet with a Group B occupancy shall have an automatic sprinkler system in compliance with Section 903.3.1..

~~48. Section 903.2.3 Group E. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.3:~~

~~Section 903.2.3 Group E. An automatic sprinkler system shall be provided throughout all buildings containing a Group E occupancy.~~

~~49. Section 903.2.4 Group F-1. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.4:~~

~~Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy of 2,000 square feet or greater.~~

~~50. Section 903.2.4.1 Woodworking operations. Delete in its entirety.~~

~~51. Section 903.2.7 Group M. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.7:~~

~~Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy of 2,000 square feet or greater or where a Group M occupancy is used for the display and sale of upholstered furniture.~~

~~52. Section 903.2.9 Group S-1. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.9:~~

~~Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy of 2,000 square feet or greater or in buildings with repair garages servicing vehicles parked in basements.~~

~~53. Section 903.2.9.1 Repair garages. Delete in its entirety.~~

~~54. Section 903.2.9.2 Bulk storage of tires. Delete in its entirety.~~

~~55. Section 903.2.10 Group S-2. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.10:~~

~~Section 903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-2 occupancy of 2,000 square feet or greater or where enclosed parking garages are located beneath other groups.~~

~~56. Section 903.2.10.1 Commercial parking garages. Delete in its entirety.~~

~~57. Section 903.3 Installation requirements. Delete in its entirety and in lieu thereof substitute with the following new Section 903.3:~~

~~Section 903.3 Installation requirements. Automatic sprinkler systems shall be designed and installed in accordance with Sections 903.3.1 through 903.3.8 and other chapters of this code as applicable, except that flexible sprinkler pipe or tubing shall be prohibited.~~

~~58. Section 903.3.1.1.1 Exempt locations. Delete Subsection 3 of Section 903.3.1.1.1 in its entirety and in lieu thereof substitute with the following new Subsection 3:~~

Commented [DW12]: Recommend changing to: 903.2.4. Group F-1. All buildings greater than 2,000 square feet with a Group B occupancy shall have an automatic sprinkler system in compliance with Section 903.3.1..

ALSO - recommend keeping Group F-2 occupancies and adding language to requiring automatic sprinkler systems.

Commented [DW13]: Discuss with Village

Flexible sprinkler drops are covered within NFPA 13 and material sheets for the product to establish an equivalency to rigid piping.

If the Villages wishes to prohibit the use of flex piping for expansion of existing systems, this should be as a new section under Sec. 903.3.8.3.

~~3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling assemblies or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours when approved in writing by the Building Official or his/her designee.~~

~~59. Section 903.3.1.1.1 Exempt locations. Delete Subsection 4 of Section 903.3.1.1.1 in its entirety and in lieu thereof substitute with the following new Subsection 4:~~

~~4. In rooms or areas that are of noncombustible construction with wholly non-combustible contents when approved in writing by the Building Official or his/her designee.~~

~~60. 903.3.1.1.1 Exempt locations. Add the following sentence to end of the paragraph:~~

~~Exempt locations shall not be applicable to buildings of Type VA construction.~~

~~61. 903.3.1.1.2 Bathrooms is amended by adding the following new subsection:~~

~~903.3.1.1.2.1. In Group R occupancies in buildings of Type VA construction sprinklers shall be required in all bathrooms regardless of dimensional size or area.~~

~~62. Section 907.2 Where required — new buildings and structures. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.2:~~

~~Section 907.2 Where required — new buildings and structures. Where required all fire alarm systems shall be installed in accordance with the following:~~

~~a) An approved manual, automatic, or manual and automatic fire alarm system shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23. In all cases an approved automatic fire alarm system shall be provided in buildings of Use Groups A, B, E, I, R-1, R-2, R-3 (where over and under or side-by-side construction is employed), and all buildings of mixed use, regardless of size, and all other principal buildings and individual uses over one (1) story in height or over two thousand (2,000) square feet in area, except Use Group R-4. Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.~~

~~b) An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke detectors, 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 actuate a smoke detector.~~

~~c) Where automatic sprinklers provide protection to an area, approved flow and tamper switches interconnected to the fire alarm system shall be provided.~~

~~63. Section 907.2.8.2 Automatic smoke detection system. Amend by adding the following new Sections 907.2.8.2.1 and 907.2.8.2.2:~~

Commented [DW14]: Discuss with Village

Commented [DW15]: Discuss with Village and SAFEbuilt team

~~Section 907.2.8.2.1. Heat detectors. Heat detectors shall be provided on every floor and in all generally unattended areas such as storage rooms, garages, elevator shafts, laundry rooms, furnace rooms, basements, attic spaces, crawl spaces and similar areas. At least one (1) shall be provided in each living unit near the bedrooms. "Rate of Rise" type heat detectors are not permitted in this application.~~

~~Section 907.2.8.2.2. Detectors within Means of Egress components. Smoke detectors shall be provided in all stairways, exit access hallways and exit passageways.~~

~~64. Section 907.6.4 Zones. Delete in its entirety, (exclusive of Subsections 907.6.4.1 through 907.6.4.2) and in lieu thereof substitute the following new Section 907.6.4:~~

~~Section 907.6.4 Zones. Each floor shall be zoned separately, and a zone shall not exceed twenty thousand (20,000) square feet in area. The length of any zone shall not exceed two hundred feet (200') feet in any direction, unless otherwise approved by the fire code official.~~

~~65. Section 907.6.6 Monitoring. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.6.6:~~

~~Section 907.6.6 Monitoring. All fire protection systems shall transmit all alarm signals to the dispatch center serving Tri-State Fire Protection District, which may be routed through any central receiving station. All required fire alarm systems shall transmit alarm, trouble, and where specially permitted, supervisory signals (specifically where only allowed by the fire official) to a 24-hour monitoring company or Addison Consolidated Dispatch Center. Installation shall be in accordance with NFPA 72.~~

~~Exception: Supervisory service is not required for:~~

~~1. Single and multiple station smoke alarms required by Section 907.2.10.~~

~~2. Smoke detectors in Group I-3 occupancies.~~

~~3. Automatic sprinkler systems in one and two family dwellings.~~

~~66. Section 912.1 Installation. Amend by adding the following new sentences to the end of the paragraph:~~

~~... "In all cases a Fire Department Connection with a five inch (5") Storz inlet shall be provided. Where the existing fire department connection is not a 5" Storz type connection, it must be replaced with a 5" inch Storz connection. Any new installation of the Storz connection shall be between 36" and 48" above finished grade. Any installation where the connection is between 36" and 48" or more above grade, a 30 degree elbow shall be required. Where the existing connection is less than 36" above grade, a 30 degree elbow shall not be allowed. Tri-State Fire Protection District reserves the right to grant variances on any fire department connection."~~

~~67. Section 912.2.1 Visible location. Amend by adding the following new sentence to the end of the paragraph:~~

Commented [DW16]: Discuss with Village and SAFEbuilt team

~~Access routes shall be so arranged that fire department apparatus may respond from all points of the building to adjacent fire hydrants along routes not to exceed two hundred fifty feet (250') from the most remote point of the building perimeter to the closest fire hydrant.~~

~~68. Table 1006.2.1 Spaces with one exit or exit access doorway. The values in Column 2 (Maximum Occupant Load of Space) shall be modified so that Groups A, E, M, B, F and U shall have a value of twenty (20) people of 2,000 Sq. Ft. in gross area.~~

~~69. Table 1006.3.3(1) Stories with one exit or access to one exit for R-2 occupancies. Delete in its entirety and in lieu thereof substitute with the following new Table 1006.3.3(1).~~

~~TABLE 1006.3.3(1)~~

~~STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES~~

| STORY | OCCUPANCY | MAXIMUM NUMBER OF DWELLING UNITS | MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (FT) |
|---|----------------------|---|---|
| Basement, First, second or third story above grade plane | R-2a,b | 4 dwelling units | 50 |
| Fourth story above grade plane and higher | NP | NA | NA |

~~For SI: 1 foot = 304.8 mm.~~

~~NP = Not Permitted~~

~~a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1030~~

~~b. This table is used for R-2 occupancies consisting of dwelling units. For R-2 occupancies consisting of sleeping units, use Table 1006.3.3(2)~~

~~70. Table 1006.3.3(2) Stories with one exit or access to one exit for other occupancies. Delete in its entirety and in lieu thereof substitute with the following new Table 1006.3.3(2).~~

~~TABLE 1006.3.3(2)~~

~~STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES~~

| |
|-------------|
| |
|-------------|

Commented [DW17]: Discuss with Village

Table 1006.2.1 common path of egress travel distance and not building area.

Recommend to leave this table unmodified, and remove amendment.

STORY

OCCUPANCY

MAXIMUM OCCUPANT LOAD PER STORY

MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (FT)

First story above or below grade plane

A, Bb, E, Fb, M, U

20

75

H-2, H-3

3

25

H-4, H-5, I, R-1, R-2a,c

10

75

Sb,d

20

100

Second story above grade plane

B, F, M, Sd

20

75

Third story above grade plane and higher

NP

NA

NA

-

For SI: 1 foot = 304.8 mm.

NP = Not Permitted

~~— a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1030.~~

~~— b. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum exit access travel distance of 100 feet.~~

~~— c. This table is used for R-2 occupancies consisting of sleeping units. For R-2 occupancies consisting of dwelling units, use Table 1006.3.3(1).~~

~~— d. The length of exit access travel distance in a Group S-2 open parking garage shall not be more than 100 feet.~~

~~— 71. Section 1008.3.1 General. Delete in its entirety and in lieu thereof substitute with the following new Section 1008.3.1:~~

~~— Section 1008.3.1 General. In the event of power failure, an emergency electrical system shall automatically illuminate the following areas:~~

~~— 1. Exit access corridors, passageways and aisles in rooms and spaces which require two or more means of egress, have an occupant load greater than three (3) occupants or which have an area greater than three hundred (300) square feet.~~

~~— 2. Exit access corridors, passageways and aisles in buildings which require two or more means of egress, have an occupant load greater than three (3) occupants or which have an area greater than three hundred (300) square feet.~~

~~— 3. Exterior egress components at other than the level of exit discharge until exit discharge is accomplished for buildings which require two or more means of egress, have an occupant load greater than three (3) occupants or which have an area greater than three hundred (300) square feet.~~

~~— 4. Interior exit discharge elements, as permitted in Section 1023.1, in buildings which require two or more means of egress, have an occupant load greater than three (3) occupants or which have an area greater than three hundred (300) square feet.~~

~~— 5. The portion of the exterior exit discharge immediately adjacent to exit discharge doorways in buildings which require two or more means of egress, have an occupant load greater than three (3) occupants or which have an area greater than three hundred (300) square feet.~~

~~— 6. All bathrooms.~~

~~— 7. All interior electrical panel boards, switchgear and meter enclosures.~~

~~— 8. Fire sprinkler main assembly.~~

~~— 7243. TABLE 1020.1 CORRIDOR FIRE RESISTANCE RATING is amended by amending row number four ("R") of the table to read as follows:~~

Commented [DW18]: Discuss with Village

It is not obvious how these amendment are mean to regulate the means of egress system

Commented [DW19]: Discuss with Village and SAFEbuilt team

It would appear that the intent is require that ALL areas of the building means of egress system are to have emergency egress illumination in the event of a power failure.

The language needs to cleaned up to address the Village's intent

~~— "R, Greater than 10, Not Permitted, 1c,d "For amendments to Chapter 10 (Means of Egress) see the Tri-State Fire Protection District adoption the 2024 International Fire Code, with amendments.~~

~~— 73. Section 1030.1 General. Delete Exception 4 in its entirety.~~

~~7444.~~ Section 1301.1.1 Criteria. Delete in its entirety and in lieu thereof substitute with the following new Section 1301.1.1:

Section 1301.1.1 Criteria. Buildings shall be designed and constructed in accordance with the current edition of the Illinois Energy Conservation Code ~~—Current Version. Proof of such compliance shall be shown through the submittal of fully completed "COMcheck" compliance certificates. <<http://energycode.pnl.gov/COMcheckWeb/>>.~~

~~7546.~~ Section 1807.1.3 Rubble stone foundation walls. Delete this section in its entirety.

~~7647.~~ Section 1807.1.4 Permanent wood foundation systems. Delete this section in its entirety.

~~— 77. Section 1807.1.6.3 Masonry foundation walls. Delete this section in its entirety, unless otherwise approved in writing by the Building Official or his/her designee.~~

~~— 78. Table 1809.7 PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT FRAME CONSTRUCTION. Delete all reference to Column Three entitled "THICKNESS OF FOOTING" in its entirety and in lieu thereof the following column shall be substituted:~~

~~-~~

~~Thickness of Footing~~

~~The minimum thickness of footings shall be ten inches (10").~~

~~-~~

~~— 79. Section 1809.8 Plain concrete footings. Delete this section in its entirety and in lieu thereof substitute the following new Section 1809.8:~~

~~— Section 1809.8 Plain concrete footings: In plain concrete the minimum footing size shall be twenty inches (20") in width and ten inches (10") in depth. For foundation walls wider than ten inches (10"), footings shall be a minimum ten inches (10") in depth and shall be no less than ten inches (10") wider than the width of the foundation wall.~~

~~— 80. Section 1809.9 Masonry unit footings. Delete this section in its entirety.~~

~~— 81. Section 1809.12 Timber footings. Delete this section in its entirety.~~

~~— 82. SECTION 2303 MINIMUM STANDARDS AND QUALITY is amended by adding the following subsection 2303.4.6.1.~~

~~— 2303.4.6.1. Metal plate connected wood trusses specified for use in Type VA construction shall be designed and manufactured with additional reinforcement at each~~

Commented [DW20]: Discuss with Village

Recommend deleting this amendment

Commented [DW21]: Discuss with Village

Recommend deleting this amendment

Commented [DW22]: Discuss with Village

Recommend deleting this amendment, unless Village consulted with a local structural engineer to establish sizes

Commented [DW23]: Discuss with Village

Recommend deleting this amendment

~~metal plate connection point consisting of a minimum 3/8-inch wood structural panel applied and fastened across all connected truss members. Field modifications shall not be permitted.~~

~~—Exception: Field modifications, based on the written concurrence and approval of an Illinois Licensed and registered design professional, are permitted only with prior written approval from the Building Official or his/her designee.~~

~~—83. [Chapter 27 ELECTRICAL SYSTEMS. Delete in its entirety. (All electrical systems shall comply with the National Electrical Code as adopted and amended by Title 4 of the Village Code.)]~~

~~—84. [Chapter 28 MECHANICAL SYSTEMS. Delete in its entirety. (All mechanical systems shall comply with the International Mechanical Code and the International Fuel Gas Code as adopted and amended by Title 4 of the Village Code.)]~~

~~8548.~~ Chapter 29 PLUMBING SYSTEMS. Delete in its entirety. (All plumbing systems shall comply with the Illinois Plumbing Code and the International Plumbing Code as adopted and amended by Title 4 of the Village Code.)

~~8649.~~ Section 3001.3 Referenced Standards. Delete this section in its entirety and in lieu thereof substitute the following new Section 3001.3:

Section 3001.3 Referenced Standards. Referenced Standards to be as stringent and comply with current Illinois Elevator Safety Act (225 ILCS 312) and its Rules. For private residential conveyance application, the Act does not apply, however, the IBC code shall for new installation, permits, final acceptance. For applications not covered by the Illinois Elevator Safety Act, those conveyance applications shall be covered under the IBC code by the AHJ for new installation, permits, final acceptance, periodic inspections and testing, unsafe conditions, power to seal equipment, put conveyance out of service, and certificate compliance as well as owner/agent responsibility for contractor, maintenance, accident/injury responsibility.

Referenced Standards from (225 ILCS 312): Safety Code for Elevators and Escalators (ASME A17.1), the Standard for the Qualification of Elevator Inspectors (ASME QE1-1), the Automated People Mover Standards (ASCE 21), the Safety Requirements for Personnel Hoists and Employee Elevators (ANSI A10.4), and the Safety Standard for Platform Lifts and Stairway Chairlifts (ASME A18.1).

~~8750.~~ Section 3002.4 Elevator Car to Accommodate Ambulance Stretcher. Delete this section in its entirety and in lieu thereof substitute the following new Section 3002.4:

Section 3002.4 Elevator Car to Accommodate Ambulance Stretcher. In all buildings at least one elevator shall be provided for fire department emergency access to all floors in building. Such elevator car shall be of such size and arrangement to accommodate a minimum twenty-four inch (24") by eighty-four inch (84") ambulance stretcher in the horizontal open position and shall be identified by the International Symbol for emergency medical services (Star of Life). Said symbol shall not be less than three inches (3") high by

Commented [DW24]: Discuss with Village

Recommend deleting this amendment, unless Village consulted with a local structural engineer

Commented [DW25]: Discuss with Village

Recommend deleting this amendment, and leave Chpt 27 as written

Commented [DW26]: Discuss with Village

Recommend deleting this amendment, and leave Chpt 28 as written

three inches (3") wide and shall be placed inside on both sides of the main lobby hoistway door frame.

~~8851.~~ [F] Section 3003.2 Fire Fighters' Emergency Operation. Delete this section in its entirety and in lieu thereof substitute the following new [F] Section 3003.2:

[F] Section 3003.2 Fire Fighters' Emergency Operation. Elevators shall be provided with Phase 1 emergency recall operation and Phase 2 emergency in car operation in accordance with ASME A17.1 and NFPA72.

~~89. Section 3004.1 General. Delete this section in its entirety and in lieu thereof substitute the following new Section 3004.1:~~

~~Section 3004.1 General. Escalators, moving walks, conveyors, personnel hoists, material hoists, miscellaneous hoisting and elevating equipment shall comply with the provisions of this section.~~

~~90. Section 3004.3 Conveyors. Delete this section in its entirety and in lieu thereof substitute the following new Section 3004.3:~~

~~Section 3004.3 Conveyors. Conveyors and related equipment shall comply, be inspected and tested in accordance with ASME B20.1 listed in Chapter 35 and Section 3004.4 regarding personal hoists.~~

~~91. Section 3005.1 Access. Delete this section in its entirety and in lieu thereof substitute the following new Section 3005.1:~~

~~Section 3005.1 Access. An approved means of access shall be provided to elevator machine rooms and overhead machinery equipment spaces. This means of access is not to be used as a passage way through the machine room to any other areas of the building or roof.~~

~~9252.~~ CHAPTER 30 ELEVATORS AND CONVEYANCE SYSTEMS. Amend by adding the following new SECTION 3009 CERTIFICATE OF COMPLIANCE:

SECTION 3009 CERTIFICATE OF COMPLIANCE

Section 3009.1 Equipment Operation. The operation of all equipment governed by the provisions of this chapter and hereafter installed, relocated or altered shall be unlawful by persons other than the installer until such equipment has been inspected and tested as herein required and a final certificate of compliance has been issued by the Authority having Jurisdiction.

Section 3009.2 Posting Certificates of Compliance. The owner or lessee shall post the current-issued certificate of compliance in a conspicuous place inside the conveyance. A copy of the current issued certificate is acceptable. Please refer to Illinois Elevator Safety Act.

~~9353.~~ Section 3303.1 Construction documents. Delete this section in its entirety and in lieu thereof substitute the following new Section 3303.1:

Commented [DW27]: Discuss with Village

Recommend deleting these amendments

Commented [DW28]: Discuss with Village.

The code does cover this issue in Sec. 1016.2 (egress through an intervening space).

For clarity, 2021 IBC Sec. 1016.2 #5 could be amended to specifically state electrical and elevator machine rooms

Section 3303.1 Construction documents. Construction documents and a schedule for demolition must be submitted. A description and location of the building to be demolished, along with the proposed time and date of the demolition, must be submitted to the Building Official or his/her designee as well as to the proper fire protection district and county officials for approval. No work shall be done until such construction documents or schedule, or both, are approved.

~~9454~~. Section 3303.1 Construction documents. Amend by adding the following new Section 3303.1.1:

Section 3303.1.1 Contractor bonds and insurance. The contractor must supply a twenty thousand-dollar (\$20,000.00) wrecking bond in a form acceptable to the Building Official or his/her designee. Also, a valid certificate of insurance stating the proper types and amounts of insurance and a ten thousand-dollar (\$10,000.00) license bond from the contractor performing the work must be submitted in a form acceptable to the Building Official or his/her designee.

~~9555~~. Section 3303.6 Utility connections. Amend by adding the following new Section 3303.6.1:

Section 3303.6.1. Abandonment of wells: If a well exists on the property which is to be abandoned, it must be capped and sealed in accordance with the rules and regulations published by the Illinois department of mines and minerals. In addition, said well shall be sealed under the supervision of the DuPage County health department.

~~9656~~. Section 3303.6 Utility connections. Amend by adding the following new Section 3303.6.2:

Section 3303.6.2. Underground Storage Facilities: All underground storage facilities that are to be abandoned shall be excavated and removed from the site. A permit issued by the State Fire Marshal must accompany an application for the removal of all underground storage tanks. (Ord. 19-0-10, 6-24-2019; amd. Ord. 20-0-06, 3-9-2020)

4-2-22: MECHANICAL CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the ~~2018-2024~~ International Mechanical Code, second printing, prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been on file for a period of more than thirty (30) days prior to the adoption of this section and now is on file in the Office of the Village Clerk.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the ~~2018-2024~~ International Mechanical Code, second printing:

1. Section 101.1 Title. Delete in its entirety and in lieu thereof substitute with the following new Section 101.1:

Section 101.1 Title. These regulations shall be known as the Mechanical Code of the Village of Willowbrook, and shall be cited as such. It is referred to herein as "this code".

2. Section 106.4.3. Expiration. Delete this section in its entirety and in lieu thereof substitute the following new section:

Section 106.4.3 Expiration: Every permit issued by the Building Official or his/her designee under the provisions of this Code shall expire by limitation and become null and void if the work authorized by such permit shall not have been started within six (6) months after the date of issuance of said permit. Where, under authority of a permit, work has begun and has not been processed for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy permit issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained.

3. Section 106.4.4 Extensions: Amend by deleting the last sentence of the section.

4. Section 106.5 Fees. ~~Delete this section in its entirety and in lieu thereof substitute~~ Amend to add the following new Section 106.5:

Section 106.5 Fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

~~5. Section 108.4 Violation penalties: Delete this section in its entirety.~~

~~6. Section 108.5 Stop work orders: Delete the last sentence of this section and in lieu thereof substitute the following new sentence:~~

~~"... Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the building official to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code."~~

~~75. Section 109-113 MEANS OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 109-113:~~

Section ~~109-113~~ BOARD OF APPEALS.

Section ~~109-113.1~~ Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Commented [DW29]: These sections in 2021 IBC were shifted to Sec. 115.

Section ~~109.2~~113.1 Membership of the Board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section ~~109.3~~113.2 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section ~~109.4~~113.3 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section ~~109.5~~113.4 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section ~~109.6~~113.4 Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section ~~109.7~~113.5 Board review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

6. Section 114: Board of Appeals. Delete this section in its entirety.

7. Section 115.4 Violation penalties: Delete this section in its entirety.

8. Section 116.4 Failure to comply. Amend to read as follows:

Section 116.4 Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the building official to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code."

~~8. Section 301.7 Electrical. Delete this section in its entirety and in lieu thereof substitute the following new Section 301.7:~~

~~Section 301.7 Electrical. Electrical wiring controls and connections to equipment and appliances regulated by this code shall be in accordance with the 2017 National Electrical Code as Amended.~~

9. Section ~~301.8~~301.11 Plumbing connections. Delete this section in its entirety and in lieu thereof substitute the following new Section 301.8:

Section 301.8 Plumbing connections. Potable water supply and building drainage system connections to equipment and appliances regulated by this code shall be in accordance with the most current Illinois Plumbing Code as Amended.

~~10. Section 506.3.11 Grease duct enclosure. Delete the exception in its entirety.~~

~~11. SECTION 901 GENERAL. Amend by adding the following new Section 901.5:~~

~~Section 901.5 Unvented appliances. A 110-volt carbon monoxide detector with battery back-up power shall be installed in all rooms with unvented gas-fired appliances such as, but not limited to, room heaters, log heaters and fire places.~~

(Ord. 19-O-10, 6-24-2019)

4-2-23: RESERVED:

(Ord. 19-O-10, 6-24-2019)

4-2-24: PLUMBING CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the Illinois State Plumbing Code, prepared and published by the Illinois Department of Public Health (IDPH), together with the additions, insertions, deletions and changes hereinafter set forth, three (3) copies of which have been on file for a period of more than thirty (30) days prior to the adoption of this section and are now on file in the Office of the Village Clerk.

The design and installation of plumbing systems, including sanitary and storm drainage, sanitary facilities, water supplies and stormwater and sewage disposal in buildings shall comply with the requirements of this section and accepted engineering practices as defined in the Illinois State Plumbing Code.

Commented [DW30]: Discuss with Village

Section 301.7 in both the 2018 IMC and the 2021 IMC relates to listing and labeling of mechanical equipment.

It is recommended to leave this section in place as written in the IMC

The correct section for electrical connections is 2018 IMC Sec. 301.10 / 2021 IMC Sec. 301.10 already references the NEC. No need to amend the code

Commented [DW31]: Discuss with Village

2018 and 2021 IMC Sec. 506.3.11 the associate subsections regulate grease exhaust ducts penetrating various elements in the building. Due to the fire hazards associated with grease ducts entering concealed spaces, it HIGHLY recommended not to delete this section.

Commented [DW32]: Discuss with Village

CO detectors are already required by 2021 IBC Sec. 915 and 2021 IRC Sec. R315.

Recommend deletion of this amendment. If retained, the amendment needs a rewrite for clarity.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the Illinois Plumbing Code:

1. Amendment of Section 890.630 by adding a new section "j" to read as follows:

"j) A safe pan will be required for water heaters, furnaces and clothes washers located above living/occupied areas."

2. Deletion of Section 890.1130 c) Backflow in its entirety and in lieu thereof substitute and insert the following:

"c) Backflow. A Reduced Pressure Zone (R.P.Z.) will be required on all new commercial buildings on both the fire and domestic water service."

3. Amend Section 890.1340 Determination of Sizes for Drainage Systems by deleting paragraph (b)(2) in its entirety and in lieu thereof substitute with the following new Paragraph (b)(2):

"(b)(2) Any dwelling containing any floor (including basement floors) below grade at foundation is required to have an overhead sewer. All fixtures located below grade shall drain to an ejector pit with pump. Approval of the Building Official or his/her designee shall be required for any other type of installation. Pressure-building drains shall be sized in accordance with the ejector pump manufacturer's recommendation, but shall not be less than 2 inches in diameter."

4. In section 890.1380 Storm Water Drainage within a Building. Amend by adding a new section "a" to the end of the paragraph:

"a) Sizing of piping and appurtenances related to building storm drainage shall conform to building standards as referenced in the Village of Willowbrook Ordinance, 4-2-24(C)8, Storm Drainage."

5. Section 890.1410 Materials amend by adding the following new subsection "c":

"c) Refer to Village of Willowbrook chart indicating approved materials for piping."

6. Delete Section 890 Appendix A - Table A: Approved Building Drainage/Vent Pipe in its entirety and in lieu thereof substitute the Village of Willowbrook chart indicating approved materials for piping.

7. Delete Section 890 Appendix A - Table A: Approved Materials For Water Service Pipe in its entirety and in lieu thereof substitute the Village of Willowbrook chart indicating approved materials for piping and add:

Minimum 5'-6" of cover on all outside water mains/services is required.

8. Delete Section 890. Appendix A - Table A: Approved Materials For Water Distribution Pipe in its entirety and in lieu thereof substitute the Village of Willowbrook chart indicating approved materials for piping.

Commented [DW33]: Revise definition of "new building" Clean up definition and apply to new construction only vs. significant renovations to an existing bldg

9. (Appendix A/Page-53) Section 890 Appendix A - TABLE P: Demand at Individual Water Outlets. Amend by adding the following new subsections "a & b":

a) All Fixtures shall bear the "WaterSense" product label, as specified by the USEPA.

b) All new and/or replacement lawn irrigation sprinkler systems shall be equipped with a "WaterSense" labeled irrigation controller and be in compliance with Section 2.5(g) of the Illinois Plumbing License Law [225 ILCS 320].

(C) Additional Standards And Specifications:

1. Approved Materials For Piping Chart:

VILLAGE OF WILLOWBROOK APPROVED MATERIALS FOR PIPING

Material Type

Residential

Commercial

Material Type

Residential

Commercial

Underground waste and vent:

Cast iron soil

X

X

PVC schedule 40 (no cell core)

X

X

Aboveground waste and vent:

Cast iron (lead joints/repair only)

- X
- X

Cast iron no hub

- X
- X

Galvanized pipe

- X
- X

PVC schedule 40 (no cell core)

- X
- X

Copper type M, L, and K

- X
- X

Aboveground storm:

Cast iron (lead joints/repair only)

- X
- X

Cast iron no hub

X

X

Galvanized pipe

X

X

PVC schedule 40 (no cell core)

X

X

Copper type M, L, and K

X

X

Underground water:

Ductile iron Class 52

X

X

Copper type K

X

X

Aboveground water:

Copper type L

X

X

Copper type K

X

X

Revised 08/06/2015

2. Separate Water Tap For Fire Sprinkler System: Where a public water supply is used to serve as the water supply for a private automatic fire sprinkler system, a separate and independent water tap onto the water main shall be utilized. The water tap for the fire sprinkler system shall be made a minimum of ten feet (10') horizontally from the domestic water tap, and shall extend to an exterior valve vault prior to continuing into the building. The valve vault shall be made fully accessible and contain an approved valve which will shut off the water supply to the fire sprinkler system if required. The incoming water service for the fire sprinkler system shall enter the building separate from the domestic water service, and shall be provided with all necessary backflow prevention and valve assemblies as are required for a fire sprinkler system water supply.

3. Fireflow Meter: All fire suppression systems installed subsequent to the date of the adoption of this chapter shall be equipped with a fireflow meter of a size and type approved by the Village of Willowbrook Water Department.

4. Lawn Sprinkling Systems: No pipe, sprinkler head, valve or any other portion of any lawn sprinkling system shall be located in or upon any public right-of-way or in any easement.

5. Sprinkler Heads In Public Rights-Of-Way: Notwithstanding any provision contained in the previous paragraph to the contrary, sprinkler heads, and pipes leading thereto, may be located in or upon public rights-of-way or easements, provided that all portions thereof shall be located not more than six feet (6') from the property line, the final location being subject to the approval of the building official or his/her designee; and further provided that the owner of the sprinkler system shall first have executed a written release in favor of the Village in the form acceptable to the building official or his/her designee.

6. Car Wash Installations: All newly constructed or remodeled car wash installations shall be equipped with a water recycling system, unless otherwise permitted by the DuPage County Department of Environmental Concerns and approved by the building official or his/her designee.

7. Plumbing Permit Required: In the case of improvements on residential, commercial or industrial buildings or property, the issuance of a plumbing permit is required to make the following repairs, replacements or changes:

- (a) Conversion from galvanized water piping to copper.
- (b) Addition of any plumbing fixture.
- (c) Replacement of boiler or water heater.
- (d) Installation or conversion to overhead sewer system or antiflood system.
- (e) Underground lawn sprinkling systems.
- (f) Plumbing changes or additions to any part of the waste, vent, water piping or sewer system.

8. Storm Drainage: The provisions of this chapter shall govern the materials, design, construction and installation of storm drainage.

(a) Where Required: All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal. For one- and two-family dwellings, multi family-buildings, commercial/industrial buildings, and where approved, stormwater is permitted to discharge onto flat areas, such as streets or lawns, provided that the stormwater flows away from the building.

(b) Prohibited Drainage: Stormwater shall not be drained into sewers intended for sewage only.

(c) Tests: The conductors and the building storm drain shall be tested in accordance at the discretion of the inspector.

(d) Change In Size: The size of a drainage pipe shall not be reduced in the direction of flow.

(e) Fittings And Connections: All connections and changes in direction of the storm drainage system shall be made with approved drainage-type fittings in accordance with the Illinois Plumbing Code. The fittings shall not obstruct or retard flow in the system.

(f) Roof Design: Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.

(g) Cleanouts Required: Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of this Code for sanitary drainage pipe cleanouts.

Exception: Subsurface drainage system.

(h) Backwater Valves: Storm drainage systems shall be provided with backwater valves.

(1) Storm Backflow: Where the flood level rims are below the elevation of the manhole cover of the next upstream manhole in the public storm sewer, such fixtures shall be protected by a backwater valve installed in the building storm drain.

(2) Material: All bearing parts of backwater valves shall be of corrosion-resistant material. Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

(3) Seal: Backwater valves shall be so constructed as to provide a mechanical seal against backflow.

(4) Diameter: Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.

(5) Location: Backwater valves shall be installed so that access is provided to the working parts for service and repair.

(i) Materials: See Village of Willowbrook chart indicating approved materials for piping (subsection (C)1 of this section).

(j) Traps:

(1) Main Trap: Leaders and storm drains connected to a combined sewer shall be trapped. Individual stormwater traps shall be installed on the stormwater drain branch serving each conductor, or a single trap shall be installed in the main storm drain just before its connection with the combined building sewer or the public sewer.

(2) Material: Stormwater traps shall be of the same material as the piping system to which they are attached.

(3) Size: Traps for individual conductors shall be the same size as the horizontal drain to which they are connected.

(4) Cleanout: An accessible cleanout shall be installed on the building side of the trap.

(k) Roof Drains:

(1) Strainers: Roof drains shall have strainers extending not less than four inches (4") above the surface of the roof immediately adjacent to the roof drain. Strainers shall have an available inlet area, above roof level, of not less than one and one-half (1 1/2) times the area of the conductor or leader to which the drain is connected.

(2) Flat Decks: Roof drain strainers for use on sun decks, parking decks and similar areas that are normally serviced and maintained shall comply with subsection (C)8(k)(1) of this section or shall be of the flat-surface type, installed level with the deck, with an available inlet area not less than two (2) times the area of the conductor or leader to which the drain is connected.

(3) Roof Drain Flashings: The connection between roofs and roof drains which pass through the roof and into the interior of the building shall be made water-tight by the use of approved flashing material.

(l) Size Of Conductors, Leaders And Storm Drains:

(1) General: The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on the 100-year hourly rainfall rate of three inches (3") per hour.

(2) Vertical Conductors And Leaders: Vertical conductors and leaders shall be sized for the maximum projected roof area, in accordance with tables 1106.2(1) and 1106.2(2) of this subsection.

TABLE 1106.2(1)
SIZE OF CIRCULAR VERTICAL CONDUCTORS AND LEADERS

| Diameter Of Leader (Inches) 1 |
|--|
| Horizontally Projected Roof Area (Square Feet) |
| Rainfall Rate (Inches Per Hour) |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |

| Diameter Of Leader (Inches) 1 |
|--|
| Horizontally Projected Roof Area (Square Feet) |
| Rainfall Rate (Inches Per Hour) |
| 1 |

2

3

4

5

6

7

8

9

10

11

12

2

2,880

1,440

960

720

575

480

410

360

320

290

260

240

3

8,800

4,400

2,930

2,200
1,760
1,470
1,260
1,100
980
880
800
730
4
18,400
9,200
6,130
4,600
3,680
3,070
2,630
2,300
2,045
1,840
1,675
1,530
5
34,600
17,300
11,530
8,650
6,920

5,765

4,945

4,325

3,845

3,460

3,145

2,880

6

54,000

27,000

17,995

13,500

10,800

9,000

7,715

6,750

6,000

5,400

4,910

4,500

8

116,000

58,000

38,660

29,000

23,200

19,315

16,570

14,500
12,890
11,600
10,545
9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

Note:

1. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes, provided the cross-sectional shape fully encloses a circle of the diameter indicated in this table. For rectangular leaders, see table 1106.2(2) of this subsection. Interpolation is permitted for pipe sizes that fall between those listed in this table.

TABLE 1106.2(2)
SIZE OF RECTANGULAR VERTICAL CONDUCTORS AND LEADERS

Dimensions Of Common Leader Sizes Width x Length (Inches) 1

Horizontally Projected Roof Area (Square Feet)

Rainfall Rate (Inches Per Hour)

1
2
3
4
5
6
7
8
9
10
11
12

Dimensions Of Common Leader Sizes Width x Length (Inches) 1

Horizontally Projected Roof Area (Square Feet)

Rainfall Rate (Inches Per Hour)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13/4 x 21/2
- 3,410
- 1,700
- 1,130
- 850
- 680
- 560
- 480
- 420
- 370
- 340
- 310
- 280
- 2 x 3

5,540

2,770

1,840

1,380

1,100

920

790

690

610

550

500

460

$23/4 \times 41/4$

12,830

6,410

4,270

3,200

2,560

2,130

1,830

1,600

1,420

1,280

1,160

1,060

3 x 4

13,210

6,600

4,400
3,300
2,640
2,200
1,880
1,650
1,460
1,320
1,200
1,100
3 1/2 x 4
15,900
7,950
5,300
3,970
3,180
2,650
2,270
1,980
1,760
1,590
1,440
1,320
3 1/2 x 5
21,310
10,650
7,100
5,320

4,260

3,550

3,040

2,660

2,360

2,130

1,930

1,770

$33/4 \times 43/4$

21,960

10,980

7,320

5,490

4,390

3,660

3,130

2,740

2,440

2,190

1,990

1,830

$33/4 \times 51/4$

25,520

12,760

8,500

6,380

5,100

4,250

3,640
3,190
2,830
2,550
2,320
2,120
31/2 x 6
27,790
13,890
9,260
6,940
5,550
4,630
3,970
3,470
3,080
2,770
2,520
2,310
4 x 6
32,980
16,490
10,990
8,240
6,590
5,490
4,710
4,120

3,660

3,290

2,990

2,740

51/2 x 51/2

44,300

22,150

14,760

11,070

8,860

7,380

6,320

5,530

4,920

4,430

4,020

3,690

71/2 x 71/2

100,500

50,250

33,500

25,120

20,100

16,750

14,350

12,560

11,160

10,050

9,130
8,370

Note:

1. Sizes indicated are nominal width x length of the opening for rectangular piping.
- (3) Building Storm Drains And Sewers: The size of the building storm drain, building storm sewer and their horizontal branches having a slope of one-half (1/2) unit or less vertical in twelve (12) units horizontal (4-percent slope) shall be based on the maximum projected roof area in accordance with table 1106.3 of this subsection. The minimum slope of horizontal branches shall be one-eighth (1/8) unit vertical in twelve (12) units horizontal (1-percent slope) unless otherwise approved.

TABLE 1106.3
SIZE OF HORIZONTAL STORM DRAINAGE PIPING

| Size Of Horizontal Piping (Inches) |
|--|
| Horizontally Projected Roof Area (Square Feet) |
| Rainfall Rate (Inches Per Hour) |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| Size Of Horizontal Piping (Inches) |
| Horizontally Projected Roof Area (Square Feet) |
| Rainfall Rate (Inches Per Hour) |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |

6

1/8 unit vertical in 12 units horizontal (1% slope):

3

3,288

1,644

1,096

822

657

548

4

7,520

3,760

2,506

1,800

1,504

1,253

5

13,360

6,680

4,453

3,340

2,672

2,227

6

21,400

10,700

7,133

5,350

4,280

3,566

8

46,000

23,000

15,330

11,500

9,200

7,600

10

82,800

41,400

27,600

20,700

16,580

13,800

12

133,200

66,600

44,400

33,300

26,650

22,200

15

218,000

109,000

72,800

59,500

47,600

39,650

1/4 unit vertical in 12 units horizontal (2% slope):

3

4,640

2,320

1,546

1,160

928

773

4

10,600

5,300

3,533

2,650

2,120

1,766

5

18,880

9,440

6,293

4,720

3,776

3,146

6

30,200

15,100

10,066

7,550
6,040
5,033
8
65,200
32,600
21,733
16,300
13,040
10,866
10
116,800
58,400
38,950
29,200
23,350
19,450
12
188,000
94,000
62,600
47,000
37,600
31,350
15
336,000
168,000
112,000

84,000

67,250

56,000

1/2 unit vertical in 12 units horizontal (4% slope):

3

6,576

3,288

2,295

1,644

1,310

1,096

4

15,040

7,520

5,010

3,760

3,010

2,500

5

26,720

13,360

8,900

6,680

5,320

4,450

6

42,800

21,400

13,700

10,700

8,580

7,140

8

92,000

46,000

30,650

23,000

18,400

15,320

10

171,600

85,800

55,200

41,400

33,150

27,600

12

266,400

133,200

88,800

66,600

53,200

44,400

15

476,000

238,000

158,800
119,000
95,300
79,250

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m2.

(4) Vertical Walls: In sizing roof drains and storm drainage piping, one-half (1/2) of the area of any vertical wall that diverts rainwater to the roof shall be added to the projected roof area for inclusion in calculating the required size of vertical conductors, leaders and horizontal storm drainage piping.

(5) Parapet Wall Scupper Location: Parapet wall roof drainage scupper and overflow scupper locations shall comply with the requirements of the International Building Code.

(6) Size Of Roof Gutters: The size of semicircular gutters shall be based on the maximum projected roof area in accordance with table 1106.6 of this subsection.

TABLE 1106.6
SIZE OF SEMICIRCULAR ROOF GUTTERS

Diameter Of Gutters (Inches)
Horizontally Projected Roof Area (Square Feet)
Rainfall Rate (Inches Per Hour)

- 1
- 2
- 3
- 4
- 5
- 6

Diameter Of Gutters (Inches)
Horizontally Projected Roof Area (Square Feet)
Rainfall Rate (Inches Per Hour)

- 1
- 2

3

4

5

6

1/16 unit vertical in 12 units horizontal (0.5% slope):

3

680

340

226

170

136

113

4

1,440

720

480

360

288

240

5

2,500

1,250

834

625

500

416

6

3,840

1,920

1,280

960

768

640

7

5,520

2,760

1,840

1,380

1,100

918

8

7,960

3,980

2,655

1,990

1,590

1,325

10

14,400

7,200

4,800

3,600

2,880

2,400

1/8 unit vertical in 12 units horizontal (1% slope):

3

960

480

320

240

192

160

4

2,040

1,020

681

510

408

340

5

3,520

1,760

1,172

880

704

587

6

5,440

2,720

1,815

1,360

1,085

905

7

7,800

3,900

2,600

1,950

1,560

1,300

8

11,200

5,600

3,740

2,800

2,240

1,870

10

20,400

10,200

6,800

5,100

4,080

3,400

1/4 unit vertical in 12 units horizontal (2% slope):

3

1,360

680

454

340

272

226

4
2,880
1,440
960
720
576
480
5
5,000
2,500
1,668
1,250
1,000
834
6
7,680
3,840
2,560
1,920
1,536
1,280
7
11,040
5,520
3,860
2,760
2,205
1,840

8

15,920

7,960

5,310

3,980

3,180

2,655

10

28,800

14,400

9,600

7,200

5,750

4,800

1/2 unit vertical in 12 units horizontal (4% slope):

3

1,920

960

640

480

384

320

4

4,080

2,040

1,360

1,020

816

680

5

7,080

3,540

2,360

1,770

1,415

1,180

6

11,080

5,540

3,695

2,770

2,220

1,850

7

15,600

7,800

5,200

3,900

3,120

2,600

8

22,400

11,200

7,460

5,600

4,480

3,730
10
40,000
20,000
13,330
10,000
8,000
6,660

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m².

(m) Secondary (Emergency) Roof Drains:

(1) Secondary Drainage Required: Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

(2) Separate Systems Required: Secondary roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location that would normally be observed by the building occupants or maintenance personnel.

(3) Sizing Of Secondary Drains: Secondary (emergency) roof drain systems shall be sized in accordance with subsection (C)8(l) of this section based on the rainfall rate for which the primary system is sized in tables 1106.2(1), 1106.2(2), 1106.3 and 1106.6 of this subsection (C). Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by subsection (C)8(f) of this section. Scuppers shall not have an opening dimension of less than four inches (4"). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

(n) Values For Continuous Flow; Equivalent Roof Area: Where there is a continuous or semicontinuous discharge into the building storm drain or building storm sewer, such as from a pump, ejector, air conditioning plant or similar device, each gallon per minute of such discharge shall be computed as being equivalent to ninety six (96) square feet of roof area, based on a rainfall rate of one inch (1") per hour.

(o) Subsoil Drains: Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the approved materials for piping in accordance with subsection (C)1 of this section. Such drains shall not be less than four inches (4") in diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located backwater valve. Subsoil drains shall discharge to a trapped area

drain, sump, dry well or approved location above ground. The subsoil sump shall not be required to have either a gas-tight cover or a vent. The sump and pumping system shall comply with subsection (C)8(q) of this section.

(p) Building Subdrains: Building subdrains located below the public sewer level shall discharge into a sump or receiving tank, the contents of which shall be automatically lifted and discharged into the drainage system as required for building sumps. The sump and pumping equipment shall comply with subsection (C)8(q) of this section.

(q) Sumps And Pumping Systems: The sump pump, pit and discharge piping shall conform to the following subsections.

(1) Pump Capacity And Head: The sump pump shall be of a capacity and head appropriate to anticipated use requirements.

(2) Sump Pit: The sump pit shall not be less than eighteen inches (18") in diameter and twenty four inches (24") deep, unless otherwise approved. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast-iron, concrete or other approved material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

(3) Electrical: Electrical service outlets, when required, shall meet the requirements of NFPA 70.

(4) Piping: Discharge piping shall comply with the approved materials chart at subsection (C)1 of this section and shall include a gate valve and a full flow check valve. Pipe and fittings shall be the same size as, or larger than, pump discharge tapping.

Exception: In one- and two-family dwellings, only a check valve shall be required, located on the discharge piping from the pump or ejector.

9. Work Without Benefit Of A Permit: When work requiring a permit has been started prior to the issuance of such permit, the permit fee shall be double the amount of the standard permit fee. However, in no instance shall the fee for a permit issued under these circumstances exceed the standard permit fee by an amount in excess of:

(a) Residential Districts: Two hundred fifty dollars (\$250.00).

(b) Nonresidential Districts: Seven hundred fifty dollars (\$750.00).

(D) Backflow Prevention:

1. Cross Connection Prohibited:

(a) Cross connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited except when and where, as approved by the Department of ~~Municipal Services~~ Community Development, suitable protective devices such as the reduced pressure zone

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backflow preventer or equal are installed, tested and maintained to ensure proper operation on a continuing basis.

(b) To protect the public water system from contamination due to contaminants through the water service connection into the public water system, a program of inspection and regulation shall be provided.

(c) The building official or his/her designee or his designated agent, who shall be either a licensed plumber or an approved cross connection control device inspector, shall inspect the plumbing in every building or premises served by the public water system as frequently as in his judgment may be necessary to ensure that such plumbing has been installed and maintained in such a manner as to prevent the possibility of pollution of the water supply of the Village. The building official or his/her designee shall notify or cause to be notified in writing the owner, or authorized agent of the owner of any such building or premises, to correct, within a reasonable time period set by the building official or his/her designee any plumbing installed or existing contrary to or in violation of this section, and which, in his judgment, may therefore permit the pollution of the Village water supply, or otherwise adversely affect the public health.

(d) The building official or his/her designee or his designated agent, who shall be either a licensed plumber or an approved cross connection control device inspector, shall have the right of entry into any building during reasonable hours for the purpose of making inspection of the plumbing systems installed in such building or premises; provided, that with respect to the inspection of any single-family dwelling, consent to such inspection shall first be obtained from a person of suitable age and discretion therein or in control thereof. Refusal to allow inspection of a specific dwelling may be cause for requiring installation of suitable backflow protection or to cause discontinuance of potable water service.

2. Definitions: For the purposes of this subsection, the following definitions shall apply:

AIR GAP: The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood-level rim of the receptacle.

APPROVED: Accepted by the Willowbrook Department of ~~Municipal Services~~ [Community Development](#) as meeting an applicable specification stated or cited in this section, or as suitable for the proposed use.

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AUXILIARY SUPPLY: Any water source or system other than the potable water supply that may be available in the building or premises.

BACK SIPHONAGE: The flowing back of used, contaminated or polluted water due to a negative gauge or subatmospheric pressure in that pipe.

BACKFLOW: The flow of any water, foreign liquids, gases or other substances back into the distribution pipes of the potable water system.

BACKFLOW PREVENTER: A device or means to prevent backflow.

CONTAMINATION: See definition of pollution.

CROSS CONNECTION: Any actual or potential connection between the potable water supply and a source of contamination or pollution.

DRAIN: Any approved pipe that carries waste water or waterborne wastes in a building drainage system.

FIXTURE-PLUMBING: Installed with receptacles, devices or appliances supplied with water or that receive or discharge liquids for liquid borne wastes.

FLOOD LEVEL RIM: The edge of the receptacle from which water flows.

HAZARD, HEALTH: Any conditions or devices which, in the judgment of the building official or his/her designee may create a danger to the health and well-being of the water consumer. An example of a health hazard is a structural defect in the water supply system, whether of location, design or construction, that regularly or occasionally may prevent satisfactory treatment of the water supply or cause it to be polluted from extraneous sources.

HAZARD, PLUMBING: Any arrangement of plumbing, including piping and fixtures, whereby a cross connection can be created.

HYDROPNEUMATIC TANK: A pressure vessel in which air pressure acts upon the surface of the water contained within the vessel pressurizing the water distribution piping connected to the vessel.

OUTLET: The open end of the water supply pipe through which the water is discharged into the plumbing fixture.

PLUMBING SYSTEM: Includes the water supply and distribution pipes, plumbing, fixtures and traps; soil, waste and vent pipes; building drains and building sewers, including their respective connections, devices and appurtenances within the property lines of the premises; and water treating or water using equipment.

POLLUTION: The presence of any foreign substance (organic, inorganic, radiological or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER: An assembly of differential valves and check valves including an automatically opened spillage port to the atmosphere designed to prevent backflow.

SURGE TANK: The receiving, nonpressure vessel forming part of the air gap separation between a potable and an auxiliary supply.

VACUUM: Any pressure less than that exerted by the atmosphere.

VACUUM BREAKER, NONPRESSURE TYPE: A vacuum breaker designed so as not to be subjected to static line pressure.

VACUUM BREAKER, PRESSURE TYPE: A vacuum breaker designed to operate under conditions of static line pressure.

WATER, NONPOTABLE: Water that is not safe for human consumption or that is of questionable potability.

WATER, POTABLE: Water free from contaminants in amounts sufficient to cause disease or harmful physiological effects. Its bacteriological and chemical quality shall conform to the requirements of the Federal and State drinking water regulations and to any regulations of the public health authority having local jurisdiction.

3. Technical Requirements:

(a) Design, Installation And Maintenance Of Potable Water Supply System; Connections Prohibited Unless Protected Against Backflow: A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply through cross connections or any other piping connections to the system. Connection to the potable water supply system is prohibited unless protected against backflow as set out herein. Examples of fixtures and equipment from which the potable water supply system must be protected include, but are not limited to:

(1) Bidets;

(2) Operating, dissection, embalming and mortuary tables or similar equipment. In such installation, the hose used for water supply shall terminate at least twelve inches (12") away from every point of the table or attachments;

(3) Pumps for nonpotable water, chemicals or other substances; priming connections may be made only through an air gap; and

(4) Building drainage, sewer or vent systems.

(b) Connections To Boilers: Potable water connections to boilers shall be made through an air gap or provided with an approved backflow preventer.

(c) Refrigerating Unit Condensers And Cooling Jackets: Except where potable water provided for a refrigerator condenser or cooling jacket is entirely outside the piping or tank containing a toxic refrigerant, the inlet connection shall be provided with an approved check valve. Also adjacent to and at the outlet side of the check valve, an approved pressure relief valve set to relieve at five (5) pounds per square inch (psi) above the maximum water pressure at the point of installation shall be provided if the refrigeration units contain more than twenty (20) pounds of refrigerants.

(d) Protection Against Backflow And Back Siphonage: The following regulations shall apply to protection against backflow and back siphonage:

(1) Water Outlets: A potable water system shall be protected against backflow and back siphonage by providing and maintaining at each outlet an air gap, as specified below, between the potable water outlet and the flood level rim of the fixture it supplies or

between the outlet and any other source of contamination, or an approved device or means to prevent backflow.

(2) Minimum Required Air Gap:

A. How Measured: The minimum required air gap shall be measured vertically from the lowest end of a potable water outlet to the flood level rim or line of the fixture or receptacle into which it discharges.

B. Size: The minimum required air gap shall be twice the effective opening of a potable water outlet unless the outlet is a distance less than three (3) times the effective opening away from a wall or similar vertical surface in which case the minimum required air gap shall be three (3) times the effective opening of the outlet. In no case shall the minimum required air gap be less than two inches (2").

(e) Certification Of Devices To Prevent Backflow Or Back Siphonage: Before any device for the prevention of backflow or back siphonage is installed, it shall have first been certified by the Foundation for Cross Connection Control Research of the University of Southern California and/or the National Sanitation Foundation. Devices, other than reduced pressure zone backflow preventers, installed in a building's potable water supply distribution system for protection against backflow shall be maintained in good working condition by the person or persons responsible for the maintenance of the system. Reduced pressure zone backflow preventers installed in a building's potable water supply distribution system shall be tested and/or maintained by State certified backflow preventer maintenance/tester as otherwise provided for in this code. The building official or his/her designee shall routinely inspect such devices, and if they are found to be defective or inoperative, shall require the replacement thereof.

(f) Installation Of Devices: The following shall apply to the installation of certain devices:

(1) Atmospheric vacuum breakers (nonpressure type) shall be installed with the critical level at least six inches (6") above the flood level rim of the fixture they serve and on the discharge side of the last control valve to the fixture. No shutoff valve or faucet shall be installed beyond the vacuum breaker. For closed equipment or vessels such as pressure sterilizers, the top of the vessel shall be treated as the flood level rim but a check valve shall be installed on the discharge side of the vacuum breaker.

(2) A reduced pressure principle type backflow preventer may be installed subject to full static pressure.

(3) Backflow and back siphonage preventing devices containing backflows to separate fixtures shall be accessibly located, preferably in the same room with the fixture they serve. Installation in utility or service spaces, provided they are readily accessible, is also permitted.

(g) Below Rim Supply:

(1) Where a potable water outlet terminates below the rim of a tank or vat and the tank or vat has an overflow of a diameter not less than two inches (2"), the overflow pipe shall be provided with an air gap as close to the tank as possible.

(2) The potable water outlet to the tank or vat shall terminate at a distance not less than one and one-half (1 1/2) times the height to which water can rise in the tank above the top of the overflow. This level shall be established at the maximum flow rate of the supply to the tank or vat and with all outlets except the air gap overflow outlet closed. The distance from the outlet to the high water level shall be measured from the critical point of the potable water supply outlet.

(h) Installation Of Approved Devices: Approved devices to protect against backflow and back siphonage shall be installed at all fixtures and equipment where backflow and/or back siphonage may occur and where a minimum air gap cannot be provided between the water outlet to the fixture or equipment and its flood level rim as follows:

(1) Where a water connection is not subject to back pressure, a vacuum breaker shall be installed on the discharge side of the last valve on the line serving the fixture or equipment.

(2) Where a potable water connection is made to a line, fixture, tank, vat, pump or other equipment with a hazard of backflow or back siphonage where the water connection is subject to back pressure, and an air gap cannot be installed, the building official and/or the Superintendent of Public Works or his/her designee(s) will require adequate protection, which may include the use of an approved reduced pressure principle backflow preventer.

(i) Booster Pumps: When a booster pump is used on a water pressure booster system and the possibility exists that a positive pressure of less than twenty (20) pounds per square inch (psi) may occur on the suction side of the pump, there shall be installed a low pressure cutoff on the booster pump to prevent the creation of a vacuum or negative pressure on the suction side of the pump, thus cutting off water to other outlets.

4. Backflow Prevention Devices Required: All construction requiring permits by the Department of ~~Municipal Services~~ Community Development which involve either construction revisions, alterations or additions to the potable water distribution system of the building or premises or upon a commercial unit reoccupancy, the installation of a backflow prevention device immediately downstream of the water meter shall be required. The following provisions shall apply to such installations of backflow devices:

(a) Issuance: Issuance of a permit.

(b) Installation: Backflow preventers shall be installed by a licensed plumber at the sole expense of the owner of the premises being served. Reduced pressure principle backflow preventers shall be installed as follows:

(1) Installation shall be in a location where the unit is readily accessible for maintenance and testing. Location should be immediately "downstream" of the water meter.

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(2) Minimum clearances recommended by the manufacturer shall be observed.

(3) The unit shall be protected against flooding and freezing.

(4) Free draining of the relief port must be maintained under all conditions and provisions such as floor drains shall be provided.

(5) If installed at ceiling level, a collection system shall be installed with proper air gap under the drain port to protect areas below the unit from water damage.

(6) There shall be no reduction made in the size of the relief port drain.

(7) Provision shall be made for easy and unrestricted removal of the unit.

(c) Testing Of Reduced Pressure Principle Backflow Preventers:

(1) Annual Testing: Each year the Village will require the testing of each reduced pressure backflow preventer installed.

(2) Responsibility Of Building Owner Or Tenant: Testing of units shall be the responsibility of the building owner or tenant. All RPZ recertifications and testing shall be performed by a cross connection control device inspector (CCCDI) in accordance with the State Plumbing Code. Costs for tests, parts and/or replacement of units will be the responsibility of the building owner.

(3) Testing Of Initial Installation: Testing of initial installation prior to occupancy shall be required.

(4) Annual Inspection And Testing Scheduling: The building owner or tenant shall cause the inspection and testing of all RPZs each year based on the anniversary date of the installation. Such tests shall be conducted within thirty (30) days of the anniversary date.

(5) RPZ Certification Form: The RPZ certification form indicating the RPZ is operating effectively and being maintained in accordance with all State and local code requirements and manufacturer's recommendations shall be forwarded to the Village of Willowbrook upon every test or recertification performed.

(6) Tampering Prohibited: No persons other than a State licensed plumber or State certified backflow preventer maintenance/tester shall remove, repair, test or perform any maintenance on any reduced pressure principle backflow prevention device.

(7) Owner Assistance: Owners of all reduced pressure principle backflow preventers shall provide easy access to units and/or necessary tools and equipment, ladders or scaffolding to assist the Department of ~~Municipal Services~~ [Community Development](#) or Village inspector in inspecting the units, all at owner's expense.

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(d) Units Out Of Service Or In Need Of Repair: When a unit is out of service or otherwise is in need of service, the Department of ~~Municipal Services~~ [Community Development](#) shall be notified within twenty four (24) hours.

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(e) Bypasses: If there is only one service line and the water service cannot be interrupted, a second backflow preventer may be installed parallel with the first. Under no circumstance will a backflow preventer be bypassed by unprotected piping.

5. Corrections And Protective Devices: Any user of water shall obtain written approval from the Department of ~~Municipal Services~~ Community Development for any proposed corrective action or protective device before using or installing it. The total time allowed for completion of the necessary corrections shall be contingent upon the degree of hazard involved and include the time required to obtain and install equipment. If the cross connection has not been removed within the time as hereinafter specified, the Village shall physically separate the Willowbrook water supply from the on-site piping system in such manner that the two (2) systems cannot be connected by any unauthorized person.

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6. Piping Identification: When a secondary water source is used in addition to the Willowbrook water supply, exposed Willowbrook water and secondary water piping shall be identified by distinguishing colors or tags and so maintained that each pipe may be traced readily in its entirety; it will be necessary to protect the Willowbrook water supply at the service connection in a manner acceptable to the Department of ~~Municipal Services~~ Community Development.

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7. Private Water Storage Tanks: A private water storage tank supplied from the Willowbrook water supply system shall be deemed a secondary water supply unless it is designed and approved for potable water usage.

8. Elimination Of Existing Cross Connections: All existing cross connections to the Willowbrook water supply system shall be eliminated. The expense of such elimination shall be that of the owner of the property on which such cross connection exists.

9. Where Protection Is Required:

(a) An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 Illinois Administrative Code part 890. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving the premises, where in the judgment of the building official or his/her designee, actual or potential hazards to the public water supply system exist.

(b) An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

(1) Premises having an auxiliary water supply, unless such auxiliary supply is accepted as an additional source by the building official or his/her designee and the source is approved by the Illinois Environmental Protection Agency.

(2) Premises on which any substance is handled which can create an actual premises having sources or systems containing process fluids or waters originating from the public water supply system which are no longer under the sanitary control of the building official or his/her designee.

(3) Premises having internal cross connections that, in the judgment of the building official or his/her designee and/or the cross-connection control device inspector, are not correctable or intricate plumbing arrangements which make it impractical to determine whether or not cross connections exist.

(4) Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross connection survey.

(5) Premises having a repeated history of cross connections being established or reestablished.

(c) An approved backflow prevention device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 Illinois Administrative Code part 890. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities, unless the building official and/or the Superintendent of Public Works or his/her designee(s) determines that no actual or potential hazard to the public water supply system exists:

(1) Hospitals, mortuaries, clinics, nursing homes.

(2) Laboratories.

(3) Piers, docks, waterfront facilities.

(4) Sewage treatment plants, sewage pumping stations or stormwater pumping stations.

(5) Food or beverage processing plants.

(6) Chemical plants.

(7) Metal plating industries.

(8) Petroleum processing or storage plants.

(9) Radioactive material processing plants or nuclear reactors.

(10) Car washes.

(11) Pesticide, herbicide or extermination plants and trucks.

(12) Farm service and fertilizer plants and trucks.

10. Type Of Protection Required:

(a) The type of protection required under subsections (D)9(b)(1), (D)9(b)(2) and (D)9(b)(3) of this section shall depend on the degree of hazard which exists as follows:

(1) An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated with substances that could cause a severe health hazard.

(2) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.

(3) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly or a double check valve assembly shall be installed where the public water supply system may be polluted with substances that could cause a pollution hazard not dangerous to health.

(b) The type of protection required under subsections (D)9(b)(4) and (D)9(b)(5) of this section shall be an approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device.

(c) Where a public water supply or an auxiliary water supply is used for a fire protection system, reduced pressure principle backflow preventers shall be installed on fire safety systems connected to the public water supply when:

(1) The fire safety system contains antifreeze, fire retardant or other chemicals.

(2) Water is pumped into the system from another source.

(3) Water flows by gravity from a nonpotable source; or water can be pumped into the fire safety system from any other source.

(4) There is a connection whereby another source can be introduced into the fire safety system.

(d) All other fire safety systems connected to the potable water supply shall be protected by a double check valve assembly on metered service lines and a double detector check valve assembly on unmetered service lines.

11. Backflow Prevention Devices:

(a) All backflow prevention devices or methods required by these rules and regulations shall be approved by the Research Foundation for Cross Connection Control of the University of Southern California, American Water Works Association, American Society of Sanitary Engineering, American National Standards Institute or certified by the National Sanitation Foundation to be in compliance with applicable industry specifications.

(b) Installation of approved devices shall be made in accordance with the manufacturer's instructions. Maintenance as recommended by the manufacturer of the device shall be performed. The manufacturer's maintenance manual shall be available on site at all times.

12. Notification Of Violation: The building official and/or the Superintendent of Public Works or his/her designee(s) shall notify the owner, or authorized agent of the owner, of the building or premises in which there is found a violation of this section. The building official and/or the Superintendent of Public Works or his/her designee(s) shall set a reasonable time period, based on the level of hazard to health, for the owner to have the violation removed or corrected. Upon failure of the owner to have the defect corrected by

the end of the specified time interval, the building official and/or the Superintendent of Public Works or his/her designee(s) may, if in his judgment an imminent health hazard exists, cause the water service to the building or premises to be terminated, and/or recommend such additional fines or penalties to be invoked as herein may be provided.

13. Fines: The owner, or authorized agent of the owner responsible for maintenance of the plumbing systems in the building, who knowingly permits a violation to remain uncorrected after the expiration of time set by the building official or his/her designee shall, upon conviction thereof by the court, be required to pay a fine as otherwise provided for in this Code. (Ord. 19-O-10, 6-24-2019)

4-2-25: WATER WELL CODES ADOPTED:

(A) Codes Adopted: There is hereby adopted by reference as if fully set out herein those certain codes known as the:

Illinois Water Well Construction Code, 2013, prepared and published by the Illinois Department of Public Health. 415 Illinois Compiled Statutes 30/ part 920: Illinois Water Well Construction Code, Nov 2013.

Illinois Water Well Pump Installation Code, 2012 edition, prepared and published by the Illinois Department of Public Health. 415 Illinois Compiled Statutes 35/ part 925: Illinois Water Well Pump Installation Code, 1998.

DuPage County Private, Semi Private and Non-Community Water Supply Ordinance, 2005 edition, prepared and published by the DuPage County Health Department.

(B) Applicability: These codes shall govern the construction, installation, alteration or repair of private wells and private water supply systems in the Village. It shall be unlawful for any person to construct, install, alter or repair or cause to be constructed, installed, altered or repaired any private well or private water supply system in the Village in violation of or without complying with these rules and regulations. Upon application for any permit for a private well or private water supply system, the applicant shall show evidence that he has obtained all necessary permits as required by the Illinois Department of Public Health, DuPage County Health Department and all other government agencies exercising jurisdiction over the improvement. (Ord. 19-O-10, 6-24-2019)

4-2-26: PRIVATE SEWAGE DISPOSAL CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the DuPage County Health Department Private Sewage Disposal Ordinance, February 2006, prepared and published by the DuPage County Health Department. At least three (3) copies of this code have been on file for a period of more than thirty (30) days prior to the adoption of this section and now are on file in the Office of the Village Clerk.

(B) Applicability: This code shall govern the construction, installation, alteration and repair of private septic tanks, private sink drains, private grease traps or private sewerage disposal systems in the Village and it shall be unlawful for any person to construct, install, alter or repair, or cause to be constructed, installed, altered or repaired any private septic tanks, private sink drains, private grease traps or private sewerage disposal systems in the Village in violation or without complying with these rules and regulations. Upon application for any permit for private septic tanks, private sink drains, private grease traps or private sewerage disposal systems, the applicant shall show evidence that he has obtained all necessary permits as required by the Illinois Department of Public Health, DuPage County Health Department and all other governmental agencies exercising jurisdiction over the improvement. (Ord. 19-O-10, 6-24-2019)

4-2-27: ELECTRICAL CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the National Electrical Code (NEC), ~~2017-2023~~ edition (NFPA 70-~~2017-2023~~) as sponsored and published by the National Fire Protection Association and approved by the American National Standards Institute, together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been on file for a period of more than thirty (30) days prior to the adoption of this section and now is on file in the Office of the Village Clerk. Any reference in the NEC ~~2017-2023~~ edition (NFPA 70-~~2017-2023~~) to the "authority having jurisdiction" shall mean the building official or his/her designee.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the National Electrical Code:

~~1. Article 210.6(C) 277 Volts to Ground. Delete in its entirety and in lieu thereof substitute the following new Article 210.6(C):~~

~~Article 210.6(C) 277 Volts to Ground. Circuits exceeding one hundred and twenty volts (120V), nominal, between conductors and not exceeding two hundred and seventy-seven volts (277V), nominal, to ground shall be permitted to supply the following:~~

~~(1) Listed electric discharge luminaires (lighting fixtures);~~

~~(2) Listed incandescent luminaires (lighting fixtures), where supplied at one hundred and twenty volts (120V) or less from the output of a step-down autotransformer that is an integral component of the luminaire (fixture) and the outer shell terminal is electrically connected to a grounded conductor of the branch circuit;~~

~~(3) Luminaires (lighting fixtures) equipped with mogul-base screw shell lampholders;~~

~~(4) Lampholders, other than screw shell type, applied within their voltage ratings;~~

~~(5) Auxiliary equipment of electric discharge lamps; and~~

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SAFEbuilt recommends an adoption of the 2023 NEC, with few amendments that address local conditions. This makes the code legally defensible versus a large number of amendments where the municipality acts as an Electrical Engineer rewriting the code.

~~—(6) Cord and plug-connected or permanently connected utilization equipment.~~

~~—In no case shall such light fixtures be mounted less than eight feet (8') above finished floor. Such circuits shall be switched at a panel board, using Type SWD breakers, or at a low voltage relay switch.~~

~~—2. Article 210.8 Ground-Fault Circuit Interrupter Protection for Personnel. Amend by adding the following new Article 210.8(F):~~

~~—Article 210.8(F) All Other Areas. Ground-fault circuit-interrupter protection for personnel shall be installed on all 125-volt, single-phase, 15- and 20-ampere receptacles installed in areas where, in the opinion of the Building Official, or his agent, a potential ground fault hazard may exist.~~

~~—3. Article 210.11(C)(3) Bathroom Branch Circuits. Delete in its entirety and in lieu thereof substitute with the following new Article 210.11(C)(3):~~

~~—Article 210.11(C)(3) Bathroom Branch Circuits. In addition to the number of branch circuits required by other parts of the section, a separate twenty (20)-ampere branch circuit shall be provided to supply each bathroom or powder room.~~

~~—4. Article 230.79(C) One-Family Dwelling. Delete in its entirety and in lieu thereof substitute with the following new Article 230.79(C):~~

~~—Article 230.79(C) One-Family Dwelling. For a one-family dwelling, the service disconnecting means shall have a rating of not less than two hundred (200) amperes, 3-wire.~~

~~—5. Article 250.64 Grounding Electrode Conductor Installation. Amend by adding the following to the end of the paragraph:~~

~~—"... However, the metal water piping system grounding electrode conductor for the service shall terminate at the street side of the domestic water service and shall be protected by rigid metal conduit, intermediate metal conduit, electrical metallic tubing, or approved cable armor. The grounding electrode shall be copper and the water meter shall be provided with an adequate jumper. All service grounding electrode connections shall have an identifying tag attached to the ground clamp."~~

~~—6. Article 300.1(A) All Wiring Installations. Amend by adding the following to the end of the section:~~

~~—"... Where any wiring method or materials permitted by the National Electrical Code/2017 shall have been prohibited by this article, such wiring methods or materials shall be considered to be prohibited when referred to in any section, article or provisions of the National Electrical Code/2017."~~

~~—7. Article 300.4 Protection Against Physical Damage. Amend by adding the following new Article 300.4(I):~~

~~—Article 300.4(I) Circuits Under Fifty Volts (50V). In all non-residential applications all wiring for circuits under fifty volts (50V) in non-accessible areas shall be installed in an approved raceway but may be run exposed in accessible areas such as, but not limited to, spaces above dropped ceilings, attic spaces, and crawl spaces; said wiring must be properly fastened.~~

~~—8. Article 300.5(D)(3) Service Conductors. Amend by adding the following sentence to the end of the paragraph:~~

~~—"... Where any service conductors including secondary or subfeeder crosses under driveways, parking lots or vehicle traffic ways said conductors shall be encased in rigid metal conduit or intermediate metal conduit."~~

~~—9. Article 310.106(A) Minimum Size of Conductors. Delete in its entirety and in lieu thereof substitute with the following new Article 310.106(A):~~

~~—Article 310.106(A) Minimum Size of Conductors. The minimum size of conductors shall be as shown in Table 310.106(A), except as permitted elsewhere in this code. In no case shall the size of conductors covered or under the classification of commercial or industrial applications be no less than no. 12 copper conductor.~~

~~—10. Article 310.106(B) Conductor Material. Delete in its entirety and in lieu thereof substitute with the following new Article 310.106(B):~~

~~—Article 310.106(B) Conductor Material. Conductors in this code shall be composed of copper only.~~

~~—11. Article 320 Armored Cable; Type AC. Delete in its entirety.~~

~~—12. Article 324, Flat Conductor Cable; Type FCC. Delete in its entirety~~

~~—13. Article 326, Integrated Gas Spacer Cable; Type IGS. Delete in its entirety~~

~~—14. Article 330.10 Uses Permitted. Delete in its entirety and in lieu thereof substitute with the following new Article 330.10:~~

~~—Article 330.10 Uses Permitted. Type MC Cable shall be permitted only as prefabricated lengths for lighting control and signal circuits within dry interior locations. Such prefabricated lengths shall not be field altered.~~

~~151. Article 334 Nonmetallic-Sheathed Cable. Types NM, NMC, and NMS: Delete in its entirety.~~

~~—16. Article 338, Service Entrance Cable. Types SE and USE: Delete in its entirety.~~

~~—17. Article 340 Underground Feeder and Branch Circuit Cable. Type UF: Delete in its entirety~~

~~—18. Article 352.10 Uses Permitted. Delete sub-articles (A), (C), (E), (F) and (H) in their entireties.~~

~~—19. Article 353.10 Uses Permitted. Delete in its entirety and in lieu thereof substitute with the following new Article 353.10:~~

~~—Article 353.10 Uses Permitted. HDPE conduit shall be permitted to be used solely in conjunction with directional boring equipment.~~

~~—20. Article 354, Nonmetallic Underground Conduit with Conductors. Type NUCC: Delete in its entirety.~~

~~—21. Article 356.10 Uses Permitted. Delete in its entirety and in lieu thereof substitute with the following new Article 356.10:~~

~~—Article 356.10 Uses Permitted. LFNC conduit shall be permitted to be used solely where protection of the contained conductors is required from corrosive vapors, liquids and solids.~~

~~—22. Article 358.10 Uses Permitted. Delete in its entirety and in lieu thereof substitute the following new Article 358.10:~~

~~—Article 358.10 Uses Permitted. The use of EMT shall be permitted for both exposed and concealed work. Exposed work shall not be subject to physical damage.~~

~~—23. Article 358.12 Uses Not Permitted. Delete in its entirety and in lieu thereof substitute with the following new Article 358.12:~~

~~—Article 358.12 Uses Not Permitted. EMT shall not be used under the following conditions:~~

~~—(1) Where, during installation or afterward, it will be subject to physical damage;~~

~~—(2) Where installed in wet or damp locations;~~

~~—(3) Where installed in concrete, in direct contact with the earth or in other areas subject to corrosive influences;~~

~~—(4) In cinder concrete or cinder fill;~~

~~—(5) In any hazardous (classified) location, except as permitted by Articles 502.10, 503.10 or 504.20;~~

~~—(6) For the support of luminaires (fixtures) or other equipment except conduit bodies no larger than the largest trade size of the tubing; or~~

~~—(7) Where practicable, dissimilar metals, in contact anywhere in the system shall be avoided to eliminate the possibility of galvanic action.~~

~~—Exception: aluminum fittings and enclosures shall be permitted to be used with EMT where not subject to severe corrosive influences.~~

~~-242. Article 362 Electrical Nonmetallic Tubing. Type ENT: Delete in its entirety~~

~~—25. Article 368.2 Definition. Delete in its entirety and in lieu thereof substitute with the following new Article 368.2:~~

~~—Article 368.2 Definition. Busway. A grounded metal enclosure containing factory-mounted, bare or insulated conductors, which shall be copper bars, rods or tubes.~~

~~—263. Article 394 Concealed Knob-and-Tube Wiring. Delete in its entirety~~

~~—274. Article 398 Open Wiring on Insulators. Delete in its entirety~~

~~—28. Article 406.4 General Installation Requirements. Delete the second sentence in its entirety and in lieu thereof substitute with the following new sentence:~~

~~—"General installation requirements shall be in accordance with 406.4(A) through (G)."~~

~~—29. Article 406.4 General Installation Requirements. Amend by adding the following new Article 406.4(G):~~

~~—Article 406.3(G) Terminating Wires. Wires shall terminate on the respective screw terminals. The use of stab lock connections or terminations is prohibited.~~

~~—30. Article 410.36(B) Suspended Ceilings. Delete in its entirety and in lieu thereof substitute with the following new Article 410.36(B):~~

~~—Article 410.36(B) Means of Support. Lighting fixtures installed in or above a suspended type ceiling shall be supported from at least two sides or opposite corners to the main structure of the building.~~

~~—31. Article 410.44 Methods of Grounding. Delete in its entirety and in lieu thereof substitute with the following new Article 410.44:~~

~~—Article 410.44 Methods of Grounding. Fixtures and equipment shall be considered grounded where mechanically connected to an equipment grounding conductor as specified in Article 250.118 and sized in accordance with Article 250.122. Each new parking lot, drive lane, and street lighting pole shall be grounded by a separate grounding rod as well as an approved grounding conductor which shall originate in the electrical panelboard that supplies the power for the lighting pole. The grounding rods shall be a minimum of ten feet (10') in length and five eighths inch (5/8") in diameter. All fixtures must be able to be serviced without dismantling the fixture hanging equipment.~~

~~—32. Article 605.4 Wireways. Amend by adding the following new article 605.4(A):~~

~~—Article 605.4(A) Non-Metallic Wireways. Portable office partitions, such as cubicles, remountable wall systems, modular offices, etc., with non-metallic wireways shall be wired with flexible metal conduit between outlets. Partitions are to be wired to the permanent power source and approved by the Building Official or Electric Inspector. The wiring of portable office partitions shall be subject to the review of the Building Official and shall conform to all other conditions as listed in Article 605.~~

(C) Additional Standards And Specifications:

1. Electrical Work To Be Performed By Licensed Electrician: All electrical installations, alterations, replacements and repairs must be performed by a licensed electrician; except that the owner of a single-family home may perform electrical work on that single-family home if said structure is their principal residence.

2. Contractor Requirements For Permit: All electrical contractors working within the Village of Willowbrook must furnish the Department of ~~Municipal Services~~ [Community Development](#) with a copy of their Municipal electrical license, an up to date Certificate of Insurance and a surety bond prior to the issuance of an electrical permit.

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3. Conduit; On Or Below Grade: Heavy wall rigid metal conduit or intermediate metallic conduit shall be used in all poured concrete on or below grade. EMT is not permitted in this application.

4. Conduit; Exposed Exterior: Rigid metallic conduit or intermediate metallic conduit (IMC) shall be used in all exposed exterior installations. EMT is not permitted in this application.

5. PVC Aboveground: No PVC (RNC) shall emerge from the ground, concrete slab or encasement. PVC (RNC) shall convert to galvanized rigid conduit or intermediate conduit prior to its emergence, at the minimum cover depth required by table 300.5.

6. PVC As A Service Entry Conduit: The use of PVC (RNC) is not permitted as a service entrance or service lateral conduit.

7. Use Of EMT: The use of EMT under concrete floor slabs, below grade or outdoors is prohibited.

8. EMT Fittings: Fittings for EMT, heavy wall rigid conduit and intermediate metallic conduit shall either be threaded, set screw or compression type up to and including trade size two inch (2"). Larger than two inch (2") shall utilize threaded or compression fittings only.

9. Low Voltage Conductors: Low voltage conductors (not to exceed 50 volts) may be installed in plenums without raceway protection (except where passing through partitions or subject to mechanical injury) when the conductor/cable is listed by Underwriters Laboratories, Inc. (UL) for this purpose.

~~10. Minimum Service Size: For commercial and single family dwelling applications the minimum service size shall be two hundred (200) amperes.~~

~~110.~~ Distribution/Subpanels; Service Entrance: All distribution/subpanels shall be provided with a main disconnect.

~~12. Breakers: The use of twin, tandem or mini type breakers are not permitted.~~

~~1311.~~ Electrical Plan: Where new construction or alteration work involves electrical work of any type, the construction plans shall include a complete electrical plan that contains, where applicable, all the following information and details necessary for a complete review, including, but not limited to, the following:

(a) Size and voltage of existing service.

(b) A panel schedule for all electrical panels affected by the proposed work. Panel schedule shall include, in part, the size of all overcurrent protection devices, and the connected load in wattage (VA) for each branch circuit.

(c) A one-line diagram of the electrical service and service equipment identifying the locations and sizes of all overcurrent protection devices, the size and type of all service entrance and feeder conduit and conductors and complete details on the service grounding system including the types of all grounding electrodes and the size and type of all grounding electrode conductors.

(d) Location of service entrance equipment, panel boards and cabinets.

(e) Size and type of conductor and conduit.

(f) Size, type and location of outlets.

(g) Location of major appliances and equipment.

(h) An equipment schedule identifying all major equipment, appliances, motors, etc., and their electrical specifications and ratings.

(i) A lighting schedule identifying all proposed light fixtures including exit signs and emergency lights and their electrical specifications and ratings.

(j) Locations of all exit signs and emergency lights.

(k) All other documents and information required by the building official.

1412. Plan Review: All plans must be reviewed and approved by the Village of Willowbrook building official.

1513. Installation Approval: All installations must be approved by the building official in the field prior to occupancy or use.

1614. Panel Circuitry Directory Card: Every electrical panel shall contain a permanently affixed panel circuitry directory card identifying all circuits.

1715. Grounding Electrode Clamp: An approved nonferrous metal tag shall be attached to the grounding electrode clamp giving warning against its removal.

~~18. Minimum Size Conductor: The minimum size conductor for all commercial and industrial work shall be no. 12 AWG, copper, except for individual lighting whips and in control wiring where the conductors carry only the control load.~~

~~19. Multiple Entrances: All rooms with multiple entrances or exits which are more than six feet (6') apart shall utilize three-way or four-way switches unless an alternate arrangement is approved by the building official.~~

~~20. Overhead Feeders; Branch Circuit Conductors: Exterior overhead feeders or branch circuit conductors are not permitted.~~

~~—21. Outlets Required:~~

~~—(a) An outside lighting fixture controlled by an interior switch shall be installed at each exterior entrance, service door, porch, balcony, sliding glass door area, etc.~~

~~—(b) Attics shall have at least one light fixture controlled by a local wall switch on the floor below or by a switch located within the attic and placed no more than three feet (3') from the entrance of the attic.~~

~~—(c) Receptacle locations for offices and similar areas shall be located such that for all walls greater than two feet (2') in width, no point on the wall shall be more than six feet (6') horizontally from a receptacle.~~

~~—(d) All hallways greater than ten feet (10') in length and all lobbies or waiting areas shall have at least one receptacle.~~

~~—22. Wiring Methods:~~

~~—(a) Ground fault circuit interrupter outlets shall be resetable at each individual outlet, except that a ground fault circuit interruption device may be used for more than one outlet if the outlets are in the same room, in accordance with the manufacturer's installation guidelines.~~

~~—(b) All light fixtures above a bathtub or in a shower must be installed with ground fault circuit interrupter protection and approved for this type of installation. Said ground fault circuit interrupter shall not disconnect any other light fixture.~~

~~—(c) No switches shall be allowed within four feet (4'), measured horizontally, from the inside wall of any tub or shower stall.~~

~~—(d) All box connectors shall be of a "thread and locknut" type.~~

~~—(e) Modular or plug together lighting shall be permitted only by special approval by the building official. In no way shall any modular or plug together system be mechanically inferior to standard "hard wiring" methods.~~

~~—23. Exit Signs: All one hundred fifteen (115) volt illuminated exit signs shall derive their power from a separate, dedicated circuit.~~

~~—24. Exterior Illuminated Signs: Each exterior illuminated sign shall have a disconnect on or within the immediate vicinity of the sign.~~

~~2516.~~ Work Without Benefit Of A Permit: When work requiring a permit has been started prior to the issuance of such permit, the permit fee shall be double the amount of the standard permit fee. However, in no instance shall the fee for a permit issued under these circumstances exceed the standard permit fee by an amount in excess of:

(a) Residential Districts: Two hundred fifty dollars (\$250.00).

(b) Nonresidential Districts: Seven hundred fifty dollars (\$750.00). (Ord. 19-O-10, 6-24-2019)

4-2-28: FIRE CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, that certain Code known as the ~~2018-2024~~ International Fire Code, second printing, including Appendix "D", as prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been on file for a period of more than thirty (30) days prior to the adoption of this section and now is on file in the Office of the Village Clerk.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the ~~2018-2024~~ International Fire Code, second printing, including Appendix "D":

1. Section 101.1 Title. Amend by deleting the words and punctuation marks, "[Name of Jurisdiction]" and insert the words "The Village of Willowbrook."

~~2. Section 102.4 Application of building code. Delete in its entirety and in lieu thereof substitute with the following new Section 102.4:~~

~~Section 102.4 Application of building code. The design and construction of new structures, as well as repairs, alterations and additions to existing structures, shall comply with the International Building Code as amended by the Village of Willowbrook. Where corresponding sections of the International Fire Code have been modified or amended within the International Building Code, the most strict application shall apply. These sections include, but are not limited to, modifications or amendments to the requirements for fire suppression systems, fire alarm systems and means of egress.~~

~~3. Section 102.10 Conflicting provisions. Delete in its entirety and in lieu thereof substitute with the following new Section 102.10:~~

~~Section 102.10 Conflicting provisions. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where there is a conflict between a corresponding requirement in the International Fire Code and the International Building Code, the most strict application shall apply.~~

~~4. SECTION 102 APPLICABILITY. Amend by adding the following new Section 102.13:~~

~~Section 102.13 Provisions with Respect to Certain Use Group "U" Structures:~~

~~Notwithstanding any language contained in the following referenced sections to the contrary, all use group "U" structures which exceed two thousand (2,000) square feet in gross area and which are intended to be used or are used at any time for assembly purposes shall comply with all applicable sections of the adopted Building and Fire Codes.~~

~~Additionally, notwithstanding any language contained in the following referenced sections to the contrary, all use group "U" structures which exceed two thousand (2,000) square feet in gross area (whether legal, legal nonconforming or illegal) existing on the~~

Commented [DW35]: Discuss with Village

Recommend to delete these amendments. The language of the base code is clear

effective date hereof and which are used at any time for assembly purposes shall be brought into conformance with all applicable sections of the adopted Building and Fire Codes on or before April 1, 2000. April 1, 2000 shall, for all purposes, be deemed an appropriate amortization period for every such legal, legal nonconforming and illegal use presently existing within the corporate limits of the Village of Willowbrook. Should any such use hereafter be located within the Village of Willowbrook by reason of annexation into the Village of a lot or parcel on which such use is located, then such use shall be brought into conformance with the above referenced Sections within eleven (11) months after the date of annexation. Such eleven (11) month period shall, for all purposes, be deemed an appropriate amortization period for every such legal, legal nonconforming and illegal use so annexed to the Village.

5. Section 103.2 Appointment. Delete in its entirety and in lieu thereof substitute with the following new Section 103.2:

Section 103.2 Appointment. The Fire Code Official shall be the Building Official or his/her designee and shall be appointed by the Chief Appointing Authority of the jurisdiction; and the Fire Code Official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the Appointing Authority.

6. Section ~~105.1.2~~107.2 Types of Permits Schedule of permit fees. Operational Permit. Delete in its entirety and in lieu thereof substitute with the following new Section 105.1.2 Amend to include a new section 107.2.1 that reads as follows:

Section ~~105.1.2~~107.2.1 Types of Permits. Operational Permit Operational permit schedule of fees. An operational permit allows an applicant to conduct an operation(s) for which a permit is required by Section 105.6 in accordance with the schedule as outlined in the fee ordinances. A permit fee shall be charged annually for each type of operational permit in accordance with the schedule as outlined in the fee ordinances (see Operational Permit/Product Description and Fee Table below). A permit shall constitute authority to maintain, store or handle materials; or to conduct processes which produce conditions hazardous to life or property.

Operational Permit/Product Description and Fee Table

| Description | | Permit Required (Yes or No) | Administrative Permit Fee | IFC Code Reference |
|-------------|---|--------------------------------------|------------------------------|-----------------------|
| Description | | Permit Required (Yes or No) | Administrative Permit Fee | IFC Code Reference |
| A | Compressed Gases. Section 105.6.8: An operational permit is required: Compressed gas. Storage, use or | Yes | \$150.00 | 105.6.8 |

Commented [DW36]: Discuss with Village

This amendment starts off with a false premise, where a Group U occupancy is used for assembly purposes. That would establish the building as an assembly occupancy (Group A) versus a Group U occupancy.

Recommend that this amendment is deleted.

Commented [DW37]: Discuss with Village

Recommend to modify amendment to remove employment protection. Most Building Officials serve at the pleasure of the elected officials, and can be removed for any reason.

handling at normal temperature and pressure (NTP) of compressed gases in excess of amounts listed in Table 105.6.8 Exception: Vehicles equipped for and using compressed gas as a fuel to propel the vehicle.

| | | | | |
|----------|--|-----|----------|----------|
| B | Cryogenic Fluids. Section 105.6.10: An operational permit is required: To produce, store, transport onsite, use, handle or dispense cryogenic fluids in excess of the amount listed in Table 105.6.10 | Yes | \$150.00 | 105.6.10 |
| C | Hazardous Materials. Section 105.6.20: An operational permit is required to: Store, transport onsite, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.6.20 | Yes | \$150.00 | 105.6.20 |
| D | Flammable and Combustible Liquids. Section 5701.4: An operational permit is required: | - | - | - |
| D 1 | To use or operate a pipeline for the transportation with facilities or flammable or combustible liquids. This requirement shall not apply to the offsite transportation (DOTn) (see section 3501.1.2) nor does it apply to piping systems (see section 3503.6) | Yes | \$150.00 | 5701.4 |
| D 2 | To store, handle or use of Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following: | Yes | \$150.00 | 5701.4 |
| D 2.1 | The storage or use of Class I liquids in the fuel tanks of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant unless such storage, in the opinion of the Fire Official would cause an unsafe condition. | No | - | - |
| D 2.2 | The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored | No | - | - |

for maintenance, painting or similar purposes for a period of not more than 30 days.

| | | | | |
|--------|--|-----|--------------------------------------|--------|
| D 3 | To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment. | Yes | \$150.00 | 5701.4 |
| D 4 | To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by means other than the approved, stationary on-site pumps normally used for dispensing purposes. | Yes | \$150.00 | 5701.4 |
| D 5 | To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used. | Yes | \$150.00 | 5701.4 |
| D 6 | To install, alter, remove, abandon, place temporarily out of service (for more than 90 days) or otherwise dispose of an underground, protected above-ground or above-ground flammable or combustible tank. | Yes | \$150.00 | 5701.4 |
| D 7 | To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than for which the tank was designed and constructed. | Yes | \$150.00 | 5701.4 |
| D 8 | To manufacture, process, blend, or refine flammable or combustible liquids. | Yes | \$150.00 | 5701.4 |
| E | Inspection Fees: | | See 4-2-11(G)(5) of the Village Code | |

7. Section ~~109.111 BOARD OF APPEALS~~~~MEANS OF APPEALS~~. Delete this section in its entirety and in lieu thereof substitute the following new Section ~~109.111~~:

Section ~~109.111~~ BOARD OF APPEALS.

Section ~~109.111.1~~ Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section ~~109.211.2~~ Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section ~~109.311.3~~ Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section ~~109.411.4~~ Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section ~~109.511.5~~ Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section ~~109.611.6~~ Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section ~~109.711.7~~ Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably

recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

8. Section ~~110.4112.4~~ Violation Penalties. Delete this section in its entirety and in lieu thereof substitute the following new Section 110.4:

Section ~~110.4112.4~~ Violation Penalties. Any person who shall violate any provision of this Code shall, upon conviction thereof, be subject to a fine of an amount as provided in Title 1, Chapter 4, of the Village Code of the Village of Willowbrook. Each day that a violation continues after due notice has been served, in accordance with the terms and provisions hereof, shall be deemed a separate offense.

9. Section 202 GENERAL DEFINITIONS. Add the following new definitions:

CORPORATION COUNSEL: The Village Attorney for the Village of Willowbrook.

DEPARTMENT OF FIRE PREVENTION: The Department of ~~Municipal Services~~
Development of the Village of Willowbrook.

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FIRE CODE OFFICIAL: The Building Official or his/her designee of the Village of Willowbrook.

FIRE PREVENTION CODE OR FIRE CODE: The Village of Willowbrook Fire Prevention Code.

MUNICIPALITY: The Village of Willowbrook.

VILLAGE: The Village of Willowbrook.

~~10. Section 503.1.1 Buildings and facilities. Amend by adding the following new sentences to the end of the paragraph:~~

~~... Access roads or fire lanes for unlimited area buildings and buildings over thirty feet (30') in height may be not less than fifteen feet (15') from the buildings, unless the adjacent wall has a minimum fire resistive rating of two (2) hours. This optional design must be approved by the Fire Protection District. If the height of the building requires a greater setback to ladder the buildings, the distance from the building shall be as approved by the Fire Protection District. Access routes shall be continuous around the building. This requirement may be modified by the Fire Protection District where adequate building access openings and a complete fire suppression system are provided.~~

~~11. Section 503.2.3 Surface. Amend by adding the following new sentence to the end of the paragraph:~~

~~... In all cases the fire apparatus access road shall be designed to accommodate vehicles weighing a minimum of 80,000 pounds, or the heaviest fire department vehicle whichever is greater.~~

~~—12. Section 503.3 Markings. Delete this section in its entirety and in lieu thereof substitute the following new Section 503.3.~~

~~—Section 503.3 Markings. Approved signs or other approved notices or markings that include the words NO PARKING FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.~~

~~—13. Section 503 FIRE APPARATUS ACCESS ROADS. Amend by adding the following new section 503.7 Fire Department Access Roads.~~

~~—503.7 Fire Department Access Roads. Property, devoted to Public use, shall be so that:~~

~~—a. Public or private access for motor fire apparatus shall be provided around the building so that there may be proper operation of ladders and mechanically elevated mechanisms. Minimum width of the fire lanes shall be twenty feet (20') with greater widths to accommodate vehicles when turning or laddering buildings.~~

~~—b. Fire lanes on private property shall be approved by the Tri-State Fire Protection District. Parking of motor vehicles otherwise obstructing such fire lanes or access routes shall be prohibited at all times.~~

~~—c. Permanent all weather signs identifying fire lanes and access routes shall be posted as per Section D103.5 of Appendix D of the 2018 International Fire Code.~~

~~—d. Public or private fire department access roads and ways shall be all weather, properly maintained and accessible at all times. All such fire lanes shall meet the engineering and construction specifications for public improvements as enumerated in the Village of Willowbrook Specifications Manual.~~

~~—e. Access roads shall be not less than fifteen feet (15') from the building and further if the height of the building requires greater set back to ladder the building.~~

~~—f. Access routes shall be continuous around the building.~~

~~—g. These requirements of this section may be modified where adequate building access openings and a complete fire sprinkler system are provided.~~

~~—14. Section 506 KEY BOXES. Amend by adding the following new Section 506.3:~~

~~—Section 506.3 Alarms. At the request of the owner or lessee, the Building Official or his/her designee shall permit them to install a key box tamper switch connected to the building's burglar alarm system only. Key boxes shall be installed in all commercial buildings, where access to or within a building or an area is unduly difficult because of secured openings, buildings with fire detection or suppression equipment are monitored by a 24 hour monitoring company or Addison Consolidated Dispatch Center, and where immediate access is necessary for life saving or firefighting purposes, a fire department key box shall be located and installed on the building as directed by the Fire Official. The key box shall be a type approved by the Fire Official.~~

~~—15. Section 507.5.1 Where required. Delete this section in its entirety and in lieu thereof substitute the following new Section 507.5.1:~~

~~—Section 507.5.1 Where required. Fire hydrants shall be installed in accordance with the following:~~

~~—a. Fire hydrants shall be located along public streets, fire lanes, or access routes so that no portion of the building perimeter will be over two hundred fifty feet (250') from a public fire hydrant. Where this is not possible, hydrants shall be placed along the access route at such locations as approved by the Fire Protection District and the Building Official or his/her designee.~~

~~—b. In apartments, town houses, condominiums, town/row or cluster housing areas where streets or parking lots dead end, hydrants shall be placed along the access route at such locations as approved by the Fire Protection District and the Building Official or his/her designee.~~

~~—c. At least two (2) fire hydrants shall be located within two hundred fifty feet (250') of the building.~~

~~—d. Hydrants should be so located that:~~

~~—i. Hydrants will be located approximately ten feet (10') from all weather roadways. If this cannot be done, the closest part of the hydrant shall be set back a minimum of two feet (2') from the back of curb.~~

~~—ii. Hydrants shall not be located closer than twenty five feet (25') to a building nor more than fifty feet (50') from a fire department connection.~~

~~—e. Fire hydrants used in conjunction with water supplies shall meet the standards of the American Water Works Association standard no. C-502, and shall have two (2) two and one half inch (2 1/2") outlets and one (1) four and one half inch (4 1/2") outlet with auxiliary gate valves on the hydrant branch line. Threads shall be American national standard. Pumper outlets shall face roadways.~~

~~—f. Fire hydrants shall be protected from accidental damage by approved methods when located in areas subject to vehicular damage.~~

~~—16. 507.5.1.1 Hydrant for standpipe systems. Delete this section in its entirety and in lieu thereof substitute the following new Section 507.5.1.1.~~

~~—507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within fifty feet (50') feet of the fire department connections.~~

~~—17. Section 901.7 Systems out of service. Amend by adding the following new sentence to the end of the paragraph:~~

~~—... In all cases automatic fire suppression and alarm systems shall not be out of service for more than eight (8) hours without express consent of the Fire Code Official.~~

~~18. Section 903.2.1 Group A. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.1:~~

~~Section 903.2.1 Group A. An automatic sprinkler system shall be provided throughout all buildings containing a Group A occupancy of 2,000 square feet or greater.~~

~~Exceptions:~~

~~4. Areas used exclusively as participant sport areas where the main floor areas located at the same level as the level of exit discharge of the main entrance and exit.~~

~~5. Only concession stands, retail areas, press boxes and other accessory use areas in Group A-5 with an area greater than 1,000 square feet shall be required to be provided with an automatic sprinkler system.~~

~~6. Where the Group A fire area is located on a floor other than a level of exit discharge serving such occupancies.~~

~~19. Section 903.2.1.1 Group A-1. Delete in its entirety.~~

~~20. Section 903.2.1.2 Group A-2. Delete in its entirety.~~

~~21. Section 903.2.1.3 Group A-3. Delete in its entirety.~~

~~22. Section 903.2.1.4 Group A-4. Delete in its entirety.~~

~~23. Section 903.2.1.5 Group A-5. Delete in its entirety.~~

~~24. Section 903.2.2 Group B. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.2:~~

~~Section 903.2.2 Group B. An automatic sprinkler system shall be provided throughout all buildings containing a Group B occupancy of 2,000 square feet or greater.~~

~~25. Section 903.2.3 Group E. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.3:~~

~~Section 903.2.3 Group E. An automatic sprinkler system shall be provided throughout all buildings containing a Group E occupancy.~~

~~26. Section 903.2.4 Group F-1. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.4:~~

~~Section 903.2.4 Group F. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy of 2,000 square feet or greater.~~

~~27. Section 903.2.4.1 Woodworking operations. Delete in its entirety.~~

~~28. Section 903.2.5.1 General. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.5.1:~~

~~—Section 903.2.5.1 General. An automatic sprinkler system shall be provided throughout all buildings containing a Group H occupancy.~~

~~—29. Section 903.2.7 Group M. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.7:~~

~~—Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy of 2,000 square feet or greater or where a Group M occupancy is used for the display and sale of upholstered furniture.~~

~~—30. Section 903.2.9 Group S-1. Delete in its entirety and in lieu thereof substitute with the following new Section 903.2.9:~~

~~—Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy of 2,000 square feet or greater or in buildings with repair garages servicing vehicles parked in basements. 2 1/2" fire hose valves shall be required in all storage occupancies with maximum travel distance of 150' to reach all areas of storage and located at man doors plus as needed in other locations in the building to achieve the coverage noted above. Calculate based on 150 psi at FDC to yield 100 psi at most remote hose valve with 250 gpm flowing—accumulate flow at 250 gpm for each additional hose valve to a maximum of 1,000 gpm if fully sprinklered building—1,250 gpm if not. Control valves shall be required on branch lines feeding hose valves when the branch line exceeds forty feet (40'). Hose valve systems in these one-story type storage occupancies shall be on a separate riser with control valve and flow switch.~~

~~—31. Section 903.2.9.1 Repair garages. Delete in its entirety.~~

~~—32. Section 903.2.9.2 Bulk storage of tires. Delete in its entirety.~~

~~—33. Section 903.2.10.1 Commercial parking garages. Delete in its entirety.~~

~~—34. Section 903.3.6 Hose threads. Amend by adding the following new sentence to the end of the paragraph:~~

~~—... flexible sprinkler drops shall not be allowed. All piping shall be hard piped.~~

~~—35. Section 903.4 Sprinkler system supervision and alarms. Amend by adding the following new sentence to the end of the paragraph:~~

~~—... all valves controlling the water supply for automatic sprinkler systems and water flow switches on all sprinkler systems shall be electrically supervised. No chains & locks will be allowed.~~

~~—36. Section 905.3 Required installations. Amend by adding the following new sentence to the end of the paragraph:~~

~~—... Standpipes shall be required in all buildings over two (2) stories. Locate firehose valves at intermediate landings, plus at first floor landing. And when stairwells provide roof access, then a hose valve is required at the floor landing of the highest floor. If roof access is not available from a stairway then extend at least one (1) hose valve through to~~

the roof level unless roof slope exceeds 3 in 12. All standpipes shall be equipped with 2-1/2" hose valves with a 2-1/2" x 1-1/2" reducer and cap.

—37. Section 905.3.1 Height: Amend by adding the following new sentence to the end of the paragraph:

—Class I standpipe systems shall also be installed throughout buildings where the floor level of the highest story is 2 stories with 25-foot corridors in length and all buildings which are 4 stories in height, including penthouses. All standpipes shall be equipped with 2-1/2" hose valves with a 2-1/2" x 1-1/2" reducer and cap.

—38. Section 907.2 Where required – new buildings and structures. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.2:

—Section 907.2 Where required – new buildings and structures. Where required all fire alarm systems shall be installed in accordance with the following:

—a) An approved manual, automatic, or manual and automatic fire alarm system shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23. In all cases an approved automatic fire alarm system shall be provided in buildings of Use Groups A, B, E, I, R-1, R-2, R-3 (where over and under or side-by-side construction is employed), and all buildings of mixed use, regardless of size, and all other principal buildings and individual uses over one (1) story in height or over two thousand (2,000) square feet in area, except Use Group R-4. Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.

—b) An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke detectors, 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 actuate a smoke detector.

—c) Where automatic sprinklers provide protection to an area, approved flow and tamper switches interconnected to the fire alarm system shall be provided.

—39. Section 907.2.8.2 Automatic smoke detection system. Amend by adding the following new Sections 907.2.8.2.1 and 907.2.8.2.2:

—Section 907.2.8.2.1. Heat detectors. Heat detectors shall be provided on every floor and in all generally unattended areas such as storage rooms, garages, elevator shafts, laundry rooms, furnace rooms, basements, attic spaces, crawl spaces and similar areas. At least one (1) shall be provided in each living unit near the bedrooms. "Rate of Rise" type heat detectors are not permitted in this application.

—Section 907.2.8.2.2. Detectors within Means of Egress components. Smoke detectors shall be provided in all stairways, exit access hallways and exit passageways.

~~—40. Section 907.2: Add the following subsection:~~

~~—Section 907.2.24: Fire alarm and detection systems for townhouses shall be installed in multiple single-family dwellings (townhouses), if the building or structure contains two (2) or more units. All fire alarm and detection systems shall be listed and installed in accordance with the provisions of NFPA 72, the IBC 2018, the IFG 2018.~~

~~—41. Section 907.6.1 Wiring. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.6.1:~~

~~—907.6.1 Wiring. Wiring shall comply with the requirements of NFPA 70 and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.907.6.2 power supply. The primary and secondary power supply for the fire alarm system shall be provided in accordance with NFPA 72. Add: Battery backup shall be a minimum of 72 hours.~~

~~—All fire alarm wiring shall be installed in conduit on all construction except in accessible ceiling areas and in open areas more than eight foot (8') above the adjacent finished floor where the threat of physical damage does not exist. The installation methods shall allow for easy removal and replacement of each device.~~

~~—42. Section 907.6.4 Zones. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.6.4:~~

~~—Section 907.6.4 Zones. Except as otherwise approved by the fire official and/or the Building Official or his/her designee, each floor shall be zoned separately and a zone shall not exceed 10,000 square feet. The length of any zone shall not exceed 100 feet in any direction.~~

~~—Each type of system (sprinkler, halon, alarm, etc.) shall be separately zoned. Individual dwelling units and tenant spaces (not including tenant spaces in an office building) shall have an indicator light located in an annunciator panel. The indicator light shall operate upon activation of a detector within the tenant space.~~

~~—43. Section 907.6.4.1 Zoning indicator panel. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.6.4.1:~~

~~—Section 907.6.4.1 Zoning indicator/fire alarm control panel. A zoning indicator/fire alarm control panel and the associated controls shall be provided in an approved location. All zoning indicator/fire alarm control panels shall be located within climate-controlled enclosures. It shall be prohibited to install a zoning indicator/fire alarm control panel directly upon the outside exterior walls of a structure. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible alarm silencing switch.~~

~~—44. Section 907.6.6 Monitoring. Delete this section in its entirety and in lieu thereof substitute the following new Section 907.6.6:~~

~~Section 907.6.6 Monitoring. All fire protection systems shall transmit all alarm signals to the dispatch center serving Tri-State Fire Protection District, which may be routed through any central receiving station. All required fire alarm systems shall transmit alarm, trouble, and where specially permitted, supervisory signals (specifically where only allowed by the fire official) to a 24-hour monitoring company or Addison Consolidated Dispatch Center. Installation shall be in accordance with NFPA 72.~~

~~Exception: Supervisory service is not required for:~~

~~1. Single and multiple station smoke alarms required by Section 907.2.10.~~

~~2. Smoke detectors in Group I-3 occupancies.~~

~~3. Automatic sprinkler systems in one and two family dwellings.~~

~~45. Section 907.6.6.1 Automatic telephone dialing devices. Delete in its entirety and in lieu thereof substitute with the following new Section 907.6.6.1:~~

~~Existing automatic telephone dialing devices, used to transmit a fire protection system signal, shall be converted to a wireless signal device, or most current monitoring method required by the Village of Willowbrook, when repair of the system requires new signal equipment or disconnected systems are placed back into service, unless otherwise approved by the Fire Code Official.~~

~~46. Section 912.1 Installation. Amend by adding the following new sentences to the end of the paragraph:~~

~~... "In all cases a Fire Department Connection with a five inch (5") Storz inlet shall be provided. Where the existing fire department connection is not a 5" Storz type connection, it must be replaced with a 5" inch Storz connection. Any new installation of the Storz connection shall be between 36" and 48" above finished grade. Any installation where the connection is between 36" and 48" or more above grade, a 30 degree elbow shall be required. Where the existing connection is less than 36" above grade, a 30 degree elbow shall not be allowed. Tri-State Fire Protection District reserves the right to grant variances on any fire department connection."~~

~~47. Section 912.2.1 Visible location. Amend by adding the following new sentence to the end of the paragraph:~~

~~... "Access routes shall be so arranged that fire department apparatus may respond from all points of the building to adjacent fire hydrants along routes not to exceed two hundred fifty feet (250') from the most remote point of the building perimeter to the closest fire hydrant. If the building configuration cannot be obtained the Fire Code Official may make concessions." (Ord. 19-O-10, 6-24-2019; amd. Ord. 19-O-14, 8-12-2019)~~

(C) Adoption of Tri-State Fire Protection District Amendments

1. The Village of Willowbrook hereby adopts 2024 International Fire Code, as amended by the Tri-State Fire Protection District.

Commented [DW38]: Discuss with Village.

The goal is to align 2021 IFC Chpt 9 with those amendments found in 2021 IBC Chpt 9.

Specifically discuss Group F-2 and S-2 occupancies.

2. Where conflicts occur between the adoption of the Tri-State Fire Protection District and the Village of Willowbrook adoption of the 2024 International Fire Code. The requirements of the Village of Willowbrook shall govern.

(GD) Enforcement And Delegation Of Duties:

1. ~~This Fire Code~~The International Fire Code shall be enforced by the building official or his/her designee of the Village of Willowbrook.

2. The building official or his/her designee may delegate the review of all plans submitted in compliance with the terms of this chapter, as well as the inspection of any required construction or improvement, to fire inspectors employed or appointed by any appropriate Fire Department or Fire Protection District. He may further request that such fire inspector give written approval of any plan required under the terms of this chapter.

(D) Prohibited Or Restricted Storage Or Manufacturing:

1. Notwithstanding any provisions of the International Fire Code or any other code, rule or regulation incorporated herein to the contrary, the storage of explosives and blasting agents and the manufacture and/or storage of fireworks is expressly prohibited.

2. The storage of flammable or combustible liquids in outside, aboveground tanks is also expressly prohibited except that storage of flammable or combustible liquids shall be permitted in outside, aboveground tanks provided such tank has a maximum capacity of two thousand one hundred (2,100) gallons and complies with all of the requirements set forth in chapter 57 of the International Fire Code.

3. The bulk storage of liquefied petroleum gas shall be permitted subject to the restrictions contained in chapter 61 of the International Fire Code and shall further not be located near populated areas or congested commercial areas. The bulk storage of liquefied petroleum gas provided for herein shall be permitted only upon written approval of the building official or his/her designee of the Village of Willowbrook.

(E) Regulations Governing Construction Of High Rise Buildings: Notwithstanding any provisions of this International Fire Code to the contrary, no construction, modification, alteration or improvement of any building or structure, whether multi-family, office, industrial or commercial, in excess of the lesser of three (3) stories or thirty feet (30') in height, measured from surrounding grade, shall be commenced until the plans and specifications for such construction, modification, alteration or improvement have been approved by the building official or his/her designee as being in compliance with the following requirements:

1. Water: All plans submitted hereunder shall provide for and depict the location, placement and type of fire hydrants, ~~Fire fire Department department~~ connections to the standpipe system and sprinkler system. Each such hydrant shall have one ~~(1)~~ 4-1/2-inch and two ~~(2)~~ 2-1/2-inch ~~Fire fire Department department~~ connections with National Standard ~~threads Threads~~ (NST).

Commented [DW39]: Discuss with Village

SAFEbuilt contracts directly with local fire departments nationally through our Fire Prevention Services team. We employ certified fire plans examiners and fire protection engineers.

Commented [DW40]: Discuss with Village

Is it the Village's intent to prohibit gas stations with Underground Storage Tanks (UST)?

(a) ~~Each~~ When required by the code such building or structure shall have standpipes of a minimum diameter of four inch (4") and maximum of six inch (6") conforming to National Fire Protection Association (NFPA) 14 Standpipe Class 1, with the size and location of said standpipes to be as approved by the building official. Each such standpipe shall have a two and one-half inch (2-1/2") NST Fire Department connections equipped with shutoff valves, removable two and one-half inch (2- 1/2") to one and one-half inch (1- 1/2") NST caps, at each floor in the stairwell. There shall be a minimum of one such standpipe for each stairwell.

Commented [DW41]: Discuss with Village

Is it the Village's intent to require standpipes in ALL buildings, regardless of IFC Sec. 905?

(b) When required by the code ~~Each~~ such building shall be equipped with fire pumps conforming to National Fire Protection Association 20. Said pumps shall be located at the lowest building level or as otherwise designated by the building official or his/her designee.

Commented [DW42]: Discuss with Village

Is it the intent of the Village to require fire pumps in all buildings regardless of the hydraulic design of the fire protection system?

2. Electrical Systems And Alarm Systems: All plans submitted hereunder shall provide for and depict the location of non-energized conduit wiring and outlets acceptable to the building official or his/her designee for Fire Department or appropriate Fire Protection District use, said wiring and outlets to be located on each and every floor of each such building or structure.

(a) There shall be located on each floor of every such building and structure a conduit and outlet for portable telephones for use by the Fire Department or appropriate Fire Protection District. Each building or structure shall contain a fire alarm system covering all public areas therein, which there shall be located on each floor of every such building and structure a conduit and outlet for portable telephones for use by the Fire Department or appropriate Fire Protection District. Each building or structure shall contain a fire alarm system covering all public areas therein, which system shall minimally comply with the requirements of NFPA 72. Said system shall provide for direct supervised connections to the Fire Department or appropriate Fire Protection District and at least one floor lobby in each such building or structure. Notifier alarm equipment shall be installed with the Fire Department or appropriate Fire Protection District where feasible. Each building or structure shall be provided with emergency lighting as specified in the International Building Code. Each elevator in every such building or structure shall be equipped with a key operated override control and the control panel for said elevator located on the ground floor of each building that shall contain recall controls, all acceptable to the Fire Department or appropriate Fire Protection District. The override control in each elevator shall override all elevator call devices. No elevator call device shall be sensitive to heat, water, light or smoke.

Commented [DW43]: Discuss with Village and SAFEbuilt team

(F) Modifications: The building official or his/her designee of the Village of Willowbrook shall have the power to grant relief from or approve substitutions alternate methods or materials to any of the provisions of ~~this the International~~ Fire Code, or any rule or regulation incorporated therein, upon written application of any affected owner, or his duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the code; provided that the intent of the an equivalency to the prescriptive requirements of the code shall be observed, public safety secured and substantial justice done. The particulars of such modifications alternate method or material, when granted or

allowed, and the decision of the building official or his/her designee thereon shall be entered upon the records of the department and a signed copy furnished to the applicants. If and when questions arise pertaining to the intent of any fire prevention and/or life safety requirement, the current NFPA standards shall be referred to as accepted engineering practices.

(G) Application Of Provisions: ~~Except as provided elsewhere in this code, any existing building and/or structure shall be brought into compliance with all applicable provisions of this code in the following situations:~~ Existing buildings or structures when undergoing additions or alterations shall comply with the adopted editions of the International Building Code, International Existing Building Code, and the International Fire Code.

~~— 1. If the structure or building is increased in floor area or in height, the entire structure or building shall be made to conform with the requirements of this code.~~

~~— 2. If any portion is changed in occupancy, that portion separated by approved fire rated construction shall be made to conform with the requirements of this code.~~

~~— 3. If any portion is altered or remodeled in a dollar amount in excess of thirty five percent (35%) of the fair market value of the building or structure before the alteration or remodeling, the entire building structure shall be made to conform to the requirements of this code.~~

~~— 4. If a building or structure is damaged by fire or other cause in excess of thirty five percent (35%) of the fair market value before the damage occurred, the entire structure or building (exclusive of foundation) shall meet the requirements of this code. (Ord. 19-O-10, 6-24-2019; amd. Ord. 20-O-06, 3-9-2020)~~

4-2-29: DUPAGE COUNTY COUNTYWIDE STORMWATER AND FLOODPLAIN ORDINANCE ADOPTED:

(A) Ordinance Adopted: There is hereby adopted by reference as if fully set out herein that certain ordinance known as the DuPage County Countywide Stormwater and Floodplain Ordinance as adopted and published by the County of DuPage, State of Illinois, on May 14, 2019 and effective May 28, 2019, together with the additions, insertions, deletions and changes hereinafter set forth, three (3) copies of which have been on file for a period of more than thirty (30) days prior to the adoption hereof and now are on file in the Office of the Village Clerk.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the DuPage County Countywide Stormwater and Floodplain Ordinance adopted by the DuPage County Board May 14, 2019:

1. Section 15-28.A - Amend by deleting the words "one foot above" and in lieu thereof insert the words "three feet above".

2. Section 15-28.B - Amend by deleting the words "one foot above" and in lieu thereof insert the words "three feet above".

Commented [DW44]: Discuss with Village

Is it the intent of the Village to require that an entire building meet the current requirements of the codes when an addition is constructed that does not affect the construction type and occupancy classification?

As an example, if I have an existing store (Group M occupancy) and I am constructing an addition. Is the entire building (BOTH addition and existing area) required to meet the code for a new Group M occupancy?

Commented [DW45]: Discuss with Village.

It is recommended the trigger uses the assessed value of the building versus "fair market value"

Commented [DW46]: Discuss with Village

Would you like SAFEbuilt to review these requirements? We have a Certified Floodplain Manager on staff to review and provide recommendations.

3. Section 15-71.A - Amend by adding the sentence "Minor stormwater systems shall be designed to carry the 10-year storm."

4. Section 15-71.E - Amend by adding thereto the following additional language... "In addition, the centerline of the roadway shall be elevated above the flood elevation of fifty year rainfall event (0.02 probabilities in any year)."

5. Section 15-72.D.4 - Delete section 15-72D.4 in its entirety and substitute the following:

"For purposes of calculating the required volume, a control structure shall be assumed that limits the peak runoff from the site to 0.10 cfs/acre for the disturbed area, however that for all developments that are tributary to: (a) the 59th Street storm sewer between Cass Avenue and Holmes Avenue, the maximum release rate shall be 0.07 cfs/acre, (b) Executive Plaza, the maximum release rate shall be 0.04 cfs/acre, (c) Lake Willoway, the maximum release rate shall be 0.06 cfs/acre, and (d) the 63rd Street storm sewer between Richmond Avenue and Illinois Route 83, the maximum release rate shall be 0.03 cfs/acre.

6. Section 15-73 - Amend by adding thereto the following additional language:

- 15-73.E Storage facilities shall not be located on public or private streets.
- 15-73F Storage depths on parking lots shall not exceed one foot (1') and no storage shall be allowed in required fire lanes, primary aisles, or handicapped accessible parking stalls and routes."

7. Section 15-73.A.1 - Amend by adding the sentence "If a lower release rate is specified in 15-72.D.4, that rate shall be used for the design of the control structure."

8. Section 15-90.H - Amend by deleting the words "one foot" and in lieu insert the words "three feet"

9. Section 15-98 - Amend by adding Section 15-98.C.1 that states, "The Village of Willowbrook shall receive all Post Construction BMP Fee-in-Lieu payments and shall manage, account for, and expend the funds in accordance with Section 15-98.B of this Ordinance.

10. Appendix A - Amend the definition of Flood Protection Elevation (FPE) by deleting the words "one foot" and inserting the words "three feet."

11. All General Certifications as adopted by the DuPage County Board, and as amended and added to from time to time, are hereby adopted.

(Ord. 19-O-10, 6-24-2019)

4-2-30: MINIMUM SECURITY REGULATIONS:

(A) General Provisions:

1. Purpose: The purpose of this section is to provide minimum standards to safeguard property and public welfare by reducing the potential of successful crime through regulating and controlling the design, construction quality of materials, use and maintenance of all buildings and structures within the Village of Willowbrook and certain equipment specifically regulated herein.

2. Scope: The provisions of this section shall apply to:

(a) All new construction in the business, industrial or multiple-family dwelling class.

(b) All additions, alterations or repairs to any existing building or structure in the business, industrial or multiple-family dwelling class.

(c) The entire building or structure when additions, alterations or repairs made within any twelve (12) month period exceed thirty five percent (35%) of the replacement value of the existing building or structure in the business, industrial or multiple-family dwelling class.

3. Maintenance: All devices or safeguards which are required by this section in a building when erected, altered or repaired shall be maintained in good working order. The owner, or his/her agent, shall be responsible for the maintenance of such devices or safeguards.

4. Alternate Materials And Methods Of Construction: The provisions of this section are not intended to prevent the use of alternate devices or methods of construction other than those prescribed, provided such alternatives afford the same or greater degree of security, and they are approved by the building official or his/her designee. The burden of proving that such alternative meets or surpasses the provisions of this section shall be on the person requesting its approval.

5. Tests: Whenever there is insufficient evidence of compliance with the provisions of this section, or evidence that any material, or any construction does not conform to the requirements of this section, or in order to substantiate claims for alternate materials or methods of construction, the Village may require tests as proof of compliance. These tests are to be made at the expense of the owner by an approved agency. If there are no appropriate test methods specified in this section, the building official or his/her designee shall determine the test procedure.

6. Responsibility Of Security: The owner or his/her agent shall be responsible for compliance with the provisions of this section.

7. Violations: It shall be unlawful for any person, firm or corporation, to erect, construct, enlarge, alter, move, improve, convert, equip, occupy or maintain any building or structure within the Village or cause the same to be done, contrary to or in violation of any of the provisions of this section.

8. Appeals: In order to determine the suitability of an alternate material and method of construction and to provide for reasonable interpretation of the provisions of this section,

there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the Plan Commission of the Village.

9. Limits Of Requirements Contained In This Section: The provisions of this section shall apply to all business, office, manufacturing and multiple-family residential occupancy classes or zoning districts.

10. Life Safety Factors: No portion of this section shall supersede any other Village or Federal laws, regulations, ordinances or the National Fire Protection Association Life Safety Code.

(B) Commercial Buildings, Minimum Standards:

1. Exterior Doors: Any building requiring panic proof hardware locks, or as otherwise required by the adopted Building Code, on exit doors shall be exempt from the exterior door locking security requirements contained in this section.

(a) A single door shall be secured with either a double cylinder or single cylinder dead bolt without a turn piece with a minimum throw of one inch (1"). Any dead bolt must contain hardened material to repel attempts at cutting through the bolt.

(b) On pairs of doors, the active leaf (door) shall be secured with the type lock required for single doors in subsection (B)1(a) of this section. The inactive leaf shall be equipped with throw bolts or flush bolts at top and bottom with a minimum throw of five-eighths inch (5/8"). The throw bolt must contain hardened materials.

(c) All doors which require locking at top and bottom shall be secured with throw bolts at both top and bottom with a minimum throw of five-eighths inch (5/8"). The throw bolt must contain hardened material.

(d) Cylinders shall be protected with cylinder guards.

(e) Exterior sliding commercial entrances shall be secured as in subsections (B)1(a), (B)1(b), and (B)1(c) of this section.

(f) Rolling overhead doors, solid overhead doors, and sliding or accordion garage type doors, other than security gates or grills as regulated by section 1010 of the adopted Building Code, shall be secured with a cylinder lock or padlock on the inside, when not otherwise controlled or locked by electrical power operation. If a padlock is used on the inside, when not otherwise controlled or locked, it shall be of hardened steel shackle, with minimum five-pin tumbler operation with non-removable key when in an unlocked position.

(g) Metal accordion grate or grill type doors, other than security gates or grills as regulated by section 1010 of the adopted Building Code, shall be equipped with metal lock guide track at top and bottom, and a cylinder lock and/or padlock with hardened steel shackle and minimum five-pin tumbler operation with non-removable key when in an unlocked position. The bottom track shall be so designed that the door cannot be lifted from the track when the door is in the locked position.

(h) Outside hinges on all exterior doors shall be provided with non-removable pins when using pin type hinges, and/or the center hinge shall have a steel dowel projecting a minimum of three-fourths inch (3/4") from one plate into the opposite plate of the hinge.

(i) Doors with glass panels and doors with glass panels adjacent to the door frame shall be secured as follows:

(1) Rated burglary resistant glass or glass like material; or

(2) The glass shall be covered with iron bars of at least one-half inch (1/2") round or one inch by one-fourth inch (1" x 1/4") flat steel material, spaced not more than five inches (5") apart, secured on the inside of the glazing; or

(3) Iron or steel grills of at least one-eighth inch (1/8") material of two inch (2") mesh secured on the inside of the glazing.

(j) Inswinging doors shall have rabbited jambs.

(k) Wood doors, not of solid core construction, or with panels therein with less than one and three-eighths inch (1 3/8") thickness, shall be covered on the inside with at least 16-gauge sheet steel or its equivalent attached with screws on minimum six inch (6") centers.

(l) Jambs for all doors shall be constructed or protected so as to prevent violation of the function of the strike.

(m) All door frames shall be of steel or wood and be so reinforced as to prevent spreading strike plates. On all wood frame doorways, the strike plate shall be of hardened steel construction, a minimum of four inches (4") in length and held in place with at least two (2) screws the minimum length of which shall be sufficient to extend one inch (1") into the stud directly adjacent to the door frame.

2. Accessible Windows:

(a) Accessible windows shall be of rated burglar resistant glazing material.

(b) If the window is the type to be opened, it shall be secured with a locking mechanism capable of withstanding a force of three hundred (300) pounds applied in any direction.

(c) Louvered windows, except those above the first story, shall not be permitted.

(d) Outside hinges on all accessible windows shall be provided with non-removable pins and/or steel dowels projecting a minimum of one-half inch (1/2") from one plate into the opposite plate of the hinge.

3. Ventilating Openings: Ventilating openings, larger than ninety six (96) square inches and utilized for the intake or exhausting of air, shall have a cover securely fastened to the roof or wall so as to prevent easy removal from the exterior by a person using common tools.

4. Roof Openings:

(a) All glass skylights on the roof shall be secured as follows: Skylight units or portions of openings utilizing transparent panels, shall be provided with burglary resistant glazing material, meeting or surpassing Underwriter's Laboratory test 972 and 101/I.S.2/NAFS (Voluntary Performance Specification for Windows, Skylights and Glass). The skylight unit shall be securely fastened to the roof in such a manner as to prevent removal from the exterior by a person using common tools.

(b) All hatchway openings on the roof shall be secured as follows:

(1) If the hatchway is of wooden material, it shall be covered on the inside with at least 16-gauge sheet steel or its equivalent, attached with screws on minimum six inch (6") centers, or at least 17-gauge sheet steel or its equivalent, attached to the outside by rounded head flush bolts or vandal proof screws.

(2) The hatchway shall be secured from the inside with the means approved by the building official.

(3) Outside hinges on all hatchway openings shall be provided with non-removable pins when using pin type hinges, and/or a steel dowel projecting a minimum of one-half inch (1/2") from one plate into the opposite plate of the hinge.

(c) All air duct or air vent openings exceeding eight inches by twelve inches (8" x 12") on the roof or exterior walls shall be secured as follows:

(1) Iron bars of at least one-half inch (1/2") round or one inch by one-fourth inch (1" x 1/4") flat steel material spaced no more than five inches (5") apart and securely fastened; or

(2) A steel grill of at least one-eighth inch (1/8") material of two inch (2") mesh and securely fastened.

If the barrier is on the outside, it shall be secured with rounded head flush bolts or vandal proof screws.

5. Office Building (Multiple Occupancy): Each entrance door to individual offices shall be considered to be an exterior door and shall be protected as required under the minimum standards for exterior doors in commercial buildings.

6. Illumination:

(a) Open parking lots and access thereto shall be provided with a maintained minimum of 1.0 horizontal foot-candle of light on the parking surface from dusk until not less than thirty (30) minutes after the closing for business of the last commercial establishment serviced by such parking lot.

(b) Parking and other non-enclosed areas under or within buildings at grade shall be provided with a maintained minimum of 1.0 horizontal foot-candle of light on the parking or walking surface from dusk until dawn.

(c) All exterior doors, excluding front doors, shall have a minimum of one hundred watt (100 W) bulb over the outside door. Such bulb shall be protected with a clear polycarbonate cover or cover of equal breaking resistant material, and shall be illuminated during the period from sunset to sunrise.

Notwithstanding any provision contained herein to the contrary, the building official or his/her designee shall have final approval of all illumination and may alter the regulations contained herein, including the times during which illumination is to be provided, so as to lessen the impact on surrounding properties.

7. Building Numbering: Notwithstanding any other provision of this Code to the contrary, each individual commercial establishment shall have the business name displayed on the building or part thereof occupied by said business together with the correct address of the commercial establishment located on all exterior doors thereof.

(C) Multiple-Family Dwellings, Minimum Standards:

1. Exterior Doors: Exterior doors and doors leading from garage areas into multiple dwelling buildings and doors leading into stairwells, except in hotels and motels, shall be equipped with self-closing devices allowing egress to the exterior of the building or into the garage area or stairwell, but requiring a key to be used to gain access to the interior of the building from the outside or garage area or stairwell.

2. Garage Doors: Whenever parking facilities are provided, either under or within the confines of the perimeter walls of any multiple-family dwelling, such facility shall be fully enclosed and provided with a locking device.

3. Entrance Doors To Individual Units:

(a) In hotels, motels and multiple-family dwellings, locks on entrance doors to individual units shall have dead bolts with one inch (1") throw and hardened steel inserts in addition to dead latches with one-half inch (1/2") minimum throw. The locks shall be so constructed that both dead bolts and dead latches can be retracted by a single action of the inside knob. Alternate devices that equally resist illegal entry may be used if approved by the building official.

(b) All doors shall be of solid core with minimum thickness of one and three-fourths inches (1 3/4").

(c) Vision panels in individual entrance doors or within forty inches (40") of the inside activating device shall be of rated burglary resistant glazing material.

(d) An interviewer or door scope shall be provided in each individual unit entrance door which does not contain a vision panel.

(e) Doors swinging out shall have non-removable hinge pins and/or steel dowels projecting a minimum of one-half inch (1/2") from one hinge plate into the opposite hinge panel.

(f) Inswinging doors shall have rabbited jambs.

(g) Jambs for all doors shall be so constructed or protected as to prevent violation of the function of the strike.

(h) Cylinder guards shall be installed on all mortise or rim type cylinder locks whenever the cylinder projects beyond the face of the door or is otherwise accessible to gripping tools.

(i) Door frames shall be of steel or wood and be so reinforced as to prevent spreading.

(j) All door frames shall be of steel or wood and be so reinforced as to prevent spreading strike plates. On all wood frame doorways, the strike plate shall be of hardened steel construction, a minimum of four inches (4") in length and held in place with at least two (2) screws the minimum length of which shall be sufficient to extend one inch (1") into the stud directly adjacent to the door frame.

4. Sliding Glass Doors:

(a) Sliding glass doors shall meet or exceed the American Architectural Manufacturers' Association as set forth in Standard AAMA/NWWDA 101/I.S.2 or 101/I.S.2/NAFS.

(b) All single sliding patio doors shall have the movable section of the door sliding on the inside of the fixed portion of the door.

(c) Dead locks shall be installed on all single sliding patio doors. The lock may be permitted to be operable from the outside by a key utilizing a bored lock cylinder of pin tumbler construction. Mounting screws for the lock case shall be inaccessible from the outside. Lock bolts shall be of hardened steel material insert or bore and shall engage the strike sufficiently to prevent its being disengaged by any possible movement of the door with the space of clearance provided for installation and operation. The strike area shall be reinforced to maintain effectiveness of bolt strength.

(d) Double sliding doors must be locked at the meeting rail and meet the locking requirements in subsection (C)4(c) of this section.

5. Window Protection:

(a) Windows shall be so constructed that when the window is locked it cannot be lifted from the frame.

(b) Window locking devices shall be capable of withstanding force of three hundred (300) pounds applied in any direction.

(c) Sliding glass windows shall meet or exceed the American Architectural Manufacturers' Association as set forth in Standard AAMA/NWWDA 101/I.S.2 or 101/I.S.2/NAFS.

6. Illumination: All multiple-family dwelling buildings with common entrances to more than one unit shall be illuminated during the period from sunset to sunrise with at least the

equivalent of a one hundred watt (100 W) bulb. Such bulb shall be covered and protected by a clear polycarbonate cover or cover of equal breaking resistant material.

(a) Open parking lots and access thereto providing more than ten (10) parking spaces shall be provided with a maintained minimum of 1.0 horizontal foot-candle of light on the parking surface from dusk until dawn.

(b) Parking and other nonenclosed areas under or within buildings at grade shall be provided with a maintained minimum of 1.0 horizontal foot-candle of light on the parking or walking surface from dusk until dawn.

(c) Sidewalk and walkways leading from parking lots to buildings or from building to building shall be provided with a maintained minimum of 1.0 horizontal foot-candle of light on the walking surface from dusk to dawn.

Notwithstanding any provision contained herein to the contrary, the building official or his/her designee shall have final approval of all illumination and may alter the regulations contained herein, including the times during which illumination is to be provided, so as to lessen the impact on surrounding properties. (Ord. 19-O-10, 6-24-2019)

4-2-31: MINIMUM HOUSING REGULATIONS:

(A) Inspections:

1. All building or structures within the scope of this chapter and all construction or work for which a permit is required shall be subject to inspection by the Village in accordance with and in the manner provided by this section.

2. Inspection of premises and the issuing of orders in connection therewith under the provisions of this section shall be the responsibility of the building official or his/her designee.

3. The Village is hereby authorized to enter and inspect any dwelling, dwelling unit, rooming unit, dormitory and the surrounding premises subject to the provisions of this section.

4. If any owner, occupant or other person in charge of a dwelling, dwelling unit or rooming unit, or of a multiple dwelling or a rooming house dwelling fails or refuses to permit access or entry for an inspection, the Village, upon showing that a probable cause exists for the inspection, shall seek a court order from the Circuit Court of DuPage County restraining that person from interfering with the inspector's access and entry upon the premises.

5. The Village may collect, publish and disseminate information to the public concerning techniques of maintenance, repair and sanitation in housing and concerning the requirements of this section.

(B) Enforcement:

1. Responsibility: It shall be the duty of the building official or his/her designee to enforce the provisions of this section. Whenever, in the opinion of the building official or his/her designee, any violation of the provisions of this section is found to exist, he shall within ten (10) days after the inspection, serve written notice of such alleged violation upon the owner or occupant by:

(a) Personal service, or

(b) Mailing a copy thereof to the owner or occupant, by first class or certified mail, at his last known address, or

(c) Posting a copy thereof in a conspicuous place in or about the building containing the alleged violation.

2. Form Of Notice: Such notice may include more than one alleged violation and shall specify a period of time for compliance, which shall be such time as, in the opinion of the Village, is reasonably required to effect the changes necessary for compliance.

Such notice may contain an outline of remedial action, which if taken, will effect compliance with the provisions of this section and with rules and regulations adopted pursuant thereto.

If any alleged violation of which notice as aforesaid has been given is not corrected or eliminated within the time specified in such notice, the owner or occupant shall be subject to the penalty provisions of this section for each such uncorrected violation and for each day such violation exists after service of this notice.

3. Emergency Action: Whenever the Village finds that an emergency exists which requires immediate action to protect the public health or safety, it may, without notice, issue an order reciting the existence of such an emergency and requiring that such action be taken as it deems necessary to meet the emergency. Notwithstanding the other provisions of this section, such order shall be effective immediately. Any person to whom such order is directed shall comply therewith immediately.

4. Conformity With Ordinances And Statutes: All construction done and installations made to comply with the provisions of this section shall be in accordance with the ordinances of the Village of Willowbrook and Statutes of the State of Illinois regulating such construction and installations.

(C) Retaliatory Eviction By Owner: No owner or lessor shall evict or cause to evict or terminate the tenancy of a renter or lessee solely as retaliation that renter or lessee complains to the Village or the Circuit Court against the owner, charging the owner with violation of this section or with violation of any warranty of habitability accruing to the renter or lessee from the owner.

The fact that the rent or lease consideration of the renter or lessee is not more than thirty (30) days delinquent at the time the owner gives notice of eviction or termination of a lease or rental and the fact that, within six (6) months prior to the notice of eviction or termination of the lease or rental, the renter or lessee has not been convicted of creating a

nuisance at the dwelling or dwelling unit from which eviction is sought and the renter shall be prima facie evidence that the eviction or termination of lease or rental by the owner is solely retaliatory because that renter or lessee has complained against the owner charging him with violation of this section.

Any person convicted of violation of this section shall be fined not less than two hundred dollars (\$200.00) nor more than the maximum amount permitted under title 1, chapter 4 of this Code.

(D) Criminal Housing Management: Criminal housing management is hereby prohibited. A person commits criminal housing management when, having personal management or control of residential real estate whether as a legal or equitable owner of the residential real estate or as a managing agent or otherwise, he knowingly permits, by his gross carelessness or neglect, the physical condition or facilities of the residential real estate to become or remain so deteriorated that the health and safety of an inhabitant is endangered.

A person convicted of criminal housing management shall be fined not less than two hundred dollars (\$200.00) nor more than the maximum amount permitted under title 1, chapter 4 of this Code.

(E) Designation As "Unfit For Human Habitation":

1. The Village shall designate a dwelling, dwelling unit, or rooming unit as "unfit for human habitation" when it is damaged, decayed, dilapidated, unsanitary, unsafe, vermin infested, lacks illumination, ventilation, or required sanitation facilities to such extent as to create a clear and present danger to health, life and safety of occupants and is not repaired or corrected in less than seventy two (72) hours after receipt of notice of violation of this section.

2. Whenever any dwelling, dwelling unit or rooming unit has been designated as "unfit for human habitation" the Village shall placard the dwelling indicating that it is unfit for human habitation in accordance with the requirements set out in the Illinois Compiled Statutes, as amended. If occupied, the Village shall order the dwelling, or that part thereof, vacated within twenty four (24) hours.

Occupants shall be relocated and, if necessary, reasonably housed for not more than three (3) days at the expense of the Village. All relocation and housing costs paid by the Village and incurred pursuant to this section shall be reimbursed to the Village by either:

(a) The owner of the dwelling designated "unfit for habitation", provided that the condition of the dwelling was caused in whole or in substantial part by the neglect of the owner, or

(b) By any occupant of the dwelling designated "unfit for human habitation", provided that the condition of the dwelling was caused in whole or in substantial part by the neglect of that occupant, or

(c) By the tenant of the dwelling designated "unfit for human habitation", provided that the condition of the dwelling was caused in whole or in substantial part by the neglect of that tenant, or

(d) By the owner or the occupant or the tenant, jointly, provided that each of those to be held jointly liable has caused by his neglect, in whole or in substantial part, the condition of the dwelling designated "unfit for human habitation".

If the owner is liable for reimbursement of all or any part of the costs under this section, such costs shall constitute a lien against the premises and shall be recovered by the Village.

3. No dwelling, dwelling unit or rooming unit which has been designated as "unfit for human habitation", has been placarded as such, and has been vacated, shall be used again for human habitation until all costs and expenses of relocation and housing of vacated occupants shall be reimbursed to the Village, all defects have been repaired and corrected, and written approval is given from the Village and the placard is removed by the Village.

4. No person shall deface or remove the placard from any dwelling, dwelling unit or rooming unit which has been designated as "unfit for human habitation" and has been placarded as such. Anyone who violates this section, upon conviction, shall be fined in an amount as provided in title 1, chapter 4 of this Code.

(F) Additional Remedies Preserved: All additional remedies granted to the Village by the Statutes of the State of Illinois are hereby preserved and unimpaired by enactment of this section.

(G) Emergencies:

1. Whenever an emergency exists which requires immediate action to protect the public health, safety or welfare, the building official or his/her designee may issue an order, without notice or hearing, directing the owner, occupant, operator or agent to take appropriate action to correct or abate the emergency.

2. The owner, occupant, operator or agent shall be granted a hearing on the matter upon his request as soon as practicable, but such hearing, in no case, shall stay the abatement of the emergency.

(H) Adoption Of Property Maintenance Code:

1. Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the ~~2018-2024~~ International Property Maintenance Code, second printing, as published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been for a period of more than thirty (30) days prior to the effective date hereof and now is on file in the Office of the Village Clerk.

(I) Amendments To Code: The following additions, insertions, deletions and changes are hereby made to the ~~2018-2024~~ International Property Maintenance Code, second printing:

1. Section 102.3 Application of other codes. Delete in its entirety and in lieu thereof substitute with the following new Section 102.3:

Section 102.3 Application of other codes. Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions in Title 4 of the Village Code.

2. Section 102.3 Application of other codes. Amend by adding the following new Sections ~~102.3.1 and~~ 102.3.2:

~~—Section 102.3.1 Electrical. All references within this code to the "ICC Electrical Code" shall be changed to read, "National Electrical Code, 2017 Edition (NFPA 70-2017), as prepared and published by the National Fire Protection Association, Inc., and as amended by Title 4, Chapter 2, Section 27, of the Village Code." The provisions of said Electrical Code, as amended, shall apply to the installation, alteration, repair, and replacement of electrical systems, including equipment, appliances, fixtures, fittings and appurtenances thereto.~~

Section 102.3.2 Plumbing. All references within this code to the "International Plumbing Code" shall be changed to read, "Illinois Plumbing Code, as sponsored and published by the Illinois Department of Public Health, and as amended by Title 4, Chapter 2, Section 24, of the Village Code." The provisions of said Plumbing Code, as amended, shall apply to the installation, alteration, repair and replacement of plumbing systems, including appliances, fixtures, fittings and appurtenances thereto.

3. Section ~~103.5~~104 Fees. Delete in its entirety. (Refer to Title 4, Chapter 2, Section 11, of the Village Code for Permit Fees)

~~—4. Section 106 VIOLATIONS. Amend by adding the following new Section 106.6:~~

~~—Section 106.6 Restraining Actions. Anyone affected by any such order shall within fifteen (15) days after service of such order apply to a court of record for an order restraining the Building Official or his/her designee from razing and removing such structure or parts thereof. The court shall determine whether the order of the code official is reasonable, and if found reasonable, the court shall dissolve the restraining order, and if found not reasonable, the court shall continue the restraining order or modify it as the circumstances may require.~~

~~54. Section 107.3~~105.5 Method of service ~~Notices and orders. Delete in its entirety and in lieu thereof substitute with the following new Section 107.3~~ Amend to add the following new section:

Section ~~107.3~~105.5.1 Method of service. Such notice shall be deemed to be properly served if a copy thereof is: delivered personally, or sent by certified, first-class mail or courier addressed to the last known address. If the notice is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Electronic transmission, i.e. Electronic Mail, also known as E-Mail, or Facsimile also known as Fax, shall be deemed a method of service.

5. SECTION 107 MEANS OF APPEAL. Delete in its entirety and in lieu thereof substitute with the following new SECTION 111:

SECTION 107 BOARD OF APPEALS

Section 107.1 Application for Appeal: Each owner and occupant who is affected by this Section shall have the right to appeal from the decision of the Village made pursuant to this Section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section 107.2 Membership of the Board: The board of appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section 107.3 Board Actions: All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section 107.4 Procedure: The rules of procedure during a hearing on an appeal shall be similar to the procedures of trial for civil matters in the courts of this State except where convenience and necessity require variance therefrom. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section 107.5 Board Recommendation: Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section 107.6 Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. To recommend the extension of any time allowance provided in this Section and to recommend variance from any provision of this Section upon an owner, renter or lessee, upon presentation of evidence of substantial economic hardship in cases where property and the health and safety of persons are not endangered by physical injury or damage, and where enforcement of the pertinent provision under the circumstances, supported by evidence, would constitute a confiscation of property without compensation contrary to the Constitution of the United State of America and the State of Illinois.

Section 107.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further

consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

6. Section 108 Board of Appeals. Delete this section in its entirety without substitution.

7. Section 109 VIOLATIONS. Amend by adding the following new Section 109.6:

Section 109.6 Restraining Actions. Anyone affected by any such order shall within fifteen (15) days after service of such order apply to a court of record for an order restraining the Building Official or his/her designee from razing and removing such structure or parts thereof. The court shall determine whether the order of the code official is reasonable, and if found reasonable, the court shall dissolve the restraining order, and if found not reasonable, the court shall continue the restraining order or modify it as the circumstances may require.

8. SECTION 110 STOP WORK ORDERS. Delete in its entirety. (Refer to Title 4, Chapter 2, Section 13: STOP WORK ORDERS, of the Village Code.)

~~69.~~ Section ~~108.2111.2~~ Closing of vacant structures. Delete in its entirety and in lieu thereof substitute with the following new Section 108.2:

Section ~~108.2111.2~~ Closing of vacant structures. If the structure is vacant and unfit for human habitation and occupancy, and is not in danger of structural collapse, the code official is authorized to post a placard of condemnation on the premises and order the structure closed up so as not to be an attractive nuisance. Upon failure of the owner or owner's authorized agent to close up the premises within the time specified in the order, the code official shall cause the premises to be closed and secured through any available public agency or by contract or arrangement by private persons and the cost thereof shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate. Any vacant structure closed up by the owner, or by a public or private agency upon order of the Code Official, shall be deemed as a temporary method in which to abate the nuisance which shall not exceed sixty (60) days in duration. The Code Official may, in conjunction with the Village Attorney, seek a demolition/repair order within the sixty (60) days' time period and/or any time thereof to require repairs or removal of the structure. All associated costs plus administrative fees shall be charged as a lien upon such real estate.

~~710.~~ Section ~~110.4113.1~~ General. Revise the last sentence of the paragraph to read as follows:

... Boarding the building up for future repair shall not extend beyond 90 days, unless approved by the Building Official or his/her designee.

—8. ~~SECTION 111 MEANS OF APPEAL. Delete in its entirety and in lieu thereof substitute with the following new SECTION 111:~~

—~~SECTION 111 BOARD OF APPEALS~~

—~~Section 111.1 Application for Appeal: Each owner and occupant who is affected by this Section shall have the right to appeal from the decision of the Village made pursuant to this Section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.~~

—~~Section 111.2 Membership of the Board: The board of appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.~~

—~~Section 111.3 Board Actions: All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.~~

—~~Section 111.4 Procedure: The rules of procedure during a hearing on an appeal shall be similar to the procedures of trial for civil matters in the courts of this State except where convenience and necessity require variance therefrom. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.~~

—~~Section 111.5 Board Recommendation: Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.~~

—~~Section 111.6 Powers of the Board: The Board of Appeals shall have the following powers:~~

—~~a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.~~

—~~b. To recommend the extension of any time allowance provided in this Section and to recommend variance from any provision of this Section upon an owner, renter or lessee, upon presentation of evidence of substantial economic hardship in cases where property and the health and safety of persons are not endangered by physical injury or damage, and where enforcement of the pertinent provision under the circumstances, supported by evidence, would constitute a confiscation of property without compensation contrary to the Constitution of the United State of America and the State of Illinois.~~

—~~Section 111.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further~~

consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

~~—9. SECTION 112 STOP WORK ORDERS. Delete in its entirety. (Refer to Title 4, Chapter 2, Section 13: STOP WORK ORDERS, of the Village Code.)~~

10. Section 302.4 Weeds. Amend by inserting the following dimension:

..."Ten Inches (10)"

11. Section 302.9 Defacement of property. Amend ~~by adding the following language at the end of the last sentence~~ to read follows:

It shall be the responsibility of the owner to restore said surface to an approved state of maintenance and repair within 72 hours.", within seventy-two (72) hours"

12. Section 302 EXTERIOR PROPERTY AREAS. Amend by adding the following new Section 302.10:

302.10 Tree and Plant Nuisances.

1. Disease Conditions: All trees, shrubs, vines, cuttings, scions, graphs, plants and plant parts and plant products in places within the Village, infested with injurious insect pests or infected with plant diseases which are liable to spread to other plants, plant products or places to the injury thereof, or to the injury of man and animals, and all species and varieties of trees, shrubs, vines and other plants not essential to the welfare of the people of the Village which may serve as a favorable host plant and promote the prevalence and abundance of insect pests and plant diseases, or any stage thereof, injurious to other plants essential to the welfare of the people of this Village.

2. Dangerous Conditions; Encroachments: Any tree, shrub or other planting:

a. Which by its location or condition constitutes a threat to the safety or property of individuals or of the public; or

b. Which obstructs or encroaches upon any street right-of-way, sidewalk, public property or any public or Village utility lines or facilities.

13. Section 304.14 Insect Screens. Amend by inserting the dates:

... January 1 and December 31 in the spaces provided.

14. Section 307.1 General. Delete in its entirety and in lieu thereof substitute with the following new Section 307.1:

Section 307.1 General. Every exterior and interior flight of stairs having three (3) or more risers shall have a handrail on one side of the stair. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches and not more than 38 inches. Depending on the occupancy, the handrails shall meet the requirements of International Building Code Section 1014.3 or International Residential Code Section R311.7.8.5 for graspability. Every open portion of a stair, landing, balcony, porch, deck, ramp or other walking surface which is more than twenty-four inches (24") above the floor or grade below shall have guards. Guards shall not be less than 36 inches high above the floor of the landing, balcony, porch, deck, or ramp or other walking surface.

Exception: Guards on the open sides of stairs shall have a height of not less than 34 inches measured vertically from a line connecting the nosings.

15. Section 308.3.1 Garbage facilities. Delete in its entirety and in lieu thereof substitute with the following new Section 308.3.1:

Section 308.3.1 Garbage facilities. The owner of every dwelling shall supply an approved leakproof, covered, outside garbage container, and the owner of the premises shall be responsible for the removal of garbage.

16. Section 404.4.1 Room area. Amend the section by adding the following language at the end of the last sentence:

"... Every room intended for sleeping purposes may not include more than two (2) occupants, regardless of floor area."

17. Section 602.2 Residential occupancies. Delete in its entirety and in lieu thereof substitute with the following new Section 602.2:

Section 602.2 Residential occupancies. Every dwelling shall be provided with heating facilities capable of maintaining a room temperature of sixty- eight degrees (68°) Fahrenheit at a level of three feet (3') above the floor and a distance of three feet (3') from the exterior walls in all habitable rooms, bathrooms and toilet rooms based on the outside design temperature required for the locality by the International Plumbing Code, Appendix D.

18. Section 602.3 Heat Supply. Delete in its entirety and in lieu thereof substitute with the following new Section 602.3:

Section 602.3 Heat Supply. Every owner and operator of any building who rents, leases or lets one or more dwelling unit(s), rooming unit(s), dormitory(s) or guest room(s) on terms, either express or implied, to furnish heat to the occupants thereof shall supply sufficient heat to maintain a room temperature of not less than sixty-eight degrees (68°) Fahrenheit in all habitable rooms, bathrooms and toilet rooms. The temperature shall be measured at a point three feet (3') above the floor and three feet (3') from the exterior walls. When the outdoor temperature is below the outdoor design temperature required for the locality by the International Plumbing Code, Appendix D, the owner or operator

shall not be required to maintain the minimum room temperatures, provided the heating system is operating at full capacity, with supply valves and dampers in a full open position.

19. Section 602.4 Occupiable work spaces. Insert January 1, December 31.

20. Section 604.2 Service. Delete the last sentence in its entirety and in lieu thereof substitute the following new sentence:

Dwelling units shall be served by a three-wire, 120/240-volt, single-phase electrical service having a rating of not less than one hundred (100) amperes.

~~21. Section 702.4 Emergency escape openings. Amend by adding this new sentence:~~

~~"One emergency escape opening shall lead directly to the outside."~~

(Ord. 19-O-10, 6-24-2019)

4-2-32: SWIMMING POOL REGULATIONS ADOPTED:

(A) Code Adopted: Swimming pool installations shall comply with the provisions of the ~~2018-2024~~ International Swimming Pool and Spa Code, second printing, as prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been for a period of more than thirty (30) days prior to the effective date hereof and now is on file in the Office of the Village Clerk.

(B) Amendments To Code: The following additions, insertions, deletions and changes are hereby made to the ~~2018-2024~~ International Swimming Pool and Spa Code, second printing:

1. Section 101.1 Title. Delete in its entirety and in lieu thereof substitute with the following new Section 101.1:

Section 101.1 Title. These regulations shall be known as the Swimming Pool and Spa Code of the Village of Willowbrook, and shall be cited as such. It is referred to herein as "this code".

2. Section ~~105.5.3~~ 105.4. ~~Expiration~~ Permit issuance. ~~Delete this section in its entirety and in lieu thereof substitute the following new section~~ Amend to add the following section:

Section ~~105.5.3~~ 105.4.1 Expiration: Every permit issued by the Building Official under the provisions of this Code shall expire by limitation and become null and void if the work authorized by such permit shall not have been started within six (6) months after the date of issuance of said permit. Where, under authority of a permit, work has begun and has not been processed for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy permit issued, all rights under such permit shall thereupon terminate and work can be

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Escape and rescue openings by their definition and function lead to the exterior.

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continued only after application for and issuance of a new permit. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained.

~~3. Section 105.5.4 Extensions. Amend by deleting the last sentence of the section.~~

43. Section ~~105.6.2108.2~~ Fee schedule. Delete this section in its entirety and in lieu thereof substitute the following new Section ~~105.6.2108.2~~:

Section ~~105.6.2108.2~~ Fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

~~4. Section 111 Means of Appeals. Delete this section in its entirety without substitution.~~

~~5. Section 112 MEANS OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 112:~~

~~Section 112 BOARD OF APPEALS.~~

~~Section 112.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.~~

~~Section 112.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.~~

~~Section 112.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.~~

~~Section 112.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.~~

~~Section 112.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.~~

~~Section 112.6 Powers of the Board: The Board of Appeals shall have the following powers:~~

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section 112.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

~~56.~~ Section ~~107.4113.4~~ Violation penalties. Delete this section in its entirety.

~~67.~~ Section ~~107.5114.1~~ ~~Stop work orders~~ Authority. Delete the last sentence of this section and in lieu thereof substitute the following new sentence:

"... Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the building official or his/her designee to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code.

~~7.~~ Section ~~108~~ MEANS OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 108:

~~Section 108 BOARD OF APPEALS.~~

~~Section 108.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.~~

~~Section 108.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.~~

~~Section 108.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting~~

member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

~~—Section 108.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.~~

~~—Section 108.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.~~

~~—Section 108.6 Powers of the Board: The Board of Appeals shall have the following powers:~~

~~—a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.~~

~~—b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.~~

~~—Section 108.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.~~

8. Section 301 General. Amend by adding the following new Section 301.2:

Section 301.2 Location. All outdoor swimming pools and equipment accessory thereto shall be located on any lot in conformance with all applicable zoning regulations contained in Title 9 of the Village Code.

9. Section 302.2 Water service and drainage. Amend to reference the Illinois Plumbing Code in lieu of the International Plumbing Code.

910. Section 302.2 Water service and drainage. Amend by adding the following new Sections 302.2.1 and 302.2.2:

Section 302.2.1. Water Supply. No source of water other than that secured from the village waterworks distribution system or from an individual's privately owned well shall be used to fill any swimming pool.

Section 302.2.2. Pool Fill Notice. Village employees will no longer be available to fill swimming pools as they have in the past. Pools can now be easily filled with a typical garden hose without concern for the sanitary sewer charges. Both the Flagg Creek Water Reclamation District and the DuPage Sanitary District have programs to help offset the sanitary sewer charges for water utilized outside the home. You are encouraged to contact your sanitary sewer provider to learn more about their programs. A backflow prevention device is required on all hose bib connections.

~~10. Section 305.1 General. Is deleted in its entirety and in lieu thereof substituted with the following Section 305.1:~~

~~305.1 General. The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346, the area where the spa or hot tub is located shall not be required to comply with Sections 305.2 through 305.7.~~

11. Section 323 Safety. Amend by adding the following new Section 323.4:

Section 323.4. Safety Precautions. Every swimming pool shall be equipped with one or more throwing ring buoys not more than fifteen inches (15") in diameter and having sixty feet (60') of three- sixteenths inch (3/16") manila line attached, and one or more light but strong poles with blunted ends being not less than twelve feet (12') in length, for making reach assists or rescues.

(Ord. 19-O-10, 6-24-2019; amd. Ord. 20-O-01, 1-13-2020)

4-2-33: RESIDENTIAL CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain Code known as the International Residential Code for One- and Two-Family Dwellings, ~~2018~~2024, first printing, as prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been for a period of more than thirty (30) days prior to the effective date hereof and now is on file in the Office of the Village Clerk.

(B) Amendments To Code: The following additions, insertions, deletions and changes are hereby made to the International Residential Code for One- and Two-Family Dwellings, ~~2018~~2024, first printing:

1. ~~1.~~ Section R101.1 Title: Amend by deleting the words and punctuation marks, "(Name of Jurisdiction)" and insert the words "The Village of Willowbrook".

2. Section R105.1. Amend to add new subsection that shall read as follows:

Section R105.1.1. Kitchen and Bathroom Remodel Permits. Work performed within a structure that meets the definition of a kitchen, bathroom, or half-bathroom remodel shall not commence without first obtaining a building permit. All work shall comply

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with the Village of Willowbrook's adopted building, mechanical, plumbing, electrical, and energy codes, and shall meet all applicable requirements for new installations.

~~2. Section R102 Applicability. Amend by adding the following new Sections R102.8 and R102.9:~~

~~Section R102.8 Electrical. All references within this code to "ICC Electrical Code" shall be deleted in their entirety and in lieu thereof, the following language shall be substituted: "National Electrical Code, 2017, prepared and published by the National Fire Protection Association, Inc."~~

~~Section R102.9 Plumbing. All references within this code to the ICC Plumbing Code shall be deemed changed to read the: "current Illinois Plumbing Code, prepared and published by the Illinois Department of Public Health with amendments by the Village of Willowbrook"~~

Commented [DW49]: Will delete appropriate sections to indicate use of the NEC and Illinois Plumbing Code, as well as the IMC, Illinois Energy Conservation Code, and the IFGC

3. Section R105.2 Work exempt from permit. Delete in its entirety.

4. Section R105.5 Expiration. Delete in its entirety and in lieu thereof substitute with the following new Section R105.5:

Section R105.5 Extension and expiration of building permit. If after a building permit required by this chapter shall have been granted, if the operation called for by such permit shall not have been started within six (6) months after the date thereof, such permit shall be void and no operation thereunder shall be begun. Where, under authority of a permit, work has begun and has not been prosecuted for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy certificate or certificate of completion issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The new permit shall only be issued for a period in which to expediently complete the work originally permitted. The completion period of the extended permit shall be approved by the Building Official of his/her designee. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained. Failure to complete the originally permitted work prior to the expiration date of the extended permit shall be a violation of this code and punishable in accordance with the provisions of title 1, chapter 4 of the Village Code.

5. Section R108.1 Payment of fees. Delete in its entirety and in lieu thereof substitute the following new Section R108.1.

Section R108.1 Payment of fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

6. Section R110.2 Change in use. Delete in its entirety and in lieu thereof substitute the following new Section R110.2.

Section R110.2 Change in use. Changes in the character or use of an existing structure shall require that use or structure to be in compliance with all current codes and regulations of the Village of Willowbrook.

~~7. Section R110.3 Certificate issued. Delete in its entirety and in lieu thereof substitute the following new Section R110.3:~~

~~Section R110.3 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy.~~

~~87.~~ Section R112 BOARD OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section R112:

Section R112 BOARD OF APPEALS.

Section R112.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section R112.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section R112.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section R112.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section R112.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section R112.6 Powers of the Board: The Board of Appeals shall have the following powers:

Commented [DW50]: Base code is clearly written, and this amendment is not needed

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section R112.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

~~98.~~ Section R113.4 Violation penalties: Delete this section in its entirety and in lieu thereof substitute the following new Section R113.4:

Section R113.4 Violation penalties. Any person who shall violate a provision of this section or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or a directive of the Building Official, or of a permit or certificate issued under the provisions of this section shall be punishable by a fine of not less than seventy five dollars (\$75.00) nor more than seven hundred fifty dollars (\$750.00). Each day that a violation continues shall be deemed a separate offense.

~~109.~~ Section R114.2 Unlawful continuance: Delete this section in its entirety and in lieu thereof substitute the following new Section R114.2:

Section R114.2 Unlawful continuance: Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the building official to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code.

~~110.~~ Section R202 DEFINITIONS. Amend by adding the following new Definition:

FIRE OFFICIAL/FIRE MARSHALL. The Building Official or his designated agent/representative.

~~1211.~~ Table R301.2(1) Climatic and geographic design criteria. Delete in its entirety and in lieu thereof substitute the following new Table R301.2(1):

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

-

Ground Snow Load

Wind Design

Seismic Design Category f

Subject To Damage From

Speedd

(mph)

Topographic Effectsk

Weatheringa

Frost Line Depthb

Termitec

25

115

No

1

Severe

42"

Moderate to heavy

-

| Winter Design Tempe | Ice Barrier Underlayment Requirementh | Flood Hazardsg | Air Freezing Indexi | Mean Annual Tempj |
|---------------------------|--|-------------------|------------------------|-------------------------|
| -2 | Yes | 09/16/2006 | 2000 | 50 |

TABLE R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

| GROUND SNOW LOAD ^a | WIND DESIGN | | | | SEISMIC DESIGN CATEGORY ^f | SUBJECT DAMAGE FROM | | | ICE UNDERLAYMENT REQUIRED ^h | BARRIER FLOOD HAZARD ^g | AIR FREEZING INDEX ⁱ | MEAN ANNUAL TEMP ^j |
|---------------------------------------|---|----------------------------------|----------------------------------|------------------------------------|--------------------------------------|---|-----------------------------------|-----------------------|--|-----------------------------------|---------------------------------|-------------------------------|
| | Speed (mph) | Topographic effects ^k | Special wind region ^l | Windborne debris zone ^m | | Weathering ⁿ | Frost line depth ^o | Termites ^c | | | | |
| 25-psf | 110 | NO | NO | NO | B | Severe | 42" | Yes | Yes | Note #1 | 1433 | 30.6 |
| MANUAL J DESIGN CRITERIA ⁿ | | | | | | | | | | | | |
| Elevation | Altitude correction factor ^p | | Coincident wet bulb | Indoor design humidity | Winter relative humidity | Indoor winter design dry-bulb temperature | Outdoor winter design temperature | | dry-bulb temperature | | Heating difference | temperature |
| 596 | 0.985 | | 73 | 70 | 70 | 70 | 0 | | | | 70 | |
| Latitude | Daily range | | Summer design gains | Indoor design humidity | Summer relative humidity | Indoor summer design dry-bulb temperature | Outdoor summer design temperature | | dry-bulb temperature | | Cooling difference | temperature |
| 41 | Medium | | 50% | 31 | 75 | 75 | 61 | | | | 16 | |

Note #1: Refer to the Village of Willowbrook Municipal Code Section 4-2-29

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s

1. a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(1). The grade of masonry units shall be determined from ASTM C39, ASTM C55, ASTM C62, ASTM C73, ASTM C129, ASTM C143, ASTM C216 or ASTM C652.
2. b. Where the frost line depth requires deeper footings than indicated in Figure R403.1(1), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
3. c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
4. d. The jurisdiction shall fill in this part of the table with the wind speed from the ultimate design wind speeds map (Figure R301.2(2)). Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
5. e. The jurisdiction shall fill in this section of the table to establish the design criteria using Table 10A from VCCA Manual J or established criteria determined by the jurisdiction.
6. f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R401.2.2.1.
7. g. The jurisdiction shall fill in this part of the table with: the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas); and the title and date of the currently effective Flood Insurance Study or other flood hazard study and maps adopted by the authority having jurisdiction, as amended.
8. h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
9. i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
10. j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
11. k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
12. l. In accordance with Figure R301.2(2), where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
13. m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
14. n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from VCCA Manual J or established criteria determined by the jurisdiction.
15. o. The jurisdiction shall fill in this section of the allowable stress design table using the Ground Snow Loads in Figure R301.2(3).

~~13. Section R302.2 Townhouses. Delete in its entirety and in lieu thereof substitute the following new Section R302.2:~~

~~Section R302.2 Townhouses. Dwelling units in townhouses shall be separated from each other by a minimum two (2) hour fire resistance rated fire barrier constructed of minimum eight inch (8") concrete masonry units, or an equivalent concrete assembly. When the attached dwellings exceed four (4) units or 4800 square feet combined, a four (4) hour fire resistance rated fire barrier constructed of concrete masonry units, or an equivalent concrete assembly, shall be provided extending through the roof to a height of no less than thirty inches (30") above the lowest roof. The structural integrity of individual units shall be independent of other units.~~

~~14. Section R302.2.4 Parapets for townhouses. Delete the exception to item no. 2 in its entirety and in lieu thereof substitute the following new exception:~~

~~Exception: Unless otherwise required in Sections R302.2 and R302.3, a parapet is not required in the two cases above when the roof is covered with a minimum class C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire retardant treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8 inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of 4 feet (1219 mm) on each side of the wall or walls.~~

~~15. Section R302.2.4 Parapets for townhouses. Delete item no. 3 in its entirety and in lieu thereof substitute the following new no. item 3:~~

~~3. Unless otherwise required in sections R302.2 and R302.3, a parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall not have less than a 1-hour fire-resistive rating. The wall shall be rated for exposure from both sides.~~

~~16. Section R302.2.6 Structural Independence. Delete Exception 5 in its entirety.~~

~~17. Section R302.2.6 Structural Independence. Amend by adding the following new Section R302.2.6.1:~~

~~Section R302.2.6.1 Dwelling unit separation wall. The required dwelling unit separation wall shall be self supporting and structurally independent from the framing within either dwelling unit. The collapse of the framing/structure on either side of the demising wall shall not reduce the integrity of the demising wall.~~

~~18. Section R302.3 Two-family dwellings. Delete in its entirety and in lieu thereof substitute the following new Section R302.3:~~

~~Section R302.3 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by a minimum two (2) hour fire resistance rated fire barrier constructed of minimum eight inch (8") concrete masonry units, or an equivalent concrete assembly. When the attached dwellings exceed 4800 square feet combined, a four (4) hour~~

~~fire resistance rated fire barrier constructed of concrete masonry units, or an equivalent concrete assembly, shall be provided extending through the roof to a height of no less than thirty inches (30") above the lowest roof. The structural integrity of individual units shall be independent of other units.~~

~~19. Section R302.4.2 Membrane penetrations. Delete in its entirety and in lieu thereof substitute the following new Section R302.4.2:~~

~~Section R302.4.2 Membrane penetrations. Membrane penetrations of the required dwelling unit separation assembly are not permitted.~~

~~20. Section R302.5.1 Opening protection. Delete in its entirety and in lieu thereof substitute the following Section R302.5.1:~~

~~Section R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes are not permitted. Other openings between the garage and the residence shall be equipped with a self closing, self latching, three-quarter (3/4) hour fire rated door.~~

~~2112.~~ TABLE R302.6 DWELLING/GARAGE SEPARATION: Delete in its entirety and in lieu thereof substitute the following new TABLE R302.6:

TABLE R302.6
DWELLING/GARAGE SEPARATION

| Separation | Material |
|---|---|
| From the residence and attics | Not less than 5/8" Type X gypsum board or equivalent applied to the garage side |
| From all habitable room above the garage | Not less than 5/8" Type X gypsum board or equivalent |
| (Structures) supporting floor/ceiling assemblies used for separation required by this section | Not less than 5/8" Type X gypsum board or equivalent |
| Garages located less than 3 feet from a dwelling unit on the same lot | Not less than 5/8" Type X gypsum board or equivalent applied to the interior side of the exterior walls that are within this area |

~~2213.~~ Section R302.12 Draftstopping. Amend by deleting all reference to the language "1,000 square feet" contained therein and in lieu thereof, the following language shall be substituted:

... "500 square feet"...

~~2314.~~ Section R302.13 Fire protection of floors. Delete exception #2 in its entirety

Commented [DW51]: Discuss with Village

SAFEbuilt recommends deletion of these amendments. The base code provides the necessary level of safety w/o driving construction costs upward, which affects development in the community.

Commented [DW52]: Discuss with Village

It is recommended to delete amendment and revert to base code for the common walls and membrane penetrations.

Commented [DW53]: Discuss with Village

~~2415.~~ Section R309.1 Floor surface. Amend by adding the following new Section R309.1.1:

Section R309.1.1 Gas curb. All common walls between the garage and dwelling, including any openings for service doors, shall have a six-inch (6") gas curb, or be made gas tight by an approved membrane system.

~~2516.~~ Section ~~R310.2.2~~~~R310.2.3~~ ~~Window sill height~~~~Maximum height from floor~~. Amend by changing the number 44 inches to 40 inches.

~~2617.~~ Section R310 EMERGENCY ESCAPE AND RESCUE OPENINGS. Amend by adding the following new Section ~~R310.2.3.3~~~~R310.4.4~~:

Section ~~R310.2.3.3~~~~R310.4.4.1~~ Protective covers. The opening at the top of all window wells shall be covered with a grate or other material capable of supporting a fifty (50) pound live load on an area equal to one square foot, or a three hundred (300) pound concentrated load acting over an area of four (4) square inches, whichever produces the greater stresses. Said covers shall be removable, and, if locked, shall be able to be opened from the inside without the use of a key, tool or special knowledge.

Exception: Where the basement window extends above the elevation of the window well, a protective rail may be used if Approved by the Building Official.

~~2718.~~ Section R311.7.6 Landings for stairways. Amend by adding the following new Section R311.7.6.1:

Section R311.7.6.1 Anchorage for landings adjacent to stairs. Provide dowel bar anchorage at slabs, sidewalks and other types of landings which are adjacent to exterior concrete stairs. Dowel bars shall be designed and installed so as to maintain integrity of the riser heights as required by Section R311.7.5.1.

~~2819.~~ Section R311.7.8 Handrails. Delete in its entirety and in lieu thereof substitute the following new Section R311.7.8:

Section R311.7.8 Handrails. ~~Handrails shall be provided on not less than one side of each flight of stairs with three or more risers. Handrails shall be provided on at least one (1) side of each continuous run of treads or flight with three (3) or more risers.~~

~~2920.~~ Section R312.1.1 Where required. Delete in its entirety and in lieu thereof substitute the following new Section R312.1.1:

Section R312.1.1 Where required. Open-sided walking surfaces, including porches, balconies or raised floor surfaces or open sides of stairs located more than ~~twenty-four~~~~24~~ inches ~~(24")~~ above the floor or grade below shall have guardrails not less than ~~thirty-six~~~~36~~ inches ~~(36")~~ in height. The height of the open-sided walking surface shall be determined by measuring the lowest point of the adjacent grade below located within ~~three-3~~ feet ~~(3')~~ horizontally from the edge of the open-sided walking surface above. Insect screening shall not be considered as a guard.

~~3021.~~ Section ~~R312.2~~~~R312.1.2~~ Height. Add the following new exception:

3. Open-sided walking surfaces, including porches, balconies or raised floor surfaces located more than eighty-four inches (84") above the floor or grade below shall have guardrails not less than forty-two inches (42") in height.

~~3422.~~ SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS. Delete in its entirety in lieu thereof substitute the following new SECTION R313:

SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS.

Section R313.1 ~~1 One and two family dwelling automatic fire sprinkler system. A limited area automatic residential fire sprinkler system shall be installed within one and two family dwellings including townhouses. Design and installation. Automatic sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D.~~

Section R313.2 ~~1 Locations. Automatic sprinkler heads shall be placed in all rooms housing gas-fired mechanical appliances such as furnaces, boilers and water heaters and like appliances so as to provide coverage to all areas within ten feet (10') of any part of the gas-fired appliances. Design and installation. Automatic sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D.~~

~~Section R313.3 Design and installation. Limited area automatic residential fire sprinkler systems shall be designed in accordance with this Section, the 2018 International Building Code, Section 903.3.8 and the Illinois Plumbing Code as Adopted and Amended by the Village of Willowbrook.~~

~~32. Section R314.6 Power source. Amend by adding the following new wording to the end of the last sentence.~~

~~"..., and display a visible light which indicates its proper operation."~~

~~33. Section R401.1 Application. Delete in its entirety and in lieu thereof substitute the following new Section R401.1:~~

~~Section R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R322.~~

~~3423.~~ Section R402.1 Wood foundations. Delete in its entirety.

~~35. Section R403.1 General. Delete in its entirety and in lieu thereof substitute the following new Section R403.1:~~

~~Section R403.1 General. All exterior walls shall be supported on continuous concrete footings, or other approved structural systems which shall be of sufficient design to support safely the loads imposed as determined from the character of the soil. Footings shall be supported on undisturbed natural soil or engineered fill. Concrete footings shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.~~

Commented [DW54]: Discuss with Village

The Village requires automatic sprinklers. Recommend keep the code language in place w/o amendment, except to use NFPA 13D versus the plumbing requirements of the IRC

Commented [DW55]: Discuss with Village

Not sure HOW this visible light is accomplished. Recommend deletion

Commented [DW56]: Discuss with Village

Based code language pretty says the same thing

Recommend deletion of amendment

Commented [DW57]: Discuss with Village

Recommend deletion. Base code says the same thing

~~36. Section R403.1.1 Minimum size. Delete in its entirety and in lieu thereof substitute the following new Section R403.1.1:~~

~~Section R403.1.1 Minimum size. Footings shall be designed in accordance with the following requirements:~~

~~1. Minimum dimension for spread footings shall be ten inches (10") deep by twenty inches (20") wide.~~

~~2. The depth of all footings shall be no less than forty-two inches (42") below grade unless otherwise permitted for floating slab construction.~~

~~3. Footings shall be reinforced where crossing or bearing on pipes, fill trenches, or other unstable ground/soil. Such reinforcing shall be designed, signed and sealed by an Illinois Licensed Design Professional.~~

~~4. Footing dimensions listed within are based upon soils of average bearing capacity of 3,000 lbs. per square foot. For soils of lesser bearing capacity or where unusual loading conditions exist, larger footings and reinforcement may be required. Such design shall be designed, signed and sealed by an Illinois Licensed Design Professional.~~

~~5. A soils report from a geotechnical engineer shall be required after excavation and prior to the placement of any footing concrete unless deemed not required by the Building Inspector.~~

~~6. Footing must be keyed a minimum of two inches (2") into undisturbed soil, or shall be interlocked to the soil by other approved methods.~~

~~7. Trench foundations shall be a minimum of ten inches (10") wide and shall be allowed for single story frame buildings only.~~

~~3724. Figure R403.1(2) Permanent wood foundation basement wall section. Delete in its entirety.~~

~~3825. Figure R403.1(3) Permanent wood foundation crawl space section. Delete in its entirety.~~

~~39. Section R403.1.3.2 Slabs on ground with turned down footings. Delete in its entirety and in lieu thereof substitute the following new Section R403.1.3.2:~~

~~Section R403.1.3.2 Grade beam/floating slab foundations. For wood frame construction only, detached accessory structures not intended for habitable occupancy, a grade beam/floating slab foundation design will be permitted. The foundation shall be a minimum of twelve inches (12") deep around the perimeter, a minimum of twelve inches (12") wide at the bottom of the trench, and beveled upwards at a forty-five degree (45°) angle to meet the bottom of a five inch (5") concrete floor slab. The foundation must be a minimum of six inches (6") above grade and shall have a minimum of one No. 5 bar at the top and bottom. Four inches (4") of crushed stone or equivalent shall be required as fill below the slab. The concrete slab shall be reinforced with 6 x 6 number ten (10) wire mesh~~

Commented [DW58]: Discuss with Village

Was this amendment written though consultation with a local structural engineer? Not sure that the Village would want to assume the liability for structural design beyond the IRC

which shall extend the entire width and length of the concrete and to the bottom of the foundation.

~~40. Section R403.1.4.1 Frost protection. Delete exception 3 in its entirety.~~

~~4126. Section R403.2 Footings for wood foundations. Delete in its entirety and in lieu thereof substitute the following Section R403.2:~~

~~Section R403.2 Footings for walls, piers, posts and columns:~~

- ~~1. Provide a minimum of forty-two inch (42") frost protection.~~
- ~~2. Provide two inch by two inch (2" x 2") keyway in the top of the footing underneath the centerline of foundation walls.~~
- ~~3. Trench foundation shall be a minimum ten inches (10") wide and shall be allowed only for single story frame buildings.~~
- ~~4. For one (1) story dwellings, the minimum pier size shall be thirty inches by thirty inches by twelve inches (30" x 30" x 12"). For dwelling over one (1) story, the minimum pier size shall be thirty-six inches by thirty-six inches by fifteen inches (36" x 36" x 15"). In all cases, pier must be designed by an Illinois Licensed Design Professional to support all live and dead loads.~~
- ~~5. Pier foundations for roofed in structures attached to the principal dwelling shall be designed, signed and sealed by an Illinois Licensed Design Professional. These structures shall be open or screened in porches only.~~
- ~~6. Chimney footings for dwellings must have a minimum thickness of twelve inches (12"), with a minimum projection beyond the foundation wall of six inches (6") on each side.~~
- ~~7. Chimney footings must be poured integral with the wall footing when the chimney occurs in the outside wall or an interior bearing wall and must start at the level of the lowest adjacent wall footing.~~
- ~~8. All stoops, steps and platforms at egress areas must be supported by wing walls extending to the footing or a full frost protected foundation or other similar means acceptable to the Building Official.~~

~~4227. Section R403.3 Frost protected shallow foundations. Delete in its entirety.~~

~~43. Section R404.1 Concrete and masonry foundation walls. Delete in its entirety and in lieu thereof substitute the following Section R404.1:~~

~~Section R404.1 Concrete foundation walls. Concrete foundation walls shall be selected and constructed in accordance with the provisions of this section or in accordance with the provisions of Section R404.1.3.~~

~~44. Section R404.1.1 Design Required. Delete the words "or masonry"~~

Commented [DW59]: Discuss with Village

Commented [DW60]: Discuss with Village

This item removes the option of using ASCE 32 for the frost protection of shallow foundation. This would require a design from a licensed Professional Engineer. Why would the Village want to remove this option?

Commented [DW61]: Wood foundations were prohibited. Why retain the provisions for wood foundation footings?

~~45. Section R404.1.2 Design of masonry foundation walls. Delete in its entirety.~~

~~46. Section R404.1.2.1 Masonry foundation walls. Delete in its entirety.~~

~~47. Section R404.1.3 Concrete foundation walls. Amend by adding the following new exception:~~

~~Exception: In all cases concrete foundation walls shall be constructed as follows:~~

~~a. Walls supporting wood frame construction shall be a minimum of ten inches (10") in thickness.~~

~~b. Walls supporting masonry chimneys shall be a minimum of twelve inches (12") in thickness.~~

~~4828. Section R404.2 Wood foundation walls. Delete in its entirety.~~

~~4929. Section R405.1 Concrete or masonry foundations. Amend the last sentence by deleting the dimension of six inches (6") and in lieu thereof adding the dimension of ten inches (10").~~

~~5030. Section R405.1 Concrete or masonry foundations. Amend by deleting the Exception.~~

~~5131. Section R405.1 Concrete or masonry foundations. Amend by adding the following new Section R405.1.2:~~

~~Section R405.1.2 Sump pump discharge. Sump pumps must discharge a minimum of three feet (3') from the foundation walls. Discharge must conform to the approved grading plan and in no case shall be extended closer than ten feet (10') from the rear or side property lines. Regardless of the permitted location, distance notwithstanding, the discharge may not cause a nuisance or hazard to neighboring properties or public right-of-ways.~~

~~Where the sump pump discharge is installed underground, the installation shall be approved by the Village Civil Engineer. Said discharge shall be through a minimum four inch (4") perforated pipe incased within a minimum of twelve inch (12") clean gravel (no fines).~~

~~5232. Section R405.2 Wood foundations. Delete in its entirety.~~

~~5333. Section R406.3 Dampproofing for wood foundations. Delete in its entirety.~~

~~54. Section R408 UNDER FLOOR SPACE. Amend by adding the following new Section R408.8:~~

~~Section R408.8 Covering. In crawl spaces, the soil shall be leveled, covered with four inches (4") of clean gravel and continuous Class I vapor retarder in accordance with the International Building Code. All joints of the vapor retarder shall overlap by six inches (6") and shall be sealed or taped. The edges of the vapor retarder shall extend at least six inches~~

Commented [DW62]: Discuss with Village

Why is the Village prohibiting CMU foundation walls?

Commented [DW63]: Discuss with Village

Recommend to retail to based code requirements

~~(6") up the foundation wall and shall be attached to the foundation wall. The vapor retarder shall then be covered with a minimum of a two inch (2") screed coat of concrete.~~

~~— Crawlspace floors shall be no less than thirty inches (30") below the bottom of floor joists and girders.~~

Commented [DW64]: This was addressed in the 2021 IRC

~~5534.~~ Section R408.4 Access. Delete in its entirety and in lieu thereof substitute the following new Section R408.4:

Section R408.4 Access. Provide an access opening to all under-floor spaces of not less than twenty-four inches by twenty-four inches (24" x 24"). Through wall access openings shall not be located under a door to the residence. See [Section M1305.1.4 International Mechanical Code Section 306.4](#) for access requirements where mechanical equipment ~~is~~ located under floors.

~~5635.~~ Section R502.4 Joists under bearing partitions. Amend by adding the following new Section R502.4.1:

Section R502.4.1 Joists below bathtubs. The number of joists which support and run parallel to the length of a bathtub shall be doubled.

~~5736.~~ SECTION R504 PRESSURE PRESERVATIVELY TREATED-WOOD FLOORS (ON GROUND). Delete in its entirety.

~~5837.~~ Section R506.1 General. Delete in its entirety and in lieu thereof substitute the following new Section R506.1.

Section R506.1 Concrete slab-on-ground floors, other than garage floors, shall be a minimum four inches (4") thick. Garage floor slabs are required to be a minimum of five inch (5") thick, concrete slab shall be reinforced with 6 x 6 number ten (10) wire mesh which shall extend the entire width and length of the concrete. For expansive soils, see Section R403.1.8. The specified compressive strength of concrete shall be as set forth in Section R402.2. On attached garages where an overdig exists for foundation footings, excavation must be backfilled with washed stone or a cohesive soil compacted in eight inch (8") lifts.

~~59. Table R507.4 Deck Post Height. Replace the values in the Table with new Table R507.4:~~

| Deck Post Size | Maximum Height ^{a,b} |
|----------------|-------------------------------|
| 4 X 4 | 5-0 ^c |
| 4 X 6 | 8 |
| 6 X 6 | 14 |
| 8 X 8 | 14 |

~~a. Measured to the underside of the beam~~

~~b. Based on 40 psf live load~~

~~c. Measured to the top of the finished deck floor.~~

~~60. Section R507.3.2 Minimum Depth. Delete in its entirety and in lieu thereof substitute the following new Section R507.3.2.~~

~~Section R507.3.2 Minimum Depth. Minimum dimension for all post holes shall be forty two inches (42") in depth below grade, extending a minimum of four to six inches (4–6") above grade, and formed in a prefabricated tube (Sono tube or the like)~~

~~6138.~~ Section R801.3 Roof drainage. Amend by adding the following Section R801.3.1.

Section R801.3.1 Gutters and downspouts. All structures over ~~one hundred fifty~~150 (~~150~~) square feet in area shall be provided with gutters and downspouts along all roof edges located parallel to the grade below unless omission is specifically permitted by the Building Inspector. Downspouts must discharge to a splash block or other approved means of dispersement, and such discharge shall be made away from the building in accordance with the approved grading plans, and shall not cause a nuisance or damage to neighboring properties. Discharge must conform to the approved grading plan and in no case shall be extended closer than 10 feet (~~10'~~) from the rear or side property lines. Regardless of the permitted location, distance notwithstanding, the discharge may not cause a nuisance or hazard to neighboring properties or public right-of-ways.

~~6239.~~ Section R1004 FACTORY-BUILT FIREPLACES. Amend by adding the following new Section R1004.6:

Section R1004.6 Fireplace chimney enclosures. All exposed exterior chimney sections for fireplaces, wood burning stoves and similarly appliances, shall be enclosed in a chimney chase which provides for proper clearances per manufacturer's requirements and is constructed of masonry or approved materials consistent with the construction of the existing structure.

~~63. Section N1101.1 Scope. Delete Chapter 11 in its entirety and in lieu thereof substitute the following new Section N1101.1~~

~~Section N1101.1 Compliance. All structures shall be designed and built in accordance with the Illinois Energy Conservation Code – Latest Edition. Additionally, in all cases verification of envelope compliance shall be achieved by the submittal of a completed REScheck Envelope Compliance Certificate.~~

~~40. Delete Chapter 11 in its entirety. Refer to the Illinois Energy Conservation Code.~~

~~41. Delete Part V (Chapters 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23) in its entirety. See adopted edition of the International Mechanical Code.~~

~~42. Delete Chapter 24 in its entirety. See the adopted edition of the International Fuel Gas Code.~~

Commented [DW65]: Discuss with Village

This table has changed in the 2021 IRC. Recommend leaving the base code in place and deleting amendment

Commented [DW66]: Discuss with Village

The IRC addresses these concerns. Recommend deleting amendment

~~—64. Section M1601.1.1 Above-ground duct systems. Delete item number 5 in its entirety.~~

~~—65. Section M1601.1.1 Above-ground duct systems. Delete item number 7 in its entirety and in lieu thereof substitute the following new item number 7:~~

~~—7. Stud wall cavities and the spaces between floor joists shall not be utilized as air plenums. All air plenums shall be in approved and listed ducts.~~

~~—66. Section M1601.1.1 Above-ground duct systems. Amend by adding the following new item number 9:~~

~~—9. The maximum length of flexible air ducts and flexible connectors shall not exceed six feet (6').~~

~~—67. Section M1601.1.2 Underground duct systems. Delete in its entirety.~~

~~—68. Section G2414.1 General. Amend by adding the following new Section G2414.1.1:~~

~~—Section G2414.1.1 Interior fuel gas piping materials. All interior gas supply and distribution piping shall be black iron. Copper pipe and flexible pipe shall be used for appliance hookup only when a flexible connection is absolutely required. No flexible appliance connection piping may pass through any wall or ceiling assembly.~~

~~—69. Section G2445.2 Prohibited use. Amend by adding the following Section G2445.2.1:~~

~~—Section G2445.2.1 Approval. Unvented appliances, including unvented fireplaces, shall be allowed only by special permission of the Building official. A 110 volt carbon monoxide detector with battery back-up power shall be installed in all rooms with unvented gas-fired appliances such as room heaters, log heaters and fire places.~~

~~—70. CHAPTER 25 PLUMBING ADMINISTRATION. Delete in its entirety.~~

~~—71. CHAPTER 26 GENERAL PLUMBING REQUIREMENTS. Delete in its entirety.~~

~~—72. CHAPTER 27 PLUMBING FIXTURES. Delete in its entirety.~~

~~—73. CHAPTER 28 WATER HEATERS. Delete in its entirety.~~

~~—74. Section P2904.1 General. Delete in its entirety and in lieu thereof substitute the following new Section P2904.1:~~

43. Delete Part VII (Chapters 25, 26, 27, 28, 29, 30, 31, 32, and 33) in its entirety. See the Illinois Plumbing Code as adopted by the Village of Willowbrook.

~~—Section P2904.1 General. Where required, limited area fire sprinkler systems shall be installed in accordance with this Section, the 2018 International Building Code, Section 903.3.8, and the Illinois Plumbing Code as Adopted and Amended by the Village of Willowbrook.~~

~~—75. Section P2904.1.1 Required sprinkler locations. Delete in its entirety and in lieu thereof substitute the following new Section P2904.1.1:~~

~~Section P2904.1.1 Required sprinkler locations. Automatic sprinkler heads shall be placed in all rooms housing gas-fired mechanical appliances such as furnaces, boilers and water heaters and like appliances so as to provide coverage to all areas within ten feet (10') of any part of the gas-fired appliances. Branch supply pipe to the sprinkler head shall not have a developed length of more than twenty four inches (24") beyond the point of the tap.~~

~~76. Section P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS. Amend by adding the following new Section:~~

~~P2904.1.2 Protection of Domestic water supply. Where a limited area fire sprinkler system is installed, a single check backflow prevention device shall be provided directly after the water meter, in accordance with the Illinois Plumbing Code as Adopted and Amended by the Village of Willowbrook.~~

~~77. CHAPTER 30 SANITARY DRAINAGE. Delete in its entirety.~~

~~78. CHAPTER 31 VENTS. Delete in its entirety.~~

~~79. CHAPTER 32 TRAPS. Delete in its entirety.~~

~~80. Section P3302.1 Subsoil drains. Delete in its entirety and in lieu thereof substitute the following new Section P3302.1:~~

~~Section P3302.1 Subsoil drains. Subsoil drains (drain tile) shall be perforated plastic pipe approved for the use not less than 4" in diameter. Subsoil drains shall discharge to an approved sump pit or other approved location. The subsoil sump pit shall extend a minimum of 2" above the finished interior floor, and shall be located no less than 10' horizontally from a sanitary ejector pit.~~

~~81. Section P3303.1.2 Sump pit. Delete in its entirety and in lieu thereof substitute the following new Section P3303.1.2:~~

~~Section P3303.1.2 Sump pit. The sump pit shall not be less than 18" in diameter and 24" deep unless otherwise approved. The pit shall be accessible and located so that all drainage flows into the pit by gravity. The sump pit shall be constructed fully of formed plastic or other approved material, with a removable cover adequate to support anticipated loads in the area of use.~~

~~82. Section P3303.1.3 Electrical. Delete in its entirety.~~

~~83. Section P3303.1.4 Piping. Delete in its entirety and in lieu thereof substitute the following new Section P3303.1.4:~~

~~Section P3303.1.4 Piping. Discharge piping shall include an accessible full flow check valve. Piping and fittings shall be the same size as, or larger than, pump discharge tapping.~~

~~84. CHAPTER 34 GENERAL REQUIREMENTS. Delete in its entirety.~~

~~85. CHAPTER 35 ELECTRICAL DEFINITIONS. Delete in its entirety.~~

~~86. CHAPTER 36 SERVICES. Delete in its entirety.~~

~~87. CHAPTER 37 BRANCH CIRCUIT AND FEEDER REQUIREMENTS. Delete in its entirety.~~

~~88. CHAPTER 38 WIRING METHODS. Delete in its entirety.~~

~~89. CHAPTER 39 POWER AND LIGHTING DISTRIBUTION. Delete in its entirety.~~

~~90. CHAPTER 40 DEVICES AND LUMINAIRES. Delete in its entirety.~~

~~91. CHAPTER 41 APPLIANCE INSTALLATION. Delete in its entirety.~~

~~92. Section E4203.7 Underground Wiring. Delete in its entirety and in lieu thereof substitute the following new Section E4203.7.~~

~~Section E4203.7 Underground Wiring. Underground wiring shall not be installed under or within the area extending ten feet (10') horizontally from the inside walls of pools and outdoor hot tubs and spas except where the wiring is installed to supply pool, spa or hot tub equipment or where space limitations prevent wiring from being routed 10 feet or more horizontally from the inside walls. Where installed within 10 feet of the inside walls, the wiring method shall be a nonmetallic raceway system. The minimum raceway burial depth shall be in accordance with Table E4203.7.~~

~~93. CHAPTER 43 CLASS 2 REMOTE CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS. Delete in its entirety.~~

44. Delete Part VIII (Chapters 34, 35, 36, 37, 38, 39, 40, 41, 42, and 43) in its entirety. See the adopted edition of the National Electrical Code.

(Ord. 19-0-10, 6-24-2019)

4-2-34: FUEL GAS CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the 2018-2024 International Fuel Gas Code, second printing, prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been on file for a period of more than thirty (30) days prior to the adoption of this section and now is on file in the Office of the Village Clerk.

(B) Amendments: The following additions, insertions, deletions and changes are hereby made to the 2018-2024 International Fuel Gas Code, second printing:

1. Section 101.1 Title. Delete in its entirety and in lieu thereof substitute with the following new Section 101.1:

Section 101.1 Title. These regulations shall be known as the Fuel Gas Code of the Village of Willowbrook, and shall be cited as such. It is referred to herein as "this code".

Commented [DW67]: Discuss with Village

Recommend amending to use the IMC, IFGC, and NEC as adopted by the Village

2. Section 106.5.3. Expiration. Delete this section in its entirety and in lieu thereof substitute the following new section:

Section 106.5.3 Expiration: Every permit issued by the Building Official under the provisions of this Code shall expire by limitation and become null and void if the work authorized by such permit shall not have been started within six (6) months after the date of issuance of said permit. Where, under authority of a permit, work has begun and has not been processed for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy permit issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained.

3. Section 106.5.4 Extensions. Amend by deleting the last sentence of the section.

4. Section ~~106.6109.2 Fees~~Schedule of permit fees. Delete this section in its entirety and in lieu thereof substitute the following new Section ~~106.6109.2~~:

Section ~~106.6109.2~~ Fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

5. Section 113 Means of Appeal. Delete this section in its entirety.

6. Section 114 Board of Appeals. Delete this section in its entirety and in lieu thereof substitute the following new Section 109:

Section 114 BOARD OF APPEALS.

Section 114.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section 114.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section 114.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section 114.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section 114.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section 114.6 Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section 114.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

~~57. Section 108.4115.4 Violation penalties. Delete this section in its entirety.~~

~~68. Section 108.5116.1 Stop-work orders Authority. Delete the last sentence of this section and in lieu thereof substitute the following new sentence: Amend to include the following at end of section.~~

"... Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the building official to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code."

~~7. Section 109 MEANS OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 109:~~

~~Section 109 BOARD OF APPEALS.~~

~~Section 109.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this~~

section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

—Section 109.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

—Section 109.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

—Section 109.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

—Section 109.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

—Section 109.6 Powers of the Board: The Board of Appeals shall have the following powers:

— a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

— b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

—Section 109.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

~~89.~~ Section 301.6 Plumbing connections. Delete this section in its entirety and in lieu thereof substitute the following new Section 301.6:

Section 301.6 Plumbing connections. Potable water supply and building drainage system connections to equipment and appliances regulated by this code shall be in accordance with the most current Illinois Plumbing Code.

~~9. Section 309.2 Electrical. Delete this section in its entirety and in lieu thereof substitute the following new Section 309.2:~~

~~Section 309.2 Electrical. Electrical wiring controls and connections to equipment and appliances regulated by this code shall be in accordance with the 2017 National Electrical Code.~~

10. SECTION 403 PIPING MATERIALS. Amend by adding the following new Section 403.1.1:

Section 403.1.1 Gas piping materials. All fuel gas supply and distribution piping shall be black iron. Copper pipe and flexible pipe shall be used for appliance hookup only when a flexible connection is absolutely required. No flexible appliance connection piping may pass through any wall or ceiling assembly. All sections and wording to the contrary shall be deleted.

~~11. SECTION 601 GENERAL. Amend by adding the following new Section 601.2:~~

~~Section 601.2 Unvented appliances. A 110-volt carbon monoxide detector with battery back up power shall be installed in all rooms with unvented gas-fired appliances such as room heaters, log heaters and fire places, etc.~~

(Ord. 19-O-10, 6-24-2019)

4-2-35: EXISTING BUILDING CODE ADOPTED:

(A) Code Adopted: There is hereby adopted by reference as if fully set out herein that certain code known as the ~~2018-2024~~ International Existing Building Code, second printing, as prepared and published by the International Code Council, Inc., together with the additions, insertions, deletions and changes hereinafter set forth, one copy of which has been for a period of more than thirty (30) days prior to the effective date hereof and now is on file in the Office of the Village Clerk.

(B) Amendments To Code: The following additions, insertions, deletions and changes are hereby made to the ~~2018-2024~~ International Existing Building Code, second printing:

1. Section 101.1 Title: Amend by deleting the words and punctuation marks, "(Name of Jurisdiction)" and insert the words "The Village of Willowbrook".

2. Section 105.2 Work exempt from permit. Delete in its entirety and in lieu thereof substitute with the following new Section 105.2:

Section 105.2 Work exempt from permit. Contact the Village of Willowbrook Building Official or his/her designee in writing for a determination if a permit is required for small repairs

Commented [DW68]: Discuss with Village

CO detectors are already required by 2021 IBC Sec. 915 and 2021 IRC Sec. R315.

Recommend deletion of this amendment. If retained, the amendment needs a rewrite for clarity.

3. Section 105.5 Expirations. Delete in its entirety and in lieu thereof substitute with the following new Section 105.5:

Section 105.5 Extension and expiration of building permit. If after a building permit required by this chapter shall have been granted, if the operation called for by such permit shall not have been started within six (6) months after the date thereof, such permit shall be void and no operation thereunder shall be begun. Where, under authority of a permit, work has begun and has not been prosecuted for a continuous or cumulative period of six (6) months, all rights under such permits shall thereupon terminate and work can be continued only after application for and issuance of a new permit. Where, under authority of a permit, work has not been completed within eighteen (18) months after the issuance of such permit and an occupancy certificate or certificate of completion issued, all rights under such permit shall thereupon terminate and work can be continued only after application for and issuance of a new permit. The new permit shall only be issued for a period in which to expediently complete the work originally permitted. The completion period of the extended permit shall be approved by the Building Official or his/her designee. The fee for said new permit shall be equivalent to the fee applicable to the original building permit obtained. Failure to complete the originally permitted work prior to the expiration date of the extended permit shall be a violation of this code and punishable in accordance with the provisions of title 1, chapter 4 of the Village Code.

4. Section 108.1 Payment of fees. Delete this section in its entirety and in lieu thereof substitute the following new Section 108.1:

Section 108.1 Payment of fees. A Permit shall not be Issued until the review process has been completed and Approved and the fees prescribed in Title 4, Section 4-2-11 of the Village Municipal Code have been paid and accepted, nor shall an Amendment to a Permit be released until the additional fee, if any, due to an increase of the installation, has been paid and accepted.

5. Section 109.3 Required inspections. Amend by adding the following new Sections 109.3.11 and 109.3.12:

Section 109.3.11 Masonry firebox inspection. Masonry firebox inspections shall be made before flue/chimney installation and after the fireplace firebox and smoke shelf is completed.

Section 109.3.12 Stocking and training inspection. Stocking and training inspection shall be made after the completion of construction and prior to the installation of any stock, merchandise and non permanent/movable tenant fixtures and furniture, and prior to the allowance of tenant employee occupancy and/or training.

6. Section 112 BOARD OF APPEALS. Delete this section in its entirety and in lieu thereof substitute the following new Section 112:

Section 112 BOARD OF APPEALS.

Section 112.1 Application for appeal: Each owner and occupant who is affected by this section shall have the right to appeal from the decision of the Village made pursuant to this

section. All appeals shall be made to the Board of Appeals of the Village of Willowbrook as hereinafter constituted and within ten (10) days after receipt of notice of the decision of the Village.

Section 112.2 Membership of the board. The Board of Appeals shall be the Plan Commission of the Village of Willowbrook. A majority of the members of the Plan Commission then holding office shall constitute a quorum.

Section 112.3 Board actions. All actions of the Board must have the concurrence of a majority of those members then holding office. Action on an appeal brought before the Board may be taken by a written vote of a majority of the members upon each voting member certifying that he has read and considered the transcript of the hearing proceedings held by the Board in his absence.

Section 112.4 Procedure. The rules of procedure during a hearing on an appeal shall be similar to the procedures for zoning appeals as adopted by the Plan Commission. In any event, all evidence that is relevant and material and of probative value shall be admitted. Hearsay evidence alone shall not support any decision of the Board.

Section 112.5 Board recommendation. Recommendation to the corporate authorities from the Board shall be made within such time as may be set by the chairman, but, in any event, not later than thirty (30) days after receipt of the transcript of proceedings.

Section 112.6 Powers of the Board: The Board of Appeals shall have the following powers:

a. To make fact findings and to review fact findings of the Village, provided that fact findings of the Village shall be presumed to be correct until rebutted by a clear preponderance of the evidence to the contrary.

b. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

Section 112.7 Board Review: Within thirty (30) days of the receipt of the recommendations of the Board of Appeals, the corporate authorities shall grant or deny the time extension or variation, or refer the matter back to the Board of Appeals for further consideration. If the Board of Appeals favorably recommends the granting of a time extension or variation, that time extension or variation may be granted by resolution by a majority vote of the corporate authorities. If the Board of Appeals does not favorably recommend the granting of a time extension or variation, that time extension or variation may be granted only by favorable vote of two-thirds (2/3) of the corporate authorities. The corporate authorities shall not grant a time extension or variation unless they have made findings of fact based upon evidence adduced by the hearing held by the Board of Appeals.

7. Section 113.4 Violation penalties: Delete this section in its entirety and in lieu thereof substitute the following new Section 113.4:

Section 113.4 Violation penalties. Any person who shall violate a provision of this section or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or a directive of the Building Official, or of a permit or certificate issued under the provisions of this section shall be punishable by a fine of not less than seventy five dollars (\$75.00) nor more than seven hundred fifty dollars (\$750.00). Each day that a violation continues shall be deemed a separate offense.

8. Section 114.3 Unlawful continuance: Delete this section in its entirety and in lieu thereof substitute the following new Section 114.3:

Section 114.3 Unlawful continuance: Any person who shall continue any type of work in or about the structure after having been served with a stop work order, except such work as that person is directed by the Building Official to perform to remove a violation or unsafe conditions, shall be liable to a fine of not less than that prescribed by Title 4, Section 4-2-13(B) of the Village Code.

9. Section 202 DEFINITIONS. Amend by adding the following new Definition:

FIRE OFFICIAL/FIRE MARSHAL. The Building Official or his designated agent/representative.

(Ord. 19-O-10, 6-24-2019)



COMMITTEE OF THE WHOLE

AGENDA ITEM NO: 6.b.

DATE: November 24, 2025

SUBJECT:

PRESENTATION OF THE VILLAGE OF WILLOWBROOK WATER MASTER PLAN

STAFF REPORT

TO: Mayor Trilla and Board of Trustees
FROM: Rick Valent, Director of Public Works
THROUGH: Sean Halloran, Village Administrator

PURPOSE AND ACTION REQUESTED

Presentation of the Village of Willowbrook Water Master Plan.

BACKGROUND/SUMMARY

On October 14, 2024, the Village Board approved an agreement with Christopher B. Burke Engineering, Ltd. to prepare a comprehensive Water Master Plan. Using systemwide hydraulic modeling and input from Village staff, the consultant evaluated existing system conditions, reviewed operational reliability, and developed recommendations to support long-term infrastructure planning and reinvestment.

The Village's potable water distribution system is a critical public utility serving residents, businesses, and institutions across Willowbrook. The system includes more than fifty miles of water main, three water storage facilities, and two primary supply connections to the DuPage Water Commission. While large portions of the system have been constructed or upgraded in recent decades, approximately one quarter of the Village's water mains are more than fifty years old. As water infrastructure ages, it becomes increasingly vulnerable to break frequency, reduced fire flow performance, and higher maintenance costs. Long-term reinvestment is therefore essential to ensure safe, reliable water service.

Average water demand in Willowbrook ranges between 1.0 and 1.2 million gallons per day. Seasonal peaks continue to be well managed, and the system maintains adequate pressure throughout normal operations. These recent demand trends provide a strong and consistent planning basis for future infrastructure decisions.

Purpose of the Plan

The Village's last complete hydraulic model update was completed in 1997. Since then, Willowbrook has experienced new developments, changes in land use, shifts in consumption patterns, and significant advancements in hydraulic modeling technology. The Water Master Plan was completed to provide the Village with an updated analysis of:

- Current system performance
- Capacity during peak hours and maximum day demands
- Areas where aging infrastructure may limit service quality
- Community fire flow reliability
- Long-range capital improvement needs
- Operational opportunities for improved efficiency

These elements form a data-driven foundation for responsible planning, budgeting, and reinvestment.



System Overview

Water Main Inventory

The system contains a variety of pipe sizes. The distribution is as follows:

| Size | Length ft | Length miles | Percent of System |
|--------------|----------------|--------------|-------------------|
| 6 inch | 60,677 | 11.49 | 22.89 |
| 8 inch | 95,764 | 18.14 | 36.12 |
| 10 inch | 20,844 | 3.95 | 7.86 |
| 12 inch | 86,094 | 16.31 | 32.47 |
| 16 inch | 1,759 | 0.33 | 0.66 |
| Total | 265,138 | 50.22 | 100 |

The presence of older six-inch water mains is a key finding of the Plan because they limit fire flow capability and are more prone to maintenance needs.

Age Distribution of Water Mains

Based on available records, much of the system dates to construction eras with differing material longevity and design standards. The age profile is:

| Age years | Length ft | Length miles | Percent of System |
|-----------|-----------|--------------|-------------------|
| 60 plus | 38,355 | 7.26 | 14.47 |
| 50 | 30,322 | 5.74 | 11.44 |
| 40 | 148,982 | 28.22 | 56.19 |
| 30 | 15,772 | 2.99 | 5.95 |
| 20 | 29,811 | 5.65 | 11.24 |
| 10 | 1,896 | 0.36 | 0.72 |

More than 70% of the system is at least forty years old, reinforcing the need for phased replacement planning.



FINDINGS OF THE HYDRAULIC MODEL UPDATE

System Pressures

Testing and hydraulic modeling confirm that system pressures remain above state and regional minimum standards during normal operations. This demonstrates a stable baseline system.

Fire Flow Reliability

While overall pressures are strong, the Plan identifies several neighborhoods with older six-inch water mains where available fire flow is substantially lower than desired. Replacing these mains will improve fire protection and system resiliency.

Break History and Vulnerable Areas

The American Waterworks Associations (AWWA) standard is 0.27 breaks per mile per year. The Village is currently below this standard for the 11 years of information provided (2014 to 2025), averaging 0.247 breaks per mile for the whole system. By looking at the mains that are 40 years and older in the system, the breaks per mile per year are near 0.240 and account for about 80% of the breaks in the entire system over the last 11 years.

Break data from 2014 through 2025 highlights where aging pipes have caused recurring maintenance issues:

| Area | Breaks | Percent of Total |
|------------------|------------|------------------|
| Northwest | 15 | 12.61 |
| Knolls | 9 | 7.56 |
| Lake Hinsdale | 11 | 9.24 |
| Ridgemoor W | 8 | 6.72 |
| Ridgemoor E | 5 | 4.20 |
| Waterford | 8 | 6.72 |
| Garfield | 0 | 0 |
| Willow Pond | 1 | 0.85 |
| Commercial Areas | 26 | 21.84 |
| Sawmill Creek | 18 | 15.13 |
| Farmingdale | 18 | 15.13 |
| Total | 119 | 100 |

Fourteen of the eighteen Sawmill Creek breaks occurred on 75th Street and were corrected through lining. Commercial areas continue to experience a higher share of system breaks due to greater pavement loading, vehicle traffic exposure, and greater age diversity within the pipe network.

Future Water Demand

Regional population forecasts show minimal long term population growth in Willowbrook. Combined with continued improvements in appliance and fixture efficiency, the system's current supply and storage capacity is expected to meet long term demand without requiring major capacity expansion.



RECOMMENDED IMPROVEMENTS

The Water Master Plan recommends several categories of improvement to ensure long-term reliability and reduce emergency repair costs.

Water Main Replacement Program

The highest priority recommendation is the phased replacement of water mains installed in the 1960s and 1970s. These mains are/have:

- Smaller in diameter
- Reduced fire flow capability
- Exhibit more frequent breaks
- More costly to maintain

Replacing these segments will result in significant improvements in system performance, public safety, and operational efficiency.

Storage and Supply Facility Improvements

The Plan recommends continued maintenance and modernization of the Village's water storage tanks and DuPage Water Commission connections. Ensuring the reliability of these facilities is essential for meeting peak-hour demand and supporting consistent system pressures.

Technology and Monitoring Upgrades

Modernizing the Supervisory Control and Data Acquisition (SCADA) platform is recommended to improve monitoring of pressures, tank levels, and water flows. Enhanced real-time visibility will allow operators to respond more quickly to abnormal conditions, reduce risk, and improve compliance.

Asset Management and Long-Term Planning

The updated hydraulic model will serve as a valuable tool for:

- Prioritizing maintenance
- Evaluating development impacts
- Planning capital improvement projects
- Coordinating with the Village's Stormwater Master Plan

Using these tools in combination will strengthen Willowbrook's long-range infrastructure strategy.

BENEFITS TO THE COMMUNITY

The recommended improvements will help the Village:

- Maintain reliable and high-quality drinking water service
- Improve fire flow capabilities in key residential areas
- Reduce service disruptions caused by aging infrastructure
- Increase operational efficiency through better monitoring
- Support responsible capital planning and budgeting for decades



CONCLUSION

The Water Master Plan provides a comprehensive, data-driven understanding of Willowbrook's water system and its long-term needs. The plan confirms that while the system remains stable under normal operations, aging infrastructure will require systematic reinvestment to maintain reliability. By adopting the recommendations of the Plan and integrating them into the five-year Capital Improvement Program, the Village can ensure a responsible and sustainable approach to maintaining one of its most essential public services.

In accordance with the American Water Infrastructure Act of 2018 and the Village's 2021 Risk and Resilience Assessment, only the Executive Summary will be made publicly accessible. Detailed technical chapters remain restricted due to infrastructure sensitivity.

FINANCIAL IMPACT

No financial impact at this time.

RECOMMENDED ACTION:

For Board review and discussion, no action is needed at this time.



NOVEMBER 4, 2025

WATER DISTRIBUTION SYSTEM MASTER PLAN

VILLAGE OF WILLOWBROOK, ILLINOIS

PREPARED BY: KEVIN BALDWIN, PE
CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. HIGGINS ROAD, SUITE 600
ROSEMONT, IL 60018
(847) 823-0500

TABLE OF CONTENTS
VILLAGE OF WILLOWBROOK, IL
WATER DISTRIBUTION SYSTEM MASTER PLAN

| | <u>Page</u> |
|---|-------------|
| 1.0 EXECUTIVE SUMMARY | 1 |
| 2.0 EXISTING WATER DISTRIBUTION SYSTEM..... | 4 |
| 2.1 DUpAGE WATER COMMISSION CONNECTION | 4 |
| 2.2 ELEVATED WATER STORAGE TANKS | 4 |
| 2.3 EMERGENCY BACKUP SUPPLY WELLS | 5 |
| 2.4 DISTRIBUTION SYSTEM | 5 |
| 2.5 DATA SOURCES..... | 7 |
| 2.6 SYSTEM DEMANDS | 9 |
| 3.0 WATER DISTRIBUTION SYSTEM MODEL | 11 |
| 3.1 WATER MODEL CREATION | 11 |
| 3.2 WATER MODEL CALIBRATION | 11 |
| 4.0 WATER DISTRIBUTION SYSTEM MODELING AND ANALYSIS | 12 |
| 4.1 AVERAGE DAY, MAXIMUM DAY, AND PEAK HOUR MODELING | 12 |
| 4.2 FIRE FLOW MODELING | 13 |
| 5.0 RECOMMENDATIONS..... | 13 |
| 5.1 INCREASE WATER MAIN REPLACEMENT CAPITAL IMPROVEMENTS | 13 |
| 5.2 SCADA SYSTEM IMPROVEMENTS | 18 |
| 5.3 USE MODEL TO ASSIST SCADA SET POINTS | 19 |
| 5.4 WATER METER REPLACEMENT PROGRAM | 19 |
| 5.5 ADD REDUNDANCY TO THE PUMP STATION AT THE 3 MG STANDPIPE | 19 |
| 5.6 EMERGENCY GENERATOR AT PUMP STATION | 20 |
| 5.7/8 ELEVATED STORAGE TANK MAINTENANCE..... | 20 |
| 5.9 REDUNDANT FEED FROM DUpAGE WATER COMMISSION..... | 20 |
| 5.10 MODEL TO ASSIST ASSET MAINTENANCE + LEAK DETECTION PROGRAM | 20 |
| 5.11 MAINTAIN AND UPDATE MODEL | 21 |

Appendices

| | |
|---|-------------------------------------|
| A | Water System Hydraulic Profile |
| B | Fire Flow / Calibration Information |
| C | Water Distribution Main Matrix |
| D | Water System Exhibits |
| E | Proposed Improvements Exhibits |

Abbreviations

| | | |
|-------|---|--|
| AVG | - | Average |
| ADF | - | Average Daily Flow |
| CAD | - | Computer-Aided Drafting |
| DIP | - | Ductile Iron Pipe |
| DWC | - | DuPage Water Commission |
| GIS | - | Geographic Information System |
| GPM | - | Gallons Per Minute |
| HPT | - | Hydropneumatic Tank |
| IDNR | - | Illinois Department of Natural Resources |
| ISO | - | Insurance Service Office |
| LF | - | Linear Feet |
| MAX | - | Maximum |
| MDF | - | Maximum Daily Flow |
| MGD | - | Million Gallons Per Day |
| PH | - | Peak Hour |
| PSI | - | Pounds Per Square Inch |
| SCADA | - | Supervisory Control and Data Acquisition |
| VFD | - | Variable Frequency Drive |

1.0 EXECUTIVE SUMMARY

The Village of Willowbrook owns and operates a public water supply that provides potable water to the Village's population of over 9,000. Since previous water distribution master plan updates, the average daily flow currently ranges from approximately 1.0 - 1.2 million gallons per day (mgd). The recent maximum daily usage has been near 1.7 – 1.9 mgd. The distribution system has just over 50 miles of pipe ranging from 6 – 16 inch diameter. Approximately 26% of the distribution water mains are more than 50 years old constructed between 1960s to 1985. Other major water system components include: 1 receiving station from the DuPage Water Commission, 3 storage facilities with a total of 4 million gallons of storage, 1 high service pumps, and no emergency backup supply wells.

Prior to this study, the Village had prepared multiple representative water model and studies of its distribution system over time. The most recent study that included water modeling was completed in 1997 with an initial Water Management Study in 1983, with development specific updates being undertaken prior to the commissioning of this study.

Day to day operation of the water system is highly dependent on vigilant water operator monitoring of flow rates at key locations, spot system pressures, and water levels in the storage tanks. Responses to changes in system conditions are controlled by manually inputting changes through a central SCADA system that utilizes radio-based telemetry.

A major portion (\$3.2 million, approximately 40%) of the Village's Water Operating budget is dedicated to the purchase of the Lake Michigan Water supply from the DuPage Water Commission (DWC). Enacted rate increases in 2023 together with announced rate increases by the DWC nearly doubled the rate charged by the DWC for Lake Michigan Water between the years 2015 and 2022. These recent rate increases driven by higher purchased water costs may add limitations to the ability to fund additional capital projects at a higher rate, although additional capital (replacement) should start to be considered a growing priority as the system continues to age.

The Village commissioned a Water Rate Study in 2023 to evaluate the impact of the purchase water rate increases as well as the other expenses and revenues of the Village's Water Operating Budget. The study contains a detailed discussion of Revenue Requirements and Capital Improvement Planning. With the Village aiming to be more proactive in the need for the implementation of water main replacement capital improvement plans, the rate study highlighted that the current funding levels for water main replacement are inadequate to sustain the system and keep pace with the rate at which the Village's mains will extend beyond their predicted useful lives. It is estimated that at current funding and replacement levels, it would take the Village in the range of 350 - 400 years to replace its complete water main distribution system assuming a typical water main useful life estimated to be 80 to 100 years. A more realistic life span (for budgeting water main replacement) may be 100 to 125 years.



The scope of this Master Plan Update includes preparing a current water model of the Village's water distribution system, using the model to evaluate the performance of current and anticipated future conditions, identifying deficiencies, and making recommendations to improve the overall performance of the Village's Waterworks System.

The Village's borders with neighboring communities are well established and the Village does not anticipate major expansion of the service area driven by major new development activity. The 2023 Rate Study predicted a future water usage rate much higher than occurred over the actual 5 years. There has been a noticeable trend of downward usage of water which has been attributed to more efficient water fixtures and the population using less water due to several factors. The CMAP GT2050 Population, Employment Forecast Summary also shows that major expansion is not expected for Willowbrook's population over the next 25 years with a predicted 1,600 population increase by 2050 and the other categories (Non-Institutionalized Group Quarters and Employment) all but flat. The trends noted above and the recent flat to downward trend in per capita water usage indicate that the current average day usage and record maximum day usage are expected to be values appropriate and conservative for modeling both current and future conditions in Willowbrook. It is noted however that lower values should be used reflecting the current trends when the Village projects revenue and water rates necessary to cover expenses.

The modeling of average day, maximum day, peak hour, and maximum day plus fire flow conditions indicates that the existing water works supply system can deliver these demand conditions within acceptable limits for flow and pressure. It is noted however, that 23% (61,000 feet of a total of 265,400 feet) of the pipes that comprise the distribution system are 6-inch or smaller and that 26% of the total pipe footage (69,000 feet) is 50 years old or older.

Recommendations from the study are presented in detail in Section 5. Table 1 summarizes the list of near term and future improvements that have been considered to improve the Village's water system infrastructure with individual priority rankings, estimated timelines, and preliminary cost estimates to construct.



Table 1 – Summary of Recommendations

| # | Recommendation | Priority | Estimated Timeline (Years) | Preliminary Cost Estimate * |
|--|---|----------|----------------------------|-----------------------------------|
| 1 | Water Main Replacement Program | Medium | 3 - 5 | \$1,250,000 to \$1,750,000 Annual |
| 2 | SCADA System Improvements | High | 1 - 2 | \$125,000 |
| 3 | Model to Assist SCADA Set Points | Medium | 1 - 2 | \$5,000 |
| 4 | Water Meter Replacement Program | High | 1 - 2 | \$2,000,000 |
| 5 | Additional Pump(s) to Pump Station | Medium | 3 - 5 | \$250,000 |
| 6 | Emergency Generator at Pump Station | High | 1 - 2 | \$500,000 |
| 7 | Elevated Storage Tank Maintenance (Priority Work) | High | 1 - 2 | \$100,000 |
| 8 | Elevated Storage Tank Maintenance (With Next Paint Project) | Low | 5 - 7 | \$125,000 |
| 9 | Redundant Feed from DuPage Water Commission | Medium | 5 - 7 | \$1,500,000 |
| 10 | Model to Assist Asset Maintenance + Leak Detection Programs | Medium | 1 - 3 | \$7,500 |
| 11 | Maintain and Update Model | Low | 1 - 3 | \$5,000 Annual |
| * Preliminary Cost Estimates are estimated construction costs and do not include Engineering, Legal, and Land Acquisition. | | | | |



EXHIBIT A

Water Distribution Main Matrix

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|------------|---------|------------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL |
| 177 | 969 | 6 | Ductile Iron | 1960 | 4 | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 25 | 20 | 8 | 1 | 0 | 0 | 54 |
| 210 | 1036 | 6 | Ductile Iron | 1960 | 4 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 20 | 8 | 1 | 0 | 0 | 54 |
| 246 | 1113 | 6 | Ductile Iron | 1960 | 4 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 20 | 8 | 1 | 0 | 0 | 54 |
| 311 | 1243 | 6 | Ductile Iron | 1960 | 4 | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 20 | 8 | 1 | 0 | 0 | 54 |
| 368 | 1365 | 6 | Ductile Iron | 1960 | 4 | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 20 | 8 | 1 | 0 | 0 | 54 |
| 39 | 693 | 6 | Ductile Iron | 1974 | 4 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 65 | 745 | 6 | Ductile Iron | 1974 | 4 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 85 | 785 | 6 | Ductile Iron | 1974 | 4 | | Good | | 1 | \$ 300 | \$ - | \$ 300 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 93 | 801 | 6 | Ductile Iron | 1974 | 4 | | Good | | 1 | \$ 300 | \$ - | \$ 300 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 100 | 815 | 6 | Ductile Iron | 1974 | 4 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 151 | 917 | 6 | Ductile Iron | 1974 | 4 | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 152 | 919 | 6 | Ductile Iron | 1974 | 4 | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 276 | 1173 | 6 | Ductile Iron | 1974 | 4 | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 280 | 1181 | 6 | Ductile Iron | 1974 | 4 | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 391 | 1416 | 6 | Ductile Iron | 1974 | 4 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 394 | 1422 | 6 | Ductile Iron | 1974 | 4 | | Good | | 8 | \$ 2,400 | \$ - | \$ 2,400 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 404 | 1442 | 6 | Ductile Iron | 1974 | 4 | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 421 | 1476 | 6 | Ductile Iron | 1974 | 4 | | Good | | 9 | \$ 2,700 | \$ - | \$ 2,700 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 445 | 1534 | 6 | Ductile Iron | 1974 | 4 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 454 | 1555 | 6 | Ductile Iron | 1974 | 4 | | Good | | 11 | \$ 3,300 | \$ - | \$ 3,300 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 483 | 1637 | 6 | Ductile Iron | 1974 | 4 | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 493 | 1682 | 6 | Ductile Iron | 1974 | 4 | | Good | | 15 | \$ 4,500 | \$ - | \$ 4,500 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 656 | 2452 | 6 | Ductile Iron | 1960 | 1 | | Fair | | 259 | \$ 77,700 | \$ - | \$ 77,700 | 25 | 5 | 8 | 1 | 0 | 10 | 49 |
| 716 | 3659 | 6 | Ductile Iron | 1974 | 4 | | Good | | 373 | \$ 111,900 | \$ - | \$ 111,900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 729 | 3787 | 6 | Ductile Iron | 1974 | 4 | | Good | | 23 | \$ 6,900 | \$ - | \$ 6,900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 730 | 3788 | 6 | Ductile Iron | 1974 | 4 | | Good | | 234 | \$ 70,200 | \$ - | \$ 70,200 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 818 | 4397 | 6 | Ductile Iron | 1974 | 4 | | Good | | 270 | \$ 81,000 | \$ - | \$ 81,000 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 834 | 4502 | 6 | Ductile Iron | 1974 | 4 | | Good | | 78 | \$ 23,400 | \$ - | \$ 23,400 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 882 | 4941 | 6 | Ductile Iron | 1974 | 4 | | Good | | 374 | \$ 112,200 | \$ - | \$ 112,200 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 883 | 4942 | 6 | Ductile Iron | 1974 | 4 | | Good | | 253 | \$ 75,900 | \$ - | \$ 75,900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 886 | 5093 | 6 | Ductile Iron | 1974 | 4 | | Good | | 139 | \$ 41,700 | \$ - | \$ 41,700 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 891 | 5137 | 6 | Ductile Iron | 1974 | 4 | | Good | | 68 | \$ 20,400 | \$ - | \$ 20,400 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 892 | 5138 | 6 | Ductile Iron | 1974 | 4 | | Good | | 313 | \$ 93,900 | \$ - | \$ 93,900 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 898 | 5236 | 6 | Ductile Iron | 1974 | 4 | | Good | | 374 | \$ 112,200 | \$ - | \$ 112,200 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 902 | 5290 | 6 | Ductile Iron | 1974 | 4 | | Good | | 309 | \$ 92,700 | \$ - | \$ 92,700 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 903 | 5307 | 6 | Ductile Iron | 1974 | 4 | | Good | | 166 | \$ 49,800 | \$ - | \$ 49,800 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 904 | 5308 | 6 | Ductile Iron | 1974 | 4 | | Good | | 68 | \$ 20,400 | \$ - | \$ 20,400 | 20 | 20 | 8 | 1 | 0 | 0 | 49 |
| 1301 | 4407 | 8 | Ductile Iron | 1960 | 4 | | Good | | 19 | \$ 5,700 | \$ - | \$ 5,700 | 25 | 20 | 2 | 1 | 0 | 0 | 48 |
| 2258 | 4292 | 12 | Ductile Iron | 1960 | 4 | | Good | | 71 | \$ 26,980 | \$ - | \$ 26,980 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 2262 | 4488 | 12 | Ductile Iron | 1960 | 4 | | Good | | 203 | \$ 77,140 | \$ - | \$ 77,140 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 2266 | 4790 | 12 | Ductile Iron | 1960 | 4 | | Good | | 452.0 | \$ 171,760 | \$ - | \$ 171,760 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 2275 | 5221 | 12 | Ductile Iron | 1960 | 4 | | Good | | 360.0 | \$ 136,800 | \$ - | \$ 136,800 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 2276 | 5222 | 12 | Ductile Iron | 1960 | 4 | | Good | | 300.0 | \$ 114,000 | \$ - | \$ 114,000 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 2277 | 5223 | 12 | Ductile Iron | 1960 | 4 | | Good | | 350.0 | \$ 133,000 | \$ - | \$ 133,000 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|------------|---------|------------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL |
| 2278 | 5224 | 12 | Ductile Iron | 1960 | 4 | | Good | | 47.0 | \$ 17,860 | \$ - | \$ 17,860 | 25 | 20 | 0 | 1 | 0 | 0 | 46 |
| 53 | 721 | 6 | Ductile Iron | 1960 | | | Fair | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 90 | 795 | 6 | Ductile Iron | 1960 | | | Fair | | 1 | \$ 300 | \$ - | \$ 300 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 180 | 975 | 6 | Ductile Iron | 1960 | | | Fair | | 3 | \$ 900 | \$ - | \$ 900 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 271 | 1163 | 6 | Ductile Iron | 1960 | | | Fair | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 294 | 1209 | 6 | Ductile Iron | 1960 | | | Fair | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 398 | 1430 | 6 | Ductile Iron | 1960 | | | Fair | | 8 | \$ 2,400 | \$ - | \$ 2,400 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 563 | 1944 | 6 | Ductile Iron | 1960 | | | Fair | | 30 | \$ 9,000 | \$ - | \$ 9,000 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 721 | 3689 | 6 | Ductile Iron | 1960 | | | Fair | | 317 | \$ 95,100 | \$ - | \$ 95,100 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 760 | 3992 | 6 | Ductile Iron | 1976 | 1 | | Fair | | 363 | \$ 108,900 | \$ - | \$ 108,900 | 20 | 5 | 8 | 1 | 0 | 10 | 44 |
| 780 | 4085 | 6 | Ductile Iron | 1970 | 1 | | Fair | | 366 | \$ 109,800 | \$ - | \$ 109,800 | 20 | 5 | 8 | 1 | 0 | 10 | 44 |
| 821 | 4425 | 6 | Ductile Iron | 1970 | 1 | | Fair | | 111 | \$ 33,300 | \$ - | \$ 33,300 | 20 | 5 | 8 | 1 | 0 | 10 | 44 |
| 833 | 4486 | 6 | Ductile Iron | 1960 | | | Fair | | 230 | \$ 69,000 | \$ - | \$ 69,000 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 864 | 4793 | 6 | Ductile Iron | 1960 | | | Fair | | 362 | \$ 108,600 | \$ - | \$ 108,600 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 865 | 4794 | 6 | Ductile Iron | 1960 | | | Fair | | 324 | \$ 97,200 | \$ - | \$ 97,200 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 866 | 4795 | 6 | Ductile Iron | 1960 | | | Fair | | 343 | \$ 102,900 | \$ - | \$ 102,900 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 895 | 5176 | 6 | Ductile Iron | 1960 | | | Fair | | 43 | \$ 12,900 | \$ - | \$ 12,900 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 915 | 5458 | 6 | Ductile Iron | 1960 | | | Fair | | 240 | \$ 72,000 | \$ - | \$ 72,000 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 916 | 5459 | 6 | Ductile Iron | 1960 | | | Fair | | 338 | \$ 101,400 | \$ - | \$ 101,400 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 917 | 5460 | 6 | Ductile Iron | 1960 | | | Fair | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 918 | 5482 | 6 | Ductile Iron | 1960 | | | Fair | | 379 | \$ 113,700 | \$ - | \$ 113,700 | 25 | 0 | 8 | 1 | 0 | 10 | 44 |
| 1001 | 2156 | 8 | Ductile Iron | 1974 | 4 | | Good | | 43 | \$ 12,900 | \$ - | \$ 12,900 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1047 | 2611 | 8 | Ductile Iron | 1974 | 4 | | Good | | 152 | \$ 45,600 | \$ - | \$ 45,600 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1129 | 3687 | 8 | Ductile Iron | 1974 | 4 | | Good | | 218 | \$ 65,400 | \$ - | \$ 65,400 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1178 | 3883 | 8 | Ductile Iron | 1974 | 4 | | Good | | 185 | \$ 55,500 | \$ - | \$ 55,500 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1179 | 3885 | 8 | Ductile Iron | 1974 | 4 | | Good | | 23 | \$ 6,900 | \$ - | \$ 6,900 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1220 | 4021 | 8 | Ductile Iron | 1974 | 4 | | Good | | 42 | \$ 12,600 | \$ - | \$ 12,600 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1221 | 4022 | 8 | Ductile Iron | 1974 | 4 | | Good | | 418 | \$ 125,400 | \$ - | \$ 125,400 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1270 | 4269 | 8 | Ductile Iron | 1974 | 4 | | Good | | 82 | \$ 24,600 | \$ - | \$ 24,600 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1393 | 4647 | 8 | Ductile Iron | 1974 | 4 | | Good | | 28 | \$ 8,400 | \$ - | \$ 8,400 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1427 | 4787 | 8 | Ductile Iron | 1974 | 4 | | Good | | 59 | \$ 17,700 | \$ - | \$ 17,700 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1435 | 4813 | 8 | Ductile Iron | 1974 | 4 | | Good | | 90 | \$ 27,000 | \$ - | \$ 27,000 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1436 | 4814 | 8 | Ductile Iron | 1974 | 4 | | Good | | 69 | \$ 20,700 | \$ - | \$ 20,700 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1476 | 4993 | 8 | Ductile Iron | 1974 | 4 | | Good | | 376 | \$ 112,800 | \$ - | \$ 112,800 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1480 | 5037 | 8 | Ductile Iron | 1974 | 4 | | Good | | 193 | \$ 57,900 | \$ - | \$ 57,900 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1481 | 5038 | 8 | Ductile Iron | 1974 | 4 | | Good | | 200 | \$ 60,000 | \$ - | \$ 60,000 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1495 | 5103 | 8 | Ductile Iron | 1974 | 4 | | Good | | 390 | \$ 117,000 | \$ - | \$ 117,000 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1496 | 5104 | 8 | Ductile Iron | 1974 | 4 | | Good | | 364 | \$ 109,200 | \$ - | \$ 109,200 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 1507 | 5160 | 8 | Ductile Iron | 1974 | 4 | | Good | | 386 | \$ 115,800 | \$ - | \$ 115,800 | 20 | 20 | 2 | 1 | 0 | 0 | 43 |
| 6 | 5591 | 6 | Ductile Iron | 1960 | 3 | | Good | | 43 | \$ 12,900 | \$ - | \$ 12,900 | 25 | 8 | 8 | 1 | 0 | 0 | 42 |
| 205 | 1025 | 6 | Ductile Iron | 1960 | 3 | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 8 | 8 | 1 | 0 | 0 | 42 |
| 270 | 1161 | 6 | Ductile Iron | 1960 | 3 | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 8 | 8 | 1 | 0 | 0 | 42 |
| 324 | 1269 | 6 | Ductile Iron | 1960 | 3 | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 8 | 8 | 1 | 0 | 0 | 42 |
| 359 | 1347 | 6 | Ductile Iron | 1960 | 3 | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 8 | 8 | 1 | 0 | 0 | 42 |

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|------------|---------|------------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|--|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL | |
| 613 | 2203 | 6 | Ductile Iron | 1960 | 3 | | Good | | 69 | \$ 20,700 | \$ - | \$ 20,700 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 771 | 4032 | 6 | Ductile Iron | 1960 | 3 | | Good | | 86 | \$ 25,800 | \$ - | \$ 25,800 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 775 | 4057 | 6 | Ductile Iron | 1960 | 3 | | Good | | 188 | \$ 56,400 | \$ - | \$ 56,400 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 839 | 4533 | 6 | Ductile Iron | 1960 | 3 | | Good | | 353 | \$ 105,900 | \$ - | \$ 105,900 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 840 | 4534 | 6 | Ductile Iron | 1960 | 3 | | Good | | 451 | \$ 135,300 | \$ - | \$ 135,300 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 879 | 4934 | 6 | Ductile Iron | 1960 | 3 | | Good | | 210 | \$ 63,000 | \$ - | \$ 63,000 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 921 | 5589 | 6 | Ductile Iron | 1960 | 3 | | Good | | 11 | \$ 3,300 | \$ - | \$ 3,300 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 922 | 5590 | 6 | Ductile Iron | 1960 | 3 | | Good | | 203 | \$ 60,900 | \$ - | \$ 60,900 | 25 | 8 | 8 | 1 | 0 | 0 | 42 | |
| 47 | 709 | 6 | Ductile Iron | 1960 | 2 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 108 | 831 | 6 | Ductile Iron | 1960 | 2 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 199 | 1013 | 6 | Ductile Iron | 1960 | 2 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 206 | 1027 | 6 | Ductile Iron | 1960 | 1 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 474 | 1607 | 6 | Ductile Iron | 1960 | 2 | | Good | | 13 | \$ 3,900 | \$ - | \$ 3,900 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 526 | 1797 | 6 | Ductile Iron | 1960 | 2 | | Good | | 19 | \$ 5,700 | \$ - | \$ 5,700 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 536 | 1832 | 6 | Ductile Iron | 1960 | 2 | | Good | | 20 | \$ 6,000 | \$ - | \$ 6,000 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 562 | 1940 | 6 | Ductile Iron | 1970 | | | Fair | | 30 | \$ 9,000 | \$ - | \$ 9,000 | 20 | 0 | 8 | 1 | 0 | 10 | 39 | |
| 692 | 2897 | 6 | Ductile Iron | 1976 | | | Fair | | 290 | \$ 87,000 | \$ - | \$ 87,000 | 20 | 0 | 8 | 1 | 0 | 10 | 39 | |
| 693 | 2924 | 6 | Ductile Iron | 1976 | | | Fair | | 306 | \$ 91,800 | \$ - | \$ 91,800 | 20 | 0 | 8 | 1 | 0 | 10 | 39 | |
| 712 | 3643 | 6 | Ductile Iron | 1960 | 2 | | Good | | 102 | \$ 30,600 | \$ - | \$ 30,600 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 822 | 4426 | 6 | Ductile Iron | 1970 | | | Fair | | 57 | \$ 17,100 | \$ - | \$ 17,100 | 20 | 0 | 8 | 1 | 0 | 10 | 39 | |
| 855 | 4711 | 6 | Ductile Iron | 1960 | 2 | | Good | | 430 | \$ 129,000 | \$ - | \$ 129,000 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 856 | 4712 | 6 | Ductile Iron | 1960 | 2 | | Good | | 66 | \$ 19,800 | \$ - | \$ 19,800 | 25 | 5 | 8 | 1 | 0 | 0 | 39 | |
| 5 | 5485 | 6 | Ductile Iron | 1960 | | | Good | | 17 | \$ 5,100 | \$ - | \$ 5,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 36 | 687 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 51 | 717 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 60 | 735 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 61 | 737 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 72 | 759 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 76 | 767 | 6 | Ductile Iron | 1976 | 1 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 5 | 8 | 1 | 0 | 0 | 34 | |
| 77 | 769 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 88 | 791 | 6 | Ductile Iron | 1980 | 4 | | Good | | 1 | \$ 300 | \$ - | \$ 300 | 5 | 20 | 8 | 1 | 0 | 0 | 34 | |
| 92 | 799 | 6 | Ductile Iron | 1960 | | | Good | | 1 | \$ 300 | \$ - | \$ 300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 98 | 811 | 6 | Ductile Iron | 1970 | 1 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 5 | 8 | 1 | 0 | 0 | 34 | |
| 116 | 847 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 117 | 849 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 122 | 859 | 6 | Ductile Iron | 1960 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 146 | 907 | 6 | Ductile Iron | 1976 | 1 | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 5 | 8 | 1 | 0 | 0 | 34 | |
| 167 | 949 | 6 | Ductile Iron | 1976 | 1 | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 5 | 8 | 1 | 0 | 0 | 34 | |
| 168 | 951 | 6 | Ductile Iron | 1960 | | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 195 | 1005 | 6 | Ductile Iron | 1960 | | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 196 | 1007 | 6 | Ductile Iron | 1960 | | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 203 | 1021 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 207 | 1029 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |
| 213 | 1042 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 | |

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|----------|---------|----------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL |
| 219 | 1054 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 233 | 1082 | 6 | Ductile Iron | 1976 | 1 | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 249 | 1119 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 257 | 1135 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 261 | 1143 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 274 | 1169 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 281 | 1183 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 282 | 1185 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 284 | 1189 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 288 | 1197 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 290 | 1201 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 292 | 1205 | 6 | Ductile Iron | 1976 | 1 | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 313 | 1247 | 6 | Ductile Iron | 1970 | 1 | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 316 | 1253 | 6 | Ductile Iron | 1975 | 1 | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 322 | 1265 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 331 | 1286 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 338 | 1300 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 341 | 1306 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 348 | 1320 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 352 | 1328 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 354 | 1332 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 355 | 1334 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 358 | 1340 | 6 | Ductile Iron | 1960 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 370 | 1369 | 6 | Ductile Iron | 1960 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 376 | 1386 | 6 | Ductile Iron | 1960 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 378 | 1390 | 6 | Ductile Iron | 1960 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 400 | 1434 | 6 | Ductile Iron | 1960 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 410 | 1454 | 6 | Ductile Iron | 1960 | | | Good | | 8 | \$ 2,400 | \$ - | \$ 2,400 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 416 | 1466 | 6 | Ductile Iron | 1960 | | | Good | | 9 | \$ 2,700 | \$ - | \$ 2,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 422 | 1478 | 6 | Ductile Iron | 1960 | | | Good | | 9 | \$ 2,700 | \$ - | \$ 2,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 430 | 1494 | 6 | Ductile Iron | 1960 | | | Good | | 9 | \$ 2,700 | \$ - | \$ 2,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 431 | 1498 | 6 | Ductile Iron | 1960 | | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 434 | 1504 | 6 | Ductile Iron | 1960 | | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 435 | 1508 | 6 | Ductile Iron | 1960 | | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 436 | 1510 | 6 | Ductile Iron | 1975 | 1 | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 438 | 1518 | 6 | Ductile Iron | 1960 | | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 441 | 1526 | 6 | Ductile Iron | 1960 | | | Good | | 10 | \$ 3,000 | \$ - | \$ 3,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 453 | 1553 | 6 | Ductile Iron | 1960 | | | Good | | 11 | \$ 3,300 | \$ - | \$ 3,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 458 | 1565 | 6 | Ductile Iron | 1960 | | | Good | | 11 | \$ 3,300 | \$ - | \$ 3,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 461 | 1574 | 6 | Ductile Iron | 1960 | | | Good | | 12 | \$ 3,600 | \$ - | \$ 3,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 465 | 1582 | 6 | Ductile Iron | 1960 | | | Good | | 12 | \$ 3,600 | \$ - | \$ 3,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 470 | 1593 | 6 | Ductile Iron | 1960 | | | Good | | 12 | \$ 3,600 | \$ - | \$ 3,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 476 | 1614 | 6 | Ductile Iron | 1960 | | | Good | | 13 | \$ 3,900 | \$ - | \$ 3,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 481 | 1633 | 6 | Ductile Iron | 1960 | | | Good | | 13 | \$ 3,900 | \$ - | \$ 3,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|------------|---------|------------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL |
| 488 | 1672 | 6 | Ductile Iron | 1960 | | | Good | | 15 | \$ 4,500 | \$ - | \$ 4,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 494 | 1684 | 6 | Ductile Iron | 1960 | | | Good | | 15 | \$ 4,500 | \$ - | \$ 4,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 495 | 1692 | 6 | Ductile Iron | 1960 | | | Good | | 15 | \$ 4,500 | \$ - | \$ 4,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 498 | 1699 | 6 | Ductile Iron | 1960 | | | Good | | 16 | \$ 4,800 | \$ - | \$ 4,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 503 | 1721 | 6 | Ductile Iron | 1960 | | | Good | | 16 | \$ 4,800 | \$ - | \$ 4,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 514 | 1752 | 6 | Ductile Iron | 1960 | | | Good | | 17 | \$ 5,100 | \$ - | \$ 5,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 520 | 1773 | 6 | Ductile Iron | 1960 | | | Good | | 18 | \$ 5,400 | \$ - | \$ 5,400 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 528 | 1813 | 6 | Ductile Iron | 1960 | | | Good | | 19 | \$ 5,700 | \$ - | \$ 5,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 550 | 1889 | 6 | Ductile Iron | 1960 | | | Good | | 25 | \$ 7,500 | \$ - | \$ 7,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 557 | 1913 | 6 | Ductile Iron | 1960 | | | Good | | 28 | \$ 8,400 | \$ - | \$ 8,400 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 560 | 1928 | 6 | Ductile Iron | 1960 | | | Good | | 29 | \$ 8,700 | \$ - | \$ 8,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 577 | 2007 | 6 | Ductile Iron | 1960 | | | Good | | 39 | \$ 11,700 | \$ - | \$ 11,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 606 | 2166 | 6 | Ductile Iron | 1960 | | | Good | | 63 | \$ 18,900 | \$ - | \$ 18,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 614 | 2206 | 6 | Ductile Iron | 1960 | | | Good | | 69 | \$ 20,700 | \$ - | \$ 20,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 615 | 2212 | 6 | Ductile Iron | 1970 | 2 | | Good | | 56 | \$ 16,800 | \$ - | \$ 16,800 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 624 | 2244 | 6 | Ductile Iron | 1960 | | | Good | | 94 | \$ 28,200 | \$ - | \$ 28,200 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 647 | 2401 | 6 | Ductile Iron | 1960 | | | Good | | 110 | \$ 33,000 | \$ - | \$ 33,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 659 | 2462 | 6 | Ductile Iron | 1960 | | | Good | | 111 | \$ 33,300 | \$ - | \$ 33,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 665 | 2484 | 6 | Ductile Iron | 1960 | | | Good | | 135 | \$ 40,500 | \$ - | \$ 40,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 687 | 2782 | 6 | Ductile Iron | 1976 | 1 | | Good | | 243 | \$ 72,900 | \$ - | \$ 72,900 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 695 | 2944 | 6 | Ductile Iron | 1976 | 1 | | Good | | 315 | \$ 94,500 | \$ - | \$ 94,500 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 696 | 2984 | 6 | Ductile Iron | 1960 | | | Good | | 352 | \$ 105,600 | \$ - | \$ 105,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 697 | 2997 | 6 | Ductile Iron | 1960 | | | Good | | 248 | \$ 74,400 | \$ - | \$ 74,400 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 702 | 3193 | 6 | Ductile Iron | 1960 | | | Good | | 632 | \$ 189,600 | \$ - | \$ 189,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 708 | 3533 | 6 | Ductile Iron | 1960 | | | Good | | 115 | \$ 34,500 | \$ - | \$ 34,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 713 | 3651 | 6 | Ductile Iron | 1960 | | | Good | | 106 | \$ 31,800 | \$ - | \$ 31,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 722 | 3697 | 6 | Ductile Iron | 1970 | 1 | | Good | | 219 | \$ 65,700 | \$ - | \$ 65,700 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 723 | 3698 | 6 | Ductile Iron | 1970 | 1 | | Good | | 19 | \$ 5,700 | \$ - | \$ 5,700 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 724 | 3701 | 6 | Ductile Iron | 1960 | | | Good | | 106 | \$ 31,800 | \$ - | \$ 31,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 733 | 3823 | 6 | Ductile Iron | 1960 | | | Good | | 287 | \$ 86,100 | \$ - | \$ 86,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 734 | 3824 | 6 | Ductile Iron | 1960 | | | Good | | 5 | \$ 1,500 | \$ - | \$ 1,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 752 | 3918 | 6 | Ductile Iron | 1970 | 1 | | Good | | 198 | \$ 59,400 | \$ - | \$ 59,400 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 753 | 3925 | 6 | Ductile Iron | 1960 | | | Good | | 11 | \$ 3,300 | \$ - | \$ 3,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 754 | 3926 | 6 | Ductile Iron | 1960 | | | Good | | 6 | \$ 1,800 | \$ - | \$ 1,800 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 757 | 3975 | 6 | Ductile Iron | 1960 | | | Good | | 283 | \$ 84,900 | \$ - | \$ 84,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 758 | 3976 | 6 | Ductile Iron | 1960 | | | Good | | 361 | \$ 108,300 | \$ - | \$ 108,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 759 | 3991 | 6 | Ductile Iron | 1976 | 1 | | Good | | 13 | \$ 3,900 | \$ - | \$ 3,900 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 769 | 4027 | 6 | Ductile Iron | 1975 | 1 | | Good | | 54 | \$ 16,200 | \$ - | \$ 16,200 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 776 | 4059 | 6 | Ductile Iron | 1960 | | | Good | | 41 | \$ 12,300 | \$ - | \$ 12,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 777 | 4060 | 6 | Ductile Iron | 1960 | | | Good | | 37 | \$ 11,100 | \$ - | \$ 11,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 781 | 4091 | 6 | Ductile Iron | 1960 | | | Good | | 92 | \$ 27,600 | \$ - | \$ 27,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 782 | 4092 | 6 | Ductile Iron | 1960 | | | Good | | 99 | \$ 29,700 | \$ - | \$ 29,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 791 | 4119 | 6 | Ductile Iron | 1960 | | | Good | | 121 | \$ 36,300 | \$ - | \$ 36,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 792 | 4120 | 6 | Ductile Iron | 1960 | | | Good | | 363 | \$ 108,900 | \$ - | \$ 108,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |

Village of Willowbrook - Water System Master Plan Update - Water Distribution Main Matrix

| | TOTAL WM | TOTAL WM / ROAD | LENGTH (FT) | LENGTH (MI) |
|------|-----------------|-----------------|-------------|-------------|
| 2026 | \$ 403,200.00 | \$ 403,200.00 | 1,344 | 0.25 |
| 2027 | \$ 1,330,640.00 | \$ 1,330,640.00 | 3,960 | 0.75 |
| 2028 | \$ 1,217,100.00 | \$ 1,217,100.00 | 4,057 | 0.77 |
| 2029 | \$ 1,243,500.00 | \$ 1,243,500.00 | 4,145 | 0.79 |
| 2030 | \$ 1,200,600.00 | \$ 1,200,600.00 | 4,002 | 0.76 |

* MAINS ON A STREET SCHEDULED FOR STREET REPLACEMENT THAT SHOULD BE EVALUATED AND A DETERMINATION MADE IF MAINS ARE TO BE REPLACED.

XXXXXXXXXXXX = NOT INCLUDED IN MAIN REPLACEMENT

| PROPERTIES | | | | | | | | | | COSTS | | | MATRIX VALUES | | | | | | |
|------------|-------|-----------|---------------|------|----------------------|------------------------|------------|---------------|--------|------------|---------|------------|---------------|----------------------|-------------|-----------------|---------------------------|-------------------|-------|
| ID # | Label | Pipe Size | Pipe Material | Year | Break Density Rating | Street Condition (PCI) | Fire Flows | Street Repair | Length | WM | ROADWAY | TOTAL | AGE Matrix | Break Density Matrix | Size Matrix | Material Matrix | Street Condition Matrix * | Fire Flows Matrix | TOTAL |
| 795 | 4127 | 6 | Ductile Iron | 1960 | | | Good | | 57 | \$ 17,100 | \$ - | \$ 17,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 796 | 4128 | 6 | Ductile Iron | 1960 | | | Good | | 410 | \$ 123,000 | \$ - | \$ 123,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 809 | 4302 | 6 | Ductile Iron | 1960 | | | Good | | 285 | \$ 85,500 | \$ - | \$ 85,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 820 | 4403 | 6 | Ductile Iron | 1960 | | | Good | | 392 | \$ 117,600 | \$ - | \$ 117,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 823 | 4431 | 6 | Ductile Iron | 1976 | 1 | | Good | | 286 | \$ 85,800 | \$ - | \$ 85,800 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 824 | 4432 | 6 | Ductile Iron | 1976 | 1 | | Good | | 146 | \$ 43,800 | \$ - | \$ 43,800 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 832 | 4469 | 6 | Ductile Iron | 1960 | | | Good | | 117 | \$ 35,100 | \$ - | \$ 35,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 857 | 4729 | 6 | Ductile Iron | 1976 | 1 | | Good | | 21 | \$ 6,300 | \$ - | \$ 6,300 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 868 | 4806 | 6 | Ductile Iron | 1976 | 1 | | Good | | 341 | \$ 102,300 | \$ - | \$ 102,300 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 870 | 4859 | 6 | Ductile Iron | 1960 | | | Good | | 300 | \$ 90,000 | \$ - | \$ 90,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 871 | 4862 | 6 | Ductile Iron | 1960 | | | Good | | 272 | \$ 81,600 | \$ - | \$ 81,600 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 874 | 4901 | 6 | Ductile Iron | 1960 | | | Good | | 193 | \$ 57,900 | \$ - | \$ 57,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 875 | 4902 | 6 | Ductile Iron | 1960 | | | Good | | 183 | \$ 54,900 | \$ - | \$ 54,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 878 | 4933 | 6 | Ductile Iron | 1960 | | | Good | | 311 | \$ 93,300 | \$ - | \$ 93,300 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 880 | 4935 | 6 | Ductile Iron | 1960 | | | Good | | 373 | \$ 111,900 | \$ - | \$ 111,900 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 881 | 4936 | 6 | Ductile Iron | 1960 | | | Good | | 495 | \$ 148,500 | \$ - | \$ 148,500 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 884 | 5004 | 6 | Ductile Iron | 1960 | | | Good | | 100 | \$ 30,000 | \$ - | \$ 30,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 885 | 5033 | 6 | Ductile Iron | 1976 | 1 | | Good | | 290 | \$ 87,000 | \$ - | \$ 87,000 | 20 | 5 | 8 | 1 | 0 | 0 | 34 |
| 894 | 5157 | 6 | Ductile Iron | 1960 | | | Good | | 329 | \$ 98,700 | \$ - | \$ 98,700 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 913 | 5431 | 6 | Ductile Iron | 1960 | | | Good | | 277 | \$ 83,100 | \$ - | \$ 83,100 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 914 | 5432 | 6 | Ductile Iron | 1960 | | | Good | | 30 | \$ 9,000 | \$ - | \$ 9,000 | 25 | 0 | 8 | 1 | 0 | 0 | 34 |
| 1763 | 2563 | 12 | Ductile Iron | 1960 | 3 | | Good | | 159 | \$ 60,420 | \$ - | \$ 60,420 | 25 | 8 | 0 | 1 | 0 | 0 | 34 |
| 1765 | 2595 | 12 | Ductile Iron | 1960 | 3 | | Good | | 202 | \$ 76,760 | \$ - | \$ 76,760 | 25 | 8 | 0 | 1 | 0 | 0 | 34 |
| 1781 | 2950 | 12 | Ductile Iron | 1960 | 3 | | Good | | 319 | \$ 121,220 | \$ - | \$ 121,220 | 25 | 8 | 0 | 1 | 0 | 0 | 34 |
| 1424 | 4777 | 8 | Ductile Iron | 1960 | 1 | | Good | | 313 | \$ 93,900 | \$ - | \$ 93,900 | 25 | 5 | 2 | 1 | 0 | 0 | 33 |
| 1490 | 5061 | 8 | Ductile Iron | 1960 | 1 | | Good | | 310 | \$ 93,000 | \$ - | \$ 93,000 | 25 | 5 | 2 | 1 | 0 | 0 | 33 |
| 1515 | 5242 | 8 | Ductile Iron | 1960 | 2 | | Good | | 377 | \$ 113,100 | \$ - | \$ 113,100 | 25 | 5 | 2 | 1 | 0 | 0 | 33 |
| 1538 | 5436 | 8 | Ductile Iron | 1960 | 2 | | Good | | 319 | \$ 95,700 | \$ - | \$ 95,700 | 25 | 5 | 2 | 1 | 0 | 0 | 33 |
| 1539 | 5437 | 8 | Ductile Iron | 1960 | 2 | | Good | | 64 | \$ 19,200 | \$ - | \$ 19,200 | 25 | 5 | 2 | 1 | 0 | 0 | 33 |
| 1673 | 4621 | 10 | Ductile Iron | 1975 | 3 | | Good | | 138 | \$ 46,920 | \$ - | \$ 46,920 | 20 | 8 | 2 | 1 | 0 | 0 | 31 |
| 1674 | 4622 | 10 | Ductile Iron | 1975 | 3 | | Good | | 287 | \$ 97,580 | \$ - | \$ 97,580 | 20 | 8 | 2 | 1 | 0 | 0 | 31 |
| 2186 | 5435 | 12 | Ductile Iron | 1960 | 2 | | Good | | 174 | \$ 66,120 | \$ - | \$ 66,120 | 25 | 5 | 0 | 1 | 0 | 0 | 31 |
| 3 | 4026 | 6 | Ductile Iron | 1970 | | | Good | | 193 | \$ 57,900 | \$ - | \$ 57,900 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 19 | 5705 | 6 | Ductile Iron | 1970 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 20 | 5707 | 6 | Ductile Iron | 1970 | | | Good | | 9 | \$ 2,700 | \$ - | \$ 2,700 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 21 | 5718 | 6 | Ductile Iron | 1970 | | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 35 | 685 | 6 | Ductile Iron | 1976 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 40 | 695 | 6 | Ductile Iron | 1974 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 44 | 703 | 6 | Ductile Iron | 1970 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 48 | 711 | 6 | Ductile Iron | 1974 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 56 | 727 | 6 | Ductile Iron | 1974 | | | Good | | 7 | \$ 2,100 | \$ - | \$ 2,100 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 58 | 731 | 6 | Ductile Iron | 1970 | | | Good | | 4 | \$ 1,200 | \$ - | \$ 1,200 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 59 | 733 | 6 | Ductile Iron | 1970 | | | Good | | 3 | \$ 900 | \$ - | \$ 900 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |
| 63 | 741 | 6 | Ductile Iron | 1976 | | | Good | | 2 | \$ 600 | \$ - | \$ 600 | 20 | 0 | 8 | 1 | 0 | 0 | 29 |

| | |
|---------------|--|
| MATRIX SCALES | |
|---------------|--|

[illegible]

PER LINEAR FOOT COSTS

Water Main

| Size | Materials & Labor | Design | RE | Contingency | | ROUNDED TOTAL |
|------|----------------------|----------|----------|-------------|----|------------------|
| | | 5% | 10% | 10% | | |
| 8" | \$ 240.00 | \$ 12.00 | \$ 24.00 | \$ 24.00 | \$ | 300.00 |
| 10" | \$ 265.00 | \$ 13.25 | \$ 26.50 | \$ 26.50 | \$ | 340.00 |
| 12" | \$ 300.00 | \$ 15.00 | \$ 30.00 | \$ 30.00 | \$ | 380.00 |
| 16" | \$ 400.00 | \$ 20.00 | \$ 40.00 | \$ 40.00 | \$ | 500.00 |
| 18" | \$ 450.00 | \$ 22.50 | \$ 45.00 | \$ 45.00 | \$ | 570.00 |
| 20" | \$ 600.00 | \$ 30.00 | \$ 60.00 | \$ 60.00 | \$ | 750.00 |

Road

| | Materials & Labor | Design | RE | Contingency | | ROUNDED TOTAL |
|--|----------------------|----------|----------|-------------|----|------------------|
| | | 5% | 10% | 10% | | |
| | \$ 225.00 | \$ 11.25 | \$ 22.50 | \$ 22.50 | \$ | 290.00 |



COMMITTEE OF THE WHOLE

AGENDA ITEM NO: 6.c.

DATE: November 24, 2025

SUBJECT:

PRESENTATION OF THE 2025-2026 SNOW OPERATIONS MANUAL

STAFF REPORT

TO: Mayor Trilla and Board of Trustees
FROM: Rick Valent, Director of Public Works
THROUGH: Sean Halloran, Village Administrator

PURPOSE AND ACTION REQUESTED

Presentation of the 2025-2026 Snow Operations Manual.

BACKGROUND/SUMMARY

As part of the Village's Strategic Initiatives, Public Works continues to update its Snowplow Operations Manual to clearly communicate the policies and procedures governing snow and ice removal within the community. The manual serves both as a public-facing resource and as an operational guide to ensure that Public Works staff and contracted personnel fully understand their responsibilities during the winter season. Recent editions have included updates to procedures, plow routes, equipment assignments, contractor involvement, and vendor information related to repairs and material purchases.

For the 2025–2026 winter season, notable updates include the incorporation of a dedicated supervisor role and an expansion of contractual services early in the season due to in-house staffing reductions affecting these operations. Additionally, all Village and contractor equipment utilized in snow and ice operations will now utilize anti-icing and de-icing liquids to enhance roadway safety and efficiency.

FINANCIAL IMPACT

No financial impact at this time.

RECOMMENDED ACTION:

Staff is presenting the Snow Operations Manual for general information and to update the Board on the Village's winter preparedness activities.

SNOWPLOW OPERATIONS MANUAL

2025 - 2026



Village of
WILLOWBROOK

Introduction

This Snow Operations Manual serves as the annual Village of Willowbrook Snow Plan and provides updated guidance on the mobilization of ice control and snow plowing services. The manual includes five established routes and identifies the Village and contractor equipment assigned to each. Contracted snow plowing services will be activated once a minimum of 1.5 inches (1.5") of snowfall has accumulated, unless otherwise directed by the Public Works Supervisor. This manual will be distributed to and reviewed by all personnel, Village staff or contractual operators, prior to the start of the winter season.

Location-Route 1 Southwest Corner Orange

Route Incorporates:

Farmingdale Subdivision
Clarendon Hills Road to the West
Route 83 to the East
79th Street to the South
75th Street to the North
Indian Prairie Library

Designated Contractor

Willowbrook- International plow truck with salter
NJ Ryan- Plow truck with salter and Toolkat

Location-Route 2 Northeast Corner Green

Route Incorporates:

Waterford Subdivision
Rodgers Farm Subdivision
Garfield Ridge
Ridgefield

Designated Contractor

Willowbrook - International Plow Truck with salter
NJ Ryan- Plow truck with salter and skid steer with push box

Location-Route 3 Central Route Blue

Route Incorporates:

Plainfield Manor
Martin Court
Ridgemoor East
Ridgemoor West
Adams Street

Designated Contractor

Willowbrook- International plow truck with salter
NJ Ryan- Plow truck with salter

Location-Route 4 Northwest Corner Pink

Route Incorporates:

58th Street to the North
67th Street to the South
Route 83 to the East
Western Avenue to the West

Designated Contractor

Willowbrook- International plow truck with salter
NJ Ryan- Plow truck with salter

Location-Route 5 Executive Route Yellow

Route Incorporates:

Frontage Road to the South
Plainfield Road to the North
Madison Street to the East
Route 83 to the West
Village Hall
Community Park

Designated Contractor

Willowbrook- International plow truck with salter
NJ Ryan- Plow truck with salter and skid steer with push box

VILLAGE OF WILLOWBROOK POLICY AND PROCEDURES FOR SNOW AND ICE REMOVAL

I. Policy

- A. The objective of the Village snow removal operation is to clear snow from all streets under Village jurisdiction within four (4) hours after the conclusion of a snowfall. Should snow accumulate in excess of three inches (3"), the time needed to fully clear the streets will increase proportionately.
- B. Prior to the first snowfall, Village staff will deploy the anti-icing system. All primary streets and major Village intersections will be pretreated to slow the accumulation of snow and ice.
- C. The Village's snow removal operation will begin when snow accumulation reaches one inch (1"), or earlier if determined by the Public Works Supervisor.
- D. D. The Village's ice control operation will begin upon notification from the Police Department or other Village personnel that hazardous conditions are present on Village roadways.
- E. The primary objective of salting operations is to provide safe and accessible roadways for residents and businesses.
- F. In the event of a Police or Fire emergency that requires snow removal, that operation shall be given the highest priority.
- G. Roads under the jurisdiction of DuPage County and the Illinois Department of Transportation shall not be plowed or salted by the Village under any circumstances. When conditions on these roads require clearing, the Village exists that these roads require maintenance, the Village will notify the appropriate agency.



II. RULES AND RESPONSIBILITIES

- A. Snow removal in the Village of Willowbrook is performed by the Public Works Department under the direction of the Village Administrator.
- B. The Public Works Supervisor is responsible for supervising all snow removal resources. Primary duties include quality control, field monitoring of operations, and troubleshooting as needed.
- C. The Village relies on the use of contracted assistance under certain circumstances to provide snow removal services under the supervision of Village personnel. Contracted assistance is often necessary due to the length, severity, and frequency of winter storms to provide superior snow removal services and to ensure the safety of Village employees throughout the winter season. Typically, contractors will not be deployed unless a storm is minimally expected to produce in excess of one and a half inches (1.5") of accumulation on the streets. Use of contracted assistance is authorized by the Public Works Foreman.
- D. Each driver will be assigned a route at the time they are called out and is expected to follow that route unless otherwise directed by the Public Works Supervisor. Zone sheets and route maps will be provided to each driver.
- E. Each driver is responsible for the proper maintenance and monitoring of their assigned vehicle. If a mechanical issue is detected, the driver must return to the garage immediately.
- F. While plowing snow, drivers shall not exceed the speed limit of twenty (20) miles per hour.
- G. Drivers are not permitted to leave their assigned route at any time unless instructed by the Public Works Supervisor.

III. CITIZENS REQUEST FOR SERVICE/COMPLAINT

- A. All citizen inquiries regarding snow removal procedures should be directed to either the Public Works Supervisor or the Administrative Services Coordinator.
- B. The Administrative Services Coordinator will maintain a detailed log of all calls. Whoever receives the call, either the Public Works Supervisor or the Administrative Services Coordinator, must record the location of the service request or complaint. If the request pertains to a County-maintained road, the caller shall be informed that DuPage County has instructed the Village not to remove snow and ice from its highway system. The County has indicated that if the Village attempts to perform such work, the Village may be held liable for any resulting damages. The caller will be provided with the County Highway Department's telephone number to request service directly.



- C. The Public Works Supervisor will review all requests for service and complaints, modifying the Snow and Ice Removal Procedures when appropriate.

SPECIAL ROUTE NOTES:

- A. Village Building parking lots – before 8:00 A.M.
- B. All trucks are to be fueled and loaded before each shift change
- C. Library entry and crosswalks to be inspected hourly.

SNOW ROUTE #1

Midway Drive
Clarendon Hills Rd - 79th St to 75th St
79th Street
Brookbank Road
Virginia Court
Eleanor Place
Arlene Avenue

**The following roads shall have
only hills and intersections salted:**

Sheridan Drive
Cherry Tree Lane
Blackberry Lane
Apple Tree Lane
Honey Locust Lane
Pine Tree Lane
Hawthorn Lane
Sugarbush Lane

SNOW ROUTE #2

Waterford Subdivision
Garfield Ridge Court
Ridgefield Lane

SNOW ROUTE #3

Caitlin Court
Ridgemoor Drive and Lane Court
64th Street
Thurlow Street
Soper Avenue
Martin Court
69th Street
68th Street
68th Place
Quincy Street
67th Place
Adams Street
69th Street
Ridgemoor West Subdivision

SNOW ROUTE #4

Clarendon Hills Road - 67th St to 59th St
7th Street - Route 83 to Clarendon Hills Rd
59th Street - Western to Holmes
Western - 59th Street to 61st Street
Bentley - 65th Street to 58th Street
Chatelaine Court
Willowood Lane
60th Court
61st Street to Bentley
Virginia Avenue to 58th Street
Tennessee Avenue to 58th Street
Tennessee Ave south of 63rd to Village limits
Coralynn Court
Alabama Avenue to 58th Street
Holmes Avenue to 58th Place
58th Place - Holmes & Clarendon Hills Road

SNOW ROUTE #5

Executive Drive
Willowbrook Center Parkway
Quincy Street
71st Street
Monroe Street
Soper Avenue
Village Hall
Borse Memorial Park

SNOW REMOVAL CONTRACTORS

NJ Ryan Tree & Landscape



DaRin Ryan – Owner/Operator



Equipment List

- (2) 2020 S650 Bobcat 74 HP
 - (3) 2022 S770 Bobcat 92 HP
 - (4) 2021 F450 Salt Truck with plows
 - (2) 2022 International Plow Truck with spreaders (6 wheelers)
 - (2) John Deere 244K loader
 - (2) 2019 Sterling Rolloff Trucks
 - (2) 2018 S850 Bobcat 100 HP
 - (2) 2021 Bobcat 923 Telly
 - (3) 2022 GMC Pickup with plow
 - (2) 2021 F350 Flat Bed with plow
 - (1) 344 John Deere Loader
- All trucks have 9' - 10' plows*



REPAIR VENDORS

Rush Truck Center

4655 South Central Avenue
Chicago, IL 60638
Office
24-hour shop

B&E Auto

15W760 N Frontage Rd
Burr Ridge, IL 60527
Office

Commercial Tire

1105 N 30th Ave
Melrose Park, IL 60160
Office
After hours

Lindco Equipment Sales, Inc.

Shop Facility
Daryl Lindesmith
8765 Louisiana St.
Merrillville, IN 46410
Office
Mobile

Weld-All

728 Vandustrial Dr
Westmont, IL 60559
Office
After hours

West Side Tractor Sales









1400 W. Ogden Ave.,
Naperville, IL 60563
Office

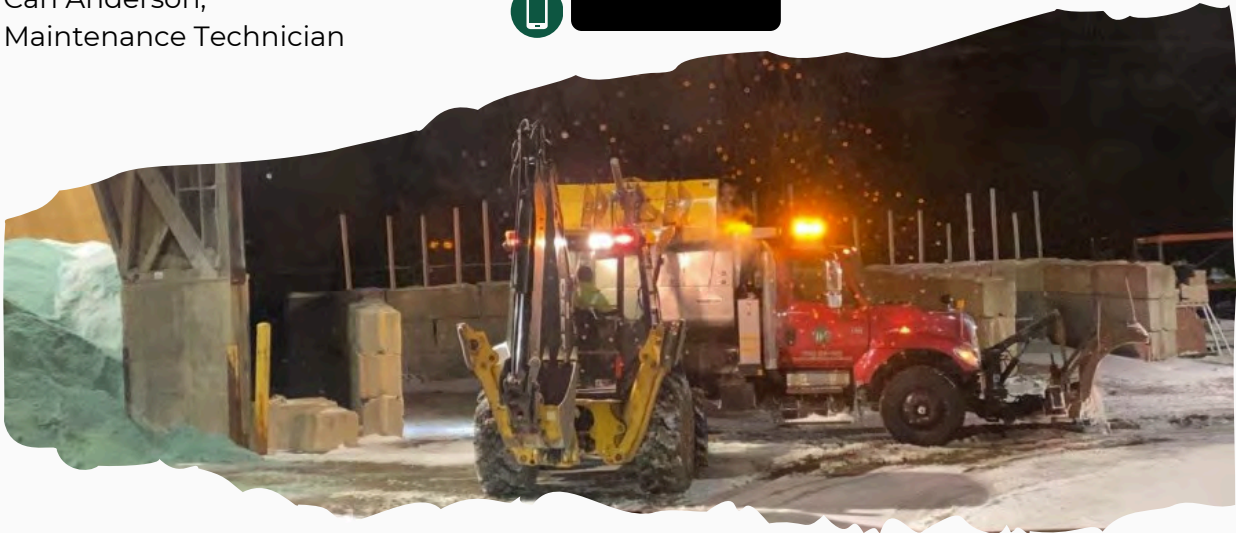
Pirtek

(24 HR Hose Service)
1499 Tonne Rd.,
Elk Grove Village, IL 60007
Office
Fax



VILLAGE EMPLOYEES

- | | |
|--|--|
|  Rick Valent, Director |  [REDACTED] |
|  Andrew Passero, Superintendent |  [REDACTED] |
|  Bryan Bower, Supervisor |  [REDACTED] |
|  Patrick Kanaverskis, Maintenance Technician |  [REDACTED] |
|  Carl Anderson, Maintenance Technician |  [REDACTED] |



2025-2026 ROCK SALT CONTACT INFORMATION

VENDOR – COMPASS MINERALS AMERICA INC. Order Phone: [REDACTED]

The Public Works Supervisor is the contact person for ordering. One (1) truckload contains 20-24 tons of salt. Orders are placed in 20-ton increments. The Village’s salt dome holds approximately 500 tons of salt.

The Public Works Supervisor will keep a running count of the total amount of salt ordered for the season.



OTHER GOVERNMENTAL AGENCIES

Illinois Department of Transportation - Right-of-Way Road Maintenance

17 W 125 Butterfield Road
Villa Park, IL 60181

[Redacted] (Main)
[Redacted] (Overnight)

DuPage County – Maintenance Department

140 N. County Farm Road
Wheaton, IL 60187

[Redacted] (Snow Main Number)
[Redacted] (Main Number)

Downers Grove Township – Highway/Streets

4340 Prince Street
Downers Grove, IL 60515

Main Number [Redacted]
Highway Main [Redacted]
Garage Number [Redacted]

2025-2026 CONTRACTOR RATES

NJ Ryan Tree & Landscape

| | |
|---------------|----------------|
| Pick-up truck | \$115 per hour |
| Dump truck | \$115 per hour |
| Skid steer | \$115 per hour |
| Laborer | \$115 per hour |

Other equipment available for snow plowing and cost of attachments

| | |
|--|----------------|
| High flow snow blower | \$125 per hour |
| Push plow angle blade 9'-10' | \$50 per hour |
| Plow truck with V box salt spreader and 10' plow | \$135 per hour |
| Bobcat with 10' pusher | \$95 per hour |
| Snow blowers | \$50 per hour |
| Pickup truck with 9' plow | \$95 per hour |
| John Deere loaders | \$175 per hour |
| Roll off truck (6-wheeler) | |



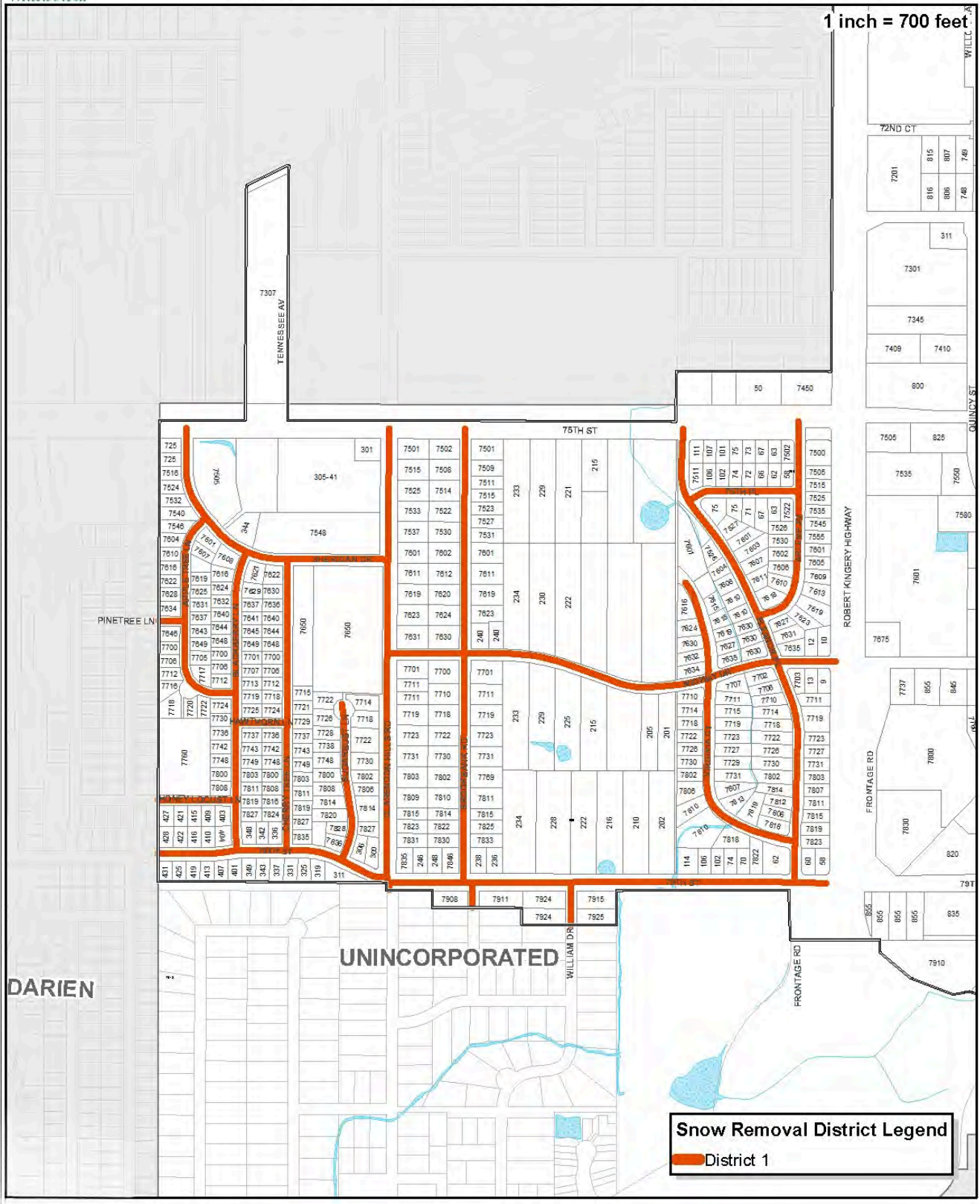


VILLAGE OF WILLOWBROOK

SNOW REMOVAL DISTRICT MAP - DISTRICT 1



1 inch = 700 feet





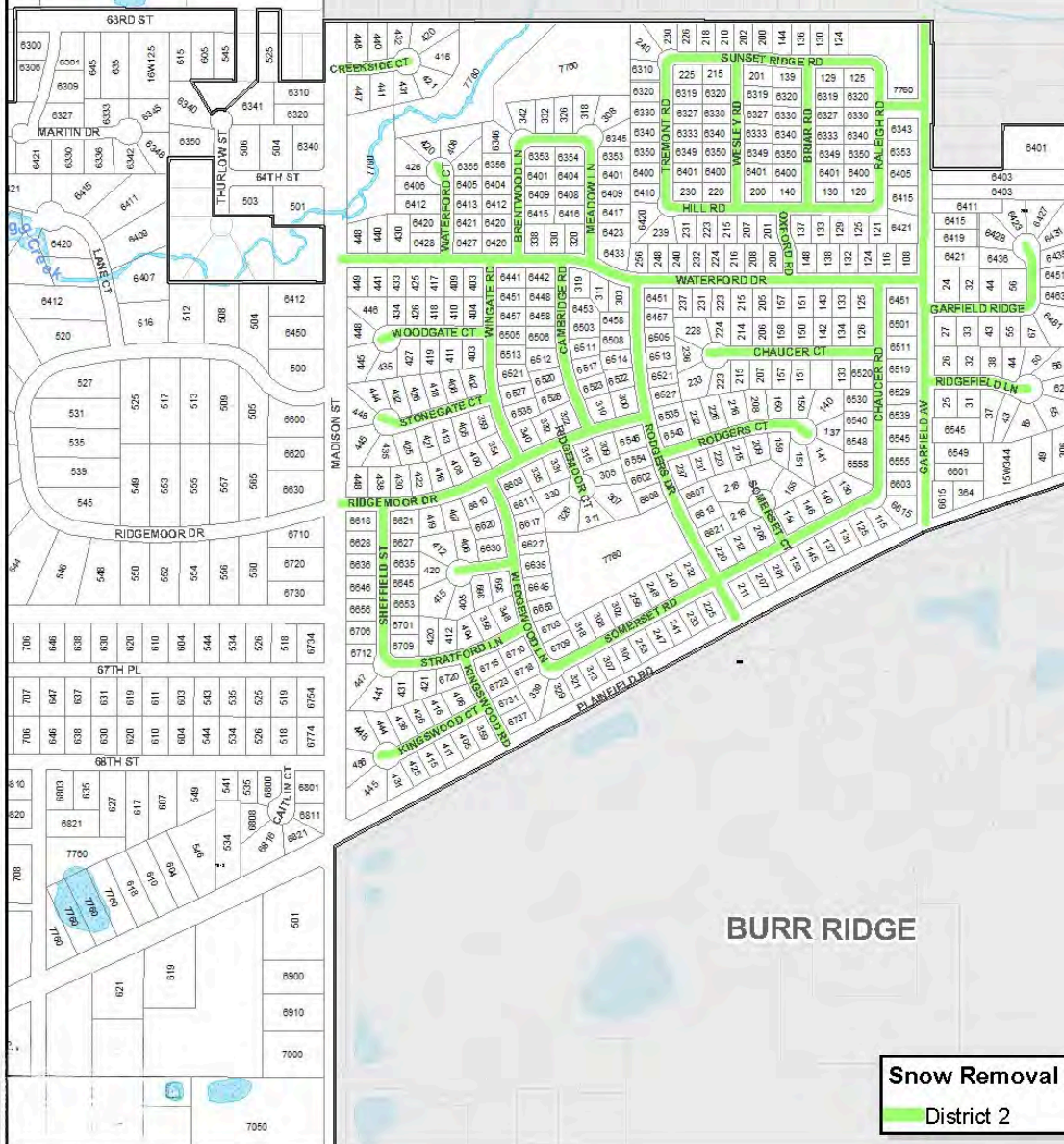
VILLAGE OF WILLOWBROOK SNOW REMOVAL DISTRICT MAP - DISTRICT 2



1 inch = 700 feet

INCORPORATED


BURR RIDGE



Snow Removal District Legend
District 2



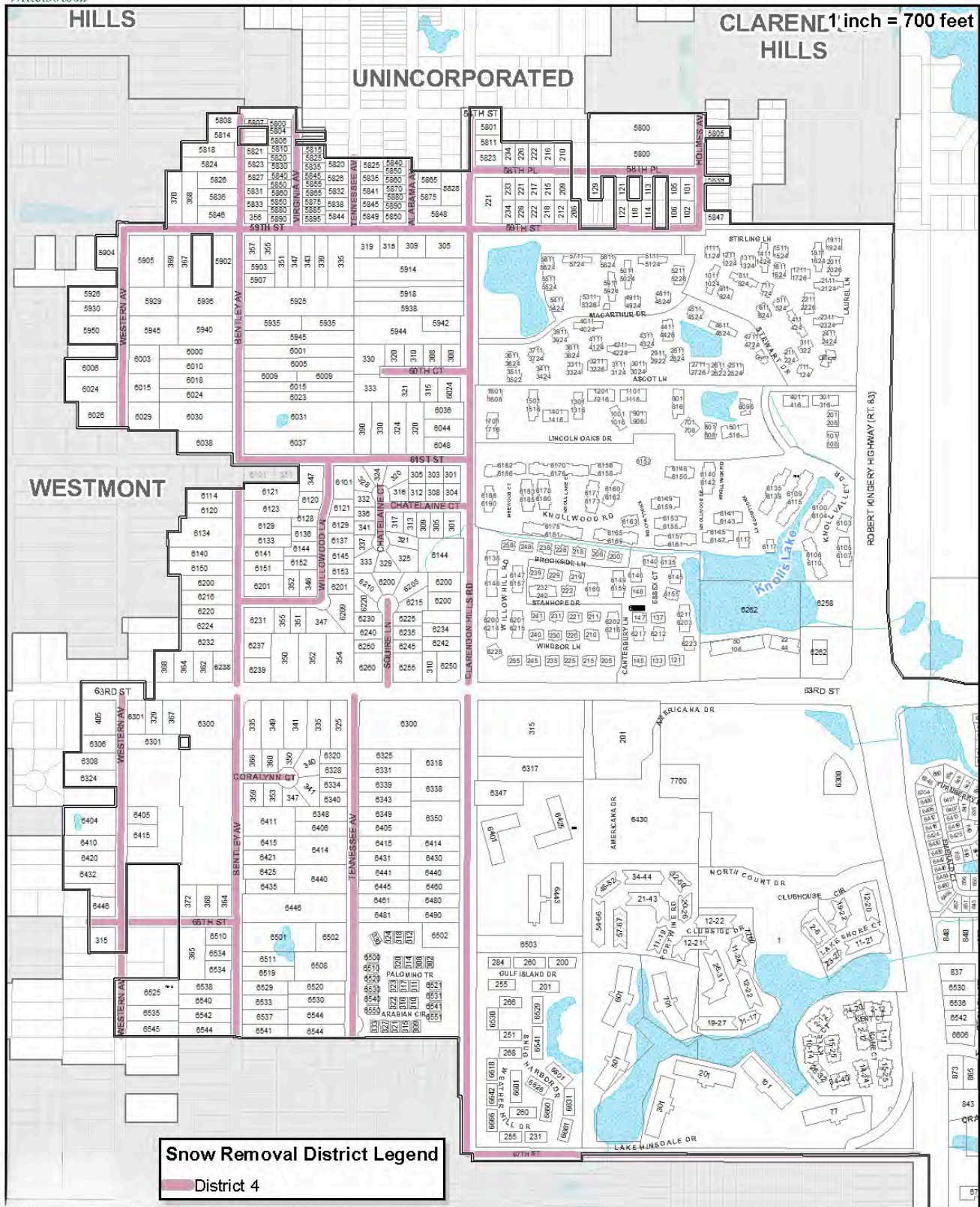
Snow Removal District Legend

 District 3



Willowbrook

VILLAGE OF WILLOWBROOK SNOW REMOVAL DISTRICT MAP - DISTRICT 4

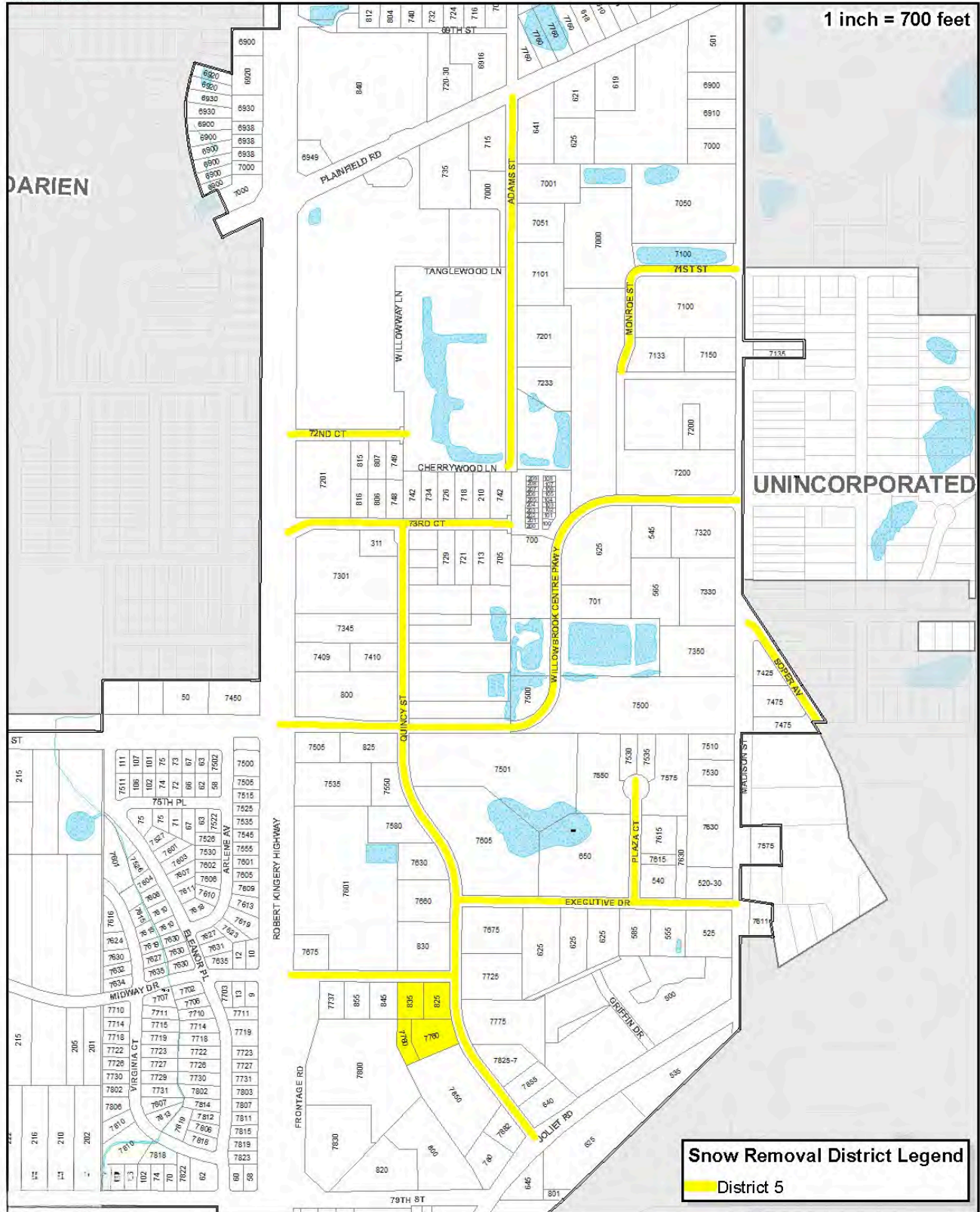




VILLAGE OF WILLOWBROOK SNOW REMOVAL DISTRICT MAP - DISTRICT 5



1 inch = 700 feet





Willowbrook

VILLAGE OF WILLOWBROOK SNOW REMOVAL DISTRICT MAP



1 INCH = 500 FEET
SCALE BASED ON A 10' X 10' GRID

