

SECTION**28.0.0 Plumbing and Sewerage Construction and Maintenance****28.1.0 Plumbing and Sewerage Inspector**

The Plumbing Inspector of the Village, appointed by the Mayor and with the consent of the Village Board of Trustees, shall approve all plumbing drawings and plumbing and sewerage installations concerned with buildings and structures.

28.2.0 Adoption by Reference

The minimum code of standards promulgated by the Department of Public Health of the State of Illinois, known as the Illinois State Plumbing Code, and the provisions of Chapter 9, "Plumbing Regulations", of the Flossmoor Municipal Code are hereby adopted, by reference. **(Ord. 563, 7/21/75)**

28.3.0 Plumbers - Licensing and Bonding

Any or all plumbing contractors, journeymen, and apprentices engaged in the plumbing profession in the Village of Flossmoor, shall be licensed in the State of Illinois and shall present evidence thereof upon demand. Plumbing contractors shall execute a bond in the penal sum of Ten Thousand Dollars (\$10,000.00) conditioned upon the faithful performance of all work in compliance with all ordinances of the Village. No permit shall be issued by the Plumbing Inspector for any plumbing or sewerage work until it has been determined that the plumbing contractor is satisfactorily licensed and until said bond has been approved and filed with the Village Clerk. **(Ord. 681, 3/4/80)**

28.4.0 Permits Required**28.4.1 Minimum Cost of Work and Fees**

All plumbing and sewerage construction or replacement, exceeding One Hundred Dollars (\$100.00) in cost, except repairs not involving alteration of the existing system, shall require plumbing permits in the regular manner as provided for in Section 4.0.0 of this ordinance. **(Ord. 688, 8/18/80)**

28.4.2 Plan Review Fee

The plans and specifications required to be submitted pursuant to Section 14.4.1(c) of the Illinois State Plumbing Code shall be accompanied by a plan review fee as stated in Chapter 25, Section 25.201(g) of the Flossmoor Municipal Code. At such time as a Plumbing Permit is issued, the applicant shall receive a credit against fees due in the amount of this plan review fee. **(Ord. 688, 8/18/80) (FMC-307, 7/17/95)**

28.4.3 Street Openings

Where it is necessary to disturb any public roadway, street, alley, sidewalk, parkway or easement, a permit will be required authorizing such work as is to be performed thereon or there under. The plumbing contractor or owner shall be required to deposit the sum as stated in Chapter 25, Section 25.228 of the Flossmoor Municipal Code with the Village Clerk for each such opening made; the terms and conditions of such deposit being that the village will retain there from the cost of repairing or replacing damage done to any property, or to Village water or sewer mains, the balance to be returned to the depositor. This deposit shall be held for a period of six (6) months after repair or replacement of the roadway, street, alley, sidewalk, parkway or easement where openings have been made; and if such repair or replacement shall not be made in a manner satisfactory to the Superintendent of Streets, Water and Sewers within said period, the deposit shall be forfeited. If any such deposit has been left with the village for a period of more than two (2) years from the date of deposit and has not been required by the depositor in writing, such deposit may be collected by the Village and deposited in its General Fund and used for General Corporate purposes. **(FMC-307, 7/17/95)**

The permit required hereunder shall be in addition to that required by Section 6.5.4 of this code, where applicable. **(Ord. 577, 12/1/75)**

28.5.0 Connections to Sewers and Water Mains

All connections to sewers and mains shall be at points specified by the Superintendent of Streets, Sewer and Water of the Village.

28.5.1 House Tap and Sewer Connections

No tap or connection shall be made to any sewer, water main or curb cock except by written permission obtained from the Superintendent of Streets, Sewers and Water and under the supervision of the Chief Plumbing Inspector and shall not be covered until inspected.

28.5.2.1. Service Lines from Water Mains

All service lines from water mains into any building or structure shall be type "K" soft drawn copper tubing, not less than one inch (1") in diameter. All tubing shall conform to ASTM "Standard Specifications for Copper Water Tube" (B-88-33).

28.5.2.2. "B" Box Location

No "B" box shall be located in a driveway or sidewalk, but shall be located at least two feet from same. Top of "B" box shall be installed level with the finished grade of the area surrounding the "B" box. **(Ord. 628, 9/6/77)**

28.5.2.3. Water Pipes Inside Building

All water pipes inside the building shall be copper; underground shall be type "K"; type "L" for all supplies above grade; no galvanized pipe or nipples will be allowed.

28.5.2.4. Waste and Vents

All waste and vents shall be cast iron, galvanized pipe, DWV copper or PVC-1 Schedule 40 plastic pipe and fittings, in accordance with the Illinois State Code. No ABS plastic pipe will be permitted.

28.5.2.5. Service Line Connection to Available Water Main Required (Ord. #1053, 12/14/92)

For all new construction where a water main is available for service line connection, a service line connection for internal domestic use shall be made to the available water main. For purposes of this Section "available" shall mean adjacent to the property or on the opposite side of a street which abuts the property. This Section shall not preclude the installation of a well in addition to the required service line so long as the well is not used for internal domestic supply nor interconnected with the internal domestic supply.

28.5.3 Water Meters

A water meter, as provided in the Flossmoor Building Code, shall be installed in the building in an easily accessible location, with a proper size valve on each side of the meter. If in the opinion of the Superintendent of Streets, Sewer and Water, a water meter vault is required, then the meter shall be enclosed in a meter vault which shall be built of 3,000 p.s.i. concrete and have a cast iron frame and a removable cast iron cover, as per the Chicago Plumbing Code Standard, and acceptable to the Superintendent of Streets, Sewer and Water. **(Ord. #1640, 9/15/08)**

28.5.4 Water Service Pipes in Public Ways

All water service pipes in public ways or other places exposed to the weather shall be installed at a depth not less than five feet (5' 0") below the surface of the ground or pavement and at right angles to the main to which they are connected. Each service type shall be installed in a separate individual trench and such trench shall be not less than six feet (6' 0") distant from any other trench or excavation of greater depth than that in which service pipe is laid, except in public ways where

permanent pavement exists, service water may be laid on a solid earthen shelf not less than one foot (1' 0") from a trench in which a house sewer or other parallel conduit is installed; provided, however, that a service water pipe may cross at right angles any trench which may be excavated on a line parallel with the center line of the public way in which the service water pipe is installed.

28.5.4.1. Separate Trench for Sewer and Water

Water service lines from the main to the building shall be one continuous piece; only flare fittings will be acceptable on long lines. A separate trench for the sanitary sewer and water service shall be dug. These two trenches shall be 10' apart. The water service shall be buried a minimum of 5'. The sanitary sewer shall be dug a depth that will provide proper grade from the residence to the street sewer. Also, see Section 28.9.5. (Ord. #824, 1/5/87)

28.5.4.2. House Drains and Water Service Locations

No house drain, water service or storm drain shall be run under a garage floor. Neither the house drain nor water service shall be run under a footing in a basement, but shall enter the basement foundation wall approximately 2' to 3' above the basement floor. In a slab type residence, the position of entry of the sewer and water service shall be determined by the administrative authority. (Ord. #824, 1/5/87)

28.5.4.3. House Drain Tee "Y"

A 4" #704 cast iron stringer tee "Y" shall be installed at the foundation wall where the house drain connects to the 5' cast iron run-out to the house sewer. Pipe sleeves shall comply with articles S890-330 of the State Plumbing Code. (Ord. #824, 1/5/87)

28.5.5 Backfilling of Water Service Trenches

No ashes, cinders, or refuse shall be used in backfilling any trench or excavation in which service pipes are installed. Each service pipe trench from the water main to the property line shall be filled with clean bank sand and compacted by flooding with water. When a water service pipe is to be installed in soil which may have a destructive or deleterious effect on the pipe, it shall be protected by methods approved by the Superintendent of Streets, Sewer and Water.

28.6.0 Sewer Connections

All sewer pipe between foundations and main shall be plastic lock seal (Amvit or equal). Slip seal tile may be used on storm sewer drains.

28.6.1 Sanitary Sewer Pipe Within Foundations (DELETED – ORD. #1636, 9/3/08)

28.6.2 Drain Tile Around Buildings

All basement areas that are 3 feet or more deep shall have footage or drain tile around the entire periphery of the basement terminating in a sump basin with pump. This basin, at least 18" in diameter, shall be set level with the finished concrete floor and have a solid concrete base. A larger basin may be required as requested by Plumbing Inspector. Sump basin shall be equipped with an automatic pump which will discharge to a storm sewer where available or a dry well of sufficient capacity located at the side or rear of the structure. Any alternate disposal of this surface water shall be subject to the approval of the Plumbing Inspector. All window wells shall be drained into the footage drain through a minimum 4" vertical rigid plastic pipe extending from a minimum 6" bed of crushed stone to an elbow or tee in the footage drain. This vertical pipe shall be securely fastened to the foundation wall and covered with a bar grate. Under no circumstance will the footage sump basin be connected so that its water will enter a sanitary sewer. Drain tile around buildings shall be outside of footing with window well drains emptying into the 4" drain through 4" tees. (Ord. #628, 9/6/77) (Ord. #824, 1/5/87)

28.6.3 Basement Floor Drains

One basement floor drain shall be installed at the hot water tank and so positioned that the relief valve discharge is directly into the drain opening.

If the total area of the basement floor is greater than 900 square feet an additional floor drain shall be installed as designated by the Plumbing Inspector. **(Ord. #628, 9/6/77)**

28.6.4 Hot Water Tanks

Hot water tanks shall be equipped with a temperature and pressure relief valve, self closing with test lever, set to relieve at 125# pressure at 210 degrees F. The discharge pipe shall be full pipe size as indicated by size of valve. No hot water tank shall be installed containing a magnesium rod. Magnesium rods shall be removed and alternate rods as suggested by the tank manufacturer shall be placed in the tank. **(Ord. #628, 9/6/77)**

28.6.5 Storm Water Disposal - Downspouts and Drains

Storm water disposal sewers, into which all downspouts, sidewalk washers, surface water drains, swimming pools, fish ponds, et cetera, shall discharge, shall be connected to the main storm sewerage system; where unavailable, it shall be discharged on splash blocks or disposed of to the satisfaction of the Superintendent of Streets, Sewer and Water. Drain water shall flow to the front but not to the sides of a lot.

28.6.6 Sewer Taps and Inspections

All sewer taps shall be made in a "Y" branch with the flow of the main sewer or drilled with a bell joint tap not to extend more than one inch (1") into the main with a cement collar. Bell joint taps made with hammer and chisel are not permitted. The entire waste and sewerage systems, both storm and sanitary, shall be left uncovered and open until all connections have been inspected and approved by the Plumbing Inspector. **(Ord. 577, 12/1/75)**

28.6.7 Combined Sewers

The use of, or construction of, "Combined Sewers", i.e., a sewer or drain which receives storm water, other liquid waste, and sewage, is hereby prohibited as a health hazard.

28.6.8 Grease Traps and Catch Basins

In any building where quantities of grease or oily wastes are discharged, a grease trap or a grease catch basin shall be installed to intercept such wastes before they enter any public sewer. Unless compliance is not technically feasible, grease traps or grease catch basins shall be located on the exterior of the building. Variations from this policy may only be granted in writing by the Director of Public Works. Grease catch basins must be constructed watertight in a substantial manner of steel, iron, brick, concrete, vitrified clay or masonry. No human or fresh animal excrement shall be discharged into a grease trap or grease catch basin, and it shall be unlawful to drain any such grease or oily wastes or any grease catch basin into any sanitary sewer. **(Ord. #1644, 10/20/08)**

28.7.0 Use of Fire Hydrants

The use of existing fire hydrants or water service pipes in parkways is not permissible. The temporary use of water by any contractor or owner will be approved in writing by the Superintendent of Streets, Sewer and Water and the minimum fee as stated in Chapter 25, Section 25.310 of the Flossmoor Municipal Code shall be charged by taking out a Building Permit and the cost of the use of water shall be determined by said Superintendent of Streets, Sewer and Water prior to issuance of the permit. **(FMC-307, 7/17/95)**

28.8.0 Plumbing Permit Fees and Costs of Installation of Utilities

28.8.1 Plumbing Permit Fees

A Plumbing Permit shall be required in addition to the Building and Electrical Permits for the installation of all plumbing work in any new building or structure remodeled to include new or

changed plumbing fixtures or equipment. The minimum Plumbing Permit fee shall be as stated in Chapter 25, Section 25.210 of the Flossmoor Municipal Code. **(Ord. 688, 8/18/80) (FMC-307, 7/17/95)**

If a Plumbing Contractor is changed after a Building Permit or Plumbing Permit is issued, a fee as stated in Chapter 25, Section 25.204 of the Flossmoor Municipal Code will be charged. **(Ord. 665, 7/16/79) (FMC-307, 7/17/95)**

28.8.2 Reimbursement for Labor and Materials of Installation

The Village shall be reimbursed by the applicant for all expenses incurred by it in connection with inspection by the Superintendent of Streets, Sewer and Water relating to the installation, connection and maintenance of all water and sewer facilities from the streetmains to all premises, including the cost of all equipment, facilities, material and labor involved.

The Plumbing Permit fee provided for herein shall entitle the applicant to four inspections: footing drain and window wells, rough-in, final and occupancy. Whenever a reinspection or additional inspection is required, a fee as stated in Chapter 25, Section 25.209 of the Flossmoor Municipal Code shall be paid for each such inspection. **(Ord. 731, 6/20/83) (FMC-307, 7/17/95)**

28.8.3.0.Connecting Service Lines from Buildings to Sanitary and Storm Sewers

Fees shall be required for each sewerage construction permit issued as follows:

- A. Sanitary Sewers - For connecting service lines from buildings to sanitary sewers, a permit fee as stated in Chapter 25, Section 25.314 of the Flossmoor Municipal Code shall be required for each connection made.
- B. Storm Sewers - For connecting service lines from buildings to carry roof drains and surface water to storm sewers, a permit fee as stated in Chapter 25, Section 25.315 of the Flossmoor Municipal Code shall be required for each connection made. **(Ord. 577, 12/1/75) (FMC-307, 7/17/95)**

28.8.4.0.Connecting Service Lines from Buildings to Water Mains

- A. For connecting service lines from buildings to water mains, a permit (tap) fee as stated in Chapter 25, Section 25.316 of the Flossmoor Municipal Code shall be required. **(FMC-307, 7/17/95)**
- B. No connection over two inches (2") inside diameter shall be made to any water main, except with cast iron tee, cut-in or approved alternative. **(Ord. #1640, 9/15/08)**
- C. No connection to a water main that is four inches (4") inside diameter or less shall be made, except with repair clamp with threaded service outlet.
- D. Any connection to a six inch (6") main, which connection shall be over one inch (1") inside diameter, shall be connected with a repair clamp with threaded service outlet.
- E. Any connection to an eight inch (8") main, which connection shall be over one and one-quarter inches (1-1/4") inside diameter, shall be connected with a repair clamp with threaded service outlet.
- F. Any connection to a ten inch (10") main, which connection shall be over one and one-half inches (1-1/2") inside diameter, shall be connected with a repair clamp with threaded service outlet. **(Ord. 577, 12/1/75)**

28.8.5 Use of Water – Metering

All water dispensed from the Village water system shall be metered. Except as to service which is already metered at this time, all meters shall be and remain the property of the Village and shall be subject to inspection by the Village and its agents at any reasonable business hours. The meters

shall be leased to the owner of the property being served for use and the Mayor and Board of Trustees may from time to time fix a charge which shall be made to and collected from the property owner being served for installation of the meter; charges shall at all times be uniform for comparable equipment.

All meters in new construction and all replacement meters shall include a device known as a touch pad device. Charges shall be as stated in Chapter 25, Section 25.307. See also Flossmoor Municipal Code, Section 13.302. **(Ord. #643, 3/6/78) (FMC-307, 7/17/95) (Ord. #1640, 9/15/08)**

The rental charge for use of the meters may be assessed and collected in one lump sum covering the use of the meter for the service life thereof, or a monthly charge may be made as shall be determined by the Mayor and the Board of Trustees. As to properties now being served where the water is already metered, the service will continue to be furnished through such meters, but if such meters shall wear out, or for any other reason be replaced, they shall be replaced by a meter owned by the Village and leased to the property owner for use only; installation or rental charges shall be applicable to said property served from the date of installation of a new meter.

28.9.0 Sewer Permit Ordinance of the Metropolitan Water Reclamation District

28.9.1 Reference by Adoption

The "Manual of Procedures for the Administration of the Sewer Permit Ordinance" of the Metropolitan Water Reclamation District, most current edition, copies of which are on file with the Village Clerk, is hereby adopted, by reference, wherever and whenever it applies to design, construction, repair and maintenance of sewer and sewerage systems in the Village. **(Ord. #1640, 9/15/08)**

28.9.2 Permit Requirement

A building or structure about to be built containing more than twenty-five (25) dwelling units or the equivalent thereof, whether on public or private property, shall have a sewer permit taken out, as referenced above, to cover the design and construction of the building service sewer. This work shall comply in all respects to the requirements of the Metropolitan Water Reclamation District reference code.

A permit will also be required when the use of the building or structure changes to a use for which a permit is required. This sewer permit will be obtained as noted in the Metropolitan Water Reclamation District code.

28.9.3 Exemptions

A building service sewer constructed to serve a single building devoted solely to residential purposes and containing less than twenty-five (25) dwelling units is exempt from the Sewer Permit requirements. Any extension of a service sewer is a violation of the sewer ordinance.

Any sewer connected in the public right-of-way or easement, except for crossing, is considered a lateral and is not exempt from the permit requirements even though it may serve a single building containing less than twenty-five (25) dwelling units. Except as provided herein and in the above Metropolitan Water Reclamation District reference, all other construction requires a sewer permit.

28.9.4 Two Sump Pumps Required

Two sump pumps are required in all basements. One sump pump for drain tile, window wells, and any area-ways. This pump to be discharged to grade in rear or at the direction of the Village Plumbing Inspector so as not to drain into the adjacent lot. Drain from downspouts, drain tile, or area-ways shall not be connected to a sanitary sewer under any circumstances.

The second sump pump is required for all floor drains, and shall be connected to the sewer.

28.9.5 Stone Bed Requirement

A six inch (6") bed of one-half inch (1/2") or three-quarter inch (3/4") stone shall be laid under the house sewer from the building to the street at the main.

28.9.6 Inspection of Sewer Connections

All sewer connections at the main shall be inspected before they are cemented or covered up. The Village Superintendent of Streets, Sewers and Water, shall be called for this inspection.

28.9.7 Overhead Sewers Below Grade

Any fixtures that are installed below grade shall be pumped to an overhead sewer by an ejector pit pump. Any water closet installed below grade shall be run to the ejector pit pump.

28.9.8 Plumbing Inspections

All plumbing inspections shall be made by the Village Plumbing Inspector. All plumbing work shall be inspected by the Village Plumbing Inspector before dry wall is installed in any building or structure; this is in addition to the required inspections by the Village Building Commissioner and the Village Chief Electrical Inspector.

28.9.9 Datum to be Used

Chicago Datum or U.S. Coast and Geodetic Survey shall be used for datum elevations for all sewers.

28.9.10 Flood Plain Requirements

Contractor, if within the "Flood Plain", shall put manhole thirty-six inches (36") above flood plain area; in no instance shall this elevation be below the Flood Plain of highest record. **(Ord. #1640, 9/15/08)**

28.9.11 Laterals and Connections

All laterals from sewers and building connections from the lateral shall conform to all requirements of main sewers.

28.9.12 Drops in Manholes

All "Drops" in manholes shall be no smaller than two (2) nominal pipe diameters less than the lateral sewer diameter, but in no case less than 8" diameter, and all drops shall be "outside drops". **(Ord. #1640, 9/15/08)**

28.9.13 Materials – ASTM

All materials used shall meet the requirements of appropriate ASTM designations or other National Standards. This shall be shown in the Building Specifications.

28.10.0 Sanitation Requirements

28.10.1 Minimum Number of Plumbing Fixtures

Except as otherwise provided for in subsection 28.10.2, the minimum number of plumbing fixtures shall be as provided for in Section 7.21.1 and Table 7.21.2 Illinois State Plumbing Code, as amended from time to time.

28.10.2 Separate Toilet Facilities

In permanent places of employment, where the number of persons using the facilities exceeds ten (10) or the gross square feet occupied by the employer exceeds 1200, separate toilet room facilities for each sex shall be provided

The "number of persons using the facilities" shall be the combined total of employees and the estimated number of other persons, e.g. patrons, premises. Where separate facilities are not required by this subsection, the washroom shall be equipped with at least 1 elongated water closet with open front seat and one lavatory, and the washroom door shall have an inside lock so as to allow occupancy of but one person at a time. Where separate facilities are required, the number of water closets or urinals required shall be figured separately for each sex and determined by the use of the aforesaid Table 7.21.2 under the category of "Office or Public Buildings".

28.10.3 Miscellaneous Requirements

All washrooms shall be provided with adequate mechanical ventilation, operated by manual wall switch. Washroom areas shall have floors of non-absorbent materials and shall be entirely separated from other rooms by solid partitions or walls extending from floor to ceiling with no openings other than an outside window where possible.

28.10.4 Water Conserving Fixtures (Ord. 678, 1/7/80)

- A. In all new construction and in all replacement of water using fixtures, only fixtures not exceeding the following flow and/or water usage shall be installed. These ratings are based on a pressure at the fixture of 40 to 50 psi.

Water Closets, tank type	3.5 gal. per flush
Water Closets, Flushometer type	3.0 gal. per flush
Urinals, tank type	3.0 gal. per flush
Urinals, flushometer type	3.0 gal. per flush
Shower heads	3.0 gal. per minute
Lavatory, sink faucets	3.0 gal. per minute

- B. Lavatories for Public Use - In addition to the requirements in item A above, in all new construction and in all replacement of fixtures, faucets of lavatories located in restrooms intended for public use shall be of metering or self closing type.
- C. Car Wash Installations - All newly constructed or remodeled car wash installations shall be equipped with a water recycling system. (Ord. #723, 11/3/82)

28.10.5 Sillcocks - Vacuum Breaker

All sillcocks in new construction or added during remodeling shall be a frost proof type with an integral vacuum breaker. All sillcocks in an existing system for which a plumbing permit has been issued shall be equipped with an adapter type vacuum breaker, which is screwed on the exposed thread of the sillcock or be changed to the frost proof type with an integral vacuum breaker. (Ord. #824, 1/5/87)

28.10.5.1. Back Flow Prevention

Any residence or building having swimming pools, lawn fountains, lawn sprinklers, photo development equipment, or chemical experiment equipment, that could cause potable water contamination by backwater siphoning, shall have a dual-check backwater preventer installed on the water service piping at the water meter. (Ord. #824, 1/5/87)

28.11.0 Water Service Line - Design and Sizing (Ord. #845, 6/15/87)

All new or replacement residential water service lines from the street main to the building shall be engineered and installed according to a formula as established by Hazen-Williams. The water

service line will be sized to provide adequate flow of water to meet the requirements of the building at peak demand. Preexisting non-used or abandoned water service line taps to the street main shall be removed.

In cases of residential remodeling, where a plumbing permit is required, a new water service line shall not be required unless the water pressure at the fixture, which is most remote from the water meter would be 6 psi or less at a velocity of not greater than 10 fps, at the water meter, after completion of the proposed remodeling. When the pressure is 6 psi or less at said remote fixture a new water service line shall be installed and sized as provided above.

In any residential remodeling, which requires a plumbing permit, if the remote fixture pressure is 6 psi or less the plumbing contractor shall provide a written acknowledgement by the owner that the less than optimum pressure is acceptable. A failure to provide the owner acknowledgement shall be grounds to issue a stop work order or deny permit issuance.