

1. AUTHORITY:

1.1. This Ordinance is enacted pursuant to the police powers granted to this **Village** by 65 ILCS 5/1-2-1, 5/11-12-12, 5/11-30-2, 5/11-30-8, and 5/11-31-2 (1994).

2. PURPOSE:

2.1. Whereas, the **Village** supplies water and collects, treats and discharges wastewater generated in the Village to protect the public health, safety and welfare

2.2. Whereas, the **Village** wants to encourage the preservation of groundwater supplies when other sources of water exist for specific uses.

2.3. Whereas, the **Village** wants to preserve and protect the environmental quality of area groundwater and surface waters; and

2.4. Whereas, the **Village** operates and maintains a wastewater treatment system so as to meet Illinois Environmental Protection Agency permit standards, protect the public health and welfare, and allow safe discharge of the water.

2.5. The **Village** proposes to encourage, and in specific instances require, municipal water supply users to use municipal treated wastewater for specific uses meeting Illinois Environmental Protection Agency permitting criteria and public health standards for a non-potable water supply.

3. DEFINITIONS:

3.1. *Air-gap separation* shall mean a physical break between a supply pipe and a receiving vessel which shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than 6 inches. Ord. 2003-20 9/3/03

3.2. *Approved backflow preventer* shall mean a device installed to protect the potable water supply from contamination by recycled water. Makes and models of acceptable devices must be approved by the **Village** and as approved by the IEPA Public Water Supply Division. Ord. 2003-20 9/3/03

3.3. *Connection fee* shall mean a charge imposed by the **Village** for providing reuse water service, including construction and/or installation of off-site and on-site facilities.

3.4. *Cross-connection* shall mean any unprotected connection between any part of a water system used or intended to supply potable water and any service or system containing reuse or other water or substance that is not safe, wholesome and potable for human consumption.

3.5. *Nonpotable water* shall mean water that is not useable for human consumption in conformance with the drinking water standards referred to in the definition of potable water.

3.6. *Potable water* shall mean water that does not contain objectionable pollution, contamination, minerals or infective agents and is considered satisfactory for domestic consumption, and conforms to the latest edition of the United States Public Health Service Drinking Water Standards.

3.7. *Reuse water* shall mean disinfected tertiary treated water.

3.8. *Reuse water facilities* shall mean facilities used in and by the **Village** for the storage, pumping and conveyance of reuse treated water. Reuse water facilities are intended to provide reuse treated water for uses such as landscape irrigation, agricultural irrigation, and construction or industrial process water.

3.9. *Reuse water service connection* shall mean the point of connection of the user's reuse water line with the reuse water service line of the **Village**, which shall normally be the downstream end of the reuse water meter connection.

3.10. *Reuse water service line* shall mean the **Village's** facility between its reuse water distribution system and the reuse water service connection.

3.11. *Reuse water mains* shall mean reuse water lines and appurtenances purchased or constructed and owned by the **Village** or which the **Village** requires an applicant, owner or user to construct but that are owned by the **Village**. The **Village** shall determine what facilities are reuse water mains from time to time. The **Village's** determination in regard to these matters shall be final and conclusive.

3.12. *User* shall mean any user of reuse water provided by the **Village**.

4. **APPLICABILITY**

4.1. **Applicable Users:** The ordinance applies to new developments or buildings or substantial improvement to existing buildings by the following municipal water supply users within the reuse water service area.

4.1.1. All public users

4.1.2. All commercial users

4.1.3. All industrial users

4.1.4. All agricultural users

4.1.5. All new residential developments users, if the development is equal to or greater than 10 acres in size.

4.2. **Mandated Water Reuse:** All applicable users listed in 4.1 must use reuse water for the following uses:

4.2.1. Landscape watering except in playgrounds frequented by children 10 years of age or under. Ord. 2003-20 9/3/03

4.2.2. Landscape water features except in playgrounds frequented by children 10 years of age or under.

4.2.3. **Industrial cooling water**

4.2.4. **Commercial, industrial and public facilities toilet flushing**

4.2.5. **Commercial car wash facilities**

4.2.6. **Commercial, industrial and public boiler feed water**

4.3. Encouraged Water Reuse:

4.3.1. Industrial processes: All industrial process users are encouraged to use reuse water for non-potable industrial processes and must submit an evaluation of a proposed reuse water system for all non-potable industrial processes.

4.4. Other Authorized Uses of Reuse Water

4.4.1. In addition to the mandated and encouraged water reuse, the uses of reuse water may include, but are not limited to, construction use water, commercial use, enhancement of wildlife habitat, and recreation impoundment. Each such use must be considered for approval by the **Village** on a case-by-case basis. The **Village** may, at its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies. Ord. 2003-20 9/3/03

4.4.2. The use of reuse water in swimming pools is NOT permitted.

5. **PERMITS**

5.1. An application for permit and required plans and supporting information must be submitted to and approved by the **Village** and a water reuse permit issued prior to commencing any construction.

5.2. A water reuse user permit shall be issued upon the approval of the **Village**. A user permit shall incorporate all the provisions of this Ordinance by express reference, and any additional requirements prescribed by the **Village**, to protect public health and welfare.

5.3. The user permit shall be effective only after all construction of reuse water facilities has been completed, tested, inspected, and final acceptance granted by the **Village**.

5.4. Copy of the current permit must be available for review at all times and clearly posted at the use site, and/or on file at the user’s office.

5.5. The permit shall specify all allowable uses of reuse water and all use restrictions thereon.

5.6. The permit shall state the capacity of reuse water to be provided to the user under the permit, and shall contain the express condition that delivery of the full capacity is subject to the **Village** supply capabilities. The **Village** shall make a good faith effort to supply full permitted capacity, but shall be held harmless in the event that such a volume is not available for any reason, including, but not limited to, reduced plant production, increased demand, repairs to facilities, or regulatory compliance.

5.7. A use of permit shall be effective indefinitely and shall not require renewal, except that the **Village** reserves the right to suspend or terminate the permit, or to modify its terms and conditions, if any of the following occurs:

- 5.7.1. A change of the owner or user of the property not covered by the permit.
 - 5.7.2. A change in the use of the property not covered by the permit.
 - 5.7.3. A violation of this Ordinance and other applicable regulations.
 - 5.7.4. A change in federal or state regulations governing the use of reuse water.
- 5.8. Permit Conditions
- 5.8.1. Permits for reuse water service shall be subject to the following conditions:
 - 5.8.1.1. Except as otherwise provided herein, all reuse water will be provided to the user in the conditions and quantity specified in the Permit for Reuse Water Service. During drought conditions use of reuse water shall be subject only to the terms of the user permit and shall not be subject to rationing restrictions which may be imposed on the use of potable water.
 - 5.8.1.2. The **Village** shall have control of and shall maintain and repair off-site facilities, and meters. The user shall repair and maintain in good working condition the reuse water service connections and onsite facilities. The **Village** shall be entitled to inspect and test all connections and onsite facilities.
 - 5.8.1.3. The **Village** and its agents shall be indemnified and held harmless by the permit holder from and against all claims, damages, losses or expenses arising from the use of reuse water under the permit or from the use of facilities by which reuse water is conveyed.
 - 5.8.1.4. Unless otherwise provided by written agreement between the user and the **Village**, the user shall pay for all onsite facilities, including their installation as well as for reuse water service lines and extension of reuse water transmission and distribution mains in order to provide reuse water service to the user's property.
 - 5.8.1.5. The user shall not make any changes in, or additions to, the reuse water system. Any changes or alternations to existing onsite facilities, whether the result of intention or unintended damage, shall be reported immediately to the **Village**.
 - 5.8.1.6. The **Village** shall control and schedule reuse water distribution to users. The provisions of reuse water service and the use of reuse water by any user shall be subject to all the terms and conditions of this Ordinance.

6. APPLICATION FOR PERMIT SUBMITTALS

- 6.1. Application for Permit
 - 6.1.1. Applications for reuse water service shall be made and will be accepted in the same manner as applications for water and sewer service, subject to the provisions of this Ordinance. In addition, the **Village** has specific procedures and policies in place for servicing, regulating, billing, and collecting of bills of utility users. Such policies, along with all policies and procedures concerning enforcement and fining and setting standards for the design and installation utility pipelines and other appurtenances apply to the reuse water system, including its design, installation, and maintenance.

6.1.2. An applicant meeting the requirements for reuse water service shall file an application for reuse water with the **Village** on a standard form designated by the **Village**.

6.1.3. The application form shall contain detailed information concerning the applicant as follows:

6.1.3.1. The applicant’s relationship to the property for which reuse water service is requested and the legal owner of the property. In cases where the applicant is not the legal owner of the property, the legal owner shall consent to the application on a supplemental notarized form.

6.1.3.2. The address and, if requested, legal description of the property covered by the application.

6.1.3.3. The purpose for which the property will be used.

6.1.3.4. The required and proposed uses of reuse water within specifically defined designated use area on the property.

6.1.3.5. The estimated quantity of water and other service requirements for reuse water.

6.1.3.6. Name, daytime, emergency and after hours contact phone numbers for onsite water reuse supervisor.

6.1.3.7. Any special condition for service pursuant to this Ordinance.

6.1.4. The applicant for reuse water shall agree to comply with the requirements of this Ordinance and any and all applicable Federal, State, and local statutes, ordinances, regulations and other requirements.

6.1.5. The signed application form shall be accompanied by plans and specifications delineating the proposed reuse water designated use area, the proposed location, size, and type of all reuse water service connections and onsite facilities, and any areas in which reuse water will be specifically excluded.

6.1.6. Upon receipt of an application for reuse water service, the **Village** shall review the application and conduct any necessary investigation in order to determine the **Village's** requirements to provide reuse water service. The **Village** may prescribe requirements in writing to the applicant as to the facilities necessary to be constructed including design, manner of construction, method of operation and conditions of service.

6.2. Accompanying Plans and Specifications

6.2.1. Plans and specifications for the construction of onsite reuse water facilities shall be submitted to the **Village** for review and approval. The plans shall delineate the proposed reuse water service area, the proposed location, size and type of all reuse water service connections and onsite facilities. The plans shall include the layout of existing potable water pipelines and facilities including any areas in which reuse water must be specifically excluded.

6.2.2. The following information shall be provided on the plans for any reuse water service system:

6.2.2.1. Water reuse meter size (inches) and, if appropriate, water sewage meter.

6.2.2.2. Plans for all facilities and irrigated areas (square feet or acres) to be served through the reuse water meter.

6.2.2.3. Peak flow through the meter (gpm).

6.2.2.4. Estimate of the yearly reuse water requirement (acre-feet or gallons).

6.2.2.5. Service pressure at the meter as provided by the **Village** (psi).

6.2.2.6. Topographic contours of the site, or if not available, sufficient information to determine elevation differences within the site.

6.2.2.7. Direction of site drainage.

6.2.2.8. Location of wells on site (if applicable). Ord. 2003-20 9/3/03

6.2.2.9. Location of site 100-Year frequency floodplain (if applicable) from the **Village's** floodplain maps and profiles.

6.2.2.10. Location of potable water lines and sanitary sewers.

6.2.2.11. Location of storm drains.

6.2.3. Plans for all facilities shall show the facilities meet the design requirement of the Facilities Design Section and Cross-Connection Prevention Section of this Ordinance.

6.2.4. Additional Information Required for Reuse Water Irrigation Systems

6.2.4.1. If the onsite facilities include a landscape irrigation system the following data for the materials used in the irrigation system shall be included on the plans:

6.2.4.1.1. A pipe schedule listing pipe sizes and materials of construction.

6.2.4.1.2. The following information for each type of sprinkler head:

6.2.4.1.2.1. Sprinkler radius (feet).

6.2.4.1.2.2. Operating pressure (psi).

6.2.4.1.2.3. Flow (gpm or gph).

6.2.4.1.2.4. Sprinkler pattern.

6.2.4.1.2.5. Manufacturer, model number and all pertinent information.

6.2.4.1.3. Drip irrigation information and all pertinent equipment.

6.2.4.1.4. Estimates of application rate, acres to be irrigated, soil texture and soil infiltration rate, and information on pressure requirement, hourly delivery rate, and the wetting pattern of sprinklers.

6.2.4.1.5. Exterior drinking fountains and potable water hose bibs and other public facilities shall be shown and called out on the plans. If no exterior drinking fountains or other public facilities are present in the design area, then it shall be specifically stated on the plans that none exist.

6.2.4.1.6. Standard Notes for Inclusion on User's Plans

6.2.4.1.6.1. Provide the following notes as applicable, on the reuse water improvement and irrigation plans under the heading “Reuse Water General Notes”.

6.2.4.1.6.1.1. All public facilities such as comfort stations, drinking fountains, etc., shall be protected from spray by reuse water.

6.2.4.1.6.1.2. Conditions that directly or indirectly cause a run-off of reuse water outside the approved reuse water use area, or cause a ponding of reuse water of permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation, shall be eliminated or controlled to the greatest extent possible with the use of the best practicable technology and methodology.

6.2.4.1.6.1.3. Contractor shall adjust heads to prevent over-spraying onto sidewalks, streets and offsite.

6.2.4.1.6.1.4. Hose bibs are strictly prohibited.

6.2.4.1.6.1.5. Identification, by means of purple color-coding or stenciling, all irrigation piping.

6.2.4.1.6.1.6. All potable water and reuse water piping shall be installed with the stenciling oriented toward the top of the trench.

6.2.4.1.6.1.7. A minimum 10 foot out-to-out horizontal separation between reuse water mains and potable water or sanitary sewer mains must be maintained at all times, or as shown on these approved plans.

6.2.4.1.6.1.8. Constant pressure reuse water line shall cross at least 18 inches below potable water lien and

maintain a minimum 18- inch crossing separation between other utilities.

6.2.4.1.6.1.9. If a constant pressure reuse water line must be installed above a potable water line or less than 18 inches below a potable water line, the reuse water line shall be installed within a protective sleeve. The sleeve shall extend 10 feet from each side of the centerline of the potable line, for a total of 20 feet.

6.2.4.1.6.1.10. Developer / contractor shall conduct a cross-connection test and coverage test as directed by the **Village** prior to any use of reuse water.

6.2.4.1.6.1.11. A break tank must be installed at any locations where a potable water supply line would adjoin a non-potable water supply line.

6.2.4.1.6.1.12. An annual cross-connection inspection of the break tank will be done by the **Village**.

6.2.4.1.6.1.13. Prior to the conversion to reuse water, a signage plan showing the locations and design of reuse water “Saving Our Water: Irrigated With Non-Potable Water” signs, per the **Village** designated standard design, shall be installed.

6.2.4.1.6.1.14. Prior to the conversion to reuse water, an on-site user/supervisor, if different than the individual noted on the application form, shall be designated in writing. This individual shall be familiar with plumbing systems within the property, with the basic concepts of backflow / cross-connection protection, and the specific requirements of a reuse water system. Copies of the designation, with contract phone numbers shall be provided to the **Village**. The water reuse permittee shall notify the **Village** and provide updated contact information immediately should that individual or his/her contact information change.

6.2.4.1.6.1.15. In an emergency contact:

6.2.4.1.6.1.16. After hours contact:

6.2.4.1.6.1.17. The reuse waterline(s) and irrigation’s system(s) shown herein shall be charged with potable water until such time when reuse water is available. Prior to the conversion to reuse water, all temporary connections shall be minimized and acceptable to the **Village**.

6.2.4.1.6.1.18. Non-residential irrigation systems shall operate between the hours of 10:00 p.m. to 6:00 a.m. the following morning, or as allowed by the **Village**.

7. FACILITIES DESIGN

7.1. Design Responsibility For Offsite and Onsite Facilities

7.1.1. The design of the offsite facilities, including the preparation of plans and specifications shall be under the responsibility of an engineer registered with the State of Illinois. The design of the onsite facilities that will use reuse water and the preparation of plans and specifications, shall be under the responsibility of an engineer registered with the State of Illinois or other appropriate party. The reuse water system, including both offsite and onsite facilities, shall be separate and independent of any potable water system.

7.2. Offsite Reuse Water Facilities

7.2.1. Offsite reuse water systems not subject to special assessments or made a condition to a private development permit may be provided by the **Village**. Where extension of reuse water distribution mains or provision of large-sized distribution mains is required or approved by the **Village**, the cost of extension or replacement shall be borne by the benefited property owners. The applicant for reuse water service shall pay a pro-rated share of the total cost of improvements based on proportionate private benefit, which shall be determined by the **Village**. Such pro-rated share of cost shall be in addition to other fees, deposits, and charges.

7.2.2. Plans and specifications for offsite facilities shall be submitted to the **Village** as specified by this Ordinance.

7.3. Onsite Reclaimed Water Facility

7.3.1. All onsite reuse water facilities, which specifically benefit the approved use area shall be provided by the applicant, owner or user at his/her expense. The user shall make, at his/her expense, any modification to the potable water system on the premises which is required by the **Village**, in order to permit reuse water service, including but not limited to the installation by the user of approved break tanks. Onsite reuse water facilities shall be designed to accommodate the use of reuse water in those areas where the **Village** has determined that reuse water will be supplied in the future, even though reuse water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the reuse water system when it becomes available. In the interim, potable water will be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with **Village** approved device installed by the user to the satisfaction of the **Village**.

7.3.2. Plans and specifications for user reuse water facilities shall be submitted to the **Village** as specified in this Ordinance.

7.4. Pressure Requirements

7.4.1. Service pressure requirements shall be determined by the **Village**. The user shall design for available pressure. When a reasonable service pressure would not be available to onsite facilities not previously served from potable water systems, the user shall be responsible for correcting the situation. If available service pressure is too high, the user shall utilize pressure regulators downstream of the meter to obtain the correct pressure. If available pressure is too low, the user shall provide booster pumping to increase the pressure.

7.4.2. Whenever possible, the **Village** will operate the reuse water system at a lower pressure than the potable water systems. This will cause potable water to flow to the reuse water system in the event of an illegal cross-connection.

7.5. Booster Pumps

7.5.1. Users who use booster pumps to increase the operating pressure shall identify the pumping systems as reuse water, avoid release of reuse water in an uncontrolled manner, and provide a proper drainage of the packing seal water. At least one sign in English and Spanish shall be posted on the premises of the booster pumps that can be readily seen by all operations personnel working in the area.

7.6. Depth of Pipe Cover

7.6.1. The top of the pipe of transmission / distribution mains shall be a minimum of 5 feet below the finished grade unless approved otherwise. The depth of cover on service lines shall be considered on a case-by-case basis by the **Village**.

7.7. Separations

7.7.1. Horizontal

7.7.1.1. A 10-foot separation of the reuse water pipeline shall be maintained at all times between a potable water pipeline and/or a parallel sanitary sewer or sludge pipeline.

7.7.2. Vertical

7.7.2.1. On new systems reuse water and sewer lines can be located at the same elevation. The potable water shall be above reuse water and sewer. Minimum vertical separation should be 18" between top and bottom surfaces of the potable water line pipe to the reuse and/or sewer line pipes. Exceptions to this general rule are as follows:

7.7.2.1.1. On irrigation systems where intermittently pressurized reuse water lines (laterals) service sprinkler heads, the potable water line(s) may be placed under the reuse water laterals. No special construction requirements are necessary provided that 18" vertical separation is maintained.

7.7.2.1.2. On sites using pressurized irrigation laterals with valve-in-head sprinklers, the potable water line(s) may be placed under the reuse water laterals if additional protection is provided for the potable line. Common

practices include sleeving or automatic flow control/shut off devices installed and functioning properly on each lateral that crosses a potable line. If sleeving is used, the sleeve shall extend 10 feet from each side of the centerline of the potable line for a total of 20 feet. No additional special construction requirements are necessary provided that an 18" vertical separation is maintained.

7.8. Color Identification of Reuse Water Pipes and Appurtenances

7.8.1. All above ground, exposed facilities shall be consistently color-coded (purple) and marked to differentiate reuse water facilities from potable water and/or wastewater facilities.

7.8.2. All new transmission / distribution mains in the reuse water system, including service pipelines, valves and other appurtenances shall either be colored purple and embossed, or be integrally stamped/marked "Non-Potable Water," or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap.

7.8.3. Color-coded identification (caution) tape differentiating the reuse water piping from other utility lines shall be consistent throughout the service area. The purple color shall be standardized by the **Village**.

7.8.4. Identification tapes shall be installed over the pipe longitudinally 2 feet below the finished surface and shall be centered. The identification shall be continuous in its coverage on the pipe and shall be fastened to each pipe length. Taping attached to sections of pipe before they are placed in the trench shall have overlaps sufficient for continuous coverage. Other satisfactory means of securing the tape during backfill of the trench may be used if suitable for the work, as determined by the **Village**.

7.8.5. When converting an existing potable water pipeline to reuse water usage the water pipeline shall be accurately located and tested in coordination with the **Village**, and the necessary actions taken to bring the water pipeline and appurtenances in compliance with this Ordinance. If the existing pipeline meets approval of the **Village** and the regulatory agencies, except for the pipe identification, the pipeline shall be approved for reuse water service. If verification of the existing pipeline is not possible, the pipeline shall be uncovered, inspected, and identified prior to use. However, all replacements of an offsite distribution and/or delivery system connected to a reuse water irrigation system and all replacement of an existing water irrigation system shall be color-coded for identification in accordance with the provisions of this Ordinance.

7.9. Reuse Water Valve Casings

7.9.1. Valve casings shall be the standard steel casing with a special triangular, heavy-duty cover. All valve covers on offsite reuse water transmission lines shall be of non-interchangeable shape with potable water covers and with a recognizable inscription cast on the top surface.

7.10. Valve Box Identification

7.10.1. Valve boxes shall be the standard concrete or fiberglass box with a special triangular, heavy-duty cover. All valve covers on offsite reuse water transmission mains

shall be of non-interchangeable shape with potable water covers and with a recognizable inscription cast on the top surface.

7.11. Blow-Off Assemblies

7.11.1.1. Either in-line type or end-of-line type blow-off or drain assembly shall be installed for removing water or sediment from the pipe. The line tap for the assembly shall be no closer than 18 inches to a valve, coupling, joint, or fitting unless it is at the end of the line. If there are restrictions on discharge or runoff, the regulatory agencies shall be consulted to find an acceptable alternative.

7.12. Identification of Onsite Pipes and Fittings

7.12.1. New on site pipelines shall be identified as reuse water pipes by using a purple color code differentiating them from potable water piping.

7.12.2. All onsite piping and valves must also be appropriately labeled or continuously taped with appropriate identifications.

7.12.3. When converting an existing potable water line to reuse water usage the water line shall be accurately located and tested in coordination with the **Village**, and the necessary actions taken to being the water line and appurtenances in compliance with this Ordinance. If the existing line meets approval of the **Village** and the regulatory agencies, except for the pipe identification, the line shall be approve for reuse water service. If verification of the existing line is not possible, the line shall be uncovered, inspected, and identified prior to use. However, all replacements of an existing reuse water irrigation system shall be color-coded for identification in accordance with the provisions of this Ordinance.

7.12.4. A warning tape or tag with metallic backing shall be installed on all reuse water pressure and/or non-pressure service pipelines. A purple tape with black lettering stating "Non-Potable Water" shall be fastened to the top of the pipe. The tape shall run continuously the entire length of the pipe and shall be at least 3 inches in width.

7.12.5. The use of purple colored pipe, with the words "Non-Potable Water" embossed or integrally stamped/marked on the pipe as an acceptable alternative to tape. The wording should be stamped on opposite sides of the pipe, repeated every three feet.

7.12.6. All connections, temporary and permanent to a reuse water system shall be identified in such a manner as to differentiate them from connections to a potable water system.

7.12.7. When potable water is being supplied to an area, which is also being supplied with reuse water, the potable water main shall also be identified. A blue or white color-coded tape, as determined by the **Village**, with the words “CAUTION—DRINKING WATER LINE” shall be fastened directing to the top of the potable water pipe and run continuously the entire length of the pipe. This tape shall be at least 3 inches in width. The color code for potable water shall be determined by the **Village** to differentiate it from reuse water.

7.13. Onsite Reuse Water Storage Facilities or Impoundments Ord. 2003-20 9/3/03

7.13.1. All reuse water storage facilities owned and/or operated by reuse water users shall be protected against erosion, overland runoff, and other impacts resulting from 100-year frequency, 24-hour duration storm event.

7.13.2. All reuse water storage facilities owned and/or operated by reuse water users shall be protected from flooding by the 100-year frequency flood.

7.13.3. Earthen reuse water storage facilities or impoundments must be lined for groundwater protection. Ord. 2003-20 9/3/03

7.14. Reuse Water for Construction Use

7.14.1. The use of reuse water for construction purposes requires approval of the **Village**. The permit shall be obtained prior to beginning construction.

7.14.2. Reuse water used for construction purposes may be used for soil compaction during grading operations, dust control and consolidation and compaction of backfill in trenches for non-potable water, sanitary sewer, storm sewer, gas and electric pipelines. Reuse water shall not be used for water jetting and consolidation or compaction of backfill in trenches for potable water pipelines.

7.15.3 Reuse water shall not be introduced into any potable water supply piping system.

7.15.4 Service connections, equipped with reuse water meters, for the construction use of reuse water shall be provided by the **Village** at locations convenient to the user but at the discretion of the **Village**.

7.15. Posting Approved Use Areas

7.15.1. Posting the use areas of reuse water is required to inform the public that reuse water is being used. Posting shall be required at any user field office, maintenance building, or yard within the approved use area, except as required by the regulatory agencies on a case-by-case basis. Notices and labels shall be posted on designated facilities such as controller panels, washdowns, or blowoff valves on trucks, and temporary construction facilities. The labels shall indicate that the system contains reuse water that is unsafe to drink or whatever other restrictions may apply. It shall be the responsibility of the Reuse Water Supervisor to ensure the required bilingual posting in English and Spanish are installed and maintained, and so placed that they can be readily seen by all personnel or public utilizing the facilities.

7.15.2. Where reuse water is used for landscape water features, signs shall be installed to notify that the water in the impoundment is non-potable. The agency responsible for the impoundment shall prepare a detailed plan showing placement and spacing of proposed signs. The signs shall include the international warning sign of “do not drink” for all reuse water systems.

7.15.3. A signage plan shall be prepared and forwarded to the **Village**, for approval prior to the use of reuse water.

7.16. Monitoring and Inspection

7.16.1. The **Village** or authorized representatives of any of these agencies shall have authority to monitor and inspect the entire reuse water system including both onsite and offsite facilities. The **Village** shall conduct monitoring programs, as it deems necessary, to ensure that user's reuse water facilities are being operated in accordance with this Ordinance, including the provision that cross-connections between potable water facilities and the reuse water facilities do not exist. In carrying out these functions the **Village** or authorized representative shall have the right to enter any user's premises during reasonable hours upon presentation of proper credentials. Reasonable hours shall include hours when irrigation is being performed to ascertain whether the use is complying with the **Village** Ordinance for Reuse Water. The user shall indemnify and hold the **Village** harmless for any damage, loss, or injury allege to have been cause by the Village personnel while inspecting onsite facilities, except where the **Village** sole negligence is duly established.

7.16.2. Each time there is a change of either owner or user on any commercial or industrial premises, the owner or user shall notify the **Village** immediately. The **Village** will then reassess the level of protection required. Also, any alterations to existing onsite facilities that may affect required protection levels must be reported immediately to the **Village**.

7.16.3. At their discretion, the **Village** may conduct surveys of any property where reuse water service is provided by the **Village**. These surveys are to determine if any actual or potential cross-connection exists. The applicant, owner, or user shall provide full cooperation to facilitate these surveys.

7.16.4. In situations where potable water line are on the same property and located in the same area as reuse water lines, an annual cross-connection control site inspection will be required. The annual cross-connection inspection will be performed by the **Village** or an authorized representative. At the discretion of the **Village**, cross-connection inspections may occur more frequently, especially on potable irrigation systems which have been converted to a reuse water irrigation system in conformance with this Ordinance

7.17. Repairs

7.17.1. Repairs to broken **Village**-owned distribution water or sewer service lines in the right-of-way shall be the responsibility of the **Village**. Repairs to shut-off boxes and the plumbing systems shall be made by and at the expense of the owner(s) of the premises served, except that meters shall be repaired only by the **Village**. Any damage done to the **Village** water main or sewer lines while tapping or connecting shall be repaired by the property owner(s). The **Village** may, in case of emergency, repair any service pipe and recover the cost from the owner(s) of the premises served, and if the owner fails or refuses to pay within sixty (60) days of being billed therefore, the water supply may be shut off until the bill is paid, and the **Village** shall have a lien of the recovery thereof under the terms and provisions of this Ordinance.

7.18. Non-Liability of **Village**

7.18.1. The **Village** shall not be liable for any damage caused by a leak or break in any water or sewer service line or for damage caused by the repair or installation of such lines when such work is not done by the **Village**, nor shall the Village be liable for any damage caused by a failure to repair any leak or break in any service line.

7.19. Temporary Use of Potable Water, Until Reuse Water is Available

7.19.1. At the discretion of the **Village**, potable water may be made available on a temporary basis, until reuse water is made available. Before the user receives temporary potable water, a reuse water permit must be obtained. Prior to commencement of reuse water service, an inspection of the onsite facilities shall be conducted by the **Village** to verify that the facilities have been maintained and are in compliance with the reuse water permit. Upon verification of compliance, the user shall request service start-up.

7.19.2. The **Village** may suspend or terminate reuse water service at any time the reuse water at the terminal point of the **Village**'s reclamation plant does not meet the requirements of the regulatory agencies. Reuse water service would, in such case, be restored when the reuse water meets the governing requirements at the terminal point of the treatment plant. In addition, an approved air gap separation must be used in any connection for temporary potable water.

7.20. Services to Common Areas

7.20.1. The **Village** reserves the right to supply reuse water to contiguous areas of a single ownership through a single reuse water service connection.

7.20.2. Common areas owned or operated by home owners' associations or similar cooperative should have only one service connection whenever it is practical, and will be operated as a single ownership.

7.20.3. A reuse water service connection and water meter shall not be used to supply property not covered by the permit authorizing the connection.

7.21. Subdividing An Approved Service Area

7.21.1. When a property provided with a reuse water service connection and water meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land on which the meter is located. Additional reuse water distribution mains a/or service lines will be required for all subdivided areas in accordance with this Ordinance, unless the subdivider provides covenants, conditions, and restrictions (CC&R's) properly recorded with the County's Recorder for the operation of onsite reuse water facilities serving more than one lot, and also provides easements for reuse water distribution mains, and/or service lines or shows easement locations in the CC&R's.

7.21.2. All reuse water used on any premise where a meter is installed must pass through the meter.

7.21.3. Every reuse water service connection and meter assembly shall include a curb cock or wheel valve, as approved by the **Village**, on the inlet side of the meter, which shall be used exclusively by the **Village** for controlling the reuse water supply through the reuse water service line. If the curb cock or wheel valve is damaged by the user's use, repair and/or replacement by the **Village** shall be at the user's expense.

7.21.4. Each user shall restrict the use of reuse water to those uses set forth in the permit for reuse water services approved by the **Village**.

7.22. Temporary Discontinuation of Reuse Water Service.

7.22.1. By reason of circumstances beyond the control of the **Village**, or in order to protect the facilities of the **Village**, or for the protection of public health, safety and welfare of the residents or property owners of the **Village**, reuse water service may be terminated under the conditions set forth below:

7.22.1.1. On a temporary basis at any time the reuse water, at the terminal point of the **Village’s** water reclamation plant discharge, does not meet the IEPA permit requirements. Reuse water service would, in such case, be renewed at such time that reuse water at the terminal point of the water reclamation plant would again meet the requirements of the IEPA permit or at such time that the **Village** would supplement the reuse water system with water from the potable water system.

7.22.1.2. When the **Village** determines that a reuse water shortage exists, or is threatened, which prevents further reuse water service.

7.23. Conditions of Pressure and Service

7.23.1. Pressure and service shall be provided on an as available basis, at the location of the user's meter. The **Village** shall indicate the desirable pressure of the system. All users shall hold the **Village** harmless from any and all damages and liabilities caused in whole or in part by pressure conditions, water quality variations, or interruptions in service. It shall be the owner’s responsibility to install booster pumps to increase pressure if necessary.

7.24. Size and Location of Service Connections

7.24.1. The **Village** reserves the right to determine the size and location of reuse water service line, the service connections, and the meters and shall also have the right to determine the kind and size of backflow prevention devices and any and all other appurtenances to the service.

7.24.2. The reuse water service lines shall be extended to a curb line, or property line of the user's property, abutting upon a public street, highway, road, or **Village’s** easement on which reuse water distribution mains are installed at the user's expense.

7.25. Illegal Connections

7.25.1. No person shall make any connection to reuse water facilities of the **Village** without a permit from the **Village**. Penalties for violations may be assessed according to this Ordinance.

7.26. Meter Testing

7.26.1. Any user may request that the meter through which the reuse water is being furnished be examined and tested by the **Village** for the purpose of ascertaining whether or not it is correctly registering the amount of reuse water being delivered through it. In such an event, the user shall make a request to the **Village** for a Meter Test. The meter testing shall be performed in conformance with the standards set for potable water meters.

8. **CROSS-CONNECTION PREVENTION**

8.1. Purpose

8.1.1. The primary purpose of this section is to protect the **Village’s** potable water supply from possible contamination by prohibiting and preventing cross-connections between the potable water distribution system and the reuse water distribution system. The secondary purpose is to protect the reuse water system from other contaminants. These provisions are in addition to, and not in lieu of, the controls and requirements of other regulatory agencies, such as the IEPA.

8.2. Backflow Prevention

8.2.1. Regulations governing backflow prevention devices are intended to protect the **Village’s** potable water supplies and are not intended to protect users from potential hazards of cross-connections in the user’s onsite facilities.

8.2.2. **Village** approved backflow prevention of the **Village’s** reuse water supply shall be provided by the user in accordance with the specifications and as required by the **Village**.

8.2.3. The backflow prevention devices required shall be in accordance with the requirements specified by the **Village**.

8.2.4. Provision, installation, maintenance and inspection of backflow prevention devices shall be the sole responsibility and duty of the user, and at user's expense. Inspection of backflow prevention devices shall be done at least once a year, or more often in those instances where successive inspections indicate repeated failures. These devices shall be inspected, repaired, or overhauled or replaced at the expense of the user whenever they are found to be defective. Records of such tests, repairs and overhauls shall be kept by the **Village**, and such records shall be made available to any concerned regulatory agency on request.

8.2.5. The installation and inspection of backflow prevention devices shall be done by a state licensed plumber, landscape installer (in the case of landscape irrigation system) or engineer at the expense of the user. The user shall submit to the **Village** original inspection certificates as proof of compliance. All inspection and testing shall be done to the satisfaction of the **Village** and the regulatory agencies concerned.

8.3. Type of Protection

8.3.1. The level of protection required is related to the degree of hazard that the **Village** determines exists on the premises served. Listed in increasing levels of protection, the following protective devices may be required: Break Tank, Reduced Pressure Principle Backflow Prevention Device (RPPD) as approved by the IEPA Public Water Supply Division, and 6" minimum Air Gap Separation (AG). The user may choose a higher level of protection than required by the **Village**. Situations not listed shall be evaluated done on a case-by-case basis and the appropriate level of protection required shall be determined by the **Village**. Ord. 2003-20 9/3/03

8.4. Sewage and Hazardous Substances:

8.4.1. On premises where the **Village’s** potable water system is used to supplement the reuse water supply, an air gap separation shall be provided.

8.4.2. On premises where reuse water is used and there is no interconnection with the potable water system, an RPPD separation may be used instead of an air gap if approved by the **Village**.

8.4.3. On premises where hazardous materials and toxic substances are stored, handled, or produced in any manner in which the substances may enter both the potable water and the reuse water systems, an air gap separation to both systems shall be provided to avoid contamination of the potable water as well as degradation to the reuse water system. An RPPD may be provided in lieu of an air gap if approved by the **Village** and the health agency.

8.4.4. On premises where entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist, an RPPD separation shall be used.

8.4.5. On premises where there is repeated history of cross-connections being established or re-established, and RPPD separation shall be used.

8.5. Color –Coding Dual or Multiple Water Systems:

8.5.1. Where any property subject to reuse water service is served by or contains dual or multiple water systems and piping, the exposed portion of reuse water pipelines, valves, and other fittings shall be painted purple, banded or marked to distinguish clearly which is used for potable water and which is used for reuse water. In addition, all new unexposed reuse water pipes installed on any such property shall be similarly painted purple, banded or marked. All reuse water outlets shall be posted with bilingual precautionary posters with the wording "Non-Potable Water." Main shut-off valves shall be clearly identified to distinguish between reuse water and potable water systems.

8.6. User’s Designated Reuse Water Supervisor

8.6.1. The user’s designated reuse water supervisor, whose qualifications and responsibilities are in the Ordinance, shall be responsible for the prevention of any cross-connections on the property, and in the event of a cross-connection to the potable water system, the user shall immediately shutoff the main reuse water supply valve and depressurize the reuse water system to prevent further mixing with the potable supply, and shall also immediately advise the **Village** of the occurrence of the cross-connection. The appropriate local and State health officers shall be immediately advised by the **Village** so that appropriate measures may be taken to control any contamination or pollution.

8.6.2. The user shall assume all responsibilities for the prevention of cross-connections between the onsite facilities and any potable water supply, and shall indemnify and hold the **Village** harmless from and against any claim of damage or loss which is caused or is alleged to have been caused, in whole or in part, by cross-connections of on-site facilities. Notwithstanding this covenant, the user shall be subject to the rules pertaining to the use of reuse water as otherwise provided herein.

8.7. Conversion To Reuse Water Service

8.7.1. When a user proposes the conversion of any existing potable water irrigation system to a reuse water irrigation system, a comprehensive investigation of the proposed reuse water system shall be performed for the **Village** at the expense of the user. On a case-by-case basis, the **Village** shall review the as-built drawings, and investigation reports, and determine the measures necessary to bring the existing system into full compliance with these Rule and Regulations. The **Village** may deny issuance of a reuse water users permit if either determines that the proposed conversion cannot be safely made.

8.8. Conversion From Reuse Water Service

8.8.1. If in the future, the **Village** authorizes the user to convert the onsite facilities from reuse water supply to a potable water system or other water supply, it shall be the responsibility of the user to pay all costs for such conversion, unless determined otherwise by the **Village**. Conversion costs shall include the following:

8.8.1.1. Isolation of the reuse water supply: Service shall be removed and plugged by the **Village** at the reuse water main, or abandoned in a manner approved by the **Village**.

8.8.1.2. Installation of Backflow Prevention Device: The users shall install approved backflow devices on all potable water, or other water meter connections.

8.8.1.3. Removal of Existing Fittings: The users shall be responsible for removal and replacement of all fittings with approved fittings for potable water.

8.8.1.4. Hydraulic Testing and Disinfection: The user shall be responsible for hydraulic testing and disinfection of the converted pipeline.

8.8.1.5. Notification: The user shall notify all personnel involved with the operations of the abandoned reuse water service.

8.8.1.6. Warning Labels / Signs: The user shall be responsible for the removal of all warning signs and labels.

8.8.1.7. Installation of Potable Water System: Provision and installation of all potable water lines and facilities and any fees due, as provided for in this Ordinance shall be the responsibility of the user.

8.9. Scheduling Reuse Water

8.9.1. The **Village** will control and schedule the delivery of reuse water if, in the opinion of the **Village**, scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the reuse water system and the provision for reasonable safeguards in relation to public health.

8.10. Temporary/Emergency Connections to the Potable Water System

8.10.1. If, in the opinion of the **Village**, an emergency exists, or is threatened to occur, whereby all or a portion of the water in the reuse water system is not available, the **Village** may approve a temporary connection to the potable water system. Examples of an emergency may include the loss of fire protection, the inability to use public buildings, or

the need to shut down business operations for an extended period or on a frequent basis due to the unavailability of reuse water. Such a temporary connection shall be made in accordance with this Ordinance, and the **Village** shall maintain and operate all connections. Ord. 2003-20 9/3/03

8.10.2. Before such temporary connection is made, the portion where potable water is to be supplied shall be isolated by an air gap separation from the remainder of the reuse water system. This isolation shall occur at either individual services or on the offsite system, as determined by the **Village**. An approved backflow prevention device shall be installed on the potable water line in accordance with this Ordinance. The emergency connection shall be removed before connection is reestablished to the reuse water system. Reestablishment of reuse water service must be inspected and approved by the **Village** inspector prior to resuming delivery of reuse water.

8.10.3. On a case-by-case basis, the **Village** may approve a temporary potable water connection for a user's reuse water system for irrigation or other uses, without an air gap. The temporary connection shall be designed to allow only one water source to serve the user's system at any given time. An approved backflow device and meter shall be installed on the potable water service and the reuse water service prior to the user's connection in accordance with this Ordinance. At no time shall the potable water system be connected to a system simultaneously served by a non-potable source.

8.10.4. The **Village**, at its own discretion, may provide potable water or disinfected raw water in lieu of reuse water.

8.11. Additional Restrictions on the Uses of Reuse Water

8.11.1. Run-Off and Ponding

8.11.1.1. Conditions that directly or indirectly cause a run-off of reuse water outside of the approved reuse water use area; cause a ponding of reuse water; or permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation, shall be controlled to the greatest extent possible with the use of the best practicable technology or methodology.

8.11.1.2. The use of reuse water shall be limited to those uses permitted by Federal and State law, and to those uses approved by the **Village** for the reuse water service area.

8.11.2. Protection of Drinking Fountains and Public Facilities

8.11.2.1. Any an all drinking fountains located within an approved reuse water use area shall be protected from windblown spray or by direct application through irrigation or other approved uses from contract with reuse water by isolating them with a protective structure or relocation.

8.11.2.2. Food establishment or public facilities such as picnic tables shall be protected from windblown spray or direct application from reuse water irrigation systems. Design of systems near such facilities may require the McHenry County Health Department approval.

8.11.3. Hose Bibs and Quick Couplers

8.11.3.1. No user shall use or install any hose bibs on a reuse water system regardless of style, construction or identifications. The use of quick couplers is at the sole discretion of the **Village**. Only quick couplers with the approved color and identification will be allowed.

9. ESTABLISHING SERVICE

9.1. Request for Service Connection

9.1.1. Following the completion of construction and/or installation of the reuse water facilities, the user shall request the **Village** to install the service connection.

9.1.2. The request for service connection shall be accompanied by all required fees for installation and connection as indicated in the current schedule of rate and as appropriate for the size and type of service.

9.1.3. The applicant, user, or owner shall submit as-built record drawings to the **Village** before a request for service start-up is made.

9.1.4. All changes in work constituting departures from the original design drawings shall be accurately recorded on one set of drawings and submitted to the **Village** for agreement and approval prior to construction. Such changes shall be approved by the **Village** before any changes, modifications, or additions are made.

9.2. Connection and Extension Regulations

9.2.1. Requirements. It shall be unlawful for any person who is not so authorized by the **Village** to uncover, make any connections with or openings into, use, alter, repair, place, extend or disturb any appurtenance thereof until the requirements set forth in this section are met.

9.2.2. Notice of Connection. No less than 24 hours prior to the connection, extension, alteration, repair, placement or disturbance, as the case may be, notice, either in writing or verbal, shall be given of such connection, extension, alteration, repair, placement or disturbance, as the case may be, to the Superintendent of Public Works.

9.2.3. Supervision by **Village**. The extension, connection, alteration, repair, placement or disturbance shall be made under the supervision, at the site thereof, of the Superintendent of Public Works, or his duly authorized agent, and is covered only after it has been inspected by the Superintendent or his duly authorized agent.

9.2.4. Plumbing Regulations, Conformity. All plumbing facilities and fixtures used in the premises, all connecting pipes to the premises from the water main or public sewer, and, in the event of water mains or sewers that are constructed or extended after 1971, all such water mains and sewers must comply with all applicable **Village**, State and other governmental rules, regulations, ordinances and laws.

9.2.5. Payment of Obligations to **Village**. Payment, or evidence of payment, shall be made of any liens, encumbrances or delinquent special assessments impressed or levied against the real estate involved for the cost of the water mains or sewers, as the case may

be, serving the property.

9.2.6. Connection to Municipal Water System. The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the **Village's** Facility Planning Area and abutting on any street, alley, or right-of-way on which there is now located or may in the future be located municipal water lines is hereby required at his expense to connect to such facility in accordance with the provisions of this Chapter, within 90 days of official notice to do so, provided that said municipal water is within 200 feet of the closest property line.

9.3. Request for Service Start-Up

9.3.1. Following final acceptance of the onsite facilities by the **Village**, the user shall request service start-up.

10. **OPERATION OF WATER REUSE SYSTEM**

10.1. Offsite Reclaimed Water Facilities

10.1.1. Operation, maintenance and monitoring of all of the **Village's** offsite reclaimed water systems including, but not limited to, reuse water transmission and distribution mains, service lines, valves, connections, storage facilities, and other appurtenances and properties up to and including the **Village's** meter, shall be under the management and control of the **Village**. No other persons except authorized representatives of the **Village** shall have any right to enter any portion of the foregoing. No other person except authorized representative of the **Village** shall have any right to operate, adjust, repair, change, alter, move or relocate any portion of the offsite reuse water system.

10.2. Onsite Reclaimed Water Facilities

10.2.1. The user or owner shall be responsible for the safe and efficient operation, maintenance and upkeep of his onsite facilities. However, the **Village** shall also have the right to monitor and inspect the onsite operation of the user's facilities. The **Village** or authorized representative of the **Village** shall monitor and inspect the entire reuse water distribution facility, including user facilities and for these purposes shall have the right to enter upon the user's premises during reasonable hours. Reasonable hours shall include hours when irrigation is being performed. Except in emergencies the **Village** and other parties authorized by the **Village** shall be entitled to enter upon the user's premises with reasonable notice to the user for onsite inspection during reasonable hours to verify that the user's facilities are in conformance with the provision of this Ordinance and all applicable permits.

10.2.2. The user shall notify the **Village** of any and all updates or proposed changes, modifications or additions to the onsite facilities. Changes shall be approved by the **Village** prior to construction and shall be designed and constructed according to the requirements, conditions and standards set forth in this Ordinance.

10.2.3. The user shall comply with any all applicable Federal, State, and local statutes, ordinances, regulations, contracts and requirements prescribed by the **Village**. In the event of violation, any charges and penalties shall be applied by the **Village** in accordance with this Ordinance.

10.2.4. It shall be the responsibility of the user to notify the **Village** of any and all failures in a reuse water system whether or not the user’s opinion the failures resulted in violations. It shall also be the responsibility of the user to notify the **Village** of any and all violations, which occur as a result of the user’s action or the action of his operations personnel.

10.2.5. The user shall keep a written log of all system failures and violations including corrective action taken. The log shall be reviewed by the **Village** regularly.

10.3. Designation / Responsibility of the Reuse Water Supervisor

10.3.1. Each reuse water user shall designate a User’s Reuse Water Supervisor. The User’s Reuse Water Supervisor shall be a person accepted and approved by the **Village** to operate and maintain the onsite facilities and irrigation systems, and to assume the responsibilities outlined here below. The **Village** shall require that the designated Users Reuse Water Supervisor obtain instruction in the use of reuse water, such instruction being provided or approved by the **Village**. He/she shall be the contact person for the user in all matters between the user and the **Village** concerning the operation of the onsite system and the use of reuse water. It shall be the responsibility of the user to notify the **Village** whenever a change of Reuse Water Supervisor occurs. Subsequently the user shall be responsible to obtain the **Village’s** acceptance and approval of his newly designated supervisor. The Reuse Water Supervisor will have the following responsibilities.

10.3.1.1. To oversee reuse water service and maintain onsite facilities.

10.3.1.2. To ensure that all operations personnel are trained and familiarized with the use of reuse water, including all pertinent information contained in the Ordinance. This information shall be supplied by the **Village** upon request by the user, user, owner or applicant. The applicant for a user’s permit shall attest that training will be provided.

10.3.1.3. To furnish operations personnel with operating instructions, maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the facilities design and this Ordinance and all applicable permits. At least one complete set of this information shall be kept onsite or in the nearest field office or maintenance building.

10.3.1.4. To operate and control the user reuse water system in order to prevent direct human consumption of reuse water and to control and prevent run-off.

10.3.1.5. To provide a preventative maintenance program and carry out ongoing regular maintenance and upkeep to ensure the continued operation of all system elements within the requirements of this Ordinance.

10.3.1.6. To prevent cross-connections to potable water systems, and also to protect the reuse water system from contamination from cross-connections to other sources.

10.3.1.7. To ensure that maintenance and inspection of backflow prevention assemblies is done regularly on an annual basis as per requirements of regulatory agencies, or more often in those instances where successive inspection indicate repeated failures.

10.3.1.8. To report to the **Village** any and all failures in the onsite facilities whether or not such failures may result in violations.

10.4. Operation and Control of Onsite Reuse Water System

10.4.1. To the extent possible, the operation of the irrigation system shall be during periods of minimal public use of the approved area. Such periods of operation shall remain within any general period of reuse water irrigation operation specified by the **Village**.

10.4.2. Operation and control measures of onsite reuse water systems shall include, but not be limited to, the following:

10.4.2.1. Onsite reuse water facilities shall be operated in such manner to prevent or control surface flows or windblown sprays of reuse water across boundary lines, or into areas not approved for reuse water use. The system design shall avoid spray patterns that tend to accumulate reuse water to produce ponding and/or run-off on public rights-of-way or adjoining areas not approved for reuse water use.

10.4.2.2. Reuse water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the reuse water facilities shall be compatible with the lowest infiltration rate anticipated or designed appropriately for the soil type to prevent run-off.

10.4.2.3. No sprinkler system shall be allowed to operate for a time longer than the landscape’s water requirements. The intent is to control and limit run-off and ponding.

10.4.2.4. The user shall enforce the following prohibitions as per this Ordinance.

10.4.2.4.1. Cross-connections

10.4.2.4.2. Disposal of reuse water in unapproved areas

10.4.2.4.3. The use of hose bibs

10.4.2.4.4. Ponding and run-off

10.4.2.4.5. Windblown sprays

10.4.2.4.6. Unapproved uses of reuse water.

11. SYSTEMS COSTS

11.1. Connection Fees

11.1.1. The fees set forth below are charged in order to reimburse the **Village** of its cost of inspection, and for the privilege of connecting to or extending the waterworks and sewage system of the **Village**. Such fees shall be the personal liability of the owner of, and

a levy on the real estate involved. Such fees are as follows:

11.1.2. Waterworks Tap-On and Connection Fees: The tap-on and connection fees shall be determined by the **Village** Board paid at the time of a water reuse building permit is issued by the **Village**.

11.2. Reimbursement and Participation Agreements:

11.2.1. In cases where a user / developer requests reuse water services in areas where the **Village** does not have existing transmission and distribution mains, the user's request for reuse water service shall be handled as follows:

11.2.1.1. Where the City determines it will be most practical to require extension of transmission and distribution mains to areas not covered in a permit application, or where oversized or additional facilities may be needed to accommodate future development, the permit may be conditioned upon the applicant financing and developing such extra service line. In this event, the **Village** or applicant shall undertake to provide for cost reimbursement whereby subsequent developers of benefited property will reimburse the original developer or the **Village** for proportional shares of the improvements.

11.2.2. In cases, where the **Village** has planned capital improvement projects which are scheduled for undertaking and completion on a planned timetable, and where the user / developer find the **Village's** plan of implementation and completion too long to wait for, and where the user chooses to undertake and complete a specific planned capital improvement project of the **Village** with the user's own financial resources, then a participation agreement shall be concluded with the user and the **Village** agreeing on equitable sharing of the financial outlay of the project, and the project shall be completed in accordance with the design and specifications of the **Village**.

11.3. Reuse Water Connection, Meter, and Service Line Charges

11.3.1. The **Village** shall make charges for the installation, and perpetual maintenance of all reuse water services, meters, and appurtenances thereto, and these shall remain the property of the **Village**. Said charges, in addition to all other usual and regular charges of the **Village** must be paid before work will be performed. Any backflow prevention devices on potable water services and flow or pressure control devices required due to application for reuse water service shall be downstream of the meter and shall be provided by the applicant, owner, or user at his/her expense.

11.3.2. The amount of said charges shall be established by resolution of the **Village** Board and shall be determined and computed in order to fully reimburse the **Village** for the cost of materials, labor, equipment, and any other costs incidental to the performance of said services.

11.3.3. Whenever an installation is required by a user, that is not covered by the schedule of rates established from time to time by the **Village**, such work will be done with charges based upon a statement of costs made by the **Village**. If the required installation, for any valid reason, cannot be installed for the amount stated in the appropriate schedule of rates established by the **Village**, owing to the peculiarity of the proposed service, the **Village** reserves the right to make said installation on the basis of a statement of cost.

11.3.4. Whenever reuse water service lines, meters or other appurtenances are requested to be removed by the user for any reasons whatsoever, the charges shall be made on the basis of a statement of costs by the **Village**.

11.3.5. The **Village** requires all applicants for reuse water service to post a guarantee deposit. An exception to this requirement is applicants who have at least one other active water service account with the **Village** and who have no record of delinquent payments with respect to their water account(s). The deposit required herein shall be equal to the estimated amount payable by the applicant for one month of reuse water service but, shall in no event be less than the sum stipulated in the schedule of rates.

11.3.6. User's guarantee deposits may be refunded upon application by the user after a twelve (12) month period from the date of receipt in which a satisfactory payment record has been established. The **Village** reserves the right to disallow or withhold the refund of any deposit after the twelve (12) month period.

11.3.7. No person not authorized by the **Village** shall tamper with, alter or injure any part of the system, or with any meter.

11.4. Sewer Fees

11.4.1. Should the use of the reuse water require the water to be returned to the Wastewater Treatment Plant for treatment after use, sewage use will be metered and all applicable sewage charges will apply.

12. VARIANCE AND APPEALS

12.1. Variance.

12.1.1. No variances will be granted to the requirement that the specific municipal water user specified per Section 4.1 install a system using reuse water per Article 4.2 except in cases of extreme hardship. However, users may set aside through purchase or easements other open space in the **Village** in the "Water Reuse Area" described in Section 4.1, at a ratio of one acre required to one acre set aside, on which the user will apply landscape watering at the same rate expected for the Ordinance required use.

12.2. Variances

The **Village** upon application, after hearing, and subject to the process and standards that follow, may grant variances to the provisions of this Ordinance as will not cause detriment to the public good, safety or welfare nor be contrary to the spirit, purpose and intent of this Ordinance where, by reason of unique and exceptional physical circumstances or condition of a particular property, the literal enforcement of the provisions of this Ordinance would result in an unreasonable hardship.

12.2.1. A public notice will be issued inviting public comment on the proposed variances.

12.2.2. Variances shall be granted only upon:

12.2.2.1. Showing of good and sufficient cause;

12.2.2.2. A determination that the variance is the minimum necessary to afford relief;

12.2.2.3. A finding that failure to grant the variance would result in exceptional hardship to the applicant;

12.2.2.4. A finding that the granting of a variance would not result in additional threats to public safety, or extraordinary public expense, nor create nuisances, cause fraud or victimization of the public, nor conflict with existing local laws or ordinances; and

12.2.2.5. The applicant's circumstances are unique and do not represent a general problem.

12.2.3. Upon consideration of the factors noted above and the intent of the Ordinance, the **Village** may attach such conditions to the granting of a variance deemed necessary to further the purposes and objectives herein.

12.2.4. Variances requested in connection with restoration of a historic site or building listed on the National Register of Historical Places or documented as worthy of preservation by the Illinois Historic Preservation Agency may be granted using criteria more permissive than the requirements contained in this Section.

12.2.5. Variances requested in connection with the redevelopment of previously developed sites, that will further the public policy goals of downtown redevelopment and neighborhood revitalization, may be granted a variance.

12.2.6. Due to the unique nature of Public Road Developments occurring in a narrow R.O.W. instead of an expansive tract of land, variances requested in connection with public road developments that will further the public policy of minimizing the condemnation of private or public property may be granted using criteria more permissive than the requirements of this Ordinance to the minimum extent necessary to achieve the minimal amount of condemnation.

12.2.7. Written findings shall be made public for all variances and shall be on file with the **Village**.

12.3. Appeals.

12.3.1. Appeals to any permit decision made in accordance with this Ordinance may be appealed to the **Village** Board by submitting a request to reconsider the decision, stating the reasons why, within 60 days of the permit decision. The Board's decision is final.

13. ENFORCEMENT AND PENALTIES

13.1. The **Village** has the right of access on the property to inspect the water reuse system required by this Ordinance during and after construction. Any person, firm, corporation or public entity violating this Ordinance shall be fined not less than \$1,000 nor more than \$10,000 for each offense. Each day that the user is found to be in noncompliance is considered an offense.