

**WATER USE AND RATE ORDINANCE  
TOWNSHIP OF GREEN OAK, MICHIGAN  
ORD. NO. \_\_\_\_**

AN ORDINANCE TO PROVIDE FOR THE PUBLIC HEALTH BY OPERATION OF THE GREEN OAK TOWNSHIP WATER SUPPLY SYSTEM ON A PUBLIC UTILITY BASIS UNDER THE PROVISIONS OF ACT 94, PUBLIC ACTS OF MICHIGAN 1933, AS AMENDED, AND TO PRESCRIBE THE RATES AND FEES FOR THE USE OF SAID FACILITIES AND TO PROVIDE FOR OTHER MATTERS PERTAINING TO SAID SYSTEM.

**THE TOWNSHIP OF GREEN OAK ORDAINS:**

**TITLE**

This Ordinance shall be known as the Green Oak Township Water Use and Rate Ordinance.

**PURPOSE**

The purpose of this Ordinance is to establish standards, rules and regulations concerning the use of the Green Oak Township Water System; and to provide for the rates and fees for the connection to, and the use of the System.

**Section 1 DEFINITIONS.** For purposes of this Ordinance, the following words and phrases shall have the meanings respectively ascribed to them by this section unless the context in which they are used specifically indicates otherwise.

- 1.1 "AWWA" - American Water Works Association.
- 1.2 "Benefit Fee" shall mean a per day Residential Equivalent Unit (REU) per use based on the Township Board adopted REU Factor Table (s).
- 1.3 "Commercial User" shall mean any user of the System other than a residential user.
- 1.4 "Commodity Rate" shall mean a unit rate expressed in dollars per unit, payable by a user and applied to the actual water consumption as determined in this Ordinance.
- 1.5 "Commodity Surcharge Rate" shall mean a variable unit rate payable by a user for any actual water consumed in excess of the allowance for which a Benefit Fee

has been paid. The commodity Surcharge Rate will be established by the Township Board.

1.6 "Consumer" - The person or legal entity served by or using water supplied by the Township.

1.7 "Consumer's Installation" - All pipes, valves, stops, plumbing, and contrivances of every kind and nature used in connection with, or forming a part of, the consumer's installation for using water for any purpose, connected directly or indirectly with the corporation stop at the main.

1.8 "Corporation Stop" - A valve which is inserted into the main for the connection of the water supply service pipes in sizes up to and including two (2) inches in diameter.

1.9 "Cross Connection" shall mean a connection or arrangement of piping or appurtenances through which water of questionable quality, wastes or other contaminants could possibly flow back into the Water Distribution System because of a reversal of flow.

1.10 "Curb Box" - A box of metal housing which encloses, protects and provides access to the curb stop.

1.11 "Curb Stop" - A valve for insertion in the service pipes, in sizes of three-fourths (3/4) inch to two (2) inches in diameter, inclusive, at or near the curb line.

1.12 "Department" - The division of water distribution of the Township of Green Oak.

1.13 "Director" shall mean the Director of Public Works or his or her authorized representative. The Director is the person designated by the Township to Supervise the operation of the Green Oak Township Water System.

1.14 "Inspector" - The Green Oak Township Plumbing inspector or his or her designee.

1.15 "LCWA" shall mean the Livingston Community Water Authority.

1.16 "Lot" shall mean a parcel of land occupied or intended to be occupied by a main building. A lot may or may not be specifically designated as such on public records.

1.17 "Meter Box" - Any approved box or vault for the housing of water meter.

1.18 "Permittee" - A consumer or his or her agent receiving a permit from the Township allowing a connection to be made to the water system.

1.19 "Person" shall mean any individual, firm, partnership, association, public or private corporation or public agency or instrumentality or any other entity receiving water service.

1.20 "Premises" shall mean each lot or parcel of land or building having any connection to the Water System.

1.21 "Revenues" Whenever the words "revenues" and "net revenues" are used in this Ordinance they shall be understood to have the meanings as defined in Section 3, Act 94, Public Acts of Michigan, 1933, as amended.

1.22 "Service Cock" - A valve for installation in water service pipes, located at or near the main.

1.23 "Service control valve box" - A box or metal housing which encloses, protects and provides access to the service control valve.

1.24 "Stop and waste valve" - A valve installed at the termination of the water supply service pipe of three fourths (3/4) inch and one (1) inch sizes, and at the beginning of the consumer's installation.

1.25 "System" shall mean Water System.

1.26 "Tap" - The drilling and threading of an opening in a main for insertion of a corporation stop.

1.27 "Township" shall mean the Township of Green Oak, Michigan, a general law Township, and any agent thereof.

1.28 "Township Board" shall mean the governing body of the Township of Green Oak.

1.29 "Water Connection" shall mean that part of the Water Distribution System connecting the water main to a point terminating at a meter pit or vault.

1.30 "Water Service Pipe" shall mean that pipe connecting the water main with the premises served. This includes the connection to the water main or the corporation cock, the shutoff valve, and the valve on the inlet side of the meter.

1.31 "Water Distribution System" shall mean the entire System (s) for distribution of potable water in the Township. The system also includes all lines connecting it to the water system operated by the Livingston Community Water Authority.

1.32 "Water Main" shall mean that part of the Water Distribution System located within easement lines or streets, and designed to supply more than one (1) water connection.

1.33" Water System" shall be understood to mean the complete facilities of the Township's Water Supply System including all wells, well houses, pumps, water storage facilities, and transmission lines, including all appurtenances thereto and including all extension and improvements thereto, which may hereafter be acquired. It shall also consist of all plants, works, instrumentalities, lines and properties now or hereafter existing, used or useful in obtaining of a water supply, its treatment, distribution, and all other necessary functions, whether such installation is owned outright or used under lease or otherwise, by the consumer. The system may be comprised of separate facilities located in separate water supply districts. The system also includes all lines connecting it to the water system operated by the Livingston Community Water Authority.

## **Section 2 PROVISIONS DEEMED INCORPORATED IN ALL CONTRACTS**

2.1 **CONTRACT FOR SERVICE.** All provisions and sections of this Ordinance about the Township Water System(s) and sale and use of water and/or amendments or additions which may be subsequently adopted, shall be considered a part of the contract with every person who is supplied with water through the water system of the Township, and every person by taking water shall be considered to express his or her consent to be bound thereby, and whenever any provision or section of this Ordinance is violated, water may be cut off from the building or place of violation at the discretion of the Township Board and shall not be turned on again except on correction of the violation and payment of the expenses of shutting off and turning on.

2.2 **HOLD HARMLESS CLAUSE.** The consumer shall indemnify, hold harmless and defend the Township against all claims, demands, costs or expenses for loss, damage or injury to persons or property in any manner, directly or indirectly, arising out of the transmission and use of water by the consumer from water service pipes installed by the consumer on the consumer's premises.

## **Section 3 ADMINISTRATION/MANAGEMENT**

**3.1 ESTABLISHMENT OF A PUBLIC UTILITY.** It is hereby determined to be desirable and necessary for the public health, safety and welfare of the Township that the Township's Water System be operated on a public utility rate basis.

**3.2 SUPERVISION AND CONTROL.** The operation and management of the System, shall be under the immediate supervision and control of the Township Board or its designee.

**3.3 RIGHTS.** The Township has the exclusive right to establish, maintain and collect rates and fees for water supply service from the water system. The Township Board may make such rules, orders or regulations as it deems advisable and necessary to assure the efficient management and operation of the System. The Township may employ or contract such person or persons in such capacity or capacities as it deems advisable to carry out the efficient management and operation of the system.

**3.4 OPERATING YEAR.** The System operation shall be based on an operating fiscal year commencing on January 1<sup>st</sup> and ending on the last day of December 31<sup>st</sup> next following.

**3.5 COMPLIANCE WITH STATE AND FEDERAL STANDARD AND REGULATIONS.** Standards and regulations established in this Ordinance or pursuant hereto are deemed to be the minimum standards consistent with the preservation of public health, safety and welfare and are necessary to fulfill the obligations of the Township concerning State and Federal law and the rules and regulations adopted pursuant thereto.

**3.6 ADDITIONAL REGULATIONS.** The Township Board may by resolution make additional rules and regulations concerning the Water System, connections thereto, meter installation and maintenance, hydrants and water mains and appurtenances thereto, which are not inconsistent herewith.

**3.7 RESTRICTING WATER USE.** The Township Board may regulate, limit or prohibit the use by a consumer of Township supplied water if it is necessary for the health, safety, and welfare of the public, including restricting the amount of water that would be available to a consumer because of water shortage emergencies. Such regulations may limit use of water by the consumer to the extent deemed necessary to insure an adequate water supply for essential needs and for fire fighting. Use of water for the irrigation of lawns and for other outside irrigations may be limited by restrictions as follows:

Lawn Sprinkling: Irrigation of lawns or other outside irrigation from the public water supply system is allowed on even numbered calendar days at all properties which have an even-numbered street address and is prohibited on odd numbered calendar days. Lawn sprinkling or other outside irrigation from the public water supply system is allowed on odd numbered calendar days at all properties which have an odd-numbered street address and is prohibited on even-numbered calendar days. All lawn sprinkling and other outside irrigation from the Township public water supply system shall be prohibited upon published notice if the Township Board shall determine that a public water shortage is likely to occur, or that the amount of pumpage of water from the Township public water supply system has reached such volume that, unless restricted, the public health and safety and welfare is likely to be endangered. The Township Board may, during such times of water shortage emergency, direct that other measures be taken or restrictions be observed by users of the public water supply system when deemed necessary to protect the health, safety and welfare and, when published, such measures and restrictions shall be followed by users of the public water supply system.

#### **Section 4 TOWNSHIP LIABILITY EXEMPTION**

4.1 **INTERRUPTIONS.** The Township, shall not be responsible for interruptions of service because of natural calamities, equipment failures, or actions of the system users. It shall be the responsibility of the consumer that all connected equipment remain in good working order. No claim or cause of action may be asserted against the Township by reason of the breaking away of any pipe, service cock, or for any other interruption of the water supply.

4.2 **EXPENSES.** The Township shall not be liable for any expenses incurred by a permittee in locating mains, services, curb stops, and water records.

#### **Section 5 ACCESS**

5.1 **INSPECTION.** The Director and other duly authorized representatives of the Township bearing proper credentials and identification shall be permitted to enter upon all properties served by the water system at reasonable times for the purpose of inspection, observation, measurement, sampling and testing to determine compliance with the provisions of this Ordinance. Any person who requests water supply and/or receives water from the Water System under this Ordinance shall be deemed to have consented to inspections pursuant to this section, including entrance upon such person's property at reasonable times to make inspections.

5.2 **METER READER ACCESS.** Any duly authorized agent or employee of the Township shall have access to the consumer's premises at all reasonable hours for the purpose of reading meters, inspections, doing repairs or installing or removing any or all Township owned apparatus used for providing service to the consumers.

## **Section 6 USE**

**6.1 CONSUMERS' USE OF THE WATER SYSTEM.** Any person owning property within a water supply district established by the Township and conforming to the standards, rules and regulations established in or under terms of this Ordinance shall be permitted to receive water from the water system provided necessary water supply lines are in existence and capacity to service is available and abutting the consumer's property.

**6.1.1 Required Connection.** Each new residential, commercial, or industrial premises, other than sheds, residential garages, and/or additions to existing structures, constructed after the effective date of this Ordinance and abutting the System or contained within a Township Water District within the Township, shall be required to immediately connect to the System.

**6.1.2 Turning on Water Service.** No person, other than an authorized employee or agent of the Township, shall turn on or turn off any water service at the curb stop. Water service shall not be turned on unless all charges, fees, etc. have been paid.

**6.1.3 Turning Off Service.** The Township reserves the right to terminate service to a consumer, after due notice has been given where payment for water supply has not been timely received, and/or for violation of this Ordinance or any rules and regulations adopted pursuant thereto. The township may shut off the water in any main to make repairs or extensions, or for any other necessary purpose at any time without notice to consumers.

**6.1.3.1 The consumer shall maintain all service pipes free from leaks at all times.** Whenever a leak appears in a consumer's installation, which allows water to escape without registering upon the meter, the Township shall give the consumer written notice thereof and the consumer shall immediately proceed to repair such service pipe. If such repairs have not been completed within 48 (forty-eight) hours after notice has been given, the Township may stop the service by shutting off the water at the curb stop or by excavating and closing the corporation stop. The costs incurred by the Township of excavating and shutting off such service shall be paid by the consumer or by the owner of the property before service is restored. If, in the determination of the Township, any leak on the consumer's installation is of such nature that it endangers public safety or constitutes a nuisance or a source of waste, the Township may shut off or stop such service until such leak is repaired.

**6.1.4 Change of Consumer.** When the premises are to be vacated or there is a change of owner, occupant or agent, prompt written notice shall be given to the Treasurers Office. The consumer may discontinue service by giving not less than 24 (twenty-four) hours written notice to the Treasurers Office during its regular office hours. If the premises is connected to the system operated by LCWA, such information shall be passed onto the billing department of the LCWA.

**6.1.5 Outside Service Connections.** Water main extensions and domestic water connections to premises outside of water districts are prohibited, except where approved by the Township Board.

**6.1.6 Water Extensions.** The total expense of extending water mains shall be borne by the benefited property owners in accordance with provisions of a contract or by special assessments levied by the Township in accordance with State law.

**6.1.7 Water Softeners.** Leave Blank

## **6.2 CONNECTION PERMITS REQUIRED; APPLICATIONS; DEPOSITS; CONTENTS.**

**6.2.1 Application.** Any person desiring to connect to the water system shall file a written application with the Township Clerk, pay the water connection fee established by resolution by the Township Board and all other charges, fees and costs as provided by this Ordinance, which include but are not limited to, commodities surcharges and benefit charges established by the Township Board. Further, the applicant shall pay any delinquent special assessment installments which are due and owing at the time of the application.

**6.2.2 Permit Required.** No person in the Township shall connect to the Water System unless the proposed connection has been approved by the Township or its designated representative. Such application shall be made on forms provided by the Township and shall contain the street name, house number, lot number, the name of the plumber or contractor, the names of the applicant and the owner, the size of the service pipe required by the consumer, and any other pertinent information which may be required by the Township. An application must be made and approval obtained from the Township at least twenty-four (24) hours before the time a tap is to be made.

**6.2.2.1 Builders.** Connection permits will be issued to Builders if the prospective lessee or owner consents in writing to the obtaining of such permit by the Builder.

**6.2.3 Installation.** Water connections shall be installed in accordance with the applicable building codes and regulations of this Ordinance and upon the payment of the required charges and fees.

**6.2.4 Meters.** All water furnished to structures through the Livingston Community Water Authority's public water supply shall be measured by a meter(s) installed, owned and controlled by the Livingston Community Water Authority. The water furnished to structures within the Saxony, Wilmore and Meadows subdivisions shall be measured by a master meter(s) installed owned and controlled by the Livingston Community Water Authority. The owner of the structure outside the Saxony, Wilmore and Meadows subdivisions may, upon application and paying such costs and fees as



determined by the Livingston Community Water Authority, have an additional meter installed for the separate metering of water used for lawn sprinkling or other use where the water used does not pass through the sanitary sewage disposal system. Duplex residences shall have separate meters and services installed for each dwelling unit upon payment of such costs and fees as determined from time to time by the Livingston Community Water Authority.

**6.2.5 Expense of Installation.** The expense of water pipe and meter installation shall be paid by the applicant.

### **6.3 USE OF ONE CONNECTION: LIMITATION.**

6.3.1 Unless written approval is granted by the Township, separate premises shall have separate curb stops, service pipe installation, and shall be separately metered.

6.3.2 Whenever water is to be supplied to more than one (1) consumer located in a single building and supplied through one (1) service, the property owner shall be responsible for the payment of water bills.

6.3.3 In no event shall a consumer extend service pipes or plumbing across any public way, or to an adjacent property in order to furnish service thereto, even though such adjacent property may be owned by the same consumer.

### **6.4 EXISTING PRIVATE WELLS.**

6.4.1 Construction of private wells in established water service districts is prohibited after the public water system is placed into service and water is provided to users within the established water service districts. The Township Board may designate areas within the service district unavailable for water service therefore allowing for the installation of new or replacement wells.

6.4.2 Private water wells that are located within a water supply district and are in operation prior in time to the effective date of this Ordinance may be abandoned by the property owner in accordance with procedures established by the Livingston County Health Department prior to connection to the Township Water System. Nothing in this Ordinance shall be construed to require the abandonment of water wells in operation within a water supply district prior to the effective date of this Ordinance, provided that, after the property is connected to the System, the private water well previously serving the property shall only be used for outside irrigation purposes. If the prior existing private water well is not used for outside irrigation, the private water well shall be abandoned by the property owner in accordance with procedures established by the Livingston County Health Department and the Michigan Department of Environmental Quality within thirty (30) days of connection to the System. Existing private wells may be repaired and maintained for irrigation wells in the established water service districts after the System is placed into service. New

wells may be installed for the sole purpose of outside irrigation provided there is no connection to the municipal water supply.

**Section 7** **SYSTEM PROHIBITIONS.** No person in the Township shall:

**7.1 DAMAGING WATER SYSTEM PROHIBITED.** Willfully, negligently or maliciously break, damage, destroy, uncover, deface, tamper with or alter, any structure, property, appurtenance, equipment or any other item which is part of the Water System.

**7.2 WATER METER, ETC.; REMOVAL PROHIBITED.** Remove any water meter,  
water pipe, other water equipment or tools.

**7.3 PREVENTION FROM MEASURING WATER PROHIBITED.** Prevent or circumvent a water meter from measuring water supplied by the water system.

**7.4 OBTAINING WATER FRAUDULENTLY PROHIBITED.**

7.4.1 Tampering with Water System equipment or stealing water service shall be grounds for discontinuance of water service. Theft of water shall include, but not be limited to the following:

7.4.1.1 Opening valves at the curb or meter that have been turned off by the Director or his or her designee;

7.4.1.2 Breaking, picking or damaging cut-off locks;

7.4.1.3 By-passing meters in any way;

7.4.1.4 Taking un-metered water from hydrants by anyone other than an authorized official of the Township or its designee, a recognized fire department; fire insurance company or utility for any purpose other than fire fighting, testing or flushing of hydrants;

7.4.1.5 Use of sprinkler system water service for any purpose other than fire protection;

7.4.1.6 Removing, disabling or adjusting meter registers;

7.4.1.7 Connecting to or intentionally damaging water lines, valves or other appurtenances for the purpose of stealing or damaging Water System equipment;

7.4.1.8 Moving the meter or extending service without permission of the Director or his or her designee;

7.4.1.9 Any other intentional act of defacement, destruction or vandalism to Water System property or act that affects Water System property;

7.4.1.10 Any intentional blockage or obstruction of Water System equipment.

7.4.2 A notice of violation may be mailed or otherwise delivered, and the consumer shall be ordered to immediately cease any unlawful practice, at the discretion of the Director or his designee if:

7.4.2.1 Evidence suggests the possibility of theft of water at the consumer's premises;

7.4.2.2 The violation does not constitute an immediate threat of safety or equipment integrity to the Water System.

7.4.3 No notice of violation will be mailed or delivered and consumer water service is subject to immediate shut-off, and the consumer will be subject to a violation payment as provided in Section 8 of this Ordinance as well as service call charges, labor and replacement parts as detailed by the Director or his or her designee, in any of the following situations:

7.4.3.1 In the opinion of the Director or his or her designee, theft of water is definitely evident on the consumer's premises;

7.4.3.2 When in the opinion of the Director or his or her designee a situation exists that may endanger public health;

7.4.4 If the Director or his or her designee determines theft of water has occurred, the Township reserves the right to adjust the consumer's current water bill and the consumer's water bills for the past twelve (12) months of usage. If the approximate amount of water that was stolen cannot be reasonably determined, the consumer's usage will be set at two to four times the consumer's metered usage for metered consumers or estimated usage for flat rate consumers, as set on a case by case basis by the Director or his or her designee according to the facts of each case.

7.4.5 Water service will not be restored until all payments for the following are received by the Township:

7.4.5.1 Adjusted payment for water service;

7.4.5.2 Violation payment;

7.4.5.3 All service call charges;

7.4.5.4 Labor;

7.4.5.5 Replacement parts;

7.4.5.6 Turn-on charge.

7.4.6 Water service will be reinstated only during regular working hours, Monday through Friday, except in the case of an emergency.

7.4.7 Discontinuance of water service by the Township shall not release the consumer from liability for payment for water service already received or from liability from payments that thereafter become due under the Township's water rates and fees.

7.4.8 The Township shall not be liable for any loss or damage resulting from the discontinuance of water service.

7.4.9 The consumer(s) whose name(s) appear(s) on the application for water service is (are) the consumer(s) responsible for payment of all charges. That consumer is also responsible for any rules or policy violations that occur regarding the water service to that property. Personal participation by the consumer in any such violation shall not be necessary to impose personal responsibility on the consumer.

7.4.10 In the event any consumer fails to pay any water rate, fee or violation payment, the consumer shall pay all costs of collection including court costs and reasonable attorney's fees incurred by the Township in collecting such sums.

7.4.11 The Township shall have the right to refuse to provide water service to an applicant or to any member of an applicant's household who is living at the same address whenever such person(s) is (are) delinquent on any payment to the Township or had his or her water service discontinued because of a violation of this Ordinance.

**7.5 RECORD KEEPING DURATION.** All records regarding theft of water shall be kept for a minimum of three years.

## **Section 8 ENFORCEMENT**

**8.1 PENALTIES.** Any person found to be violating any provision of this Ordinance shall be served with written notice stating the nature of the violation and provided a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. Violation of any provision of this Ordinance shall be a municipal civil infraction.

**8.2 VIOLATION.** A violation of this Ordinance is also declared to be a public nuisance and the Township may enforce same by injunction or other remedy, including the right to correct the violation and recover the cost of obtaining the necessary correction from the owner or person in charge of the premises.

## **Section 9 ESTABLISHMENT OF RATES AND FEES**

### **9.1 PURPOSE OF RATES AND FEES**

**9.1.1 Connection & Benefit Fees.** Fees for the installation and use of the Water System shall be established by resolution of the Township Board to recover the costs of construction of said system as necessary to preserve the same in good working order, operation and replacement of the System, and to provide for the payment of any debt service obligations of the Township as the same becomes due. Such fees shall be made in accordance with the provisions hereinafter set forth and shall be made against all premises which use the System. Fees shall be reviewed by the Township or LCWA at least annually. Any fees changes will be by Township Board resolution.

**9.1.2 Establishment of Rates.** The rates for water service are to be established by resolution of the Township Board for systems other than those hooked up to the system operated by LCWA and may be established separately from time to time as necessary to ensure sufficiency of revenues in meeting the expenses of the water system. Rates for water service for systems hooked up to LCWA are to be established by resolution of the LCWA Board and may be established separately from time to time as necessary to ensure sufficiency of revenues in meeting the expenses of the water system. The Township Board or LCWA Board may classify the users of water according to the quantities and types of water supplied, and charge such rates to users in each class as it may deem reasonable. Rates need not be uniform for separate water supply districts. Rates for LCWA shall be calculated on a cost of service basis in accordance with the method given in the water rate study

prepared by Tetra Tech in 2004. Rates shall be reviewed by the Township or LCWA at least annually. Any rate changes will be by Township or LCWA resolution.

9.1.3 Publication. Following approval by the Township Board or LCWA of the rates and fees to be charged for the water service under this Ordinance, the rate schedule shall be published. Said notice shall be published in a newspaper of general circulation in the Township within thirty (30) days following approval by the Township Board or LCWA Board.

## **9.2 TYPES OF WATER SUPPLY RATES AND FEES.**

9.2.1 Commodity Rate. All residential, commercial, and industrial water use, and other consumers connected to the System shall be measured by meter and the consumers shall be charged a commodity charge for water usage, except those un-metered premises included in the Saxony, Wilmore, Meadows and Centennial Farms Subdivisions, which premises shall be measured by one (1) or two (2) master meter(s) and the consumers shall be charged a commodity charge for water usage divided by the total number of un-metered consumers within the subdivisions. Should any un-metered consumers in these subdivisions become metered, they shall be charged a commodity charge for water usage based on their water meter readings. The sum of these individual water meter readings will be deducted from the master meter readings to determine the commodity charge for the remaining un-metered consumers.

9.2.2 Service Fee. Consumers of the Water System shall be charged a readiness to service charge. All consumers of the Water System, whether residential or nonresidential, shall be charged a flat rate based upon anticipated water supply and demand. Commercial and Industrial facilities with fire suppression systems shall be charged a flat rate depending upon the size of the fire service line.

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9.2.5 Connection Fee. The Township shall charge and the consumer shall pay, as a precondition to connecting to the water mains of the System, a connection fee. The connection fee shall include the cost of a meter and pressure reducing valve, if necessary, acquired by the Township and the cost of the cross-connection inspection. Said fee shall be paid at the time an application for permission to connect to the water mains of the System is requested.

9.2.6 Construction Fees. The property owner shall be responsible for the actual cost of construction of all lines from the water main to the premises to be served. The Township shall maintain ownership and maintenance responsibility from the main up to and including the curb stop.

9.2.7 Special Service Fees. The Township may charge its customers a fee for special services. The customers shall pay for the special services, for which a rate shall be established.

9.2.8 Turn On/Off Fees. The Township may establish a charge to the customer, and the customer shall pay the charge whenever the Township is requested to turn water services on or off; provided, however, that whenever the Township is requested to provide turn on or off service at times other than the regular business hours of the Township, the charge shall be determined on a time and material basis. The Turn Off fee shall be charged to a customer whose service has been disconnected because of nonpayment of charges or fees due the Township.

9.2.9 Benefit Fees. Those persons owning lands in direct proximity to a Township water main whose lands have not been subjected to a special assessment to pay for the construction of said main, and who make connection to said main shall pay a benefit fee for the privilege of each connection to said main in addition to all other fees above provided, which benefit fee shall be established from time to time by resolution of the Township Board. Such benefit fee shall be paid in cash or in installments, with interest and penalties, all as shall be established and provided from time to time by resolution of the Township Board.

## **Section 10 PAYMENT FOR USE OF THE SYSTEM.**

### **10.1 RESPONSIBILITY FOR PAYMENT**

10.1.1 The owner of the premises served by the water system shall be liable to the Township for any charges and fees authorized to be charged by this Ordinance.

10.1.2 When a single water service pipe serves two (2) or more consumer units, the owner of the premises, shall be responsible for payment of water used on the premises.

10.1.3 The owner of the premises, as well as any user of the water system at the premises, shall be responsible for reimbursing the Township for any and all administrative costs and fees incurred by the Township arising out of the use of "Miss Dig" services at the premises.

### **10.2 BILLING, COLLECTIONS AND CUSTOMERS' PAYMENT**

10.2.1 Meter Reading. Meters shall be read quarterly or as deemed necessary by the Township Board or LCWA Board.

10.2.2 Bills. The Township or LCWA shall render bills for water service and all other charges in connection therewith. Bill for water service shall be sent to consumers by first class mail.

10.2.3 Quarterly Bills. Quarterly water bills for users of the System shall be based upon the charges established by resolution of the Township Board or LCWA for the System.

10.2.4 Due Date of Charges. All bills shall be payable by the due date specified on the bills, and shall be paid at the Office of the Township or LCWA in person or by mail.

10.2.5 Collections. The Township or LCWA Treasurer shall collect all moneys due for water service and all other charges in connection with the water system.

10.2.6 Late Charges. If any late charges for the services of the water, which has been billed to a customer of the water system, are not paid on or before the due date specified on the bill, a delayed payment charge of ten percent (10%) of the amount of the bill shall be added thereto and collected therewith.

10.2.7 Unpaid Bills. If any bills for the service of the system shall remain unpaid after thirty (30) days following the due date specified on the bill therefore, the water supply for the lot, parcel of land, or premises affected may be cut off, and if cut off, shall not be turned on again except on payment in full of the delinquent charges therefore, and the fee charged for resumption of service. The Township or LCWA shall send a notice by registered certified mail to its customers of intent to terminate service. If the payment is not received, or satisfactory arrangements have not been made within seven (7) days after the shut off notice is sent to the consumer, the water service may be shut off. No water service that has been discontinued because of nonpayment shall be restored until all past due bills are paid or satisfactory arrangements for such payments are made.

10.2.8 Non Receipt of Bill. Failure of the consumer to receive any bill shall not relieve him/her of the liability for the charges incurred, and the consumer shall notify the Township Treasurer or LCWA Treasurer if a bill has not been received by the 15<sup>th</sup> day after the end of a billing period.

10.2.9 Charges to Become a Lien Upon Premises. The Township shall have, as security for the collection of water supply rates, assessments or fees due or to become due for the use and installation, repair, or maintenance to any house, building, or premises, a lien upon the building or premises, lot or lots, upon which the water system service was supplied. This lien shall become effective immediately upon the providing of the water service to the premises or property supplied.

10.2.9.1 The lien created by this Ordinance shall have priority over all other liens except taxes or special assessments.

10.2.9.2 Charges for water services which are under the provisions of Section 21, Act 94, Public Acts of Michigan, 1933, as amended, shall be made a lien on all premises served thereby. The charges for water furnished to any premises are hereby recognized to constitute such lien and whenever any such charge against any piece of



property or premise shall be delinquent for six (6) months, or more, that fact shall be certified on March 1<sup>st</sup> of each year to the tax assessing officer of the Township. Such charge shall be entered upon the next tax roll as a charge against such piece of property or premises and the charges shall be collected and the lien thereof enforced in the same manner as general Township taxes against such premises.

### **10.3 FUNDS COLLECTED**

10.3.1 In General. All funds collected by the Township or LCWA for the use of the System shall be received by the Township Treasurer or LCWA Treasurer and deposited in the Water Fund which is hereby established for this purpose. Moneys on deposit in the Water Fund where authorized by resolution of the Township Board or LCWA Board shall be expended for any lawful purpose related to the operation, maintenance, construction, acquisition or debt service due on account of construction, acquisition or equipping of the Water System.

10.3.2 Special Assessments. Except where special assessments are pledged to the retirement of bonds or other obligations issued by the Township, all special assessments collected for any part of the Water System shall be deposited in the Water Fund.

## **Section 11 METERS**

### **11.1 METERS REQUIRED; USE.**

11.1.1 All Livingston Community Water Authority water used on any premises must pass through a water meter. Any bypass between the meter and the main, for users or consumers required to have a meter, is prohibited.

11.1.2 All premises using Township or LCWA water shall pay for water at the rates specified by resolution.

11.1.3 Water meters, and, if needed, pressure reducing valves, shall be obtained from the Livingston Community Water Authority.

11.1.4 All water meters existing and installed before the adoption of this Ordinance and connected to the Water System shall be owned and maintained by the Township. Property owners shall replace defective meters with a meter obtained from the Township before connection to the Water System at the property owner's cost.

11.1.5 Each water meter shall be served by its own water connection and water service pipe, unless another system incorporating exterior valves to control water flow to each meter is approved by the Township.

## **11.2 WATER METERS; TYPE; SIZE DETERMINATION.**

11.2.1 Unless otherwise authorized by the Township or LCWA, all meters shall be Sensus SR II water meters with a TouchRead System and a RadioRead MXU.

11.2.2 All meters shall be under the control of the Township and shall be equipped with an instrument capable of being remotely connected and read away from the meter itself. Such instrument shall be installed on the exterior of the building as directed by the Township.

11.2.3 All new inside meters will require remote touch pads and a remote radio frequency transceiver unit as the Township or LCWA may specify.

11.2.4 Size. When requesting connection to the Water System, the consumer shall furnish information about the amount of contemplated water supply demand and the Township shall determine the size and type of meter to be installed.

11.2.4.1 For new single-family domestic use and consumption of water a 1 (one) inch meter shall be installed by the consumer.

11.2.4.2 For multiple dwelling the meter size shall be one (1) inch for two (2) to four (4) dwellings and one and one half (1-1/2) inch for five (5) to ten (10) dwellings.

11.2.4.3 Except as stated above, where an application is made for a meter larger than 1 (one) inch, the Township shall determine whether a meter of such size is required or authorized.

11.2.4.4 The use of meters larger than one and one half (1-1/2) inch will be permitted only upon specific written approval by the Township after due consideration of pertinent factors, such as the probable effect of their demand on the installed capacity of water mains and water supply and the means of sewage disposal.

11.2.4.5 For existing single-family domestic use and consumption of water, the department may make an exception and allow a 3/4 (three quarter) inch meter shall be installed by the consumer when it is determined that a 1 (one) inch meter is impractical.

## **11.3 WATER METERS; INSTALLATION; LOCATION REGULATIONS.**

11.3.1 Meters shall be installed in a readily accessible location and in a manner satisfactory to the Township.

11.3.2 A meter shall not be installed in a place where it cannot be readily reached by the meter reader.

11.3.3 All meters shall be installed horizontally in a dry, clean, sanitary location and in such places that small leaks and the spilling of water will do no damage.

11.3.4 All meters shall be in a suitable location to prevent the pipes and meters from freezing in cold weather.

11.3.5 The meter may be placed in a basement if a suitable and readily accessible location is provided in a dry basement sufficiently well heated to prevent freezing of the meter during the winter.

11.3.6 Where the premises contain no basement or cellar, the meter shall be installed in a location which shall be approved by the Director or Township's designee.

11.3.6.1 Where it is necessary to install the meter in a pit outside a building, such pit shall be built as directed by the Township.

11.3.6.2 With Director or Township designee approval, and when a sump pump or drain is provided, meters may be installed below grade line in a first floor meter pit.

11.3.6.3 All meter pits shall be built in accordance with the specifications furnished by the Township, with cover openings directly over the meters.

#### **11.4 FAILURE TO REGISTER; WATER USAGE, AMOUNT.**

11.4.1 Estimated Consumption. If any meter or metering system fails to register properly or if a meter is inaccessible for reading, the Department shall estimate consumption based upon former consumption.

11.4.2 Should a meter become defective or fail to register correctly, the quantity of water used shall be determined by the amount used during the corresponding period of the preceding year, or at the option of the Township, by averaging the amount for the period immediately preceding and subsequent to the period wherein the meter registered quantities of water usage.

#### **11.5 WATER METERS; TEST, INSPECTIONS.**

11.5.1 The accuracy of the meter at any premises will be tested by the Township upon written request of the owner and/or user who shall pay in advance a fee to cover the cost of the test. If on such test, the meter shall be found to register more than three percent (3%) more water than passes through it, another meter will be substituted therefor, and the fee will be refunded, and the water bill will be adjusted

from the immediately preceding and current billing periods, if appropriate in the judgement of the Township Board or LCWA Board.

#### **11.6 METER REPAIRS.**

11.6.1 The expense of maintaining meters will be borne by the Township.

#### **11.7 METERS, SEALS; TAMPERING, ETC., PROHIBITIONS.**

11.7.1. Meters shall be sealed by the Township and no person except an authorized employee of the Township shall break such seals. No unauthorized person shall change the location of, alter or interfere in any way with any meter.

### **Section 12 CONNECTION**

#### **12.1 WATER CONNECTIONS.**

12.1.1 Water Connections shall not be made unless the water main extends across the frontage of a lot to be served or across the frontage of the lot facing one (1) street in the case of a corner lot, except where approved by the Township Board.

#### **12.2 TAPPING MAINS; APPLICATIONS, REQUISITES.**

12.2.1 All taps shall be made after proper application for service, including the payment of charges and fees, by consumers or their authorized agents.

12.2.2 All connections to the System shall be made by a licensed contractor with the proper tools and equipment for performing connections to the System's mains. All taps and connections to the Water Main shall be installed at the main by the Township or under direct supervision of the Township or its designee.

12.2.3 Location. Before an owner, user, or contractor installs a water service pipe, he shall obtain from the Township the location for making the connection of the water service. The terminus of the water service pipe shall be located such that the water service pipe is installed to the water main in a straight line perpendicular to the main, and there are no obstruction such as driveways, manholes, trees, fire hydrants, or any other obstacles.

12.2.4 Single corporation stops, or pipe saddles, will be used to supply services or private mains.

12.2.4.1 Connection of services up to one and one-fourth (1-1/4) inch to the Township main shall be through a corporation stop with branch connections making an angle of forty-five (45) degrees to the water main service proper.

12.2.4.2 For one and one-half (1-1/2) inch and two (2) inch services, a saddle will be required.

12.2.4.3 On approved three (3) inch services, a four (4) inch connection at the main and four (4) inch valve shall be required. Approved services of four (4) inches and over shall have the same size connection as the service.

12.2.5 No permittee shall turn water off or on at the corporation or stop cock to any service pipe, except to make repairs and test work, after which he shall leave it off or on as he found it. No unauthorized person shall turn the water off or on at the corporation or stop cock.

12.2.6 Pipe from the main to the curb stop shall be a minimum grade Type K soft temper copper not less than 3/4 (three quarters) inch in diameter.

12.2.7 All holes or trenches dug in the public or private streets or roads shall be backfilled to a minimum of 95% (ninety-five percent) density by thoroughly tamping dry sand in layers not to exceed six (6) inches. All excavated material shall be entirely removed from the street or road. Excavated material that is wet, or otherwise unfit for backfill, shall be entirely removed and the backfilling done with suitable dry sand hauled in for that purpose.

12.2.7.1 Tunneling under streets or roads is prohibited, except by special permission of the Livingston County Road Commission and the Director or his or her designee. Open cuts shall be allowed in graveled streets with prior Road Commission approval.

12.2.7.2 Connections under hard surfaced paving shall be made only by boring or jetting with the prior approval of the Livingston County Road Commission and the Director or his or her designee.

### **12.3 SERVICE CONTROL VALVES AND CURB BOXES.**

12.3.1 Location. The customer will provide and install a shut off valve in the form of a service cock and curb box one (1) foot outside of the outer sidewalk line, or as near the road right-of-way line as may be convenient.

12.3.2 Curb Stops shall be Mueller B-25154; Ford Meter Box Co. B22-444M (for 1"), B22-666M (for 1.5") and B22-777M (for 2"); or approved by the Township or its designee. The curb box shall be installed at a point as near the road right-of-way line as practical and permissible.

12.3.3 Valves of non-rising stem gate valves or plug type valves may be used for the larger size connections. They shall be of approved standard manufacture, and housed in an approved type service or roadway valve box.

12.3.4 A cast iron extension curb box of an approved pattern shall be centered over the curb stop so that it is readily accessible for turning on and off by Township representatives. Curb stop boxes shall be Mueller H10300 or Ford Meter Box Co. EM2 Series, with a stationary rod to be included. The top of the stop box shall be so placed that it is never below the grade nor more than three (3) inches above grade and must be set on a brick or concrete foundation to prevent settlement.

12.3.5 No person is permitted to turn water on or off at the curb stop except for the testing of his or her work, in which event the curb stop shall be left in the same condition and position as he found it.

#### **12.4 WATER SERVICE PIPE; INSTALLATION, REQUIREMENTS.**

12.4.1 Water Service Connections shall be installed in accordance with State and local building regulations. Water Service Connections shall also be installed in compliance with the following specifications:

12.4.2 The connection of the Type K copper service pipe to the corporation stop shall be made by using an approved adapter fitting.

12.4.3 The connections and water service pipes shall be installed in a separate trench from the sewer service. The water service pipe may not be placed in the same trench with the building drain. The water service pipe and the building sewer must be ten (10) feet apart.

12.4.4 , All Water Service pipe on either private or public property shall be laid on a solid bottom not less than five and one-half (5-1/2) feet under ground or below the established grade.

12.4.5 The consumer shall continue the water service pipe connection from the valve at the road right-of-way line to the risers pipe and valve inside the building entirely at their own expense.

12.4.6 The service line from the main to the premises shall have an inside diameter no smaller than one (1) inch. All service pipes of two (2) inches or less, in diameter shall be of U.S. Government specification Type K copper tubing; other service pipe materials must be approved by AWWA. Those more than two (2) inches in diameters may be of ductile iron.

12.4.7 The water service pipe shall be laid to provide for earth settlement and for contraction and expansion through arching or bending to form an expansion loop in the form of a half "S" bend, and shall contain at least six (6) inches of excess material to provide for settlement and flexibility.

12.4.8 There shall be no joints between the curb stop and the meter unless commercial lengths are not available to allow for this provision (e.g., because of excessive building

setbacks). Only three (3) part flared unions shall be used for connections in copper pipes and all other types of flared unions are prohibited.

12.4.9 Plugged tees, or other accessible outlets between the meter and the main are prohibited. No connections or outlets shall be made on this line other than for fire fittings. It shall be unlawful for the customer, or any employee or agent of the customer, to make any connections on or use said sprinkler system for any purpose or purposes other than for fire protection, and any other use thereof shall constitute a violation of this Ordinance.

12.4.10 Any repairs to any water service pipe shall be made at the expense of the owner whose premises are served by the water service pipe.

### **12.5 COMPLETION TO WORK; INSPECTION REQUIRED.**

12.5.1 Upon completion of any new service pipe installation or repairs, it shall be the duty of the permittee to obtain approval by the Livingston County Plumbing Inspector before covering same.

12.5.2 The service trench shall not be covered, backfilled, or floored until the tap has been completed and the Livingston County Plumbing inspector has approved the installation. Clean earth or sand shall be carefully tamped every two.(2) feet above the top of the service line. This material shall be carefully and solidly rammed with proper tools. The use of clay for such purpose is prohibited.

12.5.3 If any building drainage or plumbing system or part thereof which is installed, altered or repaired is covered, it shall be uncovered for inspection after notice to the plumber, contractor, owner, or other person to uncover the work has been issued either by, the Township or the Livingston County Plumbing Inspector.

12.5.4 A separate gate valve or ball valve must be placed on the water service pipe just inside the building wall so that the water may be turned off and drained from the pipe in the event of accident or in order to make repairs. Such stop shall be equal in quality to the curb stop.

### **12.6 REPAIR.**

12.6.1 Water service pipe from the curb stop and all water service pipe from the property line to the meter shall be the responsibility of the owner of the premises.

12.6.2 Any plumber called upon to shut off water and drain pipes in any premise shall do so inside the building only.

12.6.3 Damage to pipes and meter. Persons taking water must keep their service pipe and their meter protected from frost and hot water at their own expense. Where the service pipe or meter is damaged by frost or hot water, the service pipe shall be

repaired by a licensed plumber, employed and paid by the customer. The water meter shall be repaired by the Township at the expense of the customer.

### **Section 13 HYDRANTS AND USE.**

**13.1 INSTALLATION OF HYDRANT.** All water mains on private property, six (6) inches or larger with fire hydrants, shall be installed at the property owner's expense and shall be conveyed to the Township by the property owner, and at his or her expense, the property owner shall provide a recorded easement sufficient for maintenance and repair of the same.

**13.2 OPENING OF HYDRANT.** No person shall open a Township owned fire hydrant without the express permission of the Director or his or her designee, excepting a municipal fire department, who may at any time open a fire hydrant for the purpose of obtaining water for extinguishment of fires.

### **Section 14 CROSS-CONNECTION RULES ADOPTED.**

**14.1 PURPOSE.** The purpose of this section is to protect the Water System from the possibility of contamination or pollution by isolating within the consumer's water system such contaminants or pollutants which could backflow into the Water System; and to provide for the monitoring and enforcement of a continuing program of backflow prevention which will prevent the contamination or pollution of the Water System. Cross connections shall be prohibited. It shall be unlawful for any person to make, permit to be made, or permit to exist, any cross connection on any lot or parcel of land owned or occupied by him. The Township and LCWA Board adopts by reference the Water supply Cross Connection rules of the Michigan Department of Public Health being R325.11401 to R325.11407 of the Michigan Administrative Code, as amended.

#### **14.2 RESPONSIBILITY.**

**14.2.1** The Director has the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this section and to prevent water from unapproved sources to enter the Water System. No water service connection to premises of a type specified in this section shall be installed or maintained unless the Water System is protected as required by this section.

**14.2.2** The consumer shall not allow any pollutants and contaminants to enter the Water System from the point of delivery from the Water System.. The consumer shall, at his or her own expense, install, operate, test and maintain approved backflow prevention assemblies as directed by the Director or his or her designee.



14.2.3 The Director is authorized to enforce the provisions of this section on all new buildings, additions with new services and changes of use of existing buildings.

14.3 **DEFINITIONS.** The following words and terms, when used in this article, shall have the following definitions, unless the context clearly indicates otherwise:

14.3.1 “Approved” means accepted by the Director as meeting an applicable specification stated or cited in this section, and as suitable for the proposed use.

14.3.2 “Auxiliary water supply” means any water supply on or available to the premises other than the Township’s Water System, including, but not limited to, water from another purveyor’s public potable water supply, treated effluent, wastewaters or industrial fluids.

14.3.3 “Backflow” means the reversal of the normal flow of water caused by either backpressure or backsiphonage.

14.3.4 “Backflow prevention assembly” means an assembly or means designed to prevent the reversal of the normal flow of water caused by either backpressure or backsiphonage.

14.3.4.1 “Air gap” means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of said vessel. An approved air gap shall be at least double the diameter of the supply pipe, measured vertically, above the overflow rim of the vessel, and in no case less than one inch.

14.3.4.2 “Reduced pressure principle assembly” means an assembly of two (2) independently acting approved check valves together with a hydraulically operating, mechanically independent differential pressure relief valve located between the check valves and, at the same time, below the first check valve. The unit shall include properly located test cocks and tightly closing shutoff valves at each end of the assembly. The entire assembly shall meet the design and performance specifications as determined by a recognized laboratory and approved by the Director or his or her designee for backflow prevention assemblies. To be approved, these assemblies must be readily accessible for in-line testing and maintenance.

14.3.4.3 “Double check valve assembly” means an assembly of two (2) independently operating approved check valves with tightly closing shutoff valves on each end of the check valves, plus properly located test cocks for the testing of each check valve. The entire assembly shall meet the design and performance specifications as determined by a recognized laboratory and approved by the Director or his or her designee for backflow prevention assemblies. To be approved these assemblies must be readily accessible for in-line testing and maintenance.

14.3.4.4 “Pressure vacuum breaker assembly” means an assembly containing an independently operating loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly will be equipped with properly located test cocks and tightly closing shutoff valves located at each end of the assembly.

14.3.4 “Backpressure” means the flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than the intended source.

14.3.5 “Backsiphonage” means the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than its intended source caused by the reduction of pressure in the potable water supply system.

14.3.6 “Contamination (high hazard)” means an impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual or potential hazard to the public health through poisoning or through the spread of disease.

14.3.7 “Cross-connection” means any physical connection or arrangement of piping or fixtures between two (2) otherwise separate piping systems, one of which contains potable water and the other nonpotable water or industrial fluids through which, or because of which, backflow may occur into the potable water system. This would include any temporary connections, such as swing connections, removable sections, four-way plug valves, spools, dummy section of pipe, swivel or change-over devices or sliding multiport tube.

14.3.8 “Pollution (low hazard)” means the presence of any foreign substance (organic, inorganic or biological) in the water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

14.3.9 “Tester certified” means a person who has completed a minimum of forty (40) hours of training and has passed a written and practical exam as part of a certification or re-certification process. Each person certified to make competent tests or to repair, overhaul and make reports on backflow prevention assemblies shall be conversant with the applicable laws, rules and regulations and have had experience in plumbing or pipe fitting or have other qualifications which are equivalent in the opinion of the Director or his or her designee.

14.3.10 “Water, nonpotable” means water which is not safe for human consumption.

14.3.11 “Water, potable” means any water which, according to standards recognized by the Township, is safe for human consumption.

14.3.12 “Water, service connection” means the terminal end of the service connection from the Water System at its point of delivery to the consumer’s water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Unprotected takeoffs from the service line will not be permitted upstream of any meter or any backflow prevention assembly located at the point of delivery to the consumer’s water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the Water System.

#### **14.4 APPROVAL.**

14.4.1 Backflow prevention assemblies required hereunder shall be approved by the Director or his or her designee and shall be installed by and at the expense of the consumer.

14.4.2 The Director or his or her designee may approve backflow assemblies when such assemblies have met the criteria set forth in this section and provided the manufacturer has a local parts and service center.

14.4.3 Assemblies shall be specified and located on the construction plans for all new buildings, additions with new services, and changes of use or occupancy of existing buildings where required by this section. Approval shall be obtained prior to issuance of the building permit.

#### **14.5 INSTALLATION OF BACKFLOW PREVENTION ASSEMBLIES.**

14.5.1 Assemblies shall be installed at the service connection or near the property line but in all cases before the first branch line leading off of the service line, and in an accessible location approved by the Director or his or her designee.

14.5.2 Backflow prevention assemblies shall have at least the same cross-sectional area as the water service and or meter. In those instances where a continuous water supply is necessary, two (2) sets of backflow prevention assemblies shall be installed in parallel, if the water supply cannot be temporarily interrupted for the testing of assemblies.

14.5.3 No bypass shall be installed around backflow prevention assemblies.

14.5.4 Double check valve assemblies shall be installed as prescribed in the standard details approved by the Director or his or her designee. Copies of the standard details shall be available from the Director or his or her designee. Double check valve assemblies may be installed below ground in a vault, if approved in writing, on a case-by-case basis by the Director or his or her designee.

14.5.5 Reduced pressure principle assemblies shall be installed as prescribed in the standard details approved by the Director or his or her designee. Copies of the standard details shall be available from the Director or his or her designee. Reduced pressure principle assemblies shall be installed above ground.

14.5.6 All pressure-type backflow prevention assemblies, which are designed for periodic field testing, shall be equipped with resilient seated shut-off valves on both the upstream and the downstream side of the assembly. In addition, resilient seated test cocks shall be provided and located so that test equipment may be connected to the assembly at such points that the pressure in each pressure zone may be detected and, in addition, a test cock shall be located upstream of the upstream shut-off valve as close as possible to the upstream shut-off valve.

**14.6 PREMISES OR SYSTEMS REQUIRING APPROVED BACKFLOW PREVENTION ASSEMBLIES.**

14.6.1 An approved backflow prevention assembly of the type specified in this section shall be the minimum installation of each service connection (whether from a fire hydrant, temporary regular or other water service connection) to the following type of premises or systems:

<i>Premises Requiring Approved Backflow Prevention Assemblies</i>	<u><i>Type of Assembly Required</i></u>				
	<i>Double Check</i>	<i>Reduced Pressure</i>	<i>Air Gap</i>	<i>Pressure Vacuum Breaker</i>	
Air craft and missile plants		X			
Animal clinics, animal grooming shops		X			
Automotive repair with steam and/or acid cleaning equipment or solvent facilities		X			
Auxiliary water systems (interconnected)		X			
Auxiliary water systems (noninterconnected)	X				
Beverage bottling plant		X			

<i>Premises Requiring Approved Backflow Prevention Assemblies</i>	<u><i>Type of Assembly Required</i></u>			
	<i>Double Check</i>	<i>Reduced Pressure</i>	<i>Air Gap</i>	<i>Pressure Vacuum Breaker</i>
Breweries		X		
Buildings greater than 3 stories or 34 feet in height (low hazard)	X			
Buildings greater than 3 stories or 34 feet in height (high hazard)		X		
Buildings with booster pumps or potable water storage (low hazard)	X			
Buildings with booster pumps or potable water storage (high hazard)		X		
Canneries, packinghouses and reduction plants		X		
Car wash facilities		X		
Central heating and air conditioning plants		X		
Chemical plants		X		
Chemically treated potable or nonpotable water systems		X		
Civil works (government-owned or operated facilities not open for inspection by the Director or his or her designee)		X		
Commercial laundries		X		
Dairies and cold storage plants	X			
Dye works		X		

<i>Premises Requiring Approved Backflow Prevention Assemblies</i>	<u><i>Type of Assembly Required</i></u>			
	<i>Double Check</i>	<i>Reduced Pressure</i>	<i>Air Gap</i>	<i>Pressure Vacuum Breaker</i>
Film processing labs		X		
Food processing		X		
High schools and colleges		X		
Holding tank disposal stations		X		
Hospitals and mortuaries		X		
Medical and dental buildings		X		
Sanitariums, rest and convalescent homes		X		
Irrigation systems with chemical injection		X		
Irrigation systems (premises having separate systems)		X		
Labs using contaminating materials		X		
Manufacturing, processing and fabricating plants using contaminating materials		X		
Mobile home parks		X		
Motion picture studios		X		
Oil and gas production facilities		X		
Plating plants		X		
Power plants		X		
Radioactive materials processing		X		

<i>Premises Requiring Approved Backflow Prevention Assemblies</i>	<u>Type of Assembly Required</u>			
	<i>Double Check</i>	<i>Reduced Pressure</i>	<i>Air Gap</i>	<i>Pressure Vacuum Breaker</i>
Restricted, classified or other closed facilities		X		
Rubber plants		X		
Sand and gravel plants		X		
Sewage and storm drainage facilities		X		
Shopping centers		X		
Water trucks, hydraulic sewer cleaning equipment		X	X	
Any premises where a cross-connection is maintained		X		

14.6.2 Fire protection systems will be required to have the following type of protection:

<i>Premises Requiring Approved Backflow Prevention Assemblies</i>	<u>Type of Assembly Required</u>			
	<i>Double Check</i>	<i>Reduced Pressure</i>	<i>Air Gap</i>	<i>Pressure Vacuum Breaker</i>
Direct connection from public water system (noncontaminating)	X			
Direct connection from public water system (contaminating)		X		
With pump and/or storage tank		X		
With auxiliary supply		X		

14.6.3 Any premises where water supplied by the Township is subject to deterioration in sanitary quality and there is the potential for its entry into the Water System shall be protected as required by the Director or his or her designee.

#### **14.7 APPROVED BACKFLOW PREVENTION ASSEMBLIES.**

14.7.1 The standard installation at each service connection to premises or each system requiring an approved backflow prevention assembly shall be a model and size approved by the Director or his or her designee.

14.7.2 The term "approved backflow prevention assembly" means an assembly approved by the Director or his or her designee and shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association—AWWA C506-78 most recent revised publication "Standards for Reduced Pressure Principle and Double Check Valve Backflow Prevention Assemblies", and have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research (FCCCHR) of the University of Southern California established by specifications of backflow prevention assemblies in the most current issue of the "Manual of Cross-Connection Control" or another third party certifying entity approved by the Director or his or her designee.

14.7.3 Backflow prevention assemblies which may be subject to backpressure or back siphonage that have been fully tested and have been granted a certificate of approval by FCCCHR may be listed on the current list of "Approved Backflow Prevention Assemblies", which will be made available upon written request to the Director.

#### **14.8 MAINTENANCE, TESTING AND RECORDS.**

14.8.1 The consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and provide the Director or his or her designee with copies of such records. The records shall be on forms approved by the Director or his or her designee and shall include the list of materials or replacement parts used.

14.8.2 Testing, maintenance and repairs to such assemblies shall be made at the consumer's expense by a certified backflow prevention assembly tester that is approved by the Director or his or her designee or any other agency designated by the Director to prescribe test methods or to certify or approve persons to conduct such tests. It shall be the duty of the consumer to see that these tests are made at the time of the initial installation and at least once a year, on the anniversary date of the initial inspection.

14.8.3 The consumer shall notify the Director fifteen (15) days in advance when the annual tests are to be done, so that the Director or his or her designee may witness the tests if so desired.



14.8.4 Following the installation of any assembly required by this section, it shall be tested by a certified tester. The test results shall be submitted to the Director with a request for inspection approval before the certificate of occupancy can be issued.

14.8.5 Following the repair, re-piping, overhaul or relocation of an assembly, the consumer shall have it inspected by the Director or his or her designee and tested by a certified tester.

**14.9 INSPECTIONS.** It shall be the duty of the Township to cause inspections to be made of all properties served by the Water system where a cross connection with the Water System is deemed probable. The frequency of inspections and re-inspections based upon potential health hazards involved shall be established by the Director or his or her designee. The cost of the inspection as determined by the Director or his or her designee shall be borne and paid by the property owner upon which the inspection takes place. All testable backflow prevention devices shall be tested initially upon installation to be sure that the device is working properly. Subsequent testing of devices shall be conducted at a time interval specified by the Director or his or her designee and in accordance with the Michigan Department of Environmental Quality requirements. Only individuals approved by the Director or his or her designee shall be qualified to perform such testing. That individual(s) shall certify the result of his/her testing.

The consumer's water system must be open for inspection at all reasonable times, and in all emergencies to the Director or his or her designee to determine whether cross-connections or other structural or sanitary hazards, including violations of these regulations, exist. When such a condition becomes known the Director or his or her designee may deny or immediately discontinue water service to the premises by providing a physical break in the water service line until the consumer has corrected the condition in conformance with this section.

**14.10 ENTRY RIGHTS.** The Director or his or her designee shall have the right to enter at any reasonable time any property served by a connection to the Water System, for the purposes of inspecting the piping system or systems thereof for cross connections. On request, the owner, lessees or occupants of any property so served shall furnish to the inspection agency any pertinent information regarding the piping system or systems on such property. The refusal of such information or refusal of access, when requested, shall be deemed prima facie evidence of the presence of cross connections

**14.11 EXISTING ASSEMBLIES AND CONSUMERS.**

14.11.1 If the Director or his or her designee determines that a consumer's backflow prevention assembly does not meet current standards, the consumer shall retrofit the assembly so that it will meet current standards.

14.11.2 Whenever it is determined by the Director or his or her designee that a water service poses an actual or potential threat to the physical properties or the potability of the Water System an assembly complying with this section shall be installed.

**14.12 DISCONTINUANCE OF WATER SERVICE.** Where contamination of any water main is an immediate possibility or where contamination of any main occurs and a cross-contamination is found, the Township may order the water to be immediately shut off without giving notice to the owner or occupant of land as prescribed herein. Water service to any premises may be discontinued by the Director or his or her designee if a backflow prevention assembly required by this section is not installed, tested and maintained, if it has been found that a backflow prevention assembly has been removed or bypassed, or if a cross-connection exists on the premises. The Township may also terminate a consumer's water service upon twenty (20) days' notice in writing in non-emergency.

**14.13 CORRECTION REQUIRED.** Water service to such property shall not be restored until such conditions or defects are corrected and the cross connection(s) have been eliminated in compliance with the provisions of this Ordinance.

**14.14 PROTECTION AND NOTIFICATION.** The potable water supply made available on the properties served by the Water System shall be protected from possible contamination as specified by this Ordinance and by the State and County Plumbing Code as adopted by Livingston County. Any water outlet which could be used for potable or domestic purposes and which is not supplied by the potable system must be labeled in a conspicuous manner as:

\*WATER UNSAFE FOR DRINKING\*

**14.15 SUPPLEMENTAL.** This Ordinance does not supersede any State of Michigan or Livingston County Plumbing Code or Ordinance, and it shall be supplementary to such other lawful regulations as may from time to time be adopted.

**14.16 PRECAUTIONARY MEASURES.** The Township and LCWA is authorized and directed to take such other precautionary measures as may be deemed necessary to eliminate any danger of contamination of the Water System. Water service to the land in question shall not be restored until either the cross-connection, has been eliminated, or evidence furnished and access permitted to enable the Township to determine that no cross-connection prohibited by this section exists.

**14.17 PENALTY.** Any violation of this Section shall be subject to the penalties included in Section 8 of this Ordinance.

## **Section 15 COORDINATION WITH DESIGNEE**

15.1 **DUTIES DELEGATED.** The Township may delegate administrative duties and functions, including but not limited to, inspections, meter readings and billing and maintenance.

**Section 16 SEVERABILITY.** If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Ordinance.

**Section 17 CONFLICTS OR REPEALER**

17.1 **CONFLICTS.** All Ordinances, or parts thereof, in conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed.

17.2 **REPEALER.** If part or parts of this Ordinance are for any reason held to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of remaining portion of this Ordinance.

**Section 18 PUBLICATION AND EFFECTIVE DATE**

The Township Clerk shall cause this Ordinance, or a summary of this Ordinance, to be published in the manner required by law within thirty (30) days after it has been duly adopted by the Township Board. The effective date shall be thirty (30) days after the date of publication.

**Section 19 ADOPTION**

This Ordinance was duly adopted by the Green Oak Township Board at its regular meeting called and held on the \_\_\_\_\_ day of \_\_\_\_\_, 2005, and was ordered given publication in the manner required by law. This Ordinance shall become effective thirty (30) days from the date of publication of the Ordinance or a summary thereof.

\_\_\_\_\_  
Michael H. Sedlak, Township Clerk

Adoption Date: \_\_\_\_\_

Publication Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

**CERTIFICATION**

I, Michael H. Sedlak, the Clerk for Green Oak Township, Livingston County, Michigan, do hereby certify that the foregoing is a true and complete copy of Ordinance No. \_\_\_\_\_, adopted by the Green Oak Township Board at a regular meeting held on \_\_\_\_\_, 2005. The following members of the Township Board were present at that meeting:

\_\_\_\_\_

The Ordinance was adopted by the Township Board with \_\_\_\_\_ members of the Board voting in favor and \_\_\_\_\_ members voting in opposition. Notice of adoption and publication of the Ordinance was published in the Livingston County Daily Press & Argus on \_\_\_\_\_. The Ordinance shall be effective thirty (30) days after publication pursuant to 1945 P.A. 245, as amended.

\_\_\_\_\_  
Michael H. Sedlak, Township Clerk