

LAKE CHARTER TOWNSHIP

WATER ORDINANCE

Ordinance No. 73 - 1 (Revised 5/99)

AN ORDINANCE PROVIDING FOR THE OPERATION, MANAGEMENT, MAINTENANCE, REPAIR AND CONTROL OF THE LAKE CHARTER TOWNSHIP WATER SUPPLY SYSTEM AND ANY EXTENSION THEREOF, FIXING RATES AND CHARGES APPLICABLE TO SAID SYSTEM AND PROVIDING FOR THE COLLECTION THEREOF, ESTABLISHING RULES AND REGULATIONS GOVERNING SAID SYSTEM AND ANY EXTENSION THEREOF, AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF.

WHEREAS, the Charter Township of Lake has undertaken to operate, manage, maintain and repair the "Lake Charter Township Water Supply System" and to establish and collect such rates and charges pertaining thereto as shall be necessary to provide revenues sufficient to maintain the system.

THEREFORE, THE CHARTER TOWNSHIP OF LAKE, BERRIEN COUNTY, MICHIGAN, HEREBY ORDAINS:

Section 1. Definitions.

When used in this ordinance, unless otherwise indicated by the context:

- 1.1** “Township” means the Charter Township of Lake, Berrien County, Michigan.
- 1.2** “Board” and “Township Board” means the Township Board of said Township.
- 1.3** “Lake Charter Township Water Supply System”, “Water System” and “System” means collectively all plants, work, properties and instrumentality’s, as the same shall from time to time exist, which are used or useful in connection with the obtaining of a water supply, the treatment of water, and/or the distribution of water by the Township.
- 1.4** “Water Department” means collectively those officials, employees and agents of the township invested by the Board with authority over the system.
- 1.5** “Main” and “Water Main” means those pipes other than supply pipes and service pipes, used for conveying or distributing water.
- 1.6** “Service Cock” or “Corporation Cock” means a valve tapped into a main for attaching the service stub.
- 1.7** “Service stub” means a pipe tapped into a main and extending thence to and including the curb cock or valve at the property line.
- 1.8** “Service pipe” means a pipe extending from the property line into premises supplied with water.
- 1.9** “Premises” means the particular property connected to the system and includes appurtenant land and improvements.

- 1.10** “Unit” means that measure of potential water consumption equal to the quantity ordinarily consumed by occupants of a residence by a single family of average size and the number of units assigned to any premises or type of premises by the Township Board is designed to represent the potential water consumption thereof as a multiple of the quantity ordinarily consumed by occupants of a residence by a single family of average size as determined from time to time by the Township Board.
- 1.11** “Critical Customers” means a service connection which cannot be turned off by state law, local ordinance, etc. because of life support systems, certain industrial processes, etc. such as nursing homes and nuclear plants.
- 1.12** “Spaghetti line” means a service connection through which water may pass from one property to another and shall be intended to be temporary.
- 1.13** “Cross Connection” means a connection or arrangement of piping or appurtenances through which a backflow could occur. A “backflow” means water from a private system, waste or other contaminants entering a public water system due to a reversal of flow.

Section 2. Organization and Management.

- 2.1** In pursuance of and within the limits of applicable laws the operation, management, maintenance and repair of the system, including collection and disposition of the revenues thereof, shall be under the immediate supervision and control of the Superintendent of the Water System, a qualified non-elective official, who shall be appointed by the Township Board, and shall be subject at all times to the supervisory direction and control of the Township Supervisor. The Township Board shall have ultimate responsibility for the system and for enforcement of this ordinance and any additional rules and regulations adopted with respect to the system.
- 2.2** All officers, employees and agents of the Township Board, insofar as their functions pertain to the system, shall be held strictly accountable for performance of the powers and duties delegated to them, and shall not vary or exceed the authority conferred upon them.

Section 3. Extension of Mains.

- 3.1** Extension of or changes in water mains may be initiated by the Township Board or by petition from property owners or legal agents thereof. Petitions for the construction of new mains shall be addressed to the Township Board. The Township Board may refuse to grant, or may grant the same, and may prescribe the terms and conditions upon which the petition will be granted and may require the written acceptance of such terms and conditions of the petitioners. If the petition is granted, the Township Board will proceed as promptly as practical with the proposed work under the terms and conditions named. The said work will be done at the expense of the property owners unless otherwise stipulated, and any and all extensions shall be subject to the provisions of this ordinance.
- 3.2** The water mains of said system are under the exclusive control of the Township Board, and all persons other than agents and employees of the Board, are forbidden to disturb, tap, change, obstruct access to, or interfere with them in any way.

- 3.3** Any persons, firms or corporations installing mains at their own expense shall first submit complete plans and specifications, prepared by a Registered Civil Engineer, for such work, to the Water Superintendent for review. After the Water Superintendent has reviewed the plans and specifications, they are then brought to the Township Board for final approval, at which time, the Township Board shall determine any further conditions for such installation.
- 3.4** If any persons, firms or corporations install any mains that do not conform to Township specifications, the Township retains the right to refuse the assumption of responsibility and maintenance of the mains in question.

Section 4. Service Pipes and Supply Pipe Connections.

- 4.1** Before any connection shall be made to any water main, application for same shall be made in writing to the Water Department by the owner on the premises to be served, or by his or her authorized agent, and a tapping permit secured. Such applications shall be made on forms provided by the Water Department. The owner, user, and/or applicant for a water tapping permit by such application impliedly agrees to abide by all rules and regulations of the Water Department in all respects, but more especially with those regarding the responsibility for the payment of water and/or sewer billings.
- 4.2** All supply and service pipes from the main to the meter pit shall be Type "K" Copper, Schedule 80 PVC or black polyethylene that meets AWWA standards with 150 PSI minimum, of size and quality as approved by the Water Department. All fittings and connections, underground, shall be approved by the Water Department.
- 4.3** Water shall be taken and used only through water service pipes under the supervision of the Department and no connection through which water may pass from one property or premises to another shall be permitted even though the ownership of both properties or premises may be the same.
- 4.4** No spaghetti lines or temporary service connections shall be permitted to exist along side of an existing main.
- 4.5** Upon the installation of water main in an area where no previous main existed, all existing spaghetti lines and service connections of disproportionate length shall be reattached to the new main at no charge to the customer.
- 4.6** Excessive or unnecessary use or waste of water, whether caused by carelessness or by defective or leaky plumbing or fixtures, is strictly prohibited. For disregard of, or repeated violation of this requirement, the water may be turned off by the Water Department.
- 4.7** Service pipes beyond the meter pit or property line shall be the responsibility of a licensed plumber, or a homeowner exercising his constitutional privilege as provided in Section 14 of the State Plumbing Code, and all the fixtures and attachments put in on the premises in connection therewith, must conform to character, design and quality to the laws of the State of Michigan and the State Plumbing Code, and their subsequent updates, as adopted by the Lake Township Board, September 19, 1968.
- 4.8** All service pipes must be laid with a minimum of five (5) feet of cover, said lines to be inspected before backfill by an inspector from the Township. Water and sewer lines should not be in the same trench. No new connection will be made until a tap application is made and paid.

4.9 A separate gate valve the same size as the meter connections shall be placed on the service pipe on both sides of the meter for meters not in the standard meter pit. Such valves shall be equal in quality to the service cock.

4.10 New services of less than one-inch diameter will not be permitted. Supply pipes of larger size shall be determined by the Water Department.

4.11 The charges for installation of the service stub shall be as follows and shall be paid when application for service is made.

<u>Tap, Meter Size</u>	<u>Resident Cost</u>	<u>Non-Resident Cost</u>
1" Tap, 3/4" Meter	\$1585.00	\$2377.00
1" Tap, 1" Meter	\$1660.00	\$2490.00
2" Tap, 2" Meter	\$2800.00	\$4200.00

Where the service stub exceeds 60 feet in length, additional charges shall be made for time and material.

For larger sizes than listed above, the charge shall be the actual cost of installation plus 15% thereof. Upon receipt of the application of service requiring larger sizes, the Water Department will make or cause to be made an inspection of the premises and, unless service is rejected for cause, the applicant will be required to deposit with the Township an amount which, in the judgment of the Township is sufficient to cover the charge thereof. The Water Department will then make the installation and will keep or cause to be kept a detailed record of the costs including machine rental, labor and materials, and will add thereto the 15% surcharge to cover the administrative costs. If the deposit exceeds such total charge, the excess will be refunded, but if the total charge exceeds the deposit, the balance shall be paid by the applicant within 30 days of notification.

Larger sizes must also pass pressure and bacteriological testing before the water is turned on for use.

4.12 At the time application is made for a water service connection to a building under construction, the applicant must pay a flat rate for water usage as determined by the Water Department. Said fee for construction water shall entitle the applicant to water for construction purposes for a period of not more than three months. Where water is provided, without a meter, for construction of a building, any wasting of water, whether caused by carelessness or by defective fixtures is strictly prohibited. For disregard of, or repeated violation of this requirement, the water may be turned off by the Water Department. The water service shall not be turned on again until an agreement is reached between the parties involved.

4.13 No service stub and/or meter pit shall be installed when the service pipe is in line with a driveway, tree, fire hydrant, catch basin or other obstruction.

4.14 All service stubs from the main to the lot line shall be put in only by properly authorized employees of the Water Department. Before receiving a permit for a service connection, there must be paid such sum as required, to cover the expense of furnishing and installing the service stub, curb stop, pit and meter.

4.15 The water service stub, from the main to the property line, shall be maintained by the Department, but this clause shall not apply to old services installed by private parties. The service pipe from the property line to the premises shall be considered private

plumbing and be maintained by the owner of the premises. Failure to keep service pipe in good repair will result in discontinuance of service.

4.16 No person shall interfere in any way with the service stub installed by the Water Department. No person is permitted to turn water on or off at the curb stop or meter pit except for the purpose of testing their work, in which case the curb stop shall be let in the same condition and position as they found it.

4.17 All township water used on any premises where a meter is installed must pass through the meter. No bypassing of the meter will be permitted except as provided in Section 7.4.

4.18 Chlorination corporation cocks may not be used for service stubs.

Section 5. Use Of Water.

5.1 No steam boiler shall be directly connected to the water service pipe. The owner shall provide a tank of sufficient capacity to afford a supply for at least ten (10) hours, into which the service pipe shall discharge.

5.2 No person shall take or use water from premises other than his own, or of which he has possession.

5.3 Where one ownership of property is occupied by two or more distinct families, or where a business building is occupied by two or more firms or persons, a single charge for water will be made against the owners of the property, for the whole; provided, however, that a building or buildings under one ownership consisting of several premises may be served by more than one water service and meter upon approval of the Water Department. In multiple meter installations, no master meter will be allowed. When more than one meter is served by one water service, all the meters served by the service must operate from a manifold type arrangement. Failure of one unit in a manifold arrangement to pay for water received will result in a discontinuance of water to the meter.

5.4 Where a building, originally built as a single building or premises and fitted with one service pipe, but capable of being divided by sale or otherwise, has been or may be hereafter subdivided and each subdivision shall be separately owned, the separate division or divisions so made must be connected to the main by separate service pipes within thirty (30) days after such division.

5.5 Where the water has been turned off by the authorized agent of the Township Board for any reason, only authorized personnel shall turn it on again. When this rule is violated the water may be turned off at the corporation cock, in which case the owner or occupant shall, before it is again turned on, pay in advance the charges made by the Board for turning the water off and turning it on again.

5.6 No person or persons shall obstruct or interfere in any way with any curb stop, valve or fixture connected with the system by placing in, or about it, building materials, rubbish, soil, shrubbery, flowers or other hindrances to easy and free access thereto.

5.7 All cross connections, between any type of water supply and municipal water supply are strictly prohibited. In the event a cross connection is discovered the water will be turned off at the curb stop until the cross connection is severed. No direct connection of any type to a sewer line shall be allowed.

- 5.8** Only approved water conserving type air conditioning units will be allowed. An approved water conserving type shall be one:
- a. Which is equipped with cooling tower, atmospheric condenser, spray pond, or other equipment which shall directly or indirectly cool refrigerant, and,
 - b. Which can use water from the Lake Township Water System only for makeupwater to replace water lost by evaporation or by flushing of the equipment, and
 - c. Which uses an average of less than 12 gallons of water from the Lake Township Water System per hour per ton of cooling capacity when the unit is operating, and
 - d. Which has no piping connection to allow operation of the air conditioning unit by direct use of water from the Lake Township Water System either in conjunction with or in place of such cooling tower, atmospheric condenser, spray pond, or other recirculating and heat-exchanging equipment.

5.9 The Township has included the adoption of the State Cross Connection Control Program with their adoption of the State Plumbing Code (see Section 4.7) and by reference to the Water Supply Cross Connection Rules of the Michigan Department of Environmental Quality being R 325.431 to R 325.440 of the Michigan Administrative Code.

Section 6. Fire Hydrants.

- 6.1** Fire hydrants are provided for the use of the Water Department and Fire Department of the Township or by such persons as may be specifically authorized by the Water Department.
- 6.2** No person, firm or corporation shall open or cause to be opened any fire hydrant without first securing permission from the Water Department Office. A fee of fifty dollars (\$50.00) will be required and a hydrant meter will be temporarily installed. Such person, firm or corporation must report to the Water Department when such use is terminated, at which time a hydrant inspection will be made and the cost of the water used shall be added to the fee. An inspection charge of \$30.00 and the cost of repairing the hydrant shall be added to the fee if there are any damages. Unauthorized use of any fire hydrant of the township is prohibited and the unauthorized user shall pay the township a \$50.00 use fee, \$30.00 inspection fee and any damages associated with the repair, replacement or maintenance of the system, or part(s) thereof, deemed necessary by the water superintendent.
- 6.3** The Township Water Department must approve the type, size of openings, and types of nozzle thread on all hydrants installed on private property serviced by Township water.
- 6.4** No person, firm or corporation shall in any manner obstruct or prevent free access to, or place or store temporarily or otherwise any object, material, snow, debris, automobile, or structure of any kind within a distance of twenty (20) feet of any hydrant. Any such obstruction when discovered may be removed at once by the Water Department at the expense of the person, firm or corporation responsible for the obstruction.

6.5 Hydrants are located within the road right of way or easement and any person, firm or corporation desiring to have a hydrant moved to another location shall bear the complete cost of moving said hydrant.

6.6 Where pipes are provided for fire protection in any premises or where hose connections for fire apparatus are provided on any pipe, each connection or opening on said pipes shall have not less than twenty-five feet of firehose constantly attached thereto, and no water shall be taken or used through such openings or hose for any purpose other than for extinguishing fires, except for the purpose of testing said fire equipment. In such case the test must be conducted under a special permit and under the supervision of the Water Department.

6.7 Premises to or for which a separate unmetered fire line connection is provided for sprinkler or hydrant service shall pay therefor a quarterly charge as follows:

For 4" service connection, \$ 50.00

For 6" service connection, \$ 85.00

For 8" service connection, \$100.00

No free water shall be supplied to any person, business or governmental agency.

6.8 The Township shall pay for all water used by it at the established rate and may provide for fire hydrant rental to be paid from the general fund or assessed against benefiting property within the district. Such rental shall be payable in equal quarterly installments.

Section 7. Water Meters.

7.1 All service connections except separate fire connections shall be metered and shall pay for water at the rate established by the Township Board. In no case will water be supplied, except for temporary use with Water Department approval, at other than the established water rate.

7.2 The service stub and meter, installation charge for which provision is made in Section 4.11, shall include the cost of the water meter furnished by the Water Department and the installation thereof, but such meter shall remain the property of the Department and will at all times remain under its control. The meter couplings or flanges will be furnished by the Department. The maintenance of the meter will be the obligation of the Department, provided, that where replacements, repairs or adjustments of the meter are made necessary by the act, neglect or carelessness of the owner or occupant of any premises, the expense to the department caused thereby may be charged against and collected from the owner or occupant of the premises.

7.3 The Township may elect to install meters in pits or in buildings with outside readers and increase charges specified in Section 4.11 hereof to cover the additional cost. All meters shall be set horizontally in dry, clean, sanitary places, perfectly accessible, no less than 12" from floor level or more than 24" from floor level, with a minimum of 6" from any wall, 12" from top for reading purposes to immovable object, with a gate valve on both sides of the meter, and where a small leak or the spilling of water will do no damage. No meters shall be installed in crawl spaces or similar confined spaces.

- 7.4** By-passes are required on all 6" and larger meter installations. By-passes will not be allowed on smaller meters except for critical customers as determined by state and local statutes.
- 7.5** All services 1" or larger must have, between the meter and outlet, a valve to be used for testing the water meter without its removal. The size of the side opening of this tee shall be 1" for 1" service pipes, 2" for all service pipes up to and including 4", 3" for all larger service pipes. The side opening of such tee shall be plugged and sealed.
- 7.6** The owner of any premises where a meter is installed shall be held responsible for its care and protection from freezing or damage by hot water and from injury or interference by any person or persons.
- 7.7** If a meter fails to function or register, the consumer will be charged at the average quarterly consumption, as shown by the meter when in order. The accuracy of any meter installed in any premises will be tested by the Water Department upon request of the customer, who shall pay in advance a fee of thirty (\$30.00) dollars to cover the cost of the test. If, on such test, the meter shall be found to register over five per cent more water than actually passes through it, another meter will be installed and the fee of \$30.00 will be refunded to the customer, and the water bill may be adjusted as hereinafter provided.
- 7.8** All persons are forbidden to interfere with or move a water meter from any service connection without first receiving permission from the Water Department. No person shall remove or break a seal on meters or by-pass valves.

Section 8. Inspection and Inspectors.

- 8.1** Inspectors, foremen and employees of the Township Board whose duty it may be to enter upon private premises to make inspection and examination of the pipes, fixtures or attachments used in connection with the water supply, will be provided with a badge or such other credentials as the Board may deem proper to identify them as authorized agents of the department. No inspector, foreman, or other employee of the Board shall be entitled to enter upon any private premises, unless he carries and exhibits such badge or credentials.
- 8.2** Any officer, inspector, foreman, or other authorized employee of the Township Board shall, upon the presentation of the badge or other credentials provided for in the next preceding section, have free access at all reasonable hours to any premises supplied with water for the purpose of making any inspection thereof, including the examination of the entire water supply and plumbing system upon said premises. No person shall refuse to admit any authorized inspector and employee of the Board for any such purpose. In case any authorized employee be refused admittance to any premises, or being admitted shall be hindered or prevented in making such examination, the Township Board may turn off the water from said premises after giving twenty-four hours notice to the owner or occupant of said premises.
- 8.3** No person not an authorized officer or employee of the Township Board shall have or wear or exhibit any badge or credential of the Board. It shall be the duty of each and every officer and employee of the Board upon resignation or dismissal forthwith, to surrender and deliver to the Board at its office; all badges and credentials of the Township Board.

Section 9. Water Consumption Rates.

9.1 A minimum quarterly water consumption charge shall be made for water furnished to each premises connected to the system.

- (a) The minimum quarterly charge shall be computed on the basis of meter size as set forth below, which charge shall permit quarterly usage of the specified quantity of water without further charge, to-wit:

<u>Meter Size</u>	<u>Min.Chg. Res.</u>	<u>Min. Chg. Non-Res.</u>	<u>Permitted Gallons</u>
5/8", 3/4"	10.00	15.00	10,000
1"	15.00	22.50	15,000
1 1/2"	33.33	50.00	33,333
2"	50.00	75.00	50,000
3"	83.33	125.00	83,333
4"	125.00	187.50	125,000
6"	166.67	250.00	166,666
8"	250.00	375.00	250,000

- (b) In cases of multiple dwellings or multiple commercial premises served by only one service line and meter, such minimum quarterly charge shall be based on meter size as shown in 9.1 (a) above for each such separate residential or commercial occupancy of the premises.

9.2 Should more water be consumed by any premises in any quarter than the quantity permitted for the minimum charge as specified above, then an additional water consumption charge shall be made for all water consumed in excess of those specified quantities. That charge shall be \$1.00 per thousand gallons of water used for Township Residents and \$1.50 per thousand gallons for Non-Residents. A separate rate structure shall be enacted for water line extensions outside Lake Charter Township. Out of Township bulk customers shall be charged \$1.50 per thousand gallons.

9.3 The water consumption rates set forth in this section shall become effective as to each premises upon its connection to the system.

Section 10. Debt Service Charge.

(None)

Section 11. Availability or Frontage Charges.

11.1 Is deleted

11.2 Is deleted

11.3 Each premises upon which a dwelling or other building is constructed, after the effective date of this ordinance, shall connect to the Township Water Supply System and pay service stub charges as provided for in Section 4.11.

11.4 Is deleted

- 11.5** Premises now connected to water lines which are to be taken over by the Lake Township Water System shall pay a charge equal to the service stub charge specified in Section 4.11 which will include the cost of an approved meter. If the premises has an acceptable meter, the charge may be reduced to \$100.00.
- 11.6** Existing water lines which do not meet Township standards may be replaced before water is delivered to the present users and the cost charged against the benefiting property.

Section 12. Collection of Rates and Charges.

- 12.1** Rates and charges shall be billed and collected quarterly or oftener as determined by resolution of the Township Board. Failure to receive a bill shall not excuse failure to pay the bill when due. Bills shall be due and payable, without discount, at such times as the Township Board shall determine, but not more than 20 days after rendered, and such due date shall be indicated on the face of each bill. If any bill is not paid when due, then a penalty of 10% shall be added thereto. If such bill is not paid within 30 days after due, a shut-off notice shall be sent to the customer, and if the bill is not paid within the time stated in the notice (which shall be not more than an additional 30 days), then all water service to the premises shall be discontinued. An additional penalty of Twenty-five (\$25.00) Dollars shall then be charged and shall be paid together with all unpaid charges before service shall be restored.
- 12.2** Service stub installation charges, availability or frontage charges and trunkage connection charges shall be the obligation of the owner of the premises served. Consumption charges shall be the obligation of both the owner and the occupant of the premises. All such installation, availability, trunkage and consumption charges may be collected by personal action against any person liable therefore and shall, in addition, be a lien upon the premises served. Any charges which, on September 1 of each year, have been delinquent for 90 days or more shall be certified to the next Township tax roll as provided in Act 188 of 1954, together with a penalty of 6% on such delinquent amount, against the premises served and shall be collected and said lien enforced in the same manner as provided in respect to Township taxes assessed on said roll.

Section 13. General Provisions.

- 13.1** Should it become necessary to shut off the water from any section of the system because of accidents or for the purpose of making repairs or in case of construction, the Township Water System will endeavor to give timely notice to the consumers affected thereby, and will, so far as practical, use its best efforts to prevent inconvenience and damage arising from any such causes, but failure to give such notice will not render the Township responsible or liable for damages that may result therefrom, or from any other cause.
- 13.2** Whenever notice is required to be given hereunder, the same may be given, either by personal service of a notice in writing to the person, firm or corporation to be notified; or by sending an employee of the Water System to the premises with a written or printed notice, which shall be served on the person, firm, or corporation to be notified or in case it is impossible to make such service at that time, the same may be posted in some conspicuous place on the premises; or by enclosing a copy thereof in an envelope with postage prepaid, plainly addressed to the person, firm or corporation to be notified, at the post office or residence address of such person, firm or corporation,

as the same appears on the books of the Water System, and depositing the same in any United States Post Office; such notice so given shall be conclusively deemed to have been given at the time of such depositing.

13.3 If any one or more provisions of this ordinance shall ever be held by an Court of competent jurisdiction to be invalid or unenforceable for any reason, the remaining provisions hereof shall nevertheless be continued in full force and effect, it being expressly recited and declared that such remaining provisions would have been enacted despite the invalidity of such provision or provisions so held to be invalid.

13.4 Any person, firm or corporation violating any of the provisions of this ordinance, upon conviction thereof shall be fined a sum of not less than Thirty (\$30) Dollars, and not exceeding One Hundred (\$100) Dollars, plus costs, and in the imposition of such fine and costs, the Court may make a further sentence that in default of the payment of the fine and costs imposed the offender be confined in the County Jail of BERRIEN County for any period not exceeding ninety (90) days, or both such fine and imprisonment in the discretion of the Court.

13.5 This ordinance shall be published by insertion of the same in some newspaper having general circulation within said Township once within one week from the date of passage and shall take effect on its publication. An affidavit setting forth the fact and manner of such publication shall be filed with and made a part of the record of the Township Clerk.

13.6 Any and all ordinances and resolutions heretofore adopted, inconsistent herewith, are hereby repealed to the extent that the provisions thereof are inconsistent with the provisions hereof.

Passed this 21st day of June, 1999.

Ayes: 7

Nays: 0

BY ORDER OF THE LAKE CHARTER TOWNSHIP BOARD

STATE OF MICHIGAN

COUNTY OF BERRIEN

I, the undersigned, Township Clerk of the Charter Township of Lake, Berrien County, Michigan, do hereby certify that Ordinance No. 73-1 (Revised 5/99), adopted by the Township Board of said Township on June 21, 1999 was recorded in full in the minutes of the meeting of said Board on said date and was signed by the Supervisor and the Township Clerk.

Dated: 6-23-99


Gloria A. Payne, Clerk

LAKE CHARTER TOWNSHIP

WATER SYSTEM REQUIREMENTS

Section 1. General.

All construction shall conform to the latest specifications of the Michigan Department of Energy, Great Lakes and Energy (EGLE) as published in "Suggested Practice for Waterworks Design, Construction Design, Construction Operation" in the latest publication, including any current revisions or addendum's. References to specification designations by the American Water Works Association (AWWA), or the American National Standards Institute (ANSI), shall be to their most recent publication.

Section 2. Watermains.

1. **Sizing:** Mains shall be sized to provide 1000 gpm at 20 psig at all fire hydrants.
2. **Material:** Ductile iron pipe, cement lined, class 52, conforming to AWWA C150 and AWWA *Ci.04* with push-on joints conforming to AWWA C111 and C600.
3. **Installation:** Minimum depth of cover shall be five feet; brass wedges shall be installed at all pipe joints, two each 180 degrees apart on pipe sizes two inch thru 12-inch and two pairs of two each on pipe sizes greater than 12-inch.
4. **Testing:** Pressure testing shall be done at 150 psi for one hour with the allowable leakage determined by the following formula:

$$L = \frac{NDIP}{7400}$$

L = Allowable leakage in gallons per hour

N = Number of joints (based on 18 foot lengths)

D = Nominal diameter of pipe in inches

P = Average test pressure = 150 psig

Disinfection of the main shall be completed per NIDPH requirements; chlorination shall provide a chlorine residual of not less than .25 mg/l after standing 24 hours; after flushing, water samples shall show satisfactory results on two successive days; the number of sampling points shall be as directed by the Township Water Superintendent; bacteriological analysis shall be performed at the Township Water Filtration Plant laboratory.

Section 3. Gate Valves

1. All gate valves shall conform to AWWA CS 09 with resilient wedge, be connected with mechanical joints, and be of Waterous Series 500 NRS manufacture.
2. Vaults: Valves shall be placed in precast reinforced concrete vaults as required which shall be 48-inch I.D. through 12-inch diameter main and 60- inch I.D. for mains 16-inch and larger. A cast iron frame with Type A cover conforming to East Jordan Iron Works No. 1051-3 shall be used with the words "LAKE CHARTER TOWNSHIP" and "WATER" imprinted on the cover.

Section 4. Fire Hydrants

1. Hydrants shall conform to AWWA C502, "dry barrel" configuration, be "TRAFFIC" type: with replaceable "break-off" flange, close with the water pressure, have main valve opening diameter of at least 5-1/4 inch, operating and cap nuts to be pentagonal shaped (1-1/2 inch point to flat), operating nut to open counter-clockwise, six inch inlet with mechanical joint connection, drain automatically, have two 2-1/2 inch nozzles and one 4-1/2 inch pumper connection with National Standard threads. Hydrants shall be painted red. Hydrants shall be of East Jordan manufacture.
2. Installation: Hydrants shall be set to provide a distance of 18-inches from finished grade to center of pumper nozzle.

Section 5. Water Services:

1. Material: Service lines shall be Type K, copper tubing conforming to ASTM B88 and B251. Corporation Stops shall be of Ford FB-1000 manufacture; curb stops to be Ford B22-333, B22-444, or B22-777; curb boxes to be of Handley Industries manufacture, Model No. W12 with Base Model No. 6TA.
2. Installation: All clamps to be stainless steel; saddles to be nylon coated with two stainless steel straps.

Water service lines shall be placed a minimum horizontal distance of ten feet from sewer main or service lines unless otherwise authorized by the Township Water Superintendent.