



Montgomery County Environmental Services

Water & Sanitary Sewer

Rules and Regulations

May 17, 2016

Table of Contents

1	Definitions	1
1.1	Backflow	1
1.2	Backflow Prevention Device	1
1.3	Biological Oxygen Demand (BOD).....	1
1.4	Chemical Oxygen Demand (COD)	1
1.5	Condominium.....	1
1.6	County Commission	1
1.7	Cross Connection	1
1.8	Cul-de-Sac	1
1.9	Customer.....	1
1.10	Curb Stop.....	1
1.11	Domestic Water Service.....	1
1.12	Easement	2
1.13	Engineer/ Professional Engineer	2
1.14	Fire Line.....	2
1.15	Front Footage.....	2
1.16	Garbage.....	2
1.17	Industrial Wastes	2
1.18	Inspector	2
1.19	Landominium	2
1.20	Master Plan	2
1.21	Montgomery County Environmental Services (MCES)	2
1.22	Multi-Residential.....	3
1.23	Natural Outlet	3
1.24	pH.....	3
1.25	Plumber.....	3
1.26	Properly Shredded Garbage.....	3
1.27	Property Owner	3
1.28	Public Right-of-Way	3
1.29	Public Sewer.....	3

1.30	Resolution	3
1.31	Rules and Regulations	3
1.32	Sanitary Engineer	3
1.33	Sanitary Sewer	3
1.34	Sewage	4
1.35	Sanitary Sewer Collection System.....	4
1.36	Shall/ May	4
1.37	Slug Discharge/ Slug Load	4
1.38	Specifications	4
1.39	Storm Drain/ Storm Sewer.....	4
1.40	Suspended Solids/ Total Suspended Solids.....	4
1.41	Tampering	4
1.42	Watercourse.....	4
1.43	Water Distribution System.....	4
1.44	Water Reclamation Facility	4
2	General Conditions	5
2.1	Authority	5
2.2	Ownership and Operation.....	5
2.3	Effective Date	5
2.4	Validity	5
2.5	Enforcement	5
2.6	Violation	5
2.7	Penalties.....	5
2.8	Jurisdiction	6
2.9	Agreement	6
2.10	Deviations from these Rules and Regulations	6
2.11	Amendment Rights	6
2.12	Interpretation.....	6
2.13	MCES Personnel	6
3	Customer Services.....	7
3.1	Account Information	7
3.1.1	Change in Property Owner.....	7

3.1.2	Change in Billing Address	7
3.1.3	New Customer/ Existing Service	7
3.1.4	New Construction/ New Service	7
3.2	Customer Terms and Conditions.....	7
3.2.1	Account Responsibility	7
3.2.2	Property Maintenance	7
3.2.3	Emergency Shut Offs.....	8
3.2.4	Tampering with the System	8
3.2.5	Guarantee of Supply	8
3.3	Schedule of Charges.....	9
3.3.1	Consumption Charges	9
3.3.2	Service Charges	9
3.3.3	Source Water Protection Fee.....	9
3.3.4	Late Fees	9
3.3.5	Ancillary Fees	9
3.3.6	Other Jurisdictions	9
3.4	Utility Billing	9
3.4.1	Meter Reading	9
3.4.2	Billing Charges.....	10
3.4.3	Other Billing	10
3.4.4	Sewer Adjustments	11
3.5	Payments and Credits	12
3.5.1	Payment Locations.....	12
3.5.2	Payment Arrangements	12
3.5.3	Returned Payments.....	12
3.5.4	Refunds and Credits	12
3.6	Delinquencies.....	12
3.6.1	Delinquent Accounts.....	12
3.6.2	Service Restoration	13
3.6.3	Landlord/ Tenant Accounts.....	13
3.6.4	Collections.....	13
3.6.5	Abandoned Meter.....	13

3.6.6	Dispute Resolution	13
3.7	Service Maintenance and Support.....	14
3.7.1	Trip Charges	14
3.7.2	Meter Testing.....	14
3.7.3	Water Service Issues and Resolutions	14
3.7.4	Meter Repair or Replacement	15
3.7.5	Meter Leaks.....	15
3.7.6	Damaged Meter Equipment	15
3.8	Other Services	15
3.8.1	Fire Services	15
3.8.2	Other Meters.....	16
3.8.3	Water Hauling	17
3.9	Account and Service Termination	17
3.9.1	Final Billing Statement	17
3.9.2	Customer Requested Termination.....	17
3.9.3	Terminations Due to Delinquencies.....	18
3.9.4	Public Health Dayton – Montgomery County Notification	18
3.9.5	Non-Compliance.....	18
4	Water Distribution System.....	19
4.1	General.....	19
4.2	Water Main Requirements	19
4.2.1	Parallel Installation.....	20
4.2.2	Crossings	20
4.2.3	Valve, Meter, and Blow-off Structures	20
4.3	Water Service Requirements	21
4.3.1	Service Lines.....	21
4.3.2	Meters.....	22
4.3.3	Meter Pits.....	23
4.4	Fire Hydrants.....	23
4.5	Fire Line Policy	24
4.5.1	Double Detector Check Valves.....	24
4.5.2	Monitor Meters.....	25

4.5.3	Double Detector Check Location	25
4.5.4	Combination Fire/ Domestic Service	25
4.5.5	Approval/ Permit Issuance	25
4.5.6	Dry Systems and Anti-freeze	25
4.5.7	Property Owner Responsibility	26
4.5.8	Extensions/ Additions	26
4.6	Backflow Prevention and Cross Connection Control Policy	26
4.7	Repair and Maintenance	27
4.8	Deviations	28
5	Sanitary Sewer Collection System	29
5.1	Waste to be Discharged in Sanitary Sewer	29
5.2	Prohibited Wastes	29
5.3	Judgment of Waste Quality	31
5.4	Special Appurtenances	31
5.5	Testing	32
5.6	Sanitary Sewer Requirements	32
5.6.1	Parallel Installation	34
5.6.2	Crossings	34
5.7	Repair and Maintenance	35
5.7.1	Mainline Sanitary Sewers	35
5.7.2	Sanitary Sewer Service Laterals	35
6	Permitting	36
6.1	Permit Requirements	36
6.1.1	Main Line Permits	36
6.1.2	On-Premise Permits	37
6.1.3	Service Stub Permits	37
6.2	Insurance and Bonding	37
6.3	Construction and Inspection	38
7	Private Development and Improvement	40
7.1	Private Development Surety Procedures	40
7.1.1	Performance Surety	41
7.1.2	Maintenance Surety	41

7.1.3	Sub-divider's Contract.....	42
7.2	Private Improvement Release Procedures	42
7.2.1	Release Requirements	42
7.2.2	Acceptance Requirements	43
7.3	Protection Procedures	43
7.3.1	Eligibility	43
7.3.2	Fee Establishment	43
7.3.3	Collection	45
7.3.4	Reimbursement.....	45
7.3.5	Term.....	45
7.3.6	Rights.....	45
7.3.7	Disclaimer.....	45
7.4	Oversize Reimbursement Procedures.....	45
7.4.1	Eligibility	45
7.4.2	Establishment.....	45
7.4.3	Payment	46
8	Engineering Requirements.....	47
8.1	Easements.....	47
8.2	Construction Plans	47
8.2.1	Physical Format	47
8.2.2	Computer Aided Drafting Plans	48
8.2.3	Required Information.....	48
8.2.4	Sewage Pumping Station	50
8.3	Specifications	51
8.4	Revisions to Approved Plans.....	51
8.5	Approval Period	51
8.6	As-Built Drawings	51

1 Definitions

For the purpose of this document certain terms and words are herein described as follows. Words used in the singular number include the plural number and vice versa.

1.1 Backflow

The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply from any source other than the intended source of the potable water supply.

1.2 Backflow Prevention Device

Any device, method, or type of construction intended to prevent backflow into potable water system.

1.3 Biological Oxygen Demand (BOD)

The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20 degrees Centigrade, as determined by 40 CFR Part 136.

1.4 Chemical Oxygen Demand (COD)

A measure of the oxygen required to oxidize organic and inorganic compounds in water.

1.5 Condominium

Per Ohio Revised Code (O.R.C.) 5311.01.

1.6 County Commission

The duly elected members of the Board of County Commissioners of Montgomery County, Ohio.

1.7 Cross Connection

Any arrangement or connection between two otherwise separate systems.

1.8 Cul-de-Sac

A minor street having one end open to traffic and one end being permanently terminated in a vehicular turnaround.

1.9 Customer

Consumer or user of water and sewer service.

1.10 Curb Stop

A curb stop is the brass valve body and not the connections.

1.11 Domestic Water Service

A potable water supply for the home typically used for culinary and bathing purposes.

1.12 Easement

A grant of a specified use of land by the property owner to the County Commission for installation, tap-in, maintenance, repair, removal, and replacement of sanitary sewer, water lines, and storm water piping and their appurtenances.

1.13 Engineer/ Professional Engineer

A registered Professional Engineer licensed to practice engineering as defined by the Registration Act of the State of Ohio.

1.14 Fire Line

Shall be any line which is exclusively used for purposes of fire sprinklers and/ or private fire hydrants.

1.15 Front Footage

The length of a property adjacent to a public sewer or water line. If water or sewer line piping is located along more than one edge of the property, the length utilized for front footage shall be the line that the property's water and/ or sewer connects to.

1.16 Garbage

Shall mean solid wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage, and sale of produce.

1.17 Industrial Wastes

Solid, liquid, or gaseous waste resulting from any industrial, manufacturing, trade, or business process.

1.18 Inspector

A duly appointed representative of Montgomery County Environmental Services (MCES) who ensures work is in compliance with approved construction drawings and specifications, rules and regulations, and quality of construction.

1.19 Landominium

A type of residential property in which the owner owns both the home and the land on which the home is built. The home is a part of a community, like a condominium, where the landscaping, maintenance and other services are provided by a homeowners' association. A landominium will be considered single family residential.

1.20 Master Plan

A plan for sewer and water development adopted or revised by the County Commission to ensure ultimate development to which all major improvements must conform.

1.21 Montgomery County Environmental Services (MCES)

Authorized by the County Commission to assist them in the performance of its duties by Chapters 6103 and 6117 of the Ohio Revised Code (O.R.C.).

1.22 Multi-Residential

A structure having three (3) or more dwelling units that is connected by means of a single water service.

1.23 Natural Outlet

Shall mean any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.

1.24 pH

A measure of the acidity or alkalinity of a solution, expressed in standard units, which is the logarithm to the base to (10) of the reciprocal of the hydrogen ion concentration of a solutions expressed as gram equivalents per liter of solution.

1.25 Plumber

A person or company who is competent and has sufficient practical knowledge to do plumbing and drain laying. They shall be licensed, bonded, and insured as necessary to perform work in connection with MCES' water distribution and/ or sanitary sewer collection systems. They shall have competent knowledge of Occupational Safety and Health Administration (OSHA) safety requirements.

1.26 Properly Shredded Garbage

Shall mean the wastes from the preparation of cooking, and dispensing of food that have been separated to such a degree that all parts will be carried freely under the flow conditions normally prevailing in public sewers.

1.27 Property Owner

Owner of any real property.

1.28 Public Right-of-Way

The width between property lines of a dedicated street or alley.

1.29 Public Sewer

Shall mean a sewer under the jurisdiction of a public authority.

1.30 Resolution

Legislation approved by the County Commission.

1.31 Rules and Regulations

The articles and sections adopted by resolution and contained herein.

1.32 Sanitary Engineer

A registered Professional Engineer appointed by the County Commission.

1.33 Sanitary Sewer

A pipe which carries sewage and excludes storm, surface, and ground water. Discharges from a sanitary sewer are regulated.

1.34 Sewage

Household and commercial wastewater that contains human excrement and gray water (household showers, dishwashing operations, etc.)

1.35 Sanitary Sewer Collection System

Shall mean all facilities for collecting, conveying, pumping, and metering of sewage.

1.36 Shall/ May

The word “shall” is mandatory and not directory, and “may” is permissive.

1.37 Slug Discharge/ Slug Load

Any discharge at a flow rate or concentration which could cause a violation of the Prohibited Discharge Standards in Section 2.1 of the MCES Pretreatment Rules and Regulations, including any accidental spill or non-customary batch discharge, which has reasonable potential to cause interference or pass through or in any other way violate the Pretreatment Rules and Regulations, local limits, or permit conditions, or any other discharge of a non-routine, episodic nature.

1.38 Specifications

Construction, material, and equipment requirements adopted by the County Commission by resolution.

1.39 Storm Drain/ Storm Sewer

Shall mean a pipe which carries storm and surface waters and drainage, but excludes sanitary sewage and industrial wastes, other than unpolluted cooling water.

1.40 Suspended Solids/ Total Suspended Solids

The suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid and that is removable by filtering or settlement processes, also known as Non-filterable Residual, as determined by 40 CFR Part 136.

1.41 Tampering

Any act pertaining to or use of the sanitary sewer collection and water distribution systems of MCES, which in the opinion of MCES may endanger the public health, safety or welfare. This includes any unauthorized connection of a service without the express authorization of MCES or interfering with MCES’ responsibilities associated with the sanitary sewer collection and water distribution systems. Additional information provided in Section 3.2.4 (Tampering with the System).

1.42 Watercourse

Shall mean a natural channel in which a flow of water occurs, either continuously or intermittently.

1.43 Water Distribution System

Shall mean all facilities for pumping, treating, storage, distribution, and metering of water.

1.44 Water Reclamation Facility

Shall mean all facilities for treating and disposing of sewage.

2 General Conditions

2.1 Authority

The Ohio Revised Code (O.R.C.), Chapters 6103 and 6117, empowers the County Commission to adopt rules and regulations governing policies essential to the operation of Montgomery County Environmental Services (MCES) under their jurisdiction.

2.2 Ownership and Operation

The public water distribution and sanitary sewer collection systems of MCES including all appurtenances, is under the jurisdiction of MCES and its authorized agents and employees. Such jurisdiction shall include, but is not limited to, all phases and fixtures of metering for water.

Notwithstanding the above, ownership and responsibility associated with the Water Distribution System and Sanitary Sewer Collection System are discussed in Sections 4 and 5 respectively.

2.3 Effective Date

These rules and regulations shall be effective from the date established by passage of a resolution by the County Commission. Henceforth, any other rules and/ or regulations previously adopted by the County Commission, which are in direct conflict with this set of adopted rules and regulations, shall be deemed to be repealed and superseded.

2.4 Validity

Should any section or individual provision of these rules and regulations be decided by the courts to be unconstitutional or invalid, such a decision shall not affect the validity of the rules and regulations as a whole, or any part thereof, other than the particular portion so held to be unconstitutional or invalid.

2.5 Enforcement

These rules and regulations shall be enforced by MCES, or its designated representative, as directed by the County Commission.

2.6 Violation

It shall constitute a violation for any person, firm, group, or corporation, either owner or agent, to tamper with or attempt to use facilities, equipment, or services provided by MCES without first obtaining the necessary permits and approvals. Any person, firm, group, or corporation, either owner or agent, that obtains a permit or approval based on a false statement made in order to deceive MCES shall be held in violation of these Rules and Regulations and subject to prosecution.

2.7 Penalties

Any person, firm, group, or corporation, either owner or agent, committing a violation of these Rules and Regulations shall be subject to revocation or suspension of permits or license, and may be deemed guilty of a misdemeanor, and if convicted may be fined as the penalties provide in the Ohio Revised

Code. In addition, the violator of these rules and regulations shall be liable and responsible for any and all damages incurred as a result of the violation.

2.8 Jurisdiction

These Rules and Regulations, as established or amended, shall be made applicable to all persons within MCES' service areas of the water distribution and/ or sanitary sewer collection systems.

2.9 Agreement

Application for a permit or a meter shall thereby evidence the applicant's acceptance of, and agreement to be bound by, these rules and regulations.

2.10 Deviations from these Rules and Regulations

Deviations from these Rules and Regulations shall be approved in writing by MCES, and he may require additional measures as necessary to ensure the health, safety, and interest of the other customers of the system.

2.11 Amendment Rights

By resolution, the County Commission may change, amend, or supplement these Rules and Regulations. MCES shall determine how such changes, amendments or supplements shall affect facilities in existence or in the process of completion.

2.12 Interpretation

The provisions of these Rules and Regulations shall be the minimum requirements adopted for the promotion of health, safety, and welfare of the citizens and employees of MCES' service areas. These regulations are not intended to repeal, abrogate, annul, or in any manner interfere with any existing laws.

No provision herein shall be so construed as to relieve a person, firm or corporation of furnishing all private engineering services necessary in connection with the improvements.

For projects where the agreement language or contract documentation does not identify a precedence for resolving inconsistencies between the approved construction drawings, specifications, and Rules and Regulations, the precedence shall be in the following order: first, approved construction drawings; second, specifications; and third, Rules and Regulations. All discrepancies shall be resolved in this manner by MCES.

2.13 MCES Personnel

All MCES personnel whose duty constitutes entrance upon private property, or into private premises, in connection with MCES business, shall be equipped with proper credentials as MCES may deem necessary to identify them as agents of MCES. Such authorized employees shall have access to the premises, at reasonable hours, to examine fixtures and record amounts and manners in which systems are being utilized. Should access be denied, these services shall be discontinued and not restored until such a time as access is granted.

3 Customer Services

For customer inquiries, visit us online at www.mcoho.org/water for answers to frequently asked questions or call Customer Service.

3.1 Account Information

All customers and/ or property owners shall provide account and billing information.

3.1.1 Change in Property Owner

Property owners are required to contact Customer Service with any change in ownership. Situations include but are not limited to sale of property, quit claim, death, or divorce. If information is not received in a timely manner, services may be terminated.

3.1.2 Change in Billing Address

Property owners are responsible to contact Customer Service to maintain correct billing address.

3.1.3 New Customer/ Existing Service

Contact Montgomery County Environmental Services (MCES) Customer Service to establish an account. Billing name, address and phone number will be required.

Prior unpaid balances on the parcel will be due before service can be transferred.

3.1.4 New Construction/ New Service

Contact MCES prior to new construction/ new service being installed. Once the approved inspection forms and permit have been received from MCES, the account creation and meter set will be completed.

3.2 Customer Terms and Conditions

3.2.1 Account Responsibility

Property owners shall be held responsible for services provided to their premises. Property owners are responsible for any outstanding charges not paid by their tenants. The current property owner will be held responsible for all delinquent charges, even if they were not the owner of the property when the charges were accrued. Delinquency shall be just-cause for terminating service(s).

3.2.2 Property Maintenance

MCES must have access to our utilities and utility equipment at all times. No objects, structures, or earthen materials shall be placed over the meter pit, curb stop, manholes, or egress to include but not limited to soil, sod, mulch, rocks, planters, statues, bushes, vehicles or any other obstructions. Action will be taken to gain access to the meter pit, manhole, and/ or curb stop up to and including termination of service or main line disconnection.

Changes to the plumbing at your property or construction proximal to MCES utilities or utility equipment may require a permit. Contact MCES Permits for more information.

MCES has the right to repair or replace any meter where, in its judgments, it is deemed necessary. See Section 3.7.4 (Meter Repair or Replacement) for details.

Meter pits, piping, and appurtenances are the responsibility of the property owner to maintain including but not limited to keeping the pit free of debris and keeping the valves in working condition. The property owner may be notified of any repairs necessary for MCES to maintain the meter and these repairs are to be permitted then completed within 30 days per MCES specifications.

3.2.3 Emergency Shut Offs

Customers are encouraged to turn the water off inside at their main shut off valve. MCES response time may be based on the availability of resources. Service may not be turned off if the curb stop is inaccessible or broken.

3.2.4 Tampering with the System

No person other than an authorized agent of MCES may connect to or restore service to any of its water or sewer lines without proper authorization which may include a permit from MCES. No act shall be committed that would tend to hamper or restrict in any way the normal function of the water distribution or sanitary sewer collection systems. No physical connection shall be made between the public potable water system and any other sewer.

Tampering with or removal of any meter or parts thereof, or removal of an anti-tampering device, or insertion of a meter by-pass without permission of MCES shall carry a penalty provided in Section 6103.29 of the Ohio Revised Code (O.R.C.). A tampering violation is also just-cause for having service discontinued. Tampering and other related charges will be applied per occurrence. Service will not be restored until the total balance on that parcel is paid, including the estimated quantity of water and sewer which has been used and not registered. The property owner may be required to upgrade the water and sewer service to current specifications. The criminal laws of the State of Ohio provide severe penalties for tampering with water meters, meter seals, valves, and other devices in the water system. The penalties herein provided are in addition to the penalties provided by the criminal laws of the State of Ohio, and the payment of penalties herein mentioned will not in any way relieve any person from prosecution.

Upon notification, continued obstruction or damage of the curb stop or meter will result in tampering fees being assessed. If termination of service at the corporation stop is necessary, all charges associated with disconnection and restoration of services shall be the responsibility of the property owner. Only MCES or their authorized agent is permitted to complete this work.

3.2.5 Guarantee of Supply

MCES does not guarantee a fixed pressure or continuous supply of water. Those using steam boilers, gas engines, or other equipment whose operation depends on a supply of water direct from the service line should have a storage tank of sufficient gallonage to have an ample supply for an emergency, as no claims will be considered for damage arising from such shortage.

3.3 Schedule of Charges

A list of all current charges, fees, and rates for the various services performed are on file in MCES office or on the Internet at www.mcoho.org/water. These charges, fees and rates are set by and subject to amendment by the County Commission and are not to be construed as being fixed for an indefinite period of time.

3.3.1 Consumption Charges

The consumption charge is based on the volume of the water and/ or sewer.

3.3.2 Service Charges

The service charge is for customer related costs such as cost of the meter, maintenance, meter reading, billing and collections.

3.3.3 Source Water Protection Fee

The Source Water Protection Fee is collected on behalf of the City of Dayton and is designed to fund zoning efforts, groundwater cleanup, education, chemical control, and emergency planning and response to protect our source water. This rate is not set by the County Commission. This fee is set by and subject to amendment by the City of Dayton.

3.3.4 Late Fees

If payment is received after the due date, the account is subject to late charges equal to ten percent (10%) of the bill.

3.3.5 Ancillary Fees

Additional fees are on file in the MCES office or on the Internet at www.mcoho.org/water. These charges, fees and rates are subject to amendment by the County Commission and are not to be construed as being fixed for an indefinite period of time.

3.3.6 Other Jurisdictions

Portions of MCES facilities are under other jurisdictions and a schedule of charges should be available from the applicable jurisdictions.

3.4 Utility Billing

3.4.1 Meter Reading

MCES has the right to determine what methods will be used to obtain meter readings.

Meter readings will be obtained quarterly for most accounts.

Meters must be read by MCES staff at least once a year. For meters not read at least once in each twelve months, MCES may have the service discontinued.

MCES has the right to estimate consumption when regular meter readings cannot be obtained.

A notice will be conveyed to the property when a meter reading cannot be obtained. Customers will be required to provide MCES access to read or repair the meter. If meter has not been read for more than

one (1) year, MCES reserves the right to terminate water and/ or sewer service until able to gain access for a reading and inspection of meter equipment.

3.4.2 Billing Charges

Charges are calculated based on the service and schedule for the account.

A statement of the amount due shall be generated. Statements may be forwarded to another designated person, such as a tenant or agent. In the event that the statement is not received, it is still the customer's or property owner responsibility to render payment by the due date.

MCES reserves the right to issue estimated bills when deemed necessary.

Should MCES be unable to render quarterly bills, the bill may be rendered for a shorter or longer period at MCES discretion.

Charges for any discharge of sewage into the sanitary sewer collection system will typically be based upon the quantity of metered water. Charges for unmetered sewage will be subject to estimated usage as determined by MCES. Exceptions may occur when there are additional fees for treatment or other special circumstances.

If the premises are found to be discharging sewage or other wastes into the sanitary sewer collection system without payment of a sewer service charge, MCES shall measure or estimate the quantity of waste for the purpose of establishing a proper charge. Using this method, said premises shall be billed for prior and future usages. Tampering charges may apply.

3.4.3 Other Billing

3.4.3.1 Flat Rate

Unmetered services are charged a flat rate, which include fixed costs plus a pre-determined consumption, when deemed necessary by MCES.

3.4.3.2 Municipal Industrial Pretreatment Program (MIPP)

Additional charges will be assessed for certain industrial wastes to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges, as determined by MCES.

3.4.3.3 Laboratory Billing

Customers who contract with the Environmental Lab for testing services are billed as services are rendered.

3.4.3.4 Septage Receiving

Commercial customers can apply for an account at the Environmental Lab to receive an access card with monthly billing based on usage. Customers may also pay at the facility for one-time use. Current fees are listed on the MCES Ancillary Fee Schedule.

3.4.3.5 Backdated Bills

MCES reserves the right to issue bills for services and/ or consumption not previously billed but rendered to the property up to the maximum allowed by the Ohio Revised Code.

3.4.3.6 Backflow Administration Fee

Recurring fee for each backflow device at a property.

3.4.4 Sewer Adjustments

3.4.4.1 Sod Adjustments

A sod adjustment may be granted upon request for new construction. Invoice copies for sod or seed installation must be provided before the process can begin. The amount of the sod adjustment is based upon any consumption over 3,000 cubic feet in a quarter.

The sod adjustment is a one-time only reprieve and any reinstallation or additional installations will not be eligible for a bill adjustment. The sod adjustment applies only to one billing cycle.

3.4.4.2 Leak Adjustments

A sewer adjustment may be granted for leaks that MCES considers beyond the customer's control. The lost water must not enter the sanitary sewer collection system. Malfunctioning toilets, leaky faucets, unattended appliances, valves and unheated structures causing a loss of water are not eligible for a bill adjustment.

Leaks must be repaired and may require a field inspection for verification. Adjustments may be made to sewer charges for up to two billing periods.

A letter of explanation and a copy of an invoice from a licensed plumber showing date of repair, explanations of where the leak was located and what was repaired are required. Any repairs not made by a licensed plumber will require an investigation by MCES to determine eligibility.

3.4.4.3 Pool Adjustments

Customers may request a reduction in sewer charges when a swimming pool is filled from the domestic water meter. Accounts that have deduct meters and sprinkling meters are NOT eligible for waivers. Eligibility is determined by visual inspection, pool measurement and the results of a drainage test performed by MCES. A one-time nonrefundable fee is collected with the pool application. The application must be signed and accompanied by the application fee for review.

If the pool drainage system is not tied into the sanitary sewer line, the initial reduction is authorized for 100% of pool capacity. Thereafter, an annual reduction of 25% of the pool capacity may be granted for as long as the pool or drainage system is not modified. The pool application is valid for the property no matter what customer resides there. The customer is required to notify us yearly when they have filled their pool. In order to qualify for an adjustment, water usage must exceed average quarterly usage. At that time, MCES will credit a pool filling of 25% to the customer's account.

Pools that have been drained for repairs may receive a sewer reduction equal to 100% of pool capacity upon submission of a repair bill and a special meter reading to verify that usage equals normal usage and 100% pool capacity. Reductions will not exceed 100% in any calendar year.

3.5 Payments and Credits

Payments are expected to be received by the due date. If payment is received after the due date, the account is subject to late charges equal to ten percent (10%) of the bill.

3.5.1 Payment Locations

There are NO authorized payment agencies and MCES is not responsible for payment made at a third-party location. MCES offers the following payment options. Refer to the back of bill for details about each option.

- In person
- Online
- By phone
- Auto-pay
- Deposit box
- By mail

3.5.2 Payment Arrangements

MCES may offer payment arrangements. Contact Customer Service prior to the due date for details. An initial payment will be required prior to the due date. The owner of the property must give consent to enter into a payment arrangement.

3.5.3 Returned Payments

Payments that are returned for any reason are subject to additional fees. Multiple returned payments may result in the account being placed in cash only status. MCES is not liable for any overdraft charges or other bank fees incurred by the customer.

3.5.4 Refunds and Credits

Payments received in excess of the amount due will be shown on the customer's account as a credit. Customers may request a refund when an overpayment on an account occurs by contacting Customer Service.

3.6 Delinquencies

3.6.1 Delinquent Accounts

If a bill remains unpaid, the service shall be subject to termination and additional fees may be applied. Service shall not be restored until all delinquencies and charges associated with the parcel are paid.

When termination of service at the corporation stop is required, all charges associated with disconnection and restoration of services shall be the responsibility of the property owner. Only MCES or their authorized agent is permitted to complete this work.

The address of occupied premises that are shut off for delinquency may be forwarded to the appropriate health department or other agencies.

When more than one party is supplied with water from a common water service with one curb stop and one of the parties fails to pay the bills when due, or fails to comply with the Rules and Regulations of MCES, the water shall be shut off. MCES is not liable for any damages to any of the parties serviced by such common water service.

When more than one service is located on the same Parcel ID, one service being delinquent may result in service being turned off for all services on the Parcel. All delinquencies on the parcel must be paid before services are restored.

3.6.2 Service Restoration

Reactivation of a delinquent account will be completed within five (5) business days after payment has been received unless there are extenuating circumstances.

MCES is not responsible for any damages that may result when service is terminated or restored.

MCES shall require someone to be at the property when service is restored.

3.6.3 Landlord/ Tenant Accounts

The shut off process is used for MCES to collect a debt, not for property owners' use in evicting tenants. The property owner is responsible for any outstanding charges not paid by their tenants. Property owners are required to pay delinquent balances before services can be restored. Property owner authorization may be required for tenants to be granted a payment arrangement and/or due date extension. Discontinued water service will not be restored until all balances owed on that parcel are paid.

3.6.4 Collections

MCES reserves the right to use all legal means to collect debt. This includes special assessment to the property taxes.

3.6.5 Abandoned Meter

When a meter cannot be accessed, MCES may charge for the cost of an abandoned meter and a final billing statement will be issued to end the account.

3.6.6 Dispute Resolution

MCES will attempt to resolve all customer complaints and disputes. If resolution is not agreed on, customers may request a hearing with the MCES Appeals Board.

3.6.6.1 Appeals Board

The Appeals Board is comprised of three individuals who are not employees of Montgomery County. These individuals have been appointed by the County Commission to make unbiased decisions regarding disputed water/ sewer bills. The Appeals Board is the **final step** in the bill dispute process.

3.7 Service Maintenance and Support

3.7.1 Trip Charges

MCES may make a charge for any service requiring a trip to the property.

3.7.2 Meter Testing

MCES will test and correct any meter, which in its judgment is not registering correctly, without the consent of any property owner. Also, upon customer request, MCES will test any of its meters for a fee payable in advance. MCES guarantees the accuracy of the meter to be within American Water Works Association (AWWA) standards. If the meter was operating above AWWA standards, all associated fees and any overcharges will be credited. The meter will not be tested until one quarter has passed to determine if consumption has returned to normal.

3.7.3 Water Service Issues and Resolutions

3.7.3.1 High Pressure

MCES does not guarantee a fixed water pressure. Customers with excessively high pressure are advised to contact a plumber to install a pressure reducing valve at customer expense.

3.7.3.2 Low Pressure

MCES does not guarantee a fixed water pressure. In the event of low water pressure, contact MCES Dispatch. Customers with excessively low pressure may contact a plumber to investigate internal plumbing problems as this is typically the cause for low pressure.

3.7.3.3 Water Quality

MCES monitors drinking water quality throughout the distribution system. Customers experiencing discoloration or foul odor with their water are encouraged to call MCES Dispatch immediately.

3.7.3.4 No Water

Customers experiencing a total loss of water throughout the property should contact Customer Service. Customers experiencing water loss in only one portion of the property are advised to contact a plumber.

3.7.3.5 Frozen Meters/ Piping

It is the property owner's responsibility to protect the water meter and associated piping from freezing. Indoor water meters must be housed in a sufficiently heated area. For indoor meters that freeze repeatedly, MCES may require the meter be moved outside to a meter pit at the property owner's expense. In the case of outdoor meters, the water meter shall be situated at the appropriate depth and insulated if needed. The meter pit shall be maintained and repaired promptly when damaged at the property owner's expense.

Charges may be assessed to compensate MCES for expenses incurred to repair or replace meters such as but not limited to materials, labor, and overtime.

3.7.3.6 High Usage

Customers experiencing unexplained high usage are advised to contact Customer Service.

3.7.4 Meter Repair or Replacement

MCES has the right to repair or replace any meter where, in its judgment, it is deemed necessary. The property owner shall be notified in writing if adjacent plumbing needs to be repaired or does not meet MCES Specifications prior to changing the meter. Repairs and modifications are the customer's responsibility. The customer will be advised of water service shut-off date if the repairs and/ or modifications are not completed according to MCES Specifications. If the property owner has not complied, additional fees will be charged for each trip to confirm compliance as well as any shut off fee. A permit may be required for plumbing repairs or modifications. See Section 6 (Permitting).

MCES requires that the customer's metered water service is in good working condition and configured in such a manner that MCES is able to accurately meter all water used at a property. The property owner is responsible for the cost of any and all plumbing changes and upgrades necessary.

3.7.5 Meter Leaks

If a meter, excluding deduct meters, is found to be leaking MCES will attempt to determine whether or not the leak was registering on the meter. If the leak was registering on the meter, the property owner may receive an adjustment. The bill will be adjusted to an estimate of the average consumption as calculated by MCES. When necessary, the damaged meter will be replaced by MCES. A trip charge, overtime and materials charges may be assessed if the leak was caused by a party other than MCES.

If a deduct meter is found to be leaking, no adjustment shall be made. The deduct meter belongs to the property owner.

MCES will not be responsible for costs associated with water loss due to meters being reset improperly by non-MCES personnel.

3.7.6 Damaged Meter Equipment

If MCES finds that the meter's antenna or other radio-read equipment has been damaged, on the first occasion the owner shall receive written notification advising them to exercise caution when plowing snow or mowing the lawn to avoid damaging the water meter equipment. From the second occurrence onward, the customer will be charged for the damaged equipment per the Ancillary Fee Schedule.

3.8 Other Services

3.8.1 Fire Services

3.8.1.1 Fire Lines

All private fire lines and private fire hydrants connected to the water system shall be charged a flat rate. Fire lines that have a monitor meter will be charged in the same manner as any other metered service.

Failure to pay fire line or hydrant charges within the specified time shall be cause to terminate service. There shall be no charge for water used to extinguish a fire.

3.8.1.2 Fire Line Leaks

Failure to repair a leak in a fire line within the time specified in a written notice by MCES shall be cause for discontinuance of fire line service.

3.8.1.3 Fire Assembly Meters

The fire assembly meter consists of two individual meters for measuring water flow. Fire assembly water meters are mainly used for larger facilities such as apartment complexes, etc. One meter is used as the low water flows and the other meter is used for high water flows. Fire assembly meters are billed the same as domestic water meters.

3.8.2 Other Meters

3.8.2.1 Hydrant Meters

Contractors may obtain a meter from MCES if available for use on a fire hydrant for such purposes as construction, filling of water trucks, watering, etc. The contractor must apply at the office of MCES for areas serviced by MCES water mains. All fees for such use are set by the County Commission. MCES does not allow private individuals to use MCES fire hydrants.

MCES will assign a specific hydrant for the contractor's use. A tampering fee will be applied if the contractor is found using a hydrant other than the assigned hydrant. MCES reserves the right to remove the contractor from a previously approved hydrant. MCES reserves the right to limit the use of fire hydrants. If MCES is unable to offer a suitable hydrant for the contractor to use, the contractor must find some other means of obtaining water.

Applicants who use hydrants located on MCES water mains shall pay for all water consumed at the regular water rates. A security deposit and a daily rental fee shall be charged for the meter and hydrant wrench. These fees are set by the County Commission. Hydrant meters shall be billed monthly. The contractors must call in or e-mail a monthly hydrant meter reading. If MCES does not receive a reading, the water consumption will be estimated. The contractor will be held responsible for any damage to or loss of the meter and/ or wrench. Missing and damaged equipment will be billed per the Ancillary Fee Schedule, including but not limited to fire hydrants, water mains, valves, meters and wrenches.

No person other than an authorized agent of MCES, or permit applicant shall use any fire hydrant for any purpose. Permits issued for fire hydrant use shall be carried at all times by the permit applicant.

3.8.2.2 Sprinkling and Water-Only Meters

Customers may install a separate meter for water consumption when water used does not enter the sanitary sewer collection system. Customers who have this type of meter will be billed for water consumption registered on that meter including the daily service charge.

3.8.2.3 Deduct Meters

MCES no longer issues permits for installation of deduct meters. Customers with existing deduct meters will be charged a private meter reading fee and consumption charges. No bill adjustments will be given for malfunctioning or improperly installed meters. Deduct meters are owned and maintained by the customer.

3.8.2.4 Cooling Tower Meters

Customers may request to install a separate meter for cooling tower usage that measures water that is discharged into the sanitary sewer collection system. A permit is required for MCES' approval of installation and meter type.

3.8.3 Water Hauling

Customers can purchase bulk water, in 2,000 gallon increments, at 1850 Spaulding Road, Kettering, Ohio, by paying an annual fee and a per-load charge. Current fees are listed on the MCES Ancillary Fee Schedule.

3.9 Account and Service Termination

3.9.1 Final Billing Statement

A final billing statement will occur when a transfer of account or termination of service occurs. The final bill will be based on a final meter reading performed by MCES. Final meter readings are scheduled during business hours. Should it not be possible to obtain a final reading, a final billing will be estimated.

3.9.2 Customer Requested Termination

Any property owner may have a service discontinued by contacting Customer Service. Current fees are listed on the MCES Ancillary Fee Schedule.

MCES will not terminate service for the purpose of evicting a tenant.

3.9.2.1 Temporary Termination

Customers may request service be terminated temporarily but keep the account active. Examples for temporary termination include plumbing repairs or extended absences. Service charges will continue to accrue and be billed. To discontinue the service and terminate all billing, see Section 3.9.2.2 (Terminating Customer Account).

3.9.2.2 Terminating Customer Account

Customers may request to end their account, which will discontinue the service and terminate all billing.

To terminate the account, the meter must be accessible and the customer's plumbing must be in compliance with MCES plumbing standards. If the meter is not accessible or the customer's plumbing does not meet MCES plumbing standards, the water service will be shut off at the curb stop and the account will be charged an abandoned meter fee. Customers will be notified of corrections needed.

A final bill will be issued once the account has been terminated.

3.9.2.3 Meter Pull

In cases such as fire, demolition, or other situations deemed necessary by MCES, the meter will be removed by MCES.

3.9.2.4 Demolition

If a property is being demolished, an abandonment permit must be obtained from MCES. Please contact Customer Service to have the meter pulled and the water shut off at the curb. Contractor must call MCES and verify that water at the curb has been shut off prior to demolition. Failure to do so will result in additional charges associated with disconnection of services.

3.9.3 Terminations Due to Delinquencies

See Section 3.6 (Delinquencies).

3.9.4 Public Health Dayton – Montgomery County Notification

Public Health Dayton – Montgomery County (PHDMC) may be notified of a disconnection due to non-payment, plumbing issue, or non-compliance for the following, but not limited to, types of businesses:

- Food handling operations
- Commercial swimming pool
- School and day care facility
- Nursing home
- Jail/ prison
- Mobile home park
- Recreational vehicle park and camp ground
- Hotel/ motel
- Tattoo shop

3.9.5 Non-Compliance

MCES reserves the right to terminate service for failure or refusal to comply with terms of MCES Rules & Regulations.

4 Water Distribution System

4.1 General

Montgomery County Environmental Services (MCES) owns the water main and water services up to and including the curb stop. The curb box is under the ownership of MCES. It is the responsibility of the property owner to provide access to and maintain the curb box including but not limited to keeping the box free of debris. The property owner may be notified of any repairs necessary for MCES to access the curb box and these repairs are to be permitted then completed within 30 days per MCES specifications. The water service from the outlet connection of the curb stop to a structure is the customer's responsibility.

No physical connection shall be made between any other source or potential source of water or liquid and MCES water supply piping. No spigot or outlet shall be submerged or physically connected to a drain or sewer.

There shall be no electrical grounding of direct current permitted on the water system or any private extension thereof. Any electrical connections found may result in the suspension of water service to the property until such time as the property owner can demonstrate that there is no longer an electrical connection to the water system.

4.2 Water Main Requirements

To receive water service, the water mains shall be installed across the entire frontage of the parcel affected. The minimum water main size shall be eight inches (8"). A larger water main size may be required if indicated on master plans or as hydraulically needed.

Dead end mains shall be minimized and water mains should be looped when possible. Where dead-end mains are approved by special permission, they shall be provided with a fire hydrant for flushing purposes.

Water distribution system improvements shall be reviewed and approved by MCES and Ohio Environmental Protection Agency (Ohio EPA), as applicable.

Water mains should be located outside of pavement (in dedicated public right-of-ways or easements) whenever possible unless approved by MCES. All water mains must be a minimum of ten feet (10') from any structure or a distance equal to the depth one foot (1') below the bottom of the water main, whichever is greater. Building and structures are not to be constructed within water and/ or sanitary sewer easements.

MCES recommends minimizing the installation of water mains between lots. If not possible, the water main must be centered in a minimum twenty-foot (20') wide permanent easement. If the bottom of the trench exceeds ten feet (10') of depth, an additional two feet (2') of permanent easement width is required for each additional foot of depth, as a minimum.

All main line or fire hydrant taps on concrete water mains shall be made by an entity approved by MCES.

All pipe shall be installed per MCES' Specifications.

4.2.1 Parallel Installation

Water mains shall be laid at least ten feet (10') horizontally from any sanitary sewer, storm sewer or sewer manhole, whenever possible; the distance shall be measured edge-to-edge.

When local conditions prevent a horizontal separation of ten feet (10'), a water main may be laid closer to a storm or sanitary sewer provided that:

- The bottom of the water main is at least eighteen inches (18") above the top of the sewer;
- Where this vertical separation cannot be obtained, the sewer shall be constructed of materials and with joints that are equivalent to water main standards of construction and shall be pressure tested to assure water tightness prior to backfilling.

4.2.2 Crossings

Water mains crossing house sewers, storm sewers or sanitary sewers shall be laid to provide a separation of at least eighteen inches (18") between the bottom of the water main and the top of the sewer, whenever possible.

When local conditions prevent a vertical separation as described above, the following construction shall be used:

- Sewers passing over water mains should be constructed of the materials and with joints that are equivalent to water main standards of construction and shall be pressure-tested to assure water tightness prior to backfilling.
- Water mains passing under sewers shall, in addition, be protected by providing:
 - A vertical separation of at least eighteen inches (18") between the bottom of the sewer and top of the water main;
 - Adequate structural support for the sewers to prevent excessive deflection of joints and settling on and breaking the water mains;
 - That the length of water pipe be centered at the point of crossing so that the joints will be equidistant and as far as possible from the sewer.

4.2.3 Valve, Meter, and Blow-off Structures

All structures, chambers, or pits containing valves, blow-offs, meters or other such appurtenances of a distribution system, shall be designed by a Professional Engineer registered in the State of Ohio. The structures shall not be connected directly to any storm drain or sanitary sewer as this is potentially a cross-connection. They shall be drained to the surface or to underground absorption pits.

The structures shall be constructed in such a manner that the top of the structure is flush with the ground surface unless otherwise noted and they are not subject to flooding by surface water.

4.3 Water Service Requirements

4.3.1 Service Lines

No water service lines shall be installed on any private property other than the one being served and cannot cross property lines.

Water service shall not be taken off a fire line or fire hydrant branch, with an exception for a combination fire/ domestic service line. A hydrant branch is defined as the piping between the watch valve and the fire hydrant. Service must be before the fire hydrant's watch valve, or the fire line double detector check assembly.

Any water service that is not utilized shall be abandoned at the main.

All new domestic water service material specifications and inspection up to and including shut-off or by-pass connection on the customer's side of meter shall conform to MCES' Rules and Regulations.

Service lines shall be a minimum of one inch (1") diameter from the main to the meter. In copper service lines, maximum lengths must be used from main to curb stop and from curb stop to meter assembly. No couplings are permitted under pavement. (Exception: existing three-fourths inch (3/4") service stubs may be extended to the meter with three-fourths inch (3/4") copper type K to the meter assembly).

MCES recommends minimizing the installation of water services under driveways.

Each service with a one and one-half inch (1 ½") or larger meter shall be provided with an equal size by-pass; exception, one and one-half inch (1 ½") or two inch (2") service which uses "coppersettlers", may have a one inch (1") (min) bypass line. The by-pass must be valved so that it can be locked to prevent its use by anyone except MCES personnel.

Three-inch (3") ductile iron services must start with a four-inch (4") valve at the main. Then the contractor can install a four-inch (4") x three-inch (3") reducer at the valve or run four inch (4") to the meter. All valves connected to a sixteen-inch (16") and larger water main shall be a minimum of eight-inch (8").

Large (three-inch (3") or larger) domestic and fire line valves (OS&Y) in pits or buildings allow use of left or right hand open valves as long as all valves operate in the same direction and are clearly marked as to their operation.

When a service is installed to a meter, and the customer wishes to use a larger or smaller service line to the building, the service shall be enlarged or reduced after (towards the structure) the meter assembly.

Water and sewer services must have ten-feet (10') minimum horizontal separation. If this is not attainable, a minimum of eighteen-inch (18") vertical separation with the water service above the sewer

service (shelved in the trench). Fire and domestic water service lines must have a minimum three-foot (3') horizontal separation. Water service lines shall be a minimum of five feet (5') from existing or proposed side property lines.

Water services are to be perpendicular to the main from the main to meter location where practical. All others will be reviewed on a case-by-case basis by MCES and must be shown on construction plans.

The curb stop shall be located at the right-of-way or easement line and consistent throughout the development. MCES recommends minimizing the installation of curb stops in driveways.

All service taps on concrete water mains will be made by an entity approved by MCES.

4.3.2 Meters

No meter shall be set until final inspection of the water service and/ or meter pit has been made and approved. It is a violation of these Rules and Regulations for anyone to move into any structure prior to MCES inspection, approval and acceptance for metering.

The number of meters off of a service branch is dependent on pipe size, capacity requirements, and demand on that service. It is the responsibility of the property owner and/ or plumber to verify that adequate flow and pressure is provided.

Outside meters shall be located in an approved structure, chamber, or pit in accordance with MCES Rules and Regulations.

Commercial meters for domestic service must be one and one-half inch (1-½") minimum to be located inside a building and meet all other requirements. Meters smaller than one and one-half inch (1-½") may be located inside a building only when there is a combination fire line/ domestic service line with the double detector check assembly located inside the building (must still meet all other requirements). Residential meters shall be reviewed by MCES.

Meters may be installed inside of structure provided the following requirements are met:

- The riser or first flange must be located next to the outside wall where the service line enters the building. Installation must meet minimum clearance requirements per standard drawings, except as approved by MCES.
- The centerline of the meter(s) cannot be located more than four foot six inches (4'-6") above the finished floor.
- All meters, except for monitor meters, must be installed horizontally with the reading on top of the register. Monitor meters may be installed vertically as part of the double check-detector assembly.
- All meters must be located within the same room inside the structure. The meter may not be placed in an unheated space, garage, vehicle area, etc. when there is a likelihood of the service line freezing.

- Where required, an outside access door to the meter room shall be provided. If the meters are in a large area, the outside access door must be within twenty feet (20') of the meters. There must be a clear unobstructed path between the door and the meter(s).
- The maximum distance allowed between the curb stop and an inside meter(s) location is one hundred feet (100').

4.3.3 Meter Pits

Meter pit location shall be three feet (3') maximum from curb stop unless approved by MCES. No obstructions or landscaping shall be placed on the meter pit cover at any time. Meter pits are not to be located in open drainage swales, ditches, or in detention/ retention basins.

All meter pits are to be located in non-traffic areas unless otherwise approved by MCES. If approved to be located in pavement or other traffic areas, the meter pit and all other load bearing appurtenances must be "H20" load rated per American Association of State Highway and Transportation (AASHTO) Standards.

All piping, valves, meters, etc., must meet minimum clearance requirements per standard drawings, except as approved by MCES. Clearance is required between piping, valves, meters, etc. and wall, floor, or any obstruction that interferes with installation or maintenance of meter, valve, or flange. Meter pit may contain domestic and sprinkling meters provided there is sufficient room while meeting the minimum clearance requirements.

At a minimum, meter pits shall be constructed and installed per the most recent standard drawings.

4.4 Fire Hydrants

Fire hydrants shall be connected only to water mains adequately sized to carry fire flows (minimum 6").

All fire hydrants shall face the street, driveway, or access point. The 4" nozzle cap of all fire hydrants shall be located not less than two feet (2') and no more than five feet (5') back of curb, except by special permission.

Installation of fire hydrants shall be in accordance with MCES Specifications.

Spacing between fire hydrants shall not exceed five hundred feet (500') in single-family residential developments and shall not exceed three hundred feet (300') in multi-family residential, industrial and commercial areas. The maximum length typically allowed for a fire hydrant branch is fifty feet (50'). The fire hydrant branch typically is the anchor piping between the six-inch (6") watch valve and the fire hydrant.

Air and sediment accumulations may be removed through a standard fire hydrant; therefore, hydrant locations need to consider high and low points in the water distribution system piping.

All fire flow tests must be performed by MCES and other agencies may witness.

All private fire hydrants shall be painted red or a color approved by the fire department that does not match MCES' fire hydrant color.

If a fire hydrant is damaged by any person, he/ she shall, upon demand by MCES, pay all costs and expenses incurred in the repair of the fire hydrant. In case of fire or inspection, the fire department shall have the right to use any hydrant, hose, pipe, or other fixture. They shall notify, in writing, MCES of any use for maintenance purposes.

4.5 Fire Line Policy

The installation of fire protection service connections to supply water to private fire hydrants and fire sprinkler systems shall be permitted when an application and plans for such service have been approved by MCES.

MCES Specifications shall be in effect to and include all fire lines from the main line connection up to and including the outlet valve of the double detector check assembly.

The application of these Rules and Regulations and MCES Specifications does not ensure conformance to Underwriter's Laboratory approval, insurance company approval, nor approval of any other agency.

MCES does not accept responsibility for ensuring proper fire hydrant connections to lines not under its control (beyond the double detector check assembly).

Testing of fire lines required by other agencies that exceed MCES standards may be used to meet MCES requirements.

Failure to repair a leak in a fire line within the time specified in a written notice by MCES shall be cause for discontinuance of fire line service. Forty-eight (48) hours prior to termination of fire service, the local fire and police departments shall be notified so as to ensure public safety.

No person other than an authorized agent of MCES or permit applicant shall use any fire hydrant for any purpose. Permits issued for fire hydrant use shall be carried at all times by the permit applicant.

4.5.1 Double Detector Check Valves

Any fire sprinkler system line or any private fire hydrant line connected to MCES' water system shall be equipped with an Ohio EPA approved double detector check valve assembly including a monitor meter with remote read register acceptable to MCES. The testable double detector check valve shall be Underwriter's Laboratory Factory Mutual (ULFM) approved.

The installation shall be in such a manner as to meter low flows into the fire system and positively prohibit the illegal use of water.

All private fire hydrants shall be served downstream of the double detector check valve assembly.

The double detector check valve assembly shall be the property of the property owner. Purchase and repairs shall be made at property owner's expense.

4.5.2 Monitor Meters

The monitor meter shall be installed a maximum of four feet six inches (4'-6") above floor in all cases regardless of how the double detector check is installed. All monitor meters shall have a testable double check valve assembly, ASSE 1015 at a minimum, installed to ensure a possible backflow incident from the fire suppression systems is property contained.

4.5.3 Double Detector Check Location

The double detector check shall be located in a pit on all installations where the domestic service meter is located in a pit. Both pits shall be in the same general location (twenty feet (20') maximum apart at easement or property line unless otherwise approved by MCES). It is acceptable to replace the existing meter pit with a combination fire line/ domestic service inside a building provided all requirements of Section 4.3.3 (Meter Pits) are met.

A structure exempted from a pit shall locate the double detector check assembly within the structure in the same general location as the domestic meter (same room and twenty feet (20') maximum separation unless otherwise approved by MCES).

4.5.4 Combination Fire/ Domestic Service

Combination fire/ domestic services may be allowed. A tee and both valves for the domestic and fire services shall be installed ahead of the inlet valve of the double detector check valve. The tee and valves for domestic and fire services shall be installed at the same time.

4.5.5 Approval/ Permit Issuance

Request for approval of fire line and combination fire/ domestic installations shall be reviewed after submission of detailed plans. At a minimum, the detailed plans shall include the following information:

- All underground utilities shall be shown with notation of materials used.
- Pit details, where applicable, shall be shown with dimensions on all fittings and proper separation of piping.
- Inside meter room details, where applicable.

Permits will be issued after:

- Detailed plans are approved.
- Payment is made for all applicable fees (inspection, flush test, monitor meter, plan review, etc.).
- Permit applicant is properly bonded and insured.

4.5.6 Dry Systems and Anti-freeze

Dry systems or anti-freeze systems are required on all installations subject to freezing. Anti-freeze shall be food-grade acceptable by the Ohio EPA.

The use of anti-freeze requires the installation of an approved reduced pressure assembly (ASSE 1013) on the anti-freeze leg or a reduced pressure detector assembly (ASSE 1047) at the service connection. This will be reviewed on a case-by-case basis.

4.5.7 Property Owner Responsibility

Personnel of MCES shall have the right of entry to any facility with fire line connections to the water system to ensure the integrity of the system is being maintained.

4.5.8 Extensions/ Additions

Fire line extensions and/ or additions of private outside hydrants, as well as fire sprinkler system additions, shall be reviewed as an entire system by MCES.

Plans for the entire private fire system shall be provided to show that all requirements of the fire line policy are met.

Expansion of systems with no existing detector check assembly shall be required to install a double detector check assembly in a location approved by MCES.

4.6 Backflow Prevention and Cross Connection Control Policy

As a condition for water service, MCES' Water Distribution system must be protected from backflow. MCES requires a permit to be acquired for all services connected to the distribution system and services shall conform to the standards of MCES' Rules and Regulations and Specifications up to and including the meter of fire line detector check valve or private fire hydrant. All plumbing installed after the meter shall conform to the State of Ohio Plumbing Code as described in Ohio Administrative Code Chapter 4101:2 or the latest revision thereof, or Local Plumbing Codes, whichever applies. Fire lines shall conform to the current National Fire Protection Association (NFPA) Standard or MCES Rules and Regulations, whichever is more stringent.

In addition to the above, all cross connections to auxiliary potable or non-potable or hazardous water systems as outlined in Ohio EPA regulations Chapter 3745-95 or latest revision thereof, must be protected from backflow by a method approved by MCES. Backflow prevention devices must be listed on the Ohio EPA's most current list of approved devices. All commercial, industrial, institutional, and multi-residential domestic services are required to have a backflow preventer installed.

Further, if in the judgment of MCES, the customer's premise is deemed an actual or potential hazard to the safety of the water distribution system; such customer shall be ordered to protect the system from backflow in an approved manner. Notification shall be given with a compliance time by MCES. If the hazard is deemed to be of a serious nature or the customer refuses to cooperate with MCES, the service shall be shut off immediately and remain off until the customer's premises are in compliance.

Backflow prevention devices shall be tested at the expense of the customer every twelve (12) months by a certified tester, and rebuilt on a schedule specified in Chapter 4101:2 of the Ohio Administrative Code. The customer shall be notified by MCES of a date to test backflow prevention devices on the customer's premises and given thirty (30) days to comply. At the end of thirty (30) days, if the customer does not

submit proof that backflow prevention devices have been tested, a fine of an amount outlined in our Ancillary Fee Schedule may be assessed for each untested device. If the backflow prevention devices are not tested within thirty (30) days of notification and certified operational, all service(s) to the property shall be shut off and the service(s) shall not be resumed until all devices are tested and associated fees are paid in full.

Temporary connections to MCES' water distribution system shall be protected against backflow by means of an air gap or other means approved by MCES.

An Air Gap ASME 112.1.2 or testable backflow prevention device (ASSE 1013, ASSE 1015, ASSE 1020, ASSE 1047, or ASSE 1048) must be provided to ensure there is no possibility of a backflow through the monitor meter.

4.7 Repair and Maintenance

MCES shall maintain all water mains within public right-of-ways or within easements reserved or granted to Montgomery County. Maintenance will not be performed on water mains that do not lie within easements or dedicated right-of-ways.

If a break or leak occurs in any service line between the main line and the curb stop, MCES will repair this at no expense to the property owner. MCES shall not be responsible for breakage of pipes or valves occurring during removal or installation of meters, or resulting from restoration of service where such breakage is due to old or faulty plumbing.

If a leak occurs at or beyond the outlet connection of the curb stop, the property owner shall be required to pay all costs of repair to the service line. Repairs shall be made within a period of time deemed appropriate by MCES after written notification has been issued, or the water shall be turned off until the repair is made.

No extensions, alterations, or repairs shall be made to any water pipes or fixtures between meter and curb stop except by a licensed, bonded, and insured plumber and with the approval of MCES.

The property owner is responsible for the meter pit and it must be installed and maintained to MCES Specifications. If the meter pit is buried or is inaccessible, they shall be notified to have the defect corrected. If the meter pit is worked on, it shall be brought up to current MCES requirements. Meter pits must be accessible at all times to MCES personnel.

When a residential or commercial water meter (one inch (1") or less) is located inside a structure and a repair is required to the property owner's service between the curb stop and meter, the water meter shall be relocated to an outside meter pit. The property owner shall be responsible for the associated costs.

Water service repairs and replacements shall require a permit and inspection from MCES and/ or local plumbing authority.

4.8 Deviations

Any deviation from this section shall be reviewed by MCES and considered on a case-by-case basis.

Additional requirements may be imposed to ensure the health, safety, and interest of MCES and general public.

5 Sanitary Sewer Collection System

5.1 Waste to be Discharged in Sanitary Sewer

Wastes which are permitted to be discharged into the sanitary sewer collection system include normal domestic sewage. Any other waste will be permitted only upon written permission from Montgomery County Environmental Services (MCES).

The Environmental Protection Agency requires the operating agency adopt adequate industrial waste ordinance to protect and maintain treatment facilities to be eligible for Federal funding. Refer to MCES' Municipal Pretreatment Program (MIPP) Rules and Regulations available at 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water.

5.2 Prohibited Wastes

No person shall discharge or cause to be discharged, any substances, materials, waters, or wastes into the sanitary sewer if it appears likely in the opinion of MCES that such wastes can harm either the sewers, sewage treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, health, public property, or constitute a nuisance. In determining acceptability of wastes, MCES will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the water reclamation facility, degree of treatability of wastes in the water reclamation facility, and other pertinent factors. No person shall discharge any material into any sanitary sewer in an amount or concentration deemed illegal by the United States Corps of Engineers, or the Ohio Environmental Protection Agency (Ohio EPA), as the above are applied to industrial waters. In the event that the limitations of these organizations are more stringent than those included in MCES' regulations, the more stringent regulations shall apply. Customer compliance with MCES' regulations does not imply compliance to the regulations of any other governing body. The following prohibited wastes are:

- Sump pumps, roof drains, perimeter drains, and other clean water connections.
- Any storm water, surface water, ground water, roof runoff, sub-surface drainage, uncontaminated cooling water, or unpolluted industrial process waters. Storm water and all other unpolluted drainage shall be discharged to specifically designated storm sewers or a natural watercourse.
- Any waters or wastes having a pH lower than six (6.0) or higher than twelve (12.0) or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sanitary sewer collection system.
- Any solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of sanitary sewer collection system such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and

fleshings, entrails, and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

- Any waters or wastes containing heavy metals to such degree that any such material received in the composite sewage at the water reclamation facility exceeds the limits established by MCES for such materials.
- Any waters or wastes containing phenols or other taste or odor producing substances, in such concentrations exceeding limits which may be established by MCES as necessary, after treatment of the State, Federal, or other public agencies of jurisdiction for such discharge to the receiving waters. Any radioactive wastes or isotopes of such half-life concentration as may exceed limits established by MCES in compliance with applicable State or Federal regulations.
- Any unusual concentrations of inert suspended solids, such as but not limited to, Fullers earth, lime slurries, and lime residues.
- Any unusual concentrations of dissolved solids, such as but not limited to, sodium chloride and sodium sulfate.
- Any excessive discoloration, such as but not limited to, dye wastes and vegetable tanning solutions.
- Any wastewater with an unusual biological oxygen demand (BOD), chemical oxygen demand (COD), or disinfection requirements in such quantities as to constitute a significant load on the water reclamation facility.
- Any unusual volume of flow or concentration of wastes constituting a slug load.
- Any waters and wastes containing substances which are not amenable to treatment by reduction by the sewage treatment processes employed are not to be discharged except by written approval of MCES. Industrial discharges must meet the requirements of any other governmental agencies having jurisdiction over discharge to the receiving waters.
- Any liquid or vapor having a temperature higher than one hundred and fifty degrees Fahrenheit (150°F) or sixty-five degrees Centigrade (65°C).
- Any water or waste containing fats, wax, grease, oils, whether emulsified or not, in excess of one hundred (100 mg/l) or containing substances which may solidify or become viscous at temperatures between thirty-two degrees Fahrenheit (32°F), one hundred and fifty degrees Fahrenheit (150°F) and sixty-five degrees Centigrade (65°C).
- Any commercial garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 HP metric) or greater shall be subject to the review and approval of MCES.

- Any waters or wastes containing strong acid iron pickling wastes or concentrated plating solutions whether neutralized or not.
- Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid, gas, or phenols.
- Any waters or wastes containing toxic or poisonous solids, liquids, or gases, in sufficient quantity, either singularly or by interaction with other wastes, to injure or interfere with any sewage treatment process, interfere with biosolids disposal, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the water reclamation facility.
- Any other discharge of material into the sanitary sewer determined to be harmful to human or aquatic life, or deemed detrimental to efficient operation of the sanitary sewer collection system, as specified by MCES.
- All deviations or waivers from the requirements of this section shall be approved in writing by MCES.

5.3 Judgment of Waste Quality

If any prohibited wastes as described herein are discharged or proposed to be discharged to the public sewers, MCES may:

- Reject the wastes.
- Require pretreatment to an acceptable condition for discharge to the public sewers.
- Require control and monitoring of the quantities and rates of discharge.
- Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges, as determined by MCES.

If MCES permits the pretreatment or equalization of waste flows, the design and installation of the plans and equipment shall be subject to the review and approval of MCES, and subject to the requirements of all applicable codes, ordinances, and laws, including the Ohio EPA, and the Army Corps of Engineers.

5.4 Special Appurtenances

Grease, oil and sand interceptors shall be provided when, in the opinion of MCES, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by Public Health Dayton – Montgomery County, or other agencies, and shall be located as to be readily and easily accessible for inspection. Maintenance of the interceptors shall be the property owner's responsibility.

Where preliminary treatment or flow equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the property owner at their expense.

When required by MCES, the owner of any property serviced by a sanitary sewer carrying industrial wastes shall install a suitable control manhole, together with such necessary meters and other appurtenances to facilitate observation, sampling, and measurement of the wastes. Such control manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by MCES. The control manhole shall be installed by the customer at their expense, and shall be maintained by them so as to be safe and accessible at all times.

5.5 Testing

All measurements, tests, and analysis of the characteristics of waters and wastes, to which reference is made in these Rules and Regulations, shall be determined in accordance with the latest edition of “Standard Methods for the Examination of Water and Waste Water”, published by the American Public Health Association, or USEPA-accepted methods and shall be determined at the control manhole. In the event that no special control manhole has been required, the nearest downstream manhole shall be used.

Any new industrial and commercial customers shall comply with MCES’ MIPP and supply MCES with a series of sample wastes to be tested by MCES so that guidelines can be used to assist in establishing rates for billing purposes.

5.6 Sanitary Sewer Requirements

The minimum main line sewer pipe size shall be nominal eight-inch (8”) inside diameter. Sanitary sewer service laterals for commercial use shall be minimum nominal six-inch (6”) interior diameter unless otherwise approved.

Sanitary sewer grades:

Line Size	Minimum Design	Minimum As-Built
8”	0.45%	0.40%
10”	0.33%	0.28%
12”	0.27%	0.22%
15”	0.20%	0.15%
18”	0.17%	0.12%
21”	0.15%	0.10%
24”	0.13%	0.08%
27”	0.12%	0.07%
30”	0.11%	0.06%
36”	0.09%	0.05%
42”	0.087%	0.037%
48”	0.081%	0.031%
54”	0.076%	0.026%
60”	0.073%	0.023%

Sanitary sewer at a slope greater than twenty percent (20%) must be constructed of appropriately lined ductile iron pipe with restrained joints in accordance with the specifications, with concrete anchors per Ohio EPA sanitary sewer design and installation guidelines.

Sanitary sewer collection system improvements shall be reviewed and approved by MCES and Ohio EPA, where applicable.

Sanitary sewer mains shall be installed to the middle of the property or to a point perpendicular to the middle of the structure being served whichever is the greater distance. Within plats, the sanitary sewer shall be installed to the plat line.

No private sanitary sewer lateral shall be installed on any property other than the one being served. Sanitary sewer laterals are not to cross property lines.

MCES recommends minimizing the installation of sanitary sewers between lots. If not possible, the sanitary main must be centered in a minimum twenty-foot (20') wide permanent easement. If the bottom of the trench exceeds ten feet (10') in depth, an additional two feet (2') of permanent easement width is required for each additional foot of depth, as a minimum. Manholes in backyards will only be considered as a last option. When sanitary sewers must be installed between lots appropriately lined ductile iron pipe water main material or approved alternate shall be used. Approved alternate water main material may be AWWA C-900 DR18 as accepted on a case-by-case basis.

All sanitary sewer mains shall be a minimum of ten feet (10') from any building or structures or equal to depth to one foot (1') below the bottom of sewer, whichever is greater.

No sanitary sewer mains or laterals are to be located within twenty feet (20') of any detention or retention basin, as measured from the top of the overflow elevation of any retention or detention area.

The maximum spacing between manholes shall be four hundred feet (400').

Sanitary sewer with less than three and one-half feet (3 ½') cover must be constructed of ductile iron pipe, properly lined, in accordance with the materials specifications section. Sanitary sewer force mains shall have a minimum of four and one-half feet (4-1/2') of cover over the top of the pipe. No sanitary sewer main shall have less than three feet (3') of cover.

Sanitary sewers to be installed in a casing pipe shall be appropriately lined ductile iron pipe with restrained joints, in accordance with the specifications, unless approved on a case-by-case basis in writing.

PVC sewer pipe may be used only in residential areas and shall be approved prior to issuance of main line permits. No changes are to be made in material type after issuance of main line permits.

A Capacity Assurance Plan will be required on all sanitary sewer relocations or tie-ins to an existing pump station or where a known capacity problem exists. The extent of study shall be determined by

MCES including, but not limited to, the present loading on the existing pumping station and all proposed additional loadings, including all gravity sewers and discharge sewers to a point determined by the MCES. Pumping stations without adequate capacity shall be upgraded. The pumping station design should consider the eventual elimination of the station once gravity sanitary sewer is available.

5.6.1 Parallel Installation

Water mains shall be laid at least ten feet (10') horizontally from any sanitary sewer, storm sewer or sewer manhole, whenever possible; the distance shall be measured edge-to-edge.

When local conditions prevent a horizontal separation of ten feet (10'), a water main may be laid closer to a storm or sanitary sewer provided that:

- The bottom of the water main is at least eighteen inches (18") above the top of the sewer;
- Where this vertical separation cannot be obtained, the sewer shall be constructed of materials and with joints that are equivalent to water main standards of construction and shall be pressure tested to assure water tightness prior to backfilling.

5.6.2 Crossings

Water mains crossing house sewers, storm sewers or sanitary sewers shall be laid to provide a separation of at least eighteen inches (18") between the bottom of the water main and the top of the sewer, whenever possible.

When local conditions prevent a vertical separation as described above, the following construction shall be used:

- Sewers passing over water mains should be constructed of the materials and with joints that are equivalent to water main standards of construction and shall be pressure-tested to assure water tightness prior to backfilling.
- Water mains passing under sewers shall, in addition, be protected by providing:
 - A vertical separation of at least eighteen inches (18") between the bottom of the sewer and top of the water main;
 - Adequate structural support for the sewers to prevent excessive deflection of joints and settling on and breaking the water mains;
 - That the length of water pipe be centered at the point of crossing so that the joints will be equidistant and as far as possible from the sewer.

5.7 Repair and Maintenance

5.7.1 Mainline Sanitary Sewers

MCES shall maintain all mainline sanitary sewers within dedicated right-of-ways or in easements dedicated to Montgomery County. Maintenance will not be performed on sanitary sewers that do not lie within easements or dedicated right-of-ways.

Repairs completed by others shall be performed in accordance with MCES. The use of “flexible style couplings” with double stainless steel shear bands in the repair of existing sanitary sewer mainlines is acceptable.

Any access to sanitary sewer mainlines and appurtenances shall require a permit from MCES. Unauthorized entrance may be subject to fines.

5.7.2 Sanitary Sewer Service Laterals

MCES is responsible for the mainline sewer and the connection to the main only. Any sewer lateral from the mainline to a structure is the property owner’s responsibility.

It shall be the responsibility of the plumber for any maintenance on a new service from the main to the easement or property line (whichever is greater) for a period of one (1) year after the final inspection by MCES.

Sanitary sewer service repairs and replacements between the main and the structure shall require a permit and inspection from the local plumbing authority.

6 Permitting

All water taps, sewer taps, extensions, or any construction that involves water distribution system or sanitary sewer collection system, which will become part of, utilized, or be tapped into, the existing systems require permits from Montgomery County Environmental Services (MCES). Information on permit, plan review, and fees is available at MCES, located at 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water.

The issuance of permits to tap into a sewer or water line by MCES does not relieve the permit holder of the responsibility of securing permits from other governing agencies for permission to perform work in public or private right-of-ways that are involved.

Permits shall be kept at the construction site at all times while work is in progress and until a final inspection has been made by MCES.

6.1 Permit Requirements

A permit must be applied for by a licensed, bonded, and insured plumber engaged by the property owner in order to receive a new service. Permits will not be issued until application connection fees have been paid.

Plumber or contractor shall not begin work without permits being issued. A penalty fee as outlined in the Ancillary Fee Schedule shall be charged to the plumber or contractor for any and all work performed on sanitary sewer and/ or water mains without a permit. The plumber or contractor shall not be issued any further inspections or permits until the penalty fees are paid.

6.1.1 Main Line Permits

Requirements for issuance of main line permits:

- Payment of connection fees, if applicable.
- Fully approved construction drawings.
- Signed, notarized easement deeds and executed record plan approved by the appropriate Planning Commission.
- Ohio Environmental Protection Agency (Ohio EPA) approval.
- Street cut permit, if applicable.
- Protection or direct connection (capital improvement and other county-funded projects) fees paid, if applicable.
- The officially assigned street name, address, and lot number must be furnished to MCES prior to issuance of sanitary sewer or water lateral stub permits.
- Completion of Plan Review Application Form and payment of plan review fees.

- Fire Department approval (for water mains).
- Addresses for all water and sewer service laterals.
- Executed sub-dividers contract.
- Submit surety as required per Section 7.1 (Private Development Surety Procedures).

6.1.2 On-Premise Permits

If public sewer is not available, the on-premise water service permit will not be issued until an on-site sewage treatment permit is issued by the plumbing authority. Examples of on-site sewage treatment include, but not limited to, septic tanks, mound systems, and package treatment plants.

Requirements for on-premise service permits:

- Payment of connection fees.
- Acceptable plumber's bond posted with MCES, where applicable.
- All main line extensions have been constructed, inspected, tested, and released for service.
- The plat must be recorded with maintenance surety or performance surety posted for uncompleted or not accepted improvements.
- Approved service drawings other than detached single family residences. A copy of these procedures is available at MCES, 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water.

6.1.3 Service Stub Permits

Requirements for sewer service stub permits are the same as main line permits (Section 6.1.1).

Requirements for water service stub permits are the same as main line permits (Section 6.1.1) and that the main line is tested, inspected, and released by MCES.

Connection fees are not applicable to service stub permits.

6.2 Insurance and Bonding

No permits shall be issued to anyone except a licensed, bonded, and insured plumber or contractor without the express permission of MCES.

All plumbers and contractors must submit a copy of their plumbing and/ or contractor's license and a five thousand dollar (\$5,000.00) plumbing bond which must be on file with MCES. All plumbers and contractors must place on file evidence of insurance for general liability in the minimum amount of one million dollars (\$1,000,000.00) for each occurrence (bodily injury and property damage), and automobile liability in the minimum amount of one million dollars (\$1,000,000.00) for each accident. All policies must name the County Commission as an additional insured and coverage must be on a primary and

non-contributory basis. All insurance policies required by these documents shall be subject to a sixty (60) day written notice of cancellation or diminution of coverage to the County Commission. General Liability additional insured's should be on CG 2010 10 01 or 04 13 and CG 2037 0704 or equivalent.

No person or persons, firm, or corporation, or any employee of such, shall tap any sewer or water mains, or lay any house connection pipes, or dig in any street, road, or any public way for the purpose of tapping unless such person or persons have a plumber's bond. Sewer and water contractors may install service stubs to the property lines in conjunction with their mainline installation.

Plumbers who violate any of MCES' Rules and Regulations or Specifications may have their rights to receive permits suspended or revoked.

6.3 Construction and Inspection

No sanitary sewer or water main construction or appurtenances associated therewith shall be started until all permit requirements have been met.

The permit applicant must give two (2) days notice to MCES before proceeding so MCES can be prepared to have the proper number of inspectors on the job. Notification of stoppage of work must also be given.

All materials and workmanship in connection with any service from a public water main or sanitary sewer main to a structure, where applicable, shall be in accordance with MCES' Rules and Regulations, Specifications, and any federal, state, and local jurisdiction requirements, including but not limited to OSHA safety requirements, as now in force or hereafter amended. All work and materials shall adhere to MCES' Specifications in effect at the time of construction and be in accordance with the approved construction plans.

If any change or modification is deemed necessary in the plans during construction, all work shall be stopped until revised plans have been resubmitted and approved by MCES. Authorization to proceed will be considered by MCES on a case-by-case basis.

All improvements shall be constructed under the inspection of MCES or a duly authorized representative. Any work that requires overtime hours from MCES or duly authorized representative shall be paid by the Developer.

All testing must be performed in the presence of MCES.

Plumber or contractor is responsible for easement certification and grade certification, where applicable.

If MCES or the duly authorized representative deems that any work is improper, he may order all work stopped. Work shall not proceed until the permit applicant has received written permission from MCES. Work not properly performed shall be corrected at no cost to MCES.

If any plumber or contractor shall neglect or refuse to abide by these Rules and Regulations, during construction, and after reasonable notice by MCES, MCES may order correction work to be done and charge the plumber or contractor. Unless such charges are paid, MCES will not issue further permits or award future projects to the delinquent contractor.

After construction is completed, the project has been accepted by the County Commission and the Performance Bond, Letter of Credit, Certified Check or Cashier's Check is one hundred percent (100%) released, all sanitary sewer mains, water mains and appurtenances connected to the County Commission's systems will become the sole property of the County Commission for operation and maintenance.

7 Private Development and Improvement

When sanitary sewer and water extensions are required to serve a tract of ground, the herein specified procedure shall be followed:

- A preliminary plan showing lot layout and overall water distribution and sanitary sewer collection plan shall be prepared and submitted by a Professional Engineer registered with the State of Ohio. The preliminary plan shall include the proposed water demands and sewer flows.
- The availability of service for the area for the use intended shall be determined by Montgomery County Environmental Services (MCES). Capacity analysis and system modeling may be required.
- Final plans in their entirety or phases shall be submitted for review.
- Direct connection fees are to be paid and shall be in accordance with the latest schedules approved by the County Commission.
- Amounts of protections shall be determined and established, as outlined in Section 7.3 (Protection Procedures).
- Oversize facilities as required by MCES shall be determined and established, as outlined in Section 7.4 (Oversize Reimbursement Procedures).

A copy of the Engineering procedures is available at MCES, 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water.

7.1 Private Development Surety Procedures

The official blank Performance Bond or Letter of Credit forms are to be obtained from MCES, 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water. These forms are to be completed by the bonding company referencing the accepted engineer's estimate of cost.

All Letters of Credit shall contain the MCES' standard language. The initial expiration date on the Letter of Credit shall be two (2) years after the issue date.

The principal must sign all copies of the Performance Bond or Letter of Credit. If signing for a company, the signer must insert their company title.

The surety is requested to fill in its correct mailing address so MCES may send a signed and executed copy to said surety. The date on the Power-of-Attorney shall be the same as, or prior to, the date of the bond.

All spaces must be filled in before submitting to MCES. There must be at least one (1) copy of the Power-of-Attorney for the Performance Bond. The engineer's estimate will be checked for accuracy and acceptable price range.

Delivery of executed Performance Bonds or Letters of Credit for plats and private projects are to be made to MCES.

When the Performance Bonds, Letters of Credit or Certified Checks are found to be accurate, MCES will prepare a resolution for the County Commission's approval and acceptance. The Bonds or Letters of Credit and Resolution will then go to the Clerk of Commission's office for submission to the County Commission at the next regularly scheduled meeting.

After acceptance and signing by the County Commission or Administrator, the County Commission's Clerk will affix the pertinent resolution number to each copy.

All Performance Bonds, Letters of Credit and Sub-Divider's contracts shall remain active until released by formal County Commission action.

7.1.1 Performance Surety

The Developer shall execute a Performance Bond or Letter of Credit equal to one-hundred percent (100%) or post a Cashier's or Certified Check equal to twenty percent (20%) of the cost of construction based upon an estimate acceptable to MCES and to the satisfaction of the County Commission to ensure faithful performance of the construction. The minimum amount of the Cashier's or Certified Check shall not be less than five thousand dollars (\$5,000.00).

The Developer may begin construction prior to posting the surety provided the Record Plan has not been recorded. The Developer shall execute a Performance Bond or Letter of Credit equal to twenty percent (20%) or post a Cashier's or Certified Check equal to twenty percent (20%) of the cost of construction based upon an estimate acceptable to MCES and to the satisfaction of the County Commission for all work constructed and accepted prior to the recording of the Record Plan. The minimum amount of the Cashier's or Certified Check shall not be less than five thousand dollars (\$5,000.00). If a Cashier's or Certified Check is presented to MCES, it shall be deposited into a non-interest bearing account with the County Auditor.

7.1.2 Maintenance Surety

All water distribution and sanitary sewer collection systems shall be guaranteed against defects resulting from the use of inferior materials, equipment, or workmanship by the Developer for a minimum period of one (1) year from the date of acceptance for use by MCES. This date is typically when the improvements were released for service. During the life of the guarantee, the Developer shall be required to make all repairs or changes in the guaranteed work which in the opinion of MCES are necessary as a result of the use of material, equipment, or workmanship which are inferior, defective or not in accordance with MCES Rules and Regulations and Specifications for construction of sanitary sewer and water mains.

The Developer shall within a period of seven (7) working days after receipt of notice from MCES and without expense to MCES proceed to remove and replace all unsatisfactory work with suitable materials, equipment, and workmanship. Failure by the Developer to proceed with the terms of the

guarantee shall be sufficient reason for MCES to have the defects corrected, and the Developer and their Surety shall be liable for the expenses incurred by the corrections.

If, in the opinion of MCES, an emergency arises that jeopardizes continuity of service or public health, welfare, or safety, and the Developer is unable to remedy the situation at the time it exists, MCES reserves the right to immediately take steps without any notice to have the situation remedied. The Developer and their Surety shall be liable for all expenses incurred in making these repairs.

In order to indemnify MCES for such expenses of any such repair or replacement made by or at the direction of MCES, a maintenance surety shall be posted. The surety may be in the form of a Maintenance Bond, Letter of Credit, Cashier's or Certified Check. The bond shall be in the amount of twenty percent (20%) of the accepted engineer's estimate of cost. The minimum amount of the Cashier's or Certified Check is five thousand dollars (\$5,000.00). The release of the Maintenance Bond shall be in accordance with Section 7.2 (Private Improvement Release Requirements).

If a Cashier's or Certified Check is presented to MCES, it shall be deposited in a non-interest bearing account with the County Auditor.

7.1.3 Sub-divider's Contract

The property owner/ developer shall be required to enter into a contract (Sub-Divider's Contract) prior to permits being issued for the water and/ or sanitary sewer improvements.

Official blank contract forms (Sub-Divider's Contract) are to be obtained from MCES, 1850 Spaulding Road, Kettering, Ohio 45432 or online at www.mcoho.org/water. The principal must sign the contract. If it is a company signing, the signer must insert their company title. The sub-divider on the contract, and the principal on the bond, must be the same. There must be witnesses on the sub-divider's contract. MCES will prepare a Resolution for the County Commission's approval and acceptance. The resolution will then go to the Clerk of Commission's office for submission to the County Commission at the next regularly scheduled meeting.

7.2 Private Improvement Release Procedures

Specific requirements and procedures for surety releases must be met before any such releases will be processed.

7.2.1 Release Requirements

Upon completion of the installation of all water mains and/ or sanitary sewer mains, MCES will send a Request for the Sanitary Sewer Grade Certification and/ or Easement Certification to the Professional Engineer by form letter. The Sanitary Sewer Grade Certification shall include a statement of certification along with a list of proposed vs. actual inverts, spans, size of main and percent (%) of grade. The Easement Certificate shall state that the water and/ or sanitary sewer was installed within the easements and was installed as shown on the approved plans. These certifications shall be signed and sealed by a Professional Engineer or Surveyor registered in the State of Ohio.

Upon receipt and acceptance of the Sanitary Sewer Grade Certification, Easement Certification, completion of the sanitary sewer and/ or water main installation in the ground, satisfactory testing and all appurtenances at grade per plan, MCES will sign the release form. Upon receipt of the signed release and receipt of the recorded Record Plan and/ or easements, MCES will prepare a resolution to be sent to the County Commission requesting the Performance Bond or the Letter of Credit be reduced by eighty percent (80%) for the maintenance period. Cashiers or Certified Checks are not reduced.

With the County Commission's approval, a Resolution signifying the release of the performance surety and acceptance of the maintenance surety or eighty percent (80%) release of the Letter of Credit will be passed. The County Commission's Clerk will send an executed copy of the resolution to MCES. MCES will then disperse a copy each to the Developer, the Surety, and the Consulting Engineer.

7.2.2 Acceptance Requirements

All inquiries on bond status for plats and private projects are to be processed through MCES. Projects are eligible for acceptance when the On-Premise is released for water and/ or sewer. Acceptance requires all items to complete in accordance to plans, all appurtenances to grade, and as-built reproducible construction plans accepted.

All requests for acceptance are to be made to MCES. It is the property owner/ Developer's responsibility to notify MCES when the project is ready for acceptance. When the inspection is made and MCES is satisfied the job is acceptable and an acceptance form will be signed. Upon receipt of the signed acceptance form, MCES will then request the as-built plans, if not already submitted by the Professional Engineer.

Upon receipt of the as-built plans, MCES will then proceed with the field check of the as-built plans. Once as-built plans are accepted by MCES, they will prepare a resolution to be sent to the County Commission requesting acceptance along with the required maintenance surety. With the County Commissioner's approval, a resolution signifying acceptance will be passed.

This procedure will apply to private development projects and will not to apply to any bonds posted for MCES improvements which are advertised, bid upon, or awarded to a specific contractor.

7.3 Protection Procedures

7.3.1 Eligibility

An individual or firm that provides water and/ or sanitary sewer improvements to properties other than those owned by the individual or firm, is eligible for protection in accordance with Section 307.73 of the Ohio Revised Code (O.R.C.).

7.3.2 Fee Establishment

Protection fees shall be established by resolution by the County Commission upon recommendation of MCES.

This fee shall be based on a front footage. For the establishment of protection as outlined in this section only; "front footage" shall be the footage of sanitary and/ or water main installed along or through a

directly benefited property. The pro-rated share shall not be in excess of the amount chargeable to the non-participant if such non-participant had participated in water main or sanitary extensions.

A preliminary request to establish protection shall be submitted in accordance with the following steps.

- A form letter requesting preliminary protection shall be submitted to the Board of County Commissioners, in care of the Director, MCES, 1850 Spaulding Road, Kettering, Ohio 45432 (see Attachment "A"). This letter shall be submitted prior to plan approval.
- Attached to the letter of request shall be a detailed unit price cost estimate prepared by the design engineer, a property map(s) showing the property dimensions of all directly benefited properties, estimated engineering fees, appropriate inspection fees and Ohio Environmental Protection Agency (Ohio EPA) fees, and easement costs.

The amount of protection will be based on the following items:

- Construction Cost of Improvement
- Easement costs for improvement; final easement payments must be justified as to reasonableness by submission of an appropriate appraisal.
- Engineering fees (design staking and as-builts).
- Inspection fees (by permit).
- Ohio EPA fees (Plan Review, Permit to Install (PTI) Application and fee).

The front footage cost will be computed as follows:

- Amount of protection (dollars) = protection cost / front footage, where front footage is all benefitted properties (linear feet, both sides of the main).

A final request to establish protection shall be submitted in accordance with the following steps:

- A letter requesting the establishment of protection shall be submitted to the Board of County Commissioners in care of the Director, MCES, 1850 Spaulding Road, Kettering, Ohio 45432. This letter shall be submitted within ninety (90) days when the utility was released for on-premise and contain the exact name and address with whom the protection shall be established and payment made.
- Attached to the letter of request shall be a copy of the construction contract to verify the actual unit prices, and proof of payment thereof, as-built quantities from the design engineer, a notarized statement from the design engineer to verify their fees and payment of those fees, receipt of payments for any easements and appropriate justification of costs, a copy of the permit to document the inspection fees and receipts or proof of payment of any Ohio EPA fees for the improvement.

- Upon receipt, review, and agreement to documentation, MCES will prepare their resolution of recommendation to the County Commission for establishment of the protection.
- The Developer is responsible for filing the protection with the County Auditor's office and submitting a receipt of the filing to MCES.

7.3.3 Collection

Once the County Commission passes the resolution establishing the protection fees, MCES will collect these fees at the time of issuance of any applicable permitted connections by those directly benefited properties as established.

7.3.4 Reimbursement

Any protection fees collected by MCES will be reimbursed in accordance with the appropriate resolution of establishment.

7.3.5 Term

The protection shall be in effect for a ten (10) year period from the date stated in the resolution of establishment passed by the County Commission.

7.3.6 Rights

Protection rights are non-transferable and shall apply to only the individual or firm with whom they are established.

7.3.7 Disclaimer

MCES accepts no liability for collection of protection monies or policing of the improvement due to error.

7.4 Oversize Reimbursement Procedures

7.4.1 Eligibility

An individual or firm that must install sanitary sewer and/ or water lines in a larger diameter than required to properly serve their development, per MCES, is eligible for reimbursement

7.4.2 Establishment

A total figure of cost participation by MCES shall be agreed upon in writing prior to formal plan approval by the County Commission.

Oversize water lines shall be determined from the latest approved master plan or as hydraulically needed per MCES. The reimbursement shall be based on the unit price schedule for lineal feet of pipe and number of valves.

Oversize sanitary sewer lines shall be determined by the latest approved master plan, to eliminate an existing sewage pumping station, or as hydraulically needed per MCES. The cost participation when applicable shall be in accordance with the latest unit price schedule for lineal feet of pipe at various depths with or without gravel backfill.

7.4.3 Payment

A letter requesting reimbursement shall be submitted to the Board of County Commissioners in care of the Director, MCES, 1850 Spaulding Road, Kettering, Ohio 45432.

The letter shall be submitted within thirty (30) days after installation of the sanitary sewer and/ or water lines that meet the eligibility requirements.

Upon receipt of the formal request, it will be checked by MCES for accuracy and if acceptable, a resolution will be prepared and sent to the County Commission for adoption authorizing payment.

Upon receipt of the executed resolution, MCES will prepare a voucher and forward it to the County Auditor who will in turn, issue a warrant and send a check for payment to the individual or firm.

8 Engineering Requirements

8.1 Easements

All required easement deeds shall be submitted to Montgomery County Environmental Services (MCES) for acceptance and recording.

Sanitary sewers and water mains must be centered in a twenty-foot (20') wide minimum permanent easement. There shall be an additional two feet (2') of permanent easement width for every additional one-foot (1') depth over ten feet (10') of trench depth.

Any utility (sewer or water) constructed in an easement must have sufficient accessibility for the MCES operation, maintenance, and repair equipment. This would include additional easements for access, where necessary, including gravel or paved access for operation and maintenance purposes.

All easement deeds shall be drafted by the Montgomery County Prosecutor's Office. The legal description of the easement shall be provided by a Professional Surveyor registered in the State of Ohio and labeled "Exhibit A", a detailed drawing showing the proposed easement shall be provided by a Professional Surveyor registered in the State of Ohio and labeled "Exhibit B" and a completed current 1099-S form shall be submitted with each easement for review and approval. These easement deeds are granted to the County Commission which requires legislative action to accept and direct the Clerk of the Commission to record. Easements may also be shown on accepted record plans.

8.2 Construction Plans

An electronic version of the construction plans in Adobe Acrobat (pdf) format, scalable to a 22" x 34" (ANSI D) plan size, a plan review application and fee, accompanied by the design computation sheets, shall be submitted for the approval of MCES. Any plans or specifications which are improperly prepared or accompanied by insufficient or inaccurate information may be rejected by MCES, whereupon, revised plans and specifications or more sufficient data shall be required. Construction plans are to be signed, sealed, and dated by the Professional Engineer registered in the State of Ohio.

8.2.1 Physical Format

All construction plans submitted to the MCES must be on the following format:

- Standard sheet: ANSI D (22" x 34").
- Media: Mylar for as-built drawings and electronic copy (Adobe Acrobat pdf format).
- Lettering: All lettering .1" minimum, .5 maximum. Lettering shall be legible at half-size plots.
- Title Block (for line work): Located along the bottom edge of the sheet; include Sewer District, Plat Name, Section, Engineer's Name, Seal, Signature, Sheet Number, Number of Sheet, and revision block.

- Title Block (for structures): Located along the right edge of the sheet; include Sewer District, Plat Name, Section, Engineer's Name, Seal, Signature, Sheet Number, Number of Sheet, and revision block.
- The scale shall be written and represented graphically.
 - Horizontal Scale: 1" = 20' (1" = 40' with permission).
 - Vertical Scale: 1" = 5'.
- Approval Block: In the upper right hand corner of the first sheet shall include signature lines and dates for MCES, County Engineer when a County Road is involved, Director of Water for the City of Dayton (sanitary only, where applicable), applicable City or Municipal Engineer when within corporation limits, and Ohio Environmental Protection Agency (Ohio EPA) submittal and approval dates.
- Vicinity Map: Shall be provided on the first sheet to show the location of the construction.
- Cover Sheet: If there are five or more sheets, a cover sheet is required containing the approval block, vicinity map, and a key utility map with sheet reference numbers.
- North Arrow: Each sheet shall have a legible North arrow oriented up and/ or to the right or left; not downward.
- General Notes: The required general notes shall be shown on the plans.
- Bench Mark: The Bench Mark used for water and sanitary installation shall be shown on each plan and profile sheet of the plans, NAVD 88 elevation datum.
- Record Plan: A record plan for the development shall accompany the construction drawings. A 1" = 400' scale drawing of the plat shall also be submitted. The Record Plan shall have an Approval Sign-off for MCES. A Record Plan shall not be recorded without this approval.

8.2.2 Computer Aided Drafting Plans

All computer aided drafting plans (CAD) shall follow the guidelines described herein.

Any plans generated by CAD shall be submitted electronically at the time of final approval of the project, and again at the time of as-built acceptance.

CAD plans must be on AutoCAD® format acceptable to MCES. All digital plans must have a geographic reference that can be connected to State Plane, Ohio South, NAD83 coordinates.

8.2.3 Required Information

Each set of plans shall contain this note: "All sanitary sewer and/ or water lines and appurtenances shall be constructed according to MCES Specifications in effect at the time of construction".

The MCES' approval is subject to conditions imposed by the Ohio EPA.

Plan and profile for both sewer and water shall be shown on the same sheet. The profile shall be below the plan and shall be taken at the pipe centerline. The profile shall be lined up under corresponding points on the plan as nearly as practical. The existing and proposed grade profile shall be shown on each profile view.

It will be necessary for clarification to show water services including the existing main(s) and service line(s), size, curb stop and meter pit location or inside meter room on construction plans for commercial, industrial, multi-family developments and cul-de-sacs in single family residential developments.

All existing utilities and structures in the street or easement shall be shown in both plan and profile. Sizes, locations, dimensions and elevations shall be included. These utilities and structures include, but are not limited to:

- Gas mains
- Electrical and telephone conduits
- Storm sewers
- Sanitary sewer lines
- Water lines
- Telephone poles
- Street lights
- All above ground structure or landscaping feature which may affect construction
- Cable lines, including fiber optic

Abbreviations will be per MCES Standards.

MCES has established a unique manhole numbering system. All preliminary plans shall have no manhole numbers. Manhole numbers shall be assigned by MCES during the plan review process.

Manholes shall be numbered as assigned and station numbers shall be noted. The existing manhole shall be assigned a starting station. Both manhole and station numbers shall appear on both plan and profile.

The type of pipe material, joints and strength shall be shown in the profile for both sewer and water, using the ASTM or AWWA nomenclature if materials, joints or strengths vary from those required by MCES Specifications.

The location and size of all special features, such as, but not limited to gabion mats, concrete encasements, siphons, elevated sewers, special cross sections, and concrete thrust block shall be shown.

Details of all special appurtenances, such as junction chambers, siphons, regulators, metering devices, elevated sewers, etc. shall be shown.

All subdivisions, addresses, and Plat Book pages shall be clearly marked including lot numbers. Where practical, all properties abutting the improvement shall be shown for full width and depth.

The ownership of all property not subdivided by a recorded plat shall be shown on the plan, including Deed Book, page, acreage, and addresses, if available.

All corporation lines with dimensions and other information that will fix the exact location shall be shown including Section, Township, and Range.

Private driveways, lanes, and easements with appropriate dimensions and reference/ microfiche numbers shall be shown by dashed lines.

The location, description and elevation of all bench marks used in connection with the project shall appear on all plan and profile sheets.

Test boring locations shall be shown on plans.

Proposed lines shall be shown as heavy lines; existing lines shall be shown as thin dashed lines.

Existing or proposed streets and all streams or water surfaces shall be clearly shown. Contour lines at appropriate intervals shall be shown on the grading plan, when required.

All stream crossings shall be shown with stream bed elevation in profile, and are to be in accordance with Ohio EPA and/ or United States Army Corps of Engineers guidelines.

The following factors should be considered in providing adequate separation:

- Materials and type of joints for water and sewer pipes.
- Soil conditions.
- Service and branch connection into the water main and sewer line.
- Compensating variations in the horizontal and vertical separations.
- Space for repair and alterations of water and sewer pipes.
- Offsetting of pipes and manholes.

8.2.4 Sewage Pumping Station

A plan shall be submitted for projects involving construction or upgrading of sewage pumping stations. This plan shall show the following:

- The location and extent of the tributary area.

- Any municipal boundaries within the tributary area.
- The location of the pumping station and force main and pertinent elevations.

Detailed plans shall be submitted showing the following, where applicable:

- Contour map of the property to be used.
- Existing pumping station.
- Proposed pumping station, including provisions for installation of future pumps or ejections.
- Elevation of high water at the site, and maximum elevation of sewage in the collection system upon occasion of power failure.
- Test borings and ground water elevations.
- Special construction notes with drawings shall be approved by the MCES.
- Supervisory Control and Data Acquisition (SCADA) requirements per MCES.

8.3 Specifications

A complete set of specifications shall include MCES' Specifications and additional technical specifications as needed for the construction of all sewer lines, sewage pump stations and appurtenances, and all water lines, water pump stations and appurtenances shall accompany the plans. These specifications shall include all the technical construction information necessary to inform the contractor in detail of all design and construction requirements for installation of the job.

8.4 Revisions to Approved Plans

Any deviation from approved plans and specifications affecting easements, capacity, flow or operation of units or any other such basic design change shall be approved by MCES before such changes are made. These revisions shall be submitted well in advance of construction. Revised plans during construction shall be submitted before construction is to continue.

8.5 Approval Period

Approved plans are in effect for one year from the date of approval from the MCES. If permits have not been issued, they must be resubmitted for re-approval by MCES with a revised cost estimate. Plan review fees will apply for review of expired plans.

8.6 As-Built Drawings

As-built drawings must not have any objects, dimensions, elevations, grades, etc., crossed out; they must be removed from the drawing.

All sanitary manholes and water valves must be located with a minimum of two (2) dimensions required on all locations. The two dimensions cannot be in a straight line to each other.

All as-built dimensions are to be measured in feet and tenths of a foot and are not to exceed one hundred feet (100') in length.

Dimension lines shall be shown on drawings except where they would add substantial confusion in interpretation. Details shown on the same sheet with an arrow pointing to the area may be acceptable.

Dimensions shall be from centerline to centerline except for house corners and catch basins (to the closest street corner).

Written dimensions will be considered at right angles with one another unless noted or shown otherwise.

Measurements shall be on the horizontal unless noted under special conditions.

The following shall be required on all as-built drawings:

- Measurements between valves within an intersection, or when at a tee or cross. These dimensions shall be in addition to the two (2) required locations.
- Measurements between fire hydrants and fire hydrant valves.
- Distances between sanitary manholes are to be shown on the plan.
- Length of span, grade, pipe diameter and material, and invert elevations will be required in the profile.
- Length of span may vary plus/ minus five feet (5') before main line in plan must be changed. The span length must be marked clearly and correctly.
- Invert elevations may vary plus/ minus 0.5' before main line profile must be changed. The elevations, however, must be marked clearly and correctly.
- The water main shall vary plus/ minus five feet (5') be shown in the exact location as constructed on the final as-built drawing.
- Recorded easement(s) and/ or recorded plan Plat Book and Page Numbers are to be shown on the plans.
- GPS coordinates for fittings, valves, bends, manholes, fire hydrants, curb boxes, service stubs, and other appurtenances.

The following is a list of objects that will be acceptable for as-built dimension references in order of preference.

- Fire hydrant.

- Curb dimensions must be to the back of the curb and must not be to any curb or extended curb lines with a radius.
- Catch basin dimensions are to be to the nearest corner of the steel edge on the street side. The street and corner on which the catch basin is located must be indicated.
- Sanitary manhole, for valve locations.
- Utility pole, if it is to be permanent (pole number must be included).
- House corner, when a dimension to a house corner is used, the address must be given.
- Corner of a drive, house number must be given.
- DP&L markers or boxes.

ATTACHMENT A
PRELIMINARY REQUEST

Date

Board of County Commissioner's
County of Montgomery
Montgomery County Environmental Services
1850 Spaulding Road
Kettering, Ohio 45432-3732

Honorable Commissioners:

I/ We, _____ (name, address, and agent), propose to construct, at my/ our own expense, the following installation in connection with the development _____.

This will be a public improvement and constructed wholly at my/ our own expense. I/ We, therefore, respectfully request that your Board pass a resolution requiring I/ we be reimbursed a fair share of the cost of this improvement at such time as other directly benefited properties desire to use this improvement. The total cost of this improvement will be filed with Montgomery County Environmental Services as soon as this improvement has been constructed. The estimated cost of construction as shown on the attached detailed estimate is \$_____. The benefited frontage totals _____ feet, as shown on the attached property map(s). A protection of \$_____ per front foot is requested which will be verified by submission of the detailed final cost. It is understood the protection will be in effect for ten (10) years from the date in the resolution.

It is further understood and agreed this protection is effective upon completion of all the conditions of the sub-divider's contract and established by resolution as outlined in Section 7.3 (Protection Procedures) of the Rules and Regulations. Non-performance by the Developer shall render this protection request null and void. Montgomery County Environmental Services accepts no liability for collection of protection monies or policing of the improvement due to error.

Very Truly Yours