Reference Guide for Obtaining Permits and Utility Services For New Construction

(Revised 04-2012)
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Inspection Division........................................................................ 239-5153
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   Application for Hydrant Meters
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1. A meter request form may be obtained from the Utility Customer Service Division or the Inspection Division at 515 Clark Avenue or by downloading the form from the website www.amesutilities.com. *(Click on the new construction link.)* A completed form may be returned in person, by mail, or by fax (515-239-5286). If the applicant is not an active customer in the utility billing system, a separate application for utility service may be required. The applicant will be contacted, and a form may be mailed or faxed to the customer. A deposit may be required.

2. Once the application and the meter request form are received by Utility Customer Service, a service order(s) is sent to the Electric and/or Water Meter Division to install the meter(s). When you are ready for the meter(s), you must contact the appropriate division to schedule the meter(s) to be installed. (Electric – 515-239-5510; Water – 515-239-5151)

3. After the meter(s) has been installed, fees will be invoiced and billed through the Accounting Division of the Finance Department.

4. Charges for the utility consumption are billed to the customer’s name on the Application for Utility Service by the Utility Customer Service Division of the Finance Department.
1. Builders – Submit building plans and application for building permit. **Builders must possess:**
   a. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
   b. Contractor’s General Liability Insurance in not less than $500,000 combined single limit and provide proof of same prior to permit issuance

2. Subcontractors – Submit permit application for electrical, mechanical, and plumbing work. **Subcontractors must possess:**
   a. A current license, issued by the State of Iowa, for electrical, mechanical, or plumbing work
   b. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
   c. Contractor’s General Liability Insurance in not less than $500,000 combined single limit and provide proof of same prior to permit issuance
   d. And must register with the City of Ames Inspection Division prior to permit issuance

3. Inspection of the work is required at various stages of construction. These generally correspond to the beginning, middle, and end of the project.
   a. Building – Footing, Foundation, Framing, Final
   b. Electrical – Service, Rough-in, Final
   c. Mechanical – Gas Piping, HVAC System, Rough-in, Final
   d. Plumbing – Sewer, Water, Groundwork, Rough-in, Final

Builders and subcontractors are responsible to call and request inspections not less than 24 hours in advance. Additional inspections may be performed throughout the project as deemed necessary by the inspector. See *Ames Municipal Code* Chapter 5 for complete procedures; visit the web at [www.cityofames.org/attorneyweb/pdfs/chap05.pdf](http://www.cityofames.org/attorneyweb/pdfs/chap05.pdf); or contact the Inspection Division at inspections@city.ames.ia.us.
1. Builders – Submit site plan; submit building plans and application for building permit.
   a. Owner or owner’s agent must submit site plan to Planning and Housing Department for review by Development Review Committee (DRC). Following approval, submit application for building permit to Inspection Division.
   b. Builders must possess a valid State Division of Labor registration number and provide proof of same prior to permit issuance.
   c. Builders must possess Contractor’s General Liability Insurance in not less than $500,000 combined single limit and provide proof of same prior to permit issuance.

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   a. A current license, issued by the State of Iowa, for electrical, mechanical, or plumbing work
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<tbody>
<tr>
<td>1</td>
<td>Obtain Electrical Permit</td>
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<tr>
<td>2</td>
<td>Complete Meter Request Form and Application for Municipal Utility Service (if necessary)</td>
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<tr>
<td>3</td>
<td>Contact Electric Engineering Division to Determine Source for Temporary Service</td>
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<td>4</td>
<td>Temporary Service Inspection</td>
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<tr>
<td>5</td>
<td>Contact Electric Meter Division When Ready for Meter</td>
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<tr>
<td>6</td>
<td>Meter Installation and Service Connection</td>
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</table>

1. Obtain an electrical permit from the Inspections Division at 515 Clark Avenue.

2. The contractor or property owner must complete a Meter Request Form and an Application for Municipal Utility Service (if necessary). *See Page 2 of this booklet for further instructions.*

3. Contact the Electric Engineering Division at 515-239-5175 to determine the power source for temporary service. The temporary service shall be in front or back of, and within two feet of, the power source. Any variation must be approved by the Electric Meter Division prior to service connection. Select site location to allow for lateral trenching at a later date.

4. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the temporary service installation. The site address must be on the temporary meter stand.

5. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter. If an overhead service drop is required, the Electric Meter Division, upon notification of the readiness of the service, will submit a service order to the Electric Distribution Division for connection. This may require additional time.

6. Crews from the Electric Services Department will install a meter and connect the temporary service.
1&2. Refer to Steps 1 & 2 on Page 5 of this booklet.

3. Contact the Electric Engineering Division at 515-239-5175 to determine the power source for permanent service. Please provide load requirements and anticipated schedule.

4. The Electric Meter Division will issue a meter socket for the permanent service upon confirmation that a Meter Request Form has been turned in to the Utility Customer Service Division office.

5. The contractor/customer is responsible for installing the socket, service panel, grounds, and service conduit. For commercial installations, meter sockets must be marked to identify apartment, suite, etc. and must correspond with the indicators given to Utility Customer Service Division.

6. Residential homes/duplexes require a service conduit (with a 500-lb minimum pull rope/tape inside) installed at 30-inch minimum cover-depth after final grade from the socket location to the utility source. Commercial buildings require service conduit installed at 36-inch minimum cover depth after final grade. Before backfilling the trench, contact the Electric Distribution Division at 515-239-5500 at least 24 hours in advance to schedule a conduit inspection.

7. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the service entrance installation.

8. Contact the Electric Distribution Division at least 24 hours in advance to schedule the installation of service conductors.

9. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter.
1. The contractor should schedule the tap with their utility vendor. The contractor must provide the tapping valve and sleeve, valve box, extension, top, and lid according to the latest edition of the Iowa Statewide *Urban Design Standards for Public Improvements* and Iowa SUDAS Standard Specifications.

2. Call Iowa One-Call at 1-800-292-8989 for utility locates. Locates will be completed within 48 hours.

3. Contact the Public Works Department (City Hall, 515 Clark, 515-239-5160) for an Excavation and Right-of-Way Permit.

4. Notify Utility Maintenance at 515-239-5551, 24 hours in advance, with location before tapping water main.
### WATER SERVICE & FIRE LINE INSTALLATIONS
For Services 2” and Larger

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<tr>
<td>1</td>
<td>Licensed Master Plumber Obtains Permit and Piping Installed</td>
</tr>
<tr>
<td>2</td>
<td>Chlorinate Pipe and Call for Inspection</td>
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<tr>
<td>3</td>
<td>Flush Line</td>
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<tr>
<td>4</td>
<td>Call for Sample to be Taken</td>
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<tr>
<td>5</td>
<td>Inspection Division Reports Test Results to Plumbing Contractor</td>
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<tr>
<td>6</td>
<td>Call Water Meter Division for Meter Installation</td>
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</table>

**Instructions for disinfection, flushing, and sampling procedures are available at the Inspection Division office located at 515 Clark Avenue (City Hall).**

1. A licensed master plumber must obtain a plumbing permit from the Inspection Division. Piping is installed under the supervision of a licensed journeyman plumber.

2. The plumber must chlorinate the pipe and call the Inspection Division to inspect the pipe and to perform a pressure test. The chlorinated water must remain in the pipe for at least 24 hours.

3. After the 24-hour retention time, the plumber will flush the service line until total chlorine levels are equal to levels in the distribution system. Another 24 hours must pass before a bacteriological sample may be taken.

4. If the service is a combined fire and domestic service, both services, regardless of size, must be sampled. When the service line is ready for a water sample to be taken, the plumber must fill out a form requesting a bacteriological analysis and return it by mail, fax, or in person to the Inspection Division.

5. After the testing is complete (24 hours minimum after test set up), the Laboratory Services Division staff will report results to the Utility Maintenance and Water Meter Divisions. The Utility Maintenance Division will contact the Inspection Division. The Inspection Division will call the plumber with the test results. If the sample does not pass, steps 4 and 5 must be repeated. **After samples are collected, the service shall remain off at the tapping valve, and water shall not be used until the samples have passed AND a water meter has been installed.**

6. The plumber is responsible for contacting the Water Meter Division to schedule an appointment for the water meter installation. The plumber shall be present at the time the water meter is installed.
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<tbody>
<tr>
<td><strong>CONSTRUCTION WATER METER</strong></td>
<td><strong>Water Meter Division</strong></td>
</tr>
<tr>
<td>300 E. 5th Street, Bldg. 2</td>
<td>515-239-5151</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>Obtain Plumbing Permit</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Complete Application for Municipal Utility Services</td>
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<td><strong>3</strong></td>
<td>Inspection of Service Line – <strong>All services 2” and larger must meet Inspection Division requirements as described on pages 7 and 8.</strong></td>
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<td><strong>4</strong></td>
<td>Safe Access to Service Line</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Call Water Meter Division for Appointment to Install Meter</td>
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</table>

**All water services must remain off at the curb until a water meter has been installed. Unprotected water meters will be allowed from April 15 through October 15. If the water meter cannot be protected from freezing, then refer to “Using Water Without a Meter” on page 12.**

1. A licensed master plumber must obtain a plumbing permit from the Inspection Division located at 515 Clark Avenue (City Hall). The Water Meter Division will size the water meter according to the number of fixture units listed on the plumbing permit. The meter fee for the permanent meter will be billed when the construction meter is installed.

2. The contractor or property owner must complete an Application for Municipal Utility Services. An application may be obtained from the Inspection Division, at the Utility Customer Service Division, or on the web at www.amesutilities.com. A completed form may be faxed to 515-239-5261.

3. The Water Meter Division will be notified by the plumbing inspector when the service line has passed inspection. To schedule an inspection, contact the Inspection Division. The inspector will place a lock on the meter valve or curb box when the inspection has been completed. Authorization must be given by the Water Meter Division to remove the lock.

4. Safe access to the water meter location must be provided. The meter repairworker will determine if the work area is a safe environment.

5. Call the Water Meter Division at 515-239-5151 to schedule an appointment to have the water meter installed. The water meter will be installed within 48 hours from the time of notice. Upon installation, a valve and hose bibb vacuum breaker will be provided with the construction meter to provide a minimum amount of backflow protection. The valve and vacuum breaker may be removed from the meter coupling when the water meter is connected to the building’s plumbing system.
1. Permanent water meters will be installed once the construction is near completion (plumbing work, copper ground wire around meter, drywall, exterior siding/painting completed, etc.). If a backflow assembly for containment is required, the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the permanent water meter can be installed.

2. An 18/4-gauge solid-core wire must be installed from the meter setting to within three feet of the electric meter. The remote read register will be connected when the permanent water meter is installed.

3. Call the Water Meter Division to schedule an appointment to have the permanent water meter installed. The meter will be installed within 48 hours from the time of notification. (Note: If a yard meter is to be installed, it will be installed at the same time.)

If the yard meter is supplying an irrigation system, the backflow assembly for the irrigation system must be tested; and the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the yard meter can be installed. (Note: The permanent master meter will be installed and the remote read register connected at the same time.)

4. Once the permanent meter(s) has been installed and the project is ready for final inspection, call the Inspection Division at 515-239-5153. Occupancy is prohibited until a final inspection has been completed and either a Temporary Certificate of Occupancy or Certificate of Occupancy has been issued by the Inspection Division.

5. There must be sufficient clear space provided where the service line enters the building to allow installation and future maintenance of the water meter as described in Section 28.205 of the Ames Municipal Code. (See pages 17-26 for diagrams of typical water meter installations.)
1. In order to determine if backflow prevention assemblies are needed, the Water Meter Division requires the following information.
   - Plans or drawings that have been submitted to the building official
   - Other information that can be provided about the activities and water use in the proposed facility

   The Inspection Division will notify the contractor or property owner if a backflow prevention assembly is required.

2. Backflow prevention assemblies shall be installed in the horizontal plumbing immediately after the water meter and upstream of any branch piping. Any other location must be approved in writing by the Water Meter Division prior to installation. (See pages 17-26 for diagrams of typical meter and backflow prevention assembly installations.)

   Water service will be interrupted for testing of and repairs to backflow prevention assemblies. If this is unacceptable, the customer may, at his/her expense, install parallel piping including a backflow prevention assembly.

   If hot water is used in the building’s plumbing system, thermal expansion must be provided for as stated in Chapter 21.501,47),(b),(viii),g. of the Ames Municipal Code at www.cityofames.org/attorneyweb/pdfs/chap21.pdf.

3. Backflow prevention assemblies shall be tested by a registered backflow prevention assembly technician at the time of installation and on an annual basis thereafter. In some instances, assemblies may require more frequent testing. Examples of this may include assemblies with a history of repeated failures or assemblies that have been subjected to fire, flood, or other environmental conditions. For new construction, the test report must be submitted to the Water Meter Division before the permanent water meter is installed.
1. Complete an Application to Use Water Without Meter at the Water Meter Division.

2. An appointment will be made at the time the application is completed to have the service turned on.

3. The Water Meter Division must be contacted when water is no longer needed or when a water meter can be installed.

4. Charges will be calculated by the Water Meter Division and billed through the Finance Department. The charges will begin the day the service is turned on and end when the Water Meter Division has turned off the service or installed a water meter. The per-day rate is set by City Council; please consult the fee schedule for current charges.
1. The yard meter may be included on the original plumbing permit; if it is not, the plumber must apply for another permit at the Inspection Division.

2. The contractor or property owner must complete an Application for Municipal Utility Services. Only one form is needed for all municipal utility services. This form may be obtained at the Inspection Division or Utility Customer Service Division. The completed form may be faxed to 515-239-5261.

3. Once the plumbing work has been completed and an 18/2- or 18/4-gauge solid-core wire for the remote read register has been installed, call the Inspection Division at 515-239-5153 to schedule an inspection. (See page 25 for diagram of typical yard meter installation.)

4. Call the Water Meter Division to schedule an appointment to have the yard meter installed. The meter will be installed within 48 hours from the time of notification. If the yard meter is supplying an irrigation system, the backflow assembly for the irrigation system must be tested; and the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the yard meter can be installed. (Note: The permanent master meter will be installed and the remote read register connected at the same time.)

5. A monthly charge is assessed for yard meters. To inquire about the current monthly charge, call either the Water Meter Division at 515-239-5151 or Utility Customer Service Division at 515-239-5120.
1. Complete Application for Hydrant Meter
2. Schedule Appointment for Installation of Hydrant Meter
3. Contact Water Meter Division When Finished With Hydrant Meter
4. Charges Calculated and Billed

Unprotected hydrant meters will be allowed from April 15 through October 15. If the hydrant meter cannot be protected from freezing, then refer to “Using Water Without a Meter” on Page 12. There are a limited number of hydrant meters available.

1. Apply for hydrant meter at the Water Meter Division. A signature is required by the individual or contractor’s representative who will be responsible for any damages that may occur to the hydrant, meter, or backflow prevention device.

2. When the application is completed, an appointment will be scheduled for a water meter repairworker to meet the individual or contractor’s representative at the hydrant to install the hydrant meter. It is the responsibility of the individual or company requesting the hydrant meter to provide a means to secure the outlet valve to prevent unauthorized water usage.

3. Call the Water Meter Division when the hydrant meter is no longer needed. If a date to remove the meter has been predetermined and noted on the application, the Water Meter Division will remove the meter on that date unless otherwise notified. The means to secure the outlet valve must be removed prior to the removal of the meter.

4. The setting/removal fees and water rates are determined by City Council and may change annually. The current fee schedule can be found in Appendix Q of the Ames Municipal Code. A monthly fee will be charged for the hydrant meter. The fee is based on the meter size. If the hydrant meter is used fewer than 30 days, the rate will be pro-rated for the number of days the hydrant meter is used. Charges will be calculated by the Water Meter Division and billed through the Finance Department once the meter has been removed.
CONSTRUCTION OF
NEW AND REPLACEMENT
DRIVEWAYS

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<tr>
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<td>Driveway Application (formerly Curb Cut Application)</td>
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<td>2</td>
<td>New Construction</td>
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<tr>
<td>3</td>
<td>Inspection</td>
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<td>4</td>
<td>Specifications</td>
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<td>5</td>
<td>Length of Time to Complete</td>
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1. For all new driveway approaches and widening of existing driveway approaches, you must submit a Driveway Application for approval. Driveway location and width will be reviewed by the City Traffic Engineer. Prior to approving the Driveway Application, the City Traffic Engineer may require that the driveway width and location be modified to meet traffic movement requirements on the abutting street. A Driveway Application is not necessary for replacement of existing driveway at the same width and location. There is a $50.00 fee for either a Commercial or Residential Driveway Application.

2. Driveway Application permits for new driveways in conjunction with new structures are issued as part of the building permit. The $50.00 fee is included as part of the building permit fee.

3. All driveway forms and subgrade must be inspected by the city’s Public Works Engineering Division prior to placing concrete. The Engineering Division needs two hours’ notification in order to respond. Call 239-5160 to schedule an inspection.

4. The City of Ames uses as its standard the latest edition of the Iowa Statewide Urban Design Standards for Public Improvements and Iowa SUDAS Standard Specifications. If you have a copy of these specifications, please use them as your guide for driveway and approaches to driveways. The City of Ames has copies of help sheets for driveway construction. You may obtain a copy from the City of Ames Public Works Department by calling 515-239-5160.

5. Once the Driveway Application is approved, the applicant will receive a copy of the form which will allow them one year from the date of issuance to complete the work.
1. New sidewalk construction requires a City of Ames sidewalk permit. Permits are obtained from the Inspection Division located on the second floor of City Hall. Call the Inspection Division at 515-239-5153 for fee schedules since there may be periodic changes.

2. Existing sidewalk replacement does not require a sidewalk permit.

3. Sidewalks must be built in accordance with the latest edition of the Iowa Statewide Urban Design Standards for Public Improvements and Iowa SUDAS Standard Specifications, as adopted by the City of Ames. If you have a copy of these specifications, please use them as your guide for construction and replacement of sidewalks. The City of Ames has copies of help sheets for sidewalk construction. You may obtain a copy from the City of Ames Public Works Department by calling 515-239-5160.

4. Staking of sidewalk location and grade for compliance with the specifications is the responsibility of the permit holder or property owner. Questions about interpretation of the specifications can be directed to the Public Works Engineering Division at 515-239-5160.

5. Prior to placing any concrete, the Engineering Division must inspect the forms and subgrade. Call 515-239-5160 to schedule an inspection. Please give at least a two-hour advance notice on requests for inspections.
TYPICAL INSTALLATION FOR 5/8", 3/4", AND 1" DISC METER

SIDE VIEW

END VIEW

12" Minimum

12" Minimum

30" Minimum
42" Maximum

Locking Meter Valve

Ball Valve

Copper Ground Wire

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<tr>
<th>METER SIZE</th>
<th>&quot;A&quot; - METER LAYING LENGTH</th>
<th>&quot;B&quot; METER HEIGHT</th>
<th>WIDTH</th>
<th>WEIGHT</th>
<th>CONTINUOUS FLOW CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; x 3/4&quot;</td>
<td>7-1/2&quot;</td>
<td>6-5/16&quot;</td>
<td>4-1/4&quot;</td>
<td>4-1/2 LB.</td>
<td>1/4 - 20 GPM</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>9&quot;</td>
<td>6-5/8&quot;</td>
<td>5&quot;</td>
<td>5-3/4 LB.</td>
<td>1/4 - 30 GPM</td>
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<tr>
<td>1&quot;</td>
<td>10-3/4&quot;</td>
<td>7-7/8&quot;</td>
<td>7-3/4&quot;</td>
<td>11-1/2 LB.</td>
<td>1/2 - 50 GPM</td>
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Schematic not drawn to scale
Revision date: September 17, 2009
TYPICAL INSTALLATION FOR 5/8", 3/4", AND 1" DISC METER WITH BACKFLOW PREVENTION

SIDE VIEW

END VIEW

12" Minimum

Locking Meter Valve

"A"

12" Minimum

30" Minimum 42" Maximum

"B"

Ball Valves (2)

Backflow Preventer

Copper Ground Wire

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>&quot;A&quot; - METER LAYING LENGTH</th>
<th>&quot;B&quot; METER HEIGHT</th>
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<td>6-5/16&quot; 6-5/8&quot;</td>
<td>4-1/4&quot; 5&quot; 7-3/4&quot;</td>
<td>4-1/2 LB. 5-3/4 LB. 11-1/2 LB.</td>
<td>1/4 - 20 GPM 1/4 - 30 GPM 1/2 - 50 GPM</td>
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Schematic not drawn to scale
Revision date: September 17, 2009
TYPICAL INSTALLATION FOR 1-1/2" AND 2" DISC METER

SIDE VIEW

18" Minimum

Locked Meter Valve for 1-1/2" and 2" Services

12" Minimum

Approved ball valve with locking mechanism

Tee

Ball Valve

"A"

"B"

May use approved ball valve with locking mechanism for services 3" and larger

30" Minimum
42" Maximum

Meter bypass can be one pipe diameter smaller than water service

END VIEW

18" Minimum

METER SIZE | "A" - METER LAYING LENGTH | "B" METER HEIGHT | WIDTH | WEIGHT | CONTINUOUS FLOW CAPACITY
---|---|---|---|---|---
1-1/2" Disc | 13" | 8-3/8" | 8-3/4" | 19 LB. | 3/4 - 80 GPM
2" Disc | 17" | 9-3/8" | 9-1/2" | 30 LB. | 1 - 100 GPM

Schematic not drawn to scale
Revision date: September 17, 2009
TYPICAL INSTALLATION FOR 1-1/2" AND 2" DISC METER WITH BACKFLOW PREVENTION

SIDE VIEW

Ball Valves (3)

Backflow Preventer

18" Minimum

Locking Meter Valve for 1-1/2" and 2" Services

May use approved ball valve with locking mechanism for services 3" and larger

Approved ball valve with locking mechanism

18" Minimum

30" Minimum

42" Maximum

Meter bypass can be one pipe diameter smaller than water service

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>&quot;A&quot; - METER LAYING LENGTH</th>
<th>&quot;B&quot; METER HEIGHT</th>
<th>WIDTH</th>
<th>WEIGHT</th>
<th>CONTINUOUS FLOW CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2&quot; Disc 2&quot; Disc</td>
<td>13&quot;</td>
<td>8-3/8&quot;</td>
<td>8-3/4&quot;</td>
<td>19 LB.</td>
<td>3/4 - 80 GPM</td>
</tr>
<tr>
<td></td>
<td>17&quot;</td>
<td>9-3/8&quot;</td>
<td>9-1/2&quot;</td>
<td>30 LB.</td>
<td>1 - 100 GPM</td>
</tr>
</tbody>
</table>

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TYPICAL TURBO METER INSTALLATION
WITH BACKFLOW PREVENTION

SIDE VIEW

Strainer
Spacer - Minimum length is 5X the pipe diameter
Minimum length is 3X the pipe diameter
Approved ball valve with locking mechanism
Approved ball valve with locking mechanism

BACKFLOW PREVENTER

18” Minimum
Locking meter valve for 1-1/2” and 2” services
May use approved ball valve with locking mechanism for services 3” and larger
30” Minimum
42” Maximum

METER
"A" - STRAINER LAYING LENGTH
"B" - METER LAYING LENGTH
"C" METER HEIGHT
WIDTH
WEIGHT WITH STRAINER
CONTINUOUS FLOW CAPACITY

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>&quot;A&quot; - STRAINER LAYING LENGTH</th>
<th>&quot;B&quot; - METER LAYING LENGTH</th>
<th>&quot;C&quot; METER HEIGHT</th>
<th>WIDTH</th>
<th>WEIGHT WITH STRAINER</th>
<th>CONTINUOUS FLOW CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot; TURBO</td>
<td>7”</td>
<td>10”</td>
<td>11”</td>
<td>6-47/64”</td>
<td>33 LB.</td>
<td>4 - 160 GPM</td>
</tr>
<tr>
<td>3&quot; TURBO</td>
<td>7”</td>
<td>12”</td>
<td>12-1/2”</td>
<td>7-1/2”</td>
<td>55 LB.</td>
<td>5 - 500 GPM</td>
</tr>
<tr>
<td>4&quot; TURBO</td>
<td>9”</td>
<td>14”</td>
<td>12-1/8”</td>
<td>9”</td>
<td>91 LB.</td>
<td>10 - 800 GPM</td>
</tr>
</tbody>
</table>

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TYPICAL COMPOUND METER INSTALLATION

SIDE VIEW

Spacer - Minimum length 5X pipe diameter

18" Minimum

Locking Meter Valve

Strainer

May use approved ball valve with locking mechanism for services 3" and larger

Approved ball valve with locking mechanism

Minimum 3X pipe diameter

12" Minimum

"A"

"B"

18" Minimum

12" Minimum

"C"

Tee

Ball Valve

18" Minimum

Approved ball valve with locking mechanism

Meter bypass can be one pipe diameter smaller than water service

END VIEW

|

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>&quot;A&quot; - STRAINER LAYING SIZE</th>
<th>&quot;B&quot; - METER LAYING SIZE</th>
<th>&quot;C&quot; METER HEIGHT</th>
<th>WIDTH</th>
<th>WEIGHT WITH STRAINER</th>
<th>CONTINUOUS FLOW CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot; COMPOUND</td>
<td>7&quot;</td>
<td>17&quot;</td>
<td>12-1/2&quot;</td>
<td>8&quot;</td>
<td>88 L.B.</td>
<td>1/4 - 160 GPM</td>
</tr>
<tr>
<td>3&quot; COMPOUND</td>
<td>7&quot;</td>
<td>17&quot;</td>
<td>12-9/16&quot;</td>
<td>8&quot;</td>
<td>107 L.B.</td>
<td>1/4 - 350 GPM</td>
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<tr>
<td>4&quot; COMPOUND</td>
<td>9&quot;</td>
<td>24&quot;</td>
<td>15-5/8&quot;</td>
<td>10-1/2&quot;</td>
<td>234 L.B.</td>
<td>3/8 - 1000 GPM</td>
</tr>
</tbody>
</table>

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TYPICAL INSTALLATION FOR YARD METER

Side View

To Outside Faucet

Special Yard Meter

Ball Valves

House Supply

12" Minimum
18" Maximum

Master Meter

Water Service

Copper Ground Wire

End View

Rough Dimensions for Yard Meter Installations
Meter, Meter Couplings and Adaptors

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>3/4&quot; Pipe</th>
<th>1&quot; Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; x 3/4&quot; DiSc</td>
<td>12-3/4&quot;</td>
<td>14-3/4&quot;</td>
</tr>
<tr>
<td>3/4&quot; DiSc</td>
<td>14-1/4&quot;</td>
<td>16-1/4&quot;</td>
</tr>
<tr>
<td>1&quot; DiSc</td>
<td>16&quot;</td>
<td>16&quot;</td>
</tr>
</tbody>
</table>
TYPICAL METER MANIFOLD
Spacing shown is for a 5/8" x 3/4" meter. If larger meters are required, the meter spacing needs to be adjusted accordingly. Please refer to the table on the inside of the back cover for rough dimensions of meter spacing.

Schematic not drawn to scale
Quick Reference
Other Utility Telephone Numbers

Iowa One Call..........................................................1-800-292-8989

Utility Locates – Call 48 Hours Before Digging

Alliant Energy (Gas)..............................1-800-255-4268

Mediacom (CATV)..............................In Ames 233-4646
                                            Outside Ames 1-800-262-3843

Century Link (Telephone)......................1-800-603-6000
### Rough Dimensions for Meter Installations

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>¾&quot;</th>
<th>1&quot;</th>
<th>1½&quot;</th>
<th>2&quot;</th>
<th>2½</th>
<th>3&quot;</th>
<th>4&quot;</th>
<th>6&quot;</th>
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</thead>
<tbody>
<tr>
<td>¾&quot; Disc</td>
<td>11-3/4&quot;</td>
<td>13-3/4&quot;</td>
<td>13-1/2&quot;</td>
<td>17-1/2&quot;</td>
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<tr>
<td>1&quot; Disc</td>
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<td>17-1/2&quot;</td>
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<tr>
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<td>13-1/4&quot;</td>
<td>19-1/2&quot;</td>
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</tr>
<tr>
<td>2&quot; Disc</td>
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<td></td>
<td>17-1/4&quot;</td>
<td>17-1/4&quot;</td>
<td>17-1/4&quot;</td>
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</tr>
<tr>
<td>2&quot; Turbo</td>
<td></td>
<td></td>
<td>31-1/2&quot;</td>
<td>31-1/2&quot;</td>
<td>31-1/2&quot;</td>
<td>31-1/2&quot;</td>
<td></td>
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</tr>
<tr>
<td>2&quot; Compound</td>
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<td></td>
<td>36-3/4&quot;</td>
<td>36-3/4&quot;</td>
<td>36-3/4&quot;</td>
<td>36-3/4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3&quot; Turbo</td>
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<td></td>
<td>40-1/2&quot;</td>
<td>40-1/2&quot;</td>
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<tr>
<td>3&quot; Compound</td>
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<td>45-1/2&quot;</td>
<td>45-1/2&quot;</td>
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</tr>
<tr>
<td>4&quot; Turbo</td>
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<td></td>
<td>51-1/2&quot;</td>
<td>51-1/2&quot;</td>
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<td></td>
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<tr>
<td>4&quot; Compound</td>
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<td>57-1/2&quot;</td>
<td>57-1/2&quot;</td>
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<tr>
<td>6&quot; Turbo</td>
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<td>69-1/2&quot;</td>
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<td>75-1/2&quot;</td>
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Dimensions not shown will be calculated on a case-by-case basis.