



Office Use Only

|          |              |       |        |         |
|----------|--------------|-------|--------|---------|
|          | S.R.#        | Date  | Meter# | Read    |
| Install  | _____        | _____ | _____  | _____   |
| Remove   | _____        | _____ | _____  | _____   |
| Account# | Hydrant ID#: |       | Grid # | Map Pg# |

Fire Hydrant Water Meter Permit

Applicants can apply at the Customer Service Office: 625 E. 10th Street, # 200 or by fax at 972-0024.

1. Applicant Information:

- A. Applicant/Company Legal Name \_\_\_\_\_
- B. Applicant/Company Mailing Address: \_\_\_\_\_
- C. Applicant/Company is: (check one)      **Office Phone:** \_\_\_\_\_  
**Corporation:** \_\_\_\_\_      **Mobile Phone:** \_\_\_\_\_  
**Partnership:** \_\_\_\_\_      **Contact:** \_\_\_\_\_  
**Sole Proprietorship:** \_\_\_\_\_      **Email:** \_\_\_\_\_  
**Other:** \_\_\_\_\_ **Specify:** \_\_\_\_\_
- D. Federal Tax ID # or other ID (Required) \_\_\_\_\_

2. Meter and Other Information (City does not provide the backflow prevention assembly.):

- A. Meter Size Requested 1" \_\_\_\_\_ \$100 deposit, or a 3" \_\_\_\_\_ \$425 deposit.
- B. Deposit will be billed with the first utility billing statement.
- C. Fire Hydrant address or Vin#: \_\_\_\_\_
- D. Specific use of water: \_\_\_\_\_

Is water intended for potable purposes? (Check one)    Yes \_\_\_    No \_\_\_

If water will be used for potable purposes at any time during the permit life, the customer must call 972-1060, the Special Services Division's Water Protection Section to schedule a cross connection survey.

Approximate date meter to be returned: \_\_\_\_\_ Expiration date is 1 yr. for a meter on a fire hydrant and 5 years from date of issuance for a vehicle mounted meter. **Only 3" meters will be installed on a vehicle. Reference meter specifications attached for information related to how the meter will be mounted to the vehicle.**

- E. Check if this permit is for a private fire hydrant: \_\_\_\_\_ (The private fire hydrant owner's written authorization to use the private fire hydrant must accompany this application before a permit can be issued.)

3. Signatory Requirements: This permit must be signed by an authorized representative of the Applicant as described herein. For a corporation, this permit shall be signed by a responsible corporate officer. A responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation. For a partnership or sole proprietorship, this permit shall be signed by a general partner or the proprietor, respectively.

In signing, I certify that I am an authorized representative of the Applicant:

Applicant Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Signature releases the City of Austin and applicant agrees to hold harmless and defend the City of Austin from any claims from any and all liability and losses for personal injury or property damage resulting from applicant's use of a fire hydrant. This form becomes the permit upon signature by the applicant and assignment of a billing account by Austin Water Utility personnel. The permit holder must keep a copy of the permit in the vehicle used to withdraw the water. The permittee is liable for any damages to the City hydrant or infrastructure due to misuse or improper operation of the hydrant.



## Fire Hydrant Water Meter Permit Process

- A. After receiving the approved permit, the permittee shall call the Austin Water Utility Meter Shop (Meter Shop) 972-2002 to make an appointment for the installation of a meter on a vehicle or fire hydrant. The permittee must arrive on time to the scheduled appointment. Permit holders who arrive more than 15 minutes late will be required to reschedule and pay a second meter installation fee.
- B. A non-refundable installation charge will be billed on the permittee's first billing statement.
- C. Unless otherwise authorized by the Director of the Austin Water Utility, the water meter shall be used for construction purposes only.
- D. The permittee is solely responsible for the fire hydrant meter assembly until the Meter Shop personnel remove the meter. The permittee will be required to reimburse the City of Austin (City) for the cost of the meter and meter parts, if the permittee fails to request the City to remove the meter or if loss, damage, or theft of meter or meter parts occurs.
- E. Fire hydrant-mounted meter and backflow protection:

The City requires that an approved reduced pressure backflow prevention assembly (RPZ) be installed and certified by a State of Texas-licensed backflow prevention assembly tester (BPAT) registered with the Austin Water Utility, prior to obtaining water from a fire hydrant-mounted meter.

At the scheduled appointment with the City's meter setter and at the permittee's expense, the permittee shall:

1. Mark the hydrant to be used with flagging.
2. Have an RPZ properly installed, braced, and supported immediately downstream of the meter so as to prevent damage to the hydrant and meter.
3. Have the RPZ tested by a City-registered and State-licensed BPAT.
4. Furnish a current and passing Test and Maintenance Report (TMR) to the City's meter setter.

**Note: City personnel will remove any meter found attached to a hydrant without an approved RPZ. Such action is a violation of the Austin City Code and will result in enforcement actions taken against the permittee, including the forfeiture of the permittee's deposit.**

- F. Vehicle-mounted meter and backflow protection:

The applicant should refer to the meter specifications in this document to prepare the vehicle for the meter mounting. The applicant will receive a meter casing upon issuance of the permit and should mount this casing to their vehicle prior to the appointment with the Meter Shop.

The City requires backflow protection in the form of an approved 6" air gap or an approved and tested RPZ on a vehicle before a water meter will be set. If an RPZ is used, the permittee must provide a current and passing TMR to the City's meter setter before the meter can be set. Before the meter can be set, a City-registered and State-licensed BPAT must have tested and passed the RPZ, in its permanent installed location on the vehicle. The permittee is required to report the meter readings on the first day of each month by faxing the attached report to 972-0024 or email the read to: [awutaps@austintexas.gov](mailto:awutaps@austintexas.gov) The report must be provided even if the customer has not used the meter in the prior month; *failure to file a monthly read report may result in the forfeiture of the permittee's deposit.*

- G. Removal of fire hydrant- or vehicle-mounted water meters



1. The permittee is not allowed to remove a fire hydrant- or vehicle-mounted water meter at any time; such action is a violation of the Austin City Code and will result in an enforcement action taken against the permittee, including the forfeiture of the permittee's deposit.
  2. **The customer must disconnect hard piping to the meter before bringing the vehicle back to the Meter Shop.**
  3. The Meter Shop personnel shall disconnect and remove the meter upon the permittee's request, completion of construction, installation of permanent water meter, or expiration of the permit, whichever occurs first. The permittee is requested to contact the Customer Service Office within two weeks of the permit expiration date to arrange for meter removal.
  4. The permittee shall contact the Customer Service Office at 972-0000 to request a fire hydrant-mounted meter or a vehicle-mounted meter's removal by City personnel. The permittee may only remove the backflow prevention device after ceasing use of the water meter and contacting the Customer Service Office.
  5. The permittee shall call the Meter Shop at 972-2000 to make an appointment to have a **vehicle-mounted water meter** removed.
- H. Customers can request a printed copy of the registered and licensed backflow prevention assembly technicians by calling 972-1060, or access the list on the following website:

[http://www.ci.austin.tx.us/water/wwwssd\\_cc\\_main.htm](http://www.ci.austin.tx.us/water/wwwssd_cc_main.htm)

### **Fire Hydrant Operating Procedures**

1. The permittee is responsible for following these procedures and may be held liable for repairs, and be subject to other enforcement actions for not adhering to these procedures.
2. Prior to operation, the permittee shall verify that the hydrant and meter are secure and not moveable, and in the event that they are unstable, damaged, leaking, or unsafe, should immediately stop using them and call Dispatch at 972-1000 to report the situation.
3. The permittee shall a) use a fire hydrant wrench specifically designed and manufactured to open and close a fire hydrant; b) not use any additional torquing device to open or close a fire hydrant; and c) not leave hoses or appurtenances connected to a fire hydrant when not in use.
4. The permittee shall operate a fire hydrant properly by slowly opening the hydrant to a fully open position when in use and slowly closing the hydrant to a completely closed position when not in use. When a fire hydrant is first opened, the barrel or housing of the fire hydrant fills with water. Fire hydrants are designed with a drain or weep hole at the base of the hydrant, which allows any water contained in the hydrant to drain out to keep: a) the water from stagnating in the barrel of the hydrant, b) the internal parts of the hydrant from rusting or seizing up, and c) the hydrant from freezing in winter. A hydrant operated in a partially opened or closed position will cause water to blow out from the hydrant's drain or weep hole into the bedding material supporting the hydrant. This blown out water will wash out the bedding material supporting the hydrant thus possibly causing damage to the hydrant and creating a safety hazard.
5. The hydrant must be opened slowly to allow the barrel time to fill, and the permittee should feel snug resistance at the top of the counter clockwise turn. The permittee should not use the hydrant until it is fully opened.



6. To close the hydrant, the permittee must perform the final several closing turns slowly to prevent damage to the hydrant and water main. The hydrant must be fully closed until the permittee can feel snug resistance at the bottom of the clockwise turn.
7. To minimize wear and tear, and minimize costly damage due to the opening and closing of hydrants, the permittee may not use the hydrant valve to regulate the volume or flow of water withdrawn from the fire hydrant. Instead,
  - a. For **fire hydrant-mounted meters**, the permittee shall leave hydrants open during times of routine use unless there is danger of freezing and control the volume or flow of water withdrawn from the hydrant using the gate valve installed by the City on the meter; or
  - b. For **fire hydrants used with vehicle-mounted meters**, the permittee may provide and install a 2” ball or gate valve on the hydrant to regulate the volume or flow of water withdrawn from the hydrant. If such a valve is used, the permittee shall place a weather-resistant identification tag on the valve that includes the vehicle license plate number, water meter number and the date the water was being withdrawn. The permittee’s valve and identification tag shall be installed and removed from the hydrant on a daily basis.

### SPECIFICATIONS FOR 3" FIRE HYDRANT METERS

These specifications are in compliance with the latest revision of AWWA Standard C701 with certain exceptions as noted below. All specifications meet or exceed the latest revision on AWWA C701.

**TYPE**

Meters shall be of the in-line horizontal-axis high velocity type per AWWA Class II and designed for mobile use in metering flow from fire hydrants.

**OPERATING CHARACTERISTICS**

The capacity of the meter in terms of normal operating range, maximum loss of head, and maximum continuous flow shall be as shown below:

| <i>Accuracies</i> |                    |                        |              |                 |
|-------------------|--------------------|------------------------|--------------|-----------------|
| +/- 1.5%          |                    | +/-1.5%                |              |                 |
| Normal            |                    | Max. Head              | Max.         | +2/-5%          |
| Operating         |                    | Loss at                | Cont.        | Extended        |
| <u>Size</u>       | <u>Range (gpm)</u> | <u>Cont Flow (psi)</u> | <u>(gpm)</u> | <u>Low Flow</u> |
| 3"                | 5 - 660            | 37 w/integral strainer | 450          | 660<br>4        |

**SIZE**

The size of the meter shall be determined by the nominal size (in inches) of the opening in the inlet and outlet flanges. Overall lengths of the meter shall be as follows:

| Max. Meter Height from |  |                                 |
|------------------------|--|---------------------------------|
| <u>Size</u>            | <u>Laying Length</u>                     | <u>Bottom to Top of Handles</u> |
| 3"                     | 12" less couplings<br>17" with couplings | 9"                              |

**EXTERNAL BOLTS**

Casing bolts shall be made of type 316 stainless steel.

**OPTIONAL CONNECTIONS**

Maincase shall be equipped with a standard brass female swivel fire hose coupling assembly on the inlet side and a standard brass male hose coupling on the outlet side.

An additional option with the Connections shall be a brass close nipple mounted to the outlet side of the meter with 2” gate valve and then the standard brass male hose coupling.



### CASE AND COVER

The maincase shall be cast aluminum and the cover of the head assembly cast bronze. The size, model, manufacturer's trademark, statement "AWWA Class II", and arrows indicating direction of flow shall be cast in raised characters on both sides of the maincase.

The size and arrows indicating direction of flow shall be cast in raised characters on the housing cover. The cover shall contain a calibration mechanism for the purpose of calibrating the turbine measuring element while in-line and under pressure. The calibration mechanism shall be mounted under the register and be covered by a protective cap.

The case shall be equipped with replaceable dual handles for ease of carrying, installation and maintenance.

### REGISTERS

Registers shall be permanently roll sealed, straight reading, indicating in gallons, cubic feet, or cubic meters. Registers shall include a center-sweep test hand, a low flow indicator, meter size, model designation representing maximum continuous flow and a glass lens. Register shall be serviceable without interruption of the meter's operation.

### REGISTER BOX

Register boxes and covers shall be of bronze composition. No plastic retainer rings will be acceptable. The name of the manufacturer, manufacturer trademark and the meter serial number shall be clearly identifiable and located on the register box cover.

### REGISTER BOX SEALING

The register box shall be secured to meter bayonet with a tamper resistant seal screw. Options: Seal wire screw or Torx® seal screw. Register lid must have a locking design.

### METER SERIAL NUMBER

The meter serial number shall be imprinted on the meter maincase or cover as well as the register box cover.

### UNITIZED MEASURING ELEMENT

The turbine measuring chamber shall be a self-contained unit attached to the cover for easy field removal. The turbine spindles shall be stainless steel. The rotor shall balance or "float" between the turbine spindles throughout the typical operating range.

### INTERMEDIATE GEAR TRAIN

The intermediate gear train shall be directly-coupled to the rotor spindle and magnetically coupled to the register through the meter cover. The gear train shall be continuously submerged by the use of a vent tube which eliminates entrained air in the cover. All moving parts of the gear train shall be made of a self-lubricating polymer or stainless steel for operation in water.

### STRAINERS

The fire hydrant meter shall contain a double walled stainless steel screen in the inlet end of the meter housing. The strainer shall be easy to remove for routine cleaning.

### ORIFICE

The fire hydrant meter shall contain a permanent orifice design built into the outlet end of the meter housing. The orifice shall limit the maximum capacity to 660 gpm for protection of the measuring element.

### PERFORMANCE

Registration accuracy over the normal operating range shall be 98.5% to 101.