

Sam D. Heaton *Fire Chief*

Randy Crider *Deputy Fire Chief*
Jimmy Taylor *Deputy Fire Chief*
1595 County Services Pkwy.
Marietta, GA 30008-4021
www.cobbfire.org



Cobb County Fire & Emergency Services

Tom Simler *Fire Marshal*
tom.simler@cobbcounty.org
Jay Westbrook *Deputy Fire Marshal*
jay.westbrook@cobbcounty.org
phone: (770) 528-8310 • fax: (770) 528-8320

TO: Contractors doing Hydrant Testing in Cobb County

FROM: Tom Simler, Fire Marshal/Division Chief *TJS*

DATE: April 15, 2009

SUBJECT: Fire Hydrant Flow Testing

This letter is to clarify some hydrant flow test procedures required by this office and to address some common problems this office has been dealing with, in regards to hydrant flow testing reports.

Cobb County Fire Marshal's Office requires AWWA M17 flow testing methods be used with some slight modifications:

- We do not require multiple fire hydrants to be flowed at the same time, instead we require each private fire hydrant (in a complex) to be flowed separately with readings documented for each test. This helps us to ensure adequate fire flow from each hydrant.
- Each test requires two fire hydrants, the flow hydrant and the static and residual reading hydrant. We **do not** allow taking the residual reading from the flow hydrant. The static and residual reading hydrant needs to be on the customer side of the master meter (**not** a public hydrant), this helps us determine the flow available in the complex not just on the county water system. For a complex with only one private fire hydrant one of the following procedures (in order of preference) should be used:
 1. Install a gauge on the discharge side (customer side) of the master meter and take your static and residual readings from this gauge.
 2. If the building has a sprinkler system **and** there is a gauge on the riser located on the supply side of the riser check valve(s) and backflow preventers, use this gauge to take your static and residual readings.
 3. If numbers 1 and 2 are not an option then use the closest public fire hydrant to take your static and residual readings.

Document clearly on the report which of the above procedure was used and why.

The following is a list of common problems we have experienced with the reports we receive:

- No site map indicating hydrant locations with the hydrants numbered indicating which hydrant is the flow hydrant and which hydrant was used for taking the static and residual readings.
- Not using either the "Flow Test Report" form provided in the AWWA manual or the Cobb County modified AWWA form. **Cobb County Fire Marshal's Office will not accept any other form, or any form not filled out completely.** See the attached copy of this form modified to allow three hydrant flow tests to be documented on one sheet and a place for the address of the test property (**the address must be included**).
- Not listing all readings, i.e., pitot gauge, static and residual readings.
- Not listing size of outlet used.

- Not calculating gpm to 20psi.
- Calculations done incorrectly.

The official Code of Cobb County Section 54-1, states the following:

When a hydrant is found to be **OUT OF SERVICE**. “Immediate notice will be given to the Chief of the Fire Department.” To notify the Chief, contact the Hydrant Coordinator at 770-528-8177 **and** FAX a copy of the flow test to 770-528-8320.

Contractors doing hydrant testing in Cobb County have signed a letter agreeing to follow the AWWA Standard for hydrant testing. Failure to comply with this agreement will result in removal from the list of contractors eligible to do hydrant testing in Cobb County.

If you have any questions, please call me at 770-528-8307.

FLOW TEST REPORT

Name of Complex: _____ Date: _____

Address: _____

Test Made by: _____ Time: _____

Representative of: _____

Witness: _____

State Purpose of Test: _____

Consumption Rate During Test: _____

Total GPM used

If Pumps Affect Test, Indicate Pumps Operating: _____

Flow Hydrant:	A__	A__	A__
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Indicates hydrant # tested - A1, A2, A3, etc.

Size Nozzle:	_____	_____	_____
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Pitot Reading:	_____	_____	_____
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gpm:	_____	_____	_____
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Static:	B_ _____	B_ _____	B_ _____
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Indicates hydrant used for Static/Residual Readings B1, B2, etc.

Residual:	B_ _____	B_ _____	B_ _____
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Projected Results: _____ @ 20psi gpm

Remarks: _____

Location Map: Show lines sizes and distance to next cross connected line. Show valves and hydrant branch size. Indicated North. **Show Flowing Hydrants – labeled A1, A2, A3, Show location of Static and Residual Hydrants – labeled B1, B2.**

If hydrant was not used for 'B' readings indicate what was used: Sprinkler riser _____ Gauge in Pit _____

Figure 5-4 flow-test report

FLOW TEST REPORT

Name of Complex: _____ Date: _____

Address: _____

Test Made by: _____ Time: _____

Representative of: _____

Witness: _____

State Purpose of Test: _____

Consumption Rate During Test: _____ Total GPM used

If Pumps Affect Test, Indicate Pumps Operating: _____

Flow Hydrant:	<u>A 1</u>	<u>A 2</u>	<u>A 3</u>	Indicates hydrant # tested - A1, A2, A3, etc.
Size Nozzle:	<u>4"</u>	<u>2 ½"</u>	<u>4"</u>	
Pitot Reading:	<u>38</u>	<u>100</u>	<u>28</u>	
gpm:	<u>2648</u>	<u>1678</u>	<u>2273</u>	
Static:	<u>B 1 162</u>	<u>B 2 164</u>	<u>B 2 164</u>	Indicates hydrant used for Static/Residual Readings B1, B2, etc.
Residual:	<u>B 1 87</u>	<u>B 2 126</u>	<u>B 2 105</u>	
Projected Results:	<u>3740</u>	<u>3445</u>	<u>3680</u> @ 20psi gpm	

Remarks: _____

Location Map: Show lines sizes and distance to next cross connected line. Show valves and hydrant branch size. Indicated North. **Show Flowing Hydrants – labeled A1, A2, A3, Show location of Static and Residual Hydrants – labeled B1, B2.**

If hydrant was not used for 'B' readings indicate what was used: Sprinkler riser _____ Gauge in Pit _____

Figure 5-4 flow-test report

Site Map

Sample

