



HYDRAULIC INFORMATION AVAILABLE FROM WSSC

The following information is provided for those who design fire sprinkler systems. This sheet describes hydraulic information that may help the designer obtain a starting point for hydraulic calculations. Use of the sheet will help reduce the possibility of incorrectly interpreting hydraulic data received from WSSC. It is intended only for the professional.

WHAT INFORMATION IS AVAILABLE? - The information available depends on the type of water service requested by the applicant. A description of each available type of hydraulic information is given in following sections. The information available for the various types of service is listed below:

Hydraulic Information From WSSC			
Type of Service Request	Hydraulic Grade	Fire Flow Test	Hydraulic Information Sheet
Connection (<4" diameter)	Available	Available	Not available
Site Utility System (≥4" diameter)	Available	Available	Available *
Other	Available	Available	Not available
<i>* For minor site utility systems with total flows less than 200 gallons per minute (gpm) connecting to 8-inch diameter water mains, or with total flows less than 300 gpm connecting to 10-inch diameter and larger water mains, Hydraulic Information Sheets are not required or provided. Sprinkler designers should use the low hydraulic grade as a starting point.</i>			

HYDRAULIC GRADE INFORMATION -- Hydraulic grade information is in units of feet of water above mean sea level. The high hydraulic grade is used to determine the expected high pressure under normal operating conditions. The low hydraulic grade is used to determine the expected low pressure under normal operating conditions.

WSSC's **Permit Services Unit INTAKE**, 301-206-8650, provides high and low hydraulic grade information over the phone at no charge. When calling, knowing the WSSC 200' sheet number and the nearest cross streets speeds the response time.

The high and low grades are available over the internet in two forms:

- ◆ As a PDF file: <http://www.wsscwater.com/home/jsp/content/developers-form-fee.faces>. Scroll down to Hydraulic Forms, and then select "Hydraulic Grades." The grades are listed by 200' sheet and water pressure zone.
- ◆ From WSSC's Engineering Records/Information (WERI) application. Obtaining internet access to the WERI application requires users to visit the Permit Services counter in Laurel, Maryland, with a valid driver's license. Instructions for registering for access to WERI are provided on the following website: <http://www.wsscwater.com/home/jsp/content/gisdefault.faces>. By double-clicking on a pipe, then selecting the pipe report which will appear as a link on the top, right side of the screen and, finally, clicking on the link at the words "Pressure Zone" on the pipe report itself, the high and low grades will appear in a popup box.

FIRE HYDRANT FLOW TESTS -- Fire hydrant flow test results can be obtained by sending a Fire Flow Test Request Form:

[http://www.wsscwater.com/file/EngAndConst/DevServices/Fire%20Flow%20Request%20FormUpdated%20100714\).pdf](http://www.wsscwater.com/file/EngAndConst/DevServices/Fire%20Flow%20Request%20FormUpdated%20100714).pdf)

to the Utility Services Team's **Enhancement Support Group** either:

By e-mail to: Michael.Duckworth@wsscwater.com or

FAX request to 301-206-4247

The Utility Enhancement Support Group will research the request to see if there is existing data on file. Fee for existing data is **\$75.00**. If new test is needed, the fee is **\$550.00**. We will notify the requestor of our findings and advise the appropriate fee within 5 business days. The test fee can be subject to change in the future. A written record of the fire hydrant test will be sent to the requester. To find out what information needs to be included with the written request call 301-206-4258.

HYDRAULIC INFORMATION SHEETS (H.I.S.) -- A completed H.I.S. is available from WSSC as *part of* a site utility system or minor site utility system review where the water service connection is at least 4 inches in diameter. The applicant fills out Part 1. The name and phone number of the person responsible for estimating the domestic, fire sprinkler and hydrant demands should appear in the block on the top, right-hand corner. The information provided in Part 2 of the H.I.S. by the WSSC is calculated for the specific connection point to the WSSC water main, not at the property line. Once the completed H.I.S. is returned to the applicant, it is the applicant's responsibility to distribute the information. WSSC does not provide copies of the H.I.S. An H.I.S. is updated only when design changes to proposed utility systems require re-review. Submission requirements for site utility system reviews can be found at

[http://www.wsscwater.com/file/EngAndConst/DevServices/EXTERNAL%20Site%20Utility%20Checklist%20for%20ePlan%20Review%20\(ProjectDox\).pdf](http://www.wsscwater.com/file/EngAndConst/DevServices/EXTERNAL%20Site%20Utility%20Checklist%20for%20ePlan%20Review%20(ProjectDox).pdf)

CAUTION -- Applicants should be aware that HIS data received from WSSC is a theoretical estimate for a specific point in the water system. Also, it will often be necessary to transfer the results from the HIS or fire flow test from the reference point onto the applicant's property taking into account all pipes (WSSC mains, service connections and site utility system piping) between the two points. The greater the distance between the two points, the less likely the information will represent the actual hydraulic conditions on the property. Particularly in older areas of the distribution system, the information from either the fire hydrant flow test or the H.I.S. could be misleading if water mains or existing service connections have excessive tuberculation. The information could suggest a higher flow or pressure than is available. The plumbing and sprinkler systems could be inadequately designed and constructed. The sprinkler system might then fail the county's test resulting in the denial of obtain an occupancy permit.

Do you have any other questions? -- Contact the Development Services Group
by telephone (301-206-8650), email (#DSGIntake@wsscwater.com)
or visit its website:
<http://www.wsscwater.com/home/jsp/content/dsg-home.faces>