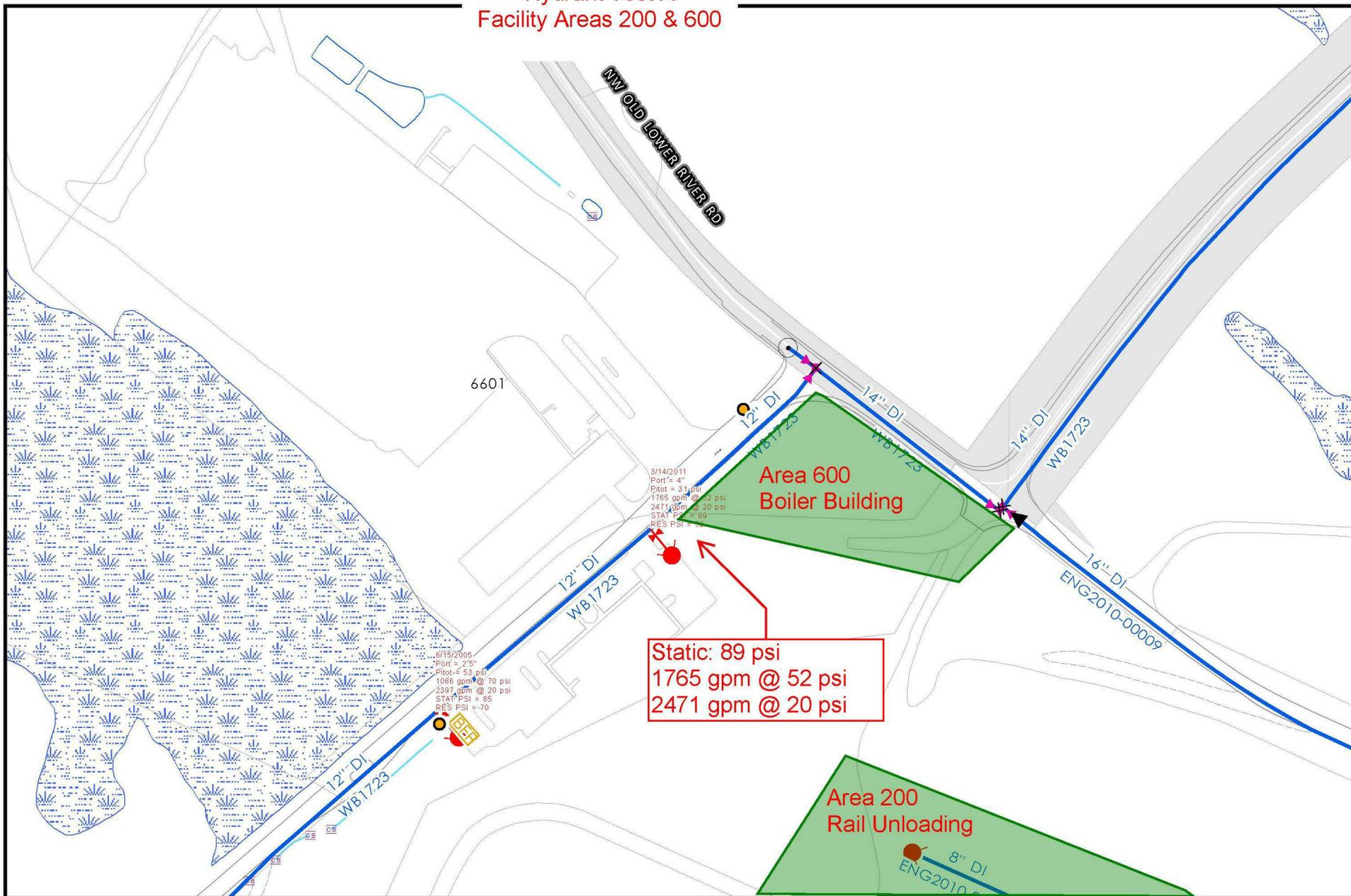


Hydrant Test A
Facility Areas 200 & 600



Water Utility Map



Fire flow Old Lower River Road

Taxlot #:

1 inch = 200 feet



THE UTILITY INFORMATION SHOWN ON THIS MAP DOES NOT INDICATE OR IMPLY AVAILABILITY. CONTACT THE ENGINEERING COUNTER STAFF AT THE CDD PERMITS CENTER AT (360) 487-7804 OR 415 W. 6TH ST. FOR AVAILABILITY OF SERVICE.

THIS INFORMATION IS COMPILED FROM A VARIETY OF SOURCES. THE CITY OF VANCOUVER ASSUMES NO RESPONSIBILITY FOR MAP ACCURACY.

Hydrant Test "B"
Facility Area 200

City of Vancouver
PO Box 1995
Vancouver, WA 98668-1995

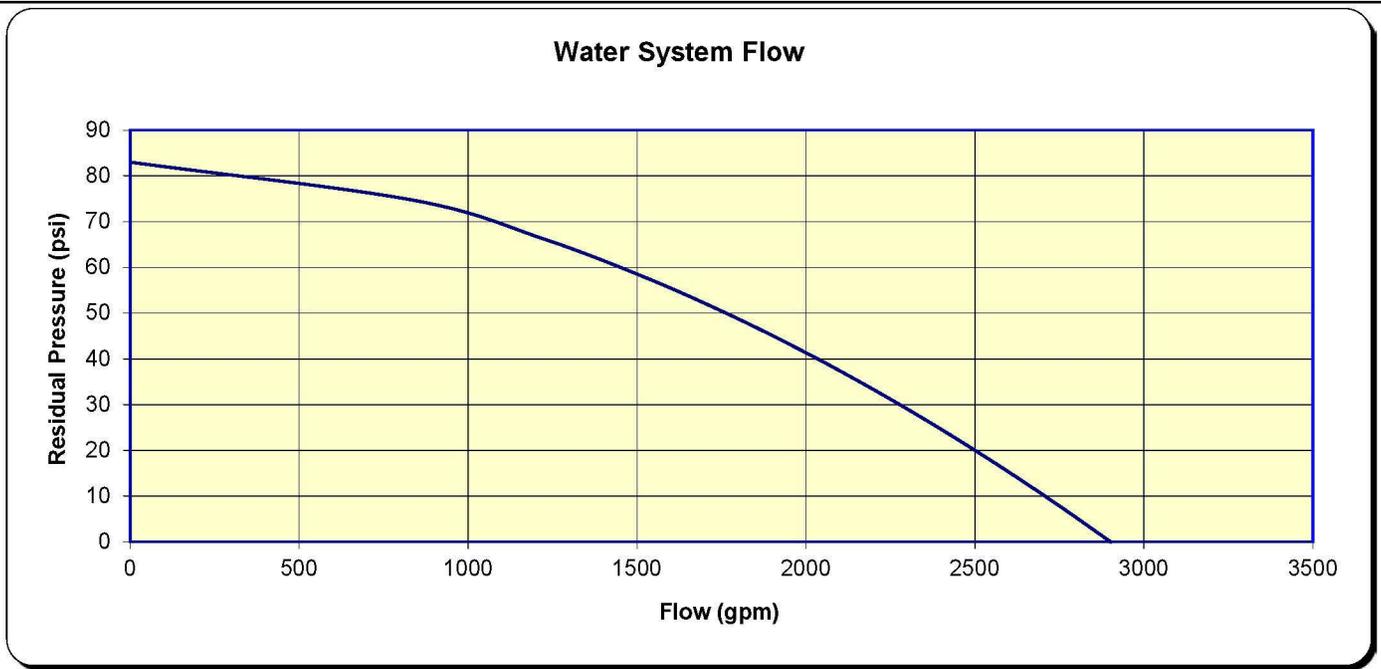


Date: 3/14/11
Water Systems Planning & Design
Ph: 360-696-8223 Fx: 360-696-8460
www.ci.vancouver.wa.us

FIRE HYDRANT FLOW TEST (NFPA 291)

Date: 3/14/2011	Time: 2:30 AM	Initials: GH	Map#:	Zone:	Elevation: ft
Residual FH ID#:	Keyera entrance gated			Static: 83 psi	Residual: 47 psi
1st Flow FH ID#:	BHP onsite north hydrant			Port: 4 in	Pitot: 34 psi
2nd Flow FH ID#:				Port: 0 in	Pitot: 0 psi

Comments:



RESULTS:	Flow (gpm)	Pressure (psi)
1st Flow	1849 @	47
2nd Flow	0 @	47
Fire Flow*	2501 @	20

*The fire flow calculation and testing is per the 'Recommended Practice for Fire Flow Testing' as documented by the National Fire Protection Agency (NFPA 291, 2002). The calculated fire flow reflects the strength of the water distribution system in the area for which the test was performed. It does not represent flow out of one single fire hydrant.

Hydrant Test "C"
Facility Area 400



Res.

Flow

Area 400
Marine Terminal

NW HARBORSIDE DR (P)
12" DI ('12)

NW GATEWAY AVE (P)

NW HARBORSIDE DR (P)

3309

3101

4399

4299

10" DI ('95)

12" DI ('95)

12" DI ('95)

8" DI ('95)

8" DI ('99)

12" DI ('95)

(56.) 12" DI ('95)

12" DI ('12)

(56.) 12" DI ('95)

DI ABANDONED
100' 1980s

10" DI ('95)

FPS

FPS

City of Vancouver
 PO Box 1995
 Vancouver, WA 98668-1995

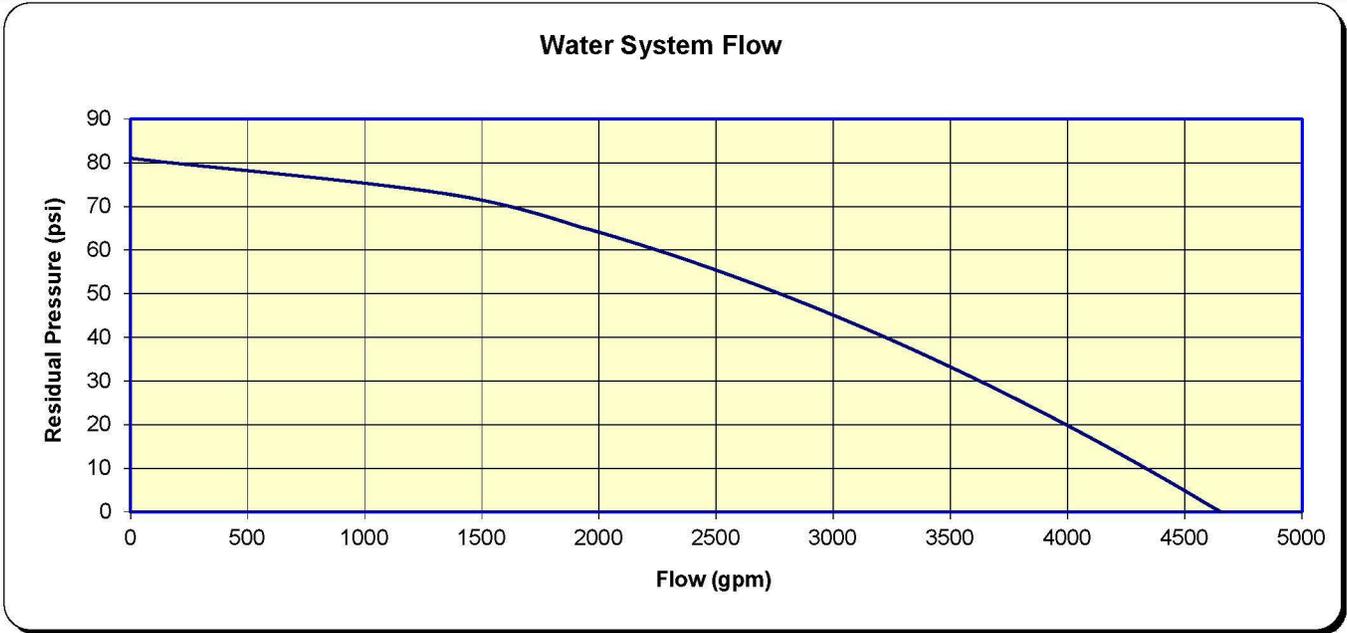


Date: 5/30/13
 Water Systems Planning & Design
 Ph: 360-696-8223 Fx: 360-696-8460
 www.ci.vancouver.wa.us

FIRE HYDRANT FLOW TEST (NFPA 291)

Date: 5/30/2013	Time: 1:15 PM	Initials: GH/TT	Map#:	Zone:	Elevation: ft
Residual FH ID#: H18548	3309 NW Gateway near the warehouse		Static: 81 psi	Residual: 62 psi	
1st Flow FH ID#: H18556	3309 NW Gateway south of the residual hydrant		Port: 4 in	Pitot: 45 psi	
2nd Flow FH ID#:			Port: 0 in	Pitot: 0 psi	

Comments:

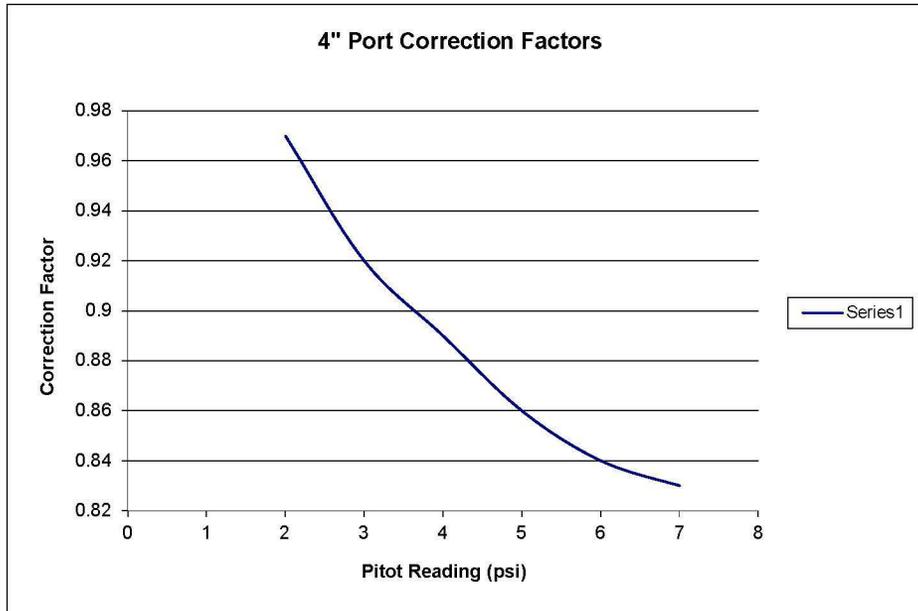


RESULTS:	Flow (gpm)	Pressure (psi)
1st Flow	2127 @	62
2nd Flow	0 @	62
Fire Flow*	3992 @	20

*The fire flow calculation and testing is per the 'Recommended Practice for Fire Flow Testing' as documented by the National Fire Protection Agency (NFPA 291, 2002). The calculated fire flow reflects the strength of the water distribution system in the area for which the test was performed. It does not represent flow out of one single fire hydrant.

1st FH Flow Coefficient = Typically 0.8 if diffuser used, 0.9 without diffuser.
 2nd FH Flow Coefficient =

Is the 1st FH Flow from the 4" port? Correction Factor = The correction factor is a multiplier. The coefficient is multiplied by this correction factor when the 4" port is used instead of the 2.5" port.
 Is the 2nd FH Flow from the 4" port? Correction Factor =



psi	Correction Factor
2	0.97
3	0.92
4	0.89
5	0.86
6	0.84
7	0.83

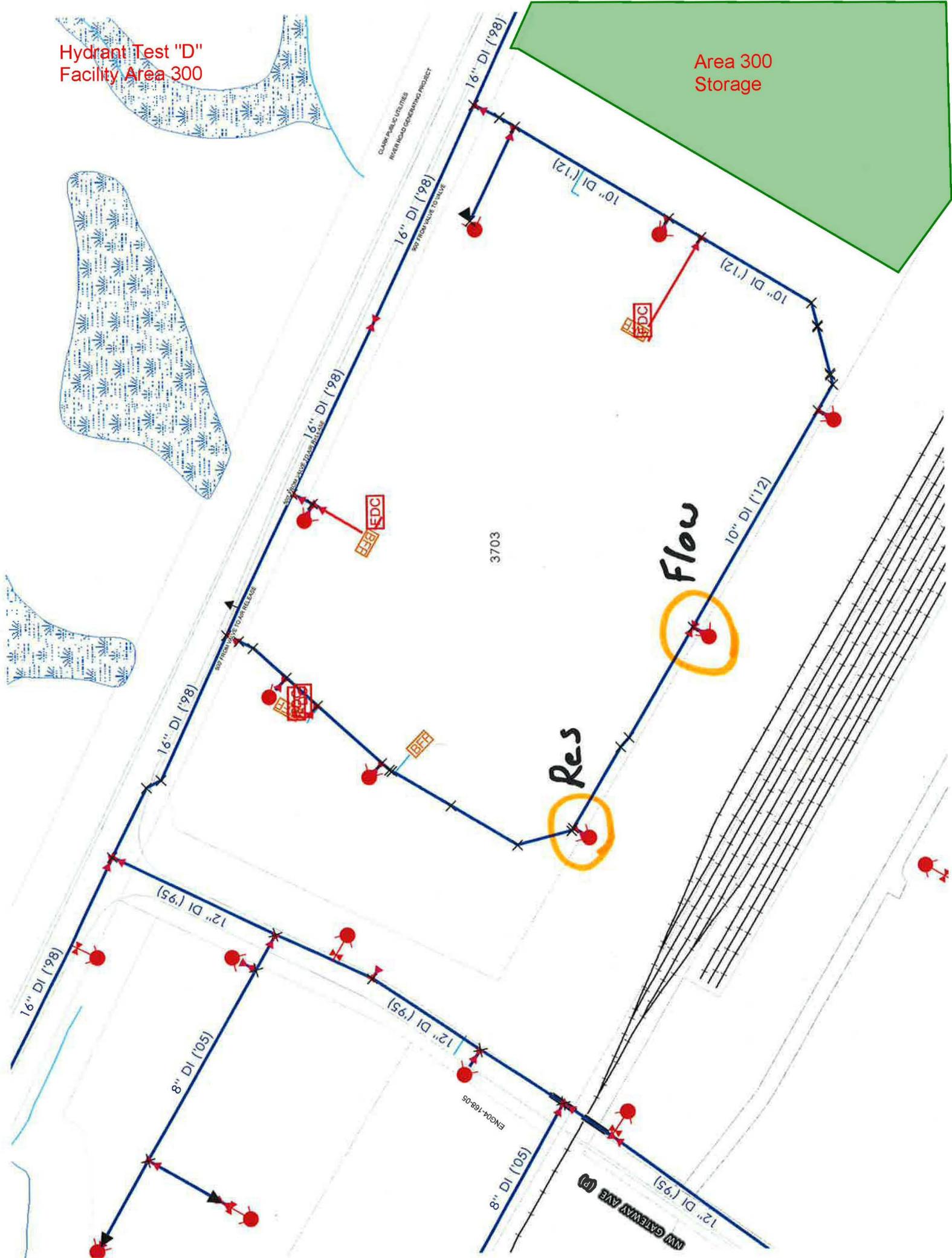
Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:			Static: <input type="text" value="psi"/>	Residual: <input type="text" value="psi"/>	
1st Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
2nd Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
Comments:					

Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:			Static: <input type="text" value="psi"/>	Residual: <input type="text" value="psi"/>	
1st Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
2nd Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
Comments:					

Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:			Static: <input type="text" value="psi"/>	Residual: <input type="text" value="psi"/>	
1st Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
2nd Flow FH ID#:			Port: <input type="text" value="in"/>	Pitot: <input type="text" value="psi"/>	
Comments:					

Hydrant Test "D"
Facility Area 300

Area 300
Storage



City of Vancouver
 PO Box 1995
 Vancouver, WA 98668-1995

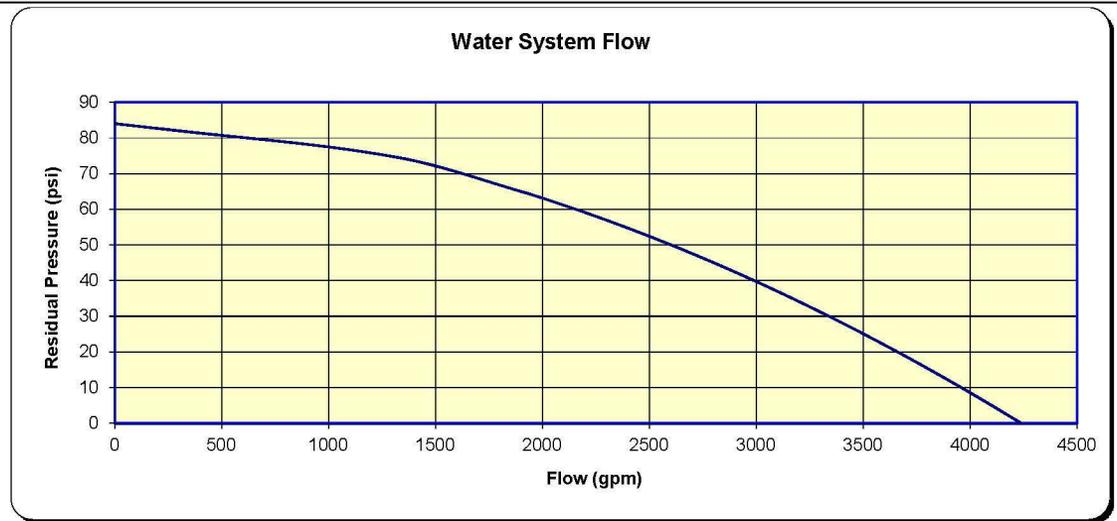


Date: 5/30/13
 Water Systems Planning & Design
 Ph: 360-696-8223 Fx: 360-696-8460
 www.ci.vancouver.wa.us

FIRE HYDRANT FLOW TEST (NFPA 291)

Date: 5/30/2013	Time: 1:45 PM	Initials: GH/TT	Map#:	Zone:	Elevation: ft
Residual FH ID#: H73070	3703 NW Gateway near SW corner of warehouse			Static: 84 psi	Residual: 63 psi
1st Flow FH ID#: H73071	3703 NW Gateway centered south of the warehouse			Port: 4 in	Pitot: 40 psi
2nd Flow FH ID#:				Port: 0 in	Pitot: 0 psi

Comments:

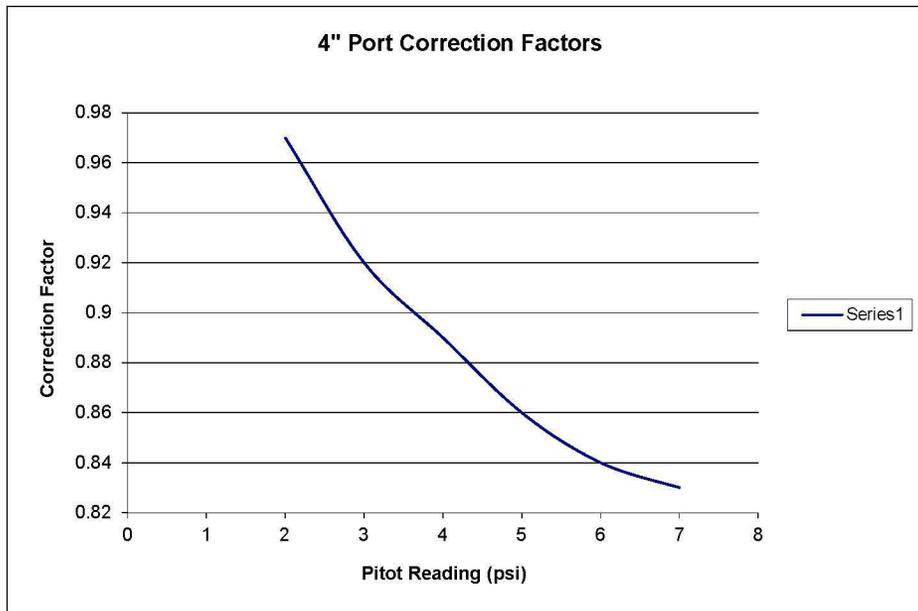


RESULTS:	Flow (gpm)	Pressure (psi)
1st Flow	2005 @	63
2nd Flow	0 @	63
Fire Flow*	3660 @	20

*The fire flow calculation and testing is per the 'Recommended Practice for Fire Flow Testing' as documented by the National Fire Protection Agency (NFPA 291, 2002). The calculated fire flow reflects the strength of the water distribution system in the area for which the test was performed. It does not represent flow out of one single fire hydrant.

1st FH Flow Coefficient = Typically 0.8 if diffuser used, 0.9 without diffuser.
 2nd FH Flow Coefficient =

Is the 1st FH Flow from the 4" port? Correction Factor = The correction factor is a multiplier. The coefficient is multiplied by this correction factor when the 4" port is used instead of the 2.5" port.
 Is the 2nd FH Flow from the 4" port? Correction Factor =



4" Port Correction Factors per NFPA 291	
psi	Correction Factor
2	0.97
3	0.92
4	0.89
5	0.86
6	0.84
7	0.83

Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:				Static: <input type="text"/> psi	Residual: <input type="text"/> psi
1st Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
2nd Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
Comments:					

Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:				Static: <input type="text"/> psi	Residual: <input type="text"/> psi
1st Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
2nd Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
Comments:					

Date:	Time:	Initials:	Map#:	Zone:	Elevation: ft
Residual FH ID#:				Static: <input type="text"/> psi	Residual: <input type="text"/> psi
1st Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
2nd Flow FH ID#:				Port: <input type="text"/> in	Pitot: <input type="text"/> psi
Comments:					