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AUG 26 2011

Beacon Hill Water & Sewer District

STATE OF WASHINGTON  
**DEPARTMENT OF HEALTH**  
 SOUTHWEST DRINKING WATER REGIONAL OPERATIONS  
*P.O. Box 47823 Olympia, Washington 98504-7823*  
*TDD Relay 1-800-833-6388*

August 19, 2011  Kimberly Adamson 1121 Westside Highway Kelso, Washington 98626	<b>Beacon Hill Water &amp; Sewer District ID #15650D</b>	
	County:	Cowlitz
	System Type:	Group A Community
	Operating Permit Color:	Green
	Surveyor:	Teresa Walker and Arlene Hyatt
	Inspection Date:	June 28, 2011

Thank you for meeting with me to conduct a survey of this system. Sanitary surveys are the Office of Drinking Water's (ODW) way to inspect public water systems through a field visit. ODW is also able to offer technical assistance to help utilities improve their system operations and ensure that public health is protected.

This report documents the findings of this survey. The following summarizes the deficiencies that require attention. There were no significant deficiencies found during this survey.

**OTHER FINDINGS:**

- **This system should plan for installing a small booster pump station for areas where the pressure is below 30 psi.**
- **The Grandview Tank is in need of replacement or should be demolished.**
- **Please locate and photograph the drain outlets for Beacon Hill and Lone Oak reservoirs and verify that they have means of preventing animal intrusions.**
- **Please verify that Cedar Gates and Lone Oak Road reservoir have watertight gaskets, overlapping covers, and screened vents.**
- **Please verify when the interior of all Lone Oak, Cedar Gates, and Beacon Hill reservoirs was last inspected and cleaned.**
- **The Beacon Hill Reservoir is not part of the SCADA and is in need of an operational gauge.**
- **The water facilities inventory (WFI) form currently reports no population figures for non-residential users. The number of non-residential connections must be revised (box 27B). Please revise the WFI.**

**RECOMMENDATIONS**

- Lone Oak reservoir will need exterior painting within the next five years.
- Beacon Hill reservoir is in need of structural study to determine the condition and stability of structural supports.

- The Beacon Hill Reservoir has had security problems, although it does have fencing around the perimeter. Please consider installing additional security devices such as lighting or fake cameras.
- Several current operators (Mike Smith, Brian Wilson, and Troy Smith) do not show up as associated with this system. Please call Operator Certification to have this revised immediately so that operators will receive credit for time worked.

As you complete the items noted above, send me photo verification of the items you have completed. Include the system name, ID number, and the date the deficiencies were corrected. You can send them to me by e-mail at [teresa.walker@doh.wa.gov](mailto:teresa.walker@doh.wa.gov) or by mail at PO Box 47823, Olympia, Washington 98504-7823.

## SYSTEM INFORMATION

In 2010, Beacon Hill Water & Sewer District assumed ownership of the Cowlitz County PUD system. They had managed the system for the last three years and transferred ownership last year. Prior to managing the system, they were only a Sewer District. They have had a steep learning curve and have been very proactive about addressing deficiencies and planning for the future of the system.

This system consists primarily of single family residences (85 percent), a few apartments and mobile home parks, and very few commercial institutions.

## SECTION 1: SOURCE

This system has:

Source ID #	Name:	Description:	Ecology Tag #
01	Longview Intertie	Primary source	
02	Kelso Intertie		
03	Woodbrook	Emergency. Disconnected	

This system is considered a purchasing system from Longview and Kelso through interties and pump stations. This system owns approximately 15 percent of the Longview Regional Water Treatment Plant (RWTP) in Longview. The source for the RWTP will change from surface water to groundwater in 2013. The Williams-Finney booster pump station is fed from Kelso. Cowlitz gardens are also fed from the Kelso intertie. Kelso and Beacon Hill have a wheeling agreement. Use is metered then Beacon Hill sends the quantity back to Kelso. The primary source is the RWTP from Longview fed through the Hillside pump station.

The emergency wells are planned to be rehabilitated but kept as emergency sources. The wells are tested and ran once a year. There is an 8-inch Cowlitz River pipe crossing (underwater) installed prior to 1980 that is of questionable condition. There is concern that if it were to fail, the emergency wells would be necessary to feed that section of the system.

The primary source, which is now the Cowlitz River, will change to groundwater at the Mint Farm (Longview) by January 2013. Many water quality parameters will change with the change in source type.

**SECTION 2: DISINFECTION**

This system receives chlorinated water from the Longview RWTP and a small quantity from the Kelso Treatment Plant. There are no re-chlorination stations at any of the booster pump stations.

The lowest residual in this system is approximately 0.2 at Deer Park off of Ostreander road. If the residual goes below 0.5 ppm Beacon Hill calls the Longview RWTP.

**SECTION 4: DISTRIBUTION SYSTEM**

This distribution system has:

FEATURES	Yes	No
Service area and facility map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum pressure requirements met	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Service meters ( monthly )	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leak detection program	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water system leakage (%)	7-10%	
Adequate valving for flushing and pipe repair	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blow-offs on dead ends	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Routine flushing (annually)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Routing valve exercise (bi-annually)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Approximately 40 percent of pipe is AC. There are some dead ends without blowoffs. Most have blowoffs. Problem areas are flushed monthly. There are a few areas where pressure is less than 30 psi at the meter in the Cedar Gates area. This system should plan for installing small booster pump stations for areas where the pressure is below 30 psi.

CROSS CONNECTION CONTROL (Community Systems)	Yes	No
System has enabling authority	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ongoing hazard inspections	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High hazards identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High hazards protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Annual testing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System has installation standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Any new connection requires a DCVA. Backflow on Existing connections are being installed as time permits.

This system has about 800 assemblies installed, which they also test. They use BMI Cross Track software.

**SECTION 5: FINISHED WATER STORAGE**

This finished water storage has ten reservoirs. Seven of these were inspected during this survey.

RESERVOIR	RESERVOIR NAME	DESCRIPTION	YEAR BUILT	TOTAL VOLUME (GAL)
1	Skyline View	Concrete-Ground Level		280,000
2	Grandview Terrace	Concrete		60,000
3	Cedar Gates	Steel stand pipe	1968	150,000
4	Lone Oak Road	Steel stand pipe		200,000
5	Beacon Hill Reservoir	Steel Tank	1927	70,000
6	Williams-Finney	hydro pneumatic tank		2,000
7	Ostrander	Concrete-Ground Level		

HATCH	Reservoir 1		Reservoir 2		Reservoir 3		Reservoir 4		Reservoir 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Locked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Watertight seal or gasket	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Over-lapping cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FEATURES	Reservoir 1		Reservoir 2		Reservoir 3		Reservoir 4		Reservoir 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Separate inlet/outlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Protected drain outlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Protected overflow outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Screened air vent	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operational water level gauge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bypass piping or isolation possibility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protected from unauthorized entry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Low level alarms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample tap at outlet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MAINTENANCE	Reservoir 1		Reservoir 2		Reservoir 3		Reservoir 4		Reservoir 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Frequency of interior inspection	Three year rotation		Three year rotation		Three year rotation		Three year rotation		Three year rotation	
Frequency of routine site visit	weekly		weekly		weekly		weekly		weekly	
Exterior in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear of excessive vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. The Grandview Tank is in need of replacement or should be demolished.
2. Lexington has geotechnical concerns on unstable ground and is only kept 2/3 full but was not inspected during this survey.
3. Drains/overflows could not be located for Beacon Hill or Lone Oak. **Please locate and photograph drain outlets for these and verify that they have means of preventing animal intrusions.**
4. The roofs, hatches, and vents are inspected annually. **Please verify that Cedar Gates, Beacon Hill, and Lone Oak Road reservoirs have watertight gaskets, overlapping covers, and screened vents.**
5. The Beacon Hill reservoir is in need of a structural study to determine condition and stability.
6. **Please verify when the interior of Lone Oak and Cedar Gates reservoirs were last inspected and cleaned.**
7. Lone Oak will need exterior painting within the next five years.
8. Beacon Hill is not part of SCADA and is in need of an operational gauge. Beacon Hill has had security problems, although it does have fencing around the perimeter. Please consider installing additional security devices such as lighting or fake cameras.
9. Most reservoirs did not have sample taps immediately available.

### SECTION 7: BOOSTER PUMPS AND FACILITIES

The booster pumps and facilities have six booster pump stations. Five were inspected during this survey.

Facility	Name	Description	Total Capacity (gpm)*
1	Hillside BPS	2- 75 HP pumps 1-50 HP pump	1100 gpm
2	Skyline Terrace PS	1 25 HP 1-40 Hp pump pumps to Grandview	325 gpm
3	Grandview Pump Station	Pumps to Cedar Gates – 2- 40 HP pumps	375 gpm
4	Williams Finney PS	2- 15 HP pumps-Brand new	100 gpm
5	Ostrander PS	2- 50 HP pumps	265 gpm

- With one pump out of service.

BOOSTER PUMPS	Facility 1		Facility 2		Facility 3		Facility 4		Facility 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Number of pumps										
Frequency of routine site visit	weekly		weekly		weekly		weekly		weekly	
Isolation valves	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pressure gauge(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pressure relief valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pump failure alarm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Control systems functional	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOOSTER PUMPS	Facility 1		Facility 2		Facility 3		Facility 4		Facility 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Protected from flooding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Redundant pumps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equipment in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BUILDINGS/ENCLOSURE	Facility 1		Facility 2		Facility 3		Facility 4		Facility 5	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Facility secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structure in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emergency Power available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This system recently rebuilt a new pump station for the Williams Finney area. Pump seals at Ostrander were leaking but the pump stations look well maintained and pumps are replaced on a regular maintenance schedule.

### SECTION 8: WATER QUALITY MONITORING AND REPORTING

This system takes ten Coliform samples per month.

COLIFORM	Yes	No
Monitoring adequate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Monitoring plan adequate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Monitoring plan followed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
# of violations since last survey	0	

LEAD & COPPER	Yes	No
Monitoring adequate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Results below action level	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This system takes 20 Lead and Copper samples. The next set of 20 is due before December 2011.

DISINFECTION BYPRODUCTS	Yes	No
Monitoring adequate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
# of treatment plants	0	
Monitoring plan adequate	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring plan followed	<input type="checkbox"/>	<input type="checkbox"/>
Results satisfactory		

This is considered a consecutive system under DBP Stage 2. DBP results taken in 2010 were slightly elevated, though not above the MCL. THMs range from 20-65. HAA5 ranged from 20-52 UG/L. Results will most likely change significantly and hopefully lower with the new groundwater sources, which will come on line in 2013. For information regarding Stage 2 sampling requirements contact Regina Grimm at (360) 236-3035.

**SECTION 9: SYSTEM MANAGEMENT AND OPERATIONS**

The system management and operation has:

<b>PROJECT/PLANNING</b>	Yes	No
System approved	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current WSP/SWSMP	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Year WSP/SWSMP approved	2006	
Distribution main submittal exception	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emergency response plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Water System Plan update was submitted in July 2011 to ODW and is currently under review.

<b>REPORTING</b>	Yes	No
WFI reviewed and updated with purveyor	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Consumer confidence report (Community's Only)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water use efficiency report (Municipal Water Suppliers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cross connection control annual report (> 1000 conn)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The WFI currently reports no population figures for non-residential users. The number of non-residential connections must be revised (box 27B). **Please revise the WFI.**

**OPERATOR CERTIFICATION**

This system is required to have one certified operator at a WDM2 level.

Name of Operator	Certification Number	Certifications	Mandatory Operator
Kim Adamson	11820	WDM2	<input checked="" type="checkbox"/>
Mike Smith		WDM1, CCS	<input type="checkbox"/>
Brian Wilson			<input type="checkbox"/>
Troy Smith	12494		<input type="checkbox"/>
Drake Stephenson	12060		<input type="checkbox"/>

WDS-Water Distribution Specialist; WDM-Water Distribution Manager; WTPO-Water Treatment Plant Operator, BTO-Basic Treatment Operator; CCS-Cross Connection Specialist; BAT-Backflow Assembly Tester

Several of the operators named do not appear to be associated with Beacon Hill on our database. **Please call Operator Certification to have this revised, immediately so that operators will receive credit for time worked.** If you have any questions or this information is inaccurate, please contact Operator Certification at (800) 525-2536.

<b>OPERATIONS</b>	Yes	No
Operational records maintained	<input checked="" type="checkbox"/>	<input type="checkbox"/>

OPERATIONS	Yes	No
Complaints followed up	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Complaints documented	<input checked="" type="checkbox"/>	<input type="checkbox"/>
# of complaints recorded at ODW (since last survey)	0	
Operation and maintenance program	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Previous survey deficiencies/findings corrected	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### CLOSING

Regulations establishing a schedule of fees, including fees for sanitary surveys, were adopted August 3, 2007 (WAC 246-290-990). An itemized invoice for \$1,836 is enclosed.

If you have any questions, please contact me at (360) 236-3032 or by e-mail at [teresa.walker@doh.wa.gov](mailto:teresa.walker@doh.wa.gov).

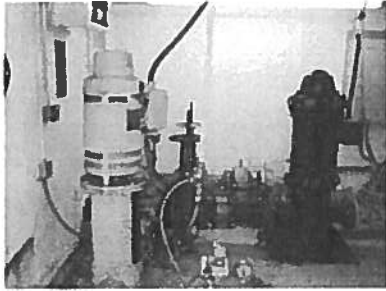
Sincerely,



Teresa A Walker, P.E.  
Office of Drinking Water, Regional Engineer

cc: Jesse Smith, Cowlitz County Health Department  
Denise Miles, ODW

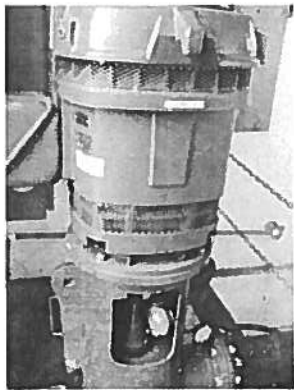




**Hillside pump station**



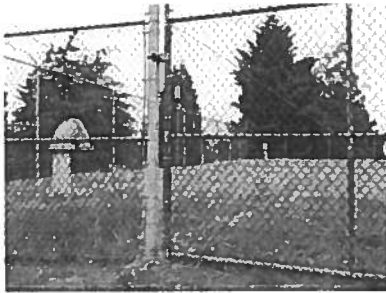
**Hillside pump station**



**Skyline View PS**



**Skyline PS**



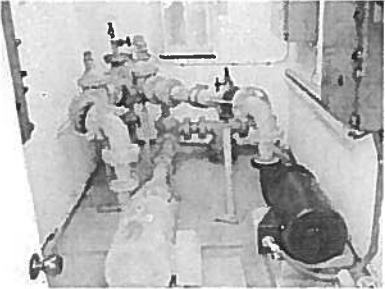
**Skyline reservoir**



**Skyline BPS**



**Grandview Terrace reservoir**



**Grandview PS**



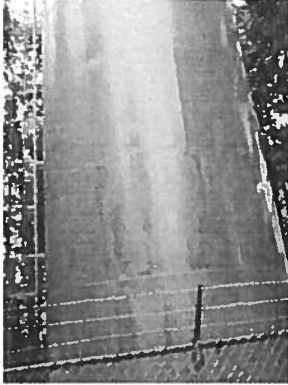
**Grandview PS**



**Drain @ Grandview**



**Cedar Gates reservoir**



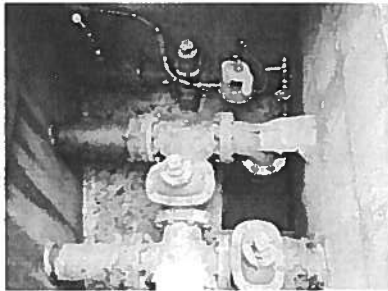
**Cedar Gates**



**Drain at Cedar Gates**



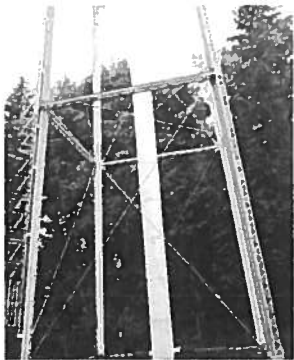
**Lone Oak Reservoir**



**Drain @ Lone Oak unknown to where**



**Beacon Hill reservoir**



**Beacon Hill supports**



**Williams Finney PS**



**Williams Finney PS**



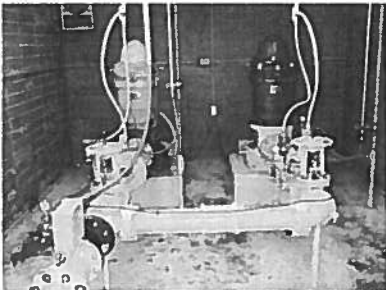
**Williams Finney Tank**



**William Finney Tank**



**Ostrander reservoir**



**Ostrander PS**



**Altitude valve vault at Ostrander**