



4120 SE International Way
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503.387.3251 PHONE
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November 2, 2016

Ms. Kate Hall
The Dallas School District
111 SW Ash Street
Dallas, OR 97338

Via email to: kate.hall@dsd2.org

**RE: Lead Water Testing
Whitworth Elementary School
1151 SE Miller Avenue
Dallas, OR 97338
PO# 170864**

TRC Project: 264210

Ms. Hall:

At your request, TRC Environmental Corporation (TRC) performed lead in water testing at the Whitworth Elementary School located at 1151 SE Miller Avenue, in Dallas, Oregon.

Testing Procedures

Water testing was performed following the United States Environmental Protection Agency (USEPA) guidance document "3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance." The 3Ts document provides an action limit of 20 parts per billion (ppb) for lead.

Samples were collected from cold water outlets on the interior of the building(s), including drinking fountains, kitchen food preparation sinks, classroom sinks, restroom sinks, mechanical room sinks, faculty lounge sinks, office sinks, plumbed refrigerator water outlets and water bottle refill stations. Any outlets that were broken or not in use at the time sampling was performed were documented as such and were not sampled.

A map of each school was annotated with the sample locations for each outlet and each sample number and location which were recorded on a Drinking Water Sample Data Sheet & Chain of Custody. Sampling for the District was conducted during the school week on Tuesday through Friday. Samples were collected using plastic 250 mL unpreserved bottles. The unpreserved bottles were preserved by the laboratory after receipt per the analytical method. During sample collection, each bottle was marked with a school identification code followed by the sample number (Ex. DSD-05-01A, DSD-05-01B). Water was sampled without touching the mouth of the container to the faucet filling the bottle to approximately one inch from the top. Two samples were collected from each of the cold water outlets being tested. The first sample collected was the first draw sample (also called an A sample). The first draw sample is the first

flow of water from the outlet into the bottle and represents the water standing in the fixture that would initially be consumed. The flush sample (also called a B sample) was collected into a new sample bottle 30 seconds after the water has been allowed to continuously flow from the outlet. The flush sample represents the water from the plumbing line behind the wall and outlet. Upon completion of a sampling event, the sample bottles were packaged and the Water Sample Data Sheet & Chain of Custody Record was signed and delivered with the samples to Edge Analytical, Inc., an independent third-party, accredited laboratory.

Laboratory and Analytical Method

Analysis for lead was performed by Edge Analytical, Inc. an Oregon drinking water accredited laboratory, using the EPA Method 200.8 for analysis.

Samples Collected and Results

TRC identified a total of 73 water fixtures of which eight (8) were determined to be “not in use” at the time sampling was conducted and are represented in Table A.1 below. Therefore TRC performed sampling of 65 fixtures within this school. Sampling was conducted on September 22, 2016 in between the hours of 4:00 a.m. and 7:00 a.m. Of the 65 first draw samples collected, three (3) had results greater than or equal to 20 parts per billion (ppb) for lead. The flush draw samples (B samples) for these three (3) samples were analyzed. The three (3) first draw results (A sample) which were at or greater than 20 ppb for lead and the flush draw sample (B sample) results for those three (3) are noted in Table B.1 below. As shown in Table B.1 below, the first draw sample results indicate lead levels above the USEPA action limit, whereas the flush draw sample results indicate levels below the USEPA action limit. Therefore, the results indicate the outlet and or plumbing lead line all the way to the stop, to be the cause of the elevated lead levels in the water and not the associated plumbing line behind the wall. A complete list of the analytical results noting all rooms and outlets that were sampled can be found in Appendix A.

Table A.1

Not In Use Fixture Location and Description
Classroom 9 – Sink Faucet
Classroom 12 – Drinking Fountain
Classroom 14 – Drinking Fountain
Classroom 15 – Drinking Fountain
Classroom 16 – Drinking Fountain
Classrooms 15 and 16 – Sink Faucet
Classroom 19 – Drinking Fountain
Computer Lab – Drinking Fountain

Table B.1

Sample #	Location and Fixture Description	Analyte	Result	USEPA Action Limit
DSD-05-21A	Stage Women’s Restroom – Sink Faucet	Lead	92 ppb	20 ppb
DSD-05-21B	Stage Women’s Restroom – Sink Faucet	Lead	6 ppb	20 ppb
DSD-05-39A	Gymnasium Storage Room – Sink Faucet	Lead	40 ppb	20 ppb
DSD-05-39B	Gymnasium Storage Room – Sink Faucet	Lead	5 ppb	20 ppb
DSD-05-57A	Computer Lab – Sink Faucet	Lead	172 ppb	20 ppb
DSD-05-57B	Computer Lab – Sink Faucet	Lead	2 ppb	20 ppb

ppb = parts per billion
USEPA = United States Environmental Protection Agency


Recommendations


TRC recommends that the District suspend the use of the water at the three (3) fixtures listed in Table B.1 above and take action to lower the concentrations for lead to those fixtures by replacing the associated outlet and supply lines from the wall to the outlet. In the interim, as recommended by the USEPA short-term control measures such as flushing the piping in the system at the fixtures noted above, every morning before the facility opens, can be conducted to remove water that has been standing in the interior pipes and or fixtures. Once the replacement is made, TRC recommends the District have the water from the new outlets re-sampled for lead to determine if the outlet and supply line replacement has resolved the issue prior to allowing these faucets to be used without the short-term control measures noted above.

A copy of the sample location map can be found in Appendix B.

TRC appreciates the opportunity to provide you with environmental consulting services. We look forward to working with you on future endeavors. If you have any questions or comments concerning this report, please call TRC at (503) 387-3251.

Sincerely,
TRC Environmental Corporation


Jason Stone
Industrial Hygienist


Ron Landolt
NW Region BSI Practice Manager

Appendix A – Analytical Results



Burlington, WA *Corporate Laboratory (a)*
 1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
 Bellingham, WA *Microbiology (b)*
 805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
 9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
 Corvallis, OR *Microbiology/Chemistry (d)*
 540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
 Bend, OR *Microbiology (e)*
 20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Revised - 10/5/2016

LEAD & COPPER RULE REPORT

Client Name: TRC - Milwaukie
 4120 SE International Way
 Suite A110
 Milwaukie, OR 97222

Reference Number: **16-23632**
 Project: 264210 - Whitworth
 Elementary

System Name:
 System ID Number:
 DWP Source Number:
 Multiple Sources:
 Sample Type:
 Sample Purpose: Investigative or Other
 County:

Analyst: mvp
 Date Received: 9/22/2016
 Report Date: 9/30/2016
 Approved By: bj
 Authorized by:

Thanh B Phan
 Lab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57780	9/22/2016	01A - Kitchen Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57781	9/22/2016	02A - Kitchen Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57782	9/22/2016	03A - Kitchen Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57783	9/22/2016	04A - Kitchen Restroom Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57784	9/22/2016	05A - Staff Restroom Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57785	9/22/2016	06A - Office Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57786	9/22/2016	07A - Staff Restroom Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57787	9/22/2016	08A - Hallway Drink Fountain #1	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57788	9/22/2016	09A - Staff Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57789	9/22/2016	10A - Lounge Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57790	9/22/2016	11A - Girl's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57791	9/22/2016	12A - Girl's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57792	9/22/2016	13A - Girl's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57793	9/22/2016	14A - Girl's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57794	9/22/2016	15A - Custodial Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57795	9/22/2016	16A - Boy's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57796	9/22/2016	17A - Boy's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	

NOTES:

RL (Reporting Level): indicates the minimum reporting level.
 AL Federal Action Levels are 0.015 mg/L for Lead and 1.3 mg/L for Copper under the Lead and Copper Rule for public water systems. A blank MCL value indicates a level is not currently established.

ND (Not Detected): indicates that the compound was not detected above the Reporting Level (RL).

These test results meet all the requirements of NELAP, unless otherwise stated in writing, and relate only to these samples. If you have any questions concerning this report contact Lawrence J Henderson at the above phone number.

LEAD & COPPER RULE REPORT

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57797	9/22/2016	18A - Boy's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57798	9/22/2016	19A - Boy's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57799	9/22/2016	20A - Stage Men's Restroom Sink Faucet	1030	LEAD	18	ppb	20	1	200.8	4072	
16_57800	9/22/2016	21A - Stage Women's Restroom Sink Faucet	1030	LEAD	92	ppb	20	1	200.8	4072	
16_57801	9/22/2016	22A - Rm. 1 Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57802	9/22/2016	23A - Rm. 1 Drink Fountain	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57803	9/22/2016	24A - Rm. 2 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57804	9/22/2016	25A - Rm. 2 Drink Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57805	9/22/2016	26A - Rm. 3 Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57806	9/22/2016	27A - Rm. 3 Drink Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57807	9/22/2016	28A - Rm. 4 Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57808	9/22/2016	29A - Rm. 4 Drink Fountain	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57809	9/22/2016	30A - Rm. 5 Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57810	9/22/2016	31A - Rm. 5 Drink Fountain	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57811	9/22/2016	32A - Rm. 6 Sink Faucet	1030	LEAD	12	ppb	20	1	200.8	4072	
16_57812	9/22/2016	33A - Rm. 6 Drink Fountain	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57813	9/22/2016	34A - Rm. 7 Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57814	9/22/2016	35A - Rm. 7 Drink Fountain	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57815	9/22/2016	36A - Rm. 8 Sink Faucet	1030	LEAD	18	ppb	20	1	200.8	4072	
16_57816	9/22/2016	37A - Rm. 8 Drink Fountain	1030	LEAD	14	ppb	20	1	200.8	4072	
16_57817	9/22/2016	38A - Hallway Drink Fountain #2	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57818	9/22/2016	39A - Gym Storage Rm. Sink Faucet	1030	LEAD	40	ppb	20	1	200.8	4072	
16_57819	9/22/2016	40A - Girl's Restroom Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57820	9/22/2016	41A - Girl's Restroom Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57821	9/22/2016	42A - Girl's Restroom Sink Faucet	1030	LEAD	1	ppb	20	1	200.8	4072	

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Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57822	9/22/2016	43A - Hallway Drink Fountain #3	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57823	9/22/2016	44A - Boy's Restroom Sink Faucet	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57824	9/22/2016	45A - Boy's Restroom Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57825	9/22/2016	46A - Boy's Restroom Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57826	9/22/2016	47A - Rm. 14 Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57827	9/22/2016	48A - Rm. 13 Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57828	9/22/2016	49A - Rm. 13 Drink Fountain	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57829	9/22/2016	50A - Hallway Drink Fountain #4	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57830	9/22/2016	51A - Rm. 12 Sink Faucet	1030	LEAD	11	ppb	20	1	200.8	4072	
16_57831	9/22/2016	52A - Rm. 20 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57832	9/22/2016	53A - Rm. 20 Drink Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57833	9/22/2016	54A - Rm. 11 Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57834	9/22/2016	55A - Rm. 11 Drink Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57835	9/22/2016	56A - Rm. 19 Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57836	9/22/2016	57A - Computer Lab Sink Faucet	1030	LEAD	172	ppb	20	1	200.8	4072	
16_57837	9/22/2016	58A - Library Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57838	9/22/2016	59A - Rm. 18 Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57839	9/22/2016	60A - Rm. 18 Drink Fountain	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57840	9/22/2016	61A - Rm. 17 Sink Faucet	1030	LEAD	9	ppb	20	1	200.8	4072	
16_57841	9/22/2016	62A - Rm. 17 Drink Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57842	9/22/2016	63A - Rm. 16 Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57843	9/22/2016	64A - Rm. 15 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57844	9/22/2016	65A - Rm. 9 Drink Fountain	1030	LEAD	6	ppb	20	1	200.8	4072	

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540 SW Third Street - Corvallis, OR 97333 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

LEAD & COPPER RULE REPORT

Client Name: TRC - Milwaukie
4120 SE International Way
Suite A110
Milwaukie, OR 97222

Reference Number: **16-25641**

Project: 264210 - Whitworth E.S.
B Samples

System Name:
System ID Number:
DWP Source Number:
Multiple Sources:
Sample Type:
Sample Purpose: Investigative or Other
County:

Analyst: mvp
Date Received: 9/22/2016
Report Date: 10/20/2016
Approved By: bj
Authorized by:

Thanh B Phan
Lab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_62882	9/22/2016	DSD-05-21B - Stage Women's Restroom Sink Faucet	1030	LEAD	6	ppb	15	1	200.8	4072	
16_62883	9/22/2016	DSD-05-39B - Gym Storage Room Sink Faucet	1030	LEAD	5	ppb	15	1	200.8	4072	
16_62884	9/22/2016	DSD-05-57B - Computer Lab Sink Faucet	1030	LEAD	2	ppb	15	1	200.8	4072	

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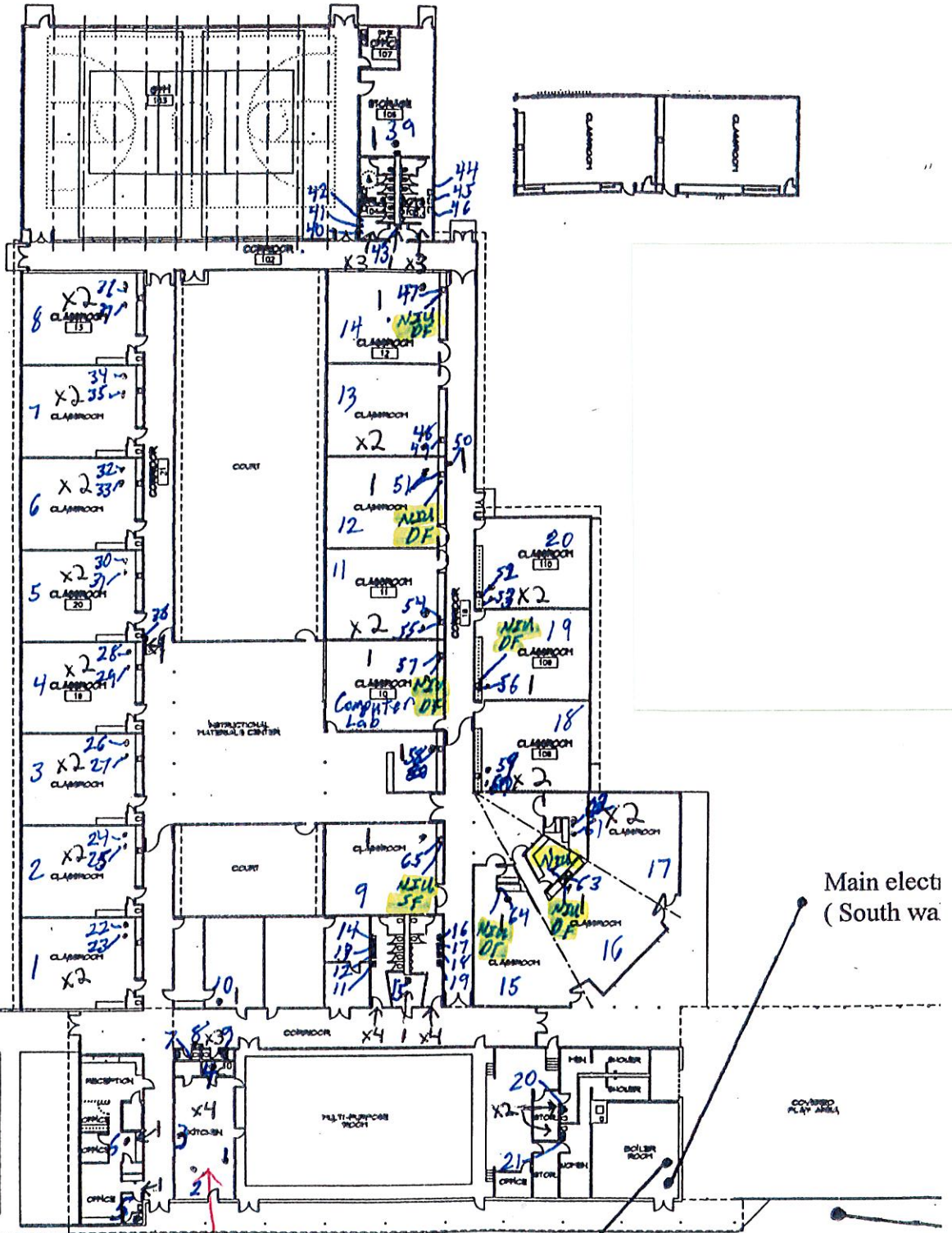
These test results meet all the requirements of NELAP, unless otherwise stated in writing, and relate only to these samples. If you have any questions concerning this report contact Lawrence J Henderson at the above phone number.

Appendix B – Location Map

- 4 Kitchen
- 3 Staff RR + Fountain
- 1 Staff Lounge
- 1 ADA RR
- 1 office

- 2 #1
- 2 #2
- 2 #3
- 2 #4
- 1 Fountain
- 2 #5
- 2 #6
- 2 #7
- 2 #8
- 1 Gym Equipment Room
- 3 Girls RR & Gym
- 3 Boys RR & Gym
- 1 Fountain & Gym
- 1 #14
- 2 #13
- 1 Fountain @ #13 & 12
- 1 #12
- 2 #20
- 2 #11
- 1 #19
- 1 Comp. Lab.
- 1 Library work room
- 2 #18
- 1 #9
- 1 #15
- 1 #16
- 2 #17
- 4 Girls RR & MPR
- 1 custodian Room
- 4 Boys RR & MPR
- 2 sinks on stage

65 sights Total



1 FLOOR PLAN
1/4" = 1'-0"



Domestic water main shut off valves
(P-1, P-2, P-3 on South wall of boiler room)

WHITWORTH ELEMENTARY SCHOOL