



Via email to [Hillary.Adam@portlandoregon.gov](mailto:Hillary.Adam@portlandoregon.gov), confirmation copy by U.S. Mail

Hillary Adam  
Land Use Services, Bureau of Development Services  
RE: LU 14-249689  
1900 SW Fourth Avenue, Suite 4500  
Portland, OR 97201

Dear Ms. Adam,

The Arlington Heights Neighborhood Association (AHNA) is concerned about impacts to our neighborhood from the Water Bureau's proposed Washington Park Reservoir Improvement Project. Specifically, we have significant concerns about the routing of trucks through our neighborhood, and the closure of the Sacagawea Circle, which is one of only two entrances to the North End of Arlington Heights. We would like the Hearings Office to request that the Water Bureau mitigate truck traffic as much as possible, and ensure that the Sacagawea Circle remains open to neighborhood traffic as part of this Improvement Project.

On February 9, 2015, Lindsay Wochnick from the Water Bureau and Jerry Moore presented the plans for renovation of the Washington Park Reservoirs to AHNA. It is our understanding that construction is slated to begin summer 2016. The storage facility at Reservoir 3 will be completed at the end of 2019, and Reservoir 4 will be decommissioned by 2020. Most intense construction activity will occur in the first three years. We were informed that Sacagawea Circle would be completely closed to at least eastbound traffic (and possibly westbound traffic) for a minimum of nine to twelve continuous months during construction. The closure of Sacagawea Circle will result in major problems getting in and out of the Arlington Heights neighborhood for residents, Washington Park visitors, and commuters who use this route from Highway 26.

Sacagawea Circle is a main route for access to downtown, I-405 S, and I-5 S. Currently, West Burnside at Tichner is very congested during rush hour precluding right-hand (in-bound) turns on red and backing up traffic on Tichner. In addition, traffic is already "stop and go" on West Burnside at rush hour. Forcing ALL traffic from the Park and the Arlington Heights neighborhood to use the intersection at Burnside and Tichner is not acceptable. There are many events and concerts in Washington Park, especially during the summer. The closure of Sacagawea Circle will significantly increase neighborhood congestion during these events, because there will now only be one point of access (Tichner) to the Rose Garden, amphitheater and Japanese Garden. Furthermore, the Water Bureau plan will add to traffic congestion by

---

2257 NW Raleigh Street, Portland OR 97210

503.823.4288

[board@arlingtonheightspdx.org](mailto:board@arlingtonheightspdx.org)

[www.arlingtonheightspdx.org](http://www.arlingtonheightspdx.org)



proposing that all of their trucks use the one available access point on Tichner (see below). AHNA has proposed several alternatives to the Water Bureau, including making the north half of Sacagawea Circle two way (by the use of signals, striping, and temporary widening) and reopening of Stearns Drive to one-way traffic. We would like to ensure that this concern is addressed as part of the Land Use Approval.

The Water Bureau proposes that all of their truck traffic access the site by Burnside via Tichner, Marconi, and Park. Even after efforts to reduce truck traffic (by using a conveyor for moving material from the upper to lower reservoir sites), the Water Bureau has acknowledged that there will be heavy trucks traversing the neighborhood, and has informed us the average rate will be one truck every 4-5 minutes throughout the day. This will cause considerable impact to residences along those roads in the form of noise, congestion, and vibration. AHNA would like consideration of more use of Hwy 26 via Kingston Drive, more use of Jefferson/Madison to access the site, and further consideration of alternatives for moving materials to the Reservoir 3 site from access via Jefferson (e.g., cranes, conveyers, concrete pumps, temporary roads) by the Water Bureau.

Please have the Water Bureau to allow two-way traffic on Sacagawea Circle, or provide another access point at the north end of Arlington Heights, as a condition for approval. Please also ensure that the routing of truck traffic is addressed before this application is approved. We appreciate your consideration. Please do not hesitate to contact me if you have any questions about these neighborhood impacts.

Sincerely,

Susan Alpert Siegel

President

## Adam, Hillary

---

**From:** Nancy Seton <NancySeton@comcast.net>  
**Sent:** Friday, March 06, 2015 5:36 PM  
**To:** Adam, Hillary  
**Cc:** Hall, Tim; Wochnick, Lindsay; Commissioner Fish; Commissioner Fritz  
**Subject:** Land Use Review number LU 14-249689 - SWHRL Neighborhood Assn. support for Washington Park Improvements Project

RE: Land Use Review number LU 14-249689, Type IV

Per the Water Bureau project website: "The Washington Park Reservoir Improvements Project will replace Reservoir 3 with a 15-million gallon underground tank and update the existing Washington Park Reservoir 4 to serve as an overflow and stormwater retention facility, including a de-chlorination. In addition, due to a historic landslide to the west – dating back to a slide during the original construction in 1894 -- to the project will stabilize the hillside and isolate the reservoir from moving soil."

Hello Hillary,

I would like to pass on our Southwest Hills Residential League (SWHRL) Neighborhood Assn. support for the Water Bureau's Washington Park Improvements Project. The SWHRL Board was unanimous in its support for the Portland Water Bureau's plans as shown on the project website. None of us has had any negative feedback from the neighborhood on the issue, and when I've mentioned your plans to friends and neighbors they were pleased.

We'd love to see reflecting ponds and a hillside restored with native plants, accessible by trails! It would be much more beautiful than a fenced in empty concrete basin. We support the plans as described on the Water Bureau website as follows:

"The project proposes to build a new below-ground reservoir in the same general footprint as the existing upper Reservoir 3, with a reflecting pool on top. Part of Reservoir 4 needs to be filled to stabilize the hillside above. The reservoir will be disconnected from the water supply and the remaining water body will include a lowland habitat area/bioswale and a reflecting pool. The public will have more access to the area and aesthetic design amenities will improve the visitor experience and understanding of the site."

And we favor putting the Washington Park reservoir(s) underground. I don't understand the reasoning claiming that open reservoirs are less expensive and healthier. I for one got rather ill during the last "Boil Water" episode. I think it's shameful that a "first world city" such as ours would have regular boil water incidents. I've never gotten sick from water elsewhere. And what a waste of money when reservoirs have to be emptied out every time there's perceived contamination. I think it's time to comply with federal regulations, and not waste any more time and money on resistance. We wouldn't claim to speak for SE Uplift and their Mt Tabor, and we prefer they not purport to speak for the SW Hills and Washington Park reservoirs.

Thanks you and best regards,

Nancy Seton

SWHRL Neighborhood Assn. President / Land Use Chair

## Adam, Hillary

---

**From:** Catherine Ellison <cmellison@comcast.net>  
**Sent:** Saturday, March 07, 2015 10:55 AM  
**To:** Adam, Hillary  
**Cc:** Catherine Ellison  
**Subject:** Washington Park Reservoir

Dear Ms Adam and the Reservoir Project Team:

I have heard a rumor and haven't had time to really go through your website to find out if this is true, BUT, we have heard that access to the neighborhoods above Washington Park will be cut off via Sacagawea Circle during the time of this project. And that this would be for a YEAR!!! If this is indeed true, this would certainly be a disaster for those who live anywhere between Burnside Street and the Park and from the Circle all the way up to Hoyt Arboretum!!! We all access downtown via the Park especially during rush hour, etc.  
PLEASE reconsider any idea of blocking off Sacagawea Circle and somehow making it possible for neighborhood traffic to travel on our usual route (NOT on Tichenor and Burnside which are completely jammed during rush hour).  
Thank you for any wonders you can work to save us from this tremendous inconvenience. I don't think you realize how much traffic goes to and fro on Sacagawea Circle DAILY.

Yours,  
Catherine M Ellison  
2916 SW Canterbury Lane  
PDX  
97205

To: The Historical Landmarks Commission  
Re: LU 14-249689  
Washington Park Reservoirs Historic District

March 8, 2015

1. What part of “not understanding” the purpose of the fully functioning open reservoirs to our community public health do our city council and PWB not get or want to have on the table for discussion? When water is brought into our system from the Columbia S. Shore Well Fields the radon in that water can dissipate in the air with the fully functioning open reservoirs. Without the open reservoirs functioning as an integral part of the entire Bull Run Water System, that radon will be coming into our homes and workplaces with water usage. The lack of concern regarding this from our elected officials will allow radioactive water to be brought into our community. The history of water in Portland years ago, cholera became a problem in Portland from the Willamette River and the public needed a better water source. This then brought our community the Bull Run Water System and Open Reservoirs. We should not be going backward by eliminating those open reservoirs which then can bring about other problems of public health. Will our community years from now find noticeable lung problems as a result of radon?

2. The new tank up at Powell Butte has some vents but they are small and not effective as the open reservoirs. That tank also had 3000 cracks and over 200,000 gallons of water leaked for some time. Engineers in a KOIN article (those engineers not on the project and did not want to be named) said it could be a design flaw. In my view it would only be prudent to retain our open reservoirs.

<http://KOIN.com/2014/02/26/powell-butte-reservoir-failing-leak-tests/>

3. Washington Park, the Historical Olmsted Landscape Designs.

Washington Park is considered by many to be the crown jewel of our parks. What will be left of that crown jewel other than remnants and photographs of what once existed in that park after the PWB project proposed up there?

Some of us attended a committee meeting last November 2014 and what we heard was alarming.

Project requirement: 30,000 trucks in construction going up the

Burnside and Jefferson Streets and right through the Arlington neighborhood streets.

Construction period of four years. The construction challenges:

Public Safety

Limited access to site for deliveries and materials removal

Noise mitigation

Worker parking

Truck traffic and concrete/material deliveries

My background is in design, and in my opinion, this PWB project is too large and out scale for this park landscape. The streets will be worn down with all these trucks and workings of the cement, dirt, noise? How is adequate mitigation possible for the neighborhood? What will happen to the character of our crown jewel of parks and that neighborhood? What will happen to the traditions of our Rose Festival, our Rose Garden and music events? All these will be out of reach for our community for four years?

4. This brings me to another critical point. Where has been the outreach and public notification for such a monumental project which will forever change this historic park?

<http://www.arlingtonheightspdx.org/calendar/>

This deadline for the official record and staff report and the tentative Historic Landmarks Commission tentative April 23<sup>rd</sup> meeting is not even on the Arlington Heights Neighborhood Association calendar.

<http://www.portlandoregon.gov/oni/article/312804>

In closing, I plead with the Historical Landmarks Commission to reject this application and if on appeal you review again the Mt. Tabor project to stand up for the two crown jewels of our city parks to save them from the city council and PWB directives and reject their applications.

Please understand that we are not mandated to do this now as the city tells us. Look only at the actions of NY to protect their open reservoirs and the lack of action our city has done in comparison. NY representative asked for a Waiver and NY received a reprieve until 2028. Our city council has not “seriously” worked for our community on this, they can say they have but evidence shows otherwise. The city set up it's own time frame on this. The EPA LT2 review is not complete until into 2016. It is only prudent to not proceed with any projects at this point. The city can ask for an extended period of time.

Our elected officials have not been good stewards of our city asset, the Bull Run Water System nor are they now good stewards of the health of our community.

For history information:

[www.friendsofreservoirs.org/](http://www.friendsofreservoirs.org/)

Our public health is at stake with the removal of the fully functioning open reservoirs. It is unacceptable that our city refuses a discussion on this valid concern. Read about the public benefits of the open reservoirs; why radon coming from the well fields will bring radioactive water into our community.

[www.bullrunwaiver.org/](http://www.bullrunwaiver.org/)

The document we received at the November 2014 Committee meeting is called Washington Park Reservoir Improvements Project. That Sounding Board 9 meeting last November had very few people attending. I would like that document dated 10/29/2014 to be put in the official record.

Washington Park Reservoir Improvements Project  
Sounding Board 9

The city has also not been good stewards of our community financial well being. It is unacceptable that the PWB brings up the concern of \$1.5 million for upkeep on Mt. Tabor open reservoirs, but has the money to do all else such as \$40 million at Mt. Tabor and the Washington Park project another \$76 million. This weak response from PWB is an insult.

Please be the good stewards we need to assist in saving the crown jewels of our park system and in the process our open reservoirs which have historically provided our city with safe drinking water for over 100 years.

RoseMarie Opp

1339 SE 130<sup>th</sup> Avenue

Portland, OR 97233

503 253-5491

[hudechrome@gmail.com](mailto:hudechrome@gmail.com)

(Lawrence Hudetz name appears as we share emails)



**WASHINGTON PARK**  
RESERVOIR IMPROVEMENTS PROJECT

SOUNDING BOARD 9

Washington Park Reservoir Improvements Project

Project Update

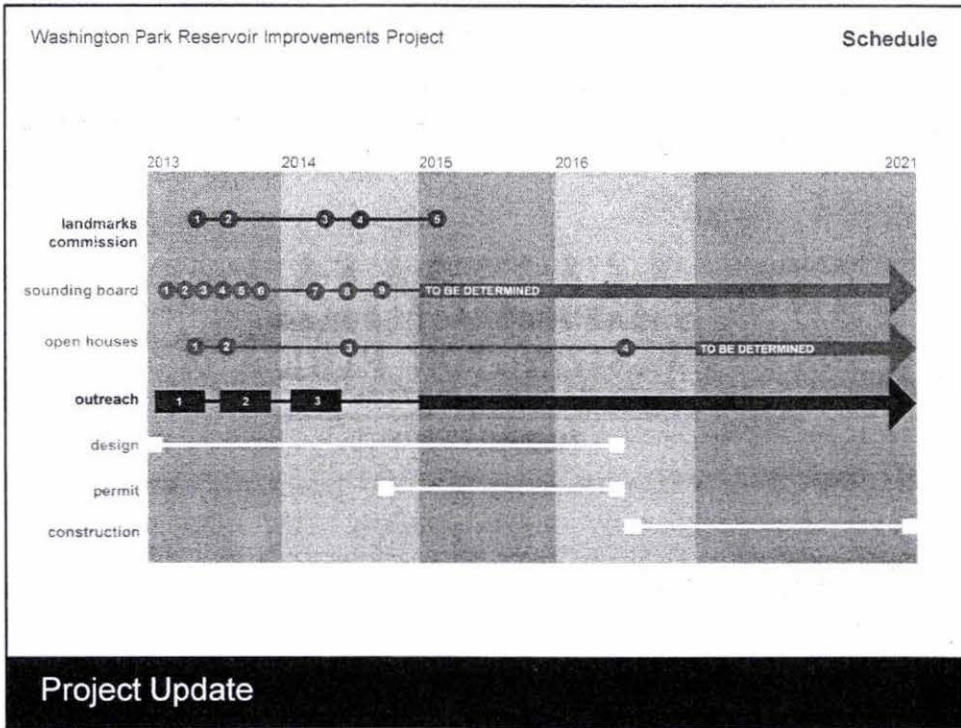
Design Update

Construction and Site Logistics

Public Comment

**Agenda**





# Design Update





Washington Park Reservoir Improvements Project

Interpretive Design

### INTERPRETING THE SITE AND ITS HISTORY

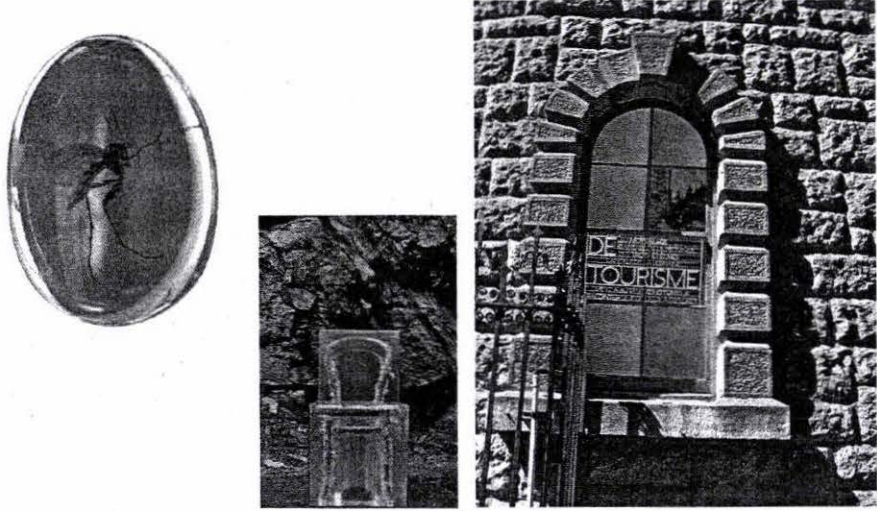
- Capturing time
- Marking time
- Merging the past with the present

Design Update

This is a text-based slide with a black border. At the top left, it says 'Washington Park Reservoir Improvements Project'. At the top right, it says 'Interpretive Design'. In the center, the title 'INTERPRETING THE SITE AND ITS HISTORY' is followed by a bulleted list: 'Capturing time', 'Marking time', and 'Merging the past with the present'. At the bottom left, it says 'Design Update'.

Washington Park Reservoir Improvements Project

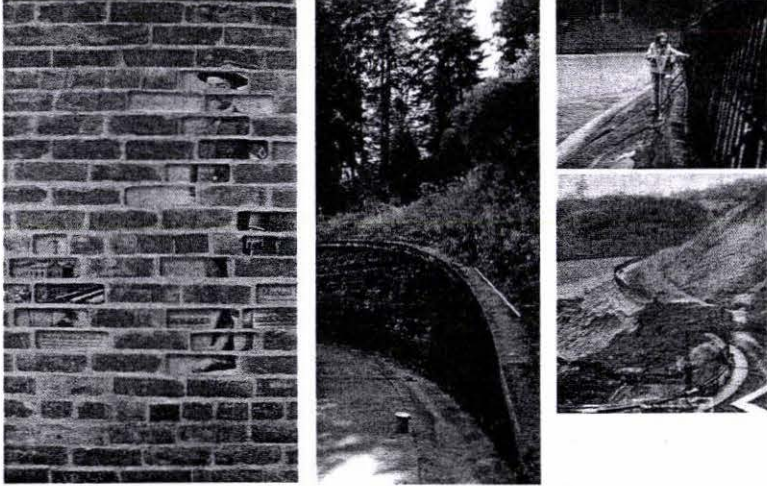
Capturing Time



Design Update

Washington Park Reservoir Improvements Project

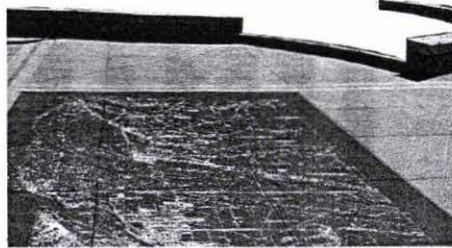
Capturing Time



Design Update

Washington Park Reservoir Improvements Project

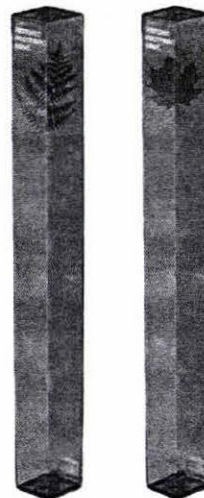
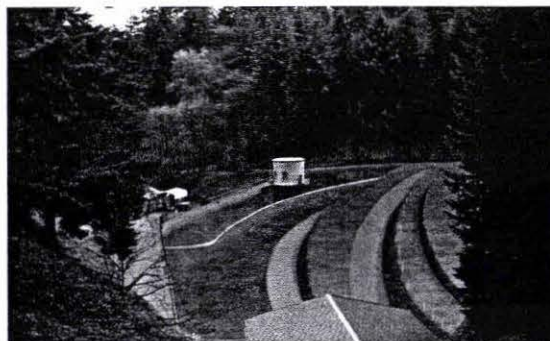
Marking Time



Design Update

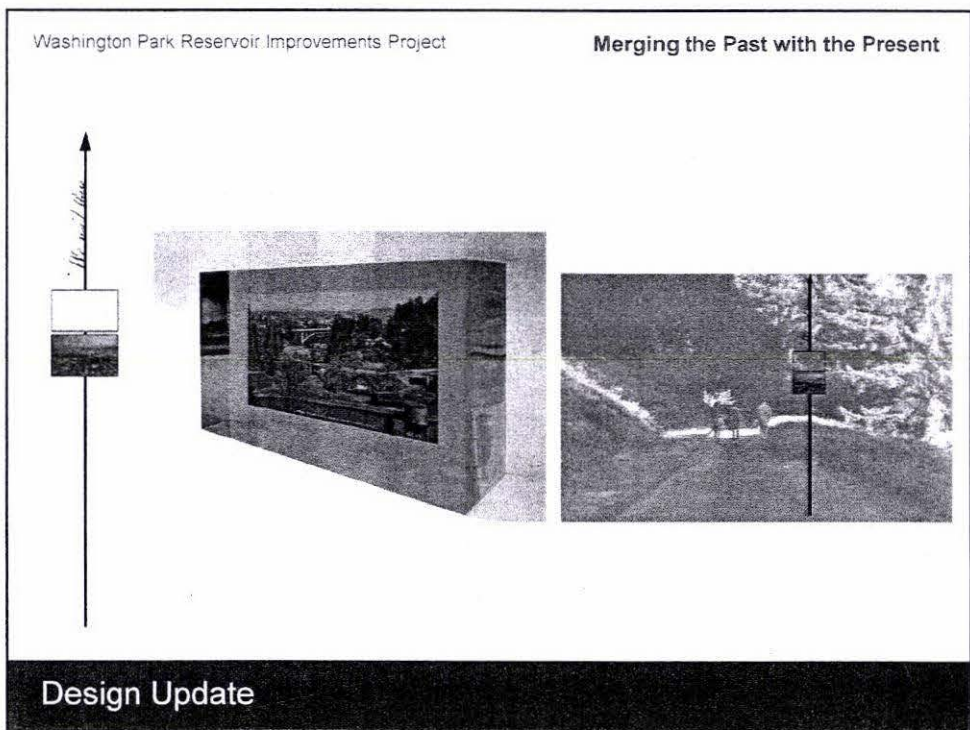
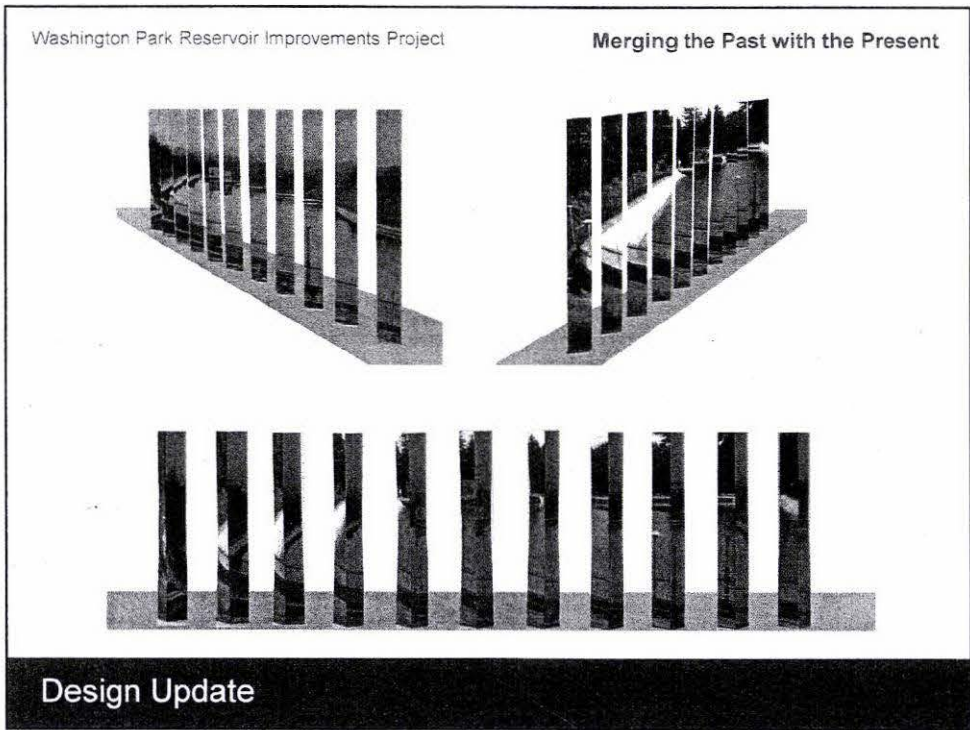
Washington Park Reservoir Improvements Project

Marking Time



Design Update





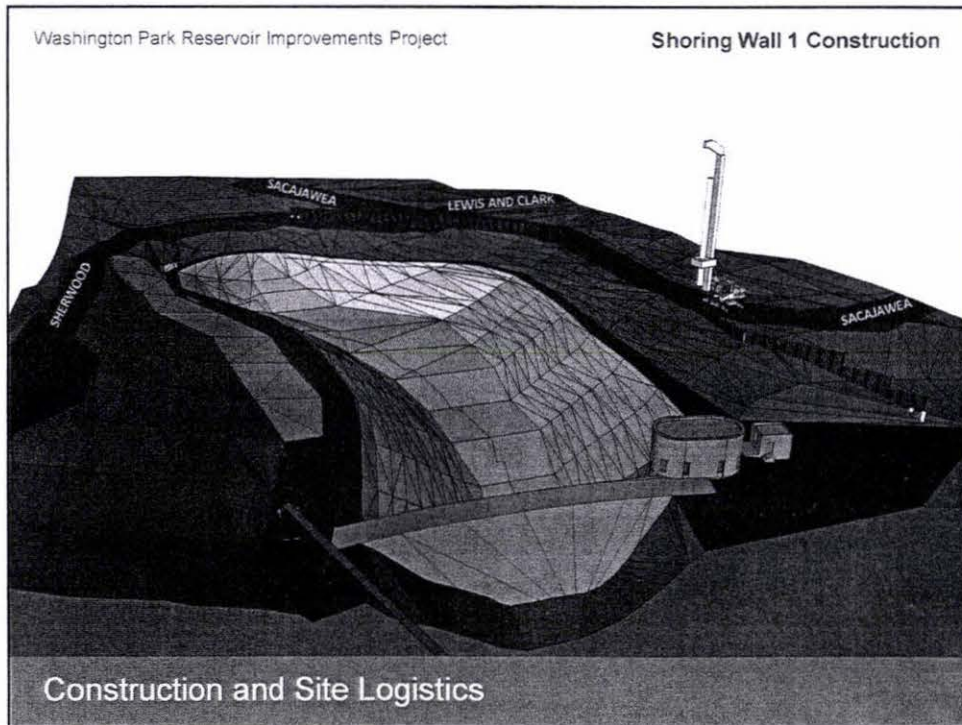
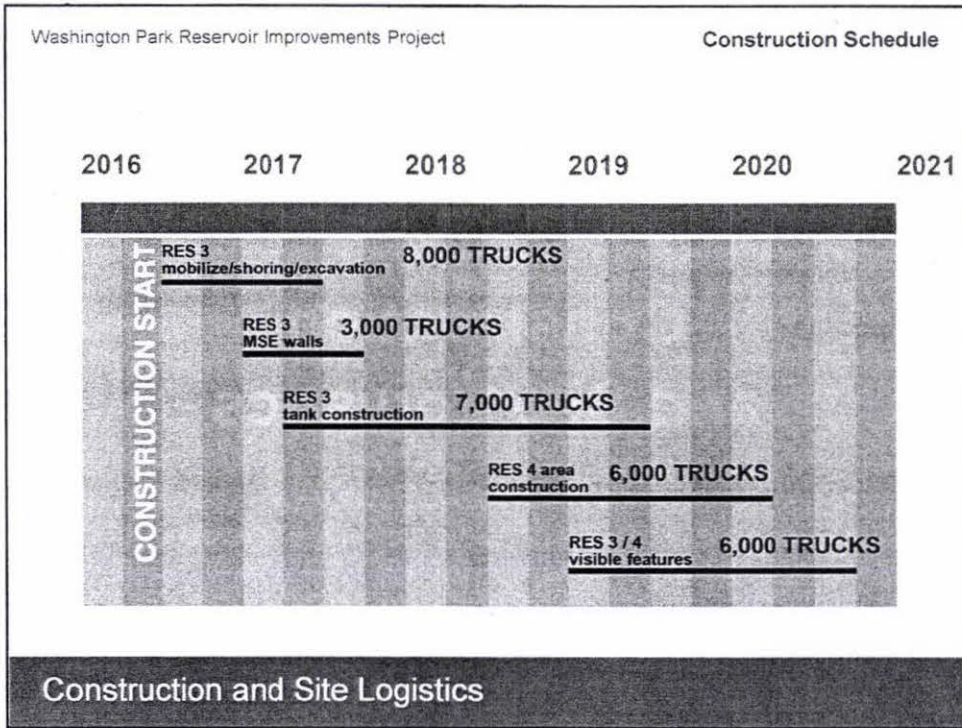
# Construction and Site Logistics

Washington Park Reservoir Improvements Project

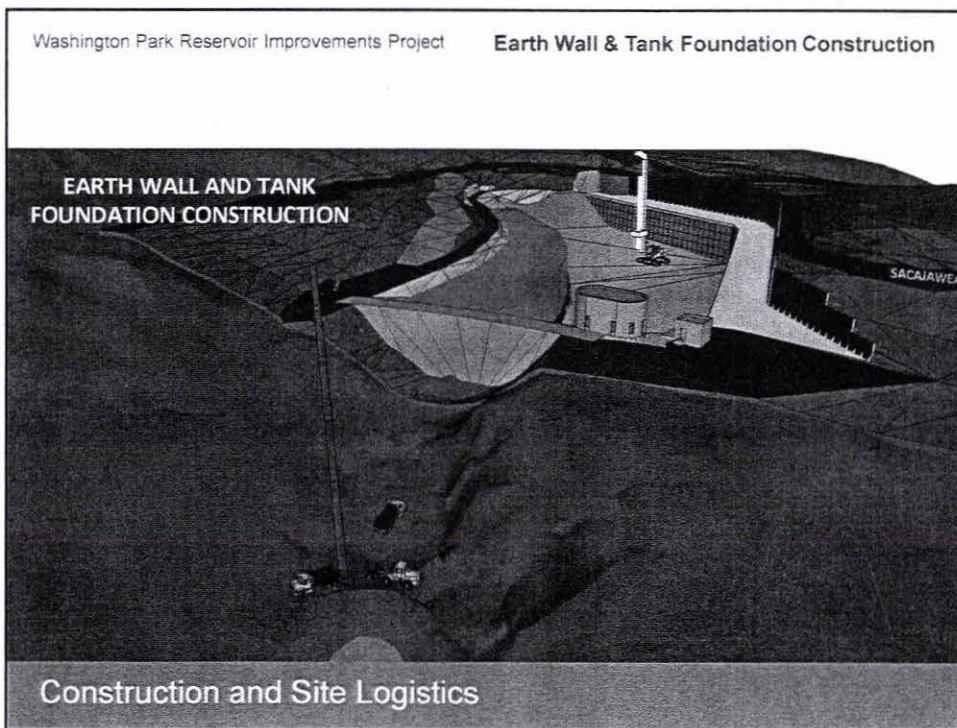
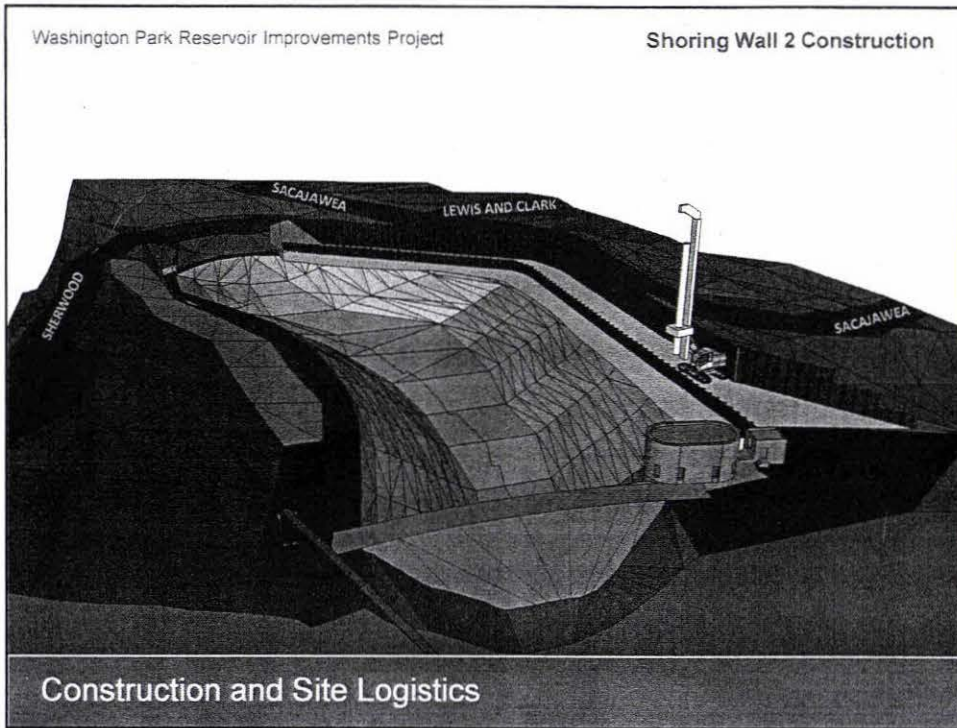
## CONSTRUCTION CHALLENGES

- Public safety
- Limited access to site for deliveries and materials removal
- Noise mitigation
- Worker parking
- Truck traffic and concrete/materials deliveries

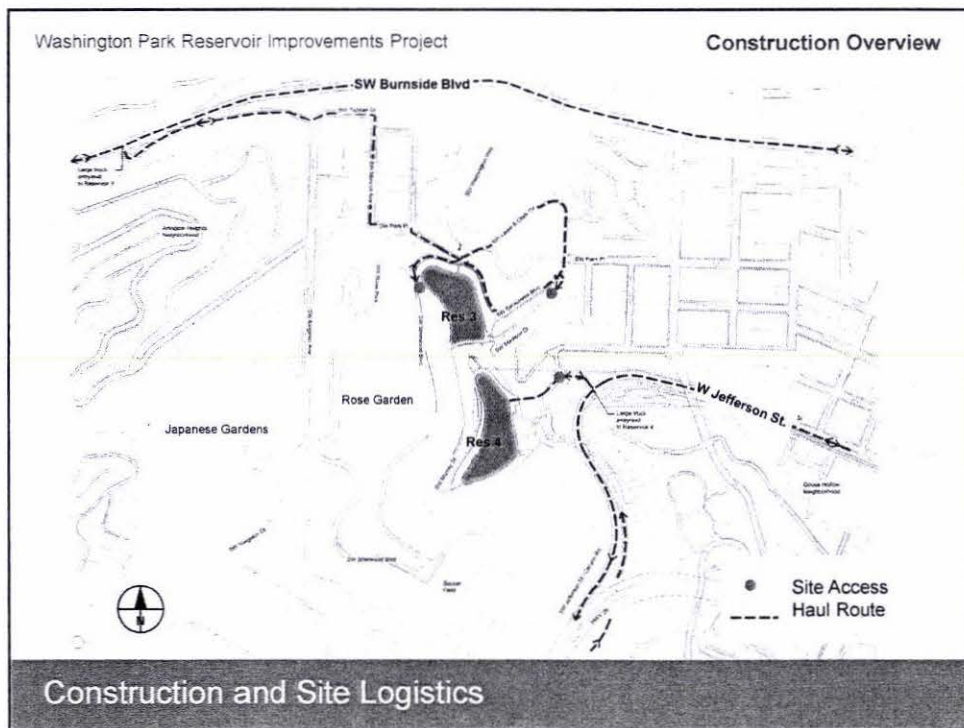
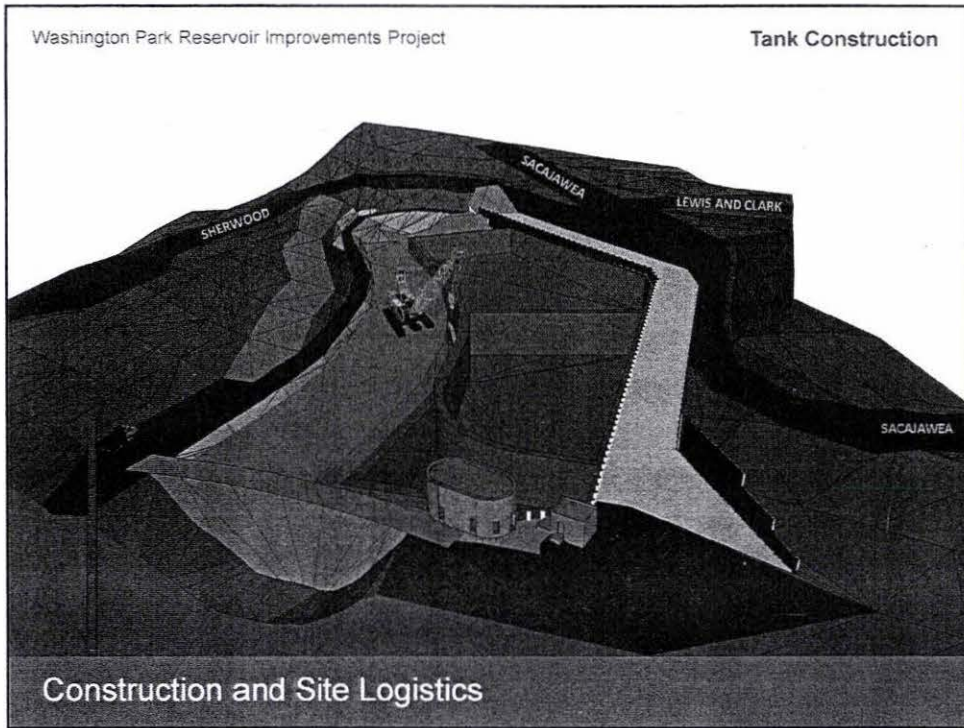
Construction and Site Logistics

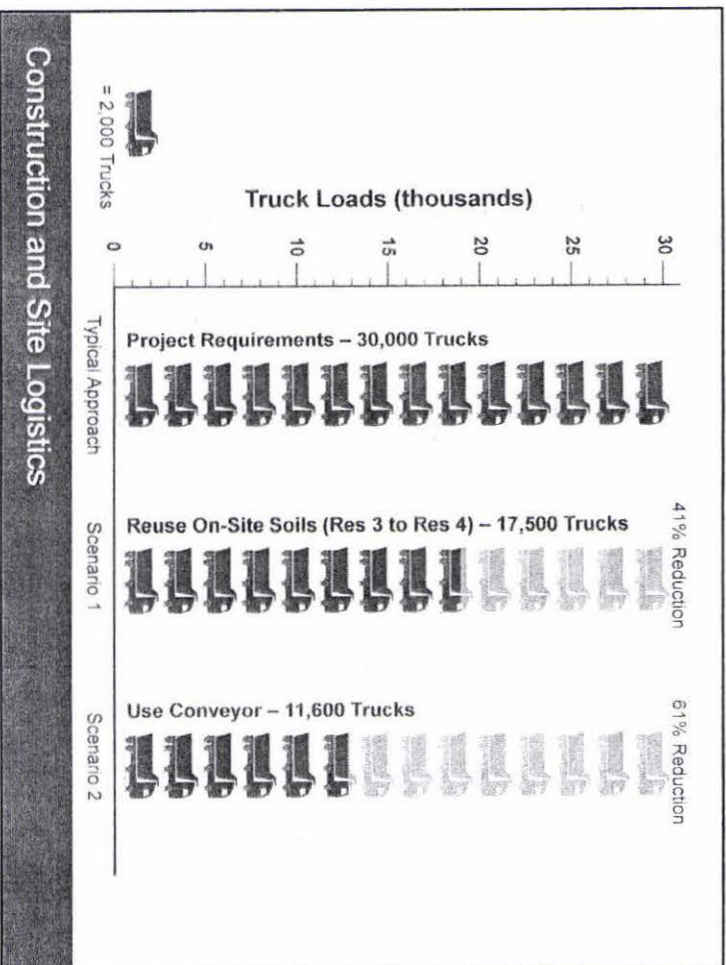












Washington Park Reservoir Improvements Project

Thank you!

Feedback – Questions - Comments

Public Comment

## City of Portland Public Involvement Principles

*Adopted by the City of Portland, Oregon on August 4, 2010*

Portland City government works best when community members and government work as partners. Effective public involvement is essential to achieve and sustain this partnership and the civic health of our city. This:

- Ensures better City decisions that more effectively respond to the needs and priorities of the community.
- Engages community members and community resources as part of the solution.
- Engages the broader diversity of the community—especially people who have not been engaged in the past.
- Increases public understanding of and support for public policies and programs.
- Increases the legitimacy and accountability of government actions.

The following principles represent a road map to guide government officials and staff in establishing consistent, effective and high quality public involvement across Portland's City government.

These principles are intended to set out what the public can expect from city government, while retaining flexibility in the way individual city bureaus carry out their work.

### City of Portland Public Involvement Principles

- **Partnership** Community members have a right to be involved in decisions that affect them. Participants can influence decision-making and receive feedback on how their input was used. The public has the opportunity to recommend projects and issues for government consideration.
- **Early Involvement** Public involvement is an early and integral part of issue and opportunity identification, concept development, design, and implementation of city policies, programs, and projects.
- **Building Relationships and Community Capacity** Public involvement processes invest in and develop long-term, collaborative working relationships and learning opportunities with community partners and stakeholders.
- **Inclusiveness and Equity** Public dialogue and decision-making processes identify, reach out to, and encourage participation of the community in its full diversity. Processes respect a range of values and interests and the knowledge of those involved. Historically excluded individuals and groups are included authentically in processes, activities, and decision and policy making. Impacts, including costs and benefits, are identified and distributed fairly.
- **Good Quality Process Design and Implementation** Public involvement processes and techniques are well-designed to appropriately fit the scope, character, and impact of a policy or project. Processes adapt to changing needs and issues as they move forward.
- **Transparency** Public decision-making processes are accessible, open, honest, and understandable. Members of the public receive the information they need, and with enough lead time, to participate effectively.
- **Accountability** City leaders and staff are accountable for ensuring meaningful public involvement in the work of city government.



Portland's Water Bureau has chosen the most destructive, least community-supported construction option available for compliance with a Federal rule. I request the Historic Landmarks Commission to intervene on behalf of these historic structures and inquire both with the Governor and with OHA as to what it would take to secure an LT2 compliance timeline that delays the start of reservoir project construction until January 1, 2017. It is high time the City advocate for restoration, preservation, and continued use of these reservoirs, and walk away from the boondoggle thus far visited upon us by the Portland Water Bureau.

#### **PWB failures of leadership –**

In 1984, the City won grant funding to conduct a city-wide inventory of historic resources -- 5,158 assets were identified and each asset was assigned a Rank I, II, or III status. Only 52 assets were given the highest Rank I status, and of those, the Tabor and Washington Park open reservoirs made up 5. While it was assumed the City would seek federal recognition and protection for all Rank I historic resources, in the almost 20 years that followed this study the City did not initiate a National Register of Historic Places nomination for these 5 reservoirs. This, despite several facilities evaluations done by Water Bureau consultants, quoted here:

"All of the open reservoirs are historically significant, and thus are eligible for inclusion in the National Register of Historic Places and for local landmark status."

– *Open Reservoir Study, Technical Memorandum*, Montgomery Watson Harza, 2001. Contracted by PWB

"The reservoirs are historically significant as examples of early engineering, and serve as monuments to the social history of the City's growth and development. They provide an early example of a planned landscape, including the views and vistas into and out of the landscape."

– *Open Reservoir Study, Facilities Evaluation*, City of Portland, 2001.

For almost 20 years these historic resources were left unprotected by the City and the Water Bureau. This massive responsibility was shouldered by volunteers and by 2004, both the Mt. Tabor Reservoirs and Mt. Tabor Park were listed on the National Register of Historic Places.

But had there not been a mechanism by which the community could bypass a local bureau that was unresponsive to community-will, these reservoirs and the story they tell might never have received national recognition and protection. Please remember this as we ask HLC to take a leadership role in protecting these historic resources.

#### **Prior attempt to destroy –**

In 2002, the Water Bureau inserted in their budget a line item to destroy and bury Mt. Tabor's historic reservoirs, and they did so without public discussion. There were no Federal mandates requiring them to do so. This project was on the docket because it appeared in a long-term planning document written for the City, by one of the construction companies that make money on big-build projects like reservoir burials. When the City hosted community meetings to discuss what citizens might like to do with the historic park after the historic reservoirs were torn out, citizens insisted on first having a discussion as to why the City was abandoning the reservoirs. Pressure from the community – which came from citizens and preservation organizations like the Historic Landmarks Commission and the Bosco-Milligan Foundation -- brought about an intense public process with an Independent Review Panel (IRP), now referred to as the "Reservoir Panel". With the IRP, citizens launched into hundreds of hours of research and were able to refute each claim made by the Water Bureau. This panel discussed everything from terrorist threats, to environmental contamination risks, to age and condition of structures. As the science on each subject was examined, the case for abandoning the open reservoirs dissolved. This 2004 Reservoir Panel, after three months of research and public debate, voted to maintain the open reservoirs. Eventually the Mayor and the Commissioner in charge of the Water Bureau decided to withdraw the project proposal. To be clear, it was community intervention that protected these historic resources in 2002.

In 2002-2004, citizens began to understand that the Portland Water Bureau might not support community-will as it relates to the historic reservoirs. So citizens started combing through Water Bureau documents and practices and they recognized a striking pattern: despite the fact that they'd inherited a well engineered water system with spare capacity for decades of new growth, PWB repeatedly neglected maintenance to instead embark on big-build projects recommended by the very contractors that profit from the planning and construction of those projects. Citizens noticed conflicting interests in the relationships between water bureau managers and the contractors that profit from the biggest contracts. And they noted practices that undercut the citizens PWB serves. Citizens discovered that PWB was advocating for big-build techniques while serving on an EPA Federal Advisory Panel tasked with crafting new drinking water regulation. This regulation, when finally published in 2006, heavily favored big construction options over lower-impact mitigation protections as the best means to achieve clean water – this despite Portland's example of the remarkable water purity achievable through protection and mitigation. That EPA regulation is now known as LT2, and it is the rule ostensibly forcing upon Portland the destructive disconnect project before us today.

#### **LT2 rule revision and local deadline extensions –**

Thanks to the efforts of New York City's water department, Mayor, New York's Governor and New York's Senator Chuck Schumer, EPA has decided to review LT2 to determine whether it should be "modified, streamlined, expanded, or repealed" to make LT2 "more effective and less burdensome."

(President Obama's Executive Order 13563 linked here for the record:

19https://drive.google.com/file/d/0B0FLHRhrA9yaNTdjYTk3NDEtNzgxZi00ZjY1LWI2ZjltYzY3ZTIyMDNiNDQz/edit?usp=sharing ).

New York City's elected officials took the above Executive Order as an opportunity to advocate for their historically significant, functional reservoirs. As such, on March 18, 2011, NYC submitted substantive comments and very specific objections to LT2 open reservoir requirements

(linked here for the record:

[https://docs.google.com/file/d/0BzH1qBHNhE0\\_NTUzZDI4ZDMtNGJhYS00ZDA4LWJiYjctYmZmYWFMjRmMmNi/edit?hl=en](https://docs.google.com/file/d/0BzH1qBHNhE0_NTUzZDI4ZDMtNGJhYS00ZDA4LWJiYjctYmZmYWFMjRmMmNi/edit?hl=en) ).

Portland's Water Bureau and the City's lobbying team failed to submit any comments advocating for our historic reservoirs, despite having recently collected significant scientific sampling data at the outlets of Portland's open reservoirs. That data should have been widely shared, as it clearly supports modification of the EPA LT2 reservoir requirements. (This data was collected as a part of PWB's participation in the American Water Works Association Research Foundation's #3021 Cryptosporidium Study. With this study, PWB sampled 7000 liters at the outlet of Portland's open reservoirs in 2008-09. Results detected zero Cryptosporidium.)

In addition to actively participating in regulatory reform opportunities like the one mentioned above, other municipalities have diligently advocated for their reservoirs at other levels. NYC and Rochester both submitted highly substantive, data-supported appeals to their local primacy agencies and as such each city secured significant timeline extensions in their reservoir compliance plans. These extensions were carefully designed to allow these cities and their historic reservoirs to benefit from pending regulatory reforms. NYC's newest timeline delays the start of reservoir projects until one month after LT2 revisions will be published. It is clear that NYC openly negotiated their compliance timeline in relation to the regulatory reform schedule. In one document NYC officials state, "US DOJ and the City have agreed to defer negotiations over revised dates until US EPA completes its review."

(linked for the record, "The New York City Municipal Water Finance Authority, Fiscal Year 2013 Consulting Engineer's Report" here: <https://drive.google.com/file/d/0BwjTV06zgxKYaVVIZTFpM0dEems/edit?usp=sharing> )

Portland has twice approached our agency of primacy -- the Oregon Health Authority (OHA) -- seeking to slow the LT2 construction timeline PWB set in motion in 2009. Internal communications between OHA reviewers regarding these extension requests, reveal opportunities for better documentation and a more favorable response. First, the PWB could provide more of the supporting data they possess -- this would positively impact the reception among reviewers. As one OHA reviewer states: "the City of Portland supplied very limited information supporting their request...The city of Rochester provided extensive documentation supporting their request." Second, there is no limit to the number of times the City can ask for a timeline extension. And third, as is revealed in one email exchange, there is no limit as to who can ask for this extension on behalf of these historic structures. I request the Historic Landmarks Commission to intervene on behalf of these historic structures and inquire both with the Governor and with OHA as to what it would take to secure an LT2 compliance timeline that delays the start of reservoir project construction until January 1, 2017. This would allow our historic resources to take advantage of regulatory revisions that happen in 2016. Those revisions could have a major impact on the future of these historic reservoirs, essentially, allowing them to have a future.

Katherine Anne Stansbury  
5519 SW Multnomah Blvd.  
Portland, OR 97219  
503-936-1977

Majority quoted from:

Comments for the record, Case file # LU 14-218444 HR, sent as an attachment via email Nov 20, 2014 to BDS staff and the Historic Landmarks Commission (HLC) from Stephanie Stewart, on behalf of the Mt. Tabor Neighborhood Association (MTNA)

## Adam, Hillary

---

**From:** Scott Fernandez <scottfernandez.pdx@gmail.com>  
**Sent:** Monday, March 09, 2015 1:53 PM  
**To:** Adam, Hillary; Scott Fernandez  
**Subject:** Washington Park open reservoirs comment  
**Attachments:** 3=9=15 Washington Park L.pdf

**Follow Up Flag:** Flag for follow up  
**Flag Status:** Flagged

REQUEST FOR RESPONSE

Case File: LU 14-249689 – Demolition Review for Reservoir 3, Reservoir 4, and the Weir Building, contributing resources within the Washington Park Reservoirs Historic District

March 7, 2015

Washington Park Land Use- open reservoir comments

Comments to Historic Landmark Commission

***“All of the open reservoirs are historically significant, and thus are eligible for inclusion in the National Register of Historic Places and for local landmark status.”*** – Open Reservoir Study, Technical Memorandum, Montgomery Watson Harza, 2001. Contracted by PWB

***“The reservoirs are historically significant as examples of early engineering, and serve as monuments to the social history of the City’s growth and development. They provide an early example of a planned landscape, including the views and vistas into and out of the landscape.”*** -- Open Reservoir Study, Facilities Evaluation, City of Portland, 2001.

***No waterborne disease outbreak or water quality incident of public significance has ever been recorded in connection with Portland's open reservoirs.*** Montgomery Watson Harza. Open Reservoir Study: Phase I Summary Report. City of Portland. January, 2002

*All features in good condition. ...a detailed maintenance program could extend the useful life of the open reservoirs to the year 2050.* Montgomery Watson Harza. Open Reservoir Study, Draft TM 5.7 Facilities Evaluation, City of Portland. August, 2001.

Today we find ourselves at the crossroads of public health. We can take the safe approach based on the already proven best available science and retain the historic open reservoirs or; disconnect and destroy these living historic treasures leaving us with known toxic and carcinogenic drinking water from covered reservoirs resulting in an adverse community public health effect. The earliest visionaries and architects of Portland's future system; Ernest Ransome, Isaac Smith, and Portland's public health officials all understood and were well aware in the 1800's the importance of clean, pure drinking water.

- **The fundamental principles of sunlight disinfection are well established**

Sunlight - to break down unwanted chemicals and providing supportive disinfection

Written by esteemed epidemiologist Milton J. Rosenau in 1902:“**Sunlight (direct) is an active germicide. It destroys spores as well as bacteria. The importance of the sun's rays in destroying or preventing the development or growth of microorganisms in nature cannot be overestimated. Even diffused light retards the growth and development of microorganisms, and if strong enough may finally kill them. In water or clear solutions it penetrates some distance. The importance of oxygen in the influence of light upon bacteria is emphasized. Bacteria in light, in the presence of oxygen and water, cause a production of hydrogen peroxide which is well known to have strong disinfection powers.**”

--Milton J. Rosenau, M.D., was commissioned as an assistant surgeon in the United States Marine Hospital Service (now the United States Public Health Service) in 1890. In 1899, he was appointed Director of the Hygienic Laboratory of that service. He was instrumental in 1922 in the establishment of the Harvard University School of Public Health and, in 1940, became first dean of the School of Public Health at the University of North Carolina

- **Oxygenation – allowing aerobic bacteria to breakdown unwanted chemicals**
- **Open air exposure- to allow volatilization/vaporization of unwanted chemicals such as radon, chloroform, etc.**

Landslide characterization issues and reasons for the changes to Washington Park reservoirs have been overblown and portrayed incorrectly. Engineering issues were addressed and mitigated to provide the reservoirs as useful and in good condition.(see attachment and engineering comments below)



famous slides are located close to one another in the West Hills of Portland. One is where Washington Park is now located. This ancient slide was reactivated in 1894 when the city cut off its toe to build two reservoirs for the city water bureau (Clark, 1904). The problem was mitigated by installing dewatering tunnels throughout the slide in the late 1800's. Today, the slide moves as fast as a person's fingernail grows. The Portland Zoo, the World Forestry

from-Landslides in the Portland Area from Storm of 1996- Portland State University

The primary function of these historic open reservoirs is to serve as drinking water reservoirs that have provided safe and healthy water for over 100 years without illness. Those who transacted the land these reservoirs reside on today expected them to serve that purpose in perpetuity with the understanding they were supporting a "healthy water initiative"; removing the contaminated Willamette River as their previous water source.

The open reservoir drinking water utility, national historic recognition and land use principles are all synergistically intertwined as one unit and must be retained as such. Disconnecting and destroying these historically acknowledged open reservoirs will not be invisible to a community expecting the safe and healthy drinking water present in open reservoirs that covered reservoirs cannot provide. The history and future of our open reservoirs as they are today providing safe and healthy drinking water is too important to ignore.

Sincerely,

Scott Fernandez M.Sc. Biology/ microbiology-water chemistry

City of Portland Mayor appointed-

Portland Utility Review Board 2001-2008

Portland Water Quality Advisory Committee 1996-2000

Scott Fernandez

1821 NE 65<sup>th</sup>

Portland, Oregon 97213

[503.282.1894](tel:503.282.1894)

**Table 1: Historical Slide Movements Since Reservoir Construction**

Date	Annual Rate of Movement	Description of Events
1893-1894	Unknown	Reservoirs constructed
1895-1896	15 inch/year	Water Bureau assessing cause of movements
1897-1898	1½ inch/year	Pump dewatering of exploratory shafts reduces movement rate; focuses stabilization techniques on dewatering options
1899-1900	4 inch/year	Exploratory shafts completed; movement rates increase due to stoppage of dewatering pumps; survey grid installed
1901-1904	¼ inch/year	Drainage tunnels constructed
1904-1906	1½ inch/year	Movements increase; additional drainage tunnels are installed
1906-1916	½ inch/year	Detailed survey monitoring
1920-1970	½ inch/year	Continued survey monitoring
1975-1986	¼ inch/year	Measurements obtained from 2 EDR casings
1987-2010	0.14 inch/year	Measurements obtained from 7 inclinometer casings

## Adam, Hillary

---

**From:** Ann Witsil <ann@catalystrategies.com>  
**Sent:** Monday, March 09, 2015 5:17 PM  
**To:** Adam, Hillary  
**Cc:** Catherine Ellison; Jennifer Briglia  
**Subject:** [User Approved] no closure to the Sacajawea Circle

Hi Hillary,

As Arlington Heights residents we do not favor a closure of the Sacajawea Circle during construction. There are few other options for getting to the down town area and back during rush hour periods. Please consider closure only at certain times of the day (mid-day) if necessary.

Thank you.

Ann Witsil  
2902 SW Canterbury Lane

**Adam, Hillary**

---

**From:** Eric Nagle <ericwnagle@gmail.com>  
**Sent:** Monday, March 16, 2015 9:55 AM  
**To:** Adam, Hillary  
**Cc:** Allison Duncan; Sam Beresky  
**Subject:** Washington Park Project Type IV LUR application  
**Attachments:** Wash Pk Reservoirs CSB rec to HLC.pdf

Dear Ms. Adam:

I am a member of the Community Sounding Board convened by the Water Bureau to provide public input on the Washington Park Reservoirs Project. The Sounding Board submitted the attached memo in support of the project to the Landmarks Commission during the design advice review, and we would like to ensure that the memo is part of the record for the LUR application.

In addition, as a representative of the Arlington Heights Neighborhood Association, I would like to place special emphasis on the need for design features on walkways that will discourage skateboarding, to ensure that the reservoir area remains a tranquil place for visitors.

thank you,

Eric Nagle



## Washington Park Reservoir Improvements Project Community Sounding Board

**To:** Historic Landmarks Commission

**From:** Washington Park Reservoir Improvements Project  
Community Sounding Board Members

**Date:** January 27, 2014

**Subject:** Community Sounding Board Input on Washington Park Reservoir concepts

**The Community Sounding Board for the Washington Park Reservoir Improvements Project would like to express our support for the proposed concept for visible features for this project.**

Over the past six months, our group has met seven times to advise the project team on community issues. Our Sounding Board is composed of park neighbors, park users, neighborhood association representatives, historic advocacy organizations, and staff from Portland Parks & Recreation. We have advised the team on the formation of Goals and Objectives (Attachment 1), helped brainstorm potential elements to be included in concept alternatives, and helped refine the concepts and identify the most viable alternatives.

Throughout the process, the Goals and Objectives have been used as a foundation to ensure the concepts reflect the values and priorities of the community. Based on these Goals and Objectives, the Community Sounding Board supports the **Cascades** concept for the upper reservoir area (Reservoir 3).

For the lower area (Reservoir 4), the preferences of our members were initially split fairly evenly between the **Lowland Habitat** and the **Reflecting Pool** concepts, although all participants expressed acceptance of either concept. We believe the subsequent **Hybrid** concept successfully blends the best of each of the previous concepts.

Beyond preferences for concepts, there are several themes that were consistently voiced by the sounding board:

- **Provide a large expanse of water** – This value has been consistently and almost universally raised throughout the process and through all forms of outreach and consultation.
- **Retain historic character** – Aside from the expanse of water, we value several historic aspects, including: *elements*, such as the fence and buildings; the tranquil *character*; and the *function* as part of the city's highly regarded water system.

- **Provide habitat** – Our group has also expressed interest in using this project as a means of addressing the city’s goals for increasing native habitat.
- **Be responsible with ratepayers’ money** – This value has been consistently raised through all forms of outreach. While we support the visible features design process and results, we want to ensure spending is kept within reason.

Specifically in regards to the proposed concepts, the Sounding Board recommends that **sections of new fencing be as low profile as possible** so as not to detract from the expanse of water and to allow for better views.

Finally, the Community Sounding Board supports the project’s public process and the direction in which the design team is moving with the visible features of the project.

**CSB Members**

- Charlie Clark –*Northwest Heights NA*
- Nicolas Clark – *Neighbors West Northwest*
- Terri Davis – *Portland Parks & Recreation*
- Chris Kent – *Goose Hollow NA*
- Annie Mahoney – *Historic Group Representative*
- Dave Malcolm – *Sylvan-Highlands NA*
- Eric Nagle – *Arlington Heights NA*
- Bill Welch – *Northwest District Association*



Attachment 1:

## **Visible Features Goals and Objectives *Final Draft***

While the Purpose of the Project articulates the fundamental “*why*” of the project, the Goals and Objectives describe “*how*.” They identify what is important to consider in developing concepts for the visible features, and provide a framework for evaluating those concepts.

### **Be Good Stewards of Public Funds**

- Ensure costs are focused on the greatest benefits to the community
- Spend public money prudently and limit impact on ratepayers
- Keep maintenance and operating costs low

### **Respect Historic Resources**

- Minimize impacts to historic structures and features
- Maintain historic character of the site
- Honor the historic function of the Washington Park reservoirs in the context of the overall Portland water system

### **Be a Good Neighbor**

- Reduce use of neighborhood parking by park visitors
- Avoid attraction of nuisance and illegal activities into the park and surrounding neighborhoods
- Enhance the quality of the park as an amenity for neighbors, as well as visitors
- Minimize construction impacts

### **Enhance Park Experience**

- Provide public access to the area with opportunities for low-intensity recreation
- Retain the reflective and tranquil character of the site that is now created and heightened by the visual connection to an expanse of water.
- Enhance views into and from the area
- Provide people with ability to connect with nature in the city
- Maintain security of the park and water facilities
- Ensure the new visible features enhance current park uses and are compatible with future park uses

### **Support Sustainability**

- Create sustainable landscapes that provide habitat for birds and other native wildlife
- Minimize climate change impacts due to construction, operations and maintenance.
- Promote wise use of our water resources through design, maintenance and education.

## Adam, Hillary

---

**From:** Katherine Anne Stansbury <kathycallaway@whiz.to>  
**Sent:** Thursday, March 19, 2015 10:23 AM  
**To:** Adam, Hillary  
**Subject:** [Approved Sender] Comment on Land Use Review number LU 14-249689  
**Attachments:** LU 14-249689 comment Stansbury - Revised.docx; ATT00001.htm

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hillary,  
Revised comment attached. Thank you for your trouble.

Comment on Land Use Review number LU 14-249689

Commissioners,

City Council and Portland's Water Bureau have not taken pride in and protected our world-class water system, a system that has functioned flawlessly for well over a century while providing beauty and recreation to our citizenry. They have instead embarked on a Rube Goldberg-style boondoggle, bent on destruction of both the Washington Park and Mt. Tabor reservoirs.

You on the HLC have the responsibility and the influence to change the course of events in this matter.

I request the Historic Landmarks Commission to intervene on behalf of these historic structures, and inquire both with the Governor and with the Oregon Health Authority to delay the start of reservoir project construction until January 1, 2017, after the EPA has reviewed LT2. This review is expected to re-instate the option for cities to pursue site-specific "risk mitigation" options that will allow current systems to remain in place and functioning. New York City has taken this path, and we could ally with them in this matter of civic preservation and systems protection.

Thank you,  
Katherine Anne Stansbury  
5519 SW Multnomah Blvd.  
Portland, Oregon 97219  
503-936-1977

## Adam, Hillary

---

**From:** cosmicdancer <cosmicdancer@peoplepc.com>  
**Sent:** Thursday, March 19, 2015 5:09 PM  
**To:** Adam, Hillary  
**Subject:** Washington Park Reservoir case - LU 14-249689 before the Historic Landmarks Commission.

This is my Testimony. Hopefully you get this as my Yahoo account wont send?!!!

After years of watching over this.... I feel our best option, not being investigated. is keeping a flow of water moving through these two reservoirs. The water is not treated so with the new technologies out, we will know EXCTLY what is in our water.

Solar Bee is a technology used in many water sources not TREATED with Chlorine type chemicals. We can have satellite real time read outs now. In this way, when the City uses any Spin on May B E Coli ... or whatever new May B, Could B, Happened in the past, or any other determinate to divert ... We Portlanders can put a hiccup in their get along... and that is what they want to do... get along with their Master Plan (explained in FB page Portland Water Ninjas under Auspicious Hearings Officer Helm) The EPA has these Billion Dollar Water Projects (LT2) under review with an expectation of findings in 2016... <http://lakes.medoraco.com/> Please also note this: Katherin Kilpatric wrote: In a Facebook thread:

I've been asking City Hall for years to publicly release the OHA compliance agreement, and associated municipal resolution, on which it bases its claim that the Mt. Tabor reservoirs must be decommissioned by 12/31 of this year. When the City applied months ago for a decommissioning permit citing that document as the reason, I filed a formal record request so I could submit it into evidence at the Historic Landmarks hearing on the City's application, given that the application was based entirely on the OHA compliance agreement. The Landmarks hearing has come and gone, and the City has yet to release this public document, even though it is easily accessible and probably on Amanda Fritz's desk.

Hello Ms. Kirkpatrick,

The City Attorney's Office has forwarded your request for documents to me in the Water Bureau.

As you know, this is a significant document search and will take time. Per the City's public records procedures, I will submit to you an estimate of the cost to reimburse bureau staff who must be taken off their regular duties to conduct the search, which includes to determine what documents do exist.

You will be required to pay 50% of the reimbursement cost before the bureau will begin the search, and the other 50% paid once the search is completed. I'm sorry, but your request is not eligible for a waiver.

Let me know if you have any questions.

Thank you.

Tim Hall

Manager, Public Information & Involvement

Hello, Mr. Hall. Thank you for your response.

As mentioned, this is not a significant search; I'm requesting a handful of documents whose whereabouts should be easily identifiable by City Council.....

The documents should be close at hand, because they're the basis of the City's current land use application to decommission the historic Mt. Tabor reservoirs. Commissioners Fish and Fritz frequently reference them in public forums, so for expediency's sake I'm asking the Commissioners by copy of this e-mail to kindly supply you with the dates of the originals and any amendments.

As I hope I made clear, the purpose for my request is to provide these documents to the Historic Landmarks Commission on the Mt. Tabor case, because it appears that the City has neglected to do so. I feel that the public would be served by entering these documents into the case record, given that these documents are the basis on which the City rests its contention that the applied-for work must be done. I'm a disabled citizen on a limited income and have done all my case research on a volunteer basis. I have nothing to gain personally from this request. I would therefore appreciate reconsideration of the public-service fee waiver, or at least an explanation as to why my request would not qualify.

Thank you,  
Katherin Kirkpatrick

But the point is not what's in that document--I already know what's in it, and they know I already know what's in it. The point is my elected officials' draconian response to my request for simple information to which I am entitled, and for which as a taxpayer I have already paid them. And the bald willingness of a decision-making body to make a decision without seeing the chief piece of evidence on which their decision should be based. These people truly believe they're entitled to act against the interests of those who pay their salaries, and they're willing to threaten and intimidate any citizen who challenges their sense of entitlement.

Reservoirs must be decommissioned by 12/31 of this year. When the City applied months ago for a decommissioning permit citing that document as the reason, I filed a formal record request so I could submit it into evidence at the Historic Landmarks hearing on the City's application, given that the application was based entirely on the OHA compliance agreement. The Landmarks hearing has come and gone, and the City has yet to release this public document, even though it is easily accessible and probably on Amanda Fritz's desk.

Sincerely,

Beth Giansiracusa

0322 SW Gaines St.

Portland, OR 97239

RECEIVED

March 19, 2015

MAR 20 2015

Hillary Adam  
Land Use Services  
Bureau of Development Services  
1900 SW 4<sup>th</sup> Avenue  
Suite #5000  
Portland, OR 97201

Re: LU 14-249689 DM (PC# 14-139549)  
**Demolition Review for Washington Park Reservoirs #3 and #4 and the Weir Building**

Dear Ms. Adam:

I was on the Board of the Arlington Heights Neighborhood Association from 1998 until one year ago and for most of that time I was its president. In that capacity I believe I was more involved with the Reservoir preservation effort than anyone else on the west side. I assisted Cascade Anderson Geller in the preparation of the Washington Park Reservoirs application for historic monument status.

In my opinion the city will be unable to carry the burden of proof on the easiest approval criterial available, namely that **“Denial of a demolition permit would effectively deprive the owner of all reasonable economic use of the site.”** Portland Planning and Zoning Code 33.846.080 C. 1. Demonstrating effective deprivation of all reasonable economic use of a site is a very high bar. The city cannot even come close to clearing it.

The city apparently and erroneously assumed the following as facts: 1) that the LT2 mandate regarding drinking water now and forever precludes reservoirs 3 and 4 from serving as storage for all water of any type; 2) that Congress will never repeal nor modify LT2; 3) that it need not consider an impending category 9 earthquake, where the outcome is unknown and therefore renders destruction of existing backup resources recklessly irresponsible, because either reservoir 3 or 4 or both may survive that earthquake; and 4) that there are alternatives to the demolition proposal, which are vastly less expensive, but easily implemented and are therefore more economically feasible than the proposal.

LT2 is political action based on questionable science. If after a category 9 earthquake either reservoir 3 or 4 or both were the only ones functioning, is there any question that Congress would prefer to have the emergency option of repealing LT2 to that of rebuilding another tank, and that this reasonably foreseeable possibility gives these resources economic utility?

The primary false assumption is that the only way to supply LT2 compliant water to the west side is by building a tank that is within the footprint of the current reservoir #3 and then constructing a new aesthetic amenity above it. There are two obvious alternatives that would cost tens of millions less and yet function as well as the proposal.



The first alternative is to simply take advantage of the #3 reservoir grillage that was installed in 2004. All that would be needed is to purchase a new cover. Since the city committed to this alternative over ten years ago as compliant with LT2, it can hardly argue now that installing a floating cover over reservoir #3 is not a “reasonable economic use of the site.”

The second alternative is to use the same strategy on the west side that was implemented on the east side. On the east side the city appropriated a mountain many miles from the existing Mt. Tabor outdoor reservoirs to contain LT2 compliant water. On the west side there is a soccer field only a few hundred feet to the south of reservoir #4, which could be excavated for the new underground tank with the soccer field rebuilt on top.

This alternative is not only tens of millions less expensive than the proposal, but far easier to implement and spares the Historic Monuments. Obviously, the viable opportunity to continue only aesthetic use of the existing reservoirs and so avoid the extreme cost of replicating their historic and artistic value destroys the city’s contention that demolition of the reservoirs is an economic necessity.

Some interested parties have the impression that the city is committed to rebuilding a replica of at least the existing reservoir 3 on top of the new tank. If that obligation is supposed to be in the proposal its actual text is to the contrary.

To be meaningful a commitment to restore must include detailed architectural plans, engineering studies, and a budget with guaranteed financing. Otherwise, the city is offering a substitute for the preservation benefits assured in Chapter 33.846, which like the reservoirs themselves are set in stone, in exchange for the vague promise of “a below-ground reservoir with a tiered reflecting pool in the same location and approximate footprint as the existing Reservoir 3 and a reflecting pool and stormwater swale in the location as the existing Reservoir 4 but with a reduced footprint.”

Significantly the proposal seeks “to remove three contributing resources (Reservoirs 3 and 4 and the Weir Building) from the Washington Park Reservoirs Historic District.” It makes no proposal for modification of the existing structures, but rather calls for their removal, that is demolition.

In conclusion the city has not and cannot demonstrate compliance with Planning and Zoning Code 33.846.080 C. 1. Moreover, the city does not even offer to attempt to replicate the protected artistic and historic features of these treasures. The proposal is facially flawed.

Sincerely,



Jeffrey E. Boly  
2879 SW Champlain Drive  
Portland, OR 97205-5833  
Home 503-223-4781; Mobile 503-381-6492  
jeff@jeffandlinda.org



Hillary Adam  
City of Portland, Land Use Services  
1900 SW 4<sup>th</sup> Ave, Suite 5000  
Portland, Oregon 97201

March 24, 2014

Dear Ms. Adam:

The Arlington Heights Neighborhood Association would like this letter to be included as testimony in the record for the Historic Landmarks Commission hearing on Case File LU 14-249689 DM (PC# 14-139549), Demolition Review for Washington Park Reservoirs #3 and #4 and the Weir Building.

There has been concern expressed in our neighborhood that the historic preservation and restoration activities described in the attachments to the public notice are not sufficiently linked to the demolition approval. After carefully reviewing the notice and attached drawings, the Arlington Heights Neighborhood Association Board agrees.

Included in the notice is a *Service Bureau note* that states "If the Demolition Review is approved by Portland City Council, a Type 3 Land Use Review is still required, as well as building permit issuance for the new development, before a demolition permit will be released." This does not, however, link the approval to specific preservation and restoration activities.

The key elements of the notice relevant to our concerns are the Proposed Demolition drawing and the Preliminary Design Concept drawing. Both of these are marked "Preliminary" which makes it ambiguous as to whether they describe the activities that will actually take place. Developing a position on the proposed demolition is impossible for our Neighborhood Association unless specific (not "preliminary") plans are provided.

To remove this ambiguity, we request the following be required for approval:

A) Demolition of historic structures shall be limited to activities shown on, and listed in Sheet Keynotes of, the Proposed Demolition drawing included in the Historic Landmarks Commission hearing notice of February 27, 2015.

B) A demolition permit shall not be released unless the required building permit for new development includes all of the historic preservation and restoration activities shown on, and listed in the Sheet Keynotes of, the Preliminary Design Concept drawing in the Historic Landmarks Commission hearing notice of February 27, 2015.

---

2257 NW Raleigh Street, Portland OR 97210

503.823.4288

board@arlingtonheightspdx.org

www.arlingtonheightspdx.org



The Arlington Heights Neighborhood Association appreciates the efforts to which the Water Bureau has gone to include public input in the design process, and their efforts to preserve the historic character of Washington Park. We believe the requirements we request for approval of a demolition permit are reasonable and in keeping with the spirit of the project.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Susan Alpert Siegel". The signature is fluid and cursive, written over a white background.

Susan Alpert Siegel, Ph.D.

President, Arlington Heights Neighborhood Association



## Adam, Hillary

---

**From:** Susan Siegel <susanalpertsiegel@gmail.com>  
**Sent:** Wednesday, March 25, 2015 9:18 AM  
**To:** Adam, Hillary  
**Cc:** boardarlingtonheights boardarlingtonheights  
**Subject:** Historic Landmarks Commission hearing on Case File LU 14-249689 DM (PC# 14-139549)  
**Attachments:** AHNAtoBDSreReservoirs\_V2\_SAS signed.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Ms. Adam,

Attached is a letter from the Arlington Heights Neighborhood Association to be included as testimony in the record for the Historic Landmarks Commission hearing on Case File LU 14-249689 DM (PC# 14-139549), Demolition Review for Washington Park Reservoirs #3 and #4 and the Weir Building.

In this letter, we request the following be required for approval:

A) Demolition of historic structures shall be limited to activities shown on, and listed in Sheet Keynotes of, the Proposed Demolition drawing included in the Historic Landmarks Commission hearing notice of February 27, 2015.

B) A demolition permit shall not be released unless the required building permit for new development includes all of the historic preservation and restoration activities shown on, and listed in the Sheet Keynotes of, the Preliminary Design Concept drawing in the Historic Landmarks Commission hearing notice of February 27, 2015.

The Arlington Heights Neighborhood Association appreciates the efforts to which the Water Bureau has gone to include public input in the design process, and their efforts to preserve the historic character of Washington Park. We believe the requirements we request for approval of a demolition permit are reasonable and in keeping with the spirit of the project.

**Please confirm receipt of this email.**

Thank you!

Susan Alpert Siegel, Ph.D.

President, Arlington Heights Neighborhood Association

RECEIVED

MAR 25 2015

# AIA Portland

A Chapter of the American Institute of Architects

March 20, 2015

Historic Landmarks Commission  
c/o Bureau of Development Services  
1900 SW 4<sup>th</sup> Avenue, Suite 5000  
Portland, Oregon 97201



RE: Washington Park Reservoir Improvement Plan

Dear Commissioners,

The Portland Chapter of the American Institute of Architects, Historic Resources Committee (HRC) is pleased to submit for your review a letter of support for the Washington Park Reservoir Improvement Plan.

The Portland AIA HRC has met with your project team once in both 2013 and 2014 and at our most recent meeting in January 2015, to review the continuing progress on the Reservoir Improvement Plan. After the review at the January meeting the AIA HRC voted to support the Plan with the following comments:

The AIA Historic Resources Committee would like to offer its support for the Washington Park Reservoir Improvement Plan.

The AIA HRC had the opportunity to review the project three times including a site visit field trip. Each of our subsequent reviews have helped inform how the design treats or rebuilds historic elements of the reservoir site.

The AIA HRC found that the level of mitigation is appropriate to meet the overall project goals. The project as proposed gives a feeling of space and brings back all of the elements that brought people to the site historically.

Thank you for the opportunity to work with you and provide comments on this important project for the City of Portland.

Respectfully submitted,

A handwritten signature in cursive script that reads "Joanne Stainbrook".

Joanne Stainbrook, AIA  
For Peter Meijer, AIA, Chair  
AIA Portland Historic Resources Committee

*Peter Meijer, AIA HRC chair, is part of the design team for this project and has a conflict. He did not participate in the discussion, review or writing of this letter.*

Dave Otte, President  
*Reviewed*

**WASHINGTON PARK RESERVOIRS  
HISTORIC STRUCTURES REPORT  
Reservoir Nos. 3 and 4**

**City of Portland Water Bureau**

**December 2010**



**CASCADE DESIGN**  
PROFESSIONALS, INC.

**THE OFFICE OF ROBERT DORTIGNACQ, AIA**

# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

Tabular Summary.....	E-4
----------------------	-----

## INTRODUCTION

<b>Washington Park History and Significance</b> .....	I-1
<b>Project Scope and Approach</b> .....	I-3
<b>Final Report Format</b> .....	I-5
<b>Methodology for Repairs</b> .....	I-6
Treatment Guidelines.....	I-6
Alternatives for Treatment.....	I-6
Prioritization .....	I-7
Procedures.....	I-8
Skill Level of Practitioners .....	I-9
<b>Summary of Findings</b> .....	I-9
<b>Documentation</b> .....	I-9
<b>Implementation Plan</b> .....	I-10

## RESERVOIR 3

<b>Gatehouse 3</b> .....	R3-1
Concrete Walls, Floor and Roof .....	R3-1
Metal Decking, Balcony .....	R3-3
Doors.....	R3-4
Windows .....	R3-5
Interior Space .....	R3-6
Entry Steps.....	R3-7
<b>36 Weir Building</b> .....	R3-8
Concrete Walls, Floor and Roof .....	R3-8
Door .....	R3-9
Window.....	R3-10
Interior Space .....	R3-11
Entry Steps.....	R3-12
<b>Site</b> .....	R3-13
Reservoir Structure and Dam.....	R3-13
Site Wall (Parapet Wall Assembly).....	R3-15
Walkways and Walls.....	R3-17
Stairways.....	R3-19
Other Features.....	R3-20

## RESERVOIR 4

<b>Gatehouse 4</b> .....	R4-1
Concrete Wall, Floor and Roof.....	R4-1
Metal Balcony .....	R4-3
Doors.....	R4-4
Windows .....	R4-5
Interior Space .....	R4-6

Entry Steps.....	R4-7
<b>Pump House 1</b> .....	R4-8
Concrete Wall, Floor and Roof.....	R4-8
Doors.....	R4-10
Windows.....	R4-11
Interior Space.....	R4-12
Entry Steps and Context.....	R4-13
<b>Generator Building</b> .....	R4-14
Concrete Wall, Floor and Roof.....	R4-14
Doors.....	R4-15
Windows.....	R4-16
Interior Space.....	R4-17
Entry Steps and Context.....	R4-18
<b>Site</b> .....	R4-19
Reservoir Structure and Dam.....	R4-19
Site Wall (Parapet Wall Assembly).....	R4-21
Walkways.....	R4-23
Other Features.....	R4-25
<b>Fountains</b> .....	R4-27

## APPENDICES

- A Bibliography
- B Construction and Materials Reference Guide
- C Historic Preservation Briefs

## LIST OF FIGURES

Figure 1 Site Plan.....	I-4
-------------------------	-----

## EXECUTIVE SUMMARY

The Washington Park Reservoirs structures and buildings are nationally significant as part of an early design for a city's open water system. The system is historically significant for its initial construction and subsequent additions involving monumental civic undertakings, for the exemplification of early concrete engineering construction technology, and for its architectural design. As recognition of their historic importance, the buildings, structures, and site were nominated to the National Register of Historic Places as the Washington Park Reservoirs Historic District on January 15, 2004. Generally, those features within the district boundary that date from the initial construction in 1894 through construction and additions dating to 1951 are considered historic contributing.

This report focuses on the historic and architectural nature of the facilities, as defined in the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. While the treatment Standards are designed to be applied to all historic resource types included in the National Register of Historic Places – buildings, sites, structures, districts, and objects – the Guidelines apply to buildings and site amenities, such as stairs, walkways, etc., only.

As stated in the Secretary of the Interior's Standards, "Work that must be done to meet accessibility requirements, health and safety requirements, or retrofitting to improve energy efficiency is usually not part of the overall process of protecting historic buildings; rather, this work is assessed for its potential impact on the historic building." The Water Bureau interprets "health and safety requirements" to include compliance with the Environmental Protection Agency (EPA) new drinking water rule, issued in January 2006, under the Safe Drinking Water Act called the Long Term 2 Enhanced Surface Water Treatment Rule, (LT2). The Water Bureau's responsibility to the public and to comply with Federal laws for drinking water and structural/seismic safety may override aesthetic concerns expressed herein.

Concerns such as facility security, ability to perform after a natural or man-made disaster, maintenance concerns or vulnerability to operational failure are beyond the scope of this report.

From a historic perspective, the historic resources in the Washington Park Reservoirs Historic District are, for the most part, in good condition. The structures and buildings were carefully designed and were built for durability and low maintenance. Those considerations have allowed the structures to age gracefully. The facilities are used on a day to day basis. Very few original construction components have been lost or removed. There have been some minor modifications to the facilities to allow continued safe and environmentally responsible operation. In many cases, these alterations, such as new electronic measuring or pipe controls, supplement the historic resources instead of replacing them. Most of the significant prior deterioration, which included the decorative concrete finishes on the two gate houses and structural damage at the pump house, has been repaired previously. Some components have recently been renovated, such as site stairs and reservoir basin and wall repairs. Other components, such as roofing and paving, may now be in serviceable condition but are noted to be replaced shortly. Still other features may be advised to be replaced for restoration purposes.

The Portland Water Bureau contracted with Cascade Design Professionals, Inc. and Robert Dortignacq, historic architect, in early 2010 to develop a Reservoirs Historic Structures Report (RHSR), in order to provide expert advice on the condition, maintenance, rehabilitation and preservation of the historic features within the Washington Park Reservoirs Historic District.

The work on this RHSR included a review of existing historic research and documentation of the features, review of prior alterations, visual observations to physically determine the condition of the resources, assessment of the findings, and development of recommendations for preservation. Recommendations for preservations could change with respect to cost, schedule, and/or scope depending on implementation of Reservoirs Program for LT2. A Tabular Summary (included at the end of this section) was developed and includes preservation recommendations that are noted sufficiently to define the overall scope of the project, uncover significant unknowns, and provide a basis for establishing a construction planning budget. They are not defined to a construction bid level in nature, but rather are intended to provide a comprehensive, overall condition assessment of the historic features, and to provide a strategy for their continued preservation. Specific repair methods and development of rehabilitation construction documents were not part of this project scope.

The history and significance of the district and its context have been well-researched and documented, and therefore, that information is not repeated in this report. Instead a condensed statement of history and significance is provided for the user's reference. In addition, a Construction and Materials Reference Guide discussing the type of deterioration and typical remedial treatment for the different materials used in the district has been specifically developed, and is included in the appendix. A brief bibliography is also included for further reference. As the sole owner and operator of the facilities, the Portland Water Bureau has an extensive library documenting the initial construction, prior projects, and maintenance, as well as photographs.

The Reservoirs Historic Structures Report (RHSR) includes the analysis of historic resources as identified in the Washington Park Reservoirs Historic District National Register nomination. The buildings, structures, and objects included in this analysis are those noted as "contributing" according to the historic district National Register nomination. A total of eleven (11) historic resources were reviewed; five (5) contributing buildings, four (4) contributing structures (each reservoir and its dam), and two (2) objects (fountains).

### **Reservoir 3**

- Gatehouse 3
- 36 Weir Building
- Site (Reservoir Structure and Dam, Site Wall [Parapet Wall] Assembly, Stairway, Walkways)

### **Reservoir 4**

- Gatehouse 4
- Pump House 1
- Generator Building
- Fountain Structures

Site (Reservoir Structure and Dam, Site Wall [Parapet Wall] Assembly, Walkways, Stairways, Valve Tunnels)

Several historic resources that were not included in the 2004 nomination are also discussed: the access stairways between the reservoirs, related tunnels, access and connecting drives, stairs and paths, and the site improvement remains of the former caretaker's cottage.

This report discusses the components of these resources, e.g., the doors, windows, and structure, by similar construction groupings for ease of identity and recommendations. The Historic District boundary, including structures and other features, is shown on the Site Plan in Figure 1 in the Introduction.

A Technical Memorandum was issued in the performance of this work. Technical Memorandum No.1 (TM1) presented a review of background information, results of site visits and staff interviews, and an assessment of the condition of each reservoir component and bulleted recommendations for the preservation treatment of the various reservoir components. TM1 has been edited into this Final Report, along with the cost estimate and Tabular Summary.

In conjunction with preparation of the Technical Memorandum and Final Report, progress meetings were held with stakeholders and the neighborhood association. A 'Conditions Workshop' was held with Portland Water Bureau staff and stakeholders to review report findings, recommendations, and alternatives. The Condition Analysis and Recommendations are organized by reservoir, then by subcomponent to facilitate use of the report. The report is provided in a loose leaf binder and in electronic format to further allow ease of use and periodic updating of preservation projects.

The Tabular Summary below is a condensed version of the main report following its organization. It contains an abbreviated version of the observations and recommendations, as well as a prioritization, cost estimate, and mechanic skill level judgment. The Summary uses abbreviations to facilitate sorting according to Structure and Component. The Structure (first column) is identified by its affiliated Reservoir, such as "GH3" for Gatehouse at Reservoir 3. The Component (second column) for each structure is further abbreviated by using letters from the component, such as "CONC" for concrete walls, floor and roof. The third and fourth columns briefly describes the work and recommended treatment. For some recommendations there may be alternative, but equally acceptable solutions. Those are labeled as sub items, e.g.: A.1, A.2. A detailed explanation of the observations and recommendations is found in the main body of the RHR. The fifth column notes the assigned priority, Short (less than 5years), Long (5-10 years), or Maintenance level. The sixth column notes the estimated cost for the anticipated work including ten percent contingency. The seventh and final column assigns a construction skill (practitioner) level for each recommendation that ranges from 'A', an historic preservation specialist, to 'C', a qualified contractor or PWB staff.

Please Note: As work is completed on these facilities, appropriate documentation should be provided.



**Washington Park Reservoir Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
<b>RESERVOIR 3</b>								
<b>GATEHOUSE 3</b>								
GH3	CONC	Wall surface spalling; deteriorated and exposed reinforcing; some hairline cracks	Option A.1: Clean concrete exterior; test for water absorption; install cementitious patching, apply breathable sealer; retain below waterline wall as is	X			\$35,000	A
GH3	CONC	Roof drain prone to clogging; some leakage	Option A.2: Install new interior drainlines; provide overflow to one line	X			\$5,000	B
GH3	CONC	Roofing deteriorated	Option A.3a: Provide new membrane roof	X			\$19,000	C
			Option A.3b: Provide new elastomeric coating at roof deck and interior of parapet	X			\$10,000	C
			Option A.4a: Provide new elastomeric coating at roof coping	X			\$8,000	B
			Option A.4b: Provide new standing seam coping at parapet and its interior side		X		\$25,000	B
			Option A.5: Preserve existing Ransome floor lights			X	-	-
GH3	BALC	Non-historic balcony	Option A.1: Maintain deck until it needs major repair or is no longer necessary			X	-	-
GH3	DOOR	Non-original doors	Option A.1: Maintain existing metal door assembly; preserve existing cast iron sill			X	-	-
			Option A.2: Replace doors and frame; preserve existing cast iron sill		X		\$12,000	B
GH3	WIND	Wood members weathered; operable - not operating	Option A.1: Preserve wood windows; provide minor repairs		X		-	-
GH3	INT	Metal stair has rust	Option A.1: Maintain metal stairway, wood cabinet, and existing historic mechanical equipment intact			X	-	-
			Option A.2: Provide limited interpretive tours, develop portable signage and graphic		X		\$4,000	-

**Washington Park Reservoir Historic Structures Report**  
**Condition Analysis and Recommendations**  
**TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
GH3	STEP	Spalling on lower steps  Portions of original plaza missing	Option A.3: Provide additional documentation, inventory and photographs of existing historic mechanical equipment		X		\$4,000	A
			Option A.1: Preserve, patch and repair entry steps, clean concrete surfaces, patch tests, patch spalled areas		X		\$4,000	B
			Option A.2: Preserve remains of original plaza and sidewalk, restore missing portions; coordinate work with adjacent site paving		X		\$10,000	B
<b>RESERVOIR 3</b>								
<b>36 WEIR BUILDING</b>								
WB3	CONC	Exterior walls and roofing in good condition; small roof drain prone to clogging	Option A.1: Clean concrete exterior, test for water absorption, apply breathable sealer, if needed			X	\$8,000	A
			Option A.2: Consider a cementitious or concrete finish coating		X		\$20,000	A
			Option A.3: Revise existing roof drain; provide free standing roof drain, or revise the drain	X			\$4,000	B
WB3	DOOR	Door and frame in fair condition; need repainting; exterior light rusty	Option A.1: Maintain existing non-original door			X	-	-
			Option A.2: Replace current door when worn out		X		\$2,000	B
			Option A.3: Replace current light fixture when worn out		X		\$1,000	C
WB3	WIND	Non-historic window in good condition	Option A.1: Maintain existing non-original window			X	-	-
			Option A.2: Replace current window when worn out	X			\$1,500	B

**Washington Park Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
WB3	INT	Finishes are in good condition	Option A.1: Preserve existing historic equipment in place		X		-	-
			Option A.2: Update interior finishes as needed		X		\$3,000	B
WB3	STEP	Steps are in good condition	Option A.1: Maintain existing non-original stair and paint handrailing			X	-	-
<b>RESERVOIR 3 SITE</b>								
S3	RES	Presence of stained concrete, extensive cracks, evidence of settlement (long-term)	Option A.1: Clean concrete dam face and walls; test for water absorption, patch test; install cementitious patching		X		\$40,000	A
			Option A.2: Provide regularly scheduled cleaning of dam face			X	\$8,000	B
			Option A.3: Continue to monitor dam stability and geologic/hydraulic affects on existing basin		X	X	-	-
			Option A.4: Prep and paint valve platform			X	\$3,000	C
			Option A.5: Remove stainless steel pipe framework		X		\$5,000	C
			Option A.6: Restore original paving		X		-	
S3	WALL	Areas of wall deteriorated, metal fence needs minor repairs, original lights and poles need repair	Option A.1: Clean concrete basin walls and urns; test for water absorption, patch tests; install cementitious patching; apply breathable sealer to wall caps	X			\$100,000	A
			Option A.2: Preserve metal fencing and light fixture posts; repair and repaint	X			-	B
			Option A.3: Test basin walls; seal guardrail wall cap and urns		X		\$60,000	B
			Option A.4: Rehabilitate historic light fixtures and posts; provide new lighting		X		\$75,000	A

**Washington Park Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
S3	WALK	Walkways damaged, broken and spalled concrete. New gutters do not match original	Option A.5: Replace existing modern poles and light fixtures with historically appropriate	X			\$100,000	B
			Option A.6: Remove-consolidate electrical and data conduits that obscure wall pattern		X		-	-
			Option A.1: Clean and preserve existing paving and gutter			X	\$5,000	C
			Option A.2: Clean soiled walls, patch spalls and cracks; monitor hillside irrigation			X	\$15,000	B
			Option A.3: Clean, plumb, repair free standing urn at SW corner of basin	X			\$4,000	B
			Option A.4: Replace, patch damaged walkway slab		X		\$20,000	B
			Option A.5: Replace, patch damaged gutter sections		X		\$30,000	B
S3	STAIR		Option A.6: Preserve historic grates and assorted historic metal lids			X	-	-
			Option A.7: Replace walkway and gutter; section not matching original design when worn		X		\$15,000	B
			Option A.1: Maintain and preserve stairs, railings, walls and urns			X	-	-
S3	OTHER	Fencing and gates are in good condition	Option A.2: patch spalls and cracks			X	-	-
			Option A.1: Preserve nonhistoric, but historically compatible fencing and gates			X	-	-
<b>RESERVOIR 4</b>								
<b>GATEHOUSE 4</b>								
GH4	CONC	Walls have areas of spalling and deterioration. topping slab has spider cracking. roof drain prone to clogging. Problem with roof flashing.	Option A.1: Clean concrete exterior; test; install cementitious patching; apply breathable sealer to above waterline portion; retain below waterline wall as is	X			\$25,000	A

Washington Park Reservoir Historic Structures Report  
 Condition Analysis and Recommendations  
 TABULAR SUMMARY

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
			Option A.2: Check drainline for integrity; install new interior drainline if leaks; provide overflow to line; check coping cap and flashings for integrity	X			\$7,000	B
			Option A.3a: Provide new membrane roof	X			\$15,000	B
			Option A.3b: Provide new elastomeric coating over existing roof deck and interior side of parapet	X			\$8,000	B
			Option A.4: Preserve existing Ransome floor lights			X	-	-
GH4	BALC	Steel is in good condition; paint coating failing	Option A.1: Prep and paint valve platform			X	-	-
GH4	DOOR	Doors in good condition	Option A.1: Maintain existing metal entry door assembly; preserve wood door frame and cast iron threshold; paint threshold			X	-	-
			Option A.2: Maintain existing wood door, frame and mortise latch and cast iron threshold at reservoir side; replace hinges; paint threshold			X	\$1,000	C
			Option A.3: Replace metal entry doors and frame; preserve existing cast iron sill		X		\$12,000	B
			Option A.4: Replace wood door at reservoir side when deteriorated; retain mortise latch, replace hinges		X		\$2,000	B
GH4	WIND	Windows in generally good condition	Option A.1: Preserve wood windows; provide minor needed repairs		X		-	-
GH4	INT	Stair has minor rusting, but good structural condition	Option A.1: Maintain metal stairway, wood cabinet and existing historic mechanical equipment intact; add modifications as needed			X	-	-
			Option A.2: Provide for limited interpretive tours, develop signage and graphics		X		\$4,000	C

**Washington Park Reservoir Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
			Option A.3: Provide additional documentation, inventory and photographs of historic equipment		X		\$4,000	A
GH4	STEP	Some staining and spalling at steps; some ponding at downspout terminus	Option A.1: Preserve, patch, repair entry steps; clean concrete surfaces; patch tests; patch spalled areas		X		\$4,000	B
			Option A.2: Preserve and restore original sidewalk		X		TBD	-
<b>RESERVOIR 4</b>								
<b>PUMP HOUSE 1</b>								
PH1	CONC	Structure no longer original, but in good condition. Scuppers worn from use and exposure	Option A.1: Maintain walls in good structural condition; clean and seal cornice band		X		\$5,000	A
			Option A.2: Preserve and rehabilitate original rain scuppers		X		\$3,000	A
			Option A.3: Preserve Ransome lights and skylights			X	-	-
			Option A.4: Coat exterior with cementitious finish; correct uneven window infill; restore door and window surrounds		X		\$18,000	B
			Option A.5: Remove sloped roof and install membrane roofing; provide new skylight; provide revised rain drains		X		\$65,000	B
PH1	DOOR	Doors and frames in fair to good condition	Option A.1: Maintain existing metal entry door assemble; preserve cast iron threshold; paint threshold			X	-	-
			Option A.2: Replace metal entry doors and frame when needed; preserve existing cast iron sill		X		\$12,000	B

**Washington Park Reservoir Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
PH1	WIND	Remaining exterior windows in good condition	Option A.1: Preserve wood windows; provide needed minor repairs; renew rope suspension on operable windows			X	\$3,000	B
PH1	INT		Option A.1: Preserve historic equipment			X	-	-
			Option A.2: Provide regular maintenance of interior finishes and equipment, including floor painting			X	-	-
			Option A.3: Develop historic interpretive materials			X	\$4,000	C
			Option A.4: Provide additional documentation, inventory and photographs of historic equipment		X		\$4,000	A
PH1	STEP	Entry in good condition	Option A.1: Replace existing step when deteriorated; coordinate with installation of raised door opening surrounds		X		\$3,000	C
<b>RESERVOIR 4 GENERATOR BUILDING</b>								
GB4	CONC	Building in fair condition. Vegetation and soil from hillside has overgrown the roof.	Option A.1: Remove vegetation and lower soil level at hillside above structure to at least 12" below roof line; maintain roof drainage operation; install overflow drain	X			\$6,000	C
			Option A.2: Periodically clean and maintain walls; seal cornice band			X	\$4,000	B
			Option A.3 Preserve and rehabilitate original rain scupper		X		\$1,500	A

**Washington Park Reservoir Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
GB4	DOOR	Non-historic door in good condition	Option A.4: Coat exterior with cementitious finish:		X		\$6,000	B
			Option A.1: Maintain existing door			X	-	-
			Option A.2: Replace current door when worn out		X		\$2,000	B
GB4	WIND	Non-historic windows in good condition	Option A.1: Maintain existing windows			X	-	-
			Option A.2: Replace current windows when worn out		X		\$5,000	B
GB4	INT	Interior wall paint needs refinishing	Option A.1: Maintain in current condition; repaint			X	-	-
GB4	STEP	Concrete in good condition	Option A.1: Maintain in current condition			X	-	-
<b>RESERVOIR 4 SITE</b>								
S4	RES	Basin lining has extensive patching. Dam face has heavy staining and biological growth. Evidence of leakage (efflorescence).	Option A.1: Clean concrete dam face, walls and urns; test for water absorption, patch tests; install cementitious patching; apply breathable sealer to wall caps and urns	X			\$35,000	A
			Option A.2: Provide regularly scheduled cleaning of dam face; consider application of breathable sealer			X	\$10,000	B
			Option A.3: Maintain reservoir basin structure, monitor leading; provide waterproofing or basin liner as necessary		X	X	-	
			Option A.4: Remove stainless steel pipe framework		X		\$15,000	C
			Option A.5: Restore original paving		X		\$25,000	B



**Washington Park Reservoir Historic Structures Report**  
**Condition Analysis and Recommendations**  
**TABULAR SUMMARY**

Structure	Component	Observation	Recommendation			Cost	Contractor Skill Level <sup>(2)</sup>	
			S	L	M			
S4	WALL	Wall has normal wear and tear. Deteriorated patches with exposed reinforcing. Walls are heavily soiled and stained.	Option A.1: Clean concrete basin walls; test for water absorption, install patch tests; install cementitious patching; apply breathable sealer to wall caps	X			\$140,000	A
			Option A.2: Preserve metal fencing and light fixture posts; make repairs and repaint	X			-	B
			Option A.3: Test basin walls for water absorption; seal guardrailing wall cap and urns			X	\$85,000	B
			Option A.4: Rehabilitate historic light fixtures and posts; providing new lighting		X		\$60,000	A
			Option A.5: Replace existing modern poles and light fixtures historically appropriate units		X		\$140,000	B
			Option A.6: Rehabilitate/restore historic lamp posts at ends of dam; provide new lighting		X		\$35,000	A
			Option A.7: Remove/consolidate electrical and data conduits that obscure wall pattern					
S4	WALK	Damaged and broken slabs. Gutter has deteriorated portions.	Option A.1: Clean and preserve existing paving and gutter			X	\$5,000	C
			Option A.2: Clean soiled walls, patch spalls and cracks; monitor hillside irrigation to prevent excessive moisture			X	\$15,000	B
			Option A.3: Replace, patch damaged walkway slab		X		\$8,000	B
			Option A.4: Replace, patch damaged gutter sections		X		\$30,000	B
			Option A.5: Preserve historic grates and assorted historic metal lids			X	-	-

**Washington Park Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation				Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
S4	OTHER		Option A.6: Replace non-matching walkway and gutter sections when worn with new matching		X		\$15,000	C
			Option A.1: Maintain gate tunnels and access			X	-	-
			Option A.2: Remove vegetation from stone wall; repair masonry as needed			X	-	-
			Option A.3: Preserve stairs and road improvements to former caretaker's cottage			X	-	-
			Option A.4: Preserve non-historic fencing and gates			X	-	-
		Option A.5: Possible reuse of caretaker's cottage; document alterations; possible historic photos		X		-	-	
<b>RESERVOIR 4</b>								
<b>FOUNTAINS</b>								
F4	FOUN	Public fountain at north end of Reservoir dam largely intact; bowl has spalled-broken corners; some minor wear and surface damage on bowl and pedestal; heavily stained basin; plumbing fittings missing	Option A.1: Preserve-Repair Public Fountain; patch/repair concrete; clean concrete; clean up landscaping			X	\$3,000	A
			Option A.2: Preserve-Repair Public Fountain: restore for operation - refit plumbing, fit with bubbler and operator for on-demand use		X		\$5,000	A
	FOUN	Pedestal fountain adjacent to generator building has majority of basin missing; broken base corners; staining; interior pipe and bronze fitting intact	Option A.3: Preserve Pedestal Fountain: Preserve in storage until able to restore			X	-	-

