

## RESOLUTION No. 37402

Authorize the Water Bureau's Preferred Alternatives to plant capacity, location, and filtration technology for the Bull Run Filtration Project (Resolution)

WHEREAS, in August 2017, City Council approved Resolution No. 37309 to comply with Oregon Health Authority's (OHA) order to treat drinking water from the Bull Run Watershed for *Cryptosporidium*, as required by the Long Term 2 Enhanced Surface Water Treatment Rule (LT2), by submitting a compliance plan and proceeding with planning, design, and construction of a filtration plant; and

WHEREAS, in September 2017, Portland Water Bureau initiated the Bull Run Filtration Project and identified, as part of the pre-planning task of the Planning Phase, four key questions related to filtration of the Bull Run water supply: project delivery (procurement) method, plant capacity, location, and filtration technology; and

WHEREAS, in December 2017, OHA and the Water Bureau signed a bilateral compliance agreement and established a compliance schedule for meeting the requirements of LT2 that requires a filtration facility to be operational by September 30, 2027; and

WHEREAS, the Water Bureau facilitated an extensive public outreach campaign through online surveys, social media, stakeholder interviews, and a community forum to answer questions and hear community feedback on the Bull Run Filtration Project; and

WHEREAS, the Water Bureau evaluated the four key questions and determined preferred alternatives with the aid of a decision-making framework as well as stakeholder and community values identified through the public outreach process; and

WHEREAS, in August 2018, the Water Bureau shared its four preferred alternatives with City Council and the public at a City Council work session; and

WHEREAS, the process and alternative evaluations used to arrive at the preferred alternatives are documented in an Executive Summary attached herein as Exhibit A; and

WHEREAS, the Water Bureau (1) identified a preferred procurement method of Construction Management/General Contractor; (2) identified a preferred filtration plant capacity range of 145 million gallons per day (mgd) to 160 mgd, with a target of 160 mgd; (3) identified a preferred filtration plant location at Carpenter Lane; and (4) a preferred filtration technology of granular media filtration; and

WHEREAS, in August 2018, City Council approved Ordinance No. 189146 authorizing an exemption to the competitive bidding requirements, and authorized use of alternative procurement.

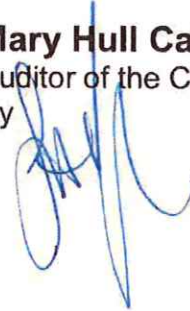
37402

NOW THEREFORE, BE IT RESOLVED, that City Council has reviewed the Executive Summary attached as Exhibit A and authorizes the Bull Run Filtration Preferred Alternatives related to Bull Run Filtration Project's plant capacity, location, and filtration technology.

Adopted by the Council: DEC 12 2018

Commissioner Amanda Fritz  
David Peters  
November 20, 2018

**Mary Hull Caballero**  
Auditor of the City of Portland  
By



Deputy

1264

Agenda No.  
**RESOLUTION NO. 37402**  
 Title

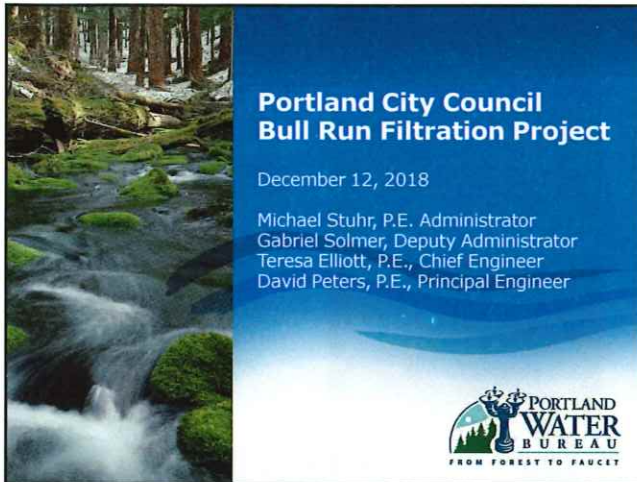
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Authorize the Water Bureau's Preferred Alternatives to plant capacity, location, and filtration technology for the Bull Run Filtration Project (Resolution)

<b>INTRODUCED BY</b> Commissioner/Auditor: <b>Commissioner Amanda Fritz</b>	CLERK USE: DATE FILED <u>DEC 04 2018</u>
<b>COMMISSIONER APPROVAL</b> Mayor—Finance & Administration - Wheeler Position 1/Utilities - Fritz <i>Amanda Fritz</i> Position 2/Works - Fish Position 3/Affairs - Saltzman Position 4/Safety - Eudaly	Mary Hull Caballero Auditor of the City of Portland  By: <i>Deputy</i> Deputy
<b>BUREAU APPROVAL</b> Bureau: Water Bureau Head: Michael P. Stuh, P.E. <i>[Signature]</i>  Prepared by: David Peters Date Prepared: November 20, 2018  Impact Statement Completed <input checked="" type="checkbox"/> Amends Budget <input type="checkbox"/>  Portland Policy Document If "Yes" requires City Policy paragraph stated in document. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  <b>City Auditor Office Approval:</b> required for Code Ordinances  <b>City Attorney Approval:</b> required for contract, code, easement, franchise, comp plan, charter <i>KLM</i>  Council Meeting Date: December 12, 2018	<b>ACTION TAKEN:</b>

AGENDA	FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:	
<b>TIME CERTAIN</b> <input checked="" type="checkbox"/> <b>Start time: 10:45 AM</b>  <b>Total amount of time needed: 15 25 min</b> (for presentation, testimony and discussion)		YEAS	NAYS
<b>CONSENT</b> <input type="checkbox"/>  <b>REGULAR</b> <input type="checkbox"/>  <b>Total amount of time needed: ____</b> (for presentation, testimony and discussion)	1. Fritz 2. Fish 3. Saltzman 4. Eudaly Wheeler	1. Fritz 2. Fish 3. Saltzman 4. Eudaly Wheeler	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>





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## Why are we here today?

- ✓ **Authorize** the Water Bureau's recommended alternatives for filtration capacity, location and technology.

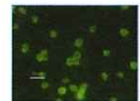
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## Bull Run Filtration Project

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## Why do we need filtration?

Filtration improves public health by removing *Cryptosporidium* (*crypto*) from the water



*The Bull Run Filtration Project continues the City's commitment to serving the best possible water to Portland customers.*

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## Filtration also provides other benefits

- ✓ Makes Portland's water **safer by removing microorganisms**
- ✓ Makes our Bull Run supply **more reliable**
- ✓ Allows Bull Run to be **used after an emergency**, such as a fire
- ✓ **May reduce the amount of chlorine needed** for disinfection and the **amount of disinfection byproducts**.
- ✓ Prepares us to respond to **future regulations**

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## Community Conversations

Prioritizing public outreach and communication to guide this work

- ✓ Online survey
- ✓ Digital/social media outreach
- ✓ Stakeholder interviews
- ✓ November 8th Community Forum
- ✓ Ongoing outreach with potential project neighbors

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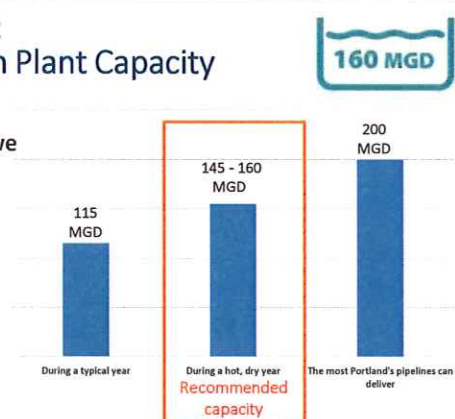
## Initial decisions focus on four foundational elements

- ☒  Procurement Method  
City Council decision 8-29-18
- ☐  Filtration Plant Capacity
- ☐  Filtration Plant Location
- ☐  Filtration Plant Technology

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## Analysis: Filtration Plant Capacity

How much water are we going to need?



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## Filtration Plant Capacity



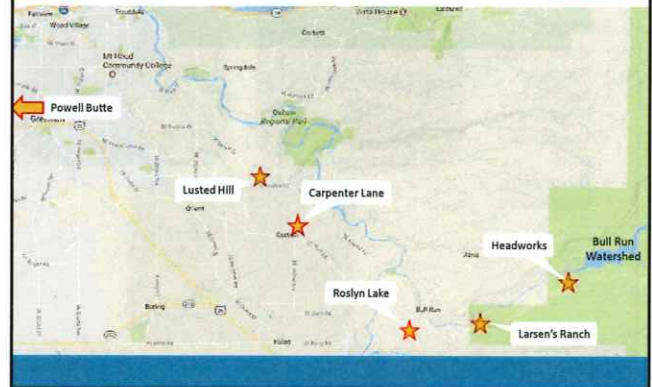
**Recommended capacity: 145 to 160 MGD**

- ✓ **Continues Bull Run as Portland's main water supply**, meeting demands on most days in most years
- ✓ **Manages costs** by matching filtration plant size to expected water use
- ✓ **Allows for future expansion** if needed

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## Analysis: Filtration Plant Location

Where should the filtration plant be located?



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## Analysis: Filtration Plant Location



Site	HGL	Proximity to Conduits	Tax Lot Size	Slopes and Geologic Hazards	Schedule
Carpenter Lane	Pass ✓	Pass ✓	Pass ✓	Pass ✓	Pass ✓
Headworks	Fail	Pass	Fail	Fail	Pass
Larsen's Ranch	Fail	Pass	Pass	Pass	Pass
Lusted Hill	Pass	Pass	Pass (with site expansion)	Pass	Pass
Powell Butte	Pass	Pass	Pass	Pass	Fail
Roslyn Lake	Fail	Pass	Pass	Pass	Pass

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## Filtration Plant Location

**Recommended site: Carpenter Lane**



- ✓ Site is at the **right elevation and location**, so that less pumping is needed
- ✓ Property is **already owned** by Portland Water Bureau so avoids the cost of purchasing a new property
- ✓ **Zoning allows a filtration facility**
- ✓ Site is **large enough to provide a buffer** between the facility and its neighbors



Carpenter Lane is a 95-acre property purchased by Portland for a future filtration facility

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## Analysis: Filtration Technology



### Factors:

- Water quality
- Hydraulics
- Regulatory requirements
- Comparative costs
- Other utility comparisons

#### Membrane



#### Slow Sand



#### Granular Media



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## Analysis: Filtration Technology



### Membranes

- ✗ High energy use
- ✗ High capital and operating costs



### Slow Sand

- ✗ Significant size
- ✗ Comparative poor water quality



### Granular Media

- ✓ Best operating capabilities
- ✓ Good water quality
- ✓ Most flexibility



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## Filtration Technology



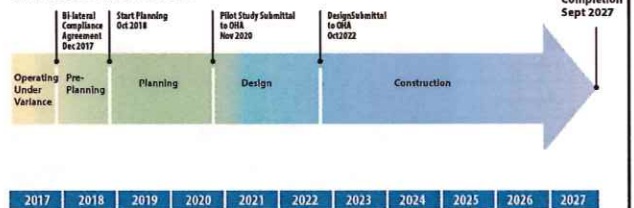
**Recommended filtration technology:**  
**granular media filtration**

- ✓ **Proven technology** that produces excellent water quality
- ✓ **Lowest cost technology** that can meet desired water quality
- ✓ **Very flexible** – it can be adapted to different water conditions and new water quality requirements
- ✓ **Fits on the filtration plant site** with room to grow in the future

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## Bull Run Filtration will be in operation by 2027

### Filtration Treatment



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### Next Steps For City Council

- ✓ **Authorize a design contract**, summer 2019
- ✓ **Authorize a professional services contract** with the Construction Manager/ General Contractor (CM/GC), end of 2019

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Questions?

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## ORDINANCE NO. 189146

Approve findings to authorize an exemption to the competitive bidding requirements and authorize the use of the alternative contracting method of Construction Manager/General Contractor in connection with the Bull Run Filtration Project for an estimated amount of \$350,000,000 (Ordinance)

The City of Portland ordains:

Section 1. The Council finds:

1. The Portland Water Bureau is a water utility that provides drinking water nearly 1 million people. The Water Bureau strives to provide the highest quality water to enhance public health and safety, and contribute to the economic viability and livability of the Portland metropolitan region.
2. In 2006, the U.S. Environmental Protection Agency (EPA) issued a federal drinking water rule called the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) that required water utilities to treat for the pathogen *Cryptosporidium*. In 2009, the Water Bureau presented LT2 compliance options to the Portland City Council, and Council directed the Water Bureau to pursue a variance to the rule (Resolution 36720).
3. In 2012, the Water Bureau obtained a 10-year variance from Oregon Health Authority (OHA) subject to a set of conditions that included maintaining an exceptionally low concentration of *Cryptosporidium* in ongoing raw water sampling.
4. Between January and March 2017, a total of 19 *Cryptosporidium* oocysts were found in 14 water samples from the Bull Run Watershed. In May 2017, the Water Bureau was informed by OHA that the variance was being revoked as a result of the low-level detections of *Cryptosporidium* in January through March of 2017.
5. The number of *Cryptosporidium* oocysts detected showed that the Water Bureau was no longer able to demonstrate an equivalent level of *Cryptosporidium* from untreated Bull Run water that would be expected with treatment. The City reviewed treatment options with City Council and community partners. In August 2017, Portland City Council voted to build a water filtration treatment facility to meet the treatment requirements for *Cryptosporidium*. On December 18, 2017, the Water Bureau entered into a Bilateral Compliance Agreement with OHA.
6. The goal of the Bull Run Filtration Project (Project) is to design and construct a filtration treatment facility on a schedule as outlined in the Bilateral Compliance Agreement.
7. The Project will require specialized skills and expertise in the construction of a large-scale treatment facility including all disciplines of engineering and architecture.

8. The construction work will require a highly specialized and qualified contractor to meet the project schedule, technical process requirements, and coordination with water system operations.
9. An alternative contracting method utilizing a Construction Manager/General Contractor (CM/GC) will allow the Water Bureau to select the most qualified contractor with the necessary specialized skills and expertise for the Project.
10. The Water Bureau proposes to use the CM/GC contracting method which will allow construction input during the design process through value engineering, constructability review that will assist in developing a construction phasing plan, and to assist in the permitting processes. Use of an alternative contracting method is more likely to minimize costs and construction impacts thereby ensuring continuous delivery of high quality water.
11. The City Council is the Local Contract Review Board with the authority to exempt certain public contracts from the competitive bidding requirements of ORS Chapter 279C.
12. Findings addressing competition, operational, budget and financial data, public benefits, value engineering, specialized expertise required, public safety, market conditions, technical complexity, funding sources, and costs recommended by the Water Bureau were available 14 days in advance of the public hearing of this ordinance.
13. The exemption of the Bull Run Filtration Project from the requirements of competitive bidding under ORS Chapter 279C is unlikely to encourage favoritism in the awarding of public contracts or substantially diminish competition for public contracts because the contract will be selected through a competitive Request for Proposals ("RFP") process.
14. The RFP for the CM/GC procurement will be published in Portland's Daily Journal of Commerce. Notification of the City Council hearing will be published in Portland's Daily Journal of Commerce 14 days before the hearing. Once approved by City Council, the RFP for a CM/GC will be advertised on the City of Portland Online Procurement Center (BuySpeed). As a result of using the competitive bid process, the use of an alternative contracting method for the Project is unlikely to encourage favoritism in the awarding of public contracts.
15. The award will potentially result in cost savings to the public because the CM/GC will be integrated into the design team for value engineering, constructability review, and assistance in developing a construction phasing plan. The early integration will potentially reduce the chances of redesign and change orders. Developing a well-coordinated project schedule and ensuring continuous delivery of potable water are

significant advantages of the CM/GC process. An extensive discussion of the CM/GC procurement method is noted in the Factual Findings, Exhibit A.

16. The estimated total for the CM/GC contract is approximately \$350,000,000.

NOW, THEREFORE, the Council directs:

- a. The Findings, attached as Exhibit A to this Ordinance, are hereby adopted.
- b. The Bull Run Filtration Project is hereby exempt from the competitive low bidding requirements of ORS Chapter 279.
- c. The Chief Procurement Officer is authorized to use a competitive Request for Proposal process to select a CM/GC contractor for the Project, and upon selection of the contractor, authorized to execute a contract for CM/GC pre-construction services during the design of the Project, provided that the contract has been approved as to form by the City Attorney.
- d. Upon Council's acceptance of the Chief Procurement Officer's report for recommending the acceptance of the Guaranteed Maximum Price from the CM/GC for the Project, the Chief Procurement Officer is authorized to execute a contract for construction of the Project, provided that the contract has been approved as to form by the City Attorney.
- e. The Mayor and Auditor are hereby authorized to draw and deliver checks chargeable to the Water Fund when demand is presented and approved by the proper authorities.
- f. As required by ORS 279C.355 and PCC 5.34.820B, the Water Bureau will prepare a post-project evaluation to the Chief Procurement Officer on behalf of City Council, within 30 days of the date the City accepts the Project.

Passed by the Council, AUG 29 2018

Commissioner Nick Fish  
Prepared by: David Peters  
July 18, 2018

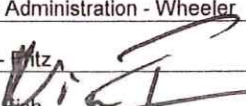

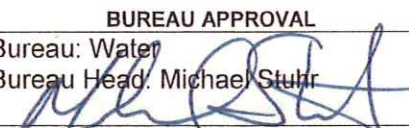
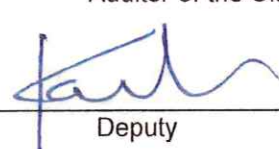
**Mary Hull Caballero**  
Auditor of the City of Portland

By 






Deputy

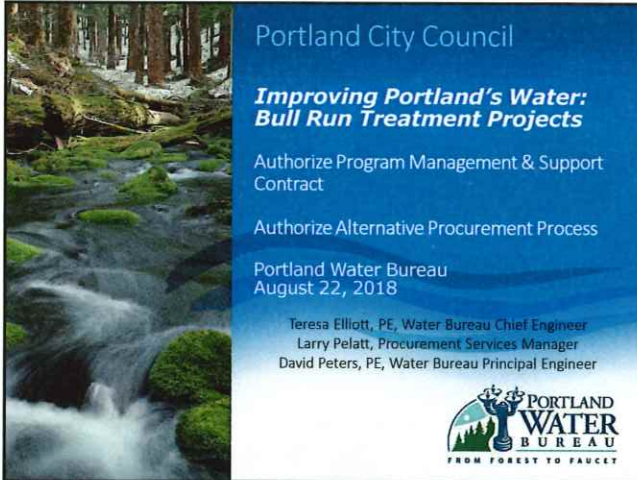
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<p align="center"><b>INTRODUCED BY</b> Commissioner/Auditor: <b>Commissioner Nick Fish</b></p> <hr/> <p align="center"><b>COMMISSIONER APPROVAL</b></p> <p>Mayor—Finance &amp; Administration - Wheeler</p> <p>Position 1/Utilities - Fritz </p> <p>Position 2/Works - Fish </p> <p>Position 3/Affairs - Saltzman</p> <p>Position 4/Safety - Eudaly</p> <hr/> <p align="center"><b>BUREAU APPROVAL</b></p> <p>Bureau: Water Bureau Head: Michael Stuhler </p> <p>Prepared by: David Peters Date Prepared: July 18, 2018</p> <p>Impact Statement Completed <input type="checkbox"/> Amends Budget <input type="checkbox"/></p> <p>Portland Policy Document If "Yes" requires City Policy paragraph stated in document. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><b>City Auditor Office Approval:</b> required for Code Ordinances</p> <p><b>City Attorney Approval:</b> required for contract, code, easement, franchise, comp plan, charter</p> <p>Council Meeting Date <b>August 22, 2018</b></p>	<p>CLERK USE: DATE FILED <u><b>AUG 14 2018</b></u></p> <hr/> <p align="center">Mary Hull Caballero Auditor of the City of Portland</p> <p>By:  Deputy</p> <p><b>ACTION TAKEN:</b></p> <p align="center"><b>AUG 22 2018 PASSED TO SECOND READING AUG 29 2018 9:30 AM</b></p>
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<b>AGENDA</b>
<p><b>TIME CERTAIN</b> <input type="checkbox"/></p> <p><b>Start time:</b> _____</p> <p><b>Total amount of time needed:</b> _____ (for presentation, testimony and discussion)</p>
<p><b>CONSENT</b> <input type="checkbox"/></p>
<p><b>REGULAR</b> <input checked="" type="checkbox"/></p> <p><b>Total amount of time needed:</b> <u>20</u> (for presentation, testimony and discussion)</p>

FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:		
		YEAS	NAYS
1. Fritz	1. Fritz		
2. Fish	2. Fish		
3. Saltzman	3. Saltzman		
4. Eudaly	4. Eudaly		
Wheeler	Wheeler		



Portland City Council


**Improving Portland's Water:  
Bull Run Treatment Projects**

Authorize Program Management & Support Contract

Authorize Alternative Procurement Process

Portland Water Bureau  
August 22, 2018

Teresa Elliott, PE, Water Bureau Chief Engineer  
Larry Pelatt, Procurement Services Manager  
David Peters, PE, Water Bureau Principal Engineer



1

## Bull Run Filtration Project

Today's actions authorize the planning and construction activities for the Bull Run Supply water filtration project.

2

## Recent Progress

2017	Aug	• Council chose filtration treatment
	Dec	• OHA Bilateral Compliance Agreement - filtration operational by Sep 30, 2027
2018	Mar	• Received 3 proposals for the Program Management and Support Services

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## Current Project Activities

2018	Aug	• Council ordinances for Program Management and Support Contract and Alternative Procurement
	Aug	• Submit letter of interest for Water Infrastructure Finance and Innovation Act (WIFIA) funding

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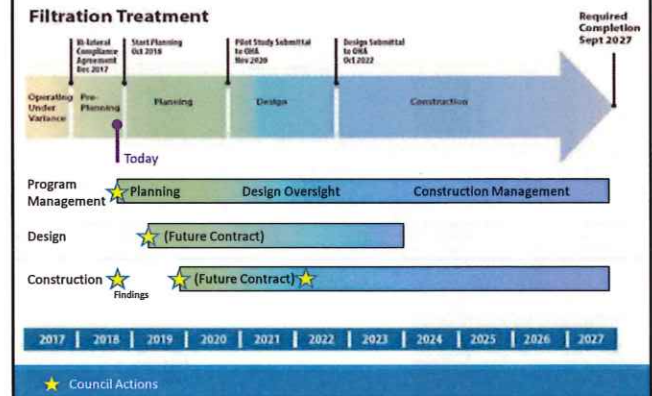
## Future Project Activities

2018	Q4	• Begin program set up, project definition, and pilot testing
	Q1	• Advance the 3 preferred alternatives
2019	Q1	• Council authorize design PTE contract
	Q4	• Council authorize construction manager/general contractor (CM/GC) PTE contract

PTE = professional, technical, expert or professional services

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## Next steps: Treatment Timelines



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## Project Budget

Program Management Contract: \$67,891,398

CM/GC Contract Estimate: \$350,000,000

Total Project Budget: \$500,000,000

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## Program Management and Support Contract

- Formal PTE Request for Proposal Process
- 3 Proposals were received
- Brown & Caldwell was selected
- 5 year contract with possible 5 year extension

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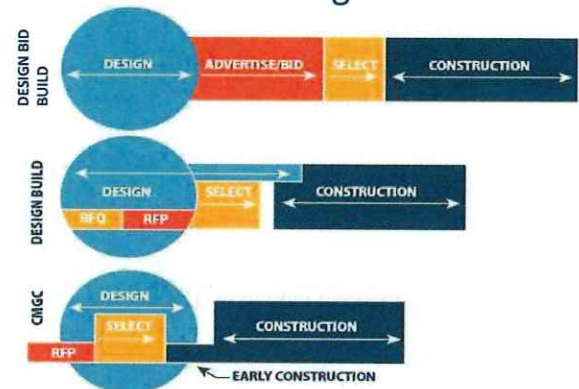
## Program Management and Support Contract D/M/W/ESB Participation

- Proposed 22% D/M/W/ESB\* participation
- Estimated to be \$14,936,000

\* D/M/W/ESB – disadvantaged, minority, women and emerging small business

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## Alternative Contracting Timelines

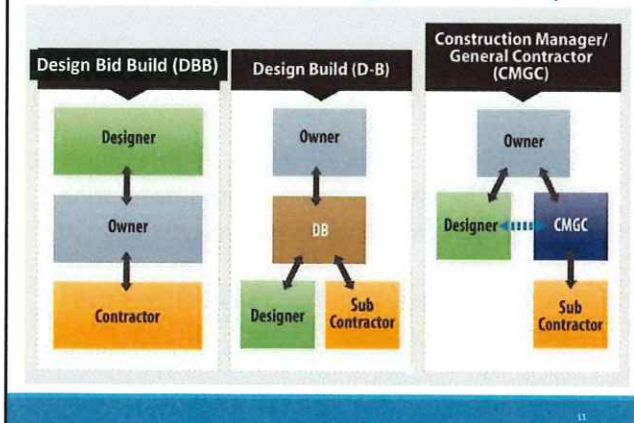


\* Design Bid Build process also known as Low Bid or Traditional

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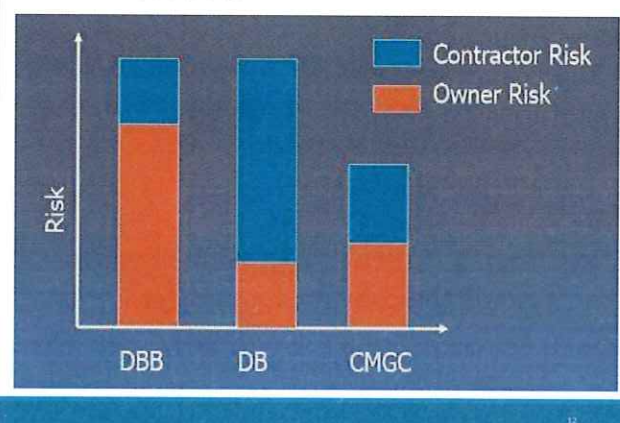
## Alternative Contracting Relationships



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## Risk Allocation



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### Alternative Contracting Analysis

- Project team assessed the options –
  - Design – Bid – Build
  - Design – Build
  - CM/GC
- **Recommended Option – CM/GC**

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### CM/GC Solicitation Process Findings

#### Competitive Bidding Requirements

- Does not discourage competition
- Likely lower cost
- Specialized expertise required
- Faster total delivery (design and construction)
- More control of the integration and operations
- More efficient use of Rate-Payer funds
- Better cost control
- Public benefits

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### CM/GC Solicitation Process

- Alternative project delivery method allows PWB actual contracting authority to meet or exceed the City's D/M/W/ESB participation goals
- Community Benefits Agreement will be used on the construction project

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### Recommendation

- Authorize Chief Procurement Officer to execute the program management contract with Brown & Caldwell
- Accept the findings and authorize exempting this project from the low bid process
- Authorize the use of the CM/GC Alternative Contracting process

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Questions?

Thank you!





LUP Hearings &lt;lup-hearings@multco.us&gt;

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## #T3-2022-16220: Additional Documents

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**Cottrell CPO** <cottrellcpo@gmail.com>  
To: LUP Hearings <LUP-hearings@multco.us>

Mon, May 5, 2025 at 10:57 AM



**External Sender** - Be Suspicious of Attachments, Links, and Requests for Payment or Login Information.

LUP,

With regards to the remand of T3-2022-16220, please accept the following documents to be added to the record.

- Portland City Council Resolution 37402
- Curriculum Vitae of Ian Courter and Lauren Courter

Please acknowledge receipt of this email.

Thank you,  
Cottrell CPO

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### 2 attachments



**37402 - December 2018.pdf**  
3267K



**Courter-NR Experts-Resumes.pdf**  
634K