

Utilities Committee Meeting Agenda

May 19, 2020, 5:00 p.m.

Pursuant to the Governor's "Stay Home - Stay Safe" Order, the City is prohibited from conducting meetings unless the meeting is NOT conducted in-person and instead provides options for the public to attend through telephone access, internet or other means of remote access, and also provides the ability for persons attending the meeting (not in-person) to hear each other at the same time. Therefore;

Remote access only

Link: <https://us02web.zoom.us/j/81063927226?pwd=eWdwRVZxNGIrUXdmaGtHdExzNngrdz09>

Zoom Meeting ID: 810 6392 7226

Password: 608497

Zoom Call-In: 1 253 215 8782

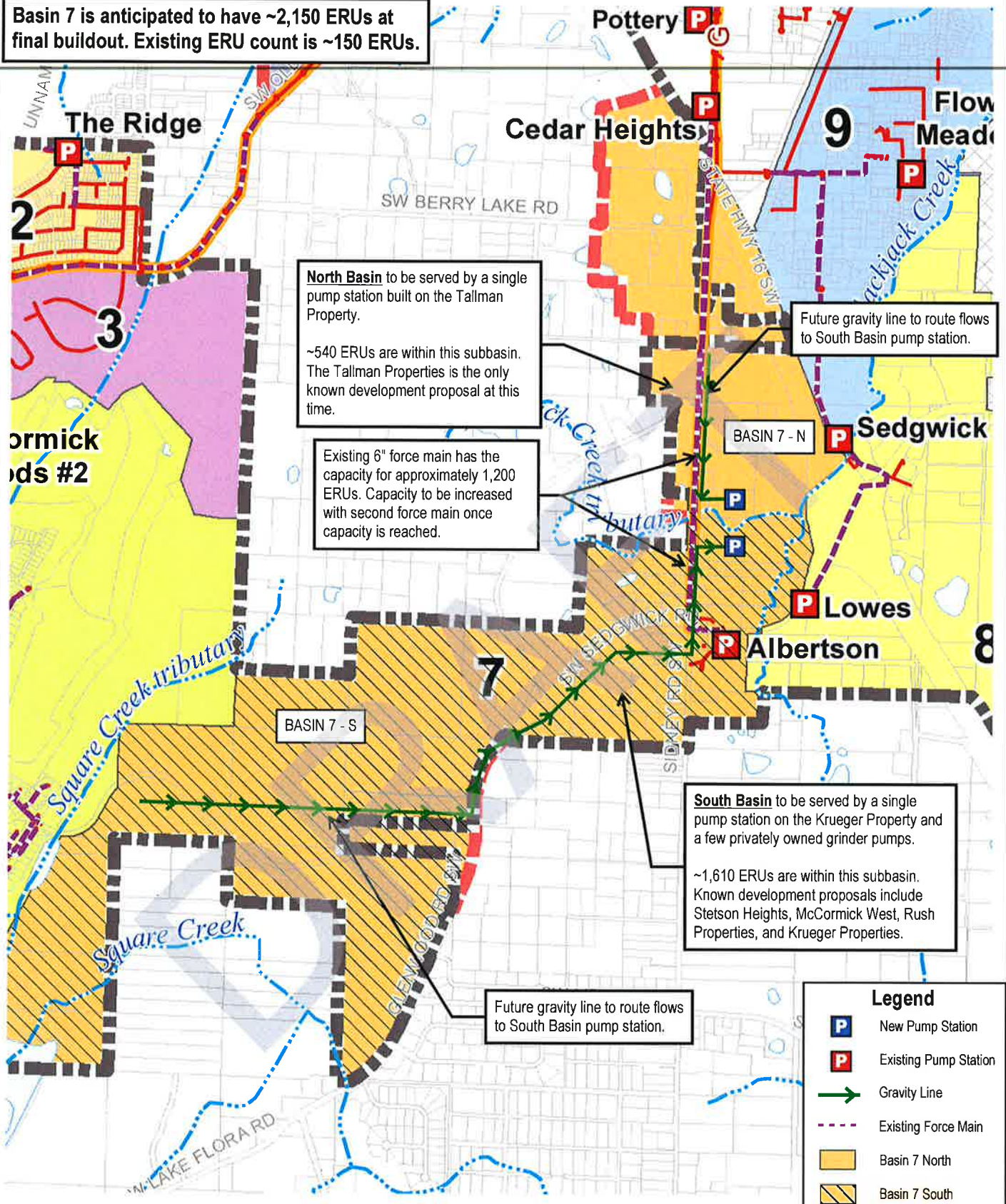
- Joint Planning Area (JPA) Sanitary Sewer Coordination - Update
- SKWRF Nutrient Cap - Discussion
- Water & Sanitary Sewer - Discussion:
 - Updated Water/Sewer CIP's
- McCormick Woods Consolidation Grant - Discussion
- 580 Zone Water Campus - Update:
 - Splash Pad
 - Well #12
- Utility Department Work Plan - Update:
 - Foster Pilot Project & Water Rights 2019/2020
 - Well #13 - Drilling
 - Well #13 - Maple Avenue (Water Main & Well #6)
 - Well #11 Improvements
 - McCormick Sewer Pump Station #2
 - Marina Sewer Pump Station
- Next Meeting: June 16, 2020

Future Agenda Items:

- Updated Sanitary Sewer CFC's
- McCormick Communities - Global Agreement
- 580 Reservoir - Update
- Transmission Main Extension - Update
- Well #13 Mains & PRV's - Update
- Water System Plan (2017) 2020/2030 - Update
- McCormick Sewer Pump Station #1 Repairs - Update
- Blackjack Creek Homeless Camp Abateements - Discussion:
- Cross Connection Control & FOG Programs - Discussion

- Stormwater Comprehensive Plan (2021) - Update
- 2019-2024 NPDES Permit Draft Comments - Update
- Bay Street - Street Lighting & Marquee - Update
- Touch-Read Water Meters - Update
- Water System Fluoridation - Update
- Fire Hydrant Operation and Maintenance Program - Update
- Valve Operation and Maintenance Program - Update
- Sanitary Side Sewer Policy - Discussion

Basin 7 is anticipated to have ~2,150 ERUs at final buildout. Existing ERU count is ~150 ERUs.



Port
ORCHARD

Est. 1890

Sewer Basin 7

North / South Sub-basin Concept

Legend

- P New Pump Station
- P Existing Pump Station
- Gravity Line
- Existing Force Main
- Basin 7 North
- Basin 7 South

DRAWN BY	IDS
DATE	12/12/19
SCALE	1"=1,500'
DRAWING NUMBER	01

Focus on: Water Quality Permitting to Control Nutrients in Puget Sound



Learn more...

[Puget Sound Nutrient Reduction Project](#)

[Domestic Wastewater Treatment Technology](#)

[General permits](#)

Provide feedback...

We are seeking public comments about using a general permit to control nutrients at WWTPs that discharge to Puget Sound marine waters and estuaries.

**Aug. 21, 2019 through
Oct. 21, 2019 at 11:59 pm**

Submit Comments:

<http://ws.ecology.commentinput.com/?id=HMk9A>

To view the public notice online, visit:

<https://ecology.wa.gov/Events/Search/Listing>.

What problem are we trying to solve?

Excess nutrients can cause too much plant and algae growth which ultimately depletes dissolved oxygen (oxygen). Many parts of Puget Sound have oxygen levels that fall below the concentrations needed for marine life to thrive and are below our state's water quality criteria. Discharges of excess nutrients to Puget Sound from domestic sewage treatment plants (WWTPs) are significantly contributing to low oxygen levels in Puget Sound. Ecology must require WWTPs to control nutrients consistent with the US Clean Water Act and Washington's Water Pollution Control Act.

Most WWTPs are owned and operated by municipalities or public utility districts. Infrastructure costs associated with reducing nutrients from WWTPs are primarily paid by the public through local sewer rates. With our region's growing population and recognizing that WWTP improvements to limit nutrients will take time, we need to start work now.

Why is Ecology considering a Puget Sound Nutrients General Permit?

We have made a preliminary determination that a general permit is the best tool to address excess nutrients from domestic WWTPs discharging to Puget Sound. A Puget Sound Nutrients General Permit would:

- Create a single coordinated public engagement process, allowing more stakeholder collaboration during permit development.
- Place WWTPs on a similar schedule rather than staggering requirements based on individual permit reissuance schedules.
- Provide a foundation for communities to work together to achieve nutrient controls across Puget Sound.

Stay informed...

To receive email updates about this effort, register for the Nutrients Permit listserv, <http://listserv.ecology.wa.gov/scripts/waECOLGY.exe?SUBED1=NUTRIENTS-PERMIT&A=1>.

Contact information

Maia Hoffman
425-649-7146

Rachel McCrea
425-649-7033
PSNutrientsGP@ecy.wa.gov



ADA accommodations

To request ADA accommodation including materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, or call Ecology at 360-407-6831, Relay Service 711, or TTY at 877-833-6341.

Availability in alternate languages

If you need this document in a language other than English, call Maia Hoffman at 425-649-7146.

What is the purpose of this public comment period?

State regulation ([Chapter 173-226 WAC](#)) requires that we notify the public of a preliminary determination to develop a general permit. The primary purpose of this public comment period is to obtain feedback on whether a general permit is an appropriate tool to control and reduce nutrients in discharges from WWTPs to Puget Sound. The alternative to a general permit is to include nutrient control requirements in each WWTP's individual permit.

In addition, this is an opportunity for commenters to provide other information relevant to WWTPs and Puget Sound water quality. For example, you may provide any documented information on the characteristics of the discharge (individually or categorically) including effluent quantity, quality, and any receiving water impacts. Existing information about WWTPs and Puget Sound water quality is available in our [searchable database](#) and [relevant publications](#).

How would a Nutrients General Permit work?

A Puget Sound Nutrients General Permit would apply to nearly 70 WWTPs discharging to marine and estuarine waters of Puget Sound. These WWTPs already have individual permits. A Nutrients General Permit would focus only on controlling nutrients. It would act in conjunction with the individual permits that regulate all other pollutants. Therefore, WWTPs would have two permits.

Because we are at the earliest stage of a general permit process, it is too soon to be certain about what the exact permit conditions would be. If we move forward with the general permit, the permit development process will determine:

- Which specific domestic WWTPs will be regulated by the proposed permit. A [potential WWTP permittee list](#) is available.
- How to cap nutrient loading. A cap could be expressed as a numeric effluent limit or other similar value against which effluent quality would be compared.
- What planning efforts are needed to evaluate nutrient reduction targets. Planning efforts might involve near-term WWTP optimization to reduce nutrients where possible with existing treatment infrastructure. Additional planning considerations may include infrastructure upgrade feasibility assessments, foundational work for water quality trading programs, or other collaborative water quality improvement efforts.
- How to specify numeric effluent limits that reflect treatment efficiency of existing WWTPs consistent with facility-specific engineering reports.

Controlling nutrients from WWTPs will not solve Puget Sound's low oxygen problem. WWTPs are only part of the solution, but a critical part. We will continue our work to reduce nutrients from other sources as well.



October 21, 2019

Water Quality Permit Coordinator
Northwest Regional Office
State of Washington Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008-5452
(Submitted Electronically)

Subject: Ecology's Preliminary Determination to Develop a Puget Sound Nutrients General Permit

Puget Sound clean water utilities jointly appreciate the opportunity to comment on the Department of Ecology's (Ecology) proposal to prepare a general permit to address nutrient discharges from municipal wastewater treatment plants (WWTPs) that discharge directly to Puget Sound. Ecology's nutrient general permit proposal introduces new concepts that will likely impact clean water utilities as the state continues to develop nutrient management plans for Puget Sound. New approaches to watershed management, such as a nutrient general permit for Puget Sound dischargers, may be appropriate providing they do not create regulatory compliance requirements that extend beyond our understanding of commensurate water quality benefits, and provided that concerns about practical applications to real-world circumstances can be addressed, such as technical feasibility, timing, and affordability. We want to be sure that our citizens and ratepayers see meaningful results for what is likely to be a significant investment of dollars.

Puget Sound clean water utilities believe that Puget Sound is a key water resource for our region and that the Salish Sea is a complex natural system impacted by many factors. These include man-made development, urbanization, discharges, ocean conditions, climate, weather, agriculture and aquaculture, and many other factors. Collaborative management of all of the manageable human-induced factors impacting the Puget Sound watershed offers the best opportunity to preserve and protect this important resource. We welcome the opportunity to work collaboratively with Ecology to develop a science-based general permit that protects water quality in Puget Sound while providing flexibility, equity, and opportunities for adaptive management for improvements with time.

Long History Protecting Water Quality in Puget Sound

For decades, the mission of Puget Sound clean water utilities has been focused on protection of water quality and successful compliance with regulatory requirements for secondary treatment, wet weather controls, toxics reduction, stormwater management, and beneficial use of biosolids. These water quality protection efforts require utilities to extensively plan, fund, construct, operate, and maintain billions of dollars in investments in their complex wastewater infrastructure. New regulatory requirements with the potential to add significant technical, operational, and economic impacts need to be carefully balanced with the understanding of the necessity and expected benefits. It is especially important that uncertainties are addressed with permit structures that provide opportunities for adaptive management over time to ensure that investments are on-target, effective, and produce tangible results.

Principles for the Development of a Nutrient General Permit

Puget Sound clean water utilities jointly believe that the following principles are essential for the development of a nutrient general permit:

- 1. *Nutrient general permit requirements must be technically and scientifically defensible and technically achievable.***
- 2. *An independent panel of scientific assessment and water quality subject matter experts should be actively convened to guide ongoing modeling work, identify modeling gaps, and advise on future monitoring and adaptive management strategies.***
- 3. *Nutrient reduction requirements must be based on demonstrated cause and effect relationships.***
- 4. *A watershed approach using adaptive management is essential to the long-term protection of Puget Sound water quality.***
- 5. *General permit requirements should result in a net environmental benefit and consider cost, as well as associated environmental, social impacts and affordability.***
- 6. *Considerations of equity should be incorporated into any new general permit.***
- 7. *Time should be provided for utilities to test, implement, and optimize any necessary nutrient control measures.***
- 8. *Ecology should coordinate closely with the municipal wastewater stakeholder group during the development of draft and final general permit requirements.***
- 9. *Flexibility should be included as part of the general permit framework to allow dischargers to consider joint reductions in the form of bubble permits, offsets, and trading.***

Specific Recommendations for a General Permit

Puget Sound clean water utilities jointly offer the following recommendations for moving forward with a nutrient general permit based on reasonable and scientifically valid objectives.

1. Science-based Adaptive Management

Our understanding of Puget Sound water quality issues is evolving and it is anticipated that we will better understand cause and effect relationships linked to dissolved oxygen depletion with greater certainty over time. No definitive nutrient endpoints for Puget Sound dissolved oxygen have been developed to date. Given that, provisions for consideration of uncertainty analysis should be incorporated into the general permit as a guide to improve the understanding of the impact of nutrient loadings on Puget Sound water quality. Time is needed to continue the water quality planning, monitoring, and modeling exercises necessary to address scientific uncertainties in the spatial and temporal extent of human-caused dissolved oxygen depletion. Further, the most effective nutrient management strategies need to be investigated to ensure that investments in implementing nutrient reduction will be effective in producing the intended results and not rendered ineffective due to a lack of scientific understanding of this complex system, counteractive mechanisms, or unanticipated causes.

2. Watershed Management Approach

A watershed management approach should be central to a nutrient general permit for Puget Sound. Both point and nonpoint sources of nutrients should be managed together such that reductions accomplished by marine dischargers are not lost to increased tributary loadings from upstream discharges, nonpoint sources, and growth with inland development. The artificial boundary created in Ecology's Salish Sea Model (SSM) may have been necessitated by the availability of monitoring data, resources, and the time available for analysis. However, that artificial boundary for analysis should not compromise the more comprehensive need to manage all watershed sources to successfully protect Puget Sound water quality.

3. Equity Considerations

Considerations of equity should be incorporated into any new general permit. These considerations may include the geographic location of discharges and their influence on near field and far field water quality. The technical and operational challenges associated with reducing nutrient discharges in wastewater effluent increase as effluent concentrations are driven to lower levels. Nutrient speciation issues become increasingly important at lower levels and refractory constituents, interference, facility specifics, and other factors may vary among different utilities and the areas they serve. Consideration should also be given to balancing other regulatory compliance impacts that present overlapping challenges for utilities.

4. Preferred Structure of a Nutrients General Permit

The preferred structure for a general permit is one which sets forth goals for nutrient reduction but allows time for more definitive water quality science prior to setting numerical effluent nutrient limits. By avoiding early effluent limits in the body of the general permit, utilities can focus on identifying the most effective and efficient opportunities for nutrient load reduction without the dominant concern of immediate compliance. Nutrient load caps, reductions, and accounting can all be addressed in the fact sheet that supports the nutrient general permit. That provides a vehicle to not only establish baseline loadings to track progress in load reduction, but also a place for documentation of the myriad of site specific details in the unique circumstances of many diverse dischargers. Accounting for all of the nuances in 70 separate facilities with different baselines and various stages of process development, plant improvements, construction improvement projects, treatment technology testing, etc. leads to a level of complicated and granular detail not well-suited for inclusion as permit effluent limits. Further, attempting to include the specifics of effluent limits in the general permit dilutes the value of a general

permit because it introduces all of the time-consuming aspects of developing individual nutrient permits. The general permit fact sheet can support this level of detail until, when, and if, nutrient endpoints are defined for Puget Sound and final water quality based effluent limits are warranted. Tracking of load reductions in the fact sheet rather than the general permit also avoids the potential dysfunction associated with the antibacksliding provisions of the federal regulations, and use of effluent performance statistics applied to under-loaded facilities that results in effluent limits that cannot be sustained as plant flows and loadings increase to full buildout.

5. *Accurate Modeling of Wastewater Treatment Facilities*

Accurate representation of individual facility effluent characteristic flows and loadings in water quality model simulations and load reduction planning is key in portraying both current conditions and future nutrient management scenarios. This includes nutrient speciation and accounting for speciation changes with application of advanced nutrient reduction treatment technology. Expressions of effluent characteristics on a concentration basis may be useful as a general description. However, mass loadings are more useful in establishing baseline conditions and tracking load reductions over time.

6. *Flexible Provisions for Regional Optimizing Solutions*

General permit considerations should include flexible provisions for load offsets, exchanges, and trading both within utilities that have multiple treatment facilities, and between different utilities. In this way, optimization opportunities can be developed to include the earliest, efficient, and effective nutrient reductions. Again, a mass basis for tracking and accounting in load reduction planning and reduction goals is most useful to facilitating these opportunities.

7. *Foundation for Adaptive Management and Science*

A Puget Sound general permit should include a foundation for a continuing dialog and exchange between Ecology's monitoring, credible scientific expert oversight, Salish Sea modeling efforts and clean water utility stakeholders subject to potential control requirements. Periodic monitoring and modeling reviews and briefings should be scheduled to coincide with general permit progress reporting requirements for treatment facilities. This provides a predictable structure for information exchange and to track progress, water quality changes, and foster adaptive management review and program improvements.

8. *Compliance Schedules that Allow for Maximizing Benefits*

The pace of mandatory nutrient control requirements should not outpace the time needed for utilities to analyze and plan for nutrient reduction at their facilities. The general permit should foster not only full-scale nutrient removal treatment improvements, but also analysis of optimization opportunities within existing facilities, side stream treatment options, and development and implementation of new technology. Provisions should be made for compliance schedules that extend over multiple permit cycles to support these efforts. In this way, utilities can formulate a complete understanding of all of the options available to reduce nutrient discharges, including capital and operating costs, energy and chemical demands, space requirements, operational complexities and staffing, and others factors associated with site specific circumstances. Premature application of load caps and effluent limits will truncate the treatment technology analysis, inappropriately eliminate potentially viable options, and limit the potential for collaborations to develop more creative solutions within and between utilities. It may also curtail the ability to optimize results by load trading and offsets between facilities and among different utilities.

9. *Allow for Incentives that Promote Greatest Benefit*

The general permit should include provisions to incentivize early nutrient reduction. In this way, progress in nutrient load reduction may be accelerated. Nutrient reduction incentives may take many forms. These may include financing and funding support, priority for State Revolving Funds (SRF) and

other funding programs, and schedule relief or time extensions on other individual NPDES permit compliance requirements.

Sincerely,



Michael P. Slevin III, P.E.
Environmental Services Director
City of Tacoma



Jane Vandenberg, P.E.
Sewer Division Manager
Pierce County Planning and Public Works



Ryan Sass
Public Works Director
City of Everett



Eric Johnston, P.E.
Interim Public Works Director
City of Bellingham



Judi Gladstone
Executive Director
Washington Association of Sewer & Water Districts



John Bowman
General Manager
Lakehaven Water & Sewer District



Tom Knuckey, P.E.
Director of Public Works and Utilities
City of Bremerton



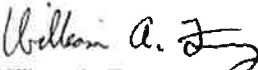
Ronald D. Hall
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Esco Bell
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City of Mount Vernon



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Midway Sewer District



William A. Franz, P.E.
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Stella V. Vakarcs, P.E.
Senior Program Manager – Sewer Utility
Kitsap County Public Works




Jeff Clarke
General Manager
Alderwood Water & Wastewater District




Tonya Christoffersen
General Manager
Lake Stevens Sewer District




Rebecca Fox
Wastewater Treatment Plant Manager
Anacortes Public Works
City of Anacortes




Glen R. Screws
General Manager
West Sound Utility District



Jim Voetberg
General Manager
Mukilteo Water and Wastewater District



Jeff Langhelm, P.E.
Public Works Director
City of Gig Harbor



Dan Eisses
General Manager
Birch Bay Water & Sewer District

This is the language that Tacoma is putting on their permits.

"The City reserves the right to rescind this certificate prior to issuance of a certificate of occupancy in the event new requirements are imposed by the Washington State Department of Ecology that limit or restrict the City's then-currently available wastewater treatment capacity through a TIN (total inorganic nitrogen) load cap, or other control mechanism, and the City determines that, as a result of these new requirements, capacity is not available for this project."



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000

711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

April 3, 2020

Elizabeth Pauli, City Manager
City of Tacoma
747 Market Street
Room 1200
Tacoma, WA 98402

Re: Reducing nutrient pollution in Puget Sound

Dear Elizabeth Pauli:

I am writing in response to the City of Tacoma's (City) concerns regarding the Washington State Department of Ecology's (Ecology) work to reduce excess nutrient pollution in Puget Sound. My understanding is that the City plans to add language to its building permits that point to this work as a signal of why the issuance of a permit will not guarantee future service by the City's wastewater treatment plants. We believe any action to this effect is premature, and we hope the City will reconsider this approach.

Ecology respects the City's desire to be as transparent as possible in explaining potential limitations on future capacity as they issue permits. However, at this early stage of the process, we believe predictions about the effect of the nutrients works on the City's duty to provide adequate public facilities under RCW 36.70A.020(12) is unnecessary.

We believe Ecology's work to develop a general permit provides a path to reducing nutrient pollution in Puget Sound while allowing cities to continue to grow as they envisioned. We are committed to exploring the specific technology and policy solutions that will meet both of these shared responsibilities.

As you know, we are engaging in a robust public process to develop the permit. Given that this general permit will cover treatment plants of various sizes that utilize different processes, we have formed an advisory committee representing diverse interests. The City of Tacoma is an important member of the advisory committee and we look forward to collaborating with the City moving forward

The purpose of the committee is to develop alternatives and recommendations. Once finalized by the committee, the recommendations will form the basis of permit conditions for the first 5-year general permit. Ecology and the Department of Commerce will also participate on the advisory committee to ensure Clean Water Act obligations and Growth Management requirements are considered and/or reflected in final recommendations.

The current general permit timeline for development is as follows:

Note: We recognize that this schedule may change due to COVID 19.

- April 15 – First meeting of the advisory committee (remotely)
- April – July 2020: Monthly advisory committee meetings
- July 2020: Final recommendations from advisory committee
- Fall 2020: Preliminary draft permit conditions released for informal public comment
- Early 2021: Final draft developed by Ecology with a formal public comment period.
- Spring/Summer 2021: Anticipated final permit issuance

We understand that nutrient reduction efforts will require significant time and investment. We are committed to working with permittees involved in this process on strategies for how to acquire funding, achieve the reductions, accommodate growth, and maintain permit compliance.

The Pacific Northwest is a national leader across many disciplines. We are well positioned to protect and restore the health and vitality of Puget Sound by making smart investments in wastewater treatment systems designed for the future. We look forward to partnering with the City in this effort.

In light of the permit development timeline and the City's opportunity to directly engage in development of permit conditions, we think it unnecessary and premature to include language in your building permits around future capacity. If you have questions or would like to discuss this further, please contact me at vincent.mcgowan@ecy.wa.gov or (360) 407-6405.

Sincerely



Vincent McGowan, P.E.
Water Quality Program Manager

cc: Dave Andersen, AICP, Washington State Department of Commerce
Jennifer Hennessey, Office of Governor Jay Inslee



City of Tacoma

Memorandum

TO: Elizabeth A. Pauli, City Manager
William C. Fosbre, City Attorney

FROM: Christopher D. Bacha, Chief Deputy City Attorney

SUBJECT: Nutrient Permit – Impacts on Development, Housing and Ratepayers

DATE: March 26, 2020

The purpose of this memorandum is to provide information regarding the State Department of Ecology's program to reduce nutrient loads discharged to the Puget Sound from wastewater treatment plants, and the potential impact of this program upon development and utility ratepayers.

SUMMARY:

The State Department of Ecology (Ecology) has announced its intent to issue a general permit that will implement nutrient total inorganic nitrogen (TIN) load caps and planning requirements that will become effective upon issuance of the permit. We understand that the proposed TIN load caps will limit treatment plant effluent flows to their current levels, and will not accommodate current or future development in the City unless, and until, the City makes substantial improvements to the Central Treatment Plant (CTP) and North End Treatment Plant (NETP). Ecology has also indicated it will be issuing a Puget Sound Nutrients General Permit with lower TIN limits by mid-2021. However, individual permits may be issued sooner.

The costs of such full-scale improvements are estimated to range from \$250 million to over \$750 million and would likely take at least six years or longer to fund, plan for and implement. In the interim, implementation of the TIN load cap would have the unintended consequence of halting development, in effect a de facto moratorium. Projects could not be approved because sewer capacity would not be available. The City will be exposed to substantial risk if it does not qualify all sewer availability notices with the right to rescind the assurance of sewer availability in the event Ecology's permit caps sewer capacity. Adding this condition will impair lending and effectively halt most development, including affordable housing, shelters, and accessory dwelling units. Further, funding of capital improvements needed to meet the new permit requirements has the potential to more than double or triple sewer rates, disproportionately affecting low-income populations.

BACKGROUND:

The focus of Ecology's efforts to reduce nutrient loads (the level of nutrients in wastewater discharged from the treatment plant) is based upon a state water quality standard of requiring no more than a depletion of 0.2 mg/L dissolved oxygen from anthropogenic sources (originating in human activity). The term "dissolved oxygen" (DO) refers to the level of oxygen present in water that can sustain marine life, i.e. oxygen that is not bonded to another element or "non-compound" oxygen. DO levels are affected by many factors including the quality of water entering the Puget Sound from the ocean, local circulation patterns, air and water temperatures, the timing and size of river flows, and nutrient retention and loading from various sources (e.g. freshwater and marine sources).

Nutrients provide nourishment for growth of the aquatic ecosystem. In particular, nitrogen and phosphorus are nutrients that support growth of algae and aquatic plants, which provide food and habitat for fish, shellfish and organisms that live in water. However, when nitrogen or phosphorous levels are high, they can fuel excessive marine algae growth that consumes DO when it dies and decomposes. This process is called eutrophication and results in depleted DO. Wastewater treatment plants are one source of nitrogen and phosphorous found in the Puget Sound.

In November of 2018, Nina Bell, Director of Northwest Environmental Advocates, filed a petition for rulemaking with Ecology. The petition asked Ecology to amend state regulations and require new effluent limits on the amount of nutrients that can be discharged from wastewater treatment plants to the Puget Sound, including tertiary treatment (nutrient removal). While Ecology in its January 11, 2019 letter to Nina Bell denied this request, it acknowledged that it shared concerns regarding nutrient impacts and dissolved oxygen impairments in the Puget Sound but did not agree that tertiary treatment was reasonable to address Puget Sound water quality impairments. Instead, Ecology confirmed its belief that a water quality-based approach was necessary to address DO impairments. In addition, Ecology made other commitments to the petitioner, including adding nutrient (TIN) caps at current levels for all wastewater treatment plants (WWTPs) that discharge into Puget Sound.

This decision was appealed to the Governor who affirmed Ecology's decision. The Governor further confirmed that within five years Ecology expects to have capped the nutrient levels discharged from all marine municipal treatment facilities and will have moved some facilities to advanced treatment programs where necessary to meet water quality standards. More specifically, the Governor indicated that Ecology would require

wastewater utilities to develop programs “suited to their physical spaces and financial resources”.¹

Ecology commenced discussion of the nutrients issue with the dischargers beginning with its first Nutrient forum in July of 2017. During the August 21, 2019 nutrient forum, Ecology announced its preliminary determination to develop a Puget Sound Nutrients General Permit to address nutrient limits and established a comment period ending October 21st. The permit schedule announced by Ecology provided that the general permit would be issued in spring or summer of 2021, and that the draft would be available in the fall of 2020.

A consortium of 19 Puget Sound Dischargers² (including Tacoma) responded collectively expressing the need to ensure that regulatory requirements be based upon current understanding of water quality benefits and take into consideration technical feasibility, timing and affordability. The joint letter also requested that Ecology wait to issue nutrient limits or caps to allow for adaptive management to evaluate the most effective and efficient methods to protect Puget Sound water quality. Instead, Ecology announced during the December 12, 2019 meeting of the Coalition for Clean Water,³ that individual permits issued before the general permit will have TIN load caps. Ecology reiterated this decision at the Puget Sound Nutrients Forum on December 19, 2019. Further, and of immediate importance to the City, is the statement from Ecology that the TIN load caps will not allow for growth and that immediate compliance would be required.

On December 16, 2019, the first NPDES wastewater permit was issued to Kitsap County by the EPA with nutrient requirements imposed by Ecology pursuant to its 401 certification authority. The nutrient requirements imposed a TIN load cap and planning requirements that include a plan for optimization of the treatment plant to maintain compliance with the TIN load cap after the cap is initially exceeded. Studying and implementing optimization at a wastewater treatment plant can take one to three years. Kitsap County appealed the planning requirements of the 401 certification and a hearing has been scheduled for October of 2020. Kitsap County did not appeal the TIN load cap. The City of Tacoma moved to intervene in the appeal which motion was granted by the Pollution Control Hearings Board presiding officer assigned to this appeal. The City of Tacoma intervened because of the potential impact of the outcome of this appeal upon the City of Tacoma and other marine dischargers. The Environmental Services Department believes that the

¹ In a subsequent lawsuit filed in February of 2019, NWEA filed suit against Ecology in Thurston County challenging Ecology’s decision and seeking an order requiring Ecology to update its regulations to require technology based effluent limits. The Court has since dismissed the lawsuit.

² Alderwood Water & Wastewater District, Anacortes, Bellingham, Birch Bay Water and Sewer District, Bremerton, Everett, Gig Harbor, Kitsap County, Lake Stevens Sewer District, Lakehaven Water & Sewer District, Lynnwood, Midway Sewer District, Mount Vernon, Mukilteo Water and Wastewater District, Pierce County, Tacoma, Washington Association of Sewer & Water Districts, and West Sound Utility District.

³ The CCW was formed by an interlocal agreement among 12 municipalities, which meet to address preservation and improvement of water quality as well as the reduction of pollution and the planning and financing of necessary facilities.

planning requirements are infeasible, that the scientific understanding of the impact of nutrients discharged from wastewater treatment plants and other sources is not yet developed, and that there is currently no demonstrable evidence that the nutrient loads from wastewater treatment plants have a measurable impact upon the anthropogenic depletion of levels of DO throughout Puget Sound.

DISCUSSION:

Ecology's decision to issue TIN load caps and planning requirements has far-reaching impacts.

Ecology has indicated that the TIN load caps will be implemented when an individual permit is issued with requirements for immediate compliance. No provision for an implementation schedule will be included, which is typically part of a new effluent permit limit in order to allow time for a facility to comply. The TIN load caps will be calculated using effluent data submitted monthly by the City. However, there has been no indication from Ecology that it will take into account the capacity that has been reserved by the City for permitted projects that are not yet connected to the City's sanitary sewer system, or for planned projects that are not yet permitted. The load cap will therefore limit the available sewer capacity to existing levels, and thus will immediately prohibit growth. Additionally, for many wastewater dischargers, the imposition of the TIN load cap will result in immediate non-compliance and a permit violation.

The City's land use code establishes concurrency requirements for permitting of development. TMC Ch. 13.16. Concurrency is a requirement of the Growth Management Act. These requirements currently require a sanitary sewer capacity analysis at the time of permit application to determine if there is available sewer capacity for the proposed development. The side sewer manual limits the requirement for an analysis of projects in excess of 100 equivalent residential units. Projects under this standard receive informal assurance of available reserved capacity through issuance of a development permit. Projects in excess of 100 ERU's must be issued a certificate of capacity at the time the development permit is issued. The permittee will fund and construct the proposed project in reliance upon the City's assurance that capacity will be available when the project is completed.

The City can no longer provide such assurance because the proposed nutrient cap limit will not accommodate growth and immediate compliance will be required. The City must modify its certificates of capacity and permits to make applicants aware that while capacity may be available at the time that the certificate or permit is issued, capacity may not be available at the time of connection or occupancy. This qualifying language will have a direct effect upon lender and investor financing of projects that require sewer availability. The probable result is de facto moratorium on most if not all development.

A de facto moratorium is clearly not what the Governor or Ecology intended; however, it is a consequence of the efforts to move quickly to implement nutrient limits. Stating the obvious, a de facto moratorium minimally means for the next five to seven years or longer, an end to most, if not all, multi-family projects for both market rate and affordable housing as well as commercial development that requires sewer capacity.

The upgrades to the CTP and NETP to accommodate nutrient removal are estimated to have a minimum cost of between \$250 and \$750 million⁴ depending on the effluent limit required by Ecology, and could be higher. The utility currently spends \$25 million per year on capital improvement projects. Assuming that the City could secure financing for the plant upgrades at the minimum cost⁵, this would add about \$13 million per year to the utility's debt service costs. At the higher end, the annual financing costs would be as much as \$38 million per year. Ratepayers should expect their rates to double or triple.

The impacted utilities have been in on-going discussions with Ecology and Ecology has convened an advisory committee to provide input regarding development of the general permit. A representative of the City is participating as a member of this committee. The City is also concurrently working to develop a science-based consortium to provide funding for the scientific research that is necessary to fully understand, among other things, the impacts of nutrients within the aquatic ecosystem, the source of those nutrients, and the impacts of nutrient reduction from wastewater and other discharges. The goal is to provide a neutral science-based analysis that will aid Ecology in assessing and developing the best approach to nutrient removal from the Puget Sound.

I hope that the foregoing has been assistance to you.

⁴ These estimates are preliminary only.

⁵ Financing for a project of this size would be complex and would require an increase in utility rates prior to issuance of debt.

All,

WSUD and SKWRF has been monitoring the actions of Ecology regarding the potential of nitrogen capping. Ecology has provided a calculation method for the potential determination of a nutrient cap which we just recently received. Ecology has provided a macro for analysis of analytical data that has been required to be reported over the last two permit cycles by SKWRF. The calculation method for a potential nitrogen loading cap is described by Ecology as follows:

The macro uses a "bootstrapping" procedure to calculate either the one-tailed upper 95% confidence interval around the mean effluent load, or the one-tailed lower 95% confidence interval around the mean pollutant removal efficiency. To perform these calculations, the macro randomly resamples the original data to create 5000 datasets with the same number of values as the original data. The mean of each resampled dataset is then calculated. The 5000 means are then sorted in ascending order. The one-tailed upper 95% confidence interval around the mean effluent load is the mean with the rank of 4750 out of 5000. The one-tailed lower 95% confidence interval around the mean pollutant removal efficiency is the mean with the rank of 250 out of 5000.

With consideration given to last five years of analytical results at the SKWRF, and the provided "bootstrap" calculation method provided by Ecology. The current potential nitrogen loading cap could be set at 556.7 lbs./day on or before the next permit issuance which will be currently identified January 1, 2024. I believe there are a number of factors which will need to be considered and it is prudent that we take a methodical approach to the potential impact to the City and District's ability to allow connections to the systems.

West Sound utilizes and issues Binding Sewer Availability Letters that commit to the connection(s) when applied for based on available system capacity. My understanding is that the City and County require these letters as part of the permitting process. Most certainly, an additional consideration by both entities will be how a new or modified system connection could potentially impact the facilities nitrogen cap and how the new capacity consideration can be managed by the City and the District concurrently.

Marty and I can provide current information on SKWRF and how the discharge nitrogen loading compares to the calculated potential nitrogen cap at the next SAC Meeting. We can also share with the members, some of the considerations we have discussed on the potential for lowering the nitrogen discharge loading and what has been accomplished at SKWRF in preparation for a potential nitrogen cap.

On another note, in light of the current events in relation to Covid-19, I would suggest a request of the SAC members is made to consider moving the location of the next meeting on May 27, 2020 from SKWRF to the WSUD offices. We can provide a venue that will easily accommodate social distancing. Please let me know your thoughts on relocation of the meeting.

Regards,

Randy Screws
General Manager
West Sound Utility District
2924 SE Lund Avenue
Port Orchard, WA 98366
Direct: 360-874-5004



City of Port Orchard					
Water System Capital Improvement Plan					
Project	Description	Cost Estimate	% CFC	Financing	
1	580 Zone Storage	1,000,000	100	CFC	
2A	Well 13 Development & Treatment	7,500,000	75	CFC/rates	
2B	Maple Street T & D Main				
2C	390 to 260 Zone PRVs				
3	Well 11 Development & Treatment	7,000,000	25	CFC/rates	
4	580 Zone Transmission & Distribution Main	945,000	100	CFC	
5	390 Zone Storage	3,000,000	100	CFC/rates	
6	Telemetry Upgrades	100,000	25	CFC/rates	
7	390 to 580 Zone Booster Station (Old Clifton)	525,000	75	CFC/rates	
8	390 to 580 Zone Transmission Main (Old Clifton)	1,325,000	75	CFC/rates	
9	Well 12 Development & Treatment	7,000,000	100	CFC	
10	Melcher Pump Station Upgrade	500,000	25	CFC/rates	
11	PRV Improvements per Hydraulic Model	350,000	50	CFC/rates	
12	390 to 580 Zone Booster Station (Glenwood)	525,000	0	developer	
				(condition of plat approval)	

13	390 to 580 Zone Transmission Main (Glenwood)	2,750,000	75	CFC/rates
14	580 to 660 Zone Booster Station	500,000	100	CFC
15	660 Zone Storage	1,500,000	100	CFC
16	Well 7 Treatment/Pump Station Upgrades	750,000	0	rates
17	Main Replacements per Hydraulic Model	2,000,000	25	CFC/rates
18	Feasibility Study for Consolidation and Fluoridation	50,000	50	CFC/rates
19	Risk and Resiliency Study for AWIA	50,000	0	rates
20	Annual Main Replacement Program	500,000	0	rates
21	Annual Valve Replacement Program	80,000	0	rates
22	Annual Hydrant Replacement Program	50,000	0	rates
23	Foster Pilot Mitigation Projects	1,000,000	100	CFC
24	390 Reservoir Booster Station	600,000	100	CFC
25	Well 10 Rehab, Activation, and Water Main	3,092,000	100	CFC
Total CIP		42,692,000		

* Update of Table 7-2 of the City Comprehensive Plan

City of Port Orchard					
Sewer System Capital Improvement Plan					
Project	Description	Cost Estimate	% CFC	Financing	
1	Marina Pump Station	15,000,000	50	CFC /rates	
2	Bay Street Pump Station	1,300,000	25	CFC/rates	
3	McCormick Pump Station 2	4,500,000	100	CFC	
4	Eagle Crest Generator Set	300,000	0	rates	
5	Albertson's Pump Station Upgrade	**	0	developer	
5A	Bravo Terrace Lift Station and Force Main	5,000,000	75	CFC	
5B	South Sidney Lift Station	2,500,000	100	CFC	
5C	North Sidney Lift Station	2,500,000	100	CFC	
5D	Sidney 2nd Force Main	1,537,500	100	CFC	
6	McCormick Woods Pump Station 3	1,000,000	100	CFC	
Total CIP		33,637,500			

* Update of Table 7-1 of the City Comprehensive Plan

** dependent on the scope of the upgrade

GVL24702

Grant Agreement

between

Department of Health

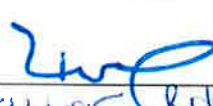

and

City of Port Orchard

FACE SHEET

Contract Number: **CBO24702**

Washington State Department of Health on behalf of
Financial Services Division
Office of Drinking Water
Drinking Water System Repairs and Consolidation

1. CONTRACTOR City of Port Orchard		2. CONTRACTOR Doing Business As (optional) Address doing Business as	
3. CONTRACTOR Representative Jacki Brown Utility Manager 360-876-4991 publicworks@cityofportorchard.us		4. DOH Representative Eloise Rudolph Grants and Loan Officer 360-236-3124 Eloise.Rudolph@doh.wa.gov <div style="text-align: right;"> PO BOX 47822 Olympia, WA 98504-7822 </div>	
5. Contract Amount \$30,000	6. Funding Source Federal: <input type="checkbox"/> State: <input checked="" type="checkbox"/> Other: <input type="checkbox"/> N/A: <input type="checkbox"/>	7. Start Date DOE	8. End Date 6/30/2021
9. Federal Funds (as applicable) N/A		10. Federal Agency N/A	
11. CFDA Number: N/A			
12. Tax ID # 91-6001487	13. SWV # 00265665-00	14. UBI # 182-000-005	15. DUNS # 08.193.2790
16. Contract Purpose The purpose of this contract is to fund a study for the consolidation of McCormick Woods's water system (PWSID 40529) with Port Orchard.			
DOH and CONTRACTOR acknowledge and accept the terms of this Contract and have executed this Contract on the date below to start as of the date and year referenced above. The rights and obligations of the parties are governed by the Contract Special Terms and Conditions, General Terms and Conditions, Attachment "A" -- Scope of Work, and Attachment "B" -- Budget.			
FOR CONTRACTOR <div style="text-align: center;">  <u>Mike Putnam</u> <u>12/31/2019</u> </div> Date Signed:		FOR DOH <div style="text-align: center;">  Department of Health Contracting Officer Signature <u>1/2/2020</u> Frank Webley Contract Specialist III </div> Date Signed:	
APPROVED AS TO FORM ONLY BY ASSISTANT ATTORNEY GENERAL APPROVAL ON FILE			

CITY OF PORT ORCHARD NOTICE TO CONSULTANTS
REQUEST FOR QUALIFICATIONS (RFQ)
McCORMICK VILLAGE PARK SPLASH PAD RETROFIT PROJECT
2020 SCHEMATIC & AD READY DESIGN (PS&E)

The City of Port Orchard solicits Statements of Qualifications (SOQ) from qualified A&E consulting firms with expertise in the preparation of the 2020 Schematic (30%) and Ad Ready (100% PS&E) Design for the McCormick Village Park Splash Pad Retrofit Project (the "Project"). Submittals meeting the criteria described herein shall be submitted to the *City of Port Orchard, RE: 2020 McCormick Village Park Splash Pad Retrofit Project, 216 Prospect Street, Port Orchard, WA 98366, and Mark R. Dorsey, P.E., Public Works Director/City Engineer* no later than **2:00 p.m. on May 29, 2020**. Information related to this RFQ, including any addenda, will be posted to the City's website at <https://www.cityofportorchard.us/bids-and-proposals/>. Any questions regarding this project should be directed to Mark R. Dorsey, P.E., (360) 876-4991 or publicworks@cityofportorchard.us.

Project Description

The Work to be performed by the Consultant Team shall consist of the Schematic (30%) and the subsequent 100% Ad Ready Design (Plans, Specifications & Estimate) necessary for the future retrofit of the existing McCormick Village Park Splash Pad Facility located at 3201 SW Old Clifton Road, Port Orchard, WA. The design Work to be performed, in compliance with all International, Federal, State and Local Regulations, is as follows;

- Retrofit the existing 'flow-thru' recreational splash pad system to a 'recycled/treated' recreational splash pad system
- New mechanical building to house the necessary recycled water treatment and pumping equipment and chemical storage
- New water storage tank to augment the new recycled/treated recreational splash pad system
- Site water, storm drainage and sanitary sewer modifications to accommodate the new recycled/treated recreational splash pad system
- Electrical modifications as needed to accommodate the new recycled/treated recreational splash pad system

The City intends to utilize the City's standard consultant agreement for this work. The Project shall occur in FY 2020, with the option for the City of Port Orchard to extend the consultant agreement for additional time if necessary at the City's sole discretion.

RFQ Schedule: *(Dates are estimates and subject to change by the City)*

Event	Date
RFQ Release	May 15, 2020 and May 22, 2020
Submittals Due	May 29, 2020
Selection	June 5, 2020
Notify Apparent Successful Firm	June 5, 2020
New Contract in Place	June 23, 2020

Funding Source

To be determined

Submittal

Submittals should include the following information:

- A cover letter/statement of interest demonstrating the firm's interest in the project and highlighting its qualifications to meet the City's needs;
- Firm name, email address, phone and fax numbers;
- Name of Principal-in-Charge and Project Manager;
- A brief overview of the firm, and the number of employees in each firm proposed to project;
- A statement of the consulting firm's qualifications, including brief resumes of staff proposed to work on the project. The information should be focused on the firm's demonstrated ability to meet the criteria set out below, and experience with similar projects to the City Hall Improvement Project.
- Description of the most recent projects performed by the consulting firm, that included a similar scope of work.

The consulting firm's SOQ shall be limited to 10 pages, double sided excluding resumes, cover sheet and cover letter. Submittals shall include a completed and signed Non-Collusion Affidavit form (Attachment A).

Please submit THREE copies of your SOQ to: City of Port Orchard, RE: Future City Hall Improvement Project 2020-2021, 216 Prospect Street, Port Orchard, WA 98366, and Mark R. Dorsey, P.E., Public Works Director/City Engineer no later than **2:00 p.m. on May 29, 2020**. Submittals will not be accepted after that time and date.

Evaluation Criteria

Submittals will be evaluated by City staff based upon the responsiveness of the submittal to this RFQ, and based on the following criteria:

- 1) Demonstrated Qualifications of Proposed Project Manager, including ability to work without significant monitoring, provide strategic recommendation, and ability to communicate information to the community and Council. (15 points)
- 2) Demonstrated Qualifications/Expertise of Firm and/or Team (20 points)
- 3) Demonstrated Ability to meet Schedule (20 points)
- 4) Description of General Approach to this Project (15 points)
- 5) Familiarity with Port Orchard Municipal Code and Related Regulatory Requirements (10 points)
- 6) Relevant Past Performance/References (10 points)
- 7) Demonstrated Water Treatment System Expertise in the Retrofit Project (10 points)

Evaluations will be based on criteria outlined herein, which may be weighted by the City in any manner it deems appropriate. Interviews, if considered necessary, will be held with selected Consultants based on an evaluation of the Qualifications. All submittals will be evaluated using the same criteria and weighting.

General Terms and Conditions

The City reserves the right to accept or reject any or all proposals, to waive all minor technicalities, and to accept the proposal or proposal determined to be the most advantageous to the City. Additionally, the City may accept a proposal subject to an exception if, in the sole judgement of the City, the proposal meets or exceeds the City's specifications.

The City of Port Orchard reserves the right to amend the terms of this "Request for Qualifications" (RFQ) to circulate various addenda, or to withdraw the RFQ at any time, regardless of how much time and effort consultants have spent on their responses. This Project is contingent upon the acquisition of a funding package, and as such, the City reserves the right to cancel this Project and any associated contracts depending on the quality of said funding package, solely at the City's discretion.

All questions shall be submitted to Mark R. Dorsey, P.E., (360) 876-4991 or publicworks@cityofportorchard.us. Unauthorized contact regarding this RFQ with other City employees may result in disqualification. Any oral communications will be considered unofficial and non-binding on the City.

Any questions will be answered in writing and posted on the City's website at <https://www.cityofportorchard.us/bids-and-proposals/>. It is the responsibility of individual firms/teams to check the website for any amendments or Q & A's to this RFQ.

If you would like to schedule a tour of the area and existing facilities, please contact Tony Lang 360.535.2490 tlang@cityofportorchard.us.

The City reserves the right to reject any and all submittals and to waive irregularities and informalities in the submittal and evaluation process. This RFQ does not obligate the City to pay any costs incurred by Consultants in the preparation and submission of their Statement of Qualifications. Furthermore, the RFQ does not obligate the City to accept or contract for any expressed or implied services.

The City reserves the right to request that any Consultant clarify its submittal or to supply any additional material deemed necessary to assist in the evaluation of the submittal.

Modification of a submittal already received will be considered only if the request is received prior to the submittal deadline. All modifications must be made in writing, executed and submitted in the same form and manner as the original submittal.

Americans with Disabilities Act (ADA) Information

The City of Port Orchard in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. This material can be made available in an alternate format by emailing the Public Works Department at publicworks@cityofportorchard.us or by calling (360) 876-4991.

Title VI Statement

The City of Port Orchard in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award."

Ownership of Work Product

Any and all data, reports, analyses, documents, photographs, pamphlets, plans, specifications, surveys, films or any other materials created, prepared, produced, constructed, assembled, made, performed or otherwise produced by the consultant or the Consultant's subcontractors for delivery to the City under this RFQ shall be the sole and absolute property of the City. Such property shall constitute "work made for hire" as defined by the U.S. Copyright Act of 1976, 17 U.S.C. §101, and the ownership of the copyright and any other intellectual property rights in such property shall vest in the City at the time of its creation. Ownership of the intellectual property includes the right to copyright, patent, and register, and the ability to transfer these rights. Material which the Consultant uses to prepare a proposal in response to this RFQ but is not created, prepared, constructed, assembled, made, performed or otherwise produced for or paid for by the City is owned by the consultant and is not "work made for hire" within the terms of this RFQ.

Public Records Request

This RFQ and all public records associated with proposals submitted in response to this RFQ shall be available from the City for inspection and copying by the public where required by the Public Records Act, Chapter 42.56 RCW (the "Act"). To the extent that public records then in the custody of the Consultant are needed for the City to respond to a request under the Act, as determined by the City, the Consultant agrees to make them promptly available to the City.

Additional Terms and Conditions. To view the City's full terms and conditions for this project, please refer to the contract for this project on the City's website at <https://www.cityofportorchard.us/bids-and-proposals/>. By this reference, the terms and conditions in the contract are incorporated into this RFQ.

Dates of publication:

Port Orchard Independent:	May 15 and May 22, 2020 editions
Daily Journal of Commerce:	May 15 and May 22, 2020 editions
Kitsap Sun	May 15 and May 22, 2020 editions
City of Port Orchard Website:	Posted May 15, 2020

NON-COLLUSION DECLARATION

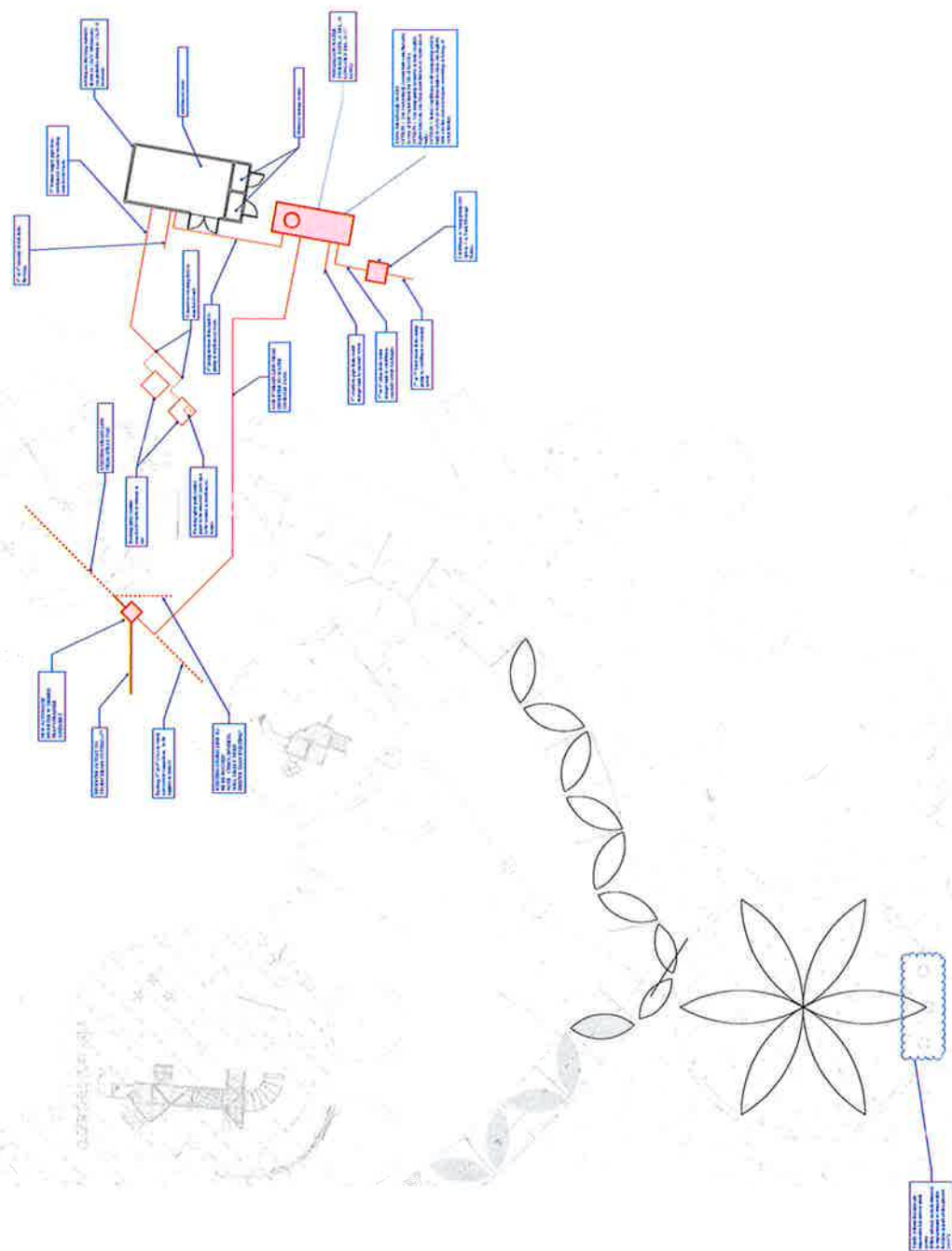
I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. That by signing the signature page of this proposal, I am deemed to have signed and agreed to the provisions of this declaration.

By: _____

(Authorized Signature)

Title: _____





City of Port Orchard

216 Prospect Street, Port Orchard, WA 98366

(360) 876-4407 • FAX (360) 895-9029

Agenda Staff Report

Agenda Item No.	Business Item	Meeting Date:	May 26, 2020
Subject	Adoption of Resolution No. 015-20, Authorizing the Mayor to Execute Contract No. C048-20 with Murraysmith, Inc. for the 2020-2021 McCormick Woods Well No. 11 Phase I – Site Improvement (Schematic 30% Design) Project	Prepared by:	Mark Dorsey, P.E. Public Works Director
		Atty Routing No:	N/A
		Atty Review Date:	N/A

Summary: As a function of the 2019-2020 Biennial Budget mid-cycle amendment process, the Ad Ready Design and Engineer's Estimate for the Well No. 11 Site Improvement Project was identified as a priority task for the Public Works Department. Therefore, on January 31, 2020, the Public Works Department published a Request for Qualifications for the 2020-2021 McCormick Woods Well No. 11 Site Improvement Project Ad Ready Design, Bid Support and Engineer of Record. By the February 14, 2020 deadline no Statements of Qualification (SOQ) were received, so upon confirmation of the required procurement process given that no responses to the Advertisement were received, the Public Works Department contacted Murraysmith, Inc., being a qualified firm from the current MRSC Roster. On April 13, 2020, a Proposal from Murraysmith, Inc. was received, but given the number of unknowns that created an unrealistic scope/budget, it was decided to implement a phased approach for the Project. Therefore, on May 8, 2020, after having met onsite with Public Works Department staff, Murraysmith, Inc. provided a new Proposal for the 2020-2021 McCormick Woods Well No. 11 Phase I – Site Improvements (Schematic 30% Design) Project in the amount of \$94,673.

Governor Inslee's Proclamation 20-28: This item is [check all that apply]: ☐ COVID-19 related; ☒ necessary and routine, for the following reasons: This action supports the continuation of the previously determined essential and critical water system infrastructure improvement project.

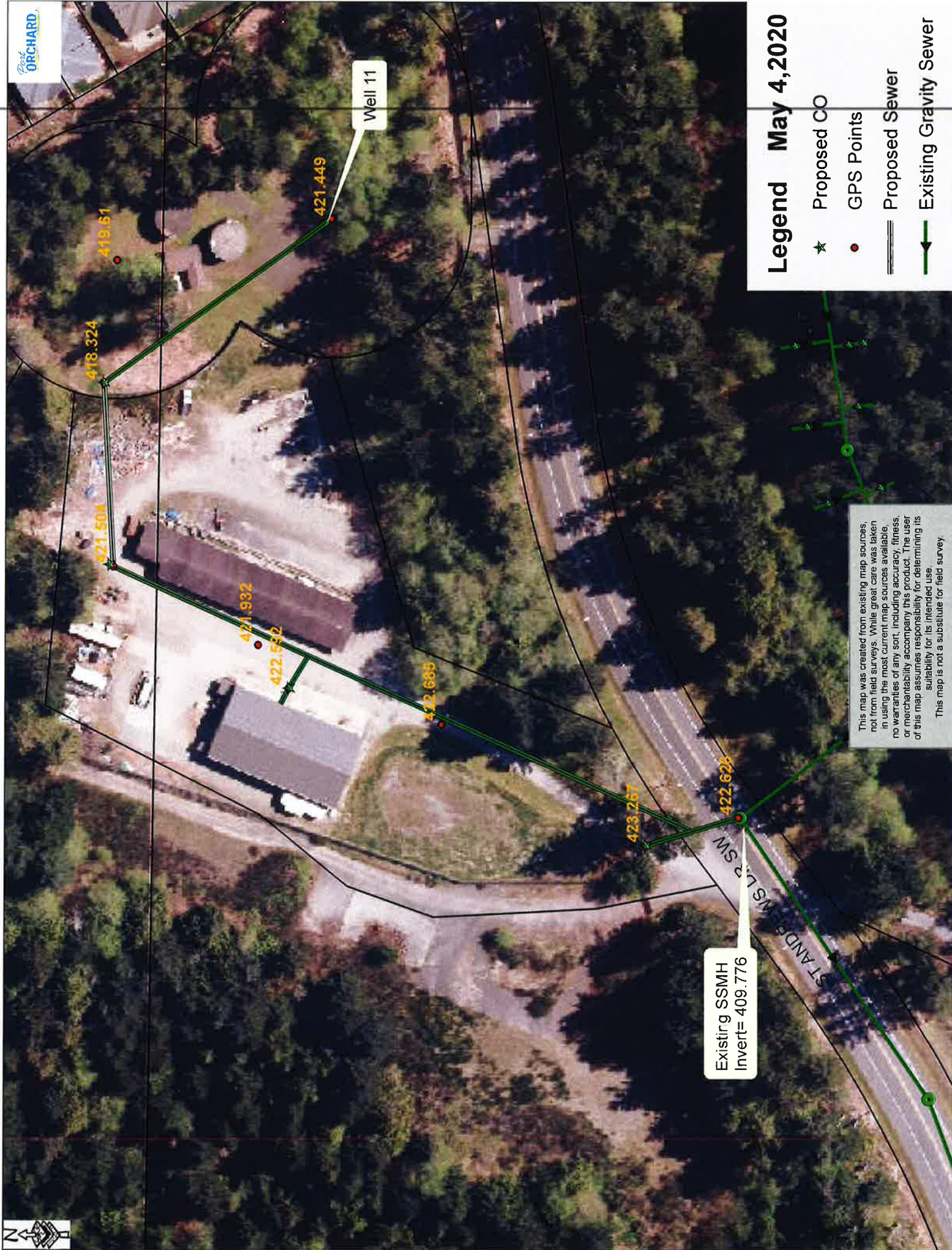
Relationship to Comprehensive Plan: Chapter 7 – Utilities

Recommendation: Staff recommends adoption of Resolution No. 015-20, thereby approving Contract No. C048-20 with Murraysmith, Inc. for the 2020-2021 McCormick Woods Well No. 11 Phase I – Site Improvements (Schematic 30% Design) Project in the amount of \$94,673 and documenting the Professional Services procurement procedures.

Motion for Consideration: I move to adopt Resolution No. 015-20, thereby approving Contract No. C048-20 with Murraysmith, Inc. for the 2020-2021 McCormick Woods Well No. 11 Phase I – Site Improvements (Schematic 30% Design) Project in the amount of \$94,673 and documenting the Professional Services procurement procedures.

Fiscal Impact: \$300,000 of funding allocated via the 2019-2020 Biennial Budget mid-cycle amendment process.

Attachments: Resolution No. 015-20
Contract No. C048-20 w/ Exhibit A & B (dated May 2020)



Legend May 4, 2020

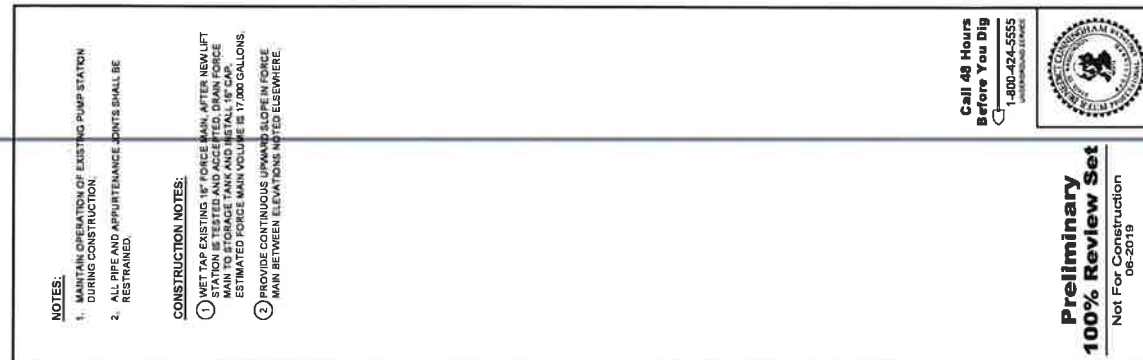
- ★ Proposed CO
- GPS Points
- ══ Proposed Sewer
- Existing Gravity Sewer

This map was created from existing map sources, not from field surveys. While great care was taken in using the most current map sources available, no warranties of any sort, including accuracy, fitness, or merchantability accompany this product. The user of this map assumes responsibility for determining its suitability for its intended use.

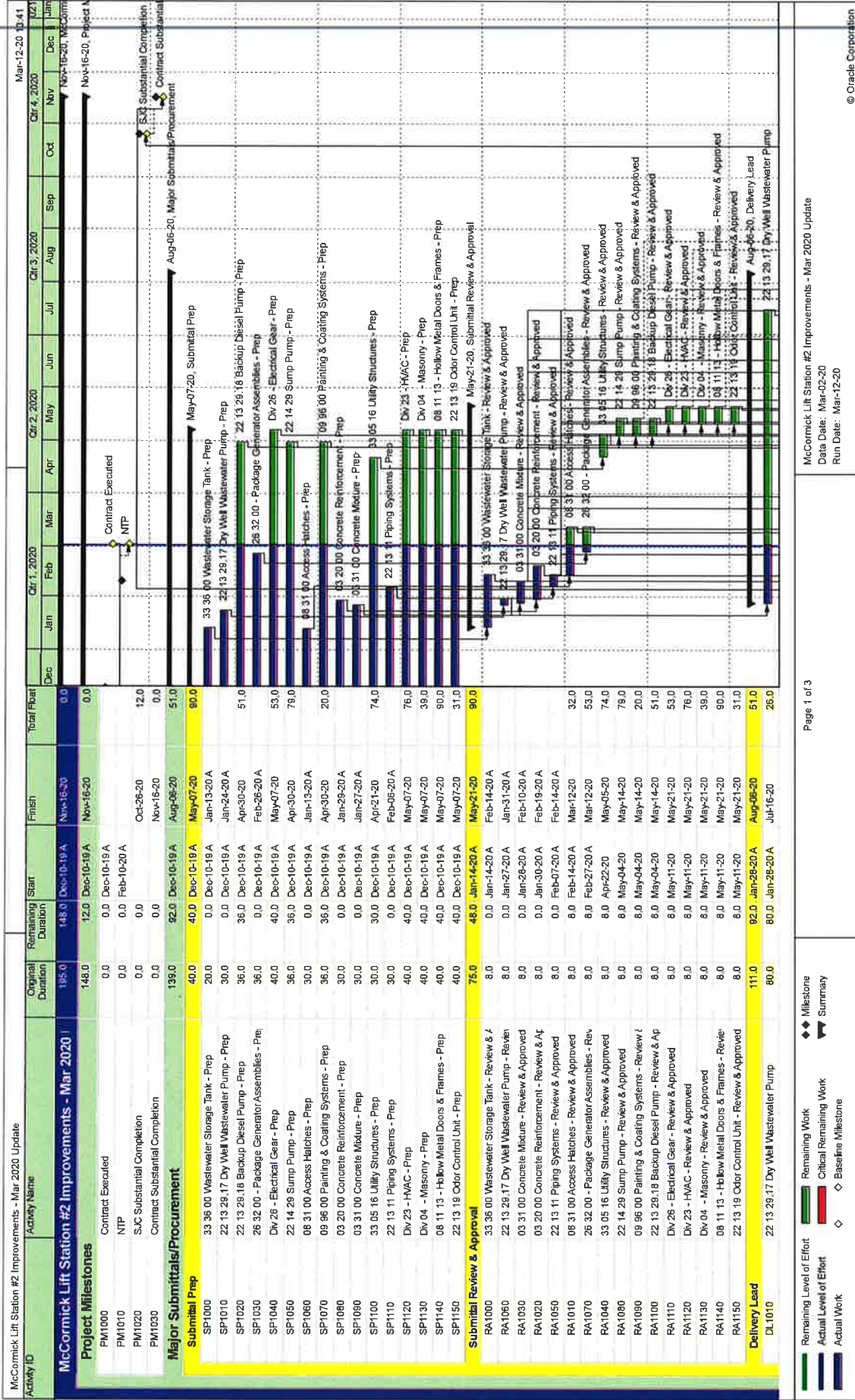
This map is not a substitute for field survey.

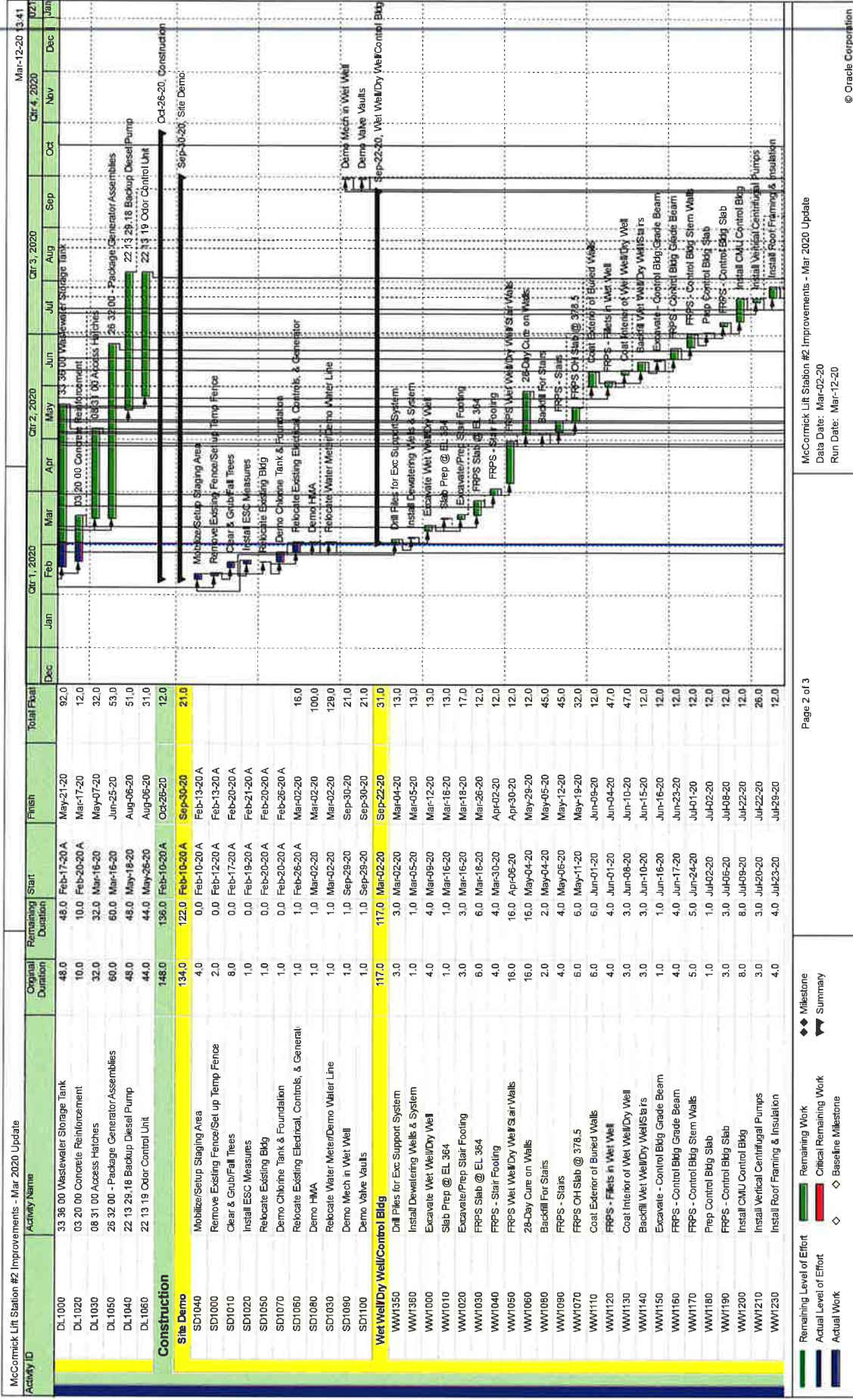
Existing SSMH
Invert= 409.776

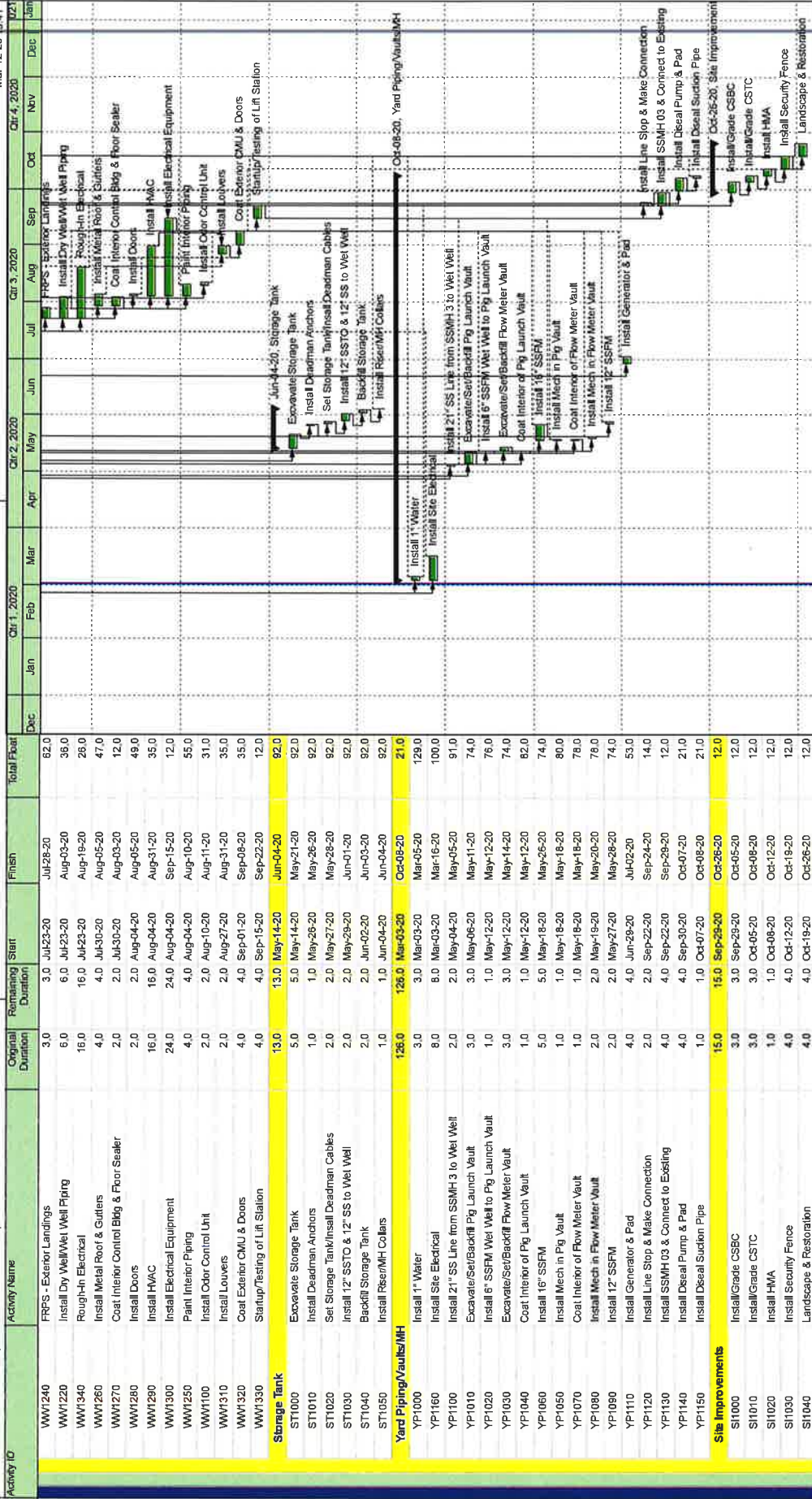
Well 11













MARINA PUMP STATION IMPROVEMENTS PREDESIGN REPORT

Prepared for City of Port Orchard

April 2020

PO 118.116



Prepared by:

RH2 Engineering, Inc.

22722 29th Drive SE, Suite 210

Bothell, WA 98021

1.800.720.8052 / rh2.com

City of Port Orchard Marina Pump Station 30% Design Review Comments

Reviewer: Nick Bond, Community Development Director

pg 46 Refers to Kitsap County as local permits rather than City of Port Orchard permits. For instance, SDAP is mentioned for instance rather than SDP/LDAP

Reviewer: Mike DeLine, Electrician

Overall, I am ok the Refined Alternative 1A Site Layout as proposed with keeping the existing dry pit and wet well.

I like the idea of the backup generator and fuel tank being above ground, next to the multiuse building rather than underground.

I like the Diesel driven Pump being located over the existing wet well.

Where will the existing wet well Access be located? I don't really see it pointed out on the drawings but it seems like it would be inside the Diesel backup pump room.

I would like to see transducers included for level and the existing bubbler system removed as mentioned. Wet well level needs to be displayed in feet of wet well depth and not in elevation values.

The proposed below-grade emergency storage structure needs to be included.

Is the Sluce gate for the emergency storage structure going to automatically operate open and shut based on the existing wet well level or manually operated? Should be automatically operated.

Need to ensure a manual transfer switch is installed for emergency power with the up position to route onsite generator power to the ATS and the down position to route power from a portable generator connection box to the ATS.

Recommend replacing existing high flow and low flow mag meters with new ones as part of the project.

In the Force Main valve vault would like to see the 18 and 24 inch force mains "Y" together rather "90'd" together to reduce the head that would be created by having two 90 degree bends to go from the 18 inch to the 24 inch force main.

What is the plan for installing the Force Main valves in the valve vault since at that point there are not currently any valves to isolate the existing force main on the treatment plant side of the proposed vault location? Cut a isolation valve In or what other options might be available? Will portable pumps be used to bypass that point to keep the station on line during that work.

Are there any options on the table to change out the spiral staircase into the existing dry pit for safer access/egress?

Should the size of the one 25Hp Vaughan Chopper Pump proposed to remain be sized to a 50 Hp (or more) Vaughan Chopper Pedestal pump to provide for flow rates in the less than the 50% capacity of the three Hidrostral H8K-H pumps proposed since it looks like the on the Hidrostral pump specs sheet included in the proposal that they need to be run only in the range of above 50% to 100% capacity. There is not any information for them to run in the 50% or less range when being controlled by a VFD.

Reviewer: Tony Lang, Operations Manager

Dry well access/ladder entrance issues need to be addressed and a top priority. The confined space access/safety requirements need to be fixed whatever layout we choose.

New access hatch for pump removal needs to be designed so we don't need a backhoe to lift the lid.

Multi-use facility could include the control room and odor control instead of the garbage containers and the spill response trailer. Do we have some requirement to house the Port of Bremerton's equipment/garbage?

I feel comfortable with the emergency storage being delayed for the time being if needed. As we get closer to build-out it will be vital that this is done.

Reviewer: Ian Smith, Civil Engineer

pg 46

Permitting (Local) refers to Kitsap County permits and not City of Port Orchard permits.

Excavation for emergency storage is deep and expensive as indicated in the report. Wondering if using 12' diameter tanks would be worth looking into to reduce construction time and overall depth. See attached. Potential issue with adjacent property encroachment in the attached layout.

As indicated in the report shoring and dewatering is challenging. Wondering if using a precast structure for the below grade facility would be worth looking into to reduce construction time.

Artificial ground freezing has been gaining steam for construction shoring recently (City of Seattle Seawall construction being a major project in mind). With the high groundwater and difficult location it may be beneficial to look into it to potentially reduce cost/risk, I have not looked into cost so it is just a shot in the dark.

Reviewer: Darren Podraza, GIS Specialist/Inspector

Alternative 1A revised looks acceptable although I prefer the alternative 3 site plan figure 21.

I believe that the oil spill response trailer belongs to the Port of Bremerton, Is it possible to have the Port store the response trailer so the city can use the space in figure 25 to house the generator?

I would prefer the MCC and all electrical controls be set above grade.

It looks like the Marina pump station receives a significant amount of inflow and infiltration, a program to minimize I&I could push out the need for a 24 inch FM for many years past 2036 and add time to the emergency response time totals. A gravity flow meter could be used on various sewer basins to determine what areas are having the largest impact on the system, summer vs winter rain events.

Reviewer: Chris Hammer, Assistant City Engineer (initial comments)

My initial impression is that the proposed project is too extensive/ overly complex.

Value Engineering Proposal:

~~Simplify the construction by locating all sewer apparatus in one building.~~

Remove the partial underground vault/ viewing platform.

Locate the public restroom and trash enclosure in a different location. (Perhaps at the currently proposed viewing platform location)

Locate the oil spill response trailer off site.

Reconfigure the above ground sewer apparatus building to house back up diesel pump and electrical panels.

Locate odor control in the former bathroom and trash/ recycling.

Locate the electrical controls in the oils spill response trailer area.

From examination of the Cost Estimate the above modification to Alternative 1A should reduce costs by over \$2.5M.

Comments:

Is there any way that an 18" force main can provide for future capacity with perhaps less efficient pumps. Seems like a very costly approach.

Can we design the project to upgrade to larger pumps/ motors in the future to work with the 18" force main?

Can a section of the skewered town that is closer to the treatment plant be rerouted to reduce the need for 24" main and reduce the length of new force main required?

Provide for a mobile back up generator to power pumps as a contingency if the on-site generator fails.

Reviewer: Chris Hammer, Assistant City Engineer (following discussion with PWD and Mayor)

Removing the spill response trailer and public restroom from the above grade building to make room for sewer apparatus.

Removing the partially under-ground building/ viewing platform from the project and relocating sewer apparatus into the above grade building.

Minimizing the size of the above grade building.

Omitting the removal of the old sewer lift station building and new viewing plaza from the project. The City will reserve this space for stormwater retrofit. We will pursue recreational and stormwater grant funding to address this work as part of a future project.

Provide sewer service for and purchase of a new stand- alone restroom building to be located on the plaza near the road end.

Design the current project to accommodate the future plaza, viewing area, and bay street pathway as shown in the rendering.

Accommodating the future parking garage design to support development. Keeping the surge vault as designed.