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TECHNICAL MEMORANDUM

Date: September 3, 2013
To: Eric Mendenhall
Ted Hill
From: Jennifer Lundberg
Jim Dougherty, Gray & Osborne, Inc.
Doug Welch, Gray & Osborne, Inc.
Subject: Shoreline Conditional Use
cc:
Project Number: 216-2564-013
Project Name: City of Sumner Wastewater Treatment Plant

The City of Sumner requests a Shoreline Conditional Use permit for the expansion of the Sumner Wastewater Treatment Plant (WWTP) because the proposed development is located within 200 feet of the White and Puyallup Rivers and within the 100 year-flood plain. The WWTP serves the cities of Sumner and Bonney Lake as well as a portion of unincorporated Pierce County. The WWTP is located at the confluence of the White and Puyallup rivers and has undergone several upgrades since its construction in 1955. The National Pollutant Discharge Elimination Permit (NPDES) for the Sumner Wastewater Treatment Plant (WWTP) requires the City to initiate planning for facility expansion when 85% of plant capacity is exceeded for three consecutive months, which occurred during the period from November 2009 through January 2010. During the period since the last upgrade, Total Suspended Solids and BOD loadings have increased more rapidly than anticipated in the 1999 Facilities Plan. Consequently, the City of Sumner is proposing to expand the WWTP to accommodate the increased flows and loadings associated with the revised flow and load trends and population growth and expansion of its service area.

The City is currently reviewing two design layouts with budgetary considerations determining the ultimate design selection. Alternative B is the preferred design. The planned expansion will increase the capacity of the existing WWTP to a maximum month design flow of either 5.41 MGD (Phase 2A) or 6.10 MGD (Phase 2B). The components for both design layouts are similar and most elements are accommodated within the existing facility. However, both layouts require construction of the following significant structures within the 200 foot floodway buffer:

- Secondary Clarifier No. 3 (located off site and adjacent to the existing secondary clarifiers)
- Aeration Basin No. 3 (onsite and adjacent to Aeration Basin No. 2)
- Solids Handling Building canopy expansion (onsite, existing structure and adding a canopy)
- Centrate Storage Tank (onsite; Alternative B only)
- Scum Pump Building (onsite; Alternative B only)

- Gravity Thickener No. 2 (onsite; Alternative A only)
- Grit Handling Building (onsite; Alternative A only)
- Odor Control System (onsite; Alternative A only)

Additional project elements include:

- RV Dump Station (onsite and within the shoreline buffer)
- Relocation of the recycling center (onsite and partially with the 200 foot buffer) to accommodate the RV Dump Station
- Solids Transfer Station (onsite; within the Shoreline Conservation Setback)

The Sumner Shoreline Master Program in conjunction with the Sumner Municipal Code determines what development is allowed within the shoreline and mitigation requirements for that development. The shorelines of the White (Stuck) and Puyallup Rivers are designated as Shorelines of Statewide Significance under the Shoreline Management Act (SMA) and are designated as such in WAC 173-18.

SMC 16.30.030 lists the criteria to grant conditional uses from the Shoreline Master Program. A Conditional Use is required because the WWTP is located in the Urban Conservancy zone. This zone has a 200 foot buffer for development along the Puyallup and White Rivers and within the 100-year floodplain. Conditional Use permits allow for greater flexibility in varying the application of the use regulations of the Shoreline Master Program as long as they are consistent with RCW 90.58.020.

1. *That the proposed use will be consistent with the policies of RCW 90. 58.020 and the policies of the shoreline master program, which include:*

- *Recognize and protect the statewide interest over local interest;*

Construction of the proposed Secondary Clarifier No. 3 and the other wastewater treatment infrastructure within 200 feet of the Puyallup and White Rivers will improve and protect water quality in this important Water of the State of Washington and Puget Sound downstream, to the benefit of all Washington citizens. The proposed development also is consistent with Growth Management Act goals of infilling within Urban Growth Zones and established communities.

- *Preserve the natural character of the shoreline;*

The City undertook a shoreline project under Phase 1 of the WWTP expansion and constructed the Puyallup River Trail around the perimeter of the facility and adjacent to the shoreline. They have also worked to maintain the vegetative corridor that provides pleasant views of the river with a natural character while screening the WWTP facility. An extension of the trail project would be the proposed land exchange between the City and Washington State Department of Fish & Wildlife (WDFW). The City proposes to exchange a 2.07 acres portion of parcel 42500001320 (to the east near the intersection of SR 410 and Linden Ave) with the WDFW parcel 42500001281. The northwest corner of the WDFW parcel 42500001281 would house the proposed Secondary Clarifier No. 3. The remainder of the parcel will have a conservation easement (instrument to be determined) so that it can be managed for public

access and habitat restoration. This will result in a net gain for shoreline access and habitat managed for shoreline character for the community.

Also part of the proposed land exchange is to modify the public access to the shoreline. Currently, access to the WDFW parcel 42500001281 is through the WWTP. Under the proposed land exchange, access would be permanently modified to be along the toe of the SR 410 ramp. This access will protect the public from WWTP operations and can be planted with native vegetation.

- *Result in long-term over short-term benefit;*

The proposed expansion including the land exchange with WDFW will result in long-term benefits for the shoreline and the community. The proposed land exchange will result in a net gain for shoreline habitat managed for habitat and public access. Additionally, the public access will be improved by moving the public access easement outside of the working area of the WWTP. Implementation of the proposed Sumner WWTP expansion project will provide adequate wastewater treatment to the City and the surrounding service area through either 2034 or 2043 (depending upon final design selection) and preserve shoreline values of the project for fish, wildlife, and recreational purposes in perpetuity. Even if Alternative A is selected, Secondary Clarifier No. 3 is sized correctly for future upgrades within the plant and no future impacts offsite are anticipated.

- *Protect the resources and ecology of the shoreline;*

The proposed expansion including the land exchange with WDFW will help protect the resources and ecology of the shoreline. The proposed land exchange will result in a net gain for shoreline habitat managed for habitat and ecological resources. Under the proposed land exchange, much of WDFW parcel 42500001281 will continue to be managed to protect the resources and ecology of the shoreline through a conservation easement (instrument to be determined). In addition, the city will exchange a portion of the WWTP facility to WDFW (2.07 acres of City-owned parcel 42500001320), equivalent in size to 42500001281 and relocate the public access easement outside of the working WWTP facility. This will result in a net increase of the amount of property protected for resources and ecology of the shoreline.

Implementation of the proposed Sumner WWTP expansion will improve/preserve wastewater treatment and quality of effluent discharged to the White River through the project period. Most construction occurs within the existing facility footprint. Construction of the Secondary Clarifier No. 3 in the northwest corner of the parcel 42500001281 will not impact the immediate shoreline area and will preserve the remainder of the parcel through a conservation easement to the WDFW. Wildlife, fish, and recreational values of the shoreline will be preserved in perpetuity.

- *Increase public access to publicly owned areas of the shorelines,-*

As detailed above, the City completed the Puyallup River Trail around the shoreline under the Phase 1 expansion. The proposed land exchange with WDFW will result in a net increase in public access to publicly owned areas of the shoreline because the WDFW-owned parcel 42500001281 will remain mostly in a conservation easement excluding the area needed for Secondary Clarifier No. 3 and WDFW will obtain 2.07 acres the City-owned parcel 42500001320. The public access easement will be relocated to the toe of the SR 410 off ramp, thus protecting the public and providing better access to the shoreline that doesn't require access through the WWTP.

- *Increase recreational opportunities for the public in the shoreline,-*

As detailed above, the City completed the Puyallup River Trail around the shoreline under the Phase 1 expansion. This provided public access to the confluence of the Puyallup and White Rivers within the City limits for recreational opportunities. Under the proposed Phase 2 expansion, recreational opportunities would be expanded further through the proposed land exchange with WDFW resulting in a net increase in lands available for recreational opportunities. The WDFW-owned parcel 42500001281 will remain mostly in a conservation easement (excluding the area needed for Secondary Clarifier No. 3) and WDFW will obtain 2.07 acres of the City-owned parcel 42500001320. The public access easement will be relocated to the toe of the SR 410 off ramp, thus protecting the public and providing better access to the shoreline that doesn't require access through the WWTP. Public recreational access in the shoreline will increase including access and use of the Puyallup River Trail, wildlife viewing, and fishing.

- *Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.*

Once construction is complete, implementation of the proposed Sumner WWTP expansion project will help to preserve water quality and the aesthetic qualities of natural shorelines of the state, specifically water quality in the Puyallup River, White River, and Puget Sound downstream. The WWTP expansion project is a preferred land use consistent with control of pollution and prevention of damage to the natural environment, which requires a shoreline location in general. To minimize impacts to the natural and built environment including public recreational access to the Puyallup and White Rivers, the City is working with WDFW to cite Secondary Clarifier No. 3 as far from the river shoreline as possible within operational constraints.

2. *That the proposed use will not interfere with the normal public use of public shorelines,-*

After construction, there will be no discernable impact to normal public use of the public shorelines with full access to the Puyallup and White Rivers and the Puyallup River Trail. Additionally, the proposed land exchange will result in a net gain of shoreline managed for public use with the 2.07 acre portion of City-owned parcel 42500001320 transferred to WDFW and a conservation easement on the portion of WDFW-owned parcel 42500001281 not used for Secondary Clarifier No. 3 after the property is transferred to the City.

3. *That the proposed use of the site and design of the project will be compatible with other permitted uses within the project area and with uses planned for the area under the Comprehensive Plan;*

The proposed expansion project at the Sumner WWTP will improve capacity of this critical public facility and allow it to provide secondary wastewater treatment and disposal for the Cities of Sumner and Bonney Lake through either 2034 or 2043, depending upon the design alternative implemented. This is consistent with the planned use of the project area as presented in the *Essential Public Facilities Sub-Element of the Sumner Comprehensive Plan, Subsections 1.1 through 1.5*, which address siting of essential facilities that are difficult to site. It is also consistent with the Existing and Planned Sewer System Maps.

Under the Shoreline Management Plan, which is an element of the Comprehensive Plan, the City must demonstrate that the proposed WWTP expansion is concurrent with need within and in adjacent jurisdictions for the expansion of Capital Facilities and Public Services. Per the requirement by Ecology and the NPDES permit, this requirement is being met as capital projects such as the WWTP require long term planning. The facility has exceeded 85% of capacity for at least 3 consecutive months in 2010, thus triggering the requirement for expansion per the NPDES permit.

4. *That the proposed use will cause no significant adverse effects to the shoreline environment in which it is located.*

The City is not proposing any work at the river shore and is working to remove structures away from the Shoreline Conservation Setback. However, the shape and location of the existing WWTP has limited available property to expansion so some development must occur within the Shoreline Conservation Setback. The City proposed expansion under Phase 2 will result in a net gain of protection of the shoreline through the proposed land exchange and conservation easement with WDFW.

5. *That the Public interest will suffer no substantial detrimental effect.*

The proposed expansion project at the Sumner WWTP will provide secondary wastewater treatment and disposal for the Cities of Sumner and Bonney Lake as well as portions of unincorporated Pierce County. It will allow for planned population growth and expansion of the service area. Water quality and aquatic habitat in the Puyallup River will be improved/preserved, and recreational access to the Puyallup River and the Puyallup River Trail will be protected and improved by the proposed land exchange and conservation easements with WDFW.