SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

Tanglewilde Thompson Place 600 Treatment Building and Distribution System Replacement

2. Name of applicant:

Public Utility District No. 1 of Thurston County (Thurston PUD)

3. Address and phone number of applicant and contact person:

Doug Piehl P.E., District Engineer 1230 Ruddell Rd SE Lacey, WA 98503 360-763-5847

4. Date checklist prepared:

6/20/2024

5. Agency requesting checklist:

Thurston PUD

6. Proposed timing or schedule (including phasing, if applicable):

Construction of new treatment system building and replacement of approximately 40,000 lineal feet of water mains planned in three phases. Anticipated construction start and completion dates:

Phase 1: Start April 2025, completion December 2025

Phase 2: Start April 2026, completion December 2026

Phase 3: Start April 2027, completion December 2027

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The remainder of the water mains in the Tanglewilde water system will require replacement, planned over the next 10 years subject to funding availability. Approximately 50,000 lineal feet of water main will be replaced in these future projects.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

An oak tree survey will be completed in the vicinity of the planned treatment building. There is no other environmental information that we know about that has been prepared, or will be prepared, directly related to this proposal. Distribution system replacement planned with this proposal is

located in existing rights of way adjacent to the existing water mains; therefore, no or minimal environmental impact is anticipated.

- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
 The PUD does not know of any pending applications for government approvals for other proposals directly related to this water system.
- 10. List any government approvals or permits that will be needed for your proposal, if known.

 Special use permit and building permit approved by Thurston County Planning. Right of way construction permits approved by Thurston County Public Works Department. Archeological and Cultural review per Washington State Executive Order 05-05 conducted in cooperation with Department of Archaeology & Historic Preservation (DAHP. Water treatment plan review and approval by Washington State Health Department Office of Drinking Water.
- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

 The project will construct a new 850 gpm water treatment plant on TPN 78801400000 near existing Thurston PUD water works facilities. The project also replaces approximately 40,000 lineal feet of water main (size less than 12-inches diameter) within existing right of ways. The project site constitutes approximately 250 acres of the 604 acres of Tanglewilde Water System service area. Disturbed area is minimal, generally consisting of a 2-ft wide trench within the existing right of way. Replacement of mains in individual blocks will be done sequentially, with active project area typically less than 500 lineal feet of right of way at any given time. Water service will be maintained with minimal short interruptions through the project. Traffic impacts will be minimized and will be governed by a traffic control plan approved by Thurston County under the Right of Way permit.
- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. The Tanglewilde Thompson Place 600 Water System is located in the City of Lacey urban growth area, located within sections 10, 11, 14, and 15 of Township 18 North, Range 01 West, W.M. All work will take place within the Tanglewilde water system's approved service area. See Service Area map attached.

B. Environmental Elements

1. Earth

a. General description of the site:

(circle one): Flat, rolling hilly, steep slopes, mountainous, other ______
The terrain within the Tanglewilde Thompson Place 600 water system service area is relatively flat to rolling, with steeper slopes along a minor ridge running across the center of the service area from east to west. Service area elevations range from 160 to 262 feet.

- b. What is the steepest slope on the site (approximate percent slope)? Limited areas of the service area contain slopes up to forty percent.
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The largest proportion of soils in the project area are Spanaway gravely sandy loam 0-3% slopes, with additional significant areas of Everett very gravelly sandy loam 8-15% slopes, Nisqually loamy fine sand 3-15% slopes, and Alderwood gravelly sandy loam 0-8% slopes, and minor areas of other soil types. All construction areas are located within existing right of ways in soils which have previously been heavily disturbed.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No surface indications or history of unstable soils in the immediate vicinity of activities have been observed or are known. The Thurston Region Hazards Assessment Map identifies minor areas of steeper slopes near 5th Ave SE, however not within right of way areas where distribution main replacement is planned.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The project involves replacement of approximately 40,000 lineal feet of water line. Anticipated excavation is approximately 12,000 yards. Approximately 2,000 yards pipe bedding (imported coarse sand) is anticipated. It is anticipated that excavated material will be suitable for trench backfill, therefore net cut and fill is expected to be 2,000 yards. Surfaces will be restored to their pre-existing state, including pavement patching or roadway shoulder restoration.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No clearing is anticipated associated with this project and all areas and surfaces will be restored to their pre-existing state at completion of the replacement. Construction stormwater best practices will be followed to protect drainage inlets and eliminate any construction related stormwater or erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 2,000 sf new impervious surfaces will be created for the water treatment facility. There is no change to impervious surface coverage for the water main replacement.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: No clearing is anticipated associated with this project and all areas and surfaces will be restored to their pre-existing state at completion of the replacement. Construction stormwater best practices will be followed to protect drainage inlets and eliminate any construction related stormwater or erosion.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Minor emissions during construction from operation of trucks and construction equipment. No new emissions result from the completed project.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: None.

3. Water

- a. Surface Water:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The only water body located in or near the project area is an isolated unnamed wetland of less than 1/10th acre which is located over 500 feet from the nearest right of way.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No water bodies or wetlands are located within 200 feet of right of ways where water main replacement construction is taking place.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. No.
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

 No.
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
 No.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.
 - The Tanglewilde Thompson Place 600 water system does withdraw and distribute water from several wells under water rights issued by the Washington State Department of Ecology. Operation of the proposed water treatment system is anticipated to increase water use by less than 1%. Proposed replacement of40,000 lineal feet of water mains will reduce pumped water through leak loss reduction. Overall, the project impact will be to reduce the quantity of groundwater withdrawal.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
 - Occasional backwash of water treatment vessels to maintain uniform flow, with discharge to ground. Discharge of wastewater from water treatment filtration processes to the land do not require coverage under the Water Treatment Plant General Permit (under NPDES).
- c. Water runoff (including stormwater):
 - 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
 - Runoff from new impervious surfaces will be dispersed or infiltrated following Thurston County permits.
 - 2) Could waste materials enter ground or surface waters? If so, generally describe. No impacts anticipated.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.
 No.

 d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:
 None

4. Plants

a. Check the types of vegetation found on the site:

X Deciduous tree: Alder, maple, aspen, oak and other
X Evergreen tree: Fir, cedar, pine, other
X Shrubs
X Grass
Pasture
Crop or grain
Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other
Water plants: Water lily, eelgrass, milfoil, other
Other types of vegetation

Vegetation consists of native conifers and residential lawns and landscaping. Due to the residential nature of the area little to no area is in its natural state.

b. What kind and amount of vegetation will be removed or altered?

Construction is located within existing right of ways. Minor areas of lawn or landscaping encroaching on the right of way may be disturbed. Any such areas will be restored per Thurston PUD standards.

c. List threatened and endangered species known to be on or near the site.

None known or identified using Thurston County GIS.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Water main replacement is located within existing right of ways. Disturbance of vegetated areas will be avoided to the maximum extent practical; any disturbed vegetated areas will be restored per Thurston PUD standards. A landscaping plan will be followed for area of the proposed water treatment building.

e. List all noxious weeds and invasive species known to be on or near the site.

Thurston County has identified the following noxious weeds in the vicinity: Ragwort Tansy, Poison Hemlock, Laureola Daphne, Wall Hawkweed, Spotted Knapweed, Diffuse Knapweed, and Bohemian Knotweed. Thurston PUD has not identified any of the above noxious weeds in right of ways with planned water main replacement.

5. Animals

a. <u>List</u> any birds and <u>other</u> animals which have been observed on or near the site or are known to be on or near the site.

Birds: Hawk, eagle, songbirds

Mammals: none Fish: none

b. List any threatened and endangered species known to be on or near the site.

Washington State Department of Fish and Wildlife does not identify any priority habitat within the project area. Thurston County GIS does not identify any endangered or threated species in the project area. US Fish and Wildlife service identifies Yelm Pocket Gopher, Marbled Murrelet, Streaked Horned Lark, and Yellow Billed Cuckoo as endangered species which may be present in the area. The area is classified as having Pocket Gopher Soils, though no Pocket Gophers are known to be present; the approved Thurston County HCP Pocket Gopher impact mitigation strategy will be followed.

c. Is the site part of a migration route? If so, explain.

The Tanglewilde Thompson Place 600 water system service area is located within the Pacific Flyway. Identified migratory birds include Bald Eagle, Black Swift, Evening Grosbeak, Lesser Yellowlegs, Olive Sided Flycatcher, Rufous Hummingbird, Short-billed Dowitcher.

d. Proposed measures to preserve or enhance wildlife, if any:

None. The project occurs within existing established rights of way and does not alter or impact wildlife habitat.

e. List any invasive animal species known to be on or near the site.

None identified.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric power will be utilized for lighting, pumps, and electrical equipment in the water treatment building. No significant changes to site energy usage are anticipated.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None specifically included. However, the replacement of the distribution system piping will significantly reduce water loss, conserving groundwater and the energy required to pump and treat drinking water.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minor fuel spills from construction equipment. Removal of minor quantities of existing transite pipe.

- 1) Describe any known or possible contamination at the site from present or past uses. The Washington State Health Department Source Water Assessment Program mapping application identifies several potential contaminant sites in the vicinity, including stormwater structures, underground storage tanks, and automotive repair shops. No impacts to or from these sites is anticipated from water main replacement.
- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Puget Sound Energy provides natural gas service within the area. Thurston PUD is coordinating with Puget Sound Energy for planning and utility locating to avoid conflicts between water and natural gas pipelines.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Minor quantities of existing transite pipe may be removed as part of this project. The treatment system will remove PFAS from groundwater; all PFAS is permanently captured in filter media and not subject to release. The EPA does not require hazardous disposal of spent media.

- Describe special emergency services that might be required.
 None identified.
- 5) Proposed measures to reduce or control environmental health hazards, if any: Fuel spill containment and cleanup kit onsite for duration of construction. Transite pipe will be handled and disposed of per OSHA and EPA requirements.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None identified.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction noise during replacement phase associated with trucks and limited excavation equipment such as small excavators. No noise is associated with the completed project.

3) Proposed measures to reduce or control noise impacts, if any:

Construction work to be generally limited to Monday through Friday between 7 am and 7 pm.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

No impacts due to water main replacement. The proposed water treatment area is to be located in a park, which is adjacent to residential zoning. The treatment building is proposed to be adjacent to other existing water works facilities. No impact to land use or adjacent properties are anticipated.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

All water main construction activities are located in the right of way; no structures have been identified in the right of way. There are several well buildings, a generator building, and controls and chlorination building on the site of the proposed water treatment building, as well as a club house, community pool, gazebo, playground, basketball court, and other various structures.

d. Will any structures be demolished? If so, what?
 No.

e. What is the current zoning classification of the site?

The proposed water treatment building is located on a parcel zoned Open Space Institutional. Water main replacement will take place in the following zoning areas: Low density residential, medium density residential, high density residential, mixed use moderate density, mixed use high density, open space school, open space institutional.

	hat is the current comprehensive plan designation of the site? ty of Lacey urban growth area
_	applicable, what is the current shoreline master program designation of the site? one.
Th	as any part of the site been classified as a critical area by the city or county? If so, specify. nurston County has classified project area as containing category 1 and 2 critical aquifer charge area and groundwater sensitive area. Mazama Pocket Gopher soils.
	proximately how many people would reside or work in the completed project? one.
	proximately how many people would the completed project displace? one.
	oposed measures to avoid or reduce displacement impacts, if any: one.
	posed measures to ensure the proposal is compatible with existing and projected land ses and plans, if any:
	chitectural and landscape design to ensure the proposed structure matches the character of cisting structures in the Tanglewilde Recreation Center.
со	roposed measures to reduce or control impacts to agricultural and forest lands of long-term immercial significance, if any: one.
9. Housir	ng
lo	oproximately how many units would be provided, if any? Indicate whether high, middle, or w-income housing. one.
m	oproximately how many units, if any, would be eliminated? Indicate whether high, iddle, or low-income housing. one.
	oposed measures to reduce or control housing impacts, if any: one.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

35 Feet, cement board or enameled steel siding proposed.

b. What views in the immediate vicinity would be altered or obstructed? None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Paint, architecture, and landscaping to match existing buildings and nearby residences.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No impacts anticipated.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? No.
- c. What existing off-site sources of light or glare may affect your proposal? None identified.
- d. Proposed measures to reduce or control light and glare impacts, if any: None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

 Tanglewilde Recreation Center, playfields and open areas at Nisqually Middle School, Olympic View Elementary School, and Lydia Hawk Elementary School.
- b. Would the proposed project displace any existing recreational uses? If so, describe. No.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: None.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

There are no properties which have been identified as eligible for listing, there are several sites that have not had a determination made. All work will take place in public right of ways or easements and will not impact any existing structures.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
 - None known. An archeological study will be performed for the subject area. Most of the area is mapped in WISAARD as "moderately low risk", though there are areas of both "low risk" and moderate risk". All construction activities are located in existing heavily disturbed areas (existing rights of way or easement).
- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. The area was reviewed using "WISAARD". An archeological study will be performed for the easement area where the treatment building is to be located. DAHP will review the entire project area, and outreach will be conducted to the Chehalis, Puyallup, Nisqually, and Squaxin tribes.
- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. Following an archeological study, an inadvertent discovery plan will be employed, with other further measures as necessary based on study findings. In the event that archaeological materials are encountered during the development of the property, an archaeologist should immediately be notified and work halted in the vicinity of the find until the materials can be inspected and assessed. At that time, the appropriate persons are to be notified of the exact nature and extent of the resource so that measures can be taken to secure them. In the event of inadvertently discovered human remains or indeterminate bones, pursuant to RCW 68.50.645, all work must stop immediately and law enforcement should be contacted. Any remains should be covered and secured against further disturbance, and communication established with local police, the DAHP, and any concerned tribal agencies.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
 The principal arterials in the area are Martin Way E and Pacific Ave. The existing water system facilities where the new water treatment building will be located has existing access from
- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Wildcat Street SE and Husky Way SE.

Transit stops are located along Martin Way E and Pacific Ave. The nearest transit stop to the proposed treatment building is approximately ½ mile.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

This site is un-manned and has existing parking and access; no parking spaces would be created or eliminated by the proposal.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No new streets or roads are planned; some pavement repair work or single lane repaving will be done where excavation for water main replacement is required crossing paved surface. Most water mains are installed in the unpaved shoulder. All streets are public.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No new or increased transportation needs are anticipated as a result of the proposal once construction is completed.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates? No additional trips.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No; the area is primarily residential and will not impact agricultural or forest product transport.

h. Proposed measures to reduce or control transportation impacts, if any:

Only transient transportation impacts during construction are anticipated. Construction is phased, and to the maximum extent possible will only require limited closure of single lanes on short sections of roadway. Construction permits will be obtained from Thurston County Public Works; during construction traffic control plans approved by Thurston County Public Works will be in place.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.
 No. The project will increase available fire flow available in the area and will improve water quality.

Proposed measures to reduce or control direct impacts on public services, if any.
 None necessary.

16. Utilities

a. Circle utilities currently available at the site:

Power (electric); water, phone, cable tv/internet, natural gas.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Thurston PUD is a water utility. The project involves replacement of water mains and treatment facilities. Thurston PUD will employ utility location service and coordination with other utilities present as necessary during water main replacement. It is anticipated that the existing electrical service at the PUD facilities site will be used to serve the new water treatment building.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Name of signee: Doug Piehl, P.E.

Position and Agency/Organization: District Engineer - Thurston PUD

Date Submitted: 6/27/2024

Tanglewilde Thompson Place 600 Water System Service Area

Located in Portions of Sections 10, 11, 14, & 15, T18NR01W, W.M.





Final SEPA Checklist Tanglewilde New Treatment Building and Distribution System Replacement

Final Audit Report 2024-06-21

Created: 2024-06-20

By: Kim Gubbe (kgubbe@thurstonpud.org)

Status: Signed

Transaction ID: CBJCHBCAABAArfZOIALtRpgiV9yayx9poYQfuQjxm1Fn

"Final SEPA Checklist Tanglewilde New Treatment Building and Distribution System Replacement" History

- Document created by Kim Gubbe (kgubbe@thurstonpud.org) 2024-06-20 10:39:47 PM GMT
- Document emailed to Doug Piehl (doug.piehl@thurstonpud.org) for signature 2024-06-20 10:39:52 PM GMT
- Email viewed by Doug Piehl (doug.piehl@thurstonpud.org)
 2024-06-21 1:26:18 PM GMT
- Document e-signed by Doug Piehl (doug.piehl@thurstonpud.org)
 Signature Date: 2024-06-21 1:28:11 PM GMT Time Source: server
- Agreement completed.
 2024-06-21 1:28:11 PM GMT