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Appendix 8: SEPA Checklist

This appendix includes a checklist addressing the State Environmental Protection Act (*SEPA") criteria. The text includes instructions and questions, preserving the format of the list, as well as the project team's responses. Note that figures referenced follow the narrative of the checklist.

PURPOSE OF CHECKLIST:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

INSTRUCTIONS FOR APPLICANTS:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

INSTRUCTIONS FOR LEAD AGENCIES:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

USE OF CHECKLIST FOR NON-PROJECT PROPOSALS:

For non-project proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements -that do not contribute meaningfully to the analysis of the proposal.

WESTERN STATE HOSPITAL MASTER PLAN

A. BACKGROUND

1. *Name of proposed project, if applicable:*

Western State Hospital Master Plan

2. *Name of applicant:*

Department of Social and Health Services

Facilities, Financial, & Analytics Administration – Office of Capital Programs

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

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4. *Date checklist prepared: 20-January-2020 - revised 17-November-2020*5. *Agency requesting checklist: City of Lakewood*6. *Proposed timing or schedule (including phasing, if applicable):*

The major development under this master plan - a new forensic hospital - is projected to begin in approximately 6 years. A residential treatment facility is a potential secondary use and would also be expected in the second half of the ten-year planning horizon of this master plan.

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

No. The Master Plan incorporates the currently proposed additions and expansion to the existing facilities anticipated for the 10-year planning period.

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

- o Natural Resources Evaluation: Western State Hospital Master Plan (PBS 2019*);
- o Subsurface Exploration, Geologic Hazard, Infiltration Study, and Geotechnical Engineering Report, Western State Hospital New Patient Support Center (Associated Earth Sciences, Inc. 2017);
- o Western State Hospital Cultural Landscape Assessment (Artifacts Architectural Consulting 2008)
- o Western State Hospital Cultural Resource Management Plan (Artifacts Architectural Consulting 2011)
- o Traffic Study: Western State Hospital Master Plan (TSI 2020);
- o Utility Review: Western State Hospital Master Plan (AEI 2020)

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.*

No applications are pending for governmental approval of other proposals affecting the WSH Campus.

10. *List any government approvals or permits that will be needed for your proposal, if known.*

The Master Plan is not anticipated to require additional permits or approvals. Individual projects to be constructed as part of the implementation of the Master Plan will require site specific permits. The individual permits may include the following City of Lakewood permits and approvals:

- o Boundary Line Adjustment
- o Building, Electrical, Mechanical and Plumbing permits
- o Clearing and Grading
- o Construction Stormwater General Permit
- o Critical Areas Review
- o Demolition

* PBS Environmental, Natural Resource Evaluation for WSH Master Plan, October, 2019

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- o Drainage Review
- o Land Use Modification
- o Master Facilities Plan Modification
- o Right-of-way
- o SEPA
- o Site Development Permit

The Master Plan does not anticipate impacts to wetlands, waters, habitats, or species that would require additional state or federal permits.

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.)*

Western State Hospital (WSH) provides evaluation and inpatient treatment for individuals with serious or long-term mental illness, including patients referred through their Behavioral Health Organization, the civil court system (when individuals meet the criteria for involuntary treatment under RCW 71.05), or through the criminal justice system (RCW 10.77).

Patient Population, Capacity and Staff Levels

WSH currently provides more than beds 900 for these patients, and the master plan projects that actual beds in use would drop to no more than 865 beds. However, as demolition and conversion plans may not occur immediately after existing beds are vacated, actual bed capacity could at times be higher than projected demand for services.

As detailed in the master plan document, the peak capacity for beds on the campus at any point in the ten-year planning cycle is 963 beds without the Residential Treatment Facility (RTF), or 1,011 if the RTF were to be built. Population-related impacts in this report consider up to this 1,000-bed capacity as the basis of impact analysis.

WSH also employs approximately 2,200 staff members, making it the fourth largest employer in the City of Lakewood.

Planned Development

DSHS is engaged in an ongoing master planning effort for the WSH Campus to: incorporate changing facility needs; address the growth management issues of stakeholders (including Pierce County and the City of Lakewood); and streamline the permitting process for future projects.

The initial master plan for the campus was approved by the City in 1998 and is based on a 10-year planning period. An update to the Master Plan was prepared in 2008, and the latest planning efforts were initiated in 2018.

As part of the current master planning update, DSHS has evaluated several alternatives for layout of the campus, including rehabilitating existing buildings and constructing new facilities. Siting Alternatives for the proposed new forensic hospital were documented in a pre-design study.

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.*

Western State Hospital is located in the City of Lakewood, Washington, see Figure 1. The site abuts the north side of Steilacoom Boulevard SW, extending from 87th Avenue SW on the east to Sentinel Drive on the west. The Campus extends northward from Steilacoom Boulevard SW to Golf course Road SW on the east side to approximately 79th Street SW on the west. The Public Land Survey System location is Sections 33, 43, and 48, Township 20 North, Range 2 East. The campus totals approximately 288 acres, and is composed for four separate tax parcels, described below.

- o The largest parcel (0220321022) is 215.71 acres in size, and includes the frontage of Steilacoom Boulevard SW from 87th Avenue SW westward to Sentinel Drive. This parcel contains most of the developed portions of the campus, as well as Garrison Springs and the associated forested valley slopes.

WESTERN STATE HOSPITAL MASTER PLAN

- o The second parcel (0220321007) is 36.73 acres in size, and extends northward from Garrison Springs. This parcel includes the majority of the Fort Steilacoom Golf Course, now closed.
- o The third parcel (0220283027) is 29.75 acres in size, and is located to the north of Parcel 0220321007. This parcel includes the northern ¼ of the Fort Steilacoom Golf Course, the forested valley slope to the north, and the forested disc golf course area to the east.
- o The last parcel (0220283026) is located at the northeastern-most corner of the site and is 6.15 acres in size. The parcel is also part of the former golf course.

B. ENVIRONMENTAL ELEMENTS

1 EARTH

a. General description of the site:

The Campus is primarily upland terraces with slopes less than 15 percent; with the overall topography sloping gently from the southeast corner to the northwest corner.

Flat, rolling, hilly, steep slopes, mountainous, other

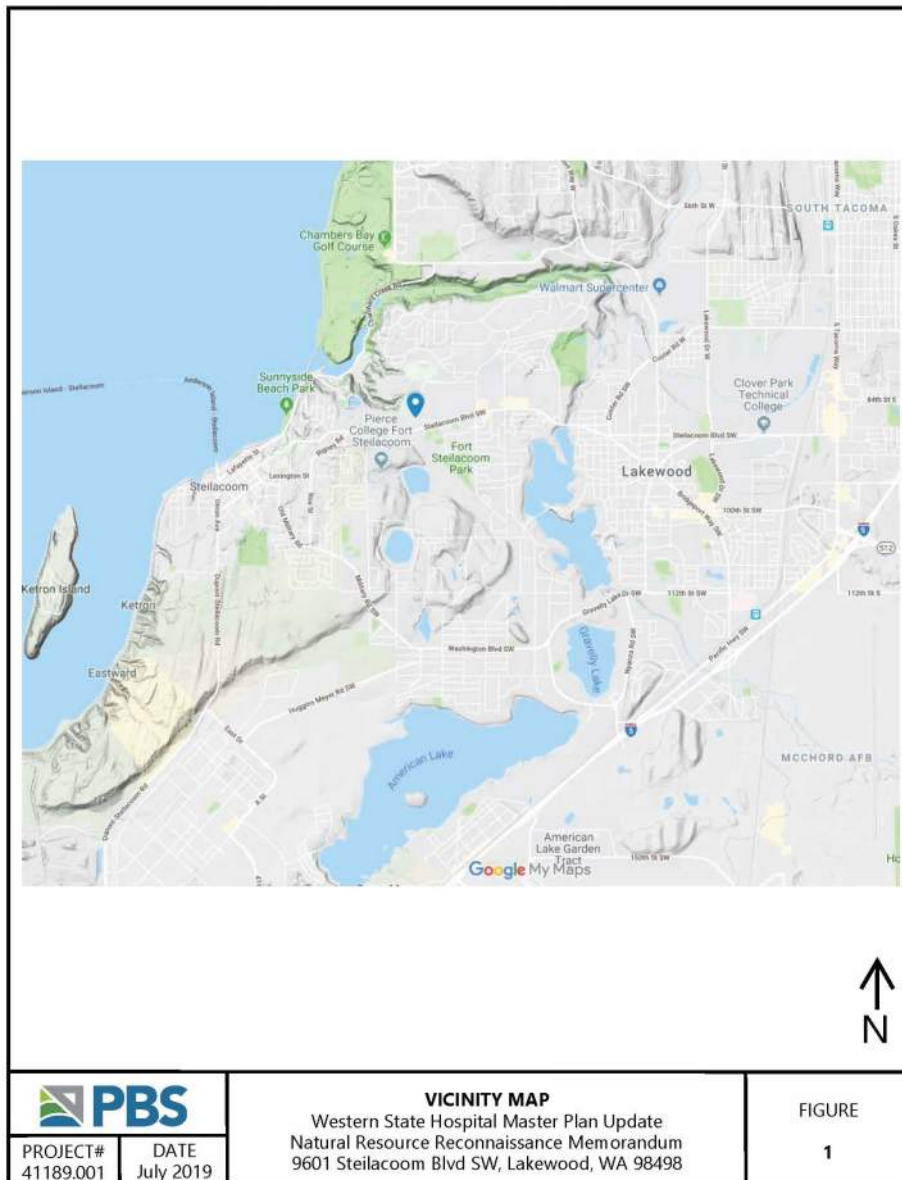
b. What is the steepest slope on the site (approximate percent slope)?

The forested valley slopes to the north and south of the golf course contain slopes of up to 70 percent inclination, with localized sections as steep as 100 percent inclinations (Associated Earth Sciences, Inc. 2017).

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.

Three soil mapping units were identified in the study area: Spanaway gravely sandy loam; Everett very gravely sandy loam; and Xerochrepts (PBS 2019). A summary of the characteristics is provided in Table 1.

Spanaway soils occur at elevations from 200 to 590 feet and are typically used for woodland, pasture, cropland, homesites, and



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Table 1: Soils present in the Study Area*:

Symbol	Map Unit Name	Slope	Landform	Parent Material	Drainage Class	Soils hydric? Hydric inclusions?
41A	Spanaway gravelly sandy loam	0 to 15%	Terraces and plains	Glacial outwash	Somewhat excessively drained	No (15% Spana, Yes)
13D	Everett very gravelly sandy loam	15 to 30%	Outwash terraces and escarpments, kames, moraines, eskers	Glacial outwash	Somewhat excessively drained	No (10% Alderwood, No but may support wetlands in some situations) (10% Indianola, No)
47F	Xerochrepts	45 to 70%	Valley sides	Sandy and gravelly outwash and/or glacial till	Well drained	No

* 1 NRCS, 2019b.

wildlife habitat (NRCS, 2019b). Spanaway gravelly sandy loam is not considered a hydric (wetland) soil by the National Technical Committee for Hydric Soils (NTCHS).

Everett soils occur at elevations from 30 to 900 feet and are typically used for livestock grazing, timber production, and urban development (PBS 2019). Everett very gravelly sandy loam is not considered a hydric soil by the NTCHS, however this soil unit does include slopes of 15 to 30 percent.

Xerochrept soils occur at elevations from 0 to 980 feet on steep valley sides; these soils are not considered hydric soils by NTCHS, however this soil unit does include slopes of 45 to 70 percent.

The Geotechnical Report prepared for a portion of the Campus indicated the area includes fill soils from 2 to 15 feet in depth, likely underlain by recessional outwash, with advance outwash at lower elevation (Associated Earth Sciences, Inc. 2017). This is consistent with the soil mapping described above.

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

Portions of the Garrison Creek valley slope are composed of gravelly soils subject to seepage and meet the City of Lakewood definition for Landslide Hazard Areas (Associated Earth Sciences, Inc. 2017). The valley slope on the north side of the Campus is similarly steep, and is expected to have similar characteristics to the valley slope along Garrison Creek. The Individual projects included in the Master Plan will provide site specific geotechnical studies (if appropriate) and will be designed to avoid steep areas that may contain unstable soils or landslide hazards.

- 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 proposed Master Plan is a planning level document, and as a result does not include the level of detail necessary to calculate filling,

excavation, or grading quantities. The individual projects will calculate grading quantities and disturbance areas on a site by site basis. Any fill used on the Campus will be consist of clean fill material obtained for approved sources.

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

No erosion would occur from ongoing use of the campus or as a result of the approval of the Master Plan. Individual projects in the Master Plan are expected to result in clearing, excavating, and grading that will expose soils and have the potential to result in erosion.

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

The Master Plan will not result in change in impervious surfaces at the WSH Campus. Full implementation of the individual projects in the Master Plan will result in a change of impervious surface from 18.9% percent to 19.6 percent with the new hospital and western parking; this would increase to 20.6 percent if the potential Residential Treatment Facility (RTF) and adjacent parking were built.

- h. *Proposed measures to reduce or control erosion, or other impacts to the earth, if any:*

The individual projects within the Master Plan will include site-specific Construction Storm Water Pollution Prevention (CSWPP) and Temporary Erosion and Sediment Control (TESC) Plans. These plans will incorporate Best Management Practices such as the establishment of stable construction entrances, placement of sediment fences, installation of control measures to cover exposed earth, use of wattles and checkdams, ongoing monitoring of stormwater runoff, etc. The project Contractor will adopt those plans and will to execute and amend the plan as necessary. The implementation of robust CSWPPP and TESC plans is anticipated to successfully control the potential for erosion and ensure compliance with Department of Ecology Construction Stormwater regulations.

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.*

Implementation of the individual projects in the Master Plan would result in construction related emissions. Anticipated emission sources would include use of construction equipment, dust from excavation and grading, and chemical odors from asphalt paving operations. These construction-related emissions are expected to be temporary in nature, and of short-term in duration. We anticipate that any operational increase in emission from vehicles using the Campus after project completion will be negligible.

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

None.

- c. *Proposed measures to reduce or control emissions or other impacts to air, if any:*

Mitigation would include reasonable precautions to avoid fugitive dust emissions, including application of water or dust-binding chemicals to bare soils during dry weather, street and vehicle cleaning to prevent mud, dirt and other debris on paved roadways and planting of paving areas that would be exposed for prolonged periods of time. Construction equipment would be maintained in good repair. After project completion, vehicular traffic is not expected to significantly increase.

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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.

Yes – two wetlands and two streams were identified on or in close proximity to the campus. Details of these surface waters are provided below.

Wetlands

Two wetlands (GS South and GS North) were identified within or in the immediate vicinity of the project area. Table 2 describes these wetlands, and summarizes the Cowardin classification, hydrogeomorphic class, and preliminary rating and buffer width per LMC 14.162.080.

Wetlands GS North and GS South are slope wetlands associated with the Garrison Springs riparian corridor. Numerous areas of seepage were observed on the valley walls upslope of the stream during the site visit, and these areas were dominated by wetland plant species. Preliminary wetland ratings were completed with the 2014

Washington State Wetland Rating System for Western Washington, consistent with LMC 14.162.030. Both wetlands fall on the margin of the Category II/III. Buffers for wetland with these ratings range from 60-225 feet, depending on the habitat score.

Table 3: Potential Streams present at the Site and Preliminary Ratings

Stream	Flows to	Preliminary Stream Rating*	Preliminary Buffer Width†
Garrison Springs	Chambers Creek	Perennial, Fish-bearing (Type F)	65-150
Unnamed Tributary to Chambers Creek	Chambers Creek	Perennial, Fish-bearing (Type F)	65-150

* Water typing based on definition per 14.165.010

† Local stream ratings and buffer widths are based on Lakewood's Shoreline Master Program (SMP) Chapter 4 Section C.

Table 2: Potential Wetlands Present at the Site with Preliminary Ratings and Buffers

Wetland	Wetland HGM Class*	Cowardin Classification†	Dominant Species Observed	Wetland Hydrology Indicators Observed	Preliminary Wetland Rating‡§	Preliminary Buffer Width
GS South	Slope	Palustrine Forested (PFO)	Red alder, salmonberry, Himalayan blackberry, lady fern, giant horsetail, and English ivy	Saturation at the surface, shallow inundation/surface flows	II/III	60-225
GS North	Slope	Palustrine Forested (PFO)	Red alder, salmonberry, Himalayan blackberry, lady fern, giant horsetail, small-fruited bulrush, and English ivy	Saturation at the surface, shallow inundation/surface flows	II/III	60-225

* Hydrogeomorphic classification after Hruby (2014).

† Cowardin classification after Cowardin et al. (1979).

‡ Preliminary rating based on Washington State Wetland Rating System for Western Washington (Hruby, 2014).

§ Local wetland ratings and buffer widths are based on City of Lakewood Municipal Code (LMC) Title 14 – Environmental Protection (LMC 14.162).

Streams

Two streams were identified within the Study Area: Garrison Springs and an Unnamed Tributary to Chambers Creek. A summary of the characteristics of these streams and preliminary stream rating and buffer widths are provided in Table 3.

Garrison Springs/Garrison Creek is located in the central west portion of the WSH Campus. Garrison Springs, is a perennial stream, originating from seeps on the steep slopes on the western portion of the Campus and flowing northwest to the Garrison Springs Hatchery and the Chambers Creek Estuary on Puget Sound. Garrison Springs is approximately 5-15 feet wide at the ordinary high water mark and appeared to be channelized adjacent to the access road which provides access to the hatchery.

Current habitat in the stream is predominantly riffle and run type. Pools are largely limited to the areas above man-made structures on the stream. The stream substrate is primarily gravels with some fines, and the banks are somewhat incised. Mixed forest canopy and forested slope wetlands provided 100 percent canopy coverage, except where interrupted by the hatchery access road. The stream flows beneath Chambers Creek Road, entering Chambers Creek through a concrete box outfall with a steel rack that limits access.

The unnamed stream is a tributary to Chambers Creek and is located beyond the Campus northern property line. As a result, most of the stream could not be evaluated during the site assessment. However, water could be heard flowing the deep, steep sided valley located to the north of the Fort Steilacoom Golf Course.

The lower reach of this stream appears to be piped beneath the abandoned industrial facility at Chambers Creek Road. Several seeps areas were also identified in this area, and a concrete pipe outfall was located on the estuary of Chambers Creek, which likely represents the terminus of this stream. Flows were present at the outfall in July 2019, indicating that flows in this stream are likely perennial. Aerial imagery shows a densely vegetated, mixed forest riparian canopy in the riparian area, extending from the disc golf area northwest to Chambers Creek Road.

Individual Master Plan projects that require State or federal funding or permits will be required to assess the presence of wetlands and

streams prior to funding or permit approval. More detailed field studies would be conducted at this time.

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 work is proposed in or over waters. Some individual projects on the Campus may be constructed within 200 feet of Garrison Creek or associated wetlands.

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 work is proposed within a 100-year floodplains.

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 waste material would be discharged to surface waters.

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 WSH Campus currently uses water from wells located in Garrison Springs. The Master Plan anticipates that in future, the WSH Campus

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will transfer control of these wells to the Lakewood Water District, and future water needs at the Campus will be supplied by the District.

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.

No waste material will be discharged into the ground water. Waste from the WSH Campus includes domestic sewage and hospital waste, and the currently served population includes approximately 900 patients and 2,800 employees. The WSH Campus waste needs are currently provided by the Town of Steilacoom Sewer Utility.

Under the proposed Master Plan, the type of waste would not change. The served population would include approximately 865 patients - with a maximum capacity of approximately 1,000 beds[†] - and 2,700 employees. The WSH Campus waste needs would continue to be provided by the Town of Steilacoom Sewer Utility, which has sufficient capacity for the proposed increases.

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.

Anticipated sources of stormwater runoff on the Campus include building roofs, surface parking lots, and internal roadways. Runoff will be collected and disposed of on-site using a combination of pervious pavements, porous concrete, bioretention cells, and roof drain infiltration galleries. All stormwater runoff will be managed and infiltrated on-site.

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is unlikely that waste material would enter ground or surface waters. Waste material from project construction would be removed from the site and treated appropriately. Any toxic substances such as fuel,

lubricants, hydraulic fluids, paint, solvents, and cleaning materials will be isolated from water on the site and disposed of at an appropriate off-site facility. Operation sewage waste be will be collected and piped off-site for treatment at Town of Steilacoom Sewer Utility facilities, and hospital waste will be removed from the site and properly disposed of at an approved facility. Construction related and operational stormwater will be conveyed to treatment facilities on-site.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Site drainage proposed in the Master Plan designed to follow the existing site drainage basins and is not expected to alter on-site drainage patterns.

d. *Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:*

The Master Plan anticipates that stormwater from the Campus will be infiltrated on site to minimize the impact on drainage patterns.

[†] See "Patient Population, Capacity and Staff Levels" on page A8-3

4. PLANTS

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

- ☒ deciduous tree: alder, maple, aspen, other
☒ evergreen tree: fir, cedar, pine, other
☒ shrubs
☒ grass
☐ pasture
☐ crop or grain
☐ Orchards, vineyards or other permanent crops.
☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
☐ water plants: water lily, eelgrass, milfoil, other
☐ other types of vegetation

The majority of the campus is developed, and vegetation in these areas consists of maintained lawn area with landscape trees. Species present in this area include:

- o common domestic grasses (bent grasses [*Agrostis sp.*], bluegrasses [*Poa sp.*], fescues [*Festuca sp.*], and rye grasses [*Lolium sp.*])
- o disturbance tolerant forbs (e.g. common dandelion [*Taraxicum officinale*], hairy cat's ear [*Hypochaeris radicata*], sheep sorrel [*Rumex acetosella*], etc.),
- o landscape trees (domestic cherry and flowering plums [*Prunus sp.*], European horse-chestnut [*Aesculus hippocastanum*], Norway maple [*Acer platanoides*], and Tree-of-Heaven [*Alianthus altissima*]),
- o scattered native trees (Douglas fir [*Pseudotsuga menziesii*], Sitka spruce [*Picea sitchensis*], and copses of Oregon white oak (*Quercus garryana*).

The Fort Steilacoom Golf Course is located the northwest corner of the property, and is also maintained as grass, with scattered native coniferous trees and Oregon White Oak.

The disc golf area (NW) has a similar canopy to the golf course. In the open areas, the shrub community is dominated by Scot's broom (*Cytissus scoparius*).

Table 4: Native Plants on the WSH Campus

Stratum	Common Name (Scientific Name)
Tree	Bigleaf maple (<i>Acer macrophyllum</i>) Oregon white oak (<i>Quercus garryana</i>) Red alder (<i>Alnus rubra</i>)
Shrub	California dewberry (<i>Rubus ursinus</i>) Dull Oregon grape (<i>Berberis nervosa</i>) Oceanspray (<i>Holodiscus discolor</i>) Salmonberry (<i>Rubus spectabilis</i>) Snowberry (<i>Symphicarpos albus</i>) Vine maple (<i>Acer circinatum</i>)
Herbaceous	Giant horsetail (<i>Equisetum telmateia</i>) Orchard grass (<i>Dactylis glomerata</i>) Sword fern, or Pineland sword fern (<i>Polystichum munitum</i>) Western lady fern (<i>Athyrium cyclosorum</i>)

In areas where the canopy is denser, the dominant shrub species include California dewberry (*Rubus ursinus*), dull Oregon grape (*Berberis nervosa*), evergreen blackberry (*Rubus laciniatus*), Himalayan blackberry (*Rubus armeniacus*), and snowberry (*Symphicarpos albus*).

In the two ravine areas, the vegetation consists of a mixture of native and non-native species. The dominant species present include:

- o red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) in the canopy, and

Table 5: Native Plants on the WSH Campus

Common Name	Scientific Name	Federal ESA Listing Status	Critical Habitat Designated?
Golden Paintbrush	<i>Castilleja levisecta</i>	Threatened	No
Marsh Sandwort	<i>Arenaria paludicola</i>	Endangered	No
Water Howellia	<i>Howellia aquatilis</i>	Threatened	No

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- o California dewberry (*Rubus ursinus*), dull Oregon grape, evergreen blackberry, Himalayan blackberry, oceanspray (*Holodiscus discolor*), salmonberry (*Rubus spectabilis*), snowberry, and vine maple (*Acer circinatum*).

Dominant herbaceous species present include giant horsetail (*Equisetum telmateia*), orchard grass (*Dactylis glomerata*), reed cararygrass (*Phalaris arundinacea*), Pineland sword fern (*Polystichum munitum*), and western lady fern (*Athyrium cyclosorum*).

Mapping from the WDNR Natural Resources Heritage Program identifies a single native plant community as present on or near the WSH Campus. This plant community is Oregon white oak dominated or co-dominated canopies. This community occurs in four locations on the Western State Hospital Campus: two on the eastern end of the Fort Steilacoom Golf Course near Garrison Springs, and two to the east one either side of Kids First Lane.

Table 4 presents a list of the native trees, shrubs, and herbaceous species identified on the WSH Campus during the field evaluation.

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

Projects considered in the Master Plan are concentrated in the developed portions of the Campus. Specific areas of vegetation removal would be determined for each of the individual projects, but the total affected areas are:

- o approximately 3 acres of miscellaneous lawns and landscaping in the area of the new forensic hospital

- o approximately 4 acres for the potential Residential Treatment Facility, which is mostly vegetated, but also include 2 cottages to be removed
- o approximately 2/3 acre for the cottage at the CSTC complex
- o approximately 1/3 acre for the Treatment and Recreational Facility at CSTC

The affected vegetation will include grasses and forbs in the landscaped lawn areas (bent grass, bluegrass, fescue, rye grass, common dandelion, hairy cat's ear, sheep sorrel, etc.), and landscape trees (domestic cherry and flowering plums, European horse-chestnut, Norway maple, and Tree-of-Heaven). Native tree than may be affected include Douglas fir, Sitka spruce, and Oregon white oak.

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

Endangered Species Act Listed Plants

A review of information from the USFWS IPaC database (Appendix A) identified three federally threatened or endangered plant species as potentially present in the vicinity of the project. These species are listed in Table 5.

Golden paintbrush is listed as Threatened under the ESA and is found in native northwest grasslands. There are no current or historic populations in Pierce County. Marsh sandwort is listed as Endangered under the ESA. This species is found in swamps, wetlands, and freshwater marshes along the coast. In western Washington, water howellia occurs in low-elevation wetlands and small vernal pools (PBS, 2019).

The field reconnaissance did not identify any individuals of golden paintbrush, marsh sandwort or water howellia on the WSH campus. However, the protocols for identification of ESA plants require multiple field visits conducted over several years and timed to match the emergence/flowering of the target species.

Individual projects in the Master Plan will conduct more comprehensive field studies to determine the presence or absence of ESA listed plants as appropriate.

Rare and Sensitive Plant Species

The WDNR Natural Resources Heritage Program website identifies three rare or sensitive species as potentially present on or near the

Table 6: Rare and Sensitive Plant Species

Common Name	Scientific Name	Historic or Current presence?	Washington State Status	Potential habitat present?
White-top aster	<i>Seriocarpus rigidus</i>	Current	Sensitive	Yes
Common bluecup	<i>Githopsis specularioides</i>	Historic	Sensitive	Possible
Giant chain fern	<i>Woodwardia fimbriata</i>	Historic	Sensitive	Yes

WSH Campus. Characteristics of these species are described listed in Table 6.

White-top aster is found in relatively flat, open grasslands of lowlands in gravelly, glacial outwash soils (WDNR, 2019c). White-top aster is mapped as occurring in the northeast corner of the WSH Campus and has been identified by WDNR as present on the WSH Campus as recently as August 13, 2010 (PBS 2019).

Common bluecup is historically found in the vicinity of the WSH Campus. This species is found in dry, open places in lowlands, such as grassy balds, talus slopes, and gravelly prairies. There are no recent observations of common bluecup in Pierce County, and none of the habitats that support this species are present on the Campus.

Giant chain fern is historically found in the vicinity of the WSH Campus. This species is found in stream banks, shaded wet road banks, the edges of bogs, and wet bluffs amongst coniferous trees and adjacent to saltwater. Similar habitats are present on the Western State Hospital Campus and nearby.

The field reconnaissance did not identify any individuals of White-top aster, common bluecup, or giant chain fern. However, the protocols for identification of rare and sensitive species may require multiple field visits timed to match the emergence/flowering of the target species. Considering the relatively recent identification of white-top aster (August 2010), this species should be presumed to be present.

Individual projects in the Master Plan will conduct more comprehensive field studies for the presence of rare and sensitive plant species.

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

The master plan includes recommendations to reduce impacts on protecting species such as the White Oak. Areas of cultivated landscape will generally be near building entries and within courtyards used for recreation. Open areas of the site will be maintained as open space, with minimal disturbance. e. *List all noxious weeds and invasive species known to be on or near the site.*

No Class A noxious weeds were identified on the WSH Campus during the field investigation. Scattered knapweed specimens were present on the site, but were not positively identified as *C. biebersteinii*, and a number of Class B and C noxious weeds were identified on

the Campus. A summary of the noxious weeds and invasive species known to be on or near the site is presented in Table 7.

Individual projects in the Master Plan will meet Pierce County and City of Lakewood regulations for control of noxious and invasive weeds.

Table 7: Noxious, Invasive, and Non-Native Plants

Common Name	Scientific Name
Class A Noxious Weed	<i>Scattered knapweed specimens were present on the site, but were not positively identified as C. biebersteinii.</i>
Class B Noxious Weed	<i>Scot's broom (Cytissus scoparius)*</i>
Class C Noxious Weed	<i>English ivy (Hedera helix)</i> <i>Evergreen blackberry (Rubus laciniatus)*</i> <i>Hairy cat's ear (Hypochaeris radicata)</i> <i>Himalayan blackberry (Rubus armeniacus)*</i> <i>Reed canarygrass (Phalaris arundinacea) *</i> <i>Tree of Heaven (Ailanthus altissima)</i>
Non-regulated, non-native species	<i>Bentgrasses (Agrostis sp.)</i> <i>Bluegrass (Poa sp.)</i> <i>Cherry (likely cultivar varieties of the genus Prunus)</i> <i>Common sheep sorrel (Rumex acetosella)</i> <i>Eastern redcedar (Juniperus virginiana)</i> <i>European horse-chestnut (Aesculus hippocastanum)</i> <i>Fescue grasses (Festuca sp.)</i> <i>Flowering plum (varieties of the genus Prunus)</i> <i>Lanceleaf plantain (Plantago lanceolata)</i> <i>Norway Maple (Acer platanoides)</i>

* Non-regulated noxious weed per Pierce County Noxious Weed Control Board.

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5. ANIMALS

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

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other

The only positive wildlife identifications during the field evaluation were woodpeckers (identified by their sound), squirrels (likely eastern gray squirrel [*Sciurus carolinensis*] or eastern fox squirrel [*Sciurus niger*]), and American crow (*Corvus brachyrhynchos*).

However, considering the large size of the site and the presence of relatively undisturbed riparian areas in close proximity to Puget

Sound, we would anticipate a variety of wildlife species that are adapted to proximity with suburban human populations, such as rats, mice, voles and similar rodents; North American raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), and passerine bird species.

Deer (*Odocoileus sp.*) and coyote (*Canis latrans*) and were not observed on the Campus, but are likely present due the proximity of the riparian habitats on and near the Campus to Chambers Creek estuary, which supports a variety of fish and wildlife species. A brief reconnaissance of the estuary area positively identified deer, great blue heron (*Ardea herodias*), and bald eagle (*Haliaeetus leucocephalus*).

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

Table 8: Federal and State-Listed Habitats and Species

Common Name	Scientific Name	Status	Critical Habitat Designated?
Puget Sound Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Federally Threatened	Yes
Puget Sound Steelhead	<i>O. mykiss</i>	Federally Threatened	Yes
Puget Sound-Coastal Bull Trout	<i>Salvelinus confluentus</i>	Federally Threatened	Yes
Gray wolf	<i>Canis lupus</i>	Federally Endangered (Proposed)	No
Marbled murrelet	<i>Brachyramphus marmoratus</i>	Federally Threatened	Yes
Streaked horned lark	<i>Eremophila alpestris strigata</i>	Federally Threatened	Yes
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Federally Threatened	Proposed
Oregon spotted frog	<i>Rana pretiosa</i>	Federally Threatened	Yes
Biodiversity area	N/A	State Priority Habitat	N/A
Little brown bat	<i>Myotis lucifugus</i>	State Priority Species	N/A
Slender-billed white-breasted nuthatch	<i>Sitta carolinensis aculeata</i>	State Candidate Species	N/A
Western Pond Turtle	<i>Actinemys marmorata</i>	State Endangered	N/A

Federal and State-Listed Habitats and Species

The USFWS IPaC website (Appendix A), NOAA Fisheries ESA listings, and WDFW PHS data identify several federally and state threatened or endangered species, as well as priority habitats and species in the vicinity of the project. The results are presented in Table 8.

Salmonscape and StreamNet were also reviewed for presence of anadromous fish, but no habitat was identified in either database.

Suburban developed areas in the Puget Sound do not provide suitable, usable habitat for large terrestrial predators such as Gray wolf or North American Wolverine. Oregon spotted frog requires relatively large areas of emergent wetland that are not present on the Campus.

Table 9: Migratory Bird Species

Common Name	Scientific Name	Breeding Season*
Bald Eagle	<i>Haliaeetus leucocephalus</i>	January 1 – September 30
Black Turnstone	<i>Arenaria melanocephala</i>	Breeds elsewhere†
Great Blue Heron	<i>Ardea herodias fannini</i>	March – August 15
Lesser Yellowlegs	<i>Tringa flavipes</i>	Breeds elsewhere‡
Marbled Godwit	<i>Limosa fedoa</i>	Breeds elsewhere§
Olive-sided Flycatcher	<i>Contopus cooperi</i>	May 20 – August 31
Red-throated Loon	<i>Gavia stellate</i>	Breeds elsewhere¶
Rufous Hummingbird	<i>Selasphorus rufus</i>	April 15 – July 15
Western Screech-owl	<i>Megascops kennicottii kennicottii</i>	March 1 – June 30

- * Noted by USFWS to be a liberal estimate of breeding season
† Indicates the species does not likely breed within project area
‡ *ibid*
§ *ibid*
¶ *ibid*

Exposed gravel areas to the site could provide potential habitat for streaked horned lark, but the frequency of disturbance on the Campus makes nesting by this species unlikely. Nearby marine areas could potentially provide foraging habitat for marbled murrelet. Habitat suitable for use by yellow-billed cuckoo includes large tracts of riparian habitat with small trees and shrubs suitable for nesting. Some areas of similar riparian habitat are present on the Campus and nearby. Future projects should assume that streaked horned lark, marbled murrelet, yellow-billed cuckoo or suitable habitats may be present and should conduct more detailed studies.

Streams on the Campus and nearby have long culverted sections or other man-made barriers that preclude use by listed anadromous ESA listed fish species (Chinook salmon, steelhead, and bull trout). However, these species are present in Puget Sound and likely use the nearby areas of Chambers Creek. As a result, future projects should assume the potential for impact to these species.

The riparian areas along Garrison Springs and the unnamed tributary to Chambers Creek meet the definition of biodiversity areas and would be protected as critical areas. Similarly, habitats for little brown bat, slender-billed white-breasted nuthatch (mapped on the site) western pond turtle (mapped in the vicinity) would also need to be considered by future projects.

Migratory Bird Act and the Bald and Golden Eagle Protection Act

The USFWS IPaC website (See PBS 2019) identified several species protected under the Migratory Bird Act as potentially present in the vicinity of the Campus. These species are listed in Table 9.

Potential impacts to these migratory birds during their breeding season would need to be considered by future projects.

Individual Master Plan projects at the Campus should conduct site specific field studies to identify ESA listed, priority, and critical species and habitats in the immediate project vicinity.

Critical Fish and Wildlife Species and Habitats

LMC 14.154.020 identifies a list of 11 critical fish and wildlife species and habitats, five of which occur on or near the Campus. Table 10 provides details on these critical fish and wildlife species and habitats present at the WSH Campus.

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

Yes. The site is part of the Pacific Flyway for migratory birds. Fish species may also use the downstream portions of the streams may provide habitat for migratory fish species.

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

The proposed WSH Master Plan retains approximately 48 acres of wildlife habitat in its current condition. The preserved habitat includes Oregon White Oak habitat (much of which is currently used for active and passive recreation), wetlands, streams, and riparian areas on or abutting the campus.

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

No invasive animals are known to be present on the WSH Campus.

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.*

Electricity, natural gas, gasoline and diesel fuel will be used to power construction equipment.

Individual projects are expected to use electricity (provided by Tacoma Power) to provide power to the building's electrical components and natural gas (provided by Puget Sound Energy) for heating buildings or water on the campus.

Currently many campus facilities are heated by steam from a central boiler room, with boilers fueled by natural gas. The plan recommends further study to develop strategies to reduce reliance on natural gas, in response to the State's Net Zero policy.

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

No. There is significant open space around the site that no built features will shade neighboring properties. Within the site, development density will allow future facilities to have building-integrated or ground-mounted photovoltaic facilities and effective solar orientation.

- 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:

Individual projects implemented as part of the Master Plan will include energy modeling and mechanical LEED services.

Table 10: Critical Fish and Wildlife Species and Habitats

Habitats and Species of Local Importance	Description
Priority Oregon white oak woodlands	WDNR identifies four patches of either oak-dominant forest or woodland canopy, or urban oak canopy (Figure 5). The four patches (32.61 ac. total) were identified in the northern half of the property.
Snag-rich areas	Snag-rich areas are likely to occur in the stream riparian areas.
Rivers and streams with critical fisheries	Rivers and streams with critical fisheries on or near the Campus.
Waters of the state, including all water bodies classified by the Washington Department of Natural Resources (DNR) water typing classification system as detailed in WAC 222-16-030, together with associated riparian areas	WDNR Forest Practices Application Mapping Tool identifies Garrison Springs and the unnamed tributary to Chambers Creek within the Study Area (
Lakes, ponds, streams, and rivers planted with game fish by a governmental entity or tribal entity.	Garrison Springs Hatchery may meet the requirements of this habitat of local importance, the hatchery is run by WDFW (WDFW, 2019b).

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.*

1) *Describe any known or possible contamination at the site from present or past uses.*

A campus-wide study for environmental health hazards has not yet been completed, however the site is known to be within the boundaries of the Tacoma Smelter Plume.

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.*

None were identified.

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.*

Transportation fuel for construction equipment will be used and may be stored on site during construction in compliance with State regulations for proper equipment storage. Other toxic chemicals that may be required for construction (such as pesticides, herbicides, fertilizers, etc.) will be stored and used in accordance with all federal, state and local regulations.

4) *Describe special emergency services that might be required.*

No special emergency services are anticipated to be required for the Master Plan or the individual projects implemented under the Master Plan. A safety plan which will include emergency spill responses in compliance with State regulations will be provided. The completed project will be served by typical public emergency services.

5) *Proposed measures to reduce or control environmental health hazards, if any:*

Master Plan projects will conduct soil sampling for arsenic and lead following the 2012 Tacoma Smelter Plume Guidance. Subsequent actions in response to testing results will comply with the Model

Toxics Control Act (MTCA) cleanup requirements in (Chapter 173-340 WAC).

Site designs for the individual projects will include protective measures to isolate or remove contaminated soils from public spaces, yards, and children's play areas, and any contaminated soils will be managed and disposed of in accordance with state and local regulations, including the Solid Waste Handling Standards regulation (Chapter 173-350 WAC).

Site specific studies will also be completed to determine the presence of any other contaminants at Master Plan project sites.

- b. *Noise*

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

Land uses surrounding the WSH Campus are primarily residential and park/public open space. As a result, existing noise in the vicinity is largely the result of traffic on the roads in the immediate vicinity.

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.*

Short-term noise would result from the use of construction equipment such as trucks, machinery and excavation activities during daylight hours. Long-term operational noise is limited to vehicular traffic using the parking lot and access roads. Use of the parking lots and access roads would occur primarily during daylight hours and at shift changes.

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

Construction will only occur during daylight hours to minimize the impact of short term noise disturbances. Long-term noise disturbances will be minimized in compliance with local noise ordinances.

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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.*

The WSH Campus is currently used as a hospital facility and provides mental healthcare services for patients in western Washington State. The campus includes the Hospital facilities, support facilities for the healthcare facilities, and open space.

The proposed Master Plan will not change the use of the facility, and the proposed Master Plan incorporates a more compact facility footprint to allow for greater security. As a result, the proposed Master Plan and the subsequent project are not expected to alter the land uses on nearby properties.

The hospital is an Essential Public Facility as defined by the State, and is being developed on land zoned for this type of use.

- 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 non-farm or non-forest use?*

While there was some production gardening by patients of the hospital in its early history, the WSH Campus has not been used as working farmland or working forest land for over 40 years.

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, the project will not affect or be affected by surrounding working farm or forest lands.

- c. *Describe any structures on the site.*

There are approximately 60 buildings on the site, built up over more than a century, and totaling approximately 1,435,000 SF. These are detailed in Table 3 and Figures 11 and 12 (pp. 1-17) of the Master Plan document.

- d. *Will any structures be demolished? If so, what?*

Yes, several outmoded structures are proposed for demolition, totaling up to 150,000 SF. These are described in the report and summarized in Figure 17 of the Master Plan document.

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

The WSH Campus is currently zoned Public Institutional and Open Space/Recreation (1) by the City of Lakewood.

- f. *What is the current comprehensive plan designation of the site?*

The current comprehensive plan designation of the Campus includes Public Institutional and Open Space designations.

- g. *If applicable, what is the current shoreline master program designation of the site?*

Not applicable; project site is not located within 200 feet of a shoreline.

- h. *Has any part of the site been classified as a critical area by the city or county? If so, specify.*

Yes, portions of the WSH Campus and the abutting lands includes areas designated as geologically hazardous areas (erosion hazard and/or landslide hazard areas), critical aquifer recharge area, wetlands, and streams (Garrison Creek and a second unnamed stream located immediately to the north of the Campus). The Campus also includes several habitats and species of local importance (Priority Oregon white oak woodlands, Snag-rich areas, rivers and streams with critical fisheries, waters of the state together with associated riparian areas, and Lakes, ponds, streams, and rivers planted with game fish by a governmental entity or tribal entity).

- i. *Approximately how many people would reside or work in the completed project?*

The health-care facilities are projected to serve 865 patients- and a maximum capacity of up 1,000 beds[‡] - as well as a staff of approximately 2,700.

[‡] See "Patient Population, Capacity and Staff Levels" on page A8-3 for explanation of population and capacity.

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- j. *Approximately how many people would the completed project displace?*

Approval of the Master Plan and construction of the individual projects will not result in displacement.

- k. *Proposed measures to avoid or reduce displacement impacts, if any:*

None proposed. The Master Plan and construction of the individual projects will not result in displacement.

- l. *Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:*

The Master Plan helps establish a more compact layout for the major facility on the WSH campus. In combination with the other revisions to the Master Plan, the facility siting will support:

- o Improved security for patients and neighbors, with fewer patients circulating between buildings;
- o Preservation of open space on the Campus;
- o Improved traffic flow;
- o More efficient utility supply, and;
- o Improved accessibility.

- m. *Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:*

None proposed. The Master Plan and construction of the individual projects will not result in impacts to agricultural and forest lands.

9. HOUSING

- a. *Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.*

While residential accommodations are provided for patients in treatment these accommodations are not considered general housing.

- b. *Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.*

None.

- c. *Proposed measures to reduce or control housing impacts, if any:*

None proposed. The Master Plan and construction of the individual projects will not result in housing impacts.

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?*

The new hospital is expected to be three stories in height, with a maximum of five stories. It would be of comparable height to existing buildings on the site.

- b. *What views in the immediate vicinity would be altered or obstructed?*

The primary buildings will be on a site area that is previously developed. Existing views are not expected to be altered significantly.

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

The design intent will include massing the building to create courtyards and other features that will benefit patients and reduce the apparent scale of the facility.

11. LIGHT AND GLARE

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

The proposed Master Plan improvements will include interior and exterior lighting fixtures attached to the building and in parking areas. Interior lighting would be on during all hours of the day, and exterior building lights, roadway and parking lot lighting would be on during evening, night and early morning hours for safety.

- b. *Could light or glare from the finished project be a safety hazard or interfere with views?*

Light from the proposed Master Plan improvements is not expected to be a safety hazard or interfere with views.

- c. *What existing off-site sources of light or glare may affect your proposal?*

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Off-site sources of light or glare may result from adjacent street and traffic lighting; these sources are not expected may affect the WSH Campus or facilities.

- d. *Proposed measures to reduce or control light and glare impacts, if any:*

Light from the proposed Master Plan improvements will be directed at pedestrian walkways, parking lots, and access roads to minimize the effects of light and glare on nearby uses and wildlife.

12. RECREATION

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

The Campus and publicly accessible properties on the vicinity provide a variety of active and passive recreational opportunities including baseball, bicycling, bird watching, disc golf, running, and walking.

These recreation opportunities are available on Campus at the former ballfields and Fort Steilacoom Golf Course (accessible during daylight hours from 87th Avenue SW), and off-site at Fort Steilacoom Park (south of Steilacoom Boulevard SW) and the Chambers Creek Canyon Park (north of the Campus).

- b. *Would the proposed project displace any existing recreational uses? If so, describe.*

The proposed Master Plan improvements are not expected to have permanent impacts to off-campus recreational uses would preserve the existing open space at the former Fort Steilacoom Golf Course and nearby areas currently used for disc golf. Construction of the individual projects in the Master Plan may result in temporary and short-term changes to site access to preserve the safety of recreational users and construction crews.

- c. *Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:*

Access changes resulting from the proposed Master Plan improvements will be minimized to the maximum extend possible while maintaining the safety of recreational users and workers at the Campus.

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.*

The WSH site presents a complex layering of historic functions with an extensive set of prehistoric, historic, and non-historic features (including archaeological sites, buildings, structures, objects, landscape elements, etc.) spread across the vast expanse of an 882-acre site. These activities encompass a broad time period from aboriginal use, Hudson Bay and early exploration by the 1830s, settlement by the 1840s, Fort Steilacoom by 1849, and hospital and institutional farm uses by 1871 (Artifacts Architectural Consulting, 2008).

Portions of the Campus area listed to the National Register of Historic Places (NRHP) and Washington Heritage Register (WHR) as the Fort Steilacoom Historic District on November 25, 1977. The NRHP listing was amended on December 16, 1991.

Culturally significant feature identified at the site include two prehistoric sites, Fort Steilacoom, associated cemeteries, 36 extant buildings dating from the period from the 1850's to the 1960's, and 17 additional structures including monuments and accessory buildings.

These buildings and structures are described in detail in the Western State Hospital Cultural Landscape Assessment (Artifacts Architectural Consulting 2008).

- 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.*

Yes. Two prehistoric sites and three historic cemeteries (military, settler, and hospital) are present in the area. Additional detail is provided in the Western State Hospital Cultural Landscape Assessment (Artifacts Architectural Consulting 2008).

- c. *Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include*

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consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

WSH has retained archaeological and cultural resource specialist to prepare documents to document the archaeological and cultural history of the WSH Campus and vicinity. Documents prepared include:

- o Western State Hospital Cultural Landscape Assessment (Artifacts Architectural Consulting 2008)
 - o Western State Hospital Cultural Resource Management Plan (Artifacts Architectural Consulting 2011)
- 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.*

The master plan calls for protection of the historical resources associated with the 19th Century history of the site, including the Fort Steilacoom era and the early hospital era. These include the Settlers' Cemetery, and potentially the early morgue and bakery buildings.

DSHS will work with the Fort Steilacoom Historical Association to support protection and interpretation of the extant Fort-era facilities.

For facilities from the hospital's expansion phases, DSHS will document facilities prior to any demolition or major alteration.

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.*

Steilacoom Boulevard is the primary street serving the site. To the east, 87th Avenue SW is the campus boundary and to the west, Sentinel Drive is the boundary.

- 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?*

Pierce Transit provides bus transit to the primary site entry. A bus route connects WSH to both central Steilacoom to the west and the Lakewood Transit Center to the east. From the transit center, transfers can be made to other destinations in Pierce Transit's service area.

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

The project will provide an additional 334 parking spaces, for a total of 1,993. This will allow WSH to reduce the incidence of informal parking in non-designated areas, and will better accommodate shift overlap periods.

- 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).*

The WSH master plan recommends changes to the internal circulation system that would lead to relocation of the primary vehicular access points. These changes are proposed to increase separation of access drives, while improving campus wayfinding. The changes are not required, but projected to be beneficial to the near-campus flow of traffic.

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

These will not be a significant mode of travel for staff, visitors or deliveries to the site.

- 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?*

Based on the targeted populations on the WSH campus, 5,709 trips on average would be generated to and from the site on weekdays. This represents a 6% reduction from current measured traffic. Peaks are projected as follows:

- o 677 trips from 7:00-8:00 a.m., 5% down from existing
- o 366 trips, from 4:00-5:00 p.m., 6% down from existing

Additional detail on the study methodology and projected travel patterns is provided in the Transportation Impact Analysis, see Appendices. The TIA also includes interim scenarios that address the

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impacts of potentially higher populations in interim periods over the planning timeframe.

- 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.

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

WSH will continue to participate in the Commute Trip Reduction (CTR) program. Primary programs include transit passes, carpool and vanpool support, employer-provided transit passes and supporting programs such as a guaranteed ride home.

As documented in the 2019 CRT report, initiatives for near term expansion include expanding the vanpool program and further coordination with Pierce Transit.

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.

The proposed Master Plan improvements will not result in an increased need for public services, including fire protection, police protection, public transit, health care, or schools.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None proposed. The proposed Master Plan improvements will not result in an increased need for public services.

16. UTILITIES

- a. Circle utilities currently available at the site: (underlined)

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: steam heat

- 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.

Current services include: Tacoma Power (electricity) and Puget Sound Energy (natural gas); current facilities are provided water from an on-site well system; future facilities will be connected to the Lakewood Water District's system.

These systems and their capacities are further described in the master plan report; see "Utilities & Infrastructure" on page 43.

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.

Signature:

Robert J. Hubenthal

Name of signee Robert J. Hubenthal

Position and Agency/Organization Capital Programs Director, WA DSHS

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WESTERN STATE HOSPITAL MASTER PLAN

D. Supplemental sheet for non-project actions (IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. *How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?*

Operation of the WSH Campus is not expected to result in increases in discharges to ground or surface waters. Operational emissions to air result from the use of motor vehicles on the WSH Campus and operation of heating, ventilation, and air conditioning equipment, which produce minimal emissions. Similarly, the Campus operations do not produce any of toxic or hazardous substances. The WSH Campus does not use industrial machinery, so the operational noise generated on the Campus is largely the result of vehicular traffic and the operation of HVAC equipment. The associated noise levels of these machines are typically low, and are consistent with the Public Institutional land use.

The project incorporates a variety of approaches to reduce the impact of the WSH Campus to the environment, including: on-site infiltration of stormwater; implementation of Best Management Practices to control construction-related erosion and sedimentation, and to contain toxic or hazardous materials used during construction; and application of appropriate site clean-up measures for any identified -toxic or hazardous materials.

Proposed measures to avoid or reduce such increases are:

Operational measure to avoid or decrease discharges include:

- o On-site stormwater treatment and infiltration;
- o Application of green building technology to reduce energy needs and potential emissions;
- o Implementation of operational safety standards for the storage of toxic or hazardous substances to prevent accidental release; and

2. *How would the proposal be likely to affect plants, animals, fish, or marine life?*

Removal of vegetation would be necessary in order to construct the new buildings proposed in the Master Plan. Vegetation to be removed is dominated by maintained lawns and horticultural tree species, although some Oregon white oak are present. The loss of this vegetation has the potential to affect some species of animals.

Since the project will not require work in wetland or streams, impacts to buffers will be avoided or minimized, and best management practices will be used to address stormwater issues on the site, fish and marine life would not be affected by the Master Plan improvements.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Development of the Campus and removal of vegetation is concentrated in the previously developed portions of the Campus, which will minimize the loss of vegetation. Replacement of notable trees (particularly Oregon white oak) would be developed in consultation with the City and other stakeholders.

In addition to efforts to minimize the footprint of the new development, existing open space on the Campus would be retained. The former Fort Steilacoom Golf Course (72.6 acres) and an area used by the community as a current disc golf course (approximately 15 acres, SE loop) would be preserved. These two active recreational uses represent about 30 percent of the campus.

3. *How would the proposal be likely to deplete energy or natural resources?*

Proposed measures to protect or conserve energy and natural resources are:

- o New facilities will be developed to contemporary standards, reducing their consumption.
- o Development of campus will also follow the State's Net Zero policy.
- o Over the long-term, the intent is to retire the natural gas fired steam boilers in favor of more sustainable energy sources.

4. *How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for*

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governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The proposed Master Plan improvements have been located in areas that avoid impacts to streams, wetlands, and floodplains. No designated parks, wilderness areas, wild and scenic rivers, or prime farmlands are present on the Campus. No populations of threatened or endangered species or their habitats have been identified on the Campus. The Campus includes historic and culturally important features (such as architecturally or historically significant buildings and structures and historically significant trees) that would be removed in order to construct new buildings on the Campus.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The Proposed Master Plan improvements will be designed and constructed in a manner that preserves and maintains environmentally sensitive areas to the maximum extent practicable while achieving the goals of this essential public facility in providing healthcare services to the residents of western Washington.

Each of the individual projects will conduct site-specific studies to identify the presence of populations of threatened or endangered species or their habitats. Proven concepts and designs would incorporate measures to avoid or minimize any potential impacts to these important resources. Similarly, the projects will incorporate measures to sensitively address architecturally or historically significant buildings and structures on Campus.

5. *How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?*

The proposed Master Plan improvements are wholly consistent with the current land use designation and zoning for the campus, and do not allow or encourage incompatible land or shoreline uses.

Proposed measures to avoid or reduce shoreline and land use impacts are:

The Master Plan based on a more compact facility design. This compact footprint allows for more efficient use of space, increased the efficiency utility services by reducing length of utility lines, and

provides increased security for employees, staff, and neighbors by consolidating the facilities and incorporating interior fencing.

6. *How would the proposal be likely to increase demands on transportation or public services and utilities?*

Proposed measures to reduce or respond to such demand(s) are:

- o As noted elsewhere, traffic impacts are projected to decrease over the course of the master plan's implementation.
- o New facilities will be developed to current standards for energy and water efficiency.

7. *Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.*

The Master Plan will be consistent local, state, or federal laws or requirements for the protection of the environment including compliance with the planning processes for Pierce County and the City of Lakewood regarding the siting essential public facilities. This compliance will include consistency with the City's Comprehensive Plan, Master Plan, Zoning, and SEPA processes, including any public involvement components of these processes.

Individual Master Plan projects will use a similar approach, conducting any site-specific studies necessary, and revising concepts and plans to comply with all applicable permitting and regulatory requirements, including building, critical areas, SEPA (if applicable), and zoning requirements.

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