



Determination of NONSIGNIFICANCE

Notice Date: June 27, 2018

**PROJECT:
NE Manley Road
CRP No. 322012**

Please find enclosed an environmental Determination of Non Significance (DNS) issued pursuant to State Environmental Policy Act (SEPA) Rules (Chapter 197-11, Washington Administrative Code). The enclosed review comments reflect evaluation of the environmental checklist by the lead agency as required by WAS 197-11-330(1)(a)(i).

Written comments may be submitted on this determination within fifteen (15) days of its issuance, after which the DNS will be reconsidered in light of the comments received.

Please address all correspondence to:

Clark County Department of Public Works
Jennifer Taylor, Permitting Coordinator
PO Box 9810
Vancouver, WA 98666-9810

DISTRIBUTION LIST

US Army Corps of Engineers

Cowlitz Indian Tribe
Confederated Tribes & Bands of the Yakama Nation
The Confederated Tribes of Grand Ronde

Washington State Department of Fish & Wildlife
Washington State Department of Ecology
Washington State Department of Natural Resources SW Washington
Washington State Department of Transportation
Washington State Department of Archaeology and Historic Preservation

City of Vancouver
Clark County Community Development
Clark County Conservation District
Clark County Council
Clark County Sheriff's Office
Clark County Fire Marshall's Office
Clark County Fire & Rescue
Fort Vancouver Regional Library
SW Washington Health District
Southwest Clean Air Agency

Battle Ground School District
Friends of Curtin Creek (postcard only)
Properties within 500' of project (postcard only)
The Columbian
The Reflector

AT&T
Century Link
Clark Public Utilities – Water
Clark Public Utilities – Electric
Clark Regional Wastewater District
Comcast Cable Services
Northwest Natural



Determination of NONSIGNIFICANCE

Notice Date: June 27, 2018

DETERMINATION OF NON-SIGNIFICANCE

Description of Proposal: The project proposes to improve traffic safety along Manley Road and provide fish passage for salmonid species in Manley Creek. The traffic safety component of the project includes roadway vertical and horizontal adjustments, replacing and installing additional guardrails, pavement overlays, striping, signage, and utility relocations. These improvements will address speed, sight distances, and other safety issues that motorists experience along the roadway. The second component of the project is to improve fish passage within Manley Creek by replacing three failing undersized pipe culverts under Manley Road and a fourth undersized pipe culvert adjacent to Manley Road with new fish-passable structures. This project will be an overall benefit to the surrounding environment.

Proponent: Clark County

Location of proposal, including street address, if any: The proposed project is located along NE Manley Road in unincorporated Clark County, Washington. It is in Section 29, Township 04 North, Range 02 East in Water Resource Inventory Area (WRIA) 27 (Lewis).

The project limits extend from the intersection of NE Manley Road and NE 82nd Avenue to the intersection of NE Manley Road and NE 244th Street, approximately 0.95 miles.

Lead Agency: Department of Public Works, Clark County, Washington

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

The lead agency has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the development regulations and comprehensive plan adopted under chapter 36.70A RCW, and in other applicable local, state, or federal laws or rules, as provided by RCW 43.21C.240 and WAC 197-11-158. Our agency will not require any additional mitigation measures under SEPA.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below.

Comments must be submitted by **July 13, 2018**.

Responsible Official: Tom Grange, P.E.
Position/title: Engineering and Construction Division Manager
Address: Clark County Public Works
1300 Franklin Street
PO Box 9810
Vancouver, WA 98666-9810

Date: 6/28/18 **Signature:** Tom Grange

The staff contact person for questions on this review is Jennifer Taylor, 564-397-4227.



SEPA CHECKLIST FOR NE MANLEY ROAD

A. Background

1. Name of proposed project, if applicable:

NE Manley Road

2. Name of applicant:

Clark County Public Works

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

Jennifer Taylor – Clark County Public Works

PO Box 9810, Vancouver, WA 98666

Email: jennifer.taylor@clark.wa.gov

Phone: 564-397-4227

4. Date checklist prepared:

June 8, 2018

5. Agency requesting checklist:

Clark County Public Works

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

The NE Manley Road Improvement Project will occur in two construction phases between approximately between Spring 2019 and Fall 2020. Two construction phases are required to maintain residential access during the proposed culvert replacements and road safety improvements. All in-water work in 2019 and 2020 will occur during the approved in-water work window, which is anticipated to be from July 1 to September 30. The first phase includes replacing the middle, north A, north B culverts, constructing wall A and relocating Manley Creek at the toe of slope, restoring Manley Creek downstream of the north A culvert, and beginning the roadway improvements. The second phase will likely include replacing the southern culvert, and completing the roadway improvements.

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

No future additions, expansion, or further activity related to this proposed project is planned.



SEPA CHECKLIST FOR NE MANLEY ROAD

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

- **Wetland Delineation and Stream Assessment Report (Otak 2017)**
- **Hydraulic Report – NE Manley Road Improvement Project (Otak 2018)**
- **Cultural Resources Survey and Inventory for the Manley Road 3R Improvement Project, Battle Ground, Washington (SWCA 2017)**
- **No Effects Letter (May 2018) and Regional Road Maintenance Program 4(d) Documentation (May 2018) for compliance with the Endangered Species Act**

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.

There are no current pending applications or approvals of other proposals that will directly affect the properties for this project.

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

- **Ecology Construction Stormwater General Permit**
- **USACE Section 404 Nationwide Permit**
- **WDFW Hydraulic Project Approval (HPA)**

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.)

Clark County Public Works proposes to construct the NE Manley Road project. The project intends to improve traffic safety along Manley Road, and provide fish passage for salmonid species in Manley Creek. The traffic safety component of the project includes roadway vertical and horizontal adjustments, replacing and installing additional guardrails, pavement overlays, striping, signage, and utility relocations. These improvements will address speed, sight distances, and other safety issues that motorists experience along the roadway. The second component of the project is to improve fish passage within Manley Creek by replacing three failing undersized pipe culverts under Manley Road (referred to as the southern, middle, and north A culverts), and a fourth undersized pipe culvert adjacent to Manley Road (referred to as the north B culvert), with new fish-passable structures. Approximately 250 linear feet of Manley Creek will be relocated and restored to install a retaining wall and stabilize a slumping section of the road embankment. A portion of Manley Creek will also be restored by removing a concrete slab and wooden foot bridge associated with a previously existing concrete dam. The culverts were designed in accordance with the Washington Department of Fish and Wildlife (WDFW) Water Crossing Design Guidelines (WDFW 2013) for fish passage.



SEPA CHECKLIST FOR NE MANLEY ROAD

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.

Manley Creek crosses underneath NE Manley Road three times between NE 244th Street and NE 82nd Avenue, and runs parallel to Manley Road for approximately 500 linear feet between the middle and northern culverts.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

(Circle one): Flat, rolling **hilly**, steep slopes, mountainous, other _____

The project site occurs along a 0.95 mile long segment of NE Manley Road. The roadway descends a north facing slope beginning near the intersection of NE 249th Street. The roadway has steep-sided embankments in several areas where Manley Creek crosses. NE Manley Road flattens out near the intersection of NE 254th Street.

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

The sides of the NE Manley Road embankments that extend down to Manley Creek include approximately 75% slopes.

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.

Per the NRCS Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>), soils on site consist of:

Washougal loam, 0 to 3 percent slopes

Riverwash, cobbly

Cove silty clay loam, 0 to 3 percent slopes

Washougal stony loam, 30 to 60 percent slopes

Washougal gravelly loam, 0 to 8 percent slopes

Gee silt loam, 8 to 20 percent slopes

Dollar loam, 0 to 5 percent slopes

Hockinson loam, 0 to 8 percent slopes



SEPA CHECKLIST FOR NE MANLEY ROAD

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

Clark County MapsOnline maps Severe Erosion Hazard and Landslide Hazard Areas along the road embankments in the project area and side slopes of Manley Creek. The sides of the road embankment are beginning to slump between the middle and northern culverts north of NE 249th Street. The slumping road embankment will be stabilized as part of this project.

- 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.

Filling, excavation, and grading are necessary to construct the safety improvements on NE Manley Road, replace the four culverts with fish-passable structures, construct two retaining walls, relocate and restore 250 linear feet of Manley Creek, and restore a portion of the Manley Creek streambed where a concrete dam previously existed. The total length of the NE Manly Road improvements is approximately 0.95 mile, and the overall project covers approximately 4 acres.

The project will require approximately 14,500 cubic yards (CY) of excavation (cut) and 18,000 CY of fill in order to construct the improvements. All suitable excavation material will be reused onsite. Any material that is determined to be unsuitable for reuse onsite will be hauled to a County approved site. Clean fill will also be imported to the site from a County approved source.

Fill material will consist of the new culvert structures, streambed gravels, gravel backfill, fabric encapsulated soil lifts, riprap, topsoil, road subbase, and new roadway surfacing. Excavated material will include the existing culvert structures, native soils, asphalt pavement and road subbase, concrete, and riprap.

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

Erosion could potentially occur as a result of construction activities. A Construction Stormwater General Permit will be acquired from Ecology prior to any ground disturbing activity. Temporary erosion and sediment control (TESC) measures and appropriate best management practices (BMPs) will be employed during construction to minimize the potential for erosion. Stream bypass pipes will be installed to isolate the construction area from Manley Creek and avoid introducing sediment into the watercourse. All temporarily impacted areas will be revegetated after construction is complete. Erosion is not anticipated to occur after construction is completed from continuing use of the roadway. Approximately 34,000 SF of the NE Manley Road surface will be treated in two new bioretention facilities parallel to the roadway.

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



SEPA CHECKLIST FOR NE MANLEY ROAD

The project area includes an existing roadway (NE Manley Road) that has an asphalt concrete surface. No new travel lanes will be constructed as part of this project, but portions of the road will be expanded to establish two-foot wide gravel shoulders and accommodate the installation of guardrails to improve vehicular safety. The existing culvert structures will be replaced within the existing road embankments. Two sharp curves on NE Manley Road in the vicinity of the 257th Street intersection will be realigned, and the abandoned section of the road will be restored to upland forest. Approximately 32,250 SF (0.74 acre) of impervious surface will be added to the project corridor.

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

Appropriate TESC measures and BMPs designed to avoid and limit erosion will be deployed during road reconstruction and culvert replacement. A Construction Stormwater General Permit from Ecology will be required for the project before construction begins. All temporary erosion and sediment control measures for terrestrial and in-water work will be installed prior to commencing activities in each environment. High visibility silt fence will be installed at the edge of the clearing limits to prevent sediment entrained in stormwater from reaching nearby surface waters. Temporary isolation berms made of gravel bags or similar material will be installed upstream and downstream of each culvert, and a stream bypass pipe will be installed to separate the construction area from Manley Creek.

The project has also been designed to limit erosion from potentially occurring within the project area after construction is complete. Riprap will be installed around the culverts to limit scour and erosion, and protect the newly constructed infrastructure. All disturbed areas will be planted with native trees and shrubs to stabilize soils post-construction. A retaining wall will be installed along the road embankment between the middle and north culverts to prevent a slope failure from occurring that could introduce sediment into Manley Creek. In addition, streambed gravels will be installed in the restored Manley Creek streambed to stabilize it through the crossings.

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.

No new types or levels of air emissions are expected to result from the proposed project above current baseline conditions. No new travel lanes are being added to the existing road. Emissions from typical motorized construction equipment will occur during project construction. All motorized equipment will meet current emission standards and will be properly maintained as necessary. There will be no additional emissions after the project is completed.

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



SEPA CHECKLIST FOR NE MANLEY ROAD

There are no off-site sources of emissions or odor that may affect this proposal.

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

All onsite motorized equipment will meet current emissions standards and will be properly maintained. Equipment not in use will not be allowed to idle.

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. Manley Creek flows through three culverts under Manley Road between NE 244th Street and NE 82nd Avenue, and runs parallel to Manley Road for approximately 500 linear feet between the middle and northern culverts. Manley Creek is a perennial stream that generally flows north-northwest towards its confluence with East Fork Lewis River, approximately 0.8 mile downstream of the project area. Manley Creek is a Type F (Fish) stream per Washington Department of Natural Resources (WDNR) and Clark County. Fifteen wetlands are located within or adjacent to the project area mostly occurring as riverine wetlands along the margins of Manley Creek.

- 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.

Yes. The project includes replacing four culverts on Manley Creek and making safety improvements to NE Manley Road. Manley Creek parallels the east side of NE Manley Road for approximately 500 linear feet between the middle and northern culverts. All in-water work will occur during the agency approved in-water work window during the summer dry season when instream flows are lowest.

Site preparation will include installing temporary erosion and sediment control (TESC) measures and temporary stream diversion to isolate construction activities from Manley Creek. All best management practices for TESC will be installed prior to any demolition work for the culvert replacements and roadway improvements. A high visibility silt fence will be installed to delineate the project limits and prevent unnecessary clearing and sediment from entering Manley Creek.

A temporary stream diversion and flow bypass pipe will be installed for each culvert replacement through the use of pumping or anchored diversion pipe. Mesh screens at pipe and pump inlets will be used for fish protection. Gravel bags or similar material will be placed across the channel upstream and downstream of the work areas to convey water around or through the project area



SEPA CHECKLIST FOR NE MANLEY ROAD

to prevent sediment from entering Manley Creek. Sediment laden water will be pumped out of the construction area and discharged upslope of the creek or into sedimentation basins. The stream diversion shall be sized to divert a minimum flow rate of 27 cubic feet per second (CFS) to accommodate the 2-year precipitation event and to allow downstream fish passage. Fish moving will be completed for each work area prior to dewatering. Dewatering of the work area shall occur at a rate slow enough to allow for the safe capture and relocation of fish to avoid stranding.

Following isolation and dewatering of the work area for each culvert, the road embankment material will be excavated and hauled away for installation of the new culverts. Streambed grading will be completed to match the existing bed elevations upstream and downstream after each culvert has been installed. The constructed streambed will have a minimum of 1.5 feet of streambed gravels. Removal of the concrete slab downstream of the north A culvert will occur during the one phase of the in-water work window (IWWW).

The stream relocation and constructed channel will include a cascade-pool bedform, which will increase instream habitat complexity relative to the existing riffle habitat between the middle and northern culverts. Fabric encapsulated soil lifts embedded with logs with rootwads and planted with willow stakes will line the left bank below the retaining wall to increase edge habitat complexity. The streambanks will be restored following construction of the new channel.

- 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.

The project will result in minimized, unavoidable permanent impacts to a total of 665 square feet (SF) of emergent wetlands in the project corridor. An additional 98 SF of wetland habitat will be temporarily impacted to install the stream diversion and flow bypass pipes for the north A and southern culvert replacements. All temporarily impacted wetlands will be restored to pre-existing conditions following construction.

Permanent fill in the stream restoration will include coir logs and fabric with emergent plugs, and will total 3.7 cubic yards (CY). Approximately 30 CY of permanent fill from riprap and streambed gravels will be needed for the southern culvert replacement and streambed grading. Approximately 1.2 CY of fill (gravel borrow) will be placed in the roadside ditch to install new guardrails. Temporary fill for the placement of gravel bags (2 CY) or similar material for the stream diversion and flow bypass pipe will be installed during construction at the respective culvert crossings. For the whole project, the total volume of permanent and temporary fill in wetlands is 36.6 CY and 2 CY, respectively.

Regarding impacts to Manley Creek, the north A and north B culvert replacements will permanently impact 2,970 SF (205 LF) and temporarily impact 90 SF. The permanent impacts are for the culvert placements and stream grading, and the temporary impacts are for the stream diversion and flow bypass pipe. The section of Manley Creek between the north A and north B



SEPA CHECKLIST FOR NE MANLEY ROAD

culverts will be restored to a single channel with streambed gravels, and a backwater channel will be constructed to provide refugia during high flow events.

An additional 387 SF of Manley Creek will be restored downstream from the north A culvert by removing a concrete slab and wooden bridge adjacent to the deck of a single-family residence. A hydraulic project approval (HPA) from WDFW (HPA #2017-5-77+01) was previously issued for this stream restoration action. After removal of the footbridge and the concrete slab, the stream banks will be stabilized with coir mats and logs that will be planted with slough sedge and spreading rush plugs to increase native plant density in this maintained lawn area. The coir logs will be placed water ward of the OHW line to stabilize the toe of the new channel margin that will be created from removing the concrete slab.

The middle culvert replacement, stream restoration, and retaining wall A installation will result in 5,419 SF (451 LF) of permanent impacts and 41 SF of temporary impacts to Manley Creek. The permanent impacts are for the culvert replacement, stream grading, and wall A installation, and the temporary impacts are for the stream diversion and flow bypass pipe. The new arch culvert will result in a reduction of 15 LF of streambed and 7.5 LF of additional culverted stream, which will be offset by the creation of the backwater channel between the north A and north B culverts. The crossing will have a roughened channel design with a 6% slope, and a cascade-pool bedform upstream and downstream of the crossing.

The southern culvert replacement will result in 1,099 SF (97 LF) of permanent impacts and 202 SF of temporary impacts to Manley Creek. The permanent impacts are for the culvert replacement and stream grading, and the temporary impacts are for the stream diversion and flow bypass pipe. A new structural plate arch will be installed on concrete footings, and the natural streambed restored through the crossing. Grading will occur upstream and downstream of the new culvert to match the existing bed elevations.

Permanent fill in Manley Creek for the north A and north B culvert replacements will include 175.4 CY of streambed gravels. The stream restoration downstream of the north A culvert will include 2.4 CY for the coir mat and logs with emergent plant plugs. Permanent fill for the middle culvert and stream relocation will include 494.1 CY of streambed gravels and native soil for the fabric encapsulated soil lifts. Permanent fill for the southern culvert will include 53.1 CY of streambed gravels. A total of 7 CY (333 SF) of temporary impacts will occur for the stream diversion and flow bypass pipes at the three project areas, including gravel bag berms or similar material. For the whole project, the total volume of permanent and temporary fill in Manley Creek is 722.6 CY and 7 CY, respectively. All fill material will be from Clark County approved sources.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.



SEPA CHECKLIST FOR NE MANLEY ROAD

Temporary stream diversion and flow bypass pipes will be installed for each culvert replacement through the use of pumping or anchored diversion pipes. Mesh screens at pipe and pump inlets will be used for fish protection. Gravel bags or similar material will be placed across the channel upstream and downstream of the work areas to convey water around or through the project area to prevent sediment from entering Manley Creek. Sediment laden water will be pumped out of the construction area and discharged upslope of the creek or into sedimentation basins. The stream diversion shall be sized to divert a minimum flow rate of 27 cubic feet per second (CFS) to accommodate the 2-year precipitation event and provide downstream fish passage. Fish moving will be completed for each work area prior to dewatering. Dewatering of the work area shall occur at a rate slow enough to allow for the safe capture and relocation of fish to avoid stranding.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The project is not located within the FEMA-mapped 100-year floodplain of East Fork Lewis River. A retaining wall (Wall B) will be located on the north side of NE Manley Road east of NE 257th Street to avoid filling in wetlands and the 100-year floodplain of East Fork Lewis River. Manley Creek does not have a FEMA-mapped 100-year floodplain.

- 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. There will be no discharges of waste materials to surface waters as a result of this project. All TESC and construction BMPs will be in place prior to any ground disturbing activities.

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.

Groundwater expressing in Manley Creek within the isolated construction area will be pumped to a dewatering basin before returning to Manley Creek.

- 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.



SEPA CHECKLIST FOR NE MANLEY ROAD

There will be no waste material from septic tanks or other sources discharged into the ground from any source for this project.

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.

The project has been designed using the Clark County Stormwater Manual 2015 Errata September 2016. Stormwater runoff currently sheetflows off the roadway and either infiltrates in vegetated roadside shoulders or is collected in roadside ditches that discharge to Manley Creek.

Two new bioretention facilities will be installed parallel to the south side of Manley Road north of the north A culvert. Stormwater that flows to the facilities will infiltrate and no surface water outlets to Manley Creek are proposed. The north bioretention facility will treat approximately 19,000 SF of pollution generating impervious surface (PGIS), and the southern facility will treat 15,000 SF of PGIS. Stormwater flowing off of other portions of the roadway will continue to flow through vegetated roadside buffers and ditches.

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

No waste materials will enter ground or surface waters as a result of the project.

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

The existing Manley Creek culverts are undersized and inhibit fish passage. Replacing the culverts with fish passable culverts will enable proper stream functioning without negatively affecting drainage patterns in the project area or the vicinity.

North of the northern culvert, stormwater that currently sheetflows off of NE Manley Road will be collected in two bioretention facilities located parallel to the roadway. The new bioretention facilities will provide stormwater treatment where none currently exists. The north bioretention facility will treat approximately 19,000 SF of pollution generating impervious surface (PGIS), and the southern facility will treat 15,000 SF of PGIS. Stormwater flowing off of other portions of the roadway will continue to flow through vegetated roadside buffers and ditches. Roadside ditches will be relocated parallel to the roadway to accommodate the road widening.



SEPA CHECKLIST FOR NE MANLEY ROAD

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

During construction, temporary erosion and sediment control measures will be installed to control surface runoff and reduce impacts to the adjacent aquatic environment in Manley Creek and associated wetlands. Temporary isolation berms and stream bypass pipes will isolate the work area to reduce the potential for impacts to Manley Creek. After construction is complete and exposed soils have been stabilized, the erosion control fencing and isolation berms will be removed. The two stormwater bioretention cells will provide water quality treatment for surface runoff from the roadway.

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

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

The project area is located in a rural residential area in unincorporated Clark County. Riparian vegetation within the project area consists of upland forest and shrub habitats, roadside grass buffers, and maintained lawns. Manley Creek flows through a forested ravine setting at the southern end of the project corridor and upstream of the middle culvert. Downstream of the middle culvert, Manley Creek flows at the toe of a forested road embankment adjacent to landscaped areas and



SEPA CHECKLIST FOR NE MANLEY ROAD

pastureland. Maintained lawns and horse pastures are located adjacent to and north of the north A culvert. Approximately 2.5 acres will be temporarily impacted to construct the road improvements and install the new culverts, including: upland pastures, fields, roadside shrub and forest edge habitats. Approximately 30 trees with 6-12-inch diameter breast height (DBH) and 44 trees greater than 12-inch DBH will be removed.

Tree species in forested upland areas include big-leaf maple (*Acer macrophyllum*), Douglas fir (*Pseudotsuga menziesii*), hazelnut (*Corylus cornuta*), and red alder (*Alnus rubra*). Common shrub and herb species include salmonberry (*Rubus spectabilis*), snowberry (*Symphoricarpos albus*), vine maple (*Acer circinatum*), osoberry (*Oemleria cerasiformis*), red elderberry (*Sambucus racemosa*), Himalayan blackberry (*Rubus armeniacus*), stinging nettle (*Urtica dioica*), Pacific waterleaf (*Hydrophyllum tenuipes*), and swordfern (*Polystichum munitum*).

Wetland vegetation within the project area consists of palustrine emergent, scrub-shrub, and forest habitats. Forested wetlands include a canopy of black cottonwood (*Populus balsamifera* spp. *trichocarpa*), Pacific willow (*Salix lasiandra*), and Oregon ash (*Fraxinus latifolia*), with an understory of salmonberry, dogwood (*Cornus alba*), Himalayan blackberry, and slough sedge (*Carex obnupta*). Shrub wetlands include Sitka willow (*Salix sitchensis*) and Douglas spirea (*Spiraea douglasii*). Emergent wetlands located along Manley Creek include dense stands of reed canarygrass, as well as obligate plants along stream margins such as water-starwort (*Callitriche stagnalis*) and pennywort (*Hydrocotyle sibthorpioides*). Riverine emergent wetlands also include small-fruited bulrush (*Scirpus microcarpus*), mannagrass (*Glyceria elata*), soft rush (*Juncus effusus*), and water parsley (*Oenanthe sarmentosa*). Wetland pastures included common velvetgrass (*Holcus lanatus*), bluegrass species (*Poa* sp.), bentgrass (*Agrostis capillaris*), and foxtail (*Alopecurus pratensis*).

The project will not result in a loss of wetland/riparian upland buffer habitat adjacent to Manley Creek and the riverine wetlands on site. A total of 53,431 SF of existing vegetated stream buffers will be either temporarily impacted during construction (43,156 SF) or permanently converted (10,277 SF). The majority of the permanent buffer conversion is from realigning the roadway, installing the bioretention facilities, and relocating Manley Creek within the riparian zone upstream and downstream of the middle culvert. However, relocating the stream channel also includes restoration of the adjacent riparian buffer. As such, the project includes a total of 54,578 SF of stream buffer restoration and planting areas. The project as a whole has a net gain of 1,147 SF of vegetated riparian buffer relative to existing conditions, and will not result in a net loss of buffer functions over time. The net gains in stream buffer area come from the stream restoration near the north A, north B, and middle culverts, and installing a layer of topsoil over planned riprap areas that will be seeded and planted with live willow stakes adjacent to the road.

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



SEPA CHECKLIST FOR NE MANLEY ROAD

Per the Washington Natural Heritage Program, no sensitive plant species or natural heritage features are known to occur within the project area. No sensitive plant species were observed during the field survey in June 2017.

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

All exposed soils that remain after the road improvements have been constructed and the new culverts installed will be planted with native vegetation. Approximately 2.1 acres will be seeded and planted with 1,215 woody trees and shrubs. A total of at least 2,340 live willow stakes will be installed along the stream banks to stabilize the new stream channel downstream of the middle culvert and at the southern culvert replacement. An additional 410 plugs of slough sedge and spreading rush (*Juncus patens*) will be installed for groundcover in the stream and wetland restoration area downstream of the north A culvert.

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

Noxious and invasive plants observed by project biologists on or near the site during the site inspection include field bindweed (*Convolvus arvensis*), English ivy (*Hedera helix*), English holly (*Ilex aquifolium*), jewelweed (*Impatiens capensis*), reed canarygrass (*Phalaris arundinacea*), Himalayan blackberry (*Rubus armeniacus*), creeping nightshade (*Solanum dulcamara*) and cut-leaf blackberry (*Rubus laciniatus*).

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 _____

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

Manley Creek is within the Willamette/Lower Columbia Recovery Domain for West Coast Salmon and Steelhead under the Endangered Species Act (ESA). Manley Creek is listed as critical habitat for the Columbia River (CR) Chum (*Oncorhynchus keta*) Evolutionarily Significant Unit (ESU), CR Steelhead (*Oncorhynchus mykiss*) Distinct Population Segment, and Lower CR Coho (*Oncorhynchus kisutch*) ESU. CR Chum, CR Steelhead, and Lower CR Coho are listed as Threatened under the ESA.



SEPA CHECKLIST FOR NE MANLEY ROAD

WDFW's SalmonScape online mapping tool shows the potential presence of fall-run chum salmon, presumed presence of summer steelhead, and documented presence of coho salmon and winter steelhead within Manley Creek.

WDFW's PHS on the Web online mapping tool lists priority species occurring within Manley Creek: resident steelhead (i.e., rainbow trout), winter- and summer-run steelhead, and coho salmon. Gray wolf (*Canis lupus*) is mapped to occur within the same surveyed land township as the project site (T04N). Caves or cave-rich areas, a WDFW-listed priority habitat, occur within the same surveyed land township as the project site.

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

The project is within the broad boundaries of the Pacific Flyway, the major migrating corridor for birds in North America west of the continental divide. However, the project site itself is not a known congregation point for migrating birds.

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

The proposed project intends to improve fish passage within Manley Creek by removing four undersized culverts and replacing them with fish-passable culverts that meet WDFW fish-passage requirements. Approximately 54,578 SF of stream and wetland buffer will be revegetated to restore riparian functions in the project corridor. Approximately 387 SF of Manley Creek will be restored by removing a concrete slab from the streambed downstream of the north A culvert. In addition, restoring Manley Creek with a cascade-pool bedform between the middle and north culverts will increase instream channel complexity and improve fish habitat.

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

There are no known invasive animal species on or near the site.

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.

There are no energy needs for this project.

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



SEPA CHECKLIST FOR NE MANLEY ROAD

The project consists of roadway and culvert improvements and will not affect the potential use of solar energy.

- 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:

There are no energy conservation features associated with this proposal.

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.

Environmental health hazards associated with this project are limited to those produced by standard road construction projects. These may include the emission of gases or spilling of fluids associated with construction equipment. Risks associated with these potential spills will be minimized or avoided by implementing appropriate BMPs and a Stormwater Pollution Protection Plan (SPPP). No environmental health hazards are anticipated to occur after completion of the project. All equipment refueling will occur on uplands away from surface waters. The contractor is required to develop a spill control plan to address how materials will be properly managed on site to prevent releases as well as containment procedures in case of an accidental release. Biodegradable hydraulic fluid will be used in all equipment operating below the ordinary high water line of Manley Creek.

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

There is no known contamination at the site from past or present uses.

- 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.

There are no existing hazardous chemicals or conditions that might affect project development and design.

- 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.

Spilling of fluids associated with construction equipment has the potential to occur. Potential spills will be minimized or avoided by implementing appropriate BMPs and a Spill Prevention, Control and Countermeasure Plan (SPCC), and properly maintaining



SEPA CHECKLIST FOR NE MANLEY ROAD

construction equipment. Fluids, such as gasoline and oil, will be stored away from the surface waters and in spill preventative containers. There will be no other storage, use or production of hazardous chemicals during project development and construction.

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

In case of a worker injury, first aid kits will be available onsite and emergency 911 response will be requested if necessary. No other emergency services relating to this proposal are anticipated following completion of the project.

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

Appropriate BMPs will minimize the risk of exposure to environmental health hazards and will reduce/control health hazards should exposure occur.

b. Noise

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

Current noise onsite consists of traffic associated with NE Manley Road. There are no other sources of noise. Existing noise will not affect the project.

- 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 associated with the project includes sound from construction equipment associated with roadway improvements. Long-term noise levels are not anticipated to increase as a result of this project as no new travel lanes will be constructed. Construction noise will be temporary in nature, occur intermittently over the course of a year, and be restricted to daylight hours.

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

Mufflers on motorized equipment will be maintained and construction will occur during daylight hours. There are no other proposed measures to control noise impacts.

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.



SEPA CHECKLIST FOR NE MANLEY ROAD

The site is currently used as a rural minor collector roadway; and is used by school busses, large industrial trucks, and personal vehicles. The area is surrounded by agriculture and single-family homes. A surface mining operation and the CPU Cherry Grove Switching Station exists on the west side of the project area near the intersection with NE 249th Street. Additional right of way adjacent to the existing road will be purchased to accommodate the horizontal and vertical road adjustments to improve site distances and angles. The existing land uses are not expected to be affected by the proposed project after construction.

- 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?

The majority of the project will occur within the existing Clark County ROW for NE Manley Road. Additional ROW will be purchased for the culvert crossings and for the horizontal road adjustments to lessen the angle at two sharp curves in the vicinity of the intersection with NE 257th Street. The ROW acquisition for the culverts will not convert working farmlands or forest lands.

- 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:

The project will not affect or be affected by surrounding working farm or forest land normal business operations during construction or following construction. Temporary traffic revisions will be in place during construction. Two construction phases will be required to avoid isolating private driveways in the project corridor. Construction staging areas may temporarily impact existing pastureland in the vicinity of the northern culverts

- c. Describe any structures on the site.

Structures in the project area include the four culverts in disrepair, NE Manley Road, fences, mailboxes, road signs, and private driveways. Utilities include overhead telephone and electric lines near the southern and northern culverts. A concrete slab on the bed of Manley Creek is located downstream of the north A culvert and west of NE Manley Road.

All four culverts are undersized. The southern culvert is prone to being partially clogged with debris. The culvert is a 36-inch diameter round corrugated metal pipe approximately 74 feet long. The culvert is in moderate condition with visible corrosion below the springline. The middle culvert is a 48-inch diameter round, smooth concrete culvert approximately 77 feet long. The culvert is in moderate condition, and the outlet is perched above a small plunge pool. The skewed alignment results in sharp bends at the inlet and the outlet of the culvert, and the channel is incising downstream. The north A culvert is a 36-inch corrugated metal pipe approximately 44 feet long and is embedded. The roadway is within 2-3 feet from the top of the culvert. The north B culvert includes two 36-inch culverts and one 24-inch culvert side by



SEPA CHECKLIST FOR NE MANLEY ROAD

side, perched between 6-12 inches at the outlets. A wooden bridge over the culverts provides access to a private residence east of Manley Road.

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

The four undersized culverts will be removed and replaced. Portions of NE Manley Road will be resurfaced or abandoned. Existing mailboxes, fences, and road signs will be temporarily relocated during construction.

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

The project area is zoned R-5 (Rural-5) and R-20 (Rural-20). A portion of the R-5 zoned area is a Surface Mining Overlay District.

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

The project area is designated R-5 (Rural-5) and R-20 (Rural-20). A portion of the R-5 designated area is a Surface Mining Overlay District.

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

This project is not within the shoreline. The shoreline administrative boundary (100-year floodplain limits of East Fork Lewis River) is located just beyond the existing right of way for a portion of the north side of NE Manley Road between NE 254th Street and NE 82nd Street. The shoreline designation is Rural Conservancy Residential. The project will not impact lands administered under the County's Shoreline Master Program.

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

Clark County critical areas include wetlands, habitat conservation areas, geologic hazard areas, flood hazard areas, and critical aquifer recharge areas. Clark County maps the project area as a Category II Critical Aquifer Recharge Area. Portions of the site are mapped as severe erosion and landslide hazard areas, and earthquake hazard areas. Manley Creek is also mapped within the project area. The project will have minimal permanent impacts to critical areas. All required permits to work in critical areas will be obtained prior to starting work.

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

None, because this is a transportation and habitat enhancement project.

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

None, because this is a transportation and habitat enhancement project that will not result in people being displaced.



SEPA CHECKLIST FOR NE MANLEY ROAD

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

None. No people will be displaced.

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

This project is consistent with the existing and projected land uses, and is consistent with the Clark County Comprehensive Plan. NE Manley Road is expected to have the same level of vehicular use as currently exists after the road safety improvements are completed.

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

No measures are proposed as this project will not impact any agriculture or forest lands of long-term commercial significance.

9. Housing

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

None. This proposal is a road improvement and culvert replacement project, and will not provide housing units.

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

None. The project will not eliminate any housing units.

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

None. There will be no impacts to housing.

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 highest proposed structure will be the new guardrails that will be installed on curves and road embankments; the guardrails will be approximately 3 feet tall.

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



SEPA CHECKLIST FOR NE MANLEY ROAD

No views in the immediate vicinity will be altered or obstructed.

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

The proposed project intends to improve traffic safety along NE Manley Road and replace four undersized culverts. Roadside vegetation in the NE Manley Road ROW and temporary construction easements will be impacted during construction. All temporarily impacted areas will be restored with native vegetation.

11. Light and Glare

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

The proposal will create no light or glare. The project will be constructed during daylight hours.

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

There will be no light or glare from the completed project.

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

There are no off-site sources of light or glare.

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

None. There will be no light or glare impacts.

12. Recreation

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

The Quarry Ridge Farm and Kyle Kellmer Performance Horses are horse stables and training facilities located along NE Manley Road. The Daybreak Regional Park and Boat Launch is located north of the project site at the end of NE 82nd Avenue along the south side of East Fork Lewis River.

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

The project will not displace any existing recreational uses. Daybreak Park, the horse stables and training facilities will continue to function during and after project construction.



SEPA CHECKLIST FOR NE MANLEY ROAD

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

None. There will be no impacts to nearby recreational opportunities.

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 project will not impact existing buildings or structures eligible for the national or local preservation registers.

- 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.

An archaeological resources report was completed for the proposed project corridor in November 2017. No archaeological material was identified. The report was submitted to the Washington State Department of Archaeology & Historic Preservation (DAHP) and the Tribes for review.

- 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 cultural resources survey was conducted by a consultant that meets the professional qualifications of the U.S. Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The cultural resources survey follows the standards of the Washington State DAHP. The report will be reviewed by DAHP and tribal authorities.

- 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 County will abide by the conditions set forth by DAHP and the Tribes to protect cultural resources along the project corridor. In the event that any archaeological or historical artifacts are found during project activity, work will stop, the site will be protected from further disturbance, and the County will notify the Tribes, and all appropriate federal, state and county agencies, including DAHP.

14. Transportation



SEPA CHECKLIST FOR NE MANLEY ROAD

- 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 project is located along NE Manley Road, a rural minor collector road. The site can be accessed from NE 239th Street to the south, and NE 259th Street to the west. A traffic control plan will be in place during construction to ensure that landowners have access to private properties along the road corridor.

- 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?

The site is not served by public transit. However, the road is used as a school-bus route for the Battle Ground School District. The majority of the project work will take place during summer months, when school is not in session. The nearest public transit stop is at West Main and 29th Street along State Route 502 in Battle Ground, approximately 2 miles southeast of the project area.

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

There is no parking proposed for this project. No parking will be eliminated.

- 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 proposal is a road improvement and culvert replacement project that will improve traffic safety along NE Manley Road: it will include realigning the roadway, installing and replacing guardrails, striping, signage and a pavement overlay.

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

The project will not use water, rail, or air transportation.

- 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 nonpassenger vehicles). What data or transportation models were used to make these estimates?

The completed project will not generate any additional vehicular trips as no new travel lanes are proposed. The project will improve traffic safety along NE Manley Road.

- 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.



SEPA CHECKLIST FOR NE MANLEY ROAD

The completed project will not interfere, affect, or be affected by the movement of agriculture or forest products on roads or streets in the area. Alternate routes and traffic detours will be available during the temporary closure of NE Manley Road during construction.

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

Temporary impacts to transportation and traffic are anticipated during construction. A traffic control plan will be in place during construction to ensure private land owners can access their property within the project corridor.

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 not result in an increased need for public services.

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

None. There will be no impacts to public services.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

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.

There are no new utilities proposed for this project. All existing utility lines will be maintained during construction and relocated as necessary.

C. Signature



SEPA CHECKLIST FOR NE MANLEY ROAD

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: _____

Name of signee Jennifer Taylor

Position and Agency/Organization Clark County Public Works

Date Submitted: 6/25/18