



April 22, 2021

City of DuPont
Ms. Barbara Kincaid
Planning and Community Development Department
1700 Civic DR
DuPont, WA 98327

RE: DuPont Steilacoom RD Improvements Critical Areas Exemption Application

Dear Ms. Kincaid,

Please find the enclosed package for the Critical Areas Exemption for DuPont Steilacoom Road. This is being submitted to allow for work in the wetland buffer in the City limits. The expanded road is not in the buffer, rather the unpaved side slopes to the road.

This package includes the following:

1. Critical Areas Ordinance Narrative
2. SEPA Environmental Checklist
3. Cultural Resources Report
4. DAHP Concurrence Letter
5. JBLM Categorical Exclusion
6. Drawing: Original Plan and Larger Impact
7. Drawing: Updated Plan and Reduced Impact
8. Drawing: Noxious Weeds Removal Areas

Sincerely,

R. Augustus Lim, P.E.
Public Works Director

DuPont Steilacoom Road Improvements

Critical Areas Ordinance Narrative

Executive Summary:

The DuPont Steilacoom Improvement project will widen the existing roadway to a 4 lane facility including drainage structures, walls, and a pedestrian use path.

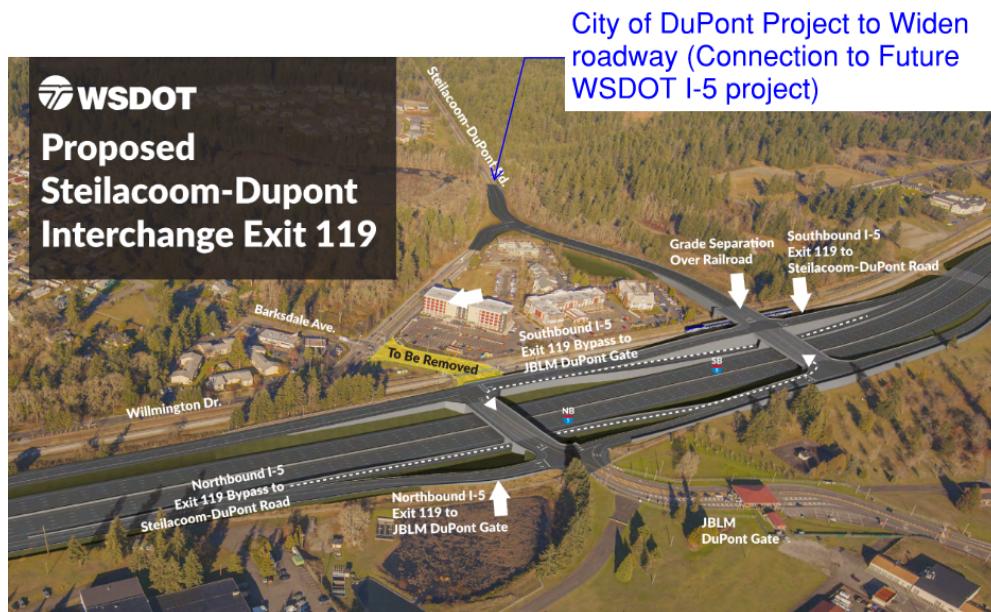
The current design represents efforts to reduce the impact of the project to wetlands and wetland buffers in the project area. In summary,

	Previous Design (Widen both sides)	Current Design (Widen to the West)	Net Change of Impact
Temporary Impact to Wetlands (City ROW)	0 SF	0 SF	
Temporary Impact to Wetlands (JBLM ROW)	5,100 SF	0 SF	
<i>Total Temporary Wetland Impact</i>	<i>5,100 SF</i>	<i>0 SF</i>	<i>5,100 SF Net Reduction</i>
Permanent impact to Wetland Buffer (City ROW)	0 SF	15,250 SF	
Permanent impact to Wetland Buffer (JBLM ROW)	41,200 SF	20,150 SF	
<i>Total Wetland Buffer Impact</i>	<i>41,200 SF</i>	<i>35,400 SF</i>	<i>5,800 SF Net Reduction</i>
Imported Fill to Wetland for Mitigation Planting (City ROW)	0 CY	0 CY	
Imported Fill to Wetland for Mitigation Planting (JBLM ROW)	200 Cubic Yards	0 CY	
<i>Total Imported fill to Wetland</i>	<i>200 CY</i>	<i>0 CY</i>	<i>200 Cubic Yard Reduction</i>

In addition, the project will include removal of approximately 80,000 SF of noxious weed, specifically thorny berry bushes and scotch broom plants along the corridor.

Project Description:

DuPont Steilacoom Improvement project widens the existing roadway from one lane in each direction to 2-lanes in each direction from Pendleton Ave to Wharf Road. The project will connect to a forthcoming WSDOT Interchange project which will increase access from I5 to DuPont Steilacoom Road. The arterial provides commercial and residential access to the City of DuPont as well as areas north of the City limits. There is no other roadway route which could be taken to provide the access for current and future traffic movements from I5 to DuPont and areas north of DuPont.



The existing roadway lies within the boundary of Joint Base Lewis McChord (JBLM) and was constructed via easement with Pierce County. The DuPont Steilacoom Road Improvements project will widen this existing road and, simultaneously, the easement will be revised to be between JBLM and The City of DuPont.

The final design, as shown in the attached exhibits, performs all of the widening work to the west of the existing road south of Center Drive in order to avoid permanent impacts to wetlands. In the area north of Center Drive the widening occurs on both sides of the road, but does not permanently impact wetlands. In the areas south of Center Drive, this will require imported backfill be placed outside of the JBLM easement and on Right of Way owned by the City of DuPont. These City-owned areas are also coincidental with buffer areas of identified wetlands. See Exhibit Attached.

Erosion Control and BMPs:

Disturbed ground, including imported fill, will be subject to Best Management Practices (BMPs) for Temporary Erosion and Sediment Control (TESC). Silt fence will line the edge of the work areas, temporary seeding and straw wattles are planned to be placed to minimize erosion of exposed soils. In accordance with WSDOT contract specification, the contractor will develop and implement a sediment control plan for review, acceptance, and monitoring by the City. As noted in the table above, an estimated 5,000 cubic yards of fill will be imported to the site with an additional 1,000 cubic yard being excavated from then placed inside the project limits.

Wetland Buffer and Drainage Patterns:

The widening to the west will impact areas of wetland buffer. The existing wetland buffer extends to the edge of existing asphalt (see graphic attached). The wetland buffer will be reduced in width with the expansion of the roadway prism, but the buffer itself will be enhanced by the type and nature of the vegetation which will exist in the final buffer.

The buffer area serves a number of functions including water quality protection, habitat for wildlife, and aesthetical enhancement of the area. The existing buffer contained noxious weeds, thorny bushes and scotchbroom and the roadway runoff was sheetflow directly into the wetland buffer. The final buffer, though not as wide, will include native plantings for wetland buffers which will improve aesthetic value as well as assist in water quality. Additionally, the final design will capture roadway runoff and convey to water quality catch basins and then introduced into the subsurface via infiltration trenches or roadway runoff will sheetflow and be treated through Compost Amended Vegetative Filter Strips (CAVFS).

The drainage patterns will not alter as the roadway cross slopes will remain the same; water will convey to the same wetland and buffers as the existing condition, however through new wetland native plantings via use of CAVFS and/or Water Quality Basins and infiltration trenches.

The function of the wetlands will be of no net loss as the roadway runoff will, in the post construction condition, pass thru water treatment facilities (trenches, water quality catch basins, and/or CAVFS), will include native wetland vegetation, for overall improved water quality as well as habitat.

Previous Alternatives:

Effort were made to avoid wetland and wetland buffer impacts in previous iterations of the design.

The original design footprint widened both on the east and west sides of the existing roadway by utilizing retaining walls along the east side of the project south of Center Drive and South of Davis Place. The designed roadway was completely within the JBLM easement boundary, did not fill wetland buffer areas on City-owned ROW, and avoided permanent impacts to wetlands

staked at the time. The design did cause permanent impacts to wetland buffer areas on the JBLM property.

Near the end of the design phase, geotechnical analysis showed that construction of those retaining walls would have required:

- Construction of soldier pile walls involving drilled concrete foundations 10'-20' into the wetland water table.
- Impact to permanent wetland of using bladders or other temporary levee devices to hold back wetland waters during wall construction.
- Impact of permanent wetland of dewatering the existing Wetland on JBLM property in the immediate work area of the wall foundations.
- Restoring the impacts to the permanent wetland with importation and placement of fill / soil amendments as well as plantings

Once realized the project was paused to re-evaluate less impactful alignments for the new, widened roadway. The roadway alignment was shifted such that wetlands would be avoided by construction of the widening work, which resulted in wetland buffer areas being impacted on City-Owned ROW.

Using fill slopes at 2:1, the upper range of impact would be approximately 19,500 square feet of wetland buffer on City-owned ROW. This was reduced by inclusion of a new fill wall just south of Davis Place (See "Wall 1 in attached Exhibit) to avoid permanent wetland impacts in that area. Alternative concepts involving taller walls in order to reduce buffer impact would require excavation into and placement of concrete shafts in below the water table established by the wetlands.

Functional Value and Compensatory Mitigation:

The areas where fill is proposed on existing wetland buffer are currently sideslopes of the existing roadway. Vegetation and soil samples were taken and determined to not be characteristic of wetland, but due to proximity of the permanent wetlands are determined to be buffer areas. The existing slopes are 2:1 and support native vegetation commensurate with the area. Adding fill into these areas will impact the wetland buffer, noting the new slopes will approximate the old slopes and thus vegetative establishment consistent with existing conditions, or as prescribed by the Agency, would be possible.

Compensatory mitigation would be achieved through removal of existing noxious weeds and the installation of native vegetation more conducive to healthy wetland buffers.

Section 25.105.070(2) Exceptions

(a) Construction of new transportation corridors such as roads, sidewalks, and trails; utilities such as water and sewer lines, gas lines, telecommunications and underground power lines; recreation facilities such as boardwalks, viewing platforms and pedestrian bridges; research facilities and monitoring stations where it can clearly be demonstrated that the project is needed for the benefit of the public; and no feasible alternative exists or to gain access to private property; and there is no feasible alternative to the proposed location; and the proposed location results in no net loss in a critical area's functional value. An alternative site for the proposed activity shall be considered feasible if it is available and the proposed activity can be carried out on the site after taking into consideration costs, existing technology, infrastructure, and logistics, in light of overall project purposes. There is no feasible alternative when the following can be demonstrated:

- (i) The basic purpose of the public transportation or underground utility project cannot reasonably be accomplished using one or more other sites in the city that would avoid or result in less adverse impacts on critical areas; and*
- (ii) The basic purpose of the project cannot be accomplished by a reduction in the size, scope, or configuration of the project as proposed or by changing the design of the project in a way that would avoid or result in fewer adverse effects on the critical area.*

SEPA ENVIRONMENTAL 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 nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT 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.

A. **Background** [\[HELP\]](#)

1. Name of proposed project, if applicable: DuPont Steilacoom Widening
DuPont-Steilacoom Road Improvement

2. Name of applicant:

City of DuPont

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

Applicant/Contact: Gus Lim, Public Works Director
1700 Civic Drive
DuPont, WA 98327

4. Date checklist prepared:

April 2021

5. Agency requesting checklist:

City of DuPont

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

This project is scheduled to begin in June 2021 and will be completed by the end of 2021.

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

No additional work is planned by the City within the project area.

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

Wetland Survey completed and shown on construction drawings

Cultural Resources Assessment (Aqua Terra Cultural Resource Consultant, 2020)

NEPA Exclusion document from Joint Base Lewis McChord

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

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

NEPA Exclusion document from Joint Base Lewis McChord

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.)

In order to address congestion problems, DuPont Steilacoom Road will be widened between Pendleton Avenue and Wharf Road (approx. 3500 feet in length) from a two travels lanes to four, with a median turn lane in places. Intersection improvements at Bell Hill Place and Center Drive, additional stormwater treatment facilities, and a HMA non-motorized path will be included as part of this project.

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.

DuPont Steilacoom Road will be improved between Pendleton Avenue and Wharf Road on a combination of City owned property as well as on land under easement from Joint-Base Lewis McChord. Work will take place in T19N., R.1E., Sections 24 and 25.

B. Environmental Elements [\[HELP\]](#)

1. Earth [\[help\]](#)

a. General description of the site:

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

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

1.5:1 (66%)

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The soils on site are principally Steilacoom gravels which were used for construction of the existing roadway prism.

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

None present.

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.

Purpose	Type	Total Area (sq ft)	Quantity (cubic yd)
<i>Cuts</i>			
Remove existing embankment for widening	Native Material, existing asphalt	20,000 SF	5,300 CY
<i>Fills</i>			
Roadway Embankments	Gravel Borrow and Native Material	60,000 SF	5,000 CY import, 1,000 CY Native
MSE Retaining Walls	Structural Fill (contractor-provided)	2,300 SF	1,000 CY

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

Erosion could occur as a result of clearing and grubbing operations, construction excavation and other earthwork activities.

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

The project will add (1.1 acres of new impervious surface) a 35% increase over baseline conditions.

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

Excavated areas will be properly protected or covered in accordance with Best Management Practices (BMPs) to minimize erosion potential. The contractor will designate a certified erosion sediment control lead to monitor and ensure that these practices and preventative measures are undertaken. Any bare earth area where no near-term work is scheduled to take place will be immediately stabilized with mulch, straw, or other acceptable methods.

2. Air [\[help\]](#)

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.

Short-term, temporary air emissions during construction from equipment, such as vehicle exhaust and possible dust, may occur. BMPs will be used to minimize and control vehicle exhaust and dust. The project is not increasing the roadway capacity; therefore, no additional air emissions are anticipated once the project is completed.

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

There are no known off-site sources of emissions or odor that would affect this proposal

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

As needed, BMPs would be used to control temporary air pollutant emissions in construction areas. Those could consist of requiring proper maintenance of construction equipment, avoiding prolonged idling of vehicles, spraying water to minimize dust, and periodically sweeping paved areas as necessary.

3. Water [\[help\]](#)

a. Surface Water: [\[help\]](#)

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. Sequalitchew Creek as well as numerous wetlands.

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 south end of the project is near Sequalitchew Creek passing under the existing roadway.

The project widening from north of Bell Hill St to Center Drive is within 200 feet of wetlands and of Sequalitchew Creek. The north end of the project is working over an existing culvert through which Sequalitchew Creek flows.

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.

No Materials will be dredged or removed from delineated wetlands.

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

No such action will be needed.

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

No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

There will be no discharges of waste materials to surface waters.

b. Ground Water: [\[help\]](#)

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.

No groundwater will be withdrawn from a well or drinking water or other purposes.

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 as a result of 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.

Surface runoff from storm water will be collected in pipes and drainage structures (catch basins and manholes). Construction will comply with a project-specific Temporary Erosion and Sediment Control Plan and a Stormwater Pollution Prevention Plan.

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

The primary potential pollutants are sediment from disturbed soils, petroleum products used by construction equipment, and fill materials (asphalt, crushed surfacing rock) to

construct the roadway widening. The discharge potential waste materials will be cleaned in such a manner to prevent high pH water from entering the wetlands or waterway.

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

As with the existing condition, the runoff will either be collected in catch basins and discharged through quarry spall spreaders or will be sheet flow runoff passing through vegetative filter strips and infiltrating into the subsurface.

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

Use of the National Pollutant Discharge Elimination System Construction Stormwater permit during construction as well as compliance with state and local regulations to reduce and control runoff.

4. **Plants** [\[help\]](#)

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?

Evergreen and deciduous trees will be removed from the eastern side of the project to create room for the widening of the roadway and associated drainage structures. Approximate area to be cleared on grubbed on the east of DuPont Steilacoom Road is 1 acre. The western side of the project will be removal of some trees as well as grass through clearing and grubbing; approximately 2 acres.

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

No threatened or endangered species are known to be on or near the site.

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

The exposed soils will be hydroseeded. Native plants are planned to be installed as recommended by Landscape Architectural design

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

Scotch broom and thorny berry bushes

5. Animals [\[help\]](#)

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.

Deer, Beaver

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.

None

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

No

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

NONE

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

None

6. Energy and Natural Resources [\[help\]](#)

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.

Signalization of the pedestrian crossing will be added to the project. Existing signal systems at Center Drive and Wharf Rd will be modified. The facilities are powered by electricity.

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

No

c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

No additional measures necessary

7. Environmental Health [\[help\]](#)

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.

No such hazards are known.

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

No known contamination on 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.

No hazardous chemical/conditions are known that 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.

Limited to the Road, the toxic or hazardous chemical that might be stored or used on site during the project's construction include diesel, oil and gasoline fueling the construction equipment. The hot mix asphalt used to pave the roadway also emits fumes for a short duration that can irritate eyes, nose, skin and lungs. Once construction concludes there are no other anticipated hazardous chemicals used.

4) Describe special emergency services that might be required.

No special emergency service vehicles are anticipated.

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

The Project will comply with the project specific SPCC (Spill Prevention, Control and Countermeasures) Plan.

b. Noise

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

The primary noise source in the project corridor is traffic on the roadway. This noise will not effect 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.

During construction, noise from equipment may occur between the hours of 7am and 7pm Monday through Friday and 9am to 6pm on Saturdays. The City may grant the project an exception, with notice to adjacent landowners, if a different work schedule would minimize overall public impact and/or convenience.

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

Contractor will keep construction equipment's mufflers in good working order.

8. Land and Shoreline Use [\[help\]](#)

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 site is currently a roadway. Adjacent property on the east side is the Joint Base Lewis McChord. Property on the west side is industrial on the north half and a housing community on the south end.

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 project has not been used as working farmlands or working 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:

No working farm or forest lands are located in the site vicinity. The project is not anticipated to affect, or be affected by, working farm or forest lands operations.

c. Describe any structures on the site.

Three existing concrete box culverts run under the existing roadway.

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

No structures will be demolished.

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

The majority of the project site occurs on JBLM owned property. A small percentage of the project occurs on land owned by City of DuPont.

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

Arterial Roadway

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

Not applicable.

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

Wetlands A and B as shown in the contract plans.

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

No people would reside or work in the completed project.

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

No people would be displaced by the completed project.

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

None

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

A future WSDOT project will improve the I-5 Interchange and widen DuPont Steilacoom road from I5 to Pendleton Ave. This project is designed to accommodate that project.

A future intersection improvement by Amazon is planned at the Center Drive Intersection. This project will benefit, not adversely affect, the implementation of that project.

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

There are no agricultural or forest lands of long term commercial significance nearby.

9. *Housing* [\[help\]](#)

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

The project would not provide any housing units.

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

The project would not eliminate any housing units.

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

No measures necessary.

10. Aesthetics [\[help\]](#)

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

There will be three Mechanically Stabilized Earth (MSE) retaining walls constructed with a maximum height of 10 feet. None of the wall faces will be visible from the roadway.

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

The view will be substantially altered for some businesses during the construction of the project as equipment and materials are moving throughout the site. Following construction the view will be altered by seeing a wider roadway.

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

No measures necessary

11. Light and Glare [\[help\]](#)

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

The roadway lighting is not proposed to change from the current configuration.

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

The roadway lighting is not proposed to change from the current configuration.

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

No off site light or glare should affect this project.

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

No additional measures necessary.

12. Recreation [\[help\]](#)

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

A pedestrian path on Center drive currently has a terminus at the western project limit.

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

There is no planned displacement of recreational uses.

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

A 5' wide HMA path will be constructed on the west side of the widened roadway for the southern half of the project. This path will enhance recreational use alongside the roadway

13. Historic and cultural preservation [\[help\]](#)

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.

No

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known

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 existing roadway was constructed by incorporation of fill material with heights of 6 to 20 feet. The project will not increase the footprint of the roadway slopes or excavate into previously untouched earth.

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.

Project planned to occur in previously disturbed areas.

14. Transportation [\[help\]](#)

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.

Project site is DuPont Steilacoom Road. It connects with City of DuPont Streets of Center Drive, Davis Place and Bell Hill Street on the west side. Roadway connects with Pendleton Ave and JBLM Gate/access road on the east side. South terminus of the project will connect to future widening and interchange improvement at I-5.

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 nearest transit stop is on Center Drive, less than half a mile away.

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 would not add or remove parking spaces

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 PROJECT IS AN IMPROVEMENT TO A PUBLIC ROAD THAT WILL DOUBLE THE NUMBER OF TRAVELED LANES AND ADD A HMA PATH ALONG HALF OF THE WEST SIDE OF THE ROADWAY.

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

No

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?

Estimated approximately 5,000 trips per day to be generated in the corridor. The peak volumes are estimated to occur in the Northbound Direction at Center drive during the AM commute.

Traffic modeling was performed by Gray and Osbourne in 2017, a Traffic Impact Analysis for the Snow Blossom Fulfillment Center in 2020, and the program Synchro used to analysis the signalized intersection.

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:

The Maintenance of Traffic and traffic control is developed to keep one lane of travel open in each direction for the the majority of project time. There may be some intermittent full weekend closures of sections of the road to allow work to occur more efficiently and cause overall less disturbance to peak use traffic patterns.

15. Public Services [\[help\]](#)

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

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

No additional measures proposed.

16. Utilities [\[help\]](#)

a. Circle utilities currently available at the site:

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

d. 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.

The existing signal system will continue to be powered by electricity from PSE. The new pedestrian push buttons at Wharf Rd will also use PSE supplied electricity.

C. Signature [\[HELP\]](#)

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 _____

Position and Agency/Organization _____

Date Submitted: _____

CULTURAL RESOURCES REPORT COVER SHEET

Author: Nicholas de Vry, Nathaniel Perhay and Sarah Amell

Title of Report: Cultural Resource Survey for the DuPont-Steilacoom Road Improvement Project, DuPont, Pierce County, Washington

Date of Report: February 3, 2020

County(ies): Pierce Section: 24, 25, and 36 Township: 19N Range: 01E

Quad: Nisqually, WA Acres: 18.89

PDF of report submitted (REQUIRED) Yes

Historic Property Inventory Forms to be Approved Online? Yes No

Archaeological Site(s)/Isolate(s) Found or Amended? Yes No

TCP(s) found? Yes No

Replace a draft? Yes No

Satisfy a DAHP Archaeological Excavation Permit requirement? Yes # No

Were Human Remains Found? Yes DAHP Case # No

DAHP Archaeological Site #:

- **Submission of PDFs is required.**
- **Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.**
- **Please check that the PDF displays correctly when opened.**

Cultural Resource Survey for the DuPont-Steilacoom Road Improvement Project, DuPont, Pierce County, Washington



Prepared for:

H.W. Lochner Inc.
Aaron Butters, PE
4317 6th Ave. SE, Suite 201
Lacey, Washington, 98503

Prepared by:

Nicholas de Vry, Cultural Resource Technician
Nathaniel Perhay, Project Archaeologist
Sarah J. Amell, Principal Investigator



Aqua Terra Cultural Resource Consultants
8525 Stoney Creek Lane SW
Olympia, WA 98512
www.AquaTerraCRC.com

Report #PI-01-19
February 3, 2020

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Cultural Resource Survey for the DuPont-Steilacoom Road Improvement Project, DuPont, Pierce County, Washington

Executive Summary

Aqua Terra Cultural Resource Consultants (ATCRC) has been contracted by H.W. Lochner Inc. to conduct a cultural resources survey for the DuPont-Steilacoom Road Improvement Project located on DuPont-Steilacoom Road between Wharf Road and Pendleton Avenue in the City of DuPont, Pierce County, Washington. The project proposes widen the DuPont-Steilacoom Road between Wharf Road and Pendleton Avenue. The Area of Potential Impacts (API) encompasses 18.89 acres with a total length of 1.2 miles. The project requires permitting from the City of DuPont (City), the Department of Archaeology and Historic Preservation (DAHP), the Nisqually Indian Tribe (Nisqually), and the U.S. Army Corps of Engineers (USACE) who jointly have a Memorandum of Agreement (MOA), under which the City issues permits for all projects within its jurisdiction and is subject to the State Environmental Policy Act (SEPA). The MOA requires that a professional archaeologist be retained during all development associated with the Project in order to avoid or mitigate adverse effects on significant cultural resources. SEPA requires that impacts to cultural resources be considered during the public environmental review process.

In accordance with SEPA, ATCRC completed a cultural resource assessment that included background research, field investigation, and preparation of this report. The project area has been designated as “Low” to “Very High Risk” for precontact archaeological resources by the DAHP due to the API’s proximity to several previously documented archaeological sites, water and heavily disturbed areas.

Field investigations consisted of pedestrian survey and subsurface testing within the project APE. 62 shovel scrapes (SS) to remove surface duff/vegetation and expose mineral soils and 9 shovel probes (SP) were excavated within the API. No cultural resources were observed in the course of the surface and subsurface investigations. ATCRC recommends that the project may proceed with the stipulation that an Inadvertent Discovery Plan (IDP) be adopted prior to ground disturbing activities in the event that archaeological resources or human remains are discovered during site development. An IDP is attached in Appendix B.

Regulatory Compliance

This project was conducted, in part, to satisfy regulatory requirements of the SEPA. SEPA requires that impacts to cultural resources be considered during the public environmental review process. Under SEPA, the Washington State DAHP is the sole agency with technical expertise in regard to cultural resources and provides formal opinions to local governments and other state agencies regarding a property’s significance and the impact of proposed projects upon such properties.

In addition, the State of Washington requires compliance with the cultural resources management laws and regulations under the Revised Code of Washington (RCW) 27.53 Archaeological Sites and Resources, RCW 27.44 Indian Graves and Records, and RCW 68.50.645 Skeletal Human Remains—Duty to Notify. The latter regulation provides a strict process for notification of law enforcement and other interested parties in the event of the discovery of any human remains, regardless of inferred cultural affiliation.

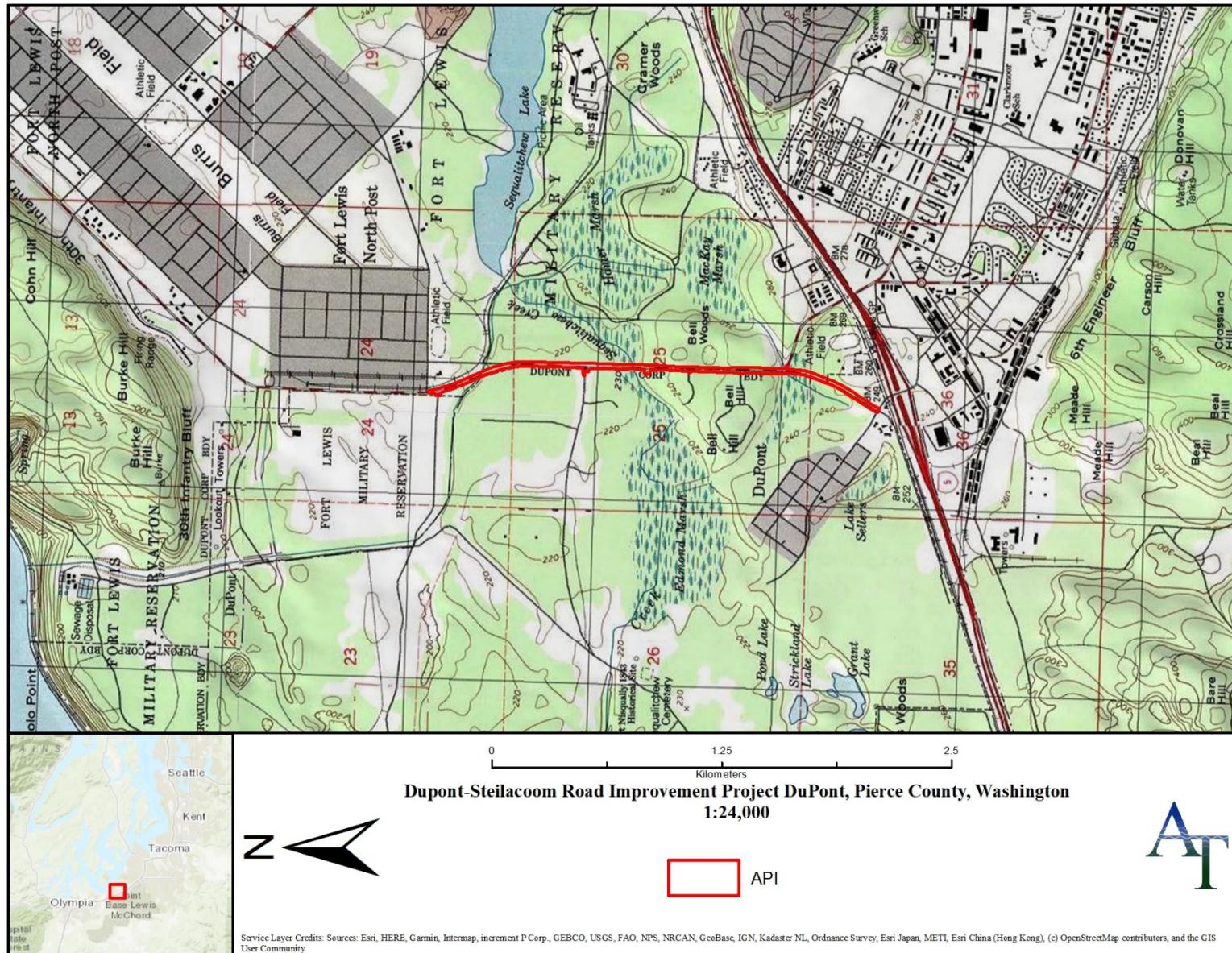


Figure 1. Dupont-Steilacoom Road Improvement Project, USGS 7.5 min. Nisqually Quadrangle.

Cultural Resource Survey for the
DuPont-Steilacoom Road Improvement Project,
DuPont, Pierce County, Washington

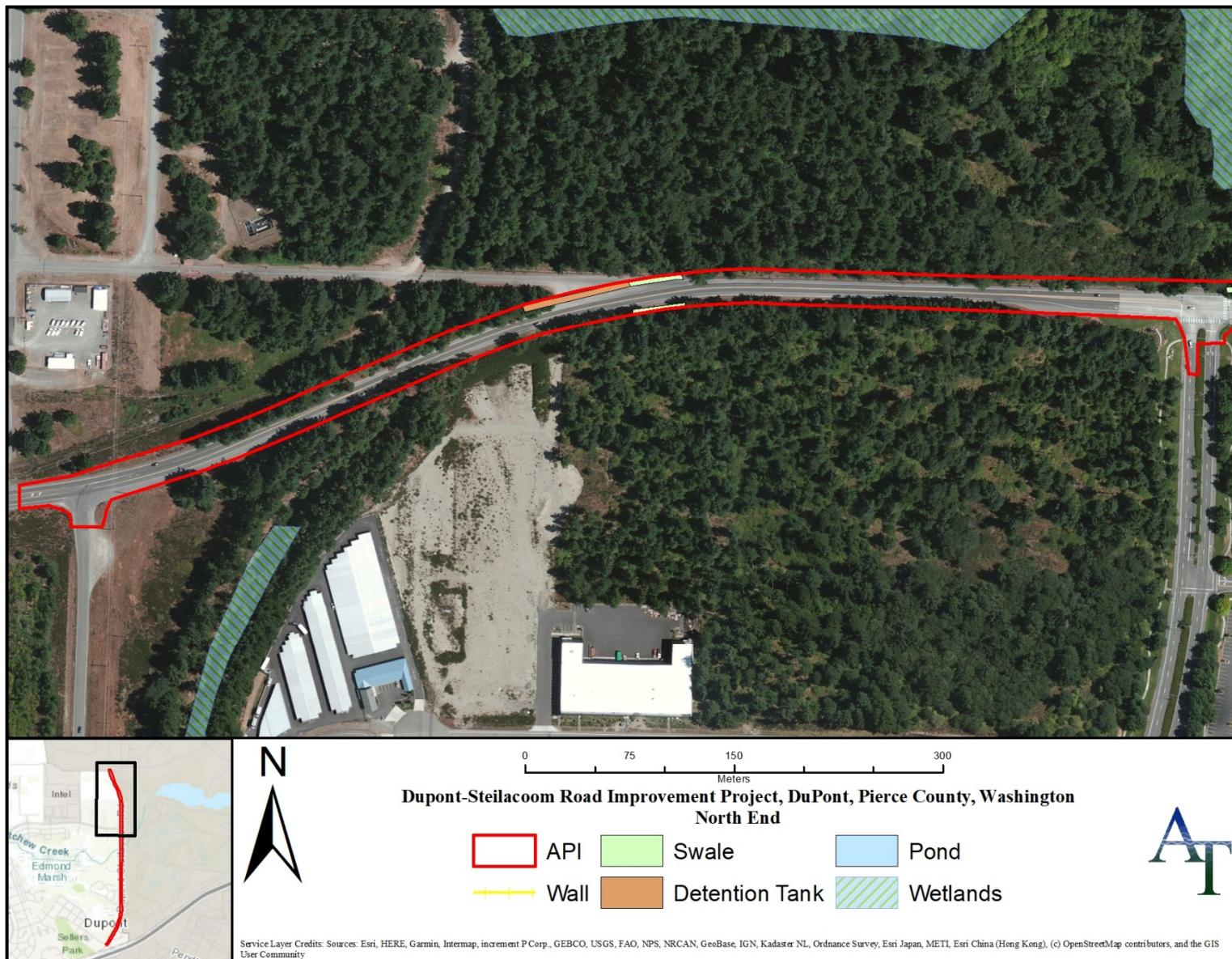


Figure 2. Aerial map of the northern third of the Dupont-Steilacoom Road Improvement Project.

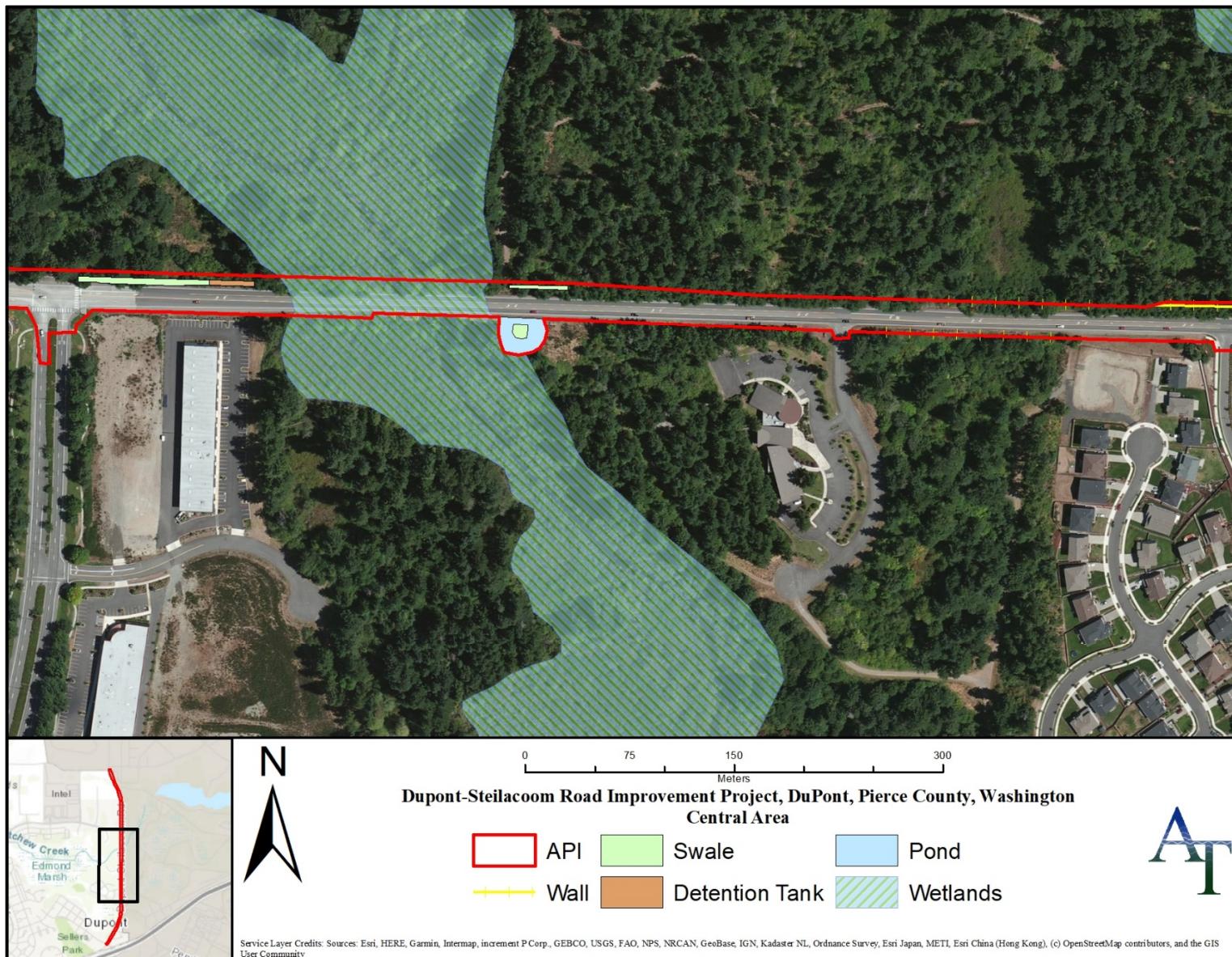


Figure 3. Aerial map of the central third of the Dupont-Steilacoom Road Improvement Project.

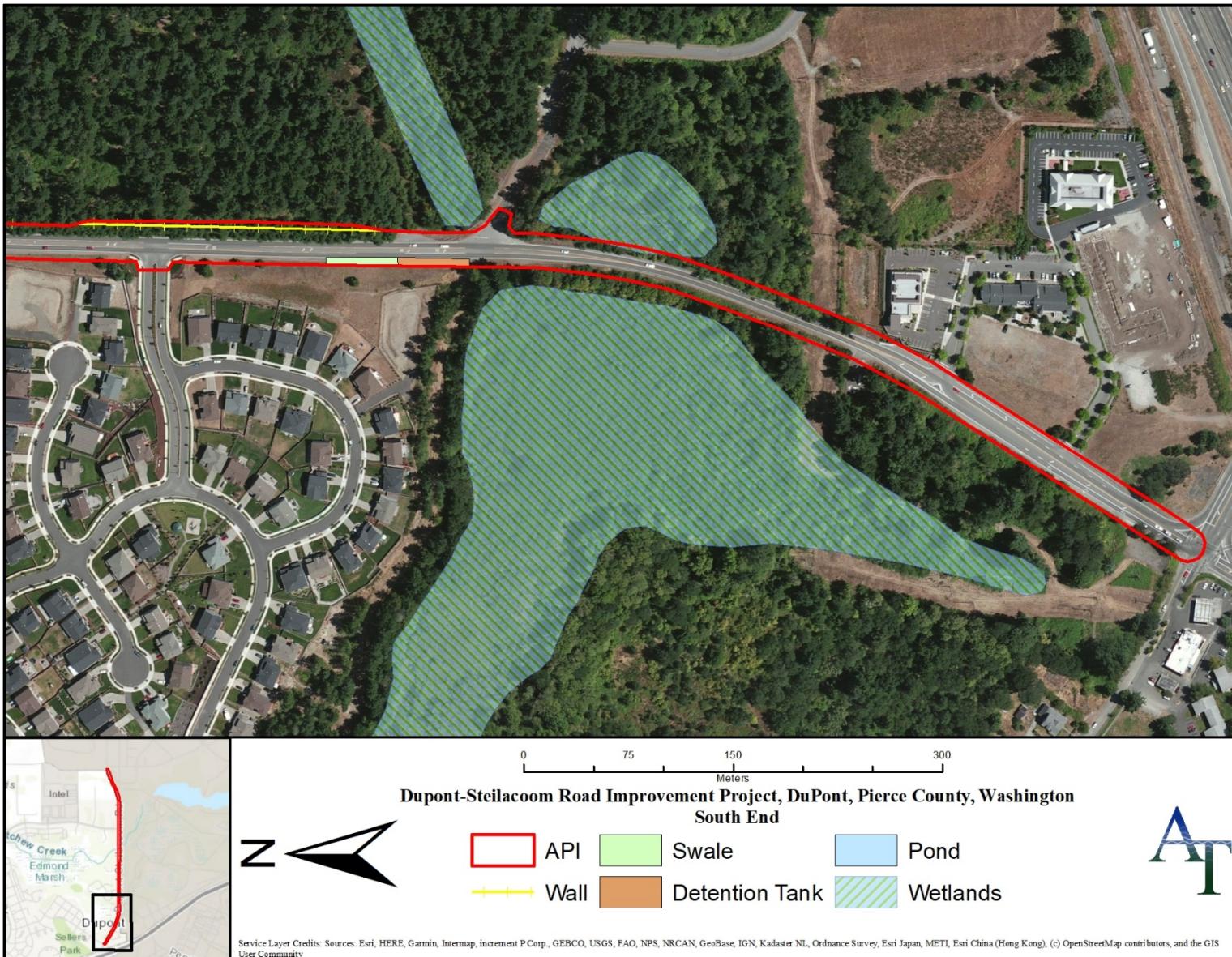


Figure 4. Aerial map of the southern third of the Dupont-Steilacoom Road Improvement Project.

Consultation

As part of the SEPA process, affiliated tribes were contacted by the City regarding the permit requests for the project. ATCRC conducted a technical notification on October 29, 2019 with the Nisqually Tribal Historic Preservation Office in order to identify any specific areas of cultural concern within the proposed API. As part of the consultation, Jeremy Badoldman of the Tribal Historic Preservation Office conducted a site visit on November 4th and assisted with the investigation.

Project Area and Description

The project area consists of 18.89 acres of improved and unimproved right-of-way and intersection expansions along 1.2 miles of Dupont-Steilacoom Road between Wharf Road and Pendleton Avenue in Dupont, Pierce County, Washington.

The API is roughly split into thirds with the northern section extending from Wharf Road to Center Drive (Figure 2), proceeded in the middle by Center Drive to Bell Hill St (Figure 3), then on the southern end Bell Hill St to the intersection of Barksdale Ave and Dupont-Steilacoom Rd (Figure 4).

Much of the eastern part of the API is restricted by a fence which is part of the Joint Base Lewis-McChord. This fence is ~1-meter from the road surface and is set in road gravel. There are several highly disturbed areas along the eastern part of the API which consist of paved shoulders, a turn in to access the base and utility corridors.

Construction will range from the cut and fill landscaping on the eastern side of the road where a previously cut and filled hill is present, to utility and fence realignments, the construction of additional drainage channels and stormwater catchment facilities, construction of detention tanks, the construction of retaining walls, construction of swales and the expansion of existing intersections.

Background Research

In October 2019, ATCRC conducted an electronic record search and literature review for the project area using the DAHP Washington State System for Architectural and Archaeological Records Database (WISAARD). This record search was completed to determine the presence or absence of previously documented architectural, archaeological, and historical period resources within or near the API, to establish the historical and cultural contexts for resource identification and to evaluate significance and the NRHP eligibility of cultural resources that may be present. Archaeological site forms, cultural resource assessments, historic property inventory forms, General Land Office maps and National Register of Historic Places nomination forms were reviewed. Additionally, historic area maps, tax parcel records, and other public records were consulted in order to develop a better understanding of the land use patterns of the area.

Environmental Setting

The API is located on the uplands terrace, northeast of the Nisqually River delta and north of Interstate-5. The API is 2.55 miles east and intersected by Sequalitchew Creek. The topography and geology were formed during the Late Pleistocene, following the advance of several glaciations that originated from Canada and extended between the Cascade and Olympic mountain ranges into the Puget Lowlands (Kruckeberg 1991:12, Lasmanis 1991).

The Vashon Stade of the Fraser Glaciation began around 18,000 BP with an advance of the Cordilleran ice sheet into the lowlands (Porter and Swanson 1998). The Puget Lobe of the ice sheet flowed down into the Puget Lowland and reached its terminus just south of Olympia between 14,500 and 14,000 BP (Clague and James 2002). The Puget Lobe began to retreat shortly after reaching its terminus. Marine waters entered the lowlands that had been carved out by the glacier and filled Puget Sound. The remaining ice floated and wasted away rapidly. Glaciomarine drift deposits were released from the melting glacial ice and deposited on the sea floor across the northern and central Puget Lowland causing the land to rebound and relative sea levels to fall and expose glacial outwash deposits (Clague and James 2002).

About 11,600 to 10,000 BP, the Cordilleran ice sheet advanced once again leaving glacial till and outwash deposits in much of northwestern Washington (Easterbrook 2003). Following the rising temperatures, the glacier retreated rapidly to the north and left the regional landscape ice-free and suitable for inhabitants by approximately 11,000 years ago (Kruckeberg 1991:22).

According to the USDA NRCS (n.d.) soils in the API have been mapped as a large variety. The north end of the road has been mapped as dump and urban fill as reported by Joint Base Lewis-McChord surveys. The rest of the soils are local gravelly sandy loams or muck formed respectively by outwash upon terraces or through river bottom or wetland deposition.

Table 1: Soil types and Surface Geology within the API.

Name	Slope %	Typical Profile
Everett-Spanaway-Spana complex	0 to 30	Oi- 0 to 1 inches: slightly decomposed plant material A- 1 to 3 inches: very gravelly sandy loam Bw- 3 to 24 inches: very gravelly sandy loam C1- 24 to 35 inches: very gravelly loamy sand C2- 35 to 60 inches: extremely cobbly coarse sand
Semiahmoo muck	0 to 1	Oap 0 to 6 inches: muck Oa1 6 to 25 inches: muck Oa2 25 to 60 inches: muck
Spanaway gravelly sandy loam	0 to 3	H1 0 to 14 inches: gravelly medial sandy loam H2 14 to 18 inches: very gravelly medial sandy loam H3 18 to 60 inches: extremely gravelly sand

Cultural Setting

Precontact Setting

Precontact occupation of the Puget Sound lowland can be subdivided into three phases that include Early (end of the last ice age to 5,000 years before present (BP), Middle (5,000 to 1,000 BP) and Late stages of development (1,000 to 250 BP). The Early period is characterized by an emphasis on the use of flaked stone tools, including fluted projectile points, leaf-shaped points and cobble-derived tools. Camps were frequently established along river terraces or outwash channels and exist today as near surface scatters or shallow buried sites. The Middle period coincides with a stabilization of the environment to something similar to today. The broad cultural patterns include a larger suite of tools including smaller notched points and groundstone, and bone or antler implements used for working wood. Shell midden sites first appear during this period indicating a transition to a more maritime-based subsistence pattern. The Late period is dominated by settlement along the coastline and along streams and rivers and far greater specialization of technology. Trade goods also appear indicating extensive trade networks up and down the coast as well as with inland plateau neighbors. Salmon became a primary food source at this time as sea levels had risen and riparian environments supported large runs of salmon and provided plentiful food.

Ethnohistoric Setting

The API is located in the traditional territory of the Nisqually, which is documented as extending along both sides of the Nisqually River from its delta at the southern end of the Puget Sound to nearly 30-miles upstream (Ruby and Brown 1986:150; Suttles and Lane 1990:486). Coastal Salish groups typically maintained strong social ties to neighboring groups in the pre-contact period. Ethnographic and archaeological information indicates that local bands established permanent villages near the convergence of protective marine shoreline and freshwater drainage outlets, while temporary camps were established during the warmer months during seasonal food source gathering times. In the ethnographic period, the Nisqually occupied at least 40 villages on the Nisqually River, where resources were plentiful. There was a village located on McAllister Creek, one at Sequalitchew Creek, one at the south end of Nisqually Lake, one near Roy, and the villages at South Bay and Olympia were called “associated villages”, because of intermarriages between neighboring villages (Carpenter et al 2008). Temporary camps were also utilized while traveling for seasonal food sources, typically during the warmer summer months.

Reviewed ethnographic records (Hilbert et al 2001; Smith 1940) do not indicate any Nisqually villages located in the immediate API. The nearest ethnographic village site appears to have been located west of the API on the mouth of the Nisqually River, ^{tu}sqwE'le. A second village site is located to the east near the junction of the Sequalitchew Creek and the river, stgwáletcabe (Smith 1940).

Historical Period Setting

Non-native settlement of the Puget Sound followed closely after exploration of the Pacific Northwest in the late 1700 and early 1800s AD. Settlement of the Puget Sound region followed soon after establishment of Hudson Bay Company (HBC) fur trading posts. The HBC capitalized on the high demand for beaver pelts and enlisted the services of local Native American trappers. Two HBC forts and one associated village were stationed on the Nisqually delta. Fort Nisqually

was a pastoral and agricultural branch of the Puget Sound Agricultural Company (a subsidiary of the Hudson Bay Company) and shipped supplies to England and other fort establishments (Stilson 2003). Further regional non-native settlement was encouraged by the Treaty of Washington in 1846, the Donation Land Claim Act of 1850, and the creation of the Territory of Washington in 1853.

Non-native settlement in Puget Sound drastically affected Indian people and their traditions. In 1854, following negotiations between the Nisqually, Squaxin, and Puyallup, and the United States government during the Medicine Creek Treaty, three reservations were to be established. Chief Leschi and Quiemuth refused to sign the treaty after learning that the Nisqually reserve was to be established west of the delta, and not on the river where people could fish (Carpenter et al 2008). This initiated the Treaty War of 1855. During this time internment camps were established on Fox Island and Squaxin Island. The war ended when territorial Governor Isaac Stevens agreed to establish reservation lands along the rivers of both the Nisqually and Puyallup and requested that Indian warriors return to the area which resulted in the hanging of Chief Leschi and murder of Quiemuth. Soon after, a large portion of the reservation was condemned by the US Army for development of military installations (later to become Fort Lewis), and many displaced Nisqually were forced to relocate to foreign lands on the Quinault River and the Puyallup, Skokomish and Chehalis reservations, as much of the reservation land remaining had already been divided and allotted into family units (Carpenter et al 2008).

The project API does sit within land claims of the Hudson Bay Company (HBC) and the associated Puget Sound Agricultural Company (PSAC). These land claims were sold to the United States following the 1864 Treaty between the United States and Great Britain that effectively removed the HBC and the PSAC from the Washington Territory (United States 1864, Kennedy et al 1983, and Kaehler 2008).

Historic maps were reviewed in an attempt to reestablish land use history. Two unnamed historic trails are delineated within a 1-mile radius of the API; one from Steilacoom to Olympia about 0.1 miles southeast, and a circular route along Red Salmon Creek to the west. The 1871 GLO maps show Donation Land Claims had been taken out in the API by William H. Mastin and John Withiel (United States Surveyor General 1871, accessed via WISAARD and the General Land Office Records on November 6, 2019).

Few European Americans lived in the immediate area at the turn of the 20th Century. In 1906 the E.I. DuPont de Nemours & Company purchased large tracts of land in the DuPont area, and opened an explosives manufacturing facility called the DuPont Powder Works (Munyan 1972), on top of the site of Lach-ah-Lett's (Nisqually) village site (Carpenter et al 2008:13). The City of DuPont was built around this industry, and the city, an example of a Pacific Northwest company town, is now listed on the Register of Historic Places.

Previous Cultural Resource Studies, Archaeological Sites and Historic Properties

A review of the WISAARD revealed that a total of 27 previous cultural resources studies have been completed within a 1-mile radius of the project API (Table 2). The majority of these studies were conducted for industrial development, development of land around Joint Base Lewis McChord, and housing developments.

Twenty-two (22) archaeological sites have been previously recorded within a 1-mile radius of the API (

Table 3). Precontact lithic material has been recorded east and northeast of the project area.

Three (3) historic properties have been inventoried within a 1-mile radius of the API (Table 4), and none will be affected by the proposed project.

Table 2. Previous cultural resources within 1-mile by distance to the API.

Author	Title (Date)	Findings	Distance from API
Amell, Sarah	Joint-Base Lewis-McChord Vicinity I-5 Improvement Project Cultural Resource Assessment (2017)	No further action required.	Adjacent to APE
Cooper, Jason	Archaeological Survey, Evaluation, and National Register Eligibility Testing at Joint Base Lewis-McChord (2014)	No further action required.	Adjacent to APE
Schultze, Carol	An Archaeological Inventory Survey of 227 Acres, Fiscal Year 2010, Joint Base Lewis-McChord Main (2012)	No further action required.	Adjacent to APE
Cooper, Jason	FINAL: Cultural Resources Survey/Discipline Report Point Defiance Bypass Project (2008)	No further action required.	Adjacent to APE
Daugherty, Richard D.	The Status of Cultural Resources in the Area Designated Parcel S, Northwest Landing, DuPont (1996)	No further action required.	Adjacent to APE
Kiers, Roger	Cultural Resources Survey, I-5/SR510 to SR 512- Stage 3 Mobility Improvements, Thurston and Pierce Counties, Washington (2013)	No further action required.	0.05 miles
Van Galder, Sarah	Federal Railroad Administration WSDOT Point Defiance Bypass Project Environmental Assessment, Section 106 Survey Report Historic, Cultural, and Archaeological Resources/ Discipline Report (2012)	No further action required.	0.05 miles
Schultze, Carol	Cultural Resources Inventory, Phase II Development Northwest Logistics Center, City of DuPont, Pierce County, Washington (2015)	Two historic-era artifact scatters were observed (45PI1358 and 45PI1359). Recommends limited archaeological monitoring of ground disturbing activities.	0.11 miles
Taylor, Allie Rae	Assessment of Site 45PI01358 for the Northwest Logistics Building 2 Project, City of DuPont (2015)	Historic-era artifact scatter was observed (45PI1358). Recommends limited archaeological monitoring of ground disturbing activities.	0.11 miles
Schumacher, James	Archaeological Monitoring for Basalite Office Facility, DuPont (2007)	No further action required.	0.15 miles

Author	Title (Date)	Findings	Distance from API
Thompson, Gail	Archaeological Monitoring at the Western Washington Sheet Metal Site, City of DuPont (2009)	No further action required.	0.18 miles
Gilpin, Jennifer	Memo to Gretchen Kaehler RE: NRHP Evaluation of Site 2245-1, Historic Period Stormwater System (2014)	No further action required.	0.27 miles
Falkner, Michael	Archaeological Site Verification of 55 Sites and Isolates on Fort Lewis (2012)	No further action required.	0.33 miles
Thompson, Gail	Archaeological Resource Assessment of Community Park Site at the Centex Homes Bell Hill Development, City of DuPont (2008)	No further action required.	0.34 miles
Robinson, Joan M.	Stage Two Cultural Resources Survey and Monitoring of the Washington State Department of Transportation's SR 5: South DuPont Interchange Project (1996)	No further action required.	0.34 miles
Dampf, Steven	Archaeological Site Testing for National Register of Historic Places Eligibility of Five Archaeological Sites at Fort Lewis, Fiscal Year 2006 (2006)	No further action required.	0.35 miles
Shaw, Derek	An Archaeological Inventory Survey of 169 Acres, Fiscal Year 2009, Joint Base Lewis-McChord Main (2010)	No further action required.	0.45 miles
Dampf, Steven	An Archaeological Inventory Survey of 100 Acres at Fort Lewis (2008)	No further action required.	0.45 miles
Webster, Juile	Historic Context, Survey and Evaluation of Housing and Support Facilities in the Division Area of Fort Lewis (2009)	No further action required.	0.50 miles
de Vry, Nicholas	Cultural Resource Monitoring of the Intel Site Redevelopment Project, DuPont (2018)	No further action required.	0.58 miles
Sadler, Dale L.	Cultural Resources Survey for the New 110th Chemical Battalion Complex at North Fort Lewis (2007)	No further action required.	0.75 miles
Sadler, Dale L.	Survey of Cultural Resources for the 5-5 Air Defense Artillery (ADA) Barracks Complex and Vehicle Maintenance Shops Construction at North Fort Lewis (2006)	No further action required.	0.75 miles

Author	Title (Date)	Findings	Distance from API
Sadler, Dale L.	Cultural Resources Assessment for the Whole Barracks Renewal Project at Fort Lewis (2006)	No further action required.	0.75 miles
Solimano, Paul S.	Intel DuPont Campus Project Cultural Resource Assessment and Monitoring (1996)	No further action required.	0.85 miles
Larson, Lynn L.	To Mr. Mike Wright, re: Cultural resource assessment of a soil storage location in the southwest corner of the Intel DuPont Campus (1996)	No further action required.	0.85 miles
Robinson, Joan M.	Cultural Resources Survey and Monitoring of the Washington State Department of Transportation's SR 5: South DuPont Interchange Project (1996)	No further action required.	0.95 miles
Robinson, Joan M.	A Final Archaeological Survey of Washington State Department of Transportation's SR 5: South DuPont Interchange Project (1997)	No further action required.	0.95 miles

Table 3. Archaeological sites within 1-mile by distance to the API.

Author	(Date) Title (Smithsonian Number)	Findings	Distance from Preliminary API
Olander, Jennifer and Schultze, Carol	(2011) HRA-1721-2 (45PI1242)	Historic Rail line.	0.03 miles
McWilliams, Tyler and Metz, Micca	(2013) Bell Hill Liquor Bottle (45PI1310)	(Isolate), a glass liquor bottle.	0.05 miles
Schultze, Carol and Fruge, Adam	(2015) HRS-2245.01-2 (45PI1359)	The site is historic artifact concentration/scatter. Cultural material is present on the surface and consists of glass vessels and base fragments and a white ceramic cup with Marine Corps markings.	0.09 miles
Cooper, Jason B. and Sparks, Shane	(2007) Northern Pacific Railroad Station/Depot at Camp Lewis (45PI0769)	Historic Object; Concrete Foundation, concrete pipes, and various historic refuse.	0.09 miles
Amell, Sarah and Mathews, Bethany	(2015) DuPont School (45PI1393)	DuPont School site includes the graded footprint of demolished school buildings, an abandoned athletic field, associated historic objects, and refuse scatters.	0.14 miles
Baumgartner, Joey and Silverman, Shari Maria	(2008) 1456-1 (45PI0921)	Historic scatter consisted of nine historical artifacts of domestic and personal origin.	0.14 miles

Author	(Date) Title (Smithsonian Number)	Findings	Distance from Preliminary API
Schultze, Carol	(2015) HRA-2245.01-1 (45PI1358)	Site is a historic artifact concentration/scatter with associated pit features. Cultural materials include military-related items such as a metal canteen, rusting oil drums, and pits that may have been related to military training activities (i.e., possible foxholes). There were also domestic and alimentary related artifacts, including brown and clear glass bottles. Smaller concentrations of artifacts along the south side of the site contained fragments of ceramic bowls, porcelain plates, medicine bottles (cork stopper-type), and mason jar lids and lid liners.	0.15 miles
Dugas, A.	(1998) FLI-LAAS-9 (45PI0515)	Possible historic homesite. Historical refuse.	0.16 miles
Lee, W. Burnett	(1973) Hudson Bay Trail Monument (45PI0203)	A monument made of rough granite on a concrete base with a bronze plaque.	0.16 miles
Shaw, Derek	(2010) Arboretum (45PI1031)	Container glass, porcelain, terracotta pipe fragments, tile fragments, linoleum fragments, a ferrous round wire nail, flat glass, ferrous staple, and coal slag	0.17 miles
Baumgartner, Joey and Silverman, Shari Maria	(2008) 1456-2 (45PI0922)	Historic scatter consists of eight historical artifacts of personal and industrial origin.	0.19 miles
Knutson, C.	(2008) Historic Isolate (45PI0969)	Isolate consists of 13 fragments of a colorless glass druggist bottle.	0.19 miles
Daugherty, Richard D.	(1998) Williamson Homestead (45PI0454)	Historic Homestead with historic refuse.	0.25 miles
Gebhardt, Jennifer and Gilpin, Jennifer	(2014) HRA-2245-1 (45PI1333)	A storm water drainage system consisting of two lidded, concrete utility vaults connected by a 24-inch (in) concrete pipe.	0.30 miles
Gebhardt, Jennifer	(2014) HRA-ISO- 2245-1/JKG4i (45PI1361)	(Isolate), interpreted as a piece of a historic period streetlamp	0.33 miles
Falkner, Michael and Olander, Jennifer	(2009) O.H. White Homestead (45PI1169)	Historic homestead; Site is composed of one pear tree, two apple trees, and domestic rosebushes. Maybe concrete rubble and culvert but could be from previous construction.	0.35 miles
Riordan, Timothy	(1953?) Town of Dupont (45PI0069)	Town built to house employees of Dupont Plant.	0.40 miles
Amell, Sarah and Mathews, Bethany	(2015) Fort Lewis Liberty Gate/Lewis Drive (45PI1394)	The Liberty Gate site consists of an abandoned roadbed, concrete sidewalk, and mature ornamental shrubs and trees.	0.41 miles
Riordan, Timothy	(1953?) Town of Dupont Dump (45PI0065)	Early 1900/s refuse dump.	0.46 miles

Author	(Date) Title (Smithsonian Number)	Findings	Distance from Preliminary API
Cooper, Jason and McWilliams, Tyler	(2013) Greene Park Landing (45PI1316)	Features of Greene Park Landing include a concrete pedestrian bridge footing, 3 concrete building foundations, a gravel concentration associated with another former building, two building depressions, roadway elements, and a water line. Cultural materials uncovered include the following: metal, glass, earthenware, porcelain, concrete, charcoal, stoneware, brick, textile fragments, and precontact lithic material.	0.47 miles
Sutherland, Mary	(2015) Kaufman and Clark (Parade Grounds) (45PI1401)	Ruins of the foundations were located, concrete fragments, foundational remains, wire nails, and amber, aqua, and clear glass fragments.	0.48 miles
Dugas, A.	(1998) FLI-LAAS-8 (45PI0516)	Homestead site consisting of a light surface and subsurface artifact scatter (e.g., glass, ceramics, and metal debris, and cut nails) relating to a domestic occupation.	0.50 miles

Table 4. Registered historic structures and districts within 1-mile organized by distance to the API.

Smithsonian Number:	Name	Location	Type	Built	Distance from API
45PI0699	Red Shield Inn/Ft. Lewis Military Museum (Ft. Lewis Inn)	Building 4320, Main Street	Building	1919	0.36 miles
45DT0151	DuPont Village Historic District	Roughly Bounded by Santa Cruz, Brandywine, Dupont and Penniman, Dupont, WA	Historic District	1915	0.38 miles
45DT0190	Fort Lewis Garrison Historic District/Camp Lewis/Fort Lewis	Roughly bounded by I-5 to the west, Division St to the east, Mann Ave to the south, and Colorado Ave to the North	Historic District	1917	0.58 miles

Cultural Resources Expectations

Based on ATCRC's background review of environmental and cultural contexts, and previously recorded cultural resources studies and sites, the project area is considered to be located in an area of high probability for cultural materials and/or deposits. However, the project area is a currently disturbed, and highly developed roadway with a close fence line adjacent to steep graded hillsides and wetlands, and a large number of utility lines and improvements. Accordingly, there is unlikely to be in situ native soils that have not been disturbed by prior activities. If additional ethnographic, archaeological or historic sites were present in the project area they would likely represent historic era materials or pre-contact Native American cultural resource materials similar to those identified within the study area.

Field Investigations

Field investigations were conducted on November 4, 2019 by Nicholas de Vry (Cultural Resource Technician) during partly cloudy weather conditions.

The field investigations consisted of a pedestrian survey and subsurface testing. Pedestrian survey consisted of walking the API and photographing existing conditions within the API, including disturbance events such as utilities, road prism improvements, and other obstructions. Subsurface testing consisted of excavating 9 SPs along the expansion areas as well as 62 shallow SSs where road improvements or other disturbances proved to be at the surface (Figure 5, 6 and 7). SPs were strategically placed based on environmental and modern cultural features identified during the pedestrian survey. Each SP measured approximately 40 centimeters (cm) in diameter and were excavated to a minimum 50 cm below the ground surface or impasse. Sediments were screened through $\frac{1}{4}$ -inch mesh and backfilled upon completion. Photo 1 provides an example of the subsurface conditions encountered during the survey. The soils encountered during shovel probe excavations presented in Appendix A.

The proposed direct impacts are along Dupont-Steilacoom Road with expansion to both the northern and southern sides. The impact areas are characterized by young growth trees or grass with a plethora of disturbances from utilities and landscaping.

Soils found across the API were representative of expected soils compared to the USDA NCRS soil map, made up of brown or black loams over laying glacial outwash or till. In the western third of the API soils consisted of “muck” while soils to the east were generally gravelly sands and drier. Much of the surveyed area consisted of gravelly fill. No cultural resources were observed.

The API is very disturbed, with a fence line along the eastern edge of the road, leaving deep ground disturbances and clearing of native soils where hills or brush have been removed (Photo 2). The west side on the other hand instead is mostly modified by landscaping and development (

Photo 3. View of gravel and landscaping along west side of Dupont-Steilacoom between Center Drive and Wharf Road.

, Photo 7). Because of the developments to the west of the API utility lines have been excavated in many places leaving disturbed soils in large swathes (Photo 4, Photo 8). In between developed portions of the west side of the road and in un-flattened portions of the east are lower elevation areas where creeks and wetlands border the API (Photo 5) and in some area raised hills which have been cut by the construction and development (Photo 6).



Photo 1. View of SP1 excavated on the SW corner of Wharf and Dupont-Steilacoom.



Photo 2. View of fence line along east side of the API with utility box in foreground.



Photo 3. View of gravel and landscaping along west side of Dupont-Steilacoom between Center Drive and Wharf Road.



Photo 4. View of gas line markings seen in many places along the API.



Photo 5. View of lower elevation creek passing underneath the API.



Photo 6. View of sloping bank off the edge of the API.



Photo 7. View of developed corner of Center Drive showing representative disturbances and utilities.



Photo 8. View of SE corner of Wharf Road showing utilities and gravel embankments.

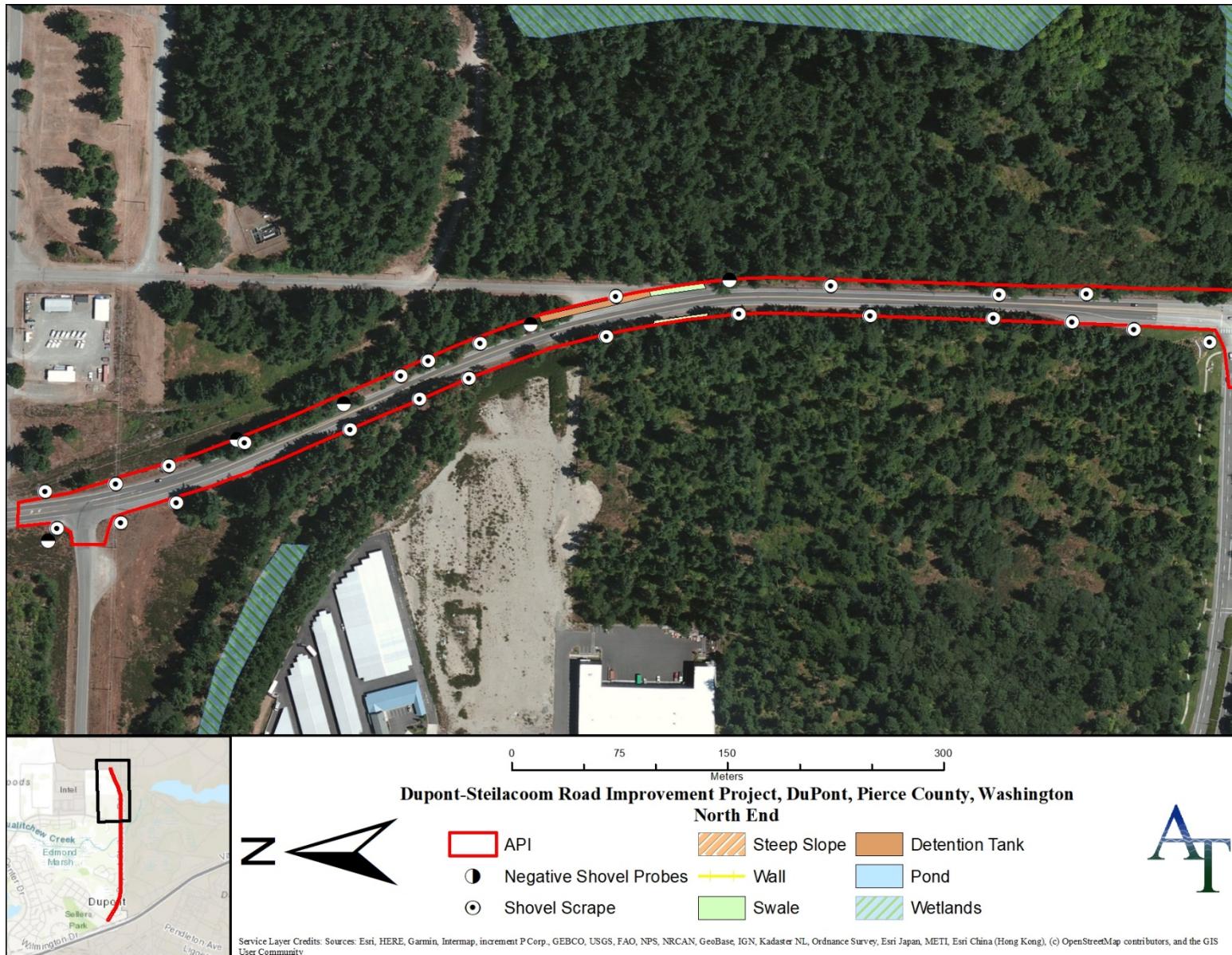


Figure 5. Survey results along Dupont-Steilacoom Road, north end.

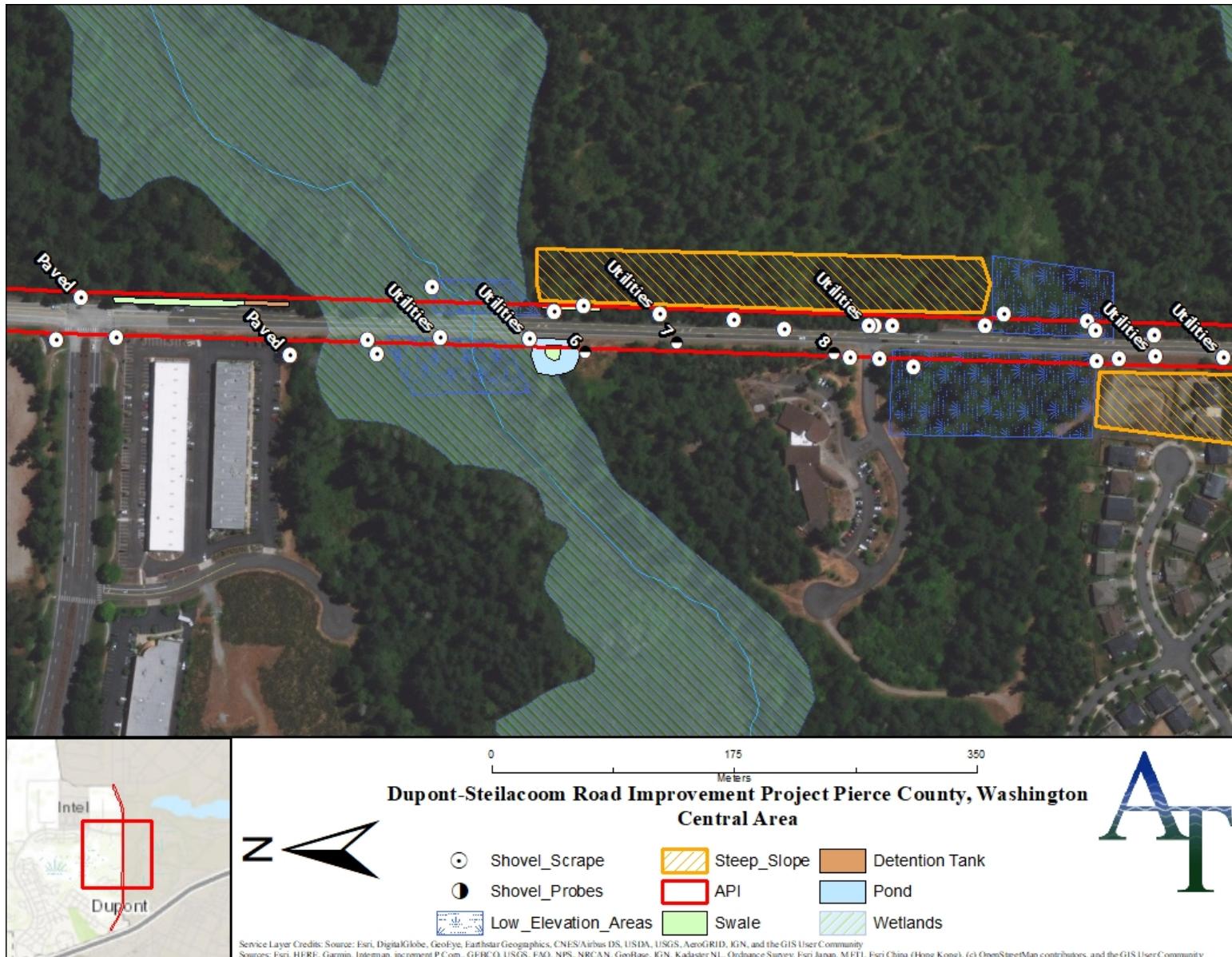


Figure 6. Survey results along Dupont-Steilacoom Road, central section.

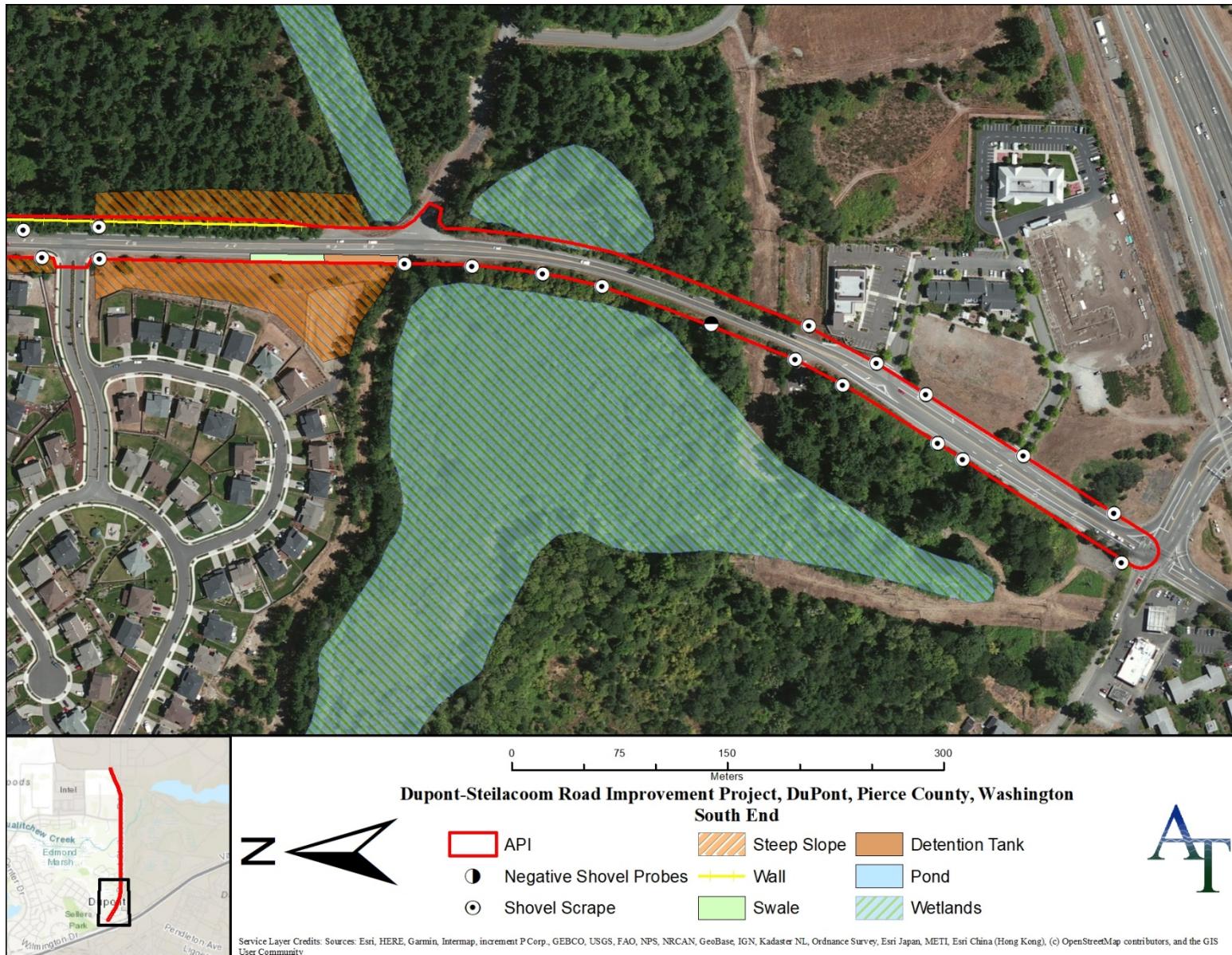


Figure 7, Survey results along Dupont-Steilacoom Road, south end.

Results and Recommendations

ATCRC's cultural resources assessment for the DuPont-Steilacoom Road Improvement Project included background research, field investigation, and preparation of this report. Background review determined that the project area is located in an area considered to have a "low" to "very high" probability for cultural resources.

Field investigations consisted of pedestrian survey, shovel scraps to remove surface duff/vegetation to expose mineral soil, and subsurface shovel testing; no cultural resources were identified in the course of surface and subsurface investigations. The shovel probe excavation log (see Appendix A) that glacial sediments were present generally within 30-40cm of the modern ground surface. Extensive disturbances were discovered throughout the entire API and soils that were documented during subsurface testing either indicated subsurface disturbance or encountered native soils that were glacial till or outwash deposits without possibility of cultural resources. Due to the quantity of disturbed soils and lack of cultural resources ATCRC recommends a finding of no archaeological deposits or historical period properties were encountered during investigations.

ATCRC also recommends that an Inadvertent Discovery Plan (IDP) be adopted prior to ground disturbing activities in the event that archaeological resources or human remains are discovered during site development. An IDP is attached Appendix B.

No cultural resources study can wholly eliminate uncertainty regarding the potential for prehistoric sites, historic properties or TCPs associated with a project. The information presented in this report is based on professional opinions derived from our analysis and interpretation of available documents, records, literature and information identified in this report, and on our reconnaissance-level field investigation and observations as described herein. Conclusions and recommendations presented apply to project conditions existing at the time of our study and those reasonably foreseeable. The data, conclusions and interpretations in this report should not be construed as a warranty of subsurface conditions described in this report. They cannot necessarily apply to site changes of which ATCRC is not aware and has not had the opportunity to evaluate.

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Appendix A: Shovel Probe Log

Shovel Probe# (Depth)	Soil Description (cm)	Cultural Material
1 (70)	0-20 Brown wet medium/semi compact loam with 7% sub rounded gravel (3-8cm) – gradual boarder. 20-60 Black wet semi compact loam with 7-10% sub rounded gravel (3-10cm) – clear boarder. 60-70 Glacial till – yellow/tan coarse sandy loam with 10% angular gravel.	None
2 (100)	0-20 Brown wet medium/semi compact loam with 7% sub rounded gravel (3-8cm) – gradual boarder. 20-30 Glacial till – yellow/tan coarse sandy loam with 10% angular gravel.	None
3 (89-98)	0-30 Brown wet medium/semi compact loam with 7% sub rounded gravel (3-8cm) – gradual boarder. 30-40 Glacial outwash - Loose grey/brown sub angular gravels.	None
4 (100)	0-30 Brown wet medium/semi compact loam with 7% sub rounded gravel (3-8cm) – gradual boarder. 30-40 Glacial till – yellow/tan coarse sandy loam with 10% angular gravel.	None
5 (100)	0-20 Grey road gravel. 20-30 Black road gravel.	None
6 (103)	0-40 Black wet semi compact loam with 7-10% sub rounded gravel (3-10cm) – clear boarder. 40-50 Glacial outwash - Loose grey/brown sub angular gravels.	None
7 (100)	0-50 Black wet semi compact loam with 7-10% sub rounded gravel (3-10cm) – clear boarder. 50-60 Glacial outwash - Loose grey/brown sub angular gravels.	None
8 (88)	0-20 Black wet semi compact loam with 7-10% sub rounded gravel (3-10cm) – clear boarder. 20-30 Glacial outwash - Loose grey/brown sub angular gravels.	None
9 (100)	0-30 Black wet semi compact loam with 7-10% sub rounded gravel (3-10cm) – clear boarder. 30-40 Glacial till – yellow/tan coarse sandy loam with 10% angular gravel.	None

Appendix B: Inadvertent Discovery Plan (IDP)

Plans and Procedures for the Inadvertent Discovery of Cultural Resources and Human Skeletal Remains for DuPont-Steilacoom Road Improvement Project, DuPont, Pierce County

1. Introduction

The following Inadvertent Discovery Plan (IDP) outlines procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

2. Recognizing Cultural Resources

A cultural resource discovery could be prehistoric or historic. Examples include:

- An accumulation of shell, burned rocks, or other food related materials;
- Bones or small pieces of bone,
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials. When in doubt, assume the material is a cultural resource.

3. On-Site Responsibilities

STEP 1: STOP WORK. If any employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work in the immediate area of the discovery must stop (typically a 10-foot radius but depends on site conditions). The discovery location should be secured at all times.

STEP 2: NOTIFY MONITOR. If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions.

STEP 3: NOTIFY PROJECT MANAGEMENT. Contact the Project Manager. If you cannot reach the Project Manager, contact the project's alternate point of contact. The Project Manager or the designated Alternate Contact will make all other calls and notifications.

Project Manager	Alternate Contact
Aaron Butters, PE 360-815-7308 abutters@hwlochner.com	Sarah Amell 360-359-6701 Sarah@AquaTerraCRC.com

If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call or speak with the media about the remains specifically.

4. Further Contacts and Consultation

A. Project Manager's Responsibilities

- Protect Find: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.
- Direct Construction Elsewhere On-site: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.
- Identify Find: The Project Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological. This will either be an archaeological consultant hired by the Project or staff from DAHP.
- If the discovery is determined not archaeological, work may proceed with no further delay.
- If the discovery is determined to be archaeological, the Project Manager will continue with notification.
- If the discovery is human remains or funerary objects, the Project Manager will ensure that the DAHP State Physical Anthropologist examines the find. If the discovery is determined to be human remains, the procedure described in Section 5 will be followed.
- Notify DAHP if DAHP has not yet been contacted, the Project Manager will do so. The Project Manager will also contact the involved agencies (if any) and interested and affected Tribes.

B. Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

C. Contacts

<i>Department of Archaeology and Historic Preservation</i>	
Lance Wollwage, Ph.D. Assistant State Archaeologist, DAHP (360) 586-3536	Rob Whitlam, Ph.D. State Archaeologist, DAHP (360) 586-3080
<i>Tribes</i>	
Nisqually Indian Tribe Annette Bullchild Tribal Historic Preservation Officer (360) 456-5221 ext. 1106	

5. Special Procedures for the Discovery of Human Skeletal Material

If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible.

The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Thomas B. Clark, Coroner Pierce County Medical Examiner's Office 3619 Pacific Ave. Tacoma, WA 98418 (253) 798-6494	DuPont City Police Department (253) 964-7060
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6. Documentation of Archaeological Materials

Archaeological deposits discovered during construction will be assumed eligible for the Washington Heritage until a formal Determination of Eligibility is made. Contact the Project Manager or DAHP regarding the possible need for an Emergency Excavation Permit per RCW27.53. DAHP will make all decisions regarding procedures for evaluation of features and eligibility determinations.

All prehistoric and historic cultural material discovered during project construction will be recorded by a professional archaeologist on State of Washington cultural resource site or isolate form using standard techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 above will be followed.

7. Proceeding with Construction

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A Cultural Resources Specialist (either from DAHP, a consulting Tribe, or a professional consultant) must determine the boundaries of the discovery location. In consultation with DAHP and affected tribes, the Project Manager will determine the appropriate level of documentation and treatment of the resource. If federal agencies are involved, the agencies will make the final determinations about treatment and documentation.

Construction may continue at the discovery location only after the process outlined in this plan is followed and DAHP determine that compliance with state and federal laws is complete.

State Archaeologist

Rob Whitlam, Ph.D.

Rob.Whitlam@dahp.wa.gov

(360) 586-3080

(360) 890-2615 – Cell

The DAHP will review the eligibility criteria above, make a recommendation to the artifact or deposits potential eligibility, and will proceed with agency and tribal notification as necessary (so long as the artifact or deposit is determined eligible).



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

March 12, 2020

Ms. Sarah Amell
Aqua Terra Cultural Resource Consultants
5518 Trosper Lake St. SW
Tumwater, WA. 98512

In future correspondence please refer to:
Project Tracking Code: 2020-02-01227
Property: Cultural Resource Survey for the DuPont-Steilacoom Road Improvement Project, DuPont,
Pierce County, Washington
Re: Concur with Survey

Dear Ms. Amell:

Thank you for contacting the State Historic Preservation Officer (SHPO) and the Department of Archaeology and Historic Preservation (DAHP) with documentation regarding the above referenced project. In response, we agree with the results and recommendations made in the survey report. We do, however, ask that an Inadvertent Discovery Plan be included as part of the construction permit.

Should new information become available or the scope of work changes, please resume consultation as our assessment may be revised. In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and contact made with concerned tribes and DAHP for further consultation.

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with the State Environmental Policy Act (SEPA).

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Dennis Wardlaw
Transportation Archaeologist
(360) 586-3085
dennis.wardlaw@dahp.wa.gov



Record of Environmental Consideration

Easement Revision for DuPont Steilacoom Road DACA67-2-84-88	NEPA #: 19-045 / CJR Real Estate /A. Demming
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1. Description of Proposed Action

The Department of the Army proposes to revise the easement for DuPont Steilacoom Road (DACA67-2-84-88). The existing easement was granted in 1988 to Pierce County for the *“construction, installation, use, repair, replacement and maintenance of said roads or streets, including culverts and other drainage facilities, and roadway striping. . .”*

Under the Proposed Action, Operations and Maintenance responsibilities of DuPont Steilacoom Road, from the future 1-5 Exit 119 interchange to Wharf Road / Integrity Gate, would transfer from Pierce County to the City of DuPont.

Transfer of the operations and maintenance responsibilities from Pierce County to the City of DuPont would allow the City of DuPont to be the design authority for any roadway improvements of DuPont Steilacoom Road over the same length.

Pierce County would perform their operations and maintenance on DuPont Steilacoom Road from Wharf Road / Integrity Gate to the Town of Steilacoom in accordance with the existing easement with Joint Base Lewis McChord.

2. Proposed Date(s) of Action:	The new easement would be granted by JBLM to the City of DuPont in 2020 or 2021
---------------------------------------	--

3. Environmental Condition of Property (ECP)

In accordance with AR 200-1, Chapter 15-5, Table 15-2, an ECP is not required.

4. Document History

6 May 2020 Memorandum, Jeff Cook, PE, H.W. Lochner, Inc. on behalf of the City of DuPont (attached).

5. Categorical Exclusion or covered in an existing EA/EIS.

Project is categorically excluded, having no significant individual or cumulative environmental impacts, under title 32 CFR Part 651, Appendix B, subparagraph (f)(1): *Grants or acquisitions of leases, licenses, easements, and permits for use of real property or facilities in which there is no significant change in land or facility use.*

- Project fits within the definition of a categorical exclusion (see above) according to 32 CFR 651.29.
- This project has not been segmented according to 32 CFR 651.29.
- There are no extraordinary circumstances regarding this project according to 32 CFR 651.29.

Record of Environmental Consideration

6. Proposed Roadway Improvements

The City of DuPont intends to widen DuPont Steilacoom Road as described in the 6 May 2020 Memorandum. Work would commence only after the easement is granted to the City. Work would be within the boundaries of the existing 80-foot JBLM easement.

Some minor work would occur outside of the easement, on JBLM property, such as replacement of security fencing and to repave roadway sections partially displaced by the work (such as at Wharf Road / Integrity Gate). The Army would grant a temporary construction easement for this work, if necessary.

7. Environmental Considerations for Proposed Roadway Improvements

Wetlands: Proposed roadway improvements would not extend onto wetlands that are adjacent to the project area. No temporary or permanent impacts to wetland would occur.

Cultural Resources: A cultural resources survey was conducted, submitted and accepted by the Washington State Department of Archeology and Historic Preservation (DAHP). The DAHP agreement letter is included as attachments to the 6 May 2020 memo.

Public Involvement: The City of DuPont intends to publically present their proposed roadway improvements project via open house events (including an online option) to allow for review, comment, and questions.

8. Approval

Environmental Evaluator



JBLM NEPA Program Manager: 253-966-1763

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RUNNER.CHRISTOPHER.J.1231803358
Date: 2020.06.30 14:13:08 -07'00'

Christopher J. Runner, NEPA Program Manager

Date

Staff Concurrence

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Date: 2020.07.02 10:54:55 -07'00'

Cynthia K. Trout, P.E., Chief, Environmental Division

Date

Record of Environmental Consideration

9. Proponent/Project Officer

Caveat with this NEPA document: Any change in the magnitude, location, duration, or timing of this project will require re-evaluation and possible revised documentation by the proponent with the Public Works, Environmental Division NEPA Program Manager (253) 966-1763.

Mike Barton, JBLM Real Estate

phone/date

MEMORANDUM

Date: May 6, 2020

To: Christopher J Runner
DPW, Environmental Division (IMLM-PWE)
NEPA Program Manager

From: Jeff Cook, PE
H.W. Lochner, Inc on behalf of the City of DuPont
Project Manager

RE: Environmental Permitting City of DuPont, DuPont Steilacoom Road Improvements Project

Purpose and Need:

The purpose of this memo is to outline the parameters for the City of DuPont's Capital Improvement project: DuPont-Steilacoom Road Improvements and seek permitting approval, or exemption, from Joint Base Lewis-McChord (JBLM).

Background:

Location: The project will widen the existing DuPont Steilacoom Road Wharf Road and North of Stanton Drive (Pendleton Ave); approximately 1.5 miles in length. A Vicinity Map is included in the attached to provide visual reference and location.

Previously, the roadway was maintained by Pierce County via an Easement from JBLM. That easement is being transferred to the City of DuPont, thus the City will be administering this widening project and maintaining the roadway upon completion under the authority provided from the JBLM easement.

Roadway Improvements:

Widening: The existing DuPont Steilacoom Road is an existing two-lane road with narrow shoulders of less than a foot in width. The newly constructed improvement will widen the road to include 4 lanes (2 northbound and 2 southbound) and widen the shoulder to widths of 2-4 feet. A proposed roadway cross-section is included in the attached to provide graphic presentation of the new roadway.

The existing roadway footprint is approximately 412,000 SF, with the existing pavement area encompassing approximately 285,000 SF of that footprint. The new project will increase the pavement area, with the addition of new travelled lanes, but will stay within the existing footprint.

The new roadway will be constructed within the boundaries of the 80-foot JBLM easement. There will be some minor work occurring outside on the easement, on JBLM property, such as construction of new security fencing to repave that which would otherwise be removed by this project.

Wetlands, Cultural Resources, SEPA:

Wetlands: The wetlands in the project area were flagged, staked and surveyed. Wetland impacts are being avoided with the use of fill walls and steepened slopes.

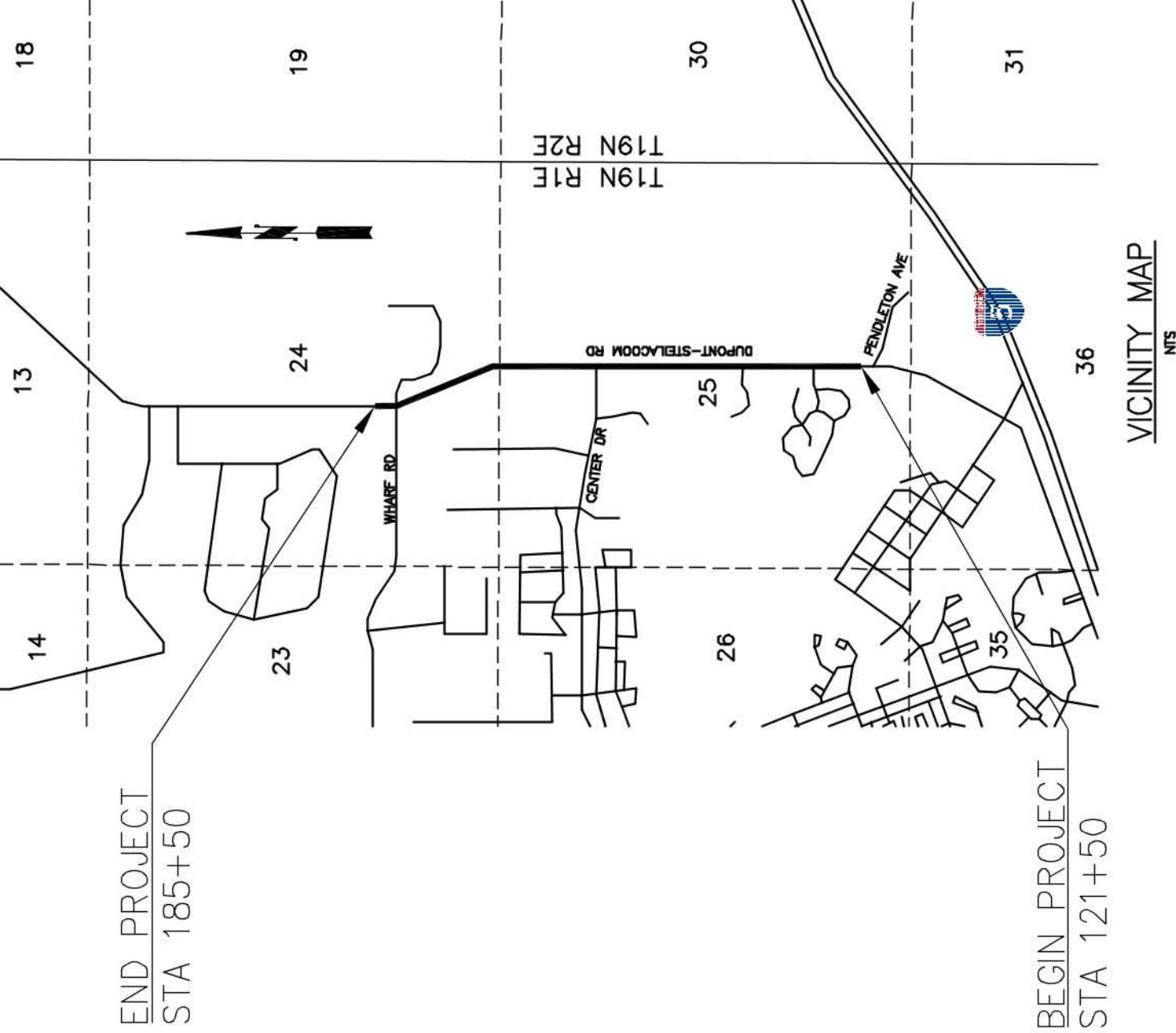
Cultural Resources: A Cultural Resource Survey was conducted, submitted and accepted by the Department of Archeology and Historic Preservation (DAHP). The DAHP agreement letter is included as attachments to this memo.

SEPA: As work is not planned to occur on City ROW, it is likely a formal SEPA process may not occur. The City does intend, and is currently planning, open house events (including an online option) to allow for public review, comment, and questions pertaining to the project.

DUPONT-STEILACOOM ROAD IMPROVEMENT

SEC. 24, T.19N., R.1E., W.M. / SEC. 25, T.19N., R.1E., W.M.

CITY OF DUPONT
XXXXXX



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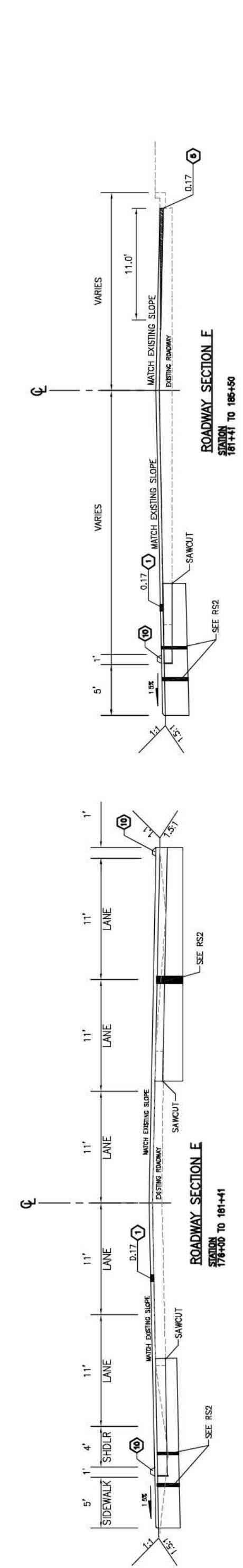
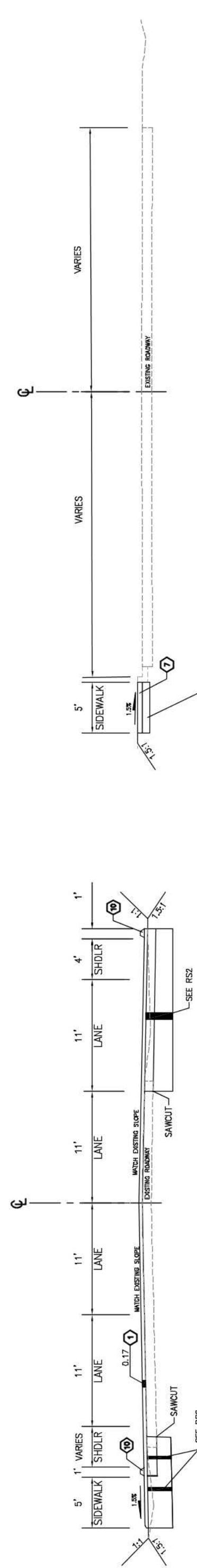
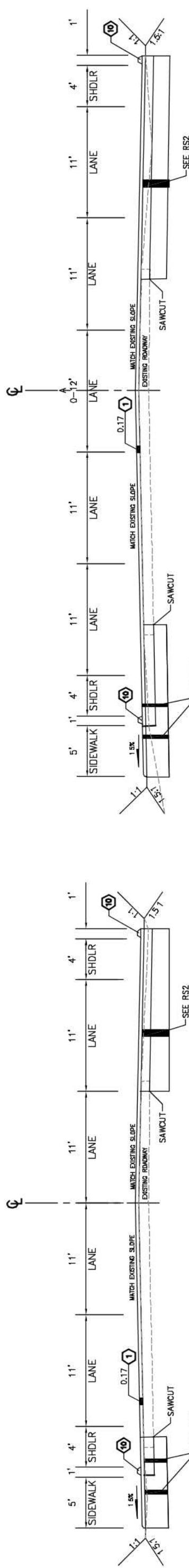
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SHEET NO.	PLAN REFERENCE NO.	TITLE
1	CV1	COVER SHEET
X	SQ1	SUMMARY OF QUANTITIES
X	RS1	ROADWAY SECTION
X	SP1-SP8	SITE PREPARATION/TESC PLAN
X	RD1-RD8	ROADWAY PLAN
X	WP1-WP5	WALL PLAN AND PROFILE
X	IN1-IN5	INTERSECTION/TRAFFIC SIGNAL PLAN
X	DR1-DRX	DRAINAGE PLAN
X	PM1-PM9	PAVEMENT MARKING/SIGNING PLAN
X	TS1-TS4	TRAFFIC SIGNAL PLAN
X	TC1-TC2	TRAFFIC CONTROL

NO.	DATE	BY	APPR.	REVISIONS	APPROVED FOR CONSTRUCTION	LOCHNER DESIGNED BY CED DRAWN BY AB	NOT FOR CONSTRUCTION	LOCHNER	CITY OF DUPONT STEILACOOM ROAD IMPROVEMENTS	DRAWING NUMBER
					ENGINEERING MANAGER	DATE			DUPONT-STEILACOOM	CV1
					PROJECT MANAGER	DATE			ROAD IMPROVEMENTS	
					PROJECT ENGINEER	DATE			COVER SHEET	
										SHT <u>1</u> OF <u>XX</u>

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INSTRUCTION NOTES:

- HMA CL $\frac{1}{2}$ IN. PG 58H-22
- HMA CL 1 IN. PG 58H-22
- CRUSHED SURFACING BASE COURSE
- SELECT BORROW INCL. HAUL
- ⑤ PLANING BITUMINOUS PAVEMENT
- ⑥ CEMENT CONC. PAVEMENT
- ⑦ CEMENT CONC. SIDEWALK
- ⑧ ROADWAY EXCAVATION INCL. HAUL

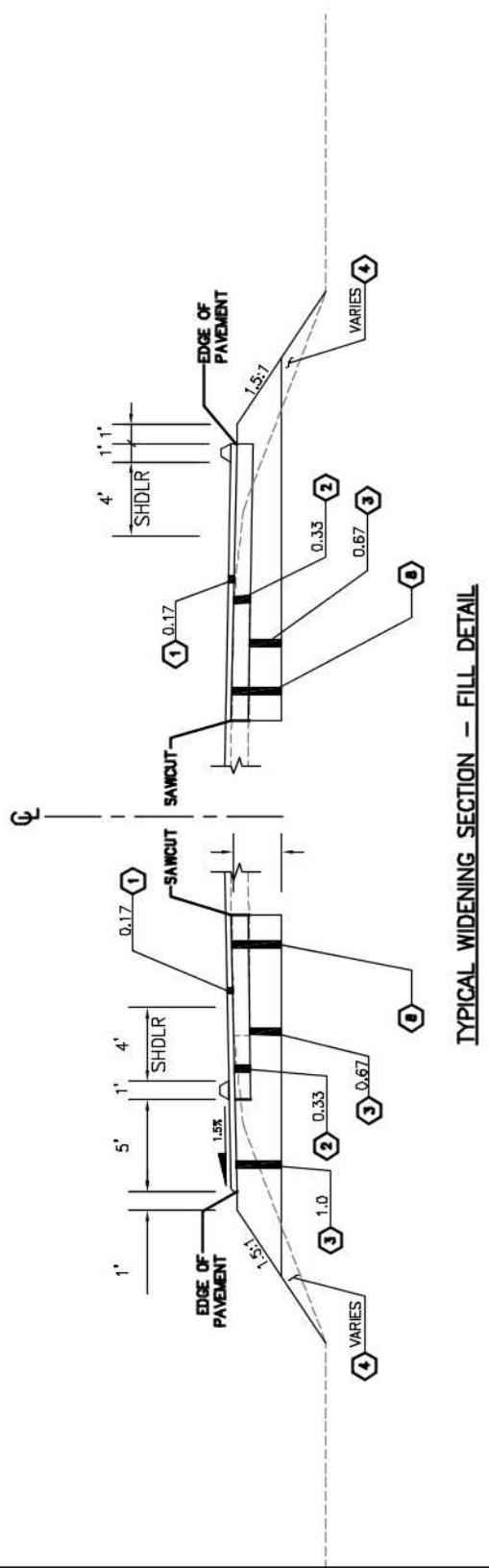
- ⑨ HMA FOR PRELEVEL CL 1/2 IN PG ——
- ⑩ EXTRUDED CURB TYPE 3
- ⑪ NOT USED

NOT TO SCALE

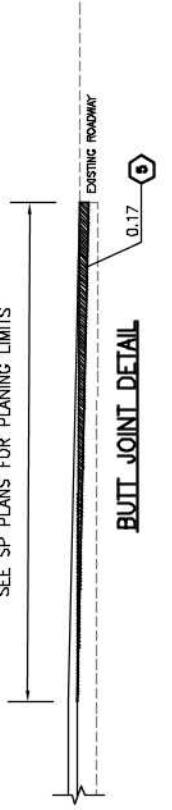
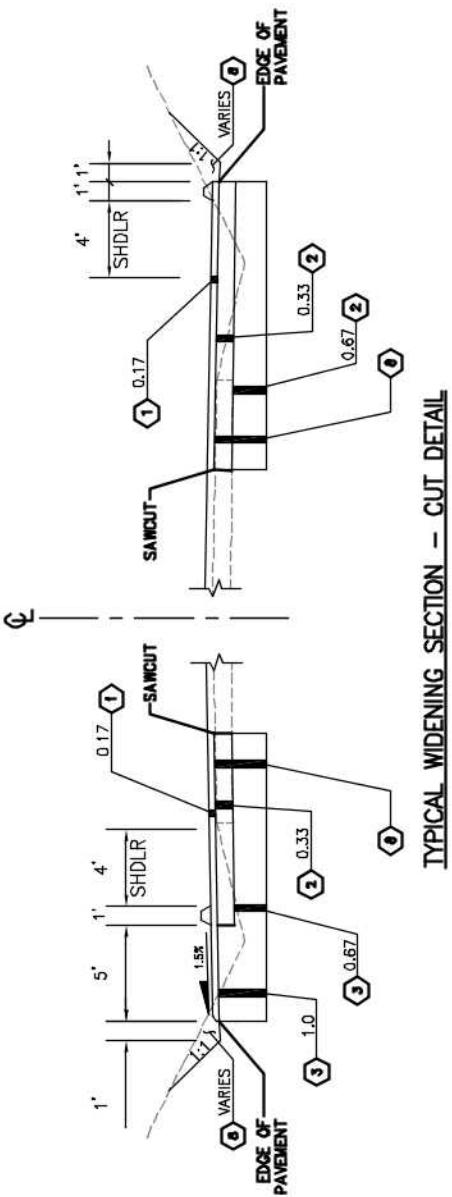
GENERAL NOTES

1. ALL DEPTHS SHOWN ARE COMPAKTED DEPTHS
2. SEE SITE PREP PLAN FOR SAMCUT LIMITS
3. SEE ROADWAY PLAN FOR VARIABLE ROADWAY WIDTHS

NOT FOR CONSTRUCTION	NOT TO SCALE									
<p>CITY OF DUPONT DUPONT-STEILACOOM ROAD IMPROVEMENTS</p> <p>ROADWAY SECTION</p> <p>LOCHNER</p> <p><i>Approved for Construction</i></p> 										
<p>APPROVED FOR CONSTRUCTION</p> <table border="1"> <tr> <td>DESIGNED BY XXX</td> <td>DRAWN BY XXX</td> <td>DATE</td> </tr> <tr> <td>ENGINEERING MANAGER</td> <td>PROJECT MANAGER</td> <td>APPROVED BY</td> </tr> <tr> <td>APPR.</td> <td>APPR.</td> <td>DATE</td> </tr> </table>		DESIGNED BY XXX	DRAWN BY XXX	DATE	ENGINEERING MANAGER	PROJECT MANAGER	APPROVED BY	APPR.	APPR.	DATE
DESIGNED BY XXX	DRAWN BY XXX	DATE								
ENGINEERING MANAGER	PROJECT MANAGER	APPROVED BY								
APPR.	APPR.	DATE								
REVISIONS	APPR.									
IND.	DATE									



TYPICAL WIDENING SECTION - FILL DETAIL



SEE SP PLANS FOR PLANNING LIMITS

EXISTING ROADWAY

CONSTRUCTION NOTES:

- ① HMA CL ½ IN. PG 58H-22
- ② HMA CL 1 IN. PG 58H-22
- ③ CRUSHED SURFACING BASE COURSE
- ④ SELECT BORROW INCL. HAUL
- ⑤ PLANING BITUMINOUS PAVEMENT
- ⑥ CEMENT CONC. PAVEMENT
- ⑦ CEMENT CONC. SIDEWALK
- ⑧ ROADWAY EXCAVATION INCL. HAUL
- ⑨ HMA FOR PRELEVEL CL. 1/2 IN. PG ——
- ⑩ EXTRUDED CURB TYPE 3
- ⑪ NOT USED

NOT TO SCALE

1. ALL DEPTHS SHOWN ARE COMPACTED DEPTHS
2. SEE SITE PREP PLAN FOR SAWCUT LIMITS
3. SEE ROADWAY PLAN FOR VARIABLE ROADWAY WIDTHS

GENERAL NOTES

CITY OF DUPONT STEILACOOM ROAD IMPROVEMENTS				DRAWING NUMBER
ROADWAY SECTION				RS2
APPROVED FOR CONSTRUCTION	NOT FOR CONSTRUCTION	LOCHNER	LOCHNER	
DESIGNED BY XXX DRAWN BY XXX CHECKED BY XXX APPROVED BY XXX DATE: XX/XX/XX	NOT FOR CONSTRUCTION	LOCHNER	LOCHNER	
REVISIONS	REVISIONS	REVISIONS	REVISIONS	REVISIONS
NO. DATE BY APPR.	NO. DATE BY APPR.	NO. DATE BY APPR.	NO. DATE BY APPR.	NO. DATE BY APPR.



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

March 12, 2020

Ms. Sarah Amell
Aqua Terra Cultural Resource Consultants
5518 Trosper Lake St. SW
Tumwater, WA. 98512

In future correspondence please refer to:
Project Tracking Code: 2020-02-01227
Property: Cultural Resource Survey for the DuPont-Steilacoom Road Improvement Project, DuPont,
Pierce County, Washington
Re: Concur with Survey

Dear Ms. Amell:

Thank you for contacting the State Historic Preservation Officer (SHPO) and the Department of Archaeology and Historic Preservation (DAHP) with documentation regarding the above referenced project. In response, we agree with the results and recommendations made in the survey report. We do, however, ask that an Inadvertent Discovery Plan be included as part of the construction permit.

Should new information become available or the scope of work changes, please resume consultation as our assessment may be revised. In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and contact made with concerned tribes and DAHP for further consultation.

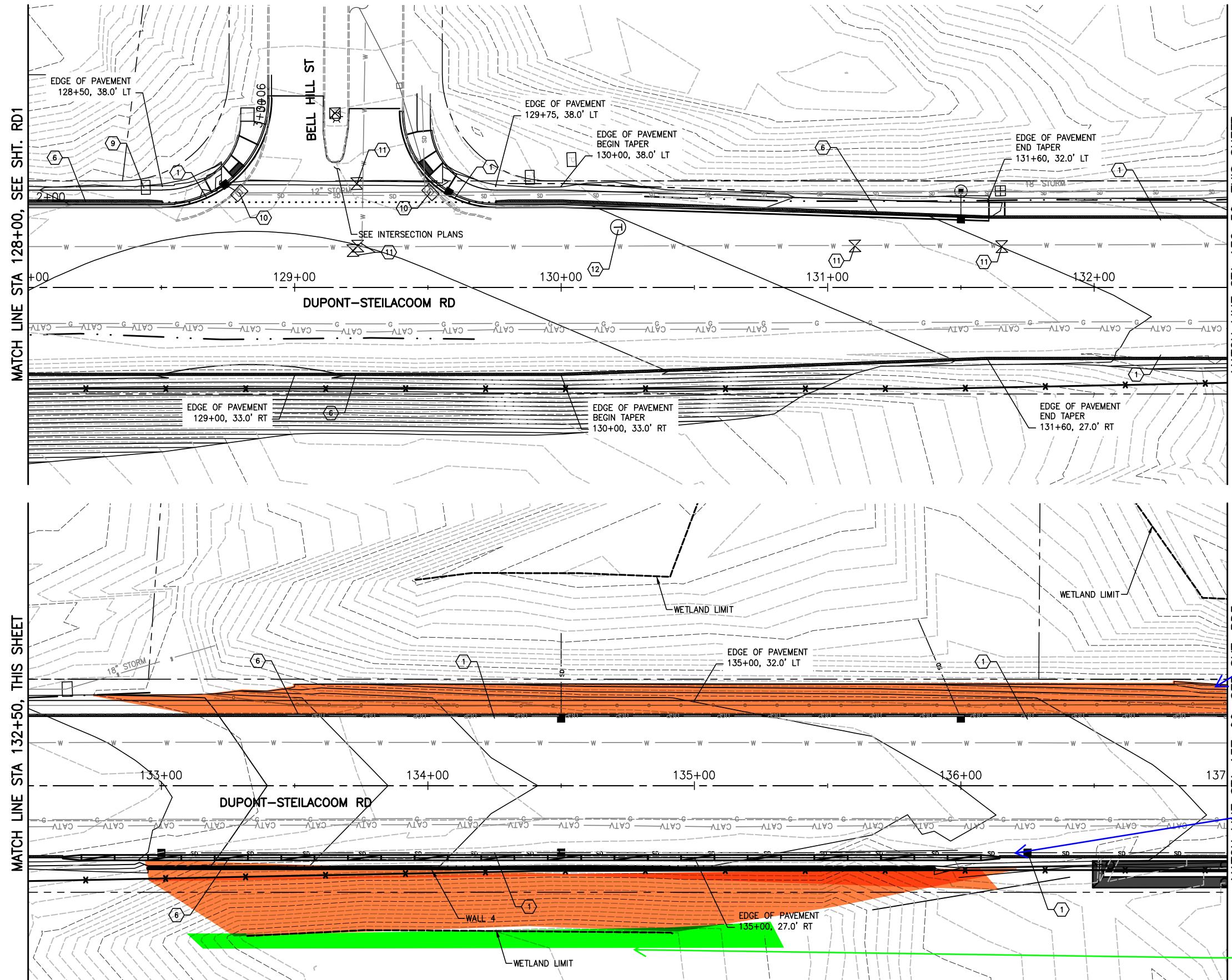
These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with the State Environmental Policy Act (SEPA).

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Dennis Wardlaw
Transportation Archaeologist
(360) 586-3085
dennis.wardlaw@dahp.wa.gov

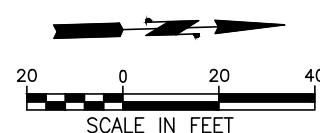




1,200 sf
Wetland
Impact

4,600 sf

- 7,400 sf



NOT FOR CONSTRUCTION

LOCHNER

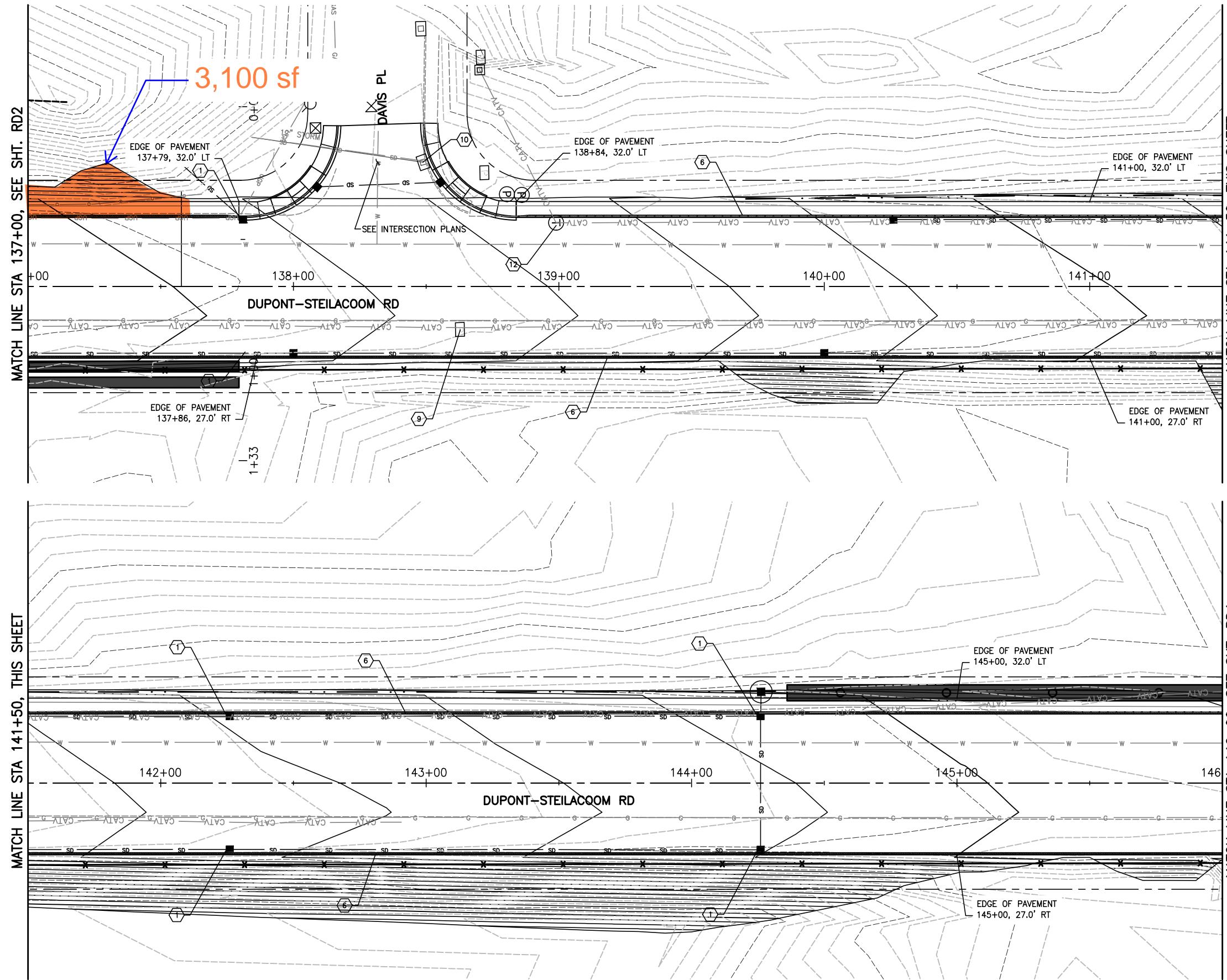


CITY OF DUFONT
DUFONT CITY LOCAL MEAN IMPROVEMENTS

ROADWAY AND DRAINAGE PLAN

DRAWING NUMBER

SHT XX OF XX



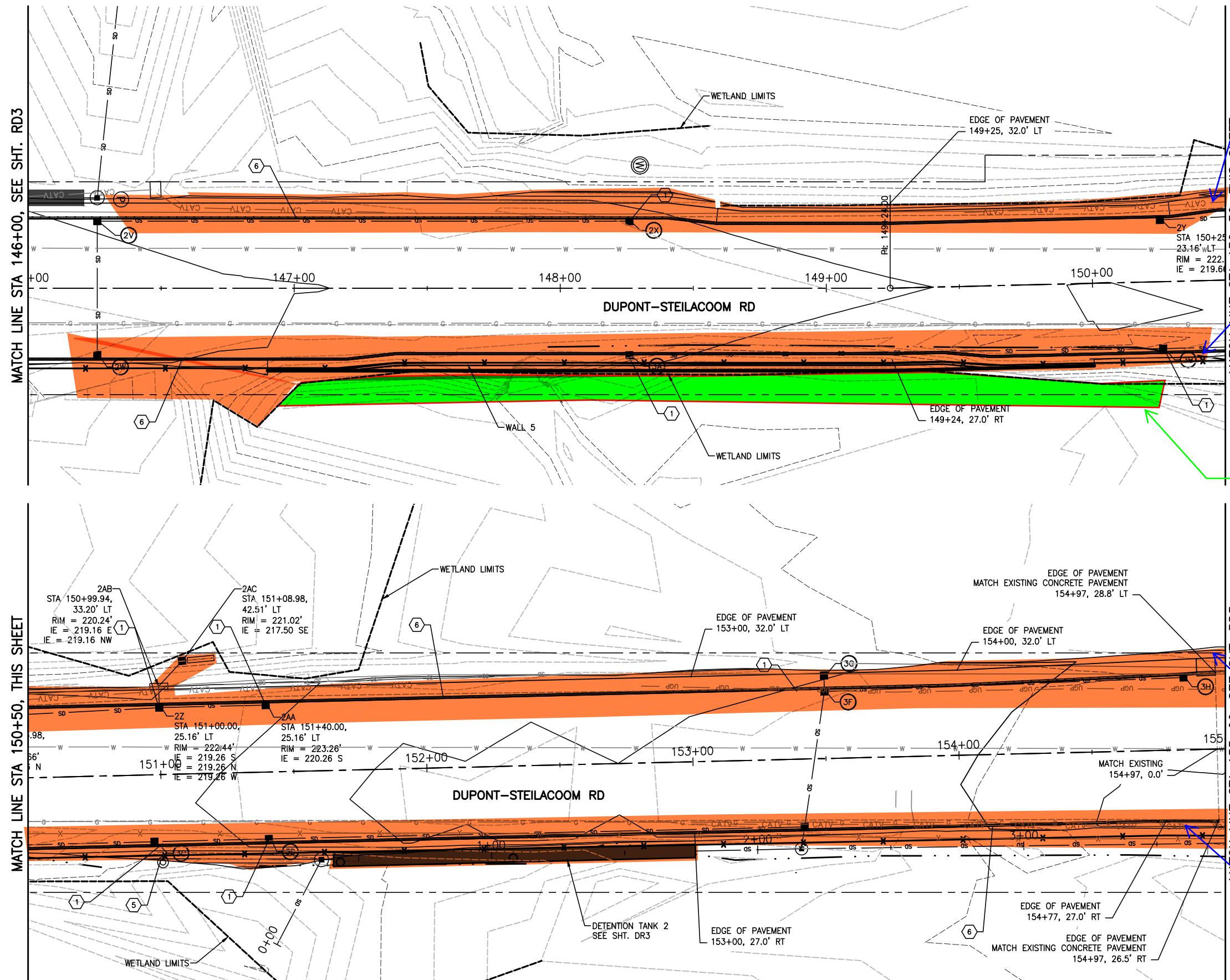
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					DATE: XX/XX/XX
					ENGINEERING MANAGER DATE
					PROJECT MANAGER DATE
					PROJECT ENGINEER DATE

NOT FOR CONSTRUCTION

LOCHNER

CITY OF DUPONT
DUPONT-STEILACOOM ROAD IMPROVEMENTS
ROADWAY AND DRAINAGE PLAN

DRAWING NUMBER
RD3
SHT XX OF XX



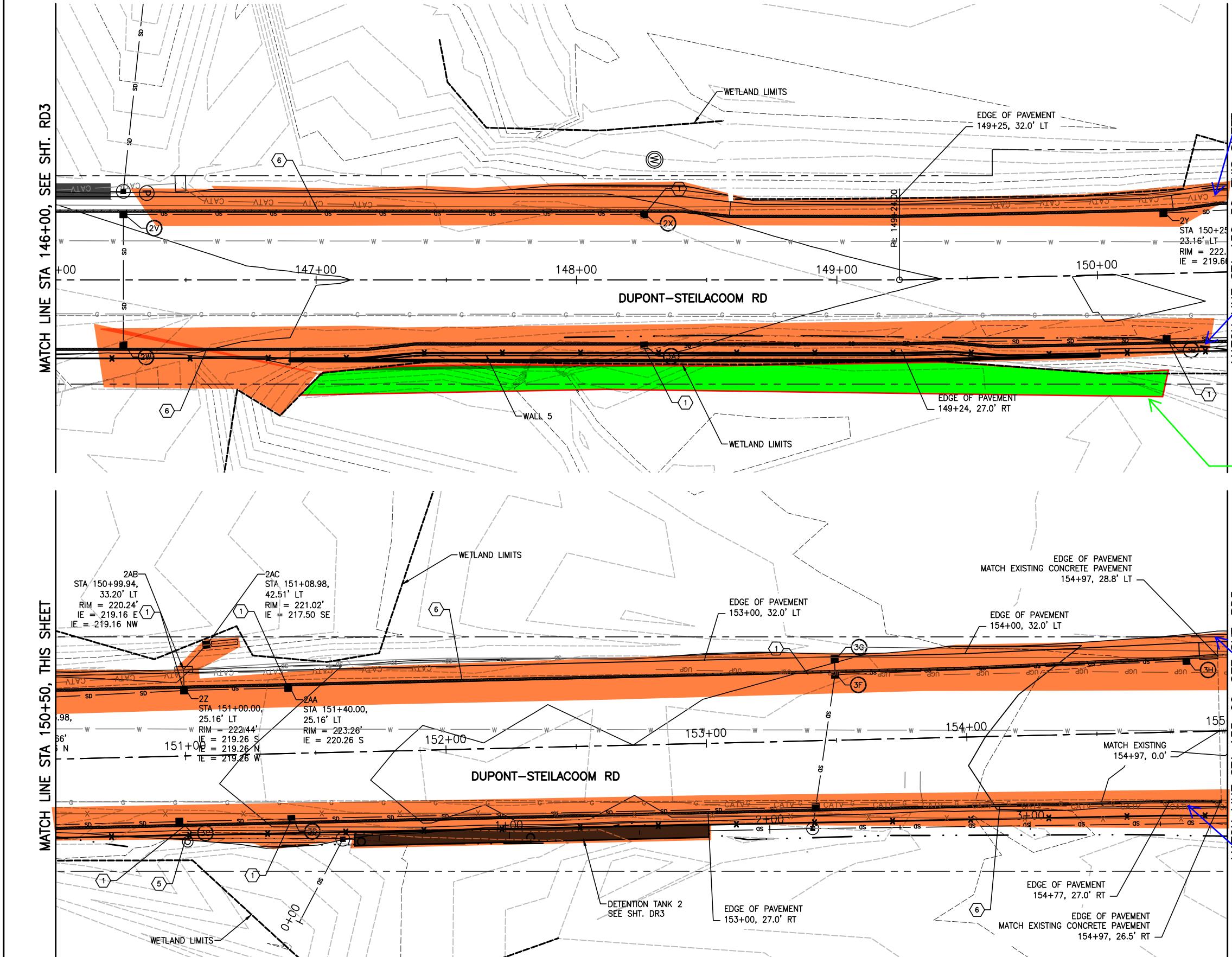
5,000 sf
Buffer Perm
Impact

7,000 SF
Buffer Perm
Impact

3,900 sf
Wetland
Temp Impact

9,100 sf
Buffer Perm
Impact

5,000 sf
Buffer Perm
Impact



NO.	DATE	BY	APPR.	REVISIONS

APPROVED FOR CONSTRUCTION	
ENGINEERING MANAGER	DATE
DRAWN BY	
PROJECT MANAGER	DATE
PROJECT ENGINEER	DATE
APPROVED BY	
DATE: XX/XX/XX	

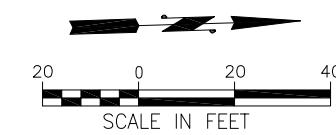
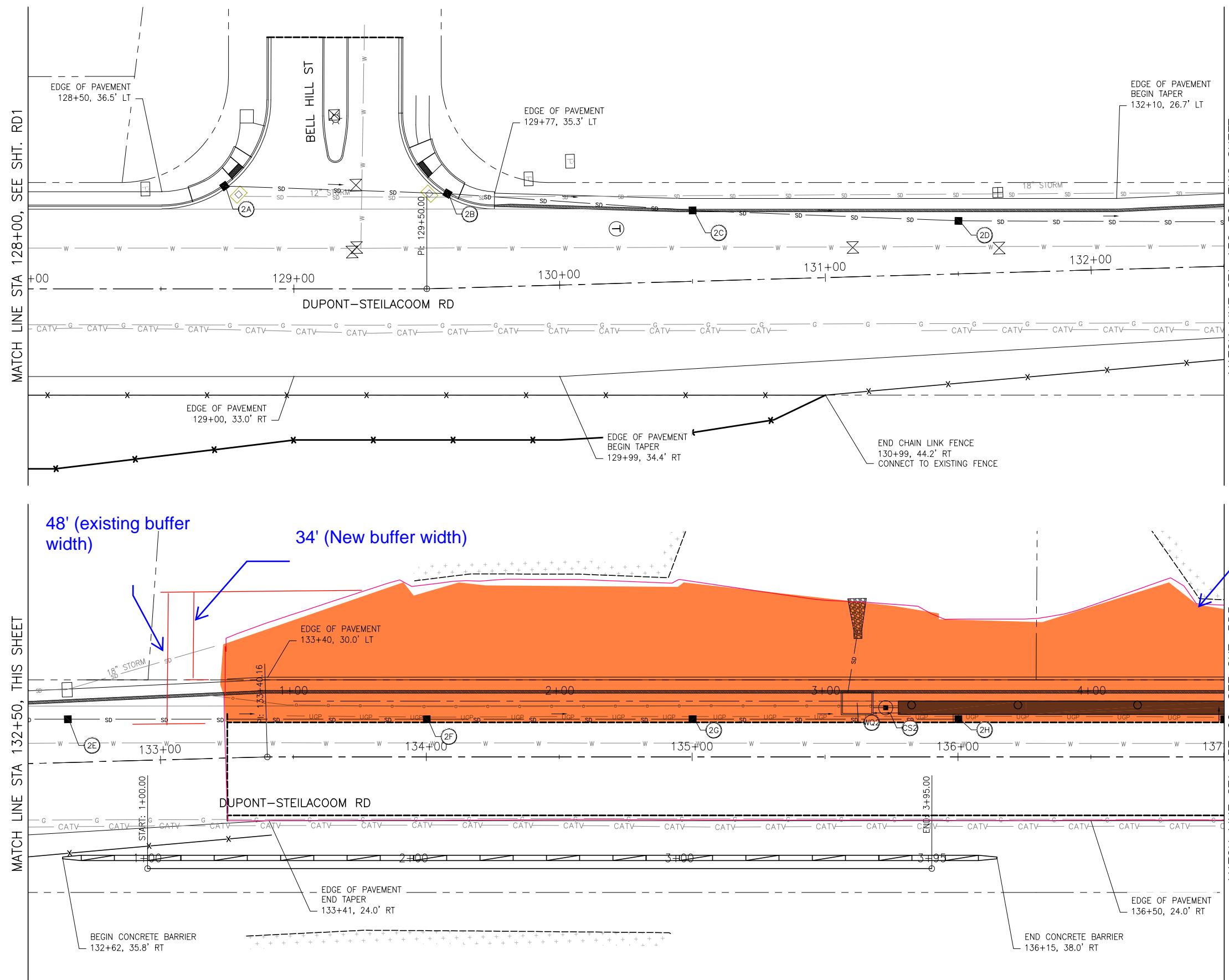
NOT FOR CONSTRUCTION

LOCHNER



CITY OF DUPONT
DUPONT-STEILACOOM ROAD IMPROVEMENTS
ROADWAY AND DRAINAGE PLAN

DRAWING NUMBER
RD4
SHT XX OF XX



NOT FOR



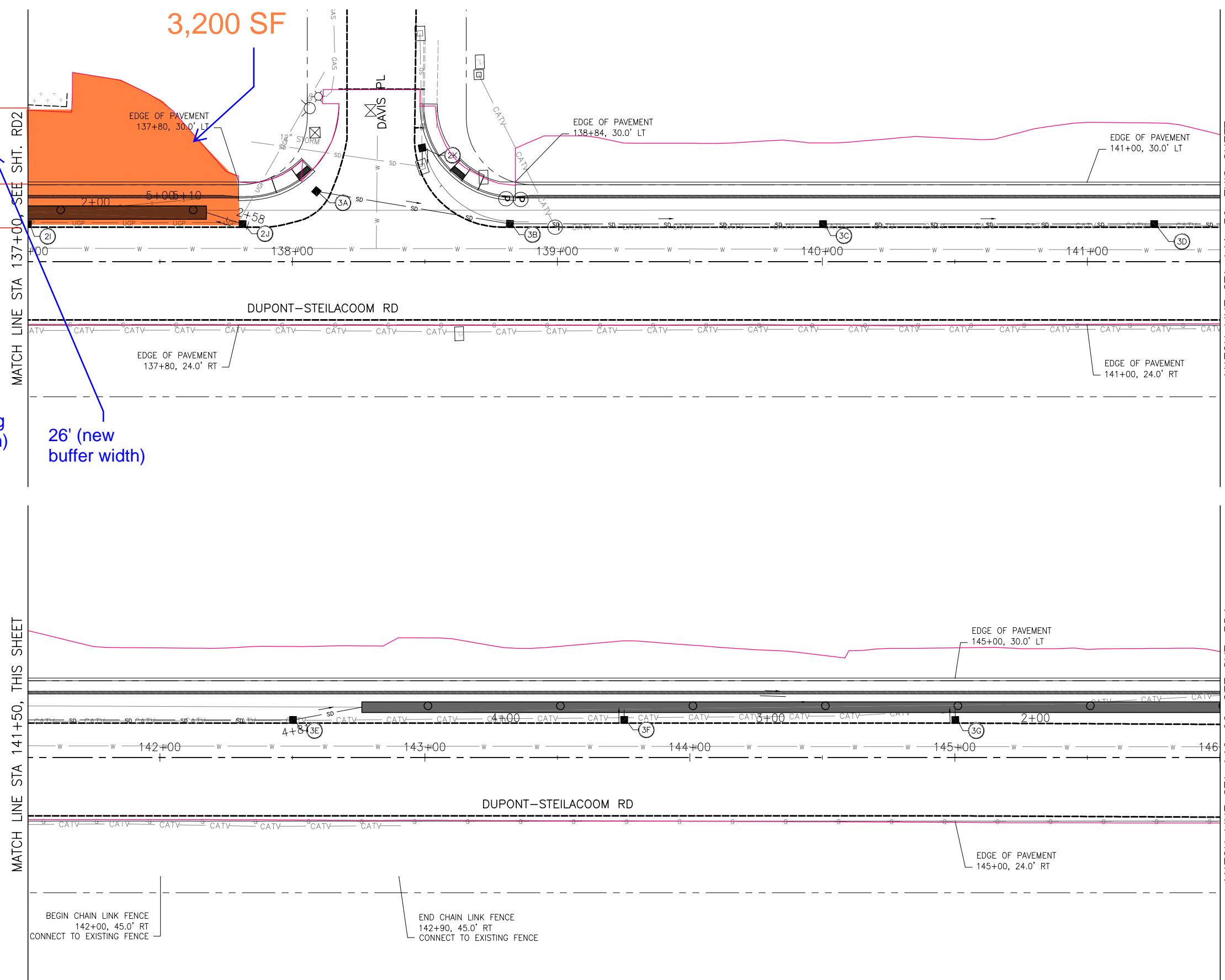
 LOCHNER



CITY OF DUPONT
DUPONT-STEILACOOM ROAD IMPROVEMENTS

ROADWAY AND DRAINAGE PLAN

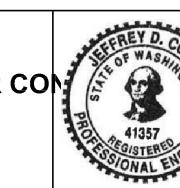
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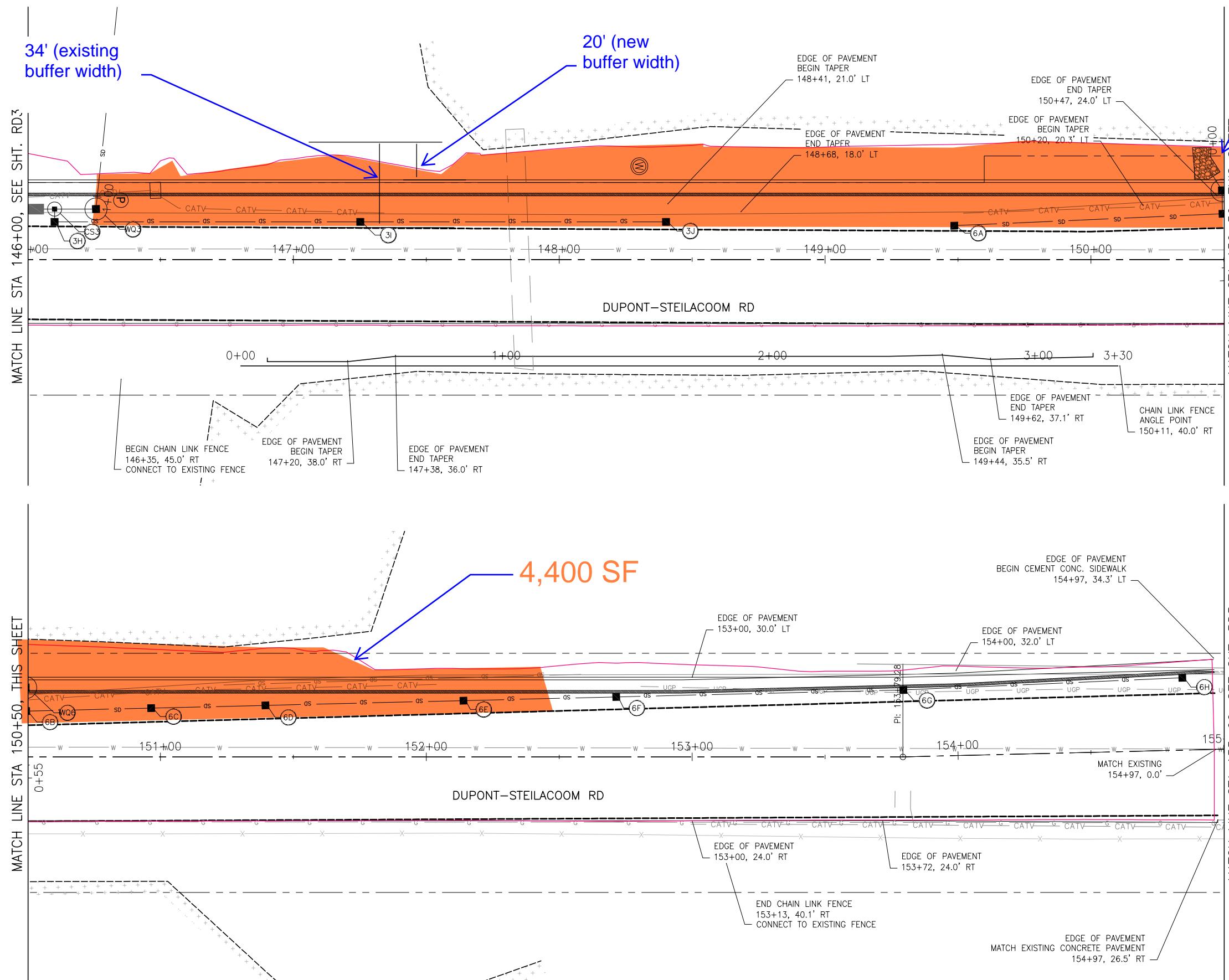
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PROJECT MANAGER	DATE
PROJECT ENGINEER	DATE

NOT FOR CONSTRUCTION

**LOCHNER**

CITY OF DUPONT
DUPONT-STEILACOOM ROAD IMPROVEMENTS
ROADWAY AND DRAINAGE PLAN

DRAWING NUMBER
RD3
SHT ____ OF XX



STORM STRUCTURE NUMBER



NO.	DATE	BY	APPR.	REVISIONS
				APPROVED FOR CONSTRUCTION
				DESIGNED BY
				ENGINEERING MANAGER DATE
				DRAWN BY
				PROJECT MANAGER DATE
				CHECKED BY
				PROJECT ENGINEER DATE
				APPROVED BY
				DATE:

NOT FOR CONSTRUCTION

JEFFREY D. COOPER
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
41357

LOCHNER



CITY OF DUPONT
DUPONT-STEILACOOM ROAD IMPROVEMENTS
ROADWAY AND DRAINAGE PLAN

DRAWING NUMBER
RD4
SHT ____ OF XX

Removal of Noxious Weed Management

MATCH LINE, THIS SHEET

