

Port of Kingston  
Kitsap County, WA

**RESOLUTION NO. 12-01-2020**

A Resolution of the Commission of the Port of Kingston

**RESOLUTION TO APPROVE AWARD CONTRACT FOR KINGSTON ACTIVE TRAFFIC MANAGEMENT – SR104 HOLDING LANES PROJECT**

**WHEREAS**, The Port of Kingston has a direct interest to improve the safety and operation of all transportation along the SR104, through and around the Kingston community, and throughout the Port district.

**WHEREAS**, The Port of Kingston is the contract manager and administrator of the designated funding.

**WHEREAS**, The Port of Kingston has received a scope of work to develop a planning level project and cost estimate for the Kingston Active Traffic Management project. The project will look at building shoulder lane(s) along the SR104 frontage and “Right of Way”, holding lanes on the WSDOT and Kitsap County owned property along SR104 & Lindvog intersection, and utilizing full time active traffic management (ATM) to manage ferry traffic through Kingston.


**WHEREAS**, The Port of Kingston commission approved a previous on November 4, 2020 with a spending limit of \$28,000 and hereby amends that resolution.

**THEREFORE BE IT RESOLVED**, by the Commissioners for the Port of Kingston hereby grant authority to the Executive Director, Greg Englin, to execute the contract for Kingston Active Traffic Management – SR104 Holding Lanes with a spending authority not to exceed \$30,000.00.

Passed by the Board of Commissioners for the Port of Kingston, Kitsap County, Washington at a regular meeting held this 8<sup>th</sup> day of December, 2020.

**PORT OF KINGSTON  
KITSAP COUNTY, WASHINGTON**

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Steve Heacock, Commissioner

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Attest: Greg Englin, Executive Director

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Mary McClure Commissioner

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Laura Gronnvoll, , Commissioner

## Scope of Work

Kingston Active Traffic Management and SR104 Holding Lanes

December 2020

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# Port of Kingston



505 5TH AVENUE S, SUITE 300  
SEATTLE, WA 98104  
800.615.9900 | 206.436.0515

## CONSULTING SERVICES FOR REMOTE FERRY HOLDING LOT

Agreement with Perteet Inc.

December 2020

### INTRODUCTION

The Kingston-Edmonds Ferry, while operated by WSF, is part of a larger, regional transit and community system that includes WSF, WSDOT, Kitsap Transit, Kitsap County, Port of Kingston (“Project Partners”) and the Kingston community and businesses. The operations of any one of these system elements can have positive, and negative, effects on the others. As is the subject of this study, ferry vehicle traffic “backs up” on SR 104 through Kingston’s downtown and up to Lindvog Road NE.

Previous work analyzed and provided 30% plans and opinion of cost for utilizing Active Traffic Management Systems (ATMS) and a remote holding lot at the southwest corner of SR 104 and Lindvog Road NE to manage ferry traffic within Kingston. The construction cost of these improvements was estimated at approximately \$10 million. Due to the large amount of funds required, other lower cost improvements are being sought by the Project Partners to compete for a grant of up to an assumed maximum of \$1.4 million.

The intent of this phase is to produce conceptual plans and cost estimate for an ATMS and improvements along SR 104 just west of Lindvog Road NE to manage eastbound Washington State Ferry (WSF) traffic through Kingston. The project will utilize the existing or expanded shoulder/holding lane in conjunction with active traffic management techniques, including (but not limited to) detection on the ferry dock and at the toll booths, license plate reader cameras (or other system) at the holding lane area and near the ferry dock to track vehicles, lane control signs (either electronic or static), and system controllers to manage holding and release of vehicles to the ferry toll booths.

The level of effort is specified in the scope of services. The budget may be transferred between discipline tasks at the discretion of the CLIENT and CONSULTANT, provided that the total contracted amount is not exceeded. The CONSULTANT will have the flexibility to manage budget within a given discipline on a subtask level.

### SCOPE OF SERVICES

#### Task 1 – Project Management

Since the partners on this phase are expected to be the same as the previous phase, a reduced project management effort is expected. As the first order of work, Perteet (CONSULTANT) will schedule a brief kickoff workshop to discuss the following:

- Project goal, budget and schedule.
- Team organization with key contacts, project stakeholders, and team responsibilities.
- Communication protocol.
- Preliminary site concept sketch.
- Preliminary concept for holding lane ingress and egress.
- Preliminary ATMS sketch.

Because of the schedule and fee, no additional project management or communication plans will be prepared.

As part of the project, the CONSULTANT will prepare monthly progress reports that describe the work items and percentage of work items that were accomplished during a given month, as well as a forecast of work to be completed over the following month. The monthly progress reports will also identify any other issues or problems that may occur in any given month. The CONSULTANT will submit these monthly progress reports to the Project

## CONSULTING SERVICES FOR REMOTE FERRY HOLDING LOT

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December 2020

Manager with the monthly invoices. The CONSULTANT Project Manager will notify the Project Manager, in writing (memo format), of any out of scope and/or budgetary issues that are inconsistent with this Scope of Work.

The Project Manager and the CONSULTANT will hold project coordination calls. At least two of the coordination calls (at Pre-raft and Final document review) will include the project's technical advisor group (extended group beyond the Project Partner representatives). The Project Manager will be responsible for coordinating the technical advisor group workshops.

### Work Elements:

- Prepare minutes for kickoff workshop.
- Facilitate project kickoff workshop.
- Prepare monthly progress reports/invoices.
- Coordination calls with the Project Manager.
- Facilitate Technical Advisor Group workshops.
- Prepare minutes for Technical Advisor Group workshops.

### Assumptions:

- This contract duration shall be no longer than four (4) months, roughly January 2021 through April 2021.
- All project workshops will be held virtually.
- Coordination calls with the Daily Work/Project Manager will be ~1/2 hour long and occur as needed (assume maximum of 5 calls).
- The technical advisor group workshops will be 1.5 hours long (maximum of three workshop/meetings, including Kick-off Workshop #1, Draft Concept and Outline Document Review Workshop #2, Final Edits and Document Review Workshop #3. One additional workshop may be scheduled if needed between workshops #2 and #3 and would require additional budget to perform if deemed necessary). Assume 3 people from Perteet will attend.
- Agenda for workshops will be prepared by the Daily Work/Project Manager.
- Deliverables for Kick-off/Workshop #1 includes a sketch site concept, concept for holding lanes ingress and egress, ATM sketch modified for the reduced lane approach and a criteria list.
- Workshop #2 will focus on the site draft, recommended concept and outline supporting documents.
- Workshop #3 will be a review of changes in the final documents that were previously submitted to and reviewed by the Technical Advisor Group.

### Deliverables:

- Workshop Minutes
- Monthly progress report and invoice

## Task 2 – Active Traffic Management System Development

The intent of this task is to develop a scaled-down active traffic management system (ATMS) concept from the original full lot design effort. This work is expected to develop a tally/tracking system to replace Washington State Patrol (WSP) officers under most queuing conditions. This work is also intended to utilize detection, signing, and signaling tools to create an efficient and safe operating system.

## CONSULTING SERVICES FOR REMOTE FERRY HOLDING LOT

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December 2020

### Work Elements:

- Determine automated tally/tracking system to ensure “first-in, first-out” operations at the holding lane(s). This system may utilize license plate reader cameras and signalization tools. Toll booths or ticket dispenser type of infrastructure are not preferred.
- Develop a concept of a scaled-down active traffic management system (ATMS) with a reduced holding area. This ATMS is expected to utilize data from on-road detection
- Develop concept of improvements for the system. This may be represented by flow charts and/or aerial photos with callouts of existing and proposed equipment.
- Coordinate with technology vendors such as Western Systems or Advanced Traffic Products to determine products able to provide the required services. This coordination would also include information for the development of the cost estimate.
- Integrate ATMS with signal operations at the SR 104 – Lindvog intersection as needed.
- Identify and coordinate integration of intelligent transportation system (ITS) infrastructure and WSDOT/WSF traffic management operations, to include systems capability with existing WSDOT ATMS.
- ATMS designs will look to, but is not bound by, the ability to expand to support the potential future construction/operations of the Lindvog Holding Area project.
- Coordinate with WSDOT on Systems Engineering Process (Design Manual 1050). Documentation within this Scope is limited to the Concept of Operations (and prior steps) stage of the Systems Engineering Process.

### Assumptions:

- No additional traffic data will be collected. All data will be from the initial work conducted for the remote holding lot effort.
- No additional operational analysis will be conducted.
- ATMS and Holding Lanes are assumed to be in operation at all times. Final determination of operational time will be made during preliminary engineering. Where possible, potential differences in infrastructure to support part-time use will be identified in the text as discussion with costs based on prior work. No new work will be completed for the intermitted use scenario.

### Deliverables:

- Draft ATMS Technical Memorandum
- Final ATMS Technical Memorandum

## Task 3 – Final Conceptual Site Design and Cost Estimate

The intent of this task is to develop the recommended concept into concept level plans that will include site layout, access and right-of-way access/improvements, grading, paving, stormwater, active traffic elements in a “sketch” type of drawing which can be utilized in grant applications for funding.

### Work Elements:

- Develop a recommended site concept. This includes:
  - The site concept will look for designs that can be incorporated in potential future construction/operations of the Lindvog Holding Area project; however, design and operational

## CONSULTING SERVICES FOR REMOTE FERRY HOLDING LOT

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December 2020

priorities such as cost, project delivery risks, and operations will be prioritized in project design. The concept development is anticipated to be an iterative process working towards a single preferred concept. The initial basis to determine the constructible area includes: limited or no impacts to the existing wetlands, \$1.4M maximum design and construction budget target (other TIB grants may be available), ability to integrate with future full lot, minimizes site walls and other constraints to be determined that could be considered excessive and not easily developed. Potential other limiting factors may include stormwater management requirements, wetland mitigation requirements, or others.

- Identify the “easily developed” buildable envelope within SR 104 ROW and adjacent WSDOT/Kitsap County properties.
- Ferry holding lane(s) layout based on “easily developed” buildable envelope constraints.
- The holding lane(s) concept will be modified/scaled based on cost constraint and operational assumptions. If the “easily developed buildable envelope” can efficiently support additional holding lane beyond the “cost constrained” design, the additional lane(s) will be shown as possible expansion lane(s), in concept only. These will not be designed or costed separately.
- Holding lanes ingress/egress to SR 104 mainline and/or SR 104 intersection with Lindvog.
- Site improvements as needed for the holding lane(s) to include illumination, stormwater, and ATMS.
- No shoulder borings are anticipated. Unless indicated by WSDOT, design/cost estimates will assume existing shoulders do not meet WSDOT holding lane pavement depth requirements.
- Mitigation measures or areas (if required)
- Prepare site concept plans:
  - Assume up to 5 sheets showing necessary equipment. This work may be placed on a combination of survey from the previous phase and aerial photos.
- Assess anticipated scope/level of effort required during the final design stage to satisfy requirements for the following project elements:
  - Drainage
  - Illumination
  - WSDOT and other agency approvals
  - Environmental impacts, compliance, and permitting
- Prepare quantities for cost estimating
- Prepare planning-level cost estimate including the following:
  - Construction costs
  - Right-of-Way
  - Preliminary Engineering
  - Construction Management
  - Agency administration expenses

## Assumptions:

- One preferred concept plan will be developed based on discussions with the Project Manager and technical advisory group.
- Cost estimate will be inflated as necessary for design and construction year 2024.

## CONSULTING SERVICES FOR REMOTE FERRY HOLDING LOT

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December 2020

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Deliverables:

- Draft and Final Concept Plan
- Draft and Final Planning-Level Opinion of Cost Estimate

### Task 4 – Summary Memorandum

The intent of this task is to produce a summary document that can be included in grant applications to describe the project need, anticipated benefits, analysis methodology, and analysis findings associated with the work in Tasks 2 and 3 of this phase of the project and the overall Remote Holding Lot assessment from the prior phase.

Work Elements:

- Document key project elements relevant to grant pursuits in a summary memorandum that includes the following:
  - Description of project need
  - Analysis methodology
  - Recommended near-term improvement and associated benefits
  - Outstanding items to be resolved during final designs
  - Concept plan, as an appendix to the memorandum
  - Planning-level opinion of cost, as an appendix to the memorandum

Deliverables:

- Summary Memorandum

### Time for Completion

Tasks 2 through 4 will be completed in 120 calendar days from issuance of the notice to proceed.

Assumptions:

- No additional data will be gathered as part of this effort. Data obtained during the first part of this work will be utilized in the development of a conceptual alternative.
- No new traffic models, VISSIM or other, will be developed for this effort.
- Project will use or improve the shoulder along the frontage of the remote holding lot property.



Project **PROMO HRS - SR 104 Ferry Holding Planning**  
 Client **Port of Kingston**  
 PM **Patricia Buchanan**

Contract Start Date **1/18/2021**  
 Contract End Date **7/19/2022**  
 Contract Duration: **18 Months**

Last Update date **12/2/2020**  
 Perteet Project No. **20190109.001.P  
 RO**

Task	Billing Rate	Sr. Associate	Sr. Engineer / Mgr	Sr. Engineer / Mgr	Lead Engineer / Mgr	Engineer II	Engineer II	Lead Technician/ Designer	Accountant	Clerical	Total Hours	Labor Dollars
		\$205.00	\$190.00	\$190.00	\$165.00	\$125.00	\$125.00	\$125.00	\$95.00	\$85.00		
Task 1 - Project Management		8.00		18.00	8.00				4.00	4.00	42.00	\$7,100.00
<b>Total Task 1 - Project Management</b>		<b>8.00</b>	<b>0.00</b>	<b>18.00</b>	<b>8.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.00</b>	<b>4.00</b>	<b>42.00</b>	<b>\$7,100.00</b>
Task 2 ATMS Development		20.00	6.00			16.00					42.00	\$7,240.00
<b>Total Task 2 ATMS Development</b>		<b>20.00</b>	<b>6.00</b>	<b>0.00</b>	<b>0.00</b>	<b>16.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>42.00</b>	<b>\$7,240.00</b>
Task 3 Concept Site Design & Estimate				8.00	12.00		36.00	24.00			80.00	\$11,000.00
<b>Total Task 3 Concept Site Design &amp; Estimate</b>		<b>0.00</b>	<b>0.00</b>	<b>8.00</b>	<b>12.00</b>	<b>0.00</b>	<b>36.00</b>	<b>24.00</b>	<b>0.00</b>	<b>0.00</b>	<b>80.00</b>	<b>\$11,000.00</b>
Task 4 Summary Memo				8.00	16.00					4.00	28.00	\$4,500.00
<b>Total Task 4 Summary Memo</b>		<b>0.00</b>	<b>0.00</b>	<b>8.00</b>	<b>16.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.00</b>	<b>28.00</b>	<b>\$4,500.00</b>
<b>Total Hours</b>		<b>28.00</b>	<b>6.00</b>	<b>34.00</b>	<b>36.00</b>	<b>16.00</b>	<b>36.00</b>	<b>24.00</b>	<b>4.00</b>	<b>8.00</b>	<b>192.00</b>	
<b>Total Dollars</b>		<b>\$5,740.00</b>	<b>\$1,140.00</b>	<b>\$6,460.00</b>	<b>\$5,940.00</b>	<b>\$2,000.00</b>	<b>\$4,500.00</b>	<b>\$3,000.00</b>	<b>\$380.00</b>	<b>\$680.00</b>		<b>\$29,840.00</b>

SUMMARY		
Labor		\$29,840.00
Expenses		\$0.00
Subconsultants		\$0.00
<b>CONTRACT TOTAL</b>		<b>\$29,840.00</b>



Port of Kingston  
Kitsap County, WA

**RESOLUTION NO. 11-04-2020**

A Resolution of the Commission of the Port of Kingston

**RESOLUTION TO APPROVE AWARD CONTRACT FOR ACTIVE TRAFFIC MANAGEMENT – SR104  
HOLDING LANES**

**WHEREAS**, The Port of Kingston has a direct interest to improve the safety and operation of all transportation along the SR104, through and around the Kingston community, and throughout the Port district.

**WHEREAS**, The Port of Kingston is the SR 104 Lindvog Ferry Holding Lot project manager and administrator of the designated funding.

**WHEREAS**, The Port of Kingston has received a scope of work to develop a planning level project and cost estimate for the Lindvog “Quick action” project. The project will look at building shoulder lane(s) along the Lindvog SR 104 frontage/ROW and utilizing full time active traffic management (ATM) to manage ferry traffic through Kingston.

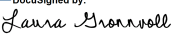
**THEREFORE BE IT RESOLVED**, by the Commissioners for the Port of Kingston hereby grants authority to the acting project manger and Executive Director, Greg Englin to execute the contract for active traffic management – SR104 holding lanes with a spending authority not to exceed \$28,000.00


Passed by the Board of Commissioners for the Port of Kingston, Kitsap County, Washington at a regular meeting held this 18<sup>th</sup> day of November, 2020.

**PORT OF KINGSTON  
KITSAP COUNTY, WASHINGTON**

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Steve Heacock, Commissioner

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Mary McClure Commissioner

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Laura Gronnvoll, , Commissioner

Attest: DocuSigned by:  
  
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Greg Englin, Executive Director