PORT OF HOOD RIVER COMMISSION
MEETING AGENDA
Tuesday, October 16, 2018
Marina Center Boardroom

4:00 P.M.
Work Session

1. Lot 1 Public Infrastructure Framework Plan
2. Future Development Options

5:00 P.M.
Regular Session

3. Call to Order
   a. Modifications, Additions to Agenda

4. Public Comment (5 minutes per person per subject; 30-minute limit)

3. Consent Agenda
   a. Approve Minutes of October 2, 2018 Regular Session *(Jana Scoggins – Page 9)*
   b. Approve Amendment No. 6 to Contract with Siegel Consulting for Bridge Replacement Consulting Services, Not to Exceed $60,000 *(Kevin Greenwood – Page 13)*
   c. Approve Accounts Payable to Jaques Sharp in the Amount of $7,172.00 *(Fred Kowell – Page 17)*

4. Reports, Presentations and Discussion Items
   a. Bridge Replacement FEIS Public Involvement (PI) Plan Overview – Anne Pressentin, EnviroIssues *(Kevin Greenwood – Page 21)*
   b. 2018 Waterfront Annual Report *(Daryl Stafford – Page 27)*
   c. Hood River Outrigger Canoe Club Presentation *(Daryl Stafford – Page 51)*
   d. Commission/Staff Communications Plan *(Michael McElwee – Page 53)*
   e. Bridge Replacement Project Update *(Kevin Greenwood – Page 57)*

5. Director's Report *(Michael McElwee – Page 73)*

6. Commissioner, Committee Reports
   a. Urban Renewal, October 9 (Streich, Meriwether)
   b. Pacific Northwest Waterways Association Annual Convention (Scholl)

7. Action Items
   a. Approve Use Agreement with Hood River Outrigger Canoe Club at Nichols Basin *(Daryl Stafford – Page 107)*
   b. Approve Contract for Transfer of Excavated Material from the Lower Mill Development Site to the Airport *(Anne Medenbach – Page 111)*
   c. Approve Contract with Hage Electric for Bridge Skew System and Span Drive Motor Rehabilitation Not to Exceed $308,711.00 *(John Mann – Page 115)*
   d. Approve Contract with HRT Security for Security Services at Port Properties, Not to Exceed $6,000 *(Michael McElwee – Page 117)*
   e. Approve Contract with Stantec for Advisory Services Related to Bridge Replacement Traffic and Revenue Studies, Not to Exceed $20,000 *(Kevin Greenwood – Page 123)*

8. Commission Call

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9. Executive Session under ORS 192.660(2)(e) Real estate negotiations and ORS 192.660(2)(h) Consultation with legal counsel regarding current litigation or litigation likely to be filed.

10. Possible Action

11. Adjourn

If you have a disability that requires any special materials, services, or assistance, please contact us at 541-386-1645 so we may arrange for appropriate accommodations.

The chair reserves the opportunity to change the order of the items if unforeseen circumstances arise. The Commission welcomes public comment on issues not on the agenda during the public comment period. With the exception of factual questions, the Commission does not immediately discuss issues raised during public comment. The Commission will either refer concerns raised during public comment to the Executive Director for a response or will request that the issue be placed on a future meeting agenda. People distributing copies of materials as part of their testimony should bring ***10 copies****. Written comment on issues of concern may be submitted to the Port Office at any time.*

Port of Hood River

Work Session

REAL ESTATE PLANNING & DEVELOPMENT

October 16, 2018

Agenda

I. Lot #1 Public Infrastructure Framework Plan

Staff will provide an update of the recent meeting with the Urban Renewal Agency Board on October 9. The PowerPoint that was used by consultant Walker/Macy to provide an update on project progress and the milestones leading to presentation/discussion with the URA Board in December or January.

Key Issues:

- Type and extent of potential public infrastructure projects on Lot #1 that are currently being evaluated by Walker/Macy

II. Development Alternatives Analysis

Review attached staff memorandum regarding next steps in the ongoing assessment of four Port properties for potential future development. Consistent with Board discussion at the October 2, 2018 meeting, staff is seeking direction on immediate next steps.

Key Issues

- Additional evaluation of Barman Property
- Hold or continue assessment of Maritime and/or Jensen Properties
- Immediate next steps associated with Lower Mill Property

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Commission Memo

Prepared by: Anne Medenbach
Date: October 16, 2018
Re: Future Development Options Discussion

During the September 11 and October 2 Commission meetings, the Commission discussed four potential Future Development Options (FDO's). These sites were identified through a portfolio analysis conducted by staff and EcoNW in Spring of 2018. The discussion pointed to additional work and deliberation regarding any development on the waterfront, including properties north of Portway Ave.

Staff was directed to develop a potential schedule for the Lower Mill site and phasing with a waterfront site development to follow. The Commission also directed staff to revise the Criteria Matrix to include any measure of controversy present for each option.

The revised matrix, showing controversy as a yes or no, indicates the Lower Mill has little controversy. The final score depicts the Lower Mill as a priority for more analysis leading to a potential development in FY 19/20.

FDO Development Option Criteria Matrix

Number	Name	Equity Req't under $1.5m	Significant Cash Flow	Significant Job Potential	Immediate Opportunity	Shovel Ready	Provides Diversity	Fills Need	Catalyzes Development	Meets Return Req't	Contentious	Average Score
	Lower Mill 1015-.80											3.0
	Lower Mill 1015-.75											3.0
	S. Jensen											2.6
	Maritime Flex											2.5
	Maritime Office											2.3
	Barman											2.0

Regarding schedule, staff has provided a draft (very preliminary) schedule based on estimated timing from recent projects. Considering that a building at the Lower Mill site would be very straight forward in design, have little to no controversy and little site work, staff feels this schedule is reasonable for planning purposes.

If the Commission would like to move forward with a Lower Mill building, the process would unfold in the following steps. (See conceptual schedule calendar attached).

1. Engage an A&E company to provide a development program consisting of: schematic design, in depth market analysis and options, detailed cost estimates for construction etc. *2-3 months*

2. Commission review and input on the development program. If the Commission wants to move forward with final design including plans and specifications for construction

bidding, they can go through the process of hiring an A & E firm. Staff would continue market analysis and work with the Board to determine pre-leasing/build to suit options. *1-2 months*

3. If an A & E contract is executed, then the team moves forward with building design.

4. There will be multiple opportunities during the design process where the Commission could provide input as desired. *2-3 months*

5. Once design is complete, the Commission could choose to move to the next step of permitting the project and going to bid for construction or shelving the project. Permitting would not be started unless the Commission was ready to move forward with a construction bid process. *2 months*

6. Once construction bid process is underway, then staff would begin executing pre-lease agreements. All pre-leasing activities before that time would be non-binding only.

7. If a contractor is selected, then construction moves forward. *12 + months*

If the Commission decides to move forward with the Lower Mill process, the discussion and work could continue simultaneously regarding pre-feasibility of waterfront future development options. All these options require more study and planning and actions could be taken to move forward to a shovel ready status.

RECOMMENDATION: Discussion.

DRAFT/Basic Construction schedule for Lower Mill																	
	Nov. 18	18-Dec	19-Jan	19-Feb	19-Mar	19-Apr	19-May	19-Jun	19-Jul	19-Aug	19-Sep	19-Oct	19-Nov	19-Dec	20-Jan	20-Feb	20-Mar
Design bid process																	
Board approval of A & E firm																	
Design process																	
Board approval of design																	
Permitting																	
Pre-leasing																	
Construction bid process																	
Contract approval																	
Construction																	

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Port of Hood River Commission
Meeting Minutes of October 2, 2018 Regular Session
Marina Center Boardroom
5:00 p.m.

THESE MINUTES ARE NOT OFFICIAL until approved by the Port Commission at the next regular meeting.

5:00 P.M.
Regular Session

Present: Commissioners Hoby Streich, John Everitt, David Meriwether, and Ben Sheppard; Legal Counsel Jerry Jaques; from staff, Michael McElwee, Fred Kowell, Genevieve Scholl, Anne Medenbach, Kevin Greenwood, Daryl Stafford, and Jana Scoggins.
Absent: Commissioner Brian Shortt
Media: Emily Fitzgerald, Hood River News

1. **CALL TO ORDER:** President Streich called the regular session to order at 5:06 p.m.
   a. Modifications, Additions to Agenda: Attorney/Client Consultation code ORS 192.660(2)(f) was added to the agenda for Executive Session. An omission corrected in the Meeting Minutes from September 11, Commissioner Ben Sheppard was present during the meeting.

2. **PUBLIC COMMENT:** None.

3. **CONSENT AGENDA:**
   a. Approve Minutes of September 11, 2018 Regular Session
   Motion: Move to approve Consent Agenda.
   Move: Meriwether
   Second: Everitt
   Discussion: None
   Vote: Streich, Everitt, Meriwether, Sheppard **Absent:** Shortt

4. **REPORTS, PRESENTATIONS AND DISCUSSION ITEMS**

   a. **Near Shore Fish Species of the Hood River Waterfront –** Michael McElwee, Executive Director, introduced Port's summer facilities crew member, Dawson Neal. Mr. Neal is an accomplished angler and was asked to work on a diagram showing different species of fish along the Waterfront area which in the future could contribute towards better access points for fishing. Mr. Neal discussed the map and the different fishing opportunities available year-round.

   b. **Hood River County Intergovernmental Natural Hazards Mitigation Plan** – Barb Ayers, Hood River County Emergency Manager/Public Information Officer, presented the 2018 Hood River County Natural Hazard Mitigation Plan developed through partnership with several organizations and agencies. Ms. Ayers reviewed the vulnerabilities for the Columbia Gorge area and focused on mitigation goals which include increasing infrastructure and road resilience, strengthening communication between public and private entities, and improving resilience of critical facilities and response services.

   c. **Development Opportunity Analysis of Four Identified Port Properties** – Anne Medenbach, Property and Development Manager, provided a report on the four properties that were analyzed for future development opportunities. Medenbach noted that each property was evaluated based on the criteria outlined in the Real Estate Asset Strategy. Ms. Medenbach fielded questions from the Commission, which resulted in a request for the Commission President to meet with the contracted architect and review timelines of possible development options.

   d. **Bridge Replacement Project Update** – Kevin Greenwood, Bridge Replacement Project Director, reported that FHWA has agreed to serve as lead federal agency for the FEIS Process. Most of FHWA's responsibilities for review will be delegated to ODOT. The state agency will require reimbursement for

their staff time, which will affect the Project Budget once the scoping and rates have been negotiated. Additionally, WSP completed stakeholder interviews and Mr. Greenwood reviewed a 30-month schedule of the Final EIS project. Mr. Greenwood reported on the meeting with Washington local government officials that occurred earlier in the day.

5. Director's Report: Michael McElwee reported that a Fall Planning Session is scheduled for November 20. Mr. McElwee summarized that the Environmental Assessment is now complete which was a pre-requisite to The Connect VI Project at the airport. The T-Hangar Wait List required to be updated, and all potential tenants needed to submit a $100 payment to remain on the list which ensured that all individuals on the wait list were serious. USACE determined that the Lower Mill wetland is not part of the "Waters of the United States" per their written correspondence. This will allow for a possible wetland replacement. Additionally, a second bridge lift was carried out on September 26 to finish greasing the cables on the South Lift Tower. A guard rail on the approach road to the north end of the bridge was damaged by a larger flatbed truck/trailer on September 20. The incident was reported to the insurance agency.

6. COMMISSIONER, COMMITTEE REPORTS:

a. Airport Advisory Committee – Anne Medenbach noted that the Fly-In program went great and was well received; however, it will require more advertising for next year. Dayle Harris and Doug Roby are the new committee members. Other items discussed included miscellaneous maintenance at the airport.

7. ACTION ITEMS:

a. Approve Resolution No. 2018-19-1 Acknowledging the Hood River County Inter-Agency Natural Hazards Mitigation Plan. Hood River County has led a multi-jurisdictional effort to prepare a Natural Hazards Mitigation Plan 2018 to anticipate the likelihood of various natural disasters and take proactive steps.

Motion: Approve Resolution 2018-19-1 adopting and approving the Hood River County Natural Hazards Mitigation Plan.
Move: Meriwether
Second: Sheppard
Discussion: None
Vote: Streich, Everitt, Meriwether, Sheppard **Absent:** Shortt
MOTION CARRIED

b. Authorize Purchase of Three Parking Pay Stations from Cale America and Associated Service Agreement Not to Exceed $25,780. The FY 18/19 budget includes the purchase of three kiosks. Two kiosks will be installed at the Event Site. These kiosks will be operational during the time when parking booth is not staffed. Additional kiosk will be placed at the west end of Portway Ave.

Motion: Authorize purchase of three parking pay stations and associated services agreement from Cale America, not to exceed $25,780.
Move: Everitt
Second: Meriwether
Discussion: None
Vote: Streich, Everitt, Meriwether, Sheppard **Absent:** Shortt
MOTION CARRIED

c. Approve Contract with Liz Olberding, Architect, for Concept Design Services of Waterfront Restroom Facility Upgrades. The Marina Restrooms are in need of updating to be compliant with the ADA requirements; and the Event Site Restroom needs to be expanded, either by a remodel or a new build. Staff recommends approval of a contract with an architect to define the scope of work, concept drawings and schematic plans.

Motion: Authorize contract with Liz Olberding, Architect for architecture design services related to waterfront restrooms, not to exceed $5,000.
Move: Meriwether

Second: Sheppard
Discussion: None
Vote: Streich, Everitt, Meriwether, Sheppard **Absent:** Shortt
MOTION CARRIED

8. COMMISSION CALL: None

9. EXECUTIVE SESSION: President Streich recessed Regular Session 6:45 p.m. to call the Commission into Executive Session under ORS 192.660(2)(e) Real Estate Negotiations and ORS 192.660(2)(f) Attorney/Client Consultation.

10. POSSIBLE ACTION: None

11. ADJOURN:
Motion: Motion to adjourn the meeting.
Move: Meriwether
Discussion: None
Vote: Unanimous
MOTION CARRIED

The meeting was adjourned at 7:25 p.m.

Respectfully submitted,

_____
Jana Scoggins

ATTEST:

_____
Hoby Streich, President, Port Commission

_____
John Everitt, Secretary, Port Commission

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CONSENT

Commission Memo

Prepared by: Kevin Greenwood
Date: October 16, 2018
Re: Siegel Consulting Contract
Amendment No. 6

Steven Siegel has provided valuable consulting assistance to the Port's bridge replacement efforts since October 2015. His considerable background on a number of metro-area projects has provided the Port with experienced advice and assistance, most recently regarding bi-state bridge relationships. With prior Amendment No. 5, Siegel continued developing and reviewing bi-state policy positions, completed the initial financial modeling of procurement alternatives, and consulted on FHWA funding requirements.

Amendment No. 6 (attached) to the contract provides budgetary consideration for a scope of work to include:

- Advise on FHWA financing requirements, regulations and protocols;
- Facilitate and review tolling operations, traffic, and revenue analyses;
- Provide technical and strategic advice on setting a direction for a legislative agenda regarding funding and governance; prepare detailed work plan for the post-NEPA effort;
- Participate in conference calls or work sessions with the Commission or other local governments.

The amendment continues through June of 2019 and will add $60,000 of service with a total amount not to exceed $244,000. Services provided by Siegel by this Amendment will be reimbursed from the $5 million grant from the State of Oregon identified in the 2017 Transportation Bill.

RECOMMENDATION: Approve Amendment No. 6 to the Contract with Steven Siegel for bridge replacement consulting services, not to exceed $60,000.

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AMENDMENT NO. 6
TO PERSONAL SERVICES CONTRACT

This Amendment No. 6 to the Personal Services Contract ("Contract") is entered into this **16th day of October, 2018** by and between Steven M. Siegel ("Contractor") and the Port of Hood River ("Port"), an Oregon Special District.

RECITALS:

WHEREAS, Contractor and Port entered into a Contract dated July 12, 2016 for bridge replacement strategic planning and financial analysis services associated with future replacement of the Hood River Bridge ("Project"); and

WHEREAS, Amendment No. 5, dated July 24, 2018, covered work related to continued research and discussions with Washington State DOT officials regarding Washington legislative actions, developing and reviewing bi-state policy positions, completing the initial financial modeling of procurement alternatives, consulting on FHWA funding requirements related to past bridge funding and that the term of the contract be extended; and

WHEREAS, the Port desires additional advising services on FHWA requirements, regulations and protocols; facilitate and review tolling operations, traffic, and revenue analyses; provide technical and strategic advice on setting a direction for a legislative agenda regarding funding and governance; prepare detailed work plan for the post-NEPA effort; participate in conference calls or work sessions with the Commission, or other participating local agencies; review key documents prepared for NEPA compliance; and

WHEREAS, all terms used in this Amendment No. 6 have the meaning given to them as in the original Contract, except as amended hereby.

NOW THEREFORE, Port and Contractor agree to carry out the additional services for an additional amount not to exceed **$60,000** for a total contract amount not to exceed **$244,000** plus reasonable reimbursable expenses; and

Port and Contractor agree to extend the term of the contract through June 30, 2019.

IN WITNESS WHEREOF, the parties hereto have caused Amendment No. 6 to be duly executed the day and year first above written.

Steven M. Siegel

3787 S.W Lyle Court
Portland, Oregon 97221
(503) 274-0013
siegelconsulting@aol.com

Port of Hood River

Michael S. McElwee
Executive Director
1000 E. Port Marina Drive
Hood River OR 97031

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CONSENT

Commission Memo

Prepared by: Fred Kowell
Date: October 16, 2018
Re: Accounts Payable Requiring Commission Approval

Jaques Sharp **$7,172.00**

Attorney services per attached summary

TOTAL ACCOUNTS PAYABLE TO APPROVE **$7,172.00**

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CONSENT

JAQUES SHARP
ATTORNEYS AT LAW

205 3RD STREET / PO BOX 457
HOOD RIVER, OR 97031
(Phone) 541-386-1311 (Fax) 541-386-8771

CREDIT CARDS ACCEPTED

October 03, 2018

HOOD RIVER, PORT OF
1000 E. PORT MARINA DRIVE
HOOD RIVER OR 97031

Account No: PORTOHaM

Previous Balance	Fees	Expenses	Advances	Payments	Balance
MCELWEE EMPLOYMENT CONTRACT					
320.00	0.00	0.00	0.00	-320.00	$0.00
MISCELLANEOUS MATTERS JJ					
836.00	308.00	0.00	0.00	-836.00	$308.00
MAINTENANCE AGREE- MARINA SEWER (CITY OF HR)					
0.00	88.00	0.00	0.00	0.00	$88.00
LEASE (Hood River Distillers)					
110.00	0.00	0.00	0.00	-110.00	$0.00
EXPO SITE DEVELOPMENT (Key Development;Pickhardt)					
1,298.00	0.00	0.00	0.00	-1,298.00	$0.00
BRANDT LAND TRADE AIRPORT AREA					
44.00	0.00	0.00	0.00	-44.00	$0.00
SOUTH RUNWAY PROJECT					
22.00	0.00	0.00	0.00	-22.00	$0.00
WESTERN POWER LEASE (Kearney)					
0.00	88.00	0.00	0.00	0.00	$88.00
P3 - BRIDGE					
132.00	0.00	0.00	0.00	-132.00	$0.00
OVERWEIGHT TRUCK ENFORCEMENT					
0.00	550.00	0.00	0.00	0.00	$550.00

HOOD RIVER, PORT OF

Account No: Octobe P(

	Previous Balance	Fees	Expenses	Advances	Payments	Balance
MARINA MOORAGE AGREEMENT	484.00	0.00	0.00	0.00	-484.00	$0.00
WATERFRONT PARKING	0.00	22.00	0.00	0.00	0.00	$22.00
STORM LINE SINK HOLE (HDR area)	0.00	1,386.00	0.00	0.00	0.00	$1,386.00
FEIS	154.00	1,320.00	0.00	0.00	-154.00	$1,320.00
PFM Financial Advisor Contract	550.00	110.00	0.00	0.00	-550.00	$110.00
TOLLS IGA (Port of Cascade Locks)	44.00	22.00	0.00	0.00	-44.00	$22.00
BRIDGE SPAN DRIVE CONTRACT	0.00	154.00	0.00	0.00	0.00	$154.00
BRIDGE INTERSTATE AGREEMENTS	0.00	1,540.00	0.00	0.00	0.00	$1,540.00
SECURITY SERVICES CONTRACT (HRT)	0.00	682.00	0.00	0.00	0.00	$682.00
BRIDGE TRAFFIC/ REVENUE CONTRACT (Stantec)	0.00	660.00	0.00	0.00	0.00	$660.00
RECREATIONAL IMMUNITY	0.00	242.00	0.00	0.00	0.00	$242.00
	3,994.00	7,172.00	0.00	0.00	-3,994.00	$7,172.00

RECEIVED
OCT 0 5 2018
BY:_____

THIS STATEMENT REFLECTS SERVICES PROVIDED AND PAYMENTS RECEIVED THROUGH THE 3Oth OF SEPTEMBER UNLESS OTHERWISE STATED

Commission Memo

Prepared by: Kevin Greenwood
Date: October 16, 2018
Re: FEIS Public Involvement Plan Presentation

A major task of any EIS process is developing a plan for public involvement. The Port's contract with WSP is no different, with 12% of the budget earmarked for the creation and implementation of a Public Involvement (PI) Plan. Anne Pressentin, EnviroIssues, has over a decade of experience working with public agencies to inform their constituents and facilitate public participation on such projects.

Late last month, Pressentin completed 19 interviews with 25 regional stakeholders representing a wide range of interests on both sides of the river. She will attend the meeting to present her findings from those interviews and lay out a strategy for informing the public, generating meaningful input from the community, and facilitating the EIS Advisory Committee. Attached is a summary of the proposed public involvement process.

Port staff has spent dozens of hours working with EnviroIssues and WSP on this critical task and looks forward to engaging the public about the EIS process. The Port's Executive Director and Communications Manager have provided practical, local knowledge to WSP and EnviroIssues. Commission feedback is sought on the results of the initial interviews and the planned activities going forward.

RECOMMENDATION: Informational.

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Hood River-White Salmon Bridge Replacement Project

Public Involvement Planning

October 16, 2018 Commission meeting

Public involvement plan purpose: Establish a strategic roadmap

Public involvement plans help local, state and federal governments make decisions that could affect customers and constituencies. The process to develop the plan allows the project team to think strategically about how public involvement can assist the project in achieving its goal. In so doing, the plan will identify communications and engagement activities to hear from key audiences and align those activities with key decision points in the project schedule.

Public involvement problem statement

"The obsolete bridge connecting Washington and Oregon between White Salmon and Hood River needs replacement to support the safety, economic vitality and quality of life for people in the Columbia River Gorge. Completion of the NEPA environmental review is the next essential step in the replacement process. This work best positions our community for future funding, permitting, construction and operation of a new bridge."

Key decisions in input opportunities in the environmental review process:

- Confirmation of the project's purpose and need statement, draft EIS alternatives, scope of analysis, and the preliminary preferred alternative
    - Location: Directly adjacent to west side of the existing bridge, avoiding Tribal fishing site on the Washington side
    - Bridge type and size: Concrete segmental box girder with one travel lane in each direction, shoulders and bike/ped walkway with viewpoint
- Vertical and horizontal navigation channel clearances
- Impacts to environmental, community and Tribal resources
- Mitigation strategies to address impacts
- Bicycle and pedestrian connections to the bridge from Hood River and White Salmon
- Bicycle and pedestrian facility design on the bridge, viewing platform
- Bridge architectural treatments

Plan Development: Consider and incorporate unique context

Plan development is informed by the current status and goals of the project, population demographics, results of stakeholder interviews and conversations with Port staff.

Demographic context: Within the project area, there are pockets of high poverty near the Hood River Bridge and a high percentage of the community that speak Spanish at home. A focused and intentional approach is needed to engage people with barriers to participation.

Stakeholder interview results:

- 19 interviews with 25 people completed in person Sept. 18-25

- Key themes heard multiple times:
    - Bridge is essential to regional economy and community connection
    - Universal agreement on need to replace the bridge: Just do it
    - Major safety concerns exist related to weight limits and narrowness
    - Support for bike and pedestrian connections
    - Consensus that "preliminary preferred alternative" (replacement bridge just west of current bridge with two travel lanes and a bike/ped path) should proceed
    - Transparency in process and decision-making is essential; multiple tactics needed

Staff guidance: Public involvement process needs to:

- Be cognizant of the region's history and past decisions related to bridge
- Build awareness of the need for and constraints of the project
- Be transparent and provide real time communication
- Endeavor to build trust and enhance working relationships
- Embrace the opportunity of collaboration to reach shared goals of a new bridge

Key considerations for public involvement

Issues of greatest concern are not related to NEPA or the NEPA process. During stakeholder interviews, respondents were more concerned with toll rates and governance/operations of the bridge.

Trust and relationship building is necessary to enhance non-NEPA discussion. While the current focus is on NEPA, complex discussions will continue with the same stakeholders after the Record of Decision.

Face to face, in-person events or meetings are needed. Strong ties and a culture of personal connections exist in the community. Working relationships related to the bridge replacement can be enhanced with in-person dialog to increase knowledge and trust and reduce rumors.

Tag onto existing forums. In-person engagement can and should occur where people already are to increase efficiency for participants and reduce cost. During stakeholder interviews, Rotary Club, briefings at elected body meetings were specifically mentioned. School events, church events, fairs and festivals also can be used.

Traditional media works well to inform about project progress. Newspaper, local radio shows (in English and Spanish), direct mail are effective. Websites and social media also can be effective.

Culturally relevant engagement needed with Tribal governments and Hispanic communities.

Audiences

Bridge users
Residents in Klickitat and Hood River counties
Businesses
Freight haulers (including timber and fruit)
Maritime transport
Tourist organizations
Recreationalists (hike, bike, water)
Government entities (local, state, federal, Tribal)
Low income populations
Spanish speakers
Environmental interest groups
Historical societies
Transit providers

Recommended public involvement activities and tactics

EIS Working Group. Invite a group of stakeholders to learn about the bridge and EIS process, work together to provide input to the project team on potential EIS considerations, and share knowledge from the community as well as summaries from discussions on non-NEPA bridge topics. Alternate meetings between Oregon and Washington locations to reduce barriers to public participation. Appoint co-chairs from each side of the river to help guide the meetings with project staff. Provide opportunities for public comment at each meeting. Meeting frequency: Tied to EIS milestones, about quarterly.

Presentations / Work sessions at meetings of elected bodies. Provide in-depth information about EIS topics or other bridge topics at regular meetings of elected bodies such as port commissions, city councils or county commissions. Such sessions allow for public discussion on key questions causing concerns in local communities. They also can provide opportunities for public comment to the elected body about project development which will inform both the project team and elected officials. Frequency: Every other month.

Project-sponsored open houses. Present information about project development at two key milestones: Project re-launch and completion of supplemental draft EIS. One should be held in Oregon and one in Washington to reduce travel barriers to participation and ensure the full range of public comments are heard. The first open house should be friendly and inviting to promote learning about the project, consensus building on the path forward and to encourage future engagement. In conjunction with the in-person events, all information and comment forms should be posted online to allow participation at any time by people unable to attend the open house. Timing: Fall 2018, Fall/winter 2019/2020

Culturally-Specific Outreach to Spanish Speakers. Work with The Next Door, Inc. to design an outreach program to hear directly from the Latino community about their concerns and aspirations with this project. Activities may include a focus group conducted in Spanish and English and/or information tables at community events. Timing: In parallel with project-sponsored open houses.

Information tables / presentations at community events. Host information tables at locations or events where people already are. For example, Rotary Club, volunteer fire fighter gatherings, festivals, schools, Wal-Mart entrance. The purpose is to educate residents about the EIS process, inform them of opportunities to provide input and hear their feedback. This format increases participation cost-effectively and time-efficiently. Frequency: Quarterly.

Regular distribution of information via existing channels. Use several information channels to routinely distribute information about project developments. Recommended channels include newspapers, radio talk shows, Port's social media accounts, e-newsletter, website. Frequency: At least monthly.

Next Steps

- Finalize public involvement approach and schedule – October 2018
- Schedule and plan first EIS Working Group meeting and open house – October-November 2018
- Initiate information distribution – October 2018
- Schedule presentations / events – Starting in November 2018

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Commission Memo

Prepared by: Daryl Stafford
Date: October 16, 2018
Re: Waterfront Annual Report

The attached 2018 Waterfront Annual Report provides a summary of the usage, site improvements, and events along Port-owned areas of the Waterfront this past season. Also included in the report is information on Event Site parking receipts, and waterfront recreation related revenue and expenditures.

During the meeting, staff will present a detailed review of the report and Commission input is sought on potential improvements for next year.

RECOMMENDATION: Discussion.

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2018 Port of Hood River Waterfront Report

October 16, 2018

Prepared by: Daryl Stafford, Waterfront Manager

Summary

This summer was extremely busy on the waterfront. The increased popularity and growth of Hood River's waterfront has placed ne and increasing demands on the Port's recreational sites, along with challenges of managing and maintaining them. New sports are emerging, old sports are making a comeback, businesses are being developed and the overall visitation numbers have increased throughout the various waterfront areas.

More than ever, user expectations are of an increased service level, demanding that the Port's recreational sites be well managed and ready to accommodate a higher intensity and greater variety of uses. As a result, Port staff is constantly reassessing of the condition of the Waterfront sites and planning for the new and growing demands placed on it.

Staff conducted face to face interviews with numerous Concessions to understand business activity overall, and the challenges that they are facing. Summer 2018 had strong numbers reported from most and the consensus across the board was that business was good. Feedback was extremely positive.

What follows is a summary of Waterfront Activity on Port Property at each location along the Waterfront.

Marina Basin

During June, July and August the Hood River Marina experienced record use. Sailboats, Power Boats, Jet Skis, Cruise Ships, Sea Planes, canoes, SUPs…. And many variations of each.

Boat Ramp & Guest Dock- The Boat Launch area is managed to provide safe and functional river access for small crafts (8ft-28ft), for both power and sailboats. The parking in the boat ramp area and the guest dock frequently filled up. Demand exceeded capacity most weekends. The restroom in the corner of the lot had heavy use yet appeared to be adequate for most of the season.

This year we received a small grant from the OSMB in the amount of $8,425 to update our guest dock electric and pave the parking lot island. The total project cost was $16,061. The Visitor Dock needs significant repair or replacement and the boat ramp needs to be extended. Port Executive Director, Michael McElwee, is working with the OSMB on grant for upgrades for this area.

Marina- The Marina adds to the allure of Hood River and provides a highly desirable haven for the boating community. Current management goals are to meet maintenance standards, to have slip rates similar to other public marinas, and to ensure a positive cash flow.

- The Marina is at 100% occupancy with a wait list of 72 applicants. During June, July and August any available sublet was filled. Staff has been working to encourage tenants to clean up their docks, replace worn lines, keep their boats registration & insurance current, and to practice OSMB Clean Marina requirements.

Currently: 100% Occupancy

Sailboats 72% **Powerboats 28%**

HR Marina Waitlists	Slips Under 30	Slips Over 30	Totals
Slips in the Marina by Size	124	32	156
Wait List by Size	45	23	68
Waitlist Percent compared to of Slips Available	38%	72%	44%

Water Safety Patrol- We are pleased to report that the Sheriff's Office Marine Division were able to increase their time on the water by 22%, and a 47% increase of time on shore. Based on the agreement approved by the Commission June 2018, the Port agreed to pay the fuel costs of the Marine Deputy's Watercraft from July 1, 2018 through September 15, 2018.

Marine Deputy Curtis Kowall extends his gratitude to the Commission for making this possible.

- Fuel for the HR Marine Deputy paid by the Port totaled $2,994 from July 1-September 15, 2018.

Hood River County Sheriff's Office Marine Division Summer 2018 Productivity (6/15-9/15)				
Activity	2017		2018	Percentage increase/decrease over 2017
Shore Patrol	176 hours		260 hours	47%
Water Patrol	148.25 hours		181.25	22%
Non-Motorized Contacts	706		472	-33%
Motorized Contacts	41		57	39%
Marine Incidents- Dispatch	68		60	12%

Hood River Yacht Club- The HRYC continued to host the extremely competitive Wednesday Night Regattas. The Club turned the management of the Shell dock over to the Port, while continuing to manage the East end of the South Dock and the HRYC fenced parking lot & boat storage. The HRYC building received a fresh coat of paint and is scheduled to get new gutters. There are some landscaping projects that our Facility Crew has been tackling to improve aesthetics.

Cruise Dock: The Cruise Ship Dock has experienced an increase in usage as well. The season started off with high water and the Facilities Crew faced some real challenges with the dock attachments. They were swift to react and were able to minimize damage by improvising attachments and stabilization.

Cruise Ships- 74 Total Stops Scheduled 2018

Company- Numbers are estimates	*Stops*	*Revenue*
American Cruise Lines	63	$ 8,145.00
Linblad Expeditions	9	$ 1,350.00
Fantasy Cruise Lines	2	$ 200.00
Pastime Yacht	Winter	$ 3,400.00
		$ 13,095.00

- This dock has been used frequently this season for boat crane outs. Currently there is no charge. Staff may request approval from the Commission to do so for next season.



Events hosted from the Marina Basin:

- **HRVHS Gorge Sailing Team**. 40 kids, 6 regattas, 1st Place State Champs
- **HRYC Moore 24 National Regatta**. 12 boats, 60 competitors, 4 days
- **Seattle Remote Control sailing Regatta** 25 participants, 3 days racing
- **Roy Webster Cross Channel Swim** 500 participants, 72nd year

Marina Park

The Marina Green is a signature view corridor for Hood River. It provides a scenic amenity and a playing field for youth sports, adult recreation, dog exercising, and space for special events. The Port works closely with Community Education and the School District, donating a significant amount of the use to them, approximately $11,663. The Marina Restrooms are open to the Public from May – September to accommodate this location. The cost of maintaining the field and restroom upkeep causes costs to exceed revenue but does provides a significant community benefit.

Events on the Marina Green:

- **Youth Lacrosse in the Spring** 50-150 kids, 74 days usage
- **Youth Soccer in the Fall** 155 kids elementary school age, 15 days usage
- **Build Corporate Retreat** 100 people playing lawn games, 1 day



DMV Parking- The gravel area south of the DMV Building was utilized frequently for people/events that were parking challenged. A fee was charged to private parties seeking temporary spot overnight. User groups included:

- Mini Cooper Road Rally 125 Cars, 200+ people, 5 days
- Chrysler Advertising Team for Commercials 6 Large trucks, 25 people 3 days
- Washington Ornithological Society 35 cars, 60 people, 3 days
- Wedding Groups running shuttles 15 cars, 25 people, 1 day

The Picnic Shelter was rented 28 times at $50 a booking, generating $1,400 revenue, a 3% increase from last year. This area and the green space north of it has potential to be marketed as a small event or wedding venue in the future with some small upgrades.



Marina Beach- With the new Pay-to-Park implementation and kite launch overcrowding at the Event Site, there has been a large increase in beach usage at the Marina Beach. This year's sandbar formation at the mouth of the Hood River created a much better kiting scenario from years past. It was suitable to all skillsets. Beginner Windsurfers are utilizing the east end of the beach and general beach goers and dog walkers are on the rise. The restrooms on the Jetty seemed to be adequate for current demands.

Events at the Marina Beach included:

- **World Class Kite Academy Jr. Kite Jam**- WCKA Director Lindsay McClure thanks the Port for supporting their Kids Kite Competition. The kids and spectators had a blast. This year 19 athletes from 9 different countries competed. She mentioned that there will be several articles in Kiteboarding Magazines highlighting the Event. The venue has become the nucleus for high level park-style and freestyle kiteboarding.
- **The Slider Project Kite Competition-** The Slider Project is a community organization that manages the worlds only freestanding public kiteboarding park. This competition hosted 33 Professional Level Riders from all over the world. Event Coordinator Rich Sabo thanks the Port for another awesome summer.
- **ABK Windsurfing Camp-** Andy Brandt runs windsurfing camps all over the world and has been doing so since 1982. He hosts 3-week long sessions of about 20 people in each that are all skill. Launching from the Marina Beach he is utilizing the area that started it all for the sport of Windsurfing. All camps sold out and he looks forward to returning next season.
- **HRVHS Wrestling Team Rumble at the Beach-** 75 kids
- **HRVMS Scavenger Hunt-** 200 kids

The Spit & Nichols Basin

The SPIT- Kite the Gorge is the only Concession at the North End of the dirt road leading to the Spit. The Port provides 2 outhouses for that area. The largest user group for that area, besides kiters, are Dog Walkers. Spring and Carlos, owners of KTG, report having another successful summer. As always, they performed a large number of rescues. Safety of beach users (non-kiters) and dogs running over, and damaging kites are a concern of theirs.

- **4th of July Fireworks** are launched from the Spit and went off without a hitch, this is great news to report. This is a huge undertaking for our Facility Crew. The Spit is closed for 3 days to prepare. Managing traffic is key. All hands were on deck and the Event went off seamlessly.

Nichols Basin: Nichols Boat Basin is a scenic amenity that is maintained for public access and non-motorized boating. The user groups are mainly SUPs, Kayaks and outrigger canoes. Beginner Windsurfing, SUP and Kayak lessons are taught in this location. The landscaping and beach are beautiful. It is a wonderful spot for families to bring their kids to play.

- **Gorge Paddle Center (GPC)** operates their concession at the SW Corner of the Basin. Todd Anderson, a former professional kayaker and owner, reported that his numbers were up. He was happy to have the new parking plan because it increased turnover and that was an advantage for his business. He requested better signage to the concessions and an upgraded fence for the Canoe Club if future budgets allowed. He thanks our Facility Crew for their efforts to keep it beautiful.

- **The Hood River Canoe Club (HRCC)** Now in their 5th year has 90 members**.** They moved from the Marina to Nichols next to the GPC and are very pleased with the location. Their hopes are to secure a long-term agreement with the Port so that they may make some improvements to their space and if possible build a structure.

Events in Nichols Basin include:

- **Global Sessions Team Building-** 50 people
- **Slingshot Company Party-** 100 people
- **King of the Salmon Fundraiser for Cancer-** 125 people
- **SECRETS SUP Science Program Fundraiser** 50 people
- **CGWA "Get on Board" Demo Day-** 100 people
- **Monster Sea & SUP Relay Fundraiser for Cancer-** 35 people

Development of a SUP/kayak/canoe Storage Shelter is in planning. Staff has been working with the City to obtain permits for the project. The modular docks are also in the permitting stages. The Canoe Club and the Gorge Paddle Center look forward to development and support the Port's efforts.

Event Site

The Event Site is the epicenter for recreation and the major focal point of the Hood River Waterfront. It is the main Kiteboarding launch site for the Gorge, and remains popular for the windsurfing and SUP community. The emergence of Foiling has created an entirely new user group. Both kiters and windsurfers now foil, and the conditions at the Event Site are very well suited for both. Downwind Paddlers running the signature "Viento Run", end their journey at this location. During the summer months users frequently exceed capacity.

One other user group that has become extremely popular at this area are Beach Goers. Because of all the excitement people are drawn to come spectate. Many are totally unaware of the dangers presented by people launching kites. Every Spring high water poses challenges for kiters launching and causes congestion of a small area to set up. Port staff and the CGKA spend endless hours chalking safety zones, educating users and preparing signage. Safety, kite etiquette, launching and dog control are all promoted.

Parking- Parking at the Event Site was at a record level. Overflow parking in Lot #1 was used most weekends and may weekdays when the Event Site Lot filled up. Total Sales were $139,534.

Event Site Parking from May 26, 2018 through September 3, 2018.

Year	Daily Pass	Oversize Vehicle	Annual Pass	Annual Oversize	Total	% Increase from Previous year
2018	**5237**	**195**	**1,065**	**19**	**$139,534**	**23%**
2017	5089	108	726	19	$114,050	13%
2016	5171	239	768	21	$101,580	-10%
2015	6019	184	819	25	$111,968	45%
2014	6626	171	595	17	$77,224	6%
2013	6186	148	572	21	$73,385	19%
2012	5331	181	642	17	$61,845	18%
2011	4660	101	510	12	$52,490	21%
2010	3333	72	440	28	$43,425	-16%
2009	4104	168	497	28	$51,255	16%

Event Site Hosts*:* John & Sharon Chow provided an invaluable service to the Port as a calming force amidst the chaos of the Event Site. They are kind, yet stern, and have earned the respect of those that know them. They provided Staff with a weekly review, collected lost and found, and politely educated dog owners, Kiteboarders and people parking.

The Chow's Requests for 2019 include:

- Repaint lines on parking stalls, paint curbs, stencil oversized stalls, more parking signs
- Position 3 safety buoys along Event Site Beach
- Add changing rooms to Bathroom area, remove dead trees in picnic area.

Concessions at the Event Site

- **Stoke on the Water Downwind SUP Tours and Lessons**- Owner Joel Yang, one of the most enthusiastic paddlers you will ever meet, reports a busy summer teaching 81 lessons. He had increase in guided tours during events. He said the Gorge Downwind Paddle Champs brought a large increase to his business. Beginner downwind lessons were down.

  A few concerns he had were Pros from out of town teaching lessons and running clinics with no permits, and dog owners not looking after their pets or picking up after them.



- **Big Winds SUP Center**- Sam Wiley, Manager, said this year was the first sign of SUP beginner lessons slowing down. Downwind Shuttles were busy. The JET Jr. Paddle Kids SUP team is based out of Big Winds and continues to dominate the field in the PNW kid's divisions.
- **Cascade Kiteboarding-** Owner Tonia Farman reported having steady business that was similar to last year. There was an increased demand for lessons however staffing was a real problem. She said the labor pool for seasonal help is so limited that she was unable to find staff to meet the demands. 30 non-lesson rescues were performed to various recreation groups.
- **Brian's Windsurfing-** Brian Shurton had a rejuvenated spirit for teaching windsurfing this year. Business was good. His daughter Kayla has stepped in to help run the business and teach kiting. Brian also helps the Event Site Hosts with the lost and found and is known as one of the Event Site Ambassadors. He brought thousands of dollars of gear to the Port office for people to recover.
- **New Wind-** Jim Bison added staff member Molly to double the lessons taught. Molly runs a school in Baja and has a loyal clientele. Combined, their efforts had a definite presence on the water. It was a successful summer for them.
- **Gorge Kite School-** Owen Richart said business was up. He shared concerns over no recycling bins at the Event Site, Dogs on the loose, and rouge Kite Schools teaching out of the Event Site.


- **Island Grind**- Larry started this summer being super busy in Portland and had a hard time spending time in HR. This posed challenges with staffing, along with having heat and smoke from the fires. Hopefully next year will be better.
- **Sandbar Café –** Susie Dow, the owner and operator, had a very busy summer even though she was frequently challenged with the extreme heat and smoke. Evenings seemed to be less consistent so next year she plans on focusing more on the lunch crowd.
- **Gorge Pedicab-** Matthew Barman got his business off the ground early July. His best location is the Hood River Inn. He hopes to add another bike for next season.
- **IwasPhotographed-** Owner Bob Stawicki spends most of his time on the river taking pictures from his inflatable. He performed quite a few rescues this summer that were very time consuming. He would like to have powerful internet offered at the Event Site for business.

Events at the Event Site

- **KB4C-** benefits Project Koru, a Hood River non-profit that empowers young adults with cancer through outdoor adventures and community. Director Tonia Farman said even though the wind did not cooperate, the Event was still a huge success. People now come to this event for the community and cause. She added an additional 3rd day that was well attended. Their safety record was flawless. KB4C raised $188,326.

  This year they hired the Broomsmen, a progressive recycling and waste solution management company to handle trash. They felt it was very successful and recommends that other events on Port property use their services. They request that the Port leave the restrooms open next year.

- **All Wind Sports Industry (AWSI)-** Event Coordinator Cody Cornett reported having an extremely successful event. Manufacturers from all over the country set up tents and gear so that Retailers could come view and demo to decide what they will stock for next year. They utilized Lot #1 for overflow parking.

  For next summer they request that the Port provide additional Garbage Cans. He thanks our Facility Crew for helping him troubleshoot removal at this year's event.

Other events include:

- **Gorge Cup Windsurf Races-** 42 Competitors, 5 races
- **Windance Boardshop Kite Demo Days-** 175 participants
- **Harvest Fest-** 8000 people expected
- **Columbia Gorge Marathon-** 2000 people expected

Jensen Parking Lot & Waterfront Park

The Jensen Parking Lot got a new facelift this season, pavement and Parking Kiosks! It took a bit of getting used to for the long-time users, however by the end of the summer everyone seemed to have embraced it.

Big Man Rotisserie did a few trial runs in the NW Corner of the Jensen Lot however the intense heat combined with the dark pavement, no running water or no seating area made for some real challenges. Trevor, owner of BMR, decided that it was not the right fit for his business. He would like to pursue another location on Port Property if the opportunity were to arise.

CGWA- Bart Vervloet, Organization Manager, held 3 swap meets in the Parking Lot and were grateful to be out of the dirt. They raise money to promote kids windsurfing in the Gorge and maintain launch sites. They would like to increase to 5 Swap Meets next season.

Recreation Events at the Jensen Parking Lot and Waterfront Park:

Gorge Paddle Champs (GPC)- Carter Johnson is the Event Director and originator, a former professional paddler. This Event is a weeklong festival based out of the Waterfront Park, Jensen Parking Lot and Lot #1, for downwind paddling of Surf Skis, Outrigger Canoes and SUPs. This year was a HUGE SUCCESS. The event is a fundraiser for **Rivers for Change**, a non-profit that seeks to connect individuals and communities to rivers.

GPC has an impressive media campaign that boasts "Everything Gorge. This year's event had 766 entrants from all over the globe. He turned away over 300 people he could not accommodate. Over 2000 paddlers shuttled on downwind runs over 6 days. 28 kegs of Full Sail Beer were consumed!

There was just under $40K in cash prizes for pros and many $1000s worth of product prizes to various age groups. This event has once again put Hood River in the spotlight. Business thrived, the Parks were at max capacity. Parking was a challenge and is being addressed for next year's event.

Gorge Paddle Champs Demographics

- 579 males (76%)
- 187 females (24%)
- 344 Surf Skis,
- 337 Outrigger Canoes
- 85 SUPs

Gorge Downwind Champs Age Highlights:

Age	Participants	%
18 and under	14	2%
19-39	184	24%
40-49	222	29%
50-59	227	29%
60-69	106	14%
70+	13	2%

Gorge Downwind Champs Geographic highlights:

State	Participants	% of Total
California	247	32%
Canada	94	12%
Washington	88	11%
Hawaii	75	10%
Oregon	44	6%
Austrailia	36	5%
Florida	26	2%

Naish Columbia Gorge Paddle Challenge (NCGPC) – Originally spearheaded by Steve Gates of Big Winds, this SUP Course Racing and Downwind Event is in its 8th year. It has become one of the most prestigious SUP Race Events in the world. 320 Athletes competed. Equal prize money was offered to the Pro Men and Women, over $18,000. This was the first year that there was an OC-1 and Surfski division. Next year Foiling will be added. Please See Exhibit A- attached letter.

Gorge Kids Triathlon- The Gorge Kids Triathlon was created in 2011 by a group of local moms who saw a need to provide a healthy activity for kids and raise funds for PE programs in the schools. The Triathlon has since grown to accommodate over 300 kids. Port Property from the Event Site to the Hook was utilized. The event is completely driven by volunteers who are dedicated to promoting activities for our children and improving wellness programming in the schools. Funds are divided evenly to ALL 5 Hood River Valley Elementary Schools.

The Hook

The Port's most rustic property on the Waterfront, The Hook has its own special niche. The new pathway extending to the far west end now serves as the culmination point of the Waterfront Trail. Quite a diversity of user groups migrate to this area; All level windsurfers, SUPs, Fisherman, dogwalkers, birdwatchers, joggers, bikers and sightseers. On any given day the trail is full.

The new launch ramp on the outside west end has made it much easier for launching windsurfers and paddleboards. Traffic in this area has increased congestion on the NW corner of the Hook and are being addressed by staff. 2 Port-a-potties at this location and seem to be adequate.

Concessions at the Hook

- **Big Winds** teaches all beginning windsurfing lessons and Kids Windsurfing Camps in the Hook. Jason Watts, manager, said the Kids Camps filled up for the entire month of July, windsurf lessons were packed and SUP rentals were up. They had a stellar summer at the Hook.
- **Hood River SUP and Kayak** offer rentals, lessons and tours. Justin Teague, owner, said he had in increase in kayak rentals over SUP rentals as compared to previous years, far more corporate retreat events than years in the past. There were early season challenges with high water, mainly because there was no beach, so he improvised his lesson plans. Overall, he said it was his busiest summer so far and was very pleased with how things went.
- **CGWA Gorge Groms-** Bart Vervloet, Director of the CGWA said they helped 130 kids and their families learn to windsurf and SUP. He has many proposals for landscape improvements to be discussed in the Fall Planning Session.

Events at the Hook

- Red Paddle SUP Demo- 25 participants
- CGWA King of the Hook- 125 participants

Staff Observations

Overall Trends to be considered:	**Recommended Efficiencies**
• Area Population Increase • Greater variety of user Groups **Emerging Issues:** • Public Demand • Security • Parking • Dogs **Potential Revenue Sources:** • Increased Parking Kiosks • Strive to maximize use of facilities • Raise Prices	• Expanded Parking • Improve User Group/Pedestrian Circulation • Facilitate use of areas that are currently underutilized • Effective and efficient use of technology • Improved Access

2017-18 Fiscal Year
Waterfront Recreation Expenditures/Revenue

EXPENDITURES	ACTUAL
Event Site	
Personnel Services	$80,021
Materials and Services	$46,650
Total	$126,671
Hook, Spit and Nichols	
Personnel Services	$42,144
Materials and Services	$35,249
Total	$77,393
Marina Park	
Personnel Services	$141,524
Materials and Services	$34,167
Total	$175,691
Total Waterfront Recreation Expenses	**$379,755**
CIP Projects Not Included in formula	$28,659
REVENUE	
Events, Parking Passes, Concessions, HR Yacht Club	$183,499
Grant-Contributed Capital	$
Total Waterfront Recreation Revenue	**$183,499**
2018 Expenses Exceeding Revenue	**-$196,256**
2017 Expenses Exceeding Revenue	**-258,875**
2016 Expenses Exceeding Revenue	-$373,721
2015 Expenses Exceeding Revenue	-$339,117
2014 Expenses Exceeding Revenue	-$358,396
2013 Expenses Exceeding Revenue	-$332,388
2012 Expenses Exceeding Revenue	-$326,320

2018 Concessions May 1- October 31	
Concessions	Amount
Big Winds	$ 4,923.36
Brian's	$ 4,923.36
Cascade Kiteboarding	$ 3,282.24
Gorge Kiteboard School	$ 3,282.24
Kite the Gorge	$ 2,461.68
New Wind	$ 3,282.24
Gorge Paddle Center	$ 2,461.68
What's SUP	$ 2,461.68
Sandbar Café	$ 1,075.00
Boab Stawicki	$ 1,000.00
Local Grind	$ 860.00
Gorge Pedicab	$ 100.00
Big Man's Rotissirie	$ 100.00
Stoke on the Water	$ 100.00
	$ 30,313.48

2018 Events			
Event Site	**Date**	Fee	Waived
AWSI Trade Show	August	$ 2,600.00	
Columbia Gorge Marathon	October	$ 1,000.00	
Gorge Cup	June/July/August	$ 800.00	
Harvest Festival	October	$ 4,350.00	
Kiteboarding for Cancer	July	$ 2,900.00	
Windance Kite Demo	July	$ 500.00	
	TOTAL	**$ 12,150.00**	
4th of July Fireworks	July		$ 1,100.00
Gorge Kids Triathlon	October		$ 500.00
Nichols Beach & Basin		Fee	Waived
CGWA "Get on Board"	June	$ 200.00	
Global Sessions: Slingshot Party	June	$ 100.00	
	TOTAL	**$ 300.00**	
King of the Salmon Fundraiser	June		$ 200.00
Monster & Sea SUP for Fundraiser	May		$ 100.00
Hook		Fee	Waived
Windance / Red paddle SUP Demo	June	$ 100.00	
	TOTAL	**$ 100.00**	
King of the Hook CGWA Family Fun Day	August		$ 150.00
Jensen Parking Lot		Fee	Waived
CGWA Swap Meets	June/July/August	$ 225.00	
Gorge DownwindPaddle Champs Parking	July	$ 1,200.00	
	TOTAL	**$ 1,425.00**	
Naish Paddle Challenge Parking at Maritime	August		$ -
SUP for Secrets Science Fundraiser	July		$ 200.00
Picnic Shelter		Fee	Waived
Summer 2018 Monthly totals	May-Sept	$ 1,400.00	
	TOTAL	**$ 1,400.00**	
Lot #1		Fee	Waived
Gorge Downwind Paddle Champs	July	$ 1,050.00	
Meadows Employee Bus Parking	November	$ 600.00	
Get on Board	June	$ 100.00	
	TOTAL	**$ 1,750.00**	
Gorge Kids Tri	October		$ 100.00
Marina/Marina Park & Beach		Fee	Waived
ABK Windsurf Camp	June /July	$ 1,500.00	
Cross Channel Swim HR Chamber	September	$ 250.00	
Moore 24 Races HRYC	August	$ 375.00	
Remote Control Sailboat Regatta	July	$ 200.00	
Slider Project Kite Competition	July	$ 700.00	
Build Corporate Retreat	September	$ 200.00	
Cruise Ships	April-October	$ 11,795.00	
	TOTAL	**$ 15,020.00**	
HRVHS Wrestling Team Rumble			$ 150.00
HRVMS 6th grade Scavenger Hunt @ ES & Marina			$ 100.00
HRYC High School Gorge Sailing Team			$ 2,000.00
World Class Kite Academy Jr. Jam Slider Contest@ Spit			$ 500.00
Mini World Cup Soccer			$ 900.00
Youth Lacrosse Community Ed @Marina Green			$ 8,751.00
DMV Parking Lot		Fee	Waived
Miscellaneous Parking Groups	**TOTAL**	**$ 775.00**	
2018 Totals Revenue from Events		**$32,920.00**	**$14,088.00**
2017 Revenue from Events		$ 22,475.00	
2016 Revenue from Events		$ 16,650.00	
2015 Revenue from Events		$ 15,860.00	
2014 Revenue from Events		$ 14,275.00	

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2018 Port Report for Naish Columbia Gorge Paddle Challenge

2018 was a great year for the Naish Columbia Gorge Paddle Challenge, and we want to thank the Port of Hood River for your continued support of the event. This was the 8th year of our event, and it has become one of the most anticipated, most competitive, and best-attended standup paddleboard races in the world. The Gorge Paddle Challenge is a world-class SUP competition for both elite athletes and amateurs of all ages. In fact, judging from the immensely positive reactions from athletes and spectators alike, this could very well have been our best year yet!

The Hood River Waterfront Park is a unique venue on the SUP race circuit. It is perfectly suited for this event, with the opportunity for us to run a downwind race which finishes at the Park, as well as a course race which takes place on the river just in front of the Park—providing exceptional viewing opportunities for spectators.

We hosted about 320 athletes from all over the world, including elite athletes from far-reaching locations such as Australia, New Caledonia, France, Hawaii, Canada, and Japan. We had a large field of amateur athletes from near and far—many from Portland, Seattle, and the surrounding areas. Many of these athletes brought their families with them and turned the weekend event into a longer family vacation. I would estimate that there were at least 500 spectators who visited the beach each day.

We had the opportunity to talk with many of our racers and spectators at the Waterfront Park, and people were very impressed with the quality of the facilities, and the family- and recreation-friendly atmosphere. Many first-time visitors are already excited about coming back again next year (or perhaps sooner)!

Many of these athletes came to the Gorge for several days or more, prior to the event, and some stayed in town for days afterward. This means that they had plenty of time to spend money at Gorge businesses, which they did. Whether it was staying at a hotel or rental property, eating and drinking at local establishments, or shopping around town, I am confident that the event brought a significant amount of revenue to Hood River and the rest of the Gorge.

The event itself supports many local businesses, as well. Most of the revenue we receive from athlete entry fees goes directly to putting on the event, i.e. directly to our local vendors. We spend thousands of dollars hiring local event staff; renting our tables, chairs, generators, stage, and other equipment; hiring someone to set up and run the sound system; hiring local jet ski and boat operators; reserving/renting the Waterfront Park; obtaining all of the necessary permits; renting portable sanitation units; purchasing supplies; the list goes on. We also have close to 30 sponsors and vendors—including local food carts, which do a

huge amount of business at the event. Most of our sponsors/vendors are local companies but several travel to the Gorge from elsewhere. Throughout the weekend they are interacting with the public and promoting and selling their products. These sponsors are also spending money in town, for lodging, food, etc. We also had a kickoff party at a local restaurant (Kickstand Coffee and Kitchen) this year, and plan to do more events like this in the future.

Parking is something that people are always concerned with, and we field a number of parking-related questions in advance of the event, but that being said, the parking seemed to work out just fine during the event. There seemed to be ample parking behind the businesses, in addition to the paid parking available on the street and in the paid lot east of the park. We understand the need for paid parking at the waterfront, and we did our best to make the parking regulations clear to people parking for our event. As in years past, this year the Port allowed us a handful of overnight parking passes for select sponsors and others who were unable to find lodging in town; this was incredibly helpful and was very much appreciated by those who used them. (I believe we gave out three passes this year).

We are so honored to be able to host this event at the Hood River Waterfront Park and to be able to showcase the wonderful recreation opportunities available here. We hope the event will continue in the same vein for many years to come! Thanks again for your support.

Sincerely,

Erin Gates, Steve Gates, and Doug Hopkins

Partners, Columbia Gorge Paddle Challenge

Commission Memo

Prepared by: Daryl Stafford
Date: October 16, 2018
Re: Hood River Outrigger Canoe Club

Heidi Ribkoff, President of the Hood River Outrigger Canoe Club, will attend the meeting to give a presentation reviewing their growth, accomplishments and goals for the future.

RECOMMENDATION: Information.

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Commission Memo

Prepared by: Michael McElwee
Date: October 16, 2018
Re: Commission/Staff Communications Plan

One of the goals listed in the Executive Director's FY18/19 Work Plan is Commission approval of a plan for increasing and improving communication opportunities between Port staff and the Commission.

Attached is a draft list of communication steps, prepared by the Executive Director with input from key staff. Commission feedback and direction is requested so that this plan can be finalized and implemented.

RECOMMENDATION: Discussion.

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PORT OF HOOD RIVER
STAFF/COMMISSIONER COMMUNICATIONS PLAN
DRAFT: October 3,2018

TASK Timing

STAFF TO COMMISSIONERS

1. **Bi-monthly Executive Directors Report:** Semi-Weekly
   Written or verbal report highlighting key activities and relevant issues

2. **Executive Director Work Plan Quarterly Update:** Three Months
   Verbal report presented during a Commission meeting that describes the status of projects on the approved Work Plan

3. **Executive Director Annotated Work Plan:** Six Months
   Annotated status report of all projects listed in the approved work plan.

4. **Executive Director Lunch with Board President:** Monthly
   Lunch meeting to discuss all aspects of Port operations and current/planned projects. Legal counsel or other Port staff may sometimes attend if needed.

5. **Commission Meeting Draft Agenda Review:** Semi-Weekly
   Executive Director forwards draft agenda to Commission President Tuesday of each week prior to Commission meeting for comment & approval. ED and Port President discuss agenda immediately prior to each meeting.

6. **Commissioner Lunches:** *Quarterly*
   Executive Director meets for lunch with each individual Commissioner to discuss to discuss any projects, issues, or other matters.

GENERAL

1. **Email/Text Port Emergencies, Incidents, etc.:** As Needed
   As appropriate and necessary, the Executive Director or other Port staff will alert the Commission via email or text to any item that may require significant public interest. This is to ensure Commissioners are aware of such incidents and ready to respond appropriately if contacted directly by members of the media or citizens.

2. **Identify Speaking Opportunities for Commissioners:** As Needed
   To raise the public profile of the Port Commission, staff will monitor regional and relevant industry and policy-based events and group activities for potential speaking opportunities for both Port staff and members of the Commission. In addition, interview opportunities with local and regional broadcast and print media will be relayed and arranged.

3. ***Newsletter and Annual Report:*** Quarterly
   The Commission President provides a "Message from the President" letter in each annual report. The focus of the letter can be as broad or detailed as the President prefers but should reflect the President's approach to leadership of the Port for the coming year.

COMMUNICATIONS FROM COMMISSIONERS

1. **Active Participation in Assigned Committees:**
   Commissioners will actively participate in the meetings and activities of the Port Committees to which they have been assigned and provide oral reports of the activities during the following Commission meetings. Committee responsibilities may also include individual meetings with staff and/or committee members and attendance at special events. Commissioners will provide leadership while also acting as a conduit for public input on committee activities and projects.

2. **Ear of the Port:**
   Commissioners serve as the eyes and ears of the Port and should make themselves available to hear from their constituency and relay any input received to Port staff. Feedback from the public on Port projects and business operations is an essential function of the Commissioner role.

3. **Heads Up:**
   Each Commission meeting begins with an up to 30-minute period allowed for public comment. These can sometimes be contentious and when they are, usually individual Commissioners have already been contacted by members of the public about the issue. The best response or resolution is often provided when staff has time to investigate the issue and prepare information ahead of time. Commissioners receiving public comment of a contentious issue should alert staff to the issue and provide guidance on how best to address it.

4. **Op-ed Opportunities:** *Local and regional newspapers often welcome Opinion/Editorials from elected on any topic of significant public interest. This provides our Commissioners will an opportunity to go on record about their position on any issue, convey Port planning or policy issues in detail with the reasoning behind any Commission decision, and simply raise awareness of the Port's benefit to the community.*

5. **Mid-Columbia Today Show Radio Program:** *Once a month, the KIHR radio station welcomes Port staff or Commissioners to be interviewed live, on-air about any topic related to Port business. This is usually a 10-20 minute interview and any Commissioner is welcome to participate at any time.*

Hood River-White Salmon Bridge Replacement Project

Project Director Report
October 16, 2018

The following summarizes Bridge Replacement Project activities from October 3 through October 16, 2018.

FINAL ENVIRONMENTAL IMPACT STUDY (FEIS)

Included in the Packet is a list of tasks accomplished in the first month of the project.

Highlights:

- Meetings set with US Coast Guard and Army Corps of Engineers. Preferred Alternative (PA) from Draft EIS showed a 80-ft. vertical clearance. There has been some discussion of whether that clearance will need to be adjusted for the *D/V Yaquina*, which has a 100-ft. clearance requirement.
- October 2018 EIS Update included in packet. Staff is obtaining quotes for producing poster-sized boards of update to be placed in foyer to increase public awareness of project. Also looking at running print ads in both Hood River and White Salmon newspapers.
- Survey of river users being developed.
- Public Information (PI) Plan being developed. (Presentation for Commission this evening.)
- ODOT will be preparing their scope of work for reviewing FEIS progress.
- Environmental Study Plan development starting now that FHWA criteria has been determined. Due to the length of time since the Type, Size & Location and Draft EIS Studies, WSP anticipates that ODOT will require a Supplemental EIS (in budget). This will eliminate the need for WSP to conduct a "re-evaluation" of the prior studies.
- First advisory committee meeting in November with first public Open House to follow.
- Received first WSP invoice for $31k. Tasks completed in first month included in board packet. Otak reviewed invoice and made recommendations for tracking efficiencies.

Risk Register. No changes since last meeting.

6-Month Detail Schedule. Included in the packet is a detailed 6-month schedule broken down by task. The 30-month high-level schedule will be included next month.

ODOT CONTRACT BUDGET

Included in your packet is an updated draft project budget of the $5-million Oregon Dept. of Transportation (ODOT) grant. The most noticeable changes to the current 2018-19 FY Projections are Siegel's contract (reduced -$19) and an increase in local counsel (+$9k). Slight increase in contingency based upon adjustments.

PROJECT DELIVERY ACTIVITY

The Traffic and Revenue Advisory Contract is included in tonight's packet for Commission consideration as a separate Action Item.

COMMUNITY OUTREACH

WASHINGTON STATE UPDATE

Washington State Sen. Curtis King attended Oct. 2nd bi-state meeting. It appears that the Washington local governments will be participating in the EIS committee.

COLUMBIA RIVER INTERTRIBAL FISHING COUNCIL (CRITFC) UPDATE

- Herb Fricke, Akana, is identifying chief executive officers at each of the four tribes.
- Letter is being drafted to each CEO requesting meeting with tribal elected officials.

INDIVIDUAL MEETINGS

- Oct. 2 attended Bi-state meeting.
- Oct. 3 attended Klickitat County Transportation Meeting.
- Oct. 3 lunch meeting with Marc Thornsbury, Port of Klickitat.
- Oct. 4-5 attending Oregon Public Ports Association annual meeting.

REGIONAL ISSUES

- Washington legislature reaching out to Oregon to kick-start I-5 Columbia River Crossing (CRC).
- Rep. Caddie McKeown (Coos Bay) noted at OPPA meeting that issue could be discussed in mid-December.
- McKeown complimented Port of Hood River's work on FEIS.
- Brendan Finn has replaced Karmen Fore as Governor Brown's Transportation Advisor. Port will look for an opportunity to invite Mr. Finn to tour the Bridge.
- Clackamas County has inquired about tolling technology.

Hood River/White Salmon Bridge Replacement Project
EIS UPDATE

OCTOBER 2018

In December 2003, a draft environmental impact statement (EIS) was published as part of a bi-state collaborative effort. This draft EIS was the first step in complying with the National Environmental Policy Act (NEPA). Currently, the Port of Hood River (Port) is advancing the project to complete the EIS effort and position the project for future funding and construction.

What's new on the project?

- Stakeholder interviews were conducted with 25 people representing local government agencies, businesses, and interest groups. These interviews will guide the Port on designing future public outreach activities.
- The Federal Highway Administration has agreed to be the lead federal agency, which is a critical role on completing the environmental impact statement (EIS) to comply with the National Environmental Policy Act (NEPA). The Oregon Department of Transportation (ODOT) will also fulfill a technical oversight role as this phase of work continues.
- Coordination is underway with the US Coast Guard and US Army Corps of Engineers to initiate federal permitting and engage these federal agencies in early bridge design assumptions.
- Traffic data was collected during peak morning and afternoon periods at locations near each bridge approach. This data will inform the traffic modeling effort.

What are the next steps?

- Initiate Section 408 review process with the US Army Corps of Engineers, which is a required authorization needed whenever a new bridge is built in a federal navigation channel.
- Begin planning for the first public involvement event to be held this fall.
- Conduct updated traffic analysis on the existing and future baseline conditions, which is a requirement for the EIS impact analysis.
- Continued collaboration with local, state, and federal agencies as well as the member tribes of the Columbia River Inter-Tribal Fish Commission.

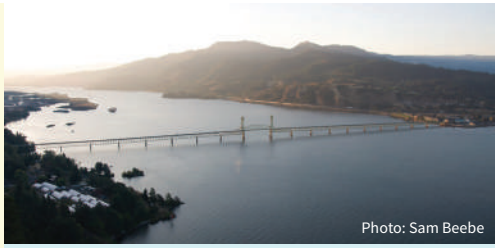
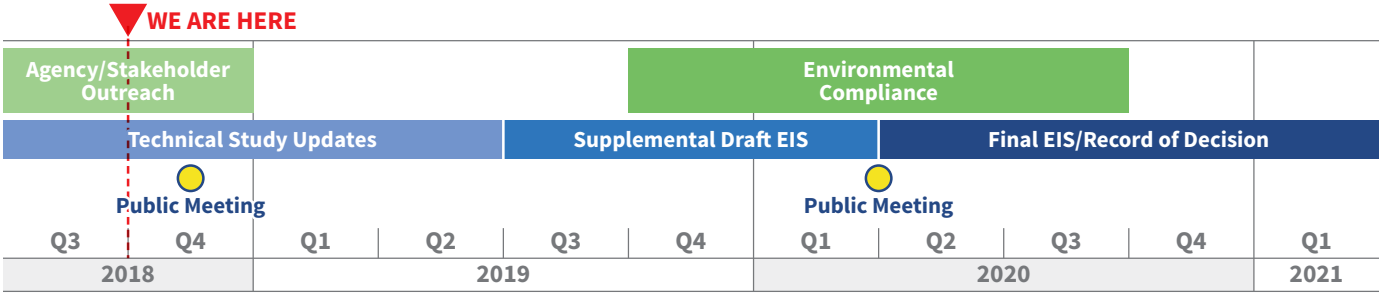


Photo: Sam Beebe

How would bridge replacement benefit the Columbia River Gorge communities?

The Hood River Bridge provides a critical connection for residents and visitors to the Columbia River Gorge National Scenic Area. One of only three bridges spanning the Columbia in this region, the bridge is a critical rural freight network facility for agriculture, forestry, heavy industry and high-tech companies with freight originating throughout the northwest. The existing bridge is nearing the end of its serviceable life and is obsolete for modern vehicles with height, width, and weight restrictions and is also a navigational hazard for marine freight vessels. The bridge has no sidewalks or bicycle lanes for non-motorized travel and would likely not withstand a large earthquake.

If project funding is secured, the new bridge would provide a safe and reliable way for everyone to cross or navigate the Columbia River—by car, truck, bus, bicycle, on foot, or on the water. A new bridge would support a thriving economy and livable communities.



To learn more about the project, please visit us at:

www.portofhoodriver.com/bridge

PROJECT CONTACT

Kevin Greenwood, Project Director
☎ 541-436-0797
@ kgreenwood@portofhoodriver.com

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Detailed Progress Summary by Task
Work Performed: August 1-31, 2018

TASK 1. PROJECT MANAGEMENT

1.1 Project Management and Coordination

- Coordinated with Port and project team to initiate project
- Setup accounting system and files for the project
- Began preparing subcontracts
- Began preparing the Project Management Plan and Quality Assurance Plan
- Developed a detailed project schedule

1.2 Client Progress Meetings

- Prepared for and facilitated a project kick-off meeting with the Port and project task leads on August 9, 2018
- Prepared and distributed an action items log

1.3 Consultant Team Meetings

- Prepared for and facilitated a consultant team meeting with project task leads on August 30, 2018
- Prepared and distributed an action items log

1.4 Risk Management

- Prepared a draft risk register; submitted to the Port on August 30, 2018

TASK 2. PUBLIC INVOLVEMENT

2.1 Public Involvement Plan and Task Coordination

- Coordinated with Port and Consultant team to begin developing the Public Involvement Plan
- Conducted internal kick-off meeting with PI team

2.6 Bridge Replacement Advisory Committee

- Attended meetings with Port and Washington local agencies on August 16, 2018

2.12 Status Reports

- Prepared and submitted a draft status report on August 31, 2018

TASK 5. ENVIRONMENTAL

5.1 Environmental Study Plan and Coordination

- Contributed to detailed project schedule and subcontract development for environmental-related items

5.2 Agency Coordination

- Coordinated with Port, ODOT and FHWA to schedule a meeting on September 24; developed a preliminary agenda

Detailed Progress Summary by Task
Work Performed: August 1-31, 2018

TASK 6. ENGINEERING

6.1 Engineering Coordination

- Contributed to detailed project schedule and subcontract development for engineering-related items
- Consulted with other task leads on permitting needs for navigation survey and in-water geotechnical work

TASK 7. TRANSPORTATION

7.1 Methodology Memorandum

- Began developing outline of the methodology memorandum

7.2 Data Review and Collection

- Coordinated with Port to obtain data about bridge traffic
- Prepared and submitted a list of data needs on August 27, 2018

10/1/2018

Ok to pay
Kgreenwood
Bridge Replacement

INVOICE

WSP USA
851 SW 6TH AVE
SUITE 1600
PORTLAND, OR 97204
503-478-2800
503-274-1412

PORT OF HOOD RIVER
1000 EAST PORT MARINA DRIVE
HOOD RIVER, OR 97031

Attn: Kevin Greenwood

Invoice Date: September 27, 2018
Invoice No: 816917
Project No: 80550A

Company Legal Name: WSP USA Inc.
Company Tax ID: 11-1531569

Project Manager: Angela Findley
Project: 80550A Hood River Bridge Replacement
Customer Order No: 2018-01
Invoice Description: Invoice 01 PE 31Aug18

Services provided from August 01, 2018 to August 31, 2018

Summary of Costs

Line Item		Contract Value	Current Invoice	Previously Billed	Total Billed To Date	Contract Balance	Percent Invoiced
1	Project Management	$382,625.00	$22,050.69	$0.00	$22,050.69	$360,574.31	5.76%
2	Public Involvement	$283,620.00	$4,134.01	$0.00	$4,134.01	$279,485.99	1.46%
3	Project Delivery Coordination	$19,440.00	$0.00	$0.00	$0.00	$19,440.00	0.00%
4	Tolling/Revenue Coordination	$0.00	$0.00	$0.00	$0.00	$0.00	n/a
5	Environmental	$1,046,102.00	$1,666.82	$0.00	$1,666.82	$1,044,435.18	0.16%
6	Engineering	$836,578.00	$3,225.22	$0.00	$3,225.22	$833,352.78	0.39%
7	Transportation	$153,962.00	$711.27	$0.00	$711.27	$153,250.73	0.46%
8	Permit Assistance	$148,548.00	$0.00	$0.00	$0.00	$148,548.00	0.00%
DE	Direct Expenses	$277,125.00	$68.67	$0.00	$68.67	$277,056.33	0.02%
Professional Services		**3,148,000.00**	**31,856.68**		**31,856.68**	**3,116,143.32**	**1.01 %**

I hereby certify that the charges invoiced are true and correct and include only such charges as were directly incurred in the performance of the work on the project, have not been previously submitted, and are in accordance with the terms and conditions of the Agreement.

Angela Findley
Project Manager

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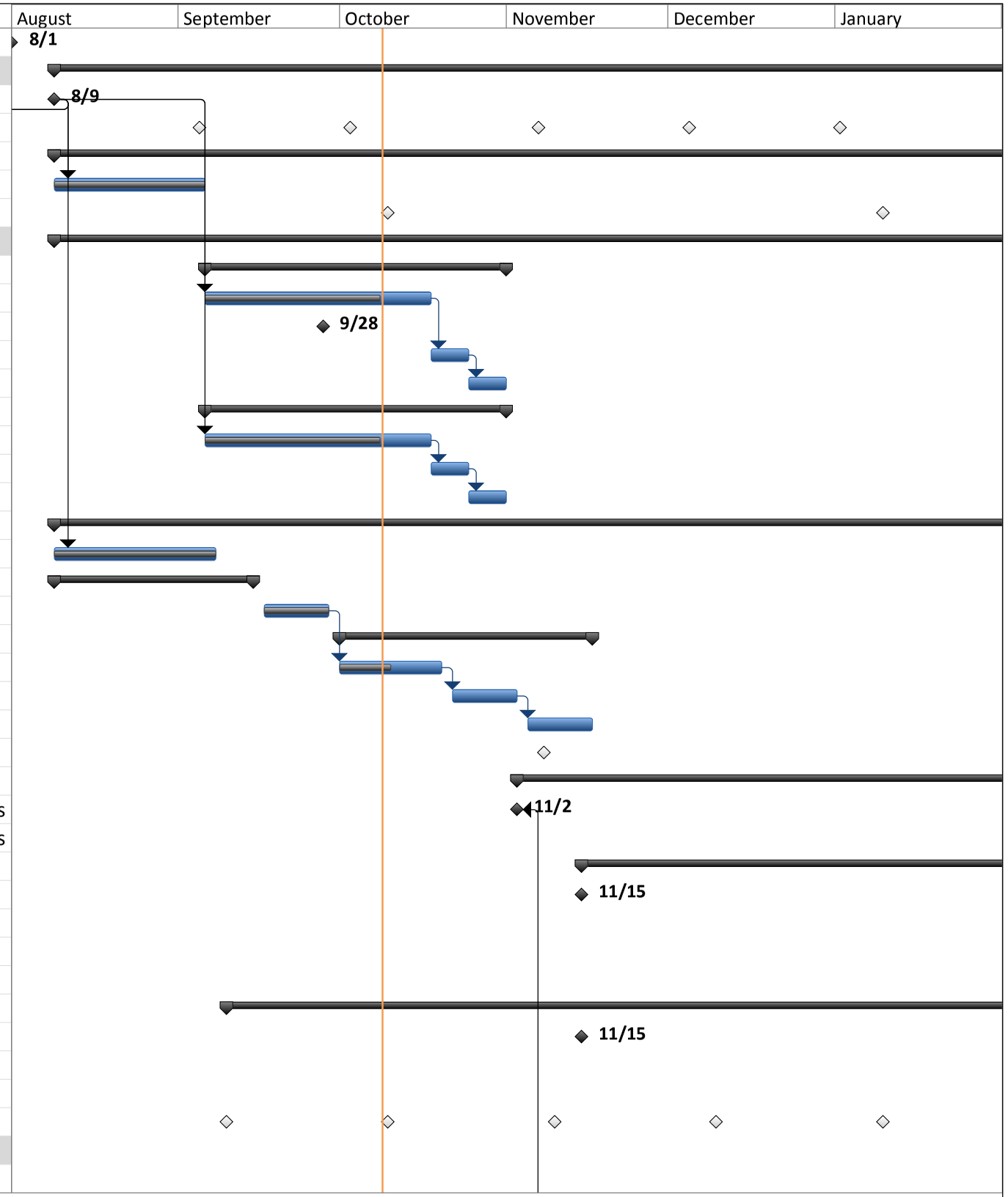
ID		Text1	Task Name	Duration	Start	Finish	Predecessors
1	✓		Notice to Proceed	0 days	Wed 8/1/18	Wed 8/1/18	
2		1	**PROJECT MANAGEMENT & COORDINATION**	**632 days**	**Thu 8/9/18**	**Sun 1/10/21**	
3	✓	1.2.1	**Project Kick-Off Meeting**	**0 days**	**Thu 8/9/18**	**Thu 8/9/18**	
4	↻	1.2.2	**Progress Meetings**	**610 days**	**Wed 9/5/18**	**Wed 1/6/21**	
34		1.5	**Risk Management**	**632 days**	**Thu 8/9/18**	**Sun 1/10/21**	
35	✓		Draft Risk Register	20 days	Thu 8/9/18	Wed 9/5/18	3
36	↻		Risk Register Updates	588 days	Wed 10/10/18	Sun 1/10/21	
47		2	**PUBLIC INVOLVEMENT**	**632 days**	**Thu 8/9/18**	**Sun 1/10/21**	
48		2.1.1	**PI Plan**	**40 days**	**Thu 9/6/18**	**Wed 10/31/18**	
49			Draft Plan	30 days	Thu 9/6/18	Wed 10/17/18	3FS+20 days
50	✓		Communications Workshop w/Port	0 days	Fri 9/28/18	Fri 9/28/18	
51			Port Review	5 days	Thu 10/18/18	Wed 10/24/18	49
52			Plan (v1)	5 days	Thu 10/25/18	Wed 10/31/18	51
53		2.1.2	**Comment Tracking Protocol**	**40 days**	**Thu 9/6/18**	**Wed 10/31/18**	
54			Draft Protocol	30 days	Thu 9/6/18	Wed 10/17/18	3FS+20 days
55			Port Review	5 days	Thu 10/18/18	Wed 10/24/18	54
56			Final Protocol	5 days	Thu 10/25/18	Wed 10/31/18	55
57		2.2	**Stakeholder Interviews**	**587 days**	**Thu 8/9/18**	**Sun 11/8/20**	
58	✓		Identify Interviewees	22 days	Thu 8/9/18	Fri 9/7/18	3
59	✓		**Interview Questionnaire**	**27 days**	**Thu 8/9/18**	**Fri 9/14/18**	
63	✓		Interviews	10 days	Mon 9/17/18	Fri 9/28/18	62
64			**Interview Memorandum**	**35 days**	**Mon 10/1/18**	**Fri 11/16/18**	
65			Draft Interview Memorandum	15 days	Mon 10/1/18	Fri 10/19/18	63
66			Port Review	10 days	Mon 10/22/18	Fri 11/2/18	65
67			Final Interview Memorandum	10 days	Mon 11/5/18	Fri 11/16/18	66
68	↻	2.7	**EIS Working Group Meetings**	**522 days**	**Thu 11/8/18**	**Sun 11/8/20**	
78		2.8	**Public Open Houses**	**327 days**	**Fri 11/2/18**	**Tue 2/4/20**	
79			Open House #1	0 days	Fri 11/2/18	Fri 11/2/18	133SF+30 days
80			Open House #2/Public Hearing	0 days	Tue 2/4/20	Tue 2/4/20	212FS+15 days
81		2.10	**Community Outreach Events**	**236 days**	**Thu 11/15/18**	**Fri 10/11/19**	
82	▦		CO Event #1 (Hood River TBD)	0 days	Thu 11/15/18	Thu 11/15/18	
83	▦		CO Event #2 (Walmart Booth)	0 days	Fri 4/19/19	Fri 4/19/19	
84	▦		CO Event #3 (White Salmon TBD)	0 days	Fri 10/11/19	Fri 10/11/19	
85	▦		CO Event #4 (Hood River TBD)	0 days	Fri 10/11/19	Fri 10/11/19	
86		2.11	**EJ Outreach**	**610 days**	**Mon 9/10/18**	**Sun 1/10/21**	
87	▦		EJ Event #1 (TBD)	0 days	Thu 11/15/18	Thu 11/15/18	
88	▦		EJ Event #2 (TBD)	0 days	Fri 4/19/19	Fri 4/19/19	
89	▦		EJ Event #3 (TBD)	0 days	Fri 10/18/19	Fri 10/18/19	
90	↻	2.12	**Status Reports**	**610 days**	**Mon 9/10/18**	**Sun 1/10/21**	
120		3	**PROJECT DELIVERY COORDINATION**	**0 days**	**Fri 8/14/20**	**Fri 8/14/20**	
121			Industry Forum	0 days	Fri 8/14/20	Fri 8/14/20	237



Project: HRB_Schedule_2018-10-0
Date: Tue 10/9/18

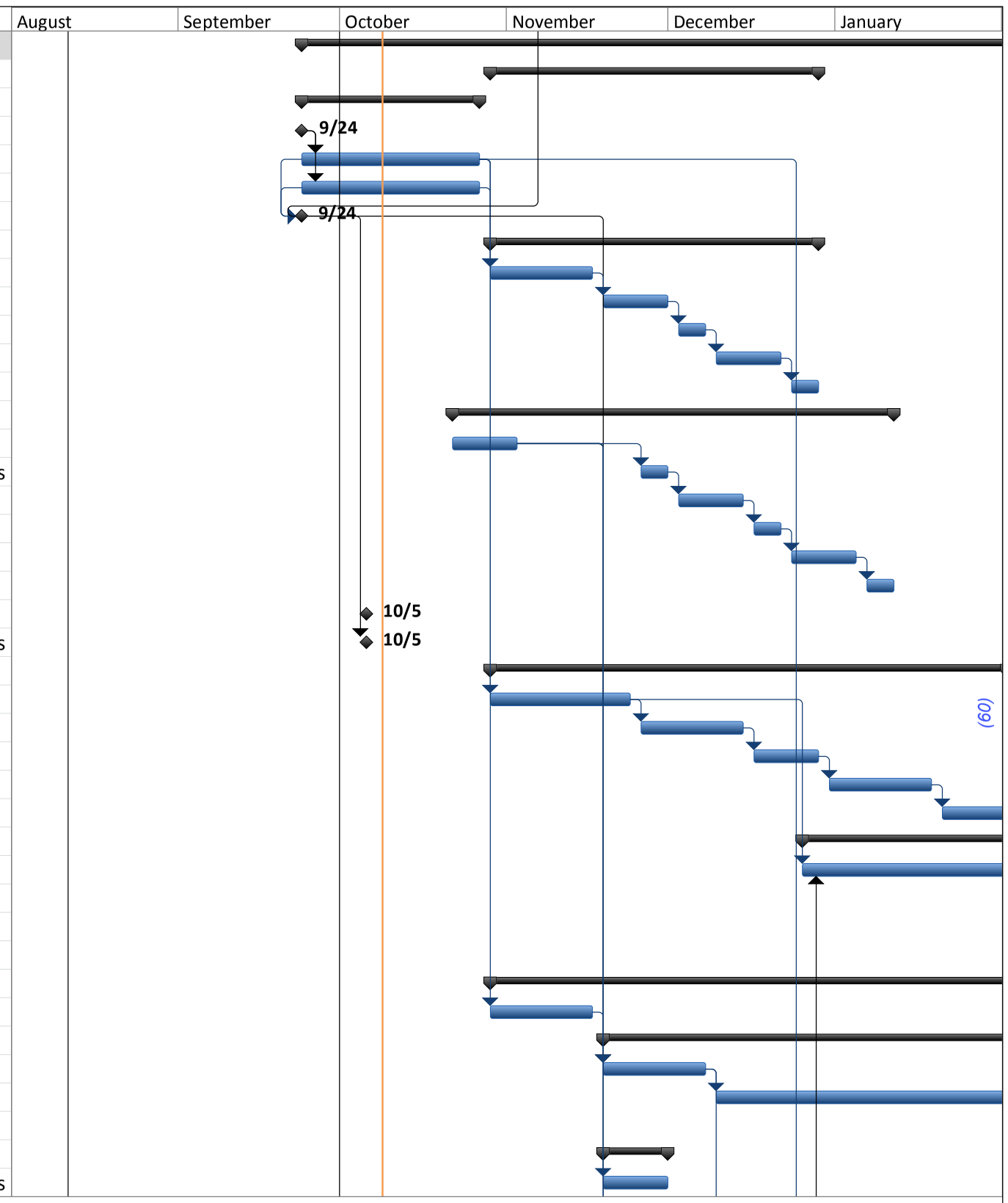
Task	Project Summary	Inactive Milestone	Manual Summary Rollup
Split	External Tasks	Inactive Summary	Manual Summary
Milestone	External Milestone	Manual Task	Start-only
Summary	Inactive Task	Duration-only	Finish-only

Deadline	
Progress	

REPORTS

REPORTS

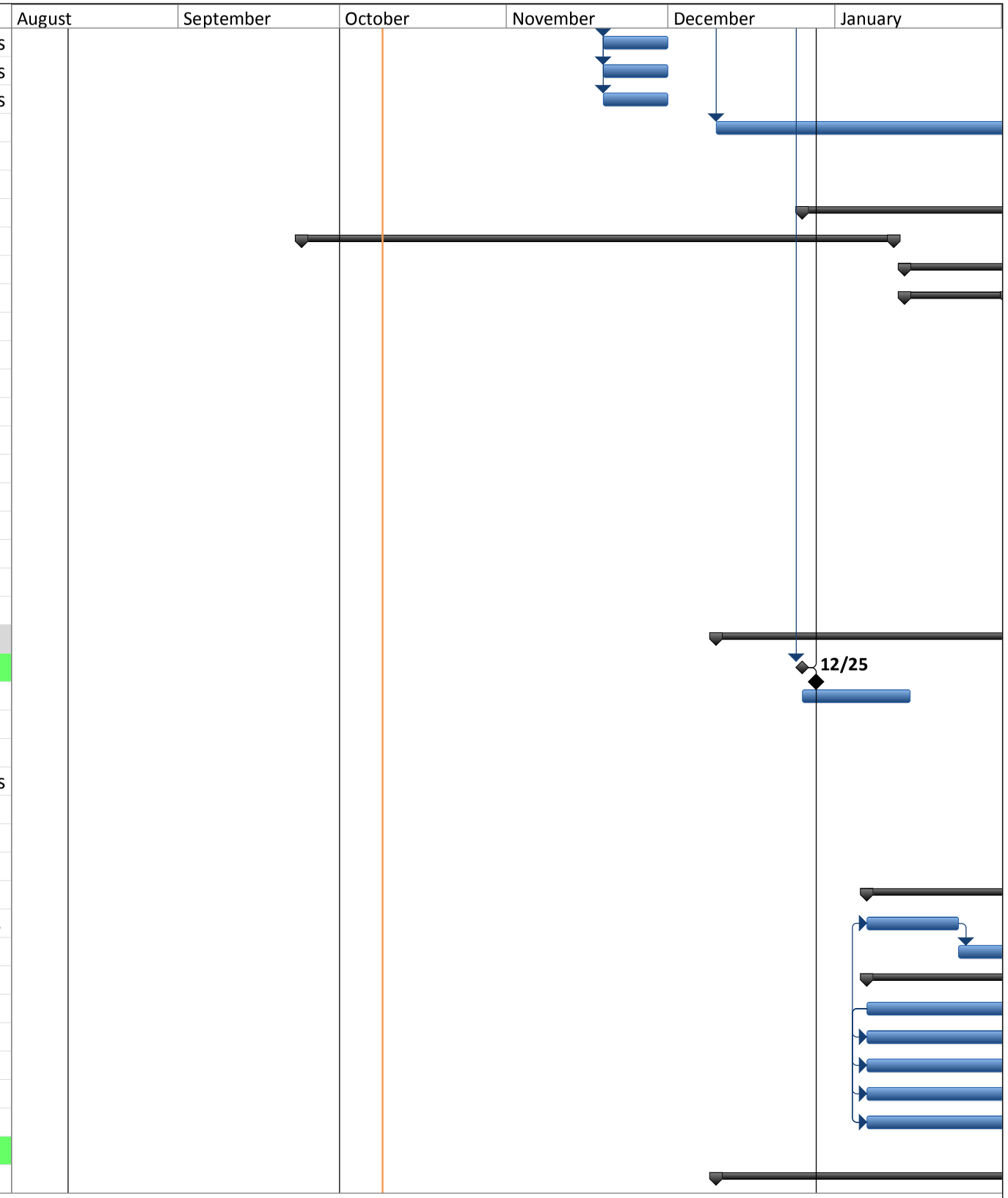
		Text1	Task Name	Duration	Start	Finish	Predecessors
		5.1	**ENVIRONMENTAL**	**590 days**	**Mon 9/24/18**	**Fri 12/25/20**	
		5.1	**Environmental Study Plan**	**45 days**	**Mon 10/29/18**	**Fri 12/28/18**	
		5.2.1	**Determine NEPA Lead Federal Agency**	**25 days**	**Mon 9/24/18**	**Fri 10/26/18**	
130			Meet w/FHWA-OR & ODOT	0 days	Mon 9/24/18	Mon 9/24/18	
131			Follow up Coordination FHWA-OR & ODOT	25 days	Mon 9/24/18	Fri 10/26/18	130
132			Coordinate with FHWA-WA & WSDOT	25 days	Mon 9/24/18	Fri 10/26/18	130
133			Confirm Lead Agency	0 days	Mon 9/24/18	Mon 9/24/18	131SS,132SS
134		**5.2.2**	**Agency Coordination Plan**	**45 days**	**Mon 10/29/18**	**Fri 12/28/18**	
135			Draft plan	15 days	Mon 10/29/18	Fri 11/16/18	131,132
136			Port & DOT Review	10 days	Mon 11/19/18	Fri 11/30/18	135
137			Revised Plan	5 days	Mon 12/3/18	Fri 12/7/18	136
138			FHWA Review	10 days	Mon 12/10/18	Fri 12/21/18	137
139			Final Plan	5 days	Mon 12/24/18	Fri 12/28/18	138
140		**5.2.3**	**Tribal Consultation Plan**	**60 days**	**Mon 10/22/18**	**Fri 1/11/19**	
141			Coordinate with Akana	10 days	Mon 10/22/18	Fri 11/2/18	
142			Draft plan	5 days	Mon 11/26/18	Fri 11/30/18	141FS+15 days
143			Port & DOT Review	10 days	Mon 12/3/18	Fri 12/14/18	142
144			Revised Plan	5 days	Mon 12/17/18	Fri 12/21/18	143
145			FHWA Review	10 days	Mon 12/24/18	Fri 1/4/19	144
146			Final Plan	5 days	Mon 1/7/19	Fri 1/11/19	145
147		**5.2.4**	**Agency and Organizations Meetings**	**0 days**	**Fri 10/5/18**	**Fri 10/5/18**	
148			Agency Meeting #1	0 days	Fri 10/5/18	Fri 10/5/18	133FS+10 days
149		**5.2.5**	**Methodology Memoranda**	**70 days**	**Mon 10/29/18**	**Fri 2/1/19**	
150			Draft Memos	20 days	Mon 10/29/18	Fri 11/23/18	131
151			Port & DOT Review	15 days	Mon 11/26/18	Fri 12/14/18	150
152			Revised Memos	10 days	Mon 12/17/18	Fri 12/28/18	151
153			FHWA Review	15 days	Mon 12/31/18	Fri 1/18/19	152
154			Final Memos	10 days	Mon 1/21/19	Fri 2/1/19	153
155		**5.4**	**Technical Reports/Memoranda/Report Updates**	**80 days**	**Wed 12/26/18**	**Tue 4/16/19**	
156			Draft Reports	50 days	Wed 12/26/18	Tue 3/5/19	150,249
157			Port & DOT Review	15 days	Wed 3/6/19	Tue 3/26/19	156
158			Final Reports	15 days	Wed 3/27/19	Tue 4/16/19	157
159		**5.5**	**ESA Section 7: Biological Assessment**	**380 days**	**Mon 4/15/19**	**Fri 9/25/20**	
166		**5.6**	**NHPA Section 106: Cultural**	**150 days**	**Mon 10/29/18**	**Fri 5/24/19**	
167		5.6.1	Literature Review	15 days	Mon 10/29/18	Fri 11/16/18	131
168		**5.6.2.1**	**APE Memorandum**	**60 days**	**Mon 11/19/18**	**Fri 2/8/19**	
169			Draft APE	15 days	Mon 11/19/18	Fri 12/7/18	167,133
170			Port, DOTs & SHPOs Review	40 days	Mon 12/10/18	Fri 2/1/19	169
171			Final APE	5 days	Mon 2/4/19	Fri 2/8/19	170
172		5.6.2.1	Meetings with Tribes	**10 days**	**Mon 11/19/18**	**Fri 11/30/18**	
173			Nez Perce	10 days	Mon 11/19/18	Fri 11/30/18	141FS+10 days



Project: HRB_Schedule_2018-10-0
Date: Tue 10/9/18

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

ID	Text1	Task Name	Duration	Start	Finish	Predecessors
174		Umatilla	10 days	Mon 11/19/18	Fri 11/30/18	141FS+10 days
175		Warm Springs	10 days	Mon 11/19/18	Fri 11/30/18	141FS+10 days
176		Yakama	10 days	Mon 11/19/18	Fri 11/30/18	141FS+10 days
177	5.6.3	Methodology Memorandum	65 days	Mon 12/10/18	Fri 3/8/19	169
178	5.6.4	Field Survey	10 days	Mon 2/4/19	Fri 2/15/19	170
179	5.6.5	Resource Forms and Report	**70 days**	**Mon 2/18/19**	**Fri 5/24/19**	
183	**5.7**	**Section 4(f)/Section 6(f) Evaluation**	**70 days**	**Wed 12/26/18**	**Tue 4/2/19**	
187	**5.8**	**Draft EIS Reevaluation - May Not Need**	**80 days**	**Mon 9/24/18**	**Fri 1/11/19**	
193	**5.9**	**Supplemental Draft EIS**	**295 days**	**Mon 1/14/19**	**Fri 2/28/20**	
194		**SDEIS Outline**	**15 days**	**Mon 1/14/19**	**Fri 2/1/19**	
198		**SDEIS Admin Draft #1**	**55 days**	**Wed 4/17/19**	**Tue 7/2/19**	
201		**SDEIS Admin Draft #2**	**45 days**	**Wed 7/3/19**	**Tue 9/3/19**	
204		**SDEIS Admin Draft #3**	**50 days**	**Wed 9/4/19**	**Tue 11/12/19**	
207		**SDEIS Signature-ready Draft**	**35 days**	**Wed 11/13/19**	**Tue 12/31/19**	
210		**SDEIS Final**	**10 days**	**Wed 1/1/20**	**Tue 1/14/20**	
213		SDEIS Public Comment Period	45 edays	Tue 1/14/20	Fri 2/28/20	212
214	**5.10**	**Responses to Comments**	**298 days**	**Wed 4/17/19**	**Fri 6/5/20**	
215		**DEIS**	**55 days**	**Wed 4/17/19**	**Tue 7/2/19**	
221		**SDEIS**	**70 days**	**Mon 3/2/20**	**Fri 6/5/20**	
227	**5.11**	**Mitigation Plan**	**333 days**	**Wed 4/17/19**	**Fri 7/24/20**	
233	**5.12**	**Final EIS/ROD**	**195 days**	**Mon 3/30/20**	**Fri 12/25/20**	
248	**6**	**ENGINEERING**	**495 days**	**Mon 12/10/18**	**Fri 10/30/20**	
249		**Footprint Set for SDEIS**	**0 days**	**Tue 12/25/18**	**Tue 12/25/18**	**306,131**
250	6.1	Design Standards Group Meetings	14 days	Wed 12/26/18	Mon 1/14/19	249
251	6.2	Land Survey	15 days	Wed 3/13/19	Tue 4/2/19	253
252	**6.3**	**Geotechnical**	**127 days**	**Wed 2/6/19**	**Thu 8/1/19**	
253	6.3.1	Subsurface Exploration	25 days	Wed 2/6/19	Tue 3/12/19	306FS+30 days
254	6.3.2	Soil Sample Lab Testing	22 days	Wed 3/13/19	Thu 4/11/19	253
255	6.3.3	Geotechnical Data Report	40 days	Fri 4/12/19	Thu 6/6/19	254
256	6.3.4	Foundation Recommendations	40 days	Fri 6/7/19	Thu 8/1/19	255
257	**6.4**	**Hydraulics**	**23 days**	**Mon 1/7/19**	**Wed 2/6/19**	
258	6.4.1	Bridge Hydraulics	13 days	Mon 1/7/19	Wed 1/23/19	265SS-22 days
259	6.4.2	Bathymetric Survey	10 days	Thu 1/24/19	Wed 2/6/19	258
260	**6.5**	**Civil Engineering**	**475 days**	**Mon 1/7/19**	**Fri 10/30/20**	
261	6.5.1	Roadway Geometry	475 days	Mon 1/7/19	Fri 10/30/20	266SF
262	6.5.2	Traffic Control	475 days	Mon 1/7/19	Fri 10/30/20	261SS
263	6.5.3	Erosion Control	475 days	Mon 1/7/19	Fri 10/30/20	261SS
264	6.5.4.	Storm Water	475 days	Mon 1/7/19	Fri 10/30/20	261SS
265	6.6	Bridge	475 days	Mon 1/7/19	Fri 10/30/20	261SS
266		**Footprint Set for FEIS**	**10 days**	**Mon 3/16/20**	**Mon 3/30/20**	**235SF**
267	**6.8**	**Architecture & Simulations**	**470 days**	**Mon 12/10/18**	**Fri 9/25/20**	

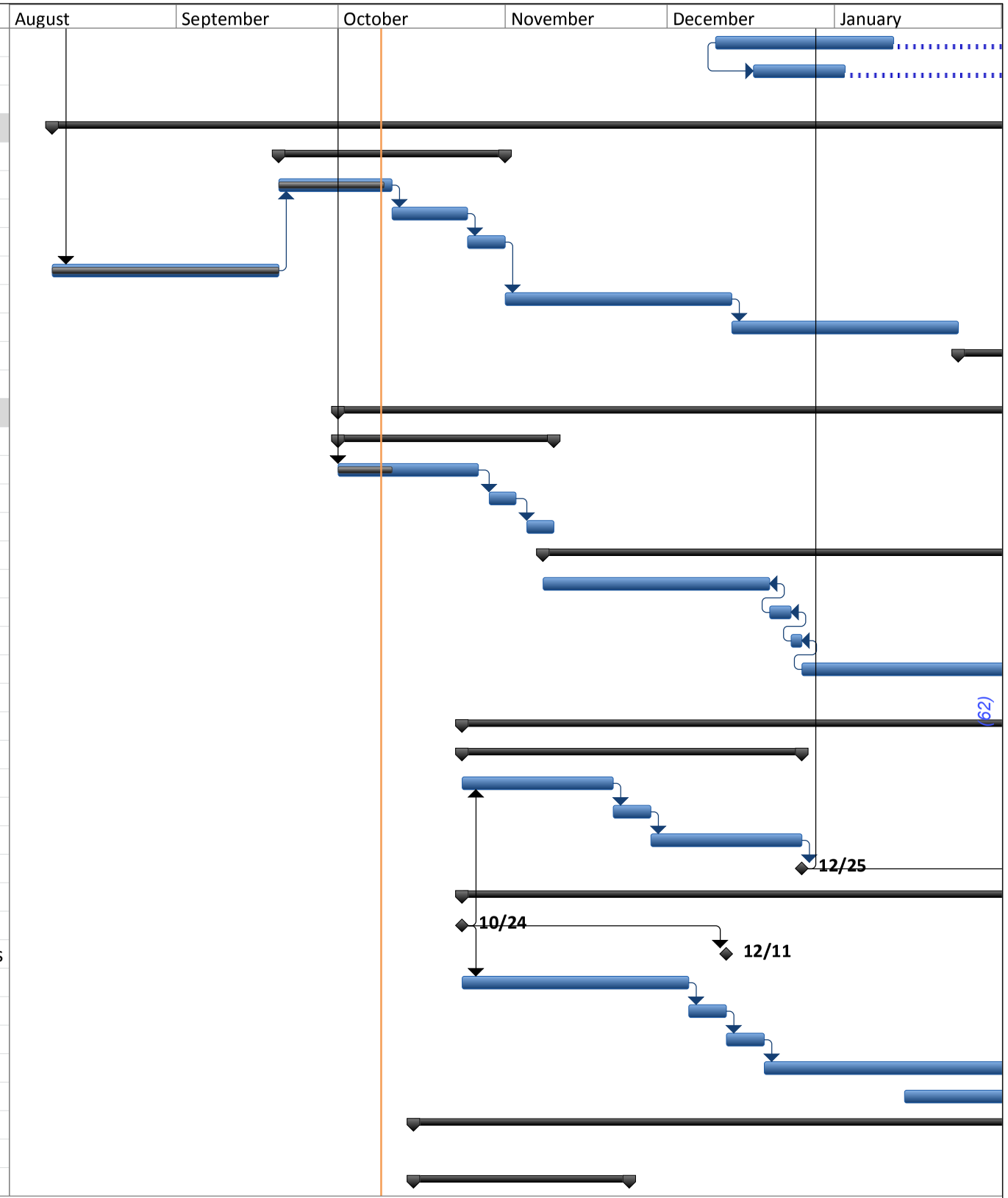


Project: HRB_Schedule_2018-10-0
Date: Tue 10/9/18

Task	Project Summary	Inactive Milestone	Manual Summary Rollup	Deadline	
Split	External Tasks	Inactive Summary	Manual Summary	Progress	
Milestone	External Milestone	Manual Task	Start-only		
Summary	Inactive Task	Duration-only	Finish-only		

REPORTS

		Text1	Task Name	Duration	Start	Finish	Predecessors
		6.8.1	Architectural Concepts	116 days	Mon 12/10/18	Fri 9/25/20	
		6.8.2	Photo Simulations	99 days	Mon 12/17/18	Fri 9/25/20	268SS-15 days
		6.9	**Cost Estimating**	**37 days**	**Mon 8/31/20**	**Tue 10/20/20**	
274		**7**	**TRANSPORATION**	**240 days**	**Thu 8/9/18**	**Wed 7/10/19**	
275		**7.1**	**Methdology Memo**	**30 days**	**Thu 9/20/18**	**Wed 10/31/18**	
276			Draft	15 days	Thu 9/20/18	Wed 10/10/18	279
277			Port & DOTs Review	10 days	Thu 10/11/18	Wed 10/24/18	276
278			Final	5 days	Thu 10/25/18	Wed 10/31/18	277
279	✓	7.2	Data Review/Collection	30 days	Thu 8/9/18	Wed 9/19/18	3
280		7.3	Existing & Future No Build Conditions Update	30 days	Thu 11/1/18	Wed 12/12/18	278
281		7.4	Build Alternatives Analysis Update	30 days	Thu 12/13/18	Wed 1/23/19	280
282		**7.5**	**Transportation Technical Report**	**70 days**	**Thu 1/24/19**	**Wed 5/1/19**	
286		**7.6**	**Long-range Travel Forecast Memo**	**50 days**	**Thu 5/2/19**	**Wed 7/10/19**	
290		**8**	**PERMIT ASSISTANCE**	**565 days**	**Mon 10/1/18**	**Fri 11/27/20**	
291		**8.1**	**Permit Plan**	**30 days**	**Mon 10/1/18**	**Fri 11/9/18**	
292			Draft Plan	20 days	Mon 10/1/18	Fri 10/26/18	3FS+37 days
293			Port Review	5 days	Mon 10/29/18	Fri 11/2/18	292
294			Final Plan	5 days	Mon 11/5/18	Fri 11/9/18	293
295		**8.2**	**In-water Permits for Geotech Investigations**	**64 days**	**Thu 11/8/18**	**Wed 2/6/19**	
296			Draft Permit Application	30 days	Thu 11/8/18	Thu 12/20/18	297SF
297			Port Review	2 days	Thu 12/20/18	Mon 12/24/18	298SF
298			Final Permit Application	2 days	Mon 12/24/18	Wed 12/26/18	299SF
299			Permit Review by Agencies	30 days	Wed 12/26/18	Wed 2/6/19	300SF
300			Permits Issued	0 days	Wed 2/6/19	Wed 2/6/19	253SF
301		**8.3**	**USCG Coordination**	**80 days**	**Wed 10/24/18**	**Tue 2/12/19**	
302		**8.3.1**	**Navigation Survey**	**45 days**	**Wed 10/24/18**	**Tue 12/25/18**	
303			Conduct Survey	20 days	Wed 10/24/18	Tue 11/20/18	308
304			Port Review	5 days	Wed 11/21/18	Tue 11/27/18	303
305			Agency Review	20 days	Wed 11/28/18	Tue 12/25/18	304
306			Confirm Navigation Clearance with USACE/USCG	0 days	Tue 12/25/18	Tue 12/25/18	305
307		**8.3.2**	**Bridge Project Initiation Request**	**80 days**	**Wed 10/24/18**	**Tue 2/12/19**	
308			USCG Meeting #1	0 days	Wed 10/24/18	Wed 10/24/18	
309			USCG Meeting #2	0 days	Tue 12/11/18	Tue 12/11/18	308FS+35 days
310			Draft Request	30 days	Wed 10/24/18	Tue 12/4/18	308
311			Port Review	5 days	Wed 12/5/18	Tue 12/11/18	310
312			Final Request	5 days	Wed 12/12/18	Tue 12/18/18	311
313			USCG Response	40 days	Wed 12/19/18	Tue 2/12/19	312
314		8.4	NSA Pre-Application Memo	20 days	Mon 1/14/19	Fri 2/8/19	192
315		**8.5**	**USACE Coordination**	**555 days**	**Mon 10/15/18**	**Fri 11/27/20**	
316		8.5.1	Section 10/404 Draft Permit Application	60 days	Mon 9/7/20	Fri 11/27/20	
320		**8.5.2**	**Section 408 Initial Request**	**30 days**	**Mon 10/15/18**	**Fri 11/23/18**	



Project: HRB_Schedule_2018-10-0
Date: Tue 10/9/18

Task	Project Summary	Inactive Milestone	Manual Summary Rollup	Deadline
Split	External Tasks	Inactive Summary	Manual Summary	Progress
Milestone	External Milestone	Manual Task	Start-only	
Summary	Inactive Task	Duration-only	Finish-only	

ID		Text1	Task Name	Duration	Start	Finish	Predecessors
321			Draft	15 days	Mon 10/15/18	Fri 11/2/18	
322			Port Review	5 days	Mon 11/5/18	Fri 11/9/18	321
323			Final	10 days	Mon 11/12/18	Fri 11/23/18	322

(63)

Project: HRB_Schedule_2018-10-0
Date: Tue 10/9/18

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

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DRAFT

BRIDGE REPLACEMENT PROJECT

within the BRIDGE R&R FUND

10/9/18 16:15

	Original Project Budget Jan. 1, 2018	Modified Project Budget Sept. 25, 2018	Completed Fiscal Year 2017-18	Adopted Budget Fiscal Year 2018-19	Projection for Fiscal Year 2018-19	RESOURCES & REQUIREMENTS DESCRIPTION	FY 19-20 Proposed By Project Director	FY 20-21 Proposed By Project Director	FY 21-22 Proposed By Project Director	PROJECT TOTAL
						REQUIREMENTS				
	525,000	525,000	66,170	203,900	158,750	PERSONAL SERVICES	164,569	134,830	0	524,318
			48,434	*143,800*	*112,750*	*Wages*	*115,569*	*95,000*		
			13,987	*60,100*	*38,000*	*Benefits*	*40,000*	*31,000*		
			3,750	*0*	*8,000*	*Taxes*	*9,000*	*8,830*		
				0		*…*	*0*	*0*		
	3,842,000	4,137,000	196,569	2,176,000	2,030,785	MATERIALS & SERVICE	1,223,939	664,132	1,000	4,116,425
	250,000	*356,000*	*142,017*	*80,000*	*112,000*	*Contracted Project Advisors*	*70,000*	*10,000*	*0*	*334,017*
		200,000	*49,127*		*81,000*	*……Procurement/Financial Advising (Siegel)*	*45,000*	*0*	*0*	*175,127*
		35,000	*20,280*		*5,000*	*……NEPA Advising (Otak)*	*5,000*	*5,000*	*0*	*35,280*
		65,000	*37,740*		*5,000*	*……Procurement/Delivery Advising (Clary)**	*20,000*	*5,000*	*0*	*67,740*
		11,500	*11,500*		*0*	*……EIS RFP Services (SWRTC)*	*0*	*0*	*0*	*11,500*
		2,619	*2,619*		*0*	*……Pre-FEIS (WSP)*				*2,619*
		21,130			*21,000*	*……Cultural Resources Advising (Akana)*	*0*	*0*	*0*	*21,000*
		20,751	*20,751*		*0*	*……Preliminary Cost Estimate (Mott)*				*20,751*
		0			*0*	*……Other*	*0*			*0*
	132,000	*186,000*	*34,215*	*20,000*	*72,000*	*Legal/Agency Reimbursement*	*48,000*	*26,000*	*0*	*180,215*
		55,000	*22,450*	*20,000*	*15,000*	*……Local Counsel (Jaques Sharp)*	*6,000*	*6,000*	*0*	*49,450*
		20,000	*11,765*		*0*	*……Specialty Counsel (Schwabe)*	*8,000*	*0*	*0*	*19,765*
		111,000	*0*		*57,000*	*……State/Fed Agency Costs*	*34,000*	*20,000*	*0*	*111,000*
	3,110,000	*3,140,000*	*0*	*1,651,000*	*1,755,785*	*Professional Services - EIS (WSP Global Inc.)*	*884,939*	*507,132*	*0*	*3,147,856*
		383,587	*0*		*140,649*	*……Task 1. Project Mgt.*	*153,436*	*89,502*	*0*	*383,587*
		299,697			*152,846*	*……Task 2. Public Involvement*	*92,907*	*53,944*		*299,697*
		19,509			*0*	*……Task 3. Project Delivery Coordination**	*0*	*19,509*		*19,509*
		0			*0*	*……Task 4. Tolling/Revenue Coordination*	*0*	*0*		*0*
		1,060,268			*535,436*	*……Task 5. Environmental*	*344,587*	*180,245*		*1,060,268*
		1,069,121			*646,818*	*……Task 6. Engineering*	*294,009*	*128,294*		*1,069,121*
		160,724			*160,724*	*……Task 7. Transportation*	*0*	*0*		*160,724*
		154,950			*119,312*	*……Task 8. Permit Assistance**	*0*	*35,638*		*154,950*
		-7,856	*0*	*1,651,000*		*……Other*				*0*
	350,000	*300,000*	*0*	*385,000*	*60,000*	*Professional Services - Other Studies*	*170,000*	*70,000*	*0*	*300,000*
		250,000	*0*	*150,000*	*50,000*	*……Traffic/Tolling/Funding Study (Stantec)**	*150,000*	*50,000*	*0*	*250,000*
		50,000	*0*	*75,000*	*10,000*	*……Project Delivery Analysis**	*20,000*	*20,000*	*0*	*50,000*
			0	*160,000*		*……Miscellaneous Studies*	*0*	*0*	*0*	*0*
	0	*50,000*	*818*	*0*	*1,000*	*Other Project Items*	*21,000*	*26,000*	*1,000*	*49,818*
		0	*0*			*……Initial Right-of-Way**		*0*	*0*	*0*
		45,000	*0*			*……Project Delivery RFI/Support**	*20,000*	*25,000*	*0*	*45,000*
		5,000	*818*		*1,000*	*……Advertising/Newspaper Notices*	*1,000*	*1,000*	*1,000*	*4,818*
			0			*……Other*	*0*		*0*	*0*
	0	*105,000*	*19,519*	*40,000*	*30,000*	*Office Equipment, Services, Supplies & Reimbursements**	*30,000*	*25,000*	*0*	*104,519*
		8,500	*1,330*		*2,600*	*……IT Service*	*2,600*	*2,000*		*8,530*
		3,500	*434*		*900*	*……Phone/Internet Service*	*900*	*800*		*3,034*
		88,000	*13,646*		*26,000*	*……Reimbursements (lodging, travel, etc.)*	*26,000*	*21,800*		*87,446*
		5,000	*3,311*		*500*	*……Office Equip & Supplies*	*500*	*400*		*4,711*
			797	*40,000*		*……Other*	*0*	*0*	*0*	*797*
			0			*…*				*0*
			0	0	0	CAPITAL OUTLAY	0	0	0	0
			0	0	0	DEBT SERVICE	0	0	0	0
	4,367,000	4,662,000	262,739	2,379,900	2,189,535	TOTAL EXPENSES	1,388,508	798,962	1,000	4,640,743
	0	0	0	0	0	TRANSFER OUT	0	0	0	0
	633,000	338,000	0	0	0	CONTINGENCY	200,000	159,257	0	359,257
	0	0	0	0	0	UNAPPROPRIATED ENDING FUND BALANCE	0	0	0	0
						** non-NEPA item*				
	5,000,000	**5,000,000**	**262,739**	**2,379,900**	**2,189,535**	**TOTAL REQUIREMENTS**	**1,588,508**	**958,219**	**1,000**	**5,000,000**

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Executive Director's Report
October 16, 2018

Staff & Administrative

- Genevieve Scholl will provide an update on the PNWA annual meeting held in Vancouver, WA on October 10-12. I could not attend but was nominated to serve on the PNWA Executive Committee, subject to a vote of the membership.

- Kevin Greenwood will provide an update on the OPPA annual meeting held in Coos Bay on October 5. Kevin presented one of the recent bridge videos that Genevieve produced along with summer intern Connor Truax and an overview of our internship program.

- The Port's auditors will be working on site October 23, 24 & 25.

- The Commission has agreed to hold the annual Fall Planning Session on November 20. As is typical, this is a meeting to focus on policy matters, long-term planning, and focused discussion on specific projects. It is important that the Commission provide input on the agenda so that it reflects topics that are Commission priorities. Staff will provide a draft agenda at the November 6 meeting after discussion with President Streich.

- It is important for each Commissioner to complete some element of training provided through SDAO this calendar year. This results in a 5% reduction in our annual insurance premium. Training can be done via attendance at formal SDAO training sessions held every month or on-line. Training opportunities available in the next three months include:

    - Regional Risk Management Training – Cottage Grove, Or: October 23
    - Regional Risk Management Training – Medford, Or: October 24
    - Regional Risk Management Training – Newport, Or: November 13
    - Risk Management Forum – Tigard, Or: November 15

  There are online training opportunities available as well. Please contact Genevieve to discuss your participation.

Recreation/Marina

- Mt. Hood Meadows has requested an Agreement to utilize the Event Site for a second year to allow skier parking on weekends and holidays. This would again allow access to the ski area via a Meadows-operated shuttle bus.

- Site Plan Review and Natural Resource Review applications for the Nichols Basin board storage shed have been deemed complete by the City. Planning staff now has until mid-January to render a decision. I will be seeking a proposal from Surround Architecture to prepare final drawings and specifications.

- There have been an increasing number of reports about a live-a-board on one of the Marina vessels. The individual does not have a key card and has been climbing the fence

for access. Daryl has been in touch with the vessel owner seeking to resolve this issue. The gate has a camera, but it is an older model and not effective. Staff anticipates installing a new camera soon.

Development/Property

- An initial meeting was held on October 5 to discuss the damaged storm line near the west end of Riverside Drive. Attendees included Hood River Distillers, City and Port staff along with SDAO and CIS personnel. This will be a complicated issue to resolve.
- I have been remiss in mentioning that Facilities staff made significant improvements to the lawn areas and irrigation system north of the Jensen Building in late August and early September. Among other tasks, topsoil was brought in and a new lawn planted. The area looks terrific. The same staff also took down several large poplars in Marina Park, a difficult project that was carried out very successfully and safely. Louis Ambers is the experienced faller on staff.
- HRVHS intern Jose Santillan is focusing his efforts on research and concept planning for a solar array on the Port's Shop Building and a solar charging station in the Port Office Building parking lot. Jose will be coming into the office 3-5 hours per week through the end of the year.
- Port staff has restriped the DMV lot to accommodate for the ADA project completed last year. This is the final step of the project after which the Port will receive reimbursement from ODOT for the work.

Airport

- Anne will meet with Farmers Irrigation District to discuss the irrigation line and potential improvements to pressures and access for the airport. The Port currently uses very little irrigation water but will need to irrigate the newly seeded area where the Lower Mill dirt is being placed on the east side of the runway. The Port will also be improving a portion of the FID main line as part of the COVI project.
- Staff has reviewed the 90% COVI drawings and sent comments to Century West.
- DSL has until the 26th to provide comment regarding the wetland permit application filed on September 26th. USACE has no timeline.

Bridge/Transportation

- One bid was received for the Skew Upgrade and Lift Span Motors Project at the bid opening on October 3. The $308,000 bid was $33,000 above the engineer's estimate but well within the budget. Port staff will carry out flagging for the work. The greatest impact to bridge operations will occur when the new lift span motors are lifted into place at the tops of the towers with a large crane. For that operation, full bridge closure will be required for 2-3 hours.
- We have selected a contractor to paint the centerline for the entire length of the bridge, except for the lift span. The work is scheduled for Oct. 16 between 2:00 and 5:30 a.m.

weather permitting and will cost less than $3,000. During the same operation, thin metal plates will be welded to the center of the lift span for subsequent painting by a Port crew. When complete, the centerline will be visible on the entire bridge for the first time in many years.

- A reminder that John Mann will be attending the Heavy Movable Structures Biennial Symposium on October 22 in Orlando. He will present the attached paper along with Paul Bandlow of SBE Engineering.
- The damaged guard rail on the approach road at the north end of the bridge is being handled as an insurance claim. John identified a contractor to do the repairs and they were completed on October 8. We will seek reimbursement from the insured party, a local contractor.
- The Port's bridge engineer, HDR, has conducted a thorough review of the recent fracture critical inspection carried out by ODOT. Because the inspection team noted concerns about the rocker bearing pins on piers #15-#18 north of the lift span, HDR staff carried out UT inspection of the pins on September 25. A report on their findings will be prepared soon and presented to the Commission.

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HEAVY MOVABLE STRUCTURES, INC.
SEVENTEENTH BIENNIAL SYMPOSIUM

October 22-25, 2018

Hood River Lift Bridge
Unique Solutions to Interesting Problems

Paul Bandlow, PE
Stafford Bandlow Engineering, Inc.

John Mann
Port of Hood River

MARRIOTT'S RENAISSANCE HOTEL AT SEAWORLD
ORLANDO, FLORIDA.

Table of Contents

Introduction

In December 2015, The Port of Hood River (POHR), which acquired and has operated the Hood River-White Salmon Interstate (Hood River) Bridge since the 1950s, notified its insurance company of their intent to file a claim for damage that may have resulted from a barge or vessel strike of the north pier of the bridge, near the water line in September 2015.

Wiss, Janney, Elstner Associates (WJE) was engaged by POHR's insurance company to make an independent assessment of the operational reliability problems with the structure, and more specifically determine if a vessel allision could have caused or contributed to the problems the bridge was experiencing. To complete the evaluation of the structure, WJE would investigate the bridge foundation and the bridge superstructure, while Stafford Bandlow Engineering, Inc. was engaged to provide engineering services to determine if the mechanical and electrical systems had sustained any damage.

During the initial visit to the bridge, Stafford Bandlow engineers were unable to witness the operation of the lift span due to a previous testing mishap. This testing mishap resulted in the bridge being out of service to marine traffic due to damaged span guides that had not been repaired. As a result of this initial inspection of the bridge, Stafford Bandlow Engineering (SBE) engineers concluded and reported that there was no evidence that the operational problems with the lift span were caused by a vessel striking the bridge. Further, it was noted that the lift span lacked the necessary monitoring, interlocks, safeguards, and controls to prevent a skew failure similar to the failure that caused damage to the span guides.

Recognizing Stafford Bandlow Engineering's expertise with the mechanical and electrical systems of this type of movable bridge, The POHR retained SBE to design and implement a low-cost, but safe and effective interim skew monitoring and control system that allowed the lift span to be operated without the concern of a skew failure. SBE also oversaw the testing and commissioning of the new skew control system and returned the lift span to service.

Once the lift span was safe to operate, SBE investigated and solved a unique operating issue that manifested itself in the form of random and concerning pulsations during operation.

History and Description

The Hood River-White Salmon Interstate Bridge is a vital Columbia River crossing in the central Columbia Gorge bi-state region connecting Hood River, Oregon with the communities of White Salmon and Bingen in Washington State. The Bridge, nearly one mile long, is constructed of steel trusses on concrete pier supports with very narrow lanes (lanes are only 9 feet, 4.75 inches wide, with a 14 feet, 7 inches height restriction). The Bridge is limited to a total gross weight limit of 80,000 lbs, with each single axle limit of 20,000 lbs. The Bridge serves an average of 4 million users annually and is open every hour of every day, except during periods scheduled maintenance or emergency closures.

Often referred to simply as the Hood River Bridge, the aging structure is deficient by modern standards, but remains an essential transportation link between Oregon and Washington. The Bridge's narrow lanes (9 feet, 4 inches) were characteristic of the 1924 era in which it was built, when horse-drawn carriages and Model-T's crossed the Columbia on what was then a state-of-the-art structure.

The Hood River Interstate Bridge was essentially rebuilt in 1938 when the construction of the Bonneville Dam caused water levels to rise and made the addition of a lift span necessary. Nowadays, the lift span is raised several times a year and has become the iconic symbol of the historic bridge purchased by the POHR in 1950.

The POHR takes its responsibility to assure the bridge's safety, operation and useful life into the foreseeable future extremely seriously, planning ahead and taking proactive action. The POHR has invested over $22 million in capital improvements and maintenance in the past two decades, and expects sizable investments in the near and long term to keep the structure functional and operating safely into the future.

The Port of Hood River continues to work with state and federal agencies as a supportive partner in the effort and pursuit of bridge replacement. As years pass, the cost of bridge replacement, currently estimated at $250 million, continues to increase, meaning that funding for a new bridge will likely require pooled resources among local, regional and federal governments and agencies.[1]

The movable span of the bridge is a through truss tower drive vertical lift bridge. The bridge spans 262 feet 6 inches between live load supports and provides a clear channel width of 246 feet. When open for vehicular traffic the vertical clearance is 54 feet and after rising 81 feet to its normal open lift height the bridge provides 135 feet of vertical clearance.

The bridge is operated from a control house located within the limits of the north tower of the bridge. Due to the narrow lanes on the bridge, all bridge operations and maintenance personnel are transported to the movable span by Port of Hood River Personnel.

Bridge machinery consists of span drive machinery, span support machinery, span lock machinery, span and counterweight guides and air buffers. The bridge power and control systems consist of a motor control center (MCC), an operators control console, a control relay panel and termination cabinets housed

[1] "Hood River Bridge", Accessed July 1, 2018, https://portofhoodriver.com/bridge/.

in the bridge operators house. A code compliant vehicular traffic control system consisting of traffic lights, warning and barrier gates is provided at both bridge approaches. Marine traffic navigational aids are provided at the bridge in the form of navigational lighting.

The majority of the machinery dates to original construction of the lift span in 1938. The high speed end of the span drive machinery (motor, brake, high speed reducer and coupling) and the entire electrical system was replaced in circa 2000. The span drive motor is a two speed motor with no speed control. Due to ongoing concerns related to skew control the high speed setting for the motor has been disabled. As a result the motor operates at 600 rpm and raises the bridge to its full lift height in approximately 13 minutes.

Basis of Insurance Claim

The Port of Hood River had reason to believe that the bridge had been struck by a vessel at the north pier of the lift span. This evidence included the following:

- An apparent recent scar in the concrete at the north pier.
- Credible witness and navigation records showing a stalled tow under the bridge for 15 minutes coincident with the witnesses' observations (these later turned out to be erroneous).
- Notably rougher bridge operation following the suspected allision.
- An engineer's report indicating changes in the operational performance of the lift span as observed in October 2015 as compared to the baseline documented in 2014 as follows:
    - Grinding of the span guides on the guide rails
    - Vibration of the lift span when operating up and down
    - Observed lift span misalignment when lift up out of the bearings.

The above information led the Port to believe that the bridge had been struck by a vessel and that the vessel caused damage to the bridge.

Accident Investigation

Initial Contact

You never know where your next job will come from and once in a while the phone rings and you have an interesting assignment that wasn't even on the radar. On December 29, 2015 Brian Santosuosso from Wiss Janney Elstner Associates (WJE) contacted Paul Bandlow at Stafford Bandlow Engineering (SBE) to discuss the Hood River Bridge and a potential project that he wanted the firm to get involved with. WJE had been contacted by an insurance company regarding the Hood River Bridge. The insurance company had been notified of the Port of Hood River's intent to file a claim for damage sustained to the lift span of the bridge resulting from a vessel allision at the north pier of the lift span. The insurance company wanted WJE to determine if the reported damage was the result of the vessel allision. WJE wanted SBE to provide engineering services to determine if the mechanical and electrical systems had sustained any damage. WJE would investigate the bridge foundations and the bridge superstructure. This was an unusual assignment and one that SBE could not pass up.

The initial work began with the usual process of gathering all available information and reviewing this information to get a basic understanding of the bridge and more importantly to find out what if any facts

existed with regard to the damage claim. In addition SBE needed to develop a scope of work for the field inspection and coordinate the inspection with WJE.

Scope of Work

SBE proposed to do the investigation work in phases as required. The scope of work for Phase 1 included the following:

1) Review available documentation for the bridge including inspection reports, drawings and other information as deemed necessary to determine the condition of the bridge prior to the alleged impact and to understand the extent of the damage (if any) that occurred as a result of the impact.
2) Conduct a field inspection of the bridge's mechanical and electrical systems to determine if there was evidence of damage to the bridge mechanical and electrical systems that was consistent with an impact to the north pier. The scope of the inspection included the following:
    a) Verification of the mechanical and electrical findings in the following reports to the extent that was warranted to determine if changes occurred that were the result of an impact with the north pier. We did not measure machinery parts to determine wear as it is not likely that significant wear would have resulted from an impact. Rather we inspected the various mechanical and electrical systems for conditions such as impact damage and changes to alignment.
        i) Hood River Interstate Bridge over the Columbia River, Hood River, Oregon. Mechanical and Electrical Inspection Report, February, 2014.
        ii) Pier Impact & Lift Span Assessment. Draft Report, Hood River – White Salmon Interstate Bridge, Port of Hood River, Hood River, OR, December 14, 2015.
    b) Visual inspection of the mechanical and electrical systems of the movable span of the bridge with an emphasis on those systems that may have been affected by the alleged impact. Our inspection was limited to areas of the bridge that do not require special access equipment.
    c) Measurements of alignment and clearances that may have been affected by an impact to the north pier. During Phase 1 of the investigation measurements were limited to those measurements that could be taken will hand tools ordinarily used in the inspection of movable bridge mechanical and electrical systems. We did not recommend special surveys for the Phase 1 inspection but advised our client that special survey work might be required based on the finding of the Phase 1 of the investigation. If special surveys were required this work would be done as Phase 2. The Phase 2 work was not required.
    d) Operational testing of the bridge to include a minimum of 4 complete bridge operations. Electrical measurements to determine the operating characteristics of all motors as part of the operational testing.
    e) Installation of strain gages on the span drive machinery to determine the bridge operating loads for correlation with the electrical test data, to determine system imbalance and to determine system friction.
3) Preparation of a comprehensive report of the findings of the investigation to include the following:
    a) Commentary on prior reports referenced above.
    b) Inspection findings.
    c) Conclusions on findings with emphasis as to whether the findings were likely to have been caused by an impact to the north pier.

d) Recommendations for further investigation as required.
e) Recommendations for work that may be required to return the bridge to a reliable operating condition.

In order to conduct the investigation SBE informed their client that they assumed the following:

1) The bridge would be operational for the full lift height at the time of our inspection.
2) The bridge would be operated for a minimum of 4 complete opening cycles throughout the course of the inspection.
3) SBE could complete the inspection in a maximum of three 8 hour days at the bridge.
4) Bridge maintenance and operations personnel would be available to answers questions regarding the operation of the bridge.

Field Work

The initial investigation was conducted by Paul Bandlow (mechanical investigation) and Gareth Rees (electrical investigation). The investigation was conducted from May 11-13 2016. Due to a problem that occurred as part of a separate investigation by others the bridge was not operational at the time of the inspection and therefore some of the scope items including electrical recordings during operation and strain gage testing were not performed as part of the field work. Despite the non-operational status of the bridge, sufficient work was performed to provide an opinion regarding damage to the mechanical and electrical systems that could have resulted from an allision with a marine vessel.

Mechanical

The mechanical inspection included the following:

1) Visual inspection of trunnion bearings and measurement of trunnion bearing clearances and journal to bushing alignment.
2) Visual inspection of pinions and ring gears to determine alignment and for evidence of changes to alignment and measurement of pinion teeth to determine wear.
3) Visual inspection of speed reducer output shaft couplings.
4) Visual inspection of speed reducer and verification of oil level.
5) Visual inspection of wire ropes.
6) General observation of the counterweight.
7) Visual inspection of the counterweight guides.
8) Visual inspection of accessible wire rope sockets at the counterweight.
9) Visual inspection and clearance measurements of the upper span guides and span guide rails.
10) Visual inspection of the counterweight ropes and rope terminations.
11) Relative tensions in the counterweight ropes using the fundamental frequency method.
12) At the bottom chord of the bridge, the lower span guides, span guide rails, and live load supports were inspected.
13) Visual inspection of the intermediate supports and clearance measurements at the intermediate supports.
14) Visual inspection and lateral clearance measurements at the span lock tongue and clevis.

Electrical

The electrical inspection work concentrated on a determination of the status of the power and control systems of the bridge to safely and reliably operate the bridge, performing an assessment as to whether the control system had been compromised by the reported allision event and if any physical damage was

visible to the bridge electrical equipment and devices that could be attributed to the reported event. The electrical inspection included the following:

1) Visual inspection of the bridge relay panel.
2) In-depth inspection of the bridge motor control center.
3) Visual inspection of the operator's control console.
4) Visual inspection of termination cabinet for all field devices.
5) Visual inspection of conduits, wireways and cable trays in the operator's house.
6) Visual inspection of the span drive motors and brakes.
7) Visual inspection of the position resolvers and rotary cam limit switches.
8) Visual inspection of the span lock actuators and limit switches.
9) Visual inspection of the span seated limit switches.
10) Visual inspection of general bridge lighting, electrical power and control distribution raceways and cabling.

Significant Findings

The mechanical findings presented in this paper are findings associated with the primary purpose of the investigation which was to determine if there was evidence to support a claim that the bridge was struck by a vessel with resulting damage to the bridge. Other mechanical findings that may be significant in general but are in not related to the primary purpose of the investigation are not presented. The electrical findings include those findings that could adversely affect the operation of the bridge.

Mechanical

Clearance measurements and bushing to journal alignment at all trunnion bearings were found to be within acceptable limits. The maximum clearance was 0.027" and is within the limits of an ANSI RC9 fit which is commonly cited as a limit for rehabilitation. Maximum taper over 10" was 0.005" and is considered acceptable. All clearances were found at the top of the bearings. Trunnion bearing measurements are tabulated in Table 1 below.

Table 1: Trunnion Bearing Clearance Measurements

Trunnion Bearing Clearance Measurements			
North Tower			
Bearing Identification	Max Clearance	Location	Taper over 10"
West Outboard	0.014"	Top	0.000"
West Inboard	0.019"	Top	0.005"
East Outboard	0.011"	Top	0.002"
East Inboard	0.025"	Top	0.005"
South Tower			
Bearing Identification	Max Clearance	Location	Taper over 10"
West Outboard	0.009"	Top	0.005"
West Inboard	0.010"	Top	0.002"
East Outboard	0.019"	Top	0.005"
East Inboard	0.027"	Top	0.004"

The racks and rack pinions are the only open gearsets. Visual inspection as well as cleaning of representative gear teeth indicated that the gear tooth wear pattern was consistent with the pattern in the gear lube indicating that there was no change to the alignment of the racks and rack pinions.

Figure 2: General view of rack and rack pinion.

Figure 3: Rack pinion tooth cleaned for inspection.

Figure 4: Rack teeth lube pattern

Figure 5 shows a picture of a typical trunnion bearing. No movement was noted between any of the trunnion bearings and the supporting structure.

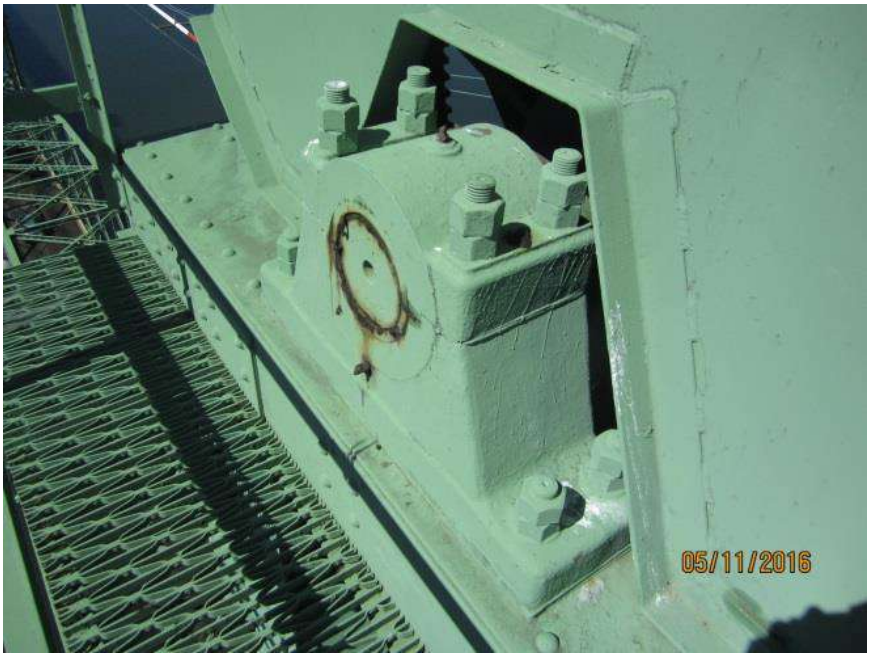

Figure 5: Typical trunnion bearing. There was no evidence of movement between the bearing and the supporting steel or between the bearing cap and base.

No significant wear was noted at any of the counterweight guides.

Damage was noted at all upper span guides in the longitudinal direction. This damage did not appear recent and was likely due to an excessive skew condition. Evidence of heavy contact was found at the southeast span guide location where the rivets that secure the guide rail to the structure are worn. The guide rail at this location was not worn indicating improper adjustment of the lower guide that allowed the guide to contact the rivets prior to contacting the guide rail. The lower span guide at this location was recently replaced and the original guide was not available for inspection.

Figure 6: Southeast span guide rail. Note damage to rivets that secure the guide rail to the structure at the right side of the guide rail but no damage to the guide rail.

Figure 7: Close up of photo in Figure 6

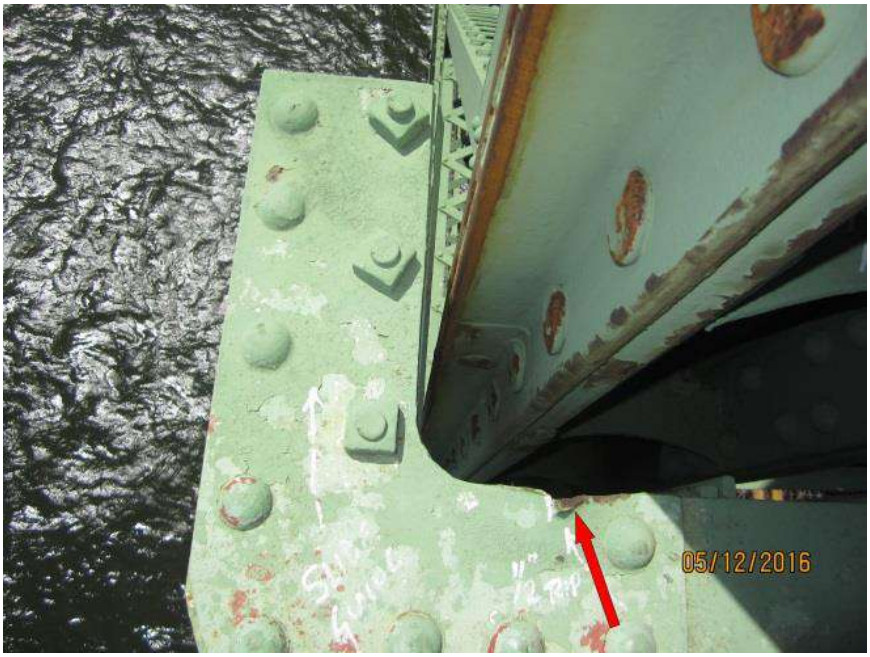

Figure 8: Southeast upper span guide. Note damage in longitudinal direction due to over-skew condition (arrow).

Wire rope tension measurements were taken using the fundamental frequency method. This method of measurement provides relative tensions and not absolute values for tension. Typically for a new installation, the ropes would be adjusted to within 5% of the average tension for the ropes at each corner of the bridge (NW, NE, SW, and SE). At the time of our investigation all but two ropes were within 10% of the average tension at each corner which is acceptable. One rope at the SE corner varied from the average tension at that corner by 14.9% and one rope at the SW corner varied from the average tension at that corner by 17.0%. The measured distribution of rope frequencies is not usual based on our experience measuring wire rope tensions on vertical lift bridges.

Rope tension measurements are tabulated in Table 2.

Table 2: Hood River Bridge Rope Tension Measurements - May 11 and 12, 2016

Hood River Bridge Rope Tension Measurements - May 11 and 12, 2016

Location	$Time_{40}$ (sec.)		Avg. Time	Tension (kips.)	% Difference from Avg.
SE	1st	2nd			
1	14.76	14.86	14.81	150.9	7.8
2	15.03	15.02	15.03	146.7	4.8
3	15.15	15.26	15.21	143.2	2.3
4	16.7	16.65	16.68	119.1	14.9
		Group Total		559.9	
		Average Tension		140.0	
		Average Time		15.4	

Location	$Time_{40}$ (sec.)		Avg. Time	Tension (kips.)	% Difference from Avg.
SW	1st	2nd			
1	17.43	17.14	17.29	110.8	17.0
2	15.22	14.995	15.11	145.1	8.7
3	15.45	15.44	15.45	138.8	4.0
4	15.23	15.61	15.42	139.2	4.3
		Group Total		533.9	
		Average Tension		133.5	
		Average Time		15.7	

Location	$Time_{40}$ (sec.)		Avg. Time	Tension (kips.)	% Difference from Avg.
NE	1st	2nd			
1	15.19	15.11	15.15	144.2	5.9
2	16.08	16.11	16.10	127.8	6.1
3	16.39	16.31	16.35	123.8	9.1
4	14.88	14.95	14.92	148.8	9.3
		Group Total		544.6	
		Average Tension		136.2	
		Average Time		15.6	

Location	$Time_{40}$ (sec.)		Avg. Time	Tension (kips.)	% Difference from Avg.
NW	1st	2nd			
1	15.4	15.41	15.41	139.5	0.3
2	15.69	15.68	15.69	134.6	3.8
3	15.43	15.32	15.38	140.1	0.2
4	15.09	15.11	15.10	145.2	3.8
		Group Total		559.4	
		Average Tension		139.9	
		Average Time		15.4	

Note: Tensions are relative and are not based on the unsupported rope length for this bridge. As such, tension values are only useful in determining variation in tension among the ropes.

$Time_{40}$ - Period for 40 oscillations as measured via stopwatch (0.01 second accuracy)

The north end of the movable span had shifted west relative to the north tower. Evidence of this included clearance at the northwest span guides, contact between the west side of the northwest live load rocker and the fixed support and contact between the northeast span guide and the northeast span guide rail.

Figure 9: Northwest lower span guide. The span guide is not in contact with the guide rail.

Figure 10: Northwest live load support. Note evidence of contact with the fixed structure at the left side of the rocker.

Figure 11: Northeast lower span guide. Note the addition of a wedge shaped shim

Although the shift of the span relative to the bridge could have indicated damage due to an impact, there was significant evidence that the observed shift was not a recent condition. The following was noted:

1) A wedge shaped shim, shown in Figure 11, was welded to the northeast guide rail in an attempt to either shift the bridge to the east or to prevent the bridge from moving farther west. The shim had not been recently installed.
2) The north span lock tongue (on lift span) was reasonably well centered in the mating clevis (on pier). Clearance on the east side of the tongue was 3/16". Based on measurements taken during the investigation, if the bridge were centered on the span guides the tongue would not engage the receiver. Therefore the bridge was shifted to the west when the span locks were installed circa 2006.

Electrical

The most significant electrical findings relate to the bridge electrical control system and the inability of the installed control system to properly protect the bridge from damaging events including significant skew events that have caused damage to the structure. The most significant deficiencies include the following:

1) No method of automatically controlling skew was provided in the installed system.
2) No over-skew protection was provided in the installed system to safeguard the movable structure from a catastrophic skew condition failure.

Accident Investigation Conclusions

The investigation found no evidence that an allision occurred that resulted in damage to the bridge mechanical and electrical systems. Therefore there was no basis to substantiate a claim regarding an allision at the north pier of the movable span.

Other conclusions based on our investigation were provided as follows:

1) Lubrication was marginal and improved maintenance was required.
2) Additional weight added to the top of the counterweight was cause for concern with regard to trunnion fatigue, and wire rope and trunnion bearing stresses.
3) The span drive machinery has only one brake compared to two brakes required by AASHTO.
4) The installed brakes apply unnecessary impact loads to the bridge operating system.
5) The wire rope sheaves are smaller than required by AASHTO. While it may not be practical to increase the size of sheaves, the effect of the sheave size on the wire rope stress should be analyzed.
6) The live load supports have significant wear, are not properly adjusted and do not effectively transmit the live load of traffic to the pier.
7) Two of the counterweight wire ropes are not adjusted properly and may require adjustment. Analysis of the wire rope loads should be conducted to see if the variation in the wire rope tensions is a significant concern.
8) The span drive motor was not specified for the prevailing duty. The motors should be capable of being driven by a variable speed drive and provided with controls that are capable of automatically controlling their speed.
9) No method of automatically controlling skew has been designed or installed. This places undue responsibility on the bridge operator to address an operating skew condition and is a potential cause of failure.
10) No over skew protection has been provided to safeguard the moveable structure from a catastrophic skew condition failure.
11) The span lock current monitors are ineffective in protecting the span lock actuators against a catastrophic jam condition and should be replaced with the actuator manufacturer recommended power monitors.

Skew Control System

During the field portion of our work, the Port of Hood River approached SBE and asked if we could work with them to help resolve operational issues they were having with the bridge. This request created a conflict as we were then working as a sub-consultant to WJE who was in turn working for the insurance company. We told the Port of Hood River that we would be happy to work for them if it was acceptable to the insurance company.

The insurance company was fine with us working for the POHR provided that the POHR would not pursue a claim related to the allision based on the findings of the investigation. The POHR agreed and SBE began working for the POHR with our first assignment to implement a skew control system so that the bridge could be safely operated without concern for a severe skew event.

At this point the bridge had been out of service to marine traffic for about 7 months as a result of a failure which occurred during operation. Our investigation revealed that the failure revolved around the inability of the existing bridge control system to recognize, take action, or correct a bridge skew condition. Due to

the length of time the bridge was out of service there was urgency associated with getting the bridge back in service. Going the usual route of design, bid, build would require significant time and did not seem appropriate. We suggested and the POHR agreed to have SBE effectively design build a rudimentary but safe and effective skew control system and skew over travel protection system that could be implemented quickly using only SBE forces and a POHR contracted electrician.

The schedule for the implementation of the control system additions and modifications was as follows:

- July 1, 2016 – Begin design of skew control system.
- July 26, 2016 – Begin installation of skew control system.
- August 10-11, 2016 – Successful test operation of bridge.
- September 6-8, 2016 – Install additional bridge protective devices, commission bridge, and place bridge into service.
- November 22, 2016 – Bridge failure due to false skew indication. Bridge out of service to marine traffic.
- November 29-30, 2016 – Failure addressed and bridge returned to full service.
- November 30, 2016 – Present. No additional skew failures reported.

The skew control system provides the following features:

1) The over skew transducer and associated intelligent meter has been arranged to monitor the moving span for skew and has been set to trip the tower drive motors at an angle of skew of 0.2 degrees (11 inches out of level) in either direction (north or south). The bridge control logic has been modified such that it recognizes the direction of skew and configures the logic to enable automatic correction of skew commanded by the bridge operator.

2) Ultimate skew can only occur if the over- skew has failed or a catastrophic failure has occurred to the bridge mechanical system. The ultimate skew consists of a tilt switch that has been set to trip the tower drive motors at an angle of 0.4 degrees (22 inches out of level) in either direction. The bridge control logic has been modified such that it prevents the operator from operating the bridge under an ultimate skew condition and disables the normal bridge drive control functions. In the event of an ultimate skew condition, the operator must inform the designated qualified bridge maintenance person. The designated qualified bridge maintenance person shall switch the bridge control system to maintenance mode using his key to manually operate the bridge to correct the ultimate skew condition and return the bridge to service.

3) The motor starter control circuits for the tower drive motors were revised as part of the control system modification work to install motor current monitoring relays. The relay outputs have been configured to block operation of the bridge unless both tower drive motors are energized.

4) The speed of the span drive motor has been limited to 600 RPM versus the maximum motor speed of 1800 RPM.

System Calibration and Testing

The following testing and associated results were documented as part of the system calibration and testing.

1) Skew Monitoring Control System Modification Testing
   The control system modified wiring was point-to-point checked for continuity against the bridge control system modified drawings prior to energizing the bridge control system. This was completed satisfactorily and all wiring discrepancies re-wired.

   The over-skew inclinometer with its intelligent meter and the ultimate skew tilt switch, both were calibrated and accurately set by programming in accordance with the manufacturer's guidelines.

   The control system was energized and the status of all control system devices checked against the modified drawings for accuracy. The bridge was next raised to a height of approximately 5' followed by returning the moving bridge to its seated position. The functioning of the control system and skew devices were monitored for correct operation. It should be noted that no skew was observed and the over-skew meter skew indication remained unchanged.

2) Skew Device Testing
   Following the successful conclusion of the first partial raising of the bridge to a height of approximately 5', skew device testing was performed. This consisted of forcing the bridge into a skew condition and determining the accuracy of the skew monitoring devices and their metering outputs. Note that the forcing of the bridge into a skew condition was carried out in both directions of skew and was achieved in bridge maintenance mode by only operating a single motor to create skew. The trip points were accurately set and tested for consistency. Both the over-skew and the ultimate skew produced excellent repeatability to within 0.01 of a degree. The accuracy of the skew devices was checked by physically measuring the actual skew and comparing it with the output from the over-skew monitor.

   Following the first successful operation of the bridge to a height of 5' this was repeated to a height of approximately 30' in increments of 5' to determine if skew was an issue in bridge operation and to determine if there were any physical issues associated with operating the bridge.

   The bridge operated smoothly for the most part, however there were periods during travel where the span seemed to stutter. This condition persisted during all test openings of the bridge but did not appear to be caused by the electric drive system for the bridge.

3) Under Current Relay Testing
   The under current relays and their logic were tested to confirm that the bridge could not be operated unless both tower drive motors were energized. All possible reasons for motor failure were tested:

   a) Open motor starter disconnect switch.
   b) Remove starter control fuse.
   c) Trip starter overload.
   d) Disconnect one of the motor leads.

   The relays operated correctly and the bridge could not be operated if any one of the above conditions was applied.

4) Calibrating Existing Height Metering
The existing panel mounted bridge height indicator meters were found to not reflect the true height of the bridge and appeared to be indicating almost two times the actual raised height of the bridge. SBE re-calibrated the height indicators for both towers and confirmed during bridge operation that both indicators were accurately reflecting the actual height of the operating bridge.

5) Test Openings
Test openings of the bridge were conducted following the commissioning of the revised skew monitoring system and the above described adjustments.

The bridge was successfully raised to a height of 66’ with no electrical control problems and no indication of a skew condition. There did appear to be the previously reported stuttering of the movable span for a portion of the raising cycle of the bridge.

Investigation of Operating Issues

SBE mechanical engineers were on-site during the testing for the skew system modifications to record strain during bridge operations. Strain gages were mounted on both rack pinon shafts at the north and south span drive machinery.

During the span operation it was observed that the movable span had a period during the opening cycle where the bridge had noticeable irregular movement. There is also a period during the closing cycle where similar behavior occurred but for a shorter duration and to a lesser magnitude than on the opening cycle. These periods of irregular movement did not occur at the same lift height. On the opening cycle the irregular movement occurred between 7 ft. and 23 ft. and on the closing cycle the behavior occurred between 51 ft. and 47 ft. The movement was characterized by short duration start-stop cycles observed at the counterweight sheave, the rack and rack pinion, and when standing on the movable span during an operation. The start-stop behavior was not noted at the high speed end of the drive. This behavior was noted at both ends of the bridge during the strain gage testing on both days of testing. Figure 12 and Figure 13 for the north and south towers respectively demonstrate the areas of irregular movement.

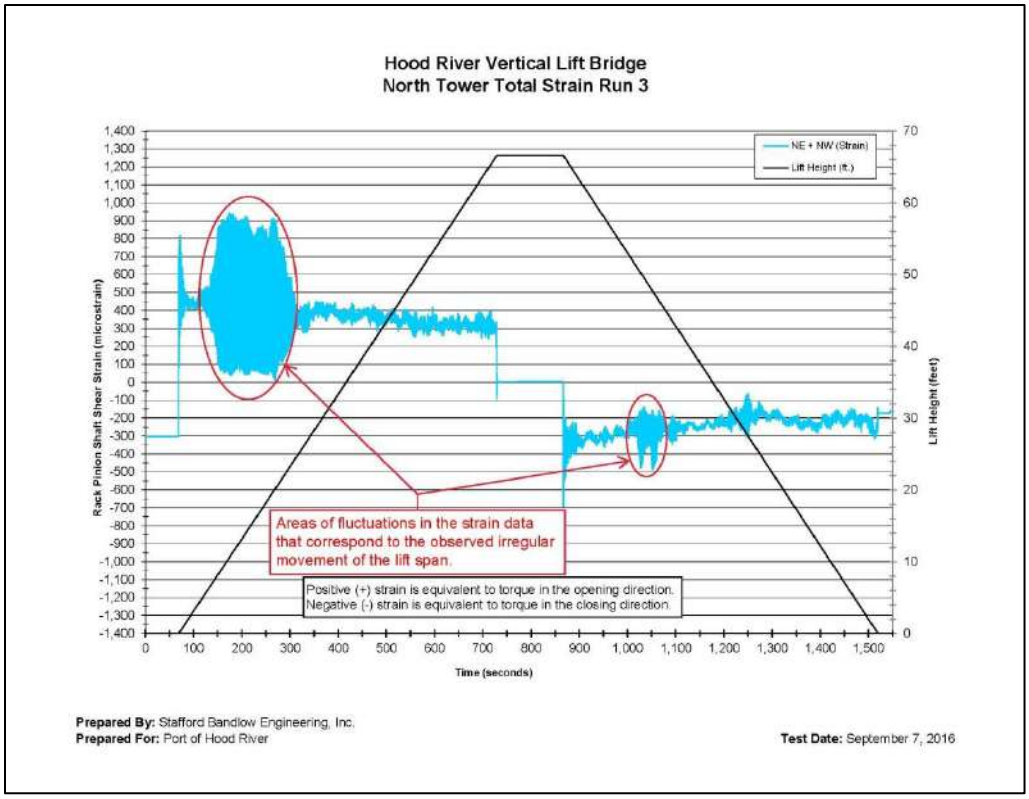

Figure 12: North Tower Strain Data

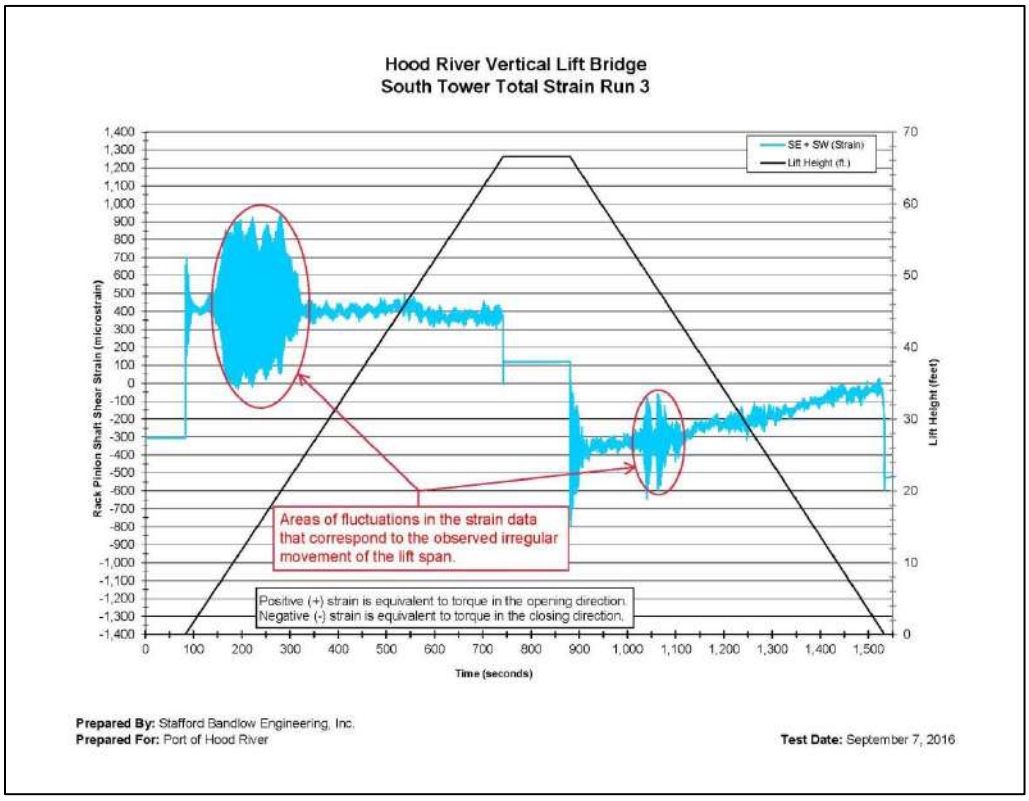

Figure 13: South Tower Strain Data

The observed behavior is somewhat consistent with stick-slip phenomena with the likely source being the trunnion bearings. Typically, some amount of noise is associated with stick–slip conditions however no unusual noises were noted during operation. The observed behavior is clearly seen in the strain gage recordings as a build-up and release of strain. It was noted in the strain gage report that the friction values for the bridge are very high. This friction is from the rack pinion bearing, the rack and pinion gear mesh, the trunnion bearings and the span and counterweight guides. No significant contact was noted at the span and counterweight guides, therefore friction from this source is considered negligible. Since the trunnion bearings are the most heavily loaded bearings, it is likely that the majority of the friction is from the trunnion bearings. It is not clear if the high friction is a factor in the observed behavior.

An attempt was made to eliminate the stick-slip by lubricating the trunnion bearings and rack pinion bearings on the second day of testing. The trunnion bearings at the south tower were lubricated during operation of the bridge by John Mann of the Port of Hood River and the bearings at the north tower were lubricated by engineers from SBE during operation of the bridge. Strain gage measurements were recorded at the north tower to see if the lubrication had any effect on the operation of the bridge. Strain gage measurements were not recorded at the south tower on the day the bearings were lubricated. Although there was a shift in friction values from the northwest corner to the southwest corner the, the overall magnitude of friction at the north end of the bridge did not vary significantly with the application of lubricant.

Later on the last day of testing, while standing on the bridge deck for an operation, it was noted that the start-stop movement nearly went away for one operation but returned on a subsequent operation.

We found no evidence of contact between the span guides or the counterweight guides that could cause the observed behavior. The one difference between this bridge and many of the other bridges we have worked on is the steady wind at the bride site. Throughout the testing the wind was continuously in the 15-25 mph range based on a hand held anemometer. Although we had no evidence that the wind was causing the observed start-stop behavior, lack of other evidence to explain this behavior resulted in the thought that the wind might the cause. Subsequent information from the Port of Hood River is that the start- stop behavior occurred during a period of no wind indicating that the wind is not the source of the irregular movement.

We did not believe that the electrical system was causing the observed behavior.

At the time of the testing we had no explanation for the observed behavior and therefore additional investigation was required to find the source of the problem.

Additional inspection and testing was conducted from October 27- 29, 2017.

All eight trunnion bearings caps were removed and visually inspected with the bridge closed and then again after raising the bridge to observe the bottom half of the journal which is not visible with the bridge closed. The top half (bridge seated) of the trunnion journals was found to be well-polished and in good condition with only minor scoring and light bronze embedment on some journals. The bottom half (bridge seated) of the trunnion journals had light scoring and light bronze embedment. In addition, these areas had minor corrosion and dried lubricant. The corrosion was found to be limited and both the dried lubricant and corrosion were removed at the time of the inspection using emery cloth and Scotch-Brite™ pads.

Figure 14: Typical top half of trunnion bearing journal.

Figure 15: Typical bottom half of trunnion bearing journal.

Figure 16: Typical bottom half of trunnion bearing journal after cleaning.

In addition to the trunnion bearings, the condition of the rack pinion bearings was a potential contributor to friction problems. A clogged lubrication fitting was previously noted at the northwest rack pinion bearing cap. There are four rack pinion shaft bearings with one bearing at the inboard side of each rack pinion. As part of the inspection, the northwest, southwest, and southeast bearing caps were removed by maintenance personnel to permit an in-depth inspection of the wearing surfaces of the bearings. Maintenance personnel were not able to remove the northeast bearing cap due to corroded fasteners.

The condition of the inspected rack pinion bearings varied from fair to poor. The southeast bearing was found in fair condition with ample lubrication and only minor deficiencies. The northwest and southwest bearings were found in poor condition with moderate to heavy corrosion and dried lubrication deposits on the journal. The bearing caps at these locations had evidence of fretting corrosion (due to inadequate lubricant), dried lubrication deposits, and clogged lubrication ports. The northwest and southwest bearings were cleaned to the extent possible with the bridge in the closed position using penetrating lubricant and emery cloth to remove lubricant deposits and corrosion around the circumference of the journal. The depth of corrosive pitting at the journals was significant as the pits could not be removed by hand polishing. After cleaning, the journals were lubricated by hand and the bearings caps were installed prior to operating the bridge.

Figure 17: Northwest rack pinion bearing. There was no evidence of recent lubrication.

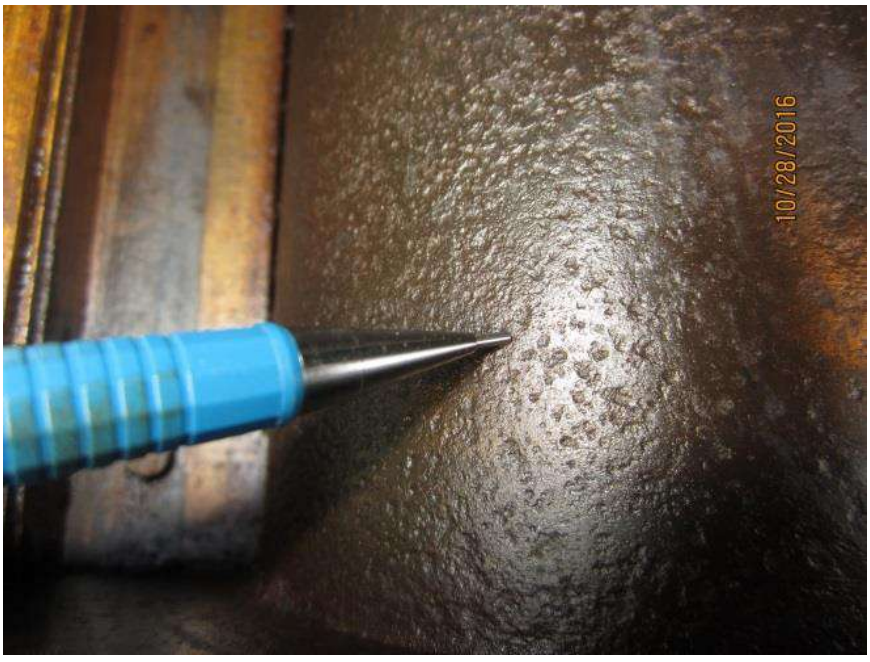

Figure 18: Southwest rack pinion bearing. Note the corrosion and heavy pitting on the journal.

Figure 19: Northwest rack pinion bearing after cleaning.

Figure 20: Northwest rack pinion bearing cap. Note clogged lubrication port and lubrication grooves

Figure 21: Northwest rack pinion bearing cap after cleaning.

Although significant work was done on October 27 and 28, 2016 to improve the condition of the trunnion and rack pinion shaft bearings, the operational behavior of the bridge remained problematic as the stuttering behavior remained. The inspection team had run out of ideas and places to look to solve the problem. On a hunch, the inspection team decided to spend the next day flushing the trunnion journals with diesel fuel and polishing the journals with Scotch-Brite™ while operating the bridge over as many cycles as possible. Since diesel fuel is very light oil, it acts as a lubricant and there was no significant risk of causing damage to the journals. So the inspection team along with maintenance personnel gathered up some Scotch-Brite™ and purchased $3 worth of diesel fuel to prepare for the next day.

On Saturday October 29, 2016 the bridge was operated repeatedly throughout the day while spraying diesel fuel on the trunnion journals and hand polishing the journals with Scotch-Brite™. Slowly the bridge responded and the stuttering appeared to dissipate. At first we were not sure if it was wishful thinking or if the stuttering was actually dissipating. As the day went on it was obvious that the flushing was having a significant effect on the operation of the bridge. By the end of the day maintenance personnel said that they had never seen the bridge operate so smoothly.

Although not completely eliminated, the work at the trunnion bearings (corrosion removal, flushing, and lubrication) led to a significant reduction in the duration and magnitude of the strain fluctuations. The strain fluctuations were eliminated when the span was rising and the strain fluctuations were reduced when the span was lowering. The strip charts in Figure 22-Figure 25 show the effects of the work done at the trunnion bearings.

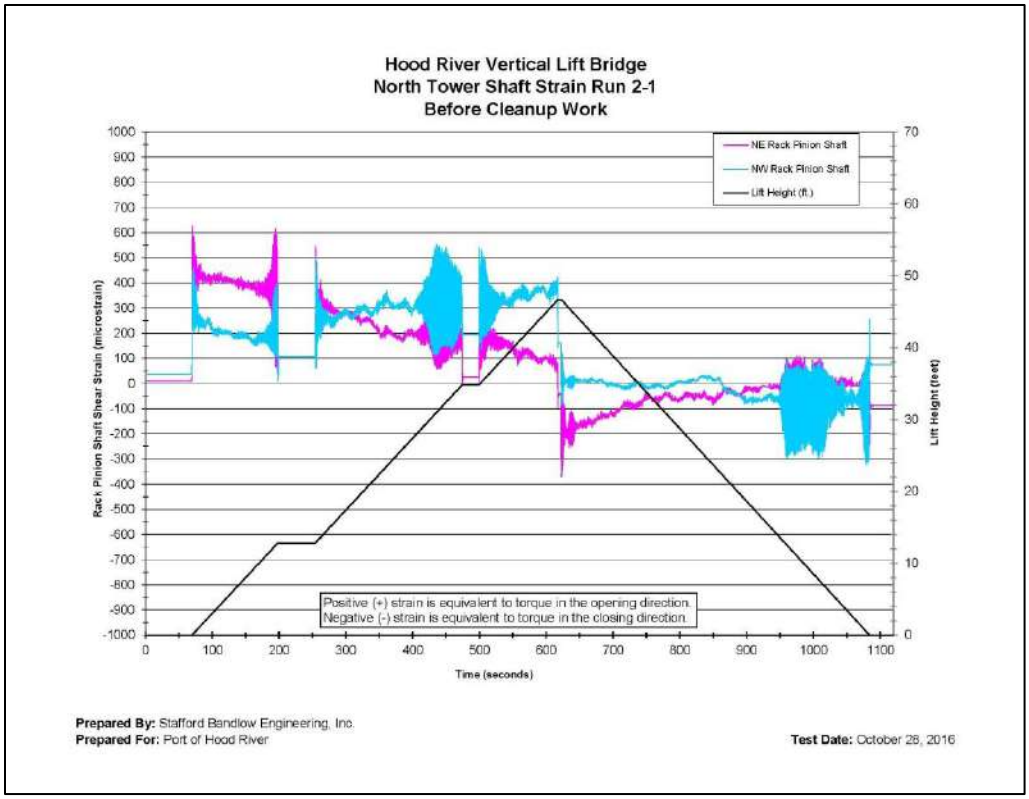

Figure 22: Strip Chart Recordings North Towner Shaft Strain Run 2-1 – Before Cleanup Work

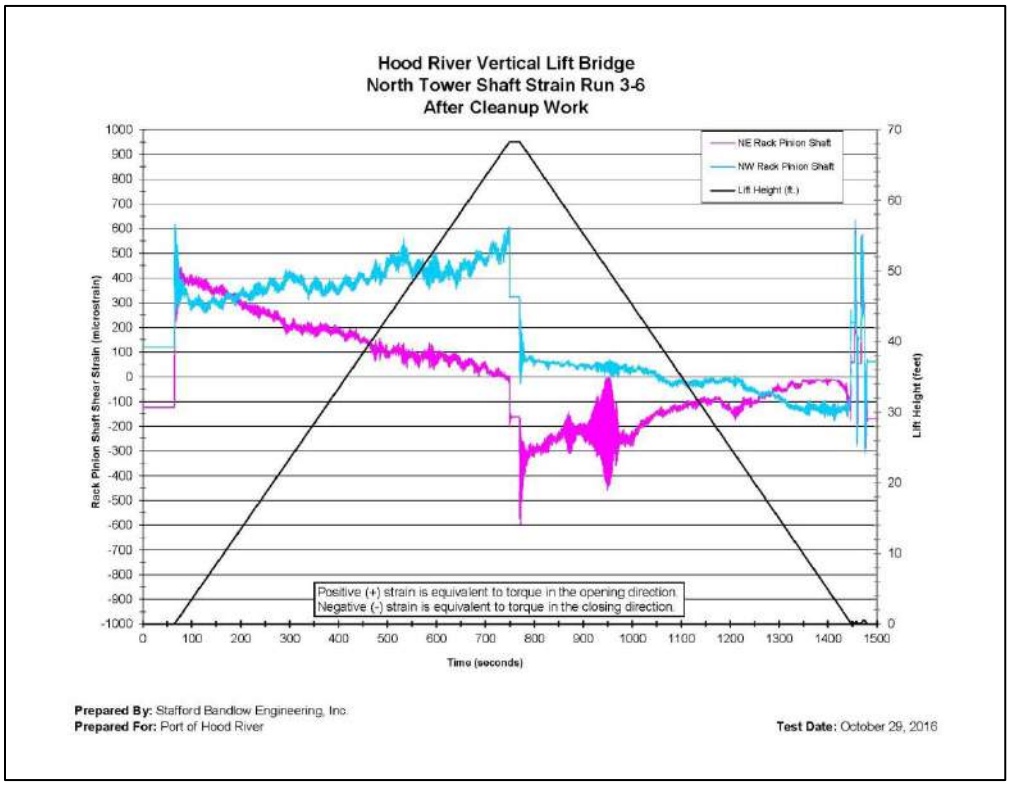

Figure 23: Strip Chart Recordings North Towner Shaft Strain Run 3-6 – After Cleanup Work

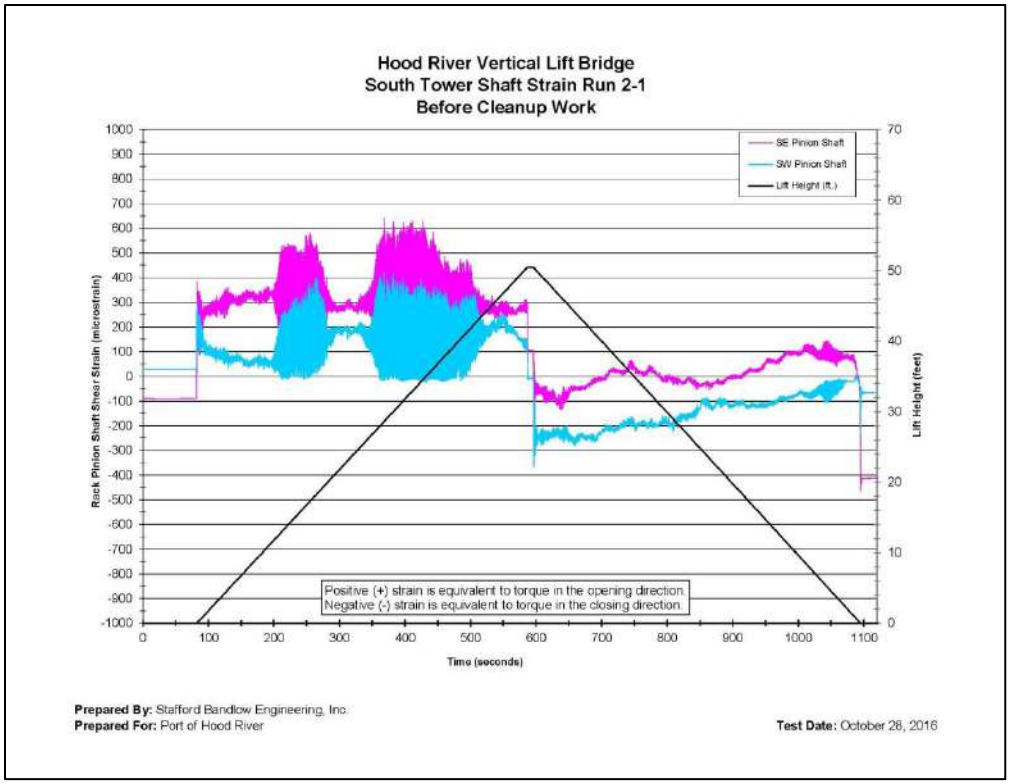

Figure 24: Strip Chart Recordings South Tower Shaft Strain Run 2-1 – Before Cleanup Work

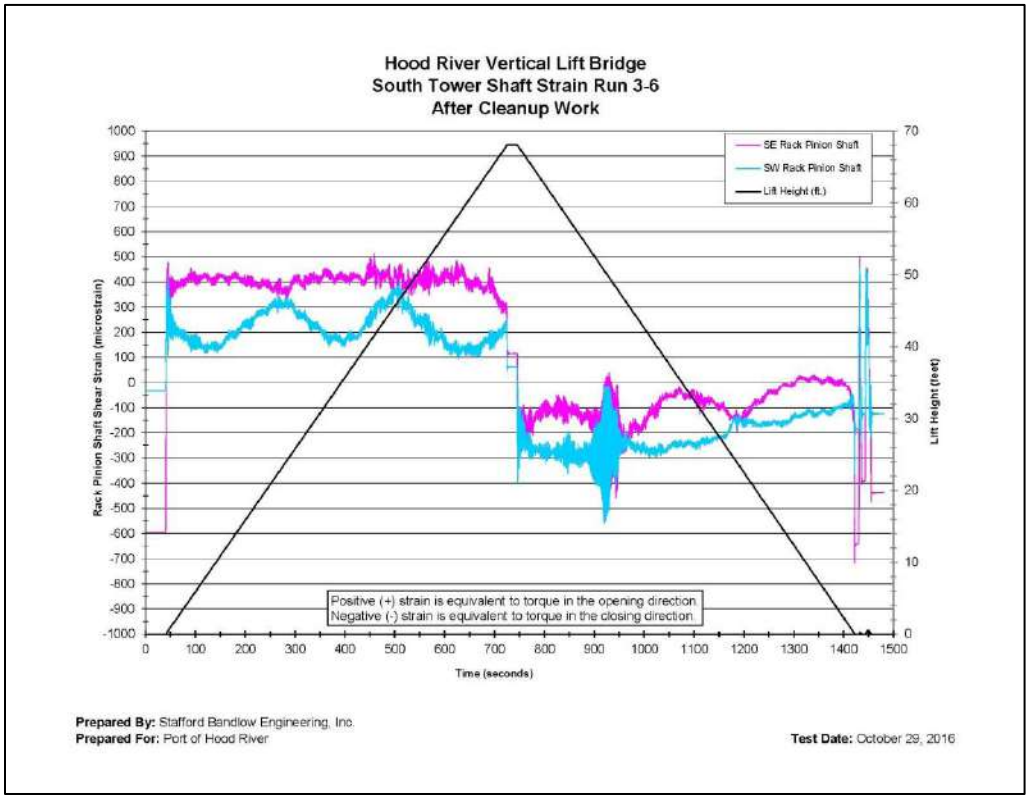

Figure 25: Strip Chart Recordings South Tower Shaft Strain Run 3-6 – After Cleanup Work

Through continued flushing and lubrication as part of a regular maintenance program the strain fluctuations have been completely eliminated as seen in the strip charts in Figure 26 and Figure 27 from our October 2017 balance testing.

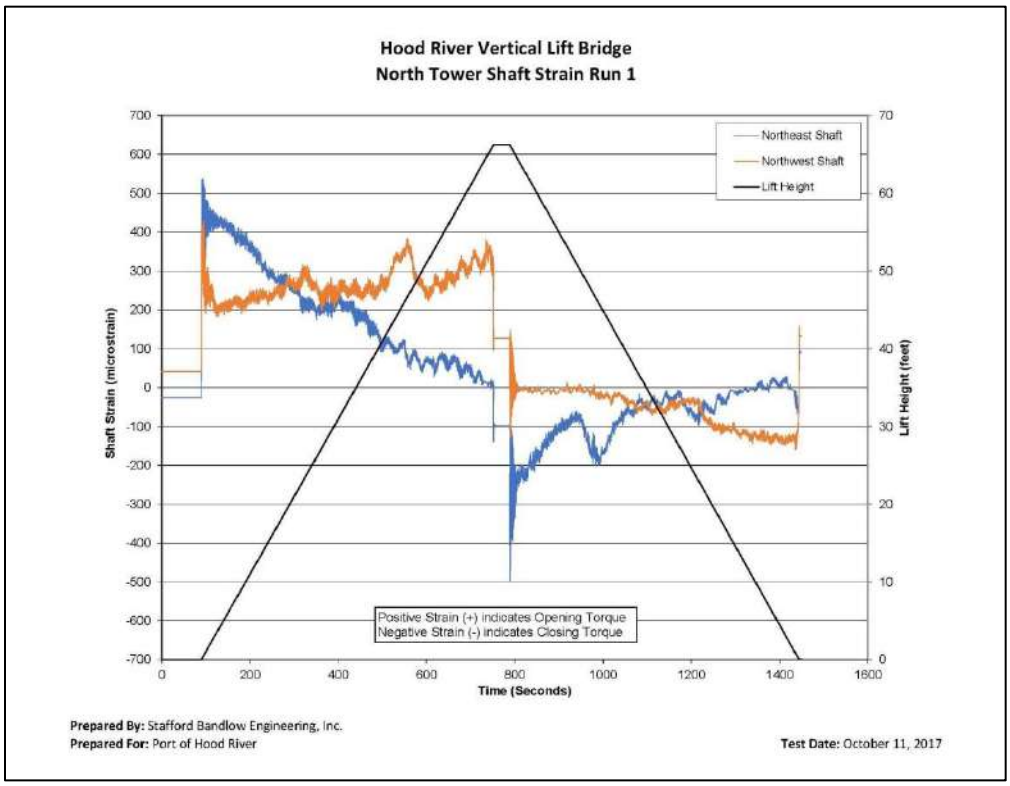

Figure 26: Strip Chart from October 2017 Balance Testing - North Tower Shaft Strain Run 1

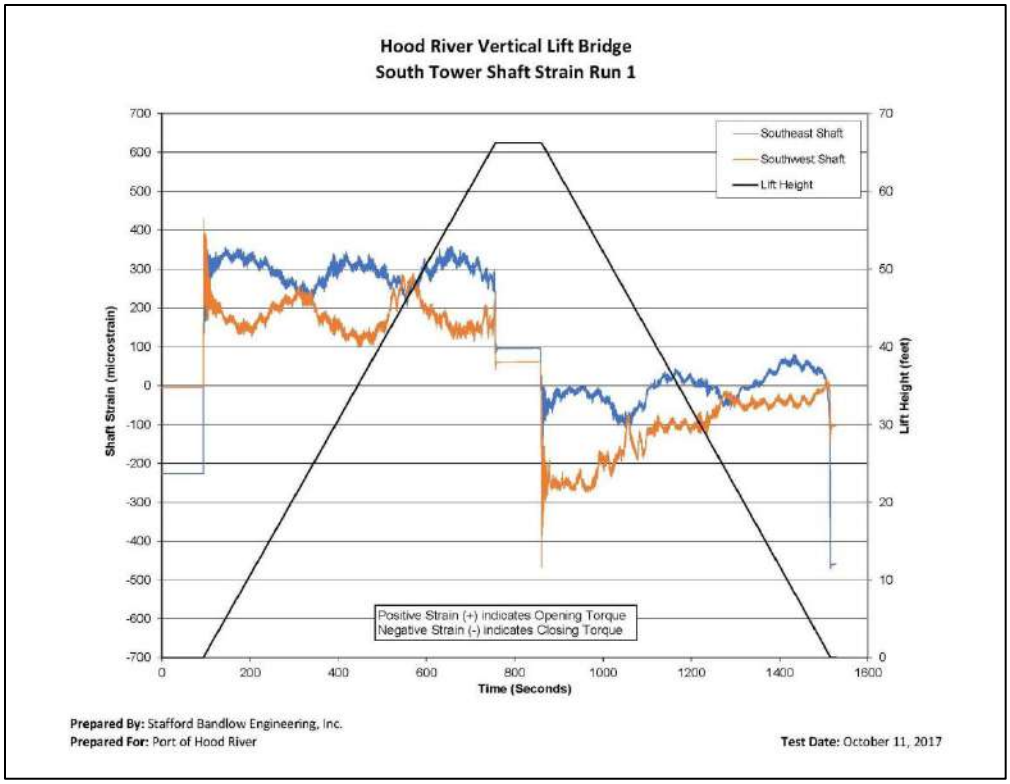

Figure 27: Strip Chart from October 2017 Balance Testing - South Tower Shaft Strain Run 1

Current Status

SBE recommended permanent changes to the bridge control system to provide fail safe operation of the bridge, enhanced span control and eliminate operator intervention in controlling skew. This design included utilizing the capabilities of the drives for primary skew control with a control system skew control algorithm used as backup and over-skew protection.

The design necessitated the replacement of the existing tower two-speed drive motors, addition of variable frequency drives and modifications and additions to the existing bridge control system. The design is presently ongoing and it is anticipated that the drives and motors will be advanced procured in August or September, 2018 with installation, testing, and commissioning of the replacement system taking place during the winter of 2018-2019.

Commission Memo

Prepared by: Daryl Stafford
Date: October 16, 2018
Re: Hood River Outrigger Canoe Club Use Agreement

The Hood River Outrigger Canoe Club wishes to enter in to a 2-year Use Agreement that is defined by two 7-month terms at their current locations in the Nichols Boat Basin. The first term is April 1, 2019 – October 31, 2019. The second term is April 1, 2020 – October 31, 2020.

They have two locations that they occupy. The first location is the area next to the seawall, north of the Gorge Paddle Center, that they fence in for the storage of outrigger canoes and associated gear. The second area is located on the south end of Frog Beach where they will keep four outrigger canoes.

RECOMMENDATION: Approve Use Agreement with Hood River Outrigger Canoe Club for canoe storage at two locations in the Nichols Basin, subject to legal counsel review.

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USE AGREEMENT
BETWEEN THE PORT OF HOOD RIVER AND HOOD RIVER OUTRIGGER CLUB

1. **Agreement:** Subject to the terms of this Use Agreement ("Agreement") the Port of Hood River ("Port") grants HROCC -Hood River Outrigger Club ("User") permission to temporarily use Port Property near the Nichols Basin Seawall ("Use Area A") and on Frog Beach ("Use Area B"), as shown on Exhibit A. The User is permitted to erect temporary fencing around the Use Area A for the storage of outrigger canoes and associated equipment. The fence is the obligation of the HROCC to maintain and remove at the end of each term. Location may be modified by Port Staff to accommodate potential SUP Shelter that maybe built in the area.

2. **Fee:** User shall pay a fee of $150 for each month the User occupies the Use Areas. The fee will increase to $175 per month in the second year of the Term.

3. **Term:** This use granted by this Agreement shall be defined by 2 terms. The first term commences on April 1, 2019 and continue through October 31, 2019 ("Term A"). The second term commences on April 1, 2020 and continue through October 31 2019 ("Term B"). During each Term, User agrees that it will not utilize Port utilities. User will utilize its own trash receptacles and remove all garbage at its expense.

4. **Laws:** User shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to its occupancy or use of Port property, and shall comply with all Port ordinances, rules or requests regarding use of the area during the term of this Agreement.

5. **User's Insurance:** User shall hold the Port, its employees, agents and Commissioners harmless from and indemnify them against any claims or liability for damage to persons or property in any way related to User occupancy or use of Port property. During the term of this Agreement User shall carry and keep in effect a Commercial General Liability insurance policy covering bodily injury and property damage in a form reasonably acceptable to the Port issued on an occurrence basis in an amount not less than $1,000,000 combined single limit per occurrence ("Commercial Insurance"), and shall keep in effect motor vehicle insurance coverage for all vehicles to be located on Port property ("Vehicle Insurance"). User shall provide the Port with proof of insurance coverage with a certificate naming the Port, its employees, agents and Commissioners as an additional insured.

6. **Covenants:** User shall not do anything which damages Port property. User shall keep the Parking in at least as good condition as it was in at the outset of the Agreement term. At the expiration of the term, User shall promptly remove all personal property from the Parking and shall return it to the Port in good, clean condition. With a 30-day notice, The Port of Hood River retains the right to rescind or alter this agreement.

7. **Attorney Fees:** In any action or proceeding for the collection of any sums or charges which may be payable hereunder, User agrees to pay, in addition thereto, a reasonable sum for Port's attorney fees and court costs before suit, at suit or on appeal.

Signing Authority: Each person signing this Agreement on behalf of the Port and User represents and warrants they have the right to do so.

By: _____
Dated:_____, 2018
Heidi Ribkoff, President HROCC
P.O. Box 1313
Hood River, OR 97031

By: _____
Dated:_____, 2018
Michael McElwee Executive Director
Port of Hood River
1000 E. Port Marina Dr., Hood River, OR 97031

Exhibit A: USE AREAS

Use Area "A"

Use Area "B"

ACTION ITEMS

Commission Memo

Prepared by: Anne Medenbach
Date: October 16, 2018
Re: Lower Mill Dirt Haul and Placement Project

Lot 902 at the Lower Mill has approximately 20,000 Cubic Yards of wood waste and soil material that needs to be relocated to enable development of the site. The stockpile is the result of the excavation completed in 2015 that removed non-structural fill from lots 1011 and 1017. The fill has been tested for hazards and confirmed to be appropriate for placing as a soil amendment on agricultural land or other areas where no structures will be built. The maximum depth of such placement is four feet.

The east end of the runway at the airport has a significant topography, the filling and leveling of which would benefit unplanned airport operations, i.e. short landings. Currently, if or when short landings occur, it is very uneven and potentially hazardous. By filling this area in with level fill, a safer airport environment is created. Additionally, the fill area is bounded to the east by an access road. Currently this access road is utilized by portions of the public. A safer environment is therefore further created by increasing the elevations of the west boundary of the road to block vehicular traffic from accessing the airport operating area.

Port staff issued an invitation to bid on September 26. A mandatory walk through was held on October 10, with fourteen contractors in attendance. Staff is confident that a number of bids will be received. The job is straight-forward and has a long timeline to allow for inclement weather.

Bids are due on October 16 at 2:00 PM and will be presented to the Commission during the meeting, showing the lowest responsive/responsible bidder.

Please note that there follows a 7-day protest period, ending October 25. At that time, barring no protests, the Port may execute a contract. Since there is not another board meeting until November 6, staff recommends the Board to approve the lowest responsive/responsible bidder "barring no protests" during the October 16 meeting. If there are no protests received by the deadline, then the Commission has authorized staff to execute the contract.

RECOMMENDATION. Authorize contract for Lower Mill Dirt Haul as recommended by staff.

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PORT OF HOOD RIVER
PUBLIC IMPROVEMENT CONTRACT

This Contract entered into between the PORT OF HOOD RIVER, an Oregon municipal corporation, ("PORT") and _____("CONTRACTOR"), shall become effective when this Contract has been signed by both parties and the Port has issued to CONTRACTOR a Notice to Proceed with the Work.

WITNESSETH:

WHEREAS, CONTRACTOR, having examined the Work site and become familiar and satisfied with conditions, has submitted an acceptable bid to construct the Ken Jernstedt Airfield South Parallel Taxiway and Apron Rehabilitation Project on PORT property in Hood River, Oregon 97031 ("Work"); and,

WHEREAS, the parties hereto desire that this Contract be undertaken and completed on the terms and conditions as hereafter set forth;

THEREFORE, IT IS AGREED AS FOLLOWS:

Terms of Performance

CONTRACTOR agrees to perform the described Work and provide all machinery, tools, apparatus, materials, equipment, labor and other means of construction necessary to complete the Work at the designated location in accordance with all terms specified in the Contract Documents, which by this reference are incorporated herein, including the following:

A) Invitation to Bid
B) Bidding Instructions
C) First-Tier Subcontractor Disclosure Form
D) Bid Form/Bid Schedule
E) Bid Bond
F) Performance Bond
G) Payment Bond
H) Certificate of Insurance
I) General Conditions of Public Works Contracts
J) FAA General Provisions
K) Special Provisions
L) Notice of Intent to Award
M) Notice to Proceed
N) Payment of Prevailing Wages Rates
O) Drawings prepared for/or issued by PORT
P) Specifications prepared for/or issued by PORT
Q) All affidavits and certifications submitted by CONTRACTOR as part of CONTRACTOR's Bid Documents, which affidavits and certifications CONTRACTOR agrees will remain effective throughout the term of this Contract.

Contract Price:
Subject to the provisions of all Contract Documents and in consideration of the faithful performance of the terms and conditions thereof by the CONTRACTOR, PORT agrees to pay CONTRACTOR _____ in the manner and at the times provided in the Contract Documents. The Contract price is for completing the Work. No alternates are included.

Contract Dates:
Project Start Date: November 6, 2018
Substantial Completion: March 29, 2019
Final Completion: April 5, 2019 (109 working days)

Liquidated damages
If the CONTRACTOR fails to complete the Work within the time specified or within any extension of time agreed to by both parties in writing, CONTRACTOR shall pay liquidated damages of $250.00, for each day of delay beyond the completion day identified above. (If no dollar amount is specified this paragraph shall not apply to this Contract.)

Representatives
Unless otherwise specified in the Contract Documents, the Port designates Michael McElwee, as its Authorized Representative in the administration of this Contract. The above-named individual shall be the initial point of contact for matters relating to performance, payment, authorization, and to carry out the responsibilities of the Port. Contractor has named _____ its Authorized Representative to act on its behalf.

Integration
The Contract Documents and this Contract constitute the entire agreement between the parties. No waiver, consent, modification or change of terms of this Contract shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. There are no other understandings, agreements, or representations, oral or written, not specified herein regarding this Contract. Contractor, by the signature below of its authorized representative, hereby acknowledges that it has read this Contract, understands it, and agrees to be bound by its terms and conditions.

IN WITNESS WHEREOF the parties have executed this Contract on _____, 20___.

_____	_____
CONTRACTOR	**PORT OF HOOD RIVER**
By _____	By Michael S. McElwee_____
Its _Manager_____	Its Executive Director_____

Commission Memo

Prepared by: John Mann
Date: October 16, 2018
Re: Bridge Skew System and Span Drive Motor Rehabilitation Project

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Staff issued an invitation to bid for the Hood River Lift Span Skew System and Span Drive Motor Rehabilitation Project on September 6, 2018. The project scope entails upgrading the skew (horizontal control) system to provide greater control tolerance and replacing the lift span motors located on top the towers for greater reliability. The work was recommended by Stafford Bandlow Engineering ("SBE") based on their Span Drive Evaluation Report dated January 5, 2017.

Two bids were received at the October 3, 2018 bid opening. One was found to be unresponsive. The other bid was for $308,711.00 from Hage Electric Inc. located in The Dalles, OR. The protest period has passed without contest.

Staff and SBE have thoroughly reviewed the responsive bid and have received all required insurance and bond documentation for the project. No Alternates have been selected. Port staff will provide traffic protection for the work, which is expected to be completed by January 2019. The engineer's estimate for the project was $274,000.00. The Port's FY 18/19 budget includes $431,000.00.

Because the Public Works Contract is a lengthy document it is not included in the packet. However, it has been reviewed by the Port's general counsel and will be emailed separately to the Commission.

RECOMMENDATION: Authorize public works contract with Hage Electric, Inc. for the Hood River Bridge Skew System Upgrade and Span Drive Motor Rehabilitation Project not to exceed $308,711.00

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ACTION ITEMS

Commission Memo

Prepared by: Michael McElwee
Date: October 16, 2018
Re: Contract with HRT Security

For many years, the Port has been challenged with providing reasonable lock-up, surveillance and monitoring of Port-owned waterfront properties. In the summer months, Port employees routinely close gates, ensure that visitors have vacated the Event Site, the Hook and the Spit, and contact potential overnight parkers and ask them to move. In the winter months, although usage is much lower, some lock-up and monitoring still needs to occur, although Port staff presence on weekends is greatly reduced. This year, the Waterfront Parking Plan adds the new challenge of parking enforcement. And, there are other issues such as an increase in the transient population, increased vandalism, reported theft and so on.

The attached contract would bring in a local security firm, HRT Patrol Services, to provide surveillance, monitoring and some enforcement services during overnight hours at six locations on the waterfront. This is a three-month contract to allow staff to determine whether this service can be successfully and effectively implemented. There are potential issues associated with hiring a private firm to carry out enforcement services on behalf of a public agency and we want to use a trial period to determine whether this is an appropriate long-term step.

Utilizing a private firm is expected to result in some reductions in staffing costs including call-outs on weekends which are paid at a rate of time and a half. HRT would also be trained in parking enforcement. Both should result in some off-sets to the contract costs. Staff has discussed this approach with Hood River Police Chief Holste and we will be in regular touch with him if the contract is approved.

RECOMMENDATION: Authorize Personal Services Contract with HRT Security Patrol Services not to exceed $9,300.

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ACTION ITEMS

Personal Services Contract
For Services Under $50,000

1. This Contract is entered into between the Port of Hood River ("Port") and **HRT Security Patrol Service** ("Contractor"). Contractor agrees to perform waterfront property patrol and parking enforcement as described in the Scope of Services in attached Exhibit A not to exceed **$6,000.00**. Port shall pay Contractor in accordance with the schedule and/or requirements in attached Exhibit A.

2. This Contract shall be in effect from **November 1, 2018** through **February 1, 2019.** Either Contractor or Port may terminate this Contract in the event of a breach of the Contract by the other. Port may terminate this Contract for any reason by giving 15 days written notice to Contractor at Contractor's address listed below. If Port terminates this Contract, Contractor shall only receive compensation for work done and expenses paid by Contractor prior to the Contract termination date.

3. All work products of the Contract, which result from this Contract, are the exclusive property of Port. Port shall have access to all books, documents, papers and records of Contractor which relate to this Contract for purpose of making audit, examination, excerpts, and transcripts for three years after final payment.

4. Contractor will apply that skill and knowledge with care and diligence to perform the work in a professional manner and in accordance with standards prevalent in Contractor's industry, trade or profession. Contractor will, at all times during the term of the Contract, be qualified, professionally competent, and duly licensed to perform the work. Contractor shall provide a list of all employees or agents who will be providing patrol and enforcement services and a copy of the current license for each such person as issued by the Oregon Board on Public Safety Standards and Training as defined in ORS 181A.840 – 181A.995.

5. Contractor certifies that Contractor is an Independent Contractor as defined in ORS 670.600 and shall be entitled to no compensation other than that stated above.

6. Contractor shall indemnify, defend, and hold harmless Port, its Commissioners, officers, agents, and employees from all claims, suits, or actions of whatsoever nature resulting from or arising out of the activities of Contractor or its subcontractors, agents or employees under this Contract, except to the extent the Port is negligent and responsible to pay damages. Contractor shall provide insurance in accordance with attached Exhibit B.

7. This Contract may be executed in any number of counterparts, and any single counterpart or set of counterparts signed, in either case, by all parties hereto shall constitute a full and original instrument, but all of which shall together constitute one and the same instrument.

8. This Contract shall be governed by the laws of the State of Oregon and any litigation involving any question arising under this Contract must be brought in the Circuit Court in Hood River County, Oregon. If any provision of this Contract is found to be illegal or unenforceable, this Contract shall remain in full force and effect and the provision shall be stricken.

9. Contractor shall adhere to all applicable federal, state, and local laws and regulations, including those governing its relationship with its employees.

10. This Contract contains the entire agreement between Contractor and Port and supersedes all prior written or oral discussions or agreements. Any modification to this Contract shall be reduced to writing and signed by the Contractor and Port. Contractor shall not assign this Contract or subcontract its work under this Contract without the prior written approval of Port.

11. The person signing below on behalf of Contractor warrants they have authority to sign for and bind Contractor.

HRT Security Patrol Services

_____

Kenton Chandler Date
ADDRESS, Hood River OR 97031
(541) 387-2822 / Email: kchandler.hrts@gmail.com

EIN: _____
CCB #xxxxxx / Corporate Registry #

PORT OF HOOD RIVER

_____

Michael McElwee, Executive Director Date
1000 E. Port Marina Drive, Hood River OR 97031
(541)386-1645; Email: porthr@gorge.net

Personal Services Contract
Exhibit A

I. SCOPE OF WORK:

Carry out waterfront property patrol and parking enforcement services ("Patrol Services") at the following six (6) sites on the Hood River Waterfront:

- West Portway Ave.
- Event Site
- N. 1st St.,
- Marina Park
- Toll Plaza/Port Office Bldg.
- West Portway Ave./Hook

Contractor shall provide the following Patrol Services:

- Nightly patrols between the hours of 2100 and 0500 on a random basis. Patrols will be conducted in marked or un-marked vehicles by uniformed employees.
- Enforcement of applicable Oregon laws, City of Hood River Ordinances and Port of Hood River Ordinance 24.
- Checking/securing gates
- Pay-to-Park Parking enforcement using Handheld device.

Contractor reserves the right to temporarily suspend services, regardless of cause, where the potential outcome could adversely affect the safety of officers, clients or public.

Contractor is only authorized to cause a vehicle to be towed per O.R.S. 98.54 (3)A –(3)B.

II. DELIVERABLES:

Contractor shall use reasonable efforts to keep a log showing of elapsed time performing Patrol Services and a detailed description of all incidents or actions performed in carrying out Patrol Services. The log shall be in a form acceptable to the Port, available for Port review at any time by the Port and which shall be transmitted to the Port on a weekly basis.

III. CONSIDERATION:

Hourly rates under this Contract shall be:

$350 per site per month. $2,100 per month.

IV. BILLING AND PAYMENT PROCEDURE:

The Contractor shall submit to the Port a monthly invoice in a form and in sufficient detail to determine the work performed for the amount requested. The invoice shall contain at a minimum:

- Invoice date
- Contract project title
- Record of hours worked and a brief description of activities

The Port shall process payment in its normal course and manner for Accounts Payable, net 20 days.

Personal Services Contract
Exhibit B

INSURANCE

ACTION ITEMS

During the term of this Contract, Contractor shall maintain in force at its own expense, each insurance noted below:

1. Workers' Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers. (Required of contractors with one or more employees, unless exempt order ORS 656.027.)

   ___**x**__ Required and attached OR _____ Contractor is exempt

   Certified by Contractor: _____
   Signature/Title

---

2. Commercial General Liability insurance on an occurrence basis with a combined single limit of not less than $1,000,000 each occurrence for bodily injury and property damage. The Liability Insurance coverage shall provide contractual liability coverage for the indemnity required under this Contract. The coverage shall name the Port of Hood River and each of its Commissioners, officers, agents, and employees as Additional Insured with respect to the Contractor's services to be provided under the Contract.

   _____X_____ Required and attached Waived _____

3. Automobile Liability insurance with a combined single limit of not less than $1,000,000 each occurrence for bodily injury and property damage, including coverage for owned, hired, or non-owned vehicles, as applicable.

   _____X_____ Required and attached Waived _____

4. Professional Liability insurance with a combined single limit per occurrence of not less than $1,000,000 general annual aggregate for malpractice or errors and omissions coverage against liability for personal injury, death or damage of property, including loss of use thereof, arising from the firm's acts, errors or omissions in any way related to this Contract.

   _____X_____ Required and attached Waived _____

5. On All Types of Insurance. There shall be no cancellation or material change, reduction of limits, or intent not to renew the insurance coverages without 30-days written notice from the Contractor or its insurer(s) to the Port.

6. Certificate of Insurance. As evidence of the insurance coverage required by this Contract, the Contractor shall furnish acceptable insurance certificates to the Port at the time Contractor returns the signed Contract. The General Liability certificate shall provide that the Port, its Commissioners, officers, agents, and employees are Additional Insured but only with respect to the Contractor's services to be provided under this Contract. Endorsement CG 20 10 11 85 or its equivalent must be attached to the Certificate. The Certificate shall provide that the insurance shall not terminate or be canceled without 30 days written notice first being given to the Port. Insuring companies or entities are subject to Port acceptance. If requested, complete copies of the insurance policy shall be provided to the Port. The Contractor shall be financially responsible for all pertinent deductibles, self-insured retentions, and/or self-insurance.

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ACTION ITEMS

Commission Memo

Prepared by: Kevin Greenwood
Date: September 11, 2018
Re: Stantec Traffic & Revenue Advising Contract

A Traffic and Revenue (T&R) Study is an analysis tool that evaluates the feasibility of tolling on transportation facilities based upon specific policy objectives. In the case of the Hood River Bridge, the T&R will help the Port Commission determine whether a new facility can be built within a range of acceptable tolls and what level of public grant funding would be required to make up the difference.

Stantec is a national leader in traffic and revenue modeling and Steve Abendschein is the west coast manager for transportation planning and development. Steve and his team come highly recommended from Steve Siegel as they worked together on the Columbia River Crossing project.

This contract is not to produce a T&R study but rather to advise the Port on a plan forward. T&R studies have the potential to be very long and expensive projects. As part of this contract, the Port Commission may want to schedule a work session in the fall to fully explore how T&R studies are critical to financing a large infrastructure project.

The proposed contract with Stantec would include the following services:

- Review and develop Traffic and Revenue Scope of Work including a tentative budget and schedule that aligns with the FEIS process. Consider both traditional municipal financing and P3 tracks.
- Review the WSP FEIS SOW, specifically Task 7 "Transportation" and coordinate with WSP traffic consultants.
- Review materials currently available to the Port and assess percent completeness of a Level I study.
- Advise on the appropriate all electronic toll operations systems and procedures for the Hood River Bridge (existing and, if different, replacement bridge).
- Recommend the appropriate traffic forecasting methodologies and costs to be used in a Level II and Level III T&R studies.
- Advise on when the Level II T&R study should commence.
- Present and participate in a T&R work session with the Port Commission in Hood River, Ore.

Attached is Abendschein's resume and a Stantec Memo commenting on the range of effort associated with T&R studies.

RECOMMENDATION: Authorize Contract with Stantec for traffic and revenue consultation associated with the bridge replacement project not to exceed $20,000.

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Personal Services Contract
For Services Under $50,000

1. This Contract is entered into between the Port of Hood River ("Port") and **STANTEC CONSULTING SERVICES INC.** ("Contractor"). Contractor agrees to perform the Scope of Work described in attached Exhibit A to Port's reasonable satisfaction for a maximum consideration not to exceed **$20,000**. Port shall pay Contractor in accordance with the schedule and/or requirements in attached Exhibit A.

2. This Contract shall be in effect from the date at which every party has signed this Contract through **March 31, 2019**. Either Contractor or Port may terminate this Contract in the event of a breach of the Contract by the other. Port may terminate this Contract for any reason by giving 15 days written notice to Contractor at Contractor's address listed below. If Port terminates this Contract, Contractor shall only receive compensation for work done and expenses paid by Contractor prior to the Contract termination date.

3. All work products of the Contract, which result from this Contract, are the exclusive property of Port. Port shall have access to all books, documents, papers and records of Contractor, which relate to this Contract for purpose of making audit, examination, excerpts, and transcripts for a period of three years after final payment.

4. Contractor will apply that skill and knowledge with care and diligence to perform the work in a professional manner and in accordance with standards prevalent in Contractor's industry, trade or profession. Contractor will, at all times during the term of the Contract, be qualified, professionally competent, and duly licensed to perform the work.

5. Contractor certifies that Contractor is an Independent Contractor as defined in ORS 670.600 and shall be entitled to no compensation other than that stated above.

6. Contractor shall indemnify, save, and hold harmless Port, its Commissioners, officers, and employees from all damages, losses, or actions to the extent caused by the negligent activities of Contractor or its subcontractors, agents or employees under this Contract. Contractor shall provide insurance in accordance with attached Exhibit B.

7. This Contract may be executed in any number of counterparts, and any single counterpart or set of counterparts signed, in either case, by all parties hereto shall constitute a full and original instrument, but all of which shall together constitute one and the same instrument.

8. This Contract shall be governed by the laws of the State of Oregon and any litigation involving any question arising under this Contract must be brought in the Circuit Court in Hood River County, Oregon. If any provision of this Contract is found to be illegal or unenforceable, this Contract shall remain in full force and effect and the provision shall be stricken.

9. Contractor shall adhere to all applicable federal, state, and local laws and regulations, including those governing its relationship with its employees.

10. This Contract contains the entire agreement between Contractor and Port and supersedes all prior written or oral discussions or agreements. Any modification to this Contract shall be reduced to writing and signed by the Contractor and Port. Contractor shall not assign this Contract or subcontract its work under this Contract without the prior written approval of Port.

11. Except for third party claims of bodily injury or property damage which shall be unlimited, the total amount of all claims Port may have against Contractor under this Contract or arising from the performance or non-performance of the Services under any theory of law, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to $20,000. Port's sole and exclusive remedy under this Contract for any claim, demand or suit shall be directed and/or asserted only against Contractor, including Contractor's agents or employees providing services under this Contract.

12. Neither Port nor Contractor shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected to this Contract or the performance of the services on this Project. This mutual waiver includes, but is not limited to, damages related to loss of use, loss of profits, loss of income, unrealized energy savings, diminution of property value or loss of reimbursement or credits from governmental or other agencies.

13. The person signing below on behalf of Contractor warrants they have authority to sign for and bind Contractor.

STANTEC CONSULTING SERVICES INC.

Steve Abendschein Date
Senior Principal
475 5th Avenue, 12th Floor
New York, NY 10017

PORT OF HOOD RIVER

Michael McElwee Date
Executive Director
1000 E. Port Marina Drive
Hood River OR 97031

Federal Tax ID Number: 11-2167170

Personal Services Contract
Exhibit A

I. SCOPE OF WORK:

Review and develop Traffic and Revenue (T&R) Scope of Work (SOW) including a tentative budget and schedule that aligns with the FEIS process; review the WSP FEIS SOW and coordinate with WSP traffic consultants; review materials currently available to the Port and assess percent completeness of a Level I study; advise of the appropriate all-electronic toll operations systems and procedures for the Hood River Bridge (existing and replacement bridges); recommend the appropriate traffic forecasting methodologies and costs to be used in a Level II and Level III T&R studies; advise on when the Level II T&R should commence. Preparation of materials and travel to Hood River, Ore. to present findings is included in contract fee.

II. DELIVERABLES AND TIMEFRAME:

The deliverable(s) covered under this Contract shall be:

Written summary of terms documented in the Scope of Work.

The due dates for the deliverable(s) shall be:

Completion of all work products by **March 31, 2019.**

III. CONSIDERATION:

Hourly rates under this Contract shall be:

Principal T&R Specialist - $325 (Abendschein/Gobeille)
Senior T&R Specialist - $275
T&R Specialist - $200
Junior T&R Specialist $125

IV. BILLING AND PAYMENT PROCEDURE:

The Contractor shall submit to the Port for payment an itemized invoice in a form and in sufficient detail to determine the work performed for the amount requested. The invoice shall contain at a minimum:

- Invoice date
- Contract project title
- Record of hours worked and a brief description of activities
- Billing rate applied

Invoices for services will be submitted on a monthly basis. Payments due which exceed 90 days from date of invoice may be subject to a monthly charge of 1.5% of the unpaid balance (18% annual).

The Port shall process payment in its normal course and manner for Accounts Payable, net 30 days.

Personal Services Contract
Exhibit B

INSURANCE

During the term of this Contract, Contractor shall maintain in force at its own expense, each insurance noted below:

1. Workers' Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers. (Required of contractors with one or more employees, unless exempt order ORS 656.027.)

X Required and attached

Certified by Contractor: _____ Steve Ahrendschein Senior Principal
Signature/Title

2. Commercial General Liability insurance on an occurrence basis with a limit of not less than $1,000,000 each occurrence for bodily injury and property damage and $2,000,000 general aggregate. The Liability Insurance coverage shall provide contractual liability. The coverage shall name the Port of Hood River and each of its Commissioners, officers, agents, and employees as Additional Insured with respect to the Contractor's services to be provided under the Contract.

X Required and attached

3. Automobile Liability insurance with a combined single limit of not less than $1,000,000 each occurrence for bodily injury and property damage, including coverage for owned, hired, or non-owned vehicles, as applicable.

X Required and attached

4. Professional Liability insurance with a $1,000,000 per claim and $1,000,000 in the aggregate for malpractice or errors and omissions coverage against liability for personal injury, death or damage of property, including loss of use thereof, arising from the firm's acts, errors or omissions in any way related to this Contract.

X Required and attached

5. On All Types of Insurance. There shall be no cancellation or intent not to renew the insurance coverages without 30-days written notice from the Contractor or its insurer(s) to the Port, except 10 days for premium non-payment.

6. Certificate of Insurance. As evidence of the insurance coverage required by this Contract, the Contractor shall furnish acceptable insurance certificates to the Port at the time Contractor returns the signed Contract. The General Liability certificate shall provide that the Port, its Commissioners, officers, agents, and employees are Additional Insured but only with respect to the Contractor's services to be provided under this Contract. Endorsement CG 20 10 04 13 or its equivalent must be attached to the Certificate. The Certificate shall provide that the insurance shall not terminate or be canceled without 30 days written notice first being given to the Port. Insuring companies or entities are subject to Port acceptance. The Contractor shall be financially responsible for all pertinent deductibles, self-insured retentions, and/or self-insurance.

Steven Abendschein PE

Senior Principal

Stantec

Mr. Abendschein has brought his transportation engineering experience to projects that have ranged from master plans and environmental impact studies to major urban corridor designs and revenue studies. He is experienced in forecasting traffic and revenue, performing toll facility feasibility studies, conducting capacity and corridor analyses, analyzing trip and parking generations and creating traffic simulation models. Mr. Abendschein also serves as the managing leader for Stantec's national traffic and revenue practice, and as the Project Manager for all of the firm's west coast traffic and revenue clients, a role he has served in for the past thirteen years.

EDUCATION

Master of Engineering, Engineering Management, Cornell University, Ithaca, New York, 2003

Bachelor of Science, Civil Engineering, Cornell University, Ithaca, New York, 2002

REGISTRATIONS

Professional Engineer ##086519-1, State of New York

MEMBERSHIPS

Member, International Bridge, Tunnel and Turnpike Association

Chair, Scholarship Committee, American Council of Engineering Companies (New York)

PROJECT EXPERIENCE

Toll Facilities

MTA Independent Engineer Traffic and Revenue Study, New York, New York

Mr. Abendschein served as the Project Manager for the annual traffic forecasting and analysis of seven bridges and two tunnels that are operated by the Triborough Bridge and Tunnel Authority and are included within the Metropolitan Transportation Authority's combined continuing disclosure filings for bond financing purposes. Mr. Abendschein was responsible for preparing the independent engineering reports and any necessary bringdown letters as a part of the MTA's continued disclosure filings.

Alaskan Way Viaduct (SR 99) Investment Grade Study, Seattle, Washington

Mr. Abendschein is serving as the Project Manager for the on-going production of an investment grade level traffic and revenue study in order to support the financing of the tolled tunnel. As a part of the study, an extensive data collection program was undertaken, and both regional and microsimulation models were developed and calibrated. Traffic and revenue estimates will also be prepared for numerous toll alternatives, and an analysis of traffic diversion to local streets will also be completed.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

91 Express Lanes-SR 241 Direct Connector, Orange County, California

As the Project Manager, Mr. Abendschein was responsible for forecasting the traffic and revenue potential of constructing direct connectors from the northbound SR 241 to the eastbound 91 Express Lanes, and from the westbound 91 Express Lanes to the southbound SR-241, a joint project for OCTA and TCA. A number of geometric and tolling alternatives were analyzed, and a microsimulation model was constructed in order to determine the operational impacts to the existing 91 Express Lane users. Mr. Abendschein made several presentations to the OCTA and TCA boards, which summarized the study's findings.

Foothill/Eastern Investment Grade Traffic and Revenue Study, Orange County, California

Mr. Abendschein served as the Project Manager for the investment grade study on the Foothill/Eastern Transportation Corridor, which served as the basis for the refinancing of $2 billion in long-term debt. His responsibilities involved the oversight of a large-scale, region-wide data collection program, with over one-hundred count locations, including an origin-destination survey. Given the roadway's proximity to the Orange County/San Diego County border, two local regional models (the RivTAM and SANDAG) were merged into one large-scale model in order to ensure that proper trip assignment patterns were achieved. Logit toll diversions were incorporated into the models, which were calibrated and validated to the new collected traffic data. An intermediate model year was developed, future land use forecasts were prepared and long-term traffic and revenue forecasts were created.

I-405 Express Lanes Traffic and Revenue Study, Orange County, California

As the Project Manager, Mr. Abendschein was responsible for producing traffic and revenue estimates for various Express Lane alternatives along the I-405 Corridor between SR-73 and I-605. Traffic and revenue estimates were completed for alternatives with and without intermediate access points for multiple tolling scenarios (HOV 2+ versus HOV 3+). He was also responsible for overseeing the construction of a corridor microsimulation model using VISSIM in order to analyze the traffic operational impacts of numerous Express Lane configurations, while also examining traffic responses to varying toll levels.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

91 Express Lanes Extension Investment Grade Study, Riverside County, California

Mr. Abendschein served as the Project Manager for this on-going investment grade study in order to analyze the potential traffic and revenue that would be generated by extending the existing 91 Express Lanes into Riverside County, and the proposed HOT lanes into the intersecting I-15 corridor. Mr. Abendschein was responsible for overseeing an extensive data collection program that involved gathering traffic volumes, speeds and origin-destination information. The data was used to calibrate the regional travel demand model in order to forecast future traffic volumes. In addition, Mr. Abendschein was involved in the development of a calibrated microsimulation model using VISSIM for the SR-91 Corridor in order to analyze the traffic operational impacts to the Express Lane extension. The model, which extends from the SR 55/SR 91 merge in the west to Pierce Street, east of the SR 91/I-15 Interchange, includes the detailed modeling of SR 241, SR 71 and I-15, and was used to analyze the operational characteristics of the 91 Express Lanes extension. Using all of the above-mentioned analysis tools, Stantec completed fifty-year traffic and revenue forecasts for a number of different tolling policies.

91 Express Lanes Traffic and Revenue Studies, Orange, California

As Project Manager, Mr. Abendschein was responsible for overseeing the development of a spreadsheet-based traffic and revenue forecast model for the Orange County 91 Express Lanes. The model took into consideration congestion in the corridor, a toll schedule that varied by direction, day, and by hour, and the impact of HOV-3+ vehicles that are allowed to use the lanes for a reduced cost or at no charge. The model was calibrated to replicate existing conditions traffic and revenue for the eastbound and westbound lanes on an hourly basis for both weekdays and weekends and was used to forecast the impact of various build scenarios on the existing toll facility's traffic and revenue.

SR 125 Level II Traffic and Revenue Study, San Diego, California

Mr. Abendschein is serving as the Project Manager for Stantec's on-going contract with SANDAG in order to analyze the traffic and revenue potential of the recently-purchased SR 125 Corridor. These efforts involve assisting the agency with completing an accurate evaluation of the facility; performing a study that included significant new data collection efforts, a recalibration and the incorporation of tolling into the regional model; and analyzing several future toll schedule alternatives. After the purchase of the facility was complete, Stantec has continued to assist SANDAG in its analysis of future toll schedule alternatives, and in completing traffic and revenue studies that are required by the TIFIA loan agreement.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

Bay Area Express Lanes Traffic and Revenue Study, Bay Area, California

As Project Manager and senior tolling engineer, Mr. Abendschein is leading this study that is examining the conversion of 460 lane miles of HOV facilities into Express Lanes. The study, a Level I feasibility study, assesses the revenue potential of tolling the available capacity in the existing HOV network, which spans over thirty-five tolling segments across seven corridors in the Bay Area.

I-680 NB Express Lane Revenue Study, Alameda, California

Mr. Abendschein served as Project Manager for the revenue forecast for the proposed I-680 NB Express Lane from SR 237 to SR 84. He oversaw the collection and summarization of existing travel patterns in the I-680 corridor. Utilizing future growth forecasts in the corridor and a spreadsheet-based market share model, Mr. Abendschein prepared a traffic and revenue forecast for several tolling and operational alternatives for the I-680 NB Express Lane.

I-80 Solano Express Lane Revenue Study, Solano, California

Mr. Abendschein served as Project Manager who evaluated the feasibility of providing Express Lanes within the median of I-80 in Solano County for a distance of 18.6 miles. Mr. Abendschein oversaw the analysis of existing travel patterns within the corridor, analyzed the potential future Express Lane usage depending upon a number of tolling and operational alternatives and prepared a revenue forecast for the facility.

I-580 Express Lanes Revenue Study, Alameda, California

Mr. Abendschein served as the Project Manager for the revenue forecast of the proposed I-580 Express Lanes, which span approximately fourteen miles from the I-580 Interchange to Greenville Road in Livermore. Utilizing future growth forecasts within the corridor and a spreadsheet-based market share model, Mr. Abendschein prepared a traffic and revenue forecast for several tolling and operational alternatives for the I-580 Express Lanes.

TCA Foothill/Eastern Investment Grade Study, Orange County, California

Mr. Abendschein served as the Project Manager for the Investment Grade Study on the Foothill/Eastern Transportation Corridor that served as the basis for the re-financing of $2B in long-term debt. Among his responsibilities include oversight of a large-scale, region-wide data collection program, with over 100 count locations, including an origin-destination survey. Given the roadway's proximity to the Orange County/San Diego County border, two local regional models (the RivTAM and SANDAG models) were merged into one large-scale model to ensure proper trip assignment patterns were achieved. Logit toll diversions were incorporated into the models, which were calibrated and validated to the new traffic data collected. An intermediate model year was developed, future land use forecasts were prepared, and long-term traffic and revenue forecasts were prepared.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

TCA San Joaquin Hills Investment Grade Study, Orange County, California

Mr. Abendschein served as the Project Manager for the investment grade study on the San Joaquin Hills Transportation Corridor that served as the basis for the refinancing of $1.4 billion in long-term debt. In order to prepare this study, a large-scale data collection program was completed to calibrate the regional travel demand model. This program encompassed counts at over one-hundred locations, the analysis of agency transaction data and the completion of speed and travel time runs. Logit-based toll diversion equations were incorporated into the regional travel demand model, along with updated socioeconomic projections and the development of a future toll schedule. Mr. Abendschein led all presentations to rating agencies and potential investors, and was the main author of the investment grade traffic and revenue report.

San Bernardino County HOT Lanes, San Bernardino, California

As the Project Manager, Mr. Abendschein was responsible for forecasting the traffic and revenue that was generated by a network of over one-hundred miles of proposed HOT lanes along three interstate highways. He oversaw the development of a spreadsheet model that used a travel demand model's daily corridor traffic forecasts as input, and took into consideration the usage of the HOT lanes on an hourly basis, the volume to capacity ratio on the adjacent general purpose lanes and the potential use of the lanes by HOV-3+ vehicles that would ride toll-free. The model was used to apportion the demand to the general purpose and HOT lanes on an hourly and daily basis using a market share analysis. Toll schedules were created that allowed for variable tolls, which were dependent upon HOT Lane demands.

Bella Vista Bypass: Traffic and Revenue Study, Bentonville, Arkansas

As Project Manager, Mr. Abendschein was responsible for building a traffic and revenue model that applied site-specific toll diversion curves to estimate and project the probable Bella Vista Bypass traffic and revenue for a 30-year time period. In addition to conducting baseline estimates, several sensitivity analyses were undertaken, including forecasting the traffic and revenue impacts caused by changing the toll rates charged at the mainline toll plaza, reducing the bypass from four lanes to two, relocating mainline toll plaza, and converting the Bella Vista Bypass into an all-electronic toll facility.

Vespucio Norte Express - Traffic and Revenue Study, Santiago, Chile

As Transportation Engineer, Mr. Abendschein constructed a detailed, 30-year spreadsheet model that forecasted tolled traffic volumes and revenues by analyzing numerous economic trends, including but not limited to international copper prices, future Chilean GDP, and regional development. The model featured user-friendly components such as automated, iterative congestion pricing in order to determine toll pricing strategies. The results of the model were used to aid in the decision to purchase an equity share for the sale of 20 percent interest in the Vespucio Norte Express all-electronic toll facility in Santiago, Chile.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

I-5 Columbia River Crossing Partnership: Traffic and Tolling Analysis, Portland, Oregon
As Project Manager, Mr. Abendschein was responsible for producing a spreadsheet model to calculate traffic and revenue projections for a new Columbia River crossing. Using existing traffic distribution patterns and classification data, he projected annual traffic and revenue streams for a 40 year period for various tolling alternatives. In addition, Mr. Abendschein helped create several toll schedule alternatives to model for future work.

Environmental Impact Assessments

Triborough Bridge and Tunnel Toll Rate Impact Environmental Assessment, New York, New York
A regular two-year scheduled toll increase for the Triborough Bridge and Tunnel Authority was assessed for environmental effects, in particular the effects due to added congestion at toll plazas and diversion to nearby toll free routes. Mr. Abendschein served as the project manager, overseeing the technical analyses and preparation of the Environmental Assessment Statement. These analyses included determining levels of diversion by payment type for several toll policy alternatives by analyzing historic toll elasticities and driver responses to past toll increases.

Crotona Park / West Farms Rezoning, Bronx, NY
Mr. Abendschein oversaw the traffic and pedestrian analyses completed as part of the Environmental Impact Statement (EIS) for the proposed rezoning of a 16.8 acre area in the Crotona Park East section of the Bronx. The project included over 2,700 residential units (including 915 subsidized units) and approximately 140,000 square feet of commercial space.

15 Penn Plaza Redevelopment, New York, NY
As Project Manager, Mr. Abendschein is responsible for producing the traffic and parking and transit and pedestrians chapters for the 15 Penn Plaza Environmental Impact Statement. As part of the redevelopment of 15 Penn Plaza, the Gimbels Passageway, an underground pedestrian corridor connecting the 34th Street-Herald Square subway station with the 34th Street-Penn Station subway station, will be reopened. Mr. Abendschein is responsible for projecting future pedestrian volumes and level-of-service for three future analysis years: 2013, 2018 and 2030.

Madison Square Garden Relocation, NY, NY
As Transportation Engineer, Mr. Abendschein is responsible for overseeing the transit and pedestrian section of the Madison Square Garden Relocation Environmental Impact Statement (EIS). Mr. Abendschein has been involved in the trip generation and trip assignment process and has analyzed sidewalks, corners, and crosswalks in the Madison Square Garden area. He also used existing bus and subway ridership data to analyze existing transit demand versus capacity. He then projected future ridership for the projected 80 million square feet of development in the Moynihan District and assigned these transit users to specific bus and subway lines to determine if future transit capacity exceeded demand. He is also responsible for drafting the transit and pedestrians chapter for the EIS. He is also responsible for drafting the transit and pedestrian chapter for the EIS.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

Traffic Engineering

Route 9A Project – Lower Manhattan Redevelopment, New York, New York

As Transportation Engineer, Mr. Abendschein was responsible for conducting traffic and pedestrian analyses along Route 9A for various construction alternatives. Mr. Abendschein optimized signal timings to allow acceptable traffic flows as well as safe pedestrian crossings. He also developed traffic simulations using VISSIM and Paramics to illustrate various impacts created by numerous Route 9A alignment scenarios. Mr. Abendschein coordinated and conducted several pedestrian surveys throughout the Route 9A study area and was responsible for conducting level-of-service and capacity analyses for future conditions along the Route 9A corridor. He was involved in analyzing site access/egress for future World Trade Center development. Mr. Abendschein also assisted in drafting the traffic section of the Supplemental Environmental Impact Statement.

Southeast Queens Transportation Study, Queens and Nassau Counties, New York

Mr. Abendschein served as the Technical Advisor for a regional transportation study in southeast Queens. Components of the study included an accident analysis and level-of-service analysis to evaluate potential transportation improvements in the area.

Sagtikos State Parkway /Sunken Meadow State Parkway Operational Performance Study, Suffolk County, New York

A roadway performance study for the 11.2 mile Sagtikos State Parkway/Sunken Meadow State Parkway (NY 908K) corridor is currently being performed in order to address existing operational deficiencies and impacts to the transportation network from significant development in the area. As Project Manager, Mr. Abendschein oversees the project's transportation analyses, which includes utilizing the NYMTC Best Practices Model (BPM) and developing a VISSIM micro-simulation model to analyze short- and long-term transportation improvement projects.

** denotes projects completed with other firms*

Steven Abendschein PE

Senior Principal

PUBLICATIONS

Do Toll Roads Need a Publicist. ACEC Insights, 2014.

Stantec

Memo

To:	Kevin Greenwood Port of Hood River	From:	Rick Gobeille Steve Abendschein
File:		Date:	August 31, 2018

Reference: Range of Effort Associated with Traffic and Revenue (T&R) Studies

There are commonly eight primary levels of work that are associated with Traffic and Revenue (T&R) forecasting studies. In addition to forecasting Traffic and Revenue, depending on the level of work, its complexity and specific client requests, these efforts frequently include other related analyses including:

- Development of Toll Policy
- Development of Toll Rates and Customer Discount Programs
- Development of Long Term Toll Schedules
- Estimates of Toll Operating and Maintenance Costs
- Estimates of Facility Operating and Maintenance Costs
- Estimates of Debt Capacity
- Estimates of CAPEX and Renewal and replacement costs.

As noted, the specifics of each assignment and the characteristics of each facility will influence what aforementioned analyses can be completed.

1. Planning Level Study – Very often an entity will request a T&R planning level study. A scope is usually developed around a question like: “What if we put a toll on this section of the highway?” This study activity is usually performed at a very high level and is only used as guidance by those that requested it whether to consider a further, more-detailed study. This is also often referred to as a “back-of-the-envelope” analysis.

2. Budgetary Estimates – When retained by a tolling Authority, the T&R specialist is usually annually required to make an estimate of future T&R as part of the Authority’s Trust Agreement. These are generally used as planning tools by the Authorities and as guidance for anticipating when a potential toll rate modification or bond issue may be required to meet the terms of the Trust Agreement.

3. Level I T&R Study - A Level I Study generally entails a limited analysis of a proposed toll project. These studies are often requested by a private developer or toll authority that is considering a new project and is looking to make a decision on its viability before expending significant time and money further developing the overall project design and financing. This type of project usually includes an extensive site visit and results in a short letter report or technical memorandum of the findings.

4. Level II T&R Study – A Level II Study usually follows a Level I study that found a project to be potentially viable. Efforts for a Level II Study generally include some type of traffic modeling, a more extensive collection of basic data sets, and a more extensive level of site visits. Many of these efforts are supported by local offices and local sub-consultants and sub-contractors to more effectively collect information. The final output of a study of this nature is a report detailing the findings and including a series of sensitivity analyses that in essence put a range on the projections of traffic and revenue that may be related to changes in key assumptions. In some cases, Level II reports are used for financing, typically for private placement or concession level financing. Projects with this Level of analyses have been financed with invest-grade ratings.

5. Level III T&R Study – A Level III Study is often referred to as an "investment-grade" study. This type of study is generally for a major reconstruction or for a green-field project. It requires extensive work in developing a forecasting model, large amounts of data collection, and extensive analyses of various economic factors not typically considered in some of the other Levels of studies. Though the name for these types of studies is often referred to as "investment-grade", there is no guarantee that an investment-grade rating for a project will result from this study. Many other factors go into the development of a project's rating. Revenues are only one of several factors that the bond rating agencies use to assess the rating for any debt issued.

6. T&R Estimates for Official Statements – Often projections of traffic and revenue are used as part of an "Official Statement" that is required as part of a public offering of debt. Studies of the Levels conducted for items 2, 4 and 5 listed herein have been used as supporting reports for Official Statements. The most common uses for each would be Budgetary Estimates for new issues of debt on an existing facility, a Level II study for new debt that is privately placed or public debt on a "simple" green-field project, or the Level III Study that would be used for a new issue or for a complex green-field project. Costs for these efforts range widely, but almost always include senior staff making presentations to the rating agencies and potential investors.

7. Certificates Prepared in Accordance with Trust Agreements – Most all Revenue Bond-based debt issued for toll facilities include provisions in their trust agreements state that certain events would trigger the debt issuer conducting a traffic study. The results of these studies would result in the traffic engineer "certifying" that the study conducted is true and reasonable. Events that may include such a trigger are toll rate changes, a change in vehicle classes, the constructing or closing of a toll plaza, etc. A certificate is generally included as part of the documents that accompany an Official Statement or are submitted as independent documents to the Trustees of the Bonds that would be affected by the proposed changes. The certificate usually takes one of two forms: a letter from the consultant, or a one-page form document that addresses specific items that are contained within an Official Statement.

8. Due Diligence – Parties would sometimes contract with a T&R firm to perform a due diligence of work conducted by others. For example, investors or insurers would like a third party to do a reasonableness check on a T&R Study conducted by another firm.

In all cases, Stantec would not be making any specific financing or investment decisions. Our work will be input to and support for the actual financial planning and debt recommendations for an agency. We do not act as an Independent Registered Municipal Advisor.

Stantec

Reference: **Range of Effort Associated with Traffic and Revenue (T&R) Studies**

Stantec Consulting Services Inc.

Rick Gobeille PE
Senior Principal

Phone: 2123665625
Fax: Sender's Fax
Rick.Gobeille@stantec.com

Attachment: Attachment

c. C.C.

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