

Commission Memo



Prepared by: Fred Kowell
 Date: May 15, 2018
 Re: Financial Review for the Nine Months
 Ended March 31, 2018

Please see the four attachments regarding this financial review as follows:

- Bridge Traffic and Revenue Report
- Schedule of Expenditures by Cost Center by Fund
- Schedule of Revenues by Cost Center by Fund
- Statement of Operating Revenues, Expenditures and Other Sources and Uses

Bridge Traffic and Revenue Report

The Bridge Traffic and Revenue Report, shows traffic is up by 8% over last year and revenues are up 13% due to the February toll increase. It looks like the toll revenues that were impacted by the Eagle Creek fire, about \$80,000, have been recovered as compared against the prior year, but still well below our budget forecast for the year. Toll revenues should come in around \$4.96 million this year as compared against a budgeted \$5.2 million.

Schedule of Expenditures by Cost Center by Fund

Personnel services are running slightly under the budget but for many cost centers they are on target. Some of the cost centers are seasonal in nature and will close to the budget as we get closer to year end.

Materials & Services overall is tracking slightly below budget, but for many cost centers like industrial properties, the marina, and the hook/spit, will exceed their budgets mainly due to much higher utility costs, and in some instances, maintenance which was not planned for.

Capital Outlay is tracking below budget as most of the capital projects are now moving forward due to the spring/summer season. It is anticipated that some projects that have been delayed due to environmental (FAA) or agreements with other jurisdictions (Lower Mill) will come significantly under budget. Maintenance is over budget with regard to the equipment and vehicles purchased (i.e., electronic sign) which was higher than originally budgeted. Under Administration, the money machine ended up costing less than budgeted and will cover the shortfall in Maintenance.

Schedule of Revenues

Unlike toll revenues, lease revenues from our industrial and commercial properties are tracking according to their budget and should come in over budget in some instances due to the higher utility reimbursements. Recreation will start in May 2018 with the sale of annual passes and should see slight increases in revenues as the pre-season pass has become more affordable.

Statement of Operating Revenues, Expenditures and Other Sources and Uses

Overall, the actuals are tracking according to the activities incurred during 75% of the year as outlined in the budget, with the exception of the financial impact of the Eagle Creek fire. On a cashflow basis, we're depicting an overall positive of \$713,087 which does not reflect the billings that need to occur for our reimbursable grants related to the airport and the annual marina operating grant from the OSMB.

Accounts Receivables Update – Pfriem has kept to their payment plan that will make them current over a six-month period. Other accounts receivables are within a reasonable aged period based upon their billings, with the exception of Gianino Marble who was turned over to Collections and are now reimbursing on a quarterly basis.

Since we did not have a severe winter, bridge traffic should continue to experience a 2-4% uptick as historically has occurred.

RECOMMENDATION: Discussion.

PORT OF HOOD RIVER
Bridge Traffic and Revenue Report - Quarterly
Exhibit B
Columbia State Bank Loan - Covenant - 3.9 (g)

	2013-14		2014-15		2015-16		2016-17		2017-18		Change from Prior year	
	Traffic	Revenue	Traffic	Revenue	Traffic	Revenue	Traffic	Revenue	Traffic	Revenue	Traffic	Revenue
JUL	372,181	\$ 339,743	379,536	\$ 341,480	399,634	\$ 382,921	423,744	\$ 402,074	442,251	\$ 399,618	1.04	0.99
AUG	372,950	\$ 344,140	380,914	\$ 348,030	391,499	\$ 376,690	425,567	\$ 407,839	435,364	\$ 401,815	1.02	0.99
SEPT	330,147	\$ 304,490	344,693	\$ 317,989	364,125	\$ 350,020	387,860	\$ 372,099	412,452	\$ 332,996	1.06	0.89
OCT	326,995	\$ 299,209	336,623	\$ 303,073	353,313	\$ 339,194	357,180	\$ 337,294	389,210	\$ 361,315	1.09	1.07
NOV	281,772	\$ 252,702	274,601	\$ 244,065	312,731	\$ 297,037	330,795	\$ 313,529	341,147	\$ 312,337	1.03	1.00
DEC	272,528	\$ 237,524	290,855	\$ 249,793	289,296	\$ 269,344	285,209	\$ 260,625	324,278	\$ 298,530	1.14	1.15
Calendar Year Total	3,749,551	\$3,384,542	3,829,791	\$3,424,449	4,063,317	\$3,814,690	4,280,160	\$4,028,417	4,377,500	4,038,137	1.02	1.00
JAN	274,253	\$ 244,374	286,390	\$ 259,626	291,674	\$ 272,828	245,670	\$ 238,709	327,522	\$ 293,677	1.33	1.23
FEB	248,373	\$ 219,088	281,351	\$ 259,207	305,800	\$ 286,071	266,202	\$ 244,472	296,977	\$ 387,737	1.12	1.59
MAR	297,531	\$ 265,325	324,912	\$ 299,162	342,162	\$ 317,959	350,470	\$ 324,146	357,160	\$ 501,543	1.02	1.55
APR	317,218	\$ 282,097	334,016	\$ 307,643	365,654	\$ 338,556	\$ 362,559	\$ 334,362			0.00	0.00
MAY	343,575	\$ 301,985	360,643	\$ 341,172	381,248	\$ 357,119	\$ 399,271	\$ 368,296			0.00	0.00
JUN	341,619	\$ 307,150	365,407	\$ 332,673	383,267	\$ 362,425	\$ 408,626	\$ 421,541			0.00	0.00
Fiscal Year Total	3,779,142	\$3,397,826	3,959,941	\$3,603,914	4,180,403	\$3,950,164	4,243,153	\$4,024,985	3,326,361	3,289,588	1.02	1.02

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PORT OF HOOD RIVER
 SCHEDULE OF EXPENDITURES BY COST CENTER BY FUND
 BUDGET AND ACTUAL - 75% THROUGH THE BUDGET
 FOR THE NINE MONTHS ENDED MARCH 31, 2018

EXPENDITURES	Personal Services			Materials & Services			Capital Outlay			Debt Service			Total Appropriation			
	Budget	Actual	Unspent	Budget	Actual	Unspent	Budget	Actual	Total	Budget	Actual	Unspent	Budget	Actual	Unspent	
<i>Industrial Facilities</i>																
Big 7	49,900	36,772	13,128	142,200	122,218	19,982	55,000	9,132	9,132	45,868	17%	-	247,100	168,122	78,978	
Jensen Property	61,500	44,761	16,739	171,900	136,833	35,067	466,000	1,444	1,444	464,556	0%	145,000	844,400	291,805	552,595	
Maritime Building	38,900	28,983	9,917	88,000	69,649	18,351	10,000	-	-	10,000	0%	-	136,900	98,632	38,268	
Halvard Building	64,300	47,384	16,916	227,500	197,526	29,974	10,000	-	-	10,000	0%	-	301,800	244,910	56,890	
Timberline Incubator Building	29,900	22,252	7,648	34,300	23,900	10,400	23,000	-	-	23,000	-	-	87,200	46,152	41,048	
Wasco Building	48,900	36,518	12,382	91,700	79,108	12,592	30,000	-	-	30,000	-	-	170,600	115,626	54,974	
Hanel Site	43,300	32,684	10,616	49,900	23,031	26,869	625,000	83,138	83,138	541,862	13%	140,800	859,000	195,117	663,883	
	336,700	249,354	87,346	805,500	652,265	153,235	1,219,000	93,714	93,714	1,125,286	8%	285,800	2,647,000	1,160,364	822,753	
<i>Commercial Facilities</i>																
State Office (DMV) Building	26,100	18,481	7,619	39,500	27,778	11,722	25,000	7,857	7,857	17,144	-	-	90,600	54,116	36,485	
Marina Office Building	37,700	26,918	10,782	46,100	32,980	13,120	43,000	34,945	35,090	7,910	81%	-	126,800	94,843	31,957	
Port Office Building	36,100	24,828	11,272	24,600	19,114	5,486	25,000	-	-	25,000	0%	-	85,700	43,942	41,758	
	99,900	70,227	29,673	110,200	79,872	30,328	93,000	42,802	42,947	50,054	46%	-	303,100	192,901	110,199	
<i>Waterfront Industrial Land</i>																
	40,700	30,007	10,693	78,000	28,592	49,408	85,000	4,471	4,471	80,529	5%	-	203,700	63,070	140,630	
<i>Waterfront Recreation</i>																
Eventsite	128,200	67,405	60,795	40,000	31,021	8,979	15,000	11,120	11,120	3,880	74%	-	183,200	109,546	73,654	
Hook/Spit/Nichols	45,200	33,677	11,523	29,000	27,571	1,429	54,500	-	-	54,500	0%	-	128,700	61,248	67,452	
Marina Park	154,500	109,141	45,359	63,900	24,452	39,448	43,000	-	-	43,000	0%	-	261,400	133,593	127,807	
	327,900	210,223	117,677	132,900	83,044	49,856	112,500	11,120	11,120	101,380	10%	-	573,300	304,387	268,913	
<i>Marina</i>																
	132,800	102,162	30,638	110,200	100,501	9,699	79,000	10,835	10,835	68,165	14%	96,700	80,513	16,187	124,689	
<i>Airport</i>																
	128,800	98,077	30,723	169,000	101,295	104,680	1,966,078	1,604,552	1,604,552	361,526	82%	-	2,263,878	1,803,924	459,954	
<i>Administration</i>																
Maintenance	6,000	-	6,000	151,300	84,012	67,288	20,000	3,025	3,025	16,975	15%	-	177,300	87,037	90,263	
	-	-	-	84,600	80,167	4,433	43,500	52,491	52,491	(8,991)	121%	-	128,100	132,658	(4,558)	
Total Expenditures	1,955,400	1,394,228	561,172	2,264,800	1,642,256	659,519	3,876,078	2,035,640	2,035,784	1,840,294	53%	382,500	245,544	136,956	8,478,778	
Bridge Repair & Replacement Fund	90,100	101,324	(11,224)	305,000	130,563	174,437	2,224,500	487,710	487,710	1,736,790	22%	677,500	11,393	666,107	2%	3,297,100
General Fund	173,000	95,794	77,206	417,950	242,941	175,009	-	-	-	-	-	-	590,950	338,735	252,215	

Unfavorable Variance - Expenditures

Payroll overall is on track with the budget in most areas with the exception of the Eventsite which is seasonal. However, Materials and Services in our industrial properties will most likely need budgetary relief from Capital Outlay by the end of the year as utilities and maintenance have been higher than budget. The Bridge R&R Fund had contemplated using Professional Services instead of a Port employee, thus the difference. Capital Outlay in most areas are lower than budget as we come out of the winter season into the construction season. With the exception of Maintenance which purchased the electronic board, they would be on target.

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PORT OF HOOD RIVER
Schedule of Revenues by Cost Center By Fund
Budget to Actuals - 75% Through Budget
For the Nine Months Ended March 31, 2018

	REVENUES				
	Budget	Actual	Total	Variance	%
REVENUE FUND					
<i>Toll Bridge</i>					
Bridge Tolls	5,250,000	3,313,793	3,313,793	(1,936,207)	63%
Cable Crossing Leases	10,000	5,300	5,300	(4,700)	53%
Other	1,000	10,050	10,050	9,050	1005%
	<u>5,261,000</u>	<u>3,329,143</u>	<u>3,329,143</u>	<u>(1,931,857)</u>	<u>63%</u>
<i>Industrial Facilities</i>					
Big 7					
Lease Revenues	189,800	193,901	\$ 193,901	4,101	102%
Reimbursements/Other	76,800	65,327	\$ 65,327	(11,473)	85%
<i>Jensen Property</i>					
Lease Revenues	340,900	258,135	258,135	(82,765)	76%
Reimbursements/Other	130,600	104,042	104,042	(26,558)	80%
<i>Maritime Building</i>					
Lease Revenues	202,000	147,954	147,954	(54,046)	73%
Reimbursements/Other	57,800	43,623	43,623	(14,177)	75%
<i>Halyard Building</i>					
Lease Revenues	218,500	163,722	163,722	(54,778)	75%
Reimbursements/Other	185,400	174,837	174,837	(10,563)	94%
Note Receivable	19,550	14,663	14,663	(4,887)	75%
<i>Timberline Incubator Building</i>					
Lease Revenues	69,000	53,037	53,037	(15,963)	77%
Reimbursements	15,000	12,556	12,556	(2,444)	84%
<i>Wasco Building</i>					
Lease Revenues	145,500	121,204	121,204	(24,296)	83%
Reimbursements	47,500	43,357	43,357	(4,143)	91%
<i>Hanel</i>					
Reimbursements	-	-	-	-	-
Sale of Property	490,000	-	-	(490,000)	0%
	<u>2,188,350</u>	<u>1,396,358</u>	<u>1,396,358</u>	<u>(791,992)</u>	<u>64%</u>
<i>Commercial Facilities</i>					
State Office (DMV) Building					
Lease Revenues	45,100	33,538	33,538	(11,562)	74%
Reimbursements	-	24,195	24,195	24,195	#DIV/0!
Marina Office Building					
Lease Revenues	68,900	51,181	51,181	(17,719)	74%
Reimbursements	22,500	16,548	16,548	(5,952)	74%
Port Office Building					
Lease Revenues	48,550	36,412	36,412	(12,138)	75%
Reimbursements	500	-	-	(500)	0%
	<u>185,550</u>	<u>161,874</u>	<u>161,874</u>	<u>(23,677)</u>	<u>87%</u>
<i>Waterfront Industrial Land</i>					
Lease Revenues	600	-	-	(600)	0%
Land Sale	-	-	-	-	#DIV/0!
Parking	-	-	-	-	0%
Other Income	-	1,725	1,725	1,725	#DIV/0!
URA Payments	339,100	341,462	341,462	2,362	101%
	<u>339,700</u>	<u>343,187</u>	<u>343,187</u>	<u>3,487</u>	<u>101%</u>
<i>Waterfront Recreation</i>					
Eventsite, Hook and Spit					
Eventsite - Passes/Permits and Concessions	124,200	55,671	55,671	(68,529)	45%
Hook/Spit/Nichols	24,100	2,050	2,050	(22,050)	9%
Marina Park					
Sailing Schools, Showers and Events	9,200	5,247	5,247	(3,953)	57%
Lease Revenues	6,500	5,003	5,003	(1,497)	77%
Reimbursements	2,000	1,879	1,879	(121)	94%
Grant	-	-	-	-	#DIV/0!
	<u>166,000</u>	<u>69,850</u>	<u>69,850</u>	<u>(96,150)</u>	<u>42%</u>
Marina					
Lease Revenues	196,000	191,232	191,232	(4,768)	98%
Moorage Assessment	85,200	84,872	84,872	(328)	100%
Reimbursements/Other	61,400	44,163	44,163	(17,237)	72%
Grant	7,050	-	-	(7,050)	0%
Other Financing Sources	-	-	-	-	#DIV/0!
	<u>349,650</u>	<u>320,267</u>	<u>320,267</u>	<u>(29,383)</u>	<u>92%</u>
Airport					
Lease Revenues	179,900	157,546	157,546	(22,354)	88%
Reimbursements	21,000	14,886	14,886	(6,114)	71%
Grants	1,740,000	1,140,776	1,140,776	(599,224)	66%
Other Financing Sources	-	-	-	-	-
	<u>1,940,900</u>	<u>1,313,208</u>	<u>1,313,208</u>	<u>(627,692)</u>	<u>68%</u>
Budget to Actual Revenues	<u>10,431,150</u>	<u>6,933,887</u>	<u>6,590,700</u>	<u>(3,500,751)</u>	<u>66%</u>
Revenues less Other financing sources	<u>7,834,450</u>	<u>5,426,936</u>	<u>5,083,748</u>	<u>(2,411,002)</u>	<u>69%</u>
GENERAL FUND					
Property taxes	68,400	67,181	67,181	(1,219)	98%
Transfers from other funds	522,600	337,809	337,809	(184,791)	65%
	<u>\$ 591,000</u>	<u>\$ 404,990</u>	<u>\$ 404,990</u>	<u>\$ (186,010)</u>	<u>69%</u>
BRIDGE REPAIR & REPLACEMENT FUND					
Transfers from other funds	<u>\$ 3,164,300</u>	<u>\$ 726,461</u>	<u>726,461</u>	<u>(2,437,839)</u>	<u>23%</u>

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Port of Hood River Bridge Traffic Activity



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Hood River-White Salmon Bridge Replacement Project

Project Director Report

May 15, 2018

The following summarizes Bridge Replacement Project activities from May 2 through May 15, 2018.

FINAL ENVIRONMENTAL IMPACT STUDY (FEIS)

REQUEST FOR PROPOSALS (RFP) PROCESS

- Key timeline dates (Commission meetings in *italics*), X=completed:
 - Release RFPMarch 28, 2018 X
 - Pre-Submittal MeetingApril 18, 2018 X
 - Submittals Due to the SWRTC.....April 25, 2018 X
 - EISEC interviews top ranked proposers May 23, 2018
 - Management Prepares Commission Staff Report May 29, 2018
 - *Commission Authorizes Negotiations to Begin* June 5, 2018
 - Management Prepares Commission Staff ReportJune 26, 2018
 - *Commission Approves Contract (tent.)*July 3, 2018
 - Contract Begins/Notice to ProceedJuly 2018
- Reviewed and evaluated all three proposals and returned notes to SWRTC.
- Thanks to the Port's auditor for letting the Evaluation Committee use the conference room for the day of the 23rd.
- Schedule is on track.

POLICY ADVISORY COMMITTEE (BRAC) UPDATE

- Ex-Port Commissioner Jon Davies will join the BRAC and present updates to the Region 1 Area Commission of Transportation.
- As mentioned last month the Washington communities are expressing concerns about the format of the BRAC and the Organizational Chart. Included in the packet is the letter received on May 9, signed by the Port of Klickitat, the City of Bingen, and Klickitat County, expressing concern about control of the project. A letter was sent to White Salmon Mayor David Poucher from Michael McElwee clarifying the limitations of the current effort and encouraging Washington participation. A memo of understanding (MOU) was signed in 2008 between Oregon and Washington local governments (included in packet) laying the groundwork for pursuit of the FEIS. The Port's correspondence has tried to reinforce the points about supporting efforts to fund the FEIS made in the MOU and the Port's intent to move the ball forward toward a bi-state solution.
- The BRAC is being established to fulfill expectations in the IGA between ODOT and the Port of Hood River. Any significant decisions about procurement and delivery are years away. The BRAC will work closely with the EIS Consultant Team to receive status updates, final reports and otherwise provide a feedback loop between the consultants' work and the member communities. The intent is to provide a

transparent and open review of information between the Port and communities throughout the Gorge.

- The Port Commission may want to consider the development of a policy statement via resolution that responds to concerns being heard from the Washington side of the gorge. Elements of such a resolution could include:
 - History of the Port of Hood River’s involvement with the Bridge.
 - Need for the Bridge Replacement based upon its structural obsolescence.
 - Summary of the Bi-State efforts including the significant contributions from Washington U.S. Representative Doc Hastings to complete the Draft EIS and Type Size & Location Studies.
 - Reinforce the Bi-State efforts stated in the 2008 MOU.
 - Noting the Port of Hood River’s successful effort to secure funding as agreed to in the 2008 MOU for a Final EIS.
 - Affirming that the Port is committed to a Bi-State solution to Bridge Replacement.
 - Decisions about the ownership, procurement and construction of a new bridge are not part of the current FEIS contract with the State of Oregon.
 - Acknowledging that the Port may not be the sole or part future owner of the new bridge.
 - Affirming the importance of a new bridge to the region and how it’s replacement could alter the future of the Port of Hood River.

Commission discussion is sought on this complex and significant issue.

PROJECT DELIVERY CONSIDERATION

P3 ADMINISTRATIVE RULES PROCESS

- Key timeline dates (Commission meetings in *italics*), X=completed:
 - *Prelim Review Draft #1 Discussed*January 23, 2018 X
 - *Commission Directs Changes to Draft #1*.....February 6, 2018 X
 - *Commission Directs Changes to Draft #2*.....February 20, 2018 X
 - Public Discussion Draft ReleasedFebruary 23, 2018 X
 - Written Comments DueMarch 15, 2018 X
 - *Public Hearing #1*March 20, 2018 X
 - *Commission Reviews PD Draft Changes (if any)*..... April 3, 2018 X
 - Staff Prepares Revised Recommended DraftApril 6, 2018 X
 - Notice for Second Hearing.....April 13, 2018 X
 - Written Comments DueApril 27, 2018 X
 - Staff Prepares Compilation of CommentsApril 30, 2018 X
 - *Public Hearing #2* May 1, 2018 X
 - Comments Reviewed; Recommendations to Comm..... May 4, 2018 X
 - Post Proposed Final Draft on Website..... May 11, 2018 X
 - *Commission Vote on Final Draft of Rule* June 5, 2018

- Staff incorporated Jerry Jaques' comments from the May 1st meeting into the Proposed Final Draft. No other comments were received. A red-lined version of Proposed Final Draft was posted on Port's website on May 7th, four days in advance of the schedule.
- Due to the Budget Committee Meeting on May 15th, the Commission vote on the Proposed Final Draft has been moved to June 5th. This gives the public another full two weeks to review the document.
- The Commission will receive a complete final draft of the rule in this month's packet for consideration.

FINANCING OPTIONS

- Management team had a lengthy conference call with representatives of the West Coast Infrastructure Exchange (WCX) and Partnerships BC (PBC) on May 10th. The WCX serves as a resource to public agencies in Washington, Oregon, and California exploring alternatives to traditional methods of infrastructure procurement. PBC provides public agencies (primarily in Canada) expertise in assessing how the private sector (P3s) can benefit public projects. PBC partners with the WCX when working with agencies in the United States.
- WCX/PBC can build methodologies for a variety of construction delivery models that result in "value for money" alternatives. Processes can take 24-32 months to complete including risk assessments.
- Staff is continuing to meet with and evaluate firms that can provide services to educate and inform agencies on financing alternatives.
- Steve Siegel will be developing a Washington state legislative plan and financial modeling plan to review in the next month.

CONSTRUCTION COST ESTIMATE

- A copy of the Mott McDonald SR-35 Columbia River Crossing – Estimate Report, April 27, 2018, is included in the packet.
- The Port commissioned Mott McDonald (MM) to review the design and cost assumptions prepared for the Type, Size and Location Study prepared by Parsons Brinckerhoff in 2011. The intent was to have a fresh review of the 2011 assumptions and prepare a more current cost estimate as the Port proceeds with the terms set forth by the Oregon legislature in 2017.
- Highlights from the Estimate Report:
 - MM did identify some items not adequately addressed in the 2011 estimate. Costs related to cofferdams and deck drainage were included in the new estimate.
 - A number of items were not included in the 2011 estimate and are not included in the new cost estimate. They are utility lines attached to current bridge, deck lighting, communication systems, traffic control (construction

- practice), tolling facilities/systems, and mitigation related to pile driving (construction practice).
- Removal of the old bridge is part of this estimate.
- The cost estimate in 2020 dollars is \$271,800,000 using a 50% contingency on design and construction items. This is a bump up from the 35% contingency in the 2011 study.
- A 7% sales tax for the Washington half of the bridge was assumed.
- Paul Heydenrych, Vice President of MM, is available on June 5th to answer any questions the Commission may have about the Estimate Report.

COMMUNITY OUTREACH

WORK SESSION IN JUNE

- Staff has discussed with the Commission about a follow up Work Session on next steps related to the EIS and Financing Options studies that will be starting in July.
- Here is the tentative schedule for the Commission's review...
 - National Environmental Protection Act (NEPA) 101 – 30 minutes lead by Chuck Green, OTAK
 - Simplified NEPA flow chart showing milestones
 - Summary of previous Draft EIS. What it included and where it left off.
 - Difference between NEPA clearances and permits.
 - How decisions are made
 - Advisory Committee structure
 - Project Development Schedule – 45 minutes lead by Lowell Clary
 - Elements of project development
 - Components during NEPA, after NEPA and before P3/Design Build
 - Funding vs. Financing
 - Project Delivery Alternatives and Possible Procurement Schedules – 45 minutes lead by Lowell Clary, Chuck Green
 - Process flow schedule showing NEPA, Project Delivery paths and timelines
 - Procurement steps
 - Next Steps – 30 minutes facilitated by Kevin Greenwood, Clary/Green assist
 - Overview of project roles and responsibilities
 - Overview of scope and approach for advisory groups
 - Discuss timing and draft schedule of future BRAC meetings (if first BRAC meeting)
 - Input from Federal Highway Administration (FHWA) on roles of advisory committees in NEPA process
 - Open form for discussing advisory groups
 - Identify follow up action items
- Work Session would be scheduled for two and half hours prior to June 21st.

- Opportunity for Port Commission, BRAC and public to become more educated and informed about the activities required through the IGA between the State of Oregon and the Port of Hood River.

MISCELLANEOUS

- Staff met with representatives from the Washington and Oregon state legislatures on May 8th to present background and clarify the current NEPA process. Sen. Curtis King, representing Washington's 14th district, is a key member of the Washington State Senate Transportation Committee (its former chair), called the meeting to build relationships with Oregon legislators and learn more about the current NEPA EIS phase being funded with Oregon state funds. Staff anticipates that there will be subsequent meetings with broader involvement to discuss the opportunities and challenges related to future bridge ownership and financing.
- I attended White Salmon City Council Meeting with Commissioner Shortt on May 1;
- I will be meeting with Peter Cornelison, Hood River City Council member on May 14.
- I will attend the White Salmon City Council Meeting, May 16 and the Columbia River Tow Boat Operators Association on the same day.

ADMINISTRATIVE

- Staff budget completed.
- Project Director will be on vacation June 21-28.

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Port of Hood River

Providing for the region's economic future

INDUSTRIAL/COMMERCIAL FACILITIES • AIRPORT • INTERSTATE BRIDGE • MARINA

1000 E. Port Marina Drive • Hood River, OR 97031 • (541) 386-1645 • Fax: (541) 386-1395 • portofhoodriver.com • Email: porthr@gorge.net

May 2, 2018

David Poucher, Mayor
White Salmon City Council
City of White Salmon
P.O. Box 2139
White Salmon, WA 98672

Dear Mayor Poucher & Council:

This afternoon I was forwarded a link to the draft letter for action by the White Salmon City Council at tonight's meeting, opposing the Port of Hood River's efforts to organize a Hood River/White Salmon Bridge Replacement Project Advisory Committee ("PAC"). This is the first opportunity I have had to see the draft letter that we have heard about for the last two weeks. I wanted to offer a few points that I ask you to consider in your Council's deliberations about whether to participate in the PAC.

As you know, efforts to advance bridge replacement have been going for many years. Significant steps have been taken, including the 2003 Draft Environmental Impact Statement ("DEIS"), the 2010 Type Size and Location Study (both funded by \$1.76 million in congressional earmarks secured by Rep. Doc Hastings) and the Port's 2017 Oregon Legislative efforts that secured \$5 million for a Final Environmental Impact Statement ("FEIS") and financial analysis.

I offer the following points for your consideration regarding potential participation on the PAC:

- No decisions will be made about ownership, project responsibility procurement method or financing of a new bridge in this next phase of work. The \$5-million grant from the State of Oregon is NOT to build a bridge, but to complete the NEPA/FEIS permit process and identify the feasibility of bridge delivery alternatives.
- Decisions about ownership, project responsibility, procurement method and financing are expected to be made after the FEIS/Feasibility step is completed in 2-3 years. At that time ALL agencies with a financial or operational stake in the project will jointly decide these "next steps" decisions.
- This current work phase will likely last over two years. The PAC will receive and discuss all information and have direct access to all consultant work in 'real time'. This will allow all of us to increase our understanding of this complex project together.
- The \$5 million was allocated to the Port of Hood River by the Oregon Legislature through an IGA. The Port has a legal and financial obligation to deliver the work product. That is why the Port is the contracting agency for the current work, similar to the way that the SWRTC was for the TS&L phase. Any decisions during the FEIS phase will be based on the input from the PAC, the IGA, and the scope and contract with the engineering firm selected by a bi-state evaluation committee.

Port of Hood River

Providing for the region's economic future

Several years ago, Port of Hood River Commission made the decision to focus more of the energies and resources of this agency on replacement of the Bridge. They did so with the assumption that the Port of Hood River would not likely own the future bridge and further with the understanding that the resources of this agency could fall dramatically to the point that it may not survive, certainly not in its current form. However, the Board recognized that the Gorge economy was the over-riding priority and the bridge was a critical element to our collective economic success.

The decision our Board made resulted in significant forward progress:


- Formation of the OneGorge Group for project advocacy
- Congressional approval of an amendment to the 2015 Federal FAST Act that prioritized funding for infrastructure projects in National Scenic Areas
- 2015 National Highway System ("NHS") Designation
- Submission of a 2016 FASTLane Application, seeking \$8.3 million in funding for an FEIS)
- Oregon HB 2750 in 2017 resulting in legislative authority to allow Public Private Partnership ("P3")
- Oregon HB 2017 allocating \$5 million
- 2018 P3 Administrative Rules as required by HB 2017
- 2018 Request for Proposals ("RFP") for EIS Engineering firms

These actions were carried out for the Central Gorge Region, not for the Port of Hood River. The total cost of these efforts has been over \$1 million. The success we have achieved has advanced the project and brought us to the point where all of us can now begin to realistically consider the ownership models, financing structures, and operational requirements of a new bridge. The PAC is intended to play a most significant role in this effort.

Replacement of the Hood River/White Salmon Toll Bridge is a nearly impossible project to carry out by small agencies in a rural area, especially without the financial support of ODOT or WADOT. It is likely that the project will not be successful if local entities fail to present a united front. That is an essential element in securing the financial and legislative support now, and in the future. The Columbia River Crossing Project in Portland/Vancouver is a prime example where this did not occur.

The Port Commission sincerely hopes that the City of White Salmon will decide to be part of the PAC. If not, we will keep you well apprised of all meeting agendas, minutes and consultant work efforts as the EIS tasks are carried out over the next 2-3 years. And either way, I hope you will decide to allow staff to participate in the Technical Advisory Committee that will be an important source of local input to the EIS Engineering team. That work is expected to begin in June.

Respectfully,



Michael S. McElwee
Executive Director
Port of Hood River

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE WASHINGTON AND OREGON PARTNER JURISDICTIONS FOR FUNDING OF THE
SR-35 FINAL ENVIRONMENTAL IMPACT STATEMENT

This MEMORANDUM OF UNDERSTANDING is hereby made and entered into by and between the Washington and Oregon partner jurisdictions concerning the replacement of the Hood River Bridge. The partner jurisdictions include: Skamania County, Klickitat County, Hood River County, City of Bingen, City of Hood River, City of White Salmon, Port of Klickitat, and Port of Hood River. Other participating project agencies include the Southwest Washington Regional Transportation Council, the Washington Department of Transportation and the Oregon Department of Transportation.

A. PURPOSE:

The purpose of this MOU is to agree to work cooperatively to secure the necessary funding for completion of the SR-35 Final Environmental Impact Statement (FEIS).

B. PROBLEM:

The Hood River Bridge was built in 1924 and spans the Columbia River, connecting the cities of White Salmon/Bingen, Washington to Hood River, Oregon. This major transportation route serves as an important link to local communities, the region, and interstate travel. The economic well being of this region is dependent on this Columbia River crossing.

The existing Hood River Bridge is functionally obsolete. Its deficiencies include: narrow travel lanes, lack of pedestrian and bicycle facilities, low load carrying capacity, and substandard river channel span. Given these deficiencies, there is a need to continue the process for the long-term replacement of the existing bridge.


C. SCOPE:

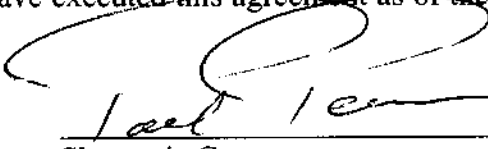
The scope of this MOU is to work with Oregon and Washington State Legislature and Departments of Transportation to secure funding necessary to begin the FEIS by the end of 2008.


D. IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE PARTIES THAT:

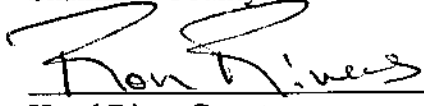
1. The Hood River Bridge is vital to the region's transportation network and health of the region's economy.
2. The region should begin now to plan for the future replacement of the existing Hood River Bridge.
3. Where appropriate, all agencies will coordinate and cooperate in support of securing local, state, and federal funding for the SR-35 Final Environmental Impact Statement (FEIS) and in particular, work with the Oregon and Washington Legislatures to:
 - a. Include the SR-35 Columbia River Crossing FEIS on priority transportation list.
 - b. Seek state funding for the FEIS.
 - c. Support your bi-state partners in seeking legislative funding with letters of support or other appropriate methods to express support.

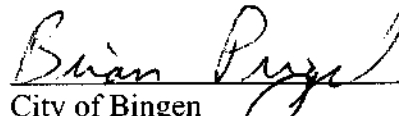
IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the last written date below.

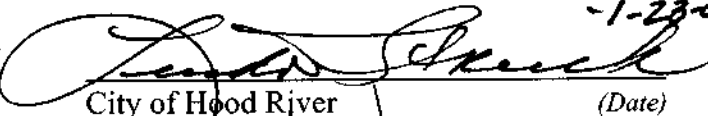
 2/14/08
Port of Hood River (Date)

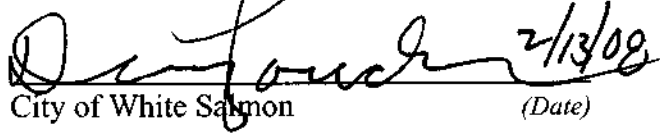
 2/15/07
Skamania County (Date)

 2-13-08
Klickitat County (Date)

 2-4-08
Hood River County (Date)

 2-8-08
City of Bingen (Date)

 -1-23-08
City of Hood River (Date)

 2/13/08
City of White Salmon (Date)

 2-13-08
Port of Klickitat (Date)



May 3, 2018

Mr. Hoby Streich
Port of Hood River
1000 E Port Marina Dr.
Hood River, OR 97031

RECEIVED
MAY 07 2018

BY: _____

Commissioner Streich:

Thank you for your letter dated March 28, 2018, requesting the participation of Klickitat County, the City of Bingen, and the Port of Klickitat (collectively the Washington Entities) in a "Bridge Replacement Advisory Group" under the direction of the Port of Hood River. We have supported the replacement of the Hood River bridge for over two decades and look forward to working with the Port of Hood River and the other Oregon entities as equal partners in addressing this important element of our regional transportation system.

As you may recall, the Washington Entities worked to secure \$750,000 in 1998 through Washington Representative Richard "Doc" Hastings and the federal Transportation Equity Act for the 21st Century (TEA-21) to fund the "SR-35 Columbia River Crossing Feasibility Study". This study included the draft environmental impact statement (EIS) upon which the current final EIS is expected to be based. Then, in 2005, we worked to secure an additional \$640,000 through Rep. Hastings and the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA) to fund the subsequent "Type, Size, and Location Study".

We believed then—as now—a new crossing will exceed the capacity of any individual county, city, or port and that each of these Oregon and Washington entities has equal standing with respect to, and holds a mutual interest in, a new bridge. As a result, the effort to accomplish its realization should be joint and collective and it is for this reason the Washington Entities supported the involvement of all seven of these local entities as full and equal participants in the prior studies (despite the funding having been received through Washington State). Based, in part, on this principle, representatives from Hood River County, the City of Hood River, and the Port of Hood River were included as coequals in the stakeholders group and the majority of public open house events were held in Hood River.

In the years since, we anticipated the Port of Hood River would embrace this perspective and partner with the six other local entities in developing a framework acceptable to all and within which each would participate equally in deciding how and in what direction to proceed. However, the Port of Hood River has signaled its intent to pursue a more unilateral course of action by seeking to impose its own organizational structure, lobby Washington State legislators, and prescribe the roles, responsibilities, and authorities of the various entities—including who may represent them—without their involvement, concurrence, or (in some cases) knowledge.


We recognize that, due to its ownership, the operation and administration of the existing bridge is entirely within the purview of the Port of Hood River. However, in so doing, we do not concede such possession confers upon it a preeminent position with respect to the planning, financing, construction, ownership, and ultimate governance of a future bridge. A new interstate crossing is

not, by definition, the domain of one county, city, or port any more than another and any initiative that serves to relegate one or more of them to an ancillary role is in conflict with our longstanding support for a fully cooperative effort. As a result, we respectfully decline the request to participate in this advisory committee or in any strictly advisory capacity.

However, as we have in the past, the Washington Entities remain willing and able to engage Hood River County, the City of Hood River, the Port of Hood River, and the City of White Salmon as full partners in this important, regional, bi-state project and hope the Port of Hood River will choose to participate alongside the six other local entities in an inclusive, democratic, and unified process. In the meantime, we will continue to plan for—and work to advance—the northern half of a new span in a manner consistent with the interests of Washington residents and our respective constituents.

Sincerely,


 Rex Johnston, Commissioner
 On behalf of the Klickitat County Commission


 Betty Barnes, Mayor
 On behalf of the Bingen City Council


 Marc Thornsby, Executive Director
 On behalf of the Port of Klickitat Commission

cc: Commissioner John Everitt
 Project Mgr. Kevin Greenwood
 Exec. Director Michael McElwee
 Commissioner David Meriwether
 Commissioner Ben Sheppard
 Commissioner Brian Shortt

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
Klickitat County, Washington**

IN THE MATTER OF }
THE BOARD OF COUNTY }
COMMISSIONER'S SR-35 INTERSTATE }
BRIDGE DECLARATION OF INTENT }

02518
Resolution # _____

WHEREAS, the Board of County Commissioners, meeting in regular session, having before it the need to consider declaring Klickitat County's intent concerning the replacement of the SR-35 Interstate Bridge; and

WHEREAS, a bridge across the Columbia River connecting State Route 14 and the cities of Bingen and White Salmon with Interstate 84 and the city of Hood River is a critical component of the regional transportation system and necessary to facilitate freight movement, economic development, and the general health and welfare of western Klickitat County; and

WHEREAS, there exists no suitable alternative to the existing Hood River bridge with the closest crossings located approximately 25 miles or 30 minutes west (Bridge of the Gods) and 20 miles or 25 minutes east (The Dalles Bridge); and

WHEREAS, the existing bridge is nearly one hundred years old, employs an undersized deck and travel lanes that fail to meet American Association of State Highway and Transportation Officials width standards, lacks pedestrian and bicycle facilities, and requires height and weight restrictions; and

WHEREAS, a new bridge crossing the Columbia River will be an interstate bridge with the south half located in Hood River County, Oregon, and the north half located in Klickitat County, Washington; and

WHEREAS, a new State Route 35 interstate bridge would rectify the deficiencies described above, maintain the current transportation system, and continue to meet the needs of residents and businesses that depend upon the existing bridge for the next fifty to one hundred years; and

WHEREAS, the Port Commission wishes to clarify its long-term objectives concerning a new bridge in order to inform its constituents and provide direction to its staff.

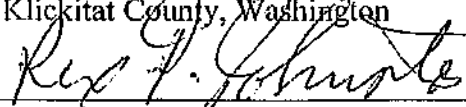
NOW, THEREFORE, BE IT RESOLVED, that the Klickitat County Board of Commissioners does hereby declare its intent to work jointly and in cooperation with the Port of Klickitat, the City of Bingen, and the City of White Salmon so as to:

- 1) Advance a regional effort to replace the existing Hood River bridge;
- 2) Encourage the allocation of all current revenue generated by the existing bridge exclusively to its operation, maintenance, repair, and future removal;
- 3) Ensure a new bridge meets the transportation needs of the region and is managed to the fair and equitable benefit of all its users;
- 4) Engage with Hood River County, the City of Hood River, and/or the Port of Hood River to chart a regionally acceptable course of action;

- 5) Support the establishment of a SR-35 bridge steering committee responsible for all planning, coordination, and decision-making concerning a new bridge and comprised of an equal number of Oregon and Washington representatives;
- 6) Develop a framework for long-term bi-state ownership, administration, and operation of a new bridge by the states of Oregon and Washington or their political subdivisions or by an authority, commission, or other governing body comprised of an equal number of Oregon and Washington representatives;
- 7) Identify the local resources, including funds and personnel, needed to support planning, financing, and constructing a new bridge and evaluate how these might be provided;
- 8) Secure the support of Washington State legislators and congressional representatives, applicable agencies, commissions, and boards, and any other entities in the state able to assist in the construction of a new bridge;
- 9) Ensure all future revenue generated by a new bridge is entirely and exclusively used for its administration, financing, operation, maintenance, repair, and ultimate replacement.

DATED this 6th day of March, 2018.

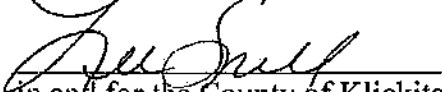
BOARD OF COUNTY COMMISSIONERS
 Klickitat County, Washington


 Rex F. Johnston, Chairman
 Absent

David M. Sauter, Commissioner


 Jim Sizemore, Commissioner

ATTEST:
 Clerk of the Board,


 In and for the County of Klickitat,
 State of Washington

City of Bingen
RESOLUTION NO. 2018- 022
A Resolution of the City of Bingen
SR-35 Interstate Bridge Declaration of Intent

WHEREAS, a bridge across the Columbia River connecting State Route 14 and the cities of Bingen and White Salmon with Interstate 84 and the city of Hood River is a critical component of the regional transportation system and necessary to facilitate freight movement, economic development, and the general health and welfare of western Klickitat County; and

WHEREAS, there exists no suitable alternative to the existing Hood River bridge with the closest crossings located approximately 25 miles or 30 minutes west (Bridge of the Gods) and 20 miles or 25 minutes east (The Dalles Bridge); and

WHEREAS, the existing bridge is nearly one hundred years old, employs an undersized deck and travel lanes that fail to meet American Association of State Highway and Transportation Officials (AASHTO) width standards, lacks pedestrian and bicycle facilities, and requires height and weight restrictions; and

WHEREAS, a new bridge crossing the Columbia River will be an interstate bridge with the south half located in Hood River County, Oregon, and the north half located in Klickitat County, Washington; and

WHEREAS, a new State Route 35 interstate bridge would rectify the deficiencies described above, maintain the current transportation system, and continue to meet the needs of residents and businesses that depend upon the existing bridge for the next fifty to one hundred years; and

WHEREAS, the City of Bingen wishes to clarify its long-term objectives concerning a new bridge in order to inform its constituents and provide direction to its staff;


NOW, THEREFORE, BE IT RESOLVED that the City Council of Bingen, Washington does hereby declare its intent to work jointly and in cooperation with Klickitat County, Klickitat Port Commission, and the City of White Salmon so as to:

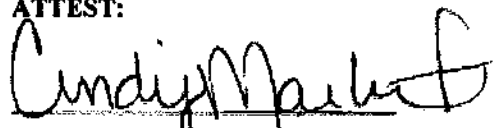
1. Advance a regional effort to replace the existing Hood River Bridge;
2. Encourage the allocation of all current revenue generated by the existing bridge exclusively to its operation, maintenance, repair, and future removal;
3. Ensure a new bridge meets the transportation needs of the region and is managed to the fair and equitable benefit of all its users;
4. Engage with Hood River County, the City of Hood River, and/or the Port of Hood River to chart a regionally acceptable course of action;
5. Support the establishment of a SR-35 bridge steering committee responsible for all planning, coordination, and decision-making concerning a new bridge and comprised of an equal number of Oregon and Washington representatives;

- 6. Develop a framework for long-term bi-state ownership, administration, and operation of a new bridge by the states of Oregon and Washington or their political subdivisions or by an authority, commission, or other governing body comprised of an equal number of Oregon and Washington representatives;
- 7. Identify the local resources, including funds and personnel, needed to support planning, financing, and constructing a new bridge and evaluate how these might be provided;
- 8. Secure the support of Washington State legislators and congressional representatives, applicable agencies, commissions, and boards, and any other entities in the state able to assist in the construction of a new bridge; and
- 9. Ensure all future revenue generated by a new bridge is entirely and exclusively used for its administration, financing, operation, maintenance, repair, and ultimate replacement.

ADOPTED BY THE CITY COUNCIL OF BINGEN, WASHINGTON AT A REGULARLY SCHEDULED MEETING, ON THIS 16th DAY OF MARCH, 2018

Resolution # 2018-022 becomes effective immediately upon adoption.


 Betty Barnes, Mayor City of Bingen

ATTEST:

 Cindy Marbut, City Administrator

Klickitat County Port District No. 1
RESOLUTION NO. 2-2018

A Resolution of the Port of Klickitat Commission
SR-35 Interstate Bridge Declaration of Intent

WHEREAS, a bridge across the Columbia River connecting State Route 14 and the cities of Bingen and White Salmon with Interstate 84 and the city of Hood River is a critical component of the regional transportation system and necessary to facilitate freight movement, economic development, and the general health and welfare of western Klickitat County; and

WHEREAS, there exists no suitable alternative to the existing Hood River bridge with the closest crossings located approximately 25 miles or 30 minutes west (Bridge of the Gods) and 20 miles or 25 minutes east (The Dalles Bridge); and

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WHEREAS, a new bridge crossing the Columbia River will be an interstate bridge with the south half located in Hood River County, Oregon, and the north half located in Klickitat County, Washington; and

WHEREAS, a new State Route 35 interstate bridge would rectify the deficiencies described above, maintain the current transportation system, and continue to meet the needs of residents and businesses that depend upon the existing bridge for the next fifty to one hundred years; and

WHEREAS, the Port Commission wishes to clarify its long-term objectives concerning a new bridge in order to inform its constituents and provide direction to its staff;

NOW, THEREFORE, BE IT RESOLVED that the Port Commission does hereby declare its intent to work jointly and in cooperation with Klickitat County, the City of Bingen, and the City of White Salmon so as to:

1. Advance a regional effort to replace the existing Hood River bridge;
2. Encourage the allocation of all current revenue generated by the existing bridge exclusively to its operation, maintenance, repair, and future removal;
3. Ensure a new bridge meets the transportation needs of the region and is managed to the fair and equitable benefit of all its users;
4. Engage with Hood River County, the City of Hood River, and/or the Port of Hood River to chart a regionally acceptable course of action;
5. Support the establishment of a SR-35 bridge steering committee responsible for all planning, coordination, and decision-making concerning a new bridge and comprised of an equal number of Oregon and Washington representatives;
6. Develop a framework for long-term bi-state ownership, administration, and operation of a new bridge by the states of Oregon and Washington or their political subdivisions or by an authority, commission, or other governing body comprised of an equal number of Oregon and Washington representatives;
7. Identify the local resources, including funds and personnel, needed to support planning, financing, and constructing a new bridge and evaluate how these might be provided;

- 8. Secure the support of Washington State legislators and congressional representatives, applicable agencies, commissions, and boards, and any other entities in the state able to assist in the construction of a new bridge; and
- 9. Ensure all future revenue generated by a new bridge is entirely and exclusively used for its administration, financing, operation, maintenance, repair, and ultimate replacement.


ADOPTED IN OPEN SESSION this 20th day of February, 2018.

ATTEST:



Margie Ziegler, Port Auditor

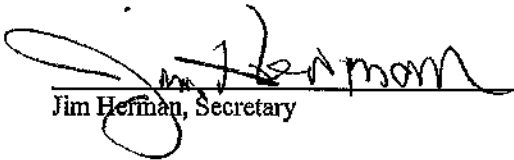
PORT OF KLICKITAT COMMISSION



Wayne Vinyard, President



Bill Schmitt, Vice-President



Jim Hoffman, Secretary

PORT SEAL



SR-35 Columbia River Crossing - Estimate Report

May 08, 2018

Mott MacDonald
111 SW Columbia Street
Suite 945
Portland, OR 97201
United States of America

T +1 (503) 243 5001

mottmac.com

SR-35 Columbia River Crossing - Estimate Report

May 08, 2018

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
0	05/08/18	Paul Dutton	Shuchen Han	Paul J. Heydenrych	Pre-PE Cost Estimate Report

Document reference: 383276 | 1 | a

Information class: Standard

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We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

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Executive Summary

The bridge over the Columbia River on SR-35 connecting the communities of Hood River, Oregon and White Salmon and Bingen, Washington was originally built in 1924. This bridge is functionally obsolete and the structural condition is not deemed adequate for the increased traffic and load. The Port of Hood River, owner of the bridge since 1950, received a \$5-million appropriation from the Oregon legislature in 2017. This continues the regional effort to replace the bridge.

A study was performed in 2011 to identify the best approach and options available for the bridge replacement. Included in the 2011 study was a cost estimate for the proposed bridge replacement.

The Port of Hood River, as part of the NEPA environmental clearance process (Final EIS) and an analysis of financing options, has recently renewed its efforts to implement the bridge replacement and has tasked Mott MacDonald to update the 2011 estimate by performing a pre-preliminary engineering (PE) cost estimate based on the information available from the 2011 Study.

Mott MacDonald developed this estimate using the same item breakdown used in the 2011 study, identifying possible omissions from the original estimate, verifying original assumptions where possible and using current, 2017, construction costs obtained from a number of sources including both the Oregon and Washington DOTs.

The updated bridge cost is estimated at \$253,756,000 in 2020 \$

The full estimate is attached as Appendix C

1 Background

Mott MacDonald was tasked with preparing an updated pre-PE estimate for the replacement of the Hood River/White Salmon Interstate Bridge.

A Type-Size-Location (TS&L) study was prepared by WSP, formerly Parsons Brinckerhoff, in October 2011. Mott MacDonald identified a number of assumptions in the original cost estimate, developed in 2011, that needed further analysis and refinement. This report provides an updated pre-PE cost estimate and outlines the background information available, data collection, quantity and estimate assumptions.

1.1 Background Information and Data Sources

1.1.1 Background Information

The most comprehensive information available was found in the original study report prepared in 2011.

- SR-35 Columbia River Crossing Study – TS&L Final Report (October 2011) prepared by Parsons Brinckerhoff, now WSP, and
- SR-35 Columbia River Crossing Study – TS&L Final Report – Appendix (October 2011) prepared by Parsons Brinckerhoff, now WSP

No additional design or analysis has been performed since this report was published. Mott MacDonald also did not perform any additional design in developing the updated cost estimate.

1.1.2 Data Sources

The following resources were used to aid in developing quantity take-offs and associated costs:

- ODOT – Oregon Department of Transportation
 - Standard Details
 - Bridge Design and Drafting Manual (BDDM)
 - Bridge Cost Data – 2016
- WSDOT – Washington State Department of Transportation
 - Bridge and Structures Standard Details
- Caltrans – California Department of Transportation
 - Bridge Design Aids
 - Bridge Design Details
 - Bridge Design Practice
 - Bridge Design Specifications
 - Bridge Memo to Designers
 - Bridge Design Detail Sheets (XS Sheets)
 - Standard Details

2 Quantity Reconciliation and Take-Offs

Our approach was, as a first step, to identify and review all the quantities on the bid item list included in the SR-35 Columbia River Crossing Study – TS&L Final Report. The estimate update follows the same layout as in the original 2011 estimate.

Where discernable, all quantities on the original bid item list were recalculated and verified by Mott MacDonald and where information was not indicated on the drawings or included in the report, quantities from the 2011 estimate were used and noted as such within the estimate. Quantity take-off primarily focused on the following big-ticket items where we performed detailed take-offs because of the potential for impacts to the overall cost:

- Drilled and Driven Piles
- Cofferdams/Marine Support
- Structural Concrete
- Reinforcement

Mott MacDonald identified some items not adequately addressed in the in the original cost estimate. Mott MacDonald feels these items contribute additional cost that may not have been previously identified. The cost for these items is included in our updated estimate.

- Cofferdams, previously noted
- Bridge Deck Drainage

Items not explicitly called out on the 2011 estimate and excluded from the Mott MacDonald estimate are:

- Natural gas pipeline, and similar utilities attached to existing bridge
- Bridge deck lighting
- Agency communication systems
- Permanent traffic management and control
- Tolling facilities and systems
- Construction Phase Costs
 - Noise and vibration mitigation for pile driving operations in river
 - Construction phase traffic control

2.1 Assumptions

In developing the estimate, a number of assumptions could not be readily derived from the information included in the 2011 estimate. The following list notes some of the assumptions Mott MacDonald made for clarity.

- The current bridge contains lead paint.

- The roadwork improvements on the intersections at each end of the bridge was assumed to be nominal. No redesign and construction costs were included for this work.
- Precast pile caps are impractical for this application, hence the requirement for cofferdams
- With the limited information available, Mott MacDonald recommends, and has used, a 40% contingency for this estimate.
- Existing piers will be removed to river bottom elevation only.
- Coated reinforcement will be used on bridge deck only.

3 Cost Estimate

In the review of the previous study and 2011 cost estimate, the major scope items that contribute approximately 85% of the original base cost were identified. These items are:

- Bridge Removal
- Reinforcement
- Cofferdams/Marine Support
- General Structural Concrete
- Post-Tensioning

Mott MacDonald identified these high cost items for further reviewed to assure the costs were adequately allowed for in the 2011 estimate.

3.1 Estimating Software

Mott MacDonald used B2W Estimate for the development and preparation of the updated cost estimate. B2W has the capability to develop a bottom-up cost estimate utilizing user provided resource information (equipment types and rates, local labor rates, material costs, etc.) and applies industry production rates to build up costs. With the limited scope and information available from the 2011 Report, the full capabilities of the software could not be utilized.

3.2 Unit Price Resources

Our team used first quarter 2018 geographically adjusted unit price data from RS Means. In the cases of more complex items, the rationality of the compiled unit prices was checked by comparing to previous projects. None of the data consider the potential impacts of the recent steel tariffs imposed by the Federal Government. As a result, this estimate has not accounted for the potential impact of future steel prices (new or salvage) that could result from these tariffs.

3.3 Cost Summary

Item Description				Total
SUBTOTAL - CONSTRUCTION ITEMS				\$113,903,451
Mobilization			10%	\$11,390,000.00
SUBTOTAL - ALL ITEMS				\$125,293,451
Recommended Contingency (Design and Construction)			40%	\$50,117,000.00
SUBTOTAL - ALL ITEMS + CONTINGENCY				\$175,410,451
Sales Tax ** (assume WA half of project)			7.50%	\$6,578,000
Final Design			15%	\$26,312,000
Engineering Services During Construction			15%	\$26,312,000
TOTAL COST IN 2018 DOLLARS				\$234,612,451
Escalation to:	2020		4%	\$19,144,000
TOTAL COST 2020 DOLLARS				\$253,756,000

Cost information detailed tables are contained in the Appendices

- Appendix A - Bridge Construction Cost Estimate Summary
- Appendix B - Bridge Construction Cost Estimate Details
- Appendix C - Total Project Cost Estimate

4 General Notes/Observations

The general concept plans in the TS&L study do not present a structural design that can be considered complete and brought to construction. Mott MacDonald has not performed a structural analysis of the current proposed design. Mott MacDonald reviewed the plans knowing the level of the design effort and understands that further analysis and review will be required by the Port.

While reviewing the TS&L study prepared in October 2011, Mott MacDonald identified the following items that could affect the cost estimate:

- Span Length
- Depth of Proposed Reinforced Concrete Box Girder
- Thickness of Proposed Deck
- Construction Methodology

These items can all contribute to cost variations. In the updated estimate Mott MacDonald used averages for the noted information, recognizing that future design variations can have marked cost impacts. Once a final structural design has been developed, a more detailed and accurate cost can be developed.

The current estimate includes 7% sales tax for the Washington side of the bridge (assumed to be 50%) as a place holder. Note that depending on the final funding sources, this tax expense could vary greatly.

5 Conclusion Summary

The approach to developing this updated estimate was to use the best information available. The 2011 Study and TS&L Report offered the most comprehensive information available. We were unable to locate any additional studies and design work after this report was issued.

The cost data was assembled from several sources listed in Section of this report. This information was up to date in the first quarter of 2018, giving an updated cost estimate in 2018 dollars.

In reviewing the cost elements line by line against the 2011 estimate, it is of interest to note that unit prices have not changed much. The largest cost variations are based on either quantity variations or updated assumptions.

Mott MacDonald has reviewed the design and construction contingency and has increased the contingency percentage. Typical contingencies at this early stage of the design range between 40% and 50%. We recommend using at least a 40% design and construction contingency allowance. If an estimate range is desired, this can be increased to 50% which would effectively add \$18 million to the total project cost estimate for a high range estimate of \$271.8 million.

APPENDIX A

Bridge Construction Cost Estimate Summary



Item Price Summary

Project Name: SR-35 Bridge Replacement Project	Customer: Port Of Hood River
Job Number:	Billing Address: 1000 E. Port Marina Drive
Bid As:	Hood River, OR 97031 USA
Estimator:	Phone: (541) 386-1645
Project Address:	Contact:
Completion Date:	

Pay Items						
Description	Job Cost ID	Task JCID	Bid Quantity	UM	Unit Bid Price	Total Bid Price
D 010 - Clearing And Grubbing			1.34	ACRE	\$16,699.60	\$22,377.46
D 020 - Embankment In Place			12,756.00	BCY	\$16.42	\$209,453.52
D 030 - Concrete Inlets			8.00	EACH	\$1,548.22	\$12,385.76
D 040 - Diversion Manholes			2.00	EACH	\$10,000.00	\$20,000.00
D 050 - Return Flow Manholes			2.00	EACH	\$3,000.00	\$6,000.00
D 060 - Vault With Internals			2.00	EACH	\$200,000.00	\$400,000.00
D 070 - Pipe, 12 Inch Diameter			740.00	LF	\$219.07	\$162,111.80
D 080 - Pipe, 15 Inch Diameter - Carried Previous Qty, Assume On Banks From Report			400.00	LF	\$342.30	\$136,920.00
D 090 - Pipe, 18 Inch Diameter			5,085.00	LF	\$492.91	\$2,506,447.35
D 100 - Bridge Removal			92,778.00	SF	\$134.31	\$12,461,013.18
D 100c - Allocated Contingency For Lead Paint Removal			92,778.00	SF	\$107.00	\$9,927,246.00
D 110 - Shoring, Cribbing, And Cofferdams			1.00	LS	\$5,440,360.15	\$5,440,360.15
D 120 - Structure Excavation			303.00	BCY	\$120.00	\$36,360.00
D 130 - Granular Structural Backfill			96.00	BCY	\$65.00	\$6,240.00
D 140 - Furnish Drilling Equipment			1.00	LS	\$50,688.00	\$50,688.00
D 150 - Drilled Shaft Concrete			3,514.00	CY	\$374.10	\$1,314,587.40
D 160 - Drilled Shaft Reinforcement			527,100.00	LB	\$1.45	\$764,295.00
D 170 - CSL Test Access Tubes			7,810.00	LF	\$10.75	\$83,957.50
D 180 - CSL Tests			38.00	EACH	\$2,157.89	\$81,999.82
D 190 - Drilled Shaft Excavation, 72 In Diameter			1,637.00	VF	\$749.79	\$1,227,406.23
D 200 - Drilled Shaft Excavation, 96 In Diameter			1,444.00	VF	\$1,109.17	\$1,601,641.48
D 210 - Furnish Pile Driving Equipment			1.00	LS	\$50,688.00	\$50,688.00
D 220 - Furnish PP 48 X 0.5 Steel Piles			5,532.00	VF	\$351.02	\$1,941,842.64
D 230 - Furnish PP 48 X 0.5 Steel Test Piles			923.00	VF	\$351.02	\$323,991.46
D 240 - Drive PP 48 X 0.5 Steel Piles			5,532.00	VF	\$208.06	\$1,150,987.92
D 250 - Drive Test Piles			923.00	VF	\$208.06	\$192,039.38
D 260 - Pile Load Dynamic			6.00	EACH	\$35,640.00	\$215,040.00
D 270 - PP 48 X 0.5 Steel Pile Splices			112.00	EACH	\$1,151.94	\$129,017.28
D 280 - Reinforcement			7,882,790.00	LB	\$1.47	\$11,587,701.30
D 290 - Coated Reinforcement			1,612,435.00	LB	\$1.59	\$2,563,771.65
D 300 - Foundation Concrete, Class 4000			9,401.00	CY	\$314.23	\$2,954,076.23
D 310 - General Structural Concrete, Class 4000			33,523.00	CY	\$714.96	\$23,967,604.08
D 320 - Reinforced Concrete End Panels			380.00	SY	\$285.63	\$108,539.40



Item Price Summary

Project Name: SR-35 Bridge Replacement Project	Customer: Port Of Hood River
Job Number:	Billing Address: 1000 E. Port Marina Drive
Bid As:	Hood River, OR 97031 USA
Estimator:	Phone: (541) 386-1645
Project Address:	Contact:
Completion Date:	

Pay Items

Description	Job Cost ID	Task JCID	Bid Quantity	UM	Unit Bid Price	Total Bid Price
D 330 - Post-Tensioning			2,228,617.00	LB	\$4.41	\$9,828,200.97
D 340 - Bearing Devices, Abutments			2.00	EACH	\$3,388.68	\$6,777.36
D 350 - Bearing Devices, Bent 2 & 14			2.00	EACH	\$2,259.12	\$4,518.24
D 360 - 2 Inch Electrical Conduit			8,800.00	LF	\$18.75	\$165,000.00
D 370 - Modular Expansion Joint Seals			113.00	LF	\$776.92	\$87,791.96
D 380 - Combination Bridge Rail			8,780.00	LF	\$397.83	\$3,492,947.40
D 390 - Handrail, Pedestrian Ornamental			4,390.00	LF	\$319.67	\$1,403,351.30
D 400 - Retaining Walls, MSE			12,835.00	SF	\$55.67	\$714,524.45
D 410 - Marine Support			1.00	LS	\$15,184,848.00	\$15,184,848.00
D 420 - Aggregate Base			1,922.00	TON	\$23.37	\$44,917.14
D 430 - HMAC			4,080.00	TON	\$85.15	\$347,412.00
D 440 - Concrete Walks			62,960.00	SF	\$5.11	\$321,725.60
D 450 - Concrete Sidewalk Ramps			4.00	EACH	\$4,000.00	\$16,000.00
D 460 - Concrete Curbs And Gutter			1,640.00	LF	\$12.14	\$19,909.60
D 470 - Concrete Barrier			8,780.00	LF	\$67.39	\$591,684.20
D 480 - Longitudinal Pavement Markings			17,540.00	LF	\$0.33	\$5,788.20
D 490 - Signage			300.00	SF	\$37.55	\$11,265.00
Pay Items Total:						\$113,903,451.41

APPENDIX B

Bridge Construction Cost Estimate Details



Cost Detail

Project Name: SR-35 Bridge Replacement Project	Customer: Port Of Hood River
Job Number:	Billing Address: 1000 E. Port Marina Drive
Bid As:	Hood River, OR 97031 USA
Estimator:	Phone: (541) 386-1645
Project Address:	Contact:
Completion Date:	

Pay Items

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
D 010 - Clearing And Grubbing	1.34	ACRE	\$16,699.60	\$22,377.46
D Clearing And Grubbing	1.34	ACRE	\$16,699.60	\$22,377.46
S C&G North Bank	0.41	ACRE	\$16,699.60	\$6,846.84
S C&G South Bank	0.93	ACRE	\$16,699.60	\$15,530.63
D 020 - Embankment In Place	12,756.00	BCY	\$16.42	\$209,453.52
D Embankment In Place	12,756.00	BCY	\$16.42	\$209,453.52
S Embankment North	7,278.00	BCY	\$16.42	\$119,504.76
S Embankment North	5,478.00	BCY	\$16.42	\$89,948.76
D 030 - Concrete Inlets	8.00	EACH	\$1,548.22	\$12,385.76
S Concrete Inlets - Carried Previous Quantity, Not Indicated On Drawings	8.00	EACH	\$1,548.22	\$12,385.76
D 040 - Diversion Manholes	2.00	EACH	\$10,000.00	\$20,000.00
S Diversion Manholes - Carried Previous Quantity And Cost, Not Indicated On Drawings Or Described.	2.00	EACH	\$10,000.00	\$20,000.00
D 050 - Return Flow Manholes	2.00	EACH	\$3,000.00	\$6,000.00
S Return Flow Manholes - Carried Previous Quantity And Cost, Not Indicated On Drawings Or Described.	2.00	EACH	\$3,000.00	\$6,000.00
D 060 - Vault With Internals	2.00	EACH	\$200,000.00	\$400,000.00
S Vault With Internals - Carried Previous Quantity And Cost, Not Indicated On Drawings Or Described.	2.00	EACH	\$200,000.00	\$400,000.00
D 070 - Pipe, 12 Inch Diameter	740.00	LF	\$219.07	\$162,111.80
D Pipe, 12 Inch Diameter	740.00	LF	\$219.07	\$162,111.80
S Pipe, 12 Inch Diameter - Laterals On Bridge 40ft/bent	600.00	LF	\$219.07	\$131,442.00
S Pipe, 12 Inch Diameter - Carried Previous Qty, Assume On Banks From Report	140.00	LF	\$219.07	\$30,669.80
D 080 - Pipe, 15 Inch Diameter - Carried Previous Qty, Assume On Banks From Report	400.00	LF	\$342.30	\$136,920.00
D Pipe, 15 Inch Diameter	400.00	LF	\$342.30	\$136,920.00
S Pipe, 15 Inch Diameter	400.00	LF	\$342.30	\$136,920.00
D 090 - Pipe, 18 Inch Diameter	5,085.00	LF	\$492.91	\$2,506,447.35
D Pipe, 18 Inch Diameter	5,085.00	LF	\$492.91	\$2,506,447.35
S Pipe, 18 Inch Diameter - Main Drainage Channel Under Bridge, Assume Full Length	4,385.00	LF	\$492.91	\$2,161,410.35

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
(Item 090 - Pipe, 18 Inch Diameter continued)				
Pipe, 18 Inch Diameter - Carried Previous Qty, Assume On Banks From Report	700.00	LF	\$492.91	\$345,037.00
D 100 - Bridge Removal	92,778.00	SF	\$79.91	\$7,413,843.18
Bridge Removal - Assume Steel Is Salvaged, Net Zero After Other Disposal Costs	92,778.00	SF	\$79.91	\$7,413,843.18
Bridge Demo Crew (300.00 SF/DY, 309.26 DY)	92,778.00	SF	\$78.83	\$7,313,843.18
CRANE TRK HYD - 100 TON- 167' BOOM	6,185.20	HR	\$181.41	\$1,122,057.13
WELDER E 60 AMP PLASMA CUTTER [5]	6,185.20	HR	\$1.09	\$33,709.34
Crane Operator	6,185.20	HR	\$57.17	\$353,582.41
Flagger [2]	6,185.20	HR	\$45.47	\$562,513.24
Laborer - Foreman	6,185.20	HR	\$54.23	\$335,404.27
Laborer - General [2]	6,185.20	HR	\$50.25	\$621,611.53
Iron Worker - Foreman	6,185.20	HR	\$59.20	\$366,191.07
Iron Worker - Journeyman [5]	6,185.20	HR	\$56.04	\$1,733,102.83
Toplander	6,185.20	HR	\$51.20	\$316,684.65
Bottomlander	6,185.20	HR	\$51.20	\$316,684.65
Toplander	6,185.20	HR	\$51.20	\$316,684.65
4X2 1 TON CONV GAS [7]	6,185.20	HR	\$2.30	\$99,581.72
AIR HOSE 4.00" 100ft	6,185.20	HR	\$7.81	\$48,306.41
AIR COMP 1300 CFM	6,185.20	HR	\$61.13	\$378,101.28
HAMMERS- HYDRAULIC- 8000 FT-LBS	6,185.20	HR	\$39.98	\$247,284.30
EXCAVATOR CAT 336FL - 3.15 CY	6,185.20	HR	\$63.43	\$392,327.24
BUCKET- CLAMSHELL- 5.0 CY- HEAVY DUTY/DIGGING	6,185.20	HR	\$11.32	\$70,016.46
Miscellaneous Material	1.00	EACH	\$100,000.00	\$100,000.00
D 100c - Allocated Contingency For Lead Paint Removal	92,778.00	SF	\$107.00	\$9,927,246.00
Lead Paint Removal - Based On The Cost Of Lead Paint Removal From The SR-99 Aurora Bridge, Less Repainting Cost.	92,778.00	SF	\$107.00	\$9,927,246.00
D 110 - Shoring, Cribbing, And Cofferdams	1.00	LS	\$5,440,360.15	\$5,440,360.15
Shoring, Cribbing, And Cofferdams	1.00	LS	\$5,440,360.15	\$5,440,360.15
Cofferdam - Bent 02	1.00	LS	\$330,490.69	\$330,490.69
Cofferdam Bracing	49,200.00	LB	\$0.34	\$16,728.00
Sheet Pile Install - Marine	9,901.00	SF	\$31.69	\$313,762.69
Cofferdam - Bent 03	1.00	LS	\$403,025.06	\$403,025.06
Cofferdam Bracing	60,000.00	LB	\$0.34	\$20,400.00
Sheet Pile Install - Marine	12,074.00	SF	\$31.69	\$382,625.06
Cofferdam - Bent 04	1.00	LS	\$403,025.06	\$403,025.06
Cofferdam Bracing	60,000.00	LB	\$0.34	\$20,400.00
Sheet Pile Install - Marine	12,074.00	SF	\$31.69	\$382,625.06
Cofferdam - Bent 05	1.00	LS	\$612,582.88	\$612,582.88
Cofferdam Bracing	91,200.00	LB	\$0.34	\$31,008.00
Sheet Pile Install - Marine	18,352.00	SF	\$31.69	\$581,574.88
Cofferdam - Bent 06	1.00	LS	\$612,582.88	\$612,582.88
Cofferdam Bracing	91,200.00	LB	\$0.34	\$31,008.00
Sheet Pile Install - Marine	18,352.00	SF	\$31.69	\$581,574.88
Cofferdam - Bent 07	1.00	LS	\$612,582.88	\$612,582.88
Cofferdam Bracing	91,200.00	LB	\$0.34	\$31,008.00
Sheet Pile Install - Marine	18,352.00	SF	\$31.69	\$581,574.88
Cofferdam - Bent 08	1.00	LS	\$681,429.23	\$681,429.23
Cofferdam Bracing	115,200.00	LB	\$0.34	\$39,168.00
Sheet Pile Install - Marine	20,267.00	SF	\$31.69	\$642,261.23

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
(Item 110 - Shoring, Cribbing, And Cofferdams continued)				
D Cofferdam - Bent 09	1.00	LS	\$681,429.23	\$681,429.23
S Cofferdam Bracing	115,200.00	LB	\$0.34	\$39,168.00
S Sheet Pile Install - Marine	20,267.00	SF	\$31.69	\$642,261.23
D Cofferdam - Bent 10	1.00	LS	\$403,025.06	\$403,025.06
S Cofferdam Bracing	60,000.00	LB	\$0.34	\$20,400.00
S Sheet Pile Install - Marine	12,074.00	SF	\$31.69	\$382,625.06
D Cofferdam - Bent 11	1.00	LS	\$339,645.06	\$339,645.06
S Cofferdam Bracing	60,000.00	LB	\$0.34	\$20,400.00
S Sheet Pile Install - Marine	10,074.00	SF	\$31.69	\$319,245.06
D Cofferdam - Bent 12	1.00	LS	\$180,271.06	\$180,271.06
S Cofferdam Bracing	20,000.00	LB	\$0.34	\$6,800.00
S Sheet Pile Install - Marine	5,474.00	SF	\$31.69	\$173,471.06
D Cofferdam - Bent 13	1.00	LS	\$180,271.06	\$180,271.06
S Cofferdam Bracing	20,000.00	LB	\$0.34	\$6,800.00
S Sheet Pile Install - Marine	5,474.00	SF	\$31.69	\$173,471.06
D 120 - Structure Excavation	303.00	BCY	\$120.00	\$36,360.00
S Structure Excavation - Undeterminable From Drawings Carrying Previous Quantities And Cost	303.00	BCY	\$120.00	\$36,360.00
D 130 - Granular Structural Backfill	96.00	BCY	\$65.00	\$6,240.00
S Granular Structural Backfill - Undeterminable From Drawings Carrying Previous Quantities And Cost	96.00	BCY	\$65.00	\$6,240.00
D 140 - Furnish Drilling Equipment	1.00	LS	\$50,688.00	\$50,688.00
D Furnish Drilling Equipment	1.00	EACH	\$50,688.00	\$50,688.00
S Mobilize Drill Rig	1.00	EACH	\$50,688.00	\$50,688.00
D 150 - Drilled Shaft Concrete	3,514.00	CY	\$374.10	\$1,314,587.40
D Drilled Shaft Concrete	3,514.00	CY	\$374.10	\$1,314,587.40
S Bent 02 Drilled Shaft Concrete	112.00	CY	\$374.10	\$41,899.20
S Bent 03 Drilled Shaft Concrete	345.00	CY	\$374.10	\$129,064.50
S Bent 04 Drilled Shaft Concrete	362.00	CY	\$374.10	\$135,424.20
S Bent 08 Drilled Shaft Concrete	898.00	CY	\$374.10	\$335,941.80
S Bent 09 Drilled Shaft Concrete	898.00	CY	\$374.10	\$335,941.80
S Bent 10 Drilled Shaft Concrete	253.00	CY	\$374.10	\$94,647.30
S Bent 11 Drilled Shaft Concrete	295.00	CY	\$374.10	\$110,359.50
S Bent 12 Drilled Shaft Concrete	203.00	CY	\$374.10	\$75,942.30
S Bent 13 Drilled Shaft Concrete	148.00	CY	\$374.10	\$55,366.80
D 160 - Drilled Shaft Reinforcement	527,100.00	LB	\$1.45	\$764,295.00
D Drilled Shaft Reinforcement	527,100.00	LB	\$1.45	\$764,295.00
S Bent 02 Drilled Shaft Reinforcing	16,800.00	LB	\$1.45	\$24,360.00
S Bent 03 Drilled Shaft Reinforcing	51,750.00	LB	\$1.45	\$75,037.50
S Bent 04 Drilled Shaft Reinforcing	54,300.00	LB	\$1.45	\$78,735.00
S Bent 08 Drilled Shaft Reinforcing	134,700.00	LB	\$1.45	\$195,315.00
S Bent 09 Drilled Shaft Reinforcing	134,700.00	LB	\$1.45	\$195,315.00
S Bent 10 Drilled Shaft Reinforcing	37,950.00	LB	\$1.45	\$55,027.50
S Bent 11 Drilled Shaft Reinforcing	44,250.00	LB	\$1.45	\$64,162.50
S Bent 12 Drilled Shaft Reinforcing	30,450.00	LB	\$1.45	\$44,152.50
S Bent 13 Drilled Shaft Reinforcing	22,200.00	LB	\$1.45	\$32,190.00
D 170 - CSL Test Access Tubes	7,810.00	LF	\$10.75	\$83,957.50
D CSL Test Access Tubes	7,810.00	LF	\$10.75	\$83,957.50
S Bent 02 CSL Tubes	320.00	LF	\$10.75	\$3,440.00

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
(Item 170 - CSL Test Access Tubes continued)				
S Bent 03 CSL Tubes	988.00	LF	\$10.75	\$10,621.00
S Bent 04 CSL Tubes	1,036.00	LF	\$10.75	\$11,137.00
S Bent 08 CSL Tubes	1,447.00	LF	\$10.75	\$15,555.25
S Bent 09 CSL Tubes	1,447.00	LF	\$10.75	\$15,555.25
S Bent 10 CSL Tubes	724.00	LF	\$10.75	\$7,783.00
S Bent 11 CSL Tubes	844.00	LF	\$10.75	\$9,073.00
S Bent 12 CSL Tubes	580.00	LF	\$10.75	\$6,235.00
S Bent 13 CSL Tubes	424.00	LF	\$10.75	\$4,558.00
D 180 - CSL Tests	38.00	EACH	\$2,157.89	\$82,000.00
D CSL Tests	38.00	EACH	\$2,157.89	\$82,000.00
S Bent 02 CSL Testing	2.00	EACH	\$2,000.00	\$4,000.00
S Bent 03 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
S Bent 04 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
S Bent 08 CSL Testing	6.00	EACH	\$2,500.00	\$15,000.00
S Bent 09 CSL Testing	6.00	EACH	\$2,500.00	\$15,000.00
S Bent 10 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
S Bent 11 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
S Bent 12 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
S Bent 13 CSL Testing	4.00	EACH	\$2,000.00	\$8,000.00
D 190 - Drilled Shaft Excavation, 72 In Diameter	1,637.00	VF	\$749.79	\$1,227,406.23
D Drilled Shaft Excavation, 72 In Diameter	1,637.00	VF	\$749.79	\$1,227,406.23
D Bent 02 Drilled Shafts	107.00	VF	\$749.79	\$80,227.53
S 6ft Dia Drilled Shafts	107.00	VF	\$749.79	\$80,227.53
D Bent 03 Drilled Shafts	329.00	VF	\$749.79	\$246,680.91
S 6ft Dia Drilled Shafts	329.00	VF	\$749.79	\$246,680.91
D Bent 04 Drilled Shafts	345.00	VF	\$749.79	\$258,677.55
S 6ft Dia Drilled Shafts	345.00	VF	\$749.79	\$258,677.55
D Bent 10 Drilled Shafts	241.00	VF	\$749.79	\$180,699.39
S 6ft Dia Drilled Shafts	241.00	VF	\$749.79	\$180,699.39
D Bent 11 Drilled Shafts	281.00	VF	\$749.79	\$210,690.99
S 6ft Dia Drilled Shafts	281.00	VF	\$749.79	\$210,690.99
D Bent 12 Drilled Shafts	193.00	VF	\$749.79	\$144,709.47
S 6ft Dia Drilled Shafts	193.00	VF	\$749.79	\$144,709.47
D Bent 13 Drilled Shafts	141.00	VF	\$749.79	\$105,720.39
S 6ft Dia Drilled Shafts	141.00	VF	\$749.79	\$105,720.39
D 200 - Drilled Shaft Excavation, 96 In Diameter	1,444.00	VF	\$1,109.17	\$1,601,641.48
D Drilled Shaft Excavation, 96 In Diameter	1,444.00	VF	\$1,109.17	\$1,601,641.48
D Bent 08 Drilled Shafts	902.00	VF	\$1,109.17	\$1,000,471.34
S 8ft Dia Drilled Shafts	902.00	VF	\$1,109.17	\$1,000,471.34
D Bent 09 Drilled Shafts	542.00	VF	\$1,109.17	\$601,170.14
S 8ft Dia Drilled Shafts	542.00	VF	\$1,109.17	\$601,170.14
D 210 - Furnish Pile Driving Equipment	1.00	LS	\$50,688.00	\$50,688.00
D Furnish Pile Driving Equipment	1.00	EACH	\$50,688.00	\$50,688.00
S Mobilize Pile Driving Rig	1.00	EACH	\$50,688.00	\$50,688.00
D 220 - Furnish PP 48 X 0.5 Steel Piles	5,532.00	VF	\$351.02	\$1,941,842.64
D Furnish PP 48 X 0.5 Steel Piles	5,532.00	VF	\$351.02	\$1,941,842.64
S Bent 05 Furnish 4ft Dia. Steel Pipe Piles	1,384.00	VF	\$351.02	\$485,811.68
S Bent 06 Furnish 4ft Dia. Steel Pipe Piles	2,092.00	VF	\$351.02	\$734,333.84
S Bent 07 Furnish 4ft Dia. Steel Pipe Piles	2,056.00	VF	\$351.02	\$721,697.12

Description		Quantity	UM	Unit Direct Cost	Total Direct Cost
D	230 - Furnish PP 48 X 0.5 Steel Test Piles	923.00	VF	\$351.02	\$323,991.46
D	Furnish PP 48 X 0.5 Steel Test Piles	923.00	VF	\$351.02	\$323,991.46
S	Bent 05 Furnish 4ft Dia. Steel Pipe Piles	231.00	VF	\$351.02	\$81,085.62
S	Bent 06 Furnish 4ft Dia. Steel Pipe Piles	349.00	VF	\$351.02	\$122,505.98
S	Bent 07 Furnish 4ft Dia. Steel Pipe Piles	343.00	VF	\$351.02	\$120,399.86
D	240 - Drive PP 48 X 0.5 Steel Piles	5,532.00	VF	\$208.06	\$1,150,987.92
D	Drive PP 48 X 0.5 Steel Piles	5,532.00	VF	\$208.06	\$1,150,987.92
S	Bent 05 Drive Piles	1,384.00	VF	\$208.06	\$287,955.04
S	Bent 06 Drive Piles	2,092.00	VF	\$208.06	\$435,261.52
S	Bent 07 Drive Piles	2,056.00	VF	\$208.06	\$427,771.36
D	250 - Drive Test Piles	923.00	VF	\$208.06	\$192,039.38
D	Drive Test Piles	923.00	VF	\$208.06	\$192,039.38
S	Bent 05 Drive Test Piles	231.00	VF	\$208.06	\$48,061.86
S	Bent 06 Drive Test Piles	349.00	VF	\$208.06	\$72,612.94
S	Bent 07 Drive Test Piles	343.00	VF	\$208.06	\$71,364.58
D	260 - Pile Load Dynamic	6.00	EACH	\$35,840.00	\$215,040.00
D	Pile Load Dynamic	6.00	EACH	\$35,840.00	\$215,040.00
S	Pile Test 50 Ton Cap.	0.00	EACH	\$15,872.00	\$0.00
S	Pile Test 100 Ton Cap.	0.00	EACH	\$22,528.00	\$0.00
S	Pile Test 150 Ton Cap.	0.00	EACH	\$29,184.00	\$0.00
S	Pile Test 200 Ton Cap.	0.00	EACH	\$31,744.00	\$0.00
S	Pile Test 400 Ton Cap.	6.00	EACH	\$35,840.00	\$215,040.00
D	270 - PP 48 X 0.5 Steel Pile Splices	112.00	EACH	\$1,151.94	\$129,017.28
D	PP 48 X 0.5 Steel Pile Splices	112.00	EACH	\$1,151.94	\$129,017.28
S	Bent 05 Pile Splices	24.00	EACH	\$1,151.94	\$27,646.56
S	Bent 05 Test Splices	4.00	EACH	\$1,151.94	\$4,607.76
S	Bent 06 Pile Splices	36.00	EACH	\$1,151.94	\$41,469.84
S	Bent 06 Test Pile Splices	6.00	EACH	\$1,151.94	\$6,911.64
S	Bent 07 Pile Splices	36.00	EACH	\$1,151.94	\$41,469.84
S	Bent 07 Test Pile Splices	6.00	EACH	\$1,151.94	\$6,911.64
D	280 - Reinforcement	7,882,790.00	LB	\$1.47	\$11,587,701.30
S	Reinforcement	7,882,790.00	LB	\$1.47	\$11,587,701.30
D	290 - Coated Reinforcement	1,612,435.00	LB	\$1.59	\$2,563,771.65
S	Coated Reinforcement	1,612,435.00	LB	\$1.59	\$2,563,771.65
D	300 - Foundation Concrete, Class 4000	9,401.00	CY	\$314.23	\$2,954,097.26
D	Foundation Concrete, Class 4000	9,401.00	CY	\$314.23	\$2,954,097.26
S	Abutment Concrete	135.00	CY	\$374.10	\$50,503.50
S	Pile Cap Concrete	9,266.00	CY	\$313.36	\$2,903,593.76
D	310 - General Structural Concrete, Class 4000	33,523.00	CY	\$714.96	\$23,967,605.75
D	General Structural Concrete, Class 4000	33,523.00	CY	\$714.96	\$23,967,605.75
S	Box Girder Concrete	23,340.00	CY	\$771.71	\$18,011,711.40
S	Bents	6,708.00	CY	\$591.95	\$3,970,800.60
S	Miscellaneous Concrete	3,475.00	CY	\$571.25	\$1,985,093.75
D	320 - Reinforced Concrete End Panels	380.00	SY	\$285.63	\$108,539.40
D	Reinforced Concrete End Panels	380.00	SY	\$285.63	\$108,539.40
S	End Panels - North Approach - Assume 18" Thick	190.00	SY	\$285.63	\$54,269.70
S	End Panels - South Approach - Assume 18" Thick	190.00	SY	\$285.63	\$54,269.70
D	330 - Post-Tensioning	2,228,617.00	LB	\$4.41	\$9,828,200.97
S	Post-Tensioning - Assuming Grouted, 200-ft Spans	2,228,617.00	LB	\$4.41	\$9,828,200.97

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
<i>(Item 330 - Post-Tensioning continued)</i>				
D 340 - Bearing Devices, Abutments	2.00	EACH	\$3,388.68	\$6,777.36
D Bearing Devices, Abutments	2.00	EACH	\$3,388.68	\$6,777.36
S Bearing Pad - North Abutment	36.00	SF	\$94.13	\$3,388.68
S Bearing Pad - South Abutment	36.00	SF	\$94.13	\$3,388.68
D 350 - Bearing Devices, Bent 2 & 14	2.00	EACH	\$2,259.12	\$4,518.24
D Bearing Devices, Bent 2 & 14	2.00	EACH	\$2,259.12	\$4,518.24
S Bearing Pad - Bent 02	24.00	SF	\$94.13	\$2,259.12
S Bearing Pad - Bent 14	24.00	SF	\$94.13	\$2,259.12
D 360 - 2 Inch Electrical Conduit	8,800.00	LF	\$18.75	\$165,000.00
S 2 Inch Electrical Conduit	8,800.00	LF	\$18.75	\$165,000.00
D 370 - Modular Expansion Joint Seals	113.00	LF	\$776.92	\$87,791.96
S Modular Expansion Joint Seals	113.00	UNIT	\$776.92	\$87,791.96
D 380 - Combination Bridge Rail	8,780.00	LF	\$397.83	\$3,492,947.40
S Combination Bridge Rail	8,780.00	LF	\$397.83	\$3,492,947.40
D 390 - Handrail, Pedestrian Ornamental	4,390.00	LF	\$319.67	\$1,403,351.30
S Handrail, Pedestrian Ornamental	4,390.00	LF	\$319.67	\$1,403,351.30
D 400 - Retaining Walls, MSE	12,835.00	SF	\$55.67	\$714,524.45
D Retaining Walls, MSE	12,835.00	SF	\$55.67	\$714,524.45
S MSE-Southwest	2,663.00	SF	\$55.67	\$148,249.21
S MSE-Southeast	2,625.00	SF	\$55.67	\$146,133.75
S MSE-Northwest	1,870.00	SF	\$55.67	\$104,102.90
S MSE-Northeast	3,465.00	SF	\$55.67	\$192,896.55
S MSE-S Abutment	507.00	SF	\$55.67	\$28,224.69
S MSE-N Abutment	845.00	SF	\$55.67	\$47,041.15
S MSE-South End	410.00	SF	\$55.67	\$22,824.70
S MSE-North End	450.00	SF	\$55.67	\$25,051.50
D 410 - Marine Support	1.00	LS	\$15,184,848.00	\$15,184,848.00
D Marine Support	1.00	LS	\$15,184,848.00	\$15,184,848.00
S Barges - Monthly Rental Assume 16 Each For Approx. 2 Years	384.00	MO	\$12,560.00	\$4,823,040.00
S Small Tug - Daily Charge Assume 2 Small Tugs For Approx. 2 Years 250 Day/year	1,000.00	DY	\$10,240.00	\$10,240,000.00
D Marine Mobilization	1.00	LS	\$121,808.00	\$121,808.00
S Barge Mobe	1,600.00	MILE	\$76.13	\$121,808.00
D 420 - Aggregate Base	1,922.00	TON	\$23.37	\$44,917.14
D Aggregate Base	1,922.00	TON	\$23.37	\$44,917.14
S Aggregate Base - Roadway South	956.00	TON	\$23.37	\$22,341.72
S Aggregate Base - Roadway North	329.00	TON	\$23.37	\$7,688.73
S Aggregate Base - Sidewalk South	474.00	TON	\$23.37	\$11,077.38
S Aggregate Base - Sidewalk North	163.00	TON	\$23.37	\$3,809.31
D 430 - HMAC	4,080.00	TON	\$85.15	\$347,412.00
D HMAC	4,080.00	TON	\$85.15	\$347,412.00
S Roadway South	478.00	TON	\$85.15	\$40,701.70
S Sidewalk South	164.00	TON	\$85.15	\$13,964.60
S Bridge Deck	3,438.00	TON	\$85.15	\$292,745.70
D 440 - Concrete Walks	62,960.00	SF	\$5.11	\$321,725.60
D Concrete Walks	62,960.00	SF	\$5.11	\$321,725.60
S Sidewalk Roadway South	7,320.00	SF	\$5.11	\$37,405.20

Description	Quantity	UM	Unit Direct Cost	Total Direct Cost
(Item 440 - Concrete Walks continued)				
S Sideway Roadway North	2,520.00	SF	\$5.11	\$12,877.20
S Bridge	52,620.00	SF	\$5.11	\$268,888.20
S Bridge Overlook	500.00	SF	\$5.11	\$2,555.00
D 450 - Concrete Sidewalk Ramps	4.00	EACH	\$4,000.00	\$16,000.00
S Concrete Sidewalk Ramps - None Identified, Carried Previous Cost And Quantity	4.00	EACH	\$4,000.00	\$16,000.00
D 460 - Concrete Curbs And Gutter	1,640.00	LF	\$12.14	\$19,909.60
D Concrete Curbs And Gutter	1,640.00	LF	\$12.14	\$19,909.60
S Curb And Gutter - Roadway South	1,220.00	LF	\$12.14	\$14,810.80
S Curb And Gutter - Sidewalk South	420.00	LF	\$12.14	\$5,098.80
D 470 - Concrete Barrier	8,780.00	LF	\$67.39	\$591,684.20
S Concrete Barrier	8,780.00	LF	\$67.39	\$591,684.20
D 480 - Longitudinal Pavement Markings	17,540.00	LF	\$0.33	\$5,788.20
S Longitudinal Pavement Markings	17,540.00	LF	\$0.33	\$5,788.20
D 490 - Signage	300.00	SF	\$37.55	\$11,265.00
S Signage	300.00	SF	\$37.55	\$11,265.00

Indirect Items

Description	Quantity	UM	Unit Indirect Cost	Total Indirect Cost
B Bridge Demo Indirect - Labor	1.00	LS	\$1,230,614.83	\$1,230,614.83
B Bridge Demo Indirect - Equipment	1.00	LS	\$597,845.97	\$597,845.97

Direct Cost Totals		
	<u>Amount</u>	<u>Percent of Direct Cost</u>
Labor:	\$4,922,459.30	4.52%
Equipment Owned:	\$2,391,383.88	2.20%
Equipment Rented:	\$0.00	0.00%
Materials Owned:	\$0.00	0.00%
Materials Purchased:	\$100,000.00	0.09%
Subcontracted:	\$101,442,461.11	93.19%
Trucking Owned:	\$0.00	0.00%
Trucking Hired:	\$0.00	0.00%
Miscellaneous:	\$0.00	0.00%
Plug:	\$0.00	0.00%
Direct Cost:	<u>\$108,856,304.29</u>	

Indirect Cost Totals		
	<u>Amount</u>	<u>Percent of Indirect Cost</u>
Labor:	\$1,230,614.83	67.30%
Equipment Owned:	\$597,845.97	32.70%
Equipment Rented:	\$0.00	0.00%
Materials Owned:	\$0.00	0.00%
Materials Purchased:	\$0.00	0.00%
Subcontracted:	\$0.00	0.00%
Trucking Owned:	\$0.00	0.00%
Trucking Hired:	\$0.00	0.00%
Miscellaneous:	\$0.00	0.00%
Plug:	\$0.00	0.00%
Indirect Cost:	<u>\$1,828,460.80</u>	

Pay Item Summary		
	<u>Amount</u>	<u>Percent of Takeoff Price</u>
Total Direct Cost:	\$108,856,304.29	95.57%
Total DC Adds/Cuts:	\$0.00	0.00%
Total Indirect Cost:	\$1,828,460.80	1.61%
Total Bond:	\$0.00	0.00%
Total Overall Cost:	<u>\$110,684,765.09</u>	97.17%
Total Overhead:	\$1,000,000.00	0.88%
Total Profit:	\$2,218,686.32	1.95%
Total Margin:	\$3,218,686.32	2.83%
Total Takeoff Price:	<u>\$113,903,451.41</u>	

APPENDIX C

Total Project Cost Estimate



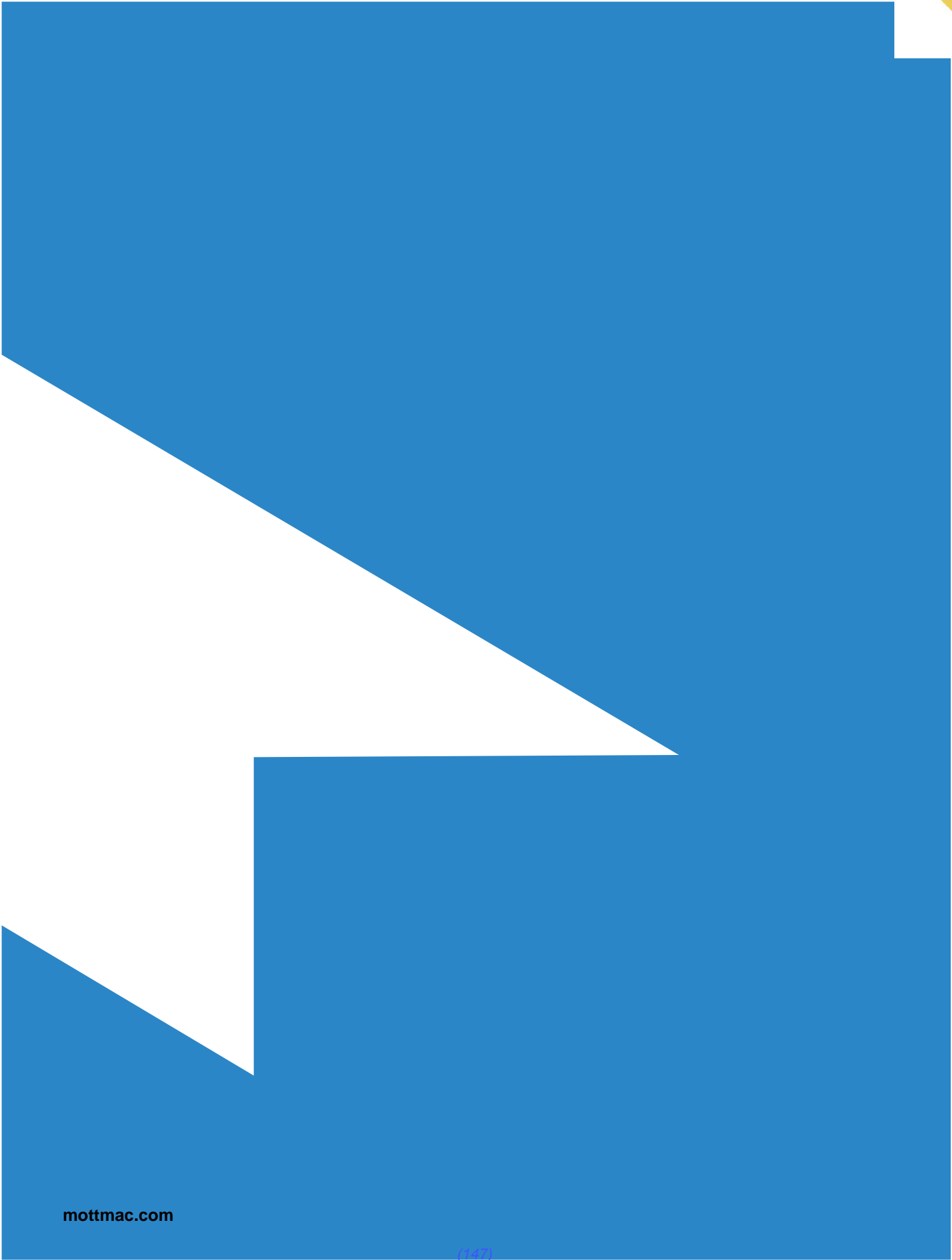
**SR35 Columbia River Bridge
Pre-PE Cost Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Total	Total
Clearing And Grubbing	1	ACRE	\$16,700	\$22,377	
Embankment In Place	12,756	BCY	\$16	\$209,454	
Roadwork					\$231,831
Concrete Inlets	8	EACH	\$1,548	\$12,385.76	
Diversion Manholes	2	EACH	\$10,000	\$20,000.00	
Return Flow Manholes	2	EACH	\$3,000	\$6,000.00	
Vault With Internals	2	EACH	\$200,000	\$400,000.00	
Pipe, 12 Inch Diameter	740	LF	\$219	\$162,111.80	
Pipe, 15 Inch Diameter - Carried Previous Qty, Assume On Banks From Report	400	LF	\$342	\$136,920.00	
Pipe, 18 Inch Diameter	5,085	LF	\$493	\$2,506,447.35	
Drainage And Sewers					\$3,243,865
Bridge Removal	92,778	SF	\$134	\$12,461,013.18	
Allocated Contingency for Lead Paint *	1	LS	\$107	\$9,927,246.00	
Shoring, Cribbing, And Cofferdams	1	LS	\$5,440,360	\$5,440,360.15	
Structure Excavation	303	BCY	\$120	\$36,360.00	
Granular Structural Backfill	96	BCY	\$65	\$6,240.00	
Furnish Drilling Equipment	1	LS	\$50,688	\$50,688.00	
Drilled Shaft Concrete	3,514	CY	\$374	\$1,314,587.40	
Drilled Shaft Reinforcement	527,100	LB	\$1	\$764,295.00	
CSL Test Access Tubes	7,810	LF	\$11	\$83,957.50	
CSL Tests	38	EACH	\$2,158	\$81,999.82	
Drilled Shaft Excavation, 72 In Diameter	1,637	VF	\$750	\$1,227,406.23	
Drilled Shaft Excavation, 96 In Diameter	1,444	VF	\$1,109	\$1,601,641.48	
Furnish Pile Driving Equipment	1	LS	\$50,688	\$50,688.00	
Furnish PP 48 X 0.5 Steel Piles	5,532	VF	\$351	\$1,941,842.64	
Furnish PP 48 X 0.5 Steel Test Piles	923	VF	\$351	\$323,991.46	
Drive PP 48 X 0.5 Steel Piles	5,532	VF	\$208	\$1,150,987.92	
Drive Test Piles	923	VF	\$208	\$192,039.38	
Pile Load Dynamic	6	EACH	\$35,840	\$215,040.00	
PP 48 X 0.5 Steel Pile Splices	112	EACH	\$1,152	\$129,017.28	
Reinforcement	7,882,790	LB	\$1	\$11,587,701.30	
Coated Reinforcement	1,612,435	LB	\$2	\$2,563,771.65	
Foundation Concrete, Class 4000	9,401	CY	\$314	\$2,954,076.23	
General Structural Concrete, Class 4000	33,523	CY	\$715	\$23,967,604.08	
Reinforced Concrete End Panels	380	SY	\$285.63	\$108,539.40	
Post-Tensioning	2,228,617	LB	\$4.41	\$9,828,200.97	
Bearing Devices, Abutments	2	EACH	\$3,388.68	\$6,777.36	
Bearing Devices, Bent 2 & 14	2	EACH	\$2,259.12	\$4,518.24	
2 Inch Electrical Conduit	8,800	LF	\$18.75	\$165,000.00	
Modular Expansion Joint Seals	113	LF	\$776.92	\$87,791.96	
Combination Bridge Rail	8,780	LF	\$397.83	\$3,492,947.40	
Handrail, Pedestrian Ornamental	4,390	LF	\$319.67	\$1,403,351.30	
Retaining Walls, MSE	12,835	SF	\$55.67	\$714,524.45	
Marine Support	1	LS	\$15,184,848.00	\$15,184,848.00	
Bridge					\$109,069,054
Aggregate Base	1,922	TON	\$23.37	\$44,917.14	
Bases					\$44,917



**SR35 Columbia River Bridge
Pre-PE Cost Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Total	Total
HMAC	4,080	TON	\$85.15	\$347,412.00	
Concrete Walks	62,960	SF	\$5.11	\$321,725.60	
Concrete Sidewalk Ramps	4	EACH	\$4,000.00	\$16,000.00	
Concrete Curbs And Gutter	1,640	LF	\$12.14	\$19,909.60	
<i>Wearing Surfaces</i>					<i>\$705,047</i>
Concrete Barrier	8,780	LF	\$67.39	\$591,684.20	
Longitudinal Pavement Markings	17,540	LF	\$0.33	\$5,788.20	
<i>Permanent Traffic Safety and Guidance Devices</i>					<i>\$597,472</i>
Signage	300	SF	\$37.55	\$11,265.00	
<i>Permanent Traffic Control and Illumination Systems</i>					<i>\$11,265</i>
<i>Right of Way Development and Control</i>					<i>\$0</i>
<i>Future Life Cycle Costs</i>					<i>\$0</i>
SUBTOTAL - CONSTRUCTION ITEMS					\$113,903,451
Mobilization			10%		\$11,390,000.00
SUBTOTAL - ALL ITEMS					\$125,293,451
Recommended Contingency (Design and Construction)			40%		\$50,117,000.00
SUBTOTAL - ALL ITEMS + CONTINGENCY					\$175,410,451
Sales Tax ** (assume WA half of project)			7.50%		\$6,578,000
Final Design			15%		\$26,312,000
Engineering Services During Construction			15%		\$26,312,000
TOTAL COST IN 2018 DOLLARS					\$234,612,451
Escalation to:	2020		4%		\$19,144,000
TOTAL COST 2020 DOLLARS					\$253,756,000



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