

City Council Special Meeting

**November 3, 2014
5:00 p.m.**



AGENDA
GIG HARBOR CITY COUNCIL – SPECIAL MEETING
Monday, November 3, 2014 – 5:00 p.m.

CALL TO ORDER / ROLL CALL:

PLEDGE OF ALLEGIANCE:

OLD BUSINESS: None.

NEW BUSINESS:

1. Eddon Boat Park Marine Railway Plans and Specifications Preparation Contract – Peterson Structural Engineers.

ADJOURN:



**Business of the City Council
City of Gig Harbor, WA**

Subject: Eddon Boat Park - Marine Railways Restoration Phase 3 (CPP1308) – Professional Services Contract with Peterson Structural Engineers, Inc.

Proposed Council Action: Authorize the Mayor to execute a Professional Services Contract with Peterson Structural Engineers, Inc. in an amount not exceed \$27,353.

Dept. Origin: Public Works

Prepared by: Emily Appleton, PE
EPA 10.31.14

For Agenda of: November 3, 2014

Exhibits: Professional Services Contract and Exhibits

Initial & Date

Concurred by Mayor: _____

Approved by City Administrator: _____

Approved as to form by City Atty: *Per email dated 10/31/14*

Approved by Finance Director: _____

Approved by Public Works Dir.: *ADK 10/31/14*

Approved by City Engineer: _____

Expenditure Required	\$27,353	Amount Budgeted	\$190,000.00	Appropriation Required	\$0
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INFORMATION/BACKGROUND

The Eddon Boat Park – Marine Railways Restoration (Phase 3) project includes reconstruction of the marine railway system necessary to haul and launch restored vessels. Preliminary design layout sufficient to obtain permits for the project was completed by Gig Harbor Boat Shop staff. In order to bid and award construction of the project under a public works contract, the plans and technical specifications issued for construction need to be stamped and signed by a qualified engineer registered in the state of WA. Due to the structural design elements required for the project, the services of a registered Structural Engineer are required as no City staff members are qualified specifically for structural engineering. Peterson Structural Engineers, Inc. (PSE), was selected via the MRSC Consultant Services Roster process under the structural engineering category in accordance with RCW 39.20. PSE was uniquely qualified due to their ability to meet a very tight schedule.

The short timeline for completing work under this contract is critical to successful project completion in compliance with permit and grant requirements. The project has been in the permitting phase for more than a year and only recently staff was able to negotiate the successful issuance of permits from all regulatory agencies. The combination of defined dates for construction activity “fish windows” and grant fund expiration require that construction begin as soon as project permits are final. Final project permit authorization is anticipated to occur by January 5, 2015, requiring that the project be out to bid by mid-November with the construction contract awarded in December.

This Professional Services Contract will allow for the completion of stamped and signed plans, specifications and an estimate of probable construction costs, sufficient to advertise the project for bidding by November 19, 2014. There is also a task for engineering support, as-needed, during bidding and construction. Authorizing this contract with Peterson Structural Engineers, Inc., will allow the project to proceed with the least risk to grant funding.

FISCAL CONSIDERATION

In 2013, the City received \$128,355 from a Washington State Heritage Capital Project Fund Grant for this project. The project is included in the 2014 Budget and includes local match funds in addition to the grant. A budget summary is provided in the table below:

2014 Budget for Parks Development, Objective No. 11:	\$190,000
2014 Contracts:	
Peterson Structural Engineers, Inc. – Professional Services:	(\$ 27,353)
Remaining 2014 Budget =	\$ 162,647

This project is also proposed in the preliminary 2015-16 Budget at a total cost of \$230,000. Anticipated future construction expenses in 2015 would be paid from the 2015-16 Budget.

BOARD OR COMMITTEE RECOMMENDATION

None.

RECOMMENDATION/MOTION

Authorize the Mayor to execute a Professional Services Contract with Peterson Structural Engineers, Inc., in an amount not exceed \$27,353.

**PROFESSIONAL SERVICES CONTRACT
BETWEEN THE CITY OF GIG HARBOR AND
PETERSON STRUCTURAL ENGINEERS, INC.**

THIS AGREEMENT is made by and between the City of Gig Harbor, a Washington municipal corporation (the "City"), and Peterson Structural Engineers, Inc., a corporation organized under the laws of the State of Washington (the "Consultant").

RECITALS

WHEREAS, the City is presently engaged in Structural Design and Preparation of Technical Specification for Eddon Boat Marine Railways and desires that the Consultant perform services necessary to provide the following consultation services; and

WHEREAS, the Consultant agrees to perform the services more specifically described in the Scope of Work including any addenda thereto as of the effective date of this Agreement, all of which are attached hereto as **Exhibit A – Scope of Work**, and are incorporated by this reference as if fully set forth herein;

NOW, THEREFORE, in consideration of the mutual promises set forth herein, it is agreed by and between the parties as follows:

TERMS

1. **Retention of Consultant - Scope of Work**. The City hereby retains the Consultant to provide professional services as defined in this Agreement and as necessary to accomplish the scope of work attached hereto as **Exhibit A** and incorporated herein by this reference as if set forth in full. The Consultant shall furnish all services, labor and related equipment necessary to conduct and complete the work, except as specifically noted otherwise in this Agreement.

2. **Payment.**

A. The City shall pay the Consultant an amount based on time and materials, not to exceed Twenty-Seven Thousand Three Hundred Fifty-Three Dollars and Zero Cents (\$27,353) for the services described in Section 1 herein. This is the maximum amount to be paid under this Agreement for the work described in **Exhibit A**, and shall not be exceeded without the prior written authorization of the City in the form of a negotiated and executed supplemental agreement. The Consultant's staff and billing rates shall be as described in **Exhibit B – Schedule of Rates and Estimated Hours**. The Consultant shall not bill for Consultant's staff not identified or listed in **Exhibit B** or bill at rates in excess of

the hourly rates shown in **Exhibit B**, unless the parties agree to a modification of this Contract, pursuant to Section 17 herein.

B. The Consultant shall submit monthly invoices to the City after such services have been performed, and a final bill upon completion of all the services described in this Agreement. The City shall pay the full amount of an invoice within forty-five (45) days of receipt. If the City objects to all or any portion of any invoice, it shall so notify the Consultant of the same within fifteen (15) days from the date of receipt and shall pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion.

3. Duration of Work. The City and the Consultant agree that work will begin on the tasks described in **Exhibit A** immediately upon execution of this Agreement. The parties agree that the work described in **Exhibit A** shall be completed by March 31, 2015; provided however, that additional time shall be granted by the City for excusable days or extra work.

4. Termination. The City reserves the right to terminate this Agreement at any time upon ten (10) days written notice to the Consultant. Any such notice shall be given to the address specified above. In the event that this Agreement is terminated by the City other than for fault on the part of the Consultant, a final payment shall be made to the Consultant for all services performed. No payment shall be made for any work completed after ten (10) days following receipt by the Consultant of the notice to terminate. In the event that services of the Consultant are terminated by the City for fault on part of the Consultant, the amount to be paid shall be determined by the City with consideration given to the actual cost incurred by the Consultant in performing the work to the date of termination, the amount of work originally required which would satisfactorily complete it to date of termination, whether that work is in a form or type which is usable to the City at the time of termination, the cost of the City of employing another firm to complete the work required, and the time which may be required to do so.

5. Non-Discrimination. The Consultant agrees not to discriminate against any customer, employee or applicant for employment, subcontractor, supplier or materialman, because of race, color, creed, religion, national origin, marital status, sex, sexual orientation, age or handicap, except for a bona fide occupational qualification. The Consultant understands that if it violates this provision, this Agreement may be terminated by the City and that the Consultant may be barred from performing any services for the City now or in the future.

6. **Independent Status of Consultant.** The parties to this Agreement, in the performance of it, will be acting in their individual capacities and not as agents, employees, partners, joint ventures, or associates of one another. The employees or agents of one party shall not be considered or construed to be the employees or agents of the other party for any purpose whatsoever.

7. **Indemnification.**

A. The Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers, harmless from any and all claims, injuries, damages, losses or suits including attorneys fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

B. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees or volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

8. **Insurance.**

A. The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the Consultant's own work including the work of the Consultant's agents, representatives, employees, subconsultants or subcontractors.

B. Before beginning work on the project described in this Agreement, the Consultant shall provide evidence, in the form of a Certificate of Insurance, of the following insurance coverage and limits (at a minimum):

1. Business auto coverage for any auto no less than a \$1,000,000 each accident limit, and
2. Commercial General Liability insurance no less than \$1,000,000 per occurrence with a \$2,000,000 aggregate. Coverage shall include, but is not limited to, contractual liability, products and completed operations, property damage, and employers liability, and
3. Professional Liability insurance with no less than \$1,000,000 per occurrence. All policies and coverages shall be on an occurrence

basis by an 'A' rated company licensed to conduct business in the State of Washington.

C. The Consultant is responsible for the payment of any deductible or self-insured retention that is required by any of the Consultant's insurance. If the City is required to contribute to the deductible under any of the Consultant's insurance policies, the Contractor shall reimburse the City the full amount of the deductible within 10 working days of the City's deductible payment.

D. The City of Gig Harbor shall be named as an additional insured on the Consultant's commercial general liability policy. This additional insured endorsement shall be included with evidence of insurance in the form of a Certificate of Insurance for coverage necessary in Section B. The City reserves the right to receive a certified and complete copy of all of the Consultant's insurance policies upon request.

E. Under this Agreement, the Consultant's insurance shall be considered primary in the event of a loss, damage or suit. The City's own comprehensive general liability policy will be considered excess coverage with respect to defense and indemnity of the City only and no other party. Additionally, the Consultant's commercial general liability policy must provide cross-liability coverage as could be achieved under a standard ISO separation of insured's clause.

F. The Consultant shall request from his insurer a modification of the ACORD certificate to include language that prior written notification will be given to the City of Gig Harbor at least 30 days in advance of any cancellation, suspension or material change in the Consultant's coverage.

9. Ownership and Use of Work Product. Any and all documents, drawings, reports, and other work product produced by the Consultant under this Agreement shall become the property of the City upon payment of the Consultant's fees and charges therefore. The City shall have the complete right to use and re-use such work product in any manner deemed appropriate by the City, provided, that use on any project other than that for which the work product is prepared shall be at the City's risk unless such use is agreed to by the Consultant.

10. City's Right of Inspection. Even though the Consultant is an independent contractor with the authority to control and direct the performance and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City's general right of inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or become applicable within the terms of this Agreement to the Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

11. **Records.** The Consultant shall keep all records related to this Agreement for a period of three years following completion of the work for which the Consultant is retained. The Consultant shall permit any authorized representative of the City, and any person authorized by the City for audit purposes, to inspect such records at all reasonable times during regular business hours of the Consultant. Upon request, the Consultant will provide the City with reproducible copies of any such records. The copies will be provided without cost if required to substantiate any billing of the Consultant, but the Consultant may charge the City for copies requested for any other purpose.

12. **Work Performed at the Consultant's Risk.** The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents, and subconsultants in the performance of the work hereunder and shall utilize all protection necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be responsible for any loss of or damage to materials, tools, or other articles used or held by the Consultant for use in connection with the work.

13. **Non-Waiver of Breach.** The failure of the City to insist upon strict performance of any of the covenants and agreements contained herein, or to exercise any option herein conferred in one or more instances shall not be construed to be a waiver or relinquishment of said covenants, agreements, or options, and the same shall be and remain in full force and effect.

14. **Resolution of Disputes and Governing Law.**

A. Should any dispute, misunderstanding, or conflict arise as to the terms and conditions contained in this Agreement, the matter shall first be referred to the City Engineer or Director of Operations and the City shall determine the term or provision's true intent or meaning. The City Engineer or Director of Operations shall also decide all questions which may arise between the parties relative to the actual services provided or to the sufficiency of the performance hereunder.

B. If any dispute arises between the City and the Consultant under any of the provisions of this Agreement which cannot be resolved by the City Engineer or Director of Operations determination in a reasonable time, or if the Consultant does not agree with the City's decision on the disputed matter, jurisdiction of any resulting litigation shall be filed in Pierce County Superior Court, Pierce County, Washington. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. The prevailing party in any such litigation shall be entitled to recover its costs, including reasonable attorney's fees, in addition to any other award.

15. **Written Notice.** All notices required to be given by either party to the other under this Agreement shall be in writing and shall be given in person or by mail to the addresses set forth below. Notice by mail shall be deemed given as of the date the same

is deposited in the United States mail, postage prepaid, addressed as provided in this paragraph.

CONSULTANT:
Peterson Structural Engineers, Inc.
ATTN: Bill Sandbo, P.E.
708 Broadway, Suite 100A
Tacoma, WA. 98402
253-830-2140

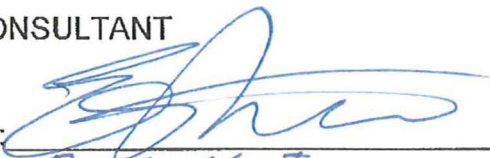
City of Gig Harbor
ATTN: Steve Misiurak, P.E.
City Engineer
3510 Grandview Street
Gig Harbor, WA 98335
(253) 851-6170

16. Subcontracting or Assignment. The Consultant may not assign or subcontract any portion of the services to be provided under this Agreement without the express written consent of the City. If applicable, any subconsultants approved by the City at the outset of this Agreement are named on **Exhibit C** attached hereto and incorporated herein by this reference as if set forth in full.

17. Entire Agreement. This Agreement represents the entire integrated agreement between the City and the Consultant, superseding all prior negotiations, representations or agreements, written or oral. This Agreement may be modified, amended, or added to, only by written instrument properly signed by both parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement this _____ day of _____, 20____.

CONSULTANT

By: 
Its: PRESIDENT

CITY OF GIG HARBOR

By: _____
Mayor Jill Guernsey

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

Exhibit A

Peterson Structural Engineers

708 Broadway Suite 100A
Tacoma, WA 98402

Scope of Work:

TASK 0. Preliminary Project Work –

- 0.1. Print Documents/AutoCad work
- 0.2. Site Visit
- 0.3. Scope Fee Development

TASK 1. Piling Design –

Schedule: 30% review on Wed 11/5/14 COB

- 1.1. Existing Document Review – review existing geotech information and pile structural calculations for pile driving design parameters and design input, review pile driving records for driven piles for the Marine Rails project.
- 1.2. Develop Design Criteria for Piles – get Gig Harbor concurrence on selected soil properties and loading for pile design. Note that unless provided, PSE can not assume any liability for the soil/structure interaction of the previously driven piles.
- 1.3. Structural Calculations for Driven Piles – develop structural calculations for the driven piles already installed
- 1.4. Structural Calculations for “Footing Piles” – develop structural calculations for the concrete “footing piles that have not yet been installed

TASK 2. Rail Design –

Schedule: 30% review on Wed 11/5/14 COB

- 2.1. Existing drawings review – review McMillan Design Co. drawings and existing rail beam calculation.
- 2.2. Develop Loading Criteria for Rail Beams – gravity and lateral loading, get Gig Harbor concurrence
- 2.3. Structural Calculations for Rail Beams – check design under loading criteria agreed upon in scope item 2.2

TASK 3. Carriage Design –

Schedule: 30% review on Wed 11/5/14 COB

- 3.1. Existing Document Review – review McMillan design drawings
- 3.2. Develop design Criteria for Carriage – consider gravity and seismic loading, get Gig Harbor concurrence
- 3.3. Carriage Calculations – provide support for main structural frame design, design ancillary members (floor plates, railings, stairs, arms etc.)

TASK 4. : Create Computer Generated Structural Drawings –

Schedule: 60% (Fri 11/7/14 COB or Mon 11/10/14 AM) and 90% (Wed 11/12/14 COB) review by Gig Harbor

- 4.1. S1 – Cover Page – project location, contact info, etc
- 4.2. S2 – General Notes – general structural notes
- 4.3. S3 – Site Plan – relationship between inside/outside marine rails and existing dock and building
- 4.4. S4 – Foundation Layout and Elevation – Inside Marine Rail

Exhibit A

- 4.5. S5 – Foundation Layout and Elevation – Outside Marine Rail
- 4.6. S6 – Foundation Details – Driven Piles and Footing Piles
- 4.7. S7 – Rail Layout – Inside Marine Rail
- 4.8. S8 – Rail Layout – Outside Marine Rail
- 4.9. S9 – Rail Details
- 4.10. S10 – Inside Carriage – Plan and Elevation
- 4.11. S11 – Outside Carriage – Plan and Elevation
- 4.12. S12 – Carriage – Structural Details – Sheet 1
- 4.13. S13 – Carriage – Structural Details – Sheet 2
- 4.14. S14 – Carriage – Ancillary Member Details – Sheet 1
- 4.15. S15 – Carriage – Ancillary Member Details – Sheet 2
- 4.16. S16 – Carriage – Miscellaneous Details

TASK 5. Project Specifications –

Schedule: 90% review on Tue 11/11/14 COB

- 5.1. Review WSDOT standard structural steel speciation for applicability to Marine Rails Project
- 5.2. In-depth review of galvanizing/corrosion requirements
- 5.3. Develop special provisions (structural only, if req'd)

TASK 6. Engineers Opinion of Probable Cost –

Schedule: 90% Review on Tue 11/11/14 COB

- 6.1. Schedule A – Foundation Work (pile cut-off, excavation, concrete and rebar placement)
- 6.2. Schedule B – Marine Rails (structural steel, erection, overwater work)
- 6.3. Schedule C – Carriages (structural steel, aluminum plating, accessories, assembly)

TASK 7. Anticipated Construction Sequence and Schedule –

Schedule: 90% Review on Wed 11/12 COB

- 7.1. Linear construction schedule showing all construction and incorporation of fish window

TASK 8. Construction Support –

Schedule: Assumes (12) Weeks of Construction Support

- 8.1. reply to RFI's, review submittals, structural observation, and inspection

PSE's understanding is that all permits will be obtained by the City of Gig Harbor. Unless a site specific geotechnical report can be provided, PSE specifically excludes the soil/structure interaction of the previously driven piles.

Fee and Schedule:

Based on the aforementioned scope, PSE's fees for professional services (including construction support) will be \$27,353. PSE understands that this project requires City Council approval before work can begin. PSE anticipates that we will be able to start work immediately after the Council approves funding for the project. Once engineering work commences, Task 1 through Task 7 will be completed by close of business on Friday, November 14th, 2014.

After engineering work commences, monthly invoices will be submitted for the work that has been completed to date. If changes or additional scope items cause a need for additional funds, we will apprise you of that situation before proceeding. Any direct costs incurred will be billed at cost plus 10%.

EXHIBIT B



Consulting Structural Engineers
Portland, Oregon • Tacoma, Washington
www.pseengineers.com

Peterson Structural Engineers 2014 Fee Schedule

Thank you for your interest in Peterson Structural Engineers. Our 2014 fee structure is below:

Principal	\$170/hr.
Senior Associate/Designer	\$140/hr.
Project Manager.....	\$125/hr.
Staff Designer.....	\$110/hr.
Administrative/Drafting.....	\$85/hr.

Direct Expenses will be billed at cost plus 10%

Thank you again for the interest in PSE's professional services. PSE takes great pride in providing our clients with high quality, prompt responses. If you have any questions about our fees, please do not hesitate to contact me at (253) 830-2140.

Sincerely,

Bill Sandbo, PE, LEED AP

Revised January 1st, 2014

EXHIBIT B



Consulting Structural Engineers
Portland, Oregon • Tacoma, Washington
www.pseengineers.com

PETERSON STRUCTURAL ENGINEERS

Eddon Boat Shop Marine Rails Fee Estimate

DATE: October 31st, 2014
FILE: PSE T14-072
ATTENTION: Emily Appleton, PE
PREPARED BY: Bill Sandbo, PE

Scope of Work (by task)	PSE 2014 RATES					TOTAL HOURS	TOTAL COST
	\$170	\$140	\$125	\$110	\$85		
	Principal	Senior Associate or Designer	Project Manager	Staff Designer	Admin or Drafter		
0. Preliminary Project Work	1.5	10.7	0	0	0	12.2	\$ 1,753
0.1. Print Documents/AutoCad/Review	0.5	1.7	0	0	0	2.2	\$ 323
0.2. Site Visit	0	3	0	0	0	3	\$ 420
0.3. Scope/Fee Development	1	6	0	0	0	7	\$ 1,010
1. Piling Design	1	4	0	8	0	13	\$ 1,610
1.1. Existing Document Review	0.25	1	0	2	0	3.25	\$ 403
1.2. Develop Design Criteria for Piles	0.25	1	0	2	0	3.25	\$ 403
1.3. Structural Calculations for Driven Piles	0.25	1	0	2	0	3.25	\$ 403
1.4. Structural Calculations for "Footing Piles"	0.25	1	0	2	0	3.25	\$ 403
2. Rail Design	1	4	0	6	0	11	\$ 1,390
2.1. Existing drawings review	0.25	1	0	1	0	2.25	\$ 293
2.2. Develop Loading Criteria for Rail Beams	0.25	1	0	1	0	2.25	\$ 293
2.3. Structural Calculations for Rail Beams	0.5	2	0	4	0	6.5	\$ 805
3. Carriage Design	1	4	0	10	0	15	\$ 1,830
3.1. Existing Document Review	0.25	1	0	1	0	2.25	\$ 293
3.2. Develop design Criteria for Carriage	0.25	1	0	1	0	2.25	\$ 293
3.3. Carriage Calculations	0.5	2	0	8	0	10.5	\$ 1,245
4. Create Structural Drawings	2	24	0	64	0	90	\$ 10,740
4.1. S1 - Cover Page	0.125	1.5	0	4	0	5.625	\$ 671
4.2. S2 - General Notes	0.125	1.5	0	4	0	5.625	\$ 671
4.3. S3 - Site Plan	0.125	1.5	0	4	0	5.625	\$ 671
4.4. S4 - Foundation Layout and Elevation - Inside Marine Rail	0.125	1.5	0	4	0	5.625	\$ 671
4.5. S5 - Foundation Layout and Elevation - Outside Marine Rail	0.125	1.5	0	4	0	5.625	\$ 671
4.6. S6 - Foundation Details - Driven Piles and Footing Piles	0.125	1.5	0	4	0	5.625	\$ 671
4.7. S7 - Rail Layout - Inside Marine Rail	0.125	1.5	0	4	0	5.625	\$ 671
4.8. S8 - Rail Layout - Outside Marine Rail	0.125	1.5	0	4	0	5.625	\$ 671
4.9. S9 - Rail Details	0.125	1.5	0	4	0	5.625	\$ 671
4.10. S10 - Inside Carriage - Plan and Elevation	0.125	1.5	0	4	0	5.625	\$ 671
4.11. S11 - Outside Carriage - Plan and Elevation	0.125	1.5	0	4	0	5.625	\$ 671
4.12. S12 - Carriage - Structural Details - Sheet 1	0.125	1.5	0	4	0	5.625	\$ 671
4.13. S13 - Carriage - Structural Details - Sheet 2	0.125	1.5	0	4	0	5.625	\$ 671
4.14. S14 - Carriages - Ancillary Member Details - Sheet 1	0.125	1.5	0	4	0	5.625	\$ 671
4.15. S15 - Carriages - Ancillary Member Details - Sheet 2	0.125	1.5	0	4	0	5.625	\$ 671
4.16. S16 - Carriages - Miscellaneous Details	0.125	1.5	0	4	0	5.625	\$ 671
5. Project Specifications	1	5	0	6	0	12	\$ 1,530
5.1. Review WSDOT steel spec	0	1	0	2	0	3	\$ 360
5.2. Review of galvanizing/corrosion requirements	0.5	2	0	2	0	4.5	\$ 585
5.3. Develop special provisions (structural, if req'd)	0.5	2	0	2	0	4.5	\$ 585
6. Engineers Opinion of Probable Cost	1	8	0	3	0	12	\$ 1,620
6.1. Schedule A - Foundation Work	0.33	2	0	1	0	3.33	\$ 446
6.2. Schedule B - Marine Rails	0.33	2	0	1	0	3.33	\$ 446
6.3. Schedule C - Carriages	0.33	4	0	1	0	5.33	\$ 726
7. Anticipated Construction Sequence and Schedule	1	4	0	0	0	5	\$ 730
7.1. Linear Construction Schedule	1	4	0	0	0	5	\$ 730
8. Construction Support	3	12	0	36	0	51	\$ 6,150
8.1. Answer RFI's, review submittals, structural observation	3	12	0	36	0	51	\$ 6,150

	Principal	Senior Associate or Designer	Project Manager	Staff Designer	Admin or Drafter	GRAND TOTAL
TOTAL HOURS	12.5	75.7	0	133	0	221.2
RATE	\$170	\$140	\$125	\$110	\$85	--
COST PER PERSON	\$ 2,125	\$10,598	\$ -	\$14,630	\$ -	\$27,353