



Jerome W. Morrisette & Associates Inc., P. S.

1700 Cooper Point Road SW, #B-2, Olympia, WA. 98502-1110
(360) 352-9456 • (360) 352-9990

December 11, 2015

The Honorable Alan Carr, Mayor
Town of Bucoda
P.O. Box 10
Bucoda, WA 98530

Re: Professional Services Proposal for the
Town of Bucoda – Main Street Reconstruction Project
Phase 1 (Design), Phase 2 (Bid Call), and Phase 3 (Construction) Services

Dear Mayor Carr:

In conformance with your request, the following professional Services Proposal for the Main Street Reconstruction Project is being provided for your consideration. The scope of construction is anticipated to be a raised roadway with a culvert structure which conveys flood flows under the roadway. Phase 1 will be the design phase which includes base mapping, right-of-way determination, design, hydraulic modeling, geotechnical investigation, environmental permitting, obtaining additional right-of-way or easements, and preparing bid documents. Phase 2 consists of bid call services. Phase 3 includes the construction services.

The following scope of services is included:

Phase 1 – Design Services

- 1.0 Our surveyors will need to enter private property to obtain finished floor elevations, corners of structures, private driveways and walkways, etc. This task is for coordinating with land owners to obtain the required rights-of-entry.
- 1.1 Topographic Survey: Field and office work required to provide a topographic survey of the proposed project area to determine the location and elevation of the existing surface improvements relative to the centerline control and selected project benchmark.
- 1.2 Centerline and Right-of-Way Control: Office work required to research the existing right-of-way and insure that it is shown correctly on the construction drawings.
- 1.3 Base Mapping: Assemble the field and office data into a single topographic base map which accurately reflects field conditions so that design can begin.
- 1.4 30% Plans and Meeting for Design Guidance: Prepare and provide 30% draft improvement plans for the Town's review. Meet with Mayor and staff to identify any design parameters to be revised.
- 1.5 Design Memorandum and Schematic Cost Estimate: Prepare design memorandum which documents all relevant design discussions and design parameters. The design memorandum documents the design decisions which were made for the project.

- 1.6 Public Outreach Efforts: We anticipate public meetings and meetings with individual land owners to explain the project parameters and obtain public input.
- 1.7 Landowner Negotiations: Prepare exhibits to be used for communicating with landowners and easements required to allow for the proposed improvements, and assist the Town with negotiations.
- 1.8 Environmental Permitting: Coordination for SEPA Checklist, coordination for wetlands delineation (we don't anticipate wetlands), coordination on mitigation measures for unavoidable impacts (if required).
- 1.9 Prepare and submit Executive Order 05-05 Cultural Resources Documentation (if required).
- 1.10 60% Plans: Prepare and provide 60% draft improvement plans for review by the Town and agency review. Meet with Mayor and staff to identify revisions.
- 1.11 Traffic Bypass Coordination and Design and Traffic Control Plan for vehicles and pedestrians.
- 1.12 60% Watermain Relocation Plans (if required): Prepare and provide 60% draft watermain relocation plans and specifications (if watermain relocation is required).
- 1.13 Prepare legal descriptions and record easements for locations where improvements are to be constructed on private property.
- 1.14 90% Plans: Prepare and provide 90% draft improvement plans for review by the Town and Agency review. Meet with Mayor and staff to identify revisions.
- 1.15 90% Project Manual: Prepare and provide 90% draft project manual which includes a first draft of the bid documents, specifications, and required attachments.
- 1.16 90% and 100% Watermain Relocation Plans (if required): Prepare and provide 90% draft and 100% watermain relocation plans and specifications (if watermain relocation is required).
- 1.17 100% Plans: Prepare and provide 100% improvement plans for bidding purposes.
- 1.18 100% Project Manual: Prepare and provide 100% project manual for bidding purposes.
- 1.19 100% Engineer's Construction Cost Estimate.

Phase 2 – Bid Call Services

- 2.1 Advertise the project and provide bidder access through BXWA and DJC plan rooms with MBE/WBE coordination and with no disks or hardcopies available to contractors.
- 2.2 Respond to bidder questions and maintain the official records of bidder questions.
- 2.3 Prepare and issue contract addenda while out to bid.
- 2.4 Conduct public bid opening.
- 2.5 Tabulate and evaluate the bids. Provide certified bid tabulation.
- 2.6 Evaluate the low bidder(s) and provide a recommendation for award.
- 2.7 Prepare and send the Notice of Award.

Phase 3 – Construction Services

- 3.1 Review the Contractor's bonding and insurance documentation, conduct preconstruction meeting, and issue the Notice to Proceed.
- 3.2 Conduct weekly construction meetings, or other construction meetings as required during construction.
- 3.3 Review Contractor's materials submittals and progress payment requests (invoices).
- 3.4 Provide onsite construction inspection services with documentation to establish the construction record.

3.5 Punchlist phase services and coordination for retainage release.

Exclusions

Note that the following tasks and related costs are not included in this proposal, but can be added if required:

1. Preparing and processing a Letter of Map Revision (or amendment) or conditional letter, and similar FEMA documents.
2. Structural Engineering Sub-consultant (the structural engineering is normally provided by the supplier of precast concrete or plate-arch bridge components).
3. Other excluded items noted in proposals from sub-consultants.

Subconsultants

We propose to use Watershed Science and Engineering, Inc. (WSE) to provide the necessary hydraulic modeling analyses and related services. This is shown as Item 4.1 on Exhibit "A". WSE has been involved in modeling the overflow from the Skookumchuck River in the vicinity of Main Street which appears to make them a good choice for this project.

We propose to use Robinson-Noble, Inc. and Normandeau Associates, Inc. for the geotechnical evaluation and environmental processing, although we would like to have the option to perform the environmental services in-house if the process turns out to be less-complicated than the scope which was budgeted. These two firms have provided proposals, the fees for which are shown as Items 4.2 and 4.3 on Exhibit "A". We have also reserved a budget for a cultural resources investigation, if required.

Note that we currently propose to use in-house land surveying services for the surveying, but that we would like to have the option to use an outside firm depending on our workload at the time that portion of the work is required.

Compensation to Jerome W. Morrissette & Associates Inc., P.S. for professional services will be at the following rates effective through the end of the project.

Principal Engineer	\$131.00	Technician Operations Manager	\$99.50
Sr. Project Engineer III	\$128.65	Sr. Engineering Technician I	\$86.70
Sr. Project Engineer II	\$125.10	Sr. Engineering Technician II	\$94.50
Sr. Project Engineer I	\$116.50	Engineering Technician IV	\$77.50
Geotechnical Engineer	\$159.65	Engineering Technician III	\$71.85
Land Surveyor	\$125.10	Engineering Technician II	\$63.20
Project Engineer III	\$118.30	Engineering Technician I	\$61.20
Project Engineer II	\$106.50	Engineering Aide III	\$48.35
Project Engineer I	\$99.40	Engineering Aide II	\$45.75

Environmental Specialist	\$123.60	Administrative Secretary	\$52.60
Sr. Planner	\$96.60	Secretary	\$47.80
Two Man Survey Crew (fully equipped)	\$152.00	GPS Survey Equipment with Robotics*	\$62.00
Three Man Survey Crew (fully equipped)	\$198.15	*(Added to the above employee rate)	

Reimbursable Expenses

We anticipate having some expenses for printing, binding, and project-related supplies. This category is shown as Item 5.1 on Exhibit "A". Note that bid documents will be distributed digitally, so that paper copies of bid documents will not be available for contractors. Paper copies of the relevant documents will be provided to the Town at major milestones during the project. All direct costs, such as permits, document copying, etc., if necessary, will be paid for at cost plus 10% by the Client (if paid through JWM&A).

JWM&A estimates the compensation to complete the subject services at **\$355,222** as identified in Exhibit "A" provided herein, and agrees to a maximum compensation "not to exceed" budget of **\$360,000** for the scope of services provided, subject to written agreement for change based upon a modified scope of work.

JWM&A will submit monthly progress billings for prompt Client remittance. Progress payments will be for the amount of compensation outstanding.

If the above proposal meets with your approval, please execute the two originals enclosed. Retain one set for your files, and return one set to JWM&A as your authorization to proceed with the services.

Thank you for the opportunity to submit a Professional Services Proposal. We are looking forward to the opportunity of working with you.

Sincerely,
J. W. Morrisette & Associates Inc., P.S.


Steve Willie, P.E.
Senior Engineer II

CLIENT APPROVAL:


Signature

12/22/15
Date

Exhibit "A" - TASKS AND PERSONNEL HOURS
Town of Bucoda 2016-2017 Main Street Reconstruction Project
(December 11, 2015)

TASK NO.	Task	Principal Engineer \$131.00	Sr. Project Engineer II \$125.10	Environmental Specialist \$123.50	Land Surveyor \$125.10	Project Engineer II \$106.50	Sr. Planner \$96.50	Two Man Survey Crew (equipped) \$159.55	Sr. Engineering Technician II \$99.50	Engineering Technician II \$63.20	Engineering Aide II \$45.75	Administrative Secretary \$52.50	GPS Survey Equipment \$62.00	TOTALS	
Phase 1- Design Services															
1.0	Coordinate Rights-of-Entry for Land Survey Purposes								40.0					\$3,980.00	
1.1	Topographic Survey - Data Collection	1.0	8.0		15.0			40.0	20.0	4.0		2.0	40.0	\$14,222.30	
1.2	Centerline and Right-of-Way Control (field and office)		2.0		15.0			10.0	4.0		20.0			\$5,036.20	
1.3	Base Mapping		2.0		2.0				25.0		30.0			\$4,360.40	
1.4	30% Plans and Meeting for Design Guidance	1.0	35.0		2.0				80.0		140.0			\$19,124.70	
1.5	Design Memorandum with Schematic Cost Estimate	1.0	35.0						25.0		20.0	10.0		\$8,438.00	
1.6	Public Outreach Efforts	1.0	10.0						20.0		10.0			\$3,829.50	
1.7	Landowner Negotiations for Temp and Perm Easements	1.0	20.0						40.0			10.0		\$7,139.00	
1.8	Environmental Permitting (JWMA portion)		10.0	10.0			10.0		10.0					\$4,448.00	
1.9	Cultural Resources Coordination		2.0	10.0			10.0		2.0					\$2,651.20	
1.10	60% Plans	1.0	30.0		2.0				80.0		140.0			\$18,499.20	
1.11	Traffic Bypass - Traffic Control Plan		5.0						8.0		16.0			\$2,153.50	
1.12	60% Watermain Relocation Plans (if required)		20.0						10.0		40.0			\$5,327.00	
1.13	Prepare Legal Descriptions and Record Easements		2.0		30.0				2.0					\$4,202.20	
1.14	90% Plans	1.0	30.0		2.0				80.0		100.0			\$16,699.20	
1.15	90% Project Manual		90.0						20.0					\$13,249.00	
1.16	90% and 100% Watermain Relocation Plans (if required)		10.0						5.0		20.0			\$2,663.50	
1.17	100% Plans	1.0	30.0		2.0				20.0		40.0			\$7,954.20	
1.18	100% Project Manual		40.0						12.0					\$6,198.00	
1.19	100% Engineer's Construction Cost Estimate		10.0						20.0		20.0			\$4,156.00	
Subtotal - Personnel Hours		8.0	391.0	20.0	70.0	0.0	20.0	50.0	523.0	4.0	596.0	22.0	40.0		
		\$1,048.00	\$48,914.10	\$2,472.00	\$8,757.00	\$0.00	\$1,932.00	\$7,982.50	\$52,038.50	\$252.80	\$27,267.00	\$1,157.20	\$2,480.00	Phase 1 Subtotal	\$154,301.10
Phase 2- Bid Call Services															
2.1	Advertise and Provide Bidder Access to Plans		3.0											\$375.30	
2.2	Respond to Bidder Questions		8.0						4.0					\$1,398.80	
2.3	Prepare and Issue Contract Addenda		12.0						2.0		8.0			\$2,066.20	
2.4	Conduct Public Bid Opening		3.0											\$375.30	
2.5	Tabulate and Evaluate Bids		2.0						4.0			12.0		\$1,279.40	
2.6	Evaluate Low Bidder(s) and Recommendation for Award		2.0											\$250.20	
2.7	Prepare and Send Notice of Award		1.0									2.0		\$230.30	
Subtotal - Personnel Hours		0.0	31.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	8.0	14.0	0.0		
		\$0.00	\$3,878.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$995.00	\$0.00	\$366.00	\$736.40	\$0.00	Phase 2 Subtotal	\$5,975.50
Phase 3- Construction Services															
3.1	Review Bonding/Insurance, Preconstruction Meeting, N.T.P.		10.0											\$1,251.00	
3.2	Construction Meetings		30.0						60.0	60.0				\$13,515.00	
3.3	Review Material Submittals and Payment Requests		40.0											\$5,004.00	
3.4	Construction Staking		10.0		10.0			65.0					65.0	\$16,909.25	
3.5	Provide Onsite Construction Inspection Services		40.0	20.0					40.0	520.0				\$44,320.00	
3.6	Punchlist Phase Services and Retainage Release		24.0											\$3,002.40	
Subtotal - Personnel Hours		0.0	154.0	20.0	10.0	0.0	0.0	65.0	100.0	580.0	0.0	0.0	65.0		
		\$0.00	\$19,265.40	\$2,472.00	\$1,251.00	\$0.00	\$0.00	\$10,377.25	\$9,950.00	\$36,656.00	\$0.00	\$0.00	\$4,030.00	Phase 3 Subtotal	\$84,001.65
Subconsultants															
4.1	Watershed Science & Engineering- Hydraulic Analysis	(Refer to Watershed Science and Engineering Proposal for Proposed Cost and Scope)												\$33,630.00	
4.2	Robinson-Noble - Geotechnical Investigation and Report	(Refer to Robinson-Noble Proposal for Proposed Cost and Scope)												\$28,300.00	
4.3	Normandeau Associates Environmental Permitting	(Refer to Normandeau Proposal for Proposed Cost and Scope)												\$28,928.00	
4.4	Cultural Resources Consultant (to be determined)	(Cultural Resources Consultant - to be determined)												\$4,500.00	
														Subtotal Before 10% Markup	\$95,358.00
														Consultant Mark-up @ 10%	\$9,535.80
														Subconsultants Subtotal	\$104,893.80
Reimbursable Expenses															
5.1	Printing, Binding, and Project-Related Expenses	\$1,500												\$1,500.00	
5.2	Public Notices for Outreach Meetings, Private Utility Locates, and Recording Fees at Thurston County	\$4,000												\$4,000.00	
														Subtotal Before 10% Markup	\$5,500.00
														Reimbursable Mark-up @ 10%	\$550.00
														Reimbursable Subtotal	\$6,050.00
														Total Cost	\$355,222.05

Scope of Work
Bucoda Main Street Reconstruction
Hydraulic Assessment and Design

Watershed Science & Engineering (WSE) will conduct detailed hydraulic modeling and analysis to support the design of the proposed Main Street reconstruction project in Bucoda, WA. The project currently calls for the construction of two bridges and elevation of portions of Main and 11th streets above 100-year flood levels. The purpose is to maintain emergency access to the residential areas south of 11th Street during floods on the Skookumchuck River.

The town of Bucoda has selected Jerome W. Morrissette & Associates Inc. (JWM&A) to complete detailed project design. WSE, acting as a sub-consultant to JWM&A, will be responsible for all hydraulic design and assessment elements of the project.

The following describes the tasks to be completed by WSE.

Task 1. Background Data Collection and Review

WSE will collect and review existing data needed to conduct the analysis. Data will include but not be limited to:

- effective and preliminary FEMA Flood Insurance Studies (FIS)
- current Skookumchuck River flow discharge records
- historical highwater mark locations and elevations
- current and historical aerial photographs
- topographic data including recent LiDAR
- proposed bridge and roadway plans

Task 2. Site Reconnaissance

WSE will conduct a one-day field reconnaissance of the project area to:

- document channel and floodplain conditions
- examine existing road crossings
- determine locations where additional field survey is necessary

Task 3. Limited Field Survey

Limited field surveys will be collected to supplement existing LiDAR data and provide additional data in the vicinity of the proposed project. It is assumed that the survey will be completed by JWM&A in conjunction with surveys required for road design. Prior to the survey, WSE staff will discuss requirements with the survey team. Upon completion, JWM&A will provide WSE with:

- AutoCAD file showing location and elevation of each surveyed point
- ASCII file of survey points (PNEZD)

Task 4. Hydraulic Analysis

WSE will update an existing unsteady HEC-RAS hydraulic model of the Skookumchuck River floodplain to evaluate potential flood impacts of the proposed project. The existing model was developed by WSE for the Chehalis River Basin Hydraulic Modeling and Analysis project completed for the Chehalis River Basin Flood Authority in 2012. A "Bucoda Bypass" reach was included in the model to allow a more accurate representation of the split-flow flooding that occurs through Bucoda.

Cross sections in the Bucoda Bypass reach will be updated to incorporate additional survey collected by JWM&A, and observations made by WSE staff during the field reconnaissance. WSE will update Manning's roughness values, expansion and contraction coefficients, and in-effective flow areas, and re-calibrate the



November 23, 2015

model to available high water marks from the January 2009 flood event. The model will then be run to simulate a 100-year flood event with a peak discharge of 12,600 cubic feet per second (cfs), WSE's revised estimate of the 100-year flow for the Skookumchuck River at Bucoda. Results will provide the existing condition baseline to which the proposed project will be compared.

WSE will create a with-project model by updating the baseline model geometry to reflect proposed bridge and roadway conditions based on plans provided by JWM&A. The with-project model will be run for the 100-year flood, and the results compared to the existing condition baseline to determine project impact. Results will be discussed with Town officials and JWM&A to determine if the impacts are acceptable. If they are not, WSE will work with JWM&A to identify an acceptable alternative, assuming one can be found. Previous conceptual level hydraulic analysis for the proposed project revealed that it will increase flood levels significantly, therefore, an allowance is included for WSE to work with JWM&A to identify and evaluate up to three variations of the proposed alternative.

Task 5. Discussions with Town Floodplain Development Director, WDFW and/or FEMA

Many floodplains in Washington State have been designated as critical habitat for threatened and/or endangered salmonids. WSE will discuss the proposed project with the Town's floodplain development director, and if necessary, WDFW and FEMA to determine if there are ESA related concerns. If there are, the project design may need to be refined to eliminate or mitigate the impacts. This scope of work does not include work beyond contacting and discussing the project with FEMA and WDFW. If, following those discussions, it is determined that the project may cause unacceptable impacts, the scope and contract agreement will be modified to include the extra work required to eliminate the impact.

Task 6. Scour Assessment and Protection Design

WSE will evaluate the proposed project for scour and erosion potential. A scour assessment will be completed to determine if the bridges and shoulders of the road are likely to experience scour or erosion problems. If they are, WSE will work with JWM&A to develop designs for scour and erosion countermeasures.

Task 7. Project Meetings

It is anticipated that WSE's project manager/engineer will participate in the following meetings:

- Project initiation meeting with the JWM&A design team. It is assumed that this meeting will be completed in conjunction with the initial site reconnaissance.
- A meeting with JWM&A and Town staff to discuss the hydraulic performance and possible impacts of the proposed alternative.
- A meeting with JWM&A and Town staff to discuss the hydraulic performance up to three variations of the proposed alternative and to select a preferred solution.
- One public meetings to present the proposed alternative to Bucoda residents

Task 8. Hydraulic Assessment and Design Report

WSE will prepare a technical report to document study methods, assumptions, and results. (Note – maps and figures included in the report will not be developed to FEMA mapping standards, therefore they will not be adequate to support a FEMA Letter of Map Revision. If Bucoda wishes to submit a Letter of Map Revision (LOMR) to update existing FEMA mapping based on study results, the work will be handled under a separate agreement.

Task 9. Project Administration

WSE will conduct general project administration activities which will include frequent discussions with the County's project manager and preparation of monthly invoices.



WATERSHED
SCIENCE & ENGINEERING

ESTIMATED COST

See attached spreadsheet.

November 23, 2015

Estimate of Professional Services
 Prepared for: Steve Willie
 Project: Bucoda Main Street Reconstruction
 Hydraulic Assessment & Design
 Date: November 23, 2015
 Prepared By: Chris Frei

TASK DESCRIPTION	Hours							Totals
	Prin	Sr. Eng. I	Sr. Eng. II	Staff Eng.	Jr. Eng.	GIS Specialist	Contract Admin	
1. Background Data Collection and Review	1		8		2			\$1,420
2. Site Reconnaissance			10		8			\$2,020
3. Limited Field Survey	1		6					\$980
4. Hydraulic Analysis	8		60		16			\$10,840
5. Discussion with Town Floodplain Development Director WDFW and/or FEMA	1		8					\$1,240
6. Scour Assessment and Protection Design	4		20					\$3,400
7. Project Meetings	2		24		8			\$4,240
8. Hydraulic Assessment and Design Report	8		30		12			\$6,580
9. Administration	3		12				4	\$2,400
Total Hours and Direct Labor Cost (DL)	28.0	0.0	178.0	0.0	46.0	0.0	4.0	
Labor Rate (\$/hr)	\$200.00	\$165.00	\$130.00	\$115.00	\$90.00	\$75.00	\$60.00	
TOTAL LABOR COST	\$5,600	\$0	\$23,140	\$0	\$4,140	\$0	\$240	\$33,120

Direct Expense Detail

	Units	Rate	Cost
Travel to Project Site	800	\$0.575	\$460.00
Reproduction and Communication			\$50.00
		Total	\$510.00

Cost Summary

Total Labor	\$33,120.00
Total Direct Expenses	\$510.00
Total	\$33,630.00



Ref. No.: Opportunity # 2016-12-0012

December 8, 2015

Attn.: Steve Willie, PE
J.W. Morrissette & Associates, Inc, PS
1700 Cooper Point Road Suite B-2
Olympia, WA, 98502-1110

RE: Environmental Documentation
for City of Bucoda Main Street Reconstruction Project

Dear Mr. Willie:

Normandeau Associates is pleased to provide J.W. Morrissette Associates (JWMA) with this scope of work for environmental services for the City of Bucoda Main Street Reconstruction Project. Our understanding of the project specifics, scope of work, schedule, and cost estimate for the proposed work is presented in this document.

The proposed project includes elevating approximately 1200 feet of Main Street and approximately 300 feet of 11th Street by 1 to 2 feet to a minimum elevation of 246 feet. Additionally, two 75-foot long culverts/bridges are proposed to provide an overflow path for Skookumchuck River floodwaters. The two culverts/bridges are proposed along the estimated overflow path on Main Street and 11th Street. The existing road beneath the proposed bridges would be removed and raised to provide an overflow path. Intersections, alleys, sidewalks, and driveways may also need to be raised to accommodate the raised roadway. The existing right-of-way would be occupied by fill material associated with the raised roadway. Currently, the right-of-way provides parking for private residences. This parking would likely be eliminated if the road is raised. Retaining walls may need to be installed near the culverts/bridges and intersection of Main and 11th to contain the fill material associated with raising the road and to limit impacts to private property. Utilities were not considered to be affected in this concept. However, it is likely that the project would trigger stormwater requirements. Property may also need to be acquired from the property owners as part of the proposed design.

- No known wetlands or streams are identified in Thurston County GIS data for the project vicinity;
- Initial field reconnaissance did not identify any streams or ditches in the project area;

Mr. Steve Willie, PE

December 8, 2015

Page 2

- No known federal lands are included in the project area, and the project will not receive federal funds.
- Soils that may support pocket gophers occur in the area. (Task 3- will provide ESA Compliance to determine if there are any direct or indirect effects on endangered species are located in the project area.)

The following sections outline the tasks, assumptions, and deliverables for the project.

SCOPE OF WORK

Specifically, Normandeau proposes to perform the following scope of work:

Task 1: Wetland Field Review and Memorandum

No streams were identified in the project vicinity during the site reconnaissance. There are several areas along the project alignment where wetlands may exist and these areas would require a wetland reconnaissance to determine the presence or absence of wetlands.

Information gathered in the field and office will be used to prepare a Wetland Delineation Memorandum. If wetlands are identified in the project vicinity, it is assumed that following review of the wetland delineation report, U. S. Army Corps of Engineers (USACE) will make a field visit to confirm the boundaries and will provide a Letter of Jurisdictional Determination.

For this task, Normandeau will:

- Flag wetlands within 100 feet of the project.
- Identify (but not delineate) any wetlands further than 100 feet from the project, but within 315 feet of the project.
- Prepare one Wetland Delineation Memorandum to meet requirements of USACE, Ecology, and City of Bucoda, as appropriate. This report will include:
 - Topographic map of the project area.
 - Relevant National Wetland Inventory Maps.
 - Thurston County wetland and soil survey mapping.
 - Site map showing wetland boundaries (if any) and the location of data points.
 - Complete set of field data sheets.
 - Washington Natural Heritage Program data on rare plants and high quality wetlands.
 - WDFW priority habitat and species information.
 - Conduct office work and field work to complete a functional assessment and categorize wetlands according to Ecology's Wetland Rating System for Western Washington

Mr. Steve Willie, PE

December 8, 2015

Page 3

(2014). This information will be incorporated into the Wetland Delineation Memorandum.

- Submit the Wetland Delineation Memorandum for one review and concurrence by USACE.
- Attend a site visit with the City and USACE (and Ecology, if they elect to attend) to review the wetland delineation and discuss concerns or recommendations agency staff may have regarding the wetland delineation and functional assessment.

Assumptions:

- Property to be acquired will be identified prior to field work.
- The City will obtain all necessary rights-of-entry to private property prior to the fieldwork.
- The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, ver. 2.0 (2010) will be followed.
- Normandeau will coordinate with JWMA to survey the location of wetland flags in the field.
- The site visit with USACE and Ecology will last not more than four hours (including travel).
- Neither the USACE nor Ecology will make adjustments to the OHWM or wetland boundaries. Any edits to the report will be editorial in nature.
- Memorandum will not exceed 10 pages (with required maps), not including appendices.
- One round of review is included in the scope.

Deliverables:

- Wetland Delineation Memorandum (one internal draft electronic copy to JWMA and the City; one draft electronic copy to USACE; one final electronic copy to JWMA, the City, and USACE).

Task 2: Joint Aquatic Resources Permit Application (JARPA) and Clean Water Act (CWA) Compliance

In the event wetlands are identified within the project impact area, Normandeau will prepare a Joint Aquatic Resources Permit Application (JARPA) for impacts to Wetlands/Waters of the US, coordinate with agency and City staff, and submit the application and supporting documents to USACE for issuance of a permit under CWA §404 and certification by Ecology under CWA §401.

For this task, Normandeau will:

- Prepare a JARPA for wetland impacts in the vicinity of the Project.
- Attend a site visit with the City and USACE staff (and Ecology, if they elect to attend) to review impacts and discuss concerns or recommendations agency staff may have regarding issuance of authorizations under CWA.

Mr. Steve Willie, PE

December 8, 2015

Page 4

Assumptions:

- Engineering drawings, impact acreages and drawings, Best Management Practices, and related design and construction information will be provided by the project engineer.
- The site visit with USACE (and Ecology) will last not more than four hours (including travel).
- If a permit is required, USACE will issue a Nationwide Permit (NWP) 14 – Linear Transportation Projects for culvert replacements within 60 days of the field meeting.
- The project will meet Ecology's §401 General Conditions and thus is Certified under NWP 14.
- No compensatory mitigation will be required by any agency.
- A Washington Department of Fish & Wildlife (WDFW) Hydraulic Project Approval (HPA) will not be required for the project.
- One round of review is included in the scope.

Deliverables:

- JARPA (one draft electronic copy to JWMA and the City; one final electronic copy and one printed copy to JWMA, the City, and USACE).

Task 3: Endangered Species Act (ESA) Compliance

In the event that a federal permit or action is required (or if federal funds will be required for the project), Normandeu will prepare an ESA compliance document for the project. Normandeu will conduct database research and a field survey to identify federally listed species in the project area. This information will be used to prepare an ESA compliance document, presumably a No Effect Letter, addressing potential direct and indirect effects to plant, fish, and wildlife species that are listed under the ESA. The No Effect Letter will meet the needs and requirements of the U.S. Fish and Wildlife Service (USFWS) and support JARPA submittals. For this task, Normandeu will provide the following:

- Research information on the location and status of special status plants, fish, and wildlife (i.e., federally listed threatened, endangered or proposed for listing species) target species. Information will be obtained from WDNR (GIS database), WDFW (website), USFWS (website) and NOAA Fisheries (website), and local biologists.
- Conduct an on-site inspection of the area of potential effect to determine the likely presence of target species and to determine whether suitable habitat exists within the project area.
- Review literature and scientific data to determine target species distribution, habitat needs, and other biological requirements.
- Review and analyze the potential direct and indirect effects of one design option on individuals, populations, and their functionally suitable habitat (e.g., habitat for documented target species

Mr. Steve Willie, PE

December 8, 2015

Page 5

or habitat for target species presumed to occur in the action area). The impacts from clearing of vegetation and associated loss of habitat will be used to evaluate loss.

- Prepare a No Effect Letter to address all species listed for Thurston County. A simple sentence or two will be included for the species on which the project will have no effect.
- Assumptions:
- No species or critical habitat under the jurisdiction of NOAA Fisheries are present in the project area.
- Impacts to habitat will be quantified (area of temporary and permanent disturbance) by JWMA for only the final alignment.
- No pre-consultation meetings with the agencies will be required.
- The project will result in no impacts to listed species, critical habitats, or Essential Fish Habitat, and a No Effect Letter will be sufficient to address ESA compliance.
- Letter report will not exceed 10 pages (with required maps).
- One round of review is included in the scope.

Deliverables:

- ESA No Effect Letter (one draft and final electronic draft to JWMA and the City).

Task 4: SEPA Compliance

Normandeau Staff will prepare a SEPA checklist for the project. The Checklist will be prepared in accordance with City and State regulations and policies, and will use previously prepared reports and studies (to the extent possible) and current studies and current design information. A Checklist includes sixteen environmental elements to be evaluated, some of which are more pertinent to this project than others. The natural resource-related elements (such as Water, Plants, and Animals) and associated analysis will be based on information obtained from the research for wetlands and Threatened/Endangered species, supplemented by field visits, and design information.

Evaluation of the human environment (such as Air, Energy, Environmental Health, Transportation, Public Services, and Utilities) can be made from the project design or project-specific studies to be prepared by others (e.g., geotechnical, hazardous material, noise, air, and traffic). Historic/Cultural evaluation (if required) will be based on the findings of a project specific cultural resources studies or report (to be prepared by others).

Assumptions:

Resource and impact, mitigation measures information required to address the non-natural resource sections of SEPA will be provided by engineering or other consulting firms via JWMA or the City.

- One round of review is included in the scope.

Mr. Steve Willie, PE

December 8, 2015

Page 6

- The City will act as lead agency and is responsible for processing of the SEPA checklist.
- All fees will be paid and processed by the City.
- The City will issue a Determination of Non-Significance (DNS) or Mitigated Determination of Significance (MDS) based on the information provided in the SEPA Checklist, i.e., no additional information or studies will be required.

Deliverables:

- SEPA Checklist (one draft electronic copy; one final electronic copy; and three paper copies to the City)

Task 5: Local Permit Support

A Critical Areas Report will be prepared for those resources (wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas [City of Bucoda Critical Areas and Natural Resource Lands]) affected by the project.

This scope also includes effort to support other local permits to be prepared by others.

Assumptions:

- A Shoreline Application for the City will not be required as the project is outside of the shoreline jurisdiction for the Skookumchuck River.
- The report will be based on supporting studies and reports including the Wetland Delineation Memorandum, JARPA (if required), ESA No Effect Letter (if required), cultural (e.g. coordination with Local Tribes)/historic report (if required), SEPA Checklist, geotechnical report, and floodplain report.
- The geologically hazardous areas and floodplain sections will be completed by other team member's qualified professional specialist.
- Report will not exceed 20 pages (with required maps), not including appendices.
- One review is included in this scope.
- The City will act as lead agency and will be responsible for processing of the Critical Area application under its regulations.
- Compensatory wetland, wetland buffer, habitat, or habitat buffer mitigation (including Oregon white oak) will not be required.
- A Significant Tree inventory or impact analysis will not be required.

Deliverables:

- Critical Area Report (one draft electronic copy; one final electronic copy in Word; and three paper copies to the City).

Mr. Steve Willie, PE

December 8, 2015

Page 7

Task 15: Project Coordination

Normandeau staff will attend a project kickoff meeting, provide planning and coordination for internal staff, provide communication and coordination with other consultants, and prepare required billing support information for the project.

This scope also includes effort to support other local permits to be prepared by others.

Assumptions:

- One kickoff meeting is included, not to exceed 6 hours, including preparation and travel.
- This task also includes support for project billing reports, etc., not to exceed 4 hours.

Deliverables:

- Attendance at one kickoff meeting.
- Emails and telephone calls for coordination as required - not to exceed 3 hours total.

SCHEDULE

Normandeau will initiate work on December 30, 2015, pending receipt of a retainer check from the client. It is anticipated that the tasks listed above will be completed by September 30th, 2016.

FEE ESTIMATE

The fee for this scope of work is estimated to be Twenty-Nine Thousand (\$29,000) dollars and billed on a Time and Materials basis. Normandeau's invoices will not detail the fee by task, but will list a single amount for the billing period. No back-up such as timesheets will be provided by Normandeau with the invoices. These estimated costs include Normandeau's labor and expenses. Normandeau proposes to complete the proposed scope of work on a time and materials basis, not to exceed the above fees and will invoice monthly for the work performed. Normandeau will not exceed the \$29,000.00 cost without your written authorization and we will contact you immediately if any conditions are encountered that would significantly change the scope of work or cost associated with this proposal. If the scoped work is completed in less time than anticipated in the scope, any unused portion of the budget would not be billed. The attached Standard Terms and Conditions (2 pages) are an integral part of the proposal.

COMPENSATION

Normandeau will invoice as follows: on a monthly basis. Payment shall be made to us within thirty (30) days of receipt of our invoice. Late payments shall incur interest at the rate of 1 1/2% per month



Mr. Steve Willie, PE

December 8, 2015

Page 8

over thirty (30) days. Normandeau may, at its sole option, terminate its obligations under this Agreement if any invoice is not paid within thirty (30) days of receipt.

RETAINER

Normandeau requires a retainer of \$2,900.00 to be submitted with this agreement. The retainer will be credited to the final invoice for services.

POINT OF CONTACT

Your point of contact at Normandeau is:

Patrick Togher, Senior Scientist
1904 Third Avenue, Suite 1010
Seattle, Washington 98101
Phone: 206.577.1108
Email: ptogher@normandeau.com



Mr. Steve Willie, PE
December 8, 2015
Page 9

If this agreement is acceptable, please sign both copies as Client and return one (1) executed copy to our office, along with your retainer, to confirm our agreement. If not executed within sixty (60) days from date of this letter, it may be subject to renegotiation.

If you have any questions, please feel free to contact us at 206.577.1108. Thank you for providing this opportunity to assist you and we look forward to providing this important service to you in the next several weeks.

Sincerely,

NORMANDEAU ASSOCIATES, INC.

Patrick J. Togher, PWS
Senior Scientist

COL (ret) Curtis Thalken
Senior Vice President / COO

PJT/ct

ACCEPTANCE AND AUTHORIZATION TO PROCEED

NAME: _____

TITLE: _____

DATE: _____

Proposal/Project COST Breakdown

City of Bucoda, Main Street Reconstruction Project									
Bucoda Main Street Reconstruction Project					Billing Total by Labor+ Expenses, by task & Subtask				
	Sue Sandler	Kent Snyder	Pat Toghger	Susie Imhoit	Bonnie Caouette	Total Hours	Task	Billing Total by Task	Labor+ Expenses, by task & Subtask
1 Wetland and Stream Report									
Wetland Field Delineation	1	10	21.5	4	2	38.5	\$ 5,090.00	\$ 5,530.00	
Draft Wetland Delineation Memorandum	1	8	8			16	\$ 2,336.00	\$ 2,676.00	
Response to client comments, Final Memorandum	1	1	12	3		17	\$ 2,158.50	\$ 2,158.50	
		1	1.5	1	2	5.5	\$ 595.50	\$ 695.50	
						0	\$ -	\$ -	
						0	\$ -	\$ -	
2 JARPA and CWA Compliance									
Draft JARPA	0	3	21	13	1.5	38.5	\$ 4,421.50	\$ 4,421.50	
Response to client comments, Final JARPA		2	8	8		18	\$ 2,062.00	\$ 2,062.00	
Agency Meeting (office 1 hr meeting w/ travel & prep)	1		2	2	1	6	\$ 774.00	\$ 774.00	
Agency Meeting (field. 4 hr meeting w/ travel & prep)			5	1		6	\$ 716.00	\$ 831.00	
			6	2	0.5	8.5	\$ 969.50	\$ 1,094.50	
						0	\$ -	\$ -	
						0	\$ -	\$ -	
3 Endangered Species Act Compliance									
ESA Species Research	1	8	27	9	3	34	\$ 5,973.50	\$ 6,313.50	
On-site inspection		5	3			3	\$ 375.00	\$ 375.00	
Literature Review		1	1	3		3	\$ 1,460.00	\$ 1,700.00	
Effects Analysis		1	2	1		4	\$ 398.00	\$ 398.00	
Prepare Draft No Effect Letter	1	1	12	4	2	20	\$ 508.00	\$ 508.00	
Response to client comments, Final NEL		1	4	1	1	7	\$ 2,399.50	\$ 2,499.50	
						0	\$ 833.00	\$ 833.00	
						0	\$ -	\$ -	
4 SEPA Compliance									
Draft SEPA Checklist	2	2	18	4	4	30	\$ 3,685.00	\$ 3,685.00	
Response to client comments, Final SEPA Checklist	2		16	2	2	22	\$ 2,769.00	\$ 2,769.00	
			2	2	2	8	\$ 916.00	\$ 916.00	
						0	\$ -	\$ -	
5 Local Permits									
Draft CAR	0	4	30	18	6	58	\$ 6,506.00	\$ 6,806.00	
Final CAR		1	16	8	2	27	\$ 3,045.00	\$ 3,145.00	
Other Local Permits		1	2	2	2	7	\$ 749.00	\$ 849.00	
		2	12	8	2	24	\$ 2,712.00	\$ 2,812.00	
						0	\$ -	\$ -	
Task 15 Project Coordination									
Project kickoff meeting	0	1	10	0	4	15	\$ 1,717.00	\$ 1,832.00	
Internal and Team coordination (emails and calls)		1	6			6	\$ 750.00	\$ 865.00	
			4		4	9	\$ 967.00	\$ 967.00	
						0	\$ -	\$ -	
Total Hours	4	28	127.5	48	20.5	214	\$ 27,393.00	\$ 28,928.00	
Billing Rate			\$125.00	\$91.00	\$75.00				
Total Labor	\$218.50	\$167.00	\$125.00	\$91.00	\$75.00				
Task 99 Expenses	\$874.00	\$4,676.00	\$15,937.50	\$4,368.00	\$1,537.50				
Total Project							\$1,535.00	\$28,928.00	



December 9, 2015

Mr. Steve Willie
Jerome W. Morrissette & Associates Inc., P.S.
1700 Cooper Point RD SW #B-2
Olympia, Washington 98502-1110

This agreement is between the Jerome W. Morrissette & Associates Inc., P.S. (Client) and Robinson Noble, Inc. (Consultant), for geotechnical engineering and consultation for the project located at Main Street and East 11th Street in Bucoda, Washington.

Project Description

Currently during overbank flooding on the Skookumchuck River portions of Main Street and 11th Street become flooded resulting in approximately 50 residences being isolated from emergency services. We understand that the plan is to provide access to the residences by raising the elevation above the flood stage. The road elevation will be a minimum of 246 feet for approximately 1,200 feet of Main Street and 300 feet of 11th Street. The plan is to either install culverts or a bridge to help prevent flooding. Both options may be feasible for the site; however, the foundations for each greatly differ. The culverts are planned to have shallow foundations while the bridge is to be supported on 3-foot diameter piles supporting 50 foot deck spans. Retaining walls and roadway shoulder slopes may be necessary to help retain the fill.

The two common methods to explore the subsurface soil conditions are to use borings or test pits. We do understand that borings tend to be slightly more expensive than test pits. However, based on the location, planned construction, and expected soil conditions, it is our opinion that the best method to explore the subsurface soil conditions is via borings. We recommend that a minimum of two borings be drilled in the locations of the planned culverts or bridge. The borings should extend about 30 feet into suitable soil, determined by our representative in field. The depth into bearing soil is required to help determine the allowable bearing capacity of the piles. The borings will be drilled on the shoulder of the roadway in order to allow reduced traffic congestion. The cuttings from the borings will have to be removed from the site. Depending on the variability of the subsurface soils, more borings may be warranted to determine a subsurface soil profile.

Scope of Work

We have been requested to provide a proposal through all phases of the project. There are many unknowns that will dictate the amount of services that will be needed. We have divided this proposal into phases and provide rough estimates for cost. The scope of services to be provided by Robinson Noble, Inc. is for geotechnical evaluation services, including the following:

Phase 1

- Review available geologic maps for the site.
- Explore the subsurface soil and groundwater conditions in the area of the planned construction with borings. We have budgeted for 130 feet of drilling.
- Evaluate pertinent physical and engineering characteristics of the soils encountered in the borings.
- Prepare a geotechnical report containing the results of our subsurface explorations, and our conclusions and recommendations for geotechnical design elements of the project. Our report will include:
 - Description of the geologic materials encountered.
 - Description of depth to groundwater, if encountered.
 - Discussion of seismicity at the site along with seismic design parameters including Site Class and site coefficients based on current IBC criteria.
 - Excavation slope angle considerations.
 - Recommendations for foundations including allowable soil bearing values, minimum footing sizes, and soil parameters for lateral load resistance.
 - Estimate the total and differential settlements of footings.
 - Recommendations for roadway subgrade preparation.
 - Recommendations for roadway asphalt thickness.
 - Recommendations for earthwork and site preparation. An evaluation of the effects of weather and/or construction equipment on site soils and mitigation of any unsuitable soil conditions at the site will be included.

Phase 2

- Design meetings (4 hours)
- Plan review services (4 hours)
- Consultation to address geotechnical aspects of the project. This includes time for phone calls or other forms of consultation. (2 hours)

Phase 3

- Complete engineering calculations for the reinforced soil walls, if needed.
- Complete typical cross sections and design specifications for construction of the reinforced soil walls.

Phase 4

- Observe placement and compaction of structural fill.
- Evaluate preparation of prepared foundation subgrade if using shallow foundations.
- Evaluate pile installation if using deep piles.

- Complete in place and laboratory testing as needed.
- Evaluate pavement subgrade prior to paving.
- Observe construction of retaining walls.
- Prepare daily field reports to document our observations and conclusions.
- Prepare a final letter summarizing our construction observations.

Services Agreement

Our services will be provided in accordance with our TERMS AND CONDITIONS and GENERAL FEE SCHEDULE, which are attached to this services agreement. Robinson Noble will invoice on a time-and-expense basis according to the attached GENERAL FEE SCHEDULE. Our services will be directed by you throughout the project. We estimate the cost of our services for the tasks described above to be

Phase 1*	\$5,700 (Robinson Noble costs), \$6,000 (driller with markup), \$2,000 (contingency if additional drilling is necessary)
Phase 2	\$1,600
Phase 3	\$1,000 to \$2,000
Phase 4**	\$3,000 to \$20,000

*This estimate could be reduced by \$5,500 if backhoe test pits could be used to design the shallow foundation system. The test pits would require a large area of disturbance on the shoulder of the roadway. Additional savings could occur if the local public agency could excavate the test pits for us.

**These are "rough" estimate and will depend on many factors of the design phase. Deep piling will require the most construction monitoring time and expertise.

The above estimates are based on our understanding of the project and the conditions outlined in this scope. If additional funds are necessary to complete our scope of services, a request for additional fund notice will be provided and receive your approval prior to continuing with the additional services. This estimate will remain valid for 90 days from the date of this scope.

We appreciate the opportunity to submit this agreement and are looking forward to working with you on this project. If this agreement meets with your approval, please sign in the spaces provided below and return one copy of this agreement to serve as your authorization for us to proceed.

o O o

Main Street and 11th Street
Bucoda, Washington
December 9, 2015
Page 4 of 4

The parties hereto execute this Agreement by signature of their respective authorized officers or representatives.

Sincerely,
Robinson Noble, Inc.



Rick B. Powell, PE
Principal Engineer

RBP:am

Client/Owner Authorized
Signature

(typed or printed name)

Billing Address _____

Phone No. _____

Email _____

Tax Parcel No. _____

Date: _____

Date: 12/9/15

Attachments: General Fee Schedule and Terms and Conditions



**ROBINSON
NOBLE**

General Fee Schedule

January 2016

Professional Positions		Fee per Hour
Principal Engineer, Hydrogeologist or Environmental Scientist		\$176
Associate Engineer, Hydrogeologist or Environmental Scientist		\$161
Senior Engineer, Hydrogeologist or Environmental Scientist		\$136
Senior Project Engineer, Hydrogeologist or Environmental Scientist		\$118
Project Engineer, Hydrogeologist or Environmental Scientist		\$106
Staff Engineer, Hydrogeologist or Environmental Scientist		\$96
Senior Field Staff		\$87
Field Staff		\$70
Legal Support/Expert Witness Services/Testimony		150% of above rates
Support Positions		
Senior GIS/CAD Specialist		\$92
Senior Technician		\$92
Senior Administrator		\$81
GIS/CAD Specialist		\$81
Technician		\$81
Administrator		\$70
Clerical Support		\$70
Other Fees and Costs		
Subcontracts/ Management Fee	Professional services	15%
	Outside laboratory services	15%
	Construction subcontracts	15%
Other Costs	Travel (auto)	\$0.62/mile
	Travel (other)	Cost +10%
	Per diem	Prevailing State rate +10%
	Other direct expenses	Cost +10%
	Field and laboratory testing/equipment rental	See following pages

This fee schedule is subject to change according to contract or Professional Services Agreement conditions.

**Geotechnical Field and Laboratory Testing Schedule
January 2016**

<u>Test</u>		<u>Fee</u>
Portable Nuclear Density Gauge	Per Hour	\$5.00
Slope Inclinator	Per day	\$250
Direct Shear	Point	\$200
Moisture-Density Relationship Curves:	Each	1 pt \$120
	Each	Multiple pts \$200
Sieve Analyses (Gradations-Wet Sieve)	Each	\$150
Hydrometer Analysis	Each	\$175
Falling Head Permeability	Each	\$165
Atterberg Limits (Liquid Limit or Plastic Limit)	Each	\$100
Moisture Content	Each	\$10
Dynamic Cone Penetrometer	Day	\$225
Points	Each	\$20
Resistivity 4-point Gauge	Day	\$300
Consolidation Test Incremental Loading (9 loads, 0.125 TSF to 32 TSF, 4 unloads)		\$550 \$50/each additional load
Shelby Tube Extrusion/Sample Description		\$40

This fee schedule is subject to change according to contract or Professional Services Agreement conditions.

TERMS AND CONDITIONS

1. **Project and Relationship of the Parties:** Client engages Consultant to perform the professional services as described in the scope of work, herein referred to as the "Project," to which these Terms and Conditions are attached. Consultant's services under this Agreement include only those specified in the scope of work. Client expressly releases any claim against Consultant relating to any additional services that Consultant recommended, but that Client either did not authorize or instruct Consultant not to perform. Consultant may retain subcontractors for Client as Consultant considers necessary for services not provided by Consultant. Any other assignment or transfer of an interest in the Agreement by either party without the written consent of the other shall be void. This Agreement shall inure to the benefit of and be binding upon the successors, assigns, and legal representatives of each of the parties hereto. This Agreement shall become effective when signed by Client. This Agreement constitutes the full and only agreement between the parties, there being no promises, agreements of understandings, written or oral, except as herein set forth and this Agreement supersedes all prior agreements or understandings regarding this Project.
 2. **Changes in Project:** Client may request changes in the Project's scope of work. Any such changes, including a change in Consultant's compensation or time of performance will be incorporated in written amendments to this Agreement. No change will be effective unless it is in writing and signed by Client and Consultant, or if made orally, confirmed by the parties in writing within 15 days.
 3. **Payment:** Consultant will perform services for the Project as specified in scope of work. The cost will be on a fees and expenses basis or fixed price as designated in the services agreement subsection. For circumstances involving changed conditions not foreseeable by Consultant at the time of execution of this Agreement, or if additional time and/or expenses are required to fulfill the Project's scope beyond the estimate, additional charges will be invoiced. Payment by Client for professional services and expenses provided by Consultant shall be based on the Fee Schedule in effect at the time of the invoice date.
 4. **Payment Conditions:** Consultant shall periodically submit invoice(s) for this Project and/or other previously contracted projects. Client shall pay each invoice promptly upon receipt. If Client objects to all or any portion of any invoice, Client shall so notify Consultant within seven (7) days from the date on the invoice, give reasons for the objection, and pay that portion of the invoice that is not in dispute. Client shall pay an additional monthly interest charge of one and one half percent (1.5%) or the maximum percentage allowed by law, whichever is less, of any undisputed amount of all account balances remaining unpaid for more than thirty (30) days from the date of receipt of the invoice. If an invoice is not paid within thirty (30) days, a late fee of \$150 shall be assessed. In the event that an invoice for payment for this Project and/or other previously contracted projects remains unpaid for thirty (30) days from the date of invoice, Consultant has the right to cease performance of the services contracted herein. Consultant will not incur any liability for damages of any type or nature due to the delay of the Project as a result of justifiably stopping performance of services due to the failure of the Client to pay for services. In the event Consultant brings legal action against Client for unpaid invoice amounts, the prevailing party shall be entitled to recover lien fees, attorney's fees, court costs, arbitration costs and other related expenses.
 5. **General Client Responsibilities:** Client shall provide complete and accurate information regarding its requirements for the Project and circumstances known to Client that would hinder or make more difficult or expensive Consultant's performance than would ordinarily be expected. Client shall furnish any required information and services and shall render approvals and decisions expeditiously. If Client observes or otherwise becomes aware of any fault or defect in the Project or in the performance of Consultant's services, Client shall give prompt written notice thereof to Consultant. Failure of Client to provide such written notice, however, shall not excuse Consultant of any performance deficiency or breach, nor eliminate its liability hereunder.
 6. **Permission to Access Subject Property(ies):** If Client is the owner of the subject property, Client expressly gives permission for Consultant to access the subject property for the purposes of conducting the Project. If Client is not the owner of the subject property, Client shall provide documentation acceptable to Consultant that provides permission to access the subject property for the purposes of conducting the Project. Consultant will take reasonable precautions to minimize damage to the land or utilities from use of equipment, but Client understands that use of exploratory equipment may cause some damage and that correction of such damage is not part of this agreement. Securing permission for installing soldier piles, tieback anchors, or soil nails into adjoining properties of the project site will be Client's responsibility. Client will be responsible for obtaining permission to cross property lines with an open excavation.
 7. **Changed Conditions:** If Consultant discovers conditions or circumstances that it did not contemplate ("Changed Conditions") at the time of this Agreement, it will give Client written notice of the Changed Conditions. Client and Consultant will then negotiate an appropriate amendment to this Agreement within 30 days after the notice. This includes delays beyond the control of Consultant.
 8. **Ownership of Hazardous Waste:** Consultant will not create or contribute to the creation or existence of hazardous waste or hazardous substances as those terms are defined under the Model Toxic Control Act, Comprehensive Environmental Response Compensation and Liability Act, and the Resource Conservation and Recovery Act ("Hazardous Wastes"). In the performance of the services, Consultant will not assume the obligations or liability as the generator, owner, operator, or arranger for the treatment, storage or disposal of Hazardous Wastes under the Model Toxic Control Act, the Comprehensive Environmental Response Compensation and Liability Act, and the Resource Conservation and Recovery Act, or any other state or federal statute regulating the handling of Hazardous Waste. Consultant will not arrange or otherwise be responsible for the disposal of any Waste associated with the services, either directly or indirectly through its subcontractors or others.
 9. **Samples:** All soil, rock, water and other samples obtained from the Project site(s) are Client's property. Unless other arrangements are mutually agreed upon in writing, or unless otherwise required, Consultant will preserve, or make arrangements to preserve, such samples for no longer than 30 calendar days following the issuance of Consultant's report to Client or the specific phase relating to the samples has been deemed as concluded by Consultant. Upon request, Consultant will deliver samples to Client with shipping charges collected on delivery or Consultant will store them for Client for an agreed upon charge.
 10. **Biological Pollutants:** Unless specifically referenced in the scope of work, Consultant's scope of work does not include the investigation or detection of the presence or absence of any Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, viruses, and the byproducts of any such biological organisms. Client agrees that Consultant will have no liability for any claim regarding bodily injury or property damage alleged to arise from or be caused by the presence or exposure to any Biological Pollutants. Client will defend, indemnify, and hold Consultant harmless from any third-party claim for damage alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants, except for damages arising from or caused by Consultant's sole negligence.
 11. **Insurance:** Consultant hereby agrees to maintain the following insurance: comprehensive general liability insurance in the amounts of \$1,000,000 per occurrence and \$2,000,000 aggregate; automotive liability insurance in the amount of \$1,000,000; and Workers' Compensation Coverage within statutory limits. Consultant waives subrogation against Client as to said policies.
 12. **Indemnity:** Subject to the terms and limitations of this Agreement, Consultant will indemnify and hold harmless Client, its shareholders, officers, directors, employees, and agents from and against any and all claims, suits, liabilities, damages, expenses (including without limitation reasonable attorney's fees and defense costs) and other losses (collectively "Losses") only to the extent caused by the Consultant's negligence in the performance of this Agreement. Client will indemnify and hold harmless Consultant, its subconsultants and subcontractors, and all of their respective shareholders, directors, officers, licensed professionals, employees, and agents (collectively "Consultant Entities") from and against any and all Losses except to the extent caused by the sole negligence of Consultant Entities.
- Client and Consultant intend that Consultant's services will not subject Consultant's individual employees, officers or directors to any personal liability. Therefore, and notwithstanding any other provisions of this Agreement, Client agrees as its sole and exclusive remedy to direct or assert any claim, demand or suit only against the business entity identified as "Consultant". The provisions of this Section 12 will survive the expiration or termination of this Agreement. If Consultant provides services to Client that the parties do not confirm through execution of an amendment to this Agreement, the provisions of this Section 12

will apply to such services as if the parties had executed an amendment. The parties have mutually negotiated the provisions contained in this Section and it is the intent of both parties that this section provide the broadest scope of indemnity permitted by R.C.W. 4.24.115.

13. Limitation of Remedies: In consideration for Client obtaining a lower fee from Consultant and other valuable consideration, Client agrees that to the fullest extent permitted by law its total cumulative remedies from Consultant, its subconsultants and subcontractors, and all of their respective shareholders, directors, officers, licensed professionals, employees, and agents is limited to the fee charged to Client under this Agreement or \$50,000, whichever is higher, for any and all of Client's injuries, damages, claims, losses, expenses, disputes, or claimed expenses arising out of this Agreement from any cause or causes, including but not limited to, Consultant's negligence, errors, omissions, breach of contract, breach of warranty, strict liability, negligent misrepresentation, statutory liability, or other acts giving rise to liability based on contract, tort or statutory. Upon Client's written request, Consultant and Client may agree to increase the limitation to a greater amount or waive this provision in exchange for a negotiated increase in Consultant's fee. This provision takes precedence over any conflicting provisions of this Agreement.

14. Standard of Performance; Disclaimer of Warranties: Services provided by Consultant under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the location of the Project. No warranty, expressed or implied, is included or intended by this Agreement. Consultant offers different levels of services to suit the desires and needs of different clients. Although the possibility of an error can never be eliminated, more detailed and extensive services yield more information and reduce the possibility of an error, but at an increased cost. Client must determine the level of service adequate for its purposes. Client warrants it has reviewed the scope of work and has determined it does not need or want a greater level of services than is being provided.

15. Consequential Damages: Client and Consultant mutually agree to waive any and all claims for consequential damages for all claims, losses, disputes, breaches, or other matters in question arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement in accordance with the termination provisions in this Agreement.

16. Suspension or Termination: Client may, upon ten days written notice, suspend Consultant's services. Consultant may terminate this Agreement if Client suspends the services for more than 60 days, in which case Client shall pay Consultant for all costs of services performed to the date of termination. If Client suspends Consultant's services, or if Client or others delay Consultant's services, then Client and Consultant agree to equitably adjust the time for completion of services and Consultant's compensation for the additional labor, equipment, and other charges associated with maintaining Consultant's workforce for Client's benefit during the delay or suspension, and any charges incurred by Consultant for demobilization and subsequent remobilization.

Either party may terminate this Agreement or an amendment, without cause, with ten days written notice; provided, however, Client shall pay Consultant for all cost of services performed through the date of termination. In the event Client requests termination of this Agreement prior to completion of work, Consultant reserves the right to complete such analyses and records as may be necessary to protect Consultant's professional reputation and to complete a report of work performed to-date. A termination fee to cover the costs incurred thereof—equal to as much as 10% of the charges incurred up to the termination date—may be charged at the Consultant's discretion and added to the cost of services performed through the termination date.

In the event of a material breach of this Agreement, the non-breaching party may terminate this Agreement if the breaching party fails to cure the breach within ten days following delivery of the non-breaching party's written notice of the breach to the breaching party. The termination notice must state the basis for the termination. The Agreement may not be terminated for cause if the breaching party cures the breach within the ten-day period.

17. Construction Procedures: Consultant shall not manage or supervise construction, or implement or be responsible for health and safety procedures nor be responsible for the health and safety of persons other than its own employees or agents on or about the construction/subject site; shall not be responsible for the acts or omissions of contractors or other parties working on the Project; and shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs. Consultant's testing, observations, or evaluations on the Project, shall not relieve other parties from their responsibility for performing their work in accordance with applicable plans, specifications, and regulations.

18. Construction Costs: Statements of probable cost prepared by Consultant represent Consultant's best judgment as a design professional familiar with the industry. It is recognized, however, that neither Consultant nor Client has control over the cost of labor, materials or equipment, over other contractors' methods of determining bid prices, or over competitive bidding, market or negotiating conditions. Accordingly, Consultant cannot and does not warrant or represent that proposals, bids, or actual costs will not vary from statement of probable costs or evaluations prepared by Consultant.

19. Ownership and Use of Documents: The statements, conclusions, and recommendations provided by Consultant are to be exclusively used within the context of the Project. They will be based upon generally accepted geotechnical practices and will be the result of analysis by the Consultant. The project report, and its attachments, will be for the exclusive use of Client. Unless specifically stated elsewhere in this Agreement, no warranty, expressed or implied, will be made.

All documents and information prepared by Consultant, (collectively known as "Documents"), but not including Samples, will remain the property of Consultant. Consultant has sole discretion to dispose of or retain Documents, provided Consultant will retain pertinent summaries and reports relating to services performed for Client under this Agreement for five years following submission of Consultant's report. During this five-year period, copies of said summaries or reports will be available to Client for the reasonable cost of their reproduction and delivery. Consultant retains the right to use Documents for any purpose.

All Documents prepared by Consultant are solely for use by Client and will not be provided by either party to any other person or entity without Consultant's prior written consent and receipt of additional compensation. Client has the right to reuse the Documents for purposes reasonably connected with the Project. However, any reuse, or adaptation for other than the specific purpose intended, by Client, or any party obtaining Documents through Client, without written verification by Consultant will be at Client's sole risk and without liability to Consultant. Client agrees to defend, indemnify and hold harmless Consultant, its officers, employees and shareholders from and against all claims, damages, losses and expenses, including attorney's fees, arising from any person or entity claiming to rely upon information or opinions contained in Documents without first having obtained Consultant's prior written consent.

20. Dispute Resolution: If a dispute arises out of or relates to this Agreement, or the breach thereof, and the dispute cannot be settled through negotiation, Consultant may compel the parties to participate in a mediation administered by the American Arbitration Association under its Construction Industry Mediation Procedures. If mediation is not successful, Consultant may compel any matter to arbitration by filing and serving a written notice of arbitration on all of the parties no later than ninety days after the later of filing and service of the complaint or the conclusion of the mediation. The arbitration shall be administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction.

21. Governing Law: This Agreement shall be governed by the laws of the State of Washington and venue shall be in Pierce County, Washington.

22. Precedence: This Agreement takes precedence over any inconsistent or contradictory provisions contained in any Exhibits to this Agreement, or any proposal, purchase order, requisition, notice to proceed, or other document regarding Consultant's services.