

>UZDOC

RFQ COPY

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130 Charleston, WV 25305-0130

Solicitation

NUMBER DEP16309 PAGE

FRANK WHITTAKER

ADDRESS CORRESPONDENCE TO ATTENTION OF \$04-558-2316

Civil & Environmental Consultants, Inc. 333 Baldwin Road Pittsburgh, PA

15205

TYPE NAME/ADDRESS HERE

ENVIRONMENTAL PROTECTION DEPARTMENT OF DIV OF WATER AND WASTE MGT 601 57TH STREET SE CHARLESTON, WV 25304 304-926-0499

DATE PRINTED 11/07/2013 BID OPENING DATE:

12/12/2013

BID OPENING TIME

1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				FOR SOLICITATION (RFQ)		
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				12/12/13 10:44: West Virginia F	19AM Purchasing Division	
NATURE -				TELEPHONE A 1.	2_420_2324 DATE_1	
Project Ma	nager FEI	05.1	599565	1 412	2-429-2324	2/11/13
				COT MAKE AND ADDED	ADDRESS CHANGES :	



VENDOR

BID OPENING DATE:

State of West Virginia Department of Administration **Purchasing Division** 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Solicitation

NUMBER DEP16309 PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF FRANK WHITTAKER

04-558-2316

ENVIRONMENTAL PROTECTION DEPARTMENT OF DIV OF WATER AND WASTE MGT 601 57TH STREET SE CHARLESTON, WV 25304

304-926-0499

333 Baldwin Road Pittsburgh, PA 15205

RFO COPY

Civil & Environmental Consultants, Inc.

TYPE NAME/ADDRESS HERE

DATE PRINTED 11/07/2013

12/12/2013

BID OPENING TIME 1:30PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT THIS IS THE END OF REQ DEP16309 ***** TOTAL: \$140,650

SIGNATURE

412-429-2324

12/11/13

Project Manager

25-1599565

ADDRESS CHANGES TO BE NOTED ABOVE



December 11, 2013

WV Department of Environmental Protection Division of Water and Waste Management 601 57th Street SE Charleston, WV 25304

To Whom It May Concern:

RE:

Solicitation DEP16309 CEC Project 133-115

We are pleased to submit out bid for benthic macroinvertebrate identification services. Please find enclosed the completed bid package.

For this project, Marisa Logan will be the lead taxonomist and project manager; she has 9 years experience as sorting and identifying benthic macroinvertebrates. As detailed in the enclosed resume, Mrs. Logan and CEC meet the project requirements in terms of qualifications, certifications, and project experience and throughput.

Specifically:

- NABS/SFS Certifications (please see attached Certificates):
 - Certified Taxonomist, Society of Freshwater Science/North American Benthological Society. Level 2, Group 2, Eastern Ephemeroptera, Plecoptera and Trichoptera (since 2008).
 - O Certified Taxonomist, Society of Freshwater Science/North American Benthological Society. Eastern Chironomidae (since 2011).
- Project experience and throughput, Mrs. Logan:
 - o Manages benthic identification for over 500 samples annually, including samples primarily from West Virginia, Pennsylvania, and Ohio;
 - o Routinely manages projects with over 200 samples per year from a West Virginia project.

QA/QC will be performed by Michael Davison, who has 25 years of experience in benthic taxonomy and is also NABS/SFS certified.

Please contact Marisa Logan at <u>mlogan@cecinc.com</u> or (412) 523-8915 if you have any questions or would like additional documentation.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Marisa Logan

Project Manager/Benthic Taxonomist

Maz

Tim Nuttle, Ph.D.

Senior Ecologist/Principal

133-115-L-Bid-12-12-13/P

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of
 the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will
 result in bid disqualification.

PKEB	IN MEETING: The item identified below shall apply to this Solicitation.
	A pre-bid meeting will not be held prior to bid opening.
	A NON-MANDATORY PRE-BID meeting will be held at the following place and time:
	A MANDATORY PRE-BID meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline: 11/19/2013

Submit Questions to: Frank Whittaker

2019 Washington Street, East Charleston, WV 25305 Fax: 304-558-4115

Email: frank.m.whittaker@wv.gov

- 5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
- 6. BID SUBMISSION: All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The bid delivery address is:

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

	The bid should contain the information listed below on the face of the envelope or the bid may not be considered:
	SEALED BID
	BUYER;
	SOLICITATION NO.:
	BID OPENING DATE:
	BID OPENING TIME:
	FAX NUMBER:
	In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:
	BID TYPE: Technical Cost
7.	BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock.
	Bid Opening Date and Time: 12/12/2013 at 1:30 pm
	Bid Opening Location: Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130
8.	an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result

in bid disqualification.

GENERAL TERMS AND CONDITIONS:

- CONTRACTUAL AGREEMENT: Issuance of a Purchase Order signed by the Purchasing Division
 Director, or his designee, and approved as to form by the Attorney General's office constitutes
 acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's
 signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions
 contained in this Contract.
- 2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
 - 2.1 "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
 - 2.2 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.
 - 2.3 "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
 - 2.4 "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
 - 2.5 "Purchase Order" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.
 - 2.6 "Solicitation" means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.
 - 2.7 "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
 - 2.8 "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

days.

3.	CON'	TRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in lance with the category that has been identified as applicable to this Contract below:
	1	Term Contract
		Initial Contract Term: This Contract becomes effective on award
		and extends for a period of one (1) year(s).
		Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to two (2) successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.
		Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.
	C .	Release Order Limitations: In the event that this contract permits release orders, a release order may only be issued during the time this Contract is in effect. Any release order issued within one year of the expiration of this Contract shall be effective for one year from the date the release order is issued. No release order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within days.

		One Time Purchase: The term of this Contract shall run from the issuance of the Purchase Order until all of the goods contracted for have been delivered, but in no event shall this Contract extend for more than one fiscal year.
		Other: See attached.
1.	receiv	CE TO PROCEED: Vendor shall begin performance of this Contract immediately upon ing notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the xecuted Purchase Order will be considered notice to proceed
5.		NTITIES: The quantities required under this Contract shall be determined in accordance with regory that has been identified as applicable to this Contract below.
	1	Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
		Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
		Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
		One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

- 6. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 7. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
- 8. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

	BID BOND: All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
	PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of . The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.
	LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.
certific or irre same labor/r	of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide ed checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, vocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and naterial payment bond will only be allowed for projects under \$100,000. Personal or business are not acceptable.
	MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
	WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.
	INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:
	Commercial General Liability Insurance: or more.
	Builders Risk Insurance: builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.
LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

- 9. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
- 10. ALTERNATES: Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.
- 11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 13. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.
- 14. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee if applicable.
- 15. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.
- 16. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 17. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."
- 18. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.
- 19. DELIVERY: All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.
- 20. INTEREST: Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.
- 21. PREFERENCE: Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

- failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.
- 22. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.
- 23. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 24. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 25. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 26. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.
- 27. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 28. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.
- 29. PREVAILING WAGE: On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

- requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.
- 30. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 31. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.
- 32. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 33. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 34. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
- 35. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 36. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 37. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

38. [RESERVED]

- 39. CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.
- 40. DISCLOSURE: Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- 41. LICENSING: In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.
- 42. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired

by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

43. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety, understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

- 44. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.
 Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all
- 45. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.
- 46. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered

goods and services.

by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

- 47. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract expenditures by agency, etc.

Vendor shall provide the Agency and/or the Purchasing Division with the

- Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing requisitions@wv.gov.
- 51. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information

50. REPORTS:

to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304)558-9911 for more information.

- 52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
 - a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
 - b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

53. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)

1. CONTRACTOR'S LICENSE: West Virginia Code § 21-11-2 requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Division of Labor.

West Virginia Code § 21-11-11 requires any prospective Vendor to include the contractor's license number on its bid. Failure to include a contractor's license number on the bid shall result in Vendor's bid being disqualified. Vendors should include a contractor's license number in the space provided below.

Contractor's Name:	Civil & Environmental Consultants, Inc.
Contractor's License	No. WV023762

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a purchase order/contract.

- 2. DRUG-FREE WORKPLACE AFFIDAVIT: W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit at the same time an affidavit that the Vendor has a written plan for a drug-free workplace policy. To comply with this law, Vendor must either complete the enclosed drug-free workplace affidavit and submit the same with its bid or complete a similar affidavit that fulfills all of the requirements of the applicable code. Failure to submit the signed and notarized drug-free workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, with the bid shall result in disqualification of Vendor's bid.
 - 2.1 DRUG-FREE WORKPLACE POLICY: Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article.

The awarding public authority may cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy.

3. DRUG FREE WORKPLACE REPORT: Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

- (1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;
- (2) The name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- (3) The average number of employees in connection with the construction on the public improvement;
- (4) Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor should utilize the attached Certified Drug Free Workplace Report Coversheet when submitting the report required hereunder.

- 4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the AIA A101-2007 and A201-2007 or the A107-2007 documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein.
- 5. SUBCONTRACTOR LIST SUBMISSION: In accordance with W. Va. Code § 5-22-1, The apparent low bidder on a contract for the construction, alteration, decoration, painting or improvement of a new or existing building or structure valued at more than \$250,000.00 shall submit a list of all subcontractors who will perform more than \$25,000.00 of work on the project including labor and materials. This provision shall not apply to any other construction projects, such as highway, mine reclamation, water or sewer projects. Additionally, if no subcontractors who will perform more than \$25,000.00 of work are to be used to complete the project, it will be noted on the subcontractor list.
 - a. Required Information. The subcontractor list shall contain the following information:
 - i. Bidder's name
 - ii. Name of each subcontractor
 - iii. License numbers as required by W. Va. Code § 21-11-1 et. seq.
 - iv. Notation that no subcontractor will be used to perform more than \$25,000.00 of work, when applicable
 - b. Submission. The completed subcontractor list shall be provided to the Purchasing Division within one business day of the opening of bids for review. Failure to submit the subcontractor list within one business day after the deadline for submitting bids shall result in disqualification of the bid.
 - c. Substitution of Subcontractor. Written approval must be obtained from the State Spending Unit before any subcontractor substitution is permitted. Substitutions are not permitted unless:

- i. The subcontractor listed in the original bid has filed for bankruptcy,
- ii. The subcontractor in the original bid has been debarred or suspended; or
- iii. The contractor certifies in writing that the subcontractor listed in the original bill fails, is unable, or refuses to perform his subcontract.
- 6. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

ADDITIONAL TERMS AND CONDITIONS (Architectural and Engineering Contracts Only)

- PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available
 for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or
 other work related to the plans and drawings.
- 2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda:
 - a. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.
- PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any
 pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications
 prepared by the Architect/Engineer.
- 4. AIA DOCUMENTS: Contracts for architectural and engineering services will be governed by the AIA document B101-2007, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein when procured under Chapter 5G of the West Virginia Code.
- 5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

Benthis Macroinvertebrate Sample Processing and/or Identification

SPECIFICATIONS

- PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids on behalf of The West Virginia Department of Environmental Protection to establish a contract for the processing and identification of benthic macroinvertebrate samples collected from West Virginia waters.
- 2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in Attachment A and section 2 of the General Terms and Conditions.
 - 2.1 "Contract Services" means the processing and identification of benthic macroinvertebrate samples.
 - 2.2 "Pricing Page" means the pages upon which Vendor should list its proposed price for the Contract Services. The Pricing Page is either included on the last page of this RFQ or attached hereto as Exhibit A.
 - 2.3 "RFQ" means the official request for quotation published by the Purchasing Division and identified as DEP16309
- 3. QUALIFICATIONS: Vendor shall have the following minimum qualifications:
 - 3.1. Must have degreed biologists on staff performing the benthic macroinvertebrate identifications.
 - 3.1.1. Biologists performing the identifications must be dedicated taxonomists; that is, the majority of their work on a daily basis involves the identification of benthic macroinvertebrates.
 - 3.2. Must have NABS certification for genus level EPT (eastern) and genus level chironomidae (eastern) is required to perform the identifications.

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- **3.2.1.** Identification of organisms by non-professional personnel or those without NABS certification is strictly forbidden.
- 3.3. Minimum of 5 years of experience with sorting/identifying benthic macroinvertebrates.
- 3.4. Must have a minimum of 5 years of experience dealing with large-scale macroinvertebrate processing and identification projects (e.g., projects with >200 samples per year). The vendor must demonstrate this by submitting the number of samples they have identified and to what taxonomic level in the last 5 years. This number should be greater than 300 per year.
- 3.5. Must provide expert testimony in legal proceedings on behalf of the DEP pertaining to work on this contract upon request.
- 3.6. Resumes of taxonomists including proof of North American Benthological Society (NABS) taxonomic certifications for those working on this project should be included in the bid package but must be submitted upon request prior to award.

4. MANDATORY REQUIREMENTS:

- **4.1 Mandatory Contract Services Requirements and Deliverables:** Contract Services must meet or exceed the mandatory requirements listed below.
 - **4.1.1** Completed results must be delivered to DEP/DWWM according to the following schedule:
 - Samples submitted by April 1 are due August 31;
 - Samples submitted by August 31 are due Dec. 1;
 - Samples submitted by December 31 are due Feb. 28;
 - Results of smaller, site-specific projects must be available within one month of sample receipt or within some other negotiated time period.

Submissions shall include the following for each sample:

a) benthic macroinvertebrate identifications reported in MS Excel or Access (WAB will provide a data template);

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- b) copies of bench sheets completed during identifications;
- c) all organisms identified (except reference taxa specimens, which will be returned when the contract or project is complete);
- d) all QA/QC information associated with sorting and identification of the samples.
- **4.1.2** The vendor must follow the Quality Control and Analytical Procedures outlined in Attachment A.
- 4.1.3 The selected firm or firms may be requested by the DEP/DWWM to testify concerning the validity of the laboratory sorting and identification process. The firm will only be required to testify to the following areas:
 - 1. Time of notification by the DEP/DWWM of sample shipment and by whom.
 - 2. Condition of sample.
 - 3. How sample was preserved by the firm.
 - 4. Dates and analysis and by whom.
 - 5. Chain of Custody procedures within the laboratory.
 - 6. Methods used.
 - 7. Results of sorting, identification, and internal QA/QC processes.

At no time will the firm respond to questions concerning interpretation of results. The Division shall reimburse the firm for the costs of any such testimony.

- 4.1.4 The vendors, who are awarded a contract, when performing work under the terms and conditions of this contract, are solely responsible for the satisfactory completion of the work.
- 4.1.5 The vendor agrees that any and all data, analyses, materials, reports or other information, oral or written, prepared by the vendor with respect to this requisition shall, except for information which has been publicly available, be treated as confidential and shall not be utilized, released, published, or disclosed, by the vendor at any time for any purpose whatsoever other than to provide consultation or other service th the DEP/DWWM.

Benthis Macroinvertebrate Sample Processing and/or Identification

5. CONTRACT AWARD:

- **5.1 Contract Award:** The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.
- 5.2 Pricing Page: Vendor should complete the Pricing Page by filling in the "Unit Price" box with the price per unit. The "Amount" box is filled in by multiplying the "Unit Price" with the "Quantity". Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Notwithstanding the foregoing, the Purchasing Division may correct errors as it deems appropriate. Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

- 6. PERFORMANCE: Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.
- 7. PAYMENT: Agency shall pay the price per unit, as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.
- 8. TRAVEL: Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.

Benthis Macroinvertebrate Sample Processing and/or Identification

9. VENDOR DEFAULT:

- 9.1. The following shall be considered a vendor default under this Contract.
 - **9.1.1.** Failure to perform Contract Services in accordance with the requirements contained herein.
 - **9.1.2.** Failure to comply with other specifications and requirements contained herein.
 - **9.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 9.1.4. Failure to remedy deficient performance upon request.
- 9.2. The following remedies shall be available to Agency upon default.
 - 9.2.1. Cancellation of the Contract.
 - 9.2.2. Cancellation of one or more release orders issued under this Contract.
 - 9.2.3. Any other remedies available in law or equity.

10. MISCELLANEOUS:

10.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Marisa Logan
Telephone Number: 412-523-8915
Fax Number: 412-429-2114
Email Address: mlogan@cecinc.com

In administering and enforcing most of the pollution control laws of the state, the importance of quality control cannot be overstated. Quality control measures must be strictly adhered to in all phases of sample collection, preservation, transportation, and analysis. The quality control and analytical processes, as they relate to the vendor's responsibility, are divided into five (5) major steps:

Step 1 - Receipt of sample at specified location - generally WAB office in Charleston, WV.

Step 2 - Sorting of samples in a timely and professional manner.

Step 3 - Identification of samples in a timely and professional manner.

Step 4 - Establishment of continuing program to ensure the reliability of data (Quality Assurance/Quality Control).

Step 5 - Legal Testimony

Step 1 - Receipt of Samples

Benthic macroinvertebrate samples will be collected by DEP/DWWM personnel. Due to the size of the sample containers (1 gallon jar) and the total number of samples collected annually (approx. 500), DEP/DWWM will not ship samples to the contractor using commercial transport such as UPS or Federal Express. Therefore, the vendor shall provide sample pick-up and delivery services. Generally, samples will be housed at DEP/DWWM's office in Charleston, WV. DEP/DWWM will bear the cost of sample transport, however, and the vendor shall include sample transport costs as part of the bid package. Typically, there are four to five sample pick-ups per year.

DEP/DWWM will provide Chain-of-Custody forms when samples are received by the vendor. The vendor shall be responsible for maintaining preservation of the samples and the internal chain of custody from the time the vendor obtains the samples until the results of benthic macroinvertebrate identifications are accepted by the DEP/DWWM. The vendor shall also maintain records of the results of identifications for a minimum of five (5) years.

Step 2 - Requirements for Sorting Benthic Macroinvertebrate Samples

Introduction

- Benthic macroinvertebrate samples shall be sorted/processed in accordance with the procedures outlined below: "WVDEP Watershed Assessment Branch - Standard Operating Procedures for Processing Benthic Macroinvertebrate Samples". This procedure must be reviewed and understood fully before submitting bids.
- 2. For the majority of the samples, sorting requires removing a sub-sample consisting of

200 (+/- 20%) benthic macroinvertebrate organisms from the entire sample. Any vertebrates (salamanders, fish) encountered during subsampling should be retained with the sample, but not identified. Specimens should be stored in archival quality containers that will prevent loss of preservative through evaporation: glass vials with leak-proof screw caps, polypropylene jars with screw caps, etc.

- 3. Occasionally, the entire sample will need to be sorted and identified (i.e., artificial substrate samples and special surveys). DEP/DWWM will notify the vendor of these special cases and realizes that these samples may require significantly more time to process and identify than 200-organism subsamples. Therefore, vendors are asked to bid on whole-sample sorting separately.
- Vendor will be responsible for examining sorting efficiency for 5% of all submitted samples for QA/QC purposes and reporting the information with each data submission.
- 5. Sorting macroinvertebrates from benthic survey samples (a procedure often referred to as "bug sorting") is an extremely important step in the biological research performed by the Department of Environmental Protection. The quality of the work performed by the "sorter" influences the quality of subsequent processes, such as identification and data analysis. A competent "sorter" must be able to recognize the morphological diversity of aquatic organisms, as well as the various methods these organisms may use to hide themselves from predators. The outcome of the final study may be affected, even if only a few organisms are overlooked during the sorting process.

The processes described below were derived with some modifications from: Barbour, M. T. et al. "Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish", Second Ed., EPA 841-B-99-002. These protocols may be downloaded from the Internet at http://www.epa.gov/owowwtr1/monitoring/rbp/download.html.

Definitions

MACROINVERTEBRATES - Animals that are large enough to be seen with the naked eye and do not have a backbone.

BENTHIC ORGANISMS (or BENTHOS) - Living organisms that reside on the bottom of streams, rivers, or lakes. Benthos may be vertebrates, invertebrates, or plants.

REFERENCE COLLECTION – A reference collection is a set of specimens, each representing some taxonomic level and not necessarily limited to a specific project. For the purposes of DEP/DWWM's studies, a reference collection does not have to be limited to a particular watershed. Reference collections should have expert confirmation of each taxon. These collections are used to verify identifications of subsequent samples.

VOUCHER COLLECTION – The voucher collection consists of the actual specimens collected during the project. Following identification and enumeration, all specimens collected for this project should be maintained in a voucher collection. This collection will be returned to the

DEP/DWWM.

Materials for Sorting

- 1. Sample Jar Contains the unprocessed sample, which consists of benthic organisms and stream debris.
- 2. Sample Vial for storage of processed sample. This container may be a plastic/glass vial or a larger plastic bottle. Most samples will fit into a 10 ml or 4-6 dram vial, however, large organisms such as crayfish and snails, will require larger vials/bottles.
- 3. Sorting tray a homemade plastic or Plexiglas tray used to evenly distribute the sieved sample and for randomly selecting the sub-sample. The internal dimensions of the tray shall be 10 inches x 40 inches divided into 100 2 inch x 2 inch grids.
- 4. White foam board or other schematic 10 inches x 40 inches marked with 100 2 inch x 2 inch grids for placing sorting tray on to demark grids and randomly select them for sorting.
- 5. White Flat-bottom Pans used for picking specimens removed from 100 grid sorting tray.
- 6. Denatured Alcohol preservative used in unprocessed and processed samples.
- Sieve #30 sieves (595 um) are used to separate alcohol and fine debris from the sample prior to sorting.
- 8. Labels Archival paper is used to internally the contents of the sample vials/bottles (i.e., the sorted sample) and self-adhesive labels are used to externally identify (if necessary) identify the sample vials/bottles. External labels may be omitted for samples stored in transparent glass containers, as long as the internal label is clearly visible.
- 9. Clear Tape Used on label as additional external adhesive.
- 10. Pencil used to label sample bottle.
- 11. Small container/vial used for short term, intermediate storage of the sample during the sorting process.
- 12. Forceps Fine tipped forceps are used to remove the organisms from the debris.
- 13. 10X Illuminated Magnifier an optical aid to illuminate and magnify the sample during the sorting process. Alternatively, magnifying visors and a desk lamp can be used.
- 14. Squirt bottle filled with alcohol, used to rinse organisms into sample vial.

15. Plexiglas - used to cover sample partially sorted overnight to prevent evaporation.

Procedures for Sorting

- 1. Select the sample to be sorted. If a sample is in two or more jars, the contents of the jars must be combined before sorting is initiated. Samples requiring more than one jar will be labeled as "1 of 2" and "2 of 2".
- Select a vial that will hold the organisms after sorting is completed. Usually a 10 mL or 4-6 dram vial is adequate for a 200-organisms subsample. Additional vials/bottles may be needed if the sample contains large organisms.
- 3. Prepare an *internal* label out of archival paper for the sample using permanent, alcoholproof, archival ink (e.g., pigma ink; regular ink will run if alcohol is spilled on the label) or a pencil. The label must include the following information:

Stream Name

Station Number (AN-code)

Random Number (if provided)

Lab Sample ID# (Lab's internal id to link electronic results to final database)

Sample Date

County

Initials of Sample Collector

Initials of Sample Processor

of grids sorted (the numbers must be kept separate if several iterations of sorting are necessary; see below)

of organisms sorted for final sample

If any of this information is missing from the original sample jar label, notify the DEP/DWWM biologists so that the error can be corrected.

External labels may be omitted for samples stored in transparent glass containers, as long as the internal label is clearly visible. External label should contain the same information as required above. Place the external label on the bottle and apply clear tape over it for additional adhesion to the vial/bottle surface.

- 4. Prepare the sample for sorting. This step is performed in a sink and should be done under a fume hood or in a well ventilated area.
 - a. Under a fume hood, open sample jar and pour contents into a #30 sieve (595 micron).
 - b. Rinse sample jar into sieve and examine jar to make sure all detritus and organisms have been removed.
 - c. Rinse the contents of the sieve in tap water to remove remaining alcohol and to

rinse out fine sand and sediment.

- d. Carefully rinse any large detritus (i.e. leaves) or stones, making sure that all organisms on these items are returned to the sieve. Discard large leaves and gravel, or other large materials after rinsing.
- e. Place the 10 inch x 40 inch 100 grid sorting tray on top of 100 grid foam board/ schematic with grids and numbers plainly visible through the plexiglas bottom. After cleaning is complete, pour the entire contents of the sieve into the gridded sorting tray. Add a small quantity of water and gently swirl or stir the sample materials until the contents are evenly distributed in the tray. Even distribution is extremely important in this step. If debris is clumped, the organisms will not be distributed evenly and the final subsample may not accurately represent the full sample. If the sample was divided into more than one jar (labeled as "1 of 2" and "2 of 2"), the jars are to be combined at this point. Only when the sample is evenly distributed throughout the gridded sorting tray is it ready for sub-sampling and sorting.
- f. Using a random number generator, select the first grid to be sorted. Using the same concept as a "cookie cutter", isolate the organisms within the chosen grid and scoop the contents of the grid place into a white enamel pan. Be careful not to damage any organisms during this step. Organisms with their head inside the grid are to be included within the grid. If you can't tell which end is the head, then the organism belongs in the grid that contains the largest portion of the body. A minimum of 4 grids must be sorted in order to ensure that a representative subsample has been obtained from the sorting tray.
- g. Fill a small container or vial with 75% alcohol for temporary storage of sub-sampled organisms. A properly labeled vial for final storage can be used at this point as well.
- h. Using fine-tipped forceps and 10X illuminated magnifier or magni-visor (sorter should use magnification of at least 2x), remove all macroinvertebrates from the subsample and transfer to the alcohol filled sample container/vial. Keep a running tally of the number of organisms that have been sorted. If there are a significant number of invertebrates that appear to be terrestrial, include them in the sample, but do not include them in the 200-organism count. The taxonomist will verify whether these organisms are truly terrestrial or semi-aquatic. Do not include empty clam or snail shells, or parts of organisms that are easily disconnected from the specimen (legs, gills, etc.).

- i. If leaves are present, be sure to examine both surfaces. Watch for unusual clumps of twigs, leaves, or sand, which may be protective cases for some organisms. If cases are found, both the case and the organism should be sorted. If the organism is in the case, the case and organism should be kept together. If an empty case is found, it should also be removed but not counted.
- j. If there is any doubt to the identity of an object (is it a seed or a bug?), it should be sorted, but not counted. A senior biologist should be notified if a large number of questionable objects are present.
- k. When all the organisms appear to have been removed from the pan, agitate the contents of the pan and examine again. Often the agitation will reorient an organism that was previously overlooked.
- I. Have a senior biologist inspect the pan after sorting has been completed. The biologist will point out any organisms that have been overlooked or misidentified as detritus. As the sorter becomes more proficient at his/her task, this step may be reduced in frequency. For the set quantity of QA samples, the number of organisms recovered by the senior biologist should be documented along with the initial number of organisms picked in order to calculate the percent sorting efficiency (see below).
- m. If 200 (+/- 20% which is 160 to 240) organisms have been picked from the initial 4 grids chosen, sub-sampling is complete. If fewer than 160 organisms have been picked, an additional grid is randomly chosen and sorted entirely even if 160 organisms have picked while sorting the additional grid. (Note: Once a grid is started it must be fully picked). This is repeated until at least 160 organisms are obtained or until the entire sample has been sorted. All attempts should be made (i.e., picking additional grids) to get as close to 200 organisms in the subsample. If more than 240 organisms are obtained from the initial 4 grids, then those individuals must be re-subsampled down to the 200 (+/- 20%) goal. The remainder of the sample (i.e., the non-selected grids) may be discarded unless otherwise directed by DEP/DWWM.
- n. If using a temporary storage container/vial, pour contents of the sub-sample into the labeled bottle/vial. Make sure that all organisms in the bottle are fully submerged in the alcohol. If some remain on the vial sides, use the squirt bottle to rinse them into the alcohol.

- o. After a sample has been sorted, record the date and your initials in the sample log book. The total number of organisms picked and the number of grids sorted should also be documented for each sample on the vial label and on the bench sheet. If a re-subsampling is necessary (subsampling a subsample that exceeds 240 organisms), record the number of grids sorted for each iteration of the subsampling process separately. This last step is very important as these values are used to calculate organism density and to determine sample comparability.
- p. Sorting efficiency shall be evaluated for 5% of the samples. Recovery errors cannot exceed 10% (i.e., no more than 20 organisms can be missed by the sorter for a given sample) of the total sample (composite of remnants from each grid sorted). If the sorter does not meet this standard, the sorted sample remnants shall be re-checked until the recovery limits are attained. A record of all samples that were sorted, a list of quality control (QC) checks and documentation of any corrective action taken shall be maintained by the vendor to document the process. DEP/DWWM reserves the right to review QA/QC documentation upon request. All QA/QC associated with sorting and identification of each sample shall also be submitted with the results.

Step 3 - Requirements for Identification of Benthic Macroinvertebrates

Introduction

- Benthic macroinvertebrate samples shall be identified in accordance with procedures outlined below: "WVDEP-DWWM Standard Operating Procedures for Identifying Macroinvertebrate Samples". This procedure must be reviewed and understood fully before submitting bids.
- 2. Vendor must have degreed biologists on staff performing the benthic macroinvertebrate identifications. NABS certification for genus level EPT (eastern) and genus level chironomidae (eastern) is required to perform the identifications. Identification of organisms by non-professional personnel or those without NABS certification is strictly forbidden. Biologists performing the identifications must be dedicated taxonomists; that is, the majority of their work on a daily basis involves the identification of benthic macroinvertebrates.
- 3. All aquatic insects (including Diptera), crustaceans, and molluscs, are to be identified to the genus-level of taxonomy. (NOTE: samples may include a significant number of chironomid larvae, which MUST be identified to genus). Hydropsyche individuals must be separated into Hydropsyche vs. Ceratopsyche according to Merritt, Cummins, and Berg (2008). Oligochaeta, Turbellaria, and Hirudinea are to be identified to family level. Macroinvertebrates that do not require family/genus level identification are Nemertea, Nematoda, Hydroida, and Bryozoa. These organisms need only be identified to the taxonomic level (phylum, class, order, etc.) indicated in the previous sentence. However, it would be desirable to report lower taxonomic levels if these organisms are easily

identified. Vertebrates and terrestrial organisms are not to be identified.

- 4. Taxonomists are permitted to use taxonomic identification keys other than those suggested in the operating procedures. However, all keys must be current and up-to-date. All results submitted to DEP/DWWM shall include a bibliography of publications used in identification of the specimens. Vendor will be responsible for identification and enumeration only; data analysis will not be required.
- 5. Results of identifications shall be submitted on the paper form(s) styles provided by DEP/DWWM and in electronic format (Microsoft Excel or Access compatible format; WVDEP will provide a data template for this purpose). All QA/QC associated with sorting and identification of each sample shall also be submitted with the results.
- 6. Identification of samples is not deemed completed until the data has been submitted to and accepted by the DEP/DWWM. Should the DEP/DWWM not provide notice of acceptance within four weeks of the date results were mailed by the vendor, the firm may consider the data to be acceptable by the Division.
- 7. The vendor shall be responsible for maintaining preservation of the samples. Vendor shall return all sample jars, voucher specimens, and reference collections to the DEP/DWWM in addition to the results of identification. Unused sample residues (i.e. detritus and unpicked portions) are to be properly disposed by the vendor unless otherwise directed on a small scale, project specific basis.
- 8. Vendor will be required to provide identification services only. No data analysis will be required. At the completion of the projects (or portions of the project) the vendor will submit the completed "WVDEP/ WAB BENTHIC MACROINVERTEBRATE LAB SHEET", voucher specimens, and identification results in Excel or Access format (WVDEP will provide an electronic data template with required fields). The voucher specimens are essentially all specimens in the 200 organism sub-sample that have not been included in the reference collection. Vendor may retain the DEP/DWWM reference specimens until the contract or project has been completed or upon request by DEP/DWWM. Specimens retained by the laboratory permanently must be first represented in the DEP/DWWM reference collection by individuals in good condition and documented on all paper and electronic forms.

Materials for Identification of Benthic Macroinvertebrates

- 1. Dissecting Microscope for examination of gross features.
- 2. Compound Microscope for examining minute features. Phase-contrast microscopes are preferable.
- 3. Fine-tipped forceps and probes for manipulating specimens.

- 4. Petri dishes or other container to hold specimens during identification.
- 5. Alcohol 75% ethanol or isopropanol is used to preserve the samples and to prevent desiccation during identification.
- 6. Wash Bottle used for alcohol storage.
- 7. Microscope Slides and glass cover slips for examination of tiny specimens and/or body parts under a compound microscope. Slides and cover slips should be clean.
- 8. Mounting Medium CMC-10 mounting medium or a similar permanent mounting medium is used to prepare permanent mounts of microscopic specimens.
- 9. Benthic Macroinvertebrate Lab Sheet standard for recording results of identification and enumeration (Figure 1).
- 10. Taxonomic Keys for the Identification of Benthic Macroinvertebrates

Procedures for Mounting Chironomidae (and other small specimens)

The procedures that follow are summarized from Epler's Identification Manual for the Larval Chironomidae (Diptera) of North and South Carolina.

- 1. Label a clean glass slide. Label should include, at a minimum, the stream name, stream code, collection data and sample ID number.
- 2. Place 2-5 drops of CMC-10, or other permanent mounting medium, on the slide.
- 3. Place the specimens in the mounting medium, ventral side up, head pointing down ("south"). Tease out larger bubbles.
- 4. Gently lower coverslip over the mounting medium at an angle.
- 5. Use the cover slip to reposition larvae, if desired. Then gently press down the cover slip over the head capsules with pencil eraser to spread the mouthparts and over the anal end to spread the hind pro-legs.
- 6. Lay the slide on a flat surface and allow it to cure for 2-3 hours. If air bubbles form, fill them in with fresh medium and allow curing for 1-2 more hours. Then ring the slide with more medium or clear fingernail polish.
- 7. Add to the label the # of organisms on the slide and a general description of the type of organisms (e.g., Chrironomidae, Oligochaeta, Acarina, etc.)

Example of the DEP/DWWM Macroinvertebrate Lab Sheet

Stream Name:	:P-WAS BEN	THIC MACROINVERTEE	BRATE LAI	B SHEET		
Sample ID: Co	AN-Code: WV R#: Collection Date (mm/dd/yy): County, State: Number of Grids Picked: Number of Organisms Picked:				i i	
Sorted by:Nu						
ID By:	Collected By: # Organisms ID'd					
Taxon ID/Taxon	Count	Taxon ID/Taxon	Count	Taxon ID/Taxon	Coun	
Annelida		Plecoptera		Diptera (Chronomidae)		
Amphipoda						
Isopoda						
				Diptera (other)		
Decapoda		Trichoptera		Diptera (other)		
Ephemeroptera						
		Megaloptera		Mollusce		
Odonata		Coleoptera				
				Other Taxa		
			-		100	

List of Taxonomic Keys

The primary taxonomic keys are listed below. The contractor may use other taxonomic keys for lower level identification; however, these references must be current and up-to-date. The contractor shall provide a list of references used in the identification of all specimens.

General Keys

- Brigham, A.R., W.U. Brigham, and A. Gnilka (eds.). 1982. Aquatic Insects and Oligochaetes North and South Carolina. Midwest Aquatic Enterprises, Mahomet, IL.
- Merritt, R.W., and K.W. Cummins (eds.). 1995. An Introduction to the Aquatic Insects of North America. 3rd edition. Kendall/Hunt Publishing Company, Dubuque, Iowa.
- Merritt, R.W., K.W. Cummins, and M.B. Berg (eds.). 2008. An Introduction to the Aquatic Insects of North America. 4th edition/revised edition. Kendall/Hunt Publishing Company, Dubuque, Iowa.
- Peckarsky, B.L., P.R. Fraissinet, M.A. Penton, and D.J. Conklin, Jr. 1990. Freshwater Macroinvertebrates of Northeastern North America. Cornell University Press, Ithaca, New York.
- Pennack, R.W. 1978. Fresh-water Invertebrates of the United States. 2nd edition. John Wiley & Sons, New York.
- Pennak, R.W. 1989. Fresh-water Invertebrates of the United States Protozoa to Mullusca. 3rd Edition. John Wiley and Sons, Inc., New York, New York. 628 pp.
- Pfeiffer, J., Kosnicki, E., Bilger, M., Marshall, B.D. and W. Davis. 2008. Taxonomic Aids for Mid-Atlantic Benthic Macroinvertebrates (Ephemeroptera: Baetidae; Pleoptera: Capniidae/Leuctridae; Diptera: Simuliidae). EPA-260-R-08-014. United States Environmental Protection Agency, Office of Environmental Information, Environmental Analysis Division, Washington, DC. Available on-line at: http://www.epa.gov/bioindicators/html/publications.html
- Smith, D.G. 2001. Pennak's Freshwater Invertebrates of the United States: Porifera to Crustacea. 4th edition. John Wiley & Sons, New York.
- Thorp, J.H and A.P. Covich, Eds. 2001. Ecology and Classification of North American Freshwater Invertebrates. Second Edition. Academic Press.

Annelida

- Brinkhurst, R.O. 1986. Guide to the freshwater aquatic microdile oligochaetes of North America. Canadian Special Publication of Fisheries and Aquatic Sciences 84: 259 pp.
- Klemm, D.J. (ed.). 1985. A guide to the freshwater Annelida (Polychaeta, naidid and tibuficid Oligochaeta, and Hirudinea) of North America. Kendall/Hunt Publishing Co., Dubuque, Iowa.
- Klemm, D.J. 1997. Identification Guide to the Freshwater Leeches (Annelida: Hirudinea) of Florida and Other Southern States. Florida Department of Environmental Protection, Division of Water Facilities, Tallahassee, FL. Available on-line at: http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/leeches.pdf
- Milligan, M.R. 1997. Identification Manual for the Aquatic Oligochaeta of Florida: Volume I-Freshwater Oligochaetes. Florida Department of Environmental Protection, Division of Water Facilities, Tallahassee, FL. Available on-line at: http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/oligofw.pdf

Crustacea

- Hobbs, H.H., Jr. 1972. Biota of Freshwater Ecosystems, Identification Manual no. 9. Crayfishes (Astacidae) of North and Middle America. EPA-WPCRS No. 18050, ELD05/72. Supt. Doc. No. 5501-0399, United States Environmental Protection Agency, Washington, D.C. 173 pp. Available on-line at: http://www.epa.gov/nscep/index.html
- Holsinger, J.R. 1972. Biota of Freshwater Ecosystems, Identification Manual no. 5. Freshwater amphipod crustaceans (Gammaridae) of North America. WPCRS No. 18050, ELD04/72. Supt. Doc. No. 5501-0369, United States Environmental Protection Agency, Washington, D.C. 89 pp.
- Jezerinac, R.F., G.W. Stocker, and D.C. Tarter. 1995. The Crayfishes (Decapoda: Cambaridae) of West Virginia. Ohio Biological Survey Bulletin. New Series. Vol. 10, No.1.
- Rogers, D.C. and M. Hill. 2008. Key to the Freshwater Malacostraca (Crustacea) of the Mid-Atlantic Region. EPA-230-R-08-017. United States Environmental Protection Agency, Office of Environmental Information, Environmental Analysis Division, Washington, DC. Available on-line at: http://www.epa.gov/bioindicators/pdf/EPA-230-R-08-017KeystotheFreshwaterMalacostracaoftheMid-AtlanticRegion.pdf
- Taylor, C.A., and G.A. Schuster. 2004. The Crayfishes of Kentucky. Illinois Natural History Survey Special Publication No. 28. 219 pp.

Williams, W.D. 1972. Biota of Freshwater Ecosystems, Identification Manual no. 7. Freshwater isopods (Asellidae) of North America. WPCRS No. 18050, ELD05-72. Supt. Doc. No. 5501-0390, United States Environmental Protection Agency, Washington, D.C. 45 pp.

Acarina

Pluchino, E.S. 1984. Guide to the Common Water Mite Genera of Florida. Florida Department of Environmental Regulation, Technical Series Vol. 7 No. 1. Orlando, Florida. Available on-line at: http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/mites.pdf

Ephemeroptera

- Bednarik, A.F. and W.P. McCafferty. 1979. Biosystematic revision of the genus *Stenonoma* (Ephemeroptera: Heptageniidae). *Canadian Bulletin of Fisheries and Aquatic Sciences* 21:1-73.
- Berner, L. and M.L. Pescador. 1988. 2nd Ed. The mayflies of Florida. Univ. Florida Press, Gainesville, Florida. 352 pp.
- Burks, B.D. 1953. The mayflies, or Ephemeroptera, of Illinois. Illinois Natural History Survey (Ubana) Bulletin 26, Part 1:1-211.
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- Lugo-Ortiz, C.R., and W.P. McCafferty. 1998. A New North American Genus of Baetidae (Ephemeroptera) and Key to Baetis Complex Genera. Entomological News 109: 345-353.
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- McCafferty, W.P. 1975. The burrowing mayflies (Ephemeroptera: Ephemeridae) of the United States. *Transactions of the American Entomological Society* 101:447-504.
- McCafferty, W.P. and R. D. Waltz. 1995. *Labiobaetis* (Ephemeroptera: Baetidae): New status, new North American species, and related new genus. *Entomological News* 106(1):19-28.
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- Morihara, D.K. and W.P. McCafferty. 1979. The *Baetis* larvae of North America (Ephemeroptera: Baetidae). *Transactions of the American Entomological Society* 105(2):129-221.

- Pescador, M.L. and L. Berner. 1981. The mayfly Baestiscidae (Ephemeroptera). Part 2. Biosystemitics of the genus *Baetisca*. Transactions of the American Entomological Society 107:163-228.
- Pescador, M.L. and B.A. Richard. 2004. Guide to the Mayfly (Ephemeroptera) Nymphs of Florida. Florida Department of Environmental Protection, Division of Water Facilities, Tallahassee, Florida. Available on-line at: http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/mayflyguide.pdf
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Odonata

- Needham, J.G. and M.J. Westfall, Jr., and M.L. May. 2000. Dragonflies of North America. Scientific Publishers, Gainesville, FL. 940 pp.
- Richardson, J.S. 2003. Identification Manual for the Dragonfly Larvae (Anisoptera) of Florida. Florida Department of Environmental Protection, Division of Water Facilities, Tallahassee, FL. Available on-line at: http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/dragonflykey.pdf
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Plecoptera

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- Floyd, M.A. 1995. Larvae of the caddisfly genus *Oecetis* in North America. Bulletin of the Ohio Biological Survey, New Series, Vol. 10, No. 2, 85 pp.
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Step 4 - Quality Control

- 1. Vendor will be required to retain all voucher specimens and establish reference collections for this project. Voucher specimens are the actual specimens identified from the samples. A reference collection is defined as a set of biological specimens, representing each specific taxon observed in the samples submitted by DEP/DWWM. Reference collections are to be arranged/curated based on taxonomic and/or phylogenetic order. Any specimens removed from the voucher collection for purposes of building the reference collection must be documented on both the paper and electronic reporting forms. The reference taxa specimens should be delivered to DEP/DWWM at the end of the contract/project period, or upon request if desired earlier. A small subset of the reference taxa specimens may be retained by the vendor permanently for internal use if the retained specimens are already represented by an individual or set of individuals in good condition in the DEP/DWWM reference collection. The retention of specimens for any purpose must be fully documented on laboratory bench sheets.
- 2. Vendor shall compile genus-level reference and voucher collections to be submitted to DEP/DWWM at end of contract period or upon request for DEP/DWWM use.
- 3. With the exception of organisms approved to be used in the laboratories' internal reference collection, all specimens identified in the 200-organism subsamples are to be returned to DEP/DWWM. Slide mounted specimens should be labeled to indicate, at a minimum, DEP sample ID, lab number, count of organisms on slide, and general grouping of organisms (e.g., Chironomidae, Oligochaeta, etc.). All other specimens are to be stored in a single sample vial (additional vials may be used when large organisms, such as crayfish, are present).

- 4. Vendor shall evaluate sorting efficiency for 5 % of all samples. Recovery errors may not exceed 10% of the total sample. A record of all samples sorted, a list of quality control checks, and documentation of any corrective action taken shall be maintained by the vendor to document the process. This information shall be provided each time the taxonomic results are submitted to DEP/DWWM.
- 5. In addition, the vendor shall re-identify a minimum of 5 % of the samples. A taxonomist other than the original identifier shall perform this check. Errors are brought to the attention of the original taxonomist and subsequent identifications are subject to scrutiny until errors are resolved. A record of all samples re-identified; a list of quality control (QC) checks; and documentation of any corrective action taken shall be maintained by the vendor to document the process. All reports documenting QA/QC will be submitted to DEP/DWWM with all other completed results in the delivery group or upon request.
- If any significant changes in taxonomy occur during the life of this contract, the vendor shall notify DEP/DWWM and provide supporting references. This process will allow our own records to remain current.
- 7. DEP/DWWM biologists and/or another contract laboratory will verify identifications for a minimum of 2.5% of the samples. Samples subjected to verification are selected randomly and will encompass checks on all taxonomists. The vendor will be advised upon analysis of the two identifications if significant¹ differences in identification are encountered. Cancellation of the contract will result if discrepancies continue.

¹ "Significant" differences will include, but will not be limited to, consistent misidentification of an organism(s) during QA/QC checks.

DEP16309 BID SHEET

Item No.	Quantity	Description	Unit Price	Amoun
1	500	Per sample un-sorted, identified to Genus level: 200-organism subsample	275	137,500
2	4	Per each "sample pick-up/delivery" not "per sample" (Assume 100 samples per pickup)	600	2,400
3	5 hr	Cost/hour for professional staff representation of data in legal/administrative setting	150	750

TOTAL = 140,650

Contract	tor: Mari	isa Logan (Civil & Environmental Consultants, Inc.)	
Signatur	e:	Maz	
Date:	12/11/13		

Quantities listed on the bid schedule are for bid evaluation purposes only and are not a guarantee of quantities to be ordered over the life of the contract. Actual quantities ordered may be more or less than those stated on this schedule.

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1.	Application is made for 2.5% resident vendor Bidder is an individual resident vendor and has re- ing the date of this certification; or,	r preference for the reason checked: sided continuously in West Virginia for four (4) years immediately preced-				
	Bidder is a partnership, association or corporation business continuously in West Virginia for four (4 ownership interest of Bidder is held by another ind maintained its headquarters or principal place of preceding the date of this certification; or,	resident vendor and has maintained its headquarters or principal place of) years immediately preceding the date of this certification; or 80% of the dividual, partnership, association or corporation resident vendor who has if business continuously in West Virginia for four (4) years immediately				
	Bidder is a nonresident vendor which has an affilia and which has maintained its headquarters or prin years immediately preceding the date of this cert	te or subsidiary which employs a minimum of one hundred state residents ncipal place of business within West Virginia continuously for the four (4) ification; or,				
2.	Application is made for 2.5% resident vendor Bidder is a resident vendor who certifies that, do working on the project being bid are residents of V immediately preceding submission of this bid; or,	uring the life of the contract, on average at least 75% of the employees. Vest Virginia who have resided in the state continuously for the two years.				
3.	affiliate or subsidiary which maintains its headque minimum of one hundred state residents who cer	mum of one hundred state residents or is a nonresident vendor with an uarters or principal place of business within West Virginia employing a rtifles that, during the life of the contract, on average at least 75% of the employees are residents of West Virginia who have resided in the state				
4.	Application is made for 5% resident vendor p Bidder meets either the requirement of both subdi	preference for the reason checked: ivisions (1) and (2) or subdivision (1) and (3) as stated above; or,				
5.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,					
6.	Bidder is a resident vendor who is a veteran of the purposes of producing or distributing the commodi continuously over the entire term of the project, or	r preference who is a veteran for the reason checked: e United States armed forces, the reserves or the National Guard, if, for ities or completing the project which is the subject of the vendor's bid and on average at least seventy-five percent of the vendor's employees are a state continuously for the two immediately preceding years.				
7.	dance with West Virginia Code §5A-3-59 and I	resident small, women- and minority-owned business, in accor- West Virginia Code of State Rules. contract award by the Purchasing Division as a certified small, women-				
requiren against	nents for such preference, the Secretary may orde	es that a Bidder receiving preference has failed to continue to meet the or the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty bid amount and that such penalty will be paid to the contracting agency richase order.				
authoriza the requ	es the Department of Revenue to disclose to the Din	e any reasonably requested information to the Purchasing Division and ector of Purchasing appropriate information verifying that Bidder has paid in does not contain the amounts of taxes paid nor any other information				
and acc	urate in all respects; and that if a contract is	Code, §61-5-3), Bidder hereby certifies that this certificate is true issued to Bidder and if anything contained within this certificate notify the Purchasing Division in writing immediately.				
	Marisa Logan (CEC, Inc.)	Signed: Make				
Date:	12/11/13	Title: Project Manager				

RFQ No. DEP 16309

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:
Vendor's Name: CIVILE ENVIVON merital Consultants, Inc.
Authorized Signature: Harry & Avesef, CFO Date: 12/11/2013
State of fensylvania
County of Alleghery, to-wit:
Taken, subscribed, and sworn to before me this 11 day of December . 20 13.
My Commission expires $9-22$, 2017 .
AFFIX SEAL HERE NOTARY PUBLIC Karen A. Lose

Purchasing Affidavit (Revised 07/01/2012)

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL KAREN A ROSE Notary Public ROBINSON TWP., ALLEGHENY COUNTY My Commission Expires Sep 22, 2017

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Civil & Environment	ntal Consultatns, Inc
(Company)	Tutter
(Authorized Signature)	
Timothy J. Nuttle,	Principal
(Representative Name, T	itle)
412-429-2324	412-429-2114
(Phone Number)	(Fax Number)
12/11/	/13
(Date)	***

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DEP16309

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

	Numbers Received: ox next to each addendum rece	ived)			
	Addendum No. 1		Addendum No. 6		
	Addendum No. 2		Addendum No. 7		
	Addendum No. 3		Addendum No. 8		
	Addendum No. 4		Addendum No. 9		
	Addendum No. 5		Addendum No. 10		
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.					
		Civil	& Environmental Consultants, Inc.		
		_	Company Authorized Signature		
			12/11/13		
	3)		Date		

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

TAXONOMIC CERTIFICATION

This certificate is awarded to

MARISA LOGAN

in recognition of the successful completion for

LEVEL 2 GROUP 2 EASTERN EPHEMEROPTERA, PLECOPTERA and TRICHOPTERA

NORTH AMERICAN BENTHOLOGICAL SOCIETY

Dr. Trefor Reynoldson

September, 2008

Date

TAXONOMIC CERTIFICATION

This five year certification is awarded to

MARISA LOGAN

In recognition of excellence for specimen identification to Genus for

Eastern Chironomidae

SOCIETY FOR FRESHWATER SCIENCE (NABS)

Dr. Murray Colbo

December, 2016

Date of Expirey