July 7, 2020

Metropolitan North Georgia Water Planning District
REQUEST FOR PROPOSALS
Consultant Support for the Post-Construction Stormwater Technology Assessment Protocol

The Metropolitan North Georgia Water Planning District (the District) is soliciting qualifications to provide consulting support for the Post-Construction Stormwater Technology Assessment Protocol.

The District is requesting proposals from consulting firms that will review proprietary stormwater technologies against vendor performance claims using the Post-Construction Stormwater Technology Assessment Protocol (PCSTAP). Work will be performed on a lump sum, per review basis. In the past five years, eight proprietary devices have been reviewed. The District reserves the right to negotiate scope and fee prior to contract award. The District reserves the right to award all or part of the available funds for this project. No specific number of proprietary device reviews are guaranteed, as it is based on vendor request.

Please provide a description of qualifications within your consulting firm to accomplish the tasks outlined in the Scope of Work provided in *Exhibit A*. This should include a timeframe for each review as discussed in the Scope of Work.

The proposal should provide project cost estimates in the format provided in *Exhibit B*. The consulting firm shall determine the level of effort for the PCSTAP Review which must be clearly provided in the proposal and should include the total staff hours.

The District will convene an evaluation committee to review all proposals. It is anticipated that the District will select a consulting firm based upon the proposals submitted. However, the District reserves the right to identify a short list of consulting firms from the proposals received. The shortlisted consulting firms would be invited to participate in a webinar-based interview process with the evaluation committee. The evaluation committee will make a consulting firm selection recommendation to the Chairman of the District Board for final approval. The District reserves the right to award this contract based on initial proposals received without formal interviews.

The contract will be awarded to the consulting firm determined to be the most qualified to perform the work based on the following evaluation criteria:

1. Qualifications and experience related to the Scope of Work of the consulting firm, and especially the individuals directly assigned to the project (55 percent)
2. Proposed approach to address the attached Scope of Work (30 percent)
3. Cost estimate versus work provided. The cost estimate shall follow the format outlined in Exhibit B. (15 percent)

Metropolitan North Georgia Water Planning District
Consultant Support for PCSTAP

Disadvantaged Business Enterprises (DBE) shall have equal opportunity to participate in the performance of the District's contracts. Such DBEs are encouraged to compete and should be so identified in responses to this RFP.

Brooks Act procedures will not apply to this solicitation, because the professional services identified in Exhibit A are not required to be performed or approved by a person licensed, registered, or certified to provide architectural or engineering services.

Proposals should be limited to a total of no more than 10 pages (not including cover, resumes, and cost proposal) with a font size that is a minimum of 11 point. Proposals should include the following information:

1. Name of the consulting firm;
2. Point of contact (name, title, email address, and phone number);
3. Project Manager (name, title, and phone number);
4. Qualifications and technical competence;
5. Description of similar experience on projects related to the Scope of Work;
6. Provide three references (at least one from metropolitan Atlanta) with current contact information (name, title, email address, and phone number);
7. Identification of specific personnel committed to work on the project, the office location(s) of this personnel, and a description of their education and experience directly related to the Scope of Work. Provide one to two-page resumes of up to four key staff as an appendix to the proposal;
8. A proposed work plan including:
    a. approach to accomplishing the work described in Exhibit A;
    b. schedule for each review.
9. A proposed project cost proposal in the format of Exhibit B to this RFP (not included in the page limit);
10. Any other pertinent information.

The PCSTAP can be found here: https://northgeorgiawater.org/proprietary-best-management-practices/ A typical submittal exceeds 100 pages and includes a combination of text and diagrams. The vendor is required to submit a technology engineering report (TER) and performance testing report (PTR) for their proprietary stormwater technology. Requirements for the TER can be found in the PCSTAP Section 5 page 8, and the PTR requirements can be found in Section 6.1 page 10. The evaluation form can be found in *Exhibit C*.

Questions shall be received no later than **July 24, 2020 at 5:00 p.m.** and should be submitted in writing to Katherine Atteberry (KAtteberry@atlantaregional.org)**.** Pertinent information, including questions and responses, from written questions will be posted on the District website (https://northgeorgiawater.org/what-is-the-metro-water-district/rfps/) by **July 31, 2020 at 4:00 p.m**. No other direct contact related to this Request for Proposals between prospective consultants and the District staff, Board members, or PCSTAP Review Committee is permitted.

No later than August 10, 2020 at 5:00 p.m. the District must receive one (1) printed copy of the proposal via a shipping service with tracking, and one (1) email to Katherine Atteberry

(KAtteberry@atlantaregional.org) that contains the tracking number for the printed copy as well as an electronic copy of the proposal in PDF format. The District will respond via email that the proposal was received. Proposals delivered by hand will not be accepted. No responses received after this date and time will be considered.

CONFIDENTIALITY AND CONFLICT OF INTEREST

ARC is subject to the Georgia Open Records law. All proposals submitted will become public records to be provided upon request. Any information containing trade secrets or proprietary information, as defined by state law, must be marked as confidential to prevent disclosure. Confidential markings must be limited to the protected information. Entire proposals marked confidential will not be honored. Additionally, conflicts of interest are governed by the ARC Standards of Ethical Conduct available here: Standards of Ethical Conduct. Respondents must disclose any potential conflicts of interest that may arise from the provision of services described herein. Such disclosure should include the name of the individual(s) with whom there is a conflict, any relevant facts to the potential conflict, and a description of the internal controls proposed to mitigate any such conflict. ARC's Staff Legal Counsel will determine whether such disclosure presents a potential organizational conflict of interest that should preclude award to the respondent.

EXHIBIT A

SCOPE OF WORK

Consultant Support for the Post-Construction Stormwater Technology Assessment Protocol

OVERVIEW

To manage post-construction stormwater, engineers and designers can use stormwater best management practices found in the Georgia Stormwater Management Manual or they may choose an "out of the box" solution from a vendor that uses proprietary technology. To ensure a level of quality and consistency across the District, the Post-Construction Stormwater Technology Assessment Protocol (PCSTAP) was developed. The PCSTAP characterizes a proprietary technology's effectiveness in removing Total Suspended Solids (TSS) from stormwater runoff and compares test results with vendor performance claims. It is specific to the soil conditions within the District.

The purpose of this scope of work is to engage qualified consulting firms to review proprietary stormwater technologies against vendor performance claims using the PCSTAP. The consultant will be responsible for making a recommendation on each device as to whether the District should concur or not with the vendor's performance claims. While managed by the District, the review of vendor data and subsequent concurrence and public dissemination using the PCSTAP guideline is not an approval process or an endorsement of any product by the District. Ultimately, local jurisdictions and other entities may use this information as part of their process to evaluate the suitability of these technologies or products for their jurisdiction. Use of the list of PCSTAP concurrences is not required of local jurisdictions.

Task 1: Perform PCSTAP Reviews

The consultant will execute individual PCSTAP reviews as assigned by the District. The following subtasks are required to successfully complete a PCSTAP Review.

Subtask 1: Read and evaluate the vendor submission.

Subtask 2: Complete the PCSTAP review form within seven business days and submit draft form with recommended next steps to the District Program Administrator.

Subtask 3: If needed and in coordination with the District Program Administrator, contact the vendor representative up to three times to receive clarification or resolve any questions raised in the application.

Subtask 4: Submit completed form recommending concurrence or denial to the District Program Administrator for final review and acceptance. Revise as required by the District Program Administrator. It should be noted that if the form is filled out correctly by the consultant, revisions should not be necessary.

Task 2: Perform On-call services

If the need arises, the consultant shall conduct additional tasks related to the PCSTAP. This will not be used for lump sum reviews outlined in Task 1. Please provide the hourly rates for key personnel for the execution of assignments under Task 2 on an as-needed basis.

EXHIBIT B

Format for Consultant Cost Proposal - Tasks 1 and 2

The following format shall be used to develop the project cost proposal for Tasks 1. The labor rates, overhead, and profit identified in Exhibit B will be used for the cost basis when developing task order proposals for Task 2. The District has included a budget for Task 2 which will be reserved for the execution of task orders on an as-needed basis. The contract term will be one year with an option to extend for two more.

Cost Proposal for Task 1

1.	Direct Labor	Estimated Hours	Rate/Hour	Total Estimated Cost
	(List by billing category.)	(List for each)	(List for each)	(List for each)
			TOTAL DIRECT LABOR:	$_____
2.	Overhead Cost			
	(overhead percentage rate) x (total direct labor)			
			TOTAL OVERHEAD:	$_____
3.	Profit			
	(percentage rate) x (total contract price excluding profit)			
			TOTAL PROFIT:	$_____
			TOTAL TASK 1:	$_____

BUDGET BY TASK

Task Item	**Budget ($)**
Task 1 – Perform PCSTAP Review [Lump sum price for one review. The amount should match the Total Task 1 entered above]	$_____
Task 2 – Perform On-call Services [Task Order(s) - Total Not to Exceed]	$ **5,000**
TOTAL PROJECT COST:	$_____

EXHIBIT C

PCSTAP Evaluation Form

METRO NORTH GEORGIA PCSTAP EVALUATION FORM

Company: _____
Device: _____
Model: _____
Date: _____

5.0 TECHNOLOGY ENGINEERING REPORT REQUIREMENTS					
5.1 Technology / Product Specifications					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. General description of the technology, incl. all components and processes					
2. Underlying scientific and engineering principles for the technology: Describe how the technology functions in treating stormwater runoff including the following information as applicable: Physical, chemical, and biological treatment processes such as filtration, adsorption/absorption, settling, or inertial separation					

	Met	Partially Met	Not Met	Don't Know	Comments
3. Describe the minimum siting and design specifications to achieve stated performance, including but not limited to:					
a. Pollutants that should and could be addressed					
b. Minimum and maximum influent concentrations					
c. Pollutants that will not be addressed or that may be increased					
4. Description of the advantages of the advantages of the technology when compared to conventional stormwater systems providing comparable stormwater control					
5. Standard drawings, including a schematic of the technology and a process flow diagram					
6. Description of technology hydraulics and system sizing to meet performance standards and goals, (e.g. to handle the following):					
a. Water quality volume					
b. Rate of runoff					
c. Type of storm					
d. Recharge requirements					
7. Description of the sizing process, including appropriate flow rates if applicable					

	Met	Partially Met	Not Met	Don't Know	Comments
8. Description of the full range of operating conditions for the technology, including minimal, maximal, and optimal conditions to achieve performance goals and standards, and for the reliability of the technology					
9. Maintenance requirements to sustain performance and safe operation					
10. Description of technology limitations, such as performance limits for control of certain water quality parameters, and predicted impacts from construction, operation, and maintenance of the technology					
11. Identified secondary impacts					
12. Discussion of the generation, handling, removal, and disposal of discharges, emissions, and waste byproducts in terms of mass balance, maintenance requirements, and cost					
13. Description of pretreatment and preconditioning of stormwater, if applicable, to achieve stated performance					
14. Identification of any special licensing or hauling requirements, safety issues, and access requirements associated with the operation or maintenance of the technology					
15. Capital and projected annual costs, incl. O&M costs					
16. Executive summary					
Additional Comments on Technology Engineering Report:					

5.2 Specific Performance Claims					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
Performance claim identifies the technology's intended use and predicts the technology's capabilities to remove contaminants and/or control the quantity of stormwater runoff. Performance claims should be objective, quantifiable, replicable, and defensible. Example: *"The Model T system can capture and treat the WQ volume for up to 1-acre runoff area that is up to 100% impervious. Under these conditions, a total suspended solid (TSS) removal X% ± Y% (at a 95% confidence level) can be achieved with inflow TSS concentrations greater than 100 mg/l for flow rates of Z cfs."*					
Additional Comments on Specific Performance Claims:					

6.0 PERFORMANCE TESTING REPORTING					
6.1 Reporting Requirements, must include the following:					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. General description of the technology, incl. all components and processes					
2. Performance testing project plan includes the following:					
a. Describe and provide a scaled plan view of the demonstration site, indicating all buildings, land uses, storm drain inlets, and other control devices					
b. Include a description of the following:					
i. Site drainage					
ii. Percent impervious area					
iii. Percent area directly connected to the test facility					
iv. Description of the path of stormwater flow to the test facility					
v. Type of activities conducted					
vi. Pollutant sources					
vii. Soil type					
viii. Geological and hydrological conditions					

	Met	Partially Met	Not Met	Don't Know	Comments
ix. Existing control structures					
x. Site drainage plan					
c. Estimate the impervious area within the drainage area and show sample inflow and outflow points					
d. Describe how the treatment technology was selected, designed, and appropriately sized for the specific test site					

	Met	Partially Met	Not Met	Don't Know	Comments
e. Specify the location of flow devices and samplers in relationship to the inlets and outlets of the stormwater technology					
f. Demonstrate that flow devices and samplers are installed and positioned properly to ensure that samples are representative of influent runoff and effluent runoff					
3. Standardized test methods and procedures used					
4. QA/QC objectives and procedures					
5. Date and time when samples were collected					
6. Rainfall data including the following:					
a. Antecedent dry period					
b. Total rainfall during the sampling event					
c. Rainfall intensity					
d. Rainfall duration					
7. Comparison of rainfall data to rainfall criteria					
8. Comparison of collected aliquots to sampling criteria					
9. Comparison of influent to effluent pollutant concentrations					
10. Particle size distribution (PSD) analysis					
11. Demonstration of scour prevention (if applicable)					

	Met	Partially Met	Not Met	Don't Know	Comments
12. An estimation of annual average total suspended solids (TSS) removal					
13. Statistical data evaluation					
14. Discussion of whether QA/QC objectives were met					
15. Discussion on deviations from any sampling points					
16. Data quality assurance summary (field and laboratory QA/QC results)					
17. Maintenance performed during the study period, including activities and frequency					
18. Total amount (estimated dry weight) of sediment and floatables removed and sediment					
19. Media replacement and/or cleaning, if applicable					
20. Evaluation of results					
21. Executive summary					
Additional Comments on Performance Testing Report:					

6.2 Use of Other Testing Data
Field testing and the resulting data and verifiable technology claims which will and/or have occurred outside the state of Georgia may be accepted for performance claim verification by the TRC with the following conditions:

	Met	Partially Met	Not Met	Don't Know	Comments
1. Adherence to the protocol's performance testing reporting requirements under 6.1 (above)					
2. Hydrological differences between the actual field test location(s) versus a representative location within Georgia must be accounted for with proper engineering design using rainfall data analyses and appropriate water quality volume treatment criteria. Only field test data from other regions within North America which have a Type II rainfall pattern will be considered.					
3. Appropriate particle size distribution that is applicable to the soil conditions for a representative location within Georgia (for consideration of potential applications where the site conditions are less than 90% impervious cover)					

7.0 SAMPLING DESIGN CRITERIA					
7.1 Test Site Selection Considerations					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Select field test sites that are consistent with the technology's intended applications (land uses) and geographical location in Georgia (e.g. Piedmont region, coastal areas, etc.)					
2. Field test site drainage area, tributary impervious cover, and land uses (roadway, commercial, high use site, residential, industrial, etc.)					
3. Potential pollutant sources in the drainage area (e.g. parking lots, roofs, landscaped areas, sediment sources, exterior storage, or process areas)					

	Met	Partially Met	Not Met	Don't Know	Comments
4. Availability of baseline stormwater quality information to characterize conditions at the site. For sites that have already been developed, it is recommended that baseline data be collected to provide a sizing basis for the device, and to determine whether the site conditions and runoff are conducive to performance testing					
5. Drainage area flow rates (i.e., water quality design flow, 2 year, 10 year, and 100 year peak flow rates) at 15 minute and 1 hour time steps as provided by an approved continuous runoff model					
6. Bypass requirements with flow rates and/or flow splitter designs necessary to accommodate the treatment technology					
7. Site adequacy for sampling, flow measurement access, and telephone/AC power, if needed					
8. Any potential adverse site conditions such as climate, tidal influence, high ground water, rainfall pattern, erosion, high spill potential, illicit connections,					

7.1.1 Sampling Locations					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Influent flows should be sampled as close as possible to the treatment device inlet.					
2. Influent flows should represent the total runoff from the drainage area and should not include debris and large particles.					
3. Design the test site so influent samples can be collected from a pipe that conveys the total influent to the unit					
4. Sample the influent at a location unaffected by accumulated or stored pollutants in, or adjacent to, the treatment device to avoid skewing the influent pollutant concentrations					
7.2 Storm Event Criteria for Sampling					
1. A minimum of 15 storm or discrete flow rate sampling events are required per site					
2. The storms should represent the entire annual hydrologic range of storm events and constitute at least 20% of the annual rainfall					
3. It is recommended that sampling events be evenly distributed over the testing period to capture seasonal influences on storm conditions and system performance					
4. Each storm event for sampling must meet the following criteria:					

	Met	Partially Met	Not Met	Don't Know	Comments
a. At least 0.15 inch of total rainfall					
b. A minimum inter-event period of 6 hours, where cessation of flow from the system begins the inter-event period					
c. A minimum storm duration of one hour					
d. Flow weighted composite samples covering a minimum of 70% of the total storm flow, incl. as much of the first 20% as possible					
e. A minimum of 10 water quality samples per storm event (10 influent + 10 effluent samples) per storm event. For composite samples, a minimum of 5 subsamples is acceptable (i.e., 2 composites with 5 subsamples = 10 water quality sample minimum or 1 composite sample with 10 subsamples = water quality sample minimum). If a storm is too small for 10 samples, an average of 10 samples per storm may be substituted.					
f. Flow measurements must be taken to predict or calculate pollutant loads. The mass of pollutants in the discharge should be based on flow rates and pollutant concentrations or another reasonable approach					
g. At least two storm events should be greater than 75% of the design storm used to size the test facility					

7.3 Stormwater Sampling Methods					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Programmable automatic flow samplers with continuous flow measurements should be used					
2. Alternate methods that are superior to programmable automatic flow samplers may be used when automatic sampling is not feasible					
3. Grab samples should only be used for the following constituents unless alternate methods are demonstrated superior:					
a. pH					
b. Temperature					
c. Cyanide					
d. Total phenols					
e. Residual chlorine					
f. Oil and Grease					
g. Total petroleum hydrocarbons (TPH)					
h. Escherichia coli					
i. Total coliform					
j. Fecal coliform					
k. Fecal streptococci					
l. Enterococci					

7.4 Sampling for Total Suspended Solids (TSS)					
7.4.1 Sampling Considerations					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
Samples must represent the vertical cross section (be a homogeneous or well mixed sample) at the influent and effluent points of the device					
7.4.2 Particle Size Distribution (PSD)					
1. Treatment technologies must remove TSS across the size fraction range typically found in urban runoff					
2. Analysis of the inflow particle size distribution (PSD) is required					
3. All TSS analysis should include particles that are smaller than 500 microns					
4. Particles greater than 250 microns must be removed with a sieve prior to PSD analysis					

	Met	Partially Met	Not Met	Don't Know	Comments
5. Laser diffraction methods may be used for particles smaller than 250 microns					
6. For sites in the Piedmont region of Georgia with less than 90% impervious cover, the assumed PSD is 20-60-20 or a lab surrogate Sil-Co-Sil 106					
7.4.3 Accumulated Sediment Sampling Procedures					
1. The following sediment constituents should be analyzed:					
a. Percent total solids					
b. Total volatile solids					
c. Particle size distribution (PSD)					
2. Sediment sample should be a composite from at least four grab samples collected from various locations within the system					

8.0 DATA QUALITY ASSURANCE AND QUALITY CONTROL					
8.1 Equipment Decontamination					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
Description of how sampling equipment will be decontaminated between sampling events					
8.2 Quality Control Samples					
1. Equipment rinsate blanks should be collected to verify that equipment is not a source of contamination					
a. Two separate rinsate blanks should be collected during initial equipment setup and testing					
b. Describe the rinsate blank collection procedure including the following					
i. Location & number of samples					
ii. Sample collection & processing procedures					
iii. Sample documentation (e.g., length of time sampler was in place prior to collecting the blank, how much stormwater passes through the sample prior to collecting the blank)					
c. At a minimum, rinsate blanks should be collected after at least one storm event has been sampled and equipment has been decontaminated					

	Met	Partially Met	Not Met	Don't Know	Comments
d. Rinsate blank at a "not detected" level					
2. Describe techniques to collect duplicate samples and include the following:					
a. Specify collection frequency					
b. Collect a minimum of 10 field duplicate samples					

8.3 Sample Preservation and Handling					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Preserve samples IAW EPA approved methods (EPA 1983) or Standard Methods (APHA, AWWA, WEF 1999)					
2. Describe how cooling the automatic samplers will be conducted					
3. Provide a table in the QA/QC plan that lists the sample container material, sample preservation, and holding time limits for analyzed pollutants					
4. Describe procedures to label and track samples from collection to lab delivery					
5. Provide sample chain of custody form					
6. For manually composited samples, describe compositing procedures to prevent cross-contamination					
7. Describe how grab samples will be collected and at what intervals they will be collected in a storm event					
8.4 Equipment Calibration					
Describe the field equipment calibration schedule and methods, including automatic samplers, flow monitors, and rainfall monitors					

8.5 Recordkeeping					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Maintain a field logbook and include the following information:					
a. Date & time					
b. Field staff names					
c. Weather conditions					
d. Number of samples collected					
e. Sample description and label information					
f. Field measurements					
g. Field QC sample identification					
h. Sampling equipment condition					
i. Measurements tracking sediment accumulation					
j. Include notes about activities or issues that could affect the sample quality such as sample integrity, test site alterations, maintenance activities, improperly functioning equipment, conditions in the tributary basin such as construction activities, reported spills, other pollutant sources					

8.6 Health and Safety Plan					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
Provide a health & safety plan including the following:					
a. Installation, operation, and maintenance of the technology					
b. Hazard identification and mitigation					
c. Engineered controls and procedures					
d. Personal protective equipment/training					
e. The collection of stormwater sample in confined spaces					
f. The collection of high flow stormwater samples from culverts, drainage channels, and sedimentation basins during storms					
g. Chemical, biological, and physical hazards associated with the technology					

9.0 STATISTICAL TESTING OF DATA AND DATA REDUCTION					
	Met	**Partially Met**	**Not Met**	**Don't Know**	**Comments**
1. Coefficient of variation (CV) should be within ±10% for efficiency data (A larger range of CV may be allowed when justified)					
2. Demonstrate the date set is normally distributed before using normal parametric statistical analysis					
3. For data sets that are not normally distributed, use nonparametric statistical analysis. Further analysis and review may be required.					