



## Table of Contents

1.0	INTRODUCTION .....	2
2.0	BACKGROUND .....	2
3.0	SCOPE OF WORK.....	3
4.0	PRE-PROPOSAL MEETING .....	5
5.0	PROPOSAL REQUIREMENTS .....	5
6.0	GENERAL TERMS & CONDITIONS FOR THE CITY OF HARRISONBURG, VA....	7
7.0	INSURANCE REQUIREMENTS.....	7
8.0	INSTRUCTIONS TO OFFERORS .....	7
9.0	QUESTIONS .....	8
10.0	PROPOSAL EVALUATION CRITERIA.....	8
11.0	AWARD OF CONTRACT.....	9
12.0	CONTRACT TERM.....	10
	ATTACHMENT A. GENERAL TERMS & CONDITIONS FOR THE CITY OF HARRISONBURG, VA (JAN. 2016) .....	11
	ATTACHMENT B. PROPRIETARY/CONFIDENTIAL INFORMATION IDENTIFICATION FORM .....	21
	ATTACHMENT C. STATE CORPORATION COMMISSION (SCC) FORM .....	22
	ATTACHMENT D. INSURANCE REQUIREMENTS FORM.....	23
	ATTACHMENT E. NON-COLLUSION AFFIDAVIT .....	24
	ATTACHMENT F. CITY OF HARRISONBURG SAMPLE STANDARD CONTRACT RFP .....	25
	ATTACHMENT G. CERTIFICATION REGARDING DEBARMENT .....	26
	ATTACHMENT H. FIRM DATA SHEET .....	28
	ATTACHMENT I. CONSULTANT SHORT LIST SCORE SHEET .....	29
	ATTACHMENT J. SWIP SCOPING DOCUMENT .....	30

## 1.0 INTRODUCTION

The City of Harrisonburg Public Works Department (City) is issuing a Request for Proposal for Consulting Engineering Firms (Offeror) who wish to be considered to provide professional engineering services for the development of a citywide Stormwater Improvement Plan (SWIP).

The SWIP is intended to be a long-range visionary plan that incorporates the City's stormwater needs to achieve regulatory compliance. It is important that the plan be developed in such a way that the City's stormwater needs are identified and an achievable plan for implementation is provided. See Attachment J. which outlines the city's envisioned approach to the SWIP.

## 2.0 BACKGROUND

The City of Harrisonburg is an independent city located in the central Shenandoah Valley region of Virginia. It is the county seat of Rockingham County and encompasses 17.3 square miles, serving a population of approximately 53,000. Harrisonburg is located along Interstate 81 and is two hours away from both Richmond, Virginia and Washington, D.C. Harrisonburg is home to two university campuses – James Madison University and Eastern Mennonite University – as well as numerous other businesses, non-profit organizations, and a vibrant downtown. The City Manager oversees the delivery of public services through the city departments. The City of Harrisonburg manages a workforce of approximately 790 employees responsible for providing government services to our citizens. Each city department has a role in how services are provided to the citizens.

The City is within an Urbanized Area, and thus subject to the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, and has held an Municipal Separate Storm Sewer System (MS4) permit since 2003. More information can be found at <http://www.harrisonburgva.gov/MS4-permit-program>.

The City of Harrisonburg also drains into the Chesapeake Bay Watershed. As part of the Special Conditions for the Chesapeake Bay Total Maximum Daily Load (TMDL), the MS4 Permit requires the City of Harrisonburg to address impairments for phosphorus, nitrogen, and sediment that enter the Chesapeake Bay.

The City of Harrisonburg's new Stormwater Utility Fee Program, <http://www.harrisonburgva.gov/stormwater-utility>, became effective July 1, 2015. Revenue collected from the fee will focus on the following activities:

- a. Development of a city-wide Stormwater Improvement Plan to identify, select, and prioritize capital projects and programs to reduce pollution, manage stormwater, and protect our drinking water sources.
- b. Design and construction of stormwater capital projects, including retrofits and community greening projects to reduce pollution and improve water quality. This includes projects on city-owned properties and partnerships (such as grants or cost-share) with private property owners.

- c. Coordination of pollution reduction efforts including staff training, pollution prevention and good housekeeping practices for municipal operations, a pollution detection and elimination program, and a public education and outreach program.
- d. Maintenance and operation of city-owned stormwater drainage and stormwater management facilities.

### **3.0 SCOPE OF WORK**

Plan development will include a desktop assessment of the watershed, field observations, targeted stormwater infrastructure modeling, and public input meetings to gather information regarding the City's stormwater improvement needs. See Attachment J for recommended methodology.

**3.1** The scope of work shall consist of, but is not limited to, the following:

- Citywide Assessment
  - A systematic, watershed-based approach is recommended for the development of the SWIP. A Geographic Information System based layer was developed depicting sub-basin management units for use during plan development. Each sub-basin management unit is based loosely on sub-drainage area boundaries that are each comprised, on average, of 500 acres.
  - A series of public information and input meetings are part of SWIP development. With assistance from city staff, the Stormwater Advisory Committee (SWAC), and citizens, the consultant will identify areas of known or historical stormwater runoff issues.
- Watershed Assessment
  - Review of Existing Plans and Stormwater Management Efforts – Review existing data and plans and identify elements from each of the data sources that can be integrated into the SWIP. Evaluation of current stormwater management efforts should include: comprehensive plan, zoning and subdivision ordinances, and design standards.
  - Review of Existing Maintenance Records – Prior to implementation of the Cityworks asset management system, the City tracked chronic maintenance/flooding issues using a spreadsheet and hardcopy map. Review existing data and identify elements that can be integrated into the SWIP.
  - Review of MS4 Permit Requirements – The Chesapeake Bay TMDL requirements for the City of Harrisonburg are the primary driver of the SWIP. Other MS4 program components to review include the MS4 Program Plan, and various stormwater ordinances.
  - Review Stormwater Assets Mapping – The City's GIS data, including stormwater infrastructure mapping, will be provided to the successful, selected Firm. All data should be considered approximate in nature and

field visits to key locations may be necessary. Quality control review checks may also be necessary.

- System Capacity Assessment
  - The City has floodplain feature datasets and open channel modeling that may be used as a baseline to analyze existing Level of Service (LOS) conditions along the studied reaches and to serve as the basis for determining suitable locations for water quality projects. The SWIP team should analyze the modeling data to identify locations where the functioning LOS of the stormwater system is not meeting the defined goal LOS.
- Water Quality Assessment
  - TMDL action plan review – Identify a plan for efficiently achieving pollutant of concern reduction credits for permit compliance.
  - Evaluate retrofit project potential – Review projects identified in 2013 Stormwater Retrofit Study for inclusion in the SWIP and evaluate new retrofit project potential. (In 2013, the Center for Watershed Protection prepared an inventory of stormwater retrofit opportunities on selected city properties. <http://www.harrisonburgva.gov/stormwater-projects>)
  - Each identified water quality project opportunity should be located with coordinates and key attribute data logged, including: Best Management Practice (BMP) retrofit type, estimated POC removal, and site attributes impacting retrofit feasibility and parcel ownership.
  - Evaluate additional projects and programs – Identify opportunities for water quality improvement projects and implementation of water quality improvement programs not previously identified.
- Field Observations
  - If needed, perform field assessment of areas of concern identified by the assessments or through citizen input. If needed, the City will be responsible for sending letters to private property owners requesting permission to access their property.
  - Further investigation into known drainage problems, and natural conveyance systems for potential solutions for improving water quality and quantity in the watershed. The City will request any field verification of GIS-based assets to be incorporated into the City’s mapping.
- Deliverables
  - Monthly Progress Reports
    - Monthly written progress reports delivered to the City with brief descriptions of work performed, tasks completed vs. total project tasks, and project budget expended vs. total budget in a format acceptable to the City.
  - SWIP Narrative
    - A final project report summarizing the work performed findings and recommendations. City staff will be provided with opportunities to review and comment on draft versions. A presentation summarizing the work, findings, and recommendations will be made to the SWAC. All files (including

spreadsheets, GIS and modeling) and final work products used in the analyses and reports shall be provided in a format acceptable to the City.

- Public Outreach Materials
  - Handouts, maps, and accompanying public meeting materials to be delivered to citizens during the initial public outreach and input efforts.
- Prioritized List of Proposed Projects
  - Develop a list of recommended stormwater improvements including, but not limited to: new, or retrofits to existing, stormwater BMP facilities and improvements to inadequate conveyance systems and outfalls.
- Prioritized List of Proposed Programs
  - Develop a list of recommended stormwater programs, including, but not limited to: street sweeping, storm drain cleaning, homeowner residential BMP credits, and a public/private cost-share program.
- List of Proposed Policies
  - Develop a list of recommended stormwater policies
- GIS-based Inventory of Proposed Projects & Supporting Data
  - Preparing preliminary design and cost estimates of high priority projects and programs in enough detail for typical grant applications that will fund design.

## **4.0 PRE-PROPOSAL MEETING**

No pre-proposal meeting will be held for this RFP.

## **5.0 PROPOSAL REQUIREMENTS**

The proposal shall provide information necessary for City of Harrisonburg to evaluate the qualifications, experience, and expertise of the proposing firm to provide Engineering services for a SWIP.

The Offeror is to make a written proposal which presents an understanding of the work to be performed. The proposal should demonstrate and provide evidence that the Offeror has the capabilities, professional expertise, and experience to provide the necessary services as described in this RFP. The Offeror shall ensure that all information required herein is submitted with the proposal. All information provided should be verifiable by documentation requested by the City of Harrisonburg. Failure to provide all information, inaccuracy or misstatement may be sufficient cause for rejection of the proposal or rescission of an award. Proposals shall be signed by an authorized representative of the Offeror.

In order to enhance the evaluation process and provide each firm an equal opportunity for consideration, adherence to a standardized technical proposal format is required. Responses

should be as thorough and detailed as possible so that the City may properly evaluate the firm's capabilities to provide the required services. Unnecessarily elaborate brochures of other presentations beyond that sufficient to present a complete and effective proposal is not desired. Elaborate artwork, expensive paper, bindings, visual and other presentation aids are not required.

## **5.1 Introduction**

Cover Letter/Executive Summary on company letterhead signed by a person with the corporate authority to enter into any contract which results from the RFP.

## **5.2 Required Elements**

The proposal submitted shall include, at a minimum, the following:

**5.2.1** Address each requirement of the Scope of Work or the area(s) of expertise proposed to be provided. In two (2) pages or less, provide information that will indicate your firm's ability to meet the time schedule for this project. The anticipated schedule is as follows:

<b>Anticipated Notice to Proceed</b>	<b>November 1, 2016</b>
<b>Public Outreach Meeting</b>	<b>March/April, 2017</b>
<b>Public Hearing for SWIP</b>	<b>October, 2017</b>
<b>Plan Adoption</b>	<b>December, 2017</b>

**5.2.2** Provide evidence that demonstrates the firm's ability to provide the requested services. In five (5) pages or less please emphasize your qualifications in the following areas: Quality control and Quality Assurance, Project Management and controls of multi-disciplinary activities.

**5.2.3** The proposed approach to provide the requested services, limited to five (5) pages.

**5.2.4** Provide three (3) references where similar work has been performed.

**5.2.5** Please indicate, by executing and returning the attached Certification Regarding Debarment forms (Attachment G), if your firm, sub-consultant, subcontractor, or any person associated therewith in the capacity of owner, partner, director, officer or any position involving the administration of Federal or State funds:

- Is currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any local, state or federal agency.
- Has been suspended, debarred, voluntarily excluded or determined ineligible by any local, state or federal agency within the past 3 years.
- Does have a proposed debarment pending; or has been indicted,

convicted, or had a civil judgment rendered against it or them by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

Any of the above conditions will not necessarily result in denial of award, but will be considered in determining offeror responsibility. For any condition noted, indicate to whom it applies, initiating agency, and dates of action. Providing false information may result in Federal criminal prosecution or administrative sanctions.

**5.2.6** The Offeror shall include signed copies of any and all addenda to the RFP as set forth in Section 9.0 of this RFP.

**5.2.7** The Offeror shall complete and return the following required forms:

- Signed Cover Page
- Proprietary/Confidential Information Identification Form (Attachment B)
- State Corporation Commission (SCC) Form (Attachment C)
- Insurance Requirements Form (Attachment D)
- Non-Collusion Affidavit (Attachment E)
- Firm Data Sheet (Attachment H)

## **6.0 GENERAL TERMS & CONDITIONS FOR THE CITY OF HARRISONBURG, VA**

Offerors shall review and take into consideration all aspects of the City's General Terms and Conditions listed in Attachment A.

## **7.0 INSURANCE REQUIREMENTS**

Offerors shall complete and return with their proposal Attachment D. Insurance Requirements Form.

## **8.0 INSTRUCTIONS TO OFFERORS**

All proposals must be in an opaque, sealed envelope or box and clearly marked: "**Sealed Proposal: Consulting Engineering for Stormwater Improvement Plan RFP 2017023-PW-P**". Proposals shall clearly indicate the legal name, address and telephone number of the Offeror (company, firm, partnership, or individual). All expenses for making proposal to the City shall be borne by the Offeror.

Offerors shall provide one (1) paper copy and one (1) identical electronic copy (on CD or thumb drive) of the proposal documents. If the proposal contains proprietary information offerors shall provide a copy clearly marked "REDACTED COPY" in addition to the one (1) copy.

Proposal documents shall be mailed or hand-delivered to the **Purchasing Office located at 409 South Main Street, Third Floor, Harrisonburg, VA 22801**. Office hours are Monday through Friday, 8:00am to 5:00pm, except City holidays ([www.harrisonburgva.gov/city-holidays](http://www.harrisonburgva.gov/city-holidays)). Faxed or emailed proposals will not be accepted. Proposals shall be received by the Purchasing Office no later than **September 13, 2016 at 3:00pm local time**. Any proposals received after this date and time will not be accepted. The City of Harrisonburg is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private couriers, or the inter-office mail system. The Offeror has the sole responsibility to have the proposal received by the Harrisonburg Purchasing Office at the above address and by the above stated time and date.

All documents contained within the proposal submission shall be completed in their entirety and signed and dated where required.

## 9.0 QUESTIONS

Questions related to the RFP or requests for clarification may be directed to Ms. Pat Hilliard, Procurement Manager for the City of Harrisonburg, by email ([Purchasing@harrisonburgva.gov](mailto:Purchasing@harrisonburgva.gov)) or by fax (540-432-7779). Oral questions will not be permitted. All responses to inquiries will be in writing and will be posted as addenda on the City's website at [www.harrisonburgva.gov/bids-proposals](http://www.harrisonburgva.gov/bids-proposals) and also on eVA at [www.eva.virginia.gov](http://www.eva.virginia.gov). All questions must be received no later than **September 2, 2016 at 12:00pm (noon) local time**. It is the responsibility of all Offerors to ensure that they have received all addenda and to include signed copies of any and all addenda with their proposal submission.

## 10.0 PROPOSAL EVALUATION CRITERIA

Selection of the successful proposal will be based upon submission of proposals meeting the selection criteria. Proposal evaluations determined to not meet one or more material RFP requirements may be excluded. The minimum selection criteria will include:

1. The specific experience, professional competence, and qualifications of the proposing firm and personnel (30 points)
2. A clearly demonstrated understanding of the work to be performed and completeness and reasonableness of the proposing firm's plan for accomplishing the Scope of services (40 points)
3. Current and past experience in providing similar services (20 points)
4. References and previous client evaluations from other government and/or commercial entities shall be considered to include documented experience in performing and completing similar tasks/services for other governmental and/or commercial clients in a professional, efficient and timely manner. (10 points)
5. Cost of Services (**Short listed firms only**). Although prices, rates or fees **ARE NOT** to be submitted with the initial proposal response, such proposed non-binding and/or binding fees may be considered for those firms involved in the discussion and

negotiation phases of the selection process. If labor rates are requested, the rates specified by the Offeror shall include all direct and indirect overhead costs, including but not limited to, transportation, general and administrative cost, etc. Labor rates will be paid on the basis of time at the site. It is anticipated the City will ask for a lump sum cost for this project. During the short list phase, the City will ask for any exceptions to the City's contractual terms and conditions to be identified as well.

The City reserves the right to cancel this RFP at any time or reject any or all proposals received as a result of this RFP if it is in the best interest of the City. The City reserves the right to waive any informality in any proposal.

## **11.0 AWARD OF CONTRACT**

- 11.1** The City's evaluation committee will read, review and evaluate each proposal based on the criteria as stated in the proposal. A preliminary rating will be used to select the offerors for further consideration, the short list (Attachment I).
- 11.2** The City shall engage in individual discussions with two (2) or more offerors deemed fully qualified, responsible and suitable on the basis of initial responses and with emphasis on professional competence, to provide the required services. Repetitive informal interviews shall be permissible. The offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts. In addition, offerors shall be informed of any ranking criteria that will be used by the City in addition to the review of the professional competence of the offeror.
- 11.3** The Request for Proposal shall **not**, however, request that offerors furnish estimates of man-hours or cost for services. At the discussion stage, the City may discuss nonbinding fee schedules and/or total project costs including man-hours or costs for services. If an offeror is selected for interview, that offeror shall submit to the City, within three (3) working days of notification, their non-binding fee/rate schedule. The specific cost proposal format(s) will be provided to the top rated Offeror(s) at the time the request is made. The individual offeror's fee/rate schedule should include a rate for all labor categories that the offeror anticipates using on the project.
- 11.4** At the conclusion of discussion, on the basis of evaluation criteria so stated in the Request for Proposal and all information developed in the selection process to this point, the City shall select in the order of preference two or more offerors whose professional qualifications and proposed services are deemed most meritorious.
- 11.5** Negotiations shall then be conducted, beginning with the offeror ranked first. If a contract satisfactory and advantageous to the City can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror. Otherwise, negotiations with the offeror ranked first shall be formally terminated

and negotiations conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.

- 11.6** Should the City determine in writing and in its sole discretion that only one (1) offeror is fully qualified or that one (1) offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that offeror.
- 11.7** The contract document will incorporate by reference all the requirements, terms and conditions of the solicitation and the Offeror's proposal as negotiated.
- 11.8** The City is not required to furnish a statement of the reasons why a particular proposal was not deemed the most advantageous or otherwise debrief any Offeror.

Once the selection has been made as to which Offeror will be awarded the contract, the Procurement Manager will post a Notice of Award on the City's website at [www.harrisonburgva.gov/bid-proposal-award-notifications](http://www.harrisonburgva.gov/bid-proposal-award-notifications) and also on eVA at [www.eva.virginia.gov](http://www.eva.virginia.gov).

The award documentation will subsequently be followed by a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the Offeror's proposal as negotiated.

Successful Offeror shall contact the Commissioner's Office to inquire about proper business licensing for the City of Harrisonburg, if it does not already possess (540-432-7707).

The City reserves the right to make on-site visitations to assess the capabilities of individual Offeror(s) and to contact references provided with the proposal.

## **12.0 CONTRACT TERM**

Contract term shall begin immediately after contract signatures are executed and continue through the project completion, 12 months, or as otherwise negotiated.

## **13.0 PAYMENT TERMS**

Payment will be made to the offeror once each month based upon City approved satisfactory and actual services rendered and/or goods received and invoices submitted by offeror.

## **14.0 OTHER MATTERS**

Ownership of all data, materials, and documentation originated and prepared for the City pursuant to the RFP shall belong exclusively to the City and be subject to public inspection in accordance with the Virginia Freedom of Information Act.



## ATTACHMENT A. GENERAL TERMS & CONDITIONS FOR THE CITY OF HARRISONBURG, VA (JAN. 2016)

These General Terms & Conditions shall apply to all purchases and be a part of every contract awarded by the City of Harrisonburg unless otherwise specified in writing. Bidders/Offerors are expected to inform themselves fully as to the conditions, requirements and specifications before submitting bids/proposals. Procurement by the City is subject to the Virginia Public Procurement Act (VPPA) Title 2.2, Chapter 43 of the Code of Virginia and the provisions of The Purchasing and Contracting Policy Manual for the City of Harrisonburg and any revisions thereto. If an inconsistency exists between the VPPA and the Purchasing and Contracting Policy Manual for the City, the VPPA Virginia Code sections take precedence.

### TABLE OF CONTENTS

<p><b>DEFINITIONS</b></p>	<p>Anti-Discrimination Antitrust Applicable Laws &amp; Courts Assignment of Contract Changes to the Contract Contract Execution Contractual Disputes Cooperative Procurement Default Drug-Free Workplace Immigration Reform &amp; Control Act of 1986 Indemnification Insurance Liability &amp; Litigation Non-Discrimination of Contractors Payment Safety &amp; OSHA Standards State Corporation Commission (SCC) ID Number Termination</p>
<p><b>CONDITIONS OF BIDDING</b></p> <ul style="list-style-type: none"> <li>Bid Price Currency</li> <li>Bid/Proposal Acceptance Period</li> <li>Cancellation of Solicitations</li> <li>City Hall Closure</li> <li>Clarifications of Terms</li> <li>Conflict of Interest/Collusion</li> <li>Debarment Status</li> <li>Discrimination Prohibited</li> <li>Errors in Bids</li> <li>Ethics in Public Contracting</li> <li>Excusable Delay</li> <li>Licenses, Permits &amp; Fees</li> <li>Mandatory Use of City Forms &amp; T&amp;C for ITB's &amp; RFP's Modification &amp; Withdrawal of Bids/Proposals</li> <li>Public Inspection of Certain Records</li> <li>Revisions to the Official ITB/RFP</li> <li>Taxes</li> </ul>	<p><b>SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>Condition of Items</li> <li>Formal Specifications</li> <li>Use of Brand Names</li> </ul>
<p><b>AWARD</b></p> <ul style="list-style-type: none"> <li>Contract Award</li> <li>Negotiation with the Lowest Bidder</li> <li>Precedence of Terms</li> <li>Qualifications of Bidders/Offerors</li> <li>Selection Process/Award</li> </ul>	<p><b>DELIVERY</b></p> <ul style="list-style-type: none"> <li>Defects or Improprieties</li> <li>Testing &amp; Inspection</li> <li>Transportation &amp; Packaging</li> </ul>
<p><b>CONTRACT PROVISIONS</b></p>	

### DEFINITIONS

- ADDENDUM/ADDENDA:** Addition(s) or supplement(s) to a solicitation to clarify, modify or support information which becomes part of the contract.
- BID:** The offer of a prospective vendor/supplier to an Invitation To Bid to provide specific goods or services at specified prices and/or other conditions specified in the solicitation.
- BIDDER/OFFEROR:** Any individual, company, firm, corporation, partnership or other organization who submits a response to an Invitation to Bid or a Request for Proposal and offering to enter into a contract with the City.

**COLLUSION:** A secret agreement or cooperation between two or more parties to accomplish a fraudulent, deceitful, or unlawful purpose.

**CONFLICT OF INTEREST:** An actual or potential situation in which the personal interests of a vendor, employee or public official are, or appear to be, in conflict with the best interests of the City.

**CONTRACTOR:** The entity that has a direct contract with the City to furnish goods, services or construction for a certain price.

**CITY or OWNER:** City of Harrisonburg, Virginia.

**DAY(S):** Defined as calendar days unless otherwise specified as business days.

**INFORMALITY:** A minor defect or variation of a bid or proposal from the exact requirements of the Invitation to Bid or Request for Proposal which does not affect the price, quality, quantity or delivery schedule for the goods, services or construction being procured.

**INVITATION TO BID (ITB):** A formal request which is made to prospective suppliers (bidders) for their quotation on goods, services, or construction desired by the City. The issuance of an ITB will contain or incorporate by reference the specifications and contractual terms and conditions applicable to the procurement.

**PROFESSIONAL SERVICES:** Any type of professional service performed by an independent contractor within the practice of accounting, actuarial services, architecture, dentistry, land surveying, landscape architecture, law, medicine, optometry, pharmacy, or professional engineering (which shall be procured as set forth in the Code of Virginia). **2.2-4301**

**PROPOSAL:** The document submitted by the offeror in response to the RFP to be used as the basis for negotiations for entering into a contract.

**PURCHASING AGENT:** The individual employed and given authority by the Harrisonburg City Council by adoption of the City of Harrisonburg Purchasing and Contracting Policy Manual. Purchasing Agent may also be referred to as Procurement Manager.

**REQUEST FOR PROPOSAL (RFP):** A formal request for a proposal from prospective offerors which will indicate the general terms which are sought to be procured from the offeror and where negotiations are conducted to come to a final contract. The RFP will specify the evaluation criteria to be used and will contain or incorporate by reference other contractual terms and conditions applicable to the procurement.

**RESPONSIBLE BIDDER/OFFEROR:** An individual, company, firm, corporation, partnership or other organization having the capability in all respects to perform fully the contract requirements, and also having the moral and business integrity and reliability which will assure good faith performance.

**RESPONSIVE BIDDER/OFFEROR:** An individual, company, firm, corporation, partnership or other organization having submitted a bid/proposal which conforms in all material respects to the ITB or RFP.

**SOLICITATION:** A formal document issued by the City with the intent to purchase goods, services or construction. Can be either an Invitation To Bid or a Request For Proposal.

**SWAM:** Small, Women, and Minority-owned businesses.

**SUBCONTRACTOR:** A business entity that has a contract to supply labor or materials to the prime contractor to whom the contract was awarded or to any subcontractor in the performance of the work provided for in such contract.

### **CONDITIONS OF BIDDING**

**BID PRICE CURRENCY:** Unless stated otherwise in the solicitation, bidders/offerors shall state bid/proposal prices in US dollars.

**BID/PROPOSAL ACCEPTANCE PERIOD:** Unless otherwise specified, all bids/proposals submitted shall be binding and may not be withdrawn for sixty (60) days following the bid/proposal opening date and time, unless extended by mutual consent of all parties. If the bid/proposal is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.

**CANCELLATION OF SOLICITATIONS: 2.2-4319** An ITB, RFP or any other solicitation may be cancelled or rejected, but shall not be cancelled or rejected solely to avoid awarding a contract to a particular responsive and responsible bidder/offeror. The reasons for cancellation shall be made part of the contract file.

**CITY HALL CLOSURE:** If City Hall is closed for business at the time scheduled for the bid opening, for whatever reasons, sealed bid/proposal will be accepted and opened on the next business day of the City, at the original scheduled hour.

**CLARIFICATION of TERMS:** If any prospective bidder/offeror has questions about the specifications or other solicitation documents, the prospective bidder/offeror should contact the person identified in the solicitation no later than five (5) business days before the due date. Any revisions to the solicitation will be made only by addendum issued by the City.

**CONFLICT OF INTEREST/COLLUSION:** Contractor certifies by signing their bid/proposal submission to the City, that no conflict of interest or collusion exists between the Contractor and City that interferes with fair competition and no conflict of interest or collusion exists between Contractor and any other person or organization that constitutes a conflict of interest with respect to the contract with the City.

**DEBARMENT STATUS:** By signing their bid/proposal, the bidders/offerors certify that they are not currently debarred from submitting bids/proposals on contracts from any agency, public entity/locality or authority of the Commonwealth of Virginia.

**DISCRIMINATION PROHIBITED: 2.2-4310** In the solicitation or awarding of a contract the City shall not discriminate against a bidder/offeror because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. The City encourages the participation of SWAM and Veteran-Owned businesses (as defined in 2.2-4310(F) in public procurement activities. Towards that end, the City encourages contractors to provide for the participation of SWAM/Veteran-Owned businesses through partnerships, joint ventures, subcontracts, and other contractual opportunities.

**ERRORS IN BIDS/PROPOSALS:** When an error is made in extending total prices, the unit price will govern. Bidders/Offerors are cautioned to recheck their bids/proposals for possible errors prior to submission.

**ETHICS IN PUBLIC CONTRACTING: 2.2-4371** By submitting their bids/proposals, the bidders/offerors certify that their bids/proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder/offeror, supplier, manufacturer or subcontractor in connection with their bid/proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal or minimal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

**EXCUSABLE DELAY:** The City shall not be in default of any failure in performance of this agreement in accordance with its terms if such failure arises out of causes beyond its reasonable control and without the fault of or negligence of the City. Such causes may include, but are not restricted to acts of God or the public enemy, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the reasonable control and without the fault or negligence of the City.

**LICENSES, PERMITS and FEES:** All proposals submitted shall have included in price the cost of any business or professional licenses, permits or fees required by the City of Harrisonburg or the Commonwealth of Virginia. At or prior to delivery of the signed contract, the bidder/offeror to whom the contract is awarded shall deliver to the City a copy of their City Business License (if applicable). The bidder/offeror shall ensure that the Business License indicates a basis amount equal to or greater than the awarded Contract value. For information on City Business Licenses contact the Harrisonburg Commissioner of the Revenue's office at 540-432-7704. The bidder/offeror must have all necessary licenses to perform the services in the Commonwealth of Virginia and, if practicing as other than an individual, be authorized to do business in the Commonwealth of Virginia.

**MANDATORY USE of CITY FORMS AND TERMS and CONDITIONS for ITBs AND RFPs:** Failure to submit a bid/proposal on the official City form(s) provided or in the format identified, for that purpose shall be a cause for rejection of the bid/proposal. Unauthorized modification of or additions to any portion of the ITB or RFP may be cause for rejection of the bid/proposal. The City reserves the right to decide, on a case by case

basis, in its sole discretion, whether to reject any bid/ proposal which has been modified. As a precondition to its acceptance of an ITB response, the City may, in its sole discretion, request that the bidder withdraw or modify nonresponsive portions of a bid which do not affect quality, quantity, price, or delivery. No modification to the provisions of the contract shall be effective unless the modification is incorporated into the contract document.

**MODIFICATION & WITHDRAWAL OF BIDS/PROPOSALS: 2.2-4330**

1. A bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake in the bid, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.

If a bid contains both clerical and judgment mistakes, a bidder may withdraw his bid from consideration if the price bid would have been substantially lower than the other bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.

2. The bidder shall give notice in writing of his claim of right to withdraw his bid within two business days after the conclusion of the bid opening procedure and shall submit original work papers with such notice.
3. No bid shall be withdrawn under this section when the result would be the awarding of the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent.
4. If a bid is withdrawn in accordance with this section, the lowest remaining bid shall be deemed to be the low bid.
5. No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.
6. The public body shall notify the bidder in writing within five business days of its decision regarding the bidder's request to withdraw its bid. If the public body denies the withdrawal of a bid under the provisions of this section, it shall state in such notice the reasons for its decision and award the contract to such bidder at the bid price, provided such bidder is a responsible and responsive bidder. At the same time that the notice is provided, the public body shall return all work papers and copies thereof that have been submitted by the bidder.
7. These procedures also apply for the withdrawal of bids for other than construction contracts.
8. A bidder/offeror may modify or withdraw his bid/proposal, either personally or by written request to the Purchasing office at any time prior to the scheduled time for opening of bids/proposals.

**PUBLIC INSPECTION OF CERTAIN RECORDS: 2.2-4342** Public inspection of all records is strictly governed by Code of Virginia 2.2-4342 and in accordance with the Virginia Freedom of Information Act (VA Code 2.2-3700 et seq). Any inspection of procurement transactions shall be subject to reasonable restrictions to ensure the security and integrity of the records. Cost estimates relating to a proposed procurement transaction prepared by or for a public body shall not be open to public inspection.

**REVISIONS to the OFFICIAL ITB/RFP:** No bidder/offeror shall modify, revise, edit or make any unauthorized change(s) to the original official ITB/RFP. The official solicitation document and the Addenda(um) are the documents posted on the City of Harrisonburg's web site, [www.harrisonburgva.gov/bids-proposals](http://www.harrisonburgva.gov/bids-proposals). Any such violation as stated above may result in rejection of the ITB/RFP response. In addition, violations may result in the debarment of the bidder/offeror by the City of Harrisonburg.

**TAXES:** Sales to the City of Harrisonburg are normally exempt from State sales tax. Virginia Sales and Use Tax Certificate of Exemption, Form ST-12, will be issued upon request. The City may also be exempt from other taxes and fees.

## **AWARD**

### **CONTRACT AWARD**

For ITB: The award(s) made in response to an ITB will be made to the lowest responsive and responsible bidder(s) for each item, or group of items indicated in the bid. The City reserves the right to make the sole determination of whether the product and/or options offered meet the minimum specifications and is acceptable in accordance with the specifications. The City's decision shall be final. The City reserves the right to make a separate award for each item, a group of items or all items, and to make awards either in whole or in part, whichever is deemed by the City to be in its best interest. Delivery time lines may be a factor in making an award.

For RFP: The award(s) made in response to an RFP will be made to the highest qualified offeror whose proposal is determined to be the most advantageous to the City, taking into consideration the evaluation criteria set forth in the RFP. After negotiations, the offeror who has made the best proposal and provides the best value shall be awarded the contract.

Professional services shall be procured and awarded by competitive negotiation as set forth in **2.2-4302.2 A 4**.

The City reserves the right to cancel a solicitation at any time and to reject any or all bids/proposals, in whole or in part, to waive any informality and to delete items prior to making the award(s), whenever it is deemed in the sole opinion of the City to be in its best interest.

**NEGOTIATION WITH THE LOWEST BIDDER:** **2.2-4318** Unless all bids are canceled or rejected, the City reserves the right to negotiate with the lowest responsive and responsible bidder to obtain a contract price within the funds available to the City whenever such low bid exceeds the City's available funds for the project. The City shall initiate such negotiations by written notice to the lowest responsive, responsible bidder that its bid exceeds the available funds and the City wishes to negotiate a lower contract price. The times, places and manner of negotiating shall be agreed to by the City and the lowest responsive, responsible bidder.

**PRECEDENCE of TERMS:** General Terms and Conditions shall apply in all instances with the exceptions for projects funded by the Federal Highway Administration (FHWA) and by the Federal Transportation Administration (FTA). In the event there is a conflict between the General Terms and Conditions and any Federal, Special, Standard, or Supplementary Terms and Conditions in this solicitation, the Federal, Special, Standard, or Supplementary Terms and Conditions shall apply.

**QUALIFICATIONS of BIDDERS/OFFERORS:** The City may make such reasonable investigations as deemed proper and necessary to determine the responsibility and ability of the bidder/offeror to perform the services/furnish the goods and the bidder/offeror shall furnish to the City all such information and data for this purpose as may be requested. The City reserves the right to inspect bidder's/offeror's physical facilities prior to award to satisfy questions regarding the bidder's/offeror's capabilities. The City further reserves the right to reject any bid/proposal if the evidence submitted by, or investigations of, such bidder/offeror fails to satisfy the City that such bidder/offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

**SELECTION PROCESS/NOTICE OF AWARD:** Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the Purchasing office will publicly post such notice and/or will notify all responsive bidders/offerors. The City posts all Notice of Awards on its website at [www.harrisonburgva.gov/bids-proposals-award-notifications](http://www.harrisonburgva.gov/bids-proposals-award-notifications) and also on eVA at [www.eva.virginia.gov](http://www.eva.virginia.gov).

### **CONTRACT PROVISIONS**

**ANTI-DISCRIMINATION:** **2.2-4311** By submitting their bids/proposals, bidders/offerors certify to the City that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the

Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act.

In every contract over \$10,000 the provisions below apply:

1. During the performance of this contract, the contractor agrees as follows:
  - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
  - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

**ANTITRUST:** By entering into a contract, the contractor conveys, sells, assigns, and transfers to the City all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the City under said contract.

**APPLICABLE LAWS and COURTS:** This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia, excluding its conflict of laws provisions, and venue for litigation with any respect thereto shall be proper only in the Circuit Court of Rockingham County, Virginia. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.

**ASSIGNMENT of CONTRACT:** A contract shall not be assignable by the contractor in whole or in part without the written consent of the City.

**CHANGES to the CONTRACT:** Changes can be made to the contract in any of the following ways:

1. The parties by mutual agreement in writing, to modify the terms, conditions or scope of the contract subject to item 2. below. Any additional goods or services to be provided shall be of a sort that is ancillary to the contract goods or services, or within the same broad product or service categories as were included in the contract award. Any increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
2. A public contract may include provisions for modification of the contract during performance, but no fixed-price contract may be increased by more than twenty-five percent (25%) of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of the Harrisonburg City Council. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of a bidder/offeror from the consequences of an error in its (bid/offer). **2.2-4309**
3. The Procurement Manager (or City delegated agent) may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt unless the contractor intends to claim an adjustment to compensation, schedule, or other contractual impact that would be caused by complying with such notice, in which case the contractor shall, in writing, promptly notify the City of the adjustment to be sought, and before proceeding to comply with the notice, shall await the City's written decision affirming, modifying, or revoking the prior written notice. If the City decides to issue a notice that requires an adjustment to compensation, the contractor shall be compensated for any additional costs incurred as the result of such order and shall give the City a credit for any savings. Said compensation shall be determined by one of the following methods:
  - a. By mutual agreement between the parties in writing; or
  - b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed,

- subject to the City's right to audit the contractor's records and/or to determine the correct number of units independently; or
- c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the City with all vouchers and records of expenses incurred and savings realized. The City shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the City within thirty (30) days from the date of receipt of the written order from the City. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the City of Harrisonburg Purchasing and Contracting Policy Manual. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the City or with the performance of the contract generally.

**CONTRACT EXECUTION:** Per City Code (Sec 3-1-2, 3-1-1), the City Manager and the Deputy City Manager shall have authority to execute all contracts and agreements on behalf of the City except as otherwise directed by the Harrisonburg City Council in specific instances.

**CONTRACTUAL DISPUTES:** Contractual claim procedures shall be as per Code of VA **2.2-4363**.

**COOPERATIVE PROCUREMENT: 2.2-4304** Except as prohibited by the current Code of Virginia 2.2-4304, all resultant contracts will be extended, with the authorization of the contractor, to other public bodies to permit their ordering of supplies and/or services at the prices and terms of the resulting contract. If any other public body decides to use the final contract, the Contractor must deal directly with that public body concerning the placement or orders, issuance of the purchase order, contractual disputes, invoicing and payment. The City acts only as the "Contracting Officer" for these public bodies. Any resulting contract with other public bodies shall be governed by the laws of that specific entity. It is the Contractor's responsibility to notify the public bodies of the availability of the contract. The City shall not be held liable for any costs or damage incurred by another public body as a result of any award extended to that public body by the Contractor.

**DEFAULT:** In case of failure to deliver goods or services in accordance with the contract terms and conditions, the City, after due oral or written notice, may procure items of a comparable quality from other sources and hold the contractor responsible for any resulting additional costs above the contract price when purchases are made in the open market. This remedy shall be in addition to any other remedies, which the City may have.

**DRUG-FREE WORKPLACE: 2.2-4312** During the performance of this contract, the contractor agrees to: (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

**IMMIGRATION REFORM and CONTROL ACT OF 1986: 2.2-4311.1** By submitting their bids/proposals, bidders/offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

**INDEMNIFICATION:** Contractor agrees to indemnify, defend and hold harmless the City, its officers, agents, volunteers, and employees from any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or

nature furnished by the contractor/any services of any kind or nature furnished by the contractor, provided that such liability is not attributable to the sole negligence of the using agency or to failure of the using agency to use the materials, goods, or equipment in the manner already and permanently described by the contractor on the materials, goods or equipment delivered.

**INSURANCE:** By signing and submitting a bid/proposal under this solicitation, the bidder/offeror certifies that if awarded the contract, it will have insurance coverages per the solicitation document at the time of contract execution. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with **2.2-4332** and **65.2-800** et seq. of the Code of Virginia. The bidder/offeror further certifies that the contractor and any subcontractors will maintain these insurance coverages during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

**LIABILITY AND LITIGATION:** The City shall not indemnify or hold harmless any contractor or other third party. The City does not waive any right or release any party from liability, whether on its own behalf or on behalf of any boards, employees or agents. The City does not waive the right to trial by jury for any cause of action arising from the contract and shall not submit any contract claim to binding arbitration or mediation. The City shall not be liable to contractor for any special, punitive or exemplary damages arising from the performance of the contract, including, but not limited to, incidental damages, and lost profit and lost wages, even if such special damages are reasonably foreseeable. Any provision(s) in the contract contrary to these statements is/are hereby deleted and rendered void.

**NONDISCRIMINATION OF CONTRACTORS: 2.2-4343.1H** A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

**PAYMENT: 2.2-4352 – 2.2-4354**

1. **To Prime Contractor:**

Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. Any payment terms requiring payment in less than 45 days will be regarded as requiring payment 45 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 45 days, however. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price.

The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act. Individual contractors shall provide their social security numbers, and proprietors, partnerships, and corporations shall provide the City with a federal employer identification number, prior to receiving any payment from the City. The City requires an updated IRS Form W-9 be filed with the Purchasing Office at or before the contract is signed.

Unreasonable Charges: Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the City shall promptly notify the contractor, in

writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification.

The provisions of this section do not relieve the City of its prompt payment obligations with respect to those charges which are not in dispute (2.2.4363).

2. To Subcontractors:

A contractor awarded a contract under this solicitation is hereby obligated to pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the City for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or;

Notify the City and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.

The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the City, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the City. Any such contract awarded shall further require the contractor to include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the City.

**SAFETY and OSHA STANDARDS:** All parties performing services for the City shall comply with all Occupational Safety and Health Administration (OSHA), State Occupational Health Standards, and any other applicable rules and regulations. All parties shall be held responsible for the training, supervision, and safety of their employees. Any unsafe acts or hazardous conditions that may cause injury or damage to any persons or property within and around the work site areas under this contract shall be remedied per the regulatory agency's guidelines.

**STATE CORPORATION COMMISSION IDENTIFICATION NUMBER:** Pursuant to Code of Virginia 2.2-4311.2 subsection B, a bidder/offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid/proposal the identification number issued to it by the State Corporation Commission (SCC) and shall not allow the identification number to lapse, be revoked or cancelled at any time during the term of the contract. Any bidder/offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law is required to include in its bid/proposal a statement describing why the bidder/offeror is not required to be so authorized. A link to the SCC site is at <http://www.scc.virginia.gov>.

**TERMINATION:** Subject to the provisions below, the contract may be terminated by the City upon thirty (30) days advance written notice to the other party. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and perform on all outstanding orders issued prior to the effective date of cancellation.

1. **Termination for Convenience:** In the event that the contract is terminated upon request and for the convenience of the City, without the required thirty (30) days advance notice, then the City shall be responsible for payment of services up to the termination date.
2. **Termination for Cause:** Termination by the City for cause, default or negligence on the part of the contractor shall be excluded from the foregoing provision; termination costs, if any shall not apply. However, the City may hold the contractor responsible for any resulting additional purchase and administrative costs. The thirty (30) day advance notice requirement is waived in the event of Termination for Cause.
3. **Termination Due to Unavailability of Funds:** Agreements are made subject to the appropriation of funds (including grant funds, gifts or donations) by the Harrisonburg City Council and are null and void in the event of non-appropriation by the City Council. Non-appropriation of funds shall not be deemed a

cancellation and shall terminate this agreement without recourse and with no liability on the part of the City.

### **SPECIFICATIONS**

**CONDITION OF ITEMS:** Unless otherwise specified in the solicitation, all items shall be new, latest edition/model in first class condition.

**FORMAL SPECIFICATIONS:** When a solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted and the bidder will be required to furnish articles in conformity with that specification.

**USE OF BRAND NAMES: 2.2-4315** Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict bidders/offerors to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The bidder/offeror is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the City to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the bidder/offeror clearly indicates in its bid/proposal that the product offered is an "equal" product, such bid/proposal will be considered to offer the brand name product referenced in the solicitation. The City reserves the right to determine the suitability of substituted items for those specified and to accept in whole or in part any and all bids/proposals received.

### **DELIVERY**

**DEFECTS OR IMPROPRIETIES:** In instances where there is a defect or impropriety in an invoice or in the goods or services received, the City shall notify the supplier of the defect or impropriety, if the defect or impropriety would prevent payment by the payment date. The notice shall be sent within (30) thirty days after receipt of the invoice or the goods or services.

**TESTING AND INSPECTION: 2.2-4302.1** The City reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications. Materials or components that have been rejected by the City, in accordance with the terms of the contract, shall be replaced by the Contractor at no cost to the City.

**TRANSPORTATION AND PACKAGING:** All materials shipped to the City must be shipped Free On Board (FOB) Destination unless otherwise stated in the contract. By submitting their bids/proposals, all bidders/offerors certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.



## ATTACHMENT B. PROPRIETARY/CONFIDENTIAL INFORMATION IDENTIFICATION FORM

Name of Firm/Offeror: \_\_\_\_\_

Trade secrets or proprietary information submitted by an offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the offeror must invoke the protections of §2.2-4342F of the Code of Virginia, in writing, either before or at the time the data or other material is submitted. The written notice must specifically identify the data or materials to be protected, including the section of the proposal in which it is contained, as well as the page number(s), and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute a trade secret or proprietary information. In addition, a summary of proprietary information provided shall be submitted on this form. The designation of an entire proposal document, line item prices, and/or total proposal prices as proprietary or trade secrets is not acceptable. If, after being given reasonable time, the offeror refuses to withdraw such a classification designation, the proposal will be rejected.

SECTION/TITLE	PAGE NUMBER(S)	REASON(S) FOR WITHHOLDING FROM DISCLOSURE

Check this box if there are none.

**Note: If proprietary/confidential information is identified, Offeror is required to submit a redacted copy of their proposal in addition to the required number of proposals requested.**

***\*This document must be completed & returned with proposal submission.***



## ATTACHMENT C. STATE CORPORATION COMMISSION (SCC) FORM

### **Virginia State Corporation Commission (“SCC”) registration information: The undersigned Offeror:**

is a corporation or other business entity with the following SCC identification number:  
\_\_\_\_\_ **-OR-**

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust **-OR-**

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Offeror in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from bidder’s out-of-state location) **-OR-**

is an out-of-state business entity that is including with this bid an opinion of legal counsel which accurately and completely discloses the undersigned Offeror’s current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia. **Attach opinion of legal counsel to this form.**

**\*\*NOTE\*\*** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for proposals (the City reserves the right to determine in its sole discretion whether to allow such waiver):

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Name:** \_\_\_\_\_  
(Print)

**Title:** \_\_\_\_\_

**Name of Firm:** \_\_\_\_\_

***\*This document must be completed & returned with proposal submission.***



## ATTACHMENT D. INSURANCE REQUIREMENTS FORM

By signing and submitting a bid or proposal the vendor certifies that if awarded the contract, they will have the following insurance coverages at the time the contract is awarded.

1.) The contractor will maintain a general liability policy with \$1,000,000 combined single limits. Coverage is to be on an occurrence basis with an insurer licensed to conduct business in the Commonwealth of Virginia. The insurer must have an A. M. Best rating of A- or better. **The insurer must list the City of Harrisonburg as an additional insured. The endorsement must be issued by the insurance company. A notation on the certificate of insurance is not sufficient.**

2.) The contractor will maintain workers' compensation coverage in compliance with the laws of the Commonwealth of Virginia. The coverage must have statutory limits and be with an insurer licensed to conduct business in the Commonwealth of Virginia. The insurer must have an A. M. Best rating of A- or better. As an alternative, it is acceptable for the contractor to be insured by a group self insurance association that is licensed by the Virginia Bureau of Insurance. The contractor will also carry employers liability insurance with a limit of at least \$100,000 bodily injury by accident/\$500,000 bodily injury by disease policy limit/\$100,000 bodily injury by disease each employee.

3.) The contractor will maintain automobile liability insurance with limits of at least \$1,000,000. The coverage is to be written with a symbol "1". The insurer must be licensed to conduct business in the Commonwealth of Virginia. The insurer must have an A. M. Best rating of A- or better.

4.) The contractor will maintain professional liability insurance with a limit of at least \$1,000,000. It is preferred that the coverage be on an occurrence basis. If the policy is on a claims made basis, this should be noted. If the contractor has professional liability insurance on a claims made basis, agreement must be made that coverage will be maintained for at least three years beyond the expiration date of the policy in force at the time of this contract. Coverage is to be with a company licensed to conduct business in the Commonwealth of Virginia and have an A. M. Best rating of A- or better.

With all policies listed above, the insurer or agent of the insurer must issue a certificate of insurance to show evidence of coverage.

### BIDDER STATEMENT

***We understand the Insurance Requirements of these specifications and will comply in full if awarded this contract.***

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

***\*This document must be completed & returned with proposal submission.\****



## ATTACHMENT E. NON-COLLUSION AFFIDAVIT

Under oath, I hereby affirm under penalty of perjury:

- (1) That I am the offeror or a partner of the offeror, or an officer or employee of the offeror's corporation with authority to sign on its behalf;
- (2) That the attached proposal or proposals have been arrived at by the offeror and have been arrived at and submitted without collusion or any design to limit bidding or competition;
- (3) That the contents of the proposal or proposals have not been communicated to any person not an employee or agent of the offeror on any bid furnished with the proposal or proposals, and will not be communicated to any such person prior to the official opening of the proposal or proposals; and
- (4) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Firm Name \_\_\_\_\_

CITY / COUNTY OF \_\_\_\_\_,

STATE OF \_\_\_\_\_, to wit:

I, \_\_\_\_\_, a Notary Public, do certify

that \_\_\_\_\_ whose name is signed to

the foregoing has this date acknowledged the same before me in my City foresaid.

Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission expires \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

***\*This document must be completed & returned with proposal submission.***



## ATTACHMENT F. CITY OF HARRISONBURG SAMPLE STANDARD CONTRACT RFP

This Contract entered into this \_\_\_ day of \_\_\_\_\_ 20\_\_\_, by \_\_\_\_\_ hereinafter called the “Contractor” and City of Harrisonburg, VA, called the “Owner”.

WITNESSETH that the Contractor and the Owner, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide the goods/services to the Owner as set forth in the Contract Documents.

PERIOD OF PERFORMANCE: From \_\_\_\_\_ through \_\_\_\_\_.

The contract documents shall consist of:

- (1) This signed form;
- (2) The entire City of Harrisonburg’s Official Request for Proposal (no revisions by the Contractor)

dated: \_\_\_\_\_

If applicable, any Official City Addenda:

#1, dated: \_\_\_\_\_

- (3) The Contractor’s Proposal dated \_\_\_\_\_ and the attached negotiated modifications (if applicable) to the Proposal, all of which documents are incorporated herein.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

CITY OF HARRISONBURG, OWNER:

By: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_ Title: \_\_\_\_\_

***\*Note: This form is just for reference and is not required to be submitted with your Proposal.***

**ATTACHMENT G. CERTIFICATION REGARDING DEBARMENT**

**PRIMARY COVERED TRANSACTIONS**

**(To be completed by a Prime Consultant)**

**Project:** \_\_\_\_\_

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency.
  - b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements or receiving stolen property.
  - c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1)b) of this certification; and
  - d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
  
- (2) Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

---

Signature	Date	Title
-----------	------	-------

---

Name of Firm

***\*This document must be completed & returned with proposal submission.***

**ATTACHMENT G. CERTIFICATION REGARDING DEBARMENT**

**LOWER TIER COVERED TRANSACTIONS**

**(To be completed by a Sub-consultant)**

Project: \_\_\_\_\_

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

---

Signature

Date

Title

---

Name of Firm

***\*This document must be completed & returned with proposal submission.***

**ATTACHMENT H. FIRM DATA SHEET**

Funding: \_\_ (S=State F=Federal)

Project No.: \_\_\_\_\_

Division: \_\_\_\_\_

EOI Due Date: \_\_\_\_\_

The prime consultant is responsible for submitting the information requested below on all firms on the project team, both prime and allsubconsultants. All firms are to be reported on one combined sheet unless the number of firms requires the use of an additional sheet. Failure to submit all of the required data will result in the proposal not being considered.

Firm's Name and Address and DBE and/or SWAM Certification Number	Firm's DBE or SWAM Status*	Firm's Age	Firm's Annual Gross Receipts

\*YD = DBE Firm Certified by DMBE

N = DBE/SWAM Firm Not Certified by

DMBE

NA = Firm Not Claiming DBE/SWAM

Status

YS = SWAM Firm Certified by DMBE. Indicate whether small, woman-owned, or small business.

DMBE is the Virginia Department of Minority Business Enterprise

***\*This document must be completed & returned with proposal submission.***

**ATTACHMENT I. CONSULTANT SHORT LIST SCORE SHEET**

DIVISION:  
 CONSULTANT SHORT LIST SCORE SHEET – FEDERALLY / STATE FUNDED PROJECT  
 (FOR PROFESSIONAL SERVICES)

EOI NO.: \_\_\_\_\_

PROJECT: \_\_\_\_\_ FIRM: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_ SUBS: \_\_\_\_\_

DATE:

		NUMERICAL VALUE				AVG.	WEIGHT	WEIGHTED EVALUATION
FIRM/TEAM'S EXPERIENCE IN SIMILAR TYPE OF SERVICES (Expertise, experience and qualifications of team in providing services asrelated to the scope of services) (1=least, 10=most)		1-10					25%	
PERSONNEL'S EXPERIENCE IN SIMILAR TYPE OF SERVICES (Expertise, experience and qualifications of team in providing services asrelated to the scope of services) (1=least, 10=most)		1-10					40%	
QUALIFICATIONS OF PROJECT MANAGER (Expertise, experience and qualifications in project management as relatedto the scope of services) (1=least, 10=most)		1-10					5%	
ORGANIZATIONAL CAPABILITY (Ability to complete work in a timely manner, size of firm(s) relative to sizeof project, proposed project staff resources, proposed use of subconsultants)(1=least, 10=most)		1-10					20%	
PRESENT WORKLOAD WITH CITY ** (Dollar value of present outstanding feeincluding estimated pending contracts under negotiation. For limited services term contracts, include the amount of all task orders executed or under negotiation Work being performed under the Public Private Transportation Act (PPTA) or as a subcontractor on a Design-Build project shall not be included. Work being performed as a prime or joint venture on a Design-Build project shall be included.) † (Only Category ___ workload is counted on this selection*)	Above \$8,000,000	0					10%	
	7,000,001-8,000,000	1						
	6,000,001-7,000,000	2						
	5,000,001-6,000,000	3						
	4,000,001-5,000,000	4						
	3,000,001-4,000,000	5						
	2,000,001-3,000,000	6						
	1,500,001-2,000,000	7						
	1,000,001-1,500,000	8						
	500,001-1,000,000	9						
0-500,000	10							
							TOTAL	

**\*CATEGORIES OF WORKLOAD:**

A - TERM SURVEYING AND UTILITY DESIGNATION/LOCATION CONTRACTS

B - PRELIMINARY ENGINEERING CONTRACTS - includes transportation planning and environmental studies, utility relocation and design, and roadway and bridge design.

C - CONSTRUCTION ENGINEERING CONTRACTS - includes construction inspection, preparation of final estimates, and bridge and traffic structure safety inspection.

D - OPERATION AND MAINTENANCE CONTRACTS - includes operation and maintenance of traffic management systems.

\*\*When determining total Present Workload with the CITY, the outstanding workload of each DBE/SWaM subconsultant will not be counted.

† The outstanding workload of any certified DBE or SWaM prime and subconsultant is not to be included. When a DBE or SWaM firm graduates from the program, their

workload incurred while a DBE or SWaM will be exempted for the next three years. Any work obtained after graduating from the program will be counted.

In determining the final short list, the top ranked firms and their subconsultants will have their City of Harrisonburg Consultant Performance Reports reviewed and/or references checked.

***\*Note: This form is just for reference and is not required to be submitted with your Proposal.***

# STORMWATER IMPROVEMENT PLAN SCOPING

## SCOPING RECOMMENDATIONS REPORT

CITY OF HARRISONBURG, VIRGINIA



JULY 20, 2016

FINAL SUBMITTAL

PREPARED BY:

**TIMMONS GROUP**

1001 BOULDERS PARKWAY, SUITE 300

RICHMOND, VA 23225

TG Project Number: 37347.001

# Contents

- Stormwater Improvement Plan Scoping Report ..... 1**
- I. Citywide Assessment ..... 1
  - A. Define Stormwater Improvement Plan Scoping Report Goals ..... 2
  - B. Systematic Watershed Approach..... 3
  - C. Public Participation & Stakeholder Involvement ..... 3
- II. Project Administration ..... 4
- III. Watershed Assessment..... 4
  - A. Review of Existing Plans ..... 4
  - B. Existing Maintenance Records ..... 6
  - C. MS4 Program Plan Review ..... 8
  - D. City GIS Geodatabase..... 8
- IV. System Capacity Assessment ..... 10
  - A. Evaluation of Existing Open Channel Modeling ..... 10
  - B. Evaluation of Other Key Systems ..... 12
- V. Water Quality Assessment..... 13
  - A. TMDL Action Plan Review ..... 13
  - B. Evaluate Projects Identified in 2013 Stormwater Retrofit Study..... 13
  - C. Evaluate Other Retrofit Projects ..... 14
  - D. Evaluate Potential for Additional Proposed Projects & Practices..... 14
- VI. Program Assessment..... 14
- VII. Field Observations ..... 15
  - A. Public Notification and Site Access Procedures ..... 15
  - B. Reference GIS-Based Unique Identification Numbers ..... 15
  - C. Windshield Survey to Evaluate Watershed Characteristics ..... 15
  - D. Investigate Known Drainage Problems ..... 15
  - E. Natural Conveyance Systems Characterization ..... 16
  - F. Potential Project Specific Site Visits..... 16
- VIII. Project and Program Identification..... 16
  - A. Conceptual Project Development ..... 16
  - B. Project and Program Prioritization Matrix Development ..... 17
  - C. Define High Priority Projects and Programs ..... 17

- D. Project Sheet Development for High Priority Projects ..... 17
- IX. Deliverables..... 18
  - A. Monthly Written Progress Reports ..... 18
  - B. Narrative Report ..... 18
  - C. Public Outreach Materials ..... 18
  - D. Prioritized Listing of Proposed Projects and Programs, and List of Policies ..... 18
  - E. High Priority Project Sheet Summaries..... 18
  - F. GIS-based Inventory of Proposed Projects & Supporting Data ..... 18

Appendix A: Composite Map of Inventoried Stormwater Issues & Supporting Information Table

## Stormwater Improvement Plan Scoping Report

The City of Harrisonburg (City) is an independent city located in the Shenandoah Valley of the Commonwealth of Virginia and is surrounded by Rockingham County. The City comprises more than 17 square-miles (over 11,000 acres), is home to nearly 53,875 residents (2015 Weldon Cooper Study), and is located entirely within the Chesapeake Bay watershed.

Based on the US Census in 2000, the City is subject to the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). The current permit cycle became effective July 1, 2013 and will expire on June 30, 2018. In response to the requirements of the VPDES permit (Permit #VAR040075) and the costs of operating a stormwater program, the City recently (February 2015) developed a stormwater fund which is collected through a stormwater utility fee. The stormwater utility fee is charged to property owners within the City based on the property's impervious surface coverage. The stormwater fund was developed to be a dedicated source of revenue for stormwater management activities necessary to protect the general health, safety, and welfare of residents of the City and to meet requirements of the City's VPDES MS4 permit and federal and state regulations to address identified water quality and quantity needs (section 6-5 of the City Code). The stormwater fund also provides for the cost of administration of the stormwater program, facility operation and maintenance, and other activities consistent with state/federal regulations or permits governing stormwater management.

AN ESSENTIAL OUTCOME OF THE STORMWATER IMPROVEMENT PLAN IS TO PROVIDE AN ACHIEVABLE PLAN FOR MEETING REGULATORY COMPLIANCE REGARDING THE CHESAPEAKE BAY TMDL AND TO PROVIDE A PLAN FOR THE CITY'S LONG-TERM STORMWATER NEEDS.

With the Stormwater Improvement Plan (SWIP), the City is taking a proactive approach to planning for stormwater management needs within the City and managing the stormwater fund for long-term project and program implementation. An essential outcome of the SWIP is to provide an achievable plan for meeting regulatory compliance regarding the Chesapeake Bay TMDL and to provide a plan for the City's long-term stormwater needs. The SWIP will be used as a tool to assess the long-term budgetary needs of the stormwater program as it relates to primarily water quality improvement projects and programs.

### I. Citywide Assessment

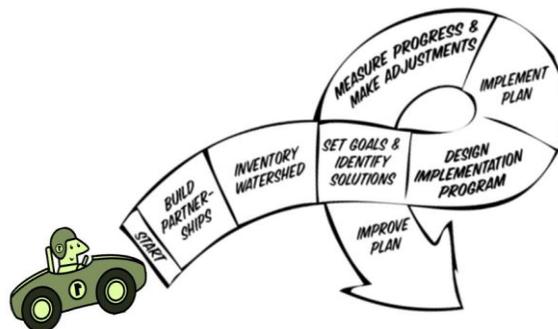
The Stormwater Improvement Plan will be a citywide plan for managing the City's stormwater needs. As such, stormwater needs will be evaluated on a citywide basis. Given the size of the City (>17 sq-mi), it is essential that the citywide assessment proceed in a systematic manner and be a multi-faceted approach to accurately assess the stormwater needs for all areas of the City. The efforts of the SWIP will build upon previously completed stormwater studies and incorporate, to the maximum extent possible, other City strategic plans, initiatives, and planning documents.

## A. Define Stormwater Improvement Plan Scoping Report Goals

The SWIP is intended to be a long-range visionary plan that incorporates the City's stormwater needs to achieve regulatory compliance. It is important that the plan be developed in such a way that the City's stormwater water quality needs are identified and an achievable plan for implementation is provided. The SWIP will:

1. Develop a plan to assist the City in achieving anticipated pollutant of concern (POC) reduction requirements as outlined in the city's MS4 permit.
2. Develop a comprehensive list of recommended stormwater improvement projects, programs, and policies identified within the City.
  - a. **Projects:**
    - i. Develop prioritization methodologies.
    - ii. Prioritize identified projects using standardized ranking schemes.
    - iii. Identify high priority projects based on rankings.
    - iv. Develop preliminary design and cost estimates for the high priority projects suitable for typical grant applications.
    - v. Provide an implementation schedule for identified high priority projects.
  - b. **Programs:**
    - i. Develop prioritization methodologies.
    - ii. Prioritize identified programs using standardized ranking schemes.
    - iii. Identify high priority programs based on rankings.
    - iv. Create guidelines for program development.
    - v. Provide an implementation schedule for identified high priority programs.
  - c. **Policies:**
    - i. Develop a list of recommended stormwater-related policies.

The SWIP will be a document designed to be actively used by City staff well into the future. As such, it is critical that the plan be established with an adaptive management approach to accommodate changing regulatory and funding dynamics in accordance with the US EPA approach ("A Quick Guide to Developing Watershed Plans to Restore and Protect Our Waters", 2013) illustrated in Figure 1 below.

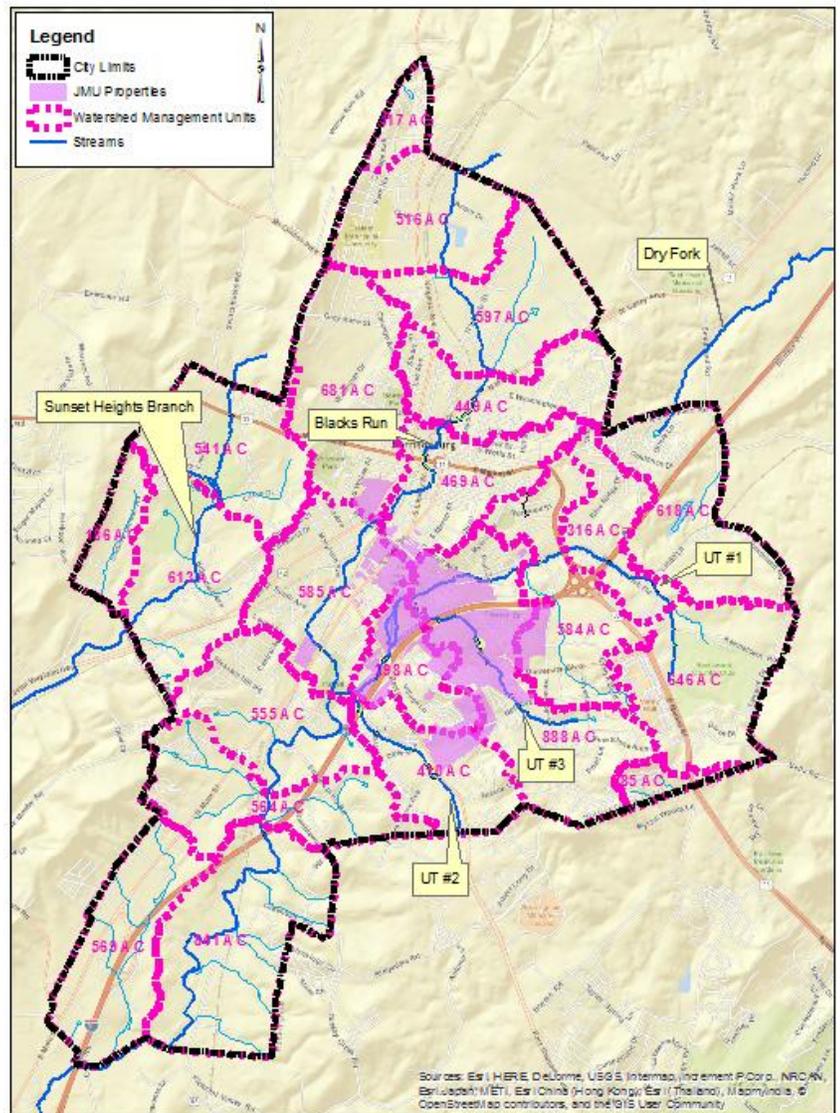


## B. Systematic Watershed Approach

A systematic, watershed-based approach to review of the City's jurisdictional area is recommended during the development of the SWIP. Given the size of the City and the need to thoroughly evaluate all areas of the City for stormwater needs, the City has developed a GIS-based layer depicting sub-basin management units for use during the development of the SWIP. The sub-basin management units are based loosely on sub-drainage area boundaries that are each comprised, on average, of 500 acres. The sub-basin management units are anticipated to assist in managing detailed studies within the management areas and to provide a framework for the systematic study of the entire City.

Each watershed within the City will be studied as part of the SWIP. It is recommended that the SWIP studies begin with a single management unit, such as the UT #2 sub-basin (Linville Creek) consisting of 410 acres, to establish a study methodology in conjunction with City staff. With the study methodology in place, it is recommended that the study then progress to a larger watershed study area focusing on the tributaries of Blacks Run, then the sub-basin management units of the main stem of Blacks Run. The detailed study of the City would then finish with the study of the remaining watershed management units (Sunset Heights Branch, Dry Fork, etc.). The proposed plan would allow a systematic and consistent detailed study of the entire City for the SWIP.

Figure 2. City of Harrisonburg Stormwater Management Units.



## C. Public Participation & Stakeholder Involvement

With the recent implementation of the stormwater utility fee, property owners in the City are becoming more aware of the City's stormwater management program and are increasingly more interested and active regarding the City's stormwater quality needs. The City aspires for the SWIP to become a community plan for addressing stormwater needs, particularly water quality needs established by the City's VPDES MS4 permit. The City wants to embrace this enthusiasm and encourage citizen participation in the SWIP process by hosting two public information and input meetings as part of the

SWIP development, outlined below. The public meetings will allow the City to educate citizens about the plan and why a SWIP is needed. The public meetings can also be used to acquire information regarding stormwater runoff issues within the City and to keep the public abreast of the SWIP progress.

**Public Participation Schedule:**

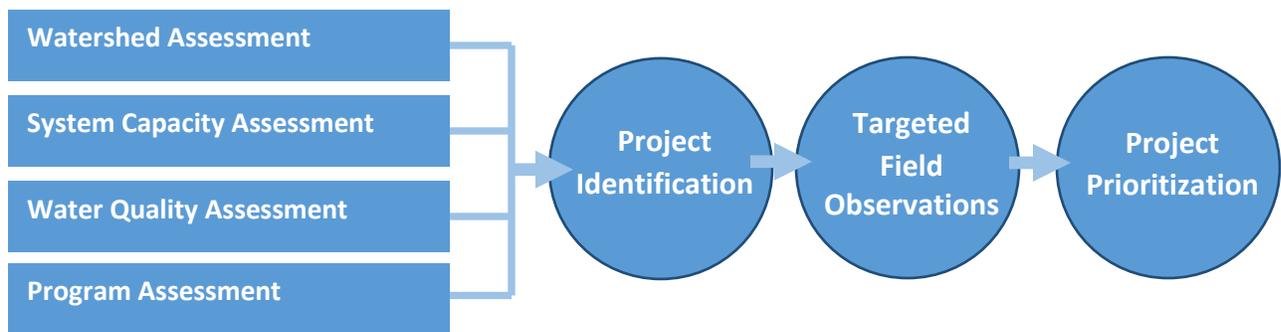
1. Public Input Meeting: Initial input and information gathering from stakeholders about stormwater runoff issues.
2. Draft SWIP Presented to Stormwater Advisory Committee (SWAC)
3. Public Information Meeting: Presentation on draft SWIP and initiation of the formal public comment period.

The SWIP team will prepare maps, handouts, and other appropriate public meeting materials for distribution during the public meetings. It is recommended that the SWIP team work with City staff to identify times and meeting places to facilitate the public meetings that will promote high public attendance. Stakeholder involvement will also include meetings with other City departments early on in the development of the SWIP.

## II. Project Administration

Since a key goal of the SWIP is to develop an actionable plan for permit compliance, it is the City’s desire to have the SWIP completed within a 12 month timeframe. The SWIP development process is anticipated to have several tasks that can be completed concurrently, see Figure 3. This will allow the plan to be developed in a time efficient manner.

Figure 3. SWIP Development Process



## III. Watershed Assessment

The City has existing data and studies that can be used to support and inform the development of the SWIP. A key step in the SWIP development process will be to review the existing data and plans in order to identify elements from each of the data sources that can be integrated into the SWIP.

### A. Review of Existing Plans

The watershed assessment will provide a systematic review of each study area to include (but not limited to) the following major sources of data.

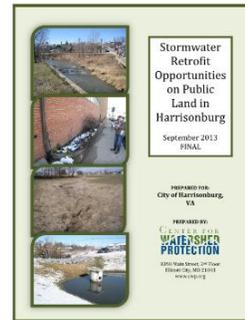
### 1. Storm Water Action Plan (1999)

In 1999 a Storm Water Action Plan was developed to identify a comprehensive list of specific projects and programmatic recommendations to improve flooding conditions within the City. Some of the recommendations have been implemented over time. Elements of the 1999 Stormwater Action Plan should be referenced during the SWIP development to identify and carry forward recommendations made that remain consistent with the current vision and goals of the City's Stormwater Program.



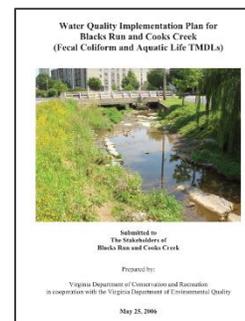
### 2. Stormwater Retrofit Opportunities on Public Land in Harrisonburg (2013)

This study takes the findings from a larger study of neighboring communities and focuses the findings of the study for the City of Harrisonburg. The study goals were to determine the level to which stormwater retrofit opportunities on publically owned properties can reduce urban nutrients and sediment. An outcome of the study was the development of an inventory of potential retrofit opportunities that quantifies costs of construction and potential pollutant removal for each opportunity. It is anticipated that this report will be valuable resource for reference during the SWIP development process.



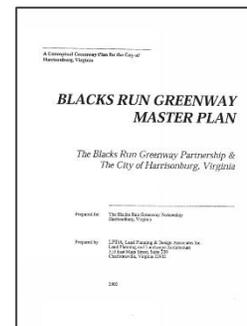
### 3. Water Quality Implementation Plan for Blacks Run and Cooks Creek (2006)

This plan submitted to the Stakeholders of Blacks Run and Cooks Creek reviews TMDL reduction requirements for fecal coliform and aquatic life and provides an implementation plan improving water quality for Blacks Run and Cooks Creek. Elements of the Water Quality Implementation Plan should be referenced during the SWIP development to identify and carry forward recommendations made that remain consistent with the current vision and goals of the City's Stormwater Program.



### 4. Blacks Run Greenway Master Plan (2002)

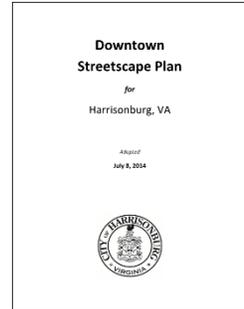
The Blacks Run Greenway Master Plan was developed in hopes that building a greenway would increase the water quality and aquatic life of Blacks Run and wildlife in areas around Blacks Run. The greenway should also enhance life in the City through outlets for hiking, walking, jogging, biking, improved access to downtown Harrisonburg, and educational opportunities to learn about the City. The Blacks Run Greenway Master Plan is referenced in the City's Comprehensive Plan and is being implemented through projects prioritized in the City's Bicycle and Pedestrian Plan. The Blacks Run Greenway Plan should be



reviewed during the SWIP process to identify how, if any, stormwater initiatives that might be developed as part of the SWIP will complement the Plan.

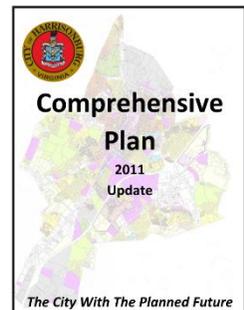
#### 5. Downtown Streetscape Plan (2014)

The 2014 Downtown Streetscape Plan, builds upon a previous version of the Plan, with the overall goal of presenting an easily communicable, comprehensive vision for the public streetscape in Downtown Harrisonburg to further develop and sustain a vibrant downtown. The Downtown Streetscape Plan should be reviewed during the SWIP process to identify how, if any, stormwater initiatives that might be developed as part of the SWIP will complement the Plan.



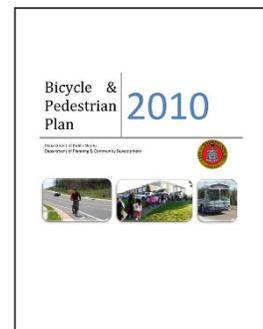
#### 6. Comprehensive Plan (2011)

The City's Comprehensive Plan presents a vision of what kind of community the City would like to be in the future. It identifies the steps required to move toward that vision by providing information about the City's current conditions, long-term goals and objectives, and recommended implementation strategies. The Comprehensive Plan also includes the Street Improvement Plan. There is some GIS data supporting the Comprehensive Plan with the City's geodatabase. The Comprehensive Plan and associated GIS layers should be reviewed during the SWIP process to identify how SWIP stormwater initiatives might complement the Comprehensive Plan.



#### 7. Bicycle & Pedestrian Plan (2010)

The purpose of the Bicycle and Pedestrian Plan (2010) is to provide a framework for developing and implementing bicycle and pedestrian transportation in the City and is an update to the 2005 plan. The Bicycle & Pedestrian Plan should be referenced during the Watershed Assessment task to become familiar with the short and long term goals of the plan and to identify how, if any, stormwater initiatives that might be developed as part of the SWIP will complement the Plan. The City is currently revising the plan for an update in 2016.



### B. Existing Maintenance Records

The City is currently implementing CityWorks as a stormwater asset management system. Consequently, a long maintenance history of stormwater assets is not yet available within CityWorks and will not be available during the SWIP process. Prior to implementation of CityWorks, the City tracked chronic maintenance issues using a spreadsheet and hardcopy map (neither integrated with GIS mapped assets). These resources will be critical in evaluating maintenance trends within the City.

## 1. Current Maintenance Practices

The City currently handles calls reporting stormwater issues on a case-by-case basis. Traditionally, the City has not tracked locations associated with the calls, though a recent effort (early 2016) has begun to track calls by street name in a spreadsheet. The most common types of issues involve debris removal of both natural and manmade materials clogging inlets/pipes.

Backyard flooding is a common complaint voiced in calls. Traditionally, the City has considered backyard flooding issues a private property issue. The focus of the stormwater maintenance program has been on keeping City streets from flooding and making necessary repairs where there are maintenance issues. It is important to note that backyard flooding issues will not be a primary focus of SWIP project/program prioritization.

Figure 4. City of Harrisonburg stormwater maintenance crew.



The City performs routine inspection and maintenance on the stormwater system, taking approximately 1.5 years to cycle through all stormwater assets. Routine maintenance includes pulling ditch lines when needed and removing sediment/debris/trash from inlets and culverts.

## 2. Routine Maintenance List

In a proactive effort to ready the City for large predicted storms, City maintenance crews frequent a list of locations for maintenance. The list of locations is stored in a spreadsheet, but not referenced to the GIS infrastructure mapping layers. This list should be evaluated during the SWIP development to identify areas of flooding concern.

## 3. 2013 Drainage Map

In 2011 the City developed a hardcopy map that identified chronic flooding locations within the City. In 2013 the map was updated to reflect changing flooding conditions, removing areas from the map that have been corrected with maintenance and adding additional locations that have been reported.

## 4. Composite Map and Site Listing

As part of this scoping project, the Timmons Group project team met with City staff and maintenance crew members (Feb 2016) to review the documented flooding locations from the 1999 Stormwater Action Plan and the 2013 Drainage Map. During this meeting City staff reviewed the map to:

1. Identify and discuss documented ongoing flooding issues,
  2. Identify issues that have been corrected and should be removed from the list,
- and

3. Identify known issues that have not been documented on the map.

An outcome of the meeting was to produce a GIS-based map and attribute table documenting current flooding issues within the City, see Appendix A.

### C. MS4 Program Plan Review

As part of the City’s MS4 permit, the City has developed an MS4 Program Plan. Several resources are included that may be useful during the SWIP development, including the TMDL Action Plan.

#### 1. TMDL Action Plan

VPDES MS4 permit compliance will be a primary driver of the Stormwater Program in the coming 15 years. Reductions of Nitrogen (N), Phosphorous (P), and Total Suspended Solids (TSS) will need to be met for the first, second, and third permit cycles. The SWIP plan will provide an actionable way to meet these reduction requirements.

### D. City GIS Geodatabase

The City currently maintains an active GIS geodatabase. The City’s geodatabase includes many feature datasets that may be helpful during the SWIP development, see Table 1.

*Table 1. Applicable Feature Classes from the City’s GIS Geodatabase*

City Buildings	City Limits	City Schools	City Streets
Comprehensive Plan layers	City Parks	Contours data (2011)	Downtown layers
ECC Data	Floodplain Data	Historic Data	Sewer Assets
JMU Data	MS4 Data layers	Planning & Zoning	Public Works
Soils	Stormwater Assets	Sanitary Sewer Assets	Water Assets
Survey Support layers	Impervious Area		

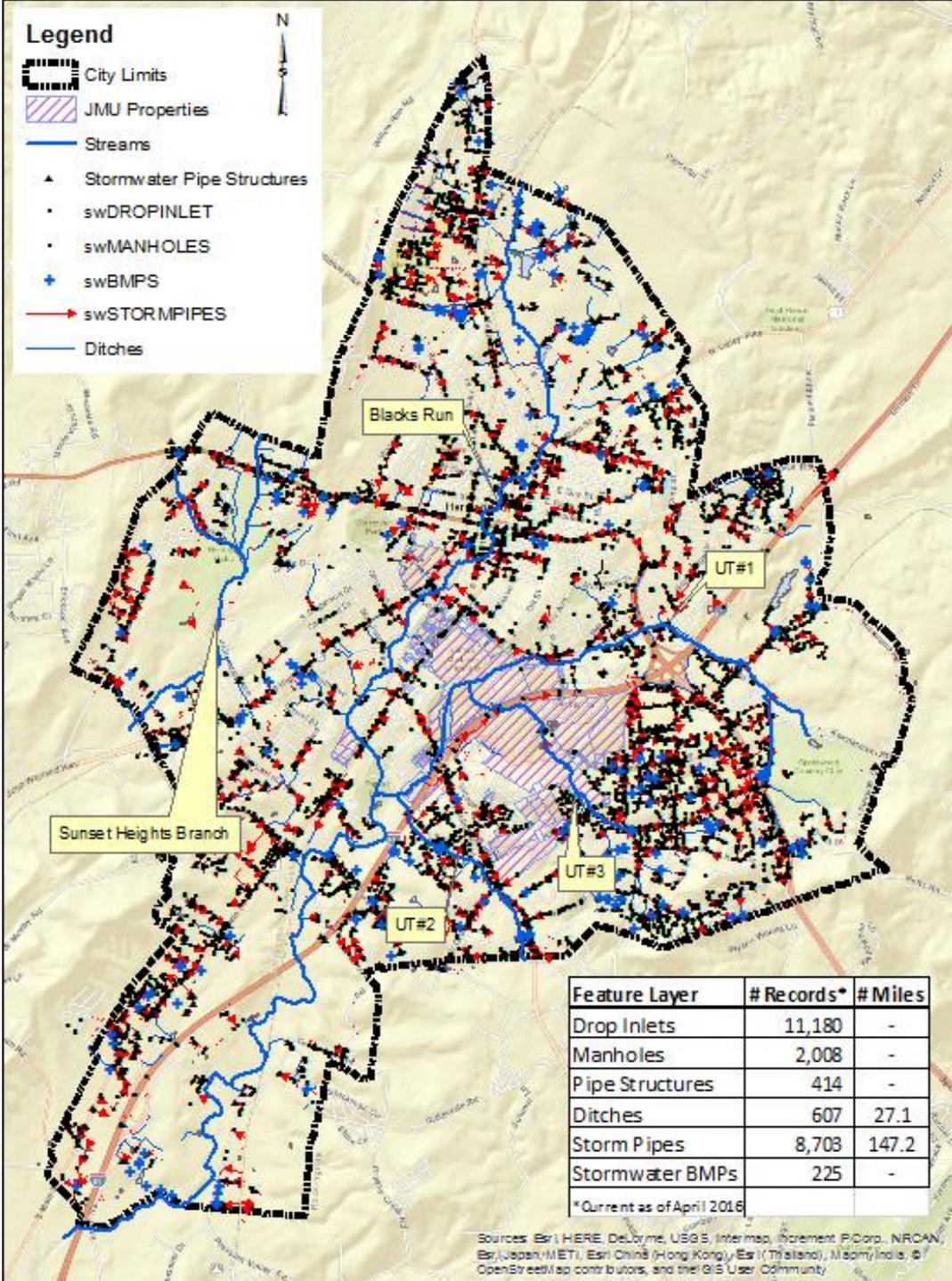
#### 1. Stormwater Assets Mapping

The City actively updates the stormwater system infrastructure mapping, see Figure 5. Data entry for the mapping is hand drawn and based on feature representation on construction plans. The stormwater infrastructure mapping is extensive, but has largely not been field verified or corrected. The feature data tables have many attribute fields, though consistent data entry and the complete attribution of all records remains a goal for the City. Many recent revisions have been made to the feature data set for stormwater infrastructure assets to support the implementation of CityWorks for asset management, including the migration of the dataset into a new data structure with field domains. Migration of attribute field entries to the new domain values is ongoing.

It is anticipated that the stormwater infrastructure mapping will be a key resource of data during the SWIP development. It should be considered approximate in nature and field visits to key locations may be necessary to verify the mapped information during

the SWIP development process. It is anticipated that the SWIP development team will likely want to perform some general quality control review checks (consisting of desktop analysis processes and potentially limited field checks in key locations) to confirm the suitability of the data for analysis.

Figure 5. City of Harrisonburg Stormwater Assets Mapping



## IV. System Capacity Assessment

System capacity assessment is not a primary component of the SWIP and will be considered as an ancillary benefit for any potential projects identified. As such, stormwater system model development will not be a significant task during the SWIP development. There are many existing resources that can inform the system capacity analysis performed during the SWIP, including:

- Routine Maintenance List (Appendix A)
- Composite Map (Appendix A)
  - 2016 GIS-based stormwater issue tracking layer
  - 2013 Drainage Map
  - Stormwater Action Plan (1999)
  - Staff Discussions (Meeting Minutes from 2/3/2016)
- Floodplain Modeling and Mapping

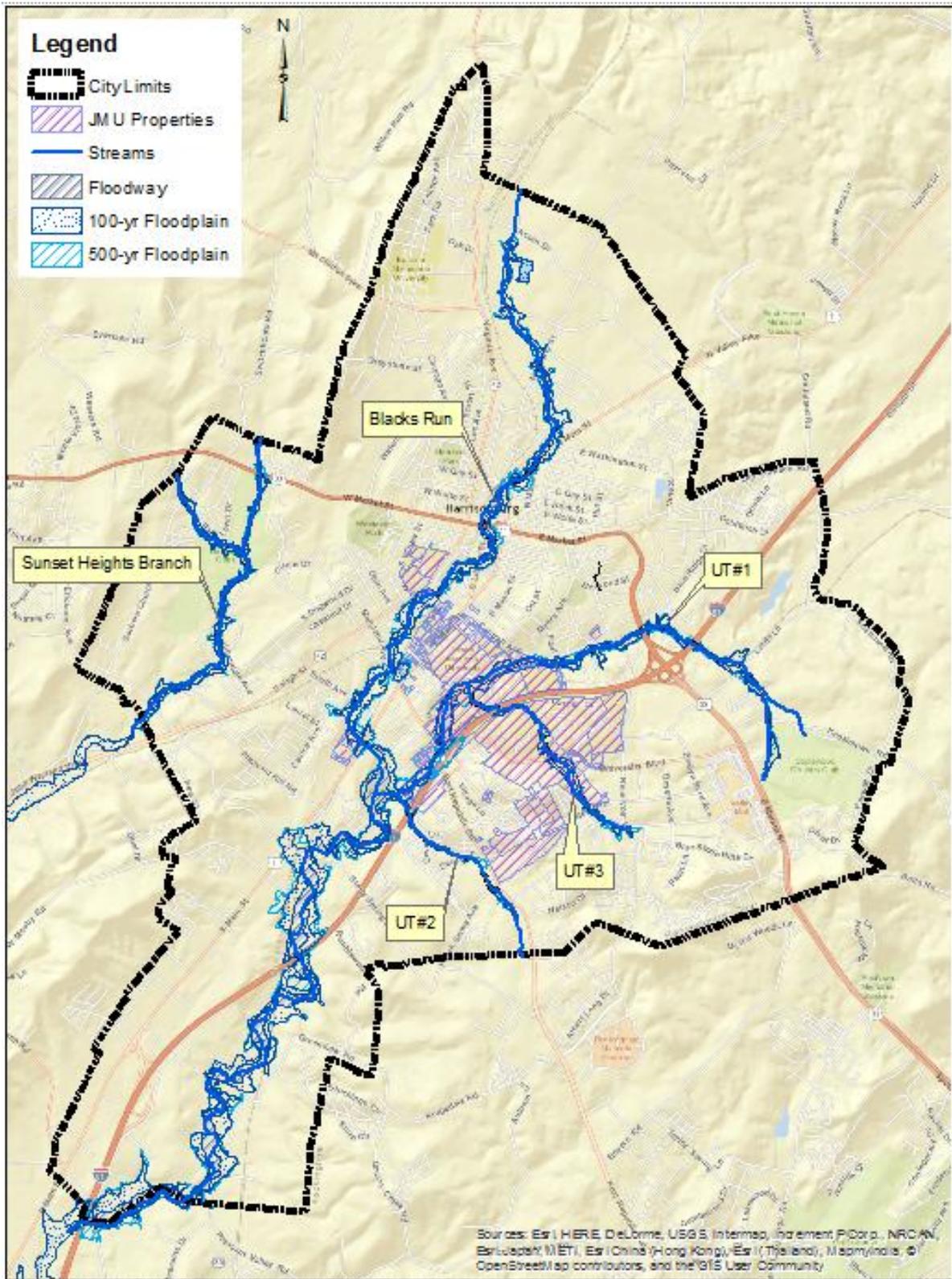
### A. Evaluation of Existing Open Channel Modeling

There are several major open channel conveyances within the City for which open channel modeling and floodplain mapping have previously been studied in 2008, see Figure 6. The hydrology supporting the models was also updated (2004) to reflect development conditions at the time of study. The modeling documentation supports the FEMA update of the study reaches. Multiple flow profiles are available within the models to evaluate system performance for a variety of design storms.

The City has access to the hydrology and hydraulic reports that document the floodplain modeling update efforts. Further, the City has access to the HEC-RAS model files supporting the floodplain study for all the modeled reaches and their supporting documentation. Within the “Floodplain” feature dataset in the City’s geodatabase, the City has GIS layers representing the following feature classes: Base Flood Elevations (BFE’s), cross sections, stream centerlines, model bridge/culvert locations, mapped floodplains (100-year and 500-year), mapped floodway, parcels within the floodplain, and buildings within the floodplain.

It is expected that previously developed modeling will serve as a basis to analyze existing LOS conditions along the studied reaches during the SWIP development process. It is anticipated that the SWIP team will perform limited checks of the modeling data prior to its use during the SWIP development. When applicable, the existing modeling can serve as a tool to evaluate hydraulic benefits of any water quality project identified during the SWIP development.

Figure 6. Existing Floodplain Mapping with the City of Harrisonburg



## 1. Define LOS goals for Road Crossings/Infrastructure Capacity

One of the first steps in evaluating system capacity performance is to define Level of Service (LOS) goals for road crossings/infrastructure. LOS goals for stormwater system infrastructure are typically evaluated by risk tolerance and defined by design storms. LOS goals will vary across elements of the stormwater infrastructure based on road classification, critical infrastructure and critical routes.

## 2. Identify Existing LOS Deficits from modeling

Based on the LOS goals identified as a task discussed in paragraph IV.A.1, the SWIP team will analyze the modeling data to identify locations where the functioning LOS of the stormwater system is not meeting the defined goal LOS. It is important that the SWIP team review the results of the modeling with the City staff to verify the reasonableness of the analysis with any anecdotal data and/or local knowledge. City maintenance records (discussed in paragraph III.B) can also be used as anecdotal evidence verifying the model and LOS findings.



Figure 7. News coverage of a flooding on Madison St on September 10, 2015.

## B. Evaluation of Other Key Systems

In addition to having a significant amount of open channel infrastructure, the City also has a significant stormwater conveyance system comprised of inlets, manholes, pipes, and stormwater Best Management Practices (BMPs). The GIS data layer currently has over 147 miles of stormwater conveyance piping mapped, ranging in size from 4 inches to multiple barrel box culverts.

Unlike open channel conveyance studies, there has not been a large modeling study completed within the City of the existing stormwater conveyance system capacity. Areas identified for system capacity modeling should be informed from the following sources of information:

- Existing City Maintenance Records, see paragraph III.B
- Review of the GIS based Stormwater Asset Mapping
- Review of findings from field observations
- Review of Open Channel Modeling (to determine areas of high backwater)
- City input

When an identified water quality project might also provide a water quantity benefit, conceptual-level (not design-level analysis) modeling/analysis is anticipated to be sufficient to analyze the potential project benefits. No surveying will be required for this project scope. It is

important to consider in the SWIP development that water quantity improvements are considered an ancillary benefit to identified water quality projects.

## V. Water Quality Assessment

The City has identified a primary outcome of the SWIP development to be an actionable plan for achieving required POC reductions for regulatory compliance.

### A. TMDL Action Plan Review

Implementing Chesapeake Bay TMDL POC reductions is the primary focus of the SWIP. The City is actively planning compliance strategies for achieving the anticipated required reductions. In addition to street sweeping, the City is currently considering other practices to achieve POC reductions, including: storm drain cleaning practices, private/public partnerships, capital projects, and purchasing nutrient offsets. A goal of the SWIP project is to identify a plan for efficiently achieving POC reduction credits for permit compliance.

Figure 8. City of Harrisonburg Street Sweeper



### B. Evaluate Projects Identified in 2013 Stormwater Retrofit Study

As discussed in paragraph III.A.2 the City partnered with several communities to identify stormwater retrofits on publically owned lands. The findings of this study should be evaluated during the SWIP development to determine which, if any, of the identified projects remain consistent with the City's current goals. Any projects from the 2013 Retrofit Study deemed consistent and applicable to the SWIP project should be carried forward and included in the SWIP. Each of the identified retrofit opportunities should be located with coordinates and key attribute data logged, including: BMP retrofit type, estimated POC removal, and site attributes impacting retrofit implementation noted.

Figure 9. Retrofit recommendation example taken from the 2013 Retrofit Study



It is important to note that the project merits and ranking will likely need to be re-evaluated using the standard developed during the SWIP development process to ensure all projects included in the SWIP are evaluated using consistent definitions. Further, any cost estimates provided by the 2013 report will need to be escalated to dollar values representing the year for the SWIP development.

### C. Evaluate Other Retrofit Projects

In addition to the retrofits identified in the 2013 Retrofit Study, it is anticipated that the SWIP team will identify additional sites where retrofit projects could be implemented to achieve water quality reduction. Potential retrofit projects that could be identified include existing stormwater facilities located on public and private properties. It is anticipated a desktop survey of available GIS data will inform the identification of potential retrofit candidate sites. Field visits may be necessary to further screen these locations for applicability.

Each of the identified retrofit opportunities deemed appropriate for including in the SWIP should be located with coordinates and key attribute data logged, including: BMP retrofit type, estimated POC removal, site attributes impacting retrofit feasibility, and parcel ownership.

### D. Evaluate Potential for Additional Proposed Projects & Practices

During the development of the SWIP, the SWIP team will endeavor to identify opportunities for water quality improvement projects not previously identified. Potential water quality projects that could be identified include projects located on public and private properties. It is anticipated a desktop survey of available GIS data will inform the identification of potential water quality project candidate sites. Field visits may be necessary to further screen these locations for applicability.

*Figure 10. Riparian planting by students along a stream on the City's Parks and Recreation maintenance property (Fall 2006).*



Each of the identified water quality project opportunities deemed appropriate for inclusion in the SWIP should be located with coordinates and key attribute data logged, including: BMP retrofit type, estimated POC removal, site attributes impacting retrofit feasibility, and parcel ownership.

## VI. Program Assessment

The City's Stormwater Management Program provides for the City's stormwater needs and has a primary goal of protecting water quality in the City's streams. The Stormwater Management Program and its current supporting programs/initiatives is predominately geared for regulatory and MS4 permit compliance and is supported by the recent implementation of a stormwater utility fee.



It is important to consider that some programmatic components can be used to leverage POC reduction credits. It is recommended that the SWIP team evaluate stormwater-related programs and activities that can be used to achieve cost efficient POC pollutant reductions. Each program or practice identified by the SWIP team should be documented to include the type of program/practice, cost of implementation, costs of maintenance, and guideline for implementation. Programs to consider include: street sweeping, storm drain cleaning,

homeowner residential BMP credits, and a public/private cost-share program alongside the stormwater utility fee credit program.

## VII. Field Observations

### A. Public Notification and Site Access Procedures

Field observation will be necessary as part of the SWIP development process. Field observations will likely require interaction with the public and/or entry to private property. It is recommended that the City establish a process for handling these issues. It is recommended that this process include:

- 1) Public notification protocol prior to and during field observations,
- 2) Instructions to the SWIP team for when/how to enter private property,
- 3) Public response form for the SWIP team field representatives to provide citizens when the SWIP team is approached, and
- 4) Coordination of access to City-owned stormwater assets and properties that are secured (by fence, restricted access, etc.).

### B. Reference GIS-Based Unique Identification Numbers

Field observations and data collected as part of the SWIP process will assist in informing the recommendations of the SWIP. The SWIP team should collect field data by referencing the unique, GIS-based identification number for the asset on which data is being collected. The GIS data collected during SWIP development should be a deliverable upon project completion so that field verified data can be incorporated into the City's mapping as needed.

### C. Windshield Survey to Evaluate Watershed Characteristics

It is anticipated that the SWIP team will need to perform a brief windshield survey of the study area(s) to generally evaluate watershed characteristics. Observations made during this effort could include observations about: stormwater asset condition, abundance (or lack thereof) of stormwater infrastructure, drainage trends, etc.

### D. Investigate Known Drainage Problems

During the review of existing maintenance records described in paragraph III.B and supporting GIS data, it is anticipated that the SWIP team will target specific areas documented with drainage issues for further field investigations. It is anticipated that these investigations will review the identified drainage issue, review field conditions, and investigate any other contributing factors to the flooding concern.

## E. Natural Conveyance Systems Characterization

Stream restoration has been demonstrated to be a practice that efficiently provides POC removal reductions using the POC reduction crediting implemented in Virginia. The City has a large network of natural conveyance systems on which stream restoration has potential for implementation. It is recommended that the SWIP team strategically identify portions of the City's natural conveyance system for field review. While it is **not** anticipated that a full scientific investigation (BANCS assessment, etc.) be performed for streams targeted as part of these observations, it is recommended that the investigations generally characterize the stability of the field visited natural conveyance systems to be able to gauge a stream's candidacy for restoration. When possible, documentation of this effort should reference the unique GIS ID for the natural conveyance reviewed.

Figure 11. Liberty Park Stream Restoration Project (Blacks Run, 2004)



## F. Potential Project Specific Site Visits

During the course of reviewing the City's GIS data, documented maintenance concerns, existing City planning documents, and previously completed studies, it is anticipated that the SWIP team will identify specific potential project locations that will need to be evaluated for feasibility consideration. It is anticipated that during the course of these site visits, the SWIP team will identify the type of potential BMP practice is appropriate for the site, factors affecting implementation, access considerations, utility considerations, and other factors.

## VIII. Project and Program Identification

As an outcome from the assessments made as part of work described in paragraphs I, III, IV, V, VI and VII, the SWIP team will be able to identify and inventory potential stormwater improvement projects and programs.

### A. Conceptual Project Development

For each location where a potential stormwater improvement project is identified, evaluated and determined to be consistent with the goals of the SWIP development, a potential design concept(s) will be developed. The inventory of conceptual project sites should include **location mapping** and a **collection of project attributes**, agreed upon by the SWIP team and City staff. It is anticipated the tracking attributes for each project could include: 1) the identified issue(s) at the site, 2) proposed improvement solution(s), and 3) project prioritization criteria. A key outcome of this task is for the City to have a **comprehensive list and location** of identified stormwater improvement projects that are consistent with the current goals of the City's Stormwater Program.

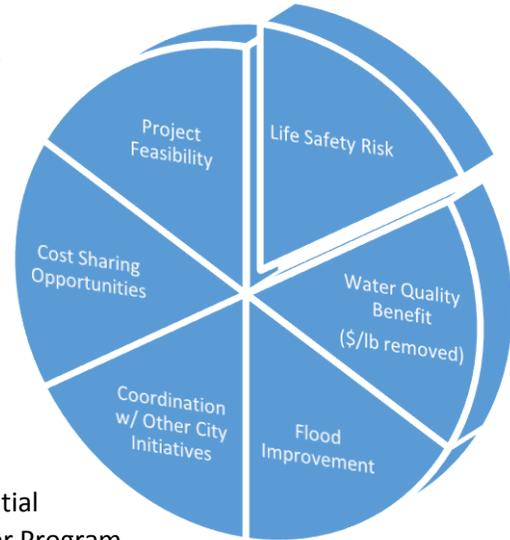
The SWIP team will need to develop, in conjunction with the City, a naming/numbering convention to track the identified projects. It is highly recommended that the location mapping for the conceptual project sites be GIS-integrated and that the collection of project attributes be maintained in a way that allows the information to be related to the mapping (such as an attribute table to the GIS, as a relate table, etc).

## B. Project and Program Prioritization Matrix Development

A key project component will be to prioritize each of the identified projects and programs. The SWIP team will need to coordinate closely with City staff to identify and appropriately weight each identified project and program. See Figure 12 for potential prioritization criteria.

It is highly recommended that the prioritization matrix be developed in a spreadsheet format and that the prioritization spreadsheet be a deliverable to the City in its native format. This deliverable will allow the City to manage the spreadsheet moving into the future, accounting for future project implementation and potential changing prioritization dynamics of the City's Stormwater Program.

Figure 12. Potential Prioritization Criteria



## C. Define High Priority Projects and Programs

The project and program prioritization matrix will rank the identified projects and programs according to the prioritization values developed and assigned by the project team. As a result, the identified projects and programs can be sorted to identify those projects and programs most highly ranked within the matrix. Once the distribution of project and program rankings is completed, the City will work with the SWIP project team to create a definition of High Priority Projects and High Priority Programs. The City anticipates that the High Priority Projects and High Priority Programs will be more highly prioritized for implementation.

## D. Project Sheet Development for High Priority Projects

A key outcome of the SWIP is that the document provides an achievable plan for meeting regulatory compliance regarding the Chesapeake Bay TMDL and other stormwater program objectives. A key deliverable of this project task is the development of Project Sheets for each of the identified High Priority Projects. It is essential that the project sheets include documentation of the conceptual design layout, provide a conceptual level cost estimate, and list key attributes of the project. The conceptual level cost estimate should include factors such as: engineering costs, right-of-way purchasing costs, and utility concerns. The key attributes should include POC reduction estimates and price per pound for those reductions. It is essential that the Project Sheets contain adequate detail and project attributes for the preparation of grant applications.

## IX. Deliverables

Many deliverables are recommended for the SWIP project. Deliverables should be submitted to the City in approved file format. Digital and hardcopy submittals are recommended.

### A. Monthly Written Progress Reports

Monthly progress reports are recommended to track progress of the SWIP development. The progress reports should include brief description of work performed, tasks completed, tasks remaining, project budget completed, and project budget remaining.

### B. Stormwater Improvement Plan Narrative Report

It is recommended that the SWIP team develop a narrative report summarizing the work performed, findings, and recommendations. It is recommended that City staff be provided with opportunities to review and comment on draft versions (two drafts submittals are anticipated with a subsequent final submittal). The Narrative Report should include maps, prioritization matrices, comprehensive prioritized list of identified projects and programs, high priority project sheets, list of potential policies, and all digital data developed in support of the project. It is recommended that the digital submittal of files be provided in both the file native format and in \*.pdf format, as appropriate.

### C. Public Outreach Materials

Any handouts, maps, and other material prepared by the SWIP team to facilitate public meetings will be a deliverable to the City. It is recommended the submittal include both hardcopy and digital copy of the finished documents. It is recommended that the digital submittal of files be provided in both the file native format and in \*.pdf format, as appropriate.

### D. Prioritized Listing of Proposed Projects, Programs, and List of Policies

It is recommended that the prioritized listing of identified proposed projects and programs, as well as the list of proposed policies, be provided in hardcopy and digital format. It is recommended that the digital submittal of files be provided in both the file native format and in \*.pdf format, as appropriate. It is highly recommended that prioritization matrices be developed in a spreadsheet format and that the prioritization spreadsheet be a deliverable to the City in its native format. This deliverable will allow the City to manage the spreadsheet moving into the future, accounting for future project implementation and potential changing prioritization dynamics of the City's Stormwater Program.

### E. High Priority Project Sheet Summaries

It is recommended that the High Priority Project Sheet Summaries be provided in hardcopy and digital format (\*.pdf or other approved format). It is also recommended that the support layers (Example: AutoCAD, GIS, etc) depicting the conceptual project location/layout be submitted.

### F. GIS-based Inventory of Proposed Projects & Supporting Data

GIS-based deliverables will be a valuable product for the City and it is highly recommended that the City request a digital data submittal in addition to hardcopy submittal of maps. GIS-based deliverables can include submittals in GIS native format and can also include data tables that

reference GIS-based identification numbers in a way that can be used as a relate data to existing GIS-based datasets. GIS-based deliverables for the project should include:

- Location mapping of prioritized projects and associated attribute table,
- Field collected data as described in section VI.
- Any other support data created as a part of this project to support mapping.