



DEPARTMENT OF FINANCE AND PURCHASING

345 South Main Street
Harrisonburg, VA 22801

Table with 3 columns: ISSUE DATE, REQUEST FOR INFORMATION (RFI) NUMBER, FOR; DEPARTMENT, DATE/TIME OF CLOSING, CONTACT.

*Please note this is a Request for Information (RFI) NOT an Invitation to Bid (ITB) or a Request for Proposals (RFP).

NAME AND ADDRESS OF FIRM:

Telephone/Fax No.:

Federal Employer Identification # :

State Corporation Commission #:

E-mail:

By signing this page, Vendor(s) certifies, acknowledges, understands, and agrees to be bound by the conditions set forth in this Request For Information (RFI).

CHECK ONE: [] INDIVIDUAL [] PARTNERSHIP [] CORPORATION [] LLC

Vendor's Legally Authorized Signature

Date

Print Name

Title

Responses to this Request For Information (RFI), subject to terms and conditions of this RFI, will be received by the City of Harrisonburg Department of Public Works, 320 East Mosby Road, Harrisonburg, VA 22801 until the date/ time specified above for furnishing items or services delivered or furnished to specified destinations within the time specified or stipulated by the vendor(s).

The City does not discriminate against small and minority businesses or faith-based organizations.

*This document must be completed & returned with response submission.

REQUEST FOR INFORMATION (RFI) FOR

Computerized Asset Management Software (CAMS) for Municipal Separate Storm Sewer System (MS4) Program

Issue Date: 7/9/2014

Closing Date for Submission: Provide *electronic* response to Thanh.Dang@HarrisonburgVA.gov with subject "RFI CAMS for Stormwater Management Assets response: <Company Name>". Submissions must be received by 2:00 p.m. (EST) on 7/25/2014. Late submissions will not be accepted.

Project Manager

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Purchasing Agent

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1 PURPOSE

The City of Harrisonburg (City) is issuing a Request for Information (RFI) from qualified vendors to offer to the City their solution for a Computerized Asset Management Software (CAMS) for the City's stormwater management assets as they relate to the Municipal Separate Storm Sewer System (MS4) permit and associated program. The system will initially be used only for the MS4 needs of the City; however, expandability to other City processes will be considered and should be addressed in this RFI. Included with this RFI are various appendices that include work flow structures, system requirements for both the MS4 system and other City departments, and a list of various items the City feels is important for this system to include.

The sole purpose of this RFI is to gather information regarding possible solutions. This is not a solicitation to purchase services and/or goods. No contract will be awarded based on the responses to this RFI received. The City may or may not choose to issue a solicitation to contract for these or similar goods or services. The City may or may not choose to incorporate information gathered through this RFI into possible future requirements or requests. Responding to this RFI is not a pre-requisite to submitting a proposal for any subsequent procurement. Respondents should not provide confidential or proprietary information. Responders are solely responsible for all expenses associated with responding to this RFI.

2 BACKGROUND

The City of Harrisonburg has been issued a General Virginia Pollutant Discharge Elimination Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) by the Virginia Department of Environmental Quality. In order to meet requirements of the MS4 permit, the City feels that a CAMS system is needed to make this process efficient and provide a computerized method for tracking activities and annual report writing. This RFI is focused on the City's immediate MS4 asset needs, however, the expandability of the CAMS to other City departments is being considered by the City and this RFI includes provisions for the vendor to provide information related to those other departments.

3 RESPONSES

Interested firms are encouraged to submit an electronic response to this RFI together with:

- Marketing materials (including information on your firm with a link to your website).
- Detailed description of the product(s), services and capabilities available.
- Completed APPENDIX B: CAMS QUESTIONS.
- Reference information for clients that the City may contact to gather additional information that may help the City further develop plans and requirements.
 - References should include:
 - Customer Name

- Name and Telephone Number of Contact
- Brief Description of Projects

Please note that this is not a Request for Proposal (RFP), but rather a Request for Information (RFI) giving vendors the opportunity to inform the City of the current capabilities they provide as well as availability in the general market.

4 DISCLOSURE OF SUBMISSION MATERIALS

Vendors agree that by responding to this RFI they are granting a license to the City of Harrisonburg for all data, materials, and documentation originated and prepared for the City pursuant to the RFI. Except for cost estimates, copyrighted or trademarked materials, such data, materials, and documentation shall be subject to public inspection in accordance with the Virginia Freedom of Information Act. Respondents should not provide confidential or proprietary information.

5 QUESTIONS

Any questions regarding this RFI shall be submitted by 12NOON EST on July 17, 2014, with subject "Questions for CAMS Stormwater Mgmt Assets: <Company Name>" and directed to: Thanh Dang, Public Works Planner at Thanh.Dang@harrisonburgva.gov.

Questions and answers will be compiled by the City and sent to all responders by July 21, 2014 and will also be posted at <http://www.harrisonburgva.gov/bids-proposals> and www.eva.virginia.gov.

6 RESPONSE DUE DATE

Submissions are requested by 2:00 PM EST, July 25, 2014. Submit responses electronically to: Thanh.Dang@harrisonburgva.gov with subject "RFI CAMS for Stormwater Mgmt Assets: <Company Name>". Late responses will NOT be accepted.

7 INVITATION TO PRESENT/DEMONSTRATE

Following receipt and review of responses, City staff may select responders to present/demonstrate their CAMS in person at City offices.

If invited, presentations should be limited to ONE HOUR each, including Questions and Answers.

8 APPENDIX A: WORKFLOWS

Provided are current workflows related to the MS4 Program for:

- Construction Site Stormwater Business Process
- Post Construction Inspections Business Process
- Outfall Inspections and Illicit Discharge Detection & Elimination Business Process
- Good Housekeeping/ Pollution Prevention for City Owned High- Priority Facilities Business Process

These workflows describe how staff interacts with customers (the public), with each other, and with existing data storage and management without a computerized asset management system (CAMS).

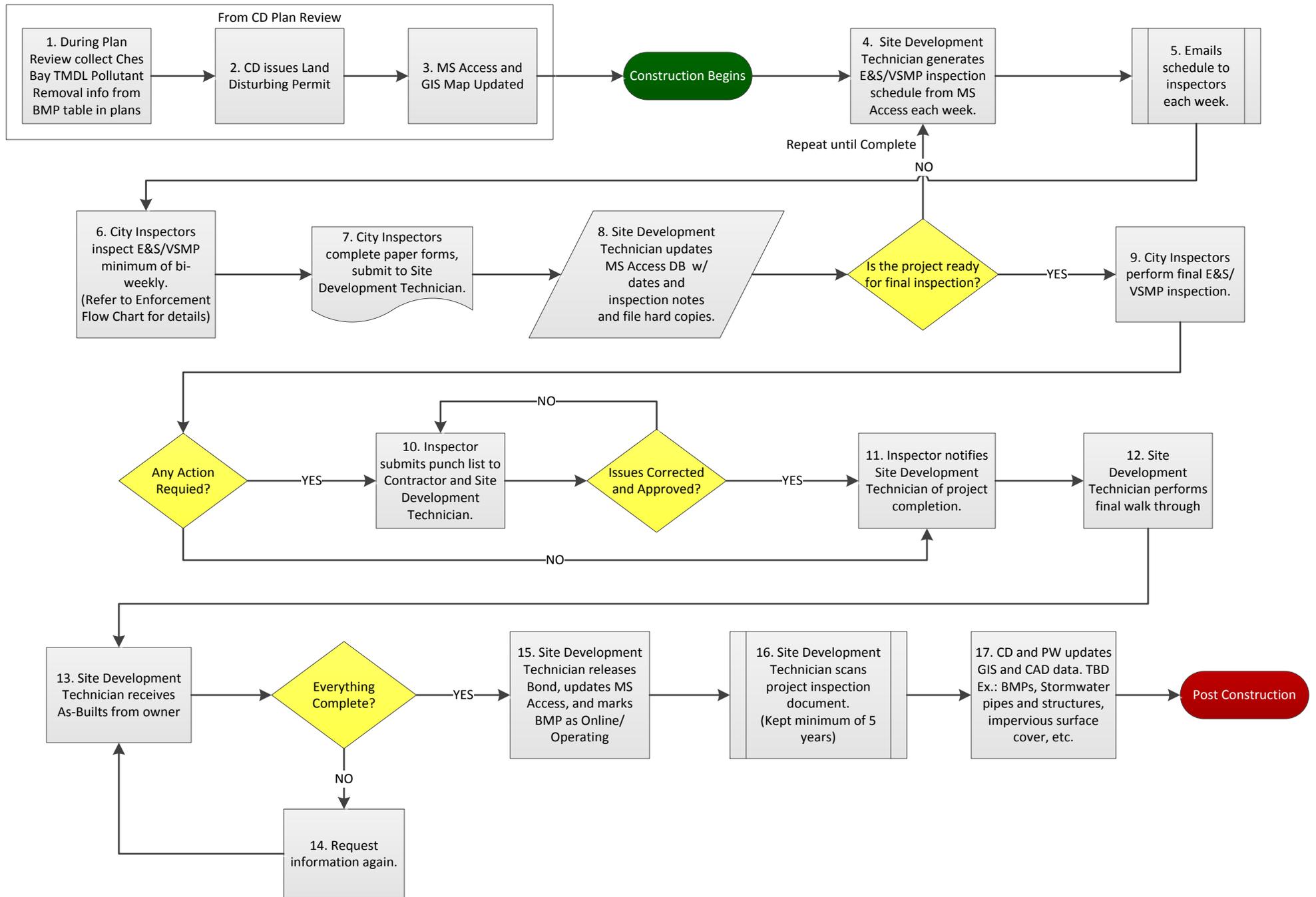
Also provided are several examples of GIS management for some assets maintained by the Department of Public Works.

- Sidewalks, Bike Facilities, Storm Pipes/ Structures
- Traffic Signals

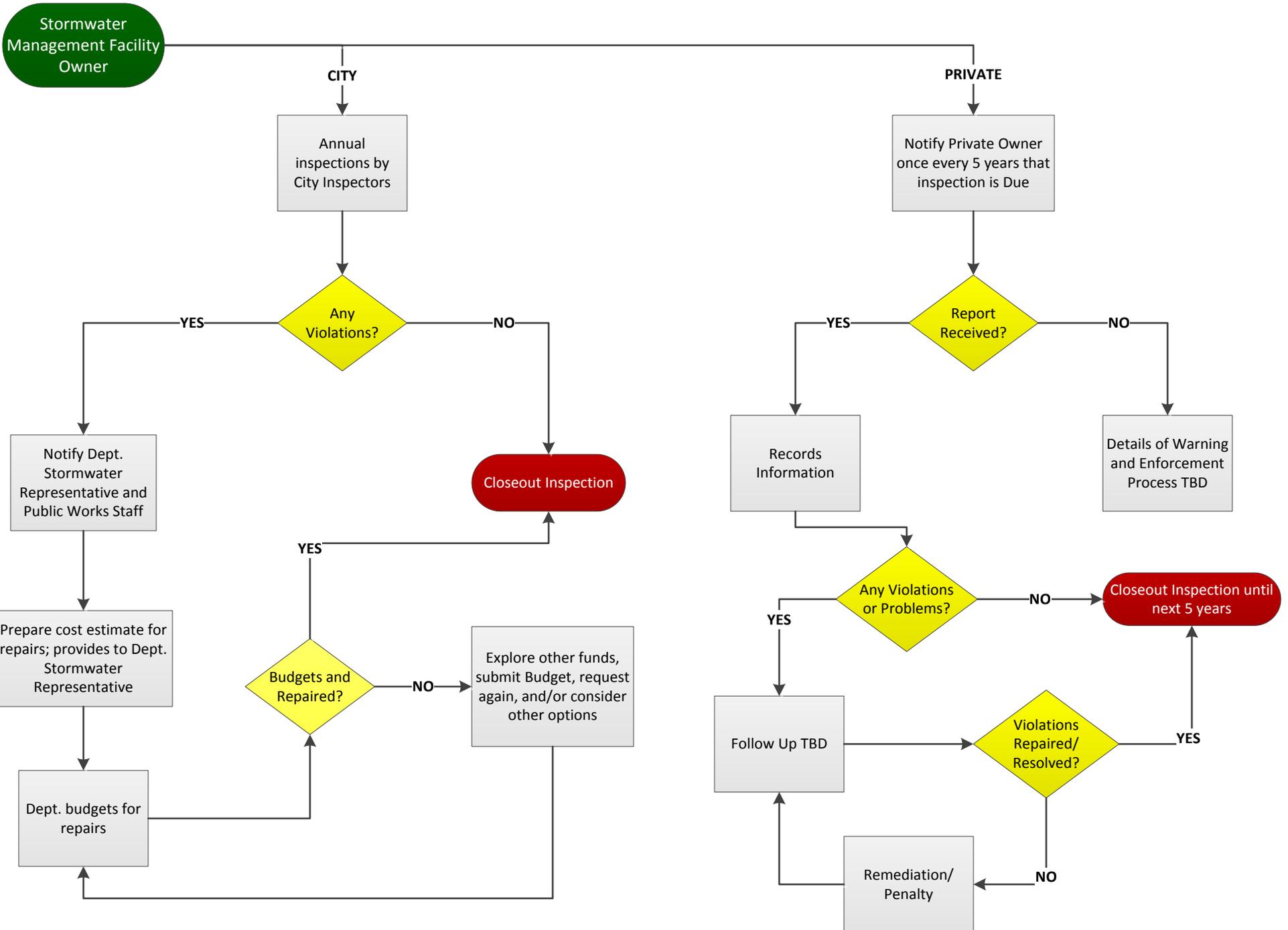
Abbreviation Definitions:

- BMP – Better Management Practices
- CD – Community Development
- DB -- Database
- DEQ – Department of Environmental Quality
- E&S – Erosion and Sediment
- GIS – Geographic Information System
- GPS – Global Positioning System
- HFD – Harrisonburg Fire Department
- IDDE – Illicit Discharge Detection and Elimination
- MS – Microsoft
- MS4 – Municipal Separate Storm Sewer System
- P&R – Parks and Recreation
- PW – Public Works
- SHC – Stream Health Coordinator
- TBD – To Be Determined
- TMDL – Total Maximum Daily Load
- VSMP – Virginia Stormwater Management Program

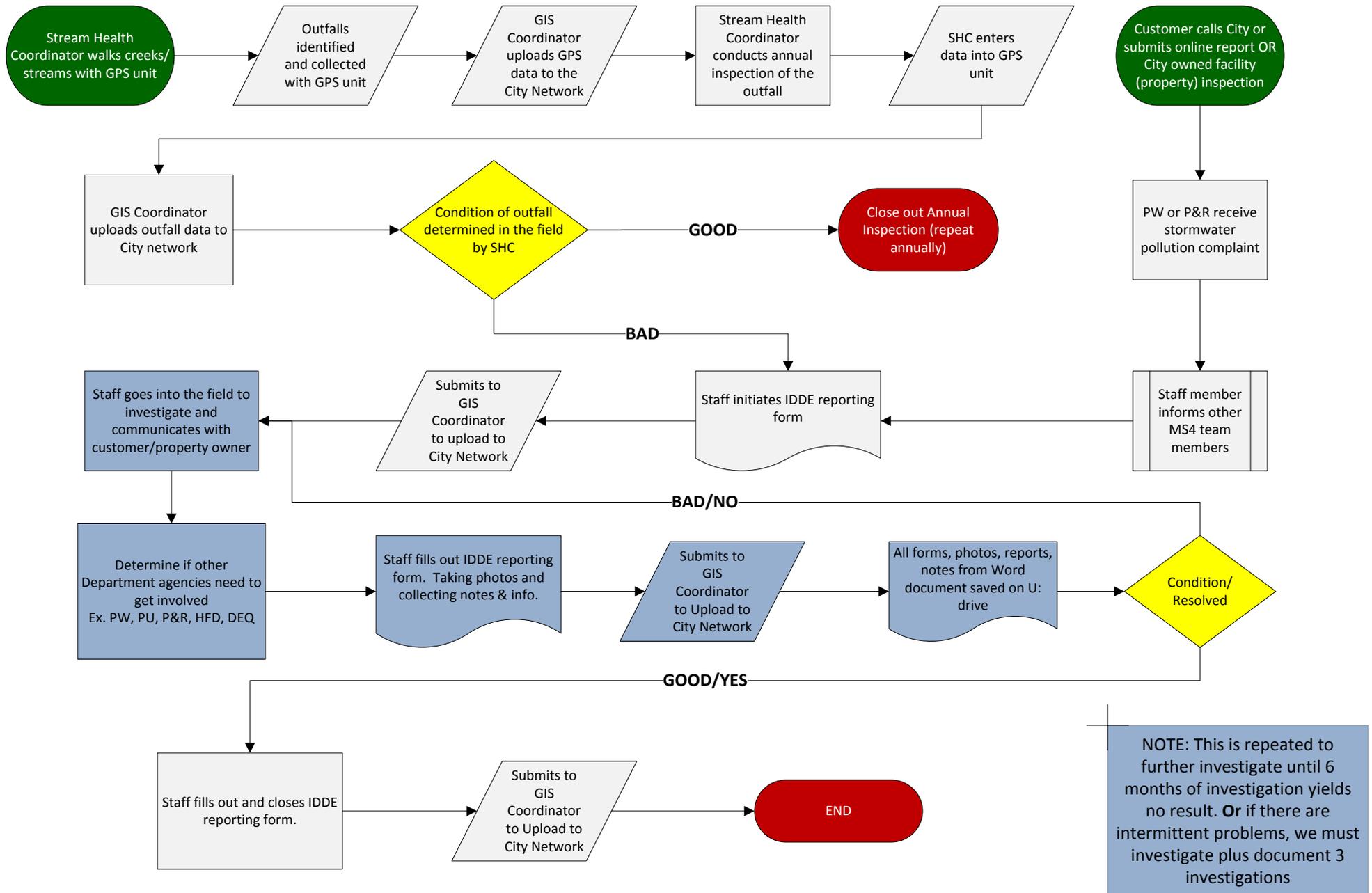
Construction Site Stormwater Business Process



Post Construction Stormwater Business Process



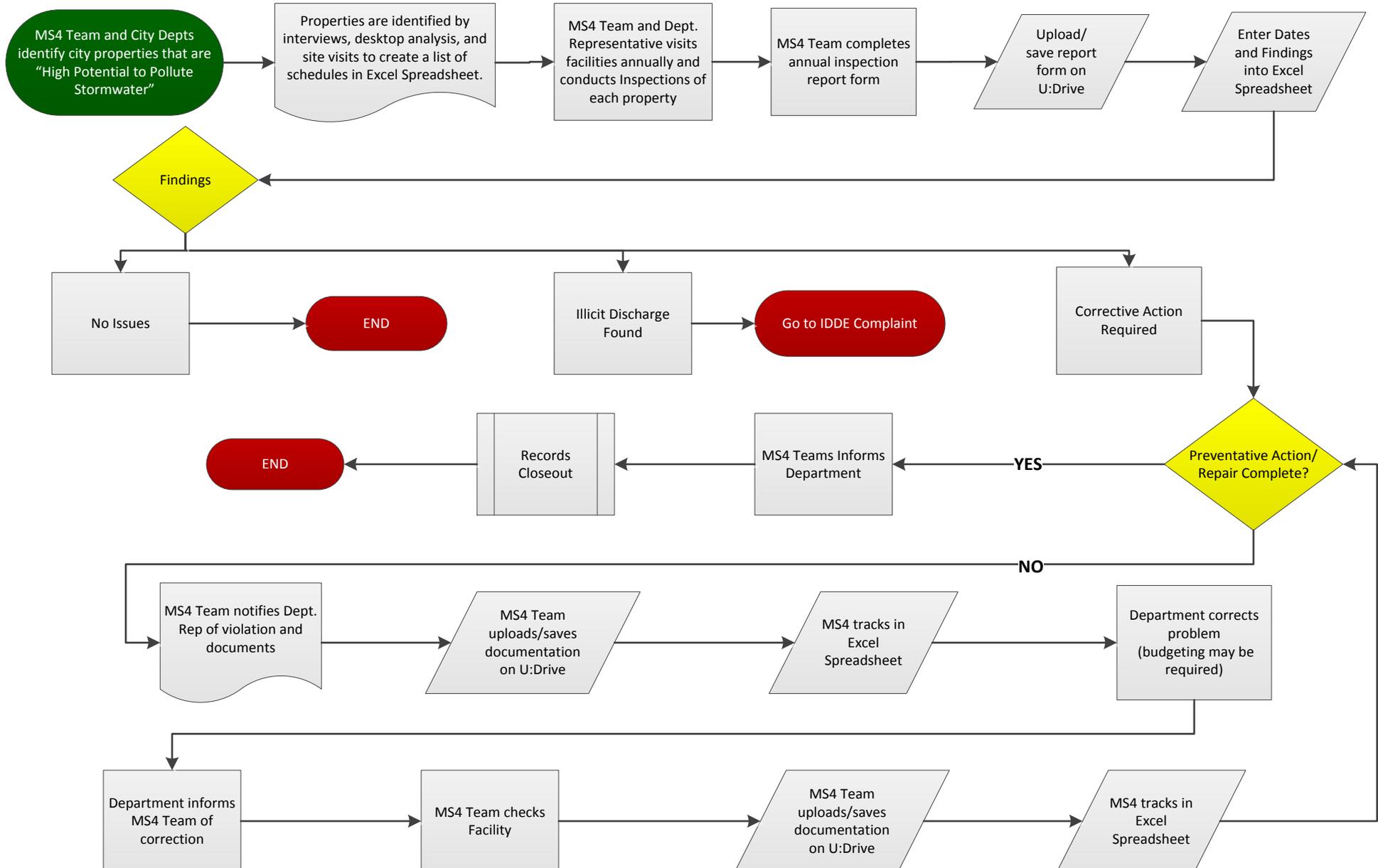
Outfall Inspections/Illicit Discharge



Good Housekeeping/Pollution Prevention

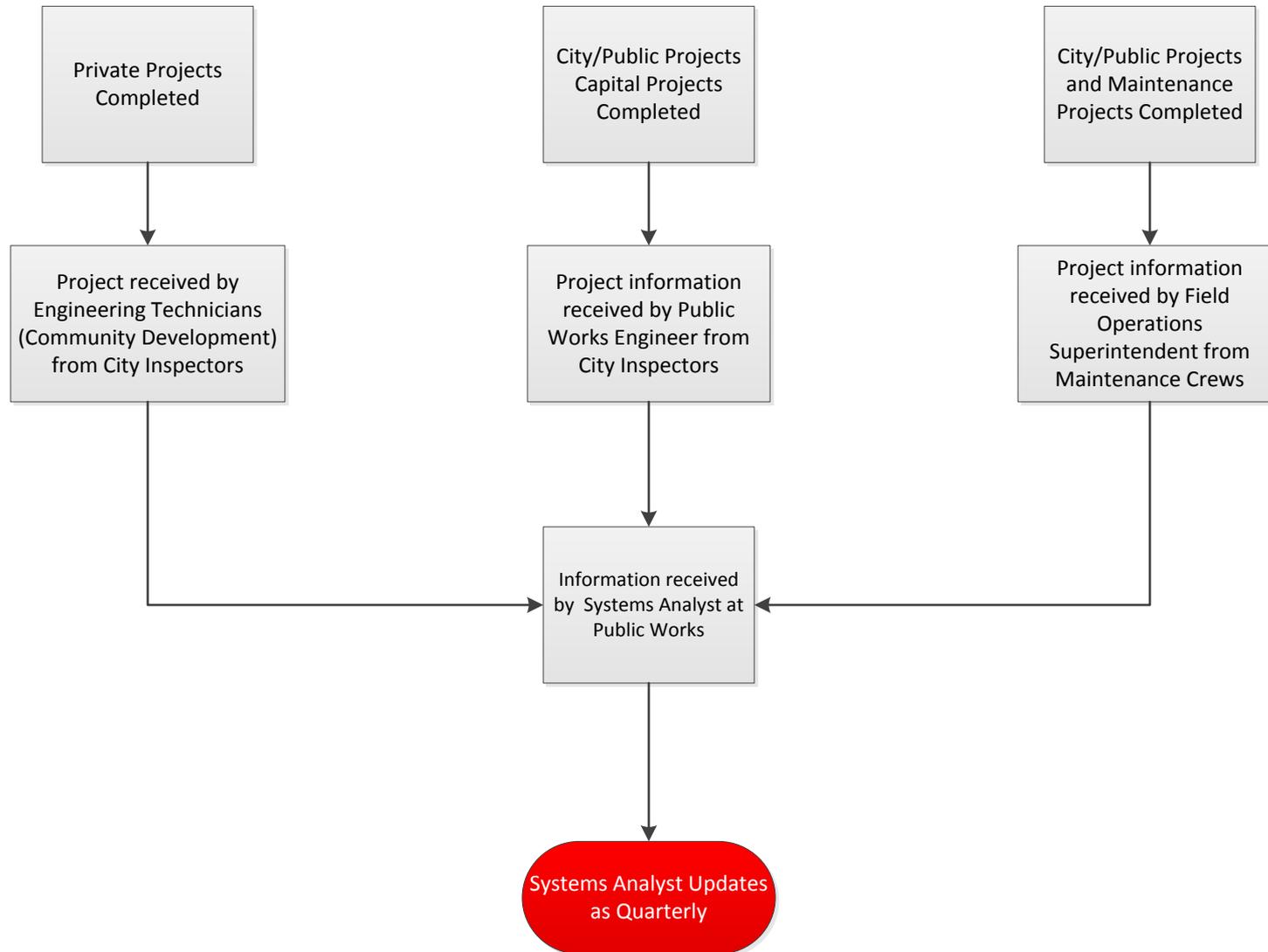
High Priority Facilities

(Properties/Areas of Operations, City Owned Only)



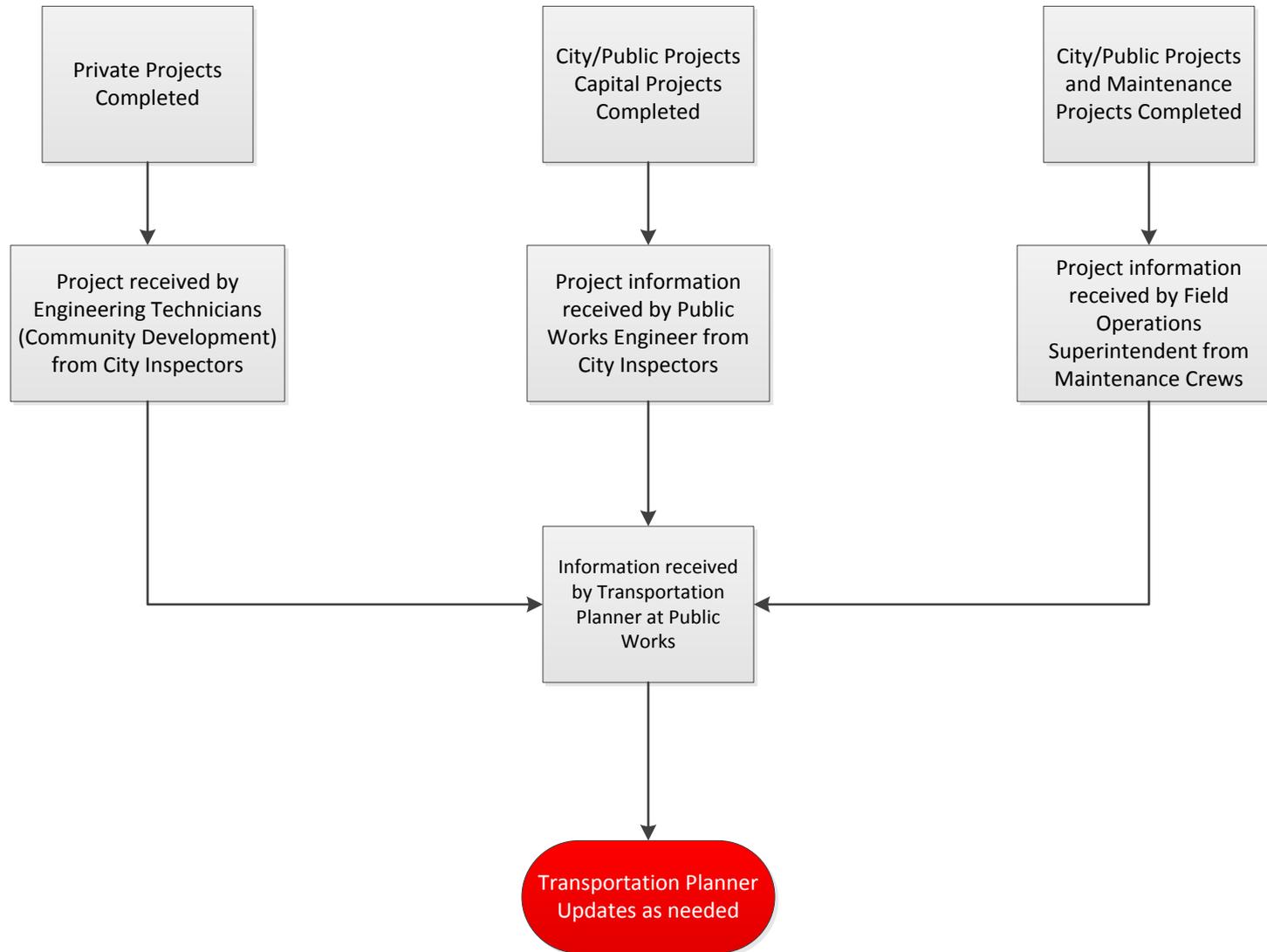
PW GIS Management Examples

(Sidewalks, Bike Facilities, Storm Pipes/Structures)



PW GIS Management Examples

(Traffic Signals Layer)



9 APPENDIX B: CAMS QUESTIONS

Responders are to complete the form.

Abbreviation Definitions:

- I/I – Infiltration/Inflow
- MS SQL – Microsoft Structured Query Language
- SCADA – Supervisory Control And Data Acquisition

Responder Company Name: _____

Asset Management System (AMS) Questions		Response
1 General		
1.1	Describe the basic nature of the user interface (web/client) and any specific features of note.	
1.2	Is the CAMS cloud-based or client-hosted?	
1.3	Describe the extent to which the CAMS is customizable to specific client needs and the level of skill and training required to do so.	
1.4	What database systems are supported?	
1.5	How easily does the CAMS integrate with other systems? Through what methods?	
1.6	Are end-user interfaces customizable? How so? What restrictions exist?	
1.7	How customizable is the end-user interface by the end-user? What types of information can they easily access? Does the interface follow a "dashboard" approach?	
1.8	Is the CAMS available across multiple platforms and devices? Is there a mobile version of the CAMS?	
1.9	What is the representative cost estimates for CAMS software installation?	
1.10	What is the representative cost estimate for CAMS implementation?	
1.11	What is the representative cost estimate for annual licensing?	
2 GIS and Asset Data		
2.1	Does the CAMS support ESRI ArcGIS Server 10.2? How and on what timetable is compatibility maintained relative to ESRI version releases?	
2.2	Does the CAMS allow for multiple GIS data-based asset types (i.e., polygraphs, points, lines)?	
2.3	Are there restrictions on count/size or complexity limitations on assets/asset types/asset groups/asset data or similar other than underlying ESRI software?	
2.4	How does the CAMS interact with the ESRI Geodatabase? Does it reside along side the database, within the database, or completely separately? Describe the advantages/disadvantages of the CAMS's architecture.	
2.5	Does the CAMS detect and support relationship classes natively?	
2.6	Does the CAMS provide the capability to directly query the ESRI Geodatabase?	
2.7	Does the CAMS provide a map interface with the capabilities to view assets, search, pan, zoom, locate, measure distances, and access asset attribute information? What other capabilities does the map interface provide?	
2.8	Does the CAMS allow for all Map Services to be hosted either through ArcGIS Online services or locally?	
2.9	Does the CAMS allow for hosting multiple services to meet the disparate needs of multiple departments?	
2.1	Does the CAMS integrate ArcGIS Locating services?	
2.11	Describe how the work activity creation works (work orders, inspections, etc...) How does the interface support associating assets (single and multiple) with specific work activities?	
2.12	Can activities (work orders, inspections, etc...) be displayed on a map? If yes, can those activities be accessed via a map?	
2.13	Can asset attributes be updated directly within the CAMS? How is this achieved? Does it utilize existing ESRI CAMSs to do so?	
2.14	How are work activities published for ArcGIS consumption?	
3 Request Management/Call Center		
3.1	Does the CAMS integrate functionality to manage calls for service (requests)? Describe the nature of this system.	

Responder Company Name: _____

Asset Management System (AMS) Questions		Response
3.2	How configurable is the request tracking functionality? Can request types/work-flows/priorities and other similar aspects be configured by client?	
3.3	How are customers managed? Can customers be classified as internal or external?	
3.4	Can a work activity be automatically generated off of a request?	
3.5	Specific to phone calls for service: how does the CAMS support efficient response? Does the CAMS integrate tools to easily communicate with the caller and record caller information?	
3.6	Does the CAMS allow for using Geocoding to geographically locate an address or specific location?	
3.7	Can work flow be associated to specific layers? For example: can a request be routed to a specific department/staff based simply on the layer?	
3.8	Can other customer databases be integrated or interfaced? Example: utility billing	
3.9	Can customer e-mail addresses be recorded and status updates be sent automatically or manually throughout the period of service?	
3.10	Can multiple requesters be attached to a request?	
3.11	Does the CAMS alert of existing similar requests to warn the service representative of possible request duplication?	
4 Work Management		
4.1	Does the CAMS provide for generating, mapping, and tracking work orders against assets?	
4.2	How configurable is the work order tracking functionality? Can work order types/work-flows/activity types/priorities and other similar aspects be configured by client?	
4.3	Can work order relationships be established between two or more work orders? Can unlimited assets and/or locations be attached to work orders?	
4.4	Are materials, labor, equipment and other costs trackable per work order?	
4.5	Are materials, labor, equipment and other costs trackable per asset?	
4.6	Can total costs be calculated for work orders/assets/projects/activities/types/etc...?	
4.7	Does the CAMS support dispatching capabilities? Describe the nature of this CAMS. Can work crews prioritize work orders? How so? By what criteria or attributes?	
4.8	Describe the ways that work orders can be generated. Can they be generated from within the map?	
4.9	Is a link between service request and work orders maintained?	
4.1	Does the CAMS allow for personnel to select and review work requests and work orders using multiple selection and sorting criteria that include all work requests and work order fields?	
4.11	Can work orders be viewed on the map labeled with pertinent information (priority, status, type, etc)?	
4.12	Can routine work orders be generated automatically (for example: routine scheduled maintenance)?	
4.13	Can multimedia files be attached to work orders? If yes, describe the nature of this content management system and its requirements.	
4.14	Are there budgeting tools? If yes, describe. Can work order be "grouped" by a project designation?	
4.15	How configurable are end user forms? Can fields be created/deleted/reordered/changed?	
4.16	Can data input fields be flagged as "required"?	
4.17	Can maintenance scores be assigned to activity types?	
4.18	Can GIS attributes be updated from the CAMS fields automatically?	
4.19	Can work orders be viewed in calendar format? Other formats?	

Responder Company Name: _____

Asset Management System (AMS) Questions		Response
5 Asset Inspection and Condition Analysis		
5.1	What types of condition information can be stored against an asset? Examples: number of leaks, number of repairs, defects, thickness measurements, anode deterioration, safety issues, etc...	
5.2	What types of inspection information can be stored against an asset? Examples: flow monitoring, I/I investigations, smoke testing, hydrant flow testing, back-flow preventions device testing, pump efficiency testing, etc...	
5.3	Are inspection forms configurable? Please describe.	
5.4	Does the CAMS calculate a "condition score"? How is this calculated? Is it configurable? Can observations be weighted within this calculation?	
5.5	Can "condition" analysis of an asset be conducted from within the map interface? Please describe.	
5.6	Can asset condition be summarized via heat maps?	
5.7	Does the CAMS provide an open methodology or interface for linking to external systems for asset condition modeling, depreciation, valuation, etc...?	
6 Utility Fees		
6.1	Does the CAMS natively integrate any revenue functionality? i.e. Storm Water Utility fees	
7 Water and Sewer		
7.1	Has the CAMS ever been integrated with SCADA systems (Genesis (32--64bit) 64 HMI by Iconics; Iconics Suite (TrendWorx, GraphWorx, AlarmsWorx); Microsoft Access; Runtime)?	
7.2	Has the CAMS ever been integrated with CCTruck - Cues: Granite XP Sewer Scoring Software?	
7.3	Has the CAMS ever been integrated with Water Valve Exercising Equipment (Wach's Valve Card)?	
7.4	Has the CAMS ever been integrated with JetStream Custom Databases?	

*The City is exploring a Storm water Utility (Fee) that may be included on the City's Real Estate Tax Bill (similar to the City of Charlottesville). The Storm water Utility Bill would be generated based on the square footage of impervious cover multiplied by a utility rate.

10 APPENDIX C: MS4 PERMIT & DRAFT CHESAPEAKE BAY TMDL GUIDANCE

Provided is the hyperlink to the General VPDES (Virginia Pollutant Discharge Elimination System) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems which describes the requirements for the MS4 program, tracking data and annual report submittals, etc.

<http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+9VAC25-890-40>

Also provided is the hyperlink to the draft guidance for the MS4 permit's Special Conditions for the Chesapeake Bay TMDL. This draft guidance was provided by the Virginia Department of Environmental Quality on May 12, 2014.

http://www.harrisonburgva.gov/sites/default/files/PublicWorks/files/stormwater/TMDLActionPlanGuidance_Draft5%202014%2005%2012.pdf

11 APPENDIX D: GIS LAYERS

Provided is a sampling of GIS layers maintained by the City of Harrisonburg.

Each layer has attribute information associated with it.

City Of Harrisonburg GIS Layers for RFI

Feature Data Set /Folder	Layer Name	Originator/Creator	Geometry Type
Census Data 2010			Feature Dataset
	Census Blocks with Population	US Census Bureau	Polygon
	Census Blocks with Population for	US Census Bureau	Polygon
CityParks	Under Development	GIS Coordinator	Feature Dataset
City Streets		GIS Coordinator	Feature Dataset
	Alleys and Undeveloped Streets	GIS Coordinator	Line
	Right of Way	GIS Coordinator	Line
	Major City Streets	GIS Coordinator	Line
	City Streets	GIS Coordinator	Line
	Intersections	GIS Coordinator	Point
2011 Contours		Sanborn Mapping	Feature Dataset
Fire Department		GIS Coordinator	Feature Dataset
	City Fire Stations	GIS Coordinator	Polygon
Flood Plain Data		FEMA	Feature Dataset
	Base Flood Elevations	FEMA	Line
	Cross Sections	FEMA	Line
	Streams for Flood Study	FEMA	Line
	100 Year Flood Plain	FEMA	Polygon
	500 Year Flood Plain	FEMA	Polygon
	Floodway	FEMA	Polygon
	Properties in Flood Plain	GIS Coordinator	Polygon
	Structures in Flood Plain	GIS Coordinator	Polygon
HEC Data		HEC	Feature Dataset

Feature Data Set /Folder	Layer Name	Originator/Creator	Geometry Type
	Fiber Optic Lines	HEC	Line
	Street Lights	HEC	Point
	Overhead Utilities	HEC	Line
	Underground Utilities	HEC	Line
	Utility Poles	HEC	Point
Parking		GIS Coordinator	Feature Dataset
	Permit Parking Areas	GIS Coordinator	Polygon
	Streets Requiring Permits	GIS Coordinator	Line
Planning and Zoning		GIS Coordinator	Feature Dataset
	Land Use Overlay 2006	GIS Coordinator	Polygon
	Zoning Ordinance Violation	GIS Coordinator	Point
	Rezoning	GIS Coordinator	Point
	Sign Permits	GIS Coordinator	Point
	Special Use Permits	GIS Coordinator	Point
	Zoning Variances	GIS Coordinator	Point
Public Works		GIS Coordinator	Feature Dataset
	Bicycle Facilities	Public Works	Line
	Bicycle Facility Priorities	Public Works	Line
	Curb and Gutter	Public Works	Line
	Garbage Pickup Areas	GIS Coordinator	Polygon
	Pedestrian Sidewalk Priorities	Public Works	Line
	Pedestrian Signal Priorities	Public Works	Point
	Plow and Salt Route Areas	GIS Coordinator	Polygon
	Plow and Salt Routes	GIS Coordinator	Line

Feature Data Set /Folder	Layer Name	Originator/Creator	Geometry Type
	Shared Use Paths	Public Works	Line
	Sidewalk	Public Works	Line
Realestate Parcel Data		GIS Coordinator	Feature Dataset
	Tax Map Block Lines	GIS Coordinator	Polygon
	Easements	GIS Coordinator	Line
	Public Right of Way	GIS Coordinator	Polygon
	Real Estate Parcel Data	GIS Coordinator	Polygon
	Zoning Overlay	GIS Coordinator	Point
Sanitary Sewer		GIS Coordinator	Feature Dataset
	Abandoned Sewer Lines	GIS Coordinator	Line
	HRRSA_LineS	Shannon Cyzick	Line
	HRRSA_MH	Shannon Cyzick	Point
	Sanitary Sewage Pump Stations	GIS Coordinator	Polygon
	Sanitary Sewer Lines	GIS Coordinator	Line
	Sanitary Sewer Manholes	GIS Coordinator	Point
School Districts		GIS Coordinator	Feature Dataset
	Elementary School Districts 2007	GIS Coordinator	Polygon
	Middle School Districts 2007	GIS Coordinator	Polygon
Storm Water		GIS Coordinator	Feature Dataset
	BMP Locations	GIS Coordinator	Point
	Ditches	GIS Coordinator	Point
	Hydrologic Units 2008	GIS Coordinator	Polygon
	Illicit Discharges	GIS Coordinator	Point
	Outfalls for MS4 Inspections	GIS Coordinator	Point

Feature Data Set /Folder	Layer Name	Originator/Creator	Geometry Type
	Ponds and Detention Facilities	GIS Coordinator	Polygon
	Project Sites	GIS Coordinator	Polygon
	Single Family Dwellings	GIS Coordinator	Polygon
	Storm Water Pipes	GIS Coordinator	Line
	Storm Structures	GIS Coordinator	Point
	Watershed Boundaries	GIS Coordinator	Polygon
Traffic Data		GIS Coordinator	Feature Dataset
	Accidents	GIS Coordinator	Point
Water		GIS Coordinator	Feature Dataset
	Abandoned Water Lines	GIS Coordinator	Line
	Fire Hydrants	GIS Coordinator	Point
	JMU Water Lines	GIS Coordinator	Line
	JMU Hydrants	GIS Coordinator	Point
	JMU Hydrant Flows	GIS Coordinator	Point
	Water Line Location Saucers	GIS Coordinator	Point
	Water System Pressure Zones	GIS Coordinator	Polygon
	Abandoned Water Valves	GIS Coordinator	Point
	Water Lines	GIS Coordinator	Line
	Water Meters	GIS Coordinator	Point
	Water Tanks	GIS Coordinator	Polygon
	Water Valves	GIS Coordinator	Point
	Water Vaults	GIS Coordinator	Polygon
Layers not in Feature Datasets			
	Cell Towers	GIS Coordinator	Point

Feature Data Set /Folder	Layer Name	Originator/Creator	Geometry Type
	City Addresses	GIS Coordinator	
	City Buildings	GIS Coordinator	Polygon
	City Limits	GIS Coordinator	Polygon
	Contours from 2011 Ortho photos	Sanborn Mapping	Line
	Index of Digital Ortho Photos	VGIN	Polygon
	2002 Digital Ortho Photos	VGIN	photo
	2006 Digital Ortho Photos	VGIN	photo
	2007 Digital Ortho Photos	VGIN	photo
	General Government Buildings	GIS Coordinator	Point
	HDPT Bus Stops	SVPDC	Points
	JMU Properties	GIS Coordinator	Line
	Parks and Recreation Properties	GIS Coordinator	Polygon
	Rail Road	GIS Coordinator	Line
	Scanned Plans	GIS Coordinator	Point
	School Properties	GIS Coordinator	Polygon
	School Locations	GIS Coordinator	Points
	Soil Types in City	DCR	Polygon
	Soil Types City and County	DCR	Polygon
	Streams in City	GIS Coordinator	Line