Agreement for Professional Services

This Agreement ("Agreement") is made on the _____25___ day of May, 2018, between the City of Eden Prairie, Minnesota (hereinafter "City"), whose business address is 8080 Mitchell Road, Eden Prairie, MN 55344, and Wenck Associates, Inc. ("Consultant"), a Minnesota corporation (hereinafter "Consultant") whose business address is 1800 Pioneer Creek Center, Maple Plain, MN 55359.

Preliminary Statement

The City has adopted a policy regarding the selection and hiring of consultants to provide a variety of professional services for City projects. That policy requires that persons, firms or corporations providing such services enter into written agreements with the City. The purpose of this Agreement is to set forth the terms and conditions for the provision of professional services by Consultant for Stormwater Inventory Data Organizaion hereinafter referred to as the "Work".

The City and Consultant agree as follows:

- 1. <u>Scope of Work.</u> The Consultant agrees to provide the professional services shown in Exhibit A (May 16, 2018 Proposal Letter from Wenck Associates) in connection with the Work. Exhibit A is intended to be the scope of service for the work of the Consultant. Any general or specific conditions, terms, agreements, consultant or industry proposal, or contract terms attached to or a part of Exhibit A are declined in full and, accordingly, are deleted and shall not be in effect in any manner.
- 2. <u>Term.</u> The term of this Agreement shall be from May 24, 2018 through December 31, 2018 the date of signature by the parties notwithstanding. This Agreement may be extended upon the written mutual consent of the parties for such additional period as they deem appropriate, and upon the terms and conditions as herein stated.
- 3. <u>Compensation for Services</u>. City agrees to pay the Consultant on an hourly basis plus expenses in a total amount not to exceed \$12,400 for the services as described in Exhibit A.
 - a. Any changes in the scope of the work which may result in an increase to the compensation due the Consultant shall require prior written approval by an authorized representative of the City or by the City Council. The City will not pay additional compensation for services that do not have prior written authorization.
 - b. Special Consultants may be utilized by the Consultant when required by the complex or specialized nature of the Project and when authorized in writing by the City.

- c. If Consultant is delayed in performance due to any cause beyond its reasonable control, including but not limited to strikes, riots, fires, acts of God, governmental actions, actions of a third party, or actions or inactions of City, the time for performance shall be extended by a period of time lost by reason of the delay. Consultant will be entitled to payment for its reasonable additional charges, if any, due to the delay.
- 4. <u>City Information</u>. The City agrees to provide the Consultant with the complete information concerning the Scope of the Work and to perform the following services:
 - a. Access to the Area. Depending on the nature of the Work, Consultant may from time to time require access to public and private lands or property. As may be necessary, the City shall obtain access to and make all provisions for the Consultant to enter upon public and private lands or property as required for the Consultant to perform such services necessary to complete the Work.
 - b. Consideration of the Consultant's Work. The City shall give thorough consideration to all reports, sketches, estimates, drawings, and other documents presented by the Consultant, and shall inform the Consultant of all decisions required of City within a reasonable time so as not to delay the work of the Consultant.
 - c. Standards. The City shall furnish the Consultant with a copy of any standard or criteria, including but not limited to, design and construction standards that may be required in the preparation of the Work for the Project.
 - d. City's Representative. A person shall be appointed to act as the City's representative with respect to the work to be performed under this Agreement. He or she shall have complete authority to transmit instructions, receive information, interpret, and define the City's policy and decisions with respect to the services provided or materials, equipment, elements and systems pertinent to the work covered by this Agreement.
- 5. <u>Method of Payment.</u> The Consultant shall submit to the City, on a monthly basis, an itemized invoice for professional services performed under this Agreement. Invoices submitted shall be paid in the same manner as other claims made to the City for:
 - a. Progress Payment. For work reimbursed on an hourly basis, the Consultant shall indicate for each employee, his or her name, job title, the number of hours worked, rate of pay for each employee, a computation of amounts due for each employee, and the total amount due for each project task. Consultant shall verify all statements submitted for payment in compliance with Minnesota Statutes Sections 471.38 and 471.391. For reimbursable expenses, if provided for in Exhibit A, the Consultant shall provide an itemized listing and such documentation as reasonably required by the City. Each invoice shall contain the City's project number and a progress summary showing the original (or amended)

- amount of the contract, current billing, past payments and unexpended balance of the contract.
- b. Suspended Work. If any work performed by the Consultant is suspended in whole or in part by the City, the Consultant shall be paid for any services set forth on Exhibit A performed prior to receipt of written notice from the City of such suspension.
- c. Payments for Special Consultants. The Consultant shall be reimbursed for the work of special consultants, as described herein, and for other items when authorized in writing by the City.
- d. Claims. To receive any payment on this Agreement, the invoice or bill must include the following signed and dated statement: "I declare under penalty of perjury that this account, claim, or demand is just and correct and that no part of it has been paid."
- 6. **Project Manager and Staffing.** The Consultant shall designated a Project Manager and notify the City in writing of the identity of the Project Manager before starting work on the Project. The Project Manager shall be assisted by other staff members as necessary to facilitate the completion of the Work in accordance with the terms established herein. Consultant may not remove or replace the Project Manager without the approval of the City.
- 7. Standard of Care. Consultant shall exercise the same degree of care, skill and diligence in the performance of its services as is ordinarily exercised by members of the profession under similar circumstances in Hennepin County, Minnesota. Consultant shall be liable to the fullest extent permitted under applicable law, without limitation, for any injuries, loss, or damages proximately caused by Consultant's breach of this standard of care. Consultant shall put forth reasonable efforts to complete its duties in a timely manner. Consultant shall not be responsible for delays caused by factors beyond its control or that could not be reasonably foreseen at the time of execution of this Agreement. Consultant shall be responsible for costs, delays or damages arising from unreasonable delays in the performance of its duties.
- 8. **Termination.** This Agreement may be terminated by either party by seven (7) days written notice delivered to the other party at the address written above. Upon termination under this provision, if there is no fault of the Consultant, the Consultant shall be paid for services rendered and reimbursable expenses until the effective date of termination. If however, the City terminates the Agreement because the Consultant has failed to perform in accordance with this Agreement, no further payment shall be made to the Consultant, and the City may retain another consultant to undertake or complete the Work identified herein.
- 9. <u>Subcontractor.</u> The Consultant shall not enter into subcontracts for services provided under this Agreement except as noted in the Scope of Work, without the express written

consent of the City. The Consultant shall pay any subcontractor involved in the performance of this Agreement within ten (10) days of the Consultant's receipt of payment by the City for undisputed services provided by the subcontractor. If the Consultant fails within that time to pay the subcontractor any undisputed amount for which the Consultant has received payment by the City, the Consultant shall pay interest to the subcontractor on the unpaid amount at the rate of 1.5 percent per month or any part of a month. The minimum monthly interest penalty payment for an unpaid balance of \$100 or more is \$10. For an unpaid balance of less than \$100, the Consultant shall pay the actual interest penalty due to the subcontractor. A subcontractor who prevails in a civil action to collect interest penalties from the Consultant shall be awarded its costs and disbursements, including attorney's fees, incurred in bringing the action.

10. <u>Independent Consultant.</u> Consultant is an independent contractor engaged by City to perform the services described herein and as such (i) shall employ such persons as it shall deem necessary and appropriate for the performance of its obligations pursuant to this Agreement, who shall be employees, and under the direction, of Consultant and in no respect employees of City, and (ii) shall have no authority to employ persons, or make purchases of equipment on behalf of City, or otherwise bind or obligate City. No statement herein shall be construed so as to find the Consultant an employee of the City.

11. <u>Insurance</u>.

- a. General Liability. Prior to starting the Work, Consultant shall procure, maintain and pay for such insurance as will protect against claims or loss which may arise out of operations by Consultant or by any subcontractor or by anyone employed by any of them or by anyone for whose acts any of them may be liable. Such insurance shall include, but not be limited to, minimum coverages and limits of liability specified in this Paragraph, or required by law.
- b. Consultant shall procure and maintain the following minimum insurance coverages and limits of liability for the Work:

Worker's Compensation	Statutory Limits
Employer's Liability	\$500,000 each accident \$500,000 disease policy limit \$500,000 disease each employee
Commercial General Liability	\$1,000,000 property damage and bodily injury per occurrence \$2,000,000 general aggregate \$2,000,000 Products – Completed Operations Aggregate \$100,000 fire legal liability each occurrence \$5,000 medical expense

Comprehensive Automobile Liability

\$1,000,000 combined single limit each accident (shall include coverage for all owned, hired and non-owed vehicles.)

Umbrella or Excess Liability \$1,000,000

- c. Commercial General Liability. The Commercial General Liability Policy shall be on ISO form CG 00 01 12 07 or CG 00 01 04 13, or the equivalent. Such insurance shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). There shall be no endorsement or modification of the Commercial General Liability form arising from pollution, explosion, collapse, underground property damage or work performed by subcontractors.
- d. Professional Liability Insurance. In addition to the coverages listed above, Consultant shall maintain a professional liability insurance policy in the amount of \$2,000,000. Said policy need not name the City as an additional insured. It shall be Consultant's responsibility to pay any retention or deductible for the professional liability insurance. Consultant agrees to maintain the professional liability insurance for a minimum of two (2) years following termination of this Agreement.
- e. Consultant shall maintain "stop gap" coverage if Consultant obtains Workers' Compensation coverage from any state fund if Employer's liability coverage is not available.
- f. All policies, except the Worker's Compensation Policy, Automobile Policy, and Professional Liability Policy, shall name the "City of Eden Prairie" as an additional insured including products and completed operations.
- g. All policies, except the Professional Liability Policy, shall apply on a "per project" basis.
- h. All General Liability policies, Automobile Liability policies and Umbrella policies shall contain a waiver of subrogation in favor of the City.
- i. All policies, except for the Worker's Compensation Policy and the Professional Liability Policy, shall be primary and non-contributory.
- j. All polices, except the Worker's Compensation Policy, shall insure the defense and indemnity obligations assumed by Consultant under this Agreement. The Professional Liability policy shall insure the defense and indemnity obligations assumed by Consultant under this Agreement except with respect to the liability for

- loss or damage resulting from the negligence or fault of anyone other than the Consultant or others for whom the Consultant is legally liable.
- k. Consultant agrees to maintain all coverage required herein throughout the term of the Agreement and for a minimum of two (2) years following City's written acceptance of the Work.
- l. It shall be Consultant's responsibility to pay any retention or deductible for the coverages required herein.
- m. All policies shall contain a provision or endorsement that coverages afforded thereunder shall not be cancelled or non-renewed or restrictive modifications added, without thirty (30) days' prior notice to the City, except that if the cancellation or non-renewal is due to non-payment, the coverages may not be terminated or non-renewed without ten (10) days' prior notice to the City.
- n. Consultant shall maintain in effect all insurance coverages required under this Paragraph at Consultant's sole expense and with insurance companies licensed to do business in the state in Minnesota and having a current A.M. Best rating of no less than A-, unless specifically accepted by City in writing.
- o. A copy of the Consultant's Certificate of Insurance which evidences the compliance with this Paragraph, must be filed with City prior to the start of Consultant's Work. Upon request a copy of the Consultant's insurance declaration page, Rider and/or Endorsement, as applicable shall be provided. Such documents evidencing Insurance shall be in a form acceptable to City and shall provide satisfactory evidence that Consultant has complied with all insurance requirements. Renewal certificates shall be provided to City prior to the expiration date of any of the required policies. City will not be obligated, however, to review such Certificate of Insurance, declaration page, Rider, Endorsement or certificates or other evidence of insurance, or to advise Consultant of any deficiencies in such documents and receipt thereof shall not relieve Consultant from, nor be deemed a waiver of, City's right to enforce the terms of Consultant's obligations hereunder. City reserves the right to examine any policy provided for under this paragraph.
- p. Effect of Consultant's Failure to Provide Insurance. If Consultant fails to provide the specified insurance, then Consultant will defend, indemnify and hold harmless the City, the City's officials, agents and employees from any loss, claim, liability and expense (including reasonable attorney's fees and expenses of litigation) to the extent necessary to afford the same protection as would have been provided by the specified insurance. Except to the extent prohibited by law, this indemnity applies regardless of any strict liability or negligence attributable to the City (including sole negligence) and regardless of the extent to which the underlying occurrence (i.e., the event giving rise to a claim which would have been covered by the specified insurance) is attributable to the negligent or otherwise wrongful act or omission (including breach of contract) of Consultant, its subcontractors, agents, employees or delegates. Consultant agrees that

this indemnity shall be construed and applied in favor of indemnification. Consultant also agrees that if applicable law limits or precludes any aspect of this indemnity, then the indemnity will be considered limited only to the extent necessary to comply with that applicable law. The stated indemnity continues until all applicable statutes of limitation have run.

If a claim arises within the scope of the stated indemnity, the City may require Consultant to:

- i. Furnish and pay for a surety bond, satisfactory to the City, guaranteeing performance of the indemnity obligation; or
- ii. Furnish a written acceptance of tender of defense and indemnity from Consultant's insurance company.

Consultant will take the action required by the City within fifteen (15) days of receiving notice from the City.

- 12. <u>Indemnification</u>. Consultant will defend and indemnify City, its officers, agents, and employees and hold them harmless from and against all judgments, claims, damages, costs and expenses, including a reasonable amount as and for its attorney's fees paid, incurred or for which it may be liable resulting from any breach of this Agreement by Consultant, its agents, contractors and employees, or any negligent or intentional act or omission performed, taken or not performed or taken by Consultant, its agents, contractors and employees, relative to this Agreement. City will indemnify and hold Consultant harmless from and against any loss for injuries or damages arising out of the negligent acts of the City, its officers, agents or employees.
- 13. Ownership of Documents. All plans, diagrams, analyses, reports and information generated in connection with the performance of the Agreement ("Information") shall become the property of the City, but Consultant may retain copies of such documents as records of the services provided. The City may use the Information for its purposes and the Consultant also may use the Information for its purposes. Use of the Information for the purposes of the project contemplated by this Agreement ("Project") does not relieve any liability on the part of the Consultant, but any use of the Information by the City or the Consultant beyond the scope of the Project is without liability to the other, and the party using the Information agrees to defend and indemnify the other from any claims or liability resulting therefrom.
- 14. Mediation. Each dispute, claim or controversy arising from or related to this agreement shall be subject to mediation as a condition precedent to initiating arbitration or legal or equitable actions by either party. Unless the parties agree otherwise, the mediation shall be in accordance with the Commercial Mediation Procedures of the American Arbitration Association then currently in effect. A request for mediation shall be filed in writing with the American Arbitration Association and the other party. No arbitration or legal or equitable action may be instituted for a period of 90 days from the filing of the request for mediation unless a longer period of time is provided by agreement of the parties. Cost of mediation shall be shared equally between the parties. Mediation shall be held in

the City of Eden Prairie unless another location is mutually agreed upon by the parties. The parties shall memorialize any agreement resulting from the mediation in a mediated settlement agreement, which agreement shall be enforceable as a settlement in any court having jurisdiction thereof.

GENERAL TERMS AND CONDITIONS

- 15. <u>Assignment.</u> Neither party shall assign this Agreement, nor any interest arising herein, without the written consent of the other party.
- 16. <u>Compliance with Laws and Regulations</u>. In providing services hereunder, the Consultant shall abide by statutes, ordinances, rules, and regulations pertaining to the provisions of services to be provided. Any violation of statutes, ordinances, rules and regulations pertaining to the services to be provided shall constitute a material breach of this Agreement and entitle the City to immediately terminate this Agreement.
- 17. <u>Conflicts.</u> No salaried officer or employee of the City and no member of the Council of the City shall have a financial interest, direct or indirect, in this Agreement. The violation of this provision renders the Agreement void.
- 18. <u>Counterparts.</u> This Agreement may be executed in multiple counterparts, each of which shall be considered an original.
- 19. <u>Damages</u>. In the event of a breach of this Agreement by the City, Contractor shall not be entitled to recover punitive, special or consequential damages or damages for loss of business.
- 20. <u>Employees</u>. Contractor agrees not to hire any employee or former employee of City and City agrees not to hire any employee or former employee of Contractor prior to termination of this Agreement and for one (1) year thereafter, without prior written consent of the former employer in each case.
- 21. **Enforcement**. The Contractor shall reimburse the City for all costs and expenses, including without limitation, attorneys' fees paid or incurred by the City in connection with the enforcement by the City during the term of this Agreement or thereafter of any of the rights or remedies of the City under this Agreement.
- 22. Entire Agreement, Construction, Application and Interpretation. This Agreement is in furtherance of the City's public purpose mission and shall be construed, interpreted, and applied pursuant to and in conformance with the City's public purpose mission. The entire agreement of the parties is contained herein. This Contract supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof as well as any previous agreements presently in effect between the parties relating to the subject matter hereof. Any alterations, amendments, deletions, or waivers of the provisions of this Contract shall be valid only when expressed in writing and duly signed by the parties, unless otherwise provided herein.

- 23. Governing Law. This Agreement shall be controlled by the laws of the State of Minnesota.
- 24. Non-Discrimination. During the performance of this Agreement, the Consultant shall not discriminate against any employee or applicants for employment because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, sexual orientation or age. The Consultant shall post in places available to employees and applicants for employment, notices setting forth the provision of this non-discrimination clause and stating that all qualified applicants will receive consideration for employment. The Consultant shall incorporate the foregoing requirements of this paragraph in all of its subcontracts for program work, and will require all of its subcontractors for such work to incorporate such requirements in all subcontracts for program work. The Consultant further agrees to comply with all aspects of the Minnesota Human Rights Act, Minnesota Statutes 363.01, et. seq., Title VI of the Civil Rights Act of 1964, and the Americans with Disabilities Act of 1990.
- 25. Notice. Any notice required or permitted to be given by a party upon the other is given in accordance with this Agreement if it is directed to either party by delivering it personally to an officer of the party, or if mailed in a sealed wrapper by United States registered or certified mail, return receipt requested, postage prepaid, or if deposited cost paid with a nationally recognized, reputable overnight courier, properly addressed to the address listed on page 1 hereof. Notices shall be deemed effective on the earlier of the date of receipt or the date of mailing or deposit as aforesaid, provided, however, that if notice is given by mail or deposit, that the time for response to any notice by the other party shall commence to run one business day after any such mailing or deposit. A party may change its address for the service of notice by giving written notice of such change to the other party, in any manner above specified, 10 days prior to the effective date of such change.
- 26. **Rights and Remedies**. The duties and obligations imposed by this Agreement and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.
- 27. <u>Services Not Provided For.</u> No claim for services furnished by the Consultant not specifically provided for herein shall be honored by the City.
- 28. <u>Severability</u>. The provisions of this Agreement are severable. If any portion hereof is, for any reason, held by a court of competent jurisdiction to be contrary to law, such decision shall not affect the remaining provisions of this Agreement.

29. **Statutory Provisions.**

a. Audit Disclosure. The books, records, documents and accounting procedures and practices of the Consultant or other parties relevant to this Agreement are subject to examination by the City and either the Legislative Auditor or the State Auditor for a period of six (6) years after the effective date of this Agreement.

- b. Data Practices. Any reports, information, or data in any form given to, or prepared or assembled by the Consultant under this Agreement which the City requests to be kept confidential, shall not be made available to any individual or organization without the City's prior written approval. This Agreement is subject to the Minnesota Government Data Practice Act, Minnesota Statutes Chapter 13 (Data Practices Act). All government data, as defined in the Data Practices Act Section 13.02, Subd 7, which is created, collected, received, stored, used, maintained, or disseminated by Consultant in performing any of the functions of the City during performance of this Agreement is subject to the requirements of the Data Practice Act and Consultant shall comply with those requirements as if it were a government entity. All subcontracts entered into by Consultant in relation to this Agreement shall contain similar Data Practices Act compliance language.
- 30. <u>Waiver</u>. Any waiver by either party of a breach of any provisions of this Agreement shall not affect, in any respect, the validity of the remainder of this Agreement.

Executed as of the day and year first written above.

CITY OF EDEN PRAIRIE		
MA		
Robert Ellis – Public Works Director		
CONSULTANT		
By: Jos Bischaff		
•		
Its: Principal		

EXHIBIT A



Responsive partner. Exceptional outcomes.

May 16, 2018

Dave Modrow

Water Resources Engineer City of Eden Prairie 8080 Mitchell Road Eden Prairie, MN 55344

Mr. Modrow:

We appreciate the opportunity to submit this proposal to assist the City of Eden Prairie with condensing and cataloging GIS data from previous basin inventories. The project will consist of organizing and formatting the data in a geodatabase that can be integrated into the City's GIS, creating a standardized data format, and building web applications for viewing the information. This proposal will serve as a prelude to the integrated stormwater management system by organizing data and streamlining data collection in the field. Below are the associated tasks with completing the project.

Data Organization

Previous basin inventories stored GIS data in open source formats as shapefiles and triangulated irregular networks (TINs). To create the TINs, point data was used from data collected from a GeoXT and survey grade GPS. Analysis was performed on the TINs to create pond bathymetric contours for the existing and depth to refusal. Volumes were also generated for the dead pool and flood pool stages for the existing and depth to refusal.

Wenck proposes to merge the shapefiles and format the layers into a file geodatabase feature class. Each of the phases will be organized in a feature dataset containing the following layers:

- Master layer of survey and bathymetric points collected;
- Points used for creating the TINs and contours;
- Contours of the existing bathymetry and depth to refusal bathymetry;
- Permanent pool areas with volumes stored in the attribute table;
- Flood pool areas with volumes stored in the attribute table;
- Convert TINs to features and convert to terrain datasets in the ArcGIS geodatabase environment. The intermediate feature layers will not be included in the final database. (Optional);
- All data layers will have the same attribute information: basin ID, phase completed, original or revised dataset; and

Geodatabase Format				
Task	Hours			
Organize Data	13			
Geodatabase Design	5			
Conversion of TINs	8			
Subtotal	\$ 2,600.00			



Data Structure and Hierarchy

Properly managing data will ensure consistent structure between all basin inventory phases. Creating a schema for the database involve determining the necessary attributes for each layer. Wenck will work with City Staff to determine the attributes associated with each layer. Below are preliminary lists of attributes associated each the layers listed above.

- GPS Survey: Basin ID, Phase Completed, Revised, Northing (Y), Easting(X), Elevation (Z), and Point Type
- Bathymetry Survey Points: Basin ID, Phase Completed, Revised, Depth of Water, Depth to Refusal, Water Surface Elevation (WSE), Water Z (WSE-Depth of Water), Sediment Z (WSE-Depth to Refusal), Sediment Accumulation
- Contours Existing: Basin ID, Phase Completed, Revised, Index (5' increments), Contour Elevation
- Contours Depth to Refusal: Basin ID, Phase Completed, Revised, Index (5' increments), Contour Elevation
- Permanent Pool: Basin ID, Phase Completed, Revised, Volume Type (Permanent Pool), Elevation, Volume, Surface Area, NURP Ratio
- Flood Pool Pool: Basin ID, Phase Completed, Revised, Volume Type (Permanent Pool), Elevation, Volume, Surface Area
- Convert TINs OR Terrains (Optional): Point Elevations will be stored in a surface with the ability to display the following: Elevation, Contours, Slope, Aspect, Nodes, and Edges
- Link predicted removal efficiencies for TSS and TP

Formalized tables with attribute types will be prepared by Wenck and reviewed by the City to standardize data structure in previous and future phases.

Data Structure and Hierarchy				
Task	Hours			
Compiling List and Discussion	6			
Formatting Data	12			
Subtotal	\$ 1,800.00			

Pond Web Map

Data compiled in the geodatabase will be made available to the City in a web application through ArcGIS Online. ArcGIS Online allows users to view data on the web through a link or traditional login through ArcGIS. Staff members not having access to a desktop license will be able to view the data through the online viewer with functionality to print and perform measurements. Changes made by Wenck will be available in real-time for viewing on the web application. Future data collection with ArcGIS for Collector will enable City staff to review bathymetry files in the field following data collection.



In addition to viewing data online, the Online platform will allow the City to download the data directly. New data posted to ArcGIS Online will be able to be queried and integrated into the City's GIS databases.

Deliverables:

Web map of pond information including bathymetry and survey information

Pond Web Map				
Task	Hours			
Initial Build of Web Application	8			
Revisions to Web Application per Discussion with City Staff	6			
Senior Review	2			
Subtotal	\$ 1,800.00			

Field Data Collection and Integrated Stormwater Management Application

To streamline data collection and evaluate data in real-time, Wenck proposes to develop a simple spatial application for photo documentation and digitizing the Stormwater System Follow-Up Checklist. The online application will utilize Collector for ArcGIS. Wenck used Collector for Phase VI to view and determine if control structures were present. This saved time by identifying features in the field without having to travel to the field multiple times.

Collector allows users to collect data and managers to view data in real-time through ArcGIS Online. Features within a map are able to edited from a phone or tablet. Additionally, multiple photos can be appended to spatial datasets. This will reduce the need to relate date/time to photos stored on a camera. Following project completion, the database can be downloaded and the photos extracted from the database.

Inspection tables will be created for the following features: inlets, outlets, stormwater BMPs and creek sections. The user will be able to click on a feature and collect annual inspection notes and document maintenance needs. The features will be symbolized based on the next year they will need to be inspected, starting with year 2018. Additional layers/features can be added per the City's request.

Application development will include the City at all phases. Wenck will convert the Stormwater System Follow-Up Checklist into an application format for the City's review. The form can be adjusted to include addition parameters that need to be collected in the field.

Wenck staff will meet with the City prior to field deployment to discuss changes. Once the application has been fully developed, a training session(s) will take place to help City staff utilize the application for the field season. In addition to a training session, Wenck will provide a technical memo or SOP on how to use the application as a refresher to the in-person



training. The application and documentation will be deployed by the Summer of 2018. This application and the pond web map will be the base for the integrated stormwater management system. Additional layers and analyses can be added to the application per the City's recommendations.

Deliverables:

- Create inspection tables for field data collection
- Create online map with stormwater network, basins, and other features per the City's request
 - Symbolize ponds base on year to be inspected, maintenance needs
- Meet with City staff to discuss web application design
- In-person training for deploying Collector application and technical memo for using the application in the field

Web Application				
Task		Hours		
Develop tables and discussion with City Staff		8		
Creation of web application		20		
Revisions to application		8		
Senior Review		4		
Training and Technical Memo/SOP		10		
Subtotal		6,200.00		

Schedule and Budget

The project team is available to start work in May 2018. The total cost for all project phases will be \$12,400. We anticipate meeting with the City to discuss final database schema by the beginning of July and building the database through the middle of August. The draft application will be available for review in mid-September and the project will be completed by December 31, 2018.



Project Team

Wenck's team for this project is listed below:

- GIS Analyst Hagen Kaczmarek
- Principal/Senior Reviewer Joe Bischoff

On behalf of the 275+ employee-owners of Wenck, thank you for this opportunity to work with the City of Eden Prairie. Should you have any questions, or need clarification of anything presented in the attached proposal, please do not hesitate to call me at 763-479-5175.

Sincerely,

Hagen Kaczmarek Wenck Associates, Inc. Environmental Scientist

763-479-5175

hkaczmarek@wenck.com

Joe Bischoff
Wenck Associates, Inc.
Principal

763-252-6829

jbischoff@wenck.com