



July 20, 2015

Ebensburg Borough Municipal Authority  
300 West High Street  
Ebensburg, PA 15931

Re: Sanitary Sewer and Storm Sewer Improvement Project  
Engineering Services Proposal  
Franklin Borough, Cambria County, PA

Dear Authority Members:

CDI-Infrastructure LLC dba L.R. Kimball is pleased to present this engineering proposal for engineering design, topographic mapping, permit application preparation, construction drawings and specifications, engineering support during bidding, engineering support during construction, and construction inspection services for the sanitary sewer and storm sewer improvement project to be funded by a PENNVEST grant/loan. The project will address the separation of storm drainage and roof drainage from sanitary sewage to reduce wet weather induced flows within the sanitary sewer system. The ultimate goal of the reduced flows in the sanitary sewer system is to allow the elimination of the two system CSOs and convey all sanitary sewage flows to the Ebensburg Wastewater Treatment Plant. This is in conformance with Ebensburg's CSO Policy Long Term Control Plan and the condition of your NDPEs permit. Elimination of the CSOs is to be completed by September 1, 2017. The project will also address stormwater improvement priority areas identified in the Ebensburg Stormwater Master Plan.

L.R. Kimball proposes to submit PENNVEST funding applications by the May 11, 2016 cut-off date. To file an application with PENNVEST, the project needs to be designed and the permits issued. This proposal addresses the engineering and mapping required to complete the design and permitting to be eligible for PENNVEST funding, as well as the engineering and inspection support through the completion of construction.

If you are in agreement with this proposal, please notify us, and L. R. Kimball will prepare a standard form of Agreement to be utilized to complete the scope of work at the fee included herein.

We look forward to this continued opportunity to work with you on your sanitary sewer project. If you have any questions, please call me at 814-472-7700 ext. 601267.

Sincerely,

A handwritten signature in black ink that reads "Cameron R. Mock".

Cameron R. Mock, PE  
Project Manager

A handwritten signature in black ink that reads "Gary J. Lapera".

Gary J. Lapera, FAIA  
Vice President

CRM/lmg

Enclosures

K:\EBG\_DRIVE\Proposals\_Presentations\C\_e\Y2015\E45 Water-Wastewater\Ebensburg Mun Auth

## SCOPE OF WORK

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This proposal is for Basic and Supplemental services consisting of engineering design, permit application preparation, topographic mapping, surveying, construction drawings and specifications, bid package, engineering support during bidding, engineering support during construction, construction inspection services, PENNVEST funding applications, and PENNVEST loan closings and administration, all for the Sanitary Sewer and Storm Sewer Improvement Project within Ebensburg Borough, Cambria County, PA.

The Sanitary Sewer Improvement Project consists of approximately 12,690 lf of 8" and 10" PVC SDR 35 sanitary sewer, 76 manholes and 200 new sanitary sewer laterals. The stormwater improvements consist of approximately 10,315 lf of 18" thru 54" diameter sewers, 128 inlets and 34 manholes. The project addresses the removal of inflow and infiltration of stormwater and groundwater from the sanitary sewer system to allow the elimination of the CSOs. This work is being performed in response to your CSO Policy Long Term Control Plan and the PA Department of Environmental Protection requirement to eliminate the two system CSOs by September 1, 2017. The stormwater component of the project addresses priority improvement areas outlined in the Ebensburg Stormwater Master Plan.

## BASIC SERVICES

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### 1. *Engineering Design Phase*

The Engineering Design Phase will use new topographic mapping for the sanitary sewer and storm sewer replacement work through-out specific areas of the Ebensburg Borough service area. The Engineering Design Phase consists of the following:

- Perform a One Call and contact existing utilities to identify the locations of existing facilities in the vicinity of the improvements. Utility notifications will be performed in accordance with Act 172, and the locations of the utilities and their owners, along with their contact-information, will be presented on the construction plan.
- Use tax maps to indicate property lines and existing property owners based upon the county tax records. This does not include a title search or plotting of deeds.
- Develop the configuration of the replacement sanitary sewers and the storm sewers.
- Prepare a construction cost estimate based on the design and construction drawings.
- Perform design calculations.
- Develop final construction drawings and specifications. The construction drawings will include:
  - Title Sheet
  - Notes, Legends and Index Sheet
  - Sanitary and Storm Plan Sheets
  - Sanitary and Storm Sewer Profiles
  - Construction Details
  - Erosion and Sedimentation Control Details
  - Highway Occupancy Permit Details
- Prepare Construction Specifications to address construction material minimum quality and construction requirements. L.R. Kimball will provide the legal advertisement, contract boiler plate, and bid form along with quantities for the bidding. The bid package will incorporate funding source special requirements.
- Incorporate comments from Ebensburg Municipal Authority (EMA) into the final package.
- Prepare the following permit applications and submissions anticipated for the subject project:
  - a. Erosion & Sedimentation Control Plan

Prepare application forms and project narrative, soils information, construction sequence, site location and construction details for submission to the Cambria County Conservation District Office. Copies of permit applications and issued permits or approvals will be provided to the EMA. Permit fees are the responsibility of EMA.

b. PADEP – Water Quality Management Application

L.R. Kimball will complete the General Information Form and the Water Quality Management Application for the proposed sewer construction for submission to the PA Department of Environmental Protection. L.R. Kimball will prepare an Engineer's Report that provides the supporting design computations for the permit submission along with the construction drawings and specifications. The permit fee is the responsibility of EMA.

c. PA Department of Transportation Highway Occupancy Permit Application.

The application, plans and construction details will be prepared for sewer construction within the PA DOT roadway rights-of-way. The submission will include traffic control standard details. The permit fee is the responsibility of EMA.

d. PADEP – Review of Stormwater Improvements

To satisfy the requirements for PENNVEST, a submission of the construction drawings and specifications must be reviewed and approved by the PADEP. A formal permit is not required for this review and approval.

e. PADEP – Outfall General Permit

L.R. Kimball will prepare and submit the General Permit(s) for the discharges of the storm sewer system into natural stream channels, where required. The application addresses the discharge facilities and erosion protection.

## **SUPPLEMENTAL SERVICES**

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1. Topographic Mapping and Surveying

L.R. Kimball will prepare topographic mapping at a scale of 1" = 50' with 1 foot contour intervals for the proposed sanitary sewer replacement area in Ebensburg Borough. The mapping will be based upon the April 17, 2014 aerial photography previously obtained for Ebensburg Borough by L.R. Kimball. The topographic mapping will be prepared using photogrammetric methods supplemented with field surveys. Field surveys will be performed to obtain first floor elevations, and where possible, basement elevations for the design of the sanitary sewer. The surveys will include the inverts of existing sanitary and storm sewers as well as other utilities apparent in the field. The field data will be added to the topographic mapping to be used for design purposes.

2. *Structure Sewer Location Determination*

To assist with the design of the new sanitary sewer system L.R. Kimball will obtain location information for existing sanitary sewers from commercial building owners. We will contact the owners of the commercial buildings within the project area to document the location and configuration of their connection to the sanitary sewer system. L.R. Kimball will prepare a letter to be sent to these property owners explaining the information being requested and the need to view their sanitary facilities. Ebensburg will assist L.R. Kimball by providing the property owners contact information.

3. *PENNVEST Funding Applications*

L.R. Kimball will prepare two grant/loan application packages. One will be for the related sanitary sewer and storm sewer improvements and the other will be for the separate storm sewer improvements identified above for submission to PENNVEST. The planning consultation was performed with PENNVEST, PADEP and EMA on June 24, 2015. Work will include preparation of the on-line digital grant applications, project narratives, project budgets, benefits, environmental benefits, project locations, project schedules, audit information, rates, and other pertinent information. Ebensburg Borough will need to provide budget information and audit reports for the last three years. A draft will be reviewed with EMA prior to submission.

#### 4. *PENNVEST Grant/Loan Closing*

Once a funding offer is received from PENNVEST, L.R. Kimball's services will include providing engineering support for the closing of the two grant/loan agreements with PENNVEST. The budgets will be updated to include actual costs to date, construction contract bids, time schedules, contract information and other supporting information. L.R. Kimball will work closely with the solicitor for EMA to assist with the closing of the loans.

#### 5. *Bidding Support Services*

L.R. Kimball will assist EMA with the bidding of the proposed sanitary sewer and storm sewer improvement project after funding offers are received. Work will include placing the public advertisement in the Johnstown Tribune Democrat, issuing bid packages to bidders, holding a pre-bid meeting, answering bidder's questions, preparing addenda, as needed, to clarify the work, participate in the bid opening, tabulate bids, review bids, and provide a recommendation to EMA regarding awarding of the construction contract.

#### 6. *Engineering Support during Construction*

L.R. Kimball will provide engineering support services and construction contract administration during construction. Engineering support services during construction will include: attending a Pre-Construction Meeting, Progress Meetings with the contractor, reviewing shop drawings, answering the contractor's questions, supervision of field inspection, preparing change orders, and reviewing contractor progress payments. Contract administration will include the preparation of PENNVEST paperwork to address the project cost reimbursement through periodic pay requests from the funding agency. The PENNVEST process is digital on-line and requires entering all contractor estimates, interest, administration, engineering, legal, permitting costs, change orders to request reimbursement.

Upon successful completion of the project, L.R. Kimball will provide EMA with a Certification of Project Completion. The Construction Phase Services fee is based on an eight month construction period.

Record drawings will be prepared based upon "red line" marked up drawings required to be produced by the contractor. L.R. Kimball will revise the electronic drawing files to depict changes shown on the "red line" mark ups. L.R. Kimball will provide EMA with one set of record drawings.

#### 7. *Construction Inspection Services*

Construction inspection services are performed to ensure that the construction is being completed in general conformance with the contract documents. L.R. Kimball will provide monthly project status reports to the EMA at the regularly scheduled authority meetings. The construction inspector will prepare a daily inspection report documenting construction activities, inspections performed, testing observed for conformance with the intent of the construction drawings and technical specifications. L.R. Kimball will also conduct a final inspection and prepare a punch list of incomplete work or work that is not in accordance with the plans and specifications. The Construction Phase Services fee is based on a thirty four week construction period.

#### 8. *Wage Rate Verification*

EMA is required, as a condition of acceptance of the PENNVEST funding, to verify the Contractor's compliance with wage rates for the Ebensburg Sanitary Sewer and Storm Sewer Replacement Project. This verification consists of conducting confidential interviews with hourly employees of the contractor or subcontractors working on the project site, cross checking of collected data with certified payrolls, and documenting compliance for PENNVEST review.

##### a. Interviews

L.R. Kimball will interview hourly employees of the contractor or subcontractors working on the project site and document findings using the U.S. Department of Labor Standard Form 1445. Based upon PADEP guidance, all employees on site will be interviewed during the first two weeks of the project. Subsequent "spot checks" will be performed by interviewing all employees on a monthly basis in conjunction with the frequency of the Borough's requests for PENNVEST funding drawdowns. As the contract time is 240 days, a total of eight rounds of interviews

are anticipated.

b. Payroll Verification

Upon receipt of subsequent weekly certified payrolls, submitted by the contractor or subcontractors on U.S. Department of Labor Standard Forms WH347, L.R. Kimball will compare wage, benefit, and craft classification data collected in the interviews with that reported on the certified payrolls. L.R. Kimball will then compare this data against the wage rates to determine whether the employee was properly classified and paid. Any discrepancies will be reviewed with the employee and reported to the contractor or subcontractor for correction. All documentation will be filed for subsequent use in conjunction with any potential audit of the project.

9. Easement Plat Preparation

L.R. Kimball will prepare property plat easements for permanent and temporary construction easements for the sanitary sewer and storm sewer improvements, as needed. It is expected that the majority of the sanitary sewer improvements will occur within existing roadway rights-of-way. Sanitary sewers along High Street and Center Street may require permanent and temporary sewer easements. Storm sewer improvements in some locations will require construction on private property due to the terrain and will require the acquisition of temporary and permanent easements. For proposal purposes it is anticipated that a total of 30 easement plats will be prepared for use by the solicitor to acquire the sanitary and storm sewer easements.

*The following services are not part of this proposal:*

- Assistance in connection with bid protests and re-bidding or renegotiating contracts for construction and materials, equipment or services.
- Permit fees will be paid by the owner and are not part of this proposal.

## **PROJECT SCHEDULE**

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The following schedule is proposed for the Ebensburg Sanitary Sewer and Storm Sewer Improvement Project. Variations to this schedule may occur as a result of conditions beyond the control of L.R. Kimball. L.R. Kimball will cooperate with EMA to attempt to meet this schedule.

<u>Phase</u>	<u>Completion Date</u>
Mapping & Surveying	August 2015
Engineering	January 2016
Permit Issuance	April 2016
PENNVEST Funding Application	May 11, 2016
Construction Bidding	August 2016
PENNVEST Closing	October 2016
Complete Construction	August 2017

**ENGINEERING FEE PROPOSAL**

L.R. Kimball proposes to provide the professional engineering services for all phases of work indicated on a cost plus not to exceed basis, based upon the actual time involvement. The engineering support and construction inspection is dependent on the contractor's work schedule and could vary. The following is a summary of the estimated Basic and Supplemental Services fees:

**BASIC SERVICES**

	<b>Sanitary &amp; Storm Services</b>	<b>Storm Services</b>
1. Engineering Design Phase	\$ 258,000.00	\$ 92,000.00

**SUPPLEMENTAL SERVICES**

1. Topographic Mapping and Surveying	\$ 20,000.00	\$ 8,000.00
2. Structure Sewer Location Determination	\$ 29,000.00	\$ 0.00
3. PENNVEST Funding Application	\$ 5,000.00	\$ 5,000.00
4. PENNVEST Grant/Loan Closing	\$ 3,500.00	\$ 3,500.00
5. Bidding Support Services	\$ 14,000.00	\$ 8,000.00
6. Engineering Support During Construction	\$ 79,000.00	\$ 16,000.00
7. Construction Inspection Services (Cost Plus basis) (Estimate based on two inspectors for 34 weeks)	\$ 187,000.00	\$ 40,000.00
8. Wage Rate Verification	\$ 9,000.00	\$ 4,000.00
9. Sewer Easement Plats (assume 20 at \$375.00/each)	\$ 7,500.00	\$ 7,500.00
<b>Supplemental Services Total</b>	<b>\$ 354,000.00</b>	<b>\$ 92,000.00</b>

<b>Subtotal</b>	<b>\$ 612,000.00</b>	<b>\$ 184,000.00</b>
<b>Agreement Not to Exceed Amount</b>		<b>\$ 796,000.00</b>
<b>Payment Terms: Net 30 Days</b>		

258,000  
 92,000  
 54,000  
 13  
 \$ 417,000  
 pre-Pennvest