



## **BERNS, CLANCY AND ASSOCIATES**

PROFESSIONAL CORPORATION

**ENGINEERS • SURVEYORS • PLANNERS**

January 27, 2014

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DAN ROTHERMEL  
ZACHARY SCHMIDT

MICHAEL BERNS  
OF COUNSEL

**Ms. Susan Chavarria**  
**CCRPC Regional Planning Manager**  
1776 East Washington Street  
Urbana, Illinois 61802

**RE: PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES  
FOR PRELIMINARY ENGINEERING REPORT  
FOR STORM WATER MANAGEMENT IN THE  
WILBUR HEIGHTS SUBDIVISION  
IN UNINCORPORATED CHAMPAIGN COUNTY, ILLINOIS**

Dear **Ms. Chavarria**:

Berns, Clancy and Associates (BCA) is pleased to submit this proposal for professional services for a storm water drainage study for the **Wilbur Heights Subdivision** in accordance with your RFP received on January 10, 2014. We are excited by the opportunity to work with the Regional Plan Commission (RPC) on this long-time nuisance drainage and flood mitigation project. We are pleased to discuss modification of this proposal with you at any time so that we can precisely accomplish your goals for the Preliminary Engineering Report for this project.

### **PROJECT CONTACTS**

Chris Billing, P.E., Vice President will be designated the senior contact person for this project. You may contact him regarding this proposal. As principals, Thomas Berns, P.E., L.S., President and Edward Clancy, P.E., L.S. Vice President will be responsible for contract decisions, staff allocation, quality assurance reviews and survey aspects of the services.

All work will be performed by staff at our main Urbana office.

### **STATEMENT OF QUALIFICATIONS AND EXPERIENCE**

Berns, Clancy and Associates is a local broad-based, Civil Engineering / Surveying / Planning Firm with specific experience related to the unique requirements of this drainage project. Our staff to be assigned to this effort has the relevant experience and necessary expertise for this project ranging from the analysis, to surveying; to preliminary drainage system planning; to preliminary hydraulic design; to document preparation; and construction cost estimating services. We are available to provide any continuing project services that might follow - - through to eventual construction.

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## **PROBLEM NARRATIVE**

We understand this densely developed residential area was initially constructed 50 to 60 years ago with limited drainage infrastructure primarily comprised of surface drainage and shallow roadside ditches. Over time, adjacent areas developed changing the conditions at the boundaries of **Wilbur Heights**. Also, little maintenance was performed which allowed the minimal drainage system to deteriorate. The drainage outlets that serve this subdivision appear to have deteriorated as well. Given the constraints of limited downstream drainage facilities, the reluctance to implement anything that would require annexation of this unincorporated subdivision area, and likely limited funds to devote to a sophisticated drainage solution, the likely direction a solution may take is an enhancement of the internal drainage system in some fashion back to its maximum functioning abilities.

The description and materials you provided are quite informative and do provide guidance toward reasonable options. We attach your RFP to this proposal as a further description of the project and a requirement outline for your desired scope of work. Efforts to study the situation, analyze options, and prepare a Preliminary Engineering Report will be quite direct. We have several options worthy of consideration already that must first run the test of analysis.

One key consideration to viable solutions will be to re-establish some semblance of the original drainage outlets that serve this subdivision. Downstream lands that accept runoff from the **Wilbur Heights Subdivision** appear to include the Canadian National Railroad. We understand your initial inclination to find a solution that would avoid coordination with the railroad, but the analysis must be performed first to identify outlet alternatives. Discussions of reasonable alternatives will follow.

## **PROPOSED SCOPE OF WORK AND DELIVERABLES**

We provide the following outline of services and deliverables and commensurate fee and expense summary as a detailed scope of work for your consideration:

### **Phase 1 – Investigations**

- a. Assemble existing subdivision and drainage data from RPC.
- b. Assemble existing infrastructure data from our files.
- c. Request informative supplemental information from other sources such as Beaver Lake Drainage District, Somer Township, Urbana Township, City of Champaign, and the Canadian National Railroad.
- d. Prepare working exhibits for the study area.
- e. Perform a field reconnaissance to catalog existing drainage conditions and infrastructure. A trip during significant rainfall events may be very informative to the analysis. This task is weather and snow dependent.
- f. Supplement field reconnaissance with a limited field survey if warranted to supplement the understanding of the existing conditions. This task is weather and snow dependent.

- g. Public liaison / meetings with stake holders may be performed by RPC with reports to BCA. BCA is available to participate in this liaison effort during this phase as requested as an additional service on an hourly basis.

Principal of the Firm .....	1 hour at \$140 per hour.....	\$ 140
Project Manager .....	8 hours at \$110 per hour.....	\$ 880
Design Engineer .....	12 hours at \$ 56 per hour.....	\$ 672
2 Person Survey Crew .....	8 hours at \$126 per hour.....	\$ 1,088
Surveyor .....	2 hours at \$ 70 per hour.....	\$ 140
Drafter.....	8 hours at \$ 70 per hour.....	\$ 560
Technician .....	4 hours at \$ 60 per hour.....	\$ 240
.....		<u>\$ 3,640</u>
Miscellaneous Expenses .....		<u>\$ 360</u>
<b>Total Fees and Expenses for</b>		
<b>Phase 1 – Investigations .....</b>		<b>\$ 4,000</b>

**Phase 2 – Drainage Analysis**

- a. Perform limited hydrologic / hydraulic analysis of subdivision drainage as needed.
- b. Develop a variety of potential solution options for consideration.
- c. Review initial options with RPC staff to reduce the candidate solutions to the most reasonable / viable for continued development.
- d. Refine most viable options and prepare an initial draft of exhibits and summaries for review.
- e. Meet with RPC staff to review a semi-final draft of solution options and summaries.
- f. We anticipate RPC may review this preliminary information with area residents and stakeholders that may be involved in the solution. BCA is available to participate in this communication effort if requested as an additional service on an hourly basis.

Principal of the Firm .....	2 hours at \$140 per hour.....	\$ 280
Project Manager .....	18 hours at \$110 per hour.....	\$ 1,980
Design Engineer .....	50 hours at \$ 56 per hour.....	\$ 2,800
Hydrologist.....	6 hours at \$ 92 per hour.....	\$ 552
Drafter.....	20 hours at \$ 70 per hour.....	\$ 1,400
Technician .....	16 hours at \$ 60 per hour.....	\$ 960
.....		<u>\$ 7,972</u>
Miscellaneous Expenses .....		<u>\$ 728</u>
<b>Total Fees and Expenses for</b>		
<b>Phase 2 – Drainage Analysis .....</b>		<b>\$ 8,700</b>

**Phase 3 – Preliminary Engineering Report**

- a. Prepare a draft of the Preliminary Engineering Report summarizing the investigations, analysis and proposed solutions.
- b. Submit the preliminary draft for review by RPC, then meet to discuss comments, questions, initial findings and refinement of solutions with RPC staff.
- c. Complete the study efforts and formalize documentation.
- d. Prepare preliminary opinions of construction and project costs for the two (2) (minimum) recommended options.
- e. Prepare an outline of drainage improvements to be undertaken in conjunction with Wilbur Avenue pavement improvements (to be undertaken by others).
- f. Prepare a list of minimal improvements the township can perform on an interim basis.
- g. Prepare a Preliminary Engineering Report in a final form to be used for neighborhood acceptance and funding applications (originals suitable for copying and PDF files).
- h. Public liaison / meetings with stake holders may be performed by RPC with reports to BCA. BCA is available to participate in this liaison effort during this phase as requested as an additional service on an hourly basis.

Principal of the Firm .....	2 hours at \$140 per hour.....	\$ 280
Project Manager .....	20 hours at \$110 per hour.....	\$ 2,200
Design Engineer .....	35 hours at \$ 56 per hour.....	\$ 1,960
Hydrologist.....	4 hours at \$ 92 per hour.....	\$ 368
Drafter.....	16 hours at \$ 70 per hour.....	\$ 1,120
Technician .....	20 hours at \$ 60 per hour.....	\$ 1,200
.....		<u>\$ 7,128</u>
Miscellaneous Expenses .....		<u>\$ 772</u>
<b>Total Fees and Expenses for</b>		
<b>Phase 3 – Preliminary Engineering Report.....</b>		<b>\$ 7,900</b>

**SUMMARY**

Based on the scope of work outlined above, we propose a "Not-to-Exceed" fee as follows:

<b>Phase 1 – Investigations .....</b>	<b>\$ 4,000</b>
<b>Phase 2 – Drainage Analysis .....</b>	<b>\$ 8,700</b>
<b>Phase 3 – Preliminary Engineering Report.....</b>	<b><u>\$ 7,900</u></b>
<b>Total "Not-to-Exceed" Fee .....</b>	<b>\$ 20,600</b>

## **PROPOSED STAFF**

Chris Billing is assigned as project manager and will lead and oversee all work performed. He has a master's degree in hydrology and leads many of our drainage and storm water management project. Most noteworthy was the \$7.7 million dollar Boneyard Creek Flood Control Project on the University of Illinois campus. He routinely performs studies and prepares storm water management plans for new development and improvement projects of a wide variety.

Assisting as design engineer and hydrologist will be Zach Schmidt with a bachelor's degree in storm water management. He will be responsible for details of the analysis, carry out the investigations, and develop details as may be required.

Don Wauthier, with advanced training in hydrology and hydraulics and vast experience with agricultural, rural and urban drainage improvements will augment the option evaluation efforts and review recommendations from a practicality and buildability standpoint. This project calls for a straight-forward practical approach to render a measurable improvement given the limitations and constraints imposed on the project.

Support staff will augment the efforts of this proposed team.

## **PROPOSED PROJECT SCHEDULE**

We will formalize a project schedule in consultation with you. However, we offer this initial plan as a starting point for consideration:

### **Phase 1 – Investigations**

2 – 3 weeks from authorization to proceed, however subject to weather for the field work and to replies from others for additional data investigation. Tasks in this phase of services are weather dependent and may impact the start of services.

### **Phase 2 – Drainage Analysis**

4 – 5 weeks, subject to timely reviews by RPC and exclusive of public review / liaison efforts that may be desired.

### **Phase 3 – Preliminary Engineering Report**

4 – 5 weeks, though dependent on review schedules by RPC staff.

**SUMMARY**

We appreciate this opportunity to submit this proposal to you, and we look forward to hearing from you in the near future. This proposal is valid for thirty (30) days from this date. After that period it is subject to review and renegotiation. **We are prepared to expand or contract the scope of services and the resultant fees and expenses outlined above to suit your requirements.**

If you find the above proposal acceptable, please sign in the space provided below and return a complete copy of this proposal to us as our formal authorization to proceed. If you have any questions or comments, please contact us at any time. **Thank you.**

Sincerely,

**BERNS, CLANCY AND ASSOCIATES, P.C.**

**APPROVED:**

  
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County Board Chair

  
Thomas B. Berns, P.E., L.S., President

  
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Date

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Enclosure  
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