AGREEMENT BETWEEN OWNER AND ENGINEER FOR ENGINEERING SERVICES

Section I - General

Whereas, the City of Crossville has reason and cause to perform such project as is beneficial to them and others as applicable, and

Whereas, the City of Crossville specifically intends to construct Water Systems Improvements in Crossville, Tennessee specifically, replacement of water mains and hydrants on Old Lantana Road, County Seat Road, and Southbend Drive hereafter referred to as the Project, and

Whereas, ECE Services is a partnership performing consulting civil and environmental engineering services in Tennessee, and

Whereas, ECE Services agrees to provide engineering services to perform the various engineering services required for the design and construction of said Project;

This Agreement has been made this the ______th day of ________, 2015 for and in consideration as set forth in the following paragraphs by and between the City of Crossville, hereafter referred to as the OWNER, and ECE Services, hereafter referred to as the ENGINEER.

The term ENGINEER shall be used to refer to ECE Services and the Engineer of Record for the Project simultaneously. The Engineer of Record for the Project shall be Chuck F. Burgess, P.E. who possesses Tennessee Certificate No. 104467 to practice engineering in the State of Tennessee.

Witnesseth, that for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed:

Section II - Basic Engineering Services

Part A Report Phase — The ENGINEER shall furnish the following usual and customary engineering services comprising the Report Phase of the Project:

1. No work anticipated in this phase.

Part B Preliminary Design Phase — The ENGINEER shall furnish the following usual and customary engineering services comprising the Preliminary Design Phase of the Project:

- 1. Meet with OWNER for one initial onsite Preliminary Design Review Meeting to review the Preliminary Plans. We assume the project will let in one contract without state or federal funding.
- Meet with OWNER for one onsite meeting to discuss OWNER'S cost estimate.
- 3. Meet with OWNER for one onsite meeting to coordinate location marking of existing utilities.
- 4. Meet with OWNER for one initial onsite project walk through to review the Preliminary Plans and identify site features.
- 5. Meet with OWNER to obtain existing system and property information.

- 6. Perform hydraulic analysis of the proposed water mains.
- 7. Develop a project base map from existing system information obtained from OWNER.
- 8. Perform design topographic survey of project area to identify
- Perform all necessary topographic survey and CAD services to align recorded legal property descriptions with proposed project line locations. No property survey will be included as part of the base services.
- 10. Prepare Preliminary Plans consisting of water main layout drawings clearly showing the planned location of main features and sizes based upon the hydraulic analysis.
- 11. Meet with OWNER for one Preliminary Design Review Meeting to review the Preliminary Plans.
- 12. All travel time and cost will be included in the base services rate for the preliminary design phase.
- 13. No travel time will be billed as part of our work.
- 14. No Per Diem will be required for any of our services or charged.

Part C Final Design Phase — The ENGINEER shall furnish the following usual and customary engineering services comprising the Final Design Phase of the Project:

- 1. Prepare Final Plans reflecting any comments from OWNER on the Preliminary Plans adding details and contract quantity estimates.
- 2. Meet with OWNER for one initial onsite Final Plans Review Meeting to review the Final Plans.
- 3. Prepare Technical Specifications and Bid Documents for the Project.
- 4. Meet with OWNER for one Final Design Review Meeting to review the Bid Documents, and Technical Specifications. Engineer will make any necessary revisions to documents resulting from the OWNER's review of the documents.
- 5. No submittals of documents for funding agency review is required.
- 6. Prepare TDOT 2011-1 for utility permit with in TDOT ROW.
- 7. Submit TDOT 2011-1 and construction plan for TDOT permit.
- 8. Develop a project construction time frame and contract length with the owner. For the purpose of this agreement we have assumed a construction period of 120 days.
- 9. All travel time and cost will be included in the base services rate for the final design phase.
- 10. No travel time will be billed as part of our work.
- 11. No Per Diem will be required for any of our services or charged.

Part D Bidding Phase – The ENGINEER shall furnish the following usual and customary engineering services comprising the Bidding Phase of the Project to assist the OWNER with Soliciting Bids for the Project:

- 1. Assist the OWNER with advertisement for bids including writing the advertisement and mailing it to prospective bidders.
- Furnish a copy of plans and bid documents to each prospective bidder only after payment by the same of a rate to be set by the ENGINEER. The ENGINEER reserves the right to not provide plans or other documents to any party unless directed by the OWNER or the party can clearly define their interest to the satisfaction of the ENGINEER.
- 3. Issue Addenda to the bid documents as necessary.

- Develop an engineering estimate of the construction cost of the Project. If the OWNER wants a more
 accurate construction cost, he shall wait until bids are opened or shall consult with a construction
 estimator.
- 5. Attend the bid opening and open bids.
- Make a recommendation of award to a Contractor's bid after reviewing all bids in detail and checking bids for errors.
- 7. Prepare a Notice of Award for construction contract.
- 8. All travel time and cost will be included in the base services rate for the bidding phase.
- 9. No travel time will be billed as part of our work.
- 10. No Per Diem will be required for any of our services or charged.

Part E Construction Phase – The ENGINEER shall furnish the following usual and customary engineering services comprising the Construction Phase of the Project:

- 1. Attend a preconstruction conference with the OWNER and contractor.
- 2. Assist in the signing of the construction contracts.
- 3. Assist OWNER to issue a Notice to Proceed to contractors to begin construction work.
- 4. Review shop drawings, submittals, schedules, and working drawings furnished by contractors for conformance with the design concept and intent.
- Interpret the intent of the drawings and specifications to protect the OWNER against defects and/or deficiencies in the construction on the part of any contractor. However, the Engineer does not guarantee the work or performance of any contractor. The Engineer does not and will not inspect the work area for safety or legal compliance with wage and employment laws or similar regulations. Engineer will not be responsible for the construction techniques, sequences, methods, or work of Contractor in any manner.
- 6. Prepare all necessary construction change orders for any modifications or changes that occur.
- 7. Provide general quality assurance of the construction work of the contractors as construction progresses to determine that the work is in conformance with the design and contract documents. Engineer will perform a site inspection at critical points in the work and no more frequently than once a week during the progress of the Work. Additional inspections and meetings will be attended by Engineer under Additional Services.
- 8. Engineer will provide the on-site services of construction administration during the Construction Phase at the direction of the OWNER. We understand controlling cost for your project is very important and propose necessary construction administration services for the entire 120 day construction period, include in our base rate. This should cover typical construction administration task from start to finish. Vehicle allowance and mileage will be included in the rate.
- 9. Review all applications for partial and final payment by contractors and subsequently submit them with proper documentation to OWNER for payment.
- Engineer will provide the services of a Resident Project Representative during the Construction Phase at the direction of the OWNER. Vehicle allowance and mileage will be included in the project travel allowance.
- 11. No travel time will be billed as part of our work.
- 12. No Per Diem will be required for any of our services or charged.

Section III - OWNER'S Responsibilities

It shall be the responsibility of the OWNER to perform or have performed all of the following in a timely and accurate manner so as to not delay the work of the ENGINEER.

- 1. The OWNER shall provide the ENGINEER with a copy of all paperwork, documents, and correspondence in reference to the Project.
- 2. The OWNER shall arrange for full access to the site(s) and surrounding properties such that the necessary field work can be performed by ENGINEER.
- 3. The OWNER shall make correct and timely payments to the ENGINEER as set out in Section IV.
- 4. The OWNER shall prepare necessary easement documents.
- 5. The OWNER shall acquire or have acquired all property, easements, and Right-of-Ways necessary for the construction of the Project. The ENGINEER will assist the OWNER in this matter at the direction of the OWNER. Payment for the services of the ENGINEER under this item shall be in accordance with Section V.
- 6. OWNER will submit and pay for all advertising media used for the advertising of the bids with the exception of the ENGINEER mailing advertisements to potential contractors on a list that the ENGINEER shall maintain.
- 7. The OWNER shall prepare applications, submit, and pay for all permitting fees associated with the Project. The ENGINEER will assist the OWNER in this matter at the direction of the OWNER. Payment for the services of the ENGINEER under this item shall be in accordance with Section V.

Section IV - Compensation for Basic Services

1. The OWNER shall compensate the ENGINEER for the basic services provided under Section II of this contract, except as modified, as a lump sum fee. The work consist of <u>Water Systems Improvements in Crossville</u>, <u>Tennessee specifically, replacement of water mains and hydrants on Old Lantana Road, County Seat Road, and Southbend Drive</u>.

The total engineering fee under this section shall be a lump sum fee of \$ 98,850, which includes preliminary design, final design, bidding, construction administration services and project travel cost allowance for all phases including RPR.

We propose full-time Resident Project Representative as hourly services for \$25,200 based on an estimated 4-month construction period. Utilizing 17 weeks at 5-days per week and excluding 22 weather delay days (from State of Tennessee Weather Delay Standard) yields 63 full time workdays at \$50 per hour.

- 2. The ENGINEER will submit invoices periodically to the OWNER but not more often than monthly for services rendered. Invoices are due upon receipt. The invoices may include all work performed to the date of the invoice.
- 3. Invoices that have not been paid within thirty days of the invoice date shall be subject to a late charge of 1.5% for each and every month or portion of a month that the invoice remains past due.
- 4. If the OWNER disputes any invoice or item on any invoice, he shall notify the ENGINEER in writing within ten days of the invoice.

Section V - Additional Services and Compensation for Additional Services

The following services may be performed by the ENGINEER at the direction of the OWNER but shall be compensated and considered as additional services under this Agreement.

- 1. Property surveys for Right-of-Ways, easements, and other special surveys that may be required.
- 2. Laboratory tests, borings, specialized geological, soils, hydraulic, or other studies that may be recommended by the ENGINEER above the level of services provided under Basic Services above.
- 3. Necessary mapping, maps, and data for water rights, water adjudication, and litigation.
- 4. Redesigns ordered by the OWNER after approval of preliminary or final plans by the OWNER.
- 5. Appearances before courts or boards on matters of litigation or hearings related to the Project.
- 6. Preparation of environmental impact assessments, reports, or environmental impact statements.
- 7. Preparation of documentation required to obtain environmental permits for construction that are not specifically listed under Basic Services.
- 8. Providing the services of construction administration beyond base service scope during construction of the Project.
- 9. Providing the services of a Resident Project Representative beyond base service scope during construction of the Project.

The ENGINEER shall submit an itemization of charges for the above items on any invoice. Any such invoice will be due and payable upon the date of such invoice. Payment provisions of Section IV apply to all invoices submitted by ENGINEER. Additional services that are performed by professionals or companies outside of ECE Services shall be paid at a factor of 1.20 times the amount invoiced to the ENGINEER. Additional services that are performed by the ENGINEER under this section shall be paid for at the ENGINEER'S standard hourly rates and unit charges in effect at the time the services are performed. The following schedule of hourly rates and unit charges are currently in effect anticipated to be applicable to this Project.

Service Description	Unit	Hourly Rate or Unit Charge
Project Engineer	Hour	\$135.00
Design Engineer	Hour	\$100.00
Construction Administration	Hour	\$75.00
CAD Technician	Hour	\$75.00
Survey Crew	Hour	\$110.00
Resident Project Representative	Hour	\$50.00

Section VI - Approval

The provisions of this Agreement shall be enforced under the laws of the State of Tennessee. If any provision of this Agreement is deemed unenforceable by a court of law or similar legal process, it shall not affect the enforcement of any other provision of this Agreement which shall remain intact and binding.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below.

IMWC	ER:
(S	EAL)
В	/ :
	Hon. James Mayberry
	Mayor
Da	ate:
El	NGINEER:
B\	Mark J. Bury
	Mr. Chuck F. Burgess, P.E.
	Consulting Engineer
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