### **City of Fayetteville Staff Review Form**

2015-0275

**Legistar File ID** 

7/7/2015

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Paul Libertini
6/18/2015
Engineering /
Development Services Department

Submitted By
Submitted Date
Division / Department

### **Action Recommendation:**

A Resolution approving Supplemental Agreement #1 to the contract with McClelland Consulting Engineers, Inc. in the amount of \$164,480.71 for engineering services for the Maple St. & Lafayette St. Bridge Rehab. Project and approve a Budget Adjustment.

### **Budget Impact:**

4520.9555.5314.0	00	Sales Tax Construction Bonds			
Account Numbe	r	_	_		
06035.1101		Lafayette & Maple Bridges			
Project Number	•	F	Project Title		
Budgeted Item?	Yes	Current Budget	\$	140,831.00	
_		Funds Obligated	\$	129,064.65	
		Current Balance	\$	11,766.35	
Does item have a cost?	Yes	Item Cost	\$	164,480.71	
Budget Adjustment Attached?	Yes	Budget Adjustment	\$	164,481.00	
<del>-</del>		Remaining Budget	\$	11,766.64	
revious Ordinance or Resolution #	43-13			V20140	
Original Contract Number:	2282	Арр	oroval Date:		

Comments:

### **MEETING OF JULY 7, 2015**

**TO:** Mayor and City Council

THRU: Don Marr, Chief of Staff

Jeremy Pate, Development Services Director

Chris Brown, City Engineer

FROM: Paul Libertini, Staff Engineer

**DATE:** June 18, 2015

SUBJECT: A Resolution approving Supplemental Agreement #1 to the contract with

McClelland Consulting Engineers, Inc. in the amount of \$164,480.71 for engineering services for the Maple St. & Lafayette St. Bridge Rehab. Project

and approve a Budget Adjustment.

### **RECOMMENDATION:**

Staff recommends City Council approval of Supplemental Agreement No.1 as the additional work described below is warranted and necessary to adequately manage the construction phase of the historic bridges rehabilitation project, and approval of the attached Budget Adjustment.

### **BACKGROUND:**

This project is located in central Fayetteville on the east side of the University of Arkansas campus on Maple Street and Lafayette Street over a single track of the Arkansas & Missouri Railroad. It is the intention of the City of Fayetteville to restore both historic bridges to their original beauty and to thus set a high example for restoration for a municipality in Arkansas and the United States.

McClelland Consulting Engineers, Inc. along with their subconsultant, Horner & Shifrin, Inc. were engaged by the City to provide professional engineering design services to prepare construction plans for the restoration of Fayetteville's two historic bridges and gain approval of the Arkansas State Historic Preservation Officer (SHPO) so that the bridges would retain their status on the National Register of Historic Places.

The project has successfully navigated the challenging Federal process obtaining approval of the construction plans and specifications. The project has been advertised for construction bids and the bid opening has been scheduled for Friday, June 26<sup>th</sup>.

### **DISCUSSION:**

The proposed Supplemental Agreement No. 1 attached to this memo provides for additional work to be performed by McClelland Consulting Engineers, Inc. and their subconsultant, Horner & Shifrin, Inc. on the project. This additional work is for Title II Services which includes construction management, inspection including specialty construction methods, and quality assurance testing that were not included in the original contract.

### **BUDGET/STAFF IMPACT:**

Construction Management Services will be paid from the Sales Tax Construction Bond Fund.

## Supplemental Agreement No. 1 Job No. 040618 FAP. No. BRN-9142 (29) Maple St. & Lafayette St. Bridge Restoration (Fayetteville)(S) Washington County

<b>Date</b>	

WHEREAS, the City of Fayetteville, Arkansas ("Owner) and McClelland Consulting Engineers, Inc. ("Consultant") entered into an Agreement for Engineering Services on March 5th, 2013; and,

**WHEREAS**, representatives of the City of Fayetteville, Arkansas requested work in addition to that defined in the Agreement.

**NOW THEREFORE**, the following modifications will be made to the Agreement to include the additional work requested:

### **MODIFICATIONS:**

- 1) The "Contract Ceiling Price" (Section 1.4) is increased from \$279,045.45 to \$443,526.16.
- 2) The "Title II Services Ceiling Price" (Section 1.17) is increased from \$29,001.29 to \$193,482.00.
- 3) See Attachment A for modifications to Section 3 and 9.
- 4) See Attachment B for modifications to Appendix A -- Justification of fees and costs.
- 5) The completion date (Section 17.1) for Job No. 040618 is changed from December 5th, 2013 to December 1st, 2015.

**IN WITNESS WHEREOF**, the parties execute this Supplemental Agreement No. 1, to be effective upon the date set out above.

McClelland Consulting Engineers, Inc.	City of Fayetteville, Arkansas
BY: Denton	BY:
President, Fayetteville	Mayor

### Attachment A

### 3.1.1.1. SCHEDULE OF SALARY RANGES

<u>Labor Classification</u> Principal Engineer	<u>Labor Rate Range</u> \$41.27 - \$65.00
Project Engineer	\$25.84 - \$48.00
Engineering Technician	\$16.50 - \$30.00
Construction Observer	\$15.00 - \$34.00
Chief Draftsman	\$22.00 - \$25.75
Draftsman	\$15.38 - \$22.00
Survey Technician	\$17.00 - \$30.00
Registered Land Surveyor	\$21.50 - \$38.50
Field Survey (1-man or Rodman)	\$16.50 - \$26.00
Survey (2- man or Robotic) Crew	\$17.00 - \$30.00
Geotech Engineer	\$26.66 - \$41.40
Soils Lab Supervisor	\$16.25 - \$21.50
Soils Lab Technician	\$12.90 - \$19.25
Office Administration	\$14.50 - \$22.00
Clerical	\$10.50 - \$20.00

### 9.3. Engineering Management Services

- McClelland Consulting Engineers, Inc. shall be responsible for engineering management services necessary to verify that the Project is completed and ready for acceptance by AHTD and the City of Fayetteville. This will require interpretation of the plans and contract documents, coordination of changes to the project, assistance in processing of change and contract documents, coordination of changes to the project, assistance in processing of Change Orders and supplemental agreements, resolving disputes, claims analysis, and all other engineering management tasks normally handled by a Resident Engineer. These tasks include, but are not limited to the following:
  - Schedule and conduct a pre-construction conference for the Project. Document the conference in accordance with AHTD procedures.
  - 2. Reconcile any and all conflicts between any utilities, storm drainage or roadway components.
  - 3. Review and monitor the Construction Contractor's work schedule and make recommendations to the City of Fayetteville regarding any changes, or needed changes, to the schedule. Review credentials and qualifications of the Construction Contractor's personnel to ascertain compliance with construction contract requirements regarding said personnel.

- 4. Maintain a complete set Project records on each Project to include daily diaries, quantities for pay items, progress estimates, material deliveries, submittals, as-builts, and correspondence.
- 5. Maintain a daily record of each pay item and every two weeks prepare a tabulation of each pay item for the progress estimate. Quantities will be based on daily records and calculations. All such records will be retained by the McClelland Consulting Engineers, Inc..
- 6. McClelland Consulting Engineers, Inc. shall conduct periodic construction meetings on the Project with the Construction Contractor and their subcontractors, the City of Fayetteville's project Representative and other interested parties to review the work schedule, plan changes, construction problems or other matters. The results of these meetings will be documented on the Resident Engineer's weekly summary.
- 7. Track and maintain a log on all Construction Contractor submittals including requests for information, shop drawings, catalog cuts, and/or samples. An up to date status of each submittal must be maintained at all times through the approval stage. McClelland Consulting Engineers, Inc. shall review and approve or reject the shop drawings. Reviewed submittals are to be returned to the Construction Contractor for follow-on action. McClelland Consulting Engineers, Inc. shall complete their review in a timely manner so they do not slow the progress on the Construction Contractor. Deficiencies will be immediately reported to the City of Fayetteville's Project Representatives.
- 8. Identify and monitor Project permit requirements and notify the Construction Contractor and the City of Fayetteville immediately when violations or potential violations occur.
- Upon notice by the Construction Contractor of pending claims for extra work or work beyond the original scope, maintain records indication the approximate cost of such work performed by the Construction Contractor.
- 10. Analyze and make recommendations to the City of Fayetteville's Project Representative on all requests received from the Construction Contractor for time extensions, contract changes, requests for information, extra work and proposals.
- 11. Coordinate all contract changes with the Construction Contractor, the City of Fayetteville and others as required.
- 12. Process Supplemental Agreements pursuant to the construction contracts for necessary changes and recommended solutions to the City of Fayetteville.
- 13. Monitor the Construction Contractor's compliance with construction contract previsions in regard to payment of predetermined wage rates in accordance with the City of Fayetteville's procedures. This will include subcontractor compliance.
- 14. Monitor each Construction Contractor's compliance with contract provisions in regard so Equal Employment Opportunity and Affirmative Action. Coordinate corrective actions with the City of Fayetteville's Project Representative.

- 15. The Construction Contractor is fully responsible for the means and methods of jobsite safety for his construction personnel. McClelland Consulting Engineers, Inc. will monitor the Construction Contractor's compliance to jobsite safety; however, it is the Construction Contractor's obligation to enforce adherence to the Federal, State and local laws, rules and regulations concerning construction and jobsite safety.
- 16. Prepare the necessary Project close-out documents to include the final estimate and all supporting records, plus on set of red lined, as-built contract documents.
- 17. Perform all inspections and reporting required for the National Pollutant Discharge Elimination System (NPDES) permits issued by the Arkansas Department of Environmental Quality in accordance with procedures contained in AHTD's Resident Engineer's Manual and Erosion and Sedimentation Control Manual.
- 18. Perform all required inspections, testing and any other required services necessary to insure the City of Fayetteville is eligible to receive 80% federal reimbursement for the cost of construction.
- 19. Prepare periodic monthly pay applications for submittal to AHTD for reimbursement.
- 20. McClelland Consulting Engineers, Inc. does not make any representation as to the legal sufficiency of contracts it helps to coordinate and the City of Fayetteville if solely responsible for determining that all contracts meet its legal requirements.

### 9.4. Project Inspection

- McClelland Consulting Engineers, Inc. shall be responsible for monitoring the Contractor's on-site construction operations and inspecting materials entering into the work as required. McClelland Consulting Engineers, Inc. shall keep detailed, accurate records of the Contractor's daily operations in accordance with City of Fayetteville's procedures, rules, standards and policies.
- The frequency and scope of inspections will vary with the work activity being performed; however, McClelland Consulting Engineers, Inc. shall perform inspection services in accordance with the AHTD Residence Engineer's Manual and other procedures, policies, directives and industry accepted standards. The inspector's hours shall parallel the Contractor's work hours.
- McClelland Consulting Engineers, Inc. is responsible for performing any required off-site batch plant or factory inspections of fabricated or manufactured items to be incorporated into the project.

### 9.5. Testing

- McClelland Consulting Engineers, Inc. shall perform Project-site sampling and testing of component materials and completed work items to ensure the materials and workmanship incorporated in the project are in substantial conformity with the plans, specifications and contract provisions. McClelland Consulting Engineers, Inc. shall meet the minimum sampling frequencies and other provision as contained in the AHTD "Manual of Field Sampling and Testing Procedure".
- McClelland Consulting Engineers, Inc. shall perform all on-site sampling of materials and such testing of materials and completed work items that are not normally required to verify conformance with the contract documents. The inspection and sampling of materials and components, and testing required at locations remote from the vicinity of the project will be performed by the McClelland Consulting Engineers, Inc. including off-site batch plants.
- McClelland Consulting Engineers, Inc. shall provide the services of a
  Testing Laboratory to perform materials testing of the construction
  materials incorporated in the work. The Testing Laboratory shall
  perform material tests in accordance with the AHTD "Manual of Field
  Sampling and Testing Procedures". The Testing Laboratory shall be
  an accredited participant in the American Society of Testing Materials
  (ASTM), Aggregate Materials Reference Laboratory (AMRL) and the
  Concrete Reference Laboratory (CCRL).
- The Testing Laboratory shall furnish a Laboratory Supervisor who shall be responsible for all Project-site materials testing, documentation, and reporting of test results. The Testing Laboratory shall report test results by phone or fax machine or e-mail on critical construction items within four hours after the test results have been obtained. A written report shall be prepared and sent to the Consulting within 48 hours after test results are known on any test performed by the Testing laboratory.
- McClelland Consulting Engineers, Inc. shall be responsible for on-site job control samples to determine the acceptability of all materials and completed work items on the basis of either test results or verification of a certification, certified mill analysis, AHTD stamp, etc.
- McClelland Consulting Engineers, Inc. shall maintain a log of each individual test record in accordance with the AHTD material testing manual.

# SUBCONSULTANT Supplemental Agreement No. 1 Job No. 040618 FAP. No. BRN-9142 (29) Maple St. & Lafayette St. Bridge Restoration (Fayetteville)(S) Washington County

Date

WHEREAS, the McClelland Consulting Engineers, Inc. ("Consultant") and Horner & Shifrin, Inc. (Subconsultant) entered into an Agreement for Engineering Services on March 5th, 2013; and,

WHEREAS, representatives of the City of Fayetteville, Arkansas requested work in addition to that defined in the Agreement.

**NOW THEREFORE**, the following modifications will be made to the Prime Agreement to include the additional work requested:

### **MODIFICATIONS:**

- 1) See Attachment A for modifications to Section 2.2 and 3.1 of the Subconsultant Agreement.
- 2) See Attachment B for modifications to Appendix A -- Justification of fees and costs

**IN WITNESS WHEREOF**, the parties execute this Supplemental Agreement No. 1, to be effective upon the date set out above.

McClelland Consulting Engineers, Inc.

Horner & Shifrin, Inc.

Y Wings

President Favetteville

BY: Michael Bancolek

### **Attachment A**

### 2.20 Engineering Management Services

- Provide engineering assistance during construction.
- Attend pre-construction conference.
- Attend one coordination meeting
- Site visits at key stages of Maple St. bridge construction including:
  - Removal of superstructure
  - Spandrel beam cantilever re-construction
  - Final Inspection
- Site visits at key stages of Lafayette St. bridge construction including:
  - Hydro-demolition and overlay
  - o Final Inspection
- Complete As-built structural plans

### 3.1 Schedule of Salary Ranges

Labor Classification	Labor Rate Range
Professional I	\$70.00 - 77.00
Professional II	\$62.02 - 68.22
Professional III	\$49.96 - 57.71
Professional IV	\$44.84 - 51.57
Professional V	\$37.71 – 42.42
Professional VI	\$29.11 – 35.26
Professional VII	\$23.16 – 28.96
Technician I	\$33.65 – 37.02
Technician II	\$31.18-33.21
Technician III	\$24.28 - 26.71
Technician IV	\$15.43 – 16.97
Word Processor II	\$19.64 – 21.60
Clerical II	\$29.13 – 32.04

### Appendix A - Manhour Estimate Summary Sheet Maple Street Bridge 01940 Bridge Replacement Lafayette Street Bridge 01941 Bridge Replacement

Lafayette Street and Maple Street Title II Professional Services	
Direct Labor Costs	
Engineering Management Services	\$ 35,202.60
Project Inspection	\$ 86,138.25
Testing	\$ 7,387.94
Sub Total Labor Costs	\$ 128,728.79
Other Direct Costs	
Construction Material Testing	\$ 1,285.50
Mileage	\$ 443.70
Design Consultant - Horner & Shifrin, Inc.	\$ 34,022.72
Sub Total Direct Costs	\$ 35,751.92
Total Lafayette Street and Maple Street Title II Professional Services	\$ 164,480.71

### Appendix A - Title II Services - Consultant Engineering Management Services

### Maple St. 01940 and Lafayette St. 01941 Bridge 01941 Replacement

**Manhower Estimate: Engineering Management Services** 

### **Direct Labor Costs**

Direct Labor Costs	Estimated				
Job Classification	Hours		Labor Rate		
Principal Engineer	100	\$	53.50	\$	5,350.00
Project Engineer	80	\$	41.50	\$	3,320.00
Construction Observer	50	\$	28.00	\$	1,400.00
Clerical	50	\$	20.00	\$	1,000.00
Cicrical	30	Ψ	20.00	\$	1,000.00
				\$	_
				\$	_
				\$	_
				\$	_
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$ \$	-
				\$	-
				\$	-
Total Labor Hours	280				
Subtotal Raw Labor				\$	11,070.00
Forward Pricing	0.00%			\$	_
Total Direct Salary				\$	11,070.00
Tiltle II Multiplier 3.18				\$	35,202.60
Total Labor Costs				\$	35,202.60
Detailed Other Direct Costs					
	Number of				
Death and /Occurring	Units				
Postage/Courier	0.5	- ¢	0.44	œ	
Postage Courier (FedEX)	07		21.00	\$ \$	-
Travel - Meetings	E c	a. \$	21.00	\$	
Mileage	120 m	ni. \$	0.51	\$	61.20
Printing/Reproduction	120	π. Ψ	0.01	\$	-
8.5x11 Black & White	ea	a. \$	0.05	\$	_
8.5x11 Color		a. \$	0.25	\$	_
11x17 Black & White		a. \$	0.10	\$	-
11x17 Color	ea	a. \$	1.00	\$	-
Black & White Printing		.f. \$	0.09	\$	-
Color Printing	S.	.f. \$	1.00	\$	-
Black & White Scanning	S.	.f. \$	0.35	\$	-
Color Scanning	S.	.f. \$	5.00	\$	-
Binding	е	a. \$	2.00	\$	-
Other Direct Costs				\$	-
Total Other Direct Costs				\$	61.20
TOTAL COST				\$	35,263.80
·					,

### Appendix A - Title II Services - Consultant Engineering Management Services

### Maple St. 01940 and Lafayette St. 01941 Bridge 01941 Replacement

Manhower Estimate: Project Inspection

### **Direct Labor Costs**

	Estimated				
Job Classification	Hours		Labor Rate		
Principal Engineer	50		\$ 53.50	\$	2,675.00
Project Engineer	75		\$ 41.50	\$	3,112.50
Construction Observer	725	1	\$ 28.00	\$	20,300.00
Clerical	50	1	\$ 20.00	\$	1,000.00
				\$	-
				\$	-
				***	-
				\$	-
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				\$	-
				\$	-
				<b>5</b>	-
				\$	-
				\$	-
Tetal Labor Harris	000			Ψ	_
Total Labor Hours	900			Φ.	07.007.50
Subtotal Raw Labor				\$	27,087.50
Forward Pricing	0.00%			\$	-
Total Direct Salary				\$	27,087.50
Tiltle II Multiplier 3.18				\$	86,138.25
Thus it Maidphot				Ψ	00,130.23
Total Labor Costs				\$	86,138.25
Total Labor Costs					
-	Number o	f			
Total Labor Costs	Number o	f			
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier				\$	
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier Postage	Units	oz.	\$ 0.44	\$	
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier Postage Courier (FedEX)	Units	oz.	\$ 0.44 \$ 21.00	<b>\$</b> \$ \$	
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings	Units	oz.	\$ 21.00	\$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage	Units	oz.		\$ \$ \$ \$ \$	
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier     Postage     Courier (FedEX)  Travel - Meetings     Mileage Printing/Reproduction	700 r	oz. ea.	\$ 21.00 \$ 0.51	\$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White	700 r	oz. (3	\$ 21.00 \$ 0.51 \$ 0.05	\$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color	700 r	DZ. \$ 9a. \$	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25	\$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White	700 r	oz. () ea. () ea. () ea. () ea. () ea. ()	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10	\$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color	700 r	DZ. \$\frac{1}{2} \text{ea.} \$\	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock	700 r	DZ. \$ 9a. \$	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock	700 r	DZ. \$ 9a. \$	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock    Black & White Printing	700 r	DZ. \$ 9a. \$	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	86,138.25
Postage/Courier Postage Courier (FedEX)  Travel - Meetings Mileage Printing/Reproduction 8.5x11 Black & White 8.5x11 Color 11x17 Black & White 11x17 Color Black & White Card Stock Color Card Stock Black & White Printing Color Printing	700 r	DZ. \$3	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09 \$ 1.00	<b>\$</b>	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock    Color Card Stock    Black & White Printing    Color Printing    Black & White Scanning	700 r	DZ. Sea. Sea. Sea. Sea. Sea. Sea. Sea. Sea	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09 \$ 1.00 \$ 0.35	<b>\$</b>	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage  Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock    Color Card Stock    Black & White Printing    Color Printing    Black & White Scanning    Binding	700 r	DZ. Sea. Sea. Sea. Sea. Sea. Sea. Sea. Sea	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09 \$ 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	86,138.25
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock    Color Card Stock    Black & White Printing    Color Printing    Black & White Scanning    Binding  Other Direct Costs	700 r	DZ. Sea. Sea. Sea. Sea. Sea. Sea. Sea. Sea	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09 \$ 1.00 \$ 0.35	<b>\$</b>	357.00 - - - - - - - - - - - -
Total Labor Costs  Detailed Other Direct Costs  Postage/Courier    Postage    Courier (FedEX)  Travel - Meetings    Mileage  Printing/Reproduction    8.5x11 Black & White    8.5x11 Color    11x17 Black & White    11x17 Color    Black & White Card Stock    Color Card Stock    Color Card Stock    Black & White Printing    Color Printing    Black & White Scanning    Binding	700 r	DZ. Sea. Sea. Sea. Sea. Sea. Sea. Sea. Sea	\$ 21.00 \$ 0.51 \$ 0.05 \$ 0.25 \$ 0.10 \$ 1.00 \$ 0.25 \$ 0.85 \$ 0.09 \$ 1.00 \$ 0.35	<b>\$</b>	86,138.25

### Appendix A - Title II Services - Consultant Engineering Management Services

### Maple St. 01940 and Lafayette St. 01941 Bridge 01941 Replacement

Manhower Estimate: Testing

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Direct Labor Costs						
	Estimat					
Job Classification	Hours	3		abor Rate		
Principal Engineer	2		\$	53.50	\$	107.00
Project Engineer	4		\$	41.50	\$	166.00
Geotech Engineer	12		\$	32.00	\$	384.00
Clerical Soils Lab Supervisor	10 10		\$ \$	20.00 21.50	\$ \$	200.00 215.00
Soild Lab Technician	65		\$	19.25	\$	1,251.25
Cond Lab Teorniolan	00		Ψ	10.20	\$	-
					\$	-
					\$	-
					\$ \$	-
					\$	-
					\$	-
					\$ \$	-
					\$	-
					\$	-
					\$ \$	-
Total Labor Hours	103				Ψ	
Subtotal Raw Labor	100				\$	2,323.25
	0.000	1				2,323.25
Forward Pricing	0.00%	O			\$	<u>-</u>
Total Direct Salary					\$	2,323.25
Tiltle II Multiplier 3.18					\$	7,387.94
Total Labor Costs					\$	7,387.94
Detailed Other Direct Costs						
	Number					
Dooto an /Coursins	Units					
Postage/Courier Postage		07	¢	0.44	\$	
Courier (FedEX)		oz. ea.	\$ \$	21.00	\$	-
Travel - Meetings		ca.	Ψ	21.00	\$	_
Mileage	50	mi.	\$	0.51	\$	25.50
Construction Materials Testing			•		\$	-
Compressive Strength of Cylinders	15	ea.	\$	20.00	\$	300.00
Nuclear Density Gauge Fee	25	ea.	\$	12.00	\$	300.00
Soils Classification	2	ea.	\$	110.00	\$	220.00
Proctor Curve	2	ea.	\$	150.00	\$	300.00
Asphalt Density Test	4	ea.	\$	35.00	\$	140.00
			\$	0.85	\$	-
			Φ	0.09	\$ \$	-
			Φ	1.00 0.35	\$ \$	-
			***	5.00	\$	_
			\$	3.00	\$	_
			\$	1.50	\$	-
			\$	2.00	\$	-
Other Direct Costs					\$	-
I=					•	4 005 50
Total Other Direct Costs					\$	1,285.50

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### Appendix A - Title II Services - Sub Consultant Engineering Management Services

### Maple St. 01940 and Lafayette St. 01941 Bridge 01941 Replacement

Manhower Estimate: Engineering Management Services

Direct	

Direct Labor Costs						
Joh Classification	Estimat			Maximum		
Job Classification Professional II	Hours 0			Labor Rate 68.22	\$	
Professional III	24		\$ \$	57.71	\$	1,385.04
Professional IV	162		ψ	51.57	\$	8,354.34
Professional VI	20		\$ \$ \$	35.26	\$	705.20
Technician II	8		Φ	33.21	\$	265.68
Technician ii	0		Φ	33.21		203.00
					\$	-
					\$	-
					\$	-
					\$	=
					\$	-
					\$ \$	-
					\$	-
					\$	=
					\$	=
					\$	-
					\$	-
					\$	-
Total Labor Hours	214					
Subtotal Raw Labor					\$	10,710.26
Forward Pricing	0.00%	<u>'</u>			\$	-
•	0.007	•				10 740 00
Total Direct Salary					\$	10,710.26
Title II Multiplier - 2.75					\$	29,453.22
Total Labor Costs					\$	29,453.22
Detailed Other Direct Costs						
Dotailed Cirici Direct Cools	Number	· of				
	Units					
Postage/Courier						
Postage		oz.	\$	0.44	\$	-
Courier (FedEX)		ea.	\$	21.00	\$	-
Communications - Long Distance &			\$		\$	
Conference Calls			φ			=
Travel - Meetings					\$	-
Mileage	4900	mi.	\$	0.575	\$	2,817.50
Lodging	12	day	\$	100.00	\$	1,200.00
Food	12	day	\$	46.00	\$	552.00
Incidentals		day	\$	5.00	\$	=
Printing/Reproduction					\$	-
8.5x11 Black & White		ea.	\$	0.08	\$	=
8.5x11 Color		ea.	\$	0.49	\$	-
11x17 Black & White		ea.	\$	0.16	\$	-
11x17 Color		ea.	\$	0.75	\$	=
Black & White Card Stock		ea.	\$	0.25	\$	-
Color Card Stock		ea.	\$ \$ \$	0.85	\$	-
Black & White Printing		s.f.	\$	0.25	\$	_
Color Printing		s.f.	\$	1.00	\$	_
Black & White Scanning		s.f.		0.35	\$	_
Color Scanning		s.f.	\$ \$	5.00	\$	_
Mounting Boards (3/16")		s.f.	\$	3.00	\$	_
Laminating (Large Scale)		s.f.	\$	1.50	\$	_
Binding		ea.	\$	2.00	\$	- -
Other Direct Costs		ou.	Ψ	2.00	\$	_
AHTD Permit Review Fees	Lump S	ıım			\$	_
SWPPP (City & State)					Φ	-
` ,	Lump Sum Lump Sum				\$ \$	-
Railroad Permit(s)	Lump S		æ	20.00	Φ	-
County Filing Fees		ea.	\$	20.00	\$	-
Robotic Total Station		hrs.	\$ \$	50.00 50.00	\$ \$	-
GPS Survey Equipment		hrs.	φ	50.00		-
Total Other Direct Costs					\$	4,569.50
TOTAL COST					\$	34,022.72