# City of Fayetteville Staff Review Form

A. 7
Jacobs Engineering Group, Inc.
Amendment No. 4
Page 1 of 20

# City Council Agenda Items and Contracts, Leases or Agreements

11/20/2012

City Council Meeting Date Agenda Items Only

Chris Brown CB	Engine	eering		Development Service	es
Submitted By		Division	2	Departm	
		Action Require	d:		
A resolution approving Supplemental A engineering services for the Fayettevill \$768,033.41.		nt #4 to the contrac	ct with Jacobs I		
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\$153,606.68 2009 Str. Sales Tax \$614.426.73 federal grapt/expense	_\$	J:	08,074.00	Flyover (Fl	FFDC)
\$614,426.73 federal grant/expense  Cost of this request	19	Category / Project Bo	udget	Program Category	
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4470.0947.4309.00				Charat Israel	
4470.9470.5314.00	-\$	Fords Head to De		Street Impro	
Account Number	\$	Funds Used to Da 40	04,467.32	Program / Project C	Jategory Name
06035.1700	-\$		<u> </u>	2009 Street	Bonds
Project Number	-	Remaining Balan	ce	Fund Na	ame
Department Director  City Attorney		UZIZ Date  LI-5-12 Date	· ·		146-08 7/14/2008 2061
Finance and Internal Services Director  An Man  Chief of Staff  Mayor		Date  11-5-2012  Date  11-7-12  Date	Received in Clerk's Offi Received Mayor's Off	in ENTERED	5 RCVD
Comments:					

# THE CITY OF FAYETTEVILLE, ARKANSAS DEPARTMENT CORRESPONDENCE

# CITY COUNCIL AGENDA MEMO

Council Meeting of November 20, 2012

To:

Mayor and City Council

Thru:

Don Marr, Chief of Staff

Jeremy Pate, Development Services Director

From:

Chris Brown, City Engineer

Date:

November 2, 2012

Subject:

A Resolution approving Supplemental Agreement No. 4 to the contract with Jacobs Engineering Group, Inc. for engineering services for the Fayetteville Expressway Economic

Development Corridor Project in the amount of \$768,033.61 and approve a Budget

Adjustment.

# PROPOSAL:

The Fayetteville Expressway Economic Development Corridor (FEEDC) is a federally funded project that will provide better traffic flow and better access to the businesses in the project area. Jacobs Engineering Group is the design engineer on the Roundabout and Flyover Projects. Construction is approximately 45% complete on the Roundabout Project, and the Flyover Project has been advertised for construction bids.

The proposed Supplemental Agreement No. 4 attached to this memo provides for additional work to be performed by Jacobs Engineering on the project. This additional work includes:

- 1. Title I Services Revising and resubmitting pavement design for the roundabout and fly-over, revising right-of-way documents, revising roundabout horizontal alignments after initial alignment approval, and bridge designing details.
- 2. Title II Services Construction Management services including quality assurance testing for the Flyover Project. Construction Management services were not included in the original contract.
- 3. Title II Services Quality Assurance Testing of bridge structural steel inspection and bridge elastomeric bearings. This cost is not included at this time until bids have been received and the general contractor informs the City of the location of the steel manufacturing plant. (A separate agenda item will be presented at a future City Council meeting to approve these inspection services.)

The total cost of Item 1 is \$40,863.12, and the cost for Item 2 is \$727,170.49. Therefore, the total proposed amount of Supplemental Agreement No. 4 is \$768,033.61. Of this amount, 80% is eligible for reimbursement through the federal earmark for this project, leaving the City's portion to be paid out of the Bond Program at \$153,606.72.

Page 3 of 20

# **RECOMMENDATION:**

Staff recommends City Council approval of Supplemental Agreement #4 as the additional work described above is warranted and necessary to adequately manage the construction phase of the Flyover Project.

# **BUDGET IMPACT:**

This project is based on an Agreement Of Understanding with AHTD in which Federal Aid money will pay 80% of the contract amount and the City will pay 20%. The Federal portion will be paid from the Federal Earmark received by the City in the 2005 Highway Bill and the City's portion will be paid from the Transportation Bond Fund. This contract will be paid from the Transportation Bond Program Fund and from the federal funding available for the project.

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 4 of 20

RESOLUTION NO.	•

A RESOLUTION APPROVING SUPPLEMENTAL AGREEMENT NO. 4 TO THE CONTRACT WITH JACOBS ENGINEERING GROUP, INC. IN THE AMOUNT OF \$768,033.41 FOR ENGINEERING SERVICES FOR THE FAYETTEVILLE EXPRESSWAY DEVELOPMENT CORRIDOR PROJECT, AND APPROVING A BUDGET ADJUSTMENT

# BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1. That the City Council of the City of Fayetteville, Arkansas hereby approves Supplemental Agreement No. 4 to the contract with Jacobs Engineering Group, Inc. in the amount of \$768,033.41 for engineering services for the Fayetteville Expressway Development Corridor Project.

Section 2. That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution as Exhibit "A".

**PASSED** and **APPROVED** this 20<sup>th</sup> day of November, 2012.

APPROVED:	ATTEST:
By:	By:SONDRA E. SMITH, City Clerk/Treasurer

# City of Fayetteville, Arkansas **Budget Adjustment Form**

V11.0310 Jacobs Engineering Group, Inc.

**Budget Year** 

2012

Division:

Engineering

Department: Development Services

**Request Date** 

11/2/2012

Prepared By:

Adjustinent No. 4

**BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION** 

A resolution approving Supplemental Agreement #4 to the contract with Jacobs Engineering Group, Inc. for engineering services for the Fayetteville Expressway Economic Development Corridor Project in the amount of \$768,033.41.

14212

Division Head	Date	Reference	<b>9</b> :		enutchens
Budget Director -	- 1/ 7:20v		Budget & Re	esearch Use On	ly
Department Director	Date	Туре:	А В	c <b>3</b>	E P
Paul a bull	11-5-2012 Date	General L	edger Date		6/7/2011
Chief of Staff	//-1-/2_ Date	Posted to	General Ledger	Initial	Date
Browld Jordan	11/8/12	Checked i	/ Verified		1405
LMayor	Date			Initial	Date
то	TAL BUDGET ADJ	USTMENT	614,427	614,427	
			Increase / (	(Decrease)	Project.Sub
Account Name	Account Nu	ımber	Expense	Revenue	Number
Federal Grants-Capital	4470.0947.4	309.00		614,427	06035 . 1700
Professional services	4470.9470.5	314.00	614,427		06035 . 1700
Street improvements	4520.9540.5	809.00	(153,607)		06035 2000
Street improvements	4520.9540.5	809.00	153,607		06035 1700
	-				

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 6 of 20

# Supplemental Agreement No. 4 Job No. 040505 F.A.P. HPP2-2816(1) Fayetteville Expressway Economic Development Corridor P.E.

Date	

WHEREAS, the City of Fayetteville, Arkansas and Jacobs Engineering Group, Inc. entered into an Agreement for Engineering Services on September 5, 2006; 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 \$1,246,066.85 to 2,014,100.46
- 2) The "Indirect Cost Rate" (Section 1.10) is changed from 123.26 percent to 123.01 percent and a field office indirect cost rate is changed from 96.94 percent to 99.08 percent.
- 3) The "Title I Services Ceiling Price" (Section 1.14) is increased from **\$964,549.93 to \$1,005,413.05.**
- 4) The "Title II Services Ceiling Price" (Section 1.17) is increased from \$281,516.92 to \$1,008,687.41.
- 5) The "Fee" (Section 3.4) is increased from \$86,052.43 to \$90,132.34 for Title I Services, from \$27,002.84 to 99,251.38 for Title II Services.
- 6) See Attachment A for modifications to Sections 6, 9 and 17.
- 7) See Attachments A5, A6, and A7 for modifications to Appendix A Justification of fees and cost.
- 8) See Attachments B1-B for modifications to Attachments B1.
- 9) The completion date (Section 17.1) for Job No. 040505 is changed from December 22, 2011 to July 8, 2014. See attachment D-3 for modifications to Appendix D.

Supplemental Agreement No. 4 Page 1 of 2 FEEDC P.E. City of Fayetteville Washington County, Arkansas

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 7 of 20

**IN WITNESS WHEREOF**, the parties execute this Supplemental Agreement No. 4, to be effective upon the date set out above.

Jacobs Engineering Group, Inc.

City of Fayetteville, Arkansas Mayor Lioneld Jordan

Title: MANAGING PANCIPAL

Mayor: \_\_\_\_\_

# Supplemental Agreement No. 4 Job No. 040505 F.A.P. HPP2-2816(1) Fayetteville Expressway Economic Development Corridor P.E.

# **ATTACHMENT A**

**DESCRIPTION OF ADDITIONAL WORK** – Work to be accomplished under this supplemental agreement consists of additional Title I service to provide additional services for revising and resubmitting pavement design for the roundabout and fly-over, revising right-of-way documents, revising roundabout horizontal alignments after initial alignment approval, and bridge designing details. In addition, this supplemental includes Title II services to include construction management for the construction of the Fly-Over project.

The following paragraphs will be modified or added.

### 6.2 Title II Services

The words "and AHTD Job 040535." shall be added to the end of the first sentence of the first paragraph.

# **9.0** TITLE II SERVICES TO BE PROVIDED BY ENGINEER - The following paragraphs will be added.

## 9.1.1 - Quality Assurance Testing

Quality Assurance testing in accordance with AHTD Standard Specification 807 and 808 is not a part of this contract.

# 9.1.2 - Job 040535 Staffing

The Engineer shall provide Resident Engineer (RE) and inspector staffing at an average rate of 20 hours and 48 hours per week, respectively. Contractor's hours on-site will be tracked and recorded daily. The Engineer will notify the City in writing if the Contractor's hours on site exceed an average 48 hours per week rate. The City will either provide qualified staff to cover inspection efforts beyond 48 hours per week or provide for the additional time required under a supplemental agreement.

# 9.3 Review and Approval of Shop Drawings

The sentence "No shop drawing will be reviewed in this project." shall be stricken and replaced with the following sentence and following paragraph.

No shop drawings will be reviewed for AHTD Project 040536.

For AHTD Project 040535, the consultant will be responsible for the review and approval of the shop drawings of the bridge elements as structural steel, bearing assemblies, and stay-place deck forms. Drawings will be reviewed to ensure that the fabricator produces a finished product that generally meets the materials and design requirements shown in the plans. In general, the review is not intended to verify the accuracy of all dimensions relative to fabrication nor the accuracy of quantities. The review will include:

- Verification that all materials are supplied as designated on the plans to include paint
- Verification that all members are the size specified on the plans

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 9 of 20

- Verify number and size of bolts in miscellaneous connections and plates such as sheet connectors, stiffeners and splice plates
- Check dimensions center to center of bearings
- Block and camber diagrams will not be reviewed
- Verify weld sizes and procedures
- Check cleaning designations
- · Circle and dimensions that we find which are obviously incorrect
- Verify joint size versus seal size and blocking diagram of expansion devices
- Detailed dimensions will not be checked
- Bolts lists will not be checked
- Traffic Signal Submittals

# 17. TERM, COMMENCEMENT, AND COMPLETION -

Section 17.3.1 shall be deleted in entirely and replaced with the following.

- 17.3.1. Title II services for Job 040536 shall be completed within 300 calendar days of the roundabout over bid advertisement based on maximum construction duration of 210 calendar days.
- 17.3.2. Title II services for Job 040535 shall be completed within 574 calendar days of the fly-over bid advertisement based on maximum construction duration of 560 calendar days.

Supplemental Agreement #4 - Attachment A5 Job No. 040535 and 040536 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Design & Roundabout) City of Fayetteville Washington County, Arkansas

# **SUMMARY OF FEES AND COSTS - TITLE I - FEEDC Addition Services**

	Direct Lo	ering Group, Inc	Rate/Hour	Man-hours	Cost	Subtotals
•	5557.13	Project Director	\$70.00	29.0	\$2,030.00	000.0.0.
		Project Manager	\$55.00	66.0	\$3,630.00	
		Senior Engineer	\$52.50	40.0	\$2,100.00	
		Engineer II	\$38.50	76.0	1	
				- 1	\$2,926.00	
		Party Chief	\$28.00	6.0	\$168.00	
		CADD Tech II	\$27.50	124.0	\$3,410.00	
		CADD Tech I	\$19.50	28.0	\$546.00	
		Admin. Assistant	\$18.15	24.0	\$435.60	
		Cubininia		000.00		Φ1Ε Q4Ε 60
	Dd	Subtotals	I but I	393.00	\$15,245.60	\$15,245.60
•	Burden	General Office Overhead	Rate 123.01%	<b>Base</b> \$15,245.60	Cost \$18,753.61	
		Subtotals	1		\$18,753.61	\$18,753.6
	Direct C			Į		
		Full Size Plots	400.00 Shts @	\$5,00 /Sht =	\$2,000.00	
		Half Size Plots	200.00 Shts @	\$0.50 /Sht =	\$100.00	
		Photo copies	600.00 Shts @	\$0.14 /Sht =	\$84.00	
		Telephone/FAX Charges	0.00 min @	\$0.10 /min =	\$0.00	
		Express Deliveries	5.00 @	\$20.00 /Ea =	\$100.00	
		Courier Deliveries	0.00 @	\$15.00 /Ea =	\$0.00	
		Auto Mileage	0.00 mi @	\$0.485 /mi =	\$0.00	
		AirTravel	0.00 RT @	\$500.00 /RT =	\$0.00	
		Meal Expenses	0 Days @	\$30.00 /Day =	\$0.00	
		Lodging Auto Rental	0 Days @	\$60.00 /Day =	\$0.00	
			0 Days @	\$45.00 /Day =	\$0.00	
		Arkansas Department of Health Rev Deed Research	view	1	\$500.00	
		Arkansas One Call				
						00.704.0
	Subcont	Subtotals			\$2,784.00	\$2,784.00
	30500111	ide:3				
				8 8 8		
		Subtotals			\$0.00	\$0.00
	Fee	Fee			\$4,079.91	
		Subtotals			\$4,079.91	\$4,079.9
	Total Ad	ditional Cost				\$40,863.1

Supplemental Agreement #4 - Attachment A5
Job No. 040535 and 040536
F.A.P. HPP2-2816(1)
FEEDC P.E. (Fly-Over Design & Roundabout)
City of Fayetteville
Washington County, Arkansas

Amendment 4 Jacobs submitted 19% Pares to the City and the AHTD for line and grade approval. Jacobs areceived no major comments (received on 22759) on the 15% submitted related to fine and grade and was further directed by AHTD in e-mail to ignore all comments outside of AHTD POW. Jacobs then proceeded to produce 90% plans. The 50% plans had line and grade comments and specific areas noted is unracycletoble. Jacobs used directed by the AHTD in additional control of the comments of the control of the AHTD in additional control of the comments and grade comments and specific areas noted is unracycletoble. Jacobs used directed of the Power of the control of the control of the City and the AHTD in additional control of the City and the AHTD in additional control of the City and	WORK TASK DESCRIPTION	Project Director	Project Manager	Senior Engineer	Engineer II	Party Chief	Tech II	CADD Tech I	Admin. Assistant	Total hours pe task
Amendment 4 Jacobs submitted 19% Pares to the City and the AHTD for line and grade approval. Jacobs areceived no major comments (received on 22759) on the 15% submitted related to fine and grade and was further directed by AHTD in e-mail to ignore all comments outside of AHTD POW. Jacobs then proceeded to produce 90% plans. The 50% plans had line and grade comments and specific areas noted is unracycletoble. Jacobs used directed by the AHTD in additional control of the comments of the control of the AHTD in additional control of the comments and grade comments and specific areas noted is unracycletoble. Jacobs used directed of the Power of the control of the control of the City and the AHTD in additional control of the City and the AHTD in additional control of the City and		hr	hr	hr	hr	hr	hr	hr	hr	
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HTD Job Number 040535 - Fly-Over  Amendment 4  Improperly documented/filed ROW map by Milholland Surveying which created a ambiguous track of land with undocumented owner. This required additional coordination and right-of-way plan submission.  4  2  4  10  Revisions to 100% ROW plans based on AHTD rejection of additional ROW from CMN Business Park.  1  2  4  7  City approved "V" shaped pier design for the interior bents could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20  40  Control of Access Changes to ROW plans and 90% Plans  2  8  4  12  20  Subtotal - Civil Engineering  21  16  40  8  6  8  0  12  11	· · · · · · · · · · · · · · · · · · ·		8						12	20
Amendment 4  Improperly documented/filed ROW map by Milholland Surveying which created a ambiguous track of land with undocumented owner. This required additional coordination and right-of-way plan submission.  Revisions to 100% ROW plans based on AHTD rejection of additional ROW from CMN Business Park.  1 2 4 7  City approved "V" shaped pier design for the interior bents could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20 40 60  Control of Access Changes to ROW plans and 90% Plans  2 8 4 12 20  Subtotal - Civil Engineering 21 16 40 8 6 8 0 12 11:	Subtotal - Civil Engineering	8	50	0	68	0	116	28	12	282
Improperly documented/filed ROW map by Milholland Surveying which created a ambiguous track of land with undocumented owner. This required additional coordination and right-of-way plan submission.  Revisions to 100% ROW plans based on AHTD rejection of additional ROW from CMN Business Park.  1 2 4 7  City approved "V" shaped pier design for the interior bents could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20 40  Control of Access Changes to ROW plans and 90% Plans  All Plan and Project Manual submittals printed to PDF as requested by the City  8 12 20  Subtotal - Civil Engineering  21 16 40 8 6 8 0 12 11:	HTD Job Number 040535 - Fly-Over									
Surveying which created a ambiguous track of land with undocumented owner. This required additional coordination and right-of-way plan submission.  Revisions to 100% ROW plans based on AHTD rejection of additional ROW from CMN Business Park.  1 2 4 7  City approved "V" shaped pier design for the interior bents could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20 40  Control of Access Changes to ROW plans and 90% Plans  2 8 4 14  All Plan and Project Manual submittals printed to PDF as requested by the City  Subtotal - Civil Engineering  21 16 40 8 6 8 0 12 11:	Amendment 4									
Revisions to 100% ROW plans based on AHTD rejection of additional ROW from CMN Business Park.  City approved "V" shaped pier design for the interior bents could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20 40  Control of Access Changes to ROW plans and 90% Plans  All Plan and Project Manual submittals printed to PDF as requested by the City  Subtotal - Civil Engineering  21 16 40 8 6 8 0 12 11	Surveying which created a ambiguous track of land with undocumented owner. This required additional coordination		4			2	4			10
could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD design software to finalize the design of the bents.  20 40 60  Control of Access Changes to ROW plans and 90% Plans 2 8 4 14  All Plan and Project Manual submittals printed to PDF as requested by the City 8 8 12 20  Subtotal - Civil Engineering 21 16 40 8 6 8 0 12 11:	Revisions to 100% ROW plans based on AHTD rejection of	1								
All Plan and Project Manual submittals printed to PDF as requested by the City 8 12 20  Subtotal - Civil Engineering 21 16 40 8 6 8 0 12 11:	could not be accurately modeled in design software RC Pier as assumed. Hand calculations were performed for load determinations and these loads were entered into STAAD	20		40						60
All Plan and Project Manual submittals printed to PDF as requested by the City 8 12 20  Subtotal - Civil Engineering 21 16 40 8 6 8 0 12 11:	Control of Access Changes to ROW plans and 90% Plans		2		8	4				14
requested by the City         8         12         20           Subtotal - Civil Engineering         21         16         40         8         6         8         0         12         11										
	requested by the City									20
Amendment Totals 29 66 40 76 6 124 28 24 393			_	_				-		393

Supplemental Agreement #4 - Attachment A6 Job No. 040536 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Title II Services) City of Fayetteville Washington County, Arkansas

# **SUMMARY OF FEES AND COSTS - TITLE II - FEEDC Roundabout**

	Direct Lab	er	Rate/Hour	Man-hours	Cost	Subtotals
•	Direct Los	Project Director	\$71.50	244.0	\$17,446.00	JUDICICIS
		Project Manager	\$57.00	368.0	\$20,976.00	
		Resident Engineer	\$46.50	1800.0	\$83,700.00	
		Senior Engineer	\$48,00	720.0	\$34,560.00	
		Senior Inspector	\$35.75	3364.0	\$120,263.00	
		CADD Technician II	\$26.50	136.0	\$3,604.00	
		Survey Manager	\$49.50	52.0	\$2,574.00	
		Party Chief	\$28.50	140.0	\$3,990.00	
		Survey Tech			\$2,800.00	
		Admin. Assistant	\$20.00 \$19.75	140.0	\$15,800.00	
		[ o. Lecture ]		220,000		<b>1005 740 0</b>
		Subtotals		7764.00	\$305,713.00	\$305,713.0
	Burden	KARAMBAN STATA STATA	Rate	Base	Cost	
		Audited Field Rate	96.94%	\$305,713.00	\$296,358.18	\$006 2E0 1
_	Di I O	Subtotals			\$296,358.18	\$296,358.1
	Direct Cos	Full Size Plots	500 00 5F4- @	#E-00 (Chi-	\$2.500.00	
			500.00 Shts @	\$5.00 /Sht =	\$2,500.00	
		Half Size Plots	1000,00 Shts @	\$0.50 /Shf =	\$500.00	
		Photo copies	1000.00 Shts @	\$0;15 /Sht =	\$150.00	
		Telephone/FAX Charges	20 Months @	\$15.00 /Month =	\$300.00	
		Express Deliveries	12.00 @	\$15,00 /Ea =	\$180.00	
		Courier Deliveries	0.00 @	\$6,50 /Ea =	\$0.00	
		Auto Mileage	8000.00 mi @	\$0.55 /mi =	\$4,400.00	
		Air Travel	0,00 RT @	\$0.00 /RT =	\$0.00	
		Meal Expenses	45 Days @	\$30.00 /Day =	\$1,350.00	
		Lodging	45 Days @	\$76.48 /Day =	\$3,441.60	
		Construction Vehicle Rate	20 Months @	\$702.00 /Month =	\$14,040,00	
		Cell Phone Contract	20 Months @	\$100:00 /Month =	\$2,000.00	
		Inspection Equipment	20 Months @	\$50.00 /Month =	\$1,000.00	
		Subtotals			\$29,861.60	\$29,861.6
	Subcontra	cts			170	
		GHBW			\$22,989.17	
		Subtotals			\$22,989.17	\$22,989.1
	Fee	Fee			\$72.248.54	
		Subtotals			\$72.248.54	\$72,248.5

Supplemental Agreement #4 - Attachment A6 Job No. 040536 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Title II Services) City of Fayetteville Washington County, Arkansas

	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	Task
	Project	Project	Resident	Senior	Senior	CADD	Survey	D-4: 00:54	Survey	Admin.	Total
TASK AND DESCRIPTION	Director	Manager	Engineer	Engineer	Inspector	leconnician	Manager	rarry cnier	Tech	Assistant	Manhours
Job No. 040535											
Project Administration											
1 Project Coordination (Setup, Tracking, etc)	40	09									100.0
2 Administration (Invoice, Correspondence, etc)	20	80									100.0
3 Miscellaneous Meetings	40	40	40								120.0
4 Off-site inspection borrow pits, coordination, etc					4						4.0
Subtotal	100	180	40		4						324.0
Survey Confrol											
1 Project Control							12	20	50		52.0
2 Beam / Girder Profiles							12	40	40		92.0
3 Cross Sections							12	40	40		92.0
4 Quantity Documentation							16	40	40		96.0
Subtotal							52	140	140		332.0
Project Inspection & Engineering Management Services											
1 Project Setup	50	40	80		80					90	280.0
2 Inspection & Management	50	40	1600	640	3200					480	5980.0
3 Engineering Support	20	40									0.09
4 Bridge Shop Drawing Review, revisions, and questions	09	20		80		80					240.0
5 Traffic Signal shop drawing review, revisions, and questions		20				16					36.0
6 Project Closeout	20	20	80		80					100	300.0
7 Final As-Built Drawings per District 4 permit	4	8				40					52.0
Paperwork scanning to PDF as requested by City of Fayetteville										160	160.0
Subtotal	144.0	188.0	1760.0	720.0	3360.0	136.0				800.0	7108.0
	244.0	368.0	1800.0	720.0	3364.0	136.0	52.0	140.0	140.0	800.0	7764.0
											Ja Ai Pi

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 13 of 20

# Supplemental Agreement No. 4

#### ATTACHMENT B1-B

# SUBCONSULTANT AGREEMENT NO. WLXL6300-S11-0001-MOD1 Job No. 040505 F.A.P. HPP2-2816(2) and HPP2-3757(1)

WHEREAS, the City of Fayetteville, AR ("Owner") and Jacobs Engineering Group Inc., (formerly Carter and Burgess, Inc.) ("Consultant") entered into an Agreement for Engineering Services ("Prime Agreement") on September 5, 2006; and,

**WHEREAS**, the Prime Agreement for Engineering Services has been novated over to Jacobs Engineering Group Inc. This and all future supplemental agreements and documentation under this project will reflect this novation; and,

WHEREAS, the Consultant and Grubbs, Hoskyn, Barton & Wyatt, Inc. ("Subconsultant") entered into a Subconsultant Agreement on July 15, 2008 in connection with the Prime Agreement between the Consultant and the Owner and this and all future supplemental agreements and documentation under this agreement shall reference the above Subconsultant Agreement number; and,

WHEREAS, representatives of the Owner requested work in addition to that defined in the Prime Agreement.

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

### **MODIFICATIONS:**

### 3. DESCRIPTION OF PROJECT AND SERVICES TO BE PROVIDED

10) The first paragraph shall be stricken and replaced with the following.

"For AHTD Job 040536, the scope of the construction and materials testing services will consist of performing field observations and testing including subgrade evaluation, undercut observations, density testing for embankments and pavement base, asphalt and concrete testing. The scope of these services also includes laboratory tests including soil classification, proctors, gradation and concrete breaks. All testing services will be provided in accordance with AHTD Standard Specification for Highway Construction (latest edition) and Manual of Field Sampling and Testing Procedures."

# 12) The following shall be added:

For AHTD Job 040535, The Title II scope of services under this Agreement will consisting of providing materials sampling and testing services to assist the Owner and Consultant in the administration of the proposed improvements. The Subconsultant will provided these services in accordance with AHTD standards, i.e., Standard Specifications for Highway Construction, current Resident Engineer's Manual, and the Manual of Field Sampling and Testing Procedures. The Subconsultant shall be responsible to ensure the project is constructed in substantial conformance to the construction plans, special provisions and specifications, and the Owner's relevant standards and manuals. The scope of the construction and materials testing services will consist of, but not be limited to, performing field observations and testing including but limited to subgrade evaluation, undercut observations, density testing for embankments and pavement base, asphalt and concrete testing. Also included is laboratory testing including soil classification, proctors, gradation and concrete breaks. All data and reports shall be quantified and mailed and e-mailed to Jacobs.

Attachment B1-B Page 1 of 3 City of Fayetteville Washington County, Arkansas

- a) The Subconsultant will provide all materials, testing laboratory equipment and staff, office clerical staff, vehicles and equipment and supplies, as required to provide the Service.
- b) The Subconsultant will provide all necessary services to include, but not limited to, identification and recommendation of corrections of omissions, substitutions, defects, and deficiencies in the work of the Construction Contractor, its subcontractors, its vendors and its consultants.
- c) The Subconsultant 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. The Subconsultant shall meet the minimum sampling frequencies and other provisions as contained in the AHTD "Manual of Field Sampling and Testing Procedures."
- d) The Subconsultant shall perform all on-site sampling of materials and such testing of materials and completed work items that are 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 Subconsultant including off-site batch plants.
- e) The Subconsultant 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).
- f) 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 on critical construction items within four hours after the test results have been obtained. A written report shall be prepared and sent to the Consultant within 48 hours after test results are known on any test performed by the Testing Laboratory.
- g) The Subconsultant 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 label, AHTD stamp, etc.
- h) The Subconsultant shall maintain and copy the Consultant on a log of each individual test record in accordance with the AHTD materials testing manual.

# For the bridge drilled shafts GHBW will:

- Verify suitable shaft bearing stratum and adequate penetration into the bearing stratum as per the structural plans
- j) Provide assistance during the drilled shaft construction as requested.

### For the bridge pilings GHBW will:

k) Provide assistance during bridge piling for pile hammer system compliance, pile soundness, and contractor methods as requested.

## For the bridge footings GHBW will:

 Provide assistant during bridge footings for compliance of the size and depth of footing excavations with respect to the geotechnical recommendations; verify suitable bearing stratum, and contractor methods as requested.

# For the MSE wall footings GHBW will:

- m) Review of MSE wall vendor calculations for appropriate assumptions and adequate wall stability and bearing.
- n) Verify suitable bearing stratum.
- o) Provide assistance during MSE wall construction as requested.

# 3. COSTS, FEES, PAYMENTS, AND RATE SCHEDULES

3.2. Project 1:

The total not-to-exceed cost for the construction services for Title II services will be **\$22,989.17**. The fixed fee for Title II services will be **\$2,372.31**.

Detailed costs for the scope of work described above are shown in Attachment A7.

3.3. The Indirect Cost Rate for the subconsultant under this agreement shall be 156.41%.

# 10. NOTICE

- 10.1. All notices, approvals, requests, consents, or other communications required or permitted under this Agreement shall be mailed or hand-delivered to:
  - 10.1.1. To the Subconsultant:

Grubbs, Hoskyn, Barton & Wyatt, Inc. 341 West County Line Road Springdale, AR 72764 ATTN: Subra Bhat, Ph.D., P.E.

10.1.2. To the Consultant:

Jacobs Engineering Group, Inc. 3729 N. Crossover Road Suite 111 Fayetteville, AR 72703-5538 ATTN: Kip Guthrie, PE

IN WITNESS WHEREOF, the parties execute this Subconsultant Agreement, to be effective

in withcoo witcheof, the parties	execute	เมเธ	Subconsultant	Agreement,	ιO	DE	GHECHAE
<u> </u>							
JACOBS ENGINEERING GROUP, INC.							
BY:							
Bill Bullion Procurement Manager							
GRUBBS, HOSKYN, BARTON & WYATT, INC.							
BY:							
Subra Bhat, Ph.D., P.E. Principal/Manager of Springdale Office							

Attachment B1-B Page 3 of 3 City of Fayetteville Washington County, Arkansas Supplemental Agreement #4 - Attachment A7 Job No. 040505 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Title II Services) City of Fayetteville Washington County, Arkansas

# Geotechnical Cost

		n, Barton & Wyatt, Inc.				
1.	Direct L		Rate/Hour	Manhours	Cost	Subtotals
		Principal	\$42.00	100	\$4,200.00	
	*	Project Manager	\$36.00	40	\$1,440.00	
		Project Engineer	\$35.00	0	\$0.00	
		Staff Engineer	\$30.00	0	\$0.00	
		Lab Technician	\$14.25	40	\$570.00	
		Field Technician	\$12.00	60	\$720.00	
		Engineering Aide/Clerical	\$13.00	60	\$780.00	
				300	\$7,710.00	\$7,710.00
2.	Burden		Rate	Base	Cost	
		Overhead	156.41 %	\$7,710.00	\$12,059.21	
					\$12,059.21	\$12,059.2°
3.	Direct C	osts				
		Vehicle Mileage, miles	1248	\$0.55 /mi =	\$686.40	
		Photo copies	700	\$0.15 /Sht =	\$105.00	
		Stamps	125	\$0.45 /Ea =	\$56.25	
				ļ		
<b>I</b> .	Subcont	rante				\$847.6
•	30000111	racis				
					\$0.00	\$0.00
•	Fee	Fee	subtotal	\$19,769.21	\$2,372.31	
					\$2,372.31	\$2,372.3
<b>.</b>	Total Co	ntract Cost				\$22,989.17

Supplemental Agreement #4 - Attachment A7 Job No. 040505 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Title II Services) City of Fayetteville Washington County, Arkansas

# Geotechnical Cost

	(1)	(2)	(2)	(9)	(2)	Task
	Dringing	Project	Lab	Field	Engineering	Total
TASK AND DESCRIPTION	Гіпсіраі	Manager	Technician	Technician	Aide/Clerical	Manhours
Job No. 040535						
Project Administration						
1 Project Coordination (Setup, Tracking, etc)	4				4	œ
2 Administration (Invoice, Correspondence, etc)	4				20	24
3 Miscellaneous Meetings	12	4				16
4 Off-site inspection borrow pits, coordination, etc		2				2
Subtotal	20	9	0	0	24	50
Project Inspection & Engineering Management Services						0
1 Bent 1 - 6 piles	12	4	4	10		30
2 Bent 2 - 96" Drilled Shaft	9	2	4	4		16
3 Bent 3 - 96" Drilled Shaft	9	2	4	4		16
4 Bent 4 - 96" Drilled Shaft	9	2	4	4		16
5 Bent 5 - 96" Drilled Shaft	9	2	4	4		16
6 Bent 6 - 96" Drilled Shaft	9	2	4	4		16
7 Bent 7 - 6 piles	12	4	4	10		30
8 Deck Pour	9	2	4	4		16
9 Roadway Testing	9	2	4	8		20
10 MSE Wall (stability calculation check per report)	2	8			4	14
11 MSE Wall (field testing)	4	2	4	8		18
12 Project Closeout	8	2			16	26
Paperwork scanning to PDF as					ŭ	16
requested by Oily Oil ayetteville					2	
Subtotal	80	34	40	90	36	300
	100	40	40	09	09	

Supplemental Agreement #4 - Attachment D-3 Job No. 040535 and 040536 F.A.P. HPP2-2816(1) FEEDC P.E. (Fly-Over Design & Roundabout) City of Fayetteville Washington County, Arkansas

FAYETTEVILLE EXPRESSWAY ECONOMIC DEVELOPMENT CORRIDOR P.E. State Job No. 040505 & 040506 Federal Aid Project No. HPP2-3757(1), HPP2-3757(2) and HPP2-2816(2)

Activity Description	Duration	Start	Finish
Fly-Over Design Schedule	-39675	8/15/08	FARE-L- W
Notice to Proceed	X	Completed	
Break in Access Submittal (Step 2)	X	Completed	
Draft CE submittal	X	Completed	
Public Meeting	X	Completed	
Design Surveys	X	Completed	
AHTD and FHWA Approval of BIA and Env. Documentation and Sain Extension Memorandum	X	Completed	
Geotechnical Engineering - prepared to mobilize with BIA approval	X	Completed	
Preliminary Design 30% Submittal - 30 days from geotechnical data	X	Completed	
AHTD 30% Preliminary Design Review and Approval	X	Completed	
Preliminary Design 60% Submittal - 90 days from 30% Design approval	X	Completed	
AHTD 60% Preliminary Design Review and Approval	X	Completed	
Final Design 90% Submittal - 90 days from Preliminary 60% Design approval	X	Completed	
AHTD 90% Final Design Review and Approval	X	Completed	
Final Design 100%Submittal - 30 days from 90% review comments	X	Completed	
Plan Advertisement, Contract Award, NTP Given to Contractor	60	10/12/12	12/11/12
Title II Services	574	12/11/12	7/8/14
Roundabout Design Schedule			
Draft CE submittal	X	Complete	
Public Meeting	X	Complete	
AHTD and FHWA Review of Draft CE submittal	X	Complete	
Design Surveys	X	Complete	
Schematic 15% Design	X	Complete	
AHTD 15% Schematic Review/Approval and Comment Clarification	X	Complete	
Environmental Documentation	X	Approved	
Geotechnical Engineering	X	Complete	
Preliminary Design 50% Submittal - 60 days from Schematic Design 15% Design approval	X	Complete	
AHTD 50% Preliminary Design Review and Approval	X	Complete	
AHTD 60% Preliminary Design Review and Approval	X	Complete	
Final Design 90% Submittal - 90 days from Preliminary 50% Design approval	X	Complete	
AHTD 90% Final Design Review and Approval	X	Complete	
Final Design 100%Submittal	X	Complete	
Property Acquistion, Utility Relocation, Plan Advertisement and Contract Award	X	Complete	3/26/12
Title II Services	300	3/26/12	1/20/13

A. 7 Jacobs Engineering Group, Inc. Amendment No. 4 Page 20 of 20