

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
BOARD ACTION SUMMARY

DEPT: Public Works

BOARD AGENDA #: \*C-1

AGENDA DATE: September 19, 2017

**SUBJECT:**

Approval of Amendment No. 1 to the Agreement with Dokken Engineering for Engineering Services for the McHenry Avenue Widening Phase II Project in Stanislaus County

**BOARD ACTION AS FOLLOWS:**

No. 2017-501

On motion of Supervisor Withrow, Seconded by Supervisor Monteith  
and approved by the following vote,

Ayes: Supervisors: Olsen, Withrow, Monteith, DeMartini, and Chairman Chiesa

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1)  Approved as recommended

2)  Denied

3)  Approved as amended

4)  Other:

MOTION:



ATTEST: PAM VILLARREAL, Assistant Clerk

File No.

**THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
AGENDA ITEM**

DEPT: Public Works

Urgent

Routine

BOARD AGENDA #: \*C-1

AGENDA DATE: September 19, 2017



CEO CONCURRENCE:

4/5 Vote Required: Yes  No

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**SUBJECT:**

Approval of Amendment No. 1 to the Agreement with Dokken Engineering for Engineering Services for the McHenry Avenue Widening Phase II Project in Stanislaus County

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**STAFF RECOMMENDATIONS:**

1. Approve Amendment No. 1 to the Agreement with Dokken Engineering for \$434,606 to provide plans, specifications and estimates for the McHenry Avenue Widening Phase II project.
2. Authorize the Director of Public Works to execute the amendment with Dokken Engineering in the amount of \$434,606, and to sign necessary documents.

**DISCUSSION:**

The purpose of the McHenry Avenue Widening Phase II Project is to improve the corridor to accommodate north/south interregional traffic between the cities of Modesto and Escalon and to State Highway 108 (McHenry Avenue/Ladd Road). This project will improve regional circulation, relieve existing traffic congestion, reduce traffic delays, accommodate future traffic, improve safety, promote non-motorized modes of transportation, and allow for goods movement and job development for existing and future development. The recent average daily traffic counts (ADTs) on McHenry Avenue is approximately 13,000 vehicles per day which is approaching the capacity for the existing two-lane rural roadway.

The project is located between the cities of Modesto and Escalon. Project limits are from Ladd Road to the south abutment of the McHenry Avenue Bridge over the Stanislaus River. Project improvements include widening McHenry Avenue, which is designated as a Minor Arterial road, with two through lanes in each direction and a dual left-turn median.

On June 28, 2016, the Board of Supervisors awarded a Professional Design Services Agreement to Dokken Engineering of Folsom, CA to provide project management, environmental documentation, preliminary and final engineering, surveying and base mapping, utility coordination and public outreach. The original contract amount was \$783,785. County staff was anticipating completing the design including plans, specifications and estimates. However, due to a temporary decrease in staffing and increased project delivery demands, County requested Dokken Engineering to provide a scope and fee for these services to assure a timely and cost effective project delivery.

Approval of Amendment No. 1 to the Agreement with Dokken Engineering for Engineering Services for the McHenry Avenue Widening Phase II Project in Stanislaus County

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The purpose of Amendment No. 1 is for Dokken Engineering to provide plans, specifications and estimates for the project. The deliverables for this scope of work include:

- 60% Plans, Draft Post Construction Project Worksheet (PCPW), Specifications and 60% Engineer's Estimate.
- Final PCPW, 90% Plans, Response to Comments, Draft Edited Specifications and 90% Engineer's Estimate.
- 100% Plans, Specifications and Engineer's Estimate.

Construction of the project is expected to start spring of 2019.

**POLICY ISSUE:**

The Board of Supervisors must approve any amendments to existing professional services agreements that exceed \$100,000.

**FISCAL IMPACT:**

The requested Amendment No. 1 for \$434,606 will bring the total contract amount to a not to exceed amount of \$1,218,391. The preliminary engineering phase of this project is funded with a combination of sources including \$1,068,520 of Regional Surface Transportation Program (RSTP), \$138,438 of State toll credits and \$222,400 of local Regional Transportation Impact Fee (RTIF) funding for a total amount of \$1,429,358. Funding for the project is available in the Fiscal Year 2017-2018 Public Works Road Projects Budget.

<b>Cost of recommended action:</b>		\$ 434,606
<b>Source(s) of Funding:</b>		
RSTP	\$ 187,866	
Toll Credits	24,340	
RTIF	222,400	
<b>Funding Total:</b>	434,606	434,606
<b>Net Cost to County General Fund</b>		\$ -

<b>Fiscal Year:</b>	2017/2018
<b>Budget Adjustment/Appropriations needed:</b>	No

**Fund Balance as of**

**BOARD OF SUPERVISORS' PRIORITY:**

The recommended actions are consistent with the Board's priorities of providing A Safe Community, A Healthy Community, and A Well Planned Infrastructure System by widening an existing corridor to enhance safety and improve traffic flow for the traveling public.

Approval of Amendment No. 1 to the Agreement with Dokken Engineering for Engineering Services for the McHenry Avenue Widening Phase II Project in Stanislaus County

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**STAFFING IMPACT:**

Existing Public Works staff is managing the services of the consulting firm.

**CONTACT PERSON:**

Matt Machado, Public Works Director

Telephone: (209) 525-4153

**ATTACHMENT(S):**

1. Agreement Amendment No. 1 with Dokken Engineering

ATTACHMENT 1

AGREEMENT AMENDMENT NO. 1 WITH DOKKEN ENGINEERING

STANISLAUS COUNTY

First Amendment to Professional Design Services Agreement  
McHenry Avenue Widening Phase II Project  
Contract No. 9216

This Amendment is made and entered into this 19th day of September, 2017, in the City of Modesto, State of California, by and between the County of Stanislaus ("County") and Dokken Engineering, ("Consultant"), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, on June 28, 2016, the Stanislaus County Board of Supervisors awarded a Professional Design Services Agreement ("Agreement") to Consultant for the McHenry Avenue Widening Phase II project;

WHEREAS, there is a need for additional services as shown in "Exhibit 1-A", attached hereto and made a part of this Amendment;

WHEREAS, the Director of Public Works has determined that additional services are necessary for Consultant to complete the project;

WHEREAS, this Amendment exceeds 10% of the Agreement and requires Board of Supervisors approval;

WHEREAS, an increase of Four Hundred Thirty-Four Thousand Six Hundred Six Dollars (\$434,606) to the Agreement is necessary to cover the additional services;

\$783,785	Agreement
<u>+434,606</u>	First Amendment
\$1,218,391	Total

WHEREAS, Consultant has continued to diligently perform the services requested to support this project in good faith; and,

NOW THEREFORE, the parties agree as follows:

1. Section 1.1 Scope of Services is amended to include additional services as shown in "Exhibit 1-A" attached hereto and made a part of this Amendment.
2. Section 3.1 Compensation is amended to include additional fees of Four Hundred Thirty-Four Thousand Six Hundred Six Dollars (\$434,606) as shown in "Exhibit 1-A" attached hereto and made a part of this Amendment. Consultant's compensation shall in no case exceed One Million Two Hundred Eighteen Thousand Three Hundred Ninety-One Dollars (\$1,218,391).


3. All other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment effective on the date written above.

COUNTY OF STANISLAUS

DOKKEN ENGINEERING

By:   
Matt Machado, Director  
Department of Public Works

By:   
Richard Liptak, PE  
President

APPROVED AS TO FORM:  
John P. Doering, County Counsel

By:   
Annada DeHart  
Deputy County Counsel



# DOKKEN ENGINEERING

Transportation Solutions from Concept to Construction

EXHIBIT 1-A

August 18, 2017

Mr. Chris Brady, P.E.  
Deputy Director  
Stanislaus County Public Works  
1716 Morgan Road  
Modesto, CA 95353

**RE: McHenry Avenue Widening Phase II, Contract No. 9216  
Federal Project No. STPL-5938(233)  
Request for Contract Amendment #1, Final Design**

Dear Mr. Brady:

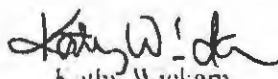
As requested, please find the attached scope and fee proposal for Dokken Engineering to complete the final design and estimate for the McHenry Avenue Widening Project. With this proposal Dokken will take the County's current design (approx. 35% complete) to 100% plans and estimate. This amendment also includes additional survey required to be completed by UNICO and additional materials testing by Crawford & Associates, Inc.

A summary of the original contract amount and the total with the addition of Amendment No. 1 is included in the following table.

Item	Date Approved	Amount	Comments
Original Contract	June 28, 2016	\$783,785	
Amendment #1	In Progress	\$434,606	Final Plans and Estimate
<b>Total Design Services with Amendments</b>		<b>\$1,218,391</b>	

We appreciate the opportunity to further assist the County in delivering this project. If you have any questions with this request, please call me at (916) 858-0642.

Sincerely,  
DOKKEN ENGINEERING

  
Kathy Wickam  
Project Engineer

Attachments: A. Contract Amendment No. 1 - Scope of Services (Exhibit A)  
B. Contract Amendment No. 1 - Hours and Cost (Exhibit B)  
C. Contract Amendment No. 1 - Cost Proposal Exhibit 10-II

Cc: Namat Hosseini, Project Manager, Dokken Engineering  
2210-050



Stanislaus County  
McHenry Avenue Widening Phase II  
Contract No. 9216  
Federal Project No. STPL-5938(233)

Amendment 1-Exhibit A  
Scope of Services  
8/16/17

**Task 3-Topographic Survey**

**Task 3.1 Record Mapping and Control Research**

UNICO will research current mapping and deed documents to determine the project right of way and property boundaries. Once researched UNICO will prepare a record property and right of way base drawing showing all adjacent property lines and right of way along the project limits. These limits are along McHenry Avenue from Ladd Road to Hogue Road where the previously UNICO boundary and right of way mapping terminates.

**Task 3.2 Control, Boundary and Right-of-Way Surveys**

UNICO will perform a right of way and boundary survey of the project limits. UNICO will search for and survey record survey monuments to determine the record right of way and parcel boundaries. Once determined and resolved, UNICO will prepare an updated right of way and parcel base map containing record boundaries and recorded easements from record and field information.

*Deliverables: CAD base file, Record Maps and Deed Documents*

**Task 3.3 Topographic Survey**

UNICO will review the previously collected topographic survey of the roadway between the previous UNICO surveys. UNICO will perform up to 24 hours of supplemental topographic surveying, if needed, to verify the data. Once confirmed, UNICO will perform topographic base mapping that will mesh with the previous UNICO survey information. UNICO will coordinate with Dokken to determine the level of effort required to verify and supplement prior survey information. UNICO will map all topography in AutoCAD format and will include appropriate labeling, 1' contours and design surface.

UNICO will perform additional topographic surveying and mapping at specific design areas as requested by Dokken. This will include a cross-section survey at the approximately 650'x600 area west of McHenry Avenue at APN 004-102-002. UNICO will also provide topographic surveying and mapping at two approximately 400'x150' areas east and west of McHenry Avenue to supplement the previous County and UNICO surveys at APN's 074-001-015 and 004-102-001. In addition, UNICO will perform supplemental topographic surveying and mapping along the improved portion of McHenry Avenue, near Stewart Road, to provide location of sound walls and curb, gutter and sidewalk improvements for conform. UNICO will also dip all storm drain manhole and inlet structures within this area. UNICO will map all topography in AutoCAD format and will include appropriate labeling, 1' contours and design surface.

*Deliverables: CAD base file, Point Files*

#### **Task 3.4 Plat Maps and Legals Description**

In addition to the original eight (8) plats and legal descriptions for the purpose of additional right of way and/or Temporary Construction Easements (TCE), UNICO will prepare an additional eight (8) plats and legal descriptions.

*Deliverables: Signed and Stamped PDF Copies*

#### **Task 3.5 Final Mapping**

UNICO will prepare a Record of Survey of the new right of way from Ladd Road to Hogue Road for submittal to Stanislaus County. This may require the setting of survey monuments. UNICO will also provide a final right of way exhibit map depicting all new right of way, easements and acquisitions.

*Deliverables: CAD base file, PDF Record of Survey*

#### **Task 4.1.7 Hazardous Waste Testing**

Based on the preliminary testing, it was determined additional soil samples were required to be collected and tested for hazardous materials (pesticides and hydrocarbons) on the project. Crawford & Associates, Inc. (CAInc) collected an additional six (6) samples of the project area and updated the geotechnical report based on the additional tests results.

#### **Task 10.4 60% PS&E**

##### **Drainage Analysis**

Dokken Engineering will verify the County's design criteria and review the proposed drainage layout and watershed areas provided by the County. For each watershed, Dokken will calculate peak flows to verify spread width and inlet interception capacity. Dokken will use these peak flows to prepare a storm drain analysis to verify pipe sizes and hydraulic grade line elevations for each manhole and inlet. Dokken will also review the retention basin sizing calculations provided by the County based on the provided design criteria, soil infiltration testing results, and maximum drawdown time. Adjustments to the provided design will be made if there are any locations that do not meet the County's design criteria.

Upon completion of the drainage analysis, Dokken Engineering will provide the County a PDF file containing a summary of the on-site hydrology calculations for each inlet, the hydraulic calculations associated with spread width, inlet efficiency and storm drain analysis, and the retention basin sizing/drawdown calculations.

##### **60% Plan Submittal**

Dokken Engineering will review the existing CAD files provided by the County and prepare a 60% Plan set for County review.

Civil sheets will include the typical sections, demo plan, and plan and profile sheets for a multi-use path from approx. station 130+90 Lt to Sta. 143+90 Lt and roadway widening from Sta. 143+90 to Sta. 219+53. Construction detail sheets will provide the non-standard details including driveway details and will be submitted with the 90% submittal. Quantity sheets will be provided with the 90% submittal.

Dokken Engineering will prepare traffic signal modification plans for the existing traffic signal at the McHenry Avenue and Stewart Road intersection. Dokken will obtain the as-built plans from the County

and perform a field visit to decide what parts of the existing traffic signal system need replacement. Existing equipment that does not meet current California MUTCD Standards or the proposed geometric improvements will be replaced. Dokken will consult with the County for their preferred traffic signal design requirements to be incorporated in the proposed traffic signal. At the 60% submittal all proposed equipment and layout will be shown along with any removals. Three traffic signal sheets will be submitted, one with existing equipment to be removed or to remain, another with the proposed design, and a final one showing the equipment and conductor schedules.

Dokken Engineering will prepare permanent erosion control plans to stabilize and restore disturbed areas to the pre-project condition. The erosion control plans will be designed in conjunction with the project's water quality compliance documents and will include any applicable post-construction Best Management Practices (BMPs) such as fiber rolls, native seed mix, erosion control blankets, tackifier, turf reinforcing mat, bonded fiber matrix, etc. The plan sheets will identify the type, limit, and quantity of permanent erosion control features. Detail sheets will provide the seed mix and application sequence for hydroseed as well as construction details for any non-standard erosion control items.

Temporary water pollution control plans will be developed to identify the temporary erosion control features discussed in the storm water pollution prevention plan. The plan sheets will identify the type, limit, and quantity of the temporary water pollution control features, such as temporary fiber rolls, temporary hydroseed, silt fence, storm drain inlet protection, stabilized construction entrance/exit, tire wash, and concrete wash out. Detail sheets will provide the seed mix and application sequence for hydroseed as well as construction details for any non-standard water pollution control items.

The roadway drainage plans will be developed in accordance with the system layouts developed during the drainage analysis. Drainage plan sheets will show systems by number and unit and will include inlet/manhole locations with station and offset, pipe layouts and sizes, ditch alignments, rock slope protection, infiltration basin, and end treatments where appropriate. Pipe profiles will be developed for each system shown on the layout sheets.

Preliminary drainage details will be identified on the detail sheets for details not covered in the Standard Plans. Completion of the detail design will occur at with the 90% PS&E submittal.

#### Post Construction Project Worksheet (PCPW)

Post construction storm water quality measures are required to be implemented on projects creating or replacing more than 2,500 square feet of impervious surface, in accordance with Stanislaus County's Phase II MS4 Permit. As a result, this task assumes that Dokken will prepare a Post Construction Project Worksheet (PCPW) in accordance with the Stanislaus County's 2015 Post Construction Standards Plan.

The PCPW will include the following features:

- A description of the project and the major engineering features
- A description of the feasible Site Design Control Measures and justification of measures considered infeasible or not applicable to the project
- A description of the feasible Low Impact Development (LID) control measures and justification of measures considered infeasible or not applicable to the project
- A description of the feasible Treatment Control Measures and justification of measures considered infeasible or not applicable to the project, as well as supporting calculations.

- A description of the Hydromodification Control Measures and justification of measures considered infeasible or not applicable to the project, as well as supporting calculations.
- Drainage Management Area (DMA) site plans
- Design drawings for Treatment Control Measures
- Volumetric BMP Sizing Tool printout

A draft version of this worksheet will be prepared and submitted to the County for review with the 60% PS&E milestone submittal. Comments will be addressed and the final worksheet will be submitted for approval with the 90% PS&E milestone submittal.

A preliminary construction cost estimate and unedited specifications will be prepared and submitted to the County for review.

*Deliverables: 60% Plans, Draft PCPW, Specifications and Engineers Estimate*

#### **Task 10.5 90% PS&E**

##### Final Post Construction Project Worksheet (PCPW)

Comments received from the County will be addressed and the final PCPW will be prepared and submitted to the County for approval.

##### 90% Plan Submittal

Based on comments received from the County on the 60% submittal, Dokken Engineering will prepare the 90% PS&E package and submit to the County for review. Construction details will be provided, and quantity values will be entered into the quantity tables. The edited special provisions will be provided for any non-standard bid items.

A 90% preliminary engineer's estimate will be submitted for the County's review.

*Deliverables: Final PCPW, 90% Plans, Response to Comments, Draft Edited Specifications and 90% Engineer's Estimate*

#### **Task 10.6 100% PS&E**

Based on comments received from the County on the 90% PS&E package submittal, Dokken Engineering will prepare the 100% PS&E package for the County review, approval and bidding.

*Deliverable: 100% Plans, Specifications and Engineer's Estimate*

McHenry Avenue  
Widening Phase II



Amendment 1-Exhibit B  
Final Design Cost Proposal  
August 17, 2017

Task Description	DOKKEN ENGINEERING										CRAWFORD & ASSOCIATES						LMCO ENGINEERING (DBE)						TOTAL HOURS	OTHER DBE CT COST	LARGE DBE CT COST						
	SALE ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	SENIOR ENGINEER PROJECT CHANGE	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER				PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER	PROJECT MANAGER
	126421	122614	119109	179200	172824	194134	162279	198642																							
Task 1 - INITIAL DESIGN																															
1.1 Project Management																															
1.2 Project Meetings																															
1.3 Design of Lane																															
1.4 Quality Assurance/Quality Control																															
Task 2 - LAYOUT DESIGN																															
2.1 Access Mapping and Control Research																															
2.2 Control, Boundary and Right of Way Survey																															
2.3 Easement Survey																															
2.4 Plot Maps and Lot Descriptions																															
2.5 Final Mapping																															
Task 3 - DRAINAGE DESIGN																															
3.1 Stormwater Management																															
3.2 Final Design																															
Task 4 - UTILITIES DESIGN																															
4.1 Stormwater																															
4.2 Gas																															
4.3 Water																															
Task 5 - ELECTRICAL DESIGN																															
5.1 Final Design																															
Task 6 - CIVIL DESIGN																															
6.1 Final Design																															
Task 7 - CONSTRUCTION ADMINISTRATION																															
7.1 Construction Administration																															
Task 8 - TRAFFIC DESIGN																															
8.1 Final Design																															
Task 9 - ENVIRONMENTAL DESIGN																															
9.1 Final Design																															
TOTAL HOURS	138	130	94	140	157	12	12	13	12	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12				
TOTAL COST	\$25,120	\$23,700	\$15,150	\$27,200	\$24,960	\$8,220	\$8,220	\$9,876	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220	\$8,220				



**Cost Proposal**

**McHenry Avenue Widening Phase II Project**

**Stanislaus County**

**CONTRACT No.**  
**CONSULTANT:** Dokken Engineering

**CONSULTANT COST PROPOSAL**  
**DATE: August 17, 2017**

**DIRECT LABOR**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Salary Range</u>	<u>Rate</u>	<u>Total</u>
Matt Griggs	Principal in Charge	0	\$65.00 - \$85.00	\$90.00	\$0.00
Namat Hosseinion	Project & Environmental Manager	0	\$65.00 - \$85.00	\$80.00	\$0.00
Kathy Wickam	Roadway & Utilities Project Engineer	128	\$50.00 - \$75.00	\$70.00	\$8,960.00
Marty Maechler	Structures Project Engineer	0	\$50.00 - \$75.00		\$0.00
Jamie Formico	Right of Way Manager	0	\$40.00 - \$60.00		\$0.00
Rosa Griggs	Project Specifications Engineer	0	\$50.00 - \$85.00		\$0.00
Staff	Senior Engineer (Drainage)	120	\$50.00 - \$75.00	\$68.50	\$8,220.00
Staff	Senior Engineer (Drainage)	140	\$50.00 - \$75.00	\$57.00	\$7,980.00
Staff	Senior Engineer (Traffic)	52	\$50.00 - \$75.00	\$60.00	\$3,120.00
Staff	Associate Engineer	916	\$34.00 - \$55.00	\$46.00	\$42,136.00
Staff	Assistant Engineer	1,567	\$34.00 - \$55.00	\$33.00	\$51,711.00
Staff	Senior Environmental Planner	0	\$32.00 - \$55.00		\$0.00
Staff	Associate Environmental Planner	0	\$25.00 - \$35.00		\$0.00
Staff	Environmental Planner	0	\$25.00 - \$35.00		\$0.00
Staff	Environmental Planner/Biologist	0	\$40.00 - \$55.00		\$0.00
Staff	Environmental Planner/Archaeologist	0	\$30.00 - \$45.00		\$0.00
Staff	Senior CADD	0	\$35.00 - \$55.00		\$0.00
Staff	Engineering Technician	530	\$15.00 - \$35.00	\$26.00	\$13,780.00
		<u>3,453</u>			
<b>TOTAL - Direct Labor</b>					<b>\$135,907</b>

**INDIRECT COSTS**

• Combined Indirect Cost Rate

<u>Rate</u>	<u>Total</u>
157.00%	\$213,373.99
<b>TOTAL - Indirect Labor</b>	
	<b>\$213,374</b>

**OTHER COSTS (ACTUAL COSTS)**

<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
<b>TOTAL - Other Costs</b>			<b>\$0</b>

**FEE** ( 10.00% )

**TOTAL - Fee** **\$34,928**

**SUBCONTRACTOR COSTS**

Unico Engineering (DBE)\*\*  
GPA Consulting (DBE)\*\*  
Crawford & Associates, Inc.\*\*\*

<u>Total</u>
\$43,051.01
\$0.00
<u>\$7,345.25</u>

**Total Subconsultant Costs** **\$50,396**

**Subtotal** **\$434,606**

**TOTAL COST - NOT TO EXCEED\*** **\$434,606**



110 BLUE RAVINE RD - SUITE 101  
 Folsom, CA 95630  
 916-900-6623  
 www.unicoengineering.com

**UNICO ENGINEERING**  
**Dakken**  
 McHenry Avenue Widening - Additional Tasks  
**COST PROPOSAL**

**Task 1 - Survey and Mapping - Record Mapping and Control Research**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Ryan Thompson	Land Surveyor	32	\$48.08	\$1,538.56

**TOTAL Task 1 - Direct Labor \$1,538.56**

**Task 2 - Survey and Mapping - Control, Boundary and Right-of-Way Surveys**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Rob Markes	Party Chief	24	\$61.96	\$1,487.04
Ryan Thompson	Land Surveyor	24	\$48.08	\$1,153.92

**TOTAL Task 2 - Direct Labor \$2,640.96**

**Task 3 - Survey and Mapping - Merger County Topographic Survey**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Rob Markes	Party Chief	24	\$61.96	\$1,487.04
Ryan Thompson	Land Surveyor	16	\$48.08	\$769.28
Loran Wagener	Drafter	64	\$22.00	\$1,408.00

**TOTAL Task 3 - Direct Labor \$3,664.32**

**Task 4 - Survey and Mapping - Supplemental Topographic Survey**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Rob Markes	Party Chief	24	\$61.96	\$1,487.04
Ryan Thompson	Land Surveyor	24	\$48.08	\$1,153.92
Loran Wagener	Drafter	24	\$22.00	\$528.00

**TOTAL Task 4 - Direct Labor \$3,168.96**

**Task 5 - Right of Way - Plats and Legal Descriptions**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Ryan Thompson	Land Surveyor	48	\$48.08	\$2,307.84
Loran Wagener	Drafter	24	\$22.00	\$528.00

**TOTAL Task 5 - Direct Labor \$2,835.84**

**Task 6 - Final Mapping**

<u>Name</u>	<u>Role</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Ryan Thompson	Land Surveyor	60	\$48.08	\$2,884.80
Loran Wagener	Rodman (PW)	16	\$57.00	\$912.00
Rob Markes	Party Chief (PW)	16	\$61.96	\$991.36

**TOTAL Task 6 - Direct Labor \$4,788.16**

**TOTAL - Direct Labor \$18,636.80**

**OVERHEAD RATE (SHR) 110.00% TOTAL - Indirect Labor \$20,500.48**

**FEE 10.00% TOTAL - Fee \$3,913.73**

**TOTAL UNICO ENGINEERING \$43,051.01**

Form 10H  
CONSULTANT COST PROPOSAL

**TABLE 3 - COST PROPOSAL BY COST CATEGORY**

CONTRACT No. \_\_\_\_\_ Date 08/18/17  
 CONSULTANT Crawford & Associates, Inc - Enviro & Geotechnical and Materials Report 17-308.1

<b>DIRECT LABOR</b>				Ave. Hourly	
Classification	Range	Hours	@	Rate	Total
Principal	55-65	1	@	\$ 60.00	\$ 60.00
					\$ _____
Sr Project Manager	55-65	4	@	\$ 60.00	\$ 240.00
					\$ _____
Project Manager	40-50	6	@	\$ 45.00	\$ 270.00
					\$ _____
Senior Engineer	35-45	20	@	\$ 40.00	\$ 800.00
					\$ _____
Project Engineer	20-30	2	@	\$ 25.00	\$ 50.00
					\$ _____
Drafting	30-45	2	@	\$ 35.00	\$ 70.00
					\$ _____
Project Assisstant	20-25	1	@	\$ 23.00	\$ 23.00
					\$ _____
<b>Subtotal Direct Labor Costs</b>					\$ 1,513.00
<b>Anticipated Salary Increases</b>					\$ _____
<b>Total Direct Labor Costs</b>					\$ 1,513.00
<b>FRINGE BENEFITS</b>				Rate	Total
Fringe Benefits				23.00%	\$ 347.99
<b>Total Fringe Benefits</b>					\$ 347.99
<b>INDIRECT COSTS</b>					
Overhead/General and Administrative				120.00%	\$ 1,815.60
<b>Total Indirect Costs</b>					\$ 1,815.60
<b>FEE @ 10%</b>					\$ 367.66
<b>OTHER COSTS</b>					
Mileage					\$ 161.00
FDR mix design					\$ 2,000.00
Hand Auger					\$ 150.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
<b>Total Other Costs</b>					\$ 2,311.00
<b>SUBCONSULTANTS</b>					
Outside Laboratory Testing					\$ 990.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
					\$ 0.00
<b>Total Subconsultants</b>					\$ 990.00
<b>CONTINGENT TASKS</b>					
					\$ 0.00
					\$ _____
					\$ _____
<b>Total Contingent Tasks</b>					\$ 0.00
<b>TOTAL COSTS</b>					\$ 7,345