CAMINO REAL REGIONAL MOBILITY AUTHORITY BOARD RESOLUTION

WHEREAS, the Camino Real Regional Mobility Authority (CRRMA) selected Brown & Gay Engineers, Inc. (Engineer) to complete the environmental and preliminary engineering phases of the Loop 375 (Americas Avenue) Managed Lanes Project (the Project);

WHEREAS, the CRRMA and Engineer entered into an Agreement for Professional Engineering and Environmental Services dated April 4, 2013 (Agreement) whereby the Engineer was to provide the referenced environmental and preliminary engineering services to the CRRMA for the Project; and

WHEREAS, the CRRMA, in coordination with and at the request of the Texas Department of Transportation, now desires to increase the scope of the Project, such that the Engineer will complete the environmental and preliminary engineering services required for additional frontage roads and braided ramps to be added to the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE CAMINO REAL REGIONAL MOBILITY AUTHORITY:

THAT, the Executive Director is authorized to execute an Amendment to the Agreement for Professional Engineering and Environmental Services for the Loop 375 (Americas Avenue) Managed Lanes Project with Brown & Gay Engineers, Inc.

CAMINO REAL REGIONAL

PASSED AND APPROVED THIS 12TH DAY OF APRIL 2017.

	MOBILITY AUTHORITY
ATTEST:	Susan A. Melendez, Chair
Joe R. Fernandez, Secretary	
APPROVED AS TO CONTENT:	
Raymond L. Telles	

Executive Director

CAMINO REAL REGIONAL MOBILITY AUTHORITY AGREEMENT FOR PROFESSIONAL ENGINEERING AND ENVIRONMENTAL SERVICES

AMENDMENT NO. 1

This **AMENDMENT NO. 1** to the Agreement for Professional Engineering and Environmental Services (the "Amendment") is made as of this _____ day of _______, 2017, by and between the **CAMINO REAL REGIONAL MOBILITY AUTHORITY**, a political subdivision of the State of Texas, hereinafter called "Authority," and **BROWN & GAY ENGINEERS**, **INC.**, a professional engineering firm registered in the State of Texas, hereinafter referred to as the "Engineer."

WITNESSETH

WHEREAS, the Authority and Engineer entered into an Agreement for Professional Engineering and Environmental Services dated April 4, 2013 (the Agreement") whereby the Engineer was to provide preliminary engineering and environmental services to the Authority for the Loop 375 (Americas Avenue) Managed Lanes Project ("Project"); and

WHEREAS, in coordination with and at the request of the Texas Department of Transportation, the Authority now desires to amend the Agreement in order for the Engineer to provide additional services as part of the Project and the Engineer desires to complete such services.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the undersigned parties agree as follows:

- 1. Revision of Services to be Provided by Engineer. The parties hereby agree to add Attachment "B-1", which is attached hereto and incorporated herein for all purposes, to the Agreement, such that the Services to be Provided by the Engineer are inclusive of both Attachment B and Attachment B-1.
- **2.** Revision to the Project Schedule. The parties hereby agree to delete Attachment "C" from the Agreement in its entirety and replace it with Attachment "C-1", which is attached hereto and incorporated herein for all purposes.
- **3.** Revision to the Fee Proposal. The parties hereby agree to supplement the Fee Proposal identified as Attachment "D" of the Agreement, by adding Attachment "D-1", which is attached hereto and incorporated herein for all purposes.
- 4. <u>Revision to the Engineer's Organization Chart</u>. The parties hereby agree to delete **Attachment "E"** from the Agreement in its entirety and replace it with **Attachment "E-1"**, which is attached hereto and incorporated herein for all purposes.

- **5. Ratification.** Except as expressly amended by this Amendment, the Agreement and its attachments shall remain in full force and effect.
- **6. Execution in Counterparts.** This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall be considered fully executed as of the date first written above, when both parties have executed an identical counterpart, notwithstanding that all signatures may not appear on the same counterpart.

IN WITNESS WHEREOF, the Authority and the Engineer have executed and attested this Amendment by their officers thereunto duly authorized.

BROWN & GAY ENGINEERS, INC.	CAMINO REAL REGIONAL MOBILITY AUTHORITY
Signature	Signature
Printed Name	Printed Name
Title	Title
 Date	Date

ATTACHMENT B-1

SERVICES TO BE PROVIDED BY THE ENGINEER

TABLE OF CONTENTS

I.	PURPOSE	2
II.	SERVICES TO BE PROVIDED BY THE ENGINEER	
	A. Project Management and Administration	
	1) Progress Reporting	3
	2) Coordination/Administration	3
	3) Project Control/Scheduling	3
	4) Subconsultant Management	3
	5) Coordination Meetings	3
	B. Surveys	
	C. Schematic Design	4
	1) Roadway Design	4
	2) Design Schematic	5
	3) Other Items	6
	D. Environmental Studies	6

ATTACHMENT B-1 SERVICES TO BE PROVIDED BY THE ENGINEER

CAMINO REAL REGIONAL MOBILITY AUTHORITY LOOP 375 (AMERICA'S AVENUE) MANAGED LANES PROJECT

I. PURPOSE

The work to be performed by the Engineer under Supplemental Agreement #1 with the Camino Real Regional Mobility Authority (CRRMA) shall consist of the following major tasks:

- Adding proposed braided ramps to the design schematic for Loop 375 (Americas Avenue)
 Managed Lanes Project as follows:
 - Two sets of braided ramps between Zaragoza Road and Pan American Drive, one set in the Northbound direction and one set in the Southbound direction
 - One set of braided ramps in the Southbound direction between North Loop Drive and Alameda Avenue
- Adding retention ponds to the project drainage plan in order to capture additional runoff from the project; the retention ponds will be located outside of the existing right of way
- Performing additional environmental work for the retention ponds outside the right of way and updating the environmental documents to address the changes on the project and the latest TxDOT requirements
- o Performing survey work necessary for the retention pond preliminary analysis and design
- o Providing project management and administration for approximately 18 more months.

II. SERVICES TO BE PROVIDED BY THE ENGINEER

Professional services to be provided by the Engineer shall comply with the latest edition of all applicable codes, ordinances, criteria, standards, regulations, and other laws. The Engineer shall be responsible for completing preliminary engineering services for three sets of braided ramps described in section I. The services to be provided by the Engineer include the following key elements:

- A. Project Management and Administration
- B. Survey
- C. Schematic Design
- D. Environmental Studies

A. Project Management and Administration

The Engineer, in coordination with the CRRMA, will be responsible for directing and coordinating all activities related to the Project. Project management and administration tasks shall include Progress Reporting, Coordination/Administration, Project Control/Scheduling, and Sub consultant Management. The work shall include the following:

1) Progress Reporting

- The Engineer shall prepare and submit monthly progress reports of activities completed during the reporting period to the CRRMA.
- The Engineer shall prepare and submit invoices that include financial and DBE participation data. Invoice shall include hours worked by individual, hourly rate, monthly invoice amount as compared to the baseline monthly estimate, monthly cumulative invoice amount as compared to baseline monthly cumulative estimate, and reasons for deviations from baseline, if appropriate. The progress report shall be submitted as an attachment to the invoice.

2) Coordination/Administration

• The Engineer shall coordinate with CRRMA GEC staff regularly throughout project development. The Engineer shall coordinate with the CRRMA GEC staff to help compile and maintain a comprehensive Administrative Record.

3) Project Control/Scheduling

• The Engineer shall maintain a Master Schedule for the Project indicating tasks/subtasks, critical dates, milestones, deliverables, and review requirements. The Engineer shall update the Schedule on a monthly basis, and shall include all CRRMA GEC, TxDOT, and other 3rd party reviews in the schedule.

4) Subconsultant Management

- The Engineer shall monitor subconsultant activities (staff and schedule).
- The Engineer shall review and recommend approval of subconsultant progress reports and invoices.

5) Coordination Meetings

• Coordination meetings shall be held quarterly along with bi-weekly telecom meetings with the CRRMA GEC. The agenda for each meeting shall be submitted to the CRRMA GEC three (3) days prior to each meeting. Written meeting summaries including action items will be prepared and finalized ten (10) days following each meeting.

Deliverables

Progress Reports and Invoices

- Summaries of all meetings
- Administrative Record
- Project Schedule and monthly updates
- Sub consultant Progress Reports and Invoices

B. Surveys

The Engineer will perform additional surveys in support of the analysis and design of proposed retention ponds. The surveys will include the following tasks:

- 1) Providing existing right of way and property lines for the properties along Loop 375 from Zaragoza Road to IH-10
- 2) Providing missing inverts and outfall elevations for the storm sewer system from Zaragoza to IH-10
- 3) Obtaining right-of-entry by submitting letters to adjacent property owners and receiving confirmation
- 4) Providing full topo surveys within the limits of the proposed retention pond perimeters with cross sections at max. 100 ft. intervals. It is assumed that up to five (5) proposed retention ponds will be surveyed in the proximity of the following drains:
 - a) Mesa Drain = 2 Acres approx
 - **b)** Middle Drain = 2.5 Acres approx
 - c) Franklin Drain = 2 Acres Approx
 - **d)** Playa Drain = 2 Acres
 - e) Playa Interceptor = 1 Acre

C. Schematic Design

The Engineer shall provide services for the Design Schematic process to include the following items:

1) Roadway Design

Complete efforts required to develop roadway elements of the Project for the addition of the braided ramps, including the preparation of roadway and bridge widening(s) typical sections, proposed bridge (s) typical sections, horizontal geometric designs, and vertical geometric designs for frontage road lanes and ramps, and construction sequencing plan narrative and typical sections.

2) Design Schematic

The Engineer shall revise Design Schematic due to the addition of the braided ramps and retention ponds, as a minimum:

- Typical sections of all improvements including widened or new bridge structures
- Roadway plan and profile and superelevation
- Location and text of proposed main lane guide signs
- Location and text of proposed managed lane signs
- Lane lines and arrows indicating the number of lanes
- Bridge widening(s) limits
- New bridge(s) limits
- Retaining wall(s) limits
- Roadway lighting locations
- Geometrics, such as pavement cross slopes, lane/shoulder widths, slope rates (for fills and cuts) of the typical sections of proposed main lanes, frontage roads, ramps, and cross roads (if any), shown in planview and cross sections.
- Current and projected traffic volumes as provided by TxDOT
- Control of access lines
- Utility conflicts/adjustments with location and elevation information
- Proposed drainage structures
- Preliminary traffic control and sequence of construction plan
- Proposed signing and striping layout
- Drainage retention ponds
- ROW determination

3) Retention Ponds

Develop preliminary retention ponds to allot for the additional drainage due to the increment of impermeable surface pavement area in the project, as follows:

- ➤ Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impacts.
- ➤ Determine the location of retention ponding areas for storing runoff.
- ➤ Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.
- Coordination with City of El Paso / Socorro / County of El Paso and the EPWU-Stormwater Management
- > Determination and revision of roadway watershed and sub water shed areas.
- > Determination flood plain requirements. (not included CLOMR/LOMR)
- Revise Proposed Storm System.

4) Other Items

The Engineer shall perform the following tasks to support the engineering design effort:

- Develop Engineer's cost estimate to include construction, ROW, utility relocations, and contingencies.
- Revise drainage analysis and maps of the proposed drainage systems.
- Prepare a bridge type evaluation and analysis for proposed braided ramp structures.
- Present reports and findings to CRRMA GEC, as required.
- Work cooperatively and collaboratively with other governmental agencies and design consultant firms.

Deliverables

- Preliminary and Final (90, and 100 percent) Design Schematic
- Cost Estimate for all phased Design Schematic submittals
- Geopak and MicroStation .DGN files for Final Design Schematic
- Revise technical memorandums on drainage analysis and bridge concepts

D. Environmental Studies

The environmental study shall be updated, revisions shall be made to technical reports and EA due to recent revisions to project design, project limit changes that include the need for proposed right-of-way (ROW), and new TxDOT requirements. It is estimated that approximately 10 acres of new ROW would be required for five proposed detention ponds. The following documents shall be revised and/or prepared:

- Prepare Project Scoping Development Tool and/or Risk Assessments
- Revise Historic PCR. Prepare Research Design and Historic Resources Reconnaissance Survey Report
- Revise Archeological Background Study. Prepare Antiquities Permit Application and Archeological Survey Results Report
- Prepare Biological Evaluation Form
- Revise Water Resources Technical Report
- Prepare Community Impacts Form
- Prepare Indirect and Cumulative Impacts Technical Report
- Revise EA document (additional information associated with the need for proposed ROW.

Document revisions shall include revisions to figures, impact calculations, and possibly field work since some of the original work was done over a year and a half ago when no new ROW was required. In addition, TxDOT has changed their forms and requirements since that time; therefore, updates are anticipated. More detail is provided below for the cultural resource tasks listed above (Historic and Archeological Resource Studies).

1) Supplemental Scope for Historic Resource Studies

The Engineer shall perform a reconnaissance-level documentation and National Register of Historic Places (NRHP) eligibility evaluation for historic-age buildings, structures, objects, districts, and non-archeological sites in the project's Area of Potential Effect (APE). Identification, evaluation, and documentation tasks associated with this work shall be completed in accordance with the provisions of the Secretary of the Interior's Standards for the Identification, Evaluation and Documentation (48 FR Parts 44716-42). Historic studies shall be performed by a staff who meet the Secretary of the Interior's Professional Standards for History and Architectural History and are precertified under TxDOT Work Categories 2.8.1 and 2.11.1. Performance of historic studies shall include the following tasks.

Task 1 – Revised Project Coordination Request (PCR)

In 2014, the Engineer completed and submitted a PCR form for historic resources to TxDOT. Since the proposed project has changed since that submission, the Engineer shall complete an updated a PCR form. This PCR form shall include a historical assessment that shall outline the previously-identified historic-age resources within 1,300 feet of the proposed project area and analyze the potential for the presence of historic-age properties in the project's APE, which is anticipated to be a maximum of 300 feet from the proposed ponds.

The Engineer shall submit the PCR form to TxDOT-El Paso District for review and forwarding to TxDOT-ENV Historical Studies Branch (HIST). Should TxDOT-ENV HIST determine that a Historic Resources Survey is not necessary, the Engineer shall not proceed to Tasks 2 through 4.

Task 2 – Research Design

The Engineer shall develop a Research Design that meets the criteria described in TxDOT's Documentation Standard for Historic Resources Research Design (April 2014). The Research Design shall include primary research and documentation tasks, and it shall outline the Engineer's proposed fieldwork and research methodology. The Engineer shall submit the Research Design to TxDOT. Once the Research Design is approved by TxDOT-ENV HIST, the Engineer shall proceed to Task 3.

Task 3 – Draft Historic Resources Reconnaissance Survey It is anticipated that the APE for work completed under this supplemental scope would be 300 feet from each proposed pond. Work completed under Task 3 shall include documentation and research of historic-age resources (defined in accordance with 36 C.F.R. 60 as a building, structure, object, historic district or non-archeological site at least 50 years old). The Engineer shall also complete on-site research sufficient to establish an appropriate historic context for resources within the APE. The Engineer shall provide a Historic Resources Survey Report (HRSR) detailing the results of the reconnaissance-level survey. The HRSR shall describe the findings of the reconnaissance-level survey and make recommendations for the need, if any, to conduct intensive-level survey efforts for individual properties in order to finalize determinations of NRHP eligibility in accordance with 36 C.F.R. 60. (Intensive survey efforts would be included under a separate scope and budget, if required.) The HRSR shall conform with TxDOT's Documentation Standard for Reconnaissance Survey Report (April 2014).

The Engineer shall submit the Draft HRSR to TxDOT El Paso District and ENV for review.

Task 4 – Final Historic Resources Reconnaissance Survey

Based on comments from TxDOT, the Engineer shall revise and finalize the HRSR. The Engineer shall also prepare a CD with the required Geographical Information Systems (GIS) data files and metadata that are required in TxDOT's Documentation Standards for Reconnaissance Survey Reports (April 2014). The Engineer shall submit the Final HRSR with the CD of GIS files to TxDOT and the CRRMA.

Assumptions

This scope and fee do not include property-specific intensive survey efforts, which includes (but is not limited to) the research of primary sources such as in-depth comparative analyses, archival research and deed research of individual properties. Additionally, this scope does not include resolution of adverse effect activities or mitigative efforts. If an intensive survey, resolution of adverse effects activities, or mitigation is needed, a supplemental scope and fee shall be provided.

2) Supplemental Scope for Archeological Resources Studies

The Engineer shall revise the previous background study and conduct an intensive pedestrian survey and National Register of Historic Places (NRHP) and State Antiquities Landmark eligibility evaluation for archeological sites in the project's Area of Potential Effect (APE), specifically 10 acres of additional new right of way (ROW) for five proposed 2-acre detention ponds. Performance of archeological studies shall include the following tasks.

Task 1 – Revised Archeological Background Study

A previous background study for the Loop 375 Managed Lanes project (dated February 3, 2014) shall be updated to include approximately 10 acres of new ROW (locations of five proposed detention ponds) with recommendations for further work including intensive archeological survey.

Task 2-Texas Antiquities Permit Application

The Engineer shall prepare an archeological survey scope of work and Texas Antiquities Permit Application to conduct an intensive archeological survey. Based on preliminary review of project plans, the proposed project is subject to compliance with Section 106 of the National Historic Preservation Act and the Texas Antiquities Code. In compliance with the Texas Antiquities Act, an Antiquities Permit is required to conduct survey. The scope of work shall identify the need for the project to comply with both the Antiquities Code of Texas and Section 106 of the National Historic Preservation Act (NHPA). The Engineer archeologists shall submit the archeological survey scope of work and permit application to TxDOT/CRRMA, and the Engineer shall revise the archeological survey scope of work and permit application in accordance with comments prior to the submission of the archeological survey scope of work and permit application to TxDOT ENV and the Texas Historical Commission (THC).

Task 3- Archeological Survey

The Engineer shall conduct an archeological survey that meets TxDOT and THC standards for archeological survey. Archeological field investigations shall involve a 100-percent pedestrian survey consisting of an intensive surface examination of the project area coupled with systematic mechanical backhoe trenching where needed and where possible. Backhoe trenches shall be excavated systematically within portions of the APE where new ROW would be required and which do not demonstrate previous disturbance to a depth commensurate with the vertical APE for the project. The Engineer shall place backhoe trenches to cover as much of the proposed new ROW as possible. Trenches shall be up to 5 meters (16.4 feet) long and 0.7 meter (2.3 feet) wide and shall be excavated to the depth of the vertical APE, that allowable by the machine, or until the water table or Pleistocene deposits are reached. If trenches are excavated deeper than 4 feet, the trench shall be stepped as per Occupational Safety and Health Administration (OSHA) requirements.

Any previously recorded archeological sites known to occur within the APE shall be revisited, shovel tested and/or backhoe trenched where possible, and photographed. Site revisit forms shall be completed and submitted to TARL. The Engineer shall assess any identified archeological resources in the APE according to eligibility criteria for State Antiquities Landmarks and historic properties per the National Register of Historic Places. Archeological sites shall be recorded on State of Texas Archeological Data Site Forms, which shall be submitted to the Texas Archeological Research Laboratory (TARL). Survey shall employ a non-collect strategy for artifacts.

Task 4-Draft Report of Findings

The Engineer shall prepare a draft archeological survey report that includes background information, results of archeology investigations, and recommendations. For each archeological site identified in the APE, the report shall include a preliminary evaluation of National Register of Historic Places and State Antiquities Landmark eligibility and, if necessary, recommendations for further work. The report shall be prepared to meet the standards of Section 106 of the NHPA and the Antiquities Code of Texas, and TxDOT Standards of Uniformity.

The Engineer shall submit the draft archeological survey report to the CRRMA, TxDOT, and THC for review and approval.

Task 5- Final Report of Findings

The Engineer shall submit the final archeological survey report to CRRMA, TxDOT and THC for review and approval.

Task 6- Curation of Survey Documents

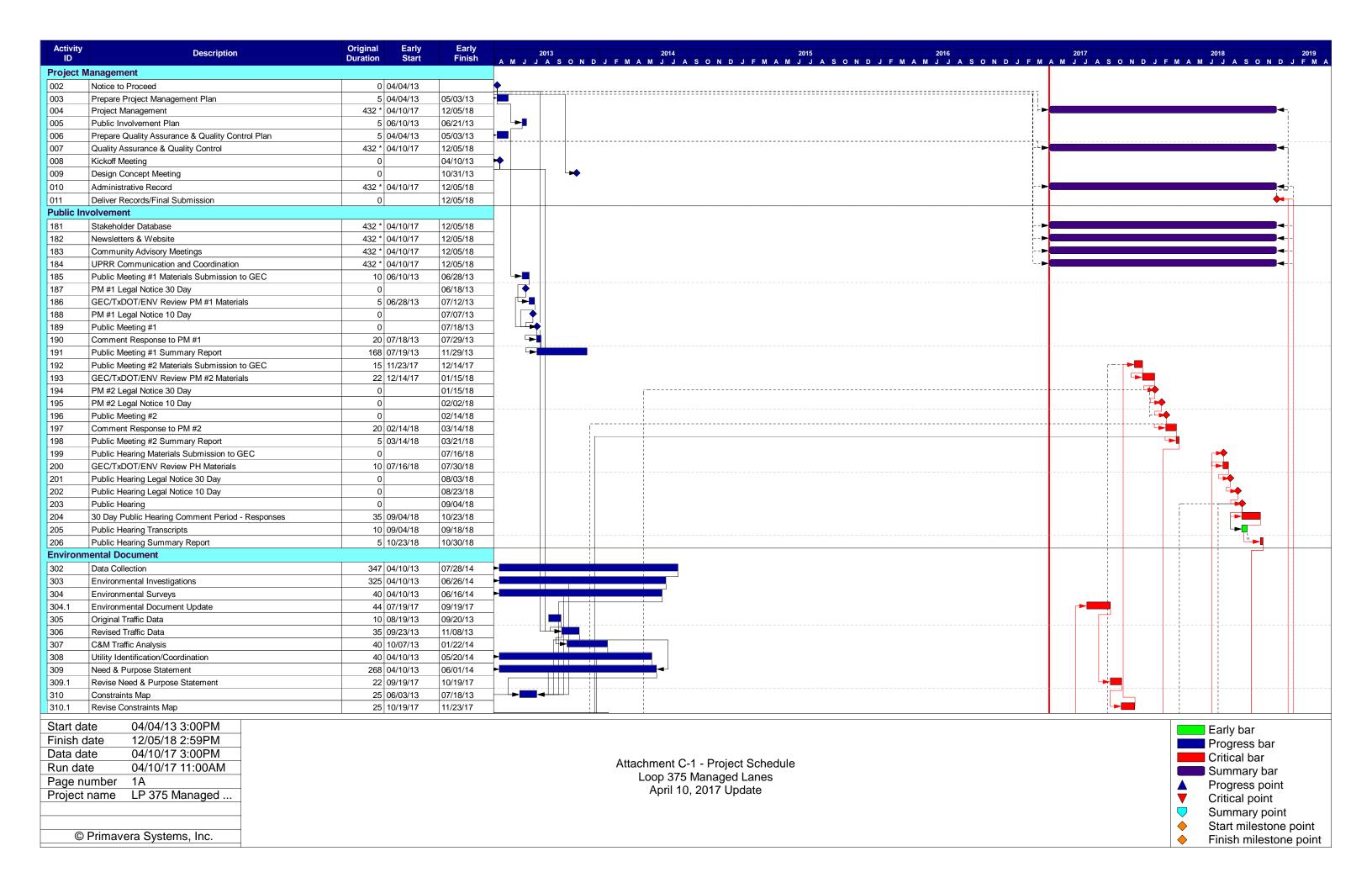
Field documentation, photos, etc. and final report shall be curated at a state accredited facility in accordance with facility standards and guidelines as required under terms and conditions of the Texas Antiquities Permit.

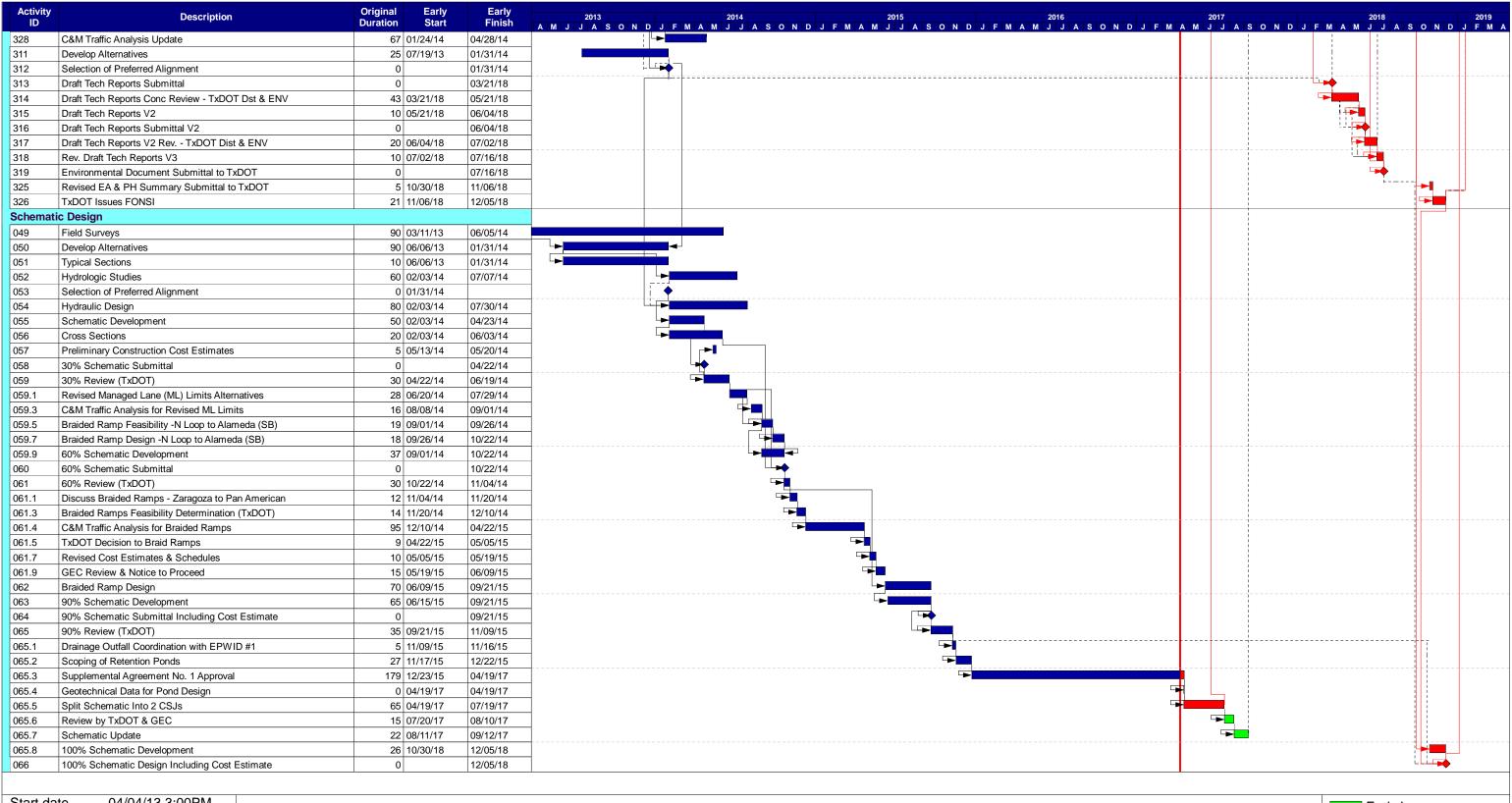
Assumptions

This proposal assumes the following:

- All proposed additional new ROW areas are high probability for archeological resources.
- Project schematics and GIS files shall be supplied to the Engineer prior to survey.
- The portion of the proposed project APE where new ROW would be required (i.e., locations of the five proposed detention ponds have not been previously surveyed for archeological resources).
- Documentation of up to two archeological sites is assumed for the purposes of this cost estimate.
- No testing or mitigation of archeological sites shall be necessary. If it is determined that additional archeological surveys, testing, or mitigation not outlined in this proposal are required, these activities would be conducted under a separate scope and budget.
- Access and right-of-entry shall be coordinated by the Engineer (B&G). Adequate access and right-of-entry shall be available to the archeologists at all times so as to not restrict the Engineer's ability to conduct the survey.

- No cemeteries exist within 75 feet of the proposed APE. If discovered, assessment of the potential presence of human burials within 75 feet of the proposed APE in deference to Section 711 of the Texas Health and Safety Code regarding cemeteries may require a supplemental cost estimate and scope.
- The total area to be surveyed is not expected to exceed 10 acres or a depth of 4 feet below current ground surface.





Start date	04/04/13 3:00PM						
Finish date	12/05/18 2:59PM						
Data date	04/10/17 3:00PM						
Run date	04/10/17 11:00AM						
Page number	2A						
Project name	LP 375 Managed						
© Primavera Systems, Inc.							

Attachment C-1 - Project Schedule Loop 375 Managed Lanes April 10, 2017 Update Early bar
Progress bar
Critical bar
Summary bar
Progress point
Critical point
Summary point
Start milestone point

Finish milestone point

Brown & Gay Engineers, Inc. Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Design of Braided Ramps and Retention Ponds

Company	Fee
Brown & Gay Engineers, Inc.	\$244,059.30
Blanton & Associates, Inc.	\$103,159.77
Raba Kistner, Inc.	\$0.00
SLI Engineers, Inc.	\$85,169.68
Villaverde, Inc.	\$102,822.57
Total	\$535,211.32

Contract Summary

Company	Original Contract Amount	Supplemental Agreement No. 1	Revised Contract Amount
Brown & Gay Engineers, Inc.	\$530,750.25	\$244,059.30	\$774,809.55
Blanton & Associates, Inc.	\$306,179.84	\$103,159.77	\$409,339.61
Raba Kistner, Inc.	\$16,544.84	\$0.00	\$16,544.84
SLI Engineers, Inc.	\$69,047.44	\$85,169.68	\$154,217.12
Villaverde, Inc.	\$75,021.08	\$102,822.57	\$177,843.65
Total	\$997,543.45	\$535,211.32	\$1,532,754.77

Brown & Gay Engineers, Inc. Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Design of Braided Ramps and Retention Ponds

Task	Brown & Gay	Blanton	Raba Kistner	SLI	Villaverde
A. Project Management and Administration	\$42,861.46	\$0.00	\$0.00	\$0.00	\$0.00
B. Survey	\$0.00	\$0.00	\$0.00	\$81,089.68	\$0.00
C. Schematic Design	\$200,977.84	\$0.00	\$0.00	\$0.00	\$102,822.57
D. Environmental Studies	\$0.00	\$85,470,77	\$0.00	\$0.00	\$0.00
E. Public Involvement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub Totals	\$243,839.30	\$85,470.77	\$0.00	\$81,089.68	\$102,822.57
Direct Expenses	\$220.00	\$17,689.00	\$0.00	\$4,080.00	\$0.00
Totals	\$244,059.30	\$103,159.77	\$0.00	\$85,169.68	\$102,822.57
	Grand Total		\$535,211.32		

Participation Percentage

45.60%

19.27%

0.00%

15.91%

19.21%

DBE Percentage for Supplemental Agreement #1

54.40%

Contract Summary by Task

Company	Original Contract Amount	Supplemental Agreement No. 1	Revised Contract Amount
A. Project Management and Administration	\$93,141.98	\$42,861,46	\$136,003.44
B. Survey	\$60,292.19	\$81,089.68	\$141,381.87
C. Schematic Design	\$467,566.87	\$303,800.41	\$771,367.28
D. Environmental Studies	\$214,028.28	\$85,470.77	\$299,499.05
E. Public Involvement	\$90,680.38	\$0.00	\$90,680.38
Sub Totals	\$925,709.70	\$513,222.32	\$1,438,932.02
Direct Expenses	\$71,833.75	\$21,989.00	\$93,822.75
Totals	\$997,543.45	\$535,211.32	\$1,532,754.77

Brown & Gay Engineers, Inc. Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Schematic Design of Braided Ramps and Retention Ponds

							Y	r				
Task Description	SENIOR PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR CADD OPERATOR	CADD OPERATOR	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABOR
A. Project Management and Administration (Based on 18 months from 10/1/16 to 4/1/18)						1 7 7	TTEN			1243	243	\$ 42,861.46
1. Progress Reporting (Based on 12 months from 1/1/16 to 1/1/17)											54	
Prepare and Submit Monthly Progress Reports for CRRMA	18										18	\$ 4,017.96
Prepare and Submit Invoices	18						18				36	\$ 5,646.9
2. Coordination/Administration (Based on 12 months from 1/1/16 to 1/1/17)											24	\$ 5,357.2
Coordinate with CRRMA GEC Staff	24										24	\$ 5,357.2
3. Project Control/Scheduling (Based on 12 months from 1/1/16 to 1/1/17)											16	\$ 2,678.6
Update Schedule on a Monthly Basis	8			8							16	\$ 2,678.6
4. Subconsultant Management (Based on 12 months from 1/1/16 to 1/1/17)			T								36	The second of th
Monitor Subconsultant Activities (staff and schedule)			18								18	-
Review and Recommend Approval of Subconsultant Progress Reports and Invoices	18										18	
5. Coordination Meetings (Based on 12 months from 1/1/16 to 1/1/17)											113	The second second
6.2 Prepare and Attend Monthly Coordination Meetings with the CRRMA GEC (Quarterly Meetings and telecom)	36	36			36					5	113	\$ 18,590.0
HOURS SUB-TOTALS	122	36		8	36		18	0	0	5	243	7
CONTRACT RATE PER HOUR	\$223.22	\$196.07	\$141.78	\$111.61	\$87.48	\$120.66				\$69.38		
TOTAL LABOR COSTS	\$27,232.84	\$7,058.52	\$2,552.04	\$892.88	\$3,149.28	\$0.00				\$346.90	\$42,861.46	
% DISTRIBUTION OF STAFF HOURS	50.21%	14.81%	7.41%	3.29%	14.81%	0.00%	7.41%	0.00%	0.00%	2.06%		
Roadway Design for 2 sets of braided ramps between Zaragoza and Pan American (NB and A Proposition of Readway and Phylos Widesigs(x) Trainel Sections	SB)				فالتالية						529	\$ 158,801: \$ 63,793.
3.1 Preparation of Roadway and Bridge Widening(s) Typical Sections 3.1.1 Roadway Typical Sections	4	0						4	0		23	\$ 2.618.
	2	Z A	. 4			4		4	16		46	
3.1.2 Proposed Bridge(s) Typical Sections 3.1.3 Horizontal Geometric Designs (2 sets of braided ramps between Zaragoza and Pan American)	2	20	48	60	24	48		0	20	-	230	
3.1.4 Vertical Geometric Designs (2 sets of braided ramps between Zaragoza and Pan American)	2	20	48	60	24			8	20		230	
Design Schematic for 2 sets of braided ramps between Zaragoza and Pan American (NB and	2	20	40	.00		40		- O	20		200	Ψ 21,000.
2. Design Schematic for 2 sets of braided ramps between Zaragoza and Fan American (ND and	SB)										414	\$ 47,238.
4.1 Typical Sections	SB)	2		4					4		414	The second second
	SB) 1	2	12	4 24	24	12		24	4 36			\$ 1,140.
4.1 Typical Sections	(SB)	2 4 2	12	4 24 4	24	12		24	4 36 8		10	\$ 1,140. \$ 13,749.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100')	SB) 1	2 4 2 4	12	4 24 4	24	12			4 36 8		10 137	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text)	1 1	2 4 2 4 4	12	4 24 4	24				4 36 8		10 137 15	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits	1 1 1	2 4 2 4 4 4	12	4 24 4	24				4 36 8		10 137 15	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,490
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits	1 1 1 1	2 4 2 4 4 4	12	4 24 4	24				4 36 8		10 137 15 144 9 9	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations	1 1 1 1 1 1	2 4 2 4 4 4	12 4 2	4 24 4	24				4 36 8		10 137 15	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes	1 1 1 1 1 1	2 4 2 4 4 4	12 4 2 6	4 24 4	24				4 36 8		10 137 15 144 9 9 9 11	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control	1 1 1 1 1 1	2 4 2 4 4 4	12 4 2 6 4	4 24 4	24				4 36 8		10 137 15 144 9 9 9 11 12	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan	1 1 1 1 1 1	2 4 2 4 4 4	12 4 2 6 4	4 4 4	24				4 36 8		10 137 15 144 9 9 9 11 12 21	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout	1 1 1 1 1 1 1	2 4 2 4 4 4	12 4 2 6 4	4 4 4	24 4 4				4 36 8		10 137 15 144 9 9 9 11 12 21 12	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items	1 1 1 1 1 1 1	2 4 2 4 4 4	12 4 2 6 4	4 4 4	24 4 4				4 36 8		10 137 15 144 9 9 9 11 12 21	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan	1 1 1 1 1 1 1	2 4 2 4 4 4 4	12 4 2 6 4 8	4 24 4 4 4 4 4 4 80	24 4 4 4				8		10 137 15 144 9 9 9 11 12 21 12	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the	1 1 1 1 1 1 1 1	2 4 2 4 4 4 4 2 24 24	4 2 6 4	4 4 4 4 4 4 4 80	4 4	120 4 4	4 4 4 6 8		8		10 137 15 144 9 9 9 11 12 21 12 25	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal	1 1 1 1 1 1 1 1 1	2 4 2 4 4 4 4 2 24 2 4	4 2 6 4	4 4 4 4 4 4 4 80 4 80	4 4	120 4 4	4 4 4 6 8		8		10 137 15 144 9 9 9 11 12 21 12 25 402	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 40,976. \$ 1,719.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Stopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps)	1 1 1 1 1 1 1 1 1 4 4 1 1	2 4 2 4 4 4 4 24 2 4	4 2 6 4	4 4 4 4 4 4 4 80 4 80	4 4	120 4 4	4 4 4 6 8		8		10 137 15 144 9 9 9 11 12 21 12 25 402	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769. \$ 1,719.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures	1 1 1 1 1 1 1 1 1 4 4 1 1 4 25	2 4 4 4 4 4 24 2 4 4 104	4 2 6 4	4 4 4 4 4 80 4 8	4 4	120 4 4 4 80 4	20 4 4 6 8 8 24 4	24	48	0	10 137 15 144 9 9 9 11 12 21 12 25 402	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769. \$ 1,719. \$ 3,396. \$ 1,677.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms	1 1 1 1 1 1 1 1 4 4 1 1	2 4 4	4 2 6 4 8 48	4 4 4 4 4 80 4 8	4 4 4	80 4 332 \$120.66	20 4 4 6 8 8 24 4 78 \$90.50	24 2	48	0 \$69.38	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769. \$ 1,719. \$ 3,396. \$ 1,677.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms	1 1 1 1 1 1 1 1 1 4 4 1 1 4 25	2 4 4 104	4 2 6 4 8 48 200	4 4 4 4 4 80 4 80	24	120 4 4 4 80 4	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00	24 2 2 78 \$87.48 \$6,823.44	48 160 \$75.41 \$12,065.60	0 \$69.38	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769. \$ 1,719. \$ 3,396. \$ 1,677.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR	1 1 1 1 1 1 1 1 4 4 1 1 4 25 \$223.22	2 4 4 104 \$196.07	4 2 6 4 8 8 200 \$141.78	4 4 4 4 4 80 4 8 8 260 \$111.61	24 108 \$87.48	80 4 332 \$120.66	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00	24 2 2 78 \$87.48 \$6,823.44	48 160 \$75.41 \$12,065.60	0 \$69.38	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8 1345	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877 \$ 47,769 \$ 40,976 \$ 1,719 \$ 3,396 \$ 1,677
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR TOTAL LABOR COSTS	1 1 1 1 1 1 1 1 4 1 4 25 \$223.22 \$5,580.50	2 4 104 \$196.07 \$20,391.28	4 2 6 4 8 8 200 \$141.78 \$28,356.00	4 4 4 4 4 80 4 8 8 260 \$111.61 \$29,018.60	24 108 \$87.48 \$9,447.84	80 4 332 \$120.66 \$40,059.12	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00	24 2 2 78 \$87.48 \$6,823.44	48 160 \$75.41 \$12,065.60	0 \$69.38 \$0.00	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8 1345	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877 \$ 47,769 \$ 40,976 \$ 1,719 \$ 3,396 \$ 1,677
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR TOTAL LABOR COSTS	1 1 1 1 1 1 1 1 4 1 4 25 \$223.22 \$5,580.50	2 4 104 \$196.07 \$20,391.28	4 2 6 4 8 8 200 \$141.78 \$28,356.00	4 4 4 4 4 4 80 4 8 260 \$111.61 \$29,018.60 19.33%	24 108 \$87.48 \$9,447.84	80 4 332 \$120.66 \$40,059.12	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00 5.80%	24 2 78 \$87.48 \$6,823.44 5.80%	48 160 \$75.41 \$12,065.60 11.90%	0 \$69.38 \$0.00 0.00%	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8 1345	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877 \$ 47,769 \$ 1,719 \$ 3,396 \$ 1,677
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR TOTAL LABOR COSTS % DISTRIBUTION OF STAFF HOURS	1 1 1 1 1 1 1 1 4 1 4 25 \$223.22 \$5,580.50 1.86%	2 4 4 104 \$196.07 \$20,391.28 7.73%	4 2 6 4 8 8 200 \$141.78 \$28,356.00	4 4 4 4 4 4 80 4 8 260 \$111.61 \$29,018.60 19.33%	108 \$87.48 \$9,447.84 8.03%	80 4 332 \$120.66 \$40,059.12 24.68%	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00 5.80%	24 2 78 \$87.48 \$6,823.44 5.80%	48 160 \$75.41 \$12,065.60 11.90%	0 \$69.38 \$0.00 0.00%	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8 1345	\$ 1,140. \$ 13,749. \$ 1,665. \$ 17,073. \$ 1,490. \$ 1,152. \$ 1,315. \$ 1,393. \$ 2,310. \$ 1,580. \$ 2,877. \$ 47,769. \$ 1,719. \$ 3,396. \$ 1,677.
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100') 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR TOTAL LABOR COSTS % DISTRIBUTION OF STAFF HOURS	1 1 1 1 1 1 1 1 4 1 4 25 \$223.22 \$5,580.50 1.86%	2 4 4 104 \$196.07 \$20,391.28 7.73%	4 2 6 4 8 8 200 \$141.78 \$28,356.00	4 4 4 4 4 4 80 4 8 260 \$111.61 \$29,018.60 19.33%	108 \$87.48 \$9,447.84 8.03%	80 4 332 \$120.66 \$40,059.12 24.68%	20 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00 5.80%	24 2 78 \$87.48 \$6,823.44 5.80%	48 160 \$75.41 \$12,065.60 11.90%	0 \$69.38 \$0.00 0.00%	10 137 15 144 9 9 9 11 12 21 12 25 402 356 13 25 8 1345	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877 \$ 47,769 \$ 40,976 \$ 1,719 \$ 3,396 \$ 1,677
4.1 Typical Sections 4.2 Roadway Plan and Profile Sheets (Roll Plots at 1"=100") 4.3 Main Lane Guide Signs (Location/Text) 4.6.1 Design Cross-Sections (Revise for braided ramps) 4.7 Bridge(s) Widening Limits 4.8 New Bridge(s) Limits 4.9 Retaining Wall(s) Limits 4.11 Roadway Lighting Locations 4.12.1 Pavement Cross Slopes 4.17 Preliminary Traffic Control 4.18 Preliminary Sequence of Construction Plan 4.19 Proposed Signing and Striping Layout 3. Other Items Schematic design for one set of braided ramps between North Loop and Alameda (SB) and removeal of the collector/distributer frontage road included in 60% schematic submittal 5.1 Develop Engineer's Cost Estimate (Revise for braided ramps) 5.3 Prepare a Bridge Type Evaluation and Analysis for all Proposed New and Widening Structures 5.8 Coordinate with Governmental Agencies and Design Consultant Firms HOURS SUB-TOTALS CONTRACT RATE PER HOUR TOTAL LABOR COSTS % DISTRIBUTION OF STAFF HOURS	1 1 1 1 1 1 1 1 4 1 4 25 \$223.22 \$5,580.50 1.86%	2 4 4 104 \$196.07 \$20,391.28 7.73%	4 2 6 4 8 8 200 \$141.78 \$28,356.00 14.87%	4 4 4 4 4 80 4 8 260 \$111.61 \$29,018.60 19.33%	108 \$87.48 \$9,447.84 8.03%	332 \$120.66 \$40,059.12 24.68%	20 4 4 4 6 8 8 24 4 78 \$90.50 \$7,059.00 5.80%	24 2 78 \$87.48 \$6,823.44 5.80% 78	48 160 \$75.41 \$12,065.60 11.90%	0 \$69.38 \$0.00 0.00%	10 137 15 144 9 9 9 9 111 12 21 12 25 402 356 13 25 8 1345 \$158,801.38	\$ 1,140 \$ 13,749 \$ 1,665 \$ 17,073 \$ 1,490 \$ 1,152 \$ 1,315 \$ 1,393 \$ 2,310 \$ 1,580 \$ 2,877 \$ 47,769 \$ 40,976 \$ 1,719 \$ 3,396 \$ 1,677

Brown & Gay Engineers, Inc. Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Schematic Design of Braided Ramps and Retention Ponds

Task Description	SENIOR PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR CADD OPERATOR	CADD OPERATOR	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABO
C. Schematic Design for Retention Ponds							1 2 2 7	41 - 1			268	\$ 42,176.4
Retention Ponds Review and Coordination						والمراور وبالمارا					136	\$ 22,756.3
Coordinate development of retention pond schematic design											130	¢ 22,750.5
Review retention pond submittals	8	40			20						68	\$ 11,378.10
Coordinate ROW data	4	20			10						34	
Coordinate field surveys	4	20			10						34	
2. Update Design Schematic with Retention Ponds					-		9 9 9				0	\$ -
Incorporate retention ponds into the schematic plans	R	20				60					132	HILL MANAGEMENT AND
Incorporate ROW information	4	10				30					88 44	
						30				-	44	\$ 6,473.38
											0	Ф (=)
						-					0	\$
											0	\$ -
											0	\$ 741
											0	\$
											0	\$
											0	\$
											0	\$
HOURS SUB-TOTALS	28	110	0	0	40			0	0	0	268	
CONTRACT RATE PER HOUR	\$223.22	\$196.07	\$141.78		\$87.48			\$87.48	\$75.41	\$69.38		
TOTAL LABOR COSTS	\$6,250.16	\$21,567.70	\$0.00		\$3,499.20			\$0.00	\$0.00	\$0.00	\$42,176.46	
% DISTRIBUTION OF STAFF HOURS	10.45%	41.04%	0.00%	0.00%	14.93%	33.58%	0.00%	0.00%	0.00%	0.00%		
TOTAL PROJECT HOURS	28	110	0	0	40	90	0	0	0	0	268	\$ 42,176.46
PROJECT TOTALS	\$6,250.16	\$21,567.70	\$0.00	\$0.00	\$3,499.20	\$10,859.40	\$0.00	\$0.00	\$0.00	\$0.00	\$42,176.46	
TOTAL PROJECT % DISTRIBUTION OF STAFF HOURS	10.45%	41.04%	0.00%	0.00%	14.93%	33.58%	0.00%	0.00%	0.00%	0.00%		

Brown & Gay Engineers, Inc.
Loop 375 Managed Lanes

Other Direct Expenses	UNITS		RATE		
Lodging/Hotel (Taxes/fees not			25.00		
included)	0	night	85.00		\$0.00
Meals (overnight stay required)	0	day	36.00		\$0.00
Rental Car (Tax/fees not included)	0	day	65.00		\$0.00
Mileage	0	mile	0.510		\$0.00
SUV or ATV Rental	0	day	100.00		\$0.00
Air Travel	0	each	400.00		\$0.00
Parking	0	day	10.00		\$0.00
Taxi/Cab fare	0	each	30.00		\$0.00
Standard Postage	0	letter	0.45		\$0.00
Overnight express-letter size	2	each	20.00		\$40.00
Overnight express-oversized box	2	each	30.00		\$60.00
Courier Services	0	each	30.00		\$0.00
8½"X11" B/W Paper Copies	30	each	0.10		\$3.00
11"X17" B/W Paper Copies	30	each	0.20		\$6.00
8½"X11" Color Paper Copies	30	each	1.00		\$30.00
11"X17" Color Paper Copies	30	each	1.20		\$36.00
CADD Plotting	30	linear foot	1.50		\$45.00
Digital Ortho Plotting	0	linear foot	2.00		\$0.00
Law Enforcement/Uniform Officer	0	hour/officer	40.00		\$0.00
Notebooks	0	each	2.00		\$0.00
Hazardous Materials Database Search	0	per search	500.00		\$0.00
Backhoe Rental	0	day	800.00		\$0.00
Boards for Public Meeting	0	each	100.00		\$0.00
Env. Field Supplies (lathes, stakes, flagging, spray paint, etc.)	0	day	20.00		\$0.00
Interpreter	0	hour	40.00		\$0.00
Court Reporter	0	hour	40.00		\$0.00
Newspaper Advertisement	0	each	2,000.00		\$0.00
Other Direct Expense Total				1	\$220.00

PRIME PROVIDER NAME: Brown & Gay Engineers, Inc.

CONTRACT NUMBER:

Brown & Gay Engineers, Inc. (PRIME)

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and/or Specified Rate Labor/Staff Classification			Negotiated urly Base Rate	Contract Rate		
Senior Project Manager		\$	74.00	\$	223.22	
Senior Bridge Engineer		\$	65.00	\$	196.07	
Senior Engineer		\$	65.00	\$	196.07	
Project Engineer		\$	47.00	\$	141.78	
Design Engineer		\$	37.00	\$	111.61	
EIT		\$	29.00	\$	87.48	
Senior Engineering Technician		\$	40.00	\$	120.66	
Engineering Technician		\$	30.00	\$	90.50	
Senior CADD Operator		\$	29.00	\$	87.48	
CADD Operator		\$	25.00	\$	75.41	
Admin/Clerical		\$	23.00	\$	69.38	
Audited Overhead Rate:	174.23%					
Negotiated Profit Rate:	10.00%					

Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment.

Physical percent complete to be billed. Documentation of hours work not required.

Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

Villaverde Inc.
Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Schematic Design of Braided Ramps

					CENIOD			TOTAL	
Task Description	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	SENIOR CADD OPERATOR	ADMIN / CLERICAL	TOTAL LABOR HOURS	OTAL LABOR COST
C. Schematic Design								123	10,311.89
1. Data Collection								0 5	
Obtain Culvert Drawings of Record from TxDOT								0	a
Conduct Inventory of on going City Projects/County/EPWU								0	
Gather Design Information								0 5	100
Field Investigation of Inlets, Storm Sewer								0	1
Gather Aerial Topo Mapping								0	-
Prepare and Maintain Photographic Information File	<u> </u>							0	14.
Coordinate/Inventory Information with Sub-Consultants (surveyor)								0	T(≇ 5
2. Design Criteria								0	0
3. Roadway Design	THE RESIDENCE OF THE PERSON NAMED IN							0	0
4. Design Schematic								123	10,311.89
Drainage Analysis								0	127
Update Existing Data & Research	-							0	
Create Existing Storm Sewer Model								0	
Review & Interpret Results								0	
Identify and Document Issues that will Require FEMA								0	
Identify and Document Issues that will Require PEW#1					-			0	
Hydraulic Analysis								0	2
Detail review of existing drainage system.								0	
								0	1 2 2
- establish base line for comparison								0	(#)
- identify existing conditions along the project.								0	
Hydrologic review of watershed and sub water shed areas.								0	(*)
Crossings (arroyos, culverts, bridge structures drainage structures).								0	
- peak flows current 5, 10, 25, 50 and 100 year frequency.								0	
- peak flows future 5, 10, 25, 50 and 100 year frequency. (Revise for braided ramps)	2	4	16	16	4	8		50	4,057.30
Analyze Impact to Downstream Facilities (Revise for braided ramps)	2	8	16		8	4		38	3,210.50
Identify impacts from Intersection Construction by Stage								0	
Recommend Mitigation Measures (Revise for braided ramps)	1	4						5	500.71
Research Erosion Control Methods								0	127
Research Design Options to Address "Best Management Practices"								0	143
Utilities Coordination for inlet (Revise for braided ramps)	1	2			2			5	432.21
Cost Estimates for Prefer Alternative (Revise for braided ramps)	2	4			8			14	1,123.70
Project Administration								0	
QA/QC								0	
Prepare 60%								0	5
Prepare 90%	2	1						3	307.93
Incorporate Changes								0	
Prepare 100%								o	S
Submit Electronic Files								o	B
Project Management - Invoicing, File Administration	1	2					2	5	376.97
Minutes of Meetings and Telephone Conversations	1	2						3	302.57
Progress/Review Meetings		-						0	B -
5. Other Items								0	ñ
HOURS SUB-TOTALS	12	27	32	16	22	12	2	123	10,311.89
CONTRACT RATE PER HOUR	\$104.43		\$92.78	\$81.02			\$37.20	120	
TOTAL LABOR COSTS	\$1,253.16	\$2,674.89	\$2,968.96	\$1,296.32			\$74.40	\$10,311.89	
% DISTRIBUTION OF STAFF HOURS	9.76%		26.02%	13.01%	17.89%	9.76%	1.63%	ψ10,011.00	
70 DISTRIBUTION OF STAFF HOURS	9.10/6	21.93/0	20.02 /8	13.01/8	17.05/6	3.1070	1.00 /0		
		H Harrison				11 - 17 - 17 - 11 A		100	40.044.00
TOTAL PROJECT HOURS	12	27	32	16	22	12	2	123	10,311.89
					والمراجعة والمستحد			040.044.05	S SLOTE
PROJECT TOTALS	\$1,253.16	\$2,674.89	\$2,968.96	\$1,296.32	\$1,426.04	\$618.12	\$74.40	\$10,311.89	
TOTAL PROJECT % DISTRIBUTION OF STAFF HOURS	9.76%	21.95%	26.02%	13.01%	17.89%	9.76%	1.63%		

Villaverde Inc. Loop 375 Managed Lanes- Supplemental Agreement No. 1 for Schematic Design of Retention Ponds

Task Description	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	SENIOR CADD OPERATOR	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABO COST
Schematic Design								0	\$
 Develop preliminary retention ponds to allot for the additional drainage due to the increment of impermeable surface pa 	vement area in t	he project.						0	
Coordination with City of El Paso / Socorro / County of El Paso and the EPWU-Stormwater Management	4	4	12	0	24	24	0	68	\$ 4,719,2
Playa Interseptor 5								0	S
Determine the location of retention ponding areas for storing runoff.	1	2	4	0	8	8		23	\$ 1,604.3
Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.	1	1	12	0	12	16		42	\$ 2,918.8
Determination and revision of roadway watershed and sub water shed areas.	0	0	16	0	24	36		76	\$ 4,894.5
Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impact	0	0	8	0	8	4		20	\$ 1,466.
Determination flood plain requirements. (not included CLOMR/LOMR)	1	0	2	0	4	2		9	\$ 652.3
Revise Proposed Storm System	1	2	12	0	12	4		31	\$ 2,399,
Playa Drain 3									•
Determine the location of retention ponding areas for storing runoff.	1	4	4	0	8	8		25	\$ 1,802.4
Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.	1	1	12	0	12	16		42	\$ 2,918.8
Determination and revision of roadway watershed and sub water shed areas.	0	2	16	2	24	36		80	\$ 5,254.7
Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impacts	ō	0	8	0	8	4		20	\$ 1,466.8
Determination flood plain requirements. (not included CLOMR/LOMR)	1	ō	2	0	4	2		9	\$ 652.2
Revise Proposed Storm System	2	6	12	0	12	4		36	\$ 2,900.5
Franklin Drain 4									
Determine the location of retention ponding areas for storing runoff.	1	4	4	0	8	8		0 25	\$ 1,802.4
Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.	1	0	12	0	12	16		41	\$ 2,819.7
Determination and revision of roadway watershed and sub water shed areas.	0	0	16	0	24	36		76	\$ 4,894.5
Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impacts	0	2	8	2	8	4		24	\$ 1,827.0
Determination flood plain requirements. (not included CLOMR/LOMR)	1	0	2	0	4	4		11	\$ 755.3
Revise Proposed Storm System	2	4	12	0	12	4		34	
Middle Drain 1 Determine the location of retention ponding areas for storing runoff.	1	4	4	-				0.5	. 4 000
Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.	1	1	4	0	8	8 16		25	
Determination and revision of roadway watershed and sub water shed areas.	0	0	12 16	0	24	36		42 76	\$ 2,918.8
Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impacts	0	2	8	2	8	4		24	\$ 4,894.5 \$ 1,827.0
Determination flood plain requirements. (not included CLOMR/LOMR)	1	8	16	0	4	4		33	\$ 2.846.7
Revise Proposed Storm System	3	7	12	0	12	4		38	\$ 3,104.0
Mesa Drain 2								0	\$ -
Determine the location of retention ponding areas for storing runoff.	1	4	4	0	8	8		25	\$ 1,802.4
Identify any ROW requirements for locating/constructing new ponding areas and/or drainage appurtenances.	1	1	12	0	12	16		42	
Determination and revision of roadway watershed and sub water shed areas.	0	0	16	0	24	36		76	\$ 4,894.5
Preliminary sizing of Retention Ponds in accordance with the City of El Paso Design Standards to have no downstream impact	0	2	8	2	8	4		24	\$ 1,827.0
Determination flood plain requirements. (not included CLOMR/LOMR) Revise Proposed Storm System	3	- 8 - 5	16 12	0	12	4		33 36	\$ 2,846.7 \$ 2,905.8
									2 2,000.0
Deliverables								0	
Design Summary Report Preliminary and Final (30, 60, 90 and 100 Percent) Design Schematic		6 16	10		16			42	\$ 594.4 \$ 3,550.0
2. Premininary and Final (50, 60, 90 and 100 Percent) Design Schematic 3. Cost Estimate		16	20		10			20	
4. Geopak and Microstation .DGN files for Design Schematic	-							0	\$
5. Technical Memorandums (Drainage Analysis, Bridge Concepts, Lighting, ITS and Aesthetics)							24	24	\$ 892.8
6 Preliminary Layouts of the Proposed Storm Sewer System.	•					26		26	\$ 1,339.2
7 Locations of Retention Ponds						24		24	
HOURS SUB-TOTALS	30	96	340	8			24	1308	\$ 92,510.6
CONTRACT RATE PER HOUR	\$104.43	\$99.07	\$92.78	\$81.02			\$37.20		
TOTAL LABOR COSTS	\$3,132.90	\$9,510.72	\$31,545.20	\$648.16	\$24,631.60		\$892.80	\$92,510.68	
% DISTRIBUTION OF STAFF HOURS	2.29%	7.34%	25.99%	0.61%	29.05%	32.87%	1.83%		

Villaverde Inc. Loop 375 Managed Lanes

Other Direct Expenses	UNITS		RATE	
Lodging/Hotel (Taxes/fees not	_		05.00	#0.00
included)	0	night	85.00	\$0.00
Meals (overnight stay required)	0	day	36.00	\$0.00
Rental Car (Tax/fees not included)	0	day	65.00	\$0.00
Mileage	0	mile	0.510	\$0.00
SUV or ATV Rental	0	day	100.00	\$0.00
Air Travel	0	each	400.00	\$0.00
Parking	0	day	10.00	\$0.00
Taxi/Cab fare	0	each	30.00	\$0.00
Standard Postage	0	letter	0.45	\$0.00
Overnight express-letter size	0	each	20.00	\$0.00
Overnight express-oversized box	0	each	30.00	\$0.00
Courier Services	0	each	30.00	\$0.00
8½"X11" B/W Paper Copies	0	each	0.10	\$0.00
11"X17" B/W Paper Copies	0	each	0.20	\$0.00
8½"X11" Color Paper Copies	0	each	1.00	\$0.00
11"X17" Color Paper Copies	0	each	1.20	\$0.00
CADD Plotting	0	linear foot	1.50	\$0.00
Digital Ortho Plotting	0	linear foot	2.00	\$0.00
Law Enforcement/Uniform Officer	0	hour/officer	40.00	\$0.00
Notebooks	0	each	2.00	\$0.00
Hazardous Materials Database Search	0	per search	500.00	\$0.00
Backhoe Rental	0	day	800.00	\$0.00
Boards for Public Meeting	0	each	100.00	\$0.00
Env. Field Supplies (lathes, stakes, flagging, spray paint, etc.)	0	day	20.00	\$0.00
Interpreter	0	hour	40.00	\$0.00
Court Reporter	0	hour	40.00	\$0.00
Newspaper Advertisement	0	each	2,000.00	\$0.00
Other Direct Expense Total		•		\$0.00

CONTRACT NUMBER:	
Villaverde, Inc.	

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and/or Specified Rate Labor/Staff Classification			Negotiated ourly Base Rate	Contract Rate			
Senior Engineer		\$	36.49	\$	104.43		
Project Engineer		\$	34.62	\$	99.07		
Design Engineer		\$	32.42	\$	92.78		
EIT		\$	28.31	\$	81.02		
Senior CADD Operator		\$	22.65	\$	64.82		
CADD Operator		\$	18.00	\$	51.51		
Admin/Clerical		\$	13.00	\$	37.20		
Negotiated Overhead Rate:	160.16%						
Negotiated Profit Rate:	10.00%						

Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment.

Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

Physical percent complete to be billed. Documentation of hours work not required.

Blanton & Associates, Inc.
Loop 375 Managed Lanes- Supplemental Agreement for the Addition of New ROW and Retention Ponds

Task Description	Principal	Env. Manager / Sr Scl.	Senior Env. Specialist	Env. Specialst	Senior Historian	Historian	Sr. Env. Tech.	Env. Tech.	Sr. CADD GIS Tech.	CADD GIS Tech.	Senior Archeologist	Archeologist	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABOR COST
Project Scoping Development Tool / Risk Assessments	V	1	4			1	SAIL IN	H . N .	2	Jack Harry Land		1	1	10	\$ 1,040.2
Revised Historic PCR, Research Design, and HRSR		4	***		84	84			68				16	256	\$ 22,428.10
Archeological Background Study, Antiquities Permit Application, and Archeology Survey Results Report		4							64		40	240	16	364	\$ 27,573.60
Biological Evaluation Form		18	16						24				4	62	\$ 7,113.92
Water Resources Technical Report		18	16						24				4	62	\$ 7,113.93
Community Impacts Report		2	24						16				4	46	\$ 5,023.60
ICI Technical Report		2	24						16				4	46	\$ 5,023.6
Preliminary Draft EA (additions based on new ROW)		8	40						32				16	96	\$ 10,153.60
HOURS SUB-TOTALS	0	57	124	ō	84	86	0	0	246	0	40	241	65	942	\$ 85,470.7
CONTRACT RATE PER HOUR	\$157.75	\$144.60	\$123.12	\$88.22	\$92.02	\$78.82	\$86.95	\$72.35	\$95.20	\$66.94	\$78.06	\$69.81	\$64.10		
TOTAL LABOR COSTS	\$0.00	\$8,242.20	\$15,266.88	\$0.00	\$7,729.68	\$6,699.70	\$0.00	\$0.00	\$23,419.20	\$0.00	\$3,122.40	\$16,824.21	\$4,166.50	\$85,470.77	
DIRECT EXPENSES (see tab #2)															\$ 17,689.00
TOTAL SUPPLEMENTAL COST															\$103,159.7

Blanton

Other Direct Expenses	UNITS		RATE	
Lodging/Hotel (Taxes/fees not included)	12	night	85.00	\$1,020.00
Meals (overnight stay required)	16	day	36.00	\$576.00
Rental Car (Tax/fees not included)		day	65.00	\$0.00
Mileage	200	mile	0.565	\$113.00
SUV or ATV Rental	12	day	100.00	\$1,200.00
Air Travel	4	each	500.00	\$2,000.00
Parking	18	day	10.00	\$180.00
Backhoe Rental	2	day	800.00	\$1,600.00
Newspaper Advertisement (rate includes \$6,000 for El Paso Times and \$1,200 for El Diario)	5.5	each	2000	\$11,000.00
Env. Field Supplies (lathes, stakes, flagging, spray paint, etc.)		day	20.00	\$0.00
Other Direct Expense Total				\$17,689.00

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and Labor/Staff Clas	Negotiated Hourly Base Rate	Contract Rate		
Principal		\$62.14	\$	157.75
Environmental Manager		\$56.96	\$	144.60
Sr. Scientist		\$56.96	\$	144.60
Sr. Environmental Specialist		\$48.50	\$	123.12
Environmental Specialist		\$34.75	\$	88.22
Sr. Historian		\$36.25	\$	92.02
Historian		\$31.05	\$	78.82
Sr. Environmental Tech		\$34.25	\$	86.95
Environmental Tech		\$28.50	\$	72.35
Sr. Archeologist		\$30.75	\$	78.06
Archeologist		\$27.50	\$	69.81
Sr. Cartographer (CADD/GIS)		\$37.50	\$	95.20
Cartographer (CADD/GIS)		\$26.37	\$	66.94
Admin/Clerical		\$25.25	\$	64.10
Audited Overhead Rate:	130.78%			
Negotiated Profit Rate:	10.00%			

Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment.

Physical percent complete to be billed. Documentation of hours work not required.

Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

SLI Engineers, Inc.
Loop 375 Managed Lanes Supplemental Agreement #1- Surveys for Retention Ponds

Task Description	Survey Project Manager	RPLS	Survey Tech.	Survey Tech. GPS	2-Person Survey Crew	3-Person Survey Crew	4-Person Survey Crew	Flagger	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABOR COST
B. Survey							the state of the state of			268	\$ 81,089.68
1. Project Control				No.						132	
Recover and establish secondary horizontal control	2	8	40			24				74	
Recover and establish primary and secondary vertical control	2	8	24			24				58	\$ 7,428.16
2. Ground Survey										136	
Provide missing inverts and outfall elevations	4	20	64			48				136	
Deed and data research	24	8	24							56	
Prepare right of entry letter	8		16							24	
Compile information and prepare ROW map	12	8	160		24					204	
Provide full topo of prop. Pond perimeters	2	12	80			50				144	\$ 17,070.68
										0	
										0	\$
3. Deliverables										0	
										0	\$ -
HOURS SUB-TOTALS	54	64	408	0	24	146	O	0	0	696	•
CONTRACT RATE PER HOUR	\$150.00	\$179.99	\$92.01	\$92.01	\$115.01	\$145.00	\$165.00	\$54.01	\$54.01		
TOTAL LABOR COSTS	\$8,100.00	\$11,519.36	\$37,540.08	\$0.00	\$2,760.24	\$21,170.00	\$0.00	\$0.00	\$0.00	\$81,089.68	
% DISTRIBUTION OF STAFF HOURS	7.76%	9.20%	58.62%	0.00%	3.45%	20.98%	0.00%	0.00%	0.00%		
TOTAL PROJECT HOURS	54	64	408	0	24	146	0	0	0	696	\$ 81,089.68
TOTAL PROJECT HOURS	34	.04	400		27	140					
PROJECT TOTALS	\$8,100.00	\$11,519.36	\$37,540.08	\$0.00	\$2,760.24	\$21,170.00	\$0.00	\$0.00	\$0.00	\$81,089.68	
TOTAL PROJECT % DISTRIBUTION OF STAFF HOURS	7,76%	9.20%	58.62%	0.00%	3.45%	20.98%	0.00%	0.00%	0.00%		

SLI Engineers, Inc. Loop 375 Managed Lanes

Other Direct Expenses	UNITS		RATE	
Lodging/Hotel (Taxes/fees not				
included)	0	night	85.00	\$0.00
Meals (overnight stay required)	0	day	36.00	\$0.00
Rental Car (Tax/fees not included)	0	day	65.00	\$0.00
Mileage	0	mile	0.510	\$0.00
SUV or ATV Rental	0	day	100.00	\$0.00
Air Travel	0	each	400.00	\$0.00
Parking	0	day	10.00	\$0.00
Taxi/Cab fare	0	each	30.00	\$0.00
Standard Postage	0	letter	0.45	\$0.00
Overnight express-letter size	0	each	20.00	\$0.00
Overnight express-oversized box	0	each	30.00	\$0.00
Courier Services	0	each	30.00	\$0.00
8½"X11" B/W Paper Copies	0	each	0.10	\$0.00
11"X17" B/W Paper Copies	0	each	0.20	\$0.00
8½"X11" Color Paper Copies	0	each	1.00	\$0.00
11"X17" Color Paper Copies	0	each	1.20	\$0.00
CADD Plotting	0	linear foot	1.50	\$0.00
Digital Ortho Plotting	0	linear foot	2.00	\$0.00
Law Enforcement/Uniform Officer	96	hour/officer	40.00	\$3,840.00
Notebooks	0	each	2.00	\$0.00
Hazardous Materials Database Search	0	per search	500.00	\$0.00
Backhoe Rental	0	day	800.00	\$0.00
Boards for Public Meeting	0	each	100.00	\$0.00
Env. Field Supplies (lathes, stakes, flagging, spray paint, etc.)	12	day	20.00	\$240.00
nterpreter	0	hour	40.00	\$0.00
Court Reporter	0	hour	40.00	\$0.00
Newspaper Advertisement	0	each	2,000.00	\$0.00
Railroad Insurance Expense	0	each	7,000.00	\$0.00

CONTRACT NUMBER:

SLI Engineering, Inc. - Survey

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and/or Specified Rate Labor/Staff Classification			egotiated ly Base Rate	Contract Rate			
Survey Project Manager		\$	48.83	\$	150.00		
Registered Professional Land Sur	veyor	\$	58.59	\$	179.99		
Survey Technician			29.95	\$	92.01		
Survey Technician - GPS			29.95	\$	92.01		
2-man Survey Crew (Portal to Port	2-man Survey Crew (Portal to Portal)			\$	115.01		
3-man Survey Crew (Portal to Portal)	tal)	\$	47.20	\$	145.00		
4-man Survey Crew (Portal to Portal)	tal)	\$	53.71	\$	165.00		
Flagger		\$	17.58	\$	54.01		
Administrative/Clerical	\$	17.58	\$	54.01			
Negotiated Overhead Rate:	179.27%						
Negotiated Profit Rate:	10.00%						

Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment.

Physical percent complete to be billed. Documentation of hours work not required.

Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

Team Organization and Staffing

Camino Real Regional Mobility Authority

Project Manager

Federico Mendoza, PE, PTOE (BGE)

Constructibility			QA/QC
Mike Lehmann, PE (BGE)			Wesley Jasek, PE (BGE)
			_
2.14.1 Environmental Document Preparation	3.3.1 Route Studie Design (Comp		NLC-1 Public Involvement
Kim Johnson (BA) ◆ Sam Blanco (RK)	Adam Ellis, Ramon Villav	` '	Tricia Mosier, PE (BGE) Kim Johnson (BA)

Gary Gehbauer, PE (BGE) **Technical Team**

2.1.1 Traffic Noise Analysis 2.2.1 Air Quality Analysis Dean Tesmer (BA)

Matt Brannen, PE (BGE)

- 2.3.1 Wetland Delineation 2.4.1 Nationwide Permit Mark Kainer (BA) Jim Gregory (BGE)
- 2.4.2 Individual Permits 2.4.3 US Coast Guard and US Army **Corps of Engineers Permit** Mark Kainer (BA) Clay Russell (BGE)
 - 2.6.1 Protected Species **Determination**

Rick Phillips (BA) Tricia Mosier (BGE)

- 2.6.2 Impact Evaluation Assessments 2.6.3 Biological Surveys Rick Phillips (BA)
- 2.7.1 Section 4(f)/6(f) Evaluations 2.8.1 Surveys, Research & **Documentation of Historic Buildings**, Structures, and Objects Maryellen Russo (BA)

- 2.10.1 Archaeological Surveys Brandon Young, RPA (BA)
- 2.11.1 Historical and Archival Research

Maryellen Russo (BA)

2.12.1 Socioeconomic and **Environmental Justice Analyses** 2.13.1 Hazardous Materials Inital Site **Assessment**

Dean Tesmer (BA)

- 3.2.1 Route Studies and Schematic Design (Major Roadways) Brian Reinhardt, PE (BGE) Matt Brannen, PE (BGE)
 - 3.5.1 Major Bridge Layouts James Hall, PE (BGE)
- 7.1.1 Traffic Engineering Studies Federico Mendoza, PE, PTOE (BGE) Carlos Chavez, PE (VI)
- 8.1.1 Signing, Pavement Marking and Channelization

Ramon Villaverde, PE (VI)

- 8.2.1 Illumination Carlos Chavez, PE (VI)
- 9.1.1 Bicycle and Pedestrian **Facility Development**
- Erin Gonzales, PE, CFM (BGE) 10.1.1 Hydrologic Studies
- 10.2.1 Basic Hydraulic Design Ramon Villaverde, PE (VI)
- 15.1 Right of Way Surveys 15.1.1 Survey
- 15.2.1 Design and Construction Survey
- 15.3.1 Aerial Mapping 15.4.1 Horizontal and Vertical Control for Aerial Mapping

Guillermo Licon, PE, RPLS (SLI)

Brown & Gay Engineers, Inc. (BGE) Blanton & Associates, Inc. (BA) Raba Kistner, Inc. (RK) SLI Engineering, Inc. (SLI) Villaverde Inc. (VI)

denotes Key Staff