TASK ORDER NO. 1

This Task Order is issued pursuant to that Professional Services Agreement (Agreement) between the City of KYLE, Texas (Owner) and BGE, Inc. (Professional) effective _____, 2022 and constitutes authorization by Owner for Professional to proceed with the following described construction and engineering design services.

Construction and Engineering Design Services

A. PROJECT DESCRIPTION

The scope of the Agreement is to provide professional construction and engineering design services (Services) for the Owner based on the scope of services listed below in Item B. Professional services may include performing preliminary engineering and planning; generating plans, specifications and estimates; researching, analyzing, and providing technical recommendations; providing construction phase services; and providing general consulting services in the areas identified herein.

B. SCOPE OF SERVICES AND DELIVERABLES

Pursuant to the Agreement, this Task Order authorizes Professional to perform the Services shown in Attachment A.

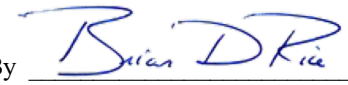
C. BASIS OF COMPENSATION

The total compensation for the Services shall be based on the hourly rates as defined in Compensation Table provided on page 3 of this document, and on the corresponding rates and hours in the Fee Estimate attached as Attachment B. Attachment B shall use the template provided by the Owner. Owner will make payments to Professional for performing the Services described on a monthly billing basis in accordance with monthly statements submitted by the Professional and approved by Owner. Final payment shall be due upon completion of the Services described.

D. TIME FOR COMPLETION

Professional will work expeditiously to complete the Services described herein by July 31, 2022. Professional will be available to provide support to the Owner and GEC through September 1, 2022.

BGE, Inc. shall begin work as soon as authorized in this Task Order No. 1.

APPROVED:	**ACCEPTED:**
CITY OF KYLE, TEXAS	**BGE, INC.**
By _____	By 
Title: City Manager	Title Director
Attest _____	Attest 
Date _____	Date 5/11/22

COMPENSATION

Compensation for the services provided pursuant to the Professional Services Agreement between the City of Kyle and BGE, Inc. executed the _____ day of _____, 2022 will be paid on a lump sum basis and calculated based on the amounts reflected below.

Professional Staff	Hourly Bill Rate	Example Staff
Design Tech	$134.65	Joe Arispe
Senior Design Tech	$178.91	Bob Westmoreland, Larry Cline
Env Specialist	$118.14	Colby Manry
EIT II	$124.90	Daniel Lacour, Sam Serna
Design Engineer	$148.52	Brittany Johs Gori, Josh Richter
Senior Env Specialist	$229.54	Jenna Gardner, Crystal Hall
Project Engineer	$195.78	Greg Calkins, Angela Renger, Shaun Spivey
QC Manager	$270.05	John Jasek
Senior Engineer	$209.29	Francisco Arce, John Colquhoun
Project Manager	$243.04	Brian Rice
Principal / Director	$290	Erin Gonzales

A. ATTACHMENT A

TASK ORDER NO. 1

SERVICES TO BE PROVIDED BY THE ENGINEER

BGE, Inc. (Engineer) will provide staff to support the City of KYLE (Owner) with general construction and engineering support services. The Owner also includes the City's General Engineering Consultant (GEC), K Friese & Associates, which the Owner has secured to act on its behalf as an Owner's Representative. The Engineer is required to coordinate with the GEC for completion of this work. Specific tasks may include, but are not limited to, the following:

The work to be performed by the Engineer shall consist of providing preliminary engineering services, development of a design schematic and environmental documents. These services may include, but are not limited to, preparing a Preliminary Engineering Report (PER), a design schematic to an equivalent 10% PS&E level of detail, environmental dashboard investigation (desktop surveys) to support the schematic work, public involvement support (exhibits for City Council), data collection analysis, drainage, conceptual traffic control, Quality Level D subsurface utility engineering (QLD SUE), and cross sections.

The Engineer shall complete the services to be provided by the Engineer according to the milestone work schedule established in the task order. The Engineer shall submit a written progress report to the Owner monthly indicating the actual work accomplished during the month, scheduled work to be accomplished for the month, and the estimated work to be accomplished for the coming month. The progress report will use a bar chart diagram to indicate the percentage complete of each task shown on the previous report and the percentage complete of each task. The Engineer is required to meet with the designated Owner project manager and environmental coordinator bi-weekly for progress tracking purposes unless prior agreement is made with Owner not to hold a scheduled meeting. The Engineer shall submit minutes of the meeting, summarizing the events of the meeting within seven calendar days after each meeting.

The Engineer shall prepare a project work schedule. The work schedule must incorporate an allocation of time for stage reviews of the design schematic and the environmental documents by Owner personnel. The Engineer shall present the work schedule to the Owner for review and acceptance and provide assistance in interpreting the proposed work schedule.

GENERAL REQUIREMENTS

1.1. Design Criteria.

Design Criteria. The Engineer shall prepare all work in accordance with the latest version of applicable Owner's procedures, specifications, manuals, guidelines, standard drawings, and standard specifications or previously approved special provisions and special specifications, which include:

- Kyle Connected 2040 Transportation Master Plan (2015)
- Kyle Transportation Master Plan Update (2021)
- The Vybe Kyle: Trail-Oriented Development (2021)
- Kyle Drainage Master Plan (2018)
- City of Kyle Roundabout Ordinance #1162 (2021)

- City of Kyle standard detail sheets and general construction notes
- TxDOT Roadway Design Manual
- TxDOT Hydraulic Design Manual
- Texas Manual on Uniform Traffic Control Devices (TMUTCD)
- Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (latest Edition)
- Other Owner approved manuals

When design criteria are not identified in Owner's manuals or TxDOT criteria, the Engineer shall notify the Owner and refer to City of Austin policies and the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Street, (latest Edition).

The Engineer shall identify, prepare exhibits and complete all necessary forms for each Design Exception and Waiver required within project limits prior to the 60% project completion submittal. The Engineer shall submit each exception and waiver to the Owner for coordination and processing of approvals. If subsequent changes require additional exceptions, the Engineer shall notify the Owner in writing as soon as possible after identification of each condition that may warrant a design exception or waiver.

The Engineer shall prepare a design time schedule and an estimated construction contract time schedule, using the latest version of MS Project, Primavera, or any Owner approved programs. The schedules shall indicate tasks, subtasks, critical dates, milestones, deliverables and review requirements in a format that depicts the interdependence of the various items. The Engineer shall provide assistance to Owner's personnel in interpreting the schedules. The Engineer shall schedule milestone submittals at interim PER and final PER project completion phases unless directed by Owner otherwise. The Engineer shall advise the Owner in writing if the Engineer is not able to meet the scheduled milestone review date.

Once the project has been completed and accepted by the Owner, the Engineer shall deliver all electronic files to the Owner within 30 calendar days of Owner's written request.

1.2. Right-of-Entry. N/A

1.3. Progress Reporting and Invoicing. The Engineer shall invoice according to Function Code breakdowns shown in Exhibit "A" of the Professional Services Agreement and Attachment "B" - Fee Schedule, of each task order. The Engineer shall submit each invoice in a format acceptable to the Owner.

With each invoice the Engineer shall submit a monthly written progress report to the Owner's Project Manager regardless of whether the Engineer is invoicing for that month.

The Engineer's written progress report shall describe activities during the reporting period; activities planned for the following period: problems encountered and actions taken to remedy them; list of meetings attended; and overall status, including a percent complete by task.

The Engineer shall complete the services according to the milestone work schedule established in the task order. The Engineer shall submit a monthly written progress report to the Owner indicating the actual work accomplished during the month, scheduled work to be accomplished for the month, the estimated work to be accomplished for the coming month, problems encountered, and actions

taken to remedy them, list of meetings attended, and overall status. The progress report must use a bar chart diagram to indicate the percentage complete of each task shown on the previous report and the percentage complete of each task. The Engineer is required to meet with the designated Owner project manager or environmental coordinator bi-weekly for progress tracking purposes unless prior written agreement is made with Owner not to hold a meeting in any given month. The Engineer shall submit minutes of the meeting summarizing the events of the meeting within seven calendar days after each meeting.

The Engineer shall prepare a project work schedule, using the latest version of Primavera software or another scheduling program approved by the Owner in writing. The schedules shall indicate tasks, subtasks, critical dates, milestones, deliverables, and review requirements in a format that depicts the interdependence of the various items. The work schedule must incorporate an allocation of time for stage reviews of the design schematic, environmental documents, and PS&E documents by Owner personnel. The Engineer shall present the work schedule to the Owner for review and acceptance and provide assistance in interpreting the proposed work schedule. The Engineer shall provide advance written notice to the Owner if the Engineer is not able to meet the scheduled milestone review date.

Condition precedents to final payment by the Owner are the Owner's receipt of all electronic files and confirmation by the Owner's Project Manager that (1) the electronic files can be opened and are usable by the Owner utilizing the Owner-owned version of the intended software, and (2) all of the Owner's review comments have been addressed.

The Engineer shall prepare a letter of transmittal to accompany each document submittal to the Owner. At a minimum, the letter of transmittal must include the project name, project limits, Owner's contract number, and Owner's task order number.

1.4. Traffic Control. The Engineer shall provide all planning, labor, and equipment to develop and to execute each Traffic Control Plan (TCP) needed by the Engineer to perform services under each task order. The Engineer shall comply with the requirements of the most recent edition of the TMUTCD. The Engineer shall submit a copy of each TCP to the Owner for approval prior commencing any work on any Owner roadway. The Engineer shall provide all signs, flags, and safety equipment needed to execute the approved TCP. The Engineer shall notify the Owner in writing five (5) days (in advance of executing each TCP requiring a lane closure and shall have received written concurrence from the Owner prior to beginning the lane closure. The Engineer's field crew shall always possess a copy of the approved TCP on the job site and shall make the TCP available to the Owner for inspection upon request. The Engineer shall assign charges for any required traffic control to the applicable function code. City requires Public Notice of lane and Road closure 7 days in advance of closure through use of message boards, thus notice to Owner would need to be about 10 days prior of closure.

1.5. State-Controlled Waters. The placement of a new structure or modification of an existing structure(s) within State-Controlled waters will require confirmation that said structure(s) lie within the General Land Office (GLO) state owned land and whether the crossing is tidally influenced or not. Consequently, the Engineer shall request, as early in the design process as possible, that the State determine whether the proposed improvements are found within the tidal GLO, is a submerged GLO property or a non-tidal GLO property. The Owner may request assistance from the Engineer to prepare an exhibit demonstrating the location of the proposed improvements on the GLO State Owned Map for the project location.

1.6. Coordination. The Engineer shall coordinate issues and communications with Owner's

internal departments through the Owner's Project Manager. The Owner will communicate the resolution of issues and provide the Engineer direction through the Owner's Project Manager.

Where applicable, the Engineer shall notify the Owner and coordinate with adjacent engineers and surveyors on all controls at project interfaces. The Engineer shall document the coordination effort, and each engineer must provide written concurrence regarding the agreed project controls and interfaces. In the event the Engineer and the other adjacent engineers are unable to agree, the Engineer shall meet jointly with the Owner and each adjacent engineer to resolve disagreements. If the engineers are unable to resolve an issue with the Owner as mediator, the Owner may decide the issue and the decision will be final.

The Engineer shall prepare each exhibit necessary for approval by each railroad, utility, and other governmental or regulatory agency in compliance with the applicable format and guidelines required by each entity and as approved by the Owner. The Engineer shall notify the Owner in writing prior to beginning any work on any outside agency's exhibit.

1.7. Level of Effort. For each task order, the Engineer shall base the level of effort at each phase on the prior work developed in earlier phases without unnecessary repetition or re-study. As directed by the Owner, the Engineer shall provide written justification regarding whether or not additional or repeated level of effort of earlier completed work is warranted, or if additional detail will be better addressed at a later stage in the project development.

1.8. Quality Assurance (QA) and Quality Control (QC). The Engineer shall provide peer review at all levels. For each deliverable, the Engineer shall have some evidence of their internal review and mark-up of that deliverable as preparation for submittal. A milestone submittal is not considered complete unless the required milestone documents and associated internal red-line mark-ups are submitted. The Owner's Project Manager may require the Engineer to submit the Engineer's internal mark-up (red-lines) or comments developed as part the Engineer's quality control step. When internal mark-ups are requested by the Owner in advance, the Owner, at its sole discretion, may reject the actual deliverable should the Engineer fail to provide the evidence of quality control. The Engineer shall clearly label each document submitted for quality assurance as an internal mark-up document.

The Engineer shall perform QA and QC on all survey procedures, field surveys, data, and products prior to delivery to the Owner. If, at any time, during the course of reviewing a survey submittal it becomes apparent to the Owner that the submittal contains errors, omissions, or inconsistencies, the Owner may cease its review and immediately return the submittal to the Engineer for appropriate action by the Engineer. A submittal returned to the Engineer for this reason is not a submittal for purposes of the submission schedule.

1.9. Use of the State's Standards. N/A

1.10. Organization of Plan Sheets. N/A

1.11. Organization of Design Project Folder and Files (Electronic Project Files). The Engineer shall organize the electronic project files in accordance with the Owner's File Management System (FMS) format. The Engineer shall maintain the project files in the Owner's file structure.

1.12. Personal Protective Equipment (PPE). The Engineer shall, and shall require its subcontractors to, (1) provide personal protective equipment (PPE) to their personnel, (2) provide

business vehicles for their personnel, and (3) require their personnel to use PPE and drive only business vehicles while performing work on or near roadways. The PPE must meet all (1) current standards set by the Occupational Safety and Health Administration (OSHA) and (2) TxDOT requirements (e.g., safety glasses, Type 3 (TY 3) pants for night work). Each business vehicle must be clearly marked with the Engineer's business name, or the name of the appropriate subcontractor, such that the name can be identified from a distance.

1.13. Data Classification. Unless otherwise clearly labeled or otherwise specifically excepted through a provision of this contract or its attachments, all data provided to or generated by the Engineer under this contract is considered public data for the purposes of applying the Owner's data security standards. The Engineer shall manage all data and work products according to the terms of the contract, including specifically Attachment I, Information Resources and Security Requirements.

1.14. Preventative Measures to Prevent the Spread of Oak Wilt Disease Contamination.

The Engineer shall take the following preventive measures while cutting, pruning, or removing oak trees in counties which have confirmed cases of oak wilt disease or when directed by the Owner:

A. When possible, employ alternative methods instead of pruning or cutting oak trees.
B. When possible, perform necessary pruning and cutting of healthy trees during January or February when sap beetles are least active.
C. Treat wounds with pruning paint in oak wilt disease infected counties to discourage insects, especially during warm weather.
D. Sterilize all pruning tools between each use on each tree with either Lysol spray or a 70 percent rubbing alcohol solution.
E. Dispose of the tree cuttings by burning, burying, or another approved method.

TASK DESCRIPTIONS AND FUNCTION CODES

The Engineer shall categorize each task performed to correspond with the Function Codes (FC) and Task Descriptions.

FUNCTION CODE 102(110) – FEASIBILITY STUDIES

ROUTE AND DESIGN STUDIES

The Engineer shall collect, review, and evaluate data described below. The Engineer shall notify the Owner in writing whenever the Engineer finds disagreement with the information or documents provided.

The Engineer shall prepare an alignment and proposed roadway schematic layout (10% plans) for each build alternative that includes projected traffic (when available), volumes and existing and proposed typical sections. The Engineer shall furnish Microsoft Office and MicroStation, GEOPAK, and OpenRoads computer generated media containing the roadway schematic layout to the Owner. All supporting attachments and exhibits must accompany the schematic layout. All MicroStation, GEOPAK, and OpenRoads computer generated files containing the roadway design schematic must be fully compatible with the software used by the Owner without further modification or conversion. The Engineer shall be required to convert files to AutoCAD if requested by the Owner.

The Engineer shall obtain, review, and evaluate available existing and twenty-year projected traffic data for use in the preparation of the schematic design layout. The data must be utilized in accordance with the requirements for schematic development and consistent with the policies of the Owner.

The Engineer shall prepare preliminary drawings to identify any potential impacts and constraints within the project corridor, including impacts to the nature, cultural, and human environment. The potential impacts and constraints identified must include all existing and proposed utilities (both public and private), structures, burial grounds, neighborhood communities, historical landmarks, and undeveloped areas. Any potential utility conflicts and structural impediments must be identified as such. The Engineer shall propose alternative alignments that avoid or minimize displacements and damages and prepare any additional attachments or exhibits required to illustrate a preferred alternative alignment.

An itemization of the schematic design and engineering work activity to be performed under this task order is detailed below. The Engineer shall prepare all designs in accordance with the latest version of:

A. Kyle Connected 2040 Transportation Master Plan (2015)
B. Kyle Transportation Master Plan Update (2021)
C. The Vybe Kyle: Trail-Oriented Development (2021)
D. Kyle Drainage Master Plan (2018)
E. City of Kyle Roundabout Ordinance #1162 (2021)
F. City of Kyle standard detail sheets and general construction notes
G. TxDOT Roadway Design Manual
H. TxDOT Hydraulic Design Manual
I. Texas Manual on Uniform Traffic Control Devices (TMUTCD)

J. Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (latest Edition)
K. Other Owner approved manuals and guides.

When design criteria are not identified in Owner manuals or TxDOT criteria, the Engineer shall notify the Owner and refer to City of Austin policies and the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Street, (latest Edition).

The design schematic horizontal layout must adhere to a design scale of 1 inch = 100 foot (or 1 inch = 200 foot, when directed by the Owner.) The Engineer shall develop the schematic layout, exhibits, and attachments in English units. All Microsoft Office, MicroStation, Keyhole Markup Language (KML), Keyhole Markup Language Zipped (KMZ), and Bentley OpenRoads computer graphic files furnished to the Owner must be uploaded to the Owner's file management system in their native format, which must be fully compatible with the programs currently used by the Owner. Schematics must follow TxDOT and Federal Highway Administration (FHWA) standards. The schematic must follow TxDOT's computer-aided design and drafting (CADD) standards. The Engineer shall submit the schematic as an original document, accompanied with an original MicroStation formatted graphics file. Final copies of the schematic design must be signed and sealed by a professional engineer licensed in the State of Texas.

110.1. Schematic Design Work Outline:

A. Develop Base Maps

The Engineer shall develop the base maps to be used for the analysis and proposed schematic layout from existing construction and right of way (ROW) plans as available. The Engineer shall re-establish the existing centerline horizontal alignments for all roadways, identify existing ROW and easements, property owners, and the approximate location of major utilities based on a Subsurface Utility Engineering (SUE) in the preparation of base maps.

B. Planimetrics and Aerial Mapping

The Engineer shall obtain planimetrics, digital terrain modeling (DTM), and aerial photographs from the Owner, if available.

C. Analyze Existing Conditions

Using collected data and base maps, the Engineer shall develop an overall analysis of the existing conditions to develop the schematic design. The written analysis must include the following:

2. ROW and easement determination
3. Horizontal alignment
4. Vertical alignment
5. Pavement cross slopes and pavement type
6. Soil exploration
7. Geotechnical testing
8. Highway-rail grade crossing studies, if applicable

9. Intersection design and analysis
10. Sight distance
11. Large guide signs and roadside signing
12. Level of service
13. Safety (i.e., crash data)
14. Locations of critical constraints
15. Drainage
16. Traffic control and construction phasing sequence

D. Schematic Alternatives

The Engineer shall identify and analyze schematic for two (2) alternatives to minimize potential adverse operational impacts, crash impacts, ROW impacts, environmental impacts, major utility conflicts, structural impediments, or exceptions to the Owner, State and FHWA design criteria. Schematics will be developed to the 10% plans level of completion.

E. Deliverable Schematic

The Engineer shall evaluate and document the following in the analysis to optimize the design:

1. Efficient use of the allocated ROW
2. Control of access (COA) and driveway locations
3. Roadway and intersection geometry
4. Cross sections
5. Bicycle and pedestrian design
6. Drainage and hydraulic design
7. Stopping sight distance
8. Level of service
9. Safety
10. Traffic and signal operations
11. Construction, ROW, easement, and utility costs
12. Construction sequencing
13. Traffic control during construction
14. Roadside safety appurtenances
15. Large guide signage
16. Environmental mitigation (e.g., noise walls, storm water best management practices (BMPs))
17. Bridge layouts and clearance
18. Railroads (if applicable)
19. Roundabout Analysis, including roundabouts at the following intersections:
    - Existing roundabout at existing Goforth Rd - analyze the existing roundabout configuration and advise or recommend changes if necessary to improve flow through the roundabout
    - Incorporate potential roundabout layout at Lehman Rd (analysis and design completed by CobbFendley)
    - Incorporate potential roundabout design at Goforth Rd extension (analysis and design completed by Kimley-Horn)

20. Accommodation of ultimate corridor configuration.
21. Accommodation of future cross street expansion as described in local thoroughfare plan (if applicable)
22. Avoidance of utility lines (if feasible)
23. Impact of construction delays from utility relocations

F. Project Management and Coordination

1. The Engineer shall direct and coordinate the various elements and activities associated with developing the design schematic.
2. The Engineer shall prepare the detailed graphic project work schedule indicating tasks, critical dates, milestones, deliverables, and Owner review requirements. The project work schedule must depict the order of the various tasks, milestones, and deliverables. The Engineer shall review the schedule monthly and provide updates regarding its progress on the schedule to the Owner.
3. The Engineer shall submit written monthly progress reports to the Owner.
4. The Engineer shall provide ongoing quality assurance and quality control to ensure completeness of product and compliance with the Owner procedures.

G. Data Collection and Field Reconnaissance

The Engineer shall collect, review, and evaluate data described below. The Engineer shall notify the Owner in writing whenever the Engineer finds disagreement with the information or documents:

1. Data, if available, from the Owner, including "as-built plans", existing schematics, right-of-way maps, Subsurface Utility Engineering (SUE) mapping, existing cross sections, existing planimetric mapping, environmental documents, existing channel and drainage easement data, existing traffic counts, accident data, Bridge Inspection records, identified endangered species, identified hazardous material sites, current unit bid price information, current special provisions, special specifications, and standard drawings.
2. Documents for existing and proposed development along proposed route from local municipalities and local ordinances related to project development.
3. Utility plans and documents from appropriate municipalities and agencies.
4. Flood plain information and studies from the Federal Emergency Management Agency (FEMA), the United States Army Corps of Engineers (USACE), local municipalities, and other governmental agencies.
5. Conduct field reconnaissance and collect data including a photographic record of notable existing features.

The Engineer shall conduct field reconnaissance and collect data as necessary to complete the schematic design. Data must include the following information. Items 1 through 5 must be obtained from the Owner, if available. Items 6 through 13 must be obtained from other agencies as required.

1. Local major thoroughfare plan

2. Plat research for adjacent properties (if available)
3. Available corridor major investment studies
4. Design data from record drawings of existing and proposed facilities
5. Previously prepared drainage studies
6. Public and private utility information (It is necessary for the Engineer's Surveyor to locate public and private utilities, even if the City has permits)
7. Existing and future design year traffic data
8. Historical crash data
9. Roadway inventory information, including the number of lanes, speed limits, pavement widths and rating, bridge widths and ratings, and ROW widths
10. Aerial photos, planimetric mapping, and DTM
11. Environmental data
12. Adopted land use maps and plans (if available)
13. Federal Emergency Management Agency (FEMA) flood boundary maps and flood insurance studies and models

H. Roadway Design Criteria

The Engineer shall develop the roadway design criteria based on the City of Kyle Transportation Master Plan Update (2021), TxDOT Roadway Design Manual and AASHTO Policy on Geometric Design of Highways and Streets guidelines. The design criteria must include the following roadway design elements: design speed, lane and shoulder widths, pavement structure and slopes, horizontal curvatures, horizontal and vertical clearances, range of vertical profile grades, and side slopes. If there is a discrepancy between the two sources, the Roadway Design Manual will govern unless otherwise directed by the Owner.

The Engineer shall prepare and submit preliminary design criteria to the Owner for review and approval and shall attend an initial kick-off meeting to establish and agree on fundamental aspects, basic features, concepts, and design criteria. This meeting will be coordinated with any adjacent roadway projects to ensure continuity with the design of the adjacent roadway projects.

110.2. Schematic Design – General Tasks

A. ROW Property Base Map

The Engineer shall obtain information on existing ROW, easements, and property information from as-built plans, ROW maps, and tax records. The Engineer shall prepare a base map depicting the information.

B. Typical Sections

The Engineer shall develop both existing and proposed typical sections that depict the number and type of lanes, shoulders, median width, curb offsets, cross slope, border width, clear zone widths, and ROW limits.

C. Environmental Constraints

The Engineer shall evaluate and document impacts to environmentally sensitive sites (as identified by the Engineer and verified by the Owner) during the schematic design process. Environmentally sensitive sites include natural, cultural, and the human environment. Examples are historic and archeological resources, burial grounds, neighborhood communities and residential areas, farmland, floodplains, wetlands, endangered species, rare habitats, wildlife corridors, wildlife crossings, parks and nature preserves, geologic features, undeveloped areas, and significant trees.

D. Drainage

The Engineer shall use data from as-built plans and FEMA maps to locate drainage outfalls and to determine existing storm sewer and culvert sizes, and design flows for use in the design of roadway geometry. The Engineer shall conduct a preliminary drainage analysis to determine and evaluate the adequacy of the ROW needed to accommodate the proposed roadway and drainage system. The drainage analysis must (1) identify the impacts to abutting properties and the 100-year floodplain due to proposed highway improvements; (2) identify the water surface elevations for the 25 and 100-year storm events for the proposed drainage infrastructure (Atlas 14); (3) identify, describe, and locate outfalls; (4) provide an overall drainage area map and sub-drainage area map. A summary of the drainage analysis will be included in the PER, which must be signed and sealed by a professional engineer licensed in Texas, must include applicable hydrologic and hydraulic models (e.g., HEC-1 and HEC-2, HEC-RAS, HEC-HMS, XP- SWMM). Drainage analysis shall include drainage areas defined, structures preliminarily sized, storm sewer and ditches identified, and construction cost estimates.

E. ROW Requirements

The Engineer shall determine the ROW requirements based on the proposed alignment, typical sections, design cross sections, access control, terrain, construction requirements, drainage, clear zone, maintenance, intelligent transportation system (ITS), and environmental constraints and mitigation requirements.

F. Construction Sequence

See Section 110.8. Preliminary Construction Sequence

G. Design Exceptions

N/A

H. Traffic Data and Projections

The Engineer shall obtain the base year traffic data from available traffic data available or new counts (provided by Owner) and develop the opening-year, design-year (opening year +20) travel forecasts. Traffic evaluation will be a high level analysis based on available data and engineering judgement to allow the facilities function as intended. The developed traffic projections must be utilized for design and environmental analysis. The Engineer shall develop traffic forecasts for the mainlanes, for no-build and build alternatives. The Engineer shall

submit the traffic volumes developed by the Engineer to the Owner for review and approval. The Engineer shall revise the traffic volumes based on the Owner's comments.

I. Traffic and Operational Analysis
   N/A
J. Safety Analysis
   N/A
K. Bicycle and Pedestrian Accommodations

The Engineer shall comply with City of Kyle design criteria and planned improvements for bicycle and pedestrian accommodations, including the 2015 and 2021 Transportation Master Plans and The Vybe Kyle: Trail Oriented Development, and the United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations. The inclusion of bicycle and pedestrian facilities must be evaluated when the project is scoped.

L. Relocate Overhead Utilities Underground

Schematic level design and cost estimates to relocate overhead utilities underground on Bunton Creek Road from Lehman Road to Porter Cover in Kyle, TX.

Schematic Design:

- Gather and analyze data from electronic base file provided by others.
- Coordinate meeting with Pedernales Electric Cooperative (PEC) (up to 1), the Lower Colorado River Authority (up to 1), and telecommunication attachment companies (1 with each provider) to discuss cost estimates.
- Develop a 3D schematic design to remove all overhead utilities to underground. The design will be completed in MicroStation and be combined with the overall roll plot.
- Prepare overhead to underground utility construction cost estimates based on the schematic design.
- Attend project team meetings(up to 6)

Exclusions:

- Electric and Telecommunication wire design
- Permitting
- Reimbursement Percentage
- Easement Research
- Landowner Coordination

110.3. Conceptual Design Schematics

The Engineer shall develop conceptual design schematics in MicroStation format to evaluate various methods of handling traffic while providing access in key areas. The Engineer shall develop a single recommended design alternative that optimizes traffic flow and access. The conceptual schematics are to be plan view only. Profile work must be done only to the extent necessary to lay out the proper horizontal geometry.

The schematics must contain the following design elements:

A. Mainlane roadway alignment
B. Pavement edges, face of curbs, and shoulder lines of mainlanes, intersections, interchanges, and connecting highways or streets
C. Typical sections of existing and proposed roadways
D. Anticipated structure locations (including wildlife crossings and fencing structures)
E. Anticipated retaining wall and sound wall locations
F. Anticipated conveyance of major drainage elements
G. Preliminary ROW and easement requirements and control-of-access locations
H. Direction of traffic flow and the number of lanes on all roadways
I. Existing and projected traffic volumes
J. Existing utilities
K. Waters of the United States (WOTUS)

110.4. Geometric Design Schematics

N/A

110.5. Cross-Sections

The Engineer shall use a Bentley 3D OpenRoads model to generate preliminary cross-sections at 100 feet intervals in conjunction with the geometric schematic. The purpose of the preliminary cross sections will be to determine the ROW footprint. The Engineer shall determine earthwork volumes for use in the cost estimate. The Engineer shall prepare 11inch x17inch or roll plots of the cross-sections.

110.6. Retaining Walls

The Engineer shall prepare preliminary retaining wall concepts to be shown on schematics, typical sections, and cross sections.

A. The Engineer shall determine if any additional walls are required and verify the need for and length of the retaining wall as shown on the ultimate schematic.
B. The Engineer shall compute and tabulate retaining wall quantities for preliminary design milestone plans submittal.

110.7. Renderings and Traffic Simulation

N/A

110.8. Preliminary Construction Sequence

The Engineer shall prepare preliminary construction sequence layouts in conjunction with the conceptual design schematic of one of the alternatives (worst-case alternative as defined by the Owner) depicting the phasing and traffic detours anticipated to safely convey traffic. The layouts must demonstrate that adequate horizontal alignments are maintained, sufficient lane widths and shoulder widths or barrier offsets are feasible, and construction zones are adequate for constructability of all proposed features. Proposed construction detours must ensure that adequate

superelevation is provided. The layouts must indicate how existing pedestrian and bicycle facilities are accommodated for each phase.

110.9. Preliminary Cost Estimate

The Engineer shall prepare a preliminary cost estimate for the project, including the costs of construction, required ROW and associated improvements, and eligible utility adjustments. Current TxDOT Austin District and Statewide unit bid prices must be used in preparation of the estimate.

110.10. Preliminary Engineering Report

The Engineer shall prepare an engineering summary report to summarize the design criteria, traffic analysis, preliminary cost estimate and basis of estimate, construction sequence description, and utility conflict issues.

Deliverables for the Preliminary Engineering Report will include:

- Refined project description
- Preliminary analysis of project challenges and opportunities
- Preliminary schedule for project development
- Identification of utility relocations and which of them are in conflict with the project
- Refined cost estimate (including estimate for city driven utility relocations and future engineering costs)
- Preliminary roll plot depicting horizontal and vertical alignment

110.12. Agency Coordination and Public Involvement

N/A

110.13. Schematic Design Project Deliverables

In conjunction with the performance of the services included under Function Code 110 of this exhibit, the Engineer shall provide the following draft and final documents and associated electronic files as applicable:

A. Draft and final copies of the agreed upon design criteria
~~B. Draft and final copies of the traffic and operational analysis report and safety analysis report~~
~~C. Draft copies of the preliminary drainage study~~
D. Preliminary (10%) copies of the conceptual design schematics alternatives (2 alternatives)
E. Preliminary (10%) copies of the design schematic cross-sections on 11-inch x 17-inch cut sheets or roll plot format, as requested by the Owner
F. Electronic 3D model copy of the preliminary cross-sections created using OpenRoads software
G. Electronic submittal of the hydrologic and hydraulic model digital files from the drainage study
H. Design exception and design waiver documents
~~I. Hard copy of a draft hydraulic report~~
~~J. Drainage report – one hard copy of final drainage report, one electronic copy of the entire drainage report in PDF format, and computer files of hydrologic and hydraulic modeling with appropriate labeling of location, and submittal date~~

110.14. Preliminary Cost Estimates.

N/A

110.16. Geotechnical Borings and Investigations:

N/A

FUNCTION CODE 120(120) – SOCIAL/ECON/ENVIRON STUDIES

SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

120.1. Environmental Documentation Standards

Each environmental service provided by the Engineer must have a deliverable. Deliverables must summarize the methods used for the environmental services and the results achieved. The summary of results must be sufficiently detailed to provide satisfactory basis for thorough review by the Owner and (where applicable) other agencies with regulatory oversight.

A. Quality Assurance/Quality Control Review

For each deliverable, the Engineer shall perform quality assurance quality control (QA/QC) reviews of environmental documents and on all supporting environmental documentation to determine whether documents conform with:

1. Current state and federal laws, regulations, policies, guidance, agreements, and memoranda of understanding between the Owner and applicable state or federal agencies; and
2. Guidelines contained in Improving the Quality of Environmental Documents, A Report of the Joint AASHTO/ACEC Committee in Cooperation with the Federal Highway Administration (May 2006) for:
    a. Readability, and
    b. Use of evidence and data in documents to support conclusions.

Upon request by the Owner, the Engineer shall provide documentation that the QA/QC reviews were performed by qualified staff.

B. Deliverables must contain all data acquired during the environmental service and be written to be understood by the public in accordance with TxDOT's Environmental Toolkit guidance, documentation standards, and current guidelines, policies, and procedures.
C. Electronic versions of each deliverable must be written in software that is fully compatible with the software currently used by the Owner and provided in the native format of the document for future use by the Owner. The Engineer shall supplement all hard copy deliverables with electronic copies in searchable Adobe Acrobat™ (.pdf) format unless another format is specified. Each deliverable must be a single, searchable *.pdf file that mirrors the layout and appearance of the physical deliverable. The Engineer shall upload the electronic files to the Owner's Procore file management system in both the document's native format and the PDF format.

D. The Engineer shall provide photographs and graphics that clearly depict details relevant to an evaluation of the project area. Comparable quality electronic photograph presentations must be at least 1200 x 1600-pixel resolution. The Owner can request images/graphics be provided in another format or quality.

120.2. Environmental Assessment (EA) Content and Format

N/A

120.3. Environmental Impact Statement (EIS) Content and Format

N/A

120.4. Environmental Re-evaluation Form

N/A

120.5. Environmental Technical Analyses and Documentation

A. Definition of technical analyses and documentation for environmental services

In general, technical analyses and documentation for environmental services might include a report, checklist, form, or analysis detailing resource-specific studies identified during the process of gathering data to make an environmental decision.

The Engineer shall prepare all technical reports and documentation for the Owner with sufficient detail and clarity to support environmental recommendations.

B. Minimum Deliverables:

1. Draft Environmental Dashboard Investigation summary, including constraints map and documentation
2. Final Environmental Dashboard Investigation summary, including constraints map and documentation

C. Environmental Dashboard Investigation (Desktop Surveys) to support the schematic work will include:

1. Obtain publicly available information including but not limited to: locations of public buildings and facilities (schools, churches, parks, cemeteries, dams), aerial photography, National Wetland Inventory Maps, County Soil Survey Maps, Texas Commission on Environmental Quality (TCEQ) & Environmental Protection Agency (EPA) Hazardous Materials Database Information, Federal Emergency Management Agency (FEMA) Floodplain Information, Vegetation Information, Threatened & Endangered Species and Karst Information, and any other Environmental Information from the appropriate local, state, or federal agencies.

2. Conduct a regulatory records review to identify listed hazardous waste generators, treatment, storage and disposal facilities; solid waste landfills, unauthorized sites;

documented spills; oil and gas exploration and production sites; and underground storage tank sites within the proposed site location. The review will also identify other environmental risks along the project corridor.

3. Conduct field reconnaissance to visually inspect the project site for additional risks and field verify any environmental risks identified by the regulatory records review. This field investigation will be limited to accessible areas within the existing right-of-way. Photographs of the site will be documented and included in the Environmental Dashboard Investigation Summary.

4. Review the City of Kyle's Long-Range Transportation Plan and other local and regional transportation plans to review and gather information of projects that could impact the project.

5. Develop a constraints map that includes environmental concerns, known constraints (structures, floodplain), aerial photography, contour information, know developments, other environmental features and utility information, based on research of public databases and sources.

6. Develop Environmental Dashboard Investigation Summary including, but not limited to the following:

a. Water Resources
    i. Waters of the US
    ii. Groundwater
    iii. Floodplains
b. Threatened and Endangered Species
c. Cultural Resources
    i. Archeological
    ii. Historic
    iii Cemeteries
    iv. Other
d. Community Resources and Socioeconomics
    i. Community Resources
    ii. Socioeconomics
e. Hazardous Materials
f. References

120.6. Informal Meetings.

N/A

120.7. Public Involvement.

N/A

120.8. Environmental Permits Issues and Commitments (EPIC) Sheets.

N/A

120.9. Cut and Fill Exhibits.

N/A

FUNCTION CODE 130(130) – RIGHT-OF-WAY (ROW) DATA

For Function Codes 130 and 150, the term Surveyor means the firm (prime provider or subprovider) that is providing the surveying services shown in this scope.

130.1. RIGHT-OF-WAY SURVEYS (15.1.1)

N/A

130.4. ROW Hearing Services

N/A

130.1. Utility Engineering Investigation

Utility engineering investigation includes utility investigations subsurface and above ground prepared in accordance with ASCE/CI Standard 38-02 [(http://www.fhwa.dot.gov/programadmin/asce.cfm)] and Utility Quality Levels.

A. Utility Quality Levels (QL)

Utility Quality Levels are defined in cumulative order (least to greatest) as follows:

1. Quality Level D - Quality level value assigned to a utility segment or utility feature after a review and compilation of data sources such as existing records, oral recollections, One-Call markings, and data repositories.
2. Quality Level C - Quality level value assigned to a utility segment or utility feature after surveying aboveground (i.e., visible) utility features and using professional judgement to correlate the surveyed locations of these features with those from existing utility records.
3. Quality Level B - Designate: Quality level value assigned to a utility segment or subsurface utility feature whose existence and position is based upon appropriate surface geophysical methods combined with professional judgment and whose location is tied to the project survey datum. Horizontal accuracy of Designated Utilities is 18" (including survey tolerances) unless otherwise indicated for a specific segment of the deliverable. Quality Level B incorporates quality levels C and D information. A composite plot is created.
4. Quality Level A – Quality level value assigned to a portion (x, y, and z geometry) of a point of a subsurface utility feature that is directly exposed, measured, and whose location and dimensions are tied to the project survey datum. Other measurable, observable, and judged utility attributes are also recorded (per District Best Practices). The utility location must be tied to the project survey datum with an accuracy of 0.1 feet (30-mm) vertical and to 0.2 feet (60-mm) horizontal. As test holes may be requested up front or during the project, test holes done prior to completion of QL D, C, or B deliverables must be symbolized on the QL B deliverable with a call out indicating test holes number. This is in addition to and not in lieu of the test hole.

B. Utility Investigations Methodology

1. Utility Investigation Quality Level D The Engineer shall:
    a. Perform records research from all available resources. Sources include, but are not limited to: Texas811, Railroad Commission of Texas (Texas RRC), verbal recollection, as-built information from plans, plats, permits and any other applicable information provided by the utility owners or other stakeholders.
    b. Document utility owners and contact information.
    c. Create a utility drawing of information gathered and identify conflicts. The utility drawing will be completed to the extent possible, using the hours and budget available.
2. Mobile 360 Video
    a. Drive corridor using 360° camera technology to document marked utilities.

130.6. Utility Adjustment Coordination. (18.3.1)

N/A

130.2. Access Management.

N/a

FUNCTION CODE 145(145, 164) – MANAGING CONTRACTED/DONATED PE

CONTRACT MANAGEMENT AND ADMINISTRATION

145.1. Contract Management and Administration

The Engineer shall:

A. Act as an agent for the Owner when specified in a task order.
B. Produce a complete and acceptable deliverable for each environmental service performed for environmental documentation.
C. Incorporate environmental data into identification of alternatives.
D. Notify the Owner of its schedule, in advance, for all field activities.
E. Notify the Owner as soon as practical, by phone and in writing, if performance of environmental services discloses the presence or likely presence of significant impacts (in accordance with 40 Code of Federal Regulations (CFR) 1500-1508). Inform the Owner of the basis for concluding there are significant impacts and the basis for concluding that the impacts might require mitigation.
F. Notify the Owner as soon as practical, by phone and in writing, if performance of environmental services results in identification of impacts or a level of controversy that might elevate the transportation activity's status from a categorical exclusion or environmental assessment. The Owner will reassess the appropriate level of documentation.

145.2. Project Management and Administration

The Engineer, in association with the Owner's Project Manager shall be responsible for directing and coordinating all activities associated with the project to comply with Owner policies and procedures, and to deliver that work on time.

Project Management and Coordination. The Engineer shall coordinate all subconsultant activity to include quality of and consistency of plans and administration of the invoices and monthly progress reports. The Engineer shall coordinate with necessary local entities.

The Engineer shall:

- Prepare monthly written progress reports for each project.
- Develop and maintain a detailed project schedule to track project conformance to Exhibit C, Work Schedule, for each task order. The schedule submittals shall be hard copy and electronic format.
- Meet on a scheduled basis with the Owner to review project progress. Prepare, distribute, and file both written and electronic correspondence.
- Prepare and distribute meeting minutes.
- Document phone calls and conference calls as required during the project to coordinate the work for various team members.
- Provide QC/QA documentation for all submittals, including the sub consultants.

FUNCTION CODE 160(150) – ROADWAY DESIGN

N/A

FUNCTION CODE 160(160) - ROADWAY DESIGN

N/A

FUNCTION CODE 160(161) - ROADWAY DESIGN

DRAINAGE

N/A

FUNCTION CODE 160(162) - ROADWAY DESIGN

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION (PERMANENT)

N/A

FUNCTION CODE 160(163) - ROADWAY DESIGN

MISCELLANEOUS (ROADWAY)

N/A

FUNCTION CODE 160(165) – ROADWAY DESIGN

Traffic Management Systems (Permanent)

N/A

FUNCTION CODE 160(170) – ROADWAY DESIGN

BRIDGE DESIGN

N/A

FUNCTION CODE 300(351) – DESIGN VERIF/CHANGES/ALTER

CONSTRUCTION PHASE SERVICES

N/A

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

PROJECT NAME: Bunton Creek Rd

PROJECT LIMITS: Lehman Rd to Porter Cv

TASK DESCRIPTION	BGE, Inc.	CobbFendley	Catalyst	Subconsultant 3	Subconsultant 4	Subconsultant 5	Subconsultant 6	TOTAL COSTS BY FC
FEASIBILITY STUDIES (FC 102 (110))	$ 84,771.36	$ 32,508.00	$ 7,800.00	$ -	$ -	$ -	$ -	$ 125,079.36
SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT (FC 120 (120))	$ 9,951.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,951.00
RIGHT-OF-WAY DATA (FC 130 (130))	$ 16,256.78	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,256.78
MANAGING CONTRACTED/DONATED PE (FC 145 (145,164))	$ 18,306.56	$ -	$ -	$ -	$ -	$ -	$ -	$ 18,306.56
ROADWAY DESIGN CONTROLS (FC 160 (160))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
DRAINAGE (FC 160 (161))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION (PERMANENT) (FC 160 (162))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MISCELLANEOUS (ROADWAY) (FC 160 (163))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TRAFFIC MANAGEMENT SYSTEMS (PERMANENT) (FC 160 (165))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
BRIDGE DESIGN (FC 160 (170))	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL LABOR EXPENSES	$ 129,285.70	$ 32,508.00	$ 7,800.00	$ -	$ -	$ -	$ -	**$ 169,593.70**
DIRECT EXPENSES (FC 164)	$ 562.50	$ 237.50	$ -	$ -	$ -	$ -	$ -	**$ 800.00**
UNIT COST EXPENSES (FC 164)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
TOTAL	$ 129,848.20	$ 32,745.50	$ 7,800.00	$ -	$ -	$ -	$ -	**$ 170,393.70**
	76.2%	19.2%	4.6%					100%

SUMMARY	
TOTAL LABOR COSTS FOR PRIME PROVIDER	$ 129,285.70
NON-SALARY (OTHER DIRECT EXPENSES) FOR PRIME PROVIDER	$ 562.50
SUBCONTRACTS (includes labor costs, direct expenses and unit cost)	$ 40,545.50
GRAND TOTAL	**$ 170,393.70**

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

BGE, Inc.

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

	TASKS	SHTS	Principal/ Director	Project Manager	Senior Engineer	Project Engineer	QC Manager	Senior Env Specialist	Env Specialist	Design Engineer	EIT II	Senior Design Tech	Design Tech	TOTAL HOURS	TOTAL COST
			$290.00	$243.04	$209.29	$195.78	$270.05	$229.54	$118.14	$148.52	$124.90	$178.91	$134.65		
FC 102 (110)	**Feasibility Studies**														
110.1	**Schematic Design Work Outline**														
	Field Reconnaissance					4				4	4			12	$ 1,876.80
	Roadway Design Criteria			1		2				6				9	$ 1,525.72
	Route Alternative Analysis for Location of ROW Purchase (2 alternatives)			4	2	6	2			16	24		4	58	$ 9,018.04
110.2	**Schematic Design Tasks**														$ -
	Data Collection and Develop ROW Base Maps									20	12	12	8	52	$ 7,693.32
	Typical Sections			2		4	2			10			12	30	$ 4,910.30
	Drainage			2	24		2			50	24			102	$ 16,472.74
	Traffic Data and Projections					4				10				14	$ 2,268.32
	Safety Analysis														$ -
	Bike and Pedestrians Accommodations					1	1			6	6			14	$ 2,106.35
110.3	**Conceptual Design (10%) Schematic**			2	2	4	4			30	8		24	74	$ 11,454.38
110.5	**Cross Sections**			2		8	2			16	8			36	$ 5,967.94
110.6	**Retaining Walls**														$ -
110.8	**Preliminary Construction Sequence**														$ -
	Conceptual Phase Layouts			4		8	1			12	8		12	45	$ 7,205.69
															$ -
110.9	**Preliminary Construction Estimates**														$ -
	Construction Cost			1	2	10				16				29	$ 4,995.74
	Utility Relocations			2		20								22	$ 4,401.68
110.10	**Preliminary Engineering Report**														$ -
	Draft Submittal			1	1	2				4	12			20	$ 2,936.77
	Final Submittal			1	1	2				4	4			12	$ 1,937.57
SUBTOTAL				22	32	75	14			204	110	12	60	529	**$ 84,771.36**
FC 120 (120)	**Social, Economic and Environmental Studies and Public Involvement**														
	Environmental Dashboard Investigation						4	16	44					64	$ 9,951.00
															$ -
															$ -
															$ -
															$ -
SUBTOTAL							4	16	44					64	**$ 9,951.00**
FC 130 (130)	**Right-of-Way Data**														
130.1	Utility Engineering Investigation														$ -
	Records Research - SUE Quality Level D					12				8	12		4	36	$ 5,574.92
	Utility Owner Documentation					9				2	6			17	$ 2,808.46
	Utility Drawing					10				4	12	6	10	42	$ 6,470.64
	Mobile 360 Video									1		4	4	9	$ 1,402.76
															$ -
															$ -
SUBTOTAL						31				15	30	10	18	104	**$ 16,256.78**
FC 145 (145,164)	**Managing Contracted/Donated PE**														
	Coordination Meetings		4	8		8								20	$ 4,670.56
	Internal meetings, subconsultant coordination		2	16		16								34	$ 7,601.12
	Invoicing, Progress Reports, Project schedule		2	16		8								26	$ 6,034.88

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

BGE, Inc.

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

TASKS	SHTS	Principal/ Director	Project Manager	Senior Engineer	Project Engineer	QC Manager	Senior Env Specialist	Env Specialist	Design Engineer	EIT II	Senior Design Tech	Design Tech	TOTAL HOURS	TOTAL COST
		$290.00	$243.04	$209.29	$195.78	$270.05	$229.54	$118.14	$148.52	$124.90	$178.91	$134.65		
														$ -
														$ -
SUBTOTAL		8	40		32								80	**$ 18,306.56**
LABOR TOTALS		**8**	**62**	**32**	**138**	**18**	**16**	**44**	**219**	**140**	**22**	**78**	**777**	**$ 129,285.70**
		1.0%	8.0%	4.1%	17.8%	2.3%	2.1%	5.7%	28.2%	18.0%	2.8%	10.0%		

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT	UNIT		
MILEAGE	250	$0.58	mile	mile		**$ 145.00**
PHOTOCOPIES B/W (11" X 17")	100	$0.20	each	each		**$ 20.00**
PHOTOCOPIES B/W (8 1/2" X 11")	100	$0.10	each	each		**$ 10.00**
PHOTOCOPIES COLOR (11" X 17")	100	$1.25	each	each		**$ 125.00**
PHOTOCOPIES COLOR (8 1/2" X 11")	100	$0.75	each	each		**$ 75.00**
LARGE FORMAT PLOTTING	150	$1.25	per sq. ft.	per sq. ft.		**$ 187.50**
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
SUBTOTAL DIRECT EXPENSES (FC 164)						**$ 562.50**

SUMMARY

TOTAL COSTS FOR PRIME PROVIDER	$ 129,285.70
NON-SALARY (OTHER DIRECT EXPENSES) FOR PRIME PROVIDER	$ 562.50
NON-SALARY (UNIT COST EXPENSES) FOR PRIME PROVIDER	$ -
SUBCONTRACTS (includes labor costs, direct expenses, and unit costs)	$ 40,545.50
GRAND TOTAL	**$ 170,393.70**

CobbFendley

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

TASKS	SHTS	Project Manager	Project Engineer II	Senior Tech I	Category	Category	Category	Category	Category	Category	Category	Category	Category	TOTAL HOURS	TOTAL COST
		$238.00	$163.00	$135.00	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)		
FC 102 (102) Feasibility Studies															
OH to UG Relocation PER															
Project Team Meetings (Assume 6)		6	6											12	$ 2,406.00
Coordination with PEC (1 meeting)		2	2											4	$ 802.00
Coordination with LCRA (1 meeting)		2	2											3	$ 601.50
Coordination with 3 Telecom Attachers (1 meeting each)		5	5											9	$ 1,804.50
Site Visit		4	4											8	$ 1,604.00
Schematic		12	32	90										134	$ 20,222.00
Quantities and Estimates		2	8	8										18	$ 2,860.00
QAQC and Comment Responses		2	4	8										14	$ 2,208.00
															$ -
															$ -
															$ -
															$ -
															$ -
															$ -
SUBTOTAL		34	62	106										202	**$ 32,508.00**
LABOR TOTALS		**34**	**62**	**106**										**202**	**$ 32,508.00**
		16.8%	30.7%	52.5%											

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT		
MILEAGE	250	0.58	mile		**$ 145.00**
RENTAL CAR (Includes taxes and fees; Insurance costs will notbe reimbursed)		$65.000	day		$ -
RENTAL CAR FUEL		$100.00	day		$ -
Air Travel - In State - Short Notice (Coach)		$420.00	Rd/Trip/perso		$ -
Lodging/Hotel (Taxes/fees not included)		$96.000	day/person		$ -
Lodging/Hotel (Taxes/fees)		$30.000	day/person		$ -
Meals (Excluding alcohol & tips) (Overnight stay required)		$50.000	day/person		$ -
OVERNIGHT MAIL - OVERSIZED BOX		$40.000	each		$ -
PHOTOCOPIES B/W (11" X 17")	100	$0.200	each		**$ 20.00**
PHOTOCOPIES B/W (8 1/2" X 11")	100	$0.100	each		**$ 10.00**
PHOTOCOPIES COLOR (11" X 17")	50	$1.25	each		**$ 62.50**
PHOTOCOPIES COLOR (8 1/2" X 11")		$0.75	each		$ -
PLOTS (COLOR ON BOND)		$1.25	per sq. ft.		$ -
					$ -
					$ -
					$ -
					$ -
SUBTOTAL DIRECT EXPENSES (FC 164)					**$ 237.50**

UNIT COST EXPENSES	# OF UNITS	COST/UNIT	UNIT		
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

CobbFendley

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

TASKS		SHTS	Project Manager	Project Engineer II	Senior Tech I	Category	Category	Category	Category	Category	Category	Category	Category	Category	TOTAL HOURS	TOTAL COST
			$238.00	$163.00	$135.00	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)		
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
SUBTOTAL UNIT COST EXPENSES (FC 164)																$ -

SUMMARY

TOTAL COSTS FOR SUBCONSULTANT 1	$	32,508.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR SUBCONSULTANT 1	$	237.50
NON-SALARY (UNIT COST EXPENSES) FOR SUBCONSULTANT 1	$	-
GRAND TOTAL	**$**	**32,745.50**

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

Catalyst

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

TASKS		SHTS	Senior Project Manager	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	TOTAL HOURS	TOTAL COST
			$300.00	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)		
FC 102 (102)	**Feasibility Studies**															
	Assist in data collection and existing conditions analysis		8												8	$ 2,400.00
	Conduct development analysis to understand development potential and develop baseline growth scenarios		12												12	$ 3,600.00
	Preliminary Construction Estimates - ROW Acquisition		6												6	$ 1,800.00
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
SUBTOTAL			26												26	**$ 7,800.00**
FC 120 (120)	**Social, Economic and Environmental Studies and Public Involvement**															
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
																$ -
SUBTOTAL																**$ -**
LABOR TOTALS			**26**												**26**	**$ 7,800.00**

100.0%

OTHER DIRECT EXPENSES		# OF UNITS	COST/UNIT	UNIT		
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
SUBTOTAL DIRECT EXPENSES (FC 164)						**$ -**

UNIT COST EXPENSES		# OF UNITS	COST/UNIT	UNIT		
						$ -

PRIME PROVIDER: BGE, Inc.

ATTACHMENT B
FEE SCHEDULE
Method of Payment:
LUMP SUM AND UNIT COSTS

Contract No. _____
Task No. 1

Catalyst

PROJECT NAME: Bunton Creek Rd
PROJECT LIMITS: Lehman Rd to Porter Cv

	TASKS	SHTS	Senior Project Manager	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	TOTAL HOURS	TOTAL COST
			$300.00	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)	Rate ($)		
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																$ -
SUBTOTAL UNIT COST EXPENSES (FC 164)																$ -

SUMMARY

TOTAL COSTS FOR SUBCONSULTANT 1	$7,800.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR SUBCONSULTANT 1	
NON-SALARY (UNIT COST EXPENSES) FOR SUBCONSULTANT 1	
GRAND TOTAL	**$7,800.00**