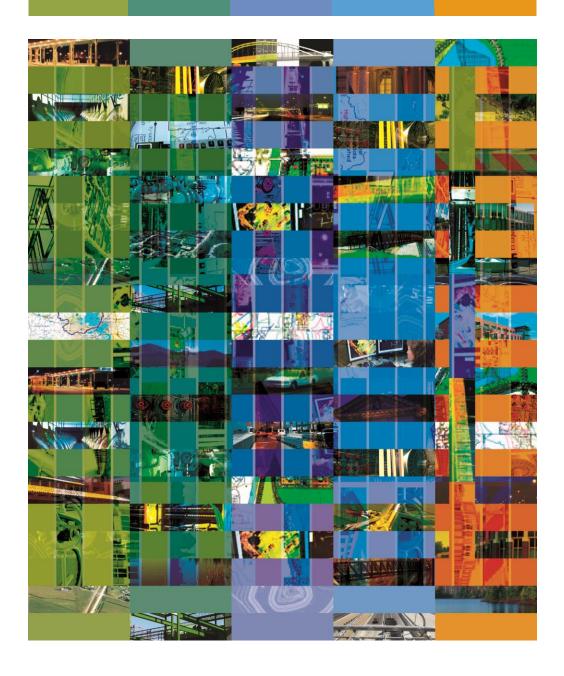
Professional

Engineering

Services

Professional Engineering Services for

RFP# 13-2014



Statement of Qualifications for

Lexington-Fayette Urban County Government

March 26, 2014



Firm Submitting Prop	osal:		
Complete Address:			
	Street	City	Zip
Contact Name:		Title:	
Telephone Number:		Fax Number:	
Email address:			

AFFIDAVIT

Comes the Affiant,	, and after being
His/her name is individual submitting the proposal or is the of submitting the proposal (hereinafter referred to as "Propose")	authorized representative, the entity
2. Proposer will pay all taxes and fees, which are owed to County Government at the time the proposal is submitted and will maintain a "current" status in regard to those taxe contract.	to the Lexington-Fayette Urban, prior to award of the contract
3. Proposer will obtain a Lexington-Fayette Urban County if applicable, prior to award of the contract.	Government business license,
4. Proposer has authorized the Division of Central Pumentioned information with the Division of Revenue and to Council that taxes and/or fees are delinquent or that a lobtained.	o disclose to the Urban County
5. Proposer has not knowingly violated any provision of the Commonwealth of Kentucky within the past five (5) years the Proposer will not violate any provision of the cancommonwealth.	and the award of a contract to

6. Proposer has not knowingly violated any provision of Chapter 25 of the

Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Mathskill	
STATE OF Wisconsin	
COUNTY OF Dane	
The foregoing instrument was subscribed, sworn to and	d acknowledged before me
by Matthew S. Richards	on this the 25+ day
of March, 2013.	
My Commission expires: 5000 2017017	— XELA. FRIED
Radul a Friedry NOTARY PUBLIC, STATE AT LARGE	PUBLIC PU

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
 - (a) Failure to perform the contract according to its terms,

- conditions and specifications;
- (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services:
- (e) The filing of a bankruptcy petition by or against the contractor;
 or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this

Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

Mattsputt Signature 3/21/14 Date



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor William O'Mara Commissioner

ADDENDUM #1

RFP Number: #13-2014

Date: March 3, 2014

Subject:

Request for Qualifications for

Professional Engineering Services

Please address inquiries to:

Theresa Maynard (859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

Paragraph two on page one should read as follows and agree with the date on the website:

"Sealed proposals will be received in the Division of Central Purchasing, Room 338, Government Center, 200 East Main Street, Lexington, KY, 40507, until **2:00 PM**, prevailing local time, on **March 26, 2014**."

Paragraph one on page two should read as follows:

Deadline for questions after the Pre-proposal meeting shall be Tuesday, MARCH 12th, 2014 at 2:00 PM local time.

Todd Slatin, Director

Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.

COMPANY:	Strand Associates, Inc.				
ADDRESS: _ 1525 Bull Lea Road, Suite 100, Lexington, KY 4051					
SIGNATURE	OF PROPOSER: Mather Mull				



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor

William O'Mara Commissioner

ADDENDUM #2

RFP Number: #13-2014

Date: March 7, 2014

Subject:

Request for Qualifications for

Professional Engineering Services

Please address inquiries to:

Theresa Maynard (859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

Disregard Addendum #1 issued on this page earlier today, March 7, 2014. That addendum was for RFP #14-2014 Request for Qualifications – Supplemental Legal Services and posted to the page for RFP #13-2014 in error.

Todd Slatin, Director

Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.

COMPANY: Strand Associates, Inc. ADDRESS: 1525 Bull Lea Road, Suite 100, Lexington, KY 4051 mattsfield

SIGNATURE OF PROPOSER:



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor William O'Mara Commissioner

ADDENDUM #3

RFP Number: #<u>13-2014</u>

Date: March 17, 2014

Subject:

Request for Qualifications for Professional Engineering Services

Please address inquiries to:

Theresa Maynard (859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

- Sign in sheets from March 10th, 2014 Pre-Proposal Meeting attached
- Questions and Answers attached

Todd Slatin, Director Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.



1525 Bull Lea Road, Suite 100 Lexington, KY 40511 (P) 859-225-8500 (F) 859-225-8501

March 26, 2014

Ms. Theresa Maynard, Buyer Senior Lexington-Fayette Urban County Government Room 338, Government Center 200 East Main Street Lexington, KY 40507

Re: RFP# 13-2014- Request for Qualifications for Professional Engineering Services

Dear Ms. Maynard:

Thank you for the opportunity to submit this statement of qualifications for the above referenced project. We are submitting our qualifications for the following contracts:

- Contract 1 Roadway Corridor and Intersection Design/Planning
- Contract 2 Right-Of-Way or Easement Acquisition
- **■** Contract 3 Construction Drawings Review for DOE Manual Compliance
- **■** Contract 4 Structures or Bridge Design
- Contract 5 Pedestrian, Bike, or Multimodal Trail Design/Planning
- Contract 6 Traffic Signal Design

Should you have any questions concerning the content of our submittal, please feel free to contact me at your earliest convenience. Thank you in advance for consideration of our firm and we look forward to the opportunity to continue our service on behalf the Lexington-Fayette Urban County Government.

Sincerely,

STRAND ASSOCIATES, INC.®

Michael A. Woolum, P.E., P.L.S.

Vice President

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•]	EHI Consultants
	Work Force Analysis Form Firm Profile
•]	Barr & Prevost
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• ;	Jacobi, Toombs and Lanz, Inc.

Work Force Analysis Form Firm Profile

2. Firm Qualifications

Strand's Local Transportation Improvements Track Record Exemplifies Understanding of Community Needs and Expectations

Our informed infrastructure recommendations help maximize community benefits.

From initial planning through design and construction, our local office staff has been actively involved with improvement of Lexington's streets and intersections for over 40 years and counting. Our work has included new construction for subdivision streets and arterials and improvements to major urban thoroughfares with state and federal jurisdictions. We have extensively served both LFUCG and KYTC on very high profile corridor improvement initiatives, which makes us keenly aware of the sensitivities involved with neighborhoods and community stakeholders. In addressing expectations of the public, this working knowledge combined with our demonstrated achievements bring confidence in our ability to help LFUCG responsibly address community needs in this important facet of the Division of Engineering's responsibility to the public.



Downtown Streetscape Improvements - Vine Street Promenade.

Experienced Management Team Brings Proven Know-How to Varied Challenges with Roadway Corridor and Intersection Planning and Design

Strand's Project Management leadership group includes individuals with unique backgrounds that enable us to effectively tailor a delivery team to meet a given project's specific needs. We propose to utilize this approach since our experience with local corridor improvement projects recognizes the diverse range of potential roadway intersection and traffic-related challenges, which could include among others:

- Turning lanes and intersection improvements supported by traffic analysis.
- Data collection and analysis to inform improvement recommendations.
- Design-sensitive corridor improvements requiring heightened public involvement.
- Assessment and implementation of traffic calming and safety enhancement initiatives.
- Modification to urban/rural roadways necessitating KYTC coordination and/or approval.

By matching project management skillsets to the needs of a given project, we can most efficiently and effectively satisfy your roadway corridor and intersection planning and design needs.

Client History and Related References Provide Further Confirmation of Strand's Transportation Expertise and Ability to Meet Client's Needs

We have had the opportunity to serve many major clients in this region for transportation engineering-related needs including: KYTC, University of Kentucky, Louisville Metro Government, National Development Council and other central KY communities to name a few. Strand's achievements include major transportation projects with roadway, bridge, and intersection improvements, award winning streetscape improvements initiatives, as well as smaller intersection, turn lane and minor roadway enhancement projects.

Strong client relationships are forged by successful project endeavors.

Diverse project requirements

Strand's flexible project teams.

addressed by

Contract 1 - Roadway Corridor and Intersection Design/Planning

You are encouraged to contact our references with regard to our prior service and the project solutions we have developed on their behalf. We are confident their responses will further document our quality commitment and reinforce your confidence in our ability to address your specific roadway corridor and intersection planning and design needs.

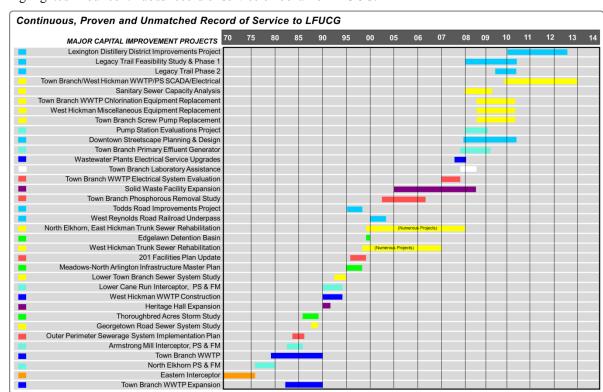
Previous Experience Strengthens Understanding Required to Address Varied Roadway Corridor and Intersection-Related Project Needs

Cost-benefit approach applies to projects large and small. With many competing program needs and an ever expanding funding gap between infrastructure spending capacity and public expectations, our Team understands the importance of leveraging infrastructure investment. Having a well-documented record of performance with major intersection and roadway corridor enhancement initiatives, our Team brings a cost-benefit mindset to this LFUCG improvements program. As no two projects are alike, our Team credentials are testimony to the nimble approach often required for successful project outcomes. Our services on such notable projects as LFUCG's Downtown Streetscape Improvements and the West Reynolds Road Railroad Underpass and Corridor Reconstruction are examples of projects with significant community benefits under challenging circumstances. Similarly, our work to expedite completion of the Appomattox Road Bridge Replacement and Meadows-North Arlington Infrastructure Master Plan in North Lexington are small neighborhood project examples having essential transportation elements, but with important community benefits. To these successful conclusions, we are committed to positive outcomes on all projects large and small.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

As documented in the chart below our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs including many important roadway-related projects. The longevity and continuity of our local staff is reinforced by their unyielding commitment to help improve the city infrastructure realm as highlighted in our continuous record of service on behalf of LFUCG.

Longevity and continuity is a hallmark of Strand's transportation team.



3. Project Team

Our Team has the requisite credentials and capabilities, and is committed to the successful completion of this program component.

Experienced Project Managers with Support of Seasoned Technical Resources Provides Specialized Experience to Serve a Complete Range of Project Needs

Our Project Team offers the complete range of engineering capabilities that are needed for the many technical challenges that could potentially result through this infrastructure program. We have included project managers with specialized experience directly related to this project discipline who take pride in their work having served on many prior projects on behalf of LFUCG. Our Project Management Team is supported by local engineers and technicians with years of experience involving roadway corridor and intersection design/planning projects. Additionally, Strand's collaborative partnership with EHI Consultants, Barr & Prevost, Jacobi, Toombs & Lanz, Inc., Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. on previous projects brings familiar expertise related to planning, geotechnical engineering, surveying, and environmental services. The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project.

Thumbnail resumes for key personnel follow within this section with full resumes of the primary team members included as an attachment in the *Appendix A - Resume*Section.

"Strand is KYTC Prequalified for all services contemplated under this contract."

Project Manager Pool Michael Woolum, P.E., P.L.S. Mark Askin, P.E. Chase Wright, P.E. Maintenance of Traffic/ Constructability Review Roadway Design Surveying Stephen Marshall, P.E., P.L.S. (JTL) Brian Andreas, P.E. Chase Wright, P.E. Jonathan McCracken, E.I.T. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Easements Construction-Related Services Drainage Rights-of-Way Acquisition Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Jonathan McCracken, E.I.T. Chase Wright, P.E. Bruce Monarch Robert Burnette Lindsie MacPherson, E.I.T. Structural Planning/Traffic Analysis **Environmental Analysis** Adam Weber, P.E. Ed Holmes, AICP (EHI) Gina Morris, PG (Third Rock) Elizabeth Kuypers, P.E. Chad Bourke, P.E., P.T.O.E. **Cultural/Historic** Signalization/Lighting **Permitting** Michael Davis, P.E. Chase Wright, P.E. Elizabeth G. Heavrin, MHP (CRA) Chad Bourke, P.E., P.T.O.E. Lindsie MacPherson, E.I.T. Luke Holman, P.E. Utility Coordination/ Landscape Architecture Geotechnical Relocation Chase Wright, P.E. Sara Tuttle, RLA Travis Burr, P.E. (B&P) Michael Davis, P.E.

Listed resources are also supported by other locally available staff.

(JTL) Jacobi, Toombs & Lanz, Inc. (EHI) EHI Consultants (Third Rock) Third Rock Consultants, LLC (CRA) Cultural Resource Analysts (B&P) Barr & Prevost

Project Management Team

Strand's management team has been developed to meet the wide range of potential assignments with appropriate staff.

Our Project Management Team has been developed to include both senior project managers and a project manager so that we can match LFUCG's needs on a particular project with the appropriate staff. Each of our project managers exceeds the defined requirements for three relevant projects within the past five years. A short biography for each project manager followed by a listing of recent applicable experience is provided below.

Michael Woolum, P.E., P.L.S. has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1985. Michael's diverse project experience includes planning and design or roadway improvements for both the public and private sectors. He will serve LFUCG as project manager on complex roadway planning and design assignments similar to the role he played on the LFUCG's Downtown Streetscape Project and Distillery District initiatives.



For projects managed by others, he will remain involved as Principal-In-Charge providing support as needed.

- Principal/Project Manager South Limestone, West Main, West Vine, East Main LFUCG
- Project Manager North Broadway KYTC District 7
- Principal West High Street LFUCG
- Principal East Main Streetscape Improvements City of Scottsville, KY

Mark Askin, P.E. has 20 years of experience in civil engineering including planning of design of roadway and utility improvements and easement/right-of-way acquisition services. Mark has served KYTC in managing numerous roadway design projects in multiple KYTC districts over the last three years. His overall understanding of all aspects involved in the delivery of transportation projects provides invaluable insight into completing transportation projects.



- Project Manager KY 2160 Roadway and Bridge Improvements KYTC District 3
- Project Manager Ringgold Road City of Somerset
- Principal Trey Street Roadway Phase I River Ridge Development, Indiana
- Project Manager Meniffee County (CR 1215) Bridge Replacement KYTC District 10

Chase Wright, P.E. has eight years of experience in civil engineering including development and transportation engineering. Chase's transportation experience includes providing engineering and management services to LFUCG, KYTC, and other local public agencies with federally funded projects. He has played key roles including managing aspects and design of transportation projects in Lexington including North Broadway, Downtown Streetscape Improvement Projects, and Distillery District. His understanding of LFUCG and KYTC requirements will be beneficial as he serves LFUCG as project manager



on select assignments.

- Assistant PM/Design Engineer South Limestone, West Main, West Vine, East Main LFUCG
- Assistant PM/Design Engineer North Broadway KYTC District 7
- Project Manager/Design Engineer West High Street LFUCG
- Project Manager/Design Engineer Scottsville Streetscape City of Scottsville, KY

Qualifications of Additional Key Project Team Members

Chad Bourke P.E., PTOE - Roadway Design and Planning/Traffic Analysis

Chad will assist with roadway design elements as well as planning and traffic analysis for assignments. Chad has over 9 years of experience, is a licensed professional engineer in Kentucky, and is a registered Professional Traffic Operations Engineer. Chad completed the Request to Experiment for the floating bike lane concept in downtown Lexington, KY as well as the traffic simulation and report that documented the several proposed scenarios for the streetscape project. Chad followed this project through design, completing the traffic signal design for the majority of the signals. Chad also plays a vital



role as a project manager and acquisition agent with Strand's right of way acquisition department. Moreover, his experience in construction observation as a young engineer gives him the needed insight to proactively design projects to avoid issues during construction.

Seth Winslow P.E. - Drainage & Constructability/MOT

Seth will assist with drainage design and constructability/MOT reviews for assignments. Seth has 15 years of experience and is a licensed professional engineer in Kentucky. Seth completed the drainage analysis for South Limestone and has been involved with reviewing plans on the North Broadway project. Seth has served as a project manager and designer for a wide variety of roadway projects from multilane urban roadways to rural bridge replacements. Seth's project assignments have included drainage, storm sewer, geometric design, and MOT.



Michael Davis, P.E. - Signalization/Lighting

Michael will provide signalization and lighting services for assignments. Mike has 31 years of experience and is a licensed professional engineer in Kentucky, Alabama, and Mississippi. Mike frequently serves LFUCG on electrical projects that include electrical distribution improvements, lighting improvements and electrical control systems. Mike is currently serving as project manager for LFUCG's \$17 million project to renovate LFUCG's West Hickman WWTP electrical system, and upgrade control systems at Town Branch and West Hickman WWTP. Mike's traffic signalization experience



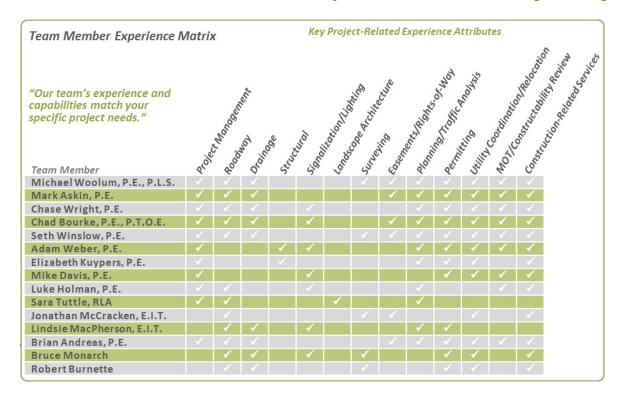
includes signals for 16 intersections in Lexington for clients that include LFUCG, the Commonwealth of Kentucky and private developers. Mike also provided electrical engineering services for the LFUCG streetscape projects that included electrical and lighting improvements on Main, Vine and Limestone Streets.

Sara Tuttle, RLA - Landscape Architecture

Sara will be responsible for landscape architecture efforts. Sara has 33 years of experience and is a Registered Landscape Architect in Kentucky. She is well versed in representing both public and private sector clients. Sara is also highly experienced in theme-based collaboration and design, transportation enhancements, and implementation of green infrastructure strategies. She has a developed a thorough understanding of LFUCG requirements through successfully represented clients in Lexington from planning through construction. Some of her projects include Griffin Gate, HealthFirst Bluegrass, Coldstream Research Campus and Southland Christian Church.



Experience matrix highlights reciprocal capabilities offered by project team members.







Strand's
Management Plan
and past project
history
demonstrate
commitment to
staffing continuity.

Subconsultant Participation

Our Project Team is supported by the added technical resources provided by EHI Consultants, Barr & Prevost, Jacobi, Toombs & Lanz, Inc., Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. respectively for planning, geotechnical engineering, surveying, environmental analysis, and cultural & historic evaluations. Strand is no stranger to this group, having collaborated with each firm on many past similar projects. EHI Consultants, Barr & Prevost, and Third Rock Consultants also provide our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to fulfill the specialized services they bring to bear on behalf of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require to meet LFUCG's 10% participant goal.

Project Management Plan

Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead a direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for this noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role for multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Roadway Corridor and Intersection Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Brad Frazier, PE, Director Division of Engineering Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	West High Street Realignment Study Distillery District Feasibility Study South Limestone Street Reconstruction West Main Streetscape Improvements East Main Streetscape Improvements West Vine Streetscape Improvements
Joshua Samples, PE Commonwealth of Kentucky Kentucky Transportation Cabinet (859) 246-2355 joshua.samples@ky.gov	US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements (Item No. 7-412)
Mayor Rob Cline City of Scottsville Scottsville, KY (270) 237-3238 Email: none	East Main (KY 100) Streetscape Improvements
Brad Chambers, President and CEO Buckingham Companies Indianapolis, IN (317) 974-1234 Brad.chambers@buckingham-co.com	The Lex Site and US 27/68 Turn Lane Improvements
Marc Hildenbrand Project Management and Utility Operations River Ridge Development Authority Jeffersonville, IN (812) 285-8979 marc@riverridgecc.com	Trey Street Roadway - Phase I

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied Roadway Corridor and Intersection Improvement-Related Project Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Strand has served LFUCG and other state agencies and local governments throughout Kentucky on a broad range of roadway and intersection improvement-related projects. Services provided have included planning, design, and constructionrelated support for projects including state highways, local roadways, turning lanes, intersection and streetscape improvements, requiring all disciplines of engineering with our in-house resources. In addition, members of our Team are recognized for their innovative approaches in solving challenging problems in the adverse dense urban core area, including award winning experience on the City's Downtown Streetscape, which inleuded application of green infrastructure solutions. In addition to many neighborhood projects, other notable accomplishments have included the West Reynolds Road Railroad Underpass, Todds Road Improvements, and KYTC North Broadway Railroad



S. Limestone Street College Town Corridor.



Mall Entrance at West Reynolds Road.

Experience with key areas of consideration provide confidence in Strand's ability to serve this DOE program component.

In supporting the roadway and intersection-related needs associated with Contract 1, our Team's capabilities and experience are well suited to address the varied challenges and needs that may arise. Our project listing and Team's experience includes specialized capabilities in the following key areas of consideration:

- Easements and Rights-of-Way Acquisition
- Community Outreach and Public Involvement
- Storm Drainage
- Urban and Rural Roadway Design Standards
- Traffic Analysis, Microsimulation, and Signalization
- Utility Coordination and Relocations
- FEMA CLOMR/LOMR
- Environmental Analysis and Permitting
- Aesthetics and Local Context

Underpass Improvements projects.

Our Project Team includes individuals who not only bring working knowledge throughout the entirety of LFUCG's infrastructure realm, but professionals who also possess rare skills in administering to construction contracts with high public expectations. The table on the following page outlines a select listing of roadway and intersection improvement-related projects that highlight our credentials to serve LFUCG's needs for this important DOE contract.

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
W. High Street (US 60) Realignment Preliminary Engineering Study Lexington-Fayette Urban County Government Lexington, KY	2014	Planning Services	 Develop planning level alternatives for roadway realignment to support Rupp Arena Project. Preliminary horizontal/vertical alignment development and roadway/intersection layouts. Develop preliminary opinion of probable construction costs. 	\$3,500,000 - \$5,500,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Brian Andreas, P.E.
Distillery District Improvements Program Feasibility Study Lexington-Fayette Urban County Government Lexington, KY	2013	Planning Services	 Evaluate existing conditions related to roadway, bicycle, and pedestrian travel modes. Review proposed redevelopment plans and develop alternative combinations for roadway/trail. Provide recommended alternatives including turn lane and intersection improvements. Identify priority action items to address concerns prohibiting development. Develop phasing and implementation strategy for the project. 	\$14,800,000 - \$23,900,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Jonathan McCracken, E.I.T
US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements Item No. 7-412.00 Kentucky Transportation Cabinet (KYTC) Lexington, KY	On-going	Design Services	 Upgrade existing rural roadway section to urban section and widen roadway typical section. Address substandard horizontal and vertical clearance at railroad bridge. Develop drainage solution to address existing roadway flooding that requires street closure. Evaluate retaining wall sections required to retain rock and address known karst topography. Incorporate bicycle and pedestrian improvements into project. Evaluation of railroad alignment alternatives and bridge replacement options. 	\$9,200,000 - \$11,200,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Chad Bourke, P.E., P.T.O.E. Seth Winslow, P.E. Lindsie MacPherson, E.I.T. Jonathan McCracken, E.I.T.
South Limestone Street Reconstruction Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway reconstruction, streetscape improvements, & utility infrastructure replacement. Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades. Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$13,150,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
West Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$1,800,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
East Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2011	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Limestone to Rose Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$2,610,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
West Vine Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$3,010,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Adam Weber, P.E. David Rice, P.E.
East Main Street (KY 100) Streetscape Improvements City of Scottsville Scottsville, KY	2014	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements. Traffic calming measures and pedestrian improvements including crosswalks and ADA walkways. Roadway lighting/electrical, drainage, and landscape improvements. Structural retaining walls and ADA compliant ramp from lower to upper walkway. 	\$375,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Michael Davis, P.E. Sara Tuttle, RLA Jonathan McCracken, E.I.T
KY 2160 Roadway Improvements and Bridge Replacement Item No. 3-1080.00 Kentucky Transportation Cabinet Allen County, KY	On-going	Design Services	 Rural roadway and bridge improvements Address substandard horizontal curve and superelevation. Improve hydraulic conveyance at bridge crossing. 	\$530,000	Mark Askin, P.E. Seth Winslow, P.E. Chase Wright, P.E.
The Lex Site and US 27/68 (S. Broadway) Turn Lane Improvements Buckingham Companies Lexington, KY	2010	Planning, Design, and Construction- related Services	 Roadway improvements to provide new turn lane into development Reconstruct intersection including traffic signalization and ADA compliance upgrades. Pavement marking and signage improvements. 	\$2,100,000	Michael Woolum, P.E., P.L.S. Michael Davis, P.E. J. Bruce Monarch
Trey Street Roadway - Phase I River Ridge Development Authority Jeffersonville, IN	2011	Design and Construction-related Services	 Urban roadway widening and realignment (7,000 LF). Utility coordination during design and construction. Design of sanitary sewer (3,600 LF gravity) and water main (3,000 LF) improvements. 	\$3,000,000	Mark Askin, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E.
KY 237 and Conrad Lane Intersection Improvements Boone County Fiscal Court Boone County, KY	2009	Planning and Design Services	 Traffic analysis to confirm proposed lane configuration. Turn lane improvements at intersection. Improvements provide pedestrian connectivity to existing sidewalk system. 	\$150,000	Mark Askin, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E.

Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	10
Other Location	Louisville, KY	1968	25	2
Sub Consultants				
EHI Consultants - Planning	Total	1995	5	5
Headquarters	Lexington, KY	1995	3	3
Local Office	Lexington, KY	1995	3	3
Third Rock Consultants - Environmental	Total	2000	26	3
Headquarters	Lexington, KY	2000	23	3
Local Office	Lexington, KY	2000	23	3
Jacobi, Toombs, & Lanz Surveying	Total	1955	42	3
Headquarters	Louisville, KY	1955	9	3
Local Office	Louisville, KY	1955	9	3
Barr & Prevost - Geotechnical/Drilling	Total	1997	125	5
Headquarters/Local Office	Columbus, OH	1997	50	5
Cultural Resource Analysts - Historic	Total	1983	74	Variable
Headquarters	Lexington, KY	1983	35	Variable
Local Office	Lexington, KY	1983	35	Variable

Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

b a c

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

For this project, the Strand team includes listed support from locally based DBE's EHI Consultants for planning and Third Rock Consultants, LLC for environmental-related services; Louisville based DBE Jacobi, Toombs & Lanz, Inc. for surveying; Ohio based DBE Barr & Prevost for geotechnical related services. We have also included Cultural Resources Analysts, a locally-based small business that specializes in cultural and historic environmental concerns. Common among each of these subconsultant team members is a prior working relationship with Strand on many other similar related projects.

For the entirety of project services under this contract, Strand is committed to meeting or exceeding LFUCG's 10% goal for DBE firm participation. If service opportunities are not available for a given project within the credentials listed herein for EHI, Third Rock, Jacobi, Toombs & Lanz, or Barr & Prevost, Strand will first reach out







to other locally-based preapproved DBE firms to solicit their support in meeting the participation goal. If we are unable to find local support, we will then reach out to other area DBE firms to meet the commitment. Rest assured, Strand is committed to fulfillment of this important contracting objective recommended by LFUCG.

2. Firm Qualifications

Strand's Experienced Rights-of-Way and Easement Acquisition Team Meets LFUCG's Needs

Our informed infrastructure recommendations help maximize community benefits.

Efficient easement and rights-of-way acquisition is essential for successful project completion. Strand regularly helps our clients succeed through rights-of-way and easement acquisition for a wide variety of projects. Typical project types include: major site developments; roadways; streetscapes; and utilities. Our approach to providing these services is based on specific client needs. Some projects may require only the preparation of easement descriptions and exhibits, while other projects may require property-owner negotiations and legal/appraisal services. We are prequalified by KYTC to provide rights-of-way acquisition services to support roadway projects. Strand's Project Team includes individuals that address all aspects of rights-of-way and easement acquisition. This includes:

- Development of Easement Legal Descriptions.
- Development of Easement Plats.
- Site Surveying.
- Deed Research.
- Acquisition, including property owner negotiation.

Through our partnerships with other local firms, se are also able to provide the following services if required by LFUCG:

- Property Title and Closings.
- Appraisals.

Experienced Project Management Addresses All Project Requirements

Our Project Team is experienced in all phases of rights-of-way and easement acquisition. We regularly work with a wide range of clients with diverse rights-of-way and easement acquisition procedures. While many of the requirements are similar for various organizations, we recognize the unique requirements of each client, and establish procedures at the beginning of project development to address these specific needs. Our managers are also experienced engineers with years of design and construction-related experience. This experience enhances our ability to understand and communicate project requirements and help clients obtain easements and rights-of-way.

Client History and Related References Provide Further Confirmation of Rights-of-Way and Easement Acquisition Expertise and Ability to Meet Client's Needs

Strong client relationships are forged by successful project endeavors.

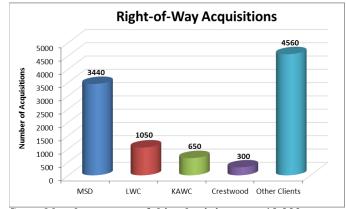
Diverse project

requirements are addressed by

Strand's flexible

project teams.

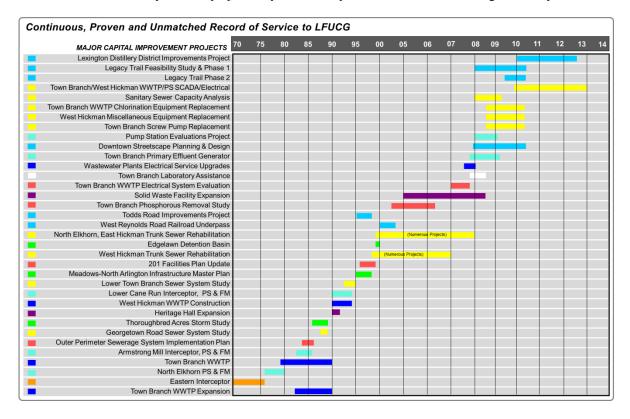
Strand has a long history of providing rights-of-way and easement acquisition services to a broad range of clients throughout Kentucky. We have served state agencies, including the Kentucky Transportation Cabinet and the Kentucky Finance and Administration Cabinet. Our success in obtaining rights-of-way for KYTC is unrivaled. We have also served municipalities, including LFUCG, Louisville MSD and Crestwood. The adjacent graphic attests to our Kentucky experience obtaining easements and rights-of-way.



Strand has been successful in obtaining over 10,000 easement and fee simple acquisition in addition to our work with KYTC.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

Longevity and continuity is a hallmark of Strand's stormwater team. As documented in the chart below, our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs. Many of these projects required the acquisition of easements and rights-of-way.



3. Project Team

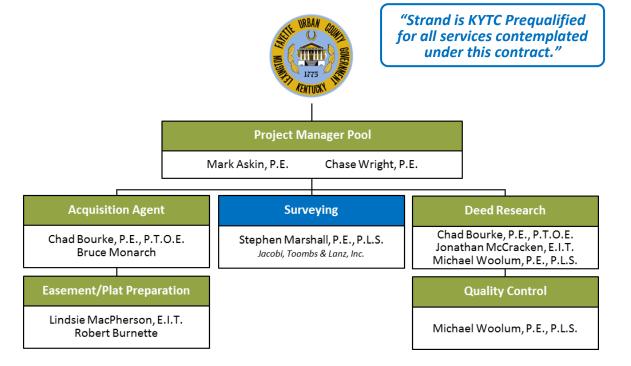
Experienced Project Managers with Support of Seasoned Project Team Members Provide Specialized Experience to Meet LFUCG's Rights of Way and Easement Acquisition Needs

Our Team has the required credentials and capabilities, and commitment to help LFUCG successfully implemented projects.

Rights-of-Way acquisition is a significant service area within the Strand organization. Our Project Team is composed of experienced personnel that provide Rights of Way and Easement services to a wide variety of Strand clients in Kentucky. These services are often provided as part of a bigger scope of services that includes design and construction-related services. However, Strand staff regularly provide rights-of-way and easement services as a specialty consultant. Our Team members are experienced in all phases of acquisition, including easement development, platting requirements, deed research, field surveying and serving as acquisition agents. Each of our Team members also has well-rounded experience providing design- and construction-phase services for municipal projects. We find this understanding of design and construction helps when staff are serving in a right of way acquisition role.

Strand's surveying and easement/plat development capabilities are supplemented with the inclusion of Jacobi, Toombs and Lanz, Inc (JTL) on our Team. Additionally, Strand has relationships with several title attorneys and appraisers that allow us to provide property title/closing and appraisal services if required by LFUCG.

The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project. Thumbnail resumes for key personnel follow within this section with full resumes of the primary team members included as an attachment in the *Appendix A - Resume Section*.



Listed resources are also supported by other locally available staff.

Project Management and Key Team Leaders

The Project Team organizational chart includes a "pool" of available project managers. Project managers will be selected based on individual project requirements for specific LFUCG projects as they are identified. Each of these project managers meets the minimum experience requirements contained in the LFUCG request for proposals.

Mark is recognized as a leading rights-of-way professional in the Commonwealth of Kentucky Mark Askin, P.E. will serve as Strand Project Manager for easements and rights-of-way acquisition. Mark currently serves as Director of Strand's Right-of-Way and Easement Acquisition Department and provides these services for clients throughout Kentucky. He has more than 17 years of experience working with KYTC, utility companies, and municipalities on right-of-way acquisition projects. In total, Mark has acquired or overseen the acquisition of over 4,600 parcels for multiple clients. Mark's experience in



transportation design as well as right-of-way acquisition contributes to his wealth of knowledge that has led to his team's high acquisition rate. Projects managed by Mark have been completed within the project schedule averaged a 97 percent acquisition rate without the use of eminent domain procedures. With projects ongoing or completed in Districts 1,2,3,4,5,6,7, and 8 Mark has developed relationships with KYTC staff and understands their individual expectations.

Chase Wright, P.E. has eight years of experience in transportation engineering. Chase's transportation experience includes providing engineering and management services to LFUCG, KYTC, and other local public agencies with federally funded projects. His projects often include right-of-way and easement aspects from deed research to acquisition services. On the recent Paris Safe Route to School Project, Chase led the project team that established property boundaries, determined easement extents,



developed easement exhibits, and prepared deeds all following the requirements of FHWA. Chase as also led similar efforts for utility projects for Paris and Bourbon County.

Michael Woolum, P.E., P.L.S. will be responsible for Quality Control. Mike has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1985. His diverse project experience includes planning, design and construction services for municipal transportation, streetscape and utility projects. Mike is a licensed surveyor with experience performing property surveys and developing plats and easement descriptions. Mike's diverse experience makes him a perfect match to serve in a QC role for this project.



Chad Bourke, P.E., P.T.O.E. will serve as an Acquisition Agent for this project. He has over seven years of engineering experience creating planning studies, performing roadway design, construction observation, and acquiring right-of-way. Chad's experience on projects from planning through construction gives him the ability to promptly answer property owner questions. He has worked as an acquisition agent for multiple clients, including KYTC.



John Bruce Monarch. will serve as a Right of Way Acquisition Agent for this project.

Bruce has 30 years of experience in Civil Engineering and a year of experience in R/W

Acquisition. Bruce has worked on several KYTC R/W acquisition projects including;

Scott Co., Item No. 07-212.00 Reconstruction of US-460 eight parcels, Nelson/Spencer

Co., Item No. 4-287.50 Bardstown-Louisville; Relocation of US-31E seven parcels,

Trigg Co. Item No. 1-180.10 Cadiz-Aurora, Trigg Co. Item No. 1-180.11 Cadiz-Aurora

eight parcels, Christian Co. Item No. 2-8505.00 Extend Lovers Lane six parcels, Fayette Co. 7-593.20

Newtown Pike Extension eighteen parcels, Fayette Co. Item No. 7-113.00 New Circle Road Rehab and

Lindsie R. MacPherson, E.I.T., is a Project Engineer with 2 years of experience in planning and design for site development and stormwater and green infrastructure related interests.. Lindsie will serve the role of project engineer, assisting with easement and plat preparation, drainage design, stormwater planning and infrastructure design, and permitting.



Experience matrix highlights reciprocal capabilities offered by project team members.

Team Member Experience Matrix Key Project-Related Experience Att			ttribu	tes						
"Our team's experience and capabilities match your specific project needs." Team Member	arde	The state of the s	Tield Sugar	to Se griffing Single Series	Dead Hole	Plate Office	Holling Collins	Sie Continue Sie	Sieguillos on	Costudida
Mark Askin, P.E.										
Jonathan McCracken, E.I.T.	✓	✓	✓				√	√	✓	
Bruce Monarch										
Chad Bourke, P.E., P.T.O.E.	\checkmark	✓			\checkmark		✓	✓	✓	
Michael Woolum, P.E., P.L.S.										
Lindsie MacPherson, E.I.T.	✓					✓	✓	√	√	
Robert Burnette			\checkmark	√		√		√	\checkmark	

Subconsultant Participation

Widening six parcels.



Our Project Team is supported by the added technical resources provided by Jacobi, Toombs and Lanz, Inc. (JTL), JTL also provides our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to utilize the specialized services they bring to bear on behalf of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require to meet LFUCG's 10% participation goal.

Project Management Plan

Strand's Management Plan and past project history demonstrate commitment to staffing continuity. Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead a direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for this noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role for multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Rightof-Way and Easement Acquisition Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Vicki Coombs, PE Louisville and Jefferson County MSD Louisville, KY (502) 540-6131 coombs@msdlouky.org	Jeffersontown Force Main Easements/Plats Hikes Lane Interceptor Easements/Plats
Brad Frazier, PE Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	Lower Cane Run Interceptor Sewer and Force Main Easements and ROW
Charles Hale, Right-of-Way Supervisor Kentucky Transportation Cabinet-District 8 Somerset, KY (606) 677-4017 charles.hale@ky.gov	US 460, Scott County ROW Acquisition New Circle Road, Fayette County ROW Acquisition Watterson Trail, Jefferson County ROW Acquisition
Judge Donnie Foley Bourbon County Fiscal Court Paris, KY (859) 987-2135 bocojudgeexec@yahoo.com	Bourbon Hills and Lynnwood Drive Sanitary Sewer Easements US 68 Bypass Utility Relocation ROW
Paul Gannoe, Executive Dir. F&A Cabinet Commonwealth of Kentucky Frankfort, KY (502) 564-3155 x240 Paul.gannoe@ky.gov	Kentucky Horse Park Wastewater Force Main Easements Eastern State Hospital Platted Utility Easements

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied Rights-of-Way and Easement Acquisition Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Experience with key areas of consideration provide confidence in Strand's ability to serve this important project component.

Strand has served LFUCG and other state and local governments on a broad range of easement and rights-of-way acquisition services for over 40 years. Services provided have included: easement and plat preparation; field surveying; legal description preparation; property owner negotiations; and legal/appraisal services. These services have been provided as part of a larger design-services contract where Strand performed utility, roadway and site design, or as stand-alone easement/rights-of-way services provided as a specialty consultant for a variety of state and local entities.

Our Project Team includes individuals who not only bring working knowledge of acquisition requirements, but also design and construction implications of rights-of-way acquisition. The table on the following page outlines a select listing of easement and rights-of-way acquisition projects that highlight our credentials to serve LFUCG's needs for this important project need.

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied **Stormwater Related Project Needs**

Strand has been providing quality professional engineering services to LFUCG since 1968.

Strand has served LFUCG and other state and local governments on a broad range of stormwater-related projects over these last 35+ years. Services provided have included permitting, planning, design and construction-related support for various projects including roadway, neighborhood drainage, flood abatement, channel restoration, flood control and infrastructure rehabilitation, calling on all disciplines of engineering with our in-house resources. In addition, members of our Team are recognized for their innovative approaches in solving challenging stormwater problems with both structural and nonstructural systems, including award winning experience on flood control dams and application of green infrastructure solutions. Our experience with LFUCG is testimony to this fact with our notable accomplishments with the Meadows, Northland, Arlington Neighborhood CIP and Downtown Streetscape Improvements project.

In supporting the stormwater management related **Experience** with needs associated with LFUCG's Remedial Measures Plan (RMP), our Team's capabilities and familiarity provide confidence with local flooding problems are well suited to in Strand's ability address the varied challenges and conditions that to serve this RMP exist. Our project listing and Team's experience includes specialized capabilities in the following key areas of consideration:

- Easements and Rights-of-Way Acquisition
- Public Involvement
- Stormwater Management Control Basins
- Open Channel/Pipe Systems
- CIP and Pre-Cast Structural Systems
- **Utility Relocations**
- FEMA CLOMR/LOMR
- Environmental Permitting (401/404)
- Aesthetics and Local Context



Appomattox Road Culvert Replacement -Double 12-foot x 6-foot R.C. Box Culvert.



Chambered 12-foot x 6-foot storm and 5-foot x 4-foot sanitary R.C. Box Culvert - Downstream.



Heritage Hall Expansion - Chambered 12-foot x 6-foot storm and 5-foot x 4-foot sanitary R.C. Box Culvert - Upstream Town Branch Creek.

Our Project Team includes individuals who not only bring working knowledge of LFUCG's drainage infrastructure realm, but professionals who also possess rare skills in administering to construction contracts with high public expectations. The table on the following page outlines a select listing of stormwater-related projects that highlight our credentials to serve LFUCG's needs for this important RMP component.

key areas of

program

component.

consideration

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
Rights-of-Way Acquisition - Newtown Pike Extension Kentucky Transportation Cabinet Fayette County, KY	On-going	Right-of-Way Acquisition	 Total of 28 parcels are being acquired to facilitate the roadway improvement project. 12 of the Parcels are in the minor acquisition review category. 3 of the Parcels require relocations. 	N/A	Mark Askin, P.E. Bruce Monarch
Rights-of-Way Acquisition - New Circle Road (KY 4) Kentucky Transportation Cabinet Fayette County, KY	On-going	Right-of-Way Acquisition	 Total of 40 parcels are being acquired to facilitate the roadway improvement project. 10 of the Parcels are in the minor acquisition review category. 7 of the Parcels require relocations. 	N/A	Mark Askin, P.E. Chad Bourke, P.E., P.T.O.E. Bruce Monarch
Rights-of-Way Acquisition - Bardstown-Louisville Lane (US 31E) Kentucky Transportation Cabinet Nelson County, KY	On-going	Right-of-Way Acquisition	 Total of 70 parcels are being acquired to facilitate the roadway improvement project. 39 of the Parcels require relocations. 	N/A	Mark Askin, P.E. Chad Bourke, P.E., P.T.O.E. Bruce Monarch Jonathan McCracken, E.I.T.
Rights-of-Way Acquisition - I 65/KY 222 Interchange Kentucky Transportation Cabinet Hardin County, KY	On-going	Right-of-Way Acquisition	 Total of 30 parcels are being acquired to facilitate the roadway improvement project. 3 of the Parcels require relocations. 	N/A	Mark Askin, P.E. Chad Bourke, P.E., P.T.O.E.
Paris Safe Route to School City of Paris Paris, KY	2014	Planning, Design, and Construction- related Services	 Sidewalk improvements along KY 1939. Development of required easement documentation for partial acquisition of 14 parcels. Drainage improvements including two new culverts. Sidewalk designed to minimize cost and avoid existing conflicts with utilities and trees. 	\$160,000	Michael Woolum, P.E., P.L.S. Mark Askin, P.E. Chase Wright, P.E.
Rights-of-Way Acquisition - US 460 Kentucky Transportation Cabinet Scott County, KY	2013	Right-of-Way Acquisition	 Total of 19 parcels were acquired to facilitate the roadway improvement project. 12 of the Parcels were in the minor acquisition review category. 5 of the Parcels required relocations. 	N/A	Mark Askin, P.E. Bruce Monarch Jonathan McCracken, E.I.T.
Rights-of-Way Acquisition - US 68/80 Kentucky Transportation Cabinet Trigg County, KY	2012	Right-of-Way Acquisition	 Total of 32 parcels were acquired to facilitate the roadway improvement project. 7 of the Parcels were in the minor acquisition review category. 	N/A	Mark Askin, P.E. Bruce Monarch
Rights-of-Way Acquisition - Three Springs Road Kentucky Transportation Cabinet Warren County, KY	2011	Right-of-Way Acquisition	 Total of 17 parcels were acquired to facilitate the roadway improvement project. Each parcel is a strip-taking on a commercial property. 	N/A	Mark Askin, P.E.
US 68/US 27 Bypass Water Main Extension City of Paris Paris, KY	2011	Planning, Design, and Construction- related Services	 Water main extension providing a critical loop in the water system. Portion of water main extension was on private property requiring easement. Provided deed research, easement development, and acquisition services. 	\$250,000	Mark Askin, P.E. Chase Wright, P.E. Robert Burnette
Bourbon Hills and Lynnwood Drive Sanitary Sewer Extension Bourbon County Fiscal Court Bourbon County, KY	2010	Planning, Design, and Construction- related Services	 Sanitary sewer extension project to serve currently unsewered areas. Portion of sanitary sewer routed through five parcels to serve existing homes along Lexington Rd. Provided deed research, easement development, and acquisition services. 	\$360,000	Mark Askin, P.E. Chase Wright, P.E. Robert Burnette
Rights-of-Way Acquisition - Veterans Parkway Kentucky Transportation Cabinet Hardin County, KY	2010	Right-of-Way Acquisition	 Total of 45 parcels were acquired to facilitate the roadway improvement project. A 98% Acquisition Rate was achieved without use of imminent domain. 	N/A	Mark Askin, P.E.
Rights-of-Way Acquisition - KY 313 Extension Kentucky Transportation Cabinet Hardin/Meade County, KY	2010	Right-of-Way Acquisition	 Total of 119 parcels were acquired to facilitate the roadway improvement project. 36 of the Parcels required relocations. A 98% Acquisition Rate was achieved without use of imminent domain. 	N/A	Mark Askin, P.E.
Rights-of-Way Acquisition - Watterson Trail (KY 1819) Kentucky Transportation Cabinet Jefferson County, KY	2008	Right-of-Way Acquisition	 Total of 55 parcels were acquired to facilitate the roadway improvement project. A 100% Acquisition Rate was achieved without use of imminent domain. 	N/A	Mark Askin, P.E.
Rights-of-Way Acquisition - Somerset Northern Bypass (I-66) Kentucky Transportation Cabinet Pulaski County, KY	2008	Right-of-Way Acquisition	 Total of 100 parcels were acquired to facilitate the roadway improvement project. 38 of the Parcels required relocations. A 95% Acquisition Rate was achieved without use of imminent domain. 	N/A	Mark Askin, P.E.

5. Similar Design Services Projects — Page 10

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Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	10
Other Location	Louisville, KY	1968	25	2
Sub Consultants				
Jacobi, Toombs, & Lanz Surveying	Total	1955	42	3
Headquarters	Louisville, KY	1955	9	3
Local Office	Louisville, KY	1955	9	3

Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

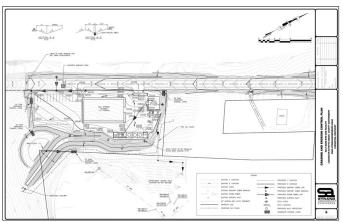
For this project, the Strand team includes support from Jacobi, Toombs and Lanz, Inc (JTL). to provide surveying and easement plat preparation services that augment Strand's internal capabilities. This is a role that JTL has served in for past Strand projects. JTL is an MBE minority-owned firm that has provided similar services on past Strand Project Teams.



2. Firm Qualifications

Familiarity and Working Knowledge of LFUCG Engineering Technical Manuals Bring Confidence with Outsourced Construction Drawing Review

Prior LFUCG experience and working knowledge makes us well prepared to support construction drawing review needs. Having supported LFUCG's 2001 initiative to standardize technical guidance manuals for public infrastructure projects in Fayette County, Strand brings ready familiarity with their application to any LFUCG project undertaking. While serving both public and private sector interests in Lexington for over 40 years, we bring first-hand knowledge of LFUCG's expectations for performance related to both design and construction-related requirements. Our services on projects that rely on these manuals, encompass projects of all types including



Salt Barn Facility Exemplifies Varied Experience with LFUCG for Construction Drawing Review.

roadway, streetscape, drainage, stormwater management, sanitary sewers, pumping stations, bridge, structures and public works building facilities. We have also assisted smaller communities in a similar technical review capacity for challenging project submittals that required careful scrutiny prior to their approval. This comprehensive experience combined with our working knowledge of the complete package of LFUCG's engineering manuals makes our firm well qualified to support this aspect of LFUCG's infrastructure program.

Experienced Management Team Brings Familiarity and Versatility Required to Effectively Support Construction Drawing Review Needs for Engineering Manual Compliance

Strand's Project Management leadership group includes individuals with direct working knowledge of LFUCG engineering manuals that enable us to effectively tailor a delivery team to meet a given project's specific needs. We propose to utilize this approach since we recognize the diverse range of potential project requirements, which could include among others:

- Pedestrian, roadway and trail-related improvements.
- Traffic analysis, signalization and lighting upgrades and new installations.
- Drainage, floodplain management and stormwater improvements.
- Conformity with regulations, ordinances and other planning and code-related requirements.
- Structural-related elements including buildings, bridges, retaining walls and foundation systems.

By matching project management and review team skillsets to the needs of a given project, we can most efficiently and effectively satisfy your construction drawing review needs for engineering manual compliance.

Strong client relationships are forged by successful project endeavors.

Diverse project

requirements

addressed by Strand's flexible

project teams.

review

Client History and Related References Provide Further Confirmation of Construction Drawing Review Capabilities to Meet Client's Needs

Strand has been fortunate to have served LFUCG on many major public sector infrastructure improvement projects including many with the Division of Engineering, requiring conformity with LFUCG technical guidance manuals. Likewise, we have served many private sector clients with complex and challenging issues

Contract 3 - Construction Drawings Review for DOE Manual Compliance

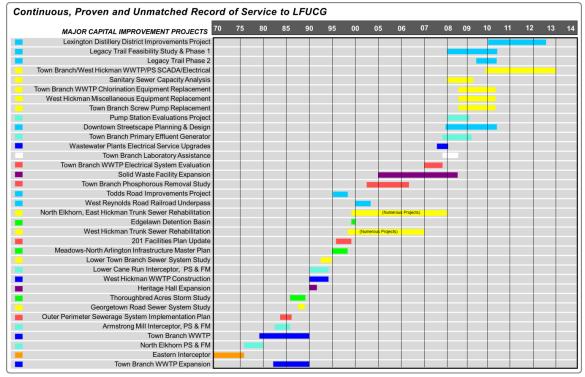
that required close collaboration with LFUCG in fulfilling expectations of the public, helping us establish a solid reputation founded on trust. Our ability to effectively serve in this capacity in Lexington is testimony to our firm's commitment to protecting the public interest through our professional conduct and project achievements. We have also served the cities of Columbia and Shepherdsville, KY in a direct capacity for technical review of high profile local projects. You are encouraged to contact our references whose responses will further document our quality commitment and reinforce your confidence in our ability to address your specific construction drawing review needs.

Firm's Previous Experience Strengthens Understanding Required to Address Varied Construction Drawing Review-Related Project Needs

With many different engineering disciplines potentially involved in reviewing construction drawings, our Team understands the importance of inter-disciplinary collaboration in minimizing potential for conflicts during construction. Having a well-documented track record that ranges from Capital Improvements Program development through project construction, our Team brings a complete planning to implementation mindset to LFUCG's improvements program. Our Team credentials are testimony to the nimble approach often required where we routinely bring outside the box thinking for successful project outcomes. Our services on such notable projects as LFUCG's Downtown Streetscape Improvements and National Development Council's Wellington Stormwater Management program are examples of projects with significant neighborhood and community improvement benefits under challenging circumstances. We will bring a focused approach to construction drawing review where our Team will complement the efforts of others in helping LFUCG maximize technical compliance and community benefits.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

As documented in the chart below our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs including many Division of Engineering and Public Works projects. The longevity and continuity of our local staff is reinforced by their unyielding commitment to help improve the City's infrastructure realm as highlighted in our continuous record of service on behalf of LFUCG.



Inter-disciplinary collaboration helps minimize potential for construction conflicts.

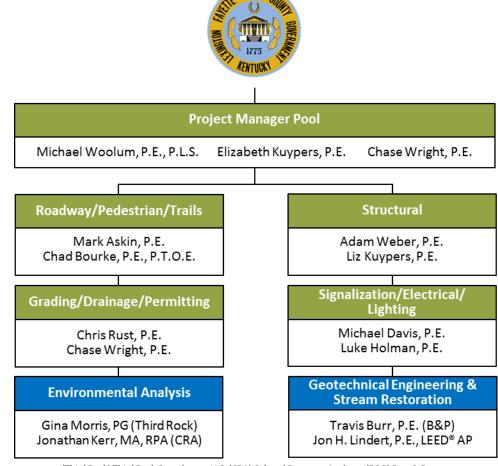
Longevity and continuity is a hallmark of Strand's construction drawing review team.

3. Project Team

Experienced Project Managers with Support of Seasoned Technical Resources Provides Specialized Experience to Serve Complete Range of Project Needs

Our Team has the requisite credentials and capabilities, and is committed to the successful completion of this program component.

Our Project Team offers the complete range of engineering capabilities that may be needed to fulfill the requirements for construction drawing review. We have included project managers with specialized experience directly related to this project discipline who take pride in their work having served on many prior projects on behalf of LFUCG. Our Project Management Team is supported by local engineers and technicians with years of experience involving public works-related projects. Additionally, Strand's collaborative partnership with Barr and Prevost and Third Rock Consultants, LLC on previous projects brings familiar expertise related to geotechnical engineering and environmental services. The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project. Thumbnail resumes for key personnel follow within this section with full resumes of the primary team members included as an attachment in the *Appendix A - Resume Section*.



Listed resources

available staff.

are also supported by other locally

Project Management and Key Team Leaders

Principal and Senior Project Managers offer flexibility for various project assignments. Our Project Management Team has been developed to include both a firm principal project manager and senior project managers so that we can match LFUCG's needs on a particular project with the appropriate staff. Each of our project managers exceeds the Project Manager requirements for three projects within the past five years. A short biography for each project manager followed by a listing of recent applicable experience is provided below. Full resumes can be found in the *Appendix A – Resume Section*.

Michael Woolum, P.E., P.L.S. has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1984. Mike has diverse project experience that includes planning and design of transportation improvements and site development for both public and private sector clientele. He will serve LFUCG as project manager on complex drawing review assignments where he can assist with challenging conditions and circumstances presented by projects like



CentrePointe and LFUCG's Downtown Streetscape Project. For projects managed by others, he will remain involved as Principal-In-Charge providing support as needed.

- Principal/Project Manager South Limestone, West Main, West Vine, East Main LFUCG
- Principal/Project Manager HealthFirst Community Center HealthFirst Bluegrass
- Principal/Project Manager Eastern State Hospital Commonwealth of Kentucky
- Principal Legacy Trail Feasibility Study and Phase I and 2 Implementation LFUCG

Elizabeth Kuypers, P.E. has 14 years of experience in civil engineering including structural engineering and project management for a variety of municipal projects. Elizabeth is the municipal department discipline coordinator for the Lexington office and a recent leadership PE graduate. Her leadership skills and involvement in diverse municipal projects constructed to LFUCG standards make her an ideal candidate to facilitate design review assignments for LFUCG.



- Project Manager Eastern State Hospital Commonwealth of Kentucky
- Project Manager Lafayette Football Stadium Renovation Fayette County Public Schools
- Project Manager Solid Waste Facility Upgrade and Expansion LFUCG
- Project Manager Paintsville Water Treatment Plant and Access Road Paintsville Utilities

Chase Wright, P.E. has eight years of experience in civil engineering including development and transportation engineering with extensive services on behalf of LFUCG. Chase's experience includes providing engineering and management services to public and private sector clients that require meeting LFUCG design standards. His involvement with projects requiring multiple disciplines and subconsultants aid in his ability to effectively manage a comprehensive team to complete challenging drawing review assignments.



- Project Manager Scottsville Streetscape Improvements Scottsville, KY
- Assistant PM/Design Engineer South Limestone, West Main, West Vine, East Main LFUCG
- Assistant PM/Design Engineer North Broadway KYTC District 7
- Project Manager/Design Engineer CentrePointe CentrePointe Vertical

Qualifications of Additional Key Project Team Members

Chad Bourke P.E., P.T.O.E. will provide additional support for roadway, pedestrian and trails-related technical reviews. Chad has over 9 years of experience, is a licensed professional engineer in Kentucky, and is a registered Professional Traffic Operations Engineer. Chad provided technical input and support on Lexington's Downtown Streetscape project including completion of a traffic simulation and report for the urban core area that documented the proposed improvement scenarios for the streetscape



project. Chad followed this project through design, completing the traffic signal design for the majority of the signals. Chad also plays a vital role as a project manager and acquisition agent with Strand's right of way acquisition department. Moreover, his experience in construction observation as a young engineer gives him the needed insight to proactively design projects to avoid issues during construction.

Adam Weber, P.E. has 14 years of experience as a structural engineer focused on transportation structures and improvements including roadway and pedestrian bridges, box culverts, retaining walls, and drainage structures. His background includes structural inspection and evaluation, structural design, and construction related services in Kentucky, Ohio, Illinois, and Wisconsin, plus working with LFUCG on roadway and trail improvement projects. Adam's experience throughout all aspects of structural



engineering combined with his LFUCG experience make him a great partner for LFUCG to support structural related needs for construction drawing review.

Chris Rust, P.E. has more than 8 years of experience including project management, technical design and storm water modeling. He has been the lead design engineer on a variety of stormwater projects in the Greater Cincinnati region. These have included traditional storm sewer design projects, as well as sustainable design projects that have included green infrastructure features such as bioretention basins, permeable pavements, and terraced reforestation. Chris has extensive hydrologic and hydraulic modeling



experience using a variety of software programs depending upon project type. Chris has provided assistance on numerous drainage master planning projects, making him ideally suited to assist with grading, drainage, and permitting reviews.

Mike has 31 years of experience electrical services to our Kentucky clients. Michael Davis, P.E. will provide support for review of traffic signal and lighting-related plans. Mike has 31 years of experience and is a licensed professional engineer in Kentucky, Alabama, and Mississippi. Mike frequently serves LFUCG on electrical projects that include electrical distribution improvements, lighting improvements and electrical control systems. Mike is currently serving as project manager for LFUCG's \$17 million project to renovate LFUCG's West Hickman WWTP electrical system, and



upgrade control systems at Town Branch and West Hickman WWTP. Mike's traffic signalization experience includes signals for 18 intersections in Lexington for clients that include LFUCG, the Commonwealth of Kentucky and private developers. Mike also provided electrical engineering services for the LFUCG streetscape projects that included electrical and lighting improvements on Main, Vine and Limestone Streets.

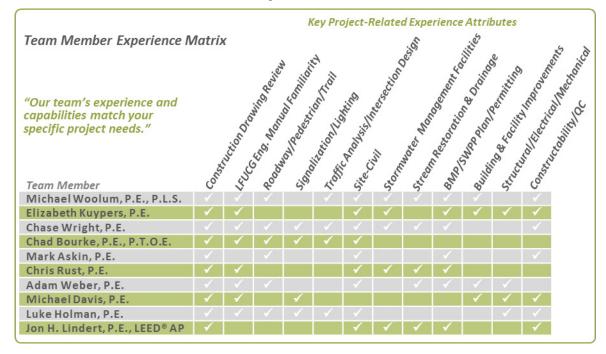
Contract 3 - Construction Drawings Review for DOE Manual Compliance

Jon H. Lindert, P.E., LEED® AP, has more than 19 years of engineering experience and is a senior project engineer who is well-versed in all aspects of watershed management, including analysis/planning, design, and construction of stormwater and stream projects. Jon has built his career on long-lasting relationships with clients as he nurtures projects from planning through implementation and by staying abreast of current technology and techniques used in the water resources field. Jon serves as our



corporate technical advisor on stormwater funding, stormwater policy, urban stormwater analysis, streambank restoration, and green infrastructure planning and design making him well qualified to support technical evaluations for sensitive stream restoration design elements.

Experience matrix highlights reciprocal capabilities offered by project team members.



Subconsultant Participation





Our Project Team is supported by the added technical resources provided by Barr and Prevost, Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. respectively for geotechnical engineering, environmental analysis, and cultural & historic evaluations. Strand is no stranger to this group, having collaborated with each firm on many past similar projects. Barr and Prevost and Third Rock Consultants also provide our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to fulfill the specialized services they bring to bear on behalf of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require to meet LFUCG's 10% participant goal.

Project Management Plan

Strand's Management Plan and past project history demonstrate commitment to staffing continuity. Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead and direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for their noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role with multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Construction Drawing Review Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Brad Frazier, PE, Director Division of Engineering Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	West High Street Realignment Study Distillery District Feasibility Study South Limestone Street Reconstruction West Main Streetscape Improvements East Main Streetscape Improvements West Vine Streetscape Improvements
Joshua Samples, PE Commonwealth of Kentucky Kentucky Transportation Cabinet (859) 246-2355 joshua.samples@ky.gov	US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements (Item No. 7-412)
Paul Gannoe, Executive Dir. F&A Cabinet Commonwealth of Kentucky Frankfort, KY (502) 564-3155 x240 Paul.gannoe@ky.gov	Eastern State Hospital Replacement
George Ward, Executive Director Coldstream Research Campus University of Kentucky (859) 231-8324 george.ward@uky.edu	Coldstream Drainage Master Plan & Park Infrastructure Program
Dr. Steve Davis, Executive Director Health First Bluegrass, Inc. Lexington, KY (859) 288-2425 Email: N/A	Primary Community Health Center

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied Construction Drawing Review-Related Project Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Strand has served LFUCG and other state agencies and local municipal governments on a broad range of public works-related projects. Services provided have included planning, design and constructionrelated support including drawing review for various projects including roadway trails, neighborhood improvements, drainage, infrastructure rehabilitation and public works building facilities, This wide array of project types routinely calls on all disciplines of engineering with our in-house resources. Members of our Team are recognized for their technical proficiency in solving challenging problems with practical solutions that respect both budget and performance requirements. Strand's well rounded experience and added credentials to support public works building projects such as the Solid Waste and Salt Barn Facilities makes us well-equipped to meet the needs for this contract



West Reynolds Road Railroad Underpass Reconstruction.



Appomattox Road Bridge/Culvert Replacement.

Experience with key areas of consideration provide confidence in Strand's ability to serve this DOE program

component.

In supporting the needs associated with this

contract, Our Team's understanding of DOE performance expectations and working knowledge of its engineering manuals make our firm well suited to address the varied needs for construction drawing review. Our project listing and Team's experience includes specialized capabilities in the following key areas of consideration:

- Roadway, Intersection Improvements and Trails
- Miscellaneous Building and Facility Type Installations
- Traffic Studies and Corridor Performance Analyses
- Bridges, Retaining Walls and Miscellaneous Structural Systems
- Signalization, Lighting and Miscellaneous Electrical Systems
- Major and Minor Drainage Systems and Related Studies
- Roadway Signage, Marking and Maintenance of Traffic Plans
- Cost-Budget Analysis and Constructability Review
- Geotechnical, Environmental Analysis and Permitting Review

Our Project Team includes individuals who not only bring working knowledge of LFUCG's infrastructure realm, but professionals who also possess the necessary skillsets to effectively translate design intent for completion of sound contract documents. The table on the following page outlines a select listing of construction drawing review-related projects that highlight our credentials to serve LFUCG's needs for construction drawing review.

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements Item No. 7-412.00 Kentucky Transportation Cabinet (KYTC) Lexington, KY	On-going	Design Services	 Upgrade existing rural roadway section to urban section and widen roadway typical section. Address substandard horizontal and vertical clearance at railroad bridge. Develop drainage solution to address existing roadway flooding that requires street closure. Evaluate retaining wall sections required to retain rock and address known karst topography. Evaluation of railroad alignment alternatives and bridge replacement options. 	\$9,200,000 - \$11,200,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. David Rice, P.E.
South Limestone Street Reconstruction Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway reconstruction, streetscape improvements, & utility infrastructure replacement. Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades. Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$13,150,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
West Reynolds Road Railroad and Roadway Improvements Lexington-Fayette Urban County Government Lexington, KY	2004	Planning, Design, and Construction- related Services	 Urban roadway improvements from Nicholasville Road to Ruccio Way. Accommodations for left/right turning lanes with pedestrian enhancements and trail facility. Four fully signalized intersections with new corridor lighting. Temporary and permanent railroad bridge to maintain continuous rail traffic. 3,700-linear feet of cantilevered retaining wall design ranging from 4 to 22 feet in height. Aesthetic retaining wall design elements to soften roadway underpass. 	\$10,000,000	Michael Woolum, P.E., P.L.S. Luke Holman, P.E. Adam Weber, P.E. David Walker, P.E., S.E. Bruce Monarch Sara Tuttle, RLA
KY 2160 Roadway Improvements and Bridge Replacement Item No. 3-1080.00 Kentucky Transportation Cabinet Allen County, KY	On-going	Design Services	 Rural roadway and bridge improvements Address substandard horizontal curve and superelevation. Improve hydraulic conveyance. 	\$530,000	Mark Askin, P.E. Seth Winslow, P.E. Chase Wright, P.E.
Appomattox Road Culvert Replacement Lexington-Fayette Urban County Government Lexington, KY	2008	Planning, Design, and Construction- related Services	 Bridge replacement over Wolf Run Creek connecting Lane Allen and Gardenside neighborhoods. Hydraulic analysis and permitting for the bridge replacement. Structure replacement included aesthetic elements and stream stabilization measures. Improved bicycle and pedestrian mobility. 	\$375,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Jon Lindert, P.E. LEED AP
Legacy Trail Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Planning for entire 12.5-mile trail connecting the Kentucky Horse Park to Downtown. Design of 8.5 miles of trail from the Kentucky Horse Park to the Northside YMCA. Design of seven bridges over Cane Run Creek and retaining walls. Public involvement including steering committee and public meetings. Drainage design including localized drainage and floodplain analysis/FEMA permitting. 	\$8,000,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Michael Davis, P.E. Jamey Cash, P.E. Jon Lindert, P.E. LEED AP
Eastern State Hospital Commonwealth of Kentucky Lexington, KY	2013	Planning, Design, and Construction- related Services	 Project role included surveying, infrastructure, and civil/site elements. Extension of public street including a three span bridge crossing of Cane Run Creek. Aesthetic design to match bridge character with structures in UK's Coldstream Research Park. Extensive floodplain permitting for new creek crossing (CLOMR/LOMR/401/404 Permits). 	\$129,000,000	Michael Woolum, P.E., P.L.S. Elizabeth Kuypers, P.E. Adam Weber, P.E. Chase Wright, P.E. Jon Lindert, P.E. LEED AP
Wellington Development National Development Council Lexington, KY	2008	Planning, Design, and Construction- related Services	 450-acre infill/redevelopment project in south Lexington. Design of roadway improvements for the overall development. Design/construction services for multiple box culverts, outlet structures, and detention facilities. Large diameter storm sewer and neighborhood improvements planning recommendations. 	\$12,500,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Bruce Monarch Sara Tuttle, RLA
Coldstream Research Park University of Kentucky Lexington, KY	On-going	Planning, Design, and Construction- related Services	 1,000-acre office research park with 3.5 miles of divided boulevards and streets. Two-acre lake with 42 foot pre-cast decorative arch bridge system. Intersection, turn lane and signal improvements for Newtown Pike at Aristides Boulevard. Comprehensive 6,000-acre watershed based stormwater master plan. 	\$15,000,000 (To Date)	Michael Woolum, P.E., P.L.S. Elizabeth Kuypers, P.E. Michael Davis, P.E. Chase Wright, P.E. Sara Tuttle, RLA
Primary Community Health Center HealthFirst Bluegrass, Inc. Lexington, KY	On-going	Planning, Design, and Construction- related Services	 Project located along Southland Dr. includes building demolition and new building on 2.8 acres. New public storm sewer connection to Wolf Run Creek to alleviate existing localized ponding. Implementation of onsite inline stormwater detention with 8,500 CF of storage. Green infrastructure and non-structural low impact BMPs including four bio-retention basins. Turn lane improvements along southland drive and ADA accessible walkways. 	\$9,700,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Michael Davis, P.E. Adam Weber, P.E. Sara Tuttle, RLA
Solid Waste Facility Upgrade and Expansion Lexington-Fayette Urban County Government Lexington, KY	2009	Planning, Design, and Construction- related Services	 Operations building expansion for additional office and administrative space. 158-car employee parking lot and covered truck sheds to house 60 collection vehicles. Maintenance building for residential collection container assembly and repair. Stormwater management facility, water quality treatment units, and employee recreational area. 	\$5,200,000	Elizabeth Kuypers, P.E. Adam Weber, P.E.
Salt Barn Lexington-Fayette Urban County Government Lexington, KY	2009	Planning and Design Services	 Planning for an undeveloped 8-acre site with survey, infrastructure, permitting, & access road. 12,000-sf salt storage building, 2,000-sf office/maintenance building, & salt brine maker/tanks. Accommodations for future development of remaining site. Green infrastructure and stormwater quality/quantity control of entire site. 	\$2,100,000 (EST)	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Jon Lindert, P.E. LEED AP

5. Similar Design Services Projects — Page 11

Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	6
Other Location	Louisville, KY	1968	25	2
Sub Consultants				
Third Rock Consultants - Environmental	Total	2000	26	3
Headquarters	Lexington, KY	2000	23	3
Local Office	Lexington, KY	2000	23	3
Barr & Prevost - Geotechnical/Drilling	Total	1997	125	5
Headquarters/Local Office	Columbus, OH	1997	50	5

Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

b a c

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

For this project, the Strand team includes listed support from Barr & Prevost; Third Rock Consultants, LLC; and Cultural Resources Analysts, Inc. to provide essential services that augment Strand's internal capabilities. Barr & Prevost is an MBE minority-owned firm based in Columbus, Ohio. For this project they will assume responsibility for providing geotechnical related support services from their Louisville office. Third Rock Consultants, LLC is a local WBE who will provide environmental-related support services. We have also





included Cultural Resources Analysts, a locally-based small business that specializes in cultural and historic environmental concerns. Common among each of these subconsultant team members is a prior working relationship with Strand on many other similar related projects. Collectively these subconsultants will assist Strand as needed for any reviews or evaluations related to their specialized capabilities.

For the entirety of project services under this contract, Strand is committed to meeting or exceeding LFUCG's 10% goal for DBE firm participation. If service opportunities are not available for a given project within the credentials listed herein for Barr & Prevost or Third Rock, Strand will first reach out to other locally-based preapproved DBE firms to solicit their support in meeting the participation goal. If we are unable to find local support, we will then reach out to other area DBE firms to meet the commitment. Rest assured, Strand is committed to fulfillment of this important contracting objective recommended by LFUCG.

2. Firm Qualifications

Dedicated Structural Engineering Discipline Supports Specialized Structural Engineering Needs for All Project Types

Turn-key service capabilities include experienced local in-house structural group. From transportation to public works facilities improvements, our local office staff have been providing structural engineering solutions on countless projects for over 40 years. In addition to complex bridge replacement projects such as the West Reynolds Road Railroad Underpass, we have served LFUCG on numerous public works projects requiring structural engineering design and construction-related services. This turn-key capability



West Reynolds Road Railroad Underpass Reconstruction.

allows the Strand Team to more effectively serve its client base through direct collaboration with other inhouse disciplines on projects of all types. In addition to design support, our structural staff routinely manages projects making them well-prepared to lead any structurally significant project undertaking.

Experienced Management Team Brings Versatility to Skillsets Required for Varied Structure and Bridge Type Projects

Strand's Project Management leadership group includes individuals with structural engineering backgrounds that enable us to effectively tailor a delivery team to meet a given project's unique requirements. We propose to utilize this approach since our experience with structural-related projects recognizes the diverse range of potential structural engineering requirements, which could include among others:

- Reinforced concrete designs and/or pre-cast solutions.
- Utilization of shallow and deep foundation systems.
- Assessment and analysis of existing structural systems.
- Concrete, steel, timber and pre-fabricated bridge solutions.
- Adaptation, reuse, and upgrades to existing structural elements.

By matching project management skillsets to the needs of a given project, we can most efficiently and effectively satisfy your engineering needs for any structure or bridge type.

Client History and Related References Provide Further Confirmation of Strand's Structural Expertise and Ability to Meet Client's Needs

Strong client relationships are forged by successful project endeavors.

Diverse project requirements

Strand's flexible project teams.

addressed by

We have had the opportunity to serve many major clients in this region for structural-related needs including: KYTC, Louisville Metro Government, Kentucky Finance and Administration Cabinet, University of Kentucky and other central KY communities to name a few. Strand's achievements include transportation projects with highway and railroad bridges, award winning dams with innovative spillway designs, recreational facilities and municipal buildings with varied structural systems and foundation types. You are encouraged to contact our references with regard to our prior service and the project solutions we have

developed on their behalf. We are confident their responses will further document our quality commitment and reinforce your confidence in our ability to address your specific structural engineering needs.

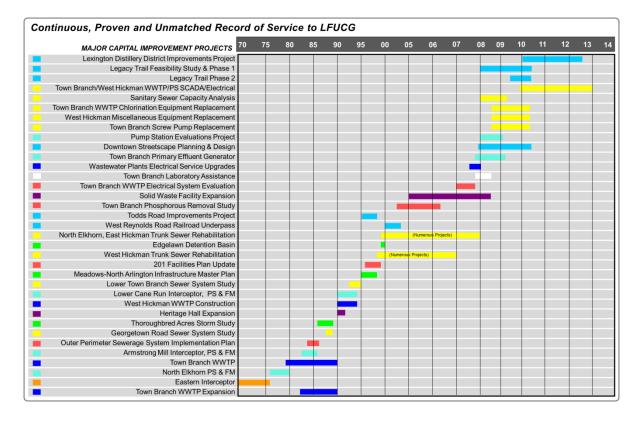
Previous Experience Strengthens Understanding Required to Address Structures and Bridge Related Performance Standards

Cost-benefit approach applies to projects large and small. As a KYTC prequalified firm for bridge and structure design, our Team understands the importance of leveraging infrastructure investment to meet prescribed performance standards. Having a well-documented track record with structural engineering expertise that includes transportation, stormwater, water/wastewater, buildings and facilities projects, our Team brings a cost-benefit mindset to this important LFUCG improvements program. As no two projects are alike, our Team credentials are testimony to the nimble approach often required for successful project outcomes. Our services on such notable projects as LFUCG's Solid Waste Facility and the West Reynolds Road Railroad Underpass and corridor reconstruction are examples of projects with significant community benefits under challenging conditions. Similarly, our work to expedite completion of the Bean Cemetery Road Bridge in Madisonville and the Appomattox Road Culvert/Bridge Replacement are small neighborhood project examples having essential structural elements with important community benefits. To these successful conclusions, we are committed to positive outcomes on all projects large and small.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

As documented in the chart below our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs including many structural and bridge-related projects. The longevity and continuity of our local staff is reinforced by their unyielding commitment to help improve the city infrastructure realm as highlighted in our continuous record of service on behalf of LFUCG.

Longevity and continuity is a hallmark of Strand's structural engineering team.



"Strand is KYTC Prequalified

for all services contemplated under this contract."

3. Project Team

Experienced Project Managers with Support of Seasoned Technical Resources Provides Specialized Experience to Serve Complete Range of Project Needs

Our Team has the requisite credentials and capabilities, and is committed to the successful completion of this program component.

Our Project Team offers the complete range of engineering capabilities that may be needed to fulfill the technical requirements for structures or bridge design. We have included project managers with specialized experience directly related to this project discipline who take pride in their work having served on many prior projects on behalf of LFUCG. Our Project Management Team is supported by local engineers and technicians with years of experience involving structural-related projects. Additionally, Strand's collaborative partnership with Jacobi, Toombs and Lanz, Inc., Barr and Prevost, Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. on previous projects brings familiar expertise related to surveying, geotechnical engineering and environmental services. The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project. Thumbnail resumes for key personnel follow within this section with full resumes of the primary

team members included as an attachment in the *Appendix A - Resume Section*.

Sara Tuttle, RLA

Project Manager Pool Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Elizabeth Kuypers, P.E. Maintenance of Traffic/ **Bridge Design** Surveying Constructability Review Adam Weber, P.E. Stephen Marshall, P.E., P.L.S. (JTL) David Walker, P.E., S.E. David Walker, P.E., S.E. Jonathan McCracken, E.I.T. Easements Roadway/Approach **Construction-Related Services Rights-of-Way Acquisition** Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Jonathan McCracken, E.I.T. Bruce Monarch Robert Burnette Seth Winslow P.E. Hydraulics/FEMA Structural Inspection **Environmental Analysis** Scour Analysis/Stream Restoration Adam Weber, P.E. Chris Rust, P.E. Gina Morris, PG (Third Rock) David Walker, P.E., S.E. Mike Williams, P.E. Walls/Miscellaneous **Permitting** Cultural/Historic **Structures** Chase Wright, P.E. Elizabeth Kuypers, P.E. Elizabeth G. Heavrin, MHP (CRA) David Walker, P.E., S.E. Lindsie MacPherson, E.I.T. **Utility Coordination/** Landscape Architecture Geotechnical Relocation

Listed resources are also supported by other locally available staff.

(JTL) Jacobi, Toombs & Lanz, Inc. (Third Rock) Third Rock Consultants, LLC (CRA) Cultural Resource Analysts (B&P) Barr & Prevost

Chase Wright, P.E.

Travis Burr, P.E. (B&P)

Project Management and Key Team Leaders

Principal and **Senior Project** Managers offer flexibility for various project assignments.

Our Project Management Team has been developed to include both a firm principal project manager and senior project managers so that we can match LFUCG's needs on a particular project with the appropriate staff. Each of our project managers exceeds the Project Manager requirements for three projects within the past five years. A short biography for each project manager followed by a listing of recent applicable experience is provided below. Full resumes can be found in the Appendix A – Resume Section.

Michael Woolum, P.E., P.L.S. has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1984. His diverse project experience includes planning and design of roadway improvements and facilities projects for both public and private sector clientele. He will serve LFUCG as project manager on complex assignments with multi-disciplinary delivery requirements. While his focus does not include detailed structural design, Mike has effectively led project teams with significant structural improvements. For projects managed by others, he will remain involved as Principal-In-Charge providing support as needed.



- Project Manager North Broadway Railroad Underpass Replacement KYTC District 7
- Project Manager West Reynolds Road Railroad Underpass and Roadway Reconstruction LFUCG
- Principal Appomattox Road Bridge/Culvert Replacement LFUCG
- Principal/Project Manager Legacy Trail Feasibility and Phase 1 and 2 Implementation LFUCG
- Project Manager Guist Creek Dam Emergency Spillway Upgrade Commonwealth of Kentucky

Elizabeth Kuypers, P.E. has 14 years of experience in civil engineering including structural engineering and project management for a variety of municipal projects. Elizabeth is the municipal department discipline coordinator for the Lexington office and a recent leadership PE graduate. Her leadership skills and structural design and building facilities experience make her an ideal candidate to manage structural project assignments.



- Project Manager Eastern State Hospital Commonwealth of Kentucky
- Project Manager Lafayette Football Stadium Renovation Fayette County Public Schools
- Project Manager Solid Waste Facility Upgrade and Expansion LFUCG
- Project Manager Paintsville Water Treatment Plant and Intake Facility- Paintsville Utilities

Adam Weber, P.E. has 14 years of experience as a practicing structural engineer focused on transportation structures and improvements including bridges, box culverts, retaining walls, sign bridges and supports, and drainage structures. His background includes structural inspection and evaluation, structural design, and construction related services in Kentucky, Ohio, Illinois, and Wisconsin, plus working with LFUCG on roadway and trail improvement projects. Adam's experience throughout all aspects of structural engineering combined with his LFUCG experience make him an asset for management of structural improvement-related projects.



- Project Manager/Design Engineer Appomattox Road Bridge/Culvert Replacement LFUCG
- Project Manager/Design Engineer Legacy Trail Feasibility and Phase 1 and 2 Implementation LFUCG
- Project Manager/Design Engineer LFUCG Salt Barn Facility LFUCG
- Design Engineer North Broadway Railroad Underpass Replacement KYTC District 7

Dave's 35 years of bridge design and construction experience will result in coordinated and

well thought out

projects.

Qualifications of Additional Key Project Team Members

David Walker, P.E., S.E. will be responsible for bridge design, miscellaneous structures, constructability review and maintenance of traffic. Dave has 35 years of experience and has been the Project Manager, Design Engineer, and/or Quality Control Engineer on many of our firm's KYTC and local program bridge projects. He is familiar with the federal highway administration and state design and plan preparation requirements and has extensive experience in bridge design, agency and utility coordination, and public involvement.



Chase Wright, P.E. will be responsible for roadway, permitting and utility **coordination**. Chase has eight years of experience in civil engineering including development and transportation engineering. Chase's transportation experience includes providing engineering and management services to LFUCG, KYTC, and other local public agencies with federally funded projects. He has played key roles including managing aspects and design of transportation projects in Lexington including North Broadway, Downtown Streetscape Improvement Projects, and Distillery District. His understanding of LFUCG and KYTC requirements will be beneficial as he serves LFUCG as project manager on select assignments.



Mike Williams, P.E. will be responsible for hydraulics, FEMA coordination, scour analysis and stream restoration efforts. Mike has been with our company for more than 14 years and has experience with all aspects of stormwater management, including hydrologic/hydraulic modeling, watershed planning/ management, streambank restoration and design, and dredging/rehabilitation of stormwater ponds. He has developed several stormwater management plans using programs such as HEC-HMS. XP-SWMM, StormCAD, HydroCAD, and HEC-RAS. Mike is instrumental in providing



in-depth design and preparation of construction drawings and specifications for new storm sewer, stormwater ponds, rehabilitation/ dredging of existing stormwater ponds, and streambank/shoreline restoration.

Chad Bourke P.E., P.T.O.E. will provide additional support for easement and rightsof-way needs associated with this contract. Chad has over 9 years of experience, is a licensed professional engineer in Kentucky, and is a registered Professional Traffic Operations Engineer. Chad previously provided technical input and support on Lexington's Downtown Streetscape project including completion of a traffic simulation and report for the urban core area that documented the proposed improvement scenarios for the streetscape project. He also plays a vital role as a project manager and acquisition



agent with Strand's right of way acquisition department where he has served on numerous KYTC rights-ofway acquisition contracts.

Sara Tuttle, RLA will be responsible for landscape architecture efforts. Sara has 33 years of experience and is a Registered Landscape Architect in Kentucky. She is well versed in representing both public and private sector clients. Sara is also highly experienced in theme-based collaboration and design, transportation enhancements, and implementation of green infrastructure strategies. She has a developed a thorough understanding of LFUCG requirements through successfully represented clients in Lexington from planning through construction. Some of her projects include Griffin Gate, HealthFirst Bluegrass, Coldstream Research Campus and Southland Christian Church. Mike has 31 years of experience electrical services to our Kentucky clients. **Michael Davis, P.E.** will provide support efforts for **utility coordination and relocations** required under this contract. Mike has 31 years of experience and is a licensed professional engineer in Kentucky, Alabama, and Mississippi. Mike frequently serves LFUCG on electrical projects that include electrical distribution improvements, lighting improvements and electrical control systems. Mike is currently serving as project manager for LFUCG's \$17 million project to renovate LFUCG's West Hickman



WWTP electrical system, and upgrade control systems at Town Branch and West Hickman WWTP. Mike also serves numerous municipalities throughout Kentucky for water and sewer-related needs as he has in Lexington for his entire professional career.

Experience matrix highlights reciprocal capabilities offered by project team members.

Team Member Experience Matrix					Key Project-Related Experience Attributes								
"Our team's experience and capabilities match your specific project needs."	.80	or de la	O loud to the state of the stat	Pool House House	Story May 1000	Actin Chair	of State of the st	tong continue and the same	SI TO SEE SEE STAND	Map Party Conf.	Working Rose of the Party of th	T. Joseph Co. Links	Copilis Copie
Team Member	BILL	SIL	Sil	50	Gi	Per	20	OL	8h	0	10	0,	
Michael Woolum, P.E., P.L.S.													
Adam Weber, P.E.	✓		\checkmark	✓	\checkmark	\checkmark	✓		✓	✓		✓	
Elizabeth Kuypers, P.E.													
David Walker, P.E., S.E.	✓		✓		✓	✓		✓		✓	✓	✓	
Chase Wright, P.E.													
Seth Winslow, P.E.		√		√	-√	√	✓			✓	√ .	√ .	
Chris Rust, P.E.													
Mike Williams, P.E.					√ .			✓	✓				
Sara Tuttle, RLA													
Jonathan McCracken, E.I.T.		√		✓	√		✓		✓	√			
Chad Bourke, P.E., P.T.O.E.		1		√			√_			1	√_		
Bruce Monarch		√_		✓_	✓		✓_		✓	1	√ _		
Lindsie MacPherson, E.I.T.		√			✓	√		√	✓	√			
Michael Davis, P.E.						√	✓_		✓	1		✓_	
Robert Burnette	5 S	√			\checkmark		\checkmark		√	√			



Subconsultant Participation

Our Project Team is supported by the added technical resources provided by Jacobi, Toombs and Lanz, Inc., Barr and Prevost, Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. respectively for surveying, geotechnical engineering, environmental analysis, and cultural & historic evaluations. Strand is no stranger to this group, having collaborated with each firm on many past similar projects. Jacobi, Toombs and Lanz, Inc., Barr and Prevost and Third Rock Consultants also provide our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to utilize the specialized services they bring to bear on behalf of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require, to meet LFUCG's 10% participant goal.

Project Management Plan

Strand's Management Plan and past project history demonstrate commitment to staffing continuity. Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead and direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for their noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role with multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Structures and Bridge Design Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Brad Frazier, PE, Director Division of Engineering Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	Legacy Trail Distillery District Feasibility Study Appomattox Road Culvert/Bridge Replacement Legacy Trail Phases 1 and 2 West Vine Streetscape Improvements West Reynolds Road Railroad Underpass
Joshua Samples, PE Commonwealth of Kentucky Kentucky Transportation Cabinet (859) 246-2355 joshua.samples@ky.gov	US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements (Item No. 7-412)
Mayor Rob Cline City of Scottsville Scottsville, KY (270) 237-3238 Email: none	East Main Street (KY 100) Streetscape and Retaining Wall Improvements
Paul Gannoe, Executive Dir. F&A Cabinet Commonwealth of Kentucky Frankfort, KY (502) 564-3155 x240 Paul.gannoe@ky.gov	Eastern State Hospital Replacement
Bill Jackson, PE, City Engineer Madisonville, KY (270) 824-2100 N/A	Bean Cemetery Road Bridge Replacement

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied Structures or Bridge-Related Project Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Strand has served LFUCG and other state agencies and local municipal governments on a broad range of structural-related projects over these last 40+ years. Services provided have included planning, design and construction-related support for various projects including roadways, bridges, neighborhood improvements, flood control, channel restoration, retaining walls and public works buildings and facilities, calling on all disciplines of engineering with our in-house resources. In addition, members of our Team are recognized for their practicality in solving challenging problems with thoughtful, yet efficient design solutions that address functionality, performance and service life cycle. Our structural resume extends to all divisions of LFUCG for public infrastructure including public works facilities and other recent accomplishments in the West Reynolds Road Railroad Underpass, LFUCG's Solid Waste, and Salt Barn Facilities and Appomattox Road Bridge/Culvert Replacement to name a few.

Experience with key areas of consideration provide confidence in Strand's ability to serve this DOE program component.

In supporting the structural-engineering needs for DOE's Contract 4, our Team's capabilities and experience are well suited to address the varied challenges and technical requirements that could arise. Our project listing and Team's experience includes specialized capabilities in the following additional areas of consideration:

- Finite Element Analysis and 3D Modeling
- Adaptive Reuse of Existing Structures
- Public Works Building Facilities
- Stream/Channel Restoration
- CIP and Pre-Cast Structural Systems
- Prefabricated Bridge and Modular Retaining Wall Systems
- FEMA CLOMR/LOMR
- Environmental Analysis and Permitting
- Aesthetics and Local Context

Our Project Team includes individuals who not only bring working knowledge throughout the entirety of LFUCG's infrastructure realm, but professionals who also possess rare skills in administering to construction contracts with high public expectations. The table on the following page outlines a select listing of structure or bridge-related projects that highlight our credentials to serve LFUCG's needs for this important DOE contract.



Appomattox Road Culvert Replacement 24-foot x 6-foot R.C. Box Culvert.



Eastern State Hospital ConSpan Arch Bridge.



Bean Cemetery Road Bridge Replacement. Madisonville, KY.

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
Solid Waste Facility Lexington-Fayette Urban County Government Lexington, KY	2009	Planning, Design, and Construction- related Services	 Operations building expansion for additional office and administrative space. 158-car employee parking lot and covered truck sheds to house 60 collection vehicles. Maintenance building for residential collection container assembly and repair. Stormwater management facility, water quality treatment units, and employee recreational area. 	\$5,200,000	Elizabeth Kuypers, P.E. Adam Weber, P.E.
Salt Barn Lexington-Fayette Urban County Government Lexington, KY	2009	Planning and Design Services	 Planning for an undeveloped 8-acre site with survey, infrastructure, permitting, & access road. 12,000-sf salt storage building, 2,000-sf office/maintenance building, & salt brine maker/tanks. Accommodations for future development of remaining site. Green infrastructure and stormwater quality/quantity control of entire site. 	\$2,100,000 (EST)	Michael Woolum, P.E., P.L.S. Adam Weber, P.E.
Legacy Trail Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Planning for entire 12.5-mile trail connecting the Kentucky Horse Park to Downtown. Design of 8.5 miles of trail from the Kentucky Horse Park to the Northside YMCA. Design of seven bridges over Cane Run Creek and retaining walls. Public involvement including steering committee and public meetings. Drainage design including localized drainage and floodplain analysis/FEMA permitting. 	\$8,000,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Michael Davis, P.E. Jamey Cash, P.E. Bruce Monarch
Newport Drainage Improvements Sanitation District No. 1 of Northern Kentucky Newport, KY	2011	Planning, Design, and Construction- related Services	 32-ft-high Earthen Stormwater Control Facility with 45 acft storage in urban area. 20-ft-high, 30-ft x 30-ft sq. drop box outlet structure with 14-ft x 10-ft RC box culvert spillway. Modified Class "C" hazard rating with Field Monitored Early Warning System and Action Plan. 	\$1,700,000	Michael Woolum, P.E., P.L.S Elizabeth Kuypers, P.E.
Appomattox Road Culvert/Bridge Replacement Lexington-Fayette Urban County Government Lexington, KY	2008	Planning, Design, and Construction- related Services	 Bridge replacement over Wolf Run Creek connecting Lane Allen and Gardenside neighborhoods. Hydraulic analysis and permitting for the bridge replacement. Structure replacement included aesthetic elements and stream stabilization measures. Improved bicycle and pedestrian mobility. 	\$375,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E.
US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements Item No. 7-412.00 Kentucky Transportation Cabinet (KYTC) Lexington, KY	On-going	Design Services	 Upgrade existing rural roadway section to urban section and widen roadway typical section. Address substandard horizontal and vertical clearance at railroad bridge. Develop drainage solution to address existing roadway flooding that requires street closure. Evaluate retaining wall sections required to retain rock and address known karst topography. Evaluation of railroad alignment alternatives and bridge replacement options. 	\$9,200,000 - \$11,200,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E.
West Reynolds Road Railroad and Roadway Improvements Lexington-Fayette Urban County Government Lexington, KY	2004	Planning, Design, and Construction- related Services	 Urban roadway improvements from Nicholasville Road to Ruccio Way. Accommodations for left/right turning lanes with pedestrian enhancements and trail facility. Four fully signalized intersections with new corridor lighting. Temporary and permanent railroad bridge to maintain continuous rail traffic. 3,700-linear feet of cantilevered retaining wall design ranging from 4 to 22 feet in height. Aesthetic retaining wall design elements to soften roadway underpass. 	\$10,000,000	Michael Woolum, P.E., P.L.S. Luke Holman, P.E. Adam Weber, P.E. David Walker, P.E., S.E. Bruce Monarch Sara Tuttle, RLA
Eastern State Hospital Commonwealth of Kentucky Lexington, KY	2013	Planning, Design, and Construction- related Services	 Project role included surveying, infrastructure, and civil/site elements. Extension of public street including a three span arch bridge crossing of Cane Run Creek. Aesthetic design to match bridge character with structures in UK's Coldstream Research Park. Extensive floodplain permitting for new creek crossing (CLOMR/LOMR/401/404 Permits). 	\$129,000,000	Michael Woolum, P.E., P.L.S. Elizabeth Kuypers, P.E. Adam Weber, P.E. Chase Wright, P.E.
Wellington Development National Development Council Lexington, KY	2008	Planning, Design, and Construction- related Services	 450-acre infill/redevelopment project in south Lexington. Design of 3.5 miles of urban arterial roadway improvements for the overall development. Design and construction services for double 10' x 10' RC .box culvert, outlet structure, and detention facility. 	\$12,500,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Bruce Monarch Sara Tuttle, RLA
East Main Street (KY 100) Streetscape and Retaining Wall Improvements City of Scottsville Scottsville, KY	2014	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements on state highway route. Aesthetic treatments included burial of overhead utilities and context sensitive design. Traffic calming measures and pedestrian improvements including crosswalks and ADA walkways. Roadway lighting/electrical, drainage, and landscape improvements. Structural retaining walls and ADA compliant ramp from lower to upper walkway. Assisted with administration for LPA grant funded project. 	\$375,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Michael Davis, P.E. Sara Tuttle, RLA Jonathan McCracken, E.I.T
West Vine Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$3,010,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Adam Weber, P.E.
Lafayette High School Stadium Replacement Project Fayette County Public Schools Lexington, KY	2011	Planning, Design, and Construction- related Services	 Project included replacement of Lafayette's football/soccer field, track and support buildings. Stadium facilities providing seating capacity for 5,000 spectators. New service buildings for concessions, ADA accessible rest room facilities, and equipment room. 	\$5,200,000	Michael Woolum, P.E., P.L.S. Elizabeth Kuypers, P.E. Michael Davis, P.E. Sara Tuttle, RLA
Bean Cemetery Road Bridge Replacement City of Madisonville Madisonville, KY	2006	Planning, Design, and Construction- related Services	 In depth structure analysis revealed bridge piers and abutments could be reused. Included complete replacement of concrete super structure with safety treatments. Drainage and scour analysis with maintenance of traffic plan for continuous operation during construction. 3-Span bridge completed from design through construction in just six months. 	\$80,000	Adam Weber, P.E. David Walker, P.E., S.E.

5. Similar Design Services Projects — Page 11

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Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	10
Other Location	Louisville, KY	1968	25	3
Sub Consultants				
Third Rock Consultants - Environmental	Total	2000	26	3
Headquarters	Lexington, KY	2000	23	3
Local Office	Lexington, KY	2000	23	3
Jacobi, Toombs, & Lanz Surveying	Total	1955	42	3
Headquarters	Louisville, KY	1955	9	3
Local Office	Louisville, KY	1955	9	3
Barr & Prevost - Geotechnical/Drilling	Total	1997	125	5
Headquarters/Local Office	Columbus, OH	1997	50	5
Cultural Resource Analysts - Historic	Total	1983	74	Variable
Headquarters	Lexington, KY	1983	35	Variable
Local Office	Lexington, KY	1983	35	Variable

Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

For this project, the Strand team includes listed support from Jacobi, Tombs and Lanz; Barr & Prevost; Third Rock Consultants, LLC; and Cultural Resources Analysts, Inc. to provide essential services that augment Strand's internal capabilities. Jacobi, Tombs and Lanz is an DBE firm based in Louisville who will be responsible for assistance with surveying related activities. As a diverse civil firm they also possess other capabilities that may be utilized to help meet our commitment to LFUCG's 10% participation goal. Barr and Prevost is an MBE minority-owned firm based in Louisville, Kentucky. For this project they will assume responsibility for providing geotechnical related services. Third Rock Consultants, LLC is a local WBE who will provide environmental-related services. We have also included Cultural Resources Analysts, a locally-based small business that specializes







in cultural and historic environmental concerns. Common among each of these subconsultant team members is a prior working relationship with Strand on many other similar related projects.

For the entirety of project services under this contract, Strand is committed to meeting or exceeding LFUCG's 10% goal for DBE firm participation. If service opportunities are not available for a given project within the credentials listed herein for Jacobi, Tombs and Lanz, Barr & Prevost, or Third Rock, Strand will first reach out to other locally-based preapproved DBE firms to solicit their support in meeting the participation goal. If we are unable to find local support, we will then reach out to other area DBE firms to meet the commitment. Rest assured, Strand is committed to fulfillment of this important contracting objective recommended by LFUCG.

2. Firm Qualifications

Strand's Local Pedestrian, Bike and Multi-Modal Trail Improvement Achievements Highlight Required Sensitivity for this Important Community Building Focus

Our informed infrastructure recommendations help maximize community benefits.

Our local office staff has become a proven resource for this essential community need with Strand's involvement on many recent effmts to bolster the City's bicycle, pedestrian and multi-modal trail facilities initiative. Having recently completed two major community defining projects with the Legacy Trail and Downtown Streetscape Improvements Master Plan and Phase I Implementation, our firm brings unparalleled perspective to this designsensitive practice area. Working within the framework of the downtown urban core area has also helped our team understand the importance of this



Legacy Trail - Kentucky Horse Park Connection.

community focus, having been engaged with numerous special interest groups, businesses and the public at large. The working knowledge we have gained will allow us to help LFUCG make informed infrastructure investment decisions that often require creativity in the buillt environment to maximize community benefits.

Experienced Management Team Brings Creativity and Versatility Required to Effectively Support Pedestrian, Bike and Multi-Modal Trail Projects

Strand's Project Management leadership group includes individuals with unique backgrounds that enable us to effectively tailor a delivery team to meet a given project's specific needs. We propose to utilize this approach since our prior experience with streetscape and trails initiatives recognizes the diverse range of potential pedestrian, bike and multi-modal trails project challenges which could include among others:

- Modifications to roadway typical sections along potentially congested street corridors.
- Neighborhood pedestrian improvements requiring sensitivity to drainage and private property issues.
- Constrained areas requiring adaptive approaches to ADA compliance.
- Design-sensitive corridor improvements requiring heighted public involvement.
- Parallel efforts involving traffic calming and safety enhancement measures.

By matching project management skillsets to the needs of a given project, we can most efficiently and effectively satisfy your pedestrian, bike and multi-modal trail planning and design needs.

Client History and Related References Provide Further Confirmation of Streetscape and Trail Expertise and Ability to Meet Client's Needs

Strong client relationships are forged by successful project endeavors.

Diverse project requirements

Strand's flexible

addressed by

project teams.

We have had the opportunity to serve many major clients in this region for streetscape and trail-related needs including: Louisville Metro Government, Cincinnati, OH, Covington, KY and many other surrounding communities to name a few. Strand's achievements include feasibility studies and master plans that have culminated in award winning streetscape and trail projects as well as numerous neighborhood improvements projects to address pedestrian safety and mobility concerns with notable projects completed under the Safe Routes to Schools program. You are encouraged to contact our references with regard to our prior service and the project solutions we have developed on their behalf. We are confident their responses will further

document our quality commitment and reinforce your confidence in our ability to address your specific pedestrian, bike and multi-modal trail planning and design needs.

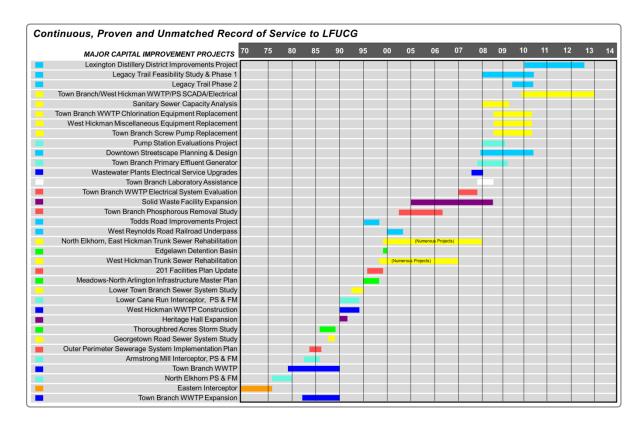
Previous Experience Strengthens Understanding Required to Address Varied Pedestrian and Bicycle-Related Project Needs

Visible community benefits strengthen buy-in to projects large and small. With many competing program needs and an ever expanding funding gap between infrastructure spending capacity and public expectations, our Team understands the importance of leveraging infrastructure investment. Having a well-documented record of performance with major streetscape, pedestrian and trail initiatives, our Team brings a cost-benefit mindset to this LFUCG improvements program. As no two projects are alike, our Team credentials are testimony to the nimble approach often required for successful project outcomes. Our services on such notable projects as LFUCG's Downtown Streetscape Improvements, Legacy Trail and the Ohio River Levee Trail are examples of projects with significant pedestrian and trail improvement benefits under challenging circumstances. Similarly, our work to expedite completion of the Appomattox Road Bridge Replacement and the Meadows-North Arlington Infrastructure Master Plan in North Lexington are small neighborhood project examples that resulted in improved mobility with important community safety benefits. To these successful conclusions, we are committed to positive outcomes on all projects large and small.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

As documented in the chart below our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs including many recent pedestrian, bike and multi-modal trail-related projects. The longevity and continuity of our local staff is reinforced by their unyielding commitment to help improve the city infrastructure realm as highlighted in our continuous record of service on behalf of LFUCG.

Longevity and continuity is a hallmark of Strand's pedestrian and bicycle facilities team.



3. Project Team

Our Team has the requisite credentials and capabilities, and is committed to the successful completion of this program component.

Experienced Project Managers with Support of Seasoned Technical Resources Provides Specialized Experience to Serve a Complete Range of Project Needs

Our Project Team offers the complete range of engineering capabilities that are needed for the many technical challenges that could potentially result through this infrastructure program. We have included project managers with specialized experience directly related to this project discipline who take pride in their work having served on many prior projects on behalf of LFUCG. Our Project Management Team is supported by local engineers and technicians with years of experience involving pedestrian, bike, and multimodal trail design/planning projects. Additionally, Strand's collaborative partnership with EHI Consultants, Barr & Prevost, Jacobi, Toombs & Lanz, Inc., Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. on previous projects brings familiar expertise related to planning, geotechnical engineering, surveying, and environmental services. The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project.

Thumbnail resumes for key personnel follow within this section with full resumes of the primary team members included as an attachment in the *Appendix A - Resume*

"Strand is KYTC Prequalified for all services contemplated under this contract."

Section. **Project Manager Pool** Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Chase Wright, P.E. Trail/Sidewalks/ADA Maintenance of Traffic/ Surveying Planning & Design Constructability Review Ed Holmes, AICP (EHI) Brian Andreas, P.E. Stephen Marshall, P.E., P.L.S. (JTL) Chase Wright, P.E. Seth Winslow, P.E. Jonathan McCracken, E.I.T. Jamey Cash, P.E. Roadway/Bike Lane Easements Construction-Related Services Planning & Design Rights-of-Way Acquisition Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Jonathan McCracken, E.I.T. Chad Bourke, P.E., P.T.O.E. Bruce Monarch Robert Burnette Drainage Landscape Architecture **Environmental Analysis** Seth Winslow, P.E. Sara Tuttle, RLA Gina Morris, PG (Third Rock) Chase Wright, P.E. Lindsie MacPherson, E.I.T. Cultural/Historic Structural **Permitting** Chase Wright, P.E. Adam Weber, P.E. Elizabeth G. Heavrin, MHP (CRA) Lindsie MacPherson, E.I.T. Elizabeth Kuypers, P.E. Utility Coordination/ Signalization/Lighting Geotechnical Relocation Michael Davis, P.E. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Travis Burr, P.E. (B&P) Michael Davis, P.E. Luke Holman, P.E.

Listed resources are also supported by other locally available staff.

(JTL) Jacobi, Toombs & Lanz, Inc. (EHI) EHI Consultants (Third Rock) Third Rock Consultants, LLC (CRA) Cultural Resource Analysts (B&P) Barr & Prevost

Project Management Team

Strand's **Management Plan** and past project history demonstrate commitment to staffing continuity. Our Project Management Team has been developed to include both senior project managers and a project manager so that we can match LFUCG's needs on a particular project with the appropriate staff. Each of our project managers exceeds the defined requirements for three relevant projects within the past five years. A short biography for each project manager followed by a listing of recent applicable experience is provided below.

Michael Woolum, P.E., P.L.S. has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1985. Michael's diverse project experience includes planning and design of bicycle and pedestrian improvements. He will serve LFUCG as project manager on complex bicycle and pedestrian planning and design assignments similar to the role he played on the LFUCG's Downtown Streetscape Project and Distillery District initiatives. For



projects managed by others, he will remain involved as Principal-In-Charge providing support as needed.

- Principal/Project Manager South Limestone, West Main, West Vine, East Main LFUCG
- Principal/Project Manager Legacy Trail LFUCG
- Project Manager North Broadway KYTC District 7
- Principal Scottsville Streetscape City of Scottsville, KY

Adam Weber, P.E. has 14 years of experience as a structural engineer focused on transportation structures and improvements including roadway and pedestrian bridges, box culverts, retaining walls, and drainage structures. His background includes structural inspection and evaluation, structural design, and construction related services in Kentucky, Ohio, Illinois, and Wisconsin, plus working with LFUCG on roadway and trail improvement projects. Adam's experience throughout all aspects of structural engineering combined with his LFUCG experience make him a great partner for LFUCG to manage bicycle and pedestrian assignments.



- Project Manager/Design Engineer Legacy Trail LFUCG
- Project Manager/Design Engineer Appomattox Road LFUCG
- Design Engineer North Broadway KYTC District 7
- Design Engineer Scottsville Streetscape City of Scottsville, KY

Chase Wright, P.E. has eight years of experience in transportation engineering. Chase's transportation experience includes providing engineering and management services to LFUCG, KYTC, and other local public agencies with federally funded projects. He has played key roles including managing aspects and design of bicycle and pedestrian improvements for Lexington and other communities. His understanding of LFUCG/KYTC requirements, ADA compliance issues and bicycle facilities will be beneficial as he serves LFUCG as project manager on bicycle and pedestrian assignments.



- Assistant PM/Design Engineer South Limestone, West Main, West Vine, East Main LFUCG
- Assistant PM/Design Engineer North Broadway KYTC District 7
- Project Manager/Design Engineer Scottsville Streetscape City of Scottsville, KY
- Project Manager/Design Engineer Paris Safe Route to School City of Paris, KY

Qualifications of Key Project Team Members

Jamey L. Cash, P.E. - Trail, Sidewalk, and ADA Compliance Planning and Design

Jamey will provide Pedestrian, Bike or Multimodal Trail Design/Planning for this project. Jamey has over 14 years of experience and is a licensed professional engineer in Kentucky. Jamey has served as project designer and project manager for various transportation related projects, including aspects for roadway, sidewalk, bike lanes, and shared-use trails. Jamey's responsibilities on these projects have included planning, surveying, geometric design, ADA Compliance, pavement markings, signing, drainage



design, right of way plans, right of way acquisition, bidding services, and construction administration. His experience on pedestrian related projects is divers and extensive.

Chad Bourke P.E., P.T.O.E. - Roadway/Bike Lane Planning and Design

Chad will assist with roadway and bike lane planning and design for assignments. Chad has over 9 years of experience, is a licensed professional engineer in Kentucky, and is a registered Professional Traffic Operations Engineer. Chad completed the Request to Experiment for the floating bike lane concept in downtown Lexington, KY. Chad followed the Downtown Streetscape project through design, completing the pavement marking, signage, and signal improvements for the project which incorporated the



additional of bike lanes. His experience in construction observation as a young engineer gives him the needed insight to proactively design projects to avoid issues during construction.

Seth Winslow P.E. - Drainage & Constructability/MOT

Seth will assist with drainage design and constructability/MOT reviews for assignments. Seth has 15 years of experience and is a licensed professional engineer in Kentucky. Seth completed the drainage analysis for South Limestone and has been involved with reviewing plans on the North Broadway project. Seth has served as a project manager and designer for a wide variety of roadway projects from multilane urban roadways to rural bridge replacements. Seth's project assignments have included drainage, storm sewer, geometric design, and MOT.



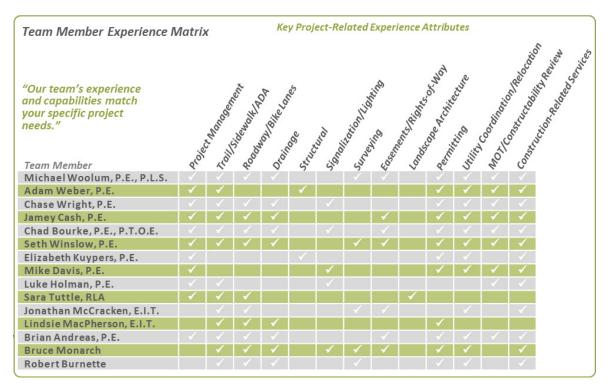
Sara Tuttle, RLA - Landscape Architecture

Sara will be responsible for **landscape architecture** efforts. Sara has 33 years of experience and is a Registered Landscape Architect in Kentucky. She is well versed in representing both public and private sector clients. Sara is also highly experienced in theme-based collaboration and design, transportation enhancements, and implementation of green infrastructure strategies. She has a developed a thorough understanding of LFUCG requirements through successfully represented clients in Lexington from



planning through construction. Some of her projects include Griffin Gate, HealthFirst Bluegrass, Coldstream Research Campus and Southland Christian Church.

Experience matrix highlights reciprocal capabilities offered by project team members.









Subconsultant Participation

Our Project Team is supported by the added technical resources provided by EHI Consultants, Barr & Prevost, Jacobi, Toombs & Lanz, Inc., Third Rock Consultants, LLC and Cultural Resources Analysts, Inc. respectively for planning, geotechnical engineering, surveying, environmental analysis, and cultural & historic evaluations. Strand is no stranger to this group, having collaborated with each firm on many past similar projects. EHI Consultants, Barr & Prevost, and Third Rock Consultants also provide our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to fulfill the specialized services they bring to bear on behalf of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require to meet LFUCG's 10% participant goal.

Project Management Plan

Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead a direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for this noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role for multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

Strand's
Management Plan
and past project
history
demonstrate
commitment to
staffing continuity.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Pedestrian, Bike, and Trail Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Brad Frazier, PE, Director Division of Engineering Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	Legacy Trail Distillery District Feasibility Study South Limestone Street Reconstruction West Main Streetscape Improvements East Main Streetscape Improvements West Vine Streetscape Improvements
Joshua Samples, PE Commonwealth of Kentucky Kentucky Transportation Cabinet (859) 246-2355 joshua.samples@ky.gov	US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements (Item No. 7-412)
Mayor Rob Cline City of Scottsville Scottsville, KY (270) 237-3238 Email: none	East Main (KY 100) Streetscape Improvements
Mike Asalon, Engineering Services Director City of Paris Paris, KY (859) 987-2110 masalon@paris.ky.gov	Paris Safe Route to School
Mayor Chris McGlone City of Vanceburg Vanceburg, KY (606) 796-6003 vanceburgmayor@gmail.com	Vanceburg Safe Route to School

5. List of Similar Projects

Previous Experience Demonstrates Understanding Required to Address Varied Pedestrian, Bike, or Multimodal Trails Related Project Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Strand has served LFUCG and other state agencies and local municipal governments on a broad range of infrastructure-related projects over the last 40+ years. Services provided have included planning, design and construction-related support for various projects including roadways, bridges, trails, neighborhood improvements, flood control, channel restoration, facilities and streetscape improvements, calling on all disciplines of engineering with our inhouse resources. In addition, members of our Team are recognized for their innovative approaches in solving design challenges in the dense urban core area, including award winning experience on the City's Legacy Trail and Downtown Streetscape Improvements Projects. Our experience with LFUCG is testimony to this fact with our notable achievements for the Distillery District Town Branch Trail and revitalized bicycle and pedestrian facilities along the Main, Vine, and S. Limestone Street Corridors.

Experience with key areas of consideration provide confidence in Strand's ability to serve this DOE program component.

In supporting pedestrian and bicycle facilities related needs associated with LFUCG's Contract 5, our Team's capabilities and experience are well suited to address the varied challenges and conditions that may arise. Our project listing and Team's experience includes specialized capabilities in the following additional areas of consideration:

- Adaptive Reuse of Existing Facilities
- Community Outreach and Public Involvement
- Planning and Feasibility Studies
- AASHTO Guide and Urban Trail Design Standards
- CIP, Pre-Cast, and Pre-Fabricated Structural Systems
- Utility Coordination and Relocations
- FEMA CLOMR/LOMR
- Environmental Analysis and Permitting
- Aesthetics and Local Context



Legacy Trail - Kentucky Horse Park Connection.



Ohio River Levee Trail.



Downtown Streetscape Improvements - Vine Street Promenade.

Our Project Team includes individuals who not only bring working knowledge throughout the entirety of LFUCG's infrastructure realm, but professionals who also possess rare skills in administering to construction contracts with high public expectations. The table on the following page outlines a select listing of pedestrian, bike and multi-modal trails-related projects that highlight our credentials to serve LFUCG's needs for this important DOE contract.

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
Distillery District Improvements Program Feasibility Study Lexington-Fayette Urban County Government Lexington, KY	2013	Planning Services	 Evaluate existing conditions related to roadway, bicycle, and pedestrian travel modes. Review proposed redevelopment plans and develop alternative combinations for roadway/trail. Provide recommended alternatives including turn lane and intersection improvements. Identify priority action items to address concerns prohibiting development. Develop phasing and implementation strategy for the project. 	\$14,800,000 - \$23,900,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Jonathan McCracken, E.I.T
US 27 (N. Broadway) Roadway, Railroad, and Bridge Improvements Item No. 7-412.00 Kentucky Transportation Cabinet (KYTC) Lexington, KY	On-going	Design Services	 Upgrade existing rural roadway section to urban section and widen roadway typical section. Address substandard horizontal and vertical clearance at railroad bridge. Develop drainage solution to address existing roadway flooding that requires street closure. Evaluate retaining wall sections required to retain rock and address known karst topography. Incorporate bicycle and pedestrian improvements into project. Evaluation of railroad alignment alternatives and bridge replacement options. 	\$9,200,000 - \$11,200,000 (EST)	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Chad Bourke, P.E., P.T.O.E. Seth Winslow, P.E. Lindsie MacPherson, E.I.T. Jonathan McCracken, E.I.T.
South Limestone Street Reconstruction Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway reconstruction, streetscape improvements, & utility infrastructure replacement. Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades. Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$13,150,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
West Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$1,800,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Jamey Cash, P.E. Michael Davis, P.E.
East Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2011	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Limestone to Rose Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$2,610,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Jamey Cash, P.E. Michael Davis, P.E.
West Vine Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$3,010,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Jamey Cash, P.E. Michael Davis, P.E.
East Main Street (KY 100) Streetscape Improvements City of Scottsville Scottsville, KY	2014	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements. Traffic calming measures and pedestrian improvements including crosswalks and ADA walkways. Roadway lighting/electrical, drainage, and landscape improvements. Structural retaining walls and ADA compliant ramp from lower to upper walkway. 	\$375,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E. Michael Davis, P.E.
Paris Safe Route to School City of Paris Paris, KY	2014	Planning, Design, and Construction- related Services	 Sidewalk improvements along KY 1939. Development of required easement documentation for partial acquisition of 14 parcels. Drainage improvements including two new culverts. Sidewalk designed to minimize cost and avoid existing conflicts with utilities and trees. 	\$160,000	Michael Woolum, P.E., P.L.S. Mark Askin, P.E. Chase Wright, P.E. Adam Weber, P.E.
Vanceburg Safe Route to School City of Vanceburg Vanceburg, KY	2013	Planning and Design Services	 Sidewalk improvements along KY 59. Drainage design to improve several areas that experience localized ponding. Pavement marking and signage improvements to enhance pedestrian visibility and slow traffic. Sidewalk accessibility ADA accessibility improvements. 	\$210,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Adam Weber, P.E.
Legacy Trail Lexington-Fayette Urban County Government Lexington, KY	2010	Planning and Design Services	 Planning for entire 12.5-mile trail connecting the Kentucky Horse Park to Downtown. Design of 8.5 miles of trail from the Kentucky Horse Park to the Northside YMCA. Design of seven bridges over Cane Run Creek and retaining walls. Public involvement including steering committee and public meetings. Drainage design including localized drainage and floodplain analysis/FEMA permitting. 	\$8,000,000	Michael Woolum, P.E., P.L.S. Adam Weber, P.E. Michael Davis, P.E. Jamey Cash, P.E. J. Bruce Monarch
Oldham County Pedestrian/Bicycle Trail Oldham County Fiscal Court Oldham County, KY	2009	Planning, Design, and Construction- related Services	 Design of 3.2 miles of trail connecting KY 393 Park and Oldham 8 commercial center on KY 53. Drainage design including several culvert extensions. Structural design for two rock gabion retaining walls. Easement acquisition for 14 parcels. 	\$620,000	Jamey Cash, P.E. Adam Weber, P.E.
Bloomfield Safe Route to School City of Bloomfield Bloomfield, KY	2013	Planning and Design Services, Construction Related Services	 Development and Design of 3,100 LF of concrete sidewalk along Arnold Lane and Faith Avenue. Drainage improvements, including several drain under sidewalk structures. Provide pedestrian connectivity between elementary school, middle school, and county library. 	\$185,000	Jamey Cash, P.E. Abbe Michalski, P.E.

Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	9
Other Location	Louisville, KY	1968	25	3
Sub Consultants				
EHI Consultants - Planning	Total	1995	5	5
Headquarters	Lexington, KY	1995	3	3
Local Office	Lexington, KY	1995	3	3
Third Rock Consultants - Environmental	Total	2000	26	3
Headquarters	Lexington, KY	2000	23	3
Local Office	Lexington, KY	2000	23	3
Jacobi, Toombs, & Lanz Surveying	Total	1955	42	3
Headquarters	Louisville, KY	1955	9	3
Local Office	Louisville, KY	1955	9	3
Barr & Prevost - Geotechnical/Drilling	Total	1997	125	5
Headquarters/Local Office	Columbus, OH	1997	50	5
Cultural Resource Analysts - Historic	Total	1983	74	Variable
Headquarters	Lexington, KY	1983	35	Variable
Local Office	Lexington, KY	1983	35	Variable

Notes

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

b a c

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

For this project, the Strand team includes listed support from locally based DBE's EHI Consultants for planning and Third Rock Consultants, LLC for environmental-related services; Louisville based DBE Jacobi, Toombs & Lanz, Inc. for surveying; Ohio based DBE Barr & Prevost for geotechnical related services. We have also included Cultural Resources Analysts, a locally-based small business that specializes in cultural and historic environmental concerns. Common among each of these subconsultant team members is a prior working relationship with Strand on many other similar related projects.

For the entirety of project services under this contract, Strand is committed to meeting or exceeding LFUCG's 10% goal for DBE firm participation. If service opportunities are not available for a given project within the credentials listed herein for EHI, Third Rock, Jacobi, Toombs & Lanz, or Barr & Prevost, Strand will first reach out







to other locally-based preapproved DBE firms to solicit their support in meeting the participation goal. If we are unable to find local support, we will then reach out to other area DBE firms to meet the commitment. Rest assured, Strand is committed to fulfillment of this important contracting objective recommended by LFUCG.

2. Firm Qualifications

Strand's Comprehensive Traffic Signalization Capabilities Bring Confidence in Delivering Effective Solutions

Our informed infrastructure recommendations help maximize community benefits.

From planning to design and construction, our local office staff has been actively engaged with transportation projects to serve Kentucky clients for over 40 years. Strand has an established working relationship with LFUCG engineering and traffic staff developed through many years of project experience. Our significant local experience includes serving LFUCG on major projects with sixteen traffic signal installations. This gives our staff the background and capability to meet future LFUCG traffic signal needs. Strand is also prequalified with the Kentucky Transportation Cabinet to provide Traffic Engineering Services and Traffic Signal Services.

Experienced Management Team Brings Skillsets Required to Address All Traffic Signalization Needs

Strand's Project Management leadership group includes individuals with unique backgrounds that enable us to

effectively tailor a delivery team to meet a given project's specific needs. We propose to utilize this approach since our experience with local signalization projects recognizes the diverse project needs, which could include:



- Potential one-way to two-way conversions.
- ADA compliance considerations.
- Electrical design.
- Aesthetic and landscape architecture considerations.
- Unique structural requirements.

By matching project management skillsets to the needs of a given project, we can most efficiently and effectively satisfy your signalization needs.

Client History and Related References Provide Further Confirmation of Signalization Expertise and Ability to Meet Client's Needs

We have had the opportunity to serve many major clients in this region for traffic signal-related needs including: LFUCG, KYTC, and the University of Kentucky. Strand's achievements include an award winning streetscape project that saw the construction of new traffic signals throughout downtown Lexington. You are encouraged to contact our references with regard to our prior service and the project solutions we have developed on their behalf. We are confident their responses will further document our quality commitment and reinforce your confidence in our ability to address your specific stormwater needs.

Diverse project requirements addressed by Strand's flexible project teams.



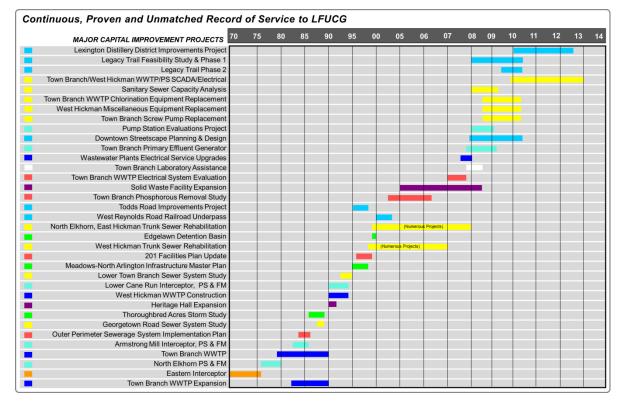
Downtown Streetscape Improvements - Vine Street Promenade. - 14 signalized intersections were constructed.

Strong client relationships are forged by successful project endeavors.

Our 40+ Years of Local Service Demonstrate Our Commitment to LFUCG

Longevity and continuity is a hallmark of Strand's team.

As documented in the chart below our local office has been serving LFUCG for over 40 years on a variety of infrastructure needs. The longevity and continuity of our local staff is reinforced by their unyielding commitment to serve LFUCG, as highlighted in our continuous record of services on behalf of LFUCG.



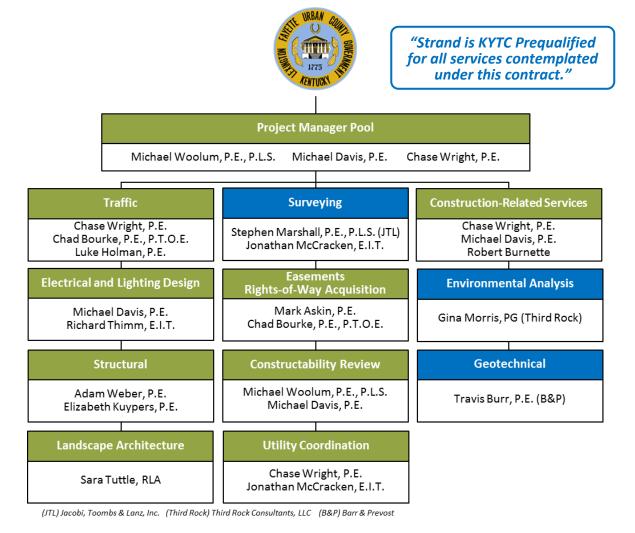
3. Project Team

Our Team has the requisite credentials and capabilities, and is committed to serving LFUCG.

Experienced Project Managers with Support of Seasoned Technical Resources Provides Specialized Experience to Serve Complete Range of Project Needs

Our Project Team offers the complete range of engineering capabilities that are needed for the many technical challenges that could potentially result through this infrastructure program. We have included project managers with specialized experience directly related to this project discipline who take pride in their work having served on many prior projects on behalf of LFUCG. Our Project Management Team is supported by local engineers and technicians with years of experience involving traffic signal design-related projects.

Additionally, Strand's collaborative partnership with Jacobi, Toombs and Lanz, Inc., Third Rock Consultants, LLC and Barr and Prevost on previous projects brings familiar expertise related to surveying, geotechnical engineering and environmental services. The individuals listed in the organizational chart below will serve in key leadership positions responsible for guiding and directing other Team members during the course of the project. Thumbnail resumes for key personnel follow within this section with full resumes of the primary team members included as an attachment in the *Appendix A - Resume Section*.

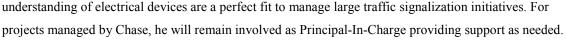


Listed resources are also supported by other locally available staff.

Project Management and Key Team Leaders

Our Project Management Team has been developed to include multiple project managers so that we can match LFUCG's needs on a particular project with the appropriate staff. Each of our project managers exceeds the Project Manager requirements for three projects within the past five years. A short biography for each project manager and team leader, followed by a listing of recent applicable experience is provided below. Full resumes can be found in the *Appendix A – Resume Section*.

Our Project Management Team is led by local staff with up to 31 years of experience serving LFUCG. **Michael Davis, P.E.** has 31 years of experience in electrical engineering which includes providing a wide range of engineering services to LFUCG since 1983. Michael's diverse project experience ranges from SCADA systems at the LFUCG wastewater treatment plants to traffic signalization and roadway lighting. He is the Lexington office Director of Operations which he oversees all aspects of projects and staff development. Mike has recently been involved in the design of 16 traffic signals for LFUCG. His leadership and



- Principal/Project Manager SCADA System Improvements LFUCG
- Principal Preliminary Design/Build Signal Design KY 914, Somerset Elmo Greer & Sons
- Design Engineer South Limestone, West Main, West Vine, East Main LFUCG
- Design Engineer South Broadway at The Lex Buckingham Properties

Michael Woolum, P.E., P.L.S. has 30 years of experience in civil engineering which includes providing a wide range of engineering services to LFUCG since 1985. Michael's diverse project experience includes planning and design or roadway improvements. He is a firm principal and routinely leads diverse project teams. He will serve LFUCG as project manager on traffic signalization similar to the role he played on the LFUCG's Downtown Streetscape Project which featured replacement of 14 traffic signals.



- Principal/Project Manager South Limestone, West Main, West Vine, East Main LFUCG
- Principal/Project Manager South Broadway at The Lex Buckingham Properties
- Principal/Project Manager Newtown Pike and Aristides Commonwealth of Kentucky

Chase Wright, P.E. has eight years of experience in civil engineering including municipal and transportation engineering. Chase's transportation experience includes providing engineering and management services to LFUCG, KYTC, and other local public agencies with federally funded projects. He has played key roles including managing aspects and design of transportation projects in Lexington including LFUCG's Downtown Streetscape

Improvement Projects where he was involved in the design of 14 traffic signals. His understanding of LFUCG projects and KYTC requirements will be beneficial as he serves

• Assistant PM/Design Engineer – South Limestone – LFUCG

LFUCG as project manager on select assignments.

- Assistant PM/Design Engineer West Main, West Vine, East Main LFUCG
- Design Engineer Preliminary Design/Build Signal Design KY 914, Somerset Elmo Greer & Sons

Adam Weber, P.E. has almost 14 years of experience as a structural engineer focused on transportation structures and improvements including bridges, box culverts, retaining walls, signal poles, sign bridges and supports, and drainage structures. His background includes structural inspection and evaluation, structural design, and construction related services in Kentucky, Ohio, Illinois, and Wisconsin, plus working with LFUCG on roadway and trail improvement projects. Adam's experience throughout all aspects of structural engineering combined with his LFUCG experience make him a great partner for LFUCG.



- Project Manager/Design Engineer Appomattox Road LFUCG
- Project Manager/Design Engineer Legacy Trail LFUCG
- Design Engineer Salt Barn Facility Main and Vine Streetscape Projects LFUCG
- Design Engineer North Broadway KYTC District 7

Mark Askin, P.E. will be responsible for easement and rights-of-way impacts associated with traffic signal projects. Mark currently serves as Director of Strand's Right-of-Way and Easement Acquisition Department and provides these services for clients throughout Kentucky. He has more than 17 years of experience working with KYTC, utility companies, and municipalities on right-of-way acquisition projects. In total, Mark has acquired or overseen the acquisition of over 4,600 parcels for multiple clients.



Experience matrix highlights reciprocal capabilities offered by project team members.

Team Member Experience N	/latri)	(Ke	y Proj	ect-Re	lated	Experi	ience A	Attribu	ites		
"Our team's experience and capabilities match your specific project needs."	. &	The Man Man	Sond Son	is of the second	Specific Designation of the second	S CONTRACTOR OF THE PARTY OF TH	404 Signal	S ORGINA STATE OF THE STATE OF	the state of the s	(1946)	18 0 8 18 18 18 18 18 18 18 18 18 18 18 18 1	September 19 19 19 19 19 19 19 19 19 19 19 19 19	on Tience
Team Member	Prol	Tigh	Side	Inte	જુ	Sege	POL	Jill	Wes	ig	72	Silv	
Chase Wright, P.E.													
Michael Woolum, P.E., P.L.S.	\checkmark	\checkmark	\checkmark	√ .	√	\checkmark	✓	✓			-√-		
Mike Davis, P.E.													
Chad Bourke, P.E., P.T.O.E.	\checkmark	\checkmark	\checkmark	✓	✓	✓		✓			✓		
Jeffrey Held, P.E., P.T.O.E.													
Luke Holman, P.E.	✓	√	√_	✓	✓	✓ :					-√		
Bruce Monarch			√										
Adam Weber, P.E.	✓										✓	✓	
Seth Winslow, P.E.											1		
												12	



Subconsultant Participation

Our Project Team is supported by the added technical resources provided by Barr and Prevost., Third Rock Consultants, LLC and Jacobi, Toombs and Lanz, Inc. respectively for geotechnical engineering, environmental analysis, and surveying. Strand is no stranger to this group, having collaborated with each firm on many past similar projects. JTL, Barr & Prevost, and Third Rock Consultants also provide our Team with DBE subcontracting opportunities in line with LFUCG's 10% participation goal. Our Project Management Team will work closely with each subconsultant firm to fulfill the specialized services they bring to bear on behalf

of LFUCG for this project. With LFUCG's approval, Strand is also prepared to include additional DBE subconsultant firms as project assignments require to meet LFUCG's 10% participant goal.

Project Management Plan

Strand's Project Management Plan and past project history demonstrate commitment to staffing continuity. Upon initiation of each and every Strand project, a Project Management Plan is prepared that outlines project objectives, key responsibilities and deliverable requirements supported by a well-defined staff assignment-accountability system. We routinely establish a leadership team for each project that includes a firm principal, project manager, and project assistant who lead a direct other required personnel. Regular team meetings also allow our Project Team to stay abreast of related activities for others that are involved. As noted in the staff organizational chart on the previous page, each of our identified key staff not only includes a committed backup for this noted discipline, but also can rely on others that will be involved who offer similar capabilities in the event of a staffing change. Our Project Management Pool approach allows us to easily commit any of these individuals for this role for multiple project assignments. We also have the ability to rely on other qualified firm personnel who are locally-based for both leadership and technical support positions.

4. Clients for Which Similar Work has Been Performed

Client History and Related References Provide Further Confirmation of Traffic Signal Expertise and Ability to Meet Clients Needs

Client Name	Similar Projects Completed
Brad Frazier, PE, Director Division of Engineering Lexington-Fayette Urban County Government Lexington, KY (859) 258-3410 bfrazier@lexingtonky.gov	West Main Streetscape Improvements East Main Streetscape Improvements West Vine Streetscape Improvements
Mike Penick, SR/WA Louisville Metropolitan Government Louisville, KY (502) 574-3888 mike.penick@louipsvilleky.gov	US 42 and Chenoweth Lane Intersection Improvements
George Ward University of Kentucky Lexington, KY (859) 231-8324 george.ward@uky.edu	Newtown Pike and Aristides Intersection
Brad Chambers, President and CEO Buckingham Companies Indianapolis, IN (317) 974-1234 Brad.chambers@buckingham-co.com	The Lex Site and US 27/68 Turn Lane Improvements
Beth Blum, PE WisDOT Southeast Region – Waukesha Waukesha, WI (262) 548-8644 Beth.Blum@dot.wi.gov	North 76th Street (WI 181) Corridor Reconstruction

5. List of Similar Projects

Previous Experience Demonstrates Our Capabilities to Address Traffic Signal Design Needs

Strand has been providing quality professional engineering services to LFUCG since 1968.

Experience with all phases of traffic signal implementation provide confidence in Strand's ability to serve LFUCG.

Strand has served LFUCG and other state and local governments on a broad range of transportation projects for over 40 years. Services provided have included planning, design and construction-related support for various projects including major traffic signalization projects for LFUCG.

Our project listing and Team's experience includes specialized capabilities in the following key areas of consideration:

- Traffic Engineering
- Signal Design
- Electrical Design
- Easements and Rights-of-Way Acquisition
- Structural Design
- Utility Relocations
- Surveying
- Landscape Architecture
- Aesthetics and Local Context

The table on the following page outlines a select listing of traffic signalization projects that highlight our credentials to meet LFUCG's project needs.



West Main and Broadway Traffic Signal During Construction.



Constructed Avenue of Champions Intersection.



Vine and Mill Street Traffic Signal

List of Similar Projects

Project Name	Date	Services Provided	Project Description	Construction Cost	Key Team Member
South Limestone Street Reconstruction Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway reconstruction, streetscape improvements, & utility infrastructure replacement. Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades. Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$13,150,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Seth Winslow, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E.
West Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$1,800,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Luke Holman, P.E.
East Main Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2011	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Limestone to Rose Reconstruct 3 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$2,610,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Luke Holman, P.E. Rick Thimm, E.I.T.
West Vine Streetscape Improvements Lexington-Fayette Urban County Government Lexington, KY	2010	Planning, Design, and Construction- related Services	 Urban roadway and streetscape improvements from Broadway to Limestone Reconstruct 4 intersections including traffic signalization and ADA compliance upgrades Roadway drainage improvements including green infrastructure. Pedestrian and bicycle improvements. Extensive project coordination with LFUCG, utilities, permitting agencies, and contractor. 	\$3,010,000	Michael Woolum, P.E., P.L.S. Chase Wright, P.E. Chad Bourke, P.E., P.T.O.E. Michael Davis, P.E. Luke Holman, P.E.
Traffic Signals for KY 914 Bypass Widening Design Build Elmo Greer and Sons Somerset, KY	2014	Planning and Design Services	 Preliminary design of three new traffic signals to accommodate roadway widening. Incorporate advance warning flasher at one intersection. Quantity calculations for traffic signal components. 	\$16,000,000 (EST)	Michael Davis, P.E. Chad Bourke, P.E., P.T.O.E. Chase Wright, P.E. Luke Holman, P.E.
The Lex Site and US 27/68 (S. Broadway) Turn Lane Improvements Buckingham Companies Lexington, KY	2010	Planning, Design, and Construction- related Services	 Roadway improvements to provide new turn lane into development Reconstruct intersection including traffic signalization and ADA compliance upgrades. Pavement marking and signage improvements. 	\$2,100,000	Michael Woolum, P.E., P.L.S. Michael Davis, P.E. J. Bruce Monarch
West Reynolds Road Railroad and Roadway Improvements Lexington-Fayette Urban County Government Lexington, KY	2004	Planning, Design, and Construction- related Services	 Urban roadway improvements from Nicholasville Road to Ruccio Way. Accommodations for left/right turning lanes with pedestrian enhancements and trail facility. Four fully signalized intersections with new corridor lighting. Temporary and permanent railroad bridge to maintain continuous rail traffic. 3,700-linear feet of cantilevered retaining wall design ranging from 4 to 22 feet in height. Aesthetic retaining wall design elements to soften roadway underpass. 	\$10,000,000	Michael Woolum, P.E., P.L.S. Luke Holman, P.E. Adam Weber, P.E. David Walker, P.E., S.E. Bruce Monarch Sara Tuttle, RLA
Coldstream Research Park University of Kentucky Lexington, KY	On-going	Planning, Design, and Construction- related Services	 1,000-acre office research park with 3.5 miles of divided boulevards and streets. Two-acre lake with 42 foot pre-cast decorative arch bridge system. Intersection, turn lane and signal improvements for Newtown Pike at Aristides Boulevard. Comprehensive 6,000-acre watershed based stormwater master plan. 	\$15,000,000 (To Date)	Michael Woolum, P.E., P.L.S. Elizabeth Kuypers, P.E. Michael Davis, P.E. Chase Wright, P.E. Bruce Monarch Sara Tuttle, RLA
US 42 and Chenoweth Lane Intersection Improvements Louisville Metro Government Louisville, KY	2008	Design Services	 Reconstruct intersection including traffic signalization Analysis of traffic impacts through data collection and microsimulation. Propose alternative solutions to mitigate traffic impacts for future growth. 	\$425,000	Mark Askin, P.E. Chad Bourke, P.E., P.T.O.E.
North 76th Street (WI 181) Corridor Wisconsin Department of Transportation Dane County, WI	2007	Planning and Design Services	 Reconstruct a 4.5 mile stretch of 6-lane urban arterial roadway. Design of 16 permanent and 15 temporary traffic signals Model traffic conditions through microsimulation and recommend turn lane storage lengths. Acquire necessary right-of-way for roadway and intersection improvements. 	\$26,000,000	Luke Holman, P.E.
Monona Drive Reconstruction (CTH BB) City of Monona, WI Dane County, WI	2010	Planning, Design, and Construction- related Services	 Reconstruct 1-mile of Monona Drive a heavily traveled commercial corridor (28,000 vpd) Access control including elimination of more than 40 percent of the existing 72 access points. Traffic modeling to determine traffic operations, need for right-turn lanes, and storage lengths. Design of 16 synchronized permanent and 14 temporary traffic signals. 	\$8,900,000	Luke Holman, P.E.
US 51/WIS 29 Corridor Intersection Improvements Wisconsin Department of Transportation Marathon County, WI	2010	Planning, Design, and Construction- related Services	 Reconstruct a 7 mile stretch of highway including widening from 4-lane to 6-lane. Reconstruct local roadway system in and around the interchange. Design of 14 traffic signals 	\$309,000,000	Luke Holman, P.E.

5. Similar Design Services Projects — Page 10

Local Office-Attachment 1

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	Madison, WI	1946	192	2
Local Office & PM Location	Lexington, KY	1968	17	10
Other Location	Louisville, KY	1968	25	2
Sub Consultants				
Third Rock Consultants - Environmental	Total	2000	26	3
Headquarters	Lexington, KY	2000	23	3
Local Office	Lexington, KY	2000	23	3
Jacobi, Toombs, & Lanz Surveying	Total	1955	42	3
Headquarters	Louisville, KY	1955	9	3
Local Office	Louisville, KY	1955	9	3
Barr & Prevost - Geotechnical/Drilling	Total	1997	125	5
Headquarters/Local Office	Columbus, OH	1997	50	5

Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.
- a. Anticipated % of Strand services performed in Lexington, KY > 95%
- b. Anticipated % of Strand services performed in Madison, WI < 2%
- c. Anticipated % of Strand services performed in Louisville, KY < 3%

7. Disadvantaged Business Enterprise Involvement

Strand's DBE Subconsultant Plan Achieves LFUCG's Participation Goal

Our DBE Engagement Plan supports LFUCG's stated 10% goal. As a firm that supports initiatives of our local government, Strand consistently endeavors to incorporate DBE participation goals in our contracting opportunities. To this end, we are fully committed to meeting LFUCG's 10% DBE participation goal with our selected DBE subconsultants for required services and others as may be needed to fulfill this commitment. Although all other required engineering services can be provided by Strand's diverse in-house staff, we are prepared to allocate project responsibilities to additional DBE firms in meeting LFUCG's stated 10% goal.

For this project, the Strand team includes listed support from locally based DBE Third Rock Consultants, LLC for environmental-related services; Louisville based DBE Jacobi, Toombs & Lanz, Inc. for surveying; Ohio based DBE Barr & Prevost for geotechnical related services. Common among each of these subconsultant team members is a prior working relationship with Strand on many other similar related projects.







For the entirety of project services under this contract, Strand is committed to meeting or exceeding LFUCG's 10% goal for DBE firm participation. If service opportunities are not available for a given project within the credentials listed herein for EHI, Third Rock, Jacobi,

Toombs & Lanz, or Barr & Prevost, Strand will first reach out to other locally-based preapproved DBE firms to solicit their support in meeting the participation goal. If we are unable to find local support, we will then reach out to other area DBE firms to meet the commitment. Rest assured, Strand is committed to fulfillment of this important contracting objective recommended by LFUCG.



B.S. Civil Engineering – University of Kentucky, 1995

Registration

Professional Engineer in Kentucky, Indiana, and Ohio

Field of Expertise

Transportation planning and design, Right-of-Way Acquisition, Wastewater Collection System Metering, Sanitary Sewer Collection, Inflow and Infiltration Studies, Stormwater Modeling, Water Distribution, and Water Distribution Modeling

Positions Held

Strand Associates, Inc.®

1995 – Present

Project Manager

Professional Experience

- **■** Highway Design and Planning
 - Items 10-1073.00 Menifee County CR 1215, 10-1075.00 Powell County Kentucky 11 (2007) Served as Project Manager for these bridge and approach replacement projects. The Menifee County project involved evaluations for structural repair of existing abutments or complete replacement of the bridge and approach on a new alignment. The Powell County project involved evaluation of bridge and approach replacement alternatives. The intersection of KY 11 with Manning Road was reconstructed to match the new approach. Projects received more than 94 percent design performance rating.
 - Trey Street Roadway and Sanitary Sewer Project Served as Principal-in-Charge for for the project which included over 7,000 feet of a roadway widening and realignment. This roadway is on the grounds of the former Indiana Army Ammunition Plant, which is being developed into a modern business park. Additionally, the project contained over 6,000 feet of proposed storm sewer, 3,600 feet of proposed sanitary sewer, and about 3,000 linear feet of new and relocated water line.
- Right-of-Way Plat Development and Acquisition experience includes determination of existing right-of-way and property ownership in rural and urban settings, development of new right-of-way, and the drafting of legal descriptions for fee acquisition, permanent and temporary easements, and utility release of rights.
- Land Acquisition Mark heads our Land Acquisition Department. He has been in charge of obtaining over 1000 Parcels for KYTC in addition to the following:
 - 750 plus easements on 12 projects for the Louisville Water Company
 - 2,250 plus easements on 49 projects for the Louisville and Jefferson County Metropolitan Sewer
 - 300 easements for the City of Crestwood
 - 450 easements for the Kentucky American Water Company
 - 40 easements for the Oldham County Sanitation District
 - 50 easements for Sanitation District No. 1
 - 50 fee acquisitions for the Mt. Sterling Water District

Professional Affiliations

■ American Society of Civil Engineers, International Right of Way Association



Chad E. Bourke, P.E., PTOE

Education

B.S. Civil Engineering – University of Kentucky, Lexington, 2004 M.S. Civil Engineering – University of Kentucky, Lexington, 2005

Registration

Professional Engineer in Kentucky Professional Traffic Operations Engineer

Positions Held

Strand Associates, Inc.® 2005 – Present Project Engineer

University of Kentucky 2003 – 2005 Research and Teaching Assistant

Professional Experience

Traffic and Transportation Planning and Design

- Louisville Metro Brownsboro Road and Chenoweth Lane, Kentucky Project Engineer for the intersection improvements at US 42 that included adding turning restrictions and an added left-turn lane at two intersections. Duties included performing traffic counts, traffic volume forecasting, traffic simulation, signal design, and the geometric layout.
- **KY 3263 Extension, Ringgold Road, City of Somerset, Kentucky** Project Engineer responsible for performing traffic counts, traffic volume forecasting, trip generation, developing traffic models in Synchro/SimTraffic, and compiling information into a report to develop a typical section for the initial and ultimate build of a proposed roadway. Also assisted with geometric and drainage design to develop right of way plans for the City of Somerset.
- Trey Street Roadway Reconstruction, River Ridge Development Authority, Indiana Project Engineer during design phase and Supervisor for Construction Observation services on 1.2 miles of roadway reconstruction in the River Ridge Development Center in southern Indiana. Construction activities included roadway construction/installation of water main, storm sewer, and sanitary sewer. Duties included coordinating monitoring construction for compliance with the contract documents.
- Traffic Signalization Design for Urban Streetscape Projects, Lexington, Kentucky Project Engineer for pavement marking layout, project signage, and traffic signal design in downtown Lexington for the following projects:
 - Lexington Streetscape Phase One Improvements South Limestone (3 intersections)
 - Lexington Streetscape Phase One Improvements Vine Street (US 25) (4 intersections)
 - Lexington Streetscape Phase One Improvements West Main Street (US 25) (4 intersections)
- Salt Barn Encroachment Permit, Lexington-Fayette Urban County Government Project Engineer responsible for developing traffic models in Synchro/SimTraffic for existing conditions and proposed alternatives and compiling the information into a report. This report was used in the submittal for an encroachment permit for Lexington-Fayette Urban County Government's construction of a salt barn on a state roadway.

Land Acquisition Services

- Fegenbush/Outer Loop/Beulah Church, Item No. 05-122.00 for District 5 Serving as the lead acquisition agent for this urban project. He is responsible for residential and commercial MARS and appraisals. We are providing acquisition and relocations services on this project.
- I-65 at KY 222 Interchange, Hardin County, Item No. 04-20.01 for District 4 Served as the lead acquisition agent on this project. We provided title reports and closings and acquisition and relocation services on this project. We successfully acquired 90 percent of 27 parcels without the use of eminent domain procedures.



B.S. in Civil Engineering, University of Illinois, 1999

Registration

Professional Engineer in Kentucky

Field of Expertise

Project Management, Municipal and Transportation Design, Drainage Design, Green Infrastructure Design, Construction Observation, Easement Acquisition and Surveying

Positions Held

Strand Associates, Inc.®	2000 – Present	Municipal Engineer
Berns, Clancy and Associates	1999	Engineering Intern
Illinois DOT	1997, 1998, and 1999	Engineering Intern

Professional Experience

- Transportation Engineering experience on projects for several state agencies, including those in Kentucky, Indiana, Illinois, and Wisconsin. His duties have included project management, plan production, geometric design, drainage design, erosion control design, temporary traffic control design, easement acquisition, signing, surveying, and construction observation.
- **Project Management** experience includes budgeting projects, managing project teams, maintaining schedules, managing plan production, bidding services, construction services and quality assurance.
- **Municipal Design** experience includes sidewalk design, pedestrian trail design, green infrastructure, water line, sanitary sewer, project specifications, bidding services, and construction services.
- **Traffic Analysis** experience includes traffic counts, existing system analysis, construction traffic modeling, and future traffic impact analysis.
- Construction Observation and Surveying experience includes urban and rural roadway projects, storm sewer, green infrastructure, pedestrian facilities, grading, water main installation, utilities, and construction layout.
- Easement Acquisition experience includes permanent and temporary easements and right-of-way for roadway, pedestrian trail, and utility projects.
- **Cost-Estimating** experience includes preparing quantity take-offs, final construction cost estimates, funding estimates, and construction spend-down schedules.
- **Drainage Analysis** experience includes green infrastructure design, storm sewer design, surface drainage calculations, inlet spacing, detention basin design, erosion control, and evaluation of existing storm sewer systems.

Professional Affiliations and Recognition

- American Society of Highway Engineers
- American Public Works Association



B.S. Electrical Engineering – University of Kentucky, Lexington, 1984

Registration

Professional Engineer in Kentucky, Alabama, and Mississippi

Field of Expertise

Electrical Distribution, Site Utilities; Traffic Signalization and Roadway Lighting; Instrumentation and Control; Sewer System Rehabilitation; Wastewater Treatment Facilities; Wastewater Pumping Stations and Force Mains; Construction Administration and Project Management

Positions Held

Strand Associates, Inc.®

1983 – Present

Senior Associate, Project Engineer/Senior Project Manager/Director of Operations

Professional Experience

- Lexington-Fayette Urban County Government South Limestone, West Main Street, Vine Street, and East Main Street Streetscape Design, Lexington, Kentucky Streetscape design project includes signal replacement, signing, sidewalk, delivery zones, on-street parking, pedestrian amenities, and landscaping. Led efforts for the electrical design for lighting and signal, including photometrics.
- Electrical Instrumentation and Control experience includes design and construction-phase services for numerous projects including water and wastewater treatment plants, pumping stations, commercial office buildings, signals and lighting. Projects include distribution systems with voltages ranging from 120/240 volts to 12,470 volts. Instrumentation control experience includes PC-based SCADA systems with up to 60 remote sites, and PLC-based control systems and treatment process monitoring/control equipment to provide plant automatic control.
- **Pumping Station** experience includes project management and design experience for wastewater pumping stations and force mains. Pump station sizes range from 35 to 15,000 gpm. Force mains range in diameter up to 30 inches, and lengths up to 24,000 feet.
- **Kentucky American Water, Owenton, Kentucky** Design of 30 mgd water booster pumping station, including mechanical, electrical, and SCADA systems.
- Cave Run Water Commission, Frenchburg, Kentucky SCADA system design and construction—phase services for 30 miles of 12- and 14-inch water main along Kentucky 1693 and US 460 in Menifee and Montgomery Counties.
- Paintsville Utilities, Paintsville, Kentucky Project Manager for 4 mgd membrane filtration water treatment plant design project that included a 24-inch raw water and finished water transmission main and 500,000-gallon elevated storage tank.

- Kentucky Society of Professional Engineers
- National Society of Professional Engineers
- Society of American Military Engineers, Huntington Post
- American Council of Engineering Companies



B.S. Civil Engineering - University of Wisconsin-Madison, 1999

Registration

Professional Engineer in Wisconsin, Ohio, and Indiana

Field of Expertise

Traffic Capacity and Operations Modeling; Signals and ITS Design and Construction

Positions Held

Strand Associates, Inc.®	1999 – Present	Project Manager/Engineer
Short Elliot Hendrickson, Inc.	1998 – 1999	Resident Project Representative
Fleming, Andre, Inc.	1997	Construction Inspection

Professional Experience

- Transportation experience includes traffic control cost analysis, signal optimization, highway design, highway corridor studies with the Highway Capacity Manual and Software, CORSIM Software, TRANSYT-7F SIGNAL 2000, Synchro/SimTraffic, and Paramics.
- Extensive Traffic Modeling and Optimization experience using Paramics, Synchro, Signal2000, CORSIM, and TRANSYT-7F. Modeling projects include:
 - Reynolds Road Signal Coordination, Lexington, Kentucky (5 intersections).
 - US 51 Needs Analysis, Stoughton, Wisconsin (Paramics model of 13 miles of rural and urban highway).
 - West Madison Beltline and adjacent arterials, Madison, Wisconsin (16 interchanges, 70 intersections. Included numerous site-specific alternatives analyses for local arterials and Beltline freeway).
 - Century Avenue Signal Coordination/Optimization, Middleton, Wisconsin (5 intersections).
 - Lexington Ky., Downtown Streetscape Project (10 intersections).
 - Prairie du Chien, Wisconsin, Corridor Model, Prairie du Chien, Wisconsin (20 intersections).
- Traffic Signal Design experience includes more than 79 permanent and 35 temporary signals, and construction observation and signal timing for various signal projects. Luke has provided quality control services on 16 traffic signals in Lexington, KY.
- ITS experience includes construction observation, design and planning. Construction responsibilities included equipment approval and field operation coordination.

- American Society of Civil Engineers
- Institute of Transportation Engineers, Intelligent Transportation Society of America



Elizabeth A. Kuypers, P.E.

Education

B.S. in Civil Engineering – University of Dayton, Ohio, 2002

Registration

Professional Engineer in Kentucky

Field of Expertise

Project Management, Structural Design of Water Supply and Wastewater Treatment Facilities, Commercial, Educational and Industrial Buildings, and Retaining Structures

Positions Held

Strand Associates, Inc.®	2002 – Present	Structural Engineer/Project Manager/Municipal Discipline Coordinator
LJB, Inc.	2001	Cooperative Education – Bridge and Highway Department
Shook Inc.	1999 - 2000	Cooperative Education – Building Construction

Professional Experience

- Liz is a licensed professional engineer in Kentucky with more than 11 years of experience. Liz has a variety of project management experience covering municipal, water, wastewater, and structural design and construction administration projects. Her project management experience has ranged from small, short-term projects up to multiyear construction administration projects with construction budgets up to \$26 million. Liz's design capabilities include structural design, architectural related tasks, as well as sanitary sewer studies. Her structural project assignments have given her experience with steel framed buildings, reinforced concrete structures of all shapes and sizes, reinforced masonry structures, retaining structures in a variety of materials, and precast structures. Through the variety of projects she has worked on she has gained the ability to analyze buildings in a variety of situations and geographical locations, for compliance to building codes, including buildings in Hazardous occupancies.
- Project Manager for 30-acre Eastern State Hospital site in the Coldstream Research Campus.
 Strand's role in this project is multi-faceted, providing planning services, surveying, off-site street and infrastructure design, as well as site/civil design and construction related services.
 Project Cost: \$129,000,000
- Project Engineer for Newport Drainage Improvements including structural design of 35'x35' drainage control structure and 12'x14'x130'long cast in place culvert to convey storm water through earthen dam. Project Manager through construction of project, including the concrete structures, earthen dam, relocation of sanitary sewer lines, and telemetry system. Project Cost: \$1,700,000
- Project Manager for LFUCG Solid Waste Facility Expansion. Project included operations building expansion for additional office and administration space, parking lot improvements, and truck sheds to house collection vehicles.

- Kentucky Society of Professional Engineers (Vice President, Bluegrass Chapter)
- National Society of Professional Engineers



J. Bruce Monarch

Education

Associate Arts, Drafting and Design Technology - Eastern Kentucky University, Richmond, 1980

Field of Expertise

Municipal Public Works Design, Construction, Plan Preparation, Stormwater Management and Planning, Land Development Design, Roadway Design, Survey, and Rights-of-Way Acquisition

Positions Held

Strand Associates, Inc.®	1992 – Present	Technician/Surveyo	or/Project Manager

C.J. Fuller Engineers 1980 – 1992 Project Manager Municipal Engineers 1977 – 1980 Surveyor/Drafter

Professional Experience

- **Field** experience includes the use of both conventional and GPS (differential-DGPS or Real-Time Kinematic-RTK) surveying instruments in the performance of traverse surveys, topographic surveys and vertical control. Bruce also performs surveying related field and office work, including the reduction of field notes and data, and transfers data to computer drawings. Bruce is familiar with the use of data collectors as well.
- Surveyor/Drafter experience for municipal engineering includes survey and drafting activities for municipal, state and federal road projects such as intersection improvements and signalization, arterial road widening and new road design in Kentucky and West Virginia.
- Transportation Improvement Projects experience includes:
 - Pendleton County High School and US HWY 27 turn lane improvements
 - Reynolds Road Railroad Underpass and roadway widening project
 - Todds Road Roadway Widening
 - Newtown Springs Turn Lane Improvements Newtown Pike, KY 922
 - Legacy Trail
- KYTC Right-of-Way Acquisition Agent experience includes:
 - Louisville Road Relocation Nelson County, KY
 - Lovers Lane Improvements Christian County, KY
 - US 68-80 Aurora-Cadiz Road Trigg County, KY
 - Newtown Pike Extension Fayette County. KY
 - US 460 Improvements Scott County, KY

Continuing Education and Seminars

■ Level II KY Right-of-Way Agent

B.S. Civil Engineering – University of Louisville, Kentucky, 2005
M. Eng. Civil Engineering – University of Louisville, Kentucky, 2006

Registration

Professional Engineer in Kentucky and Ohio

Field of Expertise

Chris has a strong technical background in stormwater design methods, including appropriate methods and techniques required to model stormwater runoff on sites that incorporate green infrastructure.

Positions Held

Strand Associates, Inc.®

2006 - Present

Project Engineer

Project Experience

- Oakley Square Green Street Cincinnati DOTE Completed detailed drawings and specifications for one of the first green streets in Cincinnati at Oakley Square. The project is located in a commercial district in Cincinnati that has significant pedestrian access. The green street incorporated several green infrastructure facilities to reduce stormwater runoff, improve water quality and enhance the neighborhood quality of life. The green street project included the following elements:
 - Eight bioretention planters totaling 732 square feet.
 - One rain garden totaling 132 square feet.
 - 1,672 square feet of pervious concrete sidewalks.
 - 100 square feet of pervious concrete gutter strip.
 - Underdrain system and overflow structures to convey runoff in larger storm events.
- Terraced Reforestation of Interstate Right-of-Way, Sanitation District No. 1 Completed detailed drawings and specifications for a terraced reforestation demonstration project along the I-71/75 corridor in Covington, Kentucky. The design included 12 terraced berms totaling over 4,700 linear feet, composed of a bioretention soil mixture and planted with a variety of trees. The berms reduce stormwater runoff, provide significant flow attenuation, and improve water quality. This area contributes runoff to the largest combined sewer overflow in the Sanitation District's combined sewer area.
- Louisville MSD Green Project Evaluations, Louisville MSD Completed preliminary stormwater calculations for a variety of proposed green infrastructure projects, including green alleys, green parking lots and dry wells. The evaluations included costs and benefits and were utilized to identify priority projects as part of Louisville MSD's Long-Term Control Plan.
- Boone County Subdivision Regulation Review, Sanitation District No. 1 Completed a review of the Boone County subdivision regulations and made recommendations to promote low impact developments and green infrastructure alternatives.

Professional Affiliations

■ Kentucky Society of Professional Engineers



B.S. Political Science – University of Kentucky, Lexington, 1974 B.S. Landscape Architecture – University of Kentucky, Lexington, 1979

Registration

Registered Landscape Architect in Kentucky

Field of Expertise

Coordination of Planning and Design for Institutional, Residential, Commercial, Professional Office, and Mixed-Use Development specializing in Zoning and Land Planning

Positions Held

Strand Associates, Inc.®

1979 – Present

Landscape Architect, Project Manager

Professional Experience

Sara, a Registered Landscape Architect, coordinates land planning and governmental approval activities for institutional, residential, commercial, mixed-use and professional office/industrial projects. As a landscape architect, Sara also provides planning and design services for amenity and landscaping packages that complete and enhance our diverse resume of land development and municipal projects.

- Landscape Architect for the development of the University of Kentucky's Coldstream Research Campus. Provided professional landscape design and construction contract administration services for the 1,000-acre development, Sara has also been instrumental in site planning for many of the buildings within the overall campus and the Kentucky Technology Center.
- Provided Planning and Regulatory Assistance in evaluating infill/redevelopment policies for the Lexington-Fayette Urban County Government while providing assistance in selecting and drafting redevelopment plans for high-profile infill sites within the downtown urban core.
- Land Planner for the Master Plan and property acquisition services for Fayette County Public Schools' proposed Agri-Science Center to be located on a property to be acquired from the Federal correctional Medical Center on Leestown Road in Lexington. This project has involved dealing with requirements of local, state, and federal agencies.
- Land Planner for the Master Plan for the Lafayette High School Athletic Campus for Fayette County Public Schools in order to effectively site the new football/soccer/track and stadium facilities while accommodating Lafayette's existing athletic facilities as well as system wide maintenance services.
- Land Planner and Facilitator for the redevelopment of two tobacco warehouse blocks adjacent to the proposed Newtown Pike Extension project. The mixed use infill development, currently under construction, will provide housing near the University of Kentucky and retail services for downtown residents. The project also included an extensive public involvement in the development of alternatives requiring numerous presentations.

Professional Activities

- 2008 LFUCG Mayor's 2040 Visioning Team
- 2005 2006 LFUCG Subdivision Regulations Update Committee

David J. Walker, P.E., S.E.

Education

M.S. Civil/Environmental Engineering – University of Illinois-Champaign, 1984 B.S. Civil/Environmental Engineering – University of Wisconsin-Platteville, 1979

Registration

Professional Engineer in Wisconsin, Iowa, Kentucky, and Indiana Licensed Structural Engineer in Illinois

Field of Expertise

Bridge Design, Structural Design, Project Management, and Structure Inspection

Positions Held

Strand Associates, Inc.®

1989 – Present

Structural Engineer, Project Manager

Professional Experience

Consulting experience in the field of structural engineering with emphasis on bridge and hydraulic structure design and inspection, project management.

- Bridge Design (Departments of Transportation) experience includes hydraulic evaluation; site layout and field survey; structural, approach roadway and pavement design; governmental agency coordination; preparation of plans, specifications, and estimates (PS&E) for single and multispan concrete slab and prestressed girder structures and box culverts; preparation of structure survey reports (SSR); design study reports (DSR); and TRANS 207 reports. Bridges designed for railroad as well as local, county, and state highway systems, and urban and pedestrian bridges.
- Railroad Bridge Design experience includes structural design for two 160-foot long four span, and one 120-foot long two span, steel girder railroad bridges. Design and detailing according to AREMA and railroad specifications was required for concrete abutments and piers, steel girders, diaphragms, lateral bracing, and connections. Coordinated with the railroad to incorporate their standard design details and specifications into the projects.
- Retaining Structure Design experience includes stability analysis and structural design for reinforced concrete, precast concrete, and modular block retaining walls, anchored and cantilevered steel sheet pile walls, and post and panel retaining walls.
- Structural Inspection Transportation system inspection experience includes both highway and railroad bridges. Building inspection experience includes existing industrial facilities roof, wall, and floor slab systems. Inspection Reports include documentation of existing conditions and proposal of rehabilitation and replacement alternatives.
- Hydraulic Structure Design experience includes reinforced concrete and steel sheet pile floodwalls, guide walls, and mooring cells; navigational structures (locks and dams); flood control pump stations; and steel floodwall closure structures. Experience includes stability analysis and structural design for new hydraulic structures and rehabilitation of existing structural elements using Corps of Engineers Engineering Manuals (EM) and Design Criteria.

Professional Affiliations

■ American Society of Civil Engineers



B.S. in Civil Engineering (Emphasis on Structural Engineering) Rose-Hulman Institute of Technology – Terre Haute, Indiana, 2000

Minor in Environmental Engineering Rose-Hulman Institute of Technology – Terre Haute, Indiana, 2000

Registration

Professional Engineer in Kentucky and Mississippi

Field of Expertise

Structural Design of Bridges, Retaining Structures, Wastewater and Water Treatment Facilities, and Industrial Buildings, Underground Utility Structures, and Miscellaneous Nonbuilding Structures

Positions Held

Strand Associates, Inc.[®] 2007 – Present Project Manager 2000 – 2007 Structural Engineer

Professional Experience

Adam's consulting experience is in the field of structural engineering with emphasis on bridge and hydraulic structure design, wastewater and potable water treatment plants, retaining structures, and industrial facilities.

- Project Management experience includes the Legacy Trail Feasibility Study, Legacy Trail Phases 1 and 2 Design, Appomattox Road Culvert Replacement project, and the Salt Barn Site and Facility Design for the Lexington-Fayette Urban County Government. Adam has also managed several potable water reservoir projects for the Frankfort Plant Board and a large sanitary sewer line extension construction project for the Jessamine-South Elkhorn Water District.
- Bridge Design (Kentucky) experience includes field survey; preparation of plans, specifications, and estimates; final structural design for multispan reinforced concrete slab bridges, box culverts, three-sided bridges, pedestrian bridges, and retaining structures; development of aesthetic surface treatments for retaining walls and wingwalls.
- Bridge Design (Illinois) experience includes type, size and location plan preparation (TS&L); preparation of plans, specifications, special provisions, and estimates; final structural design of single and multispan reinforced concrete slab and prestressed girder structures and box culverts. Bridges designed for county, state trunk highway systems, and tollway systems, which include new designs, replacements, and rehabilitation and widening.
- Bridge Design (Ohio) experience includes preparation of plans, specifications, and estimates and final structural design for three-sided arch bridges, including spread footings, pedestal walls, and cast-in-place concrete wingwalls and headwalls.

- Kentucky Society of Professional Engineers
- American Institute of Steel Construction



B.S. Civil Engineering - Purdue University, West Lafayette, Indiana, 1999

Registration

Professional Engineer in Kentucky - No. 23739

Field of Expertise

Transportation Design and Modeling and Stormwater Design and Modeling

Positions Held

Strand Associates, Inc.®	2008 – Present	Municipal Engineer
ENTRAN, PLC	2001 - 2008	Transportation Engineer
HMB, Inc.	1999 - 2001	Transportation Engineer

Professional Experience

- **Transportation Design** on a variety of roads from local to interstate in Kentucky. These roads included widening, realignments, and new construction.
 - KYTC Item 11-1078 US 421 over Stinnett Creek Seth is the project manager for this structure replacement over Stinnett Creek on US 421 in Leslie County, KY in conjunction with approximately 1,500 feet of roadway reconstruction to improve roadway and intersection sight distance near the intersection with KY 406.
 - KYTC Item 11-1080 KY 578 over Raccoon Creek Project Manager for this structure
 replacement over Raccoon Creek on KY 578 in Laurel County, Kentucky. Along with the having a
 bridge with low structural rating, this stretch of road floods regularly and has substandard geometry.
 The roadway is being realigned to the south with a raised roadway profile that allows the road to
 remain open more often
 - Trey Street Roadway and Sanitary Sewer Project Jeffersonville, IN Project Manager for the project which included over 7,000 feet of a roadway widening and realignment. This roadway is on the grounds of the former Indiana Army Ammunition Plant, which is being developed into a modern business park. Additionally, the project contained over 6,000 feet of proposed storm sewer, 3,600 feet of proposed sanitary sewer, and about 3,000 linear feet of new and relocated water line.
 - KYTC Item No. 07-144.01 US 68 Harrodsburg Road at New Circle Road Served as project
 engineer for this widening and improvement project. This Fayette County project involved
 evaluations of several different alternatives for this heavily traveled roadway including a diverging
 diamond interchange. He designed and modeled all the roadway alternatives. After an alternative
 was chosen, he was responsible for most all aspects of the design and production up to joint
 inspection.
- **Drainage Design** of storm sewers, culverts, detention basins, and drainage systems
 - Louisville-Southern Indiana Ohio River Bridges Project, Kennedy Interchange
 Reconstruction, Louisville, KY Member of the drainage design team. The Kennedy Interchange
 project is one of the first in the state to incorporate inroads storm and sanitary into the drainage
 design.

Professional Affiliations and Recognition

■ American Society of Highway Engineers – Derby City Chapter



Michael A. Woolum, P.E., PLS

Education

B.S. Civil Engineering – University of Kentucky, Lexington, 1983

Registration

Professional Engineer in Kentucky Professional Land Surveyor in Kentucky

Field of Expertise

Project Management, Roadway and Land Development Design, Surveying, Facilities Master Planning, Wastewater Collection and Conveyance Systems, Stormwater Modeling and Design, and Pumping Station Design.

Positions Held

Strand Associates, Inc.®

1984 – Present

Vice President

Professional Experience

Mike is a licensed professional engineer and Land Surveyor who serves as Vice President while being actively engaged in all aspects of the firm's operations. Mike is responsible for overall project control and management of technical services. Mike remains actively involved on projects and offers significant experience in project management and general civil and site engineering design relative to both public works and private projects.

- Roadway Planning and Design experience includes a variety of project types ranging from rural twolane sections to urban collector and arterial street systems. Planning experience includes alternatives evaluations for urban street reconstruction and widening to accommodate vehicle, pedestrian and bicycle mobility in conjunction with new development and urban infill/redevelopment initiatives. For Lexington's Streetscape Master Plan, innovative techniques such as nonpeak parking lanes and floating bike lanes provided a unique alternative to enhance bicycle and pedestrian mobility while maximizing utilization of existing roadway templates.
- Land Development experience includes a number of notable projects involving a blend of technical expertise with sensitivity to adjacent surroundings and public concerns. Mike has been actively engaged on almost every high profile Strand land development project where critical development issues have required a careful planning and design approach in addressing the concerns of the public and local decision-makers. His involvement on major in-fill development projects such as The Lex, Wellington, the Coldstream Research Park, and numerous projects within LFUCG's Expansion Area 2C are excellent examples of projects that required a sensitive design approach in addressing existing infrastructure and environmental issues.

- Kentucky Association of Professional Surveyors
- Kentucky Society of Professional Engineers
- National Society of Professional Engineers
- American Society of Civil Engineers
- Society of American Military Engineers
- Association of State Dam Safety Officials



B.S. in Civil Engineering – University of Kentucky, 2007

Registration

Professional Engineer in Kentucky

Field of Expertise

Transportation Engineering including planning and design of urban and rural highways, easement plat preparation and negotiations, urban streetscape design and Implementation, traffic signalization, pedestrian and bicycle facilities, roundabouts, utility relocation services, green infrastructure, resident project representative, construction contract administration, and experience with AutoCAD, Civil 3D, Microstation, Inroads, Geopak, and AutoTurn software.

Positions Held

Strand Associates, Inc.®	2010 – Present	Project Manager/Project Engineer
	2008 - 2009	Project Engineer
American Structurepoint, Inc.	2007 - 2008	Project Engineer
Bryant Engineering, Inc.	2004 - 2006	Co-op/Intern

Professional Experience

- Project Management experience on planning, design, and construction contract administration projects. Chase has a variety of project management experience on transportation and municipal projects. Project management responsibilities include being a team leader for a specific task to providing overall project management. His project management experiences range from quick turnaround planning studies working with several staff to \$26 million in construction with large project teams and multiple sub-consultants.
- Transportation planning experience on urban and rural highways, urban streetscapes, city streets, and pedestrian paths. Planning experience includes review of existing conditions and improvements to roadway geometrics, inclusion of pedestrian and bicycle accommodations, evaluation of alternative improvements, review of maintenance of traffic considerations, data collection for traffic analysis and trip generation, identification of utility and right-of-way impacts, public involvement, preliminary quantity calculations, and preparation of opinions of probable construction costs.
- Transportation design experience on urban and rural highways, urban streetscapes, city streets, and pedestrian paths. Design experience includes roadway realignment, drainage evaluations and improvements, detailed grading analysis for urban streetscapes and ADA compliance, erosion control, sidewalk design adjacent to state highways, signing and pavement markings, traffic signalization upgrades and replacements, maintenance of traffic, roundabouts, railroads, utility coordination, special provisions, quantity calculations, FHWA grant administration, and preparation of opinion of probable construction costs.
- Municipal experience includes multiple development projects in Lexington that were designed and constructed to LFUCG standards. Projects include CentrePointe, Southland Christian Church Richmond Road Campus, HealthFirst Community Health Center, and Eastern State Hospital.
- **Field** experience includes assistance with urban streetscape projects, including field meetings and working with the project team and the contractor to resolve conflicts in the field. Field experience also includes construction observation for a roadway project that involved asphalt sampling, concrete testing, storm sewer installation, and material records.

Publications and Presentations

"Designing for Tomorrow's Urban Environments" Southeastern Association of State Highway and Transportation Officials Annual Conference, Louisville, Kentucky, 2011

Professional Affiliations and Recognition

Kentucky Society of Professional Engineers, Bluegrass Chapter, Banquet Chapter Director



Strand Associates, Inc.

MBE WBE Participation Forms
 Affirmative Action Plan
 Equal Opportunity Agreement
 Work Force Analysis Form
Certificate of Liability Insurance



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference #_13-2014 Request for Qualifications for Professional Engineering Services

The MWDBE subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately.

MWDBE Company, Name, Address,	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
Phone, Email			
1. Molly Foree Davis, President Third Rock Consultants, Inc 2526 Regency Road, Suite 180, Lexington, KY 40503 (859) 977-2000 mforee@thirdrockconsultants.com	Environmental Analysis	* see note below	* see note below %
2. Ed Holmes, AICP EHI Consultants 333 West Vine St, Suite 300 Lexington, KY 40507 (859) 425-4881 holmes@ehiconsultants.org	Public Involvement, CAD	* see note below	* see note below %
3. Jim Prevost, P.E. Barr & Prevost 2800 Corporate Exchange Dr., Suite 240 Columbus, OH 43231 (614) 714-0270 jprevost@barreng.com	Geotechnical	* see note below	* see note below %
4. Mike Harris, P.E., Vice President Jacobi, Toombs and Lanz, Inc. 1400 S 1st St., Louisville, KY 40208 (502) 636-1835 m.harris@jtleng.com	Surveying	* see note below	* see note below %

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Strand Associates, Inc.	Mattskilly
Company	Company Representative
3/26/2014	Secretary
Date	Title

^{*} Note: Strand is committed to meeting the 10% DBE participation goal with required listed subconsultants as noted and others as may by required based on actual project assignments.

Goodrich, Angela

From: Fister, Gerry <gfister@thirdrockconsultants.com>

Sent: Thursday, March 20, 2014 11:23 AM

To: Woolum, Mike
Cc: Goodrich, Angela

Subject: LFUCG RFP #13-2014 Team Member

Mr. Woolum,

Thank you very much for inviting Third Rock Consultants, LLC to participate as a team member for the subject LFUCG procurement. We accept the invitation and appreciate the opportunity to provide environmental consulting services as needed should your team be successful.

Sincerely

Gerry Fister, PG | Third Rock Consultants, LLC | Mobile 859-619-1237 2526 Regency Rd | Ste 180 | Lexington, KY 40503 | 859.977.2000



Mr. Mike Woolum, PE Strand Associates 1525 Bull Lea Road Lexington, KY 40511

March 24, 2014

Dear Mr. Woolum,

I want to officially state that EHI Consultants, is willing to be a part of your team for the LFUCG RFQ for Professional Engineering Services, as a team member we are pleased to provide the necessary qualifications and supporting documentation that is needed for your submittal.

If you should have any questions, please feel free to contact me.

Sincerely,

Edward J. Holmes, AICP

President

Goodrich, Angela

From: Maggie Henry <mhenry@barreng.com>
Sent: Monday, March 24, 2014 2:17 PM

To: Davis, Mike

Cc: Goodrich, Angela; Jim Prevost; Andrew Barr; Enoch Chipukaizer

Subject: RFP #13-2014 Request for Qualifications for Professional Engineering Services for the

Lexington-Fayette Urban County Government - Commitment

Dear Mr. Davis:

We appreciate the opportunity to be on your team to provide geotechnical services for RFP #13-2014 Request for Qualifications for Professional Engineering Services for the Lexington-Fayette Urban County Government.

I have also copied the firm President and Principals on this email as verification of our commitment to your team.

We have provided our workforce analysis form and firm information. Should you require any additional information, please do not hesitate to contact me.

Thank you,

Maggie Henry

Marketing Manager

Barr & Prevost Engineering | Testing | Surveying

2800 Corporate Exchange Drive Suite 240 Columbus, Ohio 43231

Ph: (614) 714-0270 Fax: (614) 714-0323

www.barreng.com



Please consider the environment before printing this message.

Goodrich, Angela

From: Mike Harris <m.harris@jtleng.com> **Sent:** Tuesday, March 25, 2014 1:11 PM

To: Davis, Mike

Cc: Williams, Roddy; Goodrich, Angela; Teri Pifine **Subject:** LFUCG Municipal/Transportation SOQs

Mr. Davis,

This email shall serve as official notification that Jacobi, Toombs & Lanz is on the Strand team for the above referenced LFUCG project.

Thank you for the opportunity.

Michael C. Harris, P.E. Vice President

Jacobi, Toombs and Lanz, Inc.

1400 South 1st Street Louisville, KY 40208 (502) 583-5994 office (502) 643-1341 cell (502) 583-7321 fax m.harris@jtleng.com



1525 Bull Lea Road, Suite 100 Lexington, KY 40511 (P) 859-225-8500 (F) 859-225-8501

Equal Employment Opportunity Policy Statement

Strand Associates, Inc.[®] is committed to a policy of equal opportunity for all employees. It is our policy to seek and employ the best qualified personnel in all positions, to provide equal opportunity for advancement to all employees, including upgrading, promotion and training, and to administer these activities in a manner which will not discriminate against or give preference to any person because of race, color, religion, age, sex, national origin, handicap, marital status, or any other discriminatory basis prohibited by state or federal law.

Strand is further committed to providing a work environment in which employees are treated with courtesy, respect, and dignity. As part of this commitment, we will not tolerate any form of harassment, verbal or physical, with regard to an individual's race, sex, national origin, or any other protected characteristics Therefore, all employees are encouraged to bring forth any concerns or complaints in this regard to the attention of management by contacting Human Resources, Shawn Cannon, or Ted Richards.

All complaints of sexual harassment, or harassment of any kind, will be investigated promptly and, where necessary, immediate and appropriate action will be taken to stop and remedy any such conduct. Any employee found in violation of this policy will be subject to disciplinary action which could include discharge.

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

Signature Strand Associates, Inc.

Name of Business

Name of Organization: Strand Associates, Inc.

Date: 3 / 26 / 14

Categories	Total	Wh	ite	Lat	ino	Bla	ıck	Oth	ner	То	tal
		M	F	М	F	M	F	M	F	M	F
Administrators	12	10	1						1	10	2
Professionals	217	175	34	1		1		6		183	34
Superintendents											
Supervisors	9	8	1							8	1
Foremen											
Technicians	41	35	4	1		1				37	4
Protective Service											
Para-Professionals											
Office/Clerical	45	10	30		1		2	1	1	11	34
Skilled Craft											
Service/Maintenance	4	1	1			2				3	1
Total:	328	239	71	2	1	4	2	7	2	252	76

Prepared by:	Audra Wells,	H/R Coordinator		
			Name & Title	

OP ID: SS

1,000,000

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

01/06/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

certificat	te holder in lieu of such endo	orsement(s).							
PRODUCER			CONTACT Sue Simoneau						
	ASSOCIATES, LLC I POINT RD, STE 201		PHONE (A/C, No, Ext): 608-831-9700	31-4777					
PO BOX 45	6470 ´		E-MAIL ADDRESS: sue.simoneau@ansay.com						
Richard A.	WI 53744-5470 Hagen		PRODUCER CUSTOMER ID #: STRAA01						
			INSURER(S) AFFORDING COVERAGE	NAIC #					
INSURED	Shawn Cannon	INSURER A : CNA Insurance Companies	20443						
		INSURER B:							
	910 W Wingra Drive Madison. WI 53715		INSURER C:						
	Wadison, Wi 557 15		INSURER D :						
			INSURER E :						
			INSURER F:						
COVERAG	SES CE	RTIFICATE NUMBER:	REVISION NU	MBER:					
INDICATE	D. NOTWITHSTANDING ANY F	REQUIREMENT, TERM OR CONDITION	VE BEEN ISSUED TO THE INSURED NAMED ABO OF ANY CONTRACT OR OTHER DOCUMENT WI	TH RESPECT TO	WHICH THIS				

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR INSR POLICY FFF POLICY FXP TYPE OF INSURANCE LIMITS INSR WVD POLICY NUMBER **GENERAL LIABILITY** 1,000,000 EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) Α 5099170076 01/01/2014 | 01/01/2015 100,000 X COMMERCIAL GENERAL LIABILITY \$ CLAIMS-MADE | X | OCCUR 5,000 MED EXP (Any one person) \$ XCU cov. inc. 1,000,000 Χ PERSONAL & ADV INJURY \$ Blkt.Contractual 2,000,000 X GENERAL AGGREGATE \$ 2,000,000 GEN'L AGGREGATE LIMIT APPLIES PER: PRODUCTS - COMP/OP AGG \$ POLICY X PRO-\$ AUTOMOBILE LIABILITY COMBINED SINGLE LIMIT \$ 1,000,000 (Ea accident) 01/01/2014 01/01/2015 Х 5099170062 ANY AUTO BODILY INJURY (Per person) \$ Χ ALL OWNED AUTOS BODILY INJURY (Per accident) \$ SCHEDULED AUTOS PROPERTY DAMAGE (PER ACCIDENT) \$ Х HIRED AUTOS \$ X NON-OWNED AUTOS \$ **UMBRELLA LIAB** 2,000,000 Χ Χ \$ **OCCUR** EACH OCCURRENCE **EXCESS LIAB** 2,000,000 CLAIMS-MADE AGGREGATE \$ 01/01/2014 01/01/2015 5099170059 Α **DEDUCTIBLE** \$ Х 10.000 RETENTION \$ \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

N/A

5099170045

AFH11-397-40-97

FULL PRIOR ACTS

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE
	Ruch / a Hogen

X WC STATU-TORY LIMITS

Aggregate

E.L. EACH ACCIDENT

E.L. DISEASE - EA EMPLOYEE \$

E.L. DISEASE - POLICY LIMIT

01/01/2014 | 01/01/2015

07/11/2013 | 07/11/2014 | Occur.

WORKERS COMPENSATION

AND EMPLOYERS' LIABILITY

(Mandatory in NH)

Professional Liab.

& Pollution Liab.

OFFICER/MEMBER EXCLUDED?

ANY PROPRIETOR/PARTNER/EXECUTIVE

If yes, describe under DESCRIPTION OF OPERATIONS below





Third Rock Consultants, LLC (Third Rock), with offices in Lexington and Louisville, Kentucky; and Nashville and Knoxville, Tennessee was established in the fall of 2000 in response to the increased need for innovative, yet professional environmental consulting services. Third Rock is recognized as a leading environmental firm in our region, achieving this distinction through a combination of superior technical skills and commitment to meeting our clients' needs. Our services have long included environmental engineering design, biological and ecological analyses, environmental permitting and mitigation, and NEPA documentation, but we are proud to announce that we now offer construction management and landscape architecture services as well. Third Rock serves a wide range of private and public clients, including industry and government agencies, who are faced with challenges that demand environmental experience and technical expertise.

Third Rock is a certified woman-owned business enterprise. Molly Foree is the sole owner and president of Third Rock. She is a graduate of the University of Kentucky College of Law. Prior to entering the consulting business, Ms. Foree specialized in environmental law at Greenebaum, Doll & McDonald, PLLC, a prominent Lexington law firm. Her experience as an environmental attorney is advantageous for our clients who must comply with complicated environmental laws and regulations. Under Ms. Foree's leadership, Third Rock has achieved a reputation for providing quality environmental services in today's challenging regulatory climate.

We are the best at what we do and are proud to be distinguished from other consultants who identify themselves as environmental experts for several reasons:

Unparalleled Environmental Expertise and Years Experience

Third Rock's clients benefit from the extensive knowledge and experience of our professional staff. We take pride in our multidisciplinary team of real environmental professionals, including several recognized experts. Several of our senior staff members are distinguished by having 30 to 40 years of environmental experience. These senior staff members actually do the work.

Outstanding Resources

Third Rock specializes exclusively in environmental consulting, and we have the capability, capacity, and proven track record to successfully complete the most complex projects. Third Rock has a history of successful projects and satisfied clients in numerous states. With a full time staff of just 32, we can complete multi-million dollar projects on schedule and produce high quality deliverables. We are able to do this because of a progressive and straightforward organization structure and a hands-on-owner who personally schedules personnel time and manages project deadlines. We can do this because our professional staff is supported by an experienced team of environmental technicians, technical writers, GIS analysts; state-of-the-art equipment, hardware, and software; a fully trained and equipped dive team; and a state-of-the-art inhouse aquatic biological laboratory. We can do this because we set the bar high and have set ourselves apart as a leading environmental consulting firm in this region.

Corporate Priorities

Third Rock actively perpetuates a corporate culture of integrity, innovation, continued learning, and efficiency. Ethical business practices and consulting approaches are of utmost importance at Third Rock. Innovation also plays a critical role in our firm, and we specialize in applying innovative, cost-effective approaches to projects. We are proud that we think outside the box. This is what makes us different. This is what makes us better.



Contact Information:

Molly Foree Davis, President mforee@thirdrockconsultants.com www.thirdrockconsultants.com

Main Office:

2526 Regency Road, Suite 180, Lexington, KY 40503

P: 859-977-2000 F: 859-977-2001

Nashville Office:

511 Union Street, Suite 1850, Nashville, TN 37219

P: 615-313-3996

Knoxville Office:

244 North Peters Road, Suite 216, Knoxville, TN 37923

P: 865-694-6144

Louisville Office:

101 North 7th Street, Louisville, KY 40202

P: 502-561-3448

Name of Organization: Third Rock Consultants

Date: 3,20,14

Categories	Total	Wh	ite	Lat	ino	Bla	ck	Oth	ner	То	tai
		М	F	M	F	М	F	М	F	М	F
Administrators	1		1								
Professionals	6	3	3								
Superintendents			,								
Supervisors	1		1								
Foremen											
Technicians	4	1	3								
Protective Service											
Para-Professionals											
Office/Clerical	4	4									
Skilled Craft	9	3	6								
Service/Maintenance											
Total:	25										

Prepared by: Becky Weatherford Human Resources
Name & Title





<u>Cultural Resource Analysts, Inc.</u> <u>General Qualifications</u>

Since 1983 Cultural Resource Analysts, Inc. (CRA) has provided assistance on National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA) compliance requirements to various federal, state and local agencies, including LFUCG. NHPA assistance has ranged from survey and evaluation strategies and requirements (Section 110), to Section 106 consultation requirements, to the development, negotiation, and implementation of mitigation plans. CRA completes research and survey on thousands of historic resources each year and we are skillful in recommending determinations of National Register eligibility, complying with the Secretary of the Interior's Standards for the Treatment of Historic Structures, and in facilitating regulatory compliance. Our NEPA assistance includes collecting and organizing documentation pertaining to Section 106 coordination in order to complete and append the appropriate sections of NEPA documents. CRA is familiar with the NEPA review process and levels of compliance and is proficient in integrating the NEPA process and the Section 106 process.

The company headquarters are located in Lexington, Kentucky, and we have satellite offices in Colorado, Illinois, Indiana, Ohio, Louisiana, Tennessee, Utah, Virginia, West Virginia, and Wyoming. We have completed over 6,000 individual cultural resource management projects for a wide variety of clients throughout the United States. The company has 77 full-time, permanent employees, 30 of whom are located in Lexington, and we maintain a contact list of over 100 highly-qualified field technicians that have worked for CRA over the past five years. Current full-time archaeology staff at CRA includes 22 Principal Investigators, 25 Field Supervisors, and 12 Field Archaeologists and Laboratory Specialists. Our archaeology team consists of individuals specializing in GIS and other geospatial mapping and analysis, remote sensing and geophysical survey, bioarchaeology, geoarchaeology, paleoethnobotany, prehistoric ceramic technology and replication, prehistoric lithic technology and replication, and zooarchaeology. All archaeological principal investigators or field supervisors at CRA holding master or doctorate degrees are Registered Professional Archaeologists (RPAs).

CRA's eight architectural historians/historians (including four principal investigators) offer the full range of technical expertise for the identification, evaluation, documentation, and protection of historic buildings, structures, cemeteries, and landscapes. All of CRA's key personnel meet or exceed the Department of the Interior's Professional Qualification Standards for archaeology, architectural history, or history (36 CFR 61). Other support staff consist of 5 team members in our Information Technology/CADD/GIS departments, 3 team members in our Publications department (report editing, layout, and production), and 10 team members in our Executive Management and Administration departments.

CRA has the staffing, experience, equipment, and facilities to efficiently perform multiple task orders on a wide variety of sites located worldwide. As a Small Business firm providing the full range of services, CRA does not need the extensive use of subconsultants to complete the majority of task orders and is capable of providing cultural resource support for all aspects of any contract. We invite you to visit CRA's website for additional information at www.crai-ky.com.

Name of Organization: Cultural Resource Analysts, Inc.

Date: 3 / 24 / 14

Categories	Total	Wh	ite	Lat	ino	Bla	ıck	Oth	ner	То	tal
		M	F	М	F	M	F	M	F	M	F
Administrators	10	9	1							9	1
Professionals	43	31	12							31	12
Superintendents	0									0	0
Supervisors	8	2	5				1			2	6
Foremen	0									0	0
Technicians	12	8	3						1	8	4
Protective Service	0									0	0
Para-Professionals	0									0	0
Office/Clerical	4	1	3							1	3
Skilled Craft	0									0	0
Service/Maintenance	0										
Total:	77	51	24				1		1	51	26

Prepared by: Bridgette A. Robinson- Director Of Human Relations

Name & Title



EHI Consultants Work Force Analysis Form Firm Profile

Company Profile

EHI Consultants

EHI Consultants was founded in 1995 in Lexington, Kentucky to provide the highest quality of planning and engineering design services. Our diversity provides the capability to program, plan, design and implement a range of housing, planning, and engineering projects. We are committed to the improvement of the natural, social, physical and cultural environments. EHI believes that engineering, design and planning should complement each other and are not mutually exclusive.

EHI provides expertise in civil engineering and planning. Our engineering and planning services are based on our staff of highly qualified, licensed, civil engineers and planners. Their experience and qualifications give us the capabilities to provide roadway design, site design, erosion control, and grading and drainage as part of our engineering services. EHI also provides urban design, neighborhood planning, bicycle and pedestrian facilities, comprehensive plans, as well as public meeting facilitation as planning services.

EHI is a designated SBA Small and Disadvantaged Business and a member of the Kentucky Minority Business Council. We are certified to do business in the Commonwealth of Kentucky and with the State of Kentucky Transportation Cabinet as a disadvantaged minority business enterprise, being pre-qualified to perform services in the areas of Rural Roadway Design, Urban Roadway Design, Highway Planning Services, Bikeway Planning, EIS Writing and Coordination, and Socioeconomic Analysis which entails survey design and analysis.

Listed below are our core services relevant to this project that we provide:

Planning

Urban Design
Neighborhood Planning
Land Use & Zoning
Transportation Planning
Bicycle and Pedestrian
Socioeconomic
Historic Preservation
Comprehensive Planning

Engineering

Roadway
Roadway Design
Grading & Drainage
Civil and Site

Housing

Housing Market Study
Affordable Housing Assessment
Housing Tax Credits
Housing Infill
Housing Finance Study

Environmental

Permitting
Assessment
Reclamation
Remedial Measures
Env. Impact

Key Personnel

Edward Holmes, AICP - President Ryan Holmes - Planner Mike Peak, PE - Engineer Rachel Phillips, AICP - Planner Daryll Renfrow, PE - Engineer

Name of Organization: EHI Consultants , Lexington, KY

Date: 3 / 26 / 14

Categories	Total	Wh	ite	Lat	ino	Bla	ck	Oth	ner	To	tal
		М	F	М	F	M	F	М	F	М	F
Administrators											
Professionals	3					3					
Superintendents											
Supervisors											
Foremen											
Technicians											
Protective Service											
Para-Professionals											
Office/Clerical											
Skilled Craft											
Service/Maintenance											
Total:	3					3					

Prepared by: Ed Holmes, President		
•	Name & Title	



Who We Are

Barr & Prevost (BP), a certified Kentucky DBE and full service professional engineering firm, was established in 1992 to provide technical and professional services for the integral components of various types of construction projects through traditional work ethics and commitment to excellence. This commitment is demonstrated through our continued growth and today, BP is comprised of approximately 125+ employees, with office locations in Louisville, Kentucky, Dayton, Columbus, Cincinnati, and Cleveland, Ohio; St. Louis, Missouri; Indianapolis and Fort Wayne, Indiana; and Lansing, Michigan. BP's staff includes professional geotechnical engineers, geotechnical / environmental drilling technicians, geotechnical field and laboratory testing technicians and surveyors; all of whom are specialists in their fields and certified and/or accredited by the following organizations:

- U. S. Army Corps of Engineers (USACE)
- State Board of Registration for Professional Engineers and Surveyors
- American Institute of Professional Geologists (AIPG)
- American Concrete Institute (ACI)
- American Welding Society (AWS)
- Ohio Department of Transportation (ODOT)
- Indiana Department of Transportation (INDOT)
- Kentucky Transportation Cabinet (KYTC)
- Ohio Aggregates Association (OAA)
- National Institute for Certification in Engineering Technologies (NICET)
- Occupational Safety & Health Administration (OSHA)
- American Association of State Highway & Transportation (AASHTO) (AMRL & CCRL)
- States of Ohio & Michigan Department of Health

The majority of our work over the past 22 years has been primarily geotechnical drilling/testing/engineering, transportation design, and construction administration/inspection. Barr & Prevost is a recognized leader in geotechnical services. With an experienced team of geotechnical engineers, geologists, drillers, and field and lab testing technicians and supervisors, and with our own USACE Validated and AASHTO-certified geotechnical testing laboratories, we are ideally positioned as a single-source for comprehensive geotechnical engineering services for civil infrastructure and architectural projects.

In 2013, Barr & Prevost completed an asset purchase, which also included transference of personnel. As a result, Barr & Prevost has significantly enhanced our capabilities and experience in the drilling and testing areas, particularly on large infrastructure projects. The added personnel and equipment has allowed us to become a premier regional deep drilling firm to aid in the design of large infrastructure projects. The development of the specialized talents emerged in three areas: personnel, equipment, and project experience – where Barr & Prevost stands apart from other firms.

What We Do

Barr & Prevost is a collaborative effort comprised of highly experienced engineering professionals with extensive demonstrated experience relative to the construction of both horizontal and vertical projects. We specialize in geotechnical services, structural design/inspection, transportation engineering, surveying/SUE services and construction inspection / testing services. Our team is led by accomplished Project Managers with a cumulative average of 20 years of experience in a diverse array of multi-disciplined civil works projects. Collectively our Project Team has exceptional knowledge of applicable federal, state and local specifications and regulations. Our team offers the combined project experience, breadth of technical expertise and depth of capabilities to provide responsive and reliable services.

With our <u>2013 expansion</u>, our geotechnical materials testing division includes 9 registered geotechnical engineers, 1 registered geologist, 20 geotechnical drilling technicians and 29 materials testing technicians. Additionally, we operate two USACE Validated Laboratories and a total of five AASHTO accredited laboratories. We offer geotechnical drilling up to 400' on land and in water and specialized services such as packer testing.











Name of Organization: Barr & Prevost

Date: 3 / 26 / 14

Categories	Total	Wh	ite	Lati	ino	Bla	ck	Oth	ner	To	tal
		M	F	М	F	M	F	M	F	M	F
Administrators	10	3	4			1	1	1		5	5
Professionals	24	14	6					3	1	17	7
Superintendents											
Supervisors	7	6	1							6	1
Foremen											
Technicians	75	63	5	1	1	1		4		69	6
Protective Service											
Para-Professionals											
Office/Clerical	9		9								9
Skilled Craft											
Service/Maintenance											
Total:	125	86	25	1	1	2	1	8	1	97	28

Prepared by: Maggie Henry, Marketing Manager

Name & Title



Jacobi,Toombs&Lanz

Jacobi, Toombs & Lanz, Inc. Work Force Analysis Form Firm Profile



Jacobi, Toombs & Lanz, Inc.

Consulting Engineers & Land Surveyors

Firm Profile

Jorge I. Lanz, P.E. President

Michael C. Harris, P.E. Vice President

Gregory E. Houck, P.E. L.S. Associate

B. Todd Booker Associate

Joshua N. Hillman, P.E., LEED Green Associate Associate

Stephen L. Marshall, P.E., P.L.S Associate

Experience

Jacobi, Toombs and Lanz, Inc., Consulting Engineers and Land Surveyors is a Civil Engineering firm with over 50 years of experience. We have a proven record in the planning, design, and construction supervision of diversified projects which include the following disciplines:

Airports Water & Wastewater Stormwater
Transportation Roads &Streets Bridge
Solid Waste Environmental Utility

Land SurveyingGISConstruction ManagementInspectionParks & RecreationCommercial, Industrial &

titutional Sites

The firm was established in 1955 as a sole proprietorship, and today, as a private corporation, has offices in Indiana and Kentucky with a staff of over 40 employees. Our clients include Federal, State and local agencies, developers, utility companies, and private companies. Our firm became a certified Minority Business Enterprise (MBE) in 1999. We are registered as a MBE with the City of Indianapolis and DBE with the Indiana Department of Transportation and Indiana Department of Administration. We are also a certified DBE with the Kentucky Transportation Cabinet and MBE with the Tri-State Minority Supplier Development Council, Louisville Metro Government, and Louisville Metropolitan Sewer District.

People

Jacobi, Toombs and Lanz, Inc. (JTL) principals and associates work one-on-one with clients. We have experienced engineers, land surveyors and technical personnel ready to make your project a success.

Approach

Every project awarded to our firm receives top priority, and is developed with a systematic, technical approach to achieve design excellence and client satisfaction. JTL has a proven track record of planning, designing and overseeing the construction, expansion and rehabilitation of much of Kentucky's and Indiana's urban and rural transportation and infrastructure network.

Name of Organization: Jacobi, Toombs & Lanz, Inc.

Date: 3 / 26 / 14

Categories	Total	Wh	ite	Lat	ino	Bla	ıck	Oth	ner	То	tal
		M	F	М	F	M	F	M	F	M	F
Administrators	2		2								
Professionals	26	21	1	2		2					
Superintendents	0										
Supervisors	0										
Foremen	0										
Technicians	13	12				1					
Protective Service	0										
Para-Professionals											
Office/Clerical	1		1								
Skilled Craft	0										
Service/Maintenance	0										
Total:	42										

Prepared by:_	Teri C. Pifine	Projects Administrator	
		Name & Title	