

proposal

Professional Engineering Services
for

**RFP 13-2014
CONTRACTS 1, 3, 4, 5, 6, & 8**

Lexington Fayette County Urban Government



March 26, 2014



in association with



TABLE OF CONTENTS

Section 1	Letter of Transmittal
Section 2	Firm Qualifications
Section 3	Project Team
	Contract 1 - Organizational Chart
	Contract 3 - Organizational Chart
	Contract 4 - Organizational Chart
	Contract 5 - Organizational Chart
	Contract 6 - Organizational Chart
	Contract 8 - Organizational Chart
	Resumes
Section 4	List of Clients
Section 5	List of Similar Projects
	Contract 1
	Contract 3
	Contract 4
	Contract 5
	Contract 6
	Contract 8
Section 6	Local Office
Section 7	Disadvantaged Business Enterprise (DBE)
Section 8	Hourly Rates and Affidavit

Section 1 | LETTER OF TRANSMITTAL



3399 Tates Creek Rd, Ste 130
Lexington, Kentucky, 40502
Phone: (859) 559-0516
Fax: (859) 559-0523

March 26, 2014

Division of Central Purchasing
Room 338, Government Center
200 East Main Street
Lexington, Kentucky 40507

RE: RFP # 13-2014 Contracts 1,3,4,5,6 and 8
RFQ for Professional Engineering Services

Dear Purchasing Official:

Vision Engineering in conjunction with URS Corporation are pleased to present to you this proposal to provide Professional Engineering Services for the above referenced project. Our team is dedicated to providing quality service and has a proven efficient and cost effective approach. Vision Engineering is a DBE firm located only in Lexington, Kentucky. Given our team past experience, we feel that we are highly qualified to provide the services requested by the Lexington Fayette Urban County Government for the following reasons:

1. **Local and national experience.** Our team comprehensive experience helps LFUCG with both standard and highly complex technical challenges. Our Team has the know-how to help LFUCG overcome virtually any engineering challenge.
2. **Proven ability to meet strict deadlines.** Our Project Team routinely works under strict deadlines. Our Team understands what is at stake for LFUCG and we will work hard to prove ourselves as the most responsive, effective team available.
3. **Unmatched resources to meet the most demanding challenges.** Drawing from our national practice, Our Team offers LFUCG dozens of technical specialists with experience across the entire scope of work, while maintaining a local "small business" work relationship.

We very much appreciate this opportunity to submit our qualifications and look forward to assisting you on this project. Please contact us if you have any questions.

Sincerely,
Vision Engineering

Jihad A. Hallany, P.E.
Principal

Section 2

FIRM QUALIFICATIONS

Our Team consists of Vision Engineering and URS Corporation.

VISION ENGINEERING:

Vision Engineering is DBE firm located in Lexington since 2003 specializing in Civil Engineering. Since its inception, Vision Engineering has been involved in a large variety of innovative projects and many disciplines of Civil Engineering.

URS CORPORATION:

URS Corporation is a 107-year-old, publicly owned corporation providing professional planning, design, environmental, construction, and operations services around the globe. URS Corporation is also a recognized leader in the field of design, particularly in the field of infrastructure design in the United States and beyond. *Engineering News-Record* ranks URS the second largest firm in overall design, first largest in green design, and fourth largest in sewer/wastewater.

Our team had been selected jointly and separately for numerous engineering projects involving transportation, FEMA (Hydrologic and Hydraulic) flood plain delineation, sanitary sewers, surveying, right of way and easement acquisitions, and resident inspection. Our mission as a team is to provide LFUCG with unsurpassed engineering services by:

- » Producing innovative and quality work
- » Meeting LFUCG's expectations and goals by utilizing national/technical expertise while maintaining a local "small business" work relationship.
- » Completing projects on time and within budget, maintaining effective communication between the design team and LFUCG staff.

And we can achieve these goals by:

- » Defining the scope of project, schedule, and budget from the initial meeting with LFUCG representative.
- » To data collection and evaluation
- » To explore different design options with LFUCG with detail cost estimate for each option
- » To oversee and acquire necessary right of ways or easements
- » To update and maintaining LFUCG about project progress
- » To oversee quality control and quality assurance.

Understanding of Your Needs:

Our team had reviewed and studied the list of Contract projects 1, 3, 4, 5, 6, and 8, based on your need we have assembled a team of professionals that can provide the type of project experience and expertise to achieve successful projects. Key features of our team experience in the roadway design, structural design, traffic signals and inspections.

The team had served clients though out Kentucky providing wide range of infrastructure design. Our Team will be managed and overseen by our Principal-in-Charge, Jihad A. Hallany, P.E and Greg Groves, P.E. (URS).

Knowledge of Services:

Knowledge and experience considerations for design disciplines will vary according to the project awarded but include civil, environmental, permitting, etc. The following is an example of potential scope items and key consideration for each:

Team Qualifications:

- » **Local and national experience.** Our team comprehensive experience helps LFUCG with both standard and highly complex technical challenges. Our Team has the know-how to help LFUCG overcome virtually any engineering challenge.
- » **Proven ability to meet strict deadlines.** Our Project Team routinely works under strict deadlines. Our Team understands what is at stake for LFUCG and we will work hard to prove ourselves as the most responsive, effective team available.
- » **Unmatched resources to meet the most demanding challenges.** Drawing from our national practice, Our Team offers LFUCG dozens of technical specialists with experience across the entire scope of work. We offer multiple, independent design teams to execute a substantial volume of simultaneous projects, if desired by LFUCG.

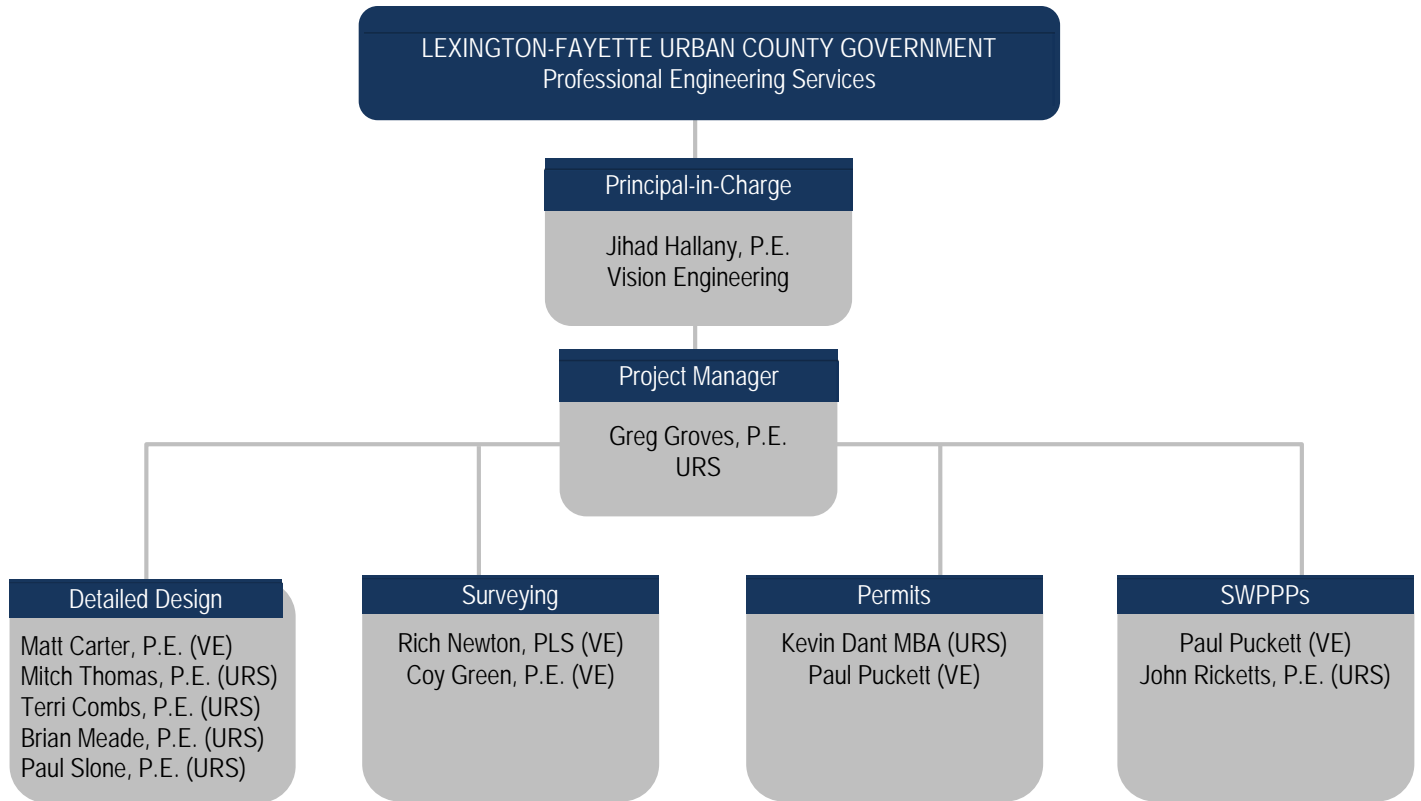
Contract Scope of Work	Key Considerations and Knowledge Required
Alignment Options	» Alternative designs options due to site specific needs and environmental Impacts
Right of Way / Easements with Acquisition	» Essential and crucial for success of the project
Environmental Permitting	» Comprehensive review of required permits for inclusion of features in design
	» Early coordination with regulatory agencies to facilitate approvals
	» FEMA, COE and KDOW permitting
Civil and Stormwater	» Proper stormwater drainage for pre- and post-construction of the facilities
	» Experience to provide proper access and entry for LFUCG's maintenance & removal of equipment
	» Compliance with BMPs needed for permitting activities and long term compliance at each site
Geotechnical	» Experience and knowledge of local site conditions
	» Development of an effective drilling and laboratory program
Cost Estimating	» Provide value engineering(VE) services for project cost control
	» Access to current and historic cost data for pump stations and storage tanks
Services During Construction	» Experienced personnel for program reports/administration
	» Prompt review of claims and disputes arising during construction
	» Local experience & knowledge to enable effective dealing with local contractors and suppliers
	» Complete record drawings of the constructed assets
	» Experienced on-site general & resident project representation
	» Resident Inspections

Vision and URS Team:

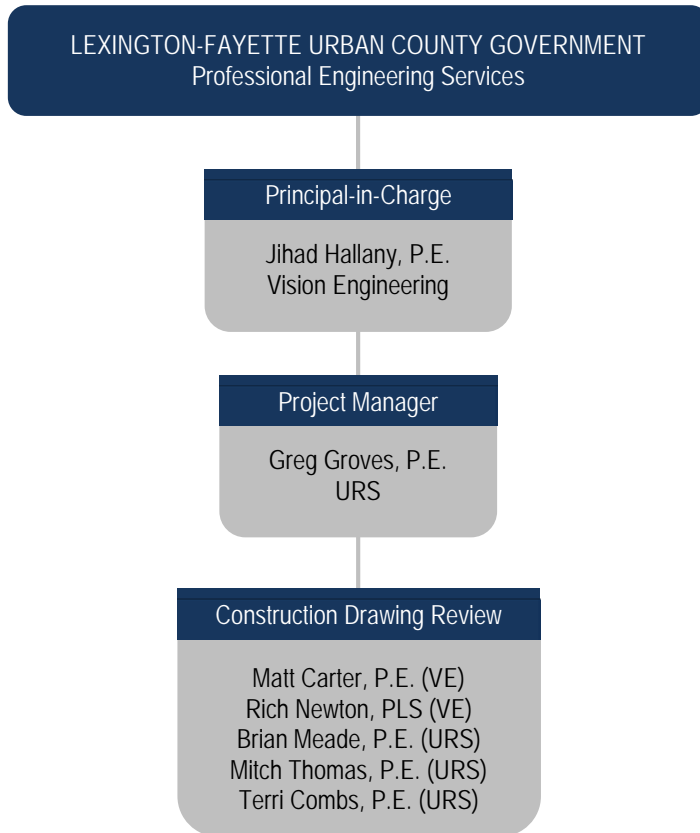
As previously mentioned, Vision Engineering and URS corporation have been selected jointly on numerous engineering projects, such as:

- » Lexington-Fayette County Government-Division of Water Quality:
 - Dig and Replace sanitary sewer, Category 2.
 - Resident Inspector (RMP).
- » Kentucky Department of Transportation:
 - Statewide Drainage Design.
 - Local Public Agency (LPA) general design.
- » Kentucky Division of Water:
 - Statewide FEMA Risk Map Updates, where Jihad Hallany, lead the Hydrological / Hydraulic model for Fayette and URS Corporation lead the QA/QC and GIS mapping of the floodplain/floodway.
 - Levee Survey and Evaluation.
- » Metropolitan Sewer District of Louisville: (MSD).
 - MS4 program
 - Evaluation of MSD inspectors for ESPC inspections and compliance.
 - Training for Qualified Post Construction Inspection (QPCI).
- » City of Frankfort: Public Work
 - Upper and Lower Slickaway- sanitary sewer replacements.
 - Sanitary sewer easement acquisitions.

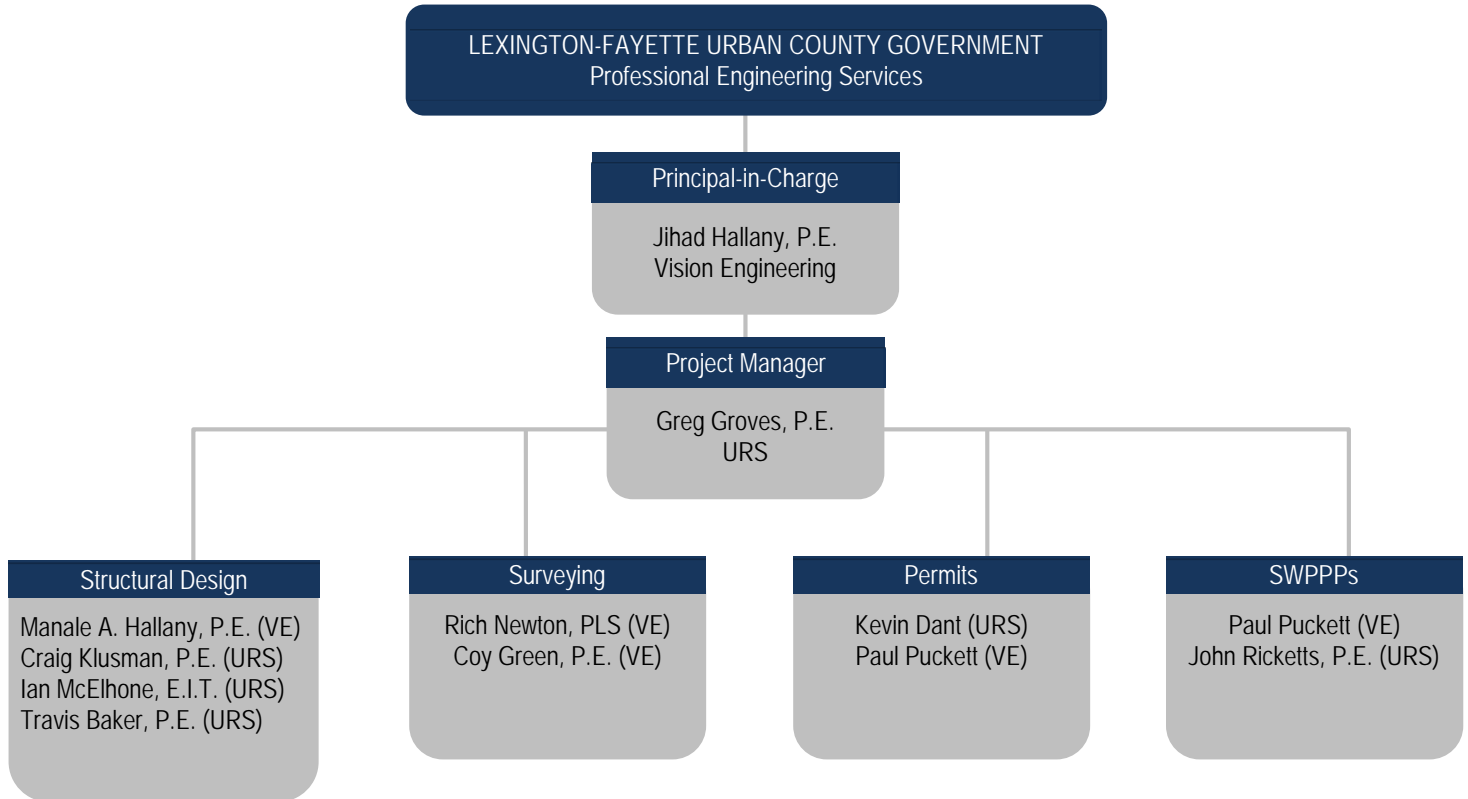
Section 3 | **PROJECT TEAM – CONTRACT 1**



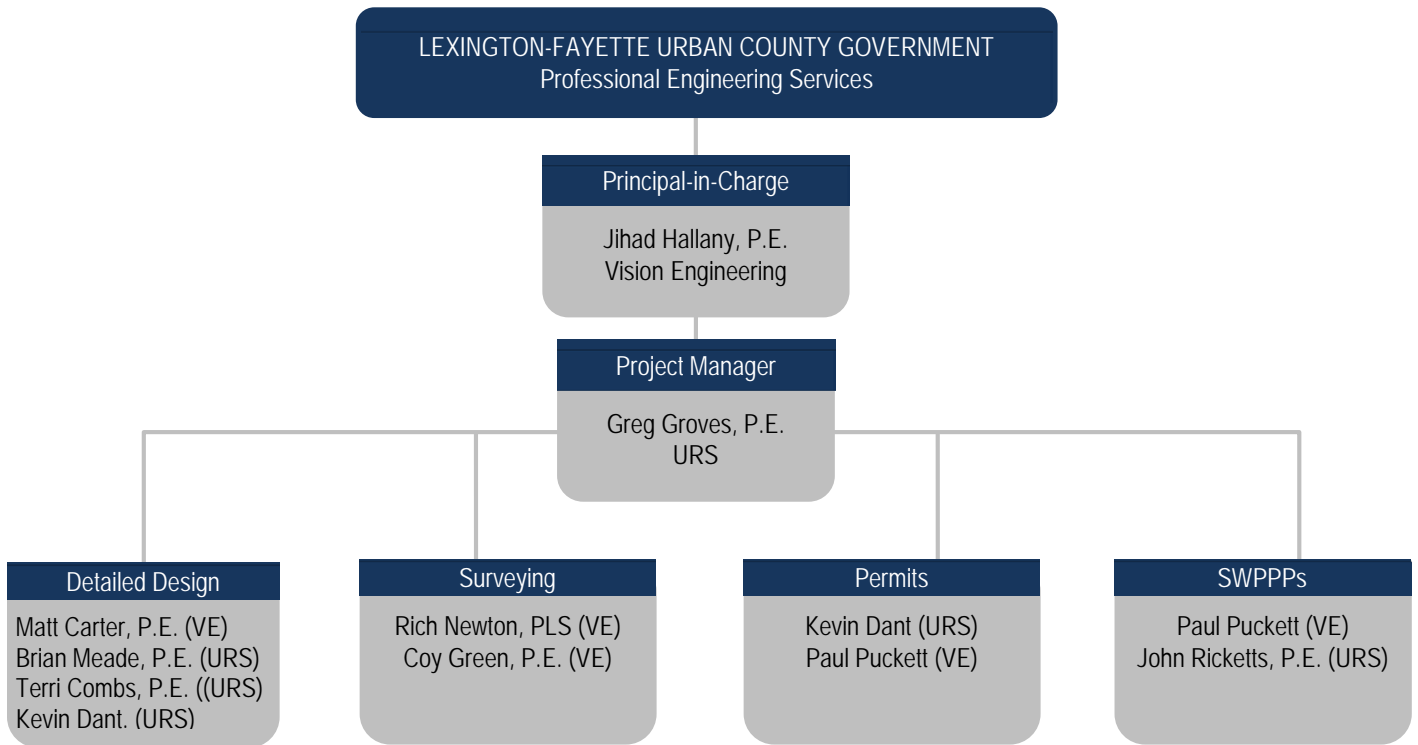
Section 3 | **PROJECT TEAM – CONTRACT 3**



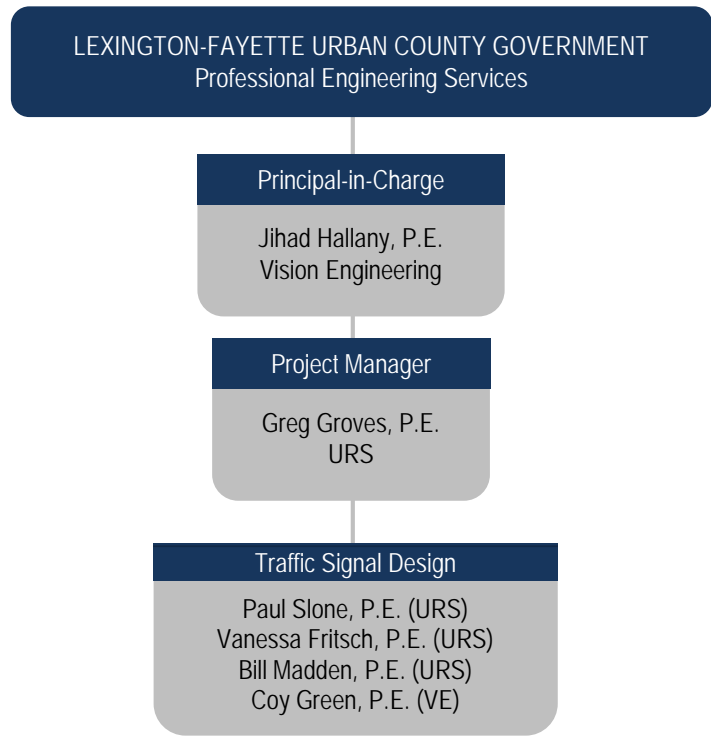
Section 3 | **PROJECT TEAM – CONTRACT 4**



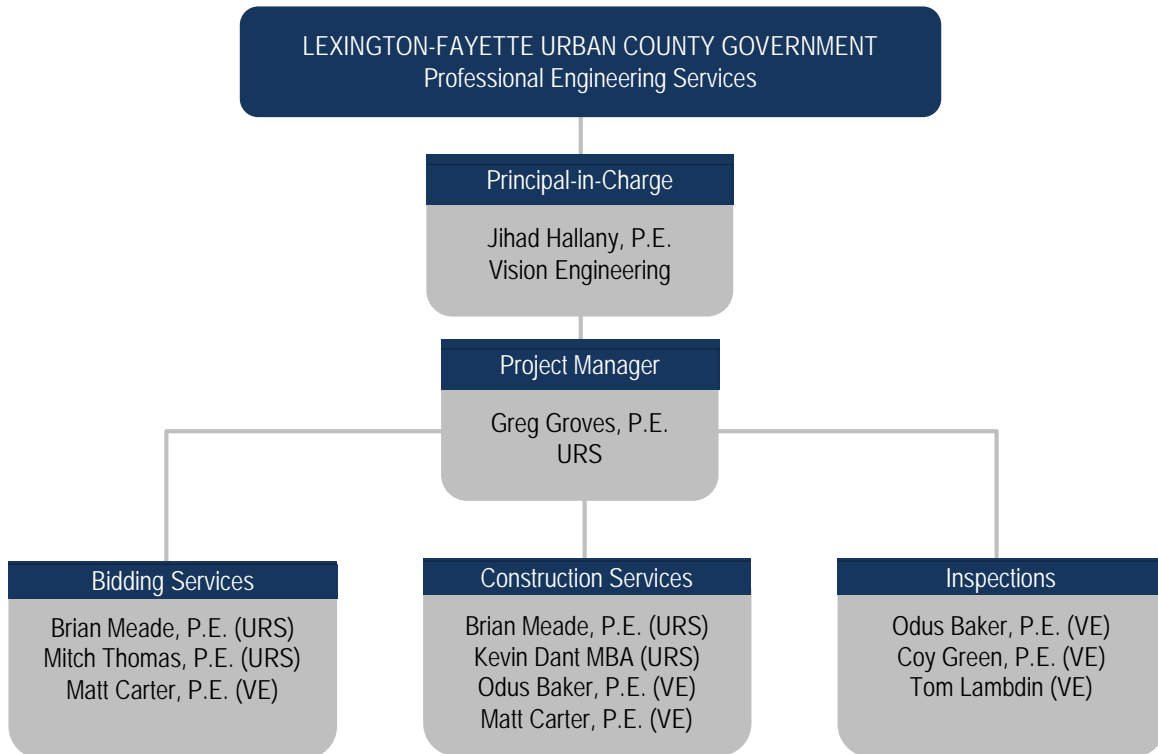
Section 3 | **PROJECT TEAM – CONTRACT 5**



Section 3 | **PROJECT TEAM – CONTRACT 6**



Section 3 | **PROJECT TEAM – CONTRACT 8**



Section 3 | **PROJECT TEAM**

**Providing Services for
Contracts: 1 3,4,5,6, & 8**

Years of Experience: 14

Education

MS, 2009, Biosystems &
Agriculture, University of Kentucky
BS, 1997, Civil Engineering, Water
Resources and Structural,
University of Kentucky

Professional Qualifications

Professional Engineer:
Kentucky # 22838
Indiana # 10403666
Ohio # 69566

Jihad A. Hallany, P.E., Principal

Principal-in-Charge

PROFESSIONAL SUMMARY.....

Mr. Hallany has served as lead engineer of Vision Engineering since joining the firm in 2003. His specialization is in water resources, environmental design and traffic studies applications. Mr. Hallany has extensive experience in modeling, design, construction of public and private projects, as well as regulatory compliance.

REPRESENTATIVE PROJECTS.....

» **Project Manager for Polo Club Boulevard, Lexington (2009):** The scope of services included permitting from COE/DOW (401/404 permits) and design of Multi-Plate arch culvert. Specific design of the culvert, is to meander arch culvert around the stream to maintain the stream bed. The scope of services included the design, construction administration, and inspection.

» **Project Manager for Kentucky Division of Water Statewide FEMA Map Risk Update, Fayette County (2011):** Scope of services included Hydrological and Hydraulic analysis for detail study of North Elkhorn, I-75 tributary, East I-75 tributary, Cane Run tributary, Pleasant Ridge tributary, Two Ponds tributary, Brighton tributary, Iron Works Tributary, Pipeline Tributary, Quarry Tributary, Radio tower tributary, South Elkhorn tributary, Stonewall Tributary, and Todd's Tributary approximately 98 miles of streams. The hydrological/hydraulic study was conducted per FEMA Guidelines and Specifications for Flood Hazard Mapping Partners Appendix C: Guidelines for Reverie Flooding Analysis and Mapping, November 2009. The outcome is used to establish base flood elevation and delineate the floodplain and floodway for multiple storm events, including 10, 25, 100, and 500 year.

- » **Red Mile Road Corridor, Lexington (2010) (Traffic Study):** Scope of Services included traffic count at two intersections of South Broadway (US-68) / Red Mile and Versailles Road (US-60)/ Red Mile and the evaluation of the impact of Red Mile mixed use on Red Mile Road for these two intersections. Traffic study included recommendations for the changing of the light cycle, widening of Red Mile Road, adding turning lanes along Versailles (US-60)/Red Mile Road, and re-striping of the South Broadway (US-68) to increase staking along the left turn lane toward Red Mile Road.
- » **Nicholasville Road US-27, Nicholasville (2009) (Traffic Study):** Scope of services included traffic count along US-27 at the intersection of US -27 with Howard and Elizabeth Street. Purpose of the study is to evaluate the impact of Toyota on Nicholasville and 35 acres of commercial development on US-27. The outcome of the traffic study is modifications traffic light cycle, at the intersection of US-27/Elizabeth Street, and the required length of left and right turn of Dillon Ways and the right turns of Days Boulevard.
- » **Project Manager for Freeman and Valley Creek, Elizabethtown (2010):** Storm water master plan recommended constructing relieve channel between Freeman and Valley Creek to bypass runoff when it reach certain stage along Freeman Creek to relieve flooding at Freeman Creek Watershed. Vision Engineering scope of services consists of evaluating exiting hydrological and hydraulic model, design channel, and obtain necessary permits. Unsteady state analysis of the relieve channel scenario revealed adverse impact on Valley Creek Watershed, the recommendation is to replace College Street Culvert by 80 ft span Bridge and raise the vertical alignment of College Street. The scope of services included permitting from COE and KDOW.
- » **Hamburg East Amended Stormwater Master Plan Expansion Area 2a (2008 - Present):** This task consists of the design, construction administration, and inspections for regional detention and water quality facilities along Brighton Tributary to minimize the impact of Hamburg Farm Development on North Elkhorn Creek. We obtained 401/404 (Kentucky Division of Water & Corp of Engineer) permits and CLOMR for Brighton Tributary and North Elkhorn Creek between Winchester Road (US-60) and Man O'War Boulevard (KY 1425). Wetland cells are under semi-annual monitor schedule, system to be dedicated to LFUCG by May 1, 2014.

**Providing Services for
Contracts: 1, 3, & 5****Years of Experience:** 16**Education:**

University of Kentucky - B.S. Civil
Engineering, 1994
University of Tennessee, Knoxville,
Tennessee - Bachelor of Arts in
Urban Studies, 1989

Registration:

Professional Engineer:
Kentucky (PE#21056), WV, TN,
and NC.

Matthew B. Carter, P.E.

Detail Design/Construction Services

PROFESSIONAL SUMMARY.....

Mr. Carter is a project manager at Vision Engineering since 2004 with experience in the areas of transportation and site development as well as construction administration.

REPRESENTATIVE PROJECTS.....

- » **Oxford Village, Georgetown (2009):** Project consists of the design and construction administration for approximately 6,350 linear feet of roadway. Scope of Services included the improvement of Old Oxford Road by adding left and right turn lanes to Oxford Village.
- » **Woodridge, Versailles (2009):** Project consists of design and construction administration of approximately 23,000 linear feet of roadway. Scope of Services included the improvement to McCowans Ferry Boulevard (KY 1964) by adding left and right turning lanes to Woodridge Developments.
- » **Barnes Mill Road, Richmond (2013):** Project consists of the relocation of Barnes Mill Road to eliminate sharp curves and direct driveways access to Barnes Mill Road adding a pedestrian bridge and sidewalk along Lancaster Avenue (KY-52). Scope of Services included planning and zoning, public meetings, survey, traffic study, design, drainage improvement, utilities relocation, and construction administration/inspections.
- » **Keithshire Way, Roadway Improvement, Lexington (2010):** Project consists of the survey and design of the left turn lane to Wellington Elementary School.
- » **New Circle Road (KY-4) and Liberty Road (KY 1927), Lexington (2010):** Projects consists of the design, construction administration and inspections of the right turning lanes and sidewalk along New Circle Road (KY-4) and widening and bike lane along Liberty Road (KY-1997). Scope of services includes traffic study, drainage and relocations of storm inlets, storm lines, water lines, fire hydrants, gas lines and electric conduits, and light poles.
- » **Nicholasville Road (US-27), Nicholasville (2009):** Project consists of adding left and right turn lanes and adjustment of traffic signal timing at the intersection of US-27 and Elizabeth Street. Scope of Services included planning, survey, traffic study, design, traffic signal modifications, relocation of fiber optic lines, construction administration, and inspections.
- » **Sir Barton Way, Lexington (2013):** Project consists of the design, construction administration, and inspection of the left and right turn lane for Indiana Wesleyan University.
- » **Red Mile Roadway Improvement, Lexington (2010):** Project consists of the design of left turn lane and improvement on Red Mile Road for right turn movement to Red Mile Village. Scope of services included, survey, design, construction administration, and inspections.
- » **Kentucky 7 Roadway Improvement, Morgan County (2013):** Project consists of adding two left turn lanes and two right turn lanes along KY-7 for Wrigley Elementary School. Scope of services included survey, traffic study, and design of the turning lanes.
- » **Tattersall's Way, Lexington (2013):** Project consists of the design, construction administration, and inspection of the Tattersall's Way, between Red Mile Road and Curry Avenue.

OTHER RELEVANT PROJECTS FROM PREVIOUS EMPLOYMENTS.....

- » Star Shoot Parkway, Lexington.
- » Sir Barton Way, Lexington.
- » Pink Pigeon, Lexington
- » Vendor Way, Lexington
- » Citation Boulevard, Lexington
- » US-68, Lexington and Jessamine County

**Providing Services for
Contract: 4****Years of Experience: 9****Education:**Master of Science in Civil
Engineering, (Emphasis in
Structures)University of Kentucky, June 2005,
GPA 4.0/4.0Bachelor of Engineering in Civil
Engineering,
Lebanese American University,
Lebanon, Feb 2003.**Manale A. Hallany, P.E.****Structural Design****PROFESSIONAL SUMMARY**

Structural Project Engineer: Responsible for the design and analysis of a broad range of structural engineering projects ranging from highway, railway and pedestrian bridges to high rise building. Develop detailed design studies and construction drawings. Prepare cost estimates, Bill of quantities and construction specifications.

REPRESENTATIVE PROJECTS.....**Structural Design:**

Development of Queen Alia International Airport - Jordan: Design engineer for the extension of Queen Alia International Airport to cater a capacity up to 12 million passengers. Scope of services include the design of the airport approach road, bridge, and parking facilities and other related infrastructures.

Desamendments to Infrastructure and Landscaping at the Pearl-Qatar: Design engineer for the design for a number of pedestrian and vehicular bridges in addition to an Inhabited Bridge.

- » **Ritz Hotel – Angola:** The hotel building consists of seven stories above grade, a ground floor and four basements.
- » **Agostinho Neto Cultural Center – Angola:** A total build up area of 2100m², comprising a ground floor and a first floor devoted to an auditorium and restaurants, and a second floor that accommodates museum, library, and exhibition. **MAG 218 Tower, Dubai – UAE:** A total plot area of 3427 m² the residential tower consists of 66 floors: 55 residential floors of 1400 m², five podium floors, three basements, two technical and one community floor.
- » **Fidar Bridge Reconstruction – Lebanon:** Design engineer of precast post-tensioned beam deck bridges of 420 total length with a two carriageways section each of 32ft width.
- » **Taif Ring Road – Saudi Arabia:** Design engineer of precast post-tensioned beam deck bridge of two carriageway sections each of 65ft wide and 850 feet long.
- » **Amman Development Corridor - Jordan:** Design engineer of a pre-stressed concrete box girder bridge of 50ft width and a total length of 480ft.
- » **Polo Club Boulevard, Lexington:** Design of foundation of the multi-plate arch culvert for 310 feet long meandering around Brighton Tributary.
- » **Wildwood Park-Pedestrian Bridge, Lexington:** Design of foundation, abutment, and approach sidewalk of the pedestrian bridge at Wildwood Park.
- » **Wellington Park-Pedestrian Bridge, Lexington:** Design of foundation and abutment of the pedestrian bridge at Wellington Park.
- » **Clays Mill Roadway Widening, Lexington:** Clays Mill Road is located in a heavily urbanized area of Lexington. Scope of service include the structural design of the extension of box culvert and the replacement of box culvert along Wolf Run by drive on slab culvert. Scope of services included design of retaining walls.
- » **Yorick Place, Richmond:** Project include the design of major retaining wall adjacent to retention pond, scope of services included the foundations, wall design, and specifications.

Providing Services for Contract: 4

Years of Experience: 12

Education:

University of Kentucky

Ph. D. Civil Engineering (2009)

M.S. Civil Engineering (2001)

Thesis Title: Depth Dependent Vortex Emergence for Vertical Intake

Major Advisor: Dr. Scott A. Yost

B.S. Civil Engineering, Water Resources and Structural (1999)

Tien Mun Yee, Ph.D

Water Resources Manager

REPRESENTATIVE PROJECTS.....

» **Kentucky Division of Water Statewide FEMA Risk Map Updates (Current):** Scope of work consists of Hydrological and Hydraulic analysis for detail and limited detail for North Elkhorn, I-75 tributary, Cane Run, East Hickman, and South Elkhorn in Fayette County for approximately (90 miles). The hydrological/hydraulic study is performed per FEMA Guidelines and Specifications for Flood Hazard Mapping Partners Appendix C: Guidance for Riverine Flooding Analysis and Mapping, November 2009. The outcome is used to establish base flood elevation and floodway encroachment for multiple storm events, including 10, 25, 50, 100, and 500 year and update effective flood maps for LFUCG.

» **Hamburg East Watershed Study (2008 - Present):** This task consists of the design and construction administration for a detention and water quality facility along Brighton Tributary to minimize the impact of Hamburg Farm Development on North Elkhorn Creek. We obtained 401/404 (Kentucky Division of Water & Corp of Engineer) permits and FEMA certification for the 100 and 500-year base flood elevation (BFE) for Brighton Tributary and

North Elkhorn Creek between Winchester Road (US-60) and Man O'War Boulevard (KY 1425). Construction complete wetland system is monitored on semi-annual.

» **Teaching for University of Kentucky:** Mr. Yee has served as Primary Instructor for: Water Resources Engineering, CE 461G at the University of Kentucky College of Engineering in Lexington, Kentucky. Mr. Yee has taught the course from December 2010 through May 2011.

PRESENTATIONS.....

Belcher, B., and Yee, T.M., NCD2010: A model for predicting river geometry using hydrodynamics and particle separation technology. NCSU Stream Restoration Conference 2010, Raleigh, NC.

Yee, T.M. and Yost, S.A., A 3-D computational fluid dynamics code for simulation of pump stations with vertical plunging jet and air bubble transport, Kentucky Water Resource Annual Symposium, Lexington, Kentucky, March 17, 2008.

PUBLICATIONS.....

Yee, T.M., Three-dimensional free surface non-hydrostatic modeling of plunging water with turbulence and air entrained transport, Ph. D Dissertation, University of Kentucky, 2009.

Providing Services for
Contracts: 1, 3, & 5

Years of Experience: 20

Education:

B.S. Morehead State University

Rich Newton, PLS

Survey Department Manager

PROFESSIONAL SUMMARY.....

Mr. Newton, P.L.S. is the Survey Manager for Vision Engineering, LLC, with over 25 years in Engineering/Survey Projects. As a manager, he is responsible for overseeing and scheduling the survey department and correlating with the design team. Typical projects that Mr. Newton completes include the ALTA, boundary, topographic, utilities survey, construction staking, as-built drawings, development plans, and final record plats. He utilizes conventional systems as well as GPS technology.

REPRESENTATIVE PROJECTS.....

- » **I-71 North, Louisville (2013):** Scope of services included establishing right of way locations, setting vertical and horizontal control monuments, and conducting detail topographic and utilities surveys as per KYTC requirements.
- » **Louisville Bridges, Louisville (2013):** Scope of services included establishing vertical and horizontal control monuments as per 184 and 1985 FGCS Horizontal and Vertical Control Survey Accuracy Standard. Scope of services included the conversation from the Kentucky Single and Indiana Single Zone and the project specific coordinate system.
- » **Lancaster Avenue (KY 52) and Barnes Mill Road Richmond, (2012):** Scope of services included establishing right of way locations, setting vertical and horizontal control monuments, and conducting detail topographic and utilities surveys.
- » **Kentucky Division of Water (KDOW) Statewide FEMA Risk Map Update (2010-Present):** Scope of service include collecting topographic data for detail and limited detail per FEMA Schedule M for culverts, bridges, dams, and reservoir in Fayette, Boyd, Greenup, Pike, and Union County, Kentucky
- » **Tattersall's Way (2013):** Scope of services included establishing right of way locations, and conducting detail topographic and utilities surveys.
- » **Nicholasville Road (US-27), Nicholasville (2009):** Scope of services included topographic and utilities surveys.
- » **New Circle Road (KY 4) and Liberty Road (KY 1927), Lexington (2010):** Scope of services included topographic and utilities survey and construction staking.
- » **Kentucky 7, Morgan County (2013):** Scope of services included topographic and utilities surveys for Wrigley Elementary School.
- » **Kentucky 11, Lee County (2014):** Scope of services included boundary, topographic and utilities surveys for Southside Elementary School.
- » **College Street Stormwater Improvement, City of Elizabethtown (2011):** Scope of services included establishing right of way locations and conducting detail topographic and utilities surveys.
- » **Licking River FEMA Risk Map Update, Kenton County, Kentucky**
- » **Red Mile Road, Lexington (2010):** Scope of services included establishing right of way locations and conducting detail topographic and utilities surveys.
- » **Red Mile Pump Station, Lexington (2013):** Scope of services included conducting detail topographic, utilities survey, and plats for easement acquisitions.
- » **Blue Sky Pump Station, Lexington (2013):** Scope of services included conducting detail topographic, utilities survey, and plats for easement acquisitions.
- » **Slickway Sewer Improvement Phase I (2010) and Phase II (2011), Frankfort:** Scope of services included conducting detail topographic, utilities survey, and plats for easement acquisitions.
- » **Project Manager for Robinson Terrace Sanitary Sewer Rehabilitation, Richmond (2010):** Scope of services included conducting detail topographic and utilities survey.
- » **U.S. Army Corps of Engineers (USACE), Boundary Survey of Rough River State Park, Kentucky**

Providing Services for Contracts: 6 & 8
Years of Experience: 6
Education:
University of Kentucky
 B.S. Landscape Architecture, (2009)
 Bachelor of Landscape Architecture
Certification
 MSD Inspector EPSC Training

Odus C. Baker
 Site Designer/Construction Inspector

PROFESSIONAL SUMMARY.....

Mr. Baker is a Site Designer / Construction Inspector at Vision Engineering, LLC. As a Site Designer / Construction Inspector, he is responsible for developing site designs, permitting, construction management, administration, and inspections for public and private, as well as civil/site projects. Typical projects of this nature involve the design of site layouts, erosion control, construction administration, and inspection of EPSC Measures, Installation of Sanitary Sewers, Storm Sewers, other utilities and Underground Detention Systems.

REPRESENTATIVE PROJECTS

- » Louisville MSD, Evaluation of MSD inspectors for EPSC Inspections and standardization compliance, Louisville, Kentucky, URS and MSD
- » Required ESC Inspections, numerous active developments in the Lexington, Kentucky area.
- » East Lake Trunk Sewer Replacement, Installation of upsized Sanitary Sewer, Lexington, Kentucky, Palmer Engineering and LFUCG
- » Century Hills Trunk Sewer Replacement, Installation of upsized Sanitary Sewer, Lexington, Kentucky, CDP Engineering and LFUCG
- » Red Mile Mixed Use: Inspection of installation of pump station, force main, and gravity sewers
- » Red Mile Mixed Use: Inspection of roadway construction for Town Green Boulevard
- » New Circle Road/Liberty: Inspection of the construction of turning lanes and sidewalk
- » Sir Barton Boulevard: Inspection of the construction of turning lanes
- » Red Mile Village: Construction of turning lanes along Red Mile, Lexington, Kentucky
- » Inspection of the Construction of Multi-Plate Arch along Polo/Club Boulevard
- » Hamburg / Polo Club Blvd, Installation and planting of 5 wetlands, Lexington, Kentucky
- » Townhomes at Newtown Crossing, Installation of two Underground Stormwater Detention Systems, Lexington, Kentucky
- » Slickaway Creek Trunk Sewer Replacement, Installation of upsized Sanitary Sewer, Frankfort, Kentucky, URS and City of Frankfort, Kentucky
- » Robinson Terrace, Installation of upgraded Sanitary Sewer System, Richmond, Kentucky
- » Town Homes at Newtown Crossing, Installation of Sanitary and Storm Sewers, Lexington, Kentucky
- » Annual Inspections of Existing Underground Detention, for certification of operation and, Lexington, Kentucky

UNITED STATES AIR FORCE / AIR NATIONAL GUARD

- » United States Air Force, 1984 to 1999
- » New York Air National Guard, 1999 to 2009 – Retired
- » Responsibilities were Flight Line Supervisor overseeing daily work tasks, coordination of maintenance tasks with other work sections, and supervise work shift. Primary task was to ensure ability to meet and exceed operation schedule while maintaining safety, quality, and reliability



Gregory T. Groves, PE

Vice-President, Louisville Office Manager

Director of Transportation (Louisville and Cincinnati Offices)

Providing Services for Contracts: 1, 3,4,5,6, & 8

Areas of Expertise

Project Management
Transportation Planning
Pre-Construction Management
Roadway/Bridge Design
Public Involvement/
Consensus Building
NEPA/ Transportation
Decision Making
R/W & Utility Coordination

Years of Experience

24 Years

Education

BS/Civil Engineering
University of Kentucky

Registration/Certification

PE/ KY 18066

Professional Affiliations

Transportation Advisory Board,
Greater Louisville Inc.
(Louisville Chamber of
Commerce)
Board of Director, American
Society of Highway Engineers
ASHE
Board of Director, American
Public Works Association
APWA
KYTC Advanced Leadership
Academy Mentor
ALA
Member Highway Subcommittee,
ACEC-KY

Overview

Mr. Groves serves as the Director of Transportation for the Indianapolis, Louisville, and Cincinnati offices of URS as well as being the Louisville Office Manager; responsible for the operation of a 60+ person office that includes several engineering and environmental disciplines serving both public and private clients.

Project Specific Experience

Jefferson County, Grade Lane, Principal in Charge

The Grade Lane Relocation project in Jefferson County is a high profile project for the Kentucky Air National Guard (KY-ANG) and administered through the Kentucky Transportation Cabinet (KYTC). The KY-ANG desires to relocate Grade Lane and modify the I-65 on-ramp for Homeland Security purposes. This will accommodate their future development and better secure their facility since existing Grade Lane bisects the KY-ANG facility. The key to the project success has been an intense agency coordination effort with KY-ANG, Louisville Regional Airport Authority, UPS, Louisville Metro Public Works, Louisville Water Company, Louisville Fire Department, FHWA and KYTC. Close collaboration with UPS Worldport on the Traffic Management Plan and the Louisville Water Company on the project's impact to their 60' transmission line, which is the largest in the state, was required to provide an acceptable design. Multiple agency meetings have been held throughout the project development process to gain the necessary approvals to keep the project moving forward. The overall project length is approximately 2500' in length and is being funded with Defense Access Road (DAR) funds.

Parks/Trails/Multiuse Path Project

Bike and Pedestrian Facility Master Plan, Louisville Metro Government, Kentucky, Principal in Charge

Paired with our project partner, Sprinkle Consulting, URS is working with the Louisville/Jefferson County Metro Public Works to develop a Bike and Pedestrian Facility Master Plan. The Master Plan will serve as the blueprint for Jefferson County as it continues to grow in identifying future bike and pedestrian facilities. The Master Plan will provide a framework for facility implementation and connectivity. In order to make concise and appropriate recommendations for this plan, evaluations have included the following: Traffic crash history, Existing facility and amenities inventory, Bicycle and Pedestrian travel demand, Placement of TARC Intermodal Transit Facilities, Facility cost per mile, Prioritization of projects

Jefferson County, River Walk, Kentucky Transportation Cabinet, Principal in Charge/ Project Manager

Through a Memorandum of Agreement, the City of Louisville had lead responsibilities during the various phases of this project and the Cabinet administered federal funding, insured NEPA compliance, and provided technical oversight as needed. This project has been a success and is utilized routinely by the community and its visitors.



Mitchell Thomas, PE

Civil Engineer



Providing Services for Contracts: 1, 3, & 8

Areas of Expertise

Transportation Design
Transportation System Planning
Civil Engineering
Public Assistance (FEMA)

Years of Experience

15 Years

Education

BSCE/Minor - Mathematics
University of Kentucky
Minor - Mathematics and
Physics Morehead State
University

Registration/Certification

2002/PE/KY/22894
2005/PE/WV/16498

Overview

Mr. Thomas has over 15 years of engineering experience working as a consultant to federal agencies, state and local governments, and private industry. He has been involved in highway and drainage design and minimizing effects to right of way. His experience in highways ranges from rural to urban and interstate to local roads. A large majority of his experience has been on highway-related projects involving design of line, grade, and providing drainage solutions on various highway projects. He has performed all associated hydraulic analysis related to highway design. Also, he has worked in the public assistance branch of FEMA to assess and recover monies to damaged public facilities and entities under federal law during that particular federally declared disaster.

Project Specific Experience

Jefferson County, Grade Lane, Roadway Design Manager: The Grade Lane Relocation project in Jefferson County is a high profile project for the Kentucky Air National Guard (KY-ANG) and administered through the Kentucky Transportation Cabinet (KYTC). The KY-ANG desires to relocate Grade Lane and modify the I-65 on-ramp for Homeland Security purposes. This will accommodate their future development and better secure their facility since existing Grade Lane bisects the KY-ANG facility. The key to the project success has been an intense agency coordination effort with KY-ANG, Louisville Regional Airport Authority, UPS, Louisville Metro Public Works, Louisville Water Company, Louisville Fire Department, FHWA and KYTC. Close collaboration with UPS Worldport on the Traffic Management Plan and the Louisville Water Company on the project's impact to their 60" transmission line, which is the largest in the state, was required to provide an acceptable design. Multiple agency meetings have been held throughout the project development process to gain the necessary approvals to keep the project moving forward. The overall project length is approximately 2500' in length and is being funded with Defense Access Road (DAR) funds.

Louisville Metro Small Engineering On-Call Services, Louisville, KY

Project Design Manager

- Poplar Lane Improvement:
- Mt. Holly Road Sidewalk Improvement:
- Blanton Lane Improvement:
- Meyzeek Middle School, Safe Routes to Schools
- Main Street Icehouse Sidewalk Improvements
- Oak Street Streetscape Implementation

River Road, Louisville, Kentucky, Reconstruction Design and Related Services

Kentucky Transportation Cabinet

Project Engineer/Task Manager

Line, grade, and drainage design of River Road widening. Worked with the KYTC and the public to develop a design per the KYTC's design standards and the public's input and involvement with the project



Providing Services for Contracts: 1,3, & 5

Areas of Expertise

Geometric Highway Design

Years of Experience

With URS: 5+ Years

With Other Firms: 2+ Years

Education

BS/ Civil Engineering
University of Kentucky

Registration/ Certification

PE/ KY 27646

Overview

Mrs. Combs has over seven years of experience working for consulting firms as well as KYTC. Her experiences include geometric highway design, right of way plan development, drainage design and analysis, construction cost estimation, traffic analysis and highway construction field inspection. She has worked on local, rural and urban projects throughout the state including widening projects, bridge replacements and new construction.

Project Specific Experience

Oldham County Greenway Bridge over I-71

Oldham County, Kentucky

Terri was a Project Engineer for URS on this pedestrian bridge project. The project included approach design, ADA compliance, drainage and Right of Way.

Jefferson County, Fern Valley Road, Project Engineer

Terri was a Project Engineer for URS on this sidewalk project on Fern Valley Road. The project included Phase II design services to design a sidewalk that met all ADA guidelines along a portion of Fern Valley Road.

Jefferson County, Ice House (Main Street Louisville, KY) Sidewalk, Project Engineer

Terri was a Project Engineer for URS on this sidewalk project on Main Street in Louisville KY. The project included Phase I and Phase II design services to complete an ADA sidewalk section in front of a reclaimed building on downtown Louisville.

KY 3048 (Old Henry Road) Extension Project to KY 362 (Ash Ave)

Jefferson/Oldham Counties, Kentucky

The project's purpose is to relieve congestion along KY 146 from I-265 (Gene Snyder Freeway) to Crestwood. URS's scope of work for the Phase II Design services includes final plan and profile sheets, drainage analysis, maintenance of traffic plans, erosion control plans, coordinate control sheets and cross sections. The typical section for the project will be a 4 lane roadway including both rural and urban sections.

Jefferson County, Mt. Holly Road, Sidewalk Improvement, Louisville Metro, Project Engineer

Terri was a Project Engineer for URS on this sidewalk improvement project that includes Phase I and Phase II design services. This project includes adding a sidewalk along Mt. Holly Road and addressing drainage issues in the area.

Jefferson County, Meyzeek Middle School, Safe Routes to Schools Louisville Metro, Project Engineer

Terri was a Project Engineer for URS on this Safe Routes to School Project. This project included upgrading existing sidewalks to ADA compliancy and designing a more pedestrian friendly area through the use of "bump outs" at intersections and clearly marked crossing areas.

River Road Widening and Storm Sewer Design, Jefferson County Kentucky Transportation Cabinet, Project Engineer

Terri is a Project Engineer for URS on this widening project which extends from Beargrass Creek to Zorn Avenue. It includes Phase I and Phase II Design services for the preparation of final plans for an ultimate 4-lane section that will have an elevation above the 10 year storm flood level. This section of roadway will be the entrance to the city of Louisville from the Jefferson Counties only Scenic Byway.



Brian T. Meade, PE

Project Manager, Senior Transportation Engineer

Providing Services for Contracts: 1, 3, 5, & 8

Areas of Expertise

Project Management
Transportation Planning
Pre-Construction Management
Roadway/Bridge Design
Public Involvement/
Consensus Building
NEPA/ Transportation Decision Making
R/W & Utility Coordination
Urban Roadway Design

Years of Experience

24+ Years

Education

BS/Civil Engineering
University of Kentucky

Registration/Certification

PE/ KY 18079

Professional Affiliations

Transportation Advisory Board, Greater Louisville Inc. (Louisville Chamber of Commerce)
American Society of Highway Engineers (ASHE)
Board of Directors American Public Works Association (APWA)

Overview

Mr. Meade recently joined the URS team after spending 24+ years with the Kentucky Transportation Cabinet. While with KYTC, Brian served as the Branch Manager for Traffic Operations for 6 years and as the Branch Manager for Project Development for 4 years. This well rounded experience enables him to have a unique perspective on both Roadway Design and Operations. His experience in transportation ranges from rural to urban, including interstates, local streets, and everything in between. Brian's KYTC experience has allowed him to work closely with multiple public agencies and to engage with elected officials, personnel from other agencies, and the public in general.

Project Specific Experience

Louisville Metro Parks – Northeast Louisville Loop Multi-Use Path, Middletown to Eastwood, Louisville Metro: The Middletown-Eastwood Trail (MET) will link the two communities of Middletown and Eastwood with a shared-use path and also provide a connection to the greater Louisville Metro area through the Louisville Loop. The first segment of the MET shared-use path begins at Eastwood Cutoff and extends west to the Gene Snyder Freeway (Interstate 265). The second segment begins at the Gene Snyder Freeway and extends west to Old Shelbyville Road. When completed, the MET shared-use path will provide a continuous and safe bicycle and pedestrian connection along one of the city's busiest streets from Eastwood to Middletown. URS is responsible for the preliminary alternatives and final design phases.

Jefferson County, Grade Lane, Project Manager: The Grade Lane Relocation project in Jefferson County is a high profile project for the Kentucky Air National Guard (KY-ANG) and administered through the Kentucky Transportation Cabinet (KYTC). The KY-ANG desires to relocate Grade Lane and modify the I-65 on-ramp for Homeland Security purposes. This will accommodate their future development and better secure their facility since existing Grade Lane bisects the KY-ANG facility. The key to the project success has been an intense agency coordination effort with KY-ANG, Louisville Regional Airport Authority, UPS, Louisville Metro Public Works, Louisville Water Company, Louisville Fire Department, FHWA and KYTC. Close collaboration with UPS Worldport on the Traffic Management Plan and the Louisville Water Company on the project's impact to their 60" transmission line, which is the largest in the state, was required to provide an acceptable design. Multiple agency meetings have been held throughout the project development process to gain the necessary approvals to keep the project moving forward. The overall project length is approximately 2500' in length and is being funded with Defense Access Road (DAR) funds.

Jefferson County, Eastern Parkway Project, KYTC Project Manager: Project consisted of improvements to Eastern Parkway from I-65 to 3rd Street near the University of Louisville Belknap Campus. The project included studying alternate alignments, grades, environmental constraints, traffic signal operations, public involvement, and cost estimates in order to select a preferred alignment. A bridge over CSX Railroad is within the limits of the project. The project was the recipient of the 2010 American Public Works Association – Kentucky Chapter (APWA) "Project of the Year" in the roadway category; and the 2010 National ABC "Excellence in Construction – Eagle Award."



Paul A. Slone, PE, PTOE

Senior Transportation Engineer

Overview

Mr. Slone is one of the top traffic operations engineers in the region. He is highly skilled at finding solutions to today complex transportation problems. His well rounded experience with multiple public agencies gives him a unique perspective of the issues faced at the state and local levels.

Project Specific Experience

Traffic Operations

Statewide Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Project Manager for providing specialized traffic engineering services under this statewide task order contract. Services include review and management of assigned coordinated traffic signal systems, collecting travel time data, developing traffic simulation models, signal retiming, and intersection inventories. Under this two-year contract, four Letter Agreements were assigned to analyze and recommend improvements to six coordinated networks. Networks ranged from small rural towns (Irvine, West Liberty, Maysville & Radcliff) to urbanized areas (Owensboro & Ashland). Now into the second iteration of this contract, URS is assisting the KYTC with three systems totaling 26 intersections in Paducah (Kentucky Avenue, Hinkleville Road and 28th Street).

District 7 Traffic Engineering Services – Kentucky Transportation Cabinet (2007-present). Mr. Slone is the Program Manager for a staff augmentation project for the KYTC District 7 Office (Lexington Area). Primary work activity is to address the tremendous work backlog due to recent staff losses experienced by the district. Backlog includes many outstanding traffic signal requests, speed studies plus various other traffic engineering studies, supervision of the district electrical contractor, and assisting with the day-to-day operation and management of the district's 277 traffic signals and 15 closed loop systems that are outside of Fayette County (Lexington maintains all state traffic signals in the county). URS was reselected to maintain this contract in 2009.

ARRA Traffic Signal Retiming – Louisville Metro Government (2010-2012). Project Manager for developing new traffic signal timing plans on three major arterial routes in Louisville. The study area includes Dixie Highway (US 31W), Bardstown Road (US 31E) and Fern Valley Road (KY 1737) totaling 67 intersections. Routes vary from 35,000 to 55,000 vehicles per day. This project involved an extensive data collection effort, development of new signal timing, signal programming using TransPHAT and Centrax, and field implementation. URS utilized a Bluetooth base data collection system to analyze the before and post implementation travel times in each corridor. This system enabled URS to average hundreds of travel time runs from everyday roadway users.

District 5 Traffic Engineering Services – Kentucky Transportation Cabinet (2007-2009). Project Manager for this Six Year Highway Plan project to help the KYTC District 5 Office (Louisville Area) re-time traffic signal systems on eight arterial routes. In all, 63 intersections are included on some of Jefferson County's most heavily congested routes. Routes include Dixie Hwy (US 31W), Preston Hwy (KY 61), Outer Loop (KY 1065), Poplar Level Rd (KY 864), US 42 at I-264, Newburg Rd, and Blankenbaker Pkwy. Services included extensive traffic data collection, modeling and downloading signal timing directly to signal controllers and providing field support to adjust timing plans. As part of the modeling process, alternative signal phasing such as lead/lag, left turns and reversing order of split phased signals was evaluated.

Providing Services for Contracts: 1 & 6

Areas of Expertise

Traffic Operations & Analysis
Traffic Signal Design & Timing
Signal Timing Implementation
Congestion Management
Simulation Modeling
Intersection/Interchange Design
Traffic Impact Analysis
Transportation Planning

Years of Experience

With URS: 8 Years
With Other Firms: 5 Years
With the Public Sector: 9 Years

Education

BS/1992/Civil Engineering/
University of Kentucky

Registration/ Certification

Professional Engineer:
Kentucky – 19880
Ohio – 66422
Professional Traffic
Operations Engineer
(PTOE)



Kevin Dant, MBA

Project Manager (Planning and NEPA Evaluations)

Providing Services for Contracts: 1,4, 5, & 8

Areas of Expertise

- NEPA Compliance and Review
- Environmental Coordination
- Environmental Compliance
- Phase I Design
- Public Involvement
- UST Management
- Facility Audit

Years of Experience

24 Years

Education

- BS/Geography/University of Louisville
- MBA/University of Louisville
- KY Professional Development Program-Community Transportation Innovation Academy

Training

- KEPSC-Certified Inspector
- Section 7 Compliance and Consultation with USFWS
- Habitat Assessment-ESA
- Environmental Justice
- UST Management
- NEPA Documentation

Overview

Mr. Dant has been with URS for five years leading projects and environmental compliance activities. Prior to joining URS he was the Environmental Coordinator for KYTC District 5. In addition, Mr. Dant has experience in UST management and remediation.

Project Specific Experience

Transportation: Environmental - Roadway & Bridge

Project Manager, Oldham County Greenway Bridge over I-71, Oldham County, Kentucky: Kevin was the Project Manager for URS on this pedestrian bridge project. The project includes approach design, ADA compliance, drainage and Right of Way.

Oldham County, Apple Patch Park and Ride: Project is to design a Park and Ride facility near the interchange of I-71 and KY 329 near Crestwood, KY. This project is being administered by Oldham County as a KYTC LPA project. Included in the project is the utilization of Green Infrastructure to minimize storm water runoff. Sidewalks will be included as well as the possibility of a TARC bus stop.

Jefferson & Oldham Counties, Old Henry Road-Crestwood Connector, Environmental Coordinator

The project's purpose is to relieve congestion along KY 146 from I-265 (Gene Snyder Freeway) to Crestwood. URS' scope of work for the Phase II Design services includes final plan and profile sheets, drainage analysis, maintenance of traffic plans, erosion control plans, coordinate control sheets and cross sections.

Louisville Metro Parks – Northeast Louisville Loop Multi-Use Path, Middletown to Eastwood, Louisville Metro, Project Manager:

The Middletown-Eastwood Trail (MET) will link the two communities of Middletown and Eastwood with a shared-use path and also provide a connection to the greater Louisville Metro area through the Louisville Loop. The first segment of the MET shared-use path begins at Eastwood Cutoff and extends west to the Gene Snyder Freeway (Interstate 265). The second segment begins at the Gene Snyder Freeway and extends west to Old Shelbyville Road. When completed, the MET shared-use path will provide a continuous and safe bicycle and pedestrian connection along one of the city's busiest streets from Eastwood to Middletown. URS is responsible for the preliminary alternatives and final design phases.

ADA Compliance Evaluations

Louisville Metro

Project Manager for ADA Compliance evaluations for Louisville Metro government. In 2011 URS developed a Pilot Assessment and Evaluation Checklist for existing curb ramps and sidewalks. Curb ramp inventories were conducted in 2012 for Tier 1 and 2 pedestrian areas within Louisville. In 2013 Sidewalk Assessment were conducted to assess condition, cross slope, and tripping displacements.



Craig R. Klusman, P.E.

Structural Engineering Manager

Providing Services for Contract: 4

Areas of Expertise

Bridge Design
Bridge Inspection
Bridge Rehabilitation
Project Management

Years of Experience

With URS: 14 Years
Total: 15 Years

Education

Bachelor of Science in Civil Engineering, University of Kentucky
Master of Science in Civil Engineering, Virginia Polytechnic Institute & State University

Professional Affiliations

American Society of Civil Engineers
Kentucky Society of Professional Engineers

Registration/Certification

PE KY 22558
PE IN PE10606330
PE OK 25329

Overview

Mr. Craig Klusman is responsible for the project management, analysis, design, details, rehabilitation, project reports, and seismic analysis for all types of highway structures, including complex and long span bridges. Mr. Klusman has extensive experience with in-depth visual inspection and fracture critical member inspection of numerous long-span steel bridges and post-tensioned concrete bridges, including the use of non-destructive testing methods. Mr. Klusman is a certified FHWA Bridge Inspection Team Leader.

Project Specific Experience

US127 - Bluegrass Parkway Interchange Reconstruction Kentucky Transportation Cabinet

Engineer of Record

Design of the reconstruction of the US127 - Bluegrass Parkway Interchange in Anderson County, KYTC Item No. 7-304.01. Project included the design and preparation of the structure plans. The work was completed on schedule and the project successfully led to construction on May 23, 2003 to Haydon Bridge Company, for \$8 million.

Statewide Bridge Repairs Kentucky Transportation Cabinet

Project Manager

Project included preparation of contract ready proposals for the repair and rehabilitation of 11 bridges in Districts 1, 2, and 3. The contract ready proposals included the notes, specifications, and plan drawings as necessary for KYTC to utilize for letting a contract to complete the specified bridge repairs. Bridge repairs included a substructure replacement, overlays, joint replacement/elimination, pier repairs utilizing structural steel repairs, pier repairs utilizing fiber polymer wraps (FRP), inspection walkway replacement, curb repair, handrail repair, bearing replacement (truss and girder spans), and abutment backwall reconstruction. Structure types included in the repairs: Steel Multi-Girder, Steel Two-Girder, Through-Truss, Deck-Truss, Cantilever Truss, Prestressed Concrete Girder, and Concrete Box-Girders. Significant structures included in the project are:

- US 68 over the Tennessee River (Eggners Ferry Bridge)
- US 62 over the Cumberland River
- US 60 over the Green River (Spottsville Bridge)
- US 62 over the Green River (Rockport Bridge)
- Western Kentucky Parkway over the Green River



Ian R. McElhone, EIT

Bridge Engineer



Providing Services for Contract: 4

Areas of Expertise

- Bridge Design
- Bridge Inspection
- Bridge Rehabilitation

Years of Experience

- With URS: 2 Years
- Total: 2 Years

Education

- BS Civil & Environmental Engineering / University of Pittsburgh
- MS Civil Engineering / University of Cincinnati

Professional Affiliations

- American Society of Civil Engineers

Registration/Certification

- Engineer-In-Training / PA / ET012788

Overview

Mr. McElhone is responsible for the analysis, design, details, rehabilitation, project reports, and seismic analysis for all types of highway structures, including complex and long span bridges. Mr. McElhone has experience with in-depth visual inspection and fracture critical member inspection of both long and short-span bridges, including the use of non-destructive testing methods.

Project Specific Experience

Bridge Design Projects

Post-Tensioned Concrete Bridge Repairs Oklahoma Department of Transportation

Project Engineer

Mr. McElhone was the project engineer for the preparation of bridge repair plans for twelve post-tensioned concrete box bridges for the Oklahoma Department of Transportation. Repairs included remedial grouting, floodcoating application and deck waterproofing with a silane treatment. URS prepared special notes, contract drawings, and maintenance of traffic details.

Ohio River Bridges Design Build Pursuit Kentucky Transportation Cabinet

Design Engineer

URS was the lead design engineer for the JV of Skanska, Dragados, and Flatiron in the design build pursuit of the estimated \$1.2 billion project. The project includes the construction of a new cable-stay Ohio River crossing, redecking of the existing Kennedy Bridge, and construction of a new Kennedy Interchange, including the design of over forty bridges. Mr. McElhone was a design engineer for the preliminary design and plan preparation for seven bridges in proposed Kennedy Interchange. Bridge types included curved steel plate girder, prestressed concrete hybrid girders, and prestressed concrete box girders.

US31 Clark Memorial Bridge over the Ohio River Kentucky Transportation Cabinet

Design Engineer

Mr. McElhone served as project engineer for the preparation of repair plans for the Indiana Approach. Project included structural steel repairs, concrete repairs, and reconstruction of the sidewalks.

US68 over the Tennessee River, Eggners Ferry Bridge, Emergency Span Replacement

Kentucky Transportation Cabinet

Project Engineer

URS was called upon to provide emergency engineering services after a large vessel impacted Span E, resulting in the loss of Span. URS helped KYTC develop conceptual repair concepts and developed 60% plans for a steel plate girder single span repair option. KYTC decided to let the project as a design-build and a single span warren truss was designed and constructed by others.



URS

Travis Baker, PE

Bridge Engineer

Providing Services for Contract: 4

Areas of Expertise

Bridge Design
Bridge Inspection
Bridge Rehabilitation

Years of Experience

With URS: 8 Years
With Other Firms: 1 Year

Education

BS/2005/Civil Engineering/
University of Cincinnati

Registration/ Certification

2011/Professional Engineer/
Ohio/#75849
2010/Professional Engineer/
Oklahoma/#24577
2009/Professional Engineer/
Kentucky/#27019
2008/SNT-TC-1A Magnetic
Particle Testing Level II
2006/FHWA Bridge
Inspection Team Leader

Overview

As a bridge engineer, Mr. Baker has completed design calculations, plan sets, and numerous repair specifications for many types of short-span bridges. He has also performed analyses of long-span bridges for repairs and new construction. In addition, Mr. Baker is experienced with in-depth and fracture critical inspections of both long and short-span bridges. He is a certified FHWA Bridge Inspection Team Leader and has been a part of inspection teams for bridges in several states.

Project Specific Experience

Bridge Design/Repair Projects

Design Engineer, Taylor Creek Culvert Extension for the Kentucky Transportation Cabinet (2013): To remedy scour and undermining that have occurred at the end of the existing 20' wide culvert, plans are being prepared to lengthen the pre-cast culvert on a new cast-in-place slab supported on H-piles. In addition, a pile supported cantilever headwall will retain the additional fill added on the extended culvert.

Design Engineer, John A. Roebling Bridge Cantilever Sidewalk Analysis for the Kentucky Transportation Cabinet (2011): To repair heavily deteriorated sidewalk support braces found during a fracture critical inspection, a STAAD model of the sidewalk framing was created to analyze the structure. Repair schemes were evaluated with consideration of constructability and longevity.

Design Engineer, US 60 Bridge over the Tennessee River for the Kentucky Transportation Cabinet (2009-2011): Final design was completed for a new truss superstructure on Highway US 60 over the Tennessee River along the border of McCracken and Livingston Counties. The main river crossing has three spans, for a total bridge length of 1800-feet. The superstructure design featured a Warren truss bridge with sway bracing. The truss depth between chords was 60-feet. Truss members were comprised of solid steel box members comprised of either Grade 50W or 70W High Performance Steel. Customized components for inspection access and wildlife deterrent were also designed.

Design Engineer, Load Rating and Repairs for I-275 Combs Hehl Twin Bridges over the Ohio River for the Kentucky Transportation Cabinet (2009): After finding out-of-spec steel in several locations on the bridge, the Kentucky Transportation Cabinet requested that the out-of-spec steel be repaired and a load rating be performed on the primary truss members and their connections. URS partnered with another consultant to develop repair plans, as well as a structural model to be used for HS20 and superload load ratings. The ratings were completed in accordance with the LFD design methodology and the FHWA guidance on gusset plate ratings.

Design Engineer, Statewide Bridge Repairs for the Kentucky Transportation Cabinet (2007-2008): Contract ready proposals were prepared to complete the repair of eleven bridges in Districts 1, 2, and 3. The contract ready proposals included the notes, specifications, maintenance of traffic considerations, and plan drawings as necessary for KYTC to utilize in letting a contract to complete the specified bridge repairs. Bridge repairs included overlays, joint replacement/elimination, curb repair, handrail repair, elastomeric and PTFE bearing replacements (truss and girder spans), abutment backwall reconstruction, substructure replacement, pier repairs using fiber reinforced polymer (FRP) materials, inspection walkway replacement, and various structural steel repairs.

Vanessa M. Fritsch, PE, PTOE

Project Manager



Providing Services for Contract: 6

Areas of Expertise

Traffic Signal Timing
Signal System Timing
Signal Design
Intersection Design

Years of Experience

With URS: 7.5 Years
With Other Firms: 2.5 Years

Education

B.S., Civil Engineering,
University of Kentucky,
2003

Professional Registration

Professio

nal Engineer,
Kentucky- 26090
Professional Traffic
Operations Engineer,
ITE

Chronology

9/06 – Present: URS
Corporation,
Cincinnati, Ohio

7/05 – 9/06: Edwards
and Kelcey, Cincinnati,
Ohio

12/03 – 6/05:

Overview

Ms. Fritsch is a Project Manager with expertise in the fields of Signal Design, Signal System Timing, Traffic Control and Intersection Design. She has over 10 years of experience with consulting firms. Ms. Fritsch has experience in signal design, system timing, traffic studies, lighting, traffic control, signing, plan preparation, maintenance of traffic plans, quantity calculations, and construction cost estimates.

Project Specific Experience

Louisville Metro Hikes Point Traffic Signal Retiming (2009): Project Engineer developing new traffic signal timing plans for 7 intersections in the Hikes Point area. Taylorsville Road, Breckenridge Lane and Hikes Lane are the three arterial routes in the project area. Primary task was to develop the five timing plans, which included lead-lag at two intersections on Breckenridge Lane to improve flow and reduce queues between two closely-spaced signals.

District 5 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-2009): Project Engineer providing detailed corridor analyses. Services include evaluation of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models to optimize timing. The assigned signal systems include: Preston Highway (8 intersections), Poplar Level Road (8 intersections), Outer Loop Road (4 intersections) and Dixie Highway (21 intersections), US 42 (5 intersections), Newburg Road (5 intersections) and Blankenbaker Road (7 intersections).

District 7 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Project Engineer providing staff augmentation to the KYTC District 7 Office (Lexington Area). Contractual duties include performing signal warrant studies, speed studies, performing signal installation inspections, managing 15 closed loop signal systems. In the first year of the contract, URS evaluated over 100 intersections. The contract was renewed in 2009, 2011 and 2013. After subsequent renewals, traffic signal warrant studies, left turn evaluations, and a sign inventory that includes 65 miles of roadway have been performed. The services also include and access management study on US 27 in Nicholasville, signal system retiming in Georgetown near the Toyota plant and continued intersection evaluations for left turn phases and signal warrants, among other things.

Statewide Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Project Engineer providing a broad range of traffic engineering services under this statewide contract. Services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. This contract was renewed in 2009, 2011 and 2013.

Eastern Parkway Safety Improvements, Kentucky Transportation Cabinet, Louisville, KY (2007-2008): Project Engineer on resurfacing and sidewalk improvements. The project involves the replacement of a signal and installation of an overheight truck detection warning system. The project also includes the installation of decorative mast arms, street lighting, railing and fence.

Richmond Centre Traffic Signal Design, Carolina Holdings, LLC., Richmond, KY (2007-2008): Project Engineer responsible for traffic signal design at new development. The project involved the installation and interconnection of two traffic signals. The project also included minor widening and intersection improvements to accommodate the projected traffic volumes.

Downtown Area Traffic Signal Retiming, Lexington-Fayette Urban County Government (LFUCG), Lexington, KY (2006-2007): Project Engineer responsible for developing the simulation used to improve system performance. The signal system includes 89 intersections in downtown Lexington, Kentucky. The project included an analysis of the existing system, development of improvements and implementation of the new timing.



William F. Madden, PE, PTOE

Senior Traffic Engineer

Providing Services for Contract: 6

Areas of Expertise

- Traffic signal timing
- Signal system timing
- Signing, pavement marking
- Trip generation
- Traffic distribution

Years of Experience

- With URS: 6 Years
- With KYTC: 23 Years

Education

- Bachelor of Science in Civil Engineering/University of Kentucky/1984

Registration/

Certification

- KY PE #15943
- OH PE #72934
- Professional Traffic Operations Engineer (PTOE)

Professional Societies/Affiliates

- Kentucky Section, Institute of Transportation Engineers
- Planning Committee for Transportation Engineering Workshop - Cincinnati

Awards

- URS Outstanding Quality Award
- October 2011

Overview

Mr. Madden is a project engineer with URS after 23 years with Kentucky Transportation Cabinet (KYTC). He is experienced in several areas of traffic engineering. His experience with URS and KYTC is as follows:

Project Specific Experience

District 7 Traffic Engineering Services Contract, KYTC (2007-Present) - Mr. Madden is the project engineer responsible for performing operational reviews of traffic signal installation and modification requests, safety studies, and signing inventories. To date, over 160 intersections and eight signal systems have been reviewed. This is a multi-year contract that was renewed in 2013. Work tasks are issued by Letter Agreement on an as-needed basis. Access improvement projects and Traffic Impact Studies have also been issued under this contract.

Statewide Traffic Engineering Services Contract, KYTC (2007-Present) -Project Engineer responsible for providing a broad range of traffic engineering services under this statewide contract. Services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. To date, URS has worked on 11 signal systems: US 60 in Paducah, (26 intersections), Various Routes in Covington (38 intersections), Multiple Routes in Northern KY (16 intersections), US 431 in Owensboro (19 intersections), and smaller systems in West Liberty, Maysville, Irvine, Florence, Ludlow, Covington and Radcliffe. This contract was also renewed in 2013.

Boone County, US 42 at Weaver Road, Intersection Improvement, KYTC, (2013-Present) – Alternatives analyses and traffic distribution for various alternatives.

Dixie Fix, KYTC (2009-2011) - Project Engineer providing design expertise for operational improvements to three intersections in Crestview Hills, KY. The project includes signal timing and interstate interchange improvements.

I-71 / Gene Snyder Alternatives Study, KYTC (2008-Present) - Project Engineer responsible for analyzing the highway capacity of several alternatives for improvements to the interchange.

KY 207, KYTC (2010-2013) – Project Engineer responsible for data collection, traffic forecasting, and crash data analysis.

Various Routes, Louisville Metro Government (2010-2013) – Project Engineer responsible for signal system timing, travel time data collection, timing evaluation, and system timing design.

Western Hills Viaduct, Cincinnati Department of Transportation and Engineering (2011-Present) – Project Engineer responsible for traffic distribution and intersection operation computer modeling.

I-275 at SR 32 SuperStreet Intersection, Clermont County Transportation Improvement District, (2008-2010) - Project Engineer providing expertise for designing seven (7) traffic signals including a complex SuperStreet intersection in Union Township. A derivative of the “Michigan U-Turn” intersection, the SuperStreet intersection requires three individual signals to efficiently move traffic through the intersection. Seven traffic signal designs were required in all as a result of the new interchange design. The project will meet the needs of the community by matching the mast arm design with those already used in the area.

Section 4 | LIST OF CLIENTS

Client	Contact	Project
Lexington-Fayette County Government- Division of Engineering	Mr. Robert Bayert LFUCG-Division of Engineering 101 East Vine Street, 4 th Floor Lexington, KY 40507 bobb@lexingtonky.gov	» Keithshire Way, Roadway Improvements.
Lexington-Fayette County Government- Division of Engineering	Mr. Keith Lovan LFUCG-Division of Engineering 101 East Vine Street, 4 th Floor Lexington, KY 40507 Klovan@lexingtonky.gov	» McConnell's Trace Greenway
Lexington-Fayette County Government- Division of Water Quality	Mr. Doug Baldwin, Project Manager Lexington-Fayette Urban Co. Government Water Quality Division 125 Lisle Industrial Rd, Ste 180 Lexington, KY 40507 wazevedo@lexingtonky.gov	» East Lake Trunk Sewer Replacement » Century Hills Trunk Sewer Replacement.
Lexington-Fayette County Government- Division of Parks and Recreation	Ms. Michelle Kosieniak, RLA LFUCG Division of Parks and Recreation 469 Parkway Drive, Lexington, KY 40504 Lexington, KY 40504 Michello@lexingtonky.gov	» Wellington Way Park. » Wildwood Park » Valley Park
LFUCG	Steve Cummins, PE 859.258.3491 Stevevec@lexingtonky.gov	» Traffic Signal Retiming
KYTC:	Kevin Martin, PE 502.782.4899 Kevin.martin@ky.gov	» Murray Roundabout » Grade Lane Relocation » Riverboat Row Box Culvert » Blankenbaker Parkway at I-64
KYTC District 7	Kelly Baker 859.246.2355 Kellya.baker@ky.gov	» US 127 Access Management » District 7 Traffic » Nicholasville Signal System » Danville Signal System
Louisville Metro	Dan O'Dea, PE 502.574.5810 Daniel.odea@louisvilleky.gov	» Bike & Pedestrian Master Plan » Middletown to Eastwood Trail (MET) » Meyzeek Middle School Safe Routes to School » Mount Holly Road » ADA Sidewalk Assessment » TARC Bus Stop Project » 18th Street at Broadway Intersection

Client	Contact	Project
Kentucky Division of Water	Mr. Carey Johnson State Floodplain Coordinator Kentucky Division of Water 14 Reilly Road, Frankfort, KY 40601-1189 (502) 564-3410 carey.johnson@ky.gov	<ul style="list-style-type: none"> » Kentucky Division of Water Statewide FEMA Map Risk Update for Fayette County. » Kentucky Division of Water Statewide FEMA Map Risk Update for Union County.
City of Elizabethtown	Mr. Robert Bush, PE Director of Stormwater Management 270-765-6121 Ext. 4328 robert.bush@elizabethtownky.gov	<ul style="list-style-type: none"> » Freeman and Valley Creek Stormwater Improvement » Conceptual Design of Veterans Basin » Design of Orchard Drive Drainage Improvements » Design of Broadway Street Drainage and Sewer Improvements » Design of Joan Avenue Basin » Design of Balmoral Road Drainage Improvements » Design of Spring Drive Drainage Improvements » Design of Springdale Drive Drainage Improvements » Design of Valley Drive Drainage Improvements
Grand Campus Place	Mr. Ed Worley 119 South Collins Richmond, KY 40475 (859) 200-4462 ed.worley@wgtky.com	<ul style="list-style-type: none"> » Barnes Mill Road & Lancaster Avenue (KY-52). » Concrete Retaining Walls.
Greer Development	Mr. Lee Greer 3620 Walden Drive, Lexington, KY, 40517 (859) 269-1966 lgreer@greercompanies.com	<ul style="list-style-type: none"> » Southland Drive-LOMR Study
Red Mile Development	Mr. Joe Costa 1200 Red Mile Road Lexington, KY 40504 Jcosta@theredmile.com	<ul style="list-style-type: none"> » Red Mile Sanitary Sewer and Pump Station » Grand Circle Drive & Winball Way. » Tattersall's Way
Hamburg Place	Mr. Warren Witt 2517 Sir Barton Way Lexington, KY 40509 (859) 321-5799 warrenwitt@hamburgplace.com	<ul style="list-style-type: none"> » Sir Barton Way & Sanford Way » Sir Barton Way (Indiana Wesley University)

Client	Contact	Project
Map II	Mr. Riley Kirn 1999 Richmond Road, Lexington, KY, 40509 (859) 509-4824 mrk@team-map.com	<ul style="list-style-type: none"> » New Circle Road (KY-4) and Liberty Road (KY 1927) » Nicholasville Road (US-27)
Oxford Place, LLC	Mr. Doug Smith 134 East Main Street Georgetown, KY 40324 (502) 863-1733	<ul style="list-style-type: none"> » Oxford Village Sanitary Sewer
City of Frankfort Sewer Department	Robert Peterson, PE Deputy Director of Collections 502-875-2448 bpeterson@frankfort.ky.gov	<ul style="list-style-type: none"> » Parkside Development Sanitary Sewer Realignment » Lower Slickaway Sewer Replacement and I/I Reduction Project
Hamburg Place Silver Oaks, Inc	Mr. Warren Witt 2517 Sir Barton Way, Lexington, KY 40509 (859) 321-5799 warrenwitt@hamburgplace.com	<ul style="list-style-type: none"> » Hamburg East Storm Water Management Plan » Polo Club Multi-Plate Arch Culvert

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 1

Project Name: Barnes Mill Road and Lancaster Avenue (KY-52), Richmond
Description: Project consists of the relocation of Barnes Mill Road to eliminate sharp curves and direct driveways access. Scope of services included adding pedestrian bridge and sidewalk along Lancaster Avenue (KY-52)

Date of Project: 2013
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$240K

Project Name: Keithshire Way, Roadway Improvements, Lexington
Description: Project consists of the survey and design of the left turn lane to Wellington Elementary School.

Date of Project: 2010
 Services Provided: Survey and Design
 Construction Cost: \$60K

Project Name: New Circle Road (KY-4) and Liberty Road (KY 1927), Lexington
Description: Projects consists of the design, construction administration and inspections of the right turning lanes and sidewalk along New Circle Road (KY-4) and widening and bike lane along Liberty Road (KY-1997)

Date of Project: 2010
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$115K

Project Name: Nicholasville Road (US-27), Nicholasville
Description: Project consists of adding left and right turn lanes and adjustment of traffic signal timing at the intersection of US-27 and Elizabeth Street

Date of Project: 2010
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$178K

Project Name: Sir Barton Way, Lexington
Description: Project consists of the design, construction administration, and inspection of the left and right turn lane for Indiana Wesleyan University.

Date of Project: 2011
 Services Provided: Survey, design, construction administration, & Inspections
 Construction Cost: \$75K

Project Name: Red Mile Roadway Improvement, Lexington
Description: Project consists of the design of left turn lane and improvement on Red Mile Road for right turn movement to Red Mile Village. Scope of services included, survey, design, construction administration, and inspections.

Date of Project: 2010
 Services Provided: Survey, design, construction administration, & Inspections
 Construction Cost: \$78K

Project Name: Kentucky 7, Roadway Improvement, Morgan County
Description: Project consists of adding two left turn lanes and two right turn lanes along KY-7 for Wrigley Elementary School. Scope of services included survey, traffic study, and design of the turning lanes.

Date of Project: 2013
 Services Provided: Survey, design, utilities relocations
 Construction Cost: \$165K

Project Name: Sir Barton Way & Sanford Way, Lexington
Description: Project consists of the design, construction administration, and inspection of Sanford Way and the left and right turn lane along Sir Barton Way

Date of Project: 2013
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$165K

QUALIFICATIONS FOR CONTRACTS: 1, 3, 4, 5, 6, and 8

Project Name: Tattersall's Way, Lexington

Description: Project consists of the design, construction administration, and inspection of Tattersall's Way and the intersection improvements with Curry Avenue. Tattersall's construction between Red Mile to Curry Avenue, is one of the recommendation of the Red Mile Development traffic study recommendations.

Date of Project: 2013
Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
Construction Cost: \$185K

Project Name: KYTC Statewide Roadway Design

Description: Project involves providing statewide roadway design services to support the KYTC's Division of Highway Design and District Offices. Specialty design services, rural design services, urban design services, multiple agency coordination, & innovative design services were all performed under this contract.

Date of Project:
Services Provided:
Construction Cost: \$20M

Project Name: KYTC Statewide LPA Design

Description: Project consists of design services for a wide variety of projects at the direction of the Kentucky Transportation Cabinet (KYTC) and various Local Public Agencies that have contracted with the KYTC to administer projects on an as-needed basis.

Date of Project: 2013-Present
Services Provided: Roadway design, sidewalk design, streetscape design, structural design, land surveying, construction engineering, planning services, geotechnical design, traffic engineering, environmental services
Construction Cost: \$200,000

Project Name: Murray Five Points Roundabout

Description: The existing intersections at Five-Points in Murray, Kentucky have traffic flow and peak hour congestion concerns. In addition, Murray State University is directly adjacent to the intersection. MSU requested improved walking conditions to campus and an attractive entryway. A highway capacity analysis was completed for the project and consensus was reached as the roundabout being the preferred alternative. URS is completing final design of the project.

Date of Project: 2012-Present
Services Provided: Traffic planning, surveying, roadway design, preliminary line and grade, right of way, public involvement
Construction Cost: \$1.6 M (Est.)

Project Name: Old Henry Road Widening and Extension

Description: The project's purpose is to relieve congestion along KY 146 from I-265 (Gene Snyder Freeway) to Crestwood by widening Old Henry Road East of I-265. The project limits are from Bush Farm Road in Jefferson County to KY 362 in Oldham County, a distance of 2.2 miles. The existing utilities will be field mapped using subsurface utility engineering techniques, as required, to maximize the avoidance of the existing utilities.

Date of Project: 2011-Present
Services Provided: Roadway engineering, traffic engineering, environmental permitting
Construction Cost: \$15M

Project Name: US 27 Access Management Plan

Description: The elected leadership for the City of Nicholasville and Jessamine County realized that an Access Management Plan was needed for US 27 between Nicholasville and Lexington. The KYTC District 7 office requested the study of the area from Man o' War Boulevard southward to the northern access control line of the proposed East Nicholasville Bypass. This plan will be enacted through a Memorandum of Understanding (MOU). The primary goal of this plan is to establish a unique set of access permitting guidelines to be accepted and enforced by multiple agencies that have funding or land use decision making power in the corridor. This plan establishes both spacing requirements and defines short and long term projects for implementation with additional strategies for sustaining the current four-lane US 27

Date of Project: 2011-2012
Services Provided: Preliminary design, access management
Construction Cost: \$8M

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 3

Project Name: KYTC Statewide Roadway Design

Description: Project involves providing statewide roadway design services to support the KYTC's Division of Highway Design and District Offices. Specialty design services, rural design services, urban design services, multiple agency coordination, & innovative design services were all performed under this contract.

Date of Project: 2011-Present
Services Provided: Highway design
Construction Cost: \$25 million

Project Name: KYTC District 7 Traffic Engineering Services

Description: Through this contract, staff augmentation is provided for a variety of traffic engineering tasks including data collection, traffic control studies, delay studies, signal retiming and more. All tasks involve various types of studies where technical/professional recommendations are made. In the first 18 months of the initial contract the backlog of traffic signal studies was cleared throughout the district and traffic signal systems in Harrodsburg, Nicholasville, Versailles, Winchester, and two systems in Richmond were worked on. During the second iteration of this contract, data collection was provided as were various intersection analyses as necessary. Detailed access improvement studies were performed for one public school campus and one technical college campus. A

Date of Project: 2007-2008
Services Provided: Staff augmentation, traffic engineering, data collection, signal warrant studies, phase warrant studies, all-way stop warrants, traffic signal retiming, traffic signal coordination, traffic impact studies, intersection capacity improvements
Construction Cost: \$715,000

Over the last four years to date, approximately 7,200 hours (3.6 FTE) of work have been provided, involving 118 intersection studies, six coordinated traffic signal systems and a sign inventory for a section of Fayette County around the Kentucky Horse Park associated with the World Equestrian Games.

Project Name: KYTC Statewide MS4 Program Compliance

Description: URS was selected in 2011 to manage KYTC's Statewide Environmental Stormwater Program. This builds on over five years of services that URS Team members provided prior to joining URS as KYTC's previous Statewide Environmental Stormwater consultant. During this time, URS team members performed a national department of transportation (DOT) benchmarking study to establish a regional program baseline, provided negotiation support for the second permit term of the Cabinet's MS4 stormwater permit, and followed this with program development and implementation. URS continues to support KYTC through their familiarity with KPDES permitting and understanding of Kentucky Division of Water (KDOW) program goals.

Date of Project:
Services Provided: Public education & outreach, NPDES permitting compliance, co-permittee coordination
Construction Cost: \$ NA

Project Name: Kentucky Division of Water Statewide FEMA Risk Map Updates.

Description: Project involves providing statewide FEMA risk map updates. Scope of services includes, detail and limited detail survey, hydrologic, hydraulic, and mapping as per FEMA appendix M and N.

Date of Project: 2010-Present
Services Provided: Survey, Hydrological/Hydraulic, FEMA risk map updates
Construction Cost: \$22 million

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 4

Project Name: Louisville Metro – Rehabilitation of 4 Bridges Over Beargrass Creek

Description: This project was for replacement/rehabilitation of four bridges for Louisville Metro. URS provided engineering services in accordance with Kentucky Transportation Design procedures. The KYTC District 5 office in Louisville was an active project team member. Design services included preliminary design, surveying, drainage design, maintenance of traffic plans, preparation of Advanced Situation Folders, preparation of bid documents and construction plans with construction cost estimates.

Date of Project:
Services Provided: Bridge design, traffic planning, roadway design
Construction Cost: \$1.2M

- Payne St. over Middle Fork Beargrass Creek
- Breckinridge St. over South Fork Beargrass Creek adjacent to CSX Railroad
- Oak St. over South Fork Beargrass Creek
- Schuff Ln. over South Fork Beargrass Creek

Project Name: KYTC Statewide Bridge Repairs

Description: As Kentucky's infrastructure continues to age, a number of bridges throughout the state are in need of repair to continue their function life. The Kentucky Transportation Cabinet asked URS to prepare Contract Ready Proposals (CRPs) to expedite the repair process. These CRPs prepared by URS were all-inclusive packages which KYTC was able to quickly let to contractors for bidding. Construction of the prescribed repairs was typically complete within less than a year of URS submitting the CRPs to KYTC.

Date of Project: 2007-2008
Services Provided: Bridge rehabilitation
Construction Cost: \$10M

The typical CRPs prepared by URS included 8.5x11 drawings, special notes, and maintenance of traffic considerations. Many repairs included in the CRPs have similar drawings and notes, thus URS developed several working templates. While these templates expedited the CRP completion, they also allowed for customization to accommodate unique bridges or repairs.

Once KYTC provided URS with the list of bridges to be repaired, URS met with the district bridge engineer to discuss the proposed repairs and maintenance of traffic considerations. Holding these meetings allowed URS to become familiar with the history of each bridge and accommodate the needs and desires of the local engineers. Upon completing the CRPs, URS allowed each bridge engineer to review the repairs before they were submitted for construction.

In 2007 and 2008, URS completed CRPs for 11 bridges in Districts 1, 2, and 3. The sections below outline the tasks which were completed for each bridge. For the bridges requiring bearing repairs, URS performed structural analyses to determine the loading on the structures for temporary support considerations.

- Livingston B00065 - US 62 over the Cumberland River: Overlay, joint elimination, compression seal repairs, strip seal repairs, bearing replacement, pier cap repairs, and steel handrail repair. For the bearing replacement, PTFE sliding bearings were used in an area which was too small for conventional bearing pads. A wide load detour plan was also prepared.
- Marshall B00023 - US 68 over the Tennessee River: Overlay, joint cleaning and sealing, joint elimination, compression seal repairs, strip seal repairs, pier cap repairs, and rocker nest bearing repairs. A truck detour plan was also prepared.
- Hopkins B00116 - KY 293 over the Tradewater Overflow: Overlay, joint elimination, compression seal repairs, and pier cap repairs.

- Hancock B00030 - US 60 over the Blackford Creek: Elastomeric pad bearing replacement, compression seal repairs, and partial elimination of deck drains.
- Henderson B00015 - US 60 over the Green River: Steel stinger repairs, truss rocker bearing repair, joint elimination, compression seal repairs, strip seal repairs, pier cap repairs, and concrete railing repairs. A truck detour plan was also prepared.
- Hopkins B00016 - US 41 NB Ramp over the Pennyrile Parkway: Overlay, concrete web bearing repair, and compression seal repairs.
- Hopkins B00028 - KY 254 over the Unnamed Trib. of Middle Fork Elk Creek: Substructure replacement, scour analysis, curb repairs, wearing surface repairs, and guardrail improvements. A detour plan was also prepared.
- Muhlenburg B00093 - Western Kentucky Parkway over the Green River: Overlay, joint elimination, compression seal repairs, strip seal repairs, modular joint repairs, inspection walk replacement, steel floorbeam and stringer repairs to address web cracking, and concrete repairs a using fiber reinforced polymer wrap. A wide load detour plan was also prepared.

For the floorbeam repairs, URS conducted magnetic particle testing on the floorbeam webs to check for flaws in the steel. Upon completing the testing, repairs were specified to remediate the critical flaws found in the webs.

For the inspection walk replacement, URS designed a new walkway and support system in accordance with OSHA standards. At the request of KYTC, the walkway was designed with innovative clamping devices such that drilling into the existing steel for installation would be minimized.

- Ohio B00050 - US 62 over the Green River: Pier cap repairs, steel floorbeam repairs to address section loss at the connections, joint elimination, compression seal repairs, strip seal repairs, and concrete curb repairs.
- Warren B00009 - KY 101 over the Barren River: Abutment backwall reconstruction and guardrail installation. A detour plan was also prepared.
- Butler B00008 - KY 70 over the Big Reedy Creek: Overlay, joint elimination, and compression seal repairs. A detour plan was also prepared.

Project Name: Lancaster Avenue (KY-52) Pedestrian Bridge, Richmond
Description: Project consists of the foundation design of the pedestrian bridge along Lancaster Road (KY 52).

Date of Project: 2013
Services Provided: Survey, design, construction administration, & Inspections
Construction Cost: \$145K

Project Name: Wildwood Park, Pedestrian Bridge, Lexington
Description: Project consists of the survey and design foundation, abutment, hydrological, hydraulic study, permitting from KDOW/ COE, and the associated approaches of the pedestrian bridge.

Date of Project: 2010
Services Provided: Survey, design, H/H, permitting.
Construction Cost: \$60K

Project Name: Wellington Park, Pedestrian Bridge, Lexington
Description: Project consists of the survey and design foundation, abutment, hydrological, hydraulic study, permitting from KDOW/ COE (on-going)

Date of Project: 2014
Services Provided: Survey, design, H/H, permitting.
Construction Cost: Bidding in June 2014

Project Name: Clays Mile Roadway Widening
Description: Project consists of structural design of the extension of box culvert and the replacement of box culvert along Wolf Run by drive on slab culvert. Scope of services included design of retaining walls.

Date of Project: 2007
Services Provided: Design and H/H studies.
Construction Cost: \$

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 5

Project Name: McConnell's Trace Greenway improvement, Lexington

Description: Project consists McConnell's Trace Greenway Improvements consisted of designing a 10' wide multi-use greenway trails for the Long Branch and White Oak Parks. Long Branch Trail is 1418 lf in length and connected McConnell's Trace Blvd. to the Town Branch Trail. Additionally there were extensive improvements designed and installed along the parks drainage way to mitigate erosion problems and to create a more aesthetic and natural look utilizing native plant species.

Date of Project: 2011
Services Provided: Survey, design, drainage improvements, utilities relocations.
Construction Cost: \$130K

White Oak Trail is 1,028 L.F. in length and connected Trailwood Lane to Town Branch Trail.

Project Name: Wildwood Park, Pedestrian Bridge, Lexington

Description: Project consists of the survey and design foundation, abutment, hydrological, hydraulic study, permitting from KDOW/ COE, and the associated approaches of the pedestrian bridge.

Date of Project: 2010
Services Provided: Survey, design, H/H, permitting.
Construction Cost: \$60K

Project Name: Wellington Park, Pedestrian Bridge, Lexington

Description: Project consists of the survey and design foundation, abutment, hydrological, hydraulic study, permitting from KDOW/ COE (on-going)

Date of Project: 2014
Services Provided: Survey, design, H/H, permitting.
Construction Cost: Bidding in June 2014

Project Name: Red Mile Development

Description: Project consists of widening of the Red Mile Road and adding a bike lanes and 10 feet side walk/ trail.

Date of Project: 2010
Services Provided: Survey, design,
Construction Cost: \$ N/A

Project Name: KYTC Statewide Roadway Design

Description: Project involves providing statewide roadway design services to support the KYTC's Division of Highway Design and District Offices. Specialty design services, rural design services, urban design services, multiple agency coordination, & innovative design services were all performed under this contract.

Date of Project:
Services Provided:
Construction Cost: \$20M

Project Name: KYTC Statewide LPA Design

Description: Project consists of design services for a wide variety of projects at the direction of the Kentucky Transportation Cabinet (KYTC) and various Local Public Agencies that have contracted with the KYTC to administer projects on an as-needed basis.

Date of Project: 2013-Present
Services Provided: Roadway design, sidewalk design, streetscape design, structural design, land surveying, construction engineering, planning services, geotechnical design, traffic engineering, environmental services
Construction Cost: \$200,000

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 6

Project Name: District 7 Traffic Engineering Services

Description: URS has been twice selected for this two-year contract to assist the KYTC District 7 office in Lexington, Kentucky. Through this contract, URS provides staff augmentation for a variety of traffic engineering tasks including data collection, traffic control studies, delay studies, signal retiming and more.

URS works behind the scenes performing assigned tasks in a manner consistent with the KYTC's internal processes. All tasks involve various types of studies where technical/professional recommendations are made. URS has not interacted with the public or participated in permit reviews.

In the first 18 months of the initial contract URS cleared the backlog of traffic signal studies throughout the district and working on traffic signal systems in Harrodsburg, Nicholasville, Versailles, Winchester, and two systems in Richmond. During the second iteration of this contract, URS continued providing data collection and various intersection analyses as necessary as well as performed detailed access improvement studies for one public school campus and one technical college campus.

Over the last four years to date, URS has provided approximately 7,200 hours (3.6 FTE) involving 118 intersection studies, six coordinated traffic signal systems and a sign inventory for a section of Fayette County around the Kentucky Horse Park associated with the World Equestrian Games.

Date of Project: 2007-2008
Services Provided: Staff augmentation, traffic engineering, data collection, signal warrant studies, phase warrant studies, all-way stop warrants, traffic signal retiming, traffic signal coordination, traffic impact studies, intersection capacity improvements
Construction Cost: NA

Project Name: KYTC Statewide Traffic Engineering Services

Description: URS is currently working on our fourth consecutive two-year contract to provide as-needed traffic engineering services to the Kentucky Transportation Cabinet (KYTC) on a statewide level. Provided services on this contract primarily involve operational evaluation and upgrading signal timing, if necessary, of assigned closed loop traffic signal systems. During the last six years URS has evaluated and/or made recommendations for improvements to 19 different signal systems in districts 1, 2, 4, 6, 9, and 12.

Date of Project: 2007-Present
Services Provided: Traffic engineering, traffic signal timing, signal systems evaluation, intersection inventories, data collection: travel time & traffic volumes
Construction Cost: NA

Most of the work performed involved evaluation of existing signal systems. URS provided value added services by making small recommendations for improving traffic flow without a major modeling effort and developing new timing plans. New timing plans were developed for the areas of Radcliff, Ashland, Crestview Hills, Florence, Maysville, Grayson, Pikeville, and Covington.

URS is also implementing new technology for evaluating travel times on the latest Letter Agreement. We are capturing Bluetooth data from passing devices (phones, ear pieces, car consoles) to greatly increase our data sampling compared to limited and time intensive data from traditional float car methods.

Project Name: District 5 Traffic Engineering Services

Description: This project was awarded to update coordinated traffic signal timing on several corridors in Jefferson County. URS was assigned a total of 59 intersections on the following corridors to update.

Date of Project: 2007-2009
Services Provided: Traffic engineering, data collection, traffic signal programming, traffic model development, staff augmentation
Construction Cost: NA

- Dixie Highway (US 31W)
- Poplar Level Road (KY 864)
- Preston Highway (KY 61)
- Outer Loop (KY 1065)
- US 42
- Blankenbaker Parkway (KY 913)
- Newburg Road (KY 1703)

URS collected peak hour traffic data at each intersection and developed Synchro models for each corridor. URS provided traffic signal database files for direct downloading into the controllers, and provided on-site implementation support and field adjustment. Before and after travel time runs were performed with a GPS unit and the KYTC's internally developed software to evaluate actual driving conditions.

Project Name: Traffic Signal Retiming, Lexington

Description: URS was selected to perform traffic signal optimization on four congested routes in Lexington. Those routes were Newtown Pike (from Stanton Way to Newtown Court), Georgetown Road (from Spur Road to Douglas Avenue), Versailles Road (from Parkers Mill Road to Oliver Lewis Way) and North Broadway (I-75 interchange area).

Date of Project:

Services Provided: Traffic signal retiming

Construction Cost: NA

The project involved extensive data collection that included collecting over 800 hours of intersection turning movement counts and before and after travel time studies. Traffic counts were collected on an average weekday as well as Saturday and Sunday. In all, a minimum of 12 timing plans were developed for each route (six for weekdays, three for Saturday and three for Sunday). Some routes required the creation of additional timing plans tailored to their unique characteristics.

URS performed the optimization, central system programming (Centrax) and field adjustments. As part of the operational evaluation of the signals, URS explored ways of optimizing phase rotation (lead/lag left turns) customized by timing plan with flashing yellow arrow left turn indications.

The left turn cross products were studied at each intersection to identify intersections with very high cross products and what times they occurred. These locations were recommended to have the flashing yellow arrow signal act as a protected only left turn phase during these times. Likewise, at times where cross products are very low and left turn phases unwarranted, locations were chosen to omit left turn phases by time of day to reduce left turn delays.

Project Name: Nicholasville Road (US-27), Nicholasville

Description: Scope of services included traffic count along US-27 at the intersection of US -27 with Howard and Elizabeth Street. Purpose of the study is to evaluate the impact of Toyota on Nicholasville and 35 acres of commercial development on US-27. The outcome of the traffic study is modifications traffic light cycle, at the intersection of US-27/Elizabeth Street, and the required length of left and right turn of Dillon Ways and the right turns of Days Boulevard.

Date of Project:

2009

Services Provided: Survey, design, traffic counts, traffic studies, studies, utilities relocations, construction administration, & Inspections

Construction Cost: \$178K

Project Name: Red Mile Road, Lexington

Description: Scope of Services included traffic count at two intersections of South Broadway (US-68) / Red Mile and Versailles Road (US-60)/ Red Mile and the evaluation of the impact of Red Mile mixed use on Red Mile Road for these two intersections. Traffic study included recommendations for the changing of the light cycle, widening of Red Mile Road, adding turning lanes along Versailles (US-60)/Red Mile Road, re-striping of the South Broadway (US-68) to increase staking along the left turn lane toward Red Mile Road, and the construction of the Tattersall's Way connecting Red Mile Road to Curry Avenue.

Date of Project:

2010

Services Provided: Traffic counts, traffic studies, and recommendation of improvement

Construction Cost: \$ N/A

Section 5

LIST OF SIMILAR PROJECTS-CONTRACT 8

Project Name: Barnes Mill Road and Lancaster Avenue (KY-52), Richmond
Description: Project consists of the relocation of Barnes Mill Road to eliminate sharp curves and direct driveways access. Scope of services included adding pedestrian bridge and sidewalk along Lancaster Avenue (KY-52)

Date of Project: 2013
Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
Construction Cost: \$240K

Project Name: East Lake Trunk Sewer Replacement, Lexington (Current)
Description: Vision Engineering is the resident inspector representing Lexington Fayette County Government, Division of Water Quality.

Date of Project: 2014
Services Provided: Resident Inspector, ESC, and preparing weekly reports
Construction Cost: \$1.3M

Project Name: Century Hills Trunk Sewer Replacement, Lexington (Current)
Description: Vision Engineering is the resident inspector representing Lexington Fayette County Government, Division of Water Quality.

Date of Project: 2014
Services Provided: Resident Inspector, ESC, and preparing weekly reports
Construction Cost: \$1.1M

Project Name: Red Mile Sanitary Sewer extension (Current)
Description: Vision Engineering is the resident inspector representing Red Mile inspecting for sanitary, force main, and pump station.

Date of Project: 2014
Services Provided: Resident Inspector, ESC, and preparing weekly reports
Construction Cost: \$1.7M

Project Name: Red Mile Development (Current)
Description: Vision Engineering is the resident inspector representing Red Mile inspecting for the construction of Grand Circle Drive and Winball Way

Date of Project: 2014
Services Provided: Survey, design, construction administration, & Inspections
Construction Cost: \$375K

Project Name: Polo Club Boulevard, Lexington
Description: Vision Engineering is the resident inspector representing Silver Oaks, LLC for the construction of the Multi-plate arch culvert.

Date of Project: 2009
Services Provided: Resident Inspector, ESC, and preparing weekly reports
Construction Cost: \$300K

Project Name: Hamburg East Stormwater Management
Description: Vision Engineering is the resident inspector representing Silver Oaks, LLC for the construction of storm water master detentions and water quality system including 5 wetlands, Vision Engineering scope of services included the monthly and yearly monitoring of the wetland system.

Date of Project: 2012
Services Provided: Resident Inspector, ESC, and preparing weekly, monthly, and yearly reports
Construction Cost: \$1.1M

Project Name: New Circle Road (KY-4) and Liberty Road (KY 1927), Lexington
Description: Projects consists of the design, construction administration and inspections of the right turning lanes and sidewalk along New Circle Road (KY-4) and widening and bike lane along Liberty Road (KY-1997)

Date of Project: 2010
Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
Construction Cost: \$115K

Project Name: Nicholasville Road (US-27), Nicholasville
Description: Project consists of adding left and right turn lanes and adjustment of traffic signal timing at the intersection of US-27 and Elizabeth Street

Date of Project: 2010
Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
Construction Cost: \$178K

Project Name: Sir Barton Way, Lexington

Description: Project consists of the design, construction administration, and inspection of the left and right turn lane for Indiana Wesley University.

Date of Project: 2011
 Services Provided: Survey, design, construction administration, & Inspections
 Construction Cost: \$75K

Project Name: Red Mile Roadway Improvement, Lexington

Description: Project consists of the design of left turn lane and improvement on Red Mile Road for right turn movement to Red Mile Village. Scope of services included, survey, design, construction administration, and inspections.

Date of Project: 2010
 Services Provided: Survey, design, construction administration, & Inspections
 Construction Cost: \$78K

Project Name: Sir Barton Way & Sanford Way, Lexington

Description: Project consists of the design, construction administration, and inspection of Sanford Way and the left and right turn lane along Sir Barton Way

Date of Project: 2013
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$165K

Project Name: Sanibel Drive, Lexington

Description: Project consists of the design, construction administration, and inspection of Sanibel Drive.

Date of Project: 2011
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$225K

Project Name: Tattersall's Way, Lexington

Description: Project consists of the design, construction administration, and inspection of Tattersall's Way and the intersection improvements with Curry Avenue. Tattersall's construction between Red Mile to Curry Avenue, is one of the recommendation of the Red Mile Development traffic study recommendations.

Date of Project: 2013
 Services Provided: Survey, design, utilities relocations, construction administration, & Inspections
 Construction Cost: \$185K

Project Name: KYTC Statewide LPA Design

Description: Project consists of design services for a wide variety of projects at the direction of the Kentucky Transportation Cabinet (KYTC) and various Local Public Agencies that have contracted with the KYTC to administer projects on an as-needed basis.

Date of Project: 2013-Present
 Services Provided: Roadway design, sidewalk design, streetscape design, structural design, land surveying, construction engineering, planning services, geotechnical design, traffic engineering, environmental services
 Construction Cost: \$200,000

Section 6 | LOCAL OFFICE

Prime Consultant		Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE Projects
VISION ENGINEERING (Prime Contractor)	Headquarters	Lexington, KY	2003	10	5
	Local Office	Lexington, KY	2003	10	5
	PM Location	Lexington, KY			
URS (Subconsultant)	Headquarters	San Francisco, CA	1951	57,000	0
	Local Office	Louisville, KY	1994	84	4
	PM Location	Louisville, KY			

WORKFORCE ANALYSIS FORM.....

Categories	Total	White		Latino		Black		Other		Total	
		M	F	M	F	M	F	M	F	M	F
Administrators											
Professionals	4	2						2		4	
Superintendents											
Supervisors											
Foremen											
Technicians	5	5								5	
Protective Service											
Para-Professionals											
Office/Clerical	1								1		1
Skilled Craft											
Service/Maintenance											
TOTAL:	10	7						2	1	9	1
Prepared by:	Naghham Bark, Office Manager										

Section 7 | **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

Vision Engineering is a DBE firm meeting all requirements of the Lexington Fayette Urban County Government. We are fully committed to meeting the goals required for this project.

Vision Engineering is a DBE firm meeting all requirements of the Lexington Fayette Urban County Government. We are fully committed to meeting the goals required for this project.

MBE/WBE Company, Name, Address, Phone, Email	Work to be Performed	% Value of Total Contract
1. Vision Engineering, LLC 3399 Tates Creek Road Suite 130 Lexington, Kentucky 859-559-0516, 859-333-8015 jhallany@visionengr.com	Contracts 1,3,4,5,6, and 8	Overall Above 60%

The undersigned company representative submits the above list of MBE/WBE 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.

Company: Vision Engineering
Date: March 26, 2014

Company Representative: Jihad Hallany, P.E.
Title: Principal

AFFIRMATIVE ACTION PLAN.....

Vision Engineering practices Equal Opportunity in recruiting, hiring, and promoting.



Section 8 | **HOURLY RATES**

VISION ENGINEERING

Job Classification	Vision Engineering	URS	LOCHNER	CSI
Principal	\$115.0	\$175.0		
Project Manager	\$105.0	\$140.0		
Project Engineer (PE)	\$80.0	\$88.0		
Project Engineer (EIT)	\$75.0	\$75.0		
Engineering Technician/CAD Technician	\$60.0	\$60.0		
Survey Crew	\$105.0			
Clerical	\$65.0			

Mileage: IRS approved amount

Printing Shipping, Outside Consultant: Actual Cost