Proposal

RFP #45-2011 Engineering Services for Blue Sky Pump Station & Force Main Lexington, Kentucky

December 22, 2011

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December 22, 2011

Brian Marcum, Purchasing Director
Lexington-Fayette Urban County Government
Room 338, Government Center
200 East Main Street
Lexington, KY 40507

Re: Request for Proposals No.: RFP #45-2011
Engineering Services for New Blue Sky Pump Station/Force Main
Construction & Existing WWTP Closure & Demolition

Mr. Marcum:

Bell Engineering is a name that has been associated with **reliability and innovation for 97 years**. As the oldest and longest continually operating consulting engineering firm in the state, we have completed projects across Kentucky and in many surrounding states. We are pleased to submit our Statement of Qualifications for engineering services associated with the above referenced project and are confident that you will conclude that Bell Engineering is the best choice for your project.

Water, wastewater and stormwater engineering have been Bell's primary areas of expertise since the firm's inception in 1914. Since then, we have added registered professional engineers with backgrounds in structural, mechanical and electrical engineering in addition to environmental, sanitary and civil to **complete a variety of projects in a timely, efficient and cost-effective manner**.

Through our commitment to our clients, Bell has developed a reputation as a **highly competent leader**. We strive not only to meet our client's expectations, but to exceed them whenever possible through **dedicated schedule management and conscientious budget monitoring**. We do this while balancing the needs of today with careful planning for future rules and regulations. Bell employees develop long-term relationships and currently have clients with a project span of 50+ years.

Bell Engineering is a **truly local firm** with our corporate office centrally located in Lexington, Kentucky. Even with our regional office in Hopkinsville, Kentucky, we are proud to say that **100% of our employees live in Kentucky**. In addition to Bell's team, you will also receive services from LE Gregg Associates. In business since 1957, LE Gregg is a subsidiary of Bell Engineering and staff from both companies work closely together on a variety of projects on a daily basis. LE Gregg is also a truly local firm with their corporate office located in Lexington, Kentucky.

As you review our proposal, we hope you will note our extensive experience in the completion of sanitary sewer projects as well as those that involved the use of KIA funds. We understand and are committed to LFUCG's goal of **complying with the Consent Decree**.

Our assigned project team utilizes individuals who each excel in particular areas that when combined, form a **vast pool of knowledge that will prove beneficial throughout all stages of your project**. We have the experience required to stem the negative environmental impacts associated with failing wastewater treatment plants and understand the threat posed to water quality and public safety. The Bell team will work diligently to not only remedy these issues, but **to create useful landscapes** through careful material placement, stabilization, re-grading and placement of cover soils and re-vegetation. We will accomplish this with our resident landscape architect.

I have acted as principal-in-charge and project manager on countless KIA projects in my 18 year career. My **extensive familiarity with KIA staff and administrative responsibilities** enables me to develop and move projects through the design process rapidly with no delay due to an KIA or project related learning curve.

Upon notice to proceed, we will hold a meeting with the LFUCG to ensure a thorough understanding of the tasks associated with the project as laid out in the RFQ.

The experience of Mr. Jason Ainslie, P.E., Mr. Eric "Chris" Haley, P.E. and Mr. Jim D. Buckles, P.E., BCEE will result in a **thorough site characterization** as outlined in Task 3. Additionally, as a landscape architect, Mr. Joshua T. Karrick, RLA, ASLA, AICP brings a creative vision to our team that will present LFUCG with **unique conceptual and preliminary designs** with the entire Bell team contributing to the responsibilities outlined in Task 3.

Throughout the evaluation and design process, Mr. James K. Roberts, P.E., PLS will provide quality assurance to ensure that all items are **technically correct and meet the overall scope as outlined**. Mr. Roberts provides QA services on a majority of Bell projects and his attention to detail ensures that you are receiving the **highest quality product** while maintaining schedules and budgets.

Bell Engineering staff has **excellent relationships spanning decades** with permitting and review agencies. This knowledge will be extremely beneficial in the completion of Task 5 and will **curb unnecessary delays** that can be experienced by incomplete submittal of applications and plans for review and permitting.

Our **past experience with LFUCG** allows our team to effectively approach and review consents for entry and project plans with affected property owners. The Bell team is **well-versed at holding public meetings** as necessary to achieve full by-in from those affected by reclamation/restoration projects. Our history of providing these services for a variety of projects will be needed to successfully accomplish Task 7.

On behalf of Bell Engineering, we thank you for the opportunity to showcase our experience and **outline the strengths that our team can bring to the New Blue Sky Pump Station/Force Main**. We look forward to the opportunity to provide quality engineering services through this and future projects.

Included in our proposal is a detailed breakdown of our fee schedule. We propose to perform all of the engineering services for this project for $87,000. Base on a construction cost estimate of $1,300,000 a typical Rural Development Fee would result in $105,000. Our fee represents a 17% savings to LFUCG.

On behalf of Bell Engineering, we would like to thank you for the opportunity to submit our Statement of Qualifications. We are committed to renewing our partnership within the community and we look forward to working closely with LFUCG on this and future projects.

Sincerely,
Bell Engineering

David F. Schrader
Principal-In-Charge

Table of Contents

- **Full-service, multi-discipline consulting**
- **Providing reliable engineering services since 1914**
- **Longest continually operating consulting engineering firm in Kentucky**

Water, wastewater, and stormwater engineering have been Bell Engineering's primary areas of expertise since the firm's inception in 1914. Since then, Bell has added registered professional engineers with backgrounds in structural, mechanical and electrical engineering in addition to environmental, sanitary and civil to complete a variety of projects in a timely, efficient and cost-effective manner. Areas of engineering expertise include:

Environmental/Sanitary
Water and Wastewater Facilities
Water Treatment Plant Evaluation
Water Treatment Plant Operations Assistance
Water Storage and Distribution
Wastewater Collection and Treatment
Wastewater Treatment Plant Evaluation
Wastewater Operations Assistance
Sewer Rehabilitation Surveys and Design
Combined Sewer Overflow Studies
Infiltration/Inflow Analysis Evaluations
Regional Facilities Planning
Stormwater Drainage Improvements
Watershed Evaluation Studies
Landfill Design & Reclamation

Civil/Structural
Surveying
Industrial Parks
Recreational Parks

Civil/Structural Cont'd.
Natural Gas
Transportation
Streetscapes
Dams & Bridges
Site Development
Energy

Related Services
HVAC Design
Fire Protection
Value Engineering
Management and Operation
Utility Rate Studies
Financial Planning
Grant/Loan Management
Automated Mapping/Facilities Management
Geographic Information Systems
Construction Management/Inspection

Wastewater Capabilities: Bell has a long history of providing quality wastewater engineering services to clients. Well-respected in the environmental engineering field, Bell has built the necessary expertise to ensure effective solutions required in the design of wastewater treatment plants, sewer system extensions, pump stations, force main and sewer system rehabilitation projects. Bell's wastewater treatment experience includes the design of over 127 wastewater treatment plants ranging in size from 10,000 gpd to 30 million gpd, over 1,000 pump stations, more than 5 million linear feet of sewer line and more than 50 facilities plans and updates.

- **Engineering studies & planning**
- **RPR services**
- **Project design**
- **In-house quality assurance**

Construction: Representing the client during all phases of construction involves a variety of services. Qualified resident project representatives (RPR's) are assigned on a part-time or full-time basis. The RPR observes construction procedures, addresses the quality of building materials and workmanship and conducts on-site inspections. Bell handles all of the paperwork associated with construction, such as work orders, shop drawings, change orders, partial/final payments and punch lists. A final inspection is done before acceptance by the client.

Funding: Bell understands the economic hardships faced by communities and we work closely with our clients to maximize available funds from the federal and state governments. This decreases the amount of local funding needed to successfully complete a project which enables communities to keep rates low while successfully funding their infrastructure needs.

Bell's staff is experienced in working effectively with the additional administrative responsibilities associated with numerous funding agencies as well as the unique requirements and protocols they follow. This means our clients can enjoy the maximum benefits of financial help with a minimum degree of inconvenience. **Bell has many years of experience working successfully with funding agencies including: CDBG, USDA RD, EPA, EDA, PRIDE, COE, ARC, KIA and others.**

Communication: The success of any project is based upon open and direct lines of communication with the client. The project manager, in concurrence with the client, is responsible for developing the project scope and project schedule. Once the schedule is established, in-house management procedures identify and track specific work tasks.

Communication with the public is also a priority. As deemed necessary, Bell Engineering will hold public planning meetings to garner public feedback, or to meet the requirements of any applicable statutes.

Quality Assurance: The Bell Quality Assurance (QA) plan is structured to meet the demands and expectations of each project/client relationship. After project expectations and scope have been fully explored and accepted by the customer, we are ready to create fee proposals and to design and implement full project development plans.

- **Client oriented**
- **Quality and satisfaction are highest priorities**
- **Regular client meetings**
- **Over 50 clients, some served for 50+years**

How does Bell do this?

- With in-house people informed about project requirements and dedicated to the satisfaction of your expectations.
- With sub consultants and shared employees who have been selected based upon the strengths they bring to your project and Bell's dedication to exceeding your expectations.
- With project management that defines tasks, schedules, scope and challenges of the project and provides the team resource requirements.
- With a QA review process that confirms scope content, reviews alternatives, checks development at appropriate stages and, of course, includes technical review of the process.
- With frequent and detailed project review of the scope status with the client.
- With a project management plan that provides what it takes to deliver the project on time, within budget and performing to the expectations of the client.

Licensing: Bell Engineering is licensed to practice in Kentucky, Indiana, Ohio, Tennessee and West Virginia.

Establishment of a qualified and experienced team is necessary for the successful development and completion of any project. The Bell team has the experience and resources necessary to complete this project ahead of schedule and within budget. Our team has been carefully assembled to provide the Division of Water Quality with both the highest level of technical expertise and a group that depends on a "team" effort for success.

The Bell Engineering team is comprised of Vision Engineering, LoVo Systems, Inc. and LE Gregg Associates. The combined resources of our companies will ensure that the Blue Sky Pump Station and Force Main project exceeds the Division of Water Quality's expectations.

Vision Engineering is a local DBE firm that was founded in 2003 specializing in environmental and water resources engineering. As a member of the Bell project team, Vision will provide quality work on time and within budget.

LoVo Systems specializes in the design and installation of a complete range of low voltage technology systems. Whether your needs are simple or complex, LoVo works with clients to design solutions that are right for any project. LoVo is a trusted name in electrical engineering and implements turnkey solutions that are affordable and done right the first time.

LE Gregg Associates was founded in Lexington, KY in 1957 to provide engineering and materials testing services. With almost 57 years of institutional experience, the firm is well-versed in the process of conducting geotechnical investigations including the necessary elements required for pump station and sewer alignment projects. LE Gregg Associates offers a broad range of geotechnical engineering services including Phase I Environmental Site Assessments and Special Inspections.

Our proposed organizational chart for this project, along with resumes, may be found in this section. Our team will not waiver from our commitment to quality service and accurate technical design.

Blue Sky Pump Station | Force Main | WWTP Closure

LFUCG

Bell Engineering

Subconsultants

LFUCG Division of Water Quality

Water Quality Director: Charlie Martin, P.E.

Lexington-Fayette Urban County Government

Mayor: Jim Gray
Urban County Council

Bell Engineering

Principal-in-Charge: David F. Schrader, P.E.

Quality Assurance

James K. Roberts, P.E., P.L.S.

Project Manager

David F. Schrader, P.E.

Mechanical Engineering

John D. Prince, P.E.

Engineering Team

Jim D. Buckles, P.E., BCEE
Stephen H. Caudill, P.E.
David E. Gerhart, P.E.
Ronald E. Rogers, P.E.
David F. Schrader, P.E.

Landscape Architect

Joshua T. Karrick, RLA, ASLA, AICP

Construction Administration

E. Lee Lowe

Electrical Engineering

Ben L. Murphy, P.E. – LoVo Systems, Inc.

Surveying

Jihad Hallany, P.E. – Vision Engineering*
*(*Certified WBE)*

Geotechnical

Jason Ainslie, P.E. – L.E. Gregg
Eric "Chris" Haley P.E. – L.E. Gregg

David F. Schrader, P.E.
Principal-In-Charge/Project Manager

EDUCATION
B.S. Civil Engineering, University of Kentucky

REGISTRATIONS
Professional Engineer, KY – 20981;
Professional Engineer, OH – 72615;
Professional Engineer, WV – 18569;
Professional Engineer, IN – 11011548;
Pretreatment Coordinator

As a **Principal in the firm** and Assistant Director of Bell's Engineering Department, Mr. Schrader has designed and managed numerous water and wastewater treatment, collection and distribution projects. He has over **18 years' experience** serving as client manager, process designer, project manager and construction administrator. Over the last 8 years, Mr. Schrader has **managed $150 million in construction** of water and wastewater treatment plants.

Mr. Schrader will serve as Principal-In-Charge and Project Manager for your project. He will be the point of contact for DWQ staff and participate in all planning and review meetings. He will coordinate all team members and sub consultants and ensure they are fulfilling their responsibilities as members of the project team. Mr. Schrader will also provide oversight in regards to evaluation and the design of the pump station, force main, transfer of flow and demolition and closure of the Blue Sky WWTP.

Project Experience

- Project manager/lead engineer for the replacement of the 80 gallon per minute (gpm) **Griffin Gate Sanitary Sewer Pump Station** on Newtown Pike with a new 225 gpm sanitary sewer pump station to address overflow issues experienced during high rain events ($173,000) – Division of Water Quality; Lexington-Fayette Urban County Government, KY

- Project manager/lead engineer for the refurbishment and replacement of **South Elkhorn Sewage Lift Station** that included a wet well, 5 submersible sewage pumps with room for a sixth for a firm capacity of 15 mgd, design of a new chemical feed system to eliminate odors associated with the station and design of a new diesel backup generator and motor controls to be installed in the existing electrical room ($14,000,000) – Division of Water Quality; Lexington-Fayette Urban County Government, KY

- Project manager/lead engineer for design of new 24 mgd **Strodes Creek Influent Pump Station** which included 2 wet wells each containing 4 submersible pumps. The station was designed to operate as one wet well or two independent wet wells to accommodate maintenance activities. Two bar screens were installed prior to the submersible pumps to remove objects larger than ¼ inch and protect the pumps from damage. Variable frequency drives with SCADA control allow for a wide range of flow while keeping the level in the wet well constant ($3,250,000) – Winchester Municipal Utilities; Winchester, KY

2005 ACEC Grand Award & National Finalist

- Project manager/lead engineer for design of new 15 mgd **Hinkston Creek Pump Station** that included 2 wet wells each containing 3 submersible pumps that were designed to operate as one wet well or two independent wet wells to accommodate maintenance activities. Two independent 16-inch force mains were installed to allow true independent operation. Variable frequency drives in conjunction with SCADA maintain a constant level in the wet well ($1,750,000) – Mt. Sterling Water & Sewer System; Mt. Sterling, KY

- Project manager/lead engineer for **Boones Trace Small Diameter Pressure Sewer System** that serves over 300 homes and commercial customers around a golf course. The project included **4 major lift stations**, 300 individual grinder pump stations and design for extensions to include over 500 additional homes, 4 additional lift stations and a package activated sludge wastewater treatment plant ($1,250,000) – Boones Trace LLC; Madison County, KY

- Project manager/lead engineer for **Lagoon Sludge Dewatering and Closure Plan** for Winchester Municipal Utilities Wastewater Treatment Plant that served a major industrial park in Winchester, KY. The biosolids were removed from the lagoons and processed through a lime conditioning system followed by a heat dryer. The dry solids were then considered a Class A biosolid and were sold to local farmers for use as fertilizer. The plant was later converted to a fish hatchery for beneficial reuse – Winchester Municipal Utilities; Winchester, KY

- Project manager/lead design engineer for **Foxhaven Pump Station Replacement** project that serves over 250 apartments and homes in Richmond, KY. The project was funded by the American Recovery and Reinvestment Act (ARRA) or "stimulus money". It was the first project in the State of Kentucky funded by ARRA and was also the first project completed in the State of Kentucky that used ARRA funds. Design and construction were completed in less than 6 months and the project finished over $15,000 under budget – Richmond, KY

-Project Manager/lead design engineer for the **Motel 6 Pump Station Replacement** project that serves several restaurants including Cracker Barrel, two gas stations, a motel and several apartment buildings ($225,000) – Richmond, KY

Ronald E. Rogers, P.E.
Civil Engineering Services

EDUCATION
B.S. Civil Engineering, University of Kentucky;
M.S. Civil Engineering, University of Kentucky;
Army Engineering School, Ft. Belvoir, VA;
Value Engineering Workshop Training

REGISTRATIONS
Professional Engineer, KY – 11669;
Professional Engineer, WV - 14125

Mr. Rogers is a recognized expert in wastewater system evaluation and planning with **35 years of experience** in the industry. He is a **Principal in the firm** and also provides quality assurance on projects. He specializes in project management and design of wastewater treatment plants, **pump stations** and sewers and **force mains** and also has extensive knowledge in preparing facilities plans, performing infiltration/inflow analysis, completing sewer system evaluation surveys and sewer rehabilitation design. Mr. Rogers has completed training in value engineering curriculum and has served on VE teams for wastewater system design evaluation.

Mr. Rogers will provide civil engineering services for your project. He will focus on the pump station and force main routing. Mr. Rogers will also be involved with the lagoon closure plan and demolition of the existing WWTP.

Project Experience

- Project manager/project engineer for **Morris Memorial Nursing Home Closure Plan and Demolition** of the wastewater treatment plant **and 0.9 acre sludge lagoon**. This project included a new gravity sewer to redirect flow to the new Salt Rock PSD regional wastewater treatment plant **eliminating the point source discharge** – Milton, MW

- Project manager/project engineer for **Milton Utilities Commission Closure Plan and Demolition** of the 0.224 mgd package wastewater treatment plant and **8.58 acre sludge lagoon**. Sewage from this facility was redirected to common force main **eliminating the point source discharge** – Milton Utilities Commission; Milton, WV

- Project engineer for the replacement of the 80 gallon per minute (gpm) **Griffin Gate Sanitary Sewer Pump Station** on Newtown Pike with a new 225 gpm sanitary sewer pump station to address overflow issues experienced during high rain events ($173,000) – Division of Water Quality; Lexington-Fayette Urban County Government, KY

- Project manager/project engineer for **Ridgeview Pump Station Improvements** project which included expansion of the pump station from 400 to 600 gallons per minute (gpm), upgrade from a 6-inch to 10-inch force main and improvements to a downstream sewer segment that was deficient in capacity – Frankfort, KY

- Project engineer for the design of the **Kennedy Street Pump Station** project which included one wastewater pump station and 2,146 L.F. of force main – Somerset, KY

- Project engineer for the design of the **Race Street Pump Station** project which included the decommissioning of the existing 80 gallon per minute (gpm) pump station and the construction of a new 125 gpm pump station on the existing site to alleviate significant inflow and infiltration problems. The existing force main was reused to minimize project cost and a new wet well and electrical controls were included – Somerset, KY

- Project engineer for the design of the **Williams Street Pump Station** project which included the decommissioning of the existing 300 gallon per minute (gpm) pump station and the construction of a new 500 gpm pump station on an adjacent site to alleviate significant inflow and infiltration problems. The existing force main was reused to minimize project cost and a new wet well and electrical controls were included – Somerset, KY

- Project engineer for the design of the **Downtown Water & Sewer System Renovations – Phase II** project which included the construction of three separate sewage pump stations; two 80 gallon per minute (gpm) at Hill Rise and Beech Valley and one 350 gpm at Cave Street – Monticello, KY

- Project manager and engineer for the design and construction of the **Hinkston Creek and U.S. 460 Pump Stations** – Mt. Sterling, KY

- Project manager for the design of the **Blackey Sewer System Improvements Project** which included three wastewater pump stations and approximately 13,000 L.F. of gravity sewer to serve the community of Blackey – Letcher County Water & Sewer District; Letcher County, KY

- Project engineer for the **Great Teays Pump Station Improvements** which included tow constant speed, non-clog, submersible pumps sized for a firm capacity of 2,400 gallons per minute (gpm) replacing an existing deep well dry pit installation. This project also eliminated 600 L.F. of very deep 16-inch force main with a new line at shallow bury depth – Putnam PSD, WV

- Project manager/engineer for the **East End Area Sewer Extension** project which included seven wastewater pump stations ranging from 45-240 gallons per minute (gpm) and approximately 15,400 L.F. of 1 ½- through 10-inch force main – Milton, WV

- Project manager/engineer for the **West End Area Sewer Extension** project which included one wastewater pump station and approximately 8,500 L.F. of gravity sewer – Milton, WV

Stephen H. Caudill, P.E.
Civil Engineering Services

EDUCATION
B.S. Civil Engineering, University of Kentucky

REGISTRATIONS
Professional Engineer, KY – 19888;
Professional Engineer, OH - 76051

Mr. Caudill has **18 years of experience** overseeing a variety of water, wastewater, stormwater and development projects. He is a **Principal in the firm** and his primary responsibilities include preparation of project plans and specifications and oversight of monthly progress meetings. Mr. Caudill has extensive **experience with a variety of funding agencies** and the additional responsibilities included with utilizing those funds.

Mr. Caudill will provide civil engineering services for your project. He will focus on the force main routing as well as manage all KIA obligations and responsibilities.

Project Experience

- Project manager/lead engineer for **Phylben Village Sanitary Sewer** project which provides first time sanitary sewer service to approximately 170 customers. The following improvements were included, 3.5 miles of new 8-inch gravity sewer, 1.1 miles of new 6-inch force main and one new pump station. A new magmeter vault was constructed and instrumentation and SCADA were also implemented to provide monitoring and control of the wastewater system by operators ($2,000,000) – Danville, KY

- Project manager/lead engineer for new **Balls Branch Sanitary Sewer Interceptor** project which included the construction of 3.1 miles of 21-inch gravity sewer, 0.6 miles of 8- and 10-inch gravity sewer, 2.7 miles of 8- and 12-inch force main, the decommissioning of three poorly performing wastewater pump stations, the upgrade of one pump station and construction of one new pump station ($4,000,000) – Danville, KY

- Project manager/lead engineer for new **Balls Branch Pump Station** project which was a quad-plex wastewater pump station at the intersection of Wilderness Trail Road and Kentucky Hwy 150. The project included the construction of a new influent manhole with twin 18-inch sluice gates to split flow, duel wet wells, and four submersible pumps each rated at 900 gallons per minute (gpm) at 70 feet TDH. The project also included the construction of a monorail system for easy pump removal , a backup generator to provide power during outages and a SCADA system to provide monitoring and control of the wastewater system by operators ($539,687) – Danville, KY

- Project manager/lead engineer for **Clark's Run Pump Station Improvements** including construction of four new submersible pumps each rated at 2,800 gallons per minute (gpm) at 24 feet TDH, a new valve vault, new bar screen, new 20-inch diameter sluice gates, new exhaust system for the motor control house, new pump controls and a new hoist/trolley system. The existing influent manhole and piping wet wells were reused in order to minimize cost ($400,000) – Danville, KY

- Project manager/lead engineer for **York Lane Pump Station Improvements** including the construction of a new wet well, two submersible pumps each rated at 400 gallons per minute (gpm) at 47 feet TDH, a backup generator to provide power during emergencies and a SCADA system to provide improved monitoring and control of the wastewater system by operators ($202,300) – Danville, KY

- Prepared plans and technical specifications for a **60-Acre Commercial/Industrial Development** which included 130,000 C.Y. of earthwork**, 4,330 L.F. of 8-inch sanitary sewer, 6,270 L.F. of storm sewer**, 2,850 L.F. of roadway, and 3 detention/water quality basins – Pleasant Ridge Partners; Lexington, KY

Ben L. Murphy, P.E.
Electrical Engineering Services

EDUCATION
M.S. Mechanical Engineering, University of Kentucky;
Master of Arts, St. Meinrad Archabbey;
Industrial Electronics & Automation Diploma, KY Advanced Technology Institute

REGISTRATIONS
Professional Engineer, KY – 25348;
Professional Engineer, IN – 110111643;
Professional Engineer, WV – 18560;
Professional Engineer, CA – M35292;
Master Electrician, KY – ME12832

Mr. Murphy's areas of expertise include electrical power distribution design, municipal water/wastewater electrical design, instrumentation design, SCADA system design and installation, HVAC system design, fire protection design, code compliance, industrial control panels, troubleshooting, controls systems, laboratory data acquisition and analysis and wireless communication design.

Mr. Murphy will provide electrical engineering services for your project. He will be involved in all electrical design work on the pump station.

Project Experience

- Electrical engineer for **Haley Pike Wetland Cell Expansion** including preparation of electrical design for expansion of a wetland cell system that treats landfill leachate. Design included flow metering, flow control, level instrumentation and control and SCADA integration into existing SCADA system - Lexington-Fayette Urban County Government; Lexington, KY

- Electrical engineer for **Haley Pike Wetland Cell SCADA System** design/build project including design, construction and implementation of a web-based wireless SCADA system to remotely monitor the Haley Pike Landfill Wetland Cell treatment system. Design included visualization, alarming, trending and data logging/reports - Lexington-Fayette Urban County Government; Lexington, KY

- Electrical engineer for **Haley Pike Landfill Pump Station and Wetland Cell Treatment System** including preparation of electrical design for installation of a pump station and wetland cell treatment system to treat leachate from the Haley Pike Landfill. Design included pumping, standby generator power, conductivity analyzers, flow metering and flow controls – Lexington-Fayette Urban County Government; Lexington, KY

- Electrical engineer for the replacement of the 80 gallon per minute (gpm) **Griffin Gate Sanitary Sewer Pump Station** on Newtown Pike with a new 225 gpm sanitary sewer pump station to address overflow issues experienced during high rain events ($173,000) – Division of Water Quality; Lexington-Fayette Urban County Government, KY

bell engineering

Jihad A. Hallany, P.E.
Surveying Services

VISION ENGINEERING

EDUCATION
M.S. Biosystems & Agriculture, University of Kentucky;
B.S. Civil Engineering, Water Resources & Structural, University of Kentucky

REGISTRATIONS
Professional Engineer, KY – 22838;
Professional Engineer – IN & OH

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 geographic information system (GIS) applications. Mr. Hallany has extensive experience in design as well as construction of public and private development.

Mr. Hallany will provide surveying services for your project. He will be involved in all surveying required for the pump station and force main as well as preparation of easements, right-of-ways and any plat preparation required.

Project Experience

- Jackson County Board of Education: Evaluation of the existing pump station and force main and upsizing the wetwells and pumps.

- Kentucky Communities Economic Opportunity Council (KCEOC): Rehabilitation of the existing pump station and control panel for approximately 100 units apartment complex.

- Forest Brook Development: Pump Station/ Force main and15,348 LF of 8 inch force main from development to the City of Wilmore. The pump station serves 661 residential community.

- Wooldridge Development: Low Pressure system for 119 patio homes that connect to City of Versailles.

- Harbor Village Subdivision: Low Pressure System for 88 single family residential communities in Georgetown.

- LDS church: Pump station and force main for approximately 4,600 lf of 4 inch force main.

- Paducah Diffusion Plan, Erosion and Sediment Control: The Department of Energy & Kentucky Department of Natural Resources funded the project.

- I-65 First Flush Treatment (1999): Kentucky Department of Transportation funded this research study.

- City of Nicholasville: Rehabilitation and Improvement of approximately 2,635 lf of 8 inch waterline along West Brown Street.

Jim D. Buckles, P.E., BCEE
Civil/Environmental Engineering Services

EDUCATION
B.S. Civil Engineering, University of Kentucky;
M.S. Microbiology, University of Kentucky;
B.S. Biology, Kentucky; Wesleyan College

REGISTRATIONS
Professional Engineer, KY – 13055;
Professional Engineer, AZ – 35040;
Professional Engineer, TN – 110922;
AAEE – 91-10036;
HAZWOPER Cert. – 1910.120

Mr. Buckles has **39 years of experience** in civil and environmental engineering. His background includes degrees in biology, microbiology and civil engineering and he specializes in on-call environmental services, industrial pretreatment programs **and EPA consent decree programs**. Mr. Buckles has presented and published over 50 papers related to water and wastewater projects. He is a past-president of the KY-TN Water Environment Association and a recipient of the Arthur Sidney Bedell Award recognizing extraordinary service in the water pollution control field. **Mr. Buckles currently manages the operations of the Boonesboro Wastewater Treatment Plant.**

Mr. Buckles will provide civil and environmental engineering services for your project. He will serve as the primary liaison between the Blue Sky and Boonesboro Wastewater Treatment Plant operators. Mr. Buckles will be involved in site review and evaluation and with the lagoon closure plan and demolition of the existing WWTP.

LFUCG Experience
- Town Branch Illicit Discharge Investigation
- KPDES Stormwater Sampling Program
- Haley Pike Landfill Sampling Program
- Construction/Demolition Landfill Leachate Program

Lexington Area Experience
- Kentucky Horse Park I/I Study
- Blue Grass Airport KPDES Permit Program
- Blue Grass Airport Deicing Fluids Treatment and Sampling Program
- Town Branch Remediation Program
- Blue Grass Army Depot Wastewater Treatment Facility
- Blue Grass Army Depot WWTP Closure
- Lexington Herald Leader Discharge Compliance
- Pepsi Cola Bottling High Strength Waste Analysis
- St. Joseph Hospital Mercury Investigation
- Winchester Municipal Utilities Industrial Pretreatment Program
- Winchester Municipal Utilities Fat, Oils and Grease (FOG) Program
- CMOM Development & Implementation
- City of Georgetown Total Toxic Compounds Study

University of Kentucky Experience
- UK Medical Center Mercury Study
- Swine Manure Treatment Facility
- Anaerobic/Aerobic/Anoxic Treatment Facility
- Animal Research Wastewater Facility

Bluegrass Area Industrial Experience

- Intertape Polymer Corp. Service Contract
- Freeman Company Stormwater BMP & KPDES Compliance
- Lexel Imaging Spill Program
- YUASA, Inc. Alternate Metals Stormwater Permit Study
- Tac Air Spill Prevention Program
- Sherwin-Williams Iron Discharge Study
- Metaforming Technologies Spill Prevention Program
- YUASA, Inc. Soluble Sulfate Reduction Program

Joshua T. Karrick, RLA, ASLA, AICP
Landscape Architect, Planning & Design Services

EDUCATION
B.S. Landscape Architecture, University of Kentucky

REGISTRATIONS
Registered Landscape Architect, KY – 679; Certified Planner - 023764

Mr. Karrick brings **12 years of experience** in Landscape Architecture and Planning to Bell Engineering. He has a strong background in project development and specializes in stormwater management, master planning, urban design, parks and recreation, streetscapes, bikeways and trails, **green design** and community planning. Mr. Karrick is involved with several societies including the American Society of Landscape Architects, the American Institute of Certified Planners and the Kentucky Association of Mapping Professionals.

Mr. Karrick will provide planning and landscape architect services for your project. He will be involved in site review, evaluation and will provide input to incorporate "green" design initiatives whenever possible. Mr. Karrick will also work to incorporate stormwater and Erosion and Sediment Control Plans and specifications for all construction documents.

LFUCG Experience

- Roland Avenue Stream Rehabilitation
- Fort Sumter Creek Restoration
- Gainesway Pond Restoration & Educational Trail
- West Hickman Trail
- Versailles Line Rail with Trail Master Plan
- Town Branch Trail Section 3
- South Elkhorn Trail Section 3
- Veterans Park Mountain Bike Trail
- Clays Mill Road Streetscape
- Harrodsburg Road Landscape and Corridor Plan
- Harrodsburg Road Green Street Master Plan
- Tates Creek Corridor Enhancement Master Plan

Lexington Area Experience

- Constitutional Alley Parking Lot Permeable Asphalt Pavement
- Lone Oak Subdivision Stream Stabilization
- Royal Springs Run Greenway Enhancement & Stream Restoration
- East End Church of Christ Vegetative Swales & Bio-Infiltration Retention Basin
- Manchester Street Corridor Schematic Plan
- Kentucky Horse Park Cigar Lane
- Nicholasville Downtown Master Plan
- Nicholasville Downtown Streetscape
- Dry Run Watershed Land Use BMP Education Project
- Shearer Elementary Outdoor Classroom
- Central Baptist Hospital Expansion
- University of Kentucky Press Avenue Phase I & II Parking Lots
- Alumni Office Park

- Hagyard Davidson McGee Equine Hospital
- Hagyard Davidson McGee - Sustainable Campus Developments
- Frito-Lay Sales and Distribution Facility
- Scott County Main Public Library Bio-Infiltration Retention Basin and Rain Gardens
- Manchester Street – Distillery District Rain Gardens
- Winchester Removing Barriers to Green Infrastructure
- Nicholasville GIS/GPS Park Maintenance Application Development
- GIS Development for the Richmond Stormwater Master Plan

Fayette County Public Schools Experience

- Henry Clay High School Athletic Facility Improvements
- Henry Clay Stadium Replacement
- Henry Clay Senior High School Athletic Facility Master Plan
- Tates Creek High School Athletic Facility Improvements
- Tates Creek High School Stadium Replacement
- Paul L. Dunbar High School Track and Field Replacement
- Fayette County Westside Bus Garage
- Blackford Property Elementary School Site Assessment
- Clark Property Elementary School Site Assessment

E. Lee Lowe
Construction Administration

EDUCATION
B.A. Arts, Ashland Community College;
B.A. Mechanical Drafting, Ashland State Vo-Tech School;
Effective Construction Contract & Field Administration, University of Wisconsin-Madison

Mr. Lowe has **22 years of experience** and serves as Construction Manager at Bell Engineering. He handles construction administration duties from the bidding phase through project closeout. He **works closely with the project owner and resident project representative** to ensure a quality project that meets the needs of our clients. Mr. Lowe has experience as a draftsman as well as a designer/planner and has worked on a wide variety of projects in the water, wastewater and stormwater areas.

Mr. Lowe will provide construction coordination and administration services, if desired, for your project.

- Construction manager for **Phylben Village Sanitary Sewer** project which provides first time sanitary sewer service to approximately 170 customers. The following improvements were included, 3.5 miles of new 8-inch gravity sewer, 1.1 miles of new 6-inch force main and one new pump station. A new magmeter vault was constructed and instrumentation and SCADA were also implemented to provide monitoring and control of the wastewater system by operators ($2,000,000) – Danville, KY

- Construction manager for new **Balls Branch Sanitary Sewer Interceptor** project which included the construction of 3.1 miles of 21-inch gravity sewer, 0.6 miles of 8- and 10-inch gravity sewer, 2.7 miles of 8- and 12-inch force main, the decommissioning of three poorly performing wastewater pump stations, the upgrade of one pump station and construction of one new pump station ($4,000,000) – Danville, KY

- Construction manager for new **Balls Branch Pump Station** project which was a quad-plex wastewater pump station at the intersection of Wilderness Trail Road and Kentucky Hwy 150. The project included the construction of a new influent manhole with twin 18-inch sluice gates to split flow, duel wet wells, and four submersible pumps each rated at 900 gallons per minute (gpm) at 70 feet TDH. The project also included the construction of a monorail system for easy pump removal , a backup generator to provide power during outages and a SCADA system to provide monitoring and control of the wastewater system by operators ($539,687) – Danville, KY

- Construction manager for the design of the **Williams Street Pump Station** project which included the decommissioning of the existing 300 gallon per minute (gpm) pump station and the construction of a new 500 gpm pump station on an adjacent site to alleviate significant

inflow and infiltration problems. The existing force main was reused to minimize project cost and a new wet well and electrical controls were included – Somerset, KY

- Construction manager for the design of the **Race Street Pump Station** project which included the decommissioning of the existing 80 gallon per minute (gpm) pump station and the construction of a new 125 gpm pump station on the existing site to alleviate significant inflow and infiltration problems. The existing force main was reused to minimize project cost and a new wet well and electrical controls were included – Somerset, KY

James K. Roberts, P.E., PLS
Quality Assurance/Survey Services

EDUCATION
B.S. Civil Engineering, University of Kentucky; Value Engineering Workshop Training; CAD Production Technology & Workshop

REGISTRATIONS
Professional Engineer, KY – 15736;
Professional Engineer, WV – 13391;
Land Surveyor, KY – 3010;
Land Surveyor, WV – 1619

Mr. Roberts is a **Principal in the firm** and serves as Executive Vice President and Director of Engineering Operations at Bell Engineering. He specializes in the design of water distribution systems and brings over **33 years of experience** in the industry. He has completed design work on both water and wastewater treatment plant projects and also serves as our **in-house quality assurance coordinator** on most projects. Client satisfaction and meeting budgets and schedules are his main focus throughout a project.

Mr. Roberts will provide quality assurance services as needed for your project. Throughout key stages of the design and construction, he will perform various QA tasks to ensure that you are receiving a technically superior project while meetings schedules and budgets.

Project Experience

- Project manager/ engineer for **Longwood and Transcraft Pump Station Improvement Project** which included expansion of sewage pump station from 500 to 1,200 gallons per minute (gpm) and upsizing of 10,000 L.F. off force main from 6- to 8-inch ($450,000) – Mt. Sterling Water and Sewer System; Mt. Sterling, KY

- Project engineer for design of **Town Branch Wastewater Treatment Plant** effluent parshall flume, chlorination basin, post-aeration steps and effluent discharge pipe – Division of Water Quality; Lexington-Fayette Urban County Government, KY

- **Gettysburg Road Storm Sewer Improvements**, analysis and design of replacement of undersized and collapsed section of trunk sewer - Lexington-Fayette Urban County Government; Lexington, KY

- Project manager for McDonald's Sewage Pump Station design to serve restaurant facility - McDonald's Corporation; Mt. Vernon, KY

- Installation, monitoring and data analysis of 3 flow monitors at Eastern Kentucky University – Richmond, KY

- Installation of 5 gravity flow monitors in the Allen Drive area and investigation of major inflow and infiltration causing manhole overflows – Richmond, KY

RICHMOND UTILITIES

- Installation of 2 gravity flow monitors in the Reynolds Drive area and investigation of major inflow and infiltration causing manhole overflows – Richmond, KY

- Completed the North Middletown collection system smoke testing, flow monitoring and physical inspection and provided recommendations for rehabilitation – Kentucky American Water Company; Lexington, KY

- Project engineer for **Hillcrest Subdivision Preliminary Study** and letter report regarding feasibility of sewer service including field investigation, preliminary alignment plans for selected alternatives and cost estimates – City of Richmond, KY

- Project engineer for **Dreaming Creek Trunk Sewer Study** and report regarding condition of system, remaining capacity determination and prioritization of problems discovered. Project included field investigation, pump station capacity measurement, sewer grade analysis, preparation of capacity charts and final report with recommendations – City of Richmond, KY

- Capacity analysis of primary pump station to treatment plant – Danville, KY

- Windsor Drive Pump Station analysis and capacity needs to add a new elementary school – Richmond, KY

- Eastway Drive and Southland Drive Pump Station study, capacity and operations analysis – Richmond, KY

- Industrial park (Rice property) and Lake Reba Pump Stations capacity analysis – Richmond, KY

David E. Gerhart, P.E.
Civil Engineering Services

EDUCATION
B.S. Environmental Engineering, Penn State University

REGISTRATIONS
Professional Engineer, KY – 20706;
Professional Engineer, WV – 14474

Mr. Gerhart has **22 years of experience** as a civil/environmental engineer and has been involved in projects varying from municipal to industrial in nature. Though most of his work has focused on the design of municipal type potable water treatment plants and wastewater treatment plants, he also has experience in industrial wastewater treatment and hazardous waste management. Recently, most of Mr. Gerhart's work has been in the design of new, expanded and improved potable water treatment plants including several new or improved filter systems. These systems include submerged membrane (Zenon type) filters, conventional gravity filters, conventional gravity filters with air and water backwash instead of water only backwash and gravity filters with modern ceramic media and air-water backwash.

Mr. Gerhart will provide civil engineering services for your project. He will be involved in all technical design work on the pump station.

John D. Prince, P.E.
Mechanical Engineering Services

EDUCATION
B.S. Mechanical Engineering, University of Kentucky

REGISTRATIONS
Professional Engineer, KY – 225856;
Professional Engineer, WV – 15904

Mr. Prince has **18 years of industry experience** and is a **Principal in the firm**. Prior to joining Bell as the head of the Environmental Engineering Department, he had five years of experience as a plumber/pipefitter/welder and is still a registered Journeyman. His construction experience includes hands-on assembly of HVAC, plumbing and industrial process piping and equipment which have given him valuable insight into the design and construction of mechanical systems and devices. Mr. Prince has served as Principal-In-Charge, Project Manager and Project Engineer on a wide variety of plumbing/HVAC related projects.

Mr. Prince will provide mechanical engineering services for your project. He will be involved in all mechanical design work on the pump station.

Jason Ainslie, P.E.
Geotechnical Engineering Services

EDUCATION
B.S. Geological Engineering, University of Missouri – Rolla

REGISTRATIONS
Professional Engineer, KY – 23677
Professional Engineer, OH – 69992
Professional Engineer, IN – 10910508

Mr. Ainslie has 12 years of experience in the fields of geotechnical and environmental engineering. His experience includes performing slope stability studies for the Kentucky Transportation Cabinet, planning and execution of geotechnical investigations for development of mine spoil sites and non-coal permitting for the Kentucky Department of Natural Resources. Mr. Ainslie's background is in Geologic Engineering and he specializes in all aspects of geotechnical engineering from developing project scopes for subsurface investigations to proposing and oversight of construction inspection projects.

Mr. Ainslie will provide geotechnical engineering services for your project. He will oversee all services provided by LE Gregg staff and coordinate their work with Mr. Schrader.

Eric "Chris" Haley, P.E.
Geotechnical Engineering Services

EDUCATION
B.A. Mathematics, Berea College;
B.S. Civil Engineering, University of Kentucky

REGISTRATIONS
Professional Engineer, KY – 24260
Professional Engineer, OH – 73827

Mr. Haley has over 12 years of experience in geotechnical engineering. His background includes degrees in mathematics and civil engineering, and he specializes in geotechnical explorations and construction observation for a wide variety of projects ranging from residential to infrastructure.

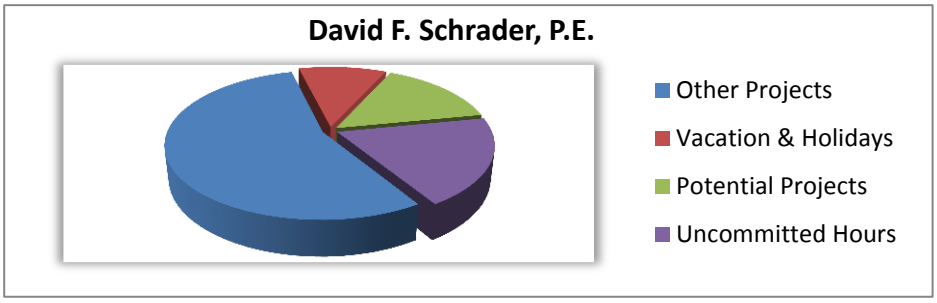
Mr. Haley will provide geotechnical engineering services for your project. He will serve as LE Gregg Project Manager for all activities related to subsurface/geotechnical investigations required for the project.

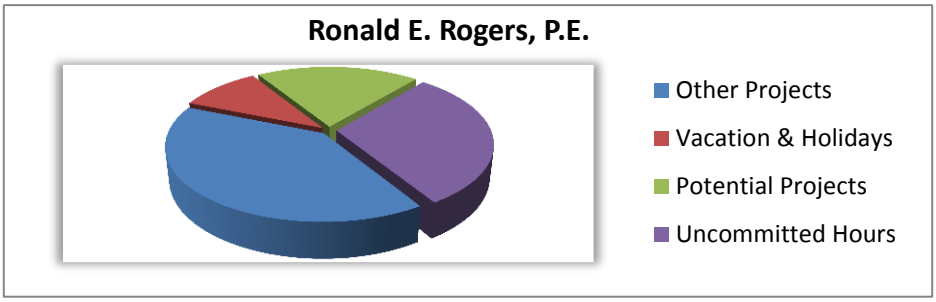
- Deep Springs Pump Station
- Jacobson Park Trail
- Shillito Park Trails
- Coolivan Park Community Center
- Coolivan Park Community Center Site 2

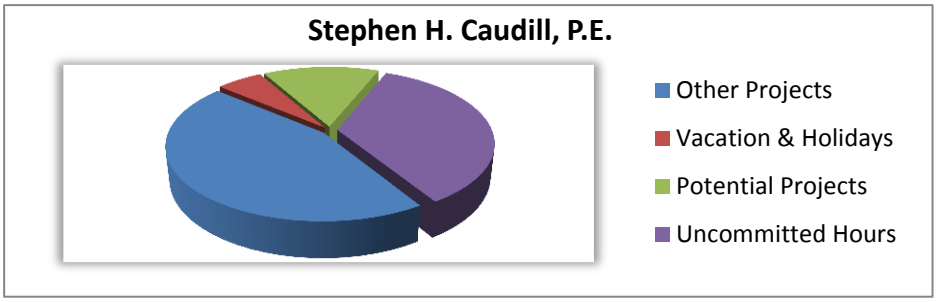
Available Man Hours

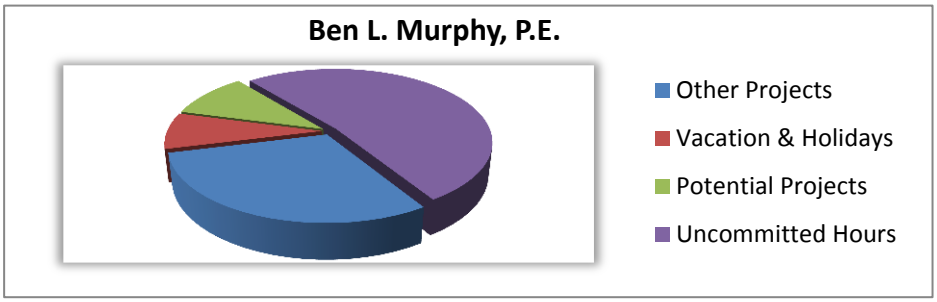
Bell Engineering project team members can proceed as soon as the Blue Sky Pump Station and Force Main project is authorized. Our team has the knowledge, experience, available personnel and desire to perform the required engineering services. There are no apparent conflicts of interest or any limitations or conditions related to availability that would prevent work from being completed accorded to the project schedule outlined within our proposal.

On the following pages, you will find the projected workload for members of the project team. As you can see, Bell has ample capacity to complete your project in a timely manner.

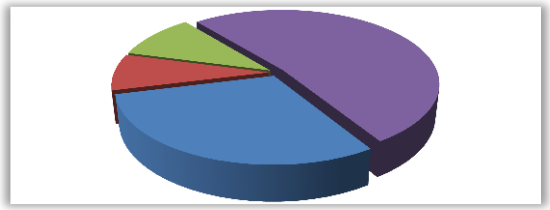




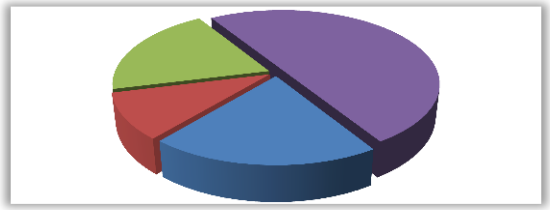




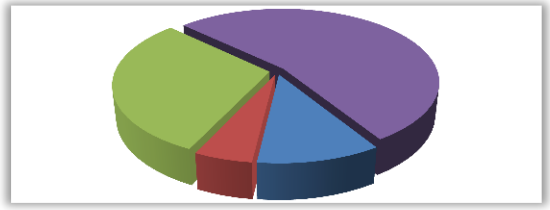
Jihad A. Hallany, P.E.



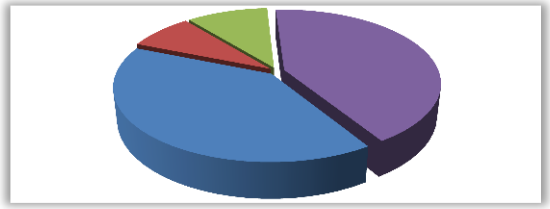
Jim D. Buckles, P.E., BCEE



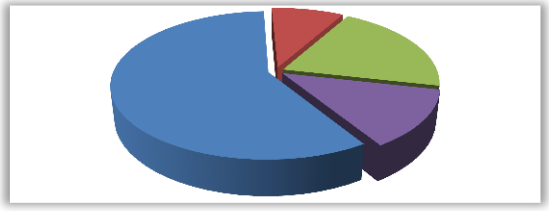
Joshua T. Karrick, RLA, ASLA, AICP



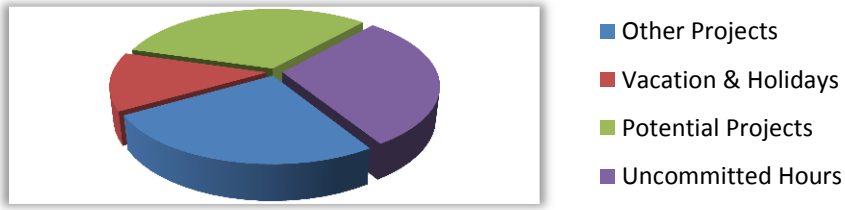
E. Lee Lowe



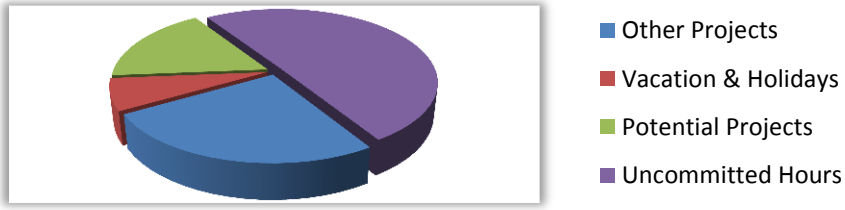
James K. Roberts, P.E., PLS



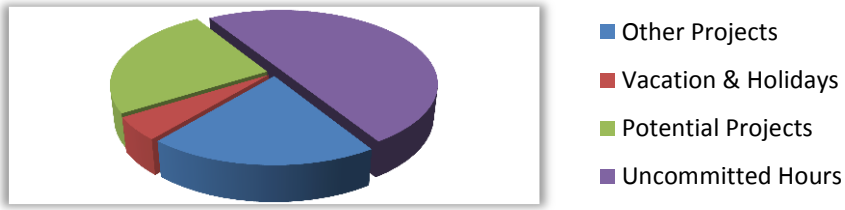
David E. Gerhart, P.E.



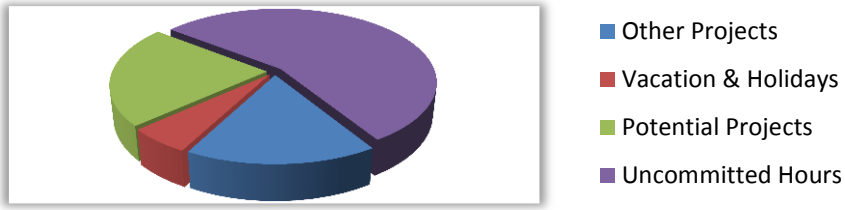
John D. Prince, P.E.



Jason Ainslie, P.E.



Eric "Chris" Haley, P.E.



Griffin Gate #2 Pump Station Replacement

Project Details

Client:	Lexington Fayette Urban County Government, KY
Consulting Fee:	$21,500
Estimated Construction Cost:	$175,000
Bid Construction Cost:	$173,000
Final Construction Cost:	$173,000
Key Personnel on Project:	David F. Schrader, P.E.

The Lexington Fayette Urban County Government (LFUCG) entered into a Federal Consent Decree that identified sanitary sewer overflows and developed capitol improvements that will alleviate future overflows of sanitary sewage into the waters of the Commonwealth.

One of the projects identified in the Consent Decree was the replacement of a sanitary sewer pump station on Newtown Pike that has a history of overflowing sewage during high rain events. This project involved the construction of dual pre-cast concrete wetwells with one submersible pump in each wetwell. The capacity of the lift station was increased from 80 gallons per minute (gpm) to 225 gpm. Once the lift station has been installed, the existing lift station will be demolished below grade and abandoned.

Number of Change Orders: 0
Total Change Order Amount: $0.00

Project Highlights/Milestones

- Completed: 2011
- Project eliminated sewage overflows
- Bid was below engineer's estimate
- Improved efficiency saving energy costs
- Project will not disturb McDonald's business even though it takes place in their parking lot

Contact: Steve Farmer, P.E., Project Manager – 859/425-2404

South Elkhorn Pumping Station Upgrade

Project Details

Client:	Lexington-Fayette Urban County Government
Consulting Fee:	N/A
Estimated Construction Cost:	$14,000,000
Bid Construction Cost:	TBD
Final Construction Cost:	TBD
Key Personnel on Project:	David F. Schrader, P.E.*

*Work on this project was completed by Mr. Schrader while employed at another firm.

The project includes approximately 7 miles of 36-inch force main and replacing four (4) existing dry-pit pumps with new Variable Frequency Drive (VFD) submersible pumps. The purpose of the project is to correct deficiencies in the existing pumps and to increase capacity of the existing pump station and force main. Also, the project will redirect the existing termination point of the force main to directly discharge into the West Hickman Wastewater Treatment Plant. This will not only improve the hydraulics of the pump station, but create more capacity in the undersized West Hickman Trunk Line. The scope of work includes the following major tasks:

- A preliminary design to evaluate different alternatives, including configurations of pumps/wet well and pipe materials and sizes.
- Hydraulic analysis for sizing the pumps and force main including future projections.
- Design of pump station upgrades, including new odor control and generator.
- Coordination with LFUCG for KDOW and KDOH permits and approvals.
- Preparation of bid documents, construction cost estimates and bidding services.
- Contract administration and resident representation during construction.

Project Highlights/Milestones

- Increased capacity from 9 mgd to 17 mgd
- Chemical feed for odor control
- Back-up generator facilities

Contact: Charles Martin, Division of Water Quality – 859/425-2400

Strodes Creek Pump Station & Screening Facility

Project Details

Client:	Winchester Municipal Utilities, KY
Consulting Fee:	$350,000
Estimated Construction Cost:	$3,000,000
Bid Construction Cost:	$3,250,000
Final Construction Cost:	$3,250,000
Key Personnel on Project:	David F. Schrader, P.E.*

*Work on this project was completed by Mr. Schrader while employed at another firm.

The Strodes Creek Pump Station and Screenings Facility includes eight (8) submersible variable speed pumps for a firm capacity of 24.0 mgd designed to provide complete pumping redundancy and influent flow measurement. Preliminary treatment includes two (2) mechanical fine screens with integral screw conveyors and a manual bypass coarse bar screen. All screening takes place before the wastewater is pumped.

The facility includes gas monitoring equipment since the existing pump station was destroyed by a Hexane explosion in 2004 following an industrial spill. The pump station includes ventilation to create a negative pressure, resulting in advanced ventilation of the wet well. Dual Septic Receiving Stations located under the electrical control building allows for continuous septage receiving. The septage receiving station includes dual wet wells to allow for laboratory testing prior to discharging into the influent wet well, allowing the operators to prevent deleterious material from entering the treatment system protecting the biological process and mechanical equipment. The project was funded through the Kentucky Infrastructure Authority (KIA).

Project Highlights/Milestones

- Completed: 2009
- Fine screening prior to pumping
- Dual septic receiving stations and storage facilities
- Dual wet well designed for independent operation
- Gas monitoring equipment for Hexane
- Variable Frequency drives
- SCADA – local and remote

Contact: Mike Flynn, General Manager – 859/744-5434

Hinkston Creek Pump Station
(ACEC Kentucky Chapter – Grand Award Winner, National Finalist – Engineering Excellence)

Project Details

Client:	Mt. Sterling Water and Sewer System, KY
Consulting Fee:	$250,000
Estimated Construction Cost:	$2,000,000
Bid Construction Cost:	$1,750,000
Final Construction Cost:	$1,750,000
Key Personnel on Project:	David F. Schrader, P.E.*

*Work on this project was completed by Mr. Schrader while employed at another firm.

This influent pump station receives wastewater flow through a 42–inch diameter gravity sewer. Influent wastewater enters the pump station inlet flumes through two 36-inch square aluminum slide gates. Flow can be diverted to either side of the pump station independently. The inlet flume is designed to calm the flow and divert flow directly to the individual pumps. A full height divider wall isolates each side effectively creating two (2) independent pump stations. This divider wall contains an 18" square aluminum slide gate that can allow both sides to operate at the same level or be completely isolated for cleaning purposes.

Six (6) submersible raw wastewater pumps deliver flow from the wet well to the screenings building for the removal of fine screenings. The flow is conveyed through twin 16-inch ductile iron force mains. This allows the flow to be maintained within the required 2 feet per second velocity range thus preventing sedimentation in the pipes. Each pump has a maximum flow rate of 1,400 gpm to provide a total hydraulic capacity of 12 mgd for a total peak flow of 9 mgd. The pumps are controlled using level transducers and variable frequency drives to maintain the level in the wet well while handling low flows.

Project Highlights/Milestones

- Completed: 2006
- Septic receiving stations and storage facilities
- Dual wet well designed for independent operation
- Gas monitoring equipment
- Variable frequency drives
- SCADA – local and remote

Contact: Rick Fletcher, General Manager – 606/498-0166

Phylben Village Sanitary Sewer Project

Project Details	
Client:	City of Danville, KY
Consulting Fee:	$242,438
Estimated Construction Cost:	$2,148,000
Bid Construction Cost:	$1,967,835
Final Construction Cost:	$2,134,245
Key Personnel on Project:	Stephen H. Caudill, P.E.

The Phylben Village Sanitary Sewer Project provides first time sanitary sewer service to approximately 170 customers in Boyle and Lincoln counties. As part of the project, the following improvements are being constructed: 3.5 miles of new 8-inch gravity sewer, 1.1 miles of new 6-inch force main and one pump station.

A new magmeter vault was constructed to meter flow as it is pumped to the City of Danville wastewater system. The pump station received instrumentation and SCADA to provide monitoring and control of the station by operators at the Danville wastewater plant.

All change orders were owner requested to expand the project scope to include items originally eliminated due to budget constraints. The project was funded through the Kentucky Infrastructure Authority (KIA), Community Development Block Grant (CDBG), USDA Rural Development (RD) and local funds. Bell provided assistance with easement acquisition of 34 properties on this project.

Project Highlights/Milestones

- Completed: 2011
- 18,726 L.F. of 8” gravity sewer
- 5,825 L.F. of 6” force main
- 1 back-up generator
- 1 magmeter and vault

Contact: Earl Coffey, City Engineer – 859/238-1200

Downtown Water & Sewer System Renovations – Phase 2

Project Details

Client:	City of Monticello, KY
Consulting Fee:	$167,645
Estimated Construction Cost:	$1,110,000
Bid Construction Cost:	$1,044,508
Final Construction Cost:	$1,204,851
Key Personnel on Project:	Kelly G. Gillespie and Ronald E. Rogers, P.E.

The City of Monticello secured the professional services of Bell Engineering in 2008 for design, bidding, and construction administration services for Phase 2 Downtown Water and Sewer System Renovation. The project consisted of replacement of 3,720 feet of 8- and 10-inch gravity sewers, **replacement of an 80 gallon per minute (gpm) Hill Rise sewage pump station, an 80 gpm Beech Valley sewage pump station and a 350 gpm Cave Street sewage pump station**, and 7,600 feet of 6-inch water main.

The project was awarded to K. Carrender Construction for $65,492 below the engineer's estimate and the original project was completed for $35,000 less than the award amount. As a result, the City of Monticello was able to replace additional water and sewer lines and utilize the entire $1.4 million in RD funds. The project was successfully completed on schedule and within budget in 2010.

Project Highlights/Milestones

- Completed: 2010
- Replacement of 3 sewage pump stations
- Construction completed ahead of schedule
- 100% Funded by RD ($1.4 million)
- Additional construction was completed by change order to expend all RD funds

Contact: Gene Jones, Manager – 606/348-8473

Sanitary Sewer Interceptor – Balls Branch

Project Details

Client:	City of Danville, KY
Consulting Fee:	$385,813
Estimated Construction Cost:	$4,000,000
Bid Construction Cost:	$3,925,000
Final Construction Cost:	$3,992,106
Key Personnel on Project:	Stephen H. Caudill, P.E.

The Balls Branch Sanitary Sewer Interceptor Project provided for the long-term wastewater collection needs of Junction City. In order to transport sewage from Junction City to Danville where it is ultimately treated, the following improvements were constructed: 3.1 miles of new 21-inch gravity sewer, 0.6 miles of new 8- and 10-inch gravity sewer and 2.7 miles of new 8- and 12-inch force main. The project required the decommissioning of three (3) poorly performing wastewater pumping stations, the upgrade of one (1) additional station and the construction of one (1) new station. Two (2) pumping stations received back-up generators to provide stand-by power during emergencies.

A new screening facility and magmeter vault were constructed to meter and screen raw sewage prior to being discharged into the existing City of Danville wastewater treatment plant lagoon system. Pumping stations and the screening facility received instrumentation and SCADA to provide improved monitoring and control of the wastewater system by operators at the Danville wastewater plant. The project was funded through the Kentucky Infrastructure Authority (KIA), Community Development Block Grant (CDBG), the Environmental Protection Agency (EPA) and local funds. Bell provided assistance with easement acquisition of 32 properties on this project.

Project Highlights/Milestones

- Completed: April 2009
- 16,606 L.F. of 21” & 8,123 L.F. of 8” gravity sewer
- 5,905 L.F. of 12” & 3,190 L.F. of 10” and 8” force main
- Two back-up generators
- New screening building at the WWTP
- Assistance with 32 property easements

Contact: Earl Coffey, City Engineer – 859/238-1200

Balls Branch Pumping Station

Project Details

Client:	City of Danville, KY
Consulting Fee:	$82,734
Estimated Construction Cost:	$550,000
Bid Construction Cost:	$539,687
Final Construction Cost:	$539,687
Key Personnel on Project:	Stephen H. Caudill, P.E.

This project included the construction of a new quad-plex wastewater pumping station for the City of Danville near the intersection of Wilderness Trail Road and Kentucky Hwy. 150. The pumping station serves all of Junction City and pumps sewage directly to the City of Danville wastewater treatment plant. The project included the construction of a new influent manhole with twin 18-inch sluice gates to split flow, duel wet wells, and four (4) submersible pumps each rated at 900 gallons per minute (gpm) @ 70 feet TDH. The project also included the construction of a monorail system for ease of pump removal, a backup generator to provide power during outages and a SCADA system to provide monitoring and control of the wastewater system by operators at the City of Danville wastewater treatment plant.

Construction of the project was completed by Schroeder Construction, Inc. of Elizabethtown, Kentucky in April 2009. Funding for the work was provided by the Kentucky Infrastructure Authority (KIA), Community Development Block Grant (CDBG), the Environmental Protection Agency (EPA) and local funds.

Number of Change Orders: 0
Total Change Order Amount: $0.00

Project Highlights/Milestones

- Completed: April 2009
- 5,905 LF of 12” force main
- Backup generator
- SCADA

Contact: Earl Coffey, City Engineer – 859/238-1200

Clark's Run Pumping Station

Project Details	
Client:	City of Danville, KY
Consulting Fee:	$27,160
Estimated Construction Cost:	$400,000
Bid Construction Cost:	TBD
Final Construction Cost:	TBD
Key Personnel on Project:	Stephen H. Caudill, P.E.

This project includes improvements to the existing influent pumping station for the City of Danville wastewater treatment plant. The project involves the reuse of the existing influent manhole and piping wet wells in order to minimize cost. The project also includes the construction of four (4) new submersible pumps each rated at 2,800 gallons per minute (gpm) @ 24 feet TDH, a new valve vault, new bar screen, new 20" diameter sluice gates, new exhaust system for the motor control house, new pump controls and a new hoist/trolley system.

Bell Engineering previously provided design services for the project. The project is awaiting funding for a spring 2012 bid date. Bell Engineering will provide bidding, construction administration and resident project representative services once funding is available.

Project Highlights/Milestones

- Design complete
- Project bidding set for spring 2012
- Four 2,800 gpm submersible pumps
- Reuse of existing influent manhole and wet wells to minimize cost

Contact: Earl Coffey, City Engineer – 859/238-1200

Williams Street Pump Station

Project Details	
Client:	City of Somerset, KY
Consulting Fee:	$55,312
Estimated Construction Cost:	$250,000
Bid Construction Cost:	$211,712
Final Construction Cost:	$220,312
Key Personnel on Project:	Kelly G. Gillespie and Ronald E. Rogers, P.E.

This project required decommissioning the existing 300 gallon per minute (gpm) Williams Street Pump Station and constructing a new 500 gpm pump station adjacent to the existing station. The Williams Street station is a collection point for most sanitary sewers located north of Somerset and they experience significant inflow and infiltration problems that contribute to periods of high flows. The old Williams Street station would consistently overflow during significant rainfall events. Bell was able to connect to the existing 8-inch force main and reroute the incoming gravity lines, thus minimizing the total project cost. The newly constructed wet well was 8 feet in diameter and 24.5 feet in depth. New electrical controls and telemetry were also installed as part of this project.

The project was completed in 2006 with one change order of $8,600, but still allowed Somerset to finish the project well under the original budget. The change order was a result of the City of Somerset deciding to install a rectangular valve vault in lieu of the specified circular valve vault. The station was successfully constructed by Walter Martin Excavating of Russell Springs, Kentucky. Bell Engineering provided design, bidding, construction administration and resident project representation services. The project was fully funded by the City of Somerset.

Project Highlights/Milestones

- Completed: 2006
- Completed within original budget
- 500 gpm pumping capacity
- Elimination of overflows

Contact: Charles R. Dick, Manager – 606/678-4466

York Lane Pump Station

Project Details

Client:	City of Danville, KY
Consulting Fee:	$41,552
Estimated Construction Cost:	$225,000
Bid Construction Cost:	$202,300
Final Construction Cost:	$202,300
Key Personnel on Project:	Stephen H. Caudill, P.E.

This project included the improvement of an existing wastewater pump station for the City of Danville. The pump station serves portions of the Junction City sanitary sewer collection system. The project included the construction of a new wet well, two (2) submersible pumps each rated at 400 gallons per minute (gpm) @ 47 feet TDH, a backup generator to provide power during emergencies and a SCADA system to provide improved monitoring and control of the wastewater system by operators at the City of Danville wastewater treatment plant.

Construction began in August of 2007 and was completed by April of 2008. The project was constructed by Schroeder Construction, Inc. of Elizabethtown, Kentucky. Bell Engineering provided design, bidding, construction administration and resident project representative services for this project. Funding for the work was provided by the Kentucky Infrastructure Authority (KIA), Community Development Block Grant (CDBG), the Environmental Protection Agency (EPA) and local funds.

Number of Change Orders: 0
Total Change Order Amount: $0.00

Project Highlights/Milestones

- Completed: April 2008
- Two 400 gpm submersible pumps
- SCADA for monitoring/control
- Back-up generator for emergencies

Contact: Earl Coffey, City Engineer – 859/238-1200

Bell has experience with a variety of funding agencies and is especially familiar with Kentucky Infrastructure Authority (KIA). **Our team's relationship with KIA staff and familiarity with the additional administrative responsibilities associated with these funds enables them to develop and move projects through the design process rapidly** with no delay due to a KIA or project related learning curve. Our team will process all necessary paperwork and provide required reporting throughout the Blue Sky Pump Station project.

Table 1 – KIA Funding Experience

	Funding Agency(s)						
Location/Project	ARC	CDBG	EDA	RD/RUS	SRF/KIA	EPA/Other	Grant/ Loan Amt. ($)
Beaver Elkhorn Water, Floyd County, KY Water Improvement					■		6,200,000
Boyd-Greenup San. Dist. #1 Russell, KY WWTP					■		3,537,211
Brandenburg, KY WWTP					■		1,963,796
Cadiz, KY WW System Improvement			■		■		1,308,900
Crofton, KY WW System Upgrade					■		868,770
Danville, KY Balls Branch Sanitary Sewer		■		■	■	■	5,000,000
Danville, KY Clark's Run Pump Station					■		650,000
Danville, KY Phylben Village/Junction City Sanitary Sewer	■	■		■	■		3,194,000
Harlan, KY Water Improvement					■		2,249,819
Harlan, KY WWTP	■		■		■		6,053,574
Hickman, KY WWTP					■		1,418,220
Hickman, KY WW System Improvement		■			■		1,600,000

Location/Project	Funding Agency(s)						Grant/ Loan Amt. ($)
	ARC	CDBG	EDA	RD/RUS	SRF/KIA	EPA/Other	
Hodgenville, KY WW System Improvement		■		■	■		110,000
Hopkinsville, KY WTP			■		■		7,000,000
Hopkinsville, KY WW System Improvement					■		10,890,000
LaGrange, KY WW System Improvement					■		719,800
Letcher Co. Fiscal Court, KY 29 Different Water Line Extension Projects	■	■		■	■		22,000,000
Monticello, KY WTP Improvements				■	■		11,246,000
Monticello, KY Phase 1 Water & Sewer Improvements				■	■		2,550,000
Mt. Sterling, KY Industrial Park Improvement		■			■		750,000
Mt. Sterling, KY WTP Improvement					■		1,009,600
Mt. Sterline, KY Hinkston Creek WWTP					■		10,000,000
Owingsville, KY Sanitary Sewer Extensions				■	■		1,706,000
Pineville, KY WWTP		■			■		2,500,000
Pleasureville, KY Collection System		■		■	■		2,738,200
Prestonsburg, KY Water Improvement					■		2,000,000
Princeton, KY Wastewater System Improvement			■		■		3,695,000

Location/Project	Funding Agency(s)						
	ARC	CDBG	EDA	RD/RUS	SRF/KIA	EPA/Other	Grant/ Loan Amt. ($)
Providence, KY Wastewater System Improvement					■		3,790,000
Richmond, KY Otter Creek WWTP					■		25,000,000
Somerset, KY WWTP Improvement					■		2,759,200
Webster County Dixon, KY Wastewater System Improvement		■			■		2,200,000
Winchester, KY Strodes Creek WWTP					■		20,000,000

Background

This section of our proposal is intended to summarize our familiarity with the existing infrastructure in the project area as well as present our approach.

The Blue Sky Wastewater Treatment Plant (WWTP) was originally constructed in the 1970's to serve the watershed in the Blue Sky Parkway not connected to the Urban Service Area. It is the desire of the Lexington-Fayette Urban County Government (LFUCG) to construct a pump station to convey all of the sewage from this facility to the collection system and ultimately to the East Hickman Pump Station. The East Hickman Pump Station conveys sewage from the East Hickman watershed to the West Hickman WWTP for final treatment.

Bell Engineering can offer a unique understanding of the areas to be served by the collection and conveyance systems. A member of our project team, Mr. Jim Buckles, P.E., has worked with the Boonesboro Manor WWTP for over 10 years. Mr. Buckles has assisted the operators in the maintenance of the facility and also helped them remain in compliance with their KPDES permit, which is currently compliant. He will continue to serve the needs of this facility until it is decommissioned and the waste is conveyed to the LFUCG collection system.

The Bell team has talked to the operators of the Boonesboro facility and completed a site visit to both properties. We have walked the entire length of the proposed force main routing options and noted all stream crossings, utility crossings, property lines, right-of-way and challenging terrain. In addition, we obtained the as-built GIS plans for Kentucky American's water lines in the project area to determine if any conflicts exist. These findings, along with maps, will be detailed in the force main section.

Project Issues

Given our project familiarity and experience with projects similar in nature, the Bell Team has a complete and thorough understanding of the project goals, objectives and scope of work. We have researched all available information, visited the treatment plant sites, walked the entire length of the proposed force main route, viewed right-of-way maps, reviewed existing utility as-builts and identified potential obstructions. The following is a list of design considerations that must be addressed prior to final design.

Our discussion of this project is divided into the following four components:

1. The proposed Blue Sky Pump Station (potentially accommodating flow from the Boonesboro Manor WWTP and eliminating the Cutters Hill Court Pump Station if feasible),
2. The proposed force main project,
3. The proposed demolition of the Blue Sky WWTP and closure of the lagoon,
4. Demolition of the Boonesboro Manor WWTP (if desired).

1. **Blue Sky Pump Station –** In order to accurately design the proposed Blue Sky Pump Station, capacity (current and future), footprint and project sites must be evaluated and determined.

   The first factor that must be determined in designing a wastewater pump station is the capacity, or design flow rate, for the proposed station. In order to properly evaluate the capacity required for the present and future developments surrounding the Blue Sky WWTP, we discussed existing zoning in the watershed and studied proposed development plans with the Department of Planning and Zoning. It is our understanding based on these conversations that the current zoning in the area is not likely to change in the near future. A zoning map of the Blue Sky Rural Activity Center (RAC) is shown below. The majority of the Blue Sky RAC area is zoned Industrial with small pockets zoned either professional or business.

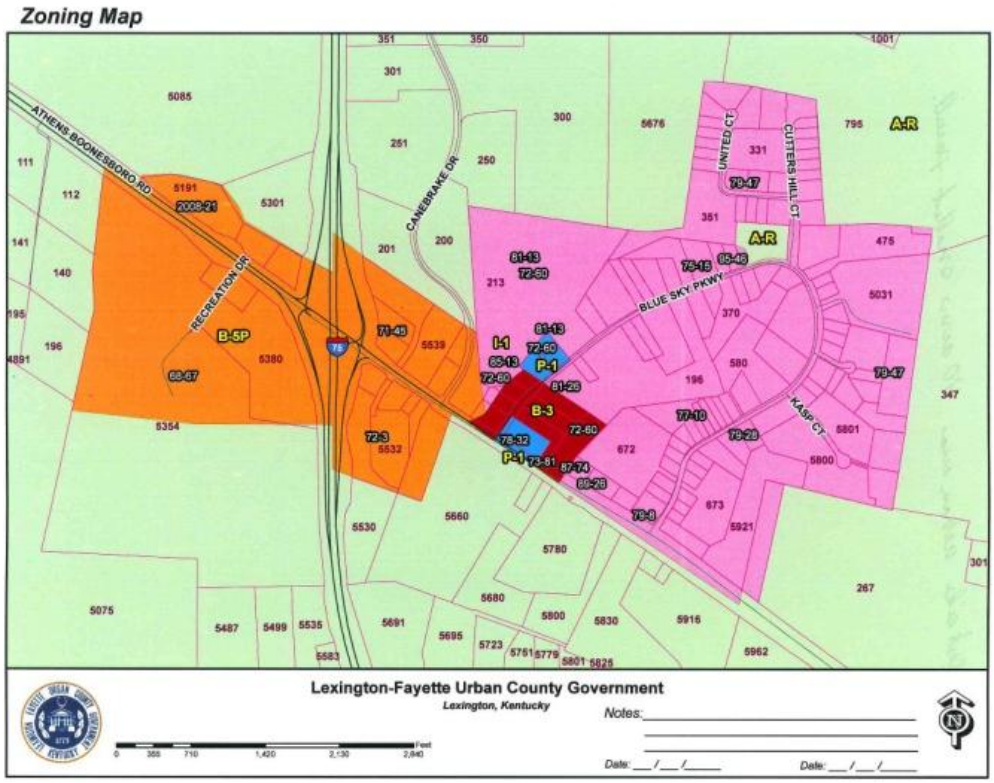


Figure 1 – Planning & Zoning Map of Project Area

A Technical Memorandum completed by HDR, Inc. dated February 25, 2009 identified a pump rate of 200 gpm. Review of historical flow data indicated that maximum day flows up to 320,000 gpd were observed. One must assume that flows reaching or exceeding that amount will occur again. A 200 gpm pump running 24 hours a day can only pump 288,000 gpd. Therefore, a 200 gpm pump station is not large enough to handle the maximum flows which have already occurred.

A more realistic approach would be to size the pump station such that the design capacity of the existing Blue Sky WWTP could be pumped in eight hours running time.

This will result in the selection of a 240 gpm pump rate. A 6-inch diameter force main is usually adequate for 240 gpm. However, a 240 gpm in a 6-inch diameter force main generates a Total Dynamic Head (TDH) over 350 feet. This design point cannot realistically be achieved with a single centrifugal submersible pump. The next option is to go to an 8-inch diameter force main, but 240 gpm in an 8-inch diameter force main does not provide the required scouring velocity of 2 feet per second. Considering all of the above, the design pump rate must be increased to 320 gpm to provide the required scouring velocity in an 8-inch diameter force main. Therefore, the recommended design pump rate is 320 gpm and the pump station is a Class C Pump Station. Assuming an 8-inch force main, a 60 horse power pump will be required.

The proposed pump station will include two 8 ft. diameter linked wet wells (as required by Class C designation) providing optimal cycle time for the pumps as well as two hour storage for emergency response in case of power or mechanical outages.

The second factor that must be evaluated is the footprint, or land area required. This must be done before a site can be identified. Based on Discharge Monitoring Reports (DMR's) and previously gathered data, the peak flow for the Blue Sky Pump Station is approximately 300 gallons per minute. The LFUCG Pump Station Manual states that a pump station with a design capacity between 99 and 999 gallons per minutes (gpm) would be classified as a Class C Pump Station. Therefore, the Blue Sky Pump Station would be classified as a Class C Pump Station. A table summarizing the requirements of a Class C Pump Station can be seen below. Based on this information and general design guidelines, it is anticipated that the footprint required for a pump station of this size would be approximately 40 ft. by 60 ft. Our proposal and approach assume design of a Class C Pump Station based on the above information.

Components	Class A P.S. 3,000 & > gpm	Class B P.S. 1,000-2,999 gpm	Class C P.S. 75-999 gpm	Class D P.S. <75 gpm
Building – 3 Room Min. & B.R.	Yes	No	No	No
Building – 2 Room Min.	No	Yes	No	No
Bar Screen	Yes(1)	Yes(1)	No	No
Flow Measurement	Yes	Yes	No	No
Odor Control	Yes	Yes	Possible	Possible
Emergency Power Generator	Yes	Yes	No	No
Emer. Power Portable Hookup	No	No	Yes	Yes
3 Phase Electrical Power Required	Yes	Yes	Yes	Yes
Telemetry	Yes	Yes	Yes	Yes
Cast in Place Concrete Required	Yes	Yes	No	No
Precast Concrete Allowed	No	No	Yes	Yes
Submersible Pumps Allowed	Yes	Yes	Yes	Yes
Dry Pit Pumps Allowed	Yes	Yes	No	No
3 Pumps Minimum	Yes	Yes	No	No
Multiple Wet Wells Required	Yes	Yes	Yes	No
Fence	Yes	Yes	Yes	Yes
Paved Access & Turnarounds	Yes	Yes	Yes	Yes

Figure 2 – LFUCG Pump Station Manual Requirements

The Technical Memorandum prepared by HDR, Inc. identified that the pump station should be classified as a Class C Pump Station and that the footprint was determined to be 40 ft. x 60 ft. as indicated in the figure below.

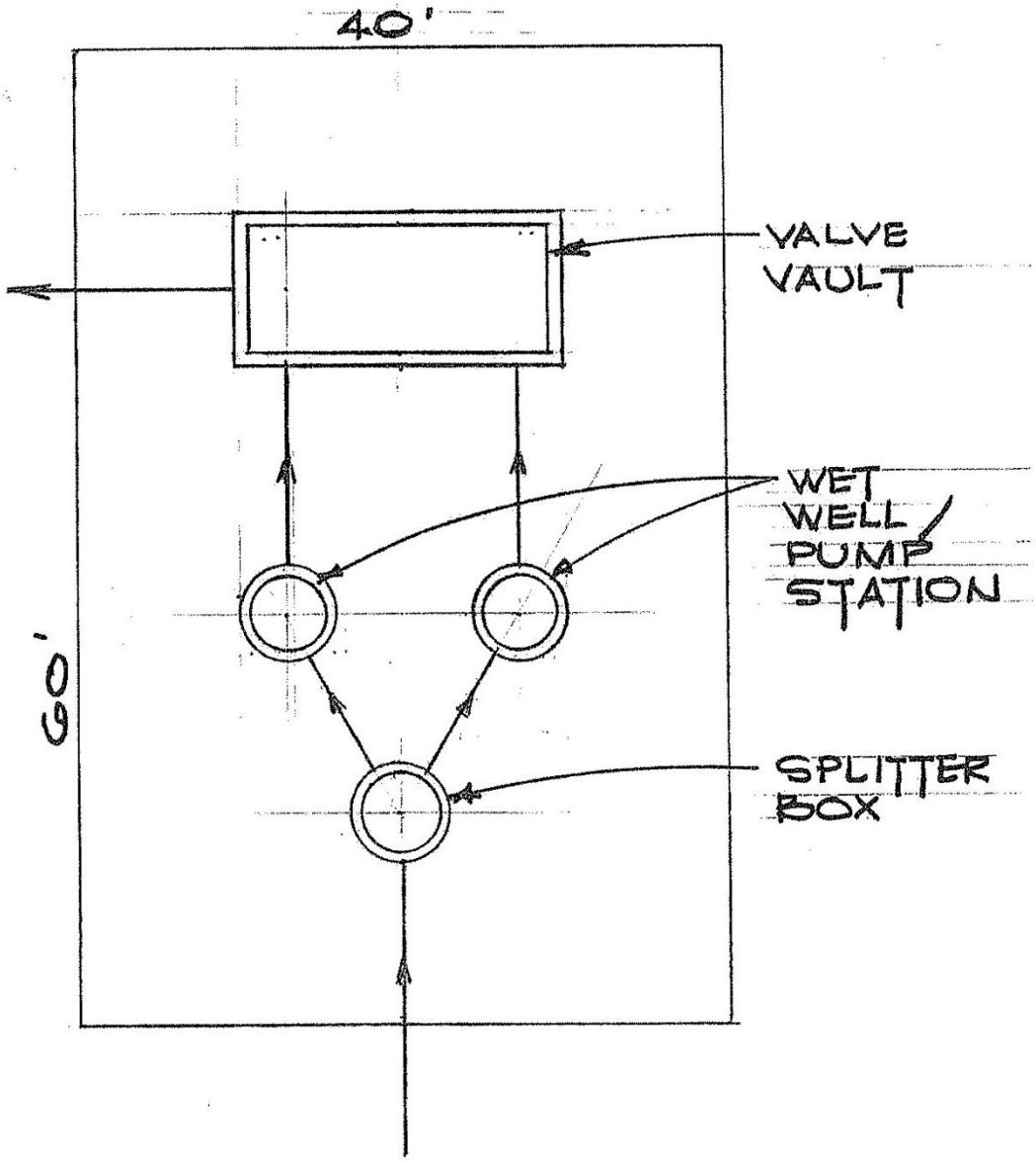
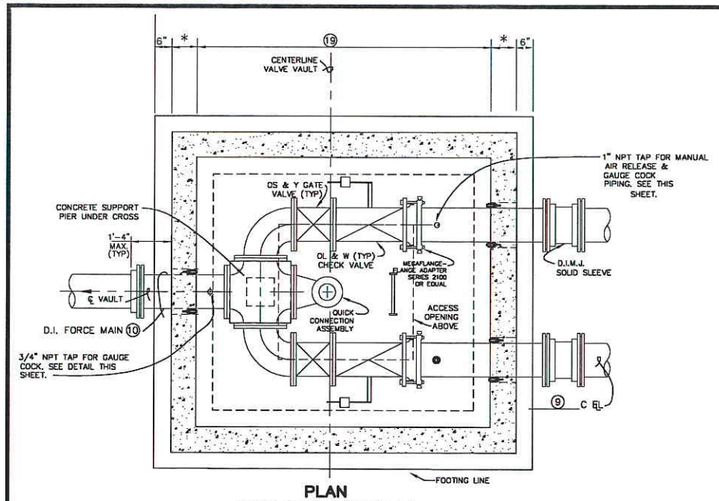
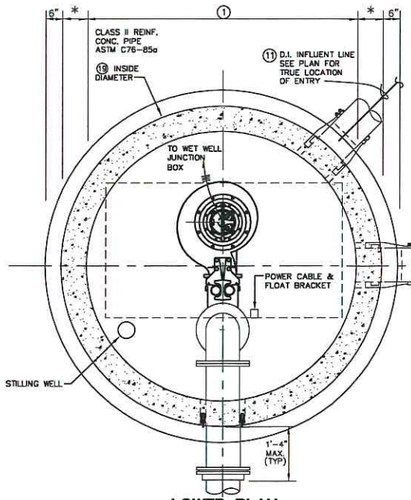


Figure 3 – HDR pump station layout

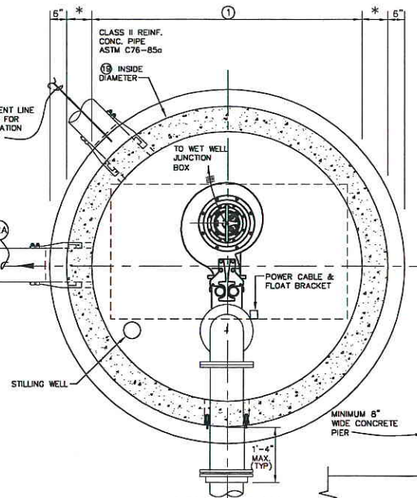
At this time, the Bell team has completed preliminary design of the new Blue Sky Pump Station. A detailed pump station drawing may be found on the following page.



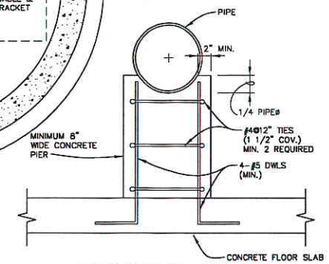
PLAN
VALVE VAULT
NOT TO SCALE



LOWER PLAN
WET WELL PUMP #1
NOT TO SCALE



LOWER PLAN
WET WELL PUMP #2
NOT TO SCALE



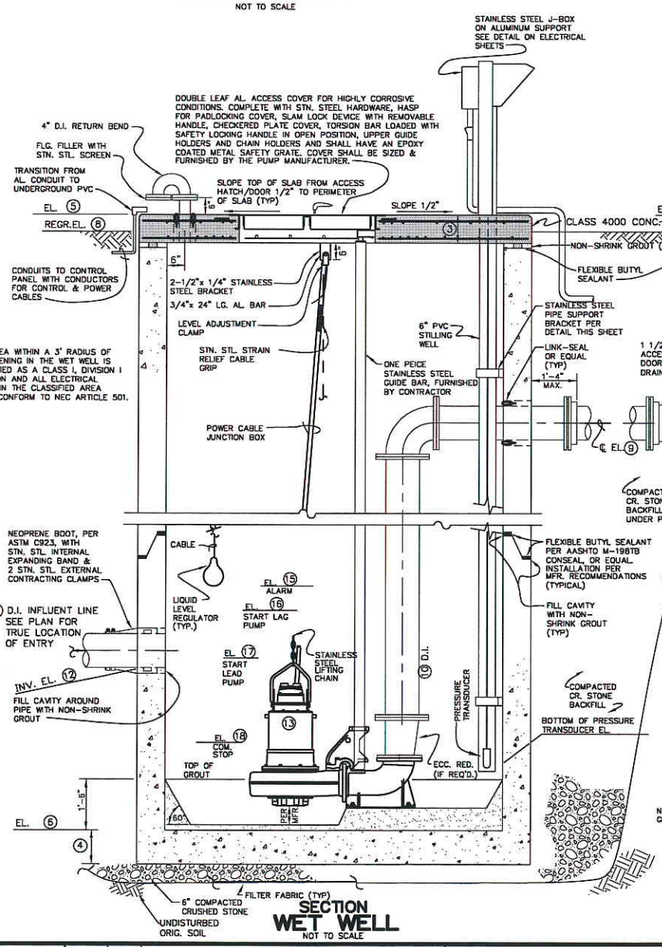
INTERIOR PIPE SUPPORT DETAIL
NOT TO SCALE

PUMPING STATION DATA

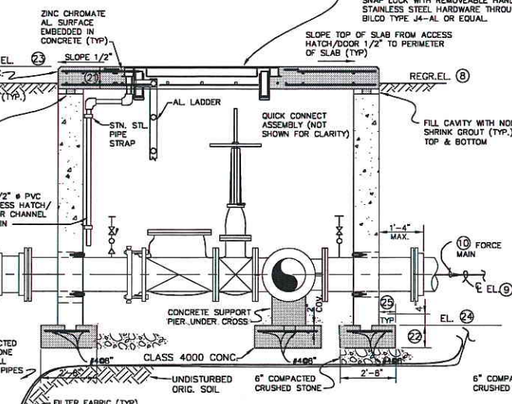
	ITEM	
1	WET WELL INSIDE DIAMETER	6 FT.
2	WET WELL DEPTH	16 FT.
3	WET WELL TOP SLAB THICKNESS	8 INCH
4	WET WELL BOTTOM SLAB THICKNESS	12 INCH
5	WET WELL TOP OF TOP SLAB ELEVATION	923.50
6	WET WELL TOP OF BOTTOM SLAB ELEVATION	907.50
7	WET WELL BOTTOM SLAB EXTENSION	12 INCH
8	REGRADE	923.00
9	CENTERLINE DISCHARGE PIPE ELEVATION	918.00
10	FORCE MAIN SIZE	6 INCH D.I.
11	GRAVITY SEWER SIZE	8 INCH D.I.
12	GRAVITY SEWER INVERT ELEVATION	914.25
12A	INTERCONNECT SEWER CENTERLINE ELEVATION	908.33
13	PUMP CAPACITY (EACH PUMP)	188
14	PUMP MOTOR H.P., PHASE (EACH PUMP)	7.5hp,3ph,480V
15	PUMP ALARM ELEVATION	914.25
16	START LAG PUMP ELEVATION	913.25
17	START LEAD PUMP ELEVATION	912.00
18	PUMP COMMON STOP ELEVATION	910.75
19	VALVE VAULT INSIDE DIMENSION	8' x 6'
20	VALVE VAULT DEPTH	7.5 FT.
21	VALVE VAULT TOP FOOTER THICKNESS	8 INCH
22	VALVE VAULT BOTTOM SLAB THICKNESS	12 INCH
23	VALVE VAULT TOP OF TOP SLAB ELEVATION	923.50
24	VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	916.00
25	VALVE VAULT BOTTOM FOOTER WIDTH	1'-8"

NOTES

- PIPING, VALVES, FITTINGS, PUMPS, MOTORS, ETC. INSIDE WET WELL AND VALVE VAULT, (EXCEPT GUIDE RAILS) SHALL BE PAINTED PER SPECIFICATIONS, SECTION 09900. DRYING TIME BETWEEN COATS AND APPLICATION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL SUBMIT MANUFACTURER'S RECOMMENDATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL.
- ALL NUTS AND BOLTS INSIDE WET WELL AND VALVE VAULT SHALL BE STAINLESS STEEL.
- PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL & REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
- ACCESS COVER MUST BE SET SUCH AS TO ALLOW GUIDE RAILS FROM PUMP DISCHARGE FLANGED CONNECTION TO BE VERTICAL FOR CORRECT OPERATION.
- SEE MANUFACTURER'S INSTALLATION DRAWINGS FOR TRUE DIMENSIONS OFF OF WET WELL CENTERLINES FOR PUMPS AND ACCESS COVER LOCATIONS.
- WET WELL SHALL BE CONSIDERED A CLASS 1, DIVISION 1, GROUP D HAZARDOUS ATMOSPHERE.

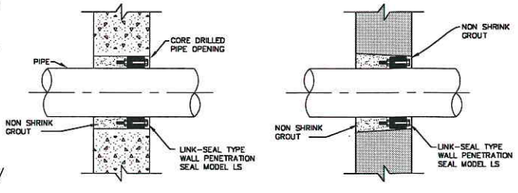


SECTION VALVE VAULT
NOT TO SCALE



SECTION VALVE VAULT
NOT TO SCALE

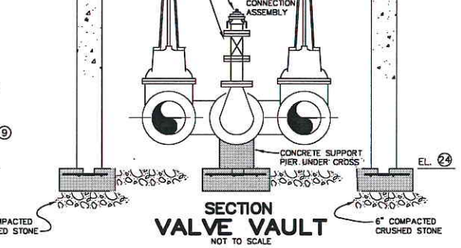
NOTES FOR WET WELL:
- ALL REINF. SHOWN IS AT BOTTOM OF SLAB UNLESS NOTED OTHERWISE
- * TOP REINF. IS NOT SHOWN, BUT SHALL BE #4@12" EACH WAY (1 1/2" COV.), WITH 2-#4@3" EXTRA AT EACH SIDE OF OPENING & 1-#5 x 3'-0" LONG DIAG. @ EA. COR OF OPNG.



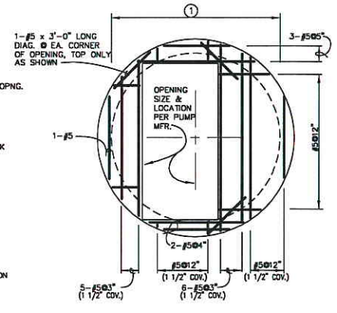
CORE PIPE OPNG. IN NEW OR EXISTING WALL OR SLAB

BOX-OUT PIPE OPNG. IN NEW WALL OR SLAB

NOTE:
SAFETY NET IN WET WELL SHALL BE EASILY RETRACTABLE AND MEET ALL OSHA SAFETY STANDARDS. SAFETY NET SHALL BE "HATCH NET 120" AS MANUFACTURED BY SAFE APPROACH, INC. OR EQUAL.

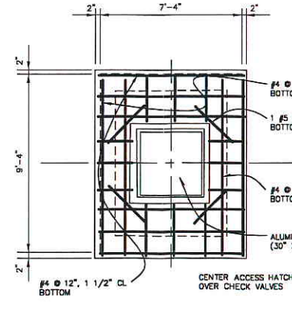


SECTION VALVE VAULT
NOT TO SCALE



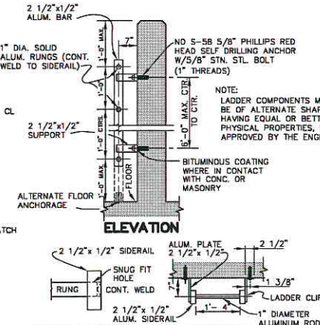
TOP SLAB REINF. PLAN
WET WELL
NOT TO SCALE

4" QUICK CONNECTION ASSEMBLY:
FURNISH & INSTALL THE FOLLOWING ITEMS:
- 1-4" STN. STL. FEMALE FLANGE COUPLER
- 1-4" STN. STL. MALE HOSE SHANK
- 1-4" STN. STL. DUST CAP
- 2-4" DIA. STN. STL. CLAMPS FOR ATTACHING HOSE TO HOSE SHANK PRODUCTS OF PT COUPLING INC. ENID, OKLAHOMA, OR EQUAL.



TOP SLAB REINF. PLAN
VALVE VAULT
NOT TO SCALE

PIPING FOR INDICATING GAUGE
AIR RELEASE PIPING & PIPING FOR INDICATING GAUGE
AIR RELEASE & GAUGE ASSEMBLIES
NOT TO SCALE



DETAIL - ALUMINUM LADDER
NOT TO SCALE

DESIGNER	AGC
DRAWN	DMB
CHECKED	DFS
APPROVED	DFS

DATE	BY	REVISION

GRAPHIC SCALE

SCALE: AS NOTED

STATE OF KENTUCKY DAVID F. SCHRADER 20981 LICENSED PROFESSIONAL ENGINEER

bell engineering
Lexington, KY (859) 278-5412
Hopkinsville, KY (270) 886-5466

BLUE SKY PUMP STATION
LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT
LEXINGTON, KENTUCKY

PUMP STATION DETAIL

DIVISION	=
CONTRACT NO.	557-11-01
DATE	DEC. 2011
SHEET NO.	2 OF 3

The third factor that must be evaluated is potential sites. The Technical Memorandum indicated that there were two potential locations for a new pump station.

Option 1 – Conveyance to a property located on United Court

The first option for a pump station site is located on a property across a tributary of the Boone Creek watershed on a vacant lot owned by LN Real Estate, LLC c/o Jeff Wildt United Building Centers. This parcel is estimated by the PVA to have a fair cash value of $47,000. The utility easement along the creek is approximately 70 ft. wide. This corridor could be used to accommodate gravity sewers and force main routing within the Blue Sky area.

In order to cross the creek with a gravity sewer at this location, the influent sewer to the treatment plant would need to be lowered approximately 15 feet to get below the streambed. Approximately 350 feet of 8-inch gravity sewer would be installed from the Cutters Hill Court Pump Station to the new Blue Sky Pump Station eliminating the need for Cutters Hill Court Pump Station and Blue Sky WWTP.

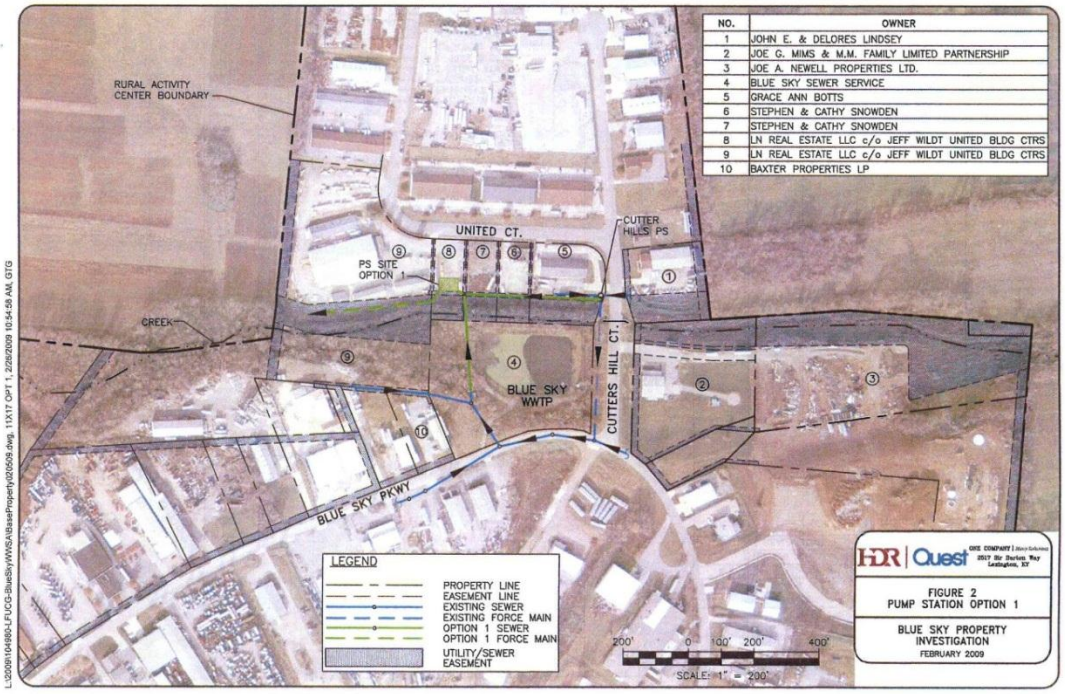


Figure 4 – HDR Technical Memorandum – Site Option 1

Option 2 – Conveyance to a property located behind the concrete plant

The second pump station site is located across Cutters Hill Court behind the concrete plant on a parcel owned by Joe A. Newell Properties, Ltd. This parcel is estimated by the PVA to have a fair cash value of $551,500 and currently operates as a concrete plant. The pump station would only require a small portion of this lot. This location has the advantage of being down-stream from the existing WWTP and Cutters Hill Court Pump Station which would allow for gravity flow from both facilities and a shallow pump station. This option would require approximately 1,900 feet of 12-inch gravity sewer to be constructed to divert flow from the Cutters Hill Court Pump Station and Blue Sky WWTP.

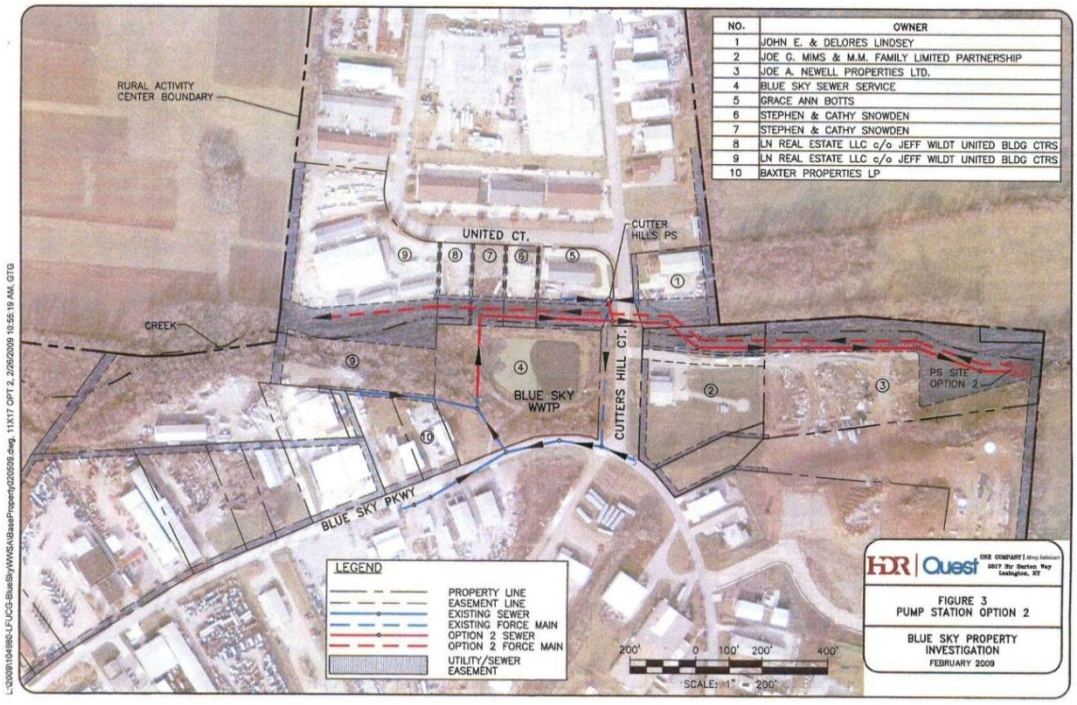


Figure 5 – HDR Technical Memorandum – Site Option 2

Both of these proposed sites would require the LFUCG to make an investment in real estate above and beyond design and construction of the project.

Option 3 – Conveyance to a site located on the Blue Sky WWTP site

The third potential location for a pump station is located on the existing 2.2 acre Blue Sky WWTP site. The common influent manhole would be intercepted and a new manhole installed to split flow between the two new wet wells. This parcel is already owned by the LFUCG eliminating land acquisition costs. The down side to having the pump station located on the existing site is that the Cutters Hill Court Pump Station would need to remain in service. Our proposal and approach utilizes this option as it is the preferred location as indicated in RFP #45-2011 under the General Project Description, **"It is anticipated that the new pump station would be constructed within the 2.2 acre parcel that contains the existing treatment plant infrastructure."**

Figure 6 – Bell Team – Site Option 3

Future Tie-In of The Boonesboro Manner WWTP

The Boonesboro Manor Wastewater Treatment Plant is a privately owned WWTP located on the west side of the Richmond Road/I-75 interchange. Currently, this 70,000 gallon per day (gpd) (design flow), activated sludge plant treats domestic wastewater from a restaurant and two service stations, but it is sized to accommodate development from the JFG Enterprises' Agricultural Rural (A-R) zone filed with the Urban County Planning Commission. Mr. Jim Buckles, P.E. has managed the operation of this WWTP facility for over 10 years. The facility is in full compliance with its Kentucky Pollutant Discharge Elimination System (KPDES) permit KY0027294. It includes: a bar screen,

aeration basin, clarification, disinfection, and de-chlorination. It has a sludge holding tank for waste solids that are disposed offsite without restrictions. Also, the facility has a membrane-lined polishing lagoon that is only used for large instantaneous peak flow (>70,000 gpd) disinfection contact time. Flow less than 70,000 gpd does not pass through the polishing lagoon.

Appendix K-1 of the consent decree calls for the diversion of flow from and eventual closure of the Boonesboro Manor WWTP whenever the necessary infrastructure required to accommodate the additional flow becomes available in the service area. The current scope of the proposal asks that the project design be able to potentially handle flow from this plant and preparations to accommodate this will be included in design. A tee and valve can be provided and installed for the future tie-in. Additionally; the tie-in of a force main from Boonesboro Manner into the Blue Sky pump station force main has been evaluated and is a viable action. Although this action is not in the current scope of this proposal, incorporation of the design of the Boonesboro Manner pump station can efficiently be accomplished during the final design of the Blue Sky pump station and force main.

Boonesboro WWTP Lagoon

Recent Similar Projects with LFUCG

Griffin Gate Pump Station Replacement (LFUCG)

Bell Engineering recently designed the newly commissioned Class C Griffin Gate Pump Station located on the McDonalds property off Newtown Pike. Mr. David Schrader, P.E. worked closely with project manager Steve Farmer and DWQ staff member Dallas Taylor to ensure that all components of the pump station met the LFUCG requirements. We understand the materials selection and equipment components that are preferred by the LFUCG personnel. This project presented some unique challenges. First, the pump station was located in a very narrow section of easement no wider than 20 feet. It was bound by I-75 right-of-way on one side and an active parking lot next to the drive through lane on the other. This McDonald's restaurant is one of the most active facilities in Lexington and traffic flow was maintained without interruption throughout construction. The owner of the facility was kept informed on a weekly basis of construction activities that would be taking place. An encroachment permit was obtained from KYDOT for access to the property from I-75 right-of-way. The project was completed on schedule and under budget. To-date, the pump station is no longer experiencing overflows and has operated without interruption.

Griffin Gate Pump Station

2. **Blue Sky Force Main & Conveyance System –** In order to accurately propose a recommended force main route, we evaluated several alignments each emptying into one of the proposed discharge points as outlined in RFP #45-2011. Both alternate routes along with ground profiles are shown on the following pages.

Alignment #1 – Richmond Road to Jacobson Park

This alternative includes the collection and conveyance of wastewater from the Blue Sky WWTP to Manhole EH4_894 at Jacobson Park. The route is shown as Alternate #1 on the following plan view and profile. The alignment consists primarily of approximately 19,500 L.F. of 8-inch force main connecting the proposed Blue Sky Parkway Pump Station and the receiving manhole.

Alignment #2 – Richmond Road to East Hickman Pump Station

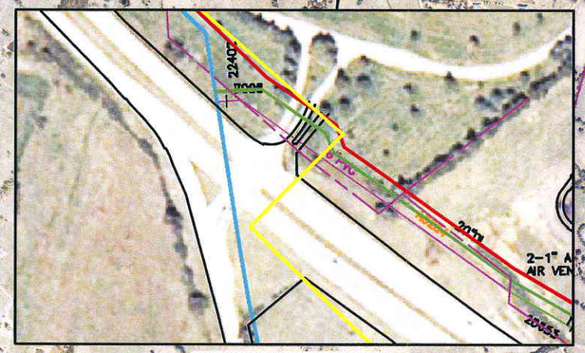
This alternative includes the collection and conveyance of wastewater from the Blue Sky WWTP to the East Hickman Pump Station. The route is shown as Alternate #2 on the following plan view and profile. The alignment consists primarily of approximately 28,000 L.F. of 8-inch force main connecting the proposed Blue Sky Parkway Pump Station and the East Hickman Pump Station.

MH EH4_894

GAS TRANSMISSION MAIN CROSSING

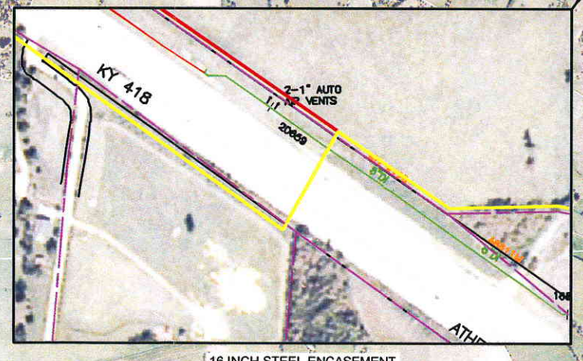
GAS CROSSING

BLUE SKY WWTP



16 INCH STEEL ENCASEMENT
BORE & JACK

8" PVC SDR 21



16 INCH STEEL ENCASEMENT
BORE & JACK

ALTERNATE #1
8" PVC, SDR 21

BLUE SKY FORCE MAIN
LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT

Scale ~ 1"=2000' | DWG. 1 OF 1

bell engineering

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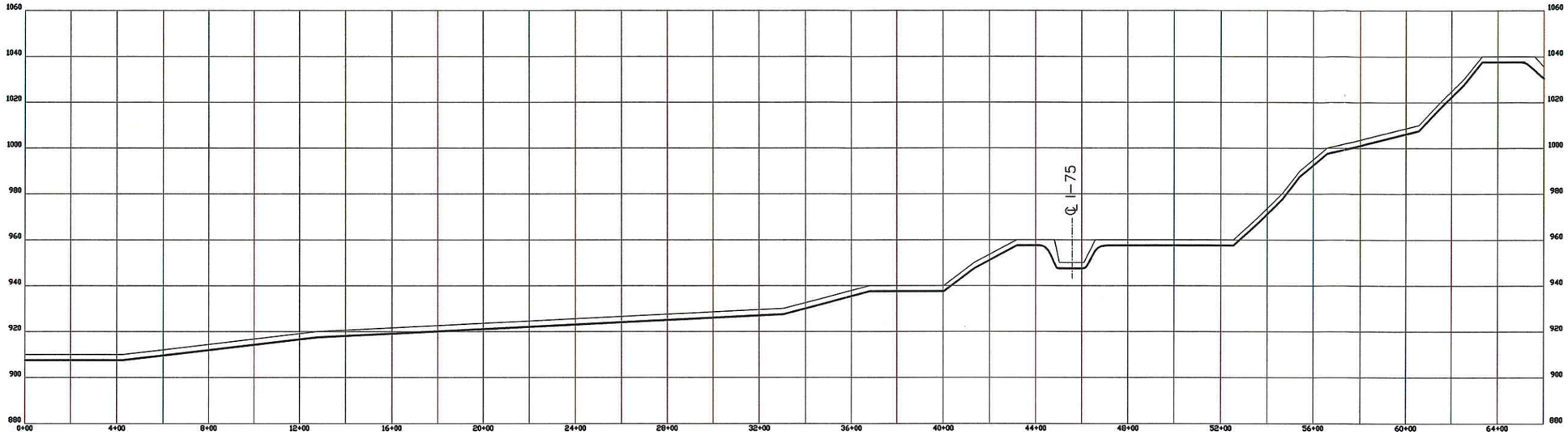

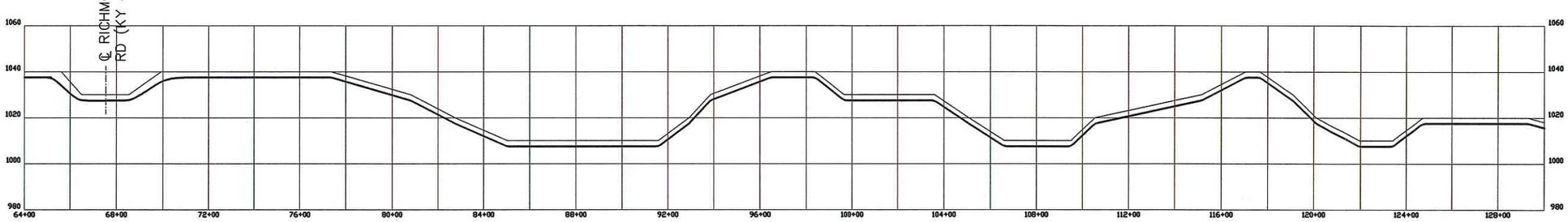

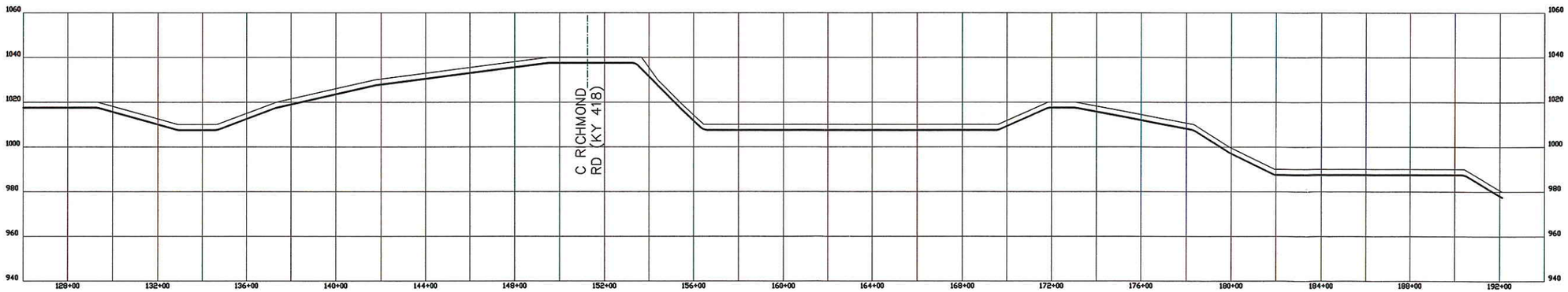

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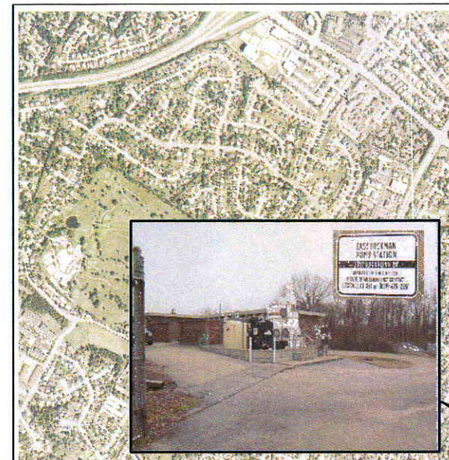
ALTERNATE #1
FORCE MAIN ROUTE

BLUE SKY FORCE MAIN
LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT

Scale ~ N.T.S.

DWG. 1 OF 1



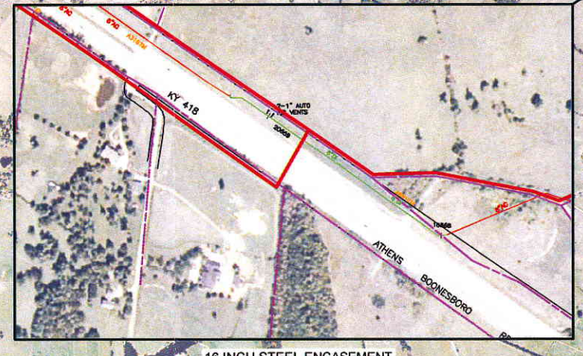
EAST HICKMAN
PUMP STATION

GAS TRANSMISSION
MAIN CROSSING

GAS CROSSING

BLUE SKY WWTP

8" PVC SDR 21



16 INCH STEEL ENCASEMENT
BORE & JACK

ALTERNATE #2
8" PVC, SDR 21

BLUE SKY FORCE MAIN
LEXINGTON–FAYETTE
URBAN COUNTY GOVERNMENT

Scale ~ 1"=2000'

DWG. 1 OF 1

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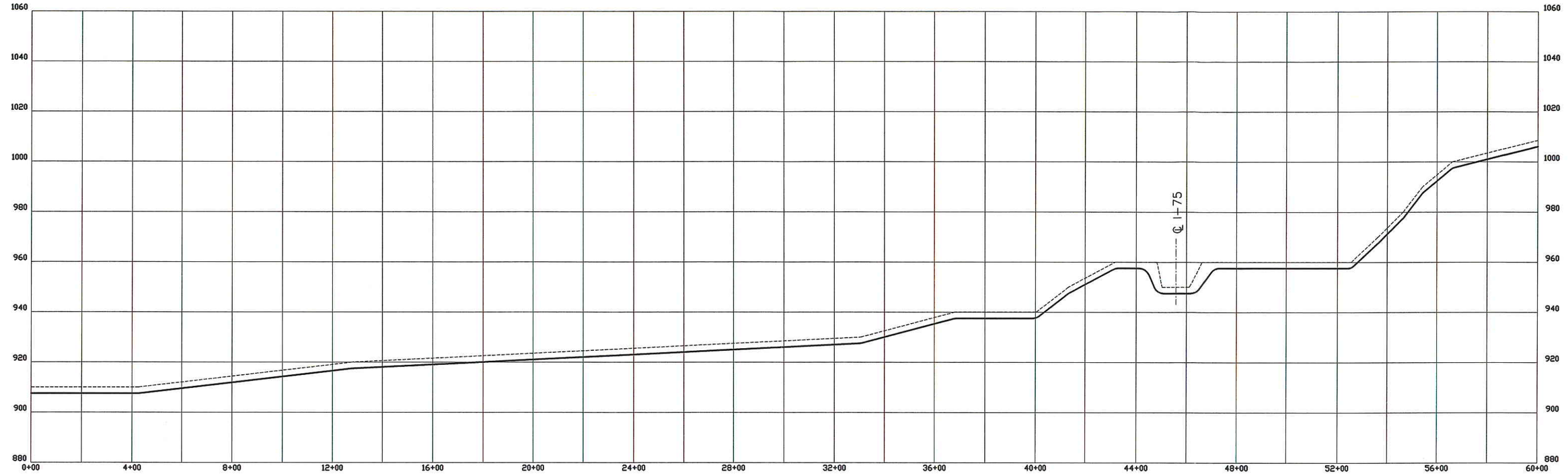
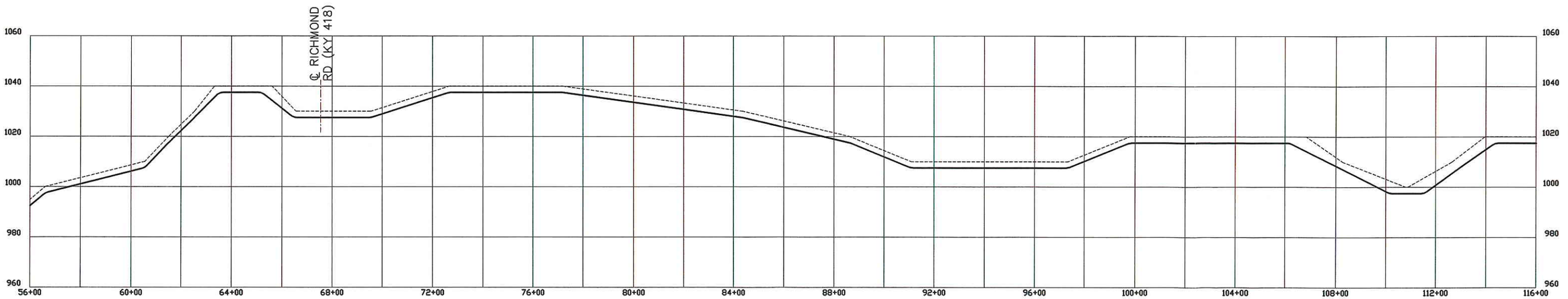




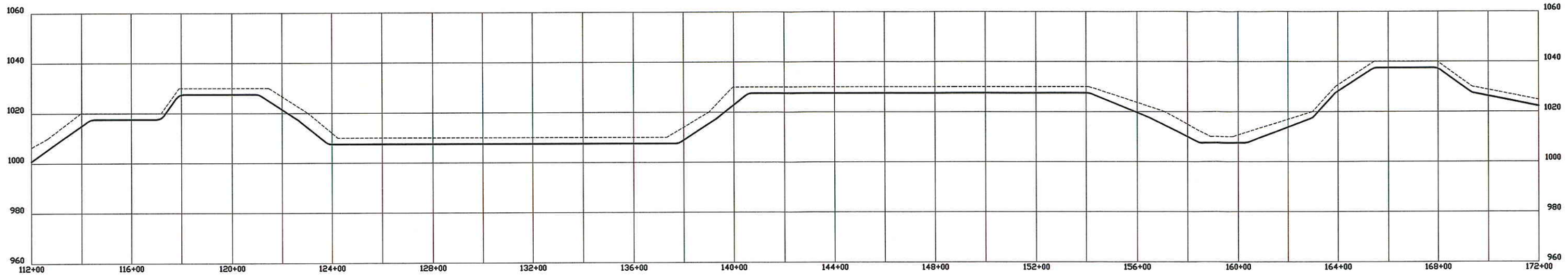
bell engineering

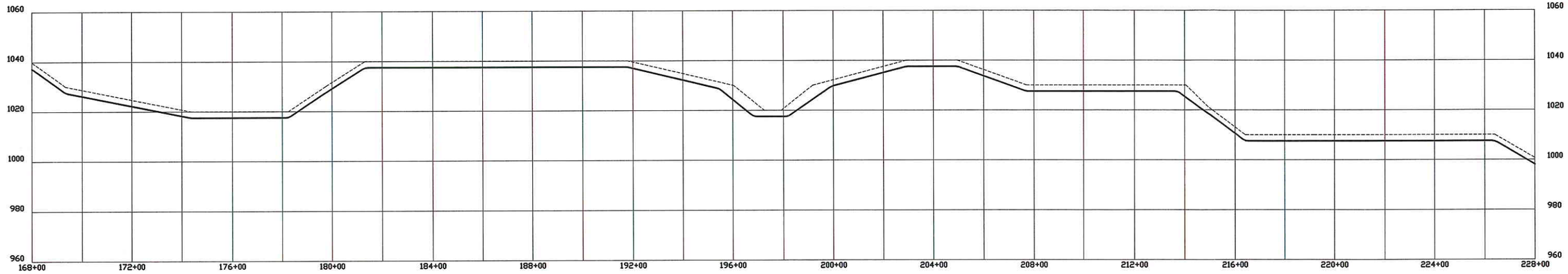
ALTERNATE #2
FORCE MAIN ROUTE

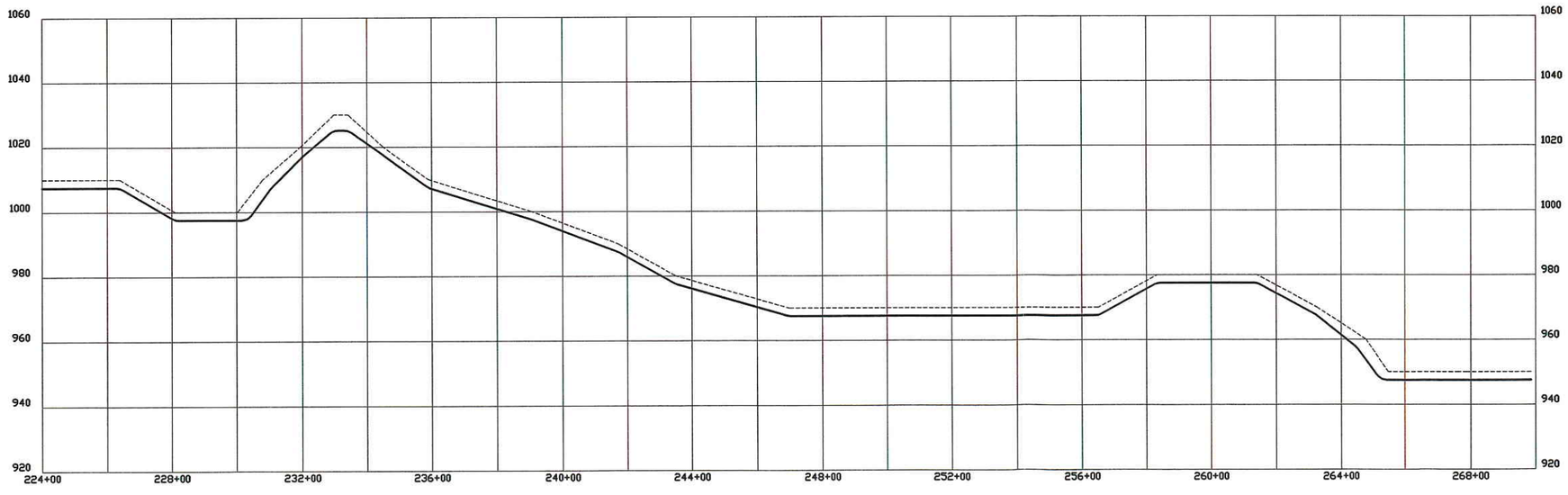
BLUE SKY FORCE MAIN
LEXINGTON–FAYETTE
URBAN COUNTY GOVERNMENT

Scale ~ N.T.S.

DWG. 1 OF 2







bell engineering

ALTERNATE #2
FORCE MAIN ROUTE

BLUE SKY FORCE MAIN
LEXINGTON–FAYETTE
URBAN COUNTY GOVERNMENT

Scale ~ N.T.S.

DWG. 2 OF 2

Recommended Alignment – Richmond Road to Jacobson Park

The two alternates were evaluated for collection/conveyance of the proposed sanitary sewer flow. Alignment #1 was chosen because it is both the most practical and cost effective alternative.

In order to convey the waste flow from the proposed pump station to the receiving manhole, existing sewage flows in the Blue Sky Parkway area must be re-routed. This will be accomplished by intercepting the wastewater flow at manhole BC1_2 in the southwestern corner of the existing Blue Sky Parkway WWTP lot. This flow will then be routed via gravity sewer to the proposed Blue Sky Pump Station to be constructed in the northwest corner of the treatment plant lot.

Flow leaving the Blue Sky Pump Station will be conveyed through an 8-inch force main cross-country in a westerly direction to the right-of-way of Interstate 75. Crossing the interstate will require the installation of approximately 375 L.F. of casing pipe via bore-and-jack methods. Permission to cross the interstate will require the approval of both the Kentucky Transportation Cabinet and the Federal Highway Administration.

After crossing the interstate, the selected sanitary sewer alignment will cross to the southwestern side of Richmond Road. Although crossing Richmond Road will ultimately entail the installation of two additional segments of casing pipe by bore-and-jack methods, it will eliminate conflicts with the Kentucky American Water main that runs along Richmond Road's northeastern side as seen below on the as-built GIS plans obtained from Kentucky American Water.

Figure 7 – KAWC As-Built GIS Maps

Current Kentucky Division of Water (KDOW) regulations require either 10 feet of separation between a potable water line and a sanitary sewer force main paralleling one another or that one of the lines be fully encased to prevent potential cross-

contamination. Providing secondary containment of the sewer force main would result in a significant increase in project costs while providing the 10 feet of separation between the lines will require additional right-of-way. For these reasons, the cost of the two additional bores needed to install the force main on the opposite side of Richmond Road is justified. Both of the road crossings will require approval from the Kentucky Transportation Cabinet.

The proposed force main will be installed along the southwestern side of Richmond Road from I-75 to Old Richmond Road. This route will require crossing three waterways identified as blue line streams on USGS maps. The preferred method of constructing these crossings is directional drilling. Although this method is more expensive and requires coordination with numerous governmental agencies, it does produce the best results from an environmental standpoint.

Construction along either side of Richmond Road will also necessitate crossing two Columbia Gas transmission mains. Crossing these mains will require the permission of the gas company and any work performed in the vicinity of these lines must also be performed in accordance with the specifications of Columbia Gas.

At Old Richmond Road, a second boring of Richmond Road will return the force main to the northeastern side of the road where the ultimate termination point at Manhole EH4_894 is located in Jacobson Park. In addition to the permits previously referenced, construction of the proposed force main will require permission of the KDOW.

3. **Blue Sky WWTP Demolition & Lagoon Closure –** The Blue Sky Wastewater Treatment Plant was built in the 1970's to treat sewage from the Blue Sky Rural Activity Center. It is currently in receivership held by the LFUCG. This 150,000 gpd (average design flow), activated sludge package treatment plant is treating wastewater from a variety of commercial and industrial companies. Historical flow data indicates that the peak flow at the WWTP is 270,000 gpd. The LFUCG plans to construct a new pump station and force main to divert the flow from this WWTP, convey said flow to the East Hickman Pump Station and ultimately to the West Hickman WWTP. Once the flow has been diverted, the Blue Sky WWTP will be decommissioned and demolished.

Blue Sky WWTP

Recent Similar Projects

WWTP Decommission & Closures

Members of the Bell team have drafted and/or implemented the following closure plans for lagoon wastewater treatment systems:

- Prior to 2006, the Blue Grass Army Depot operated two WWTP's: a 200,000 gpd trickling filter plant and a smaller (<50,000 gpd) oxidation ditch. A new pump station was constructed to pump the influent to the oxidation ditch WWTP to the larger trickling filter WWTP, therefore eliminating the need for the oxidation ditch WWTP and its outfall. A closure plan was prepared, submitted and approved by the U.S. Army and KDOW.

- Lagoon sludge dewatering and closure plan for Winchester Municipal Utilities Wastewater Treatment Plant which served a major industrial park in Winchester, KY. The biosolids were removed from the lagoons and processed through a lime conditioning system followed by a heat dryer. The dry solids

were then considered a Class A biosolid and were sold to local farmers for use as fertilizer. The plant was later converted to a fish hatchery for beneficial reuse

- Closure plan and demolition of the Morris Memorial Nursing Home wastewater treatment plant and 0.9 acre sludge lagoon. This project included a new gravity sewer to redirect flow to the new Salt Rock PSD regional wastewater treatment plant eliminating the point source discharge.

- Closure plan and demolition of the Milton Utilities Commission 0.244 mgd package wastewater treatment plant and 8.58 acre sludge lagoon. Sewage from this facility was redirected to common force main eliminating the point source discharge.

Lagoon Dike Investigation

A geotechnical investigation of the site was conducted in September 2010 to determine the depth of bedrock as well as the extents of the lagoon perimeter. In June 2010, probes and soil borings were advanced into the lagoon dike structure. Four of the borings were advanced to refusal and a soil profile was maintained to determine if the sludge or liquid contained in the lagoon had advanced through the dike structure. An additional ten soundings were used to determine the depth to bedrock.

Lagoon Survey

A survey was conducted in June 2010 on the liquid contained within the lagoon to determine the depth of liquid and the thickness of the sludge. In addition, laboratory samples of the liquid and the sludge were collected and analytical methods used to determine the composition of the sludge.

In general, the lagoon water level is approximately 2.5 ft in depth with sludge depth of approximately 1.5 feet. Knowing the perimeter distances for the lagoon, the stored water volume was calculated to be approximately 857,000 gallons meaning the accumulated sludge volume is approximately 2,524 cubic yards. The rock line was interpolated and it was determined that the estimated volume of soil below the sludge prior to bedrock was approximately 2,429 cubic yards.

The laboratory samples revealed that all parameters that could prevent the material from being hauled to a conventional landfill were below the detectible limit of the analytical methods. These results indicate that it would be perfectly safe to dewater the material on-site and haul the dried solids to a landfill.

The soil remaining in the bottom of the lagoon will then be tested to determine if it is contaminated. If the soil test results indicate contamination is present, the soil will be removed and hauled to an appropriate disposal facility. If the soil is not contaminated,

the lagoon will be backfilled and re-graded to allow for proper drainage and re-vegetated.

Procedures

The procedures for closure are proposed to be as follows:

1. Connect the BBM influent to the Lexington-Fayette Urban County (LFUCG) Sewer System.

2. Dispose the contents of the steel structure, lift station, lagoon, disinfection chamber and de-chlorination chamber into the LFUCG sewer system.

3. Disinfect, dismantle and remove the steel structure, stainless steel chamber and concrete disinfection chamber. Recycle the material whenever possible.

4. Perform inspection of the sidewalls and bottom of all excavations to determine if additional excavation or material testing is needed.

5. Backfill the excavations with onsite earth material.

6. Remove and disinfect the lagoon liner and backfill the shallow lagoon with onsite earth material.

7. Remove, disinfect and dispose of miscellaneous yard piping.

8. Remove the shallow groundwater monitoring well.

9. Grade all disturbed area to match existing drainage pathways and re-vegetate the disturbed area.

4. **Boonesboro WWTP Demolition & Lagoon Closure (if desired) –** As we have already outlined, the Bell team is very familiar with the operations of the Boonesboro WWTP and the necessary actions to decommission this plant and lagoon.

Boonesboro Manor WWTP

Procedures

The infrastructure to be de-commissioned at the site includes: 1) the in-ground steel structure that contains the bar screen, aeration basin, clarification and sludge holding tanks; 2) a small lift station that pumps effluent to the disinfection contact chamber; 3) a small concrete disinfection contact chamber; 4) a small stainless steel de-chlorination chamber; 5) an earthen polishing lagoon; and 6) miscellaneous yard piping. A shallow groundwater monitoring well is located adjacent to the steel structure that is used to detect tank leakage. No known leakage has ever been detected. The accumulated solids in the polishing lagoon are periodically inspected and at the time of their last inspection, they were determined to be less than 6 inches deep. Considering the absence of any industrial wastewater contribution to the facility, the quality of lagoon sludge is not expected to contain significant concentrations of any toxic characteristic leaching compounds or any other pollutants that would limit its disposal.

The procedures for closure are proposed to be as follows:

1. Connect the BBM influent to the Lexington-Fayette Urban County (LFUCG) Sewer System.

2. Dispose the contents of the steel structure, lift station, lagoon, disinfection chamber and de-chlorination chamber into the LFUCG sewer system.

3. Disinfect, dismantle and remove the steel structure, stainless steel chamber and

concrete disinfection chamber. Recycle the material whenever possible.

4. Perform inspection of the sidewalls and bottom of all excavations to determine if additional excavation or material testing is needed.

5. Backfill the excavations with onsite earth material.

6. Remove and disinfect the lagoon liner and backfill the shallow lagoon with onsite earth material.

7. Remove, disinfect and dispose of miscellaneous yard piping.

8. Remove the shallow groundwater monitoring well.

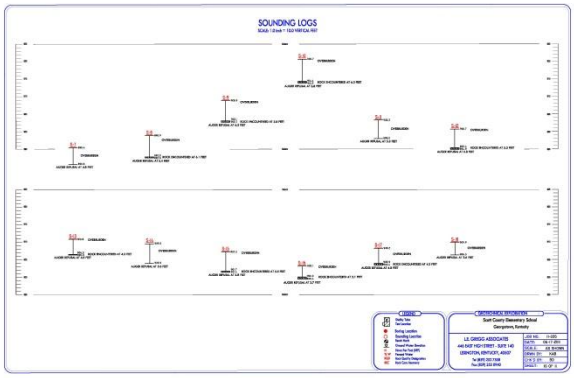
9. Grade all disturbed area to match existing drainage pathways and re-vegetate the disturbed area.

Geotechnical Engineering Services

Our team will approach the Blue Sky project as if it were two separate projects, the geotechnical investigation for the pump stations and the rock soundings for the force main alignment.

For the pump stations, once the boring locations have been established our team will work with Kentucky 811 to verify the location of any public utilities. Once the utilities have been cleared and we have been granted access, we will mobilize a truck mounted drill rig to the sites to perform the exploration. At each location, a boring will be advanced at the location of the proposed wetwell. Standard Penetration Tests (SPT) will be performed at 2.5 foot centers in the top 10 feet and every 5 feet thereafter. The borings shall be extended to a depth of 20 feet or to auger refusal. If rock is encountered at a depth of less than 20 feet, then one rock core shall be advanced 10 feet into the underlying bedrock. All geotechnical processes will be completed with minimal disturbance to the site.

After completion of the drilling phase, the recovered soil samples will be transported to L.E. Gregg's laboratory located within their corporate headquarters in downtown Lexington. Atterberg Limits and natural moisture content determinations will be conducted in accordance with ASTM practices and procedures. After the completion of the laboratory work, the date will be analyzed, design calculations will be performed and general recommendations in the form of a written report will be prepared.



Sample Sounding Log 1

For the force mail alignment, our team will lay out the soundings every 200 lineal feet along the alignment and on both sides of any obstruction requiring horizontal borings. The initial layout will focus on accessibility by the drill rig and minimizing potential utility infringement and site damage. At this point, we will again utilize Kentucky 811 to verify the location of the utilities. Once the utility locations have been cleared and the original layout adjusted as necessary, we will mobilize a truck mounted drill rig to the site to perform the rock soundings. If site conditions, utility conflicts or right of access problems prohibit drill rig access, our team will advance the soundings utilizing hand auger and probe rod methods.

Upon completion of the drilling, the borings will be backfilled and any asphalt penetrations will be repaired as necessary. Also, upon completion of the drilling program, the team will begin to survey and elevate the actual drilled locations. A summary letter which will index the sounding station to the refusal depth and refusal elevation will be provided upon completion.

Pervious Concrete & "Green" Initiatives

Pervious concrete has many beneficial quantities and we understand that the LFCUG would like to incorporate this medium wherever possible in the design of the Blue Sky Pump Station project. Materially, pervious concrete is very similar to traditional concrete, with the primary difference being the lack of fine aggregate. There is no sand in pervious concrete which produces a void structure that is typically around 20% by volume. This void structure is very important, as it creates the porosity of the surface. Water is allowed to seep directly through the surface to the crushed stone base, and in turn, to the soil below. When correctly designed and constructed, this material allows surface water to percolate to the ground, filter contaminants and recharge groundwater and aquifers. Some systems are designed to collect and re-use stormwater for other purposes, such as irrigation. Two LEED Credits may be obtained by implementing pervious concrete as a part of the site plan because of its effects on stormwater management.

Pervious concrete is also environmentally friendly in other ways. Fly ash, which is a byproduct of burning coal to generate electricity, is typically used in pervious concrete. Therefore, recycled materials may be used for these applications, saving landfill space. On larger applications, the "heat island" effect is reduced. This phenomenon is caused by large areas of dark-colored pavement and roofs, where heat is absorbed and the ambient temperatures are abnormally high. Due to the large void structure of pervious concrete, protection against freeze-thaw effects is provided. Additionally, the air space reduces the accumulation of snow and ice on the surface.

Recent Similar Projects

Pervious Concrete

Members of the Bell team have practical experience designing, specifying and overseeing the installation of pervious concrete solutions:

- UK Christian County Extension Office Parking Lot Expansion included approximately 21,000 square feet of pervious concrete.
- City of Campton new Water Treatment Plant included 2,472 square feet of pervious concrete.

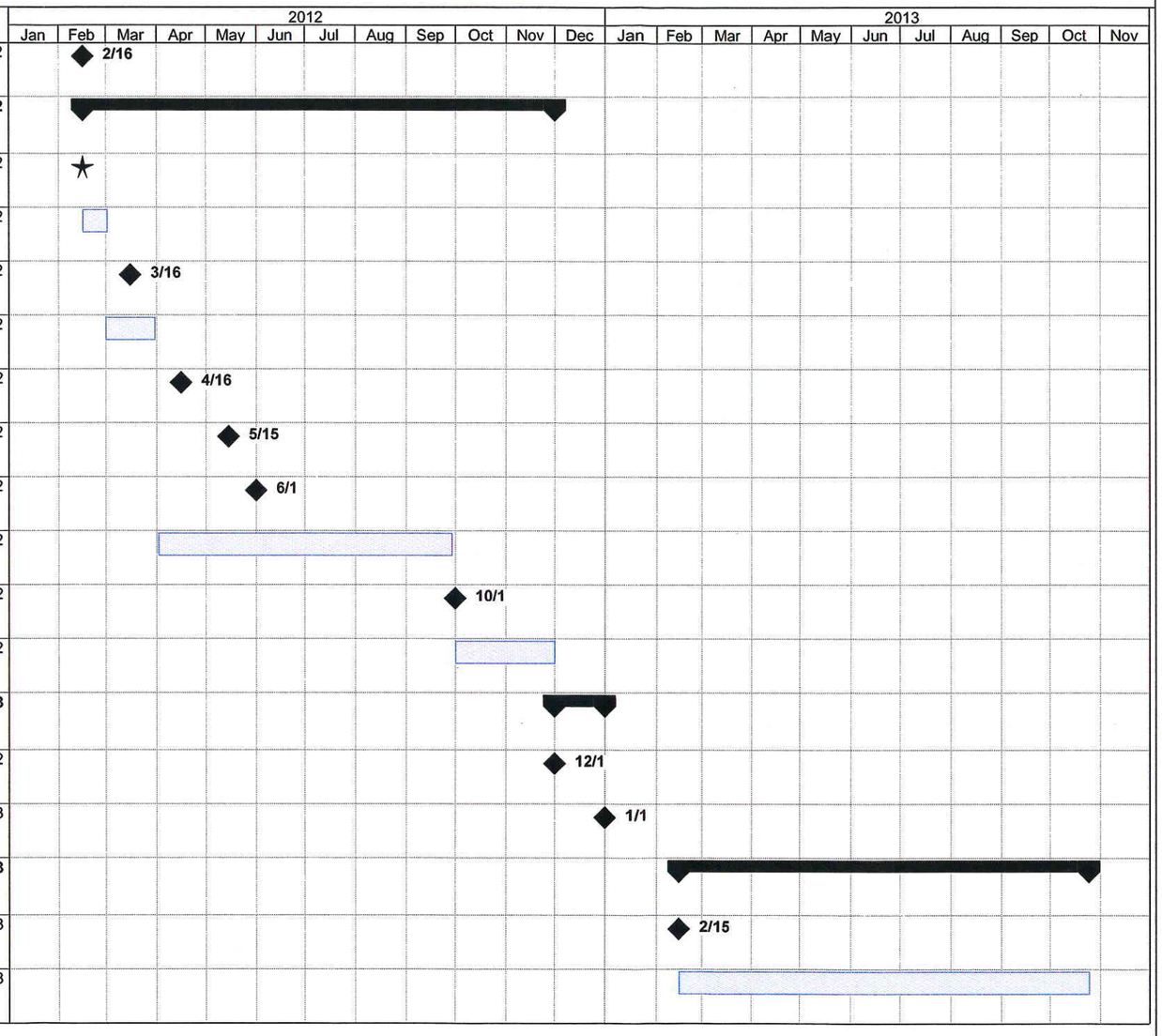
Pervious concrete pavement has become a standard for parking areas at all of our new water and wastewater treatment plants.

In addition to pervious concrete, Bell also bring years of experience working with porous asphalt and permeable pavers. Each system has its own advantages and constraints that need to be considered and evaluated with respect to infiltration requirements, water quality needs and life-cycle costs. As part of your project, we will review all of these options and make a recommendation based on your design criteria balanced with our technical experiences and fiduciary responsibilities to the project.

The Bell Engineering team understands the importance of meeting the deadlines as laid out in the consent decree. Currently, the LFUCG must have eliminated the point source discharge from the Blue Sky WWTP by January 3, 2015. KIA grant and loan funding criteria also must be considered in the project schedule and finally, the project surrounds an old and outdated WWTP that creates numerous safety and maintenance issues. On the following page, you will find our team's aggressive timeline for completing your project by October 2013.

LFUCG BLUE SKY PUMP STATION AND FORCE MAIN
PROJECT SCHEDULE
BELL ENGINEERING

ID	Task Name	Duration	Start	Finish
1	Award Contract	0 days	Thu 2/16/12	Thu 2/16/12
2	**DESIGN**	**207 days**	**Thu 2/16/12**	**Fri 11/30/12**
3	Review of Existing Documents (COMPLETE)	0 days	Thu 2/16/12	Thu 2/16/12
4	Finish Force Main Routing and Begin Easement Preparation	11 days	Thu 2/16/12	Thu 3/1/12
5	Public Meeting #1	0 days	Fri 3/16/12	Fri 3/16/12
6	Finish Pump Station Conceptual Design	22 days	Thu 3/1/12	Fri 3/30/12
7	Public Meeting #2	0 days	Mon 4/16/12	Mon 4/16/12
8	Submission of Technical Memorandum	0 days	Tue 5/15/12	Tue 5/15/12
9	Project Status Presentation to Urban Council	0 days	Fri 6/1/12	Fri 6/1/12
10	Submission of Final Construction Plans	130 days	Mon 4/2/12	Fri 9/28/12
11	Project Status Presentation to Council	0 days	Mon 10/1/12	Mon 10/1/12
12	Review Completed by DOW	45 days	Mon 10/1/12	Fri 11/30/12
13	**BIDDING**	**21 days**	**Sat 12/1/12**	**Tue 1/1/13**
14	Bidding of Construction Projects	0 days	Sat 12/1/12	Sat 12/1/12
15	Award of Construction Projects	0 days	Tue 1/1/13	Tue 1/1/13
16	**CONSTRUCTION**	**180 days**	**Fri 2/15/13**	**Thu 10/24/13**
17	Begin Construction	0 days	Fri 2/15/13	Fri 2/15/13
18	Project Completed	180 days	Fri 2/15/13	Thu 10/24/13



Project: LFUCG
Date: Thu 12/22/11

Task | Milestone | Summary | Completed

Local Office

Responsiveness, quality and satisfaction are Bell's primary goals. Bell Engineering, Vision Engineering, LoVo Systems, Inc. and LE Gregg Associates corporate offices are all located in Lexington, KY. Bell also operates a branch office in Hopkinsville, KY and a resource office in Columbia, KY.

Bell Engineering Corporate Office
2480 Fortune Drive, Suite 350 - Lexington, KY 40509

Vision Engineering Corporate Office
3399 Tates Creek Road, Suite 130 - Lexington, KY 40502

LoVo Systems, Inc. Corporate Office
2501 Sandersville Road, Unit 120 - Lexington, KY 40511

LE Gregg Associates Corporate Office
446 East High Street, Suite 140 - Lexington, KY 40507

Our entire project team is minutes away from the Division of Water Quality office as well as the project location. Our team can be on-site as needed or for emergencies with absolutely no notice. The Bell team is also available 24 hours a day, 7 days a week via smart phone service to ensure that you are satisfied with our services and that your needs are being met.

100% of the work performed on this project will be completed in-house by the Bell team and sub consultants; all of whom are residents of the Lexington and Central Kentucky area.

Summary of Project Costs

Engineering Services — **Blue Sky Pump Station**

TASK 1	**REVIEW OF EXISITNG DATA**	**Qty.**	**Units**	**Unit Cost**	**Fee**
	A. Document Reviews	0	Hrs	0	$0
			Lump Sum	**Subtotal Task 1**	**$0**
TASK 2	**Technical Memorandum**				
	Hydraulic Analysis	1	LS	$500	$500
	Force Main Routing Analysis	1	LS	$500	$500
	Force Main Alignment Map	1	LS	$500	$500
	Cutter's Hill Level Survey	1	LS	$750	$750
	Opinion of Probable Total Project Costs	1	LS	$150	$150
	Copies of Report	20	EA	$25	$500
	Subtotal Technical Memorandum				**$2,900**
			Lump Sum	**Subtotal Task 2**	**$2,900**
TASK 3	**Detailed Design**				
	Pump Station Design Review Kickoff Meeting	1	EA	$750	$750
	Monthly Status Reports	5	EA	$150	$750
	Design Progress Meeting (30%,60%,90%)	3	EA	$750	$2,250
	Enchroachment Permits	2	EA	$500	$1,000
	KYDOW Construction Permit	1	EA	$500	$500
	Stream Crossing Permit	1	EA	$250	$250
	Detailed Cost Estimates	1	EA	$150	$150
	Site Survey for PumpStation	1	EA	$750	$750
	Geotechnical Report	1	LS	$3,800	$3,800
	Final Plans and Specifications	1	LS	$20,000	$20,000
			Lump Sum	**Subtotal Task 3**	**$30,200**
	Rock Soundings	1	LF	$12	$12
	Plat Preparation / Easements	1	EA	$2,500	$2,500

TASK 4	**Bidding Services**				
	(Pump Station)				
	Pre-Bid Conference	1	EA	$750	$750
	Addenda	1	EA	$250	$250
	Evaluation and Recommendation of Award	1	EA	$150	$150
			Lump Sum	**Subtotal Task 4**	**$1,150**
	(Force Main)				
	Pre-Bid Conference	1	EA	$750	$750
	Addenda	1	EA	$250	$250
	Evaluation and Recommendation of Award	1	EA	$150	$150
			Lump Sum	**Subtotal Task 4**	**$1,150**
	(Transfer of Flow)				
	Pre-Bid Conference	1	EA	$750	$750
	Addenda	1	EA	$250	$250
	Evaluation and Recommendation of Award	1	EA	$150	$150
			Lump Sum	**Subtotal Task 4**	**$1,150**
	(Demolition)				
	Pre-Bid Conference	1	EA	$750	$750
	Addenda	1	EA	$250	$250
	Evaluation and Recommendation of Award	1	EA	$150	$150
			Lump Sum	**Subtotal Task 4**	**$1,150**
			Lump Sum	**Total Task 4**	**$4,600**

TASK 5	**Construction Services**				
	(Pump Station)				
	Shop Drawing Reviews	4	EA	$150	$600
	Monthly Progress Meetings	4	EA	$750	$3,000
	Review Pay Requests	4	EA	$250	$1,000
	Site Visits	1	EA	$500	$500
	Start-up Report	1	LS	$250	$250
	Prepare Punch List	1	LS	$250	$250
			Lump Sum	**Subtotal Task 5**	**$5,600**
	(Force Main)				
	Shop Drawing Reviews	4	EA	$150	$600
	Monthly Progress Meetings	5	EA	$750	$3,750
	Review Pay Requests	5	EA	$250	$1,250
	Site Visits	1	EA	$500	$500
	Start-up Report	1	LS	$250	$250
	Prepare Punch List	1	LS	$250	$250
	Force Main Survey (15 ft. wide topo entire length)	1	LS	$20,000	$20,000
	As-Built GPS for Force Main & Gravity Sewer	1	LS	$3,500	$3,500
			Lump Sum	**Subtotal Task 5**	**$30,100**
	(Transfer of Flow)				
	Shop Drawing Reviews	1	EA	$150	$150
	Monthly Progress Meetings	1	EA	$750	$750
	Review Pay Requests	1	EA	$250	$250
	Site Visits	1	EA	$500	$500
	Start-up Report	1	LS	$250	$250
	Prepare Punch List	1	LS	$250	$250
			Lump Sum	**Subtotal Task 5**	**$2,150**
	Construction Services (Demolition)				
	Shop Drawing Reviews	1	EA	$150	$150
	Monthly Progress Meetings	1	EA	$750	$750
	Review Pay Requests	1	EA	$250	$250
	Site Visits	1	EA	$500	$500
	Start-up Report	1	LS	$250	$250
	Prepare Punch List	1	LS	$250	$250
			Lump Sum	**Subtotal Task 5**	**$2,150**
			Lump Sum	**Totals Task 5**	**$40,000**

TASK 6	**Kentucky Infrastructure Authority**				
	(Pump Station)				
	Evironmental Review	1	LS	$250	$250
	Plans and Specifications	1	LS	$125	$125
	ATA Documents	1	LS	$250	$250
	Green Project Reserve	1	LS	$125	$125
	Project Closeout Documents	1	LS	$125	$125
				Subtotal Task 6	**$875**
	(Force Main)				
	Evironmental Review	1	LS	$250	$250
	Plans and Specifications	1	LS	$125	$125
	ATA Documents	1	LS	$250	$250
	Green Project Reserve	1	LS	$125	$125
	Project Closeout Documents	1	LS	$125	$125
				Subtotal Task 6	**$875**
	(Transfer of Flow)				
	Evironmental Review	1	LS	$250	$250
	Plans and Specifications	1	LS	$125	$125
	ATA Documents	1	LS	$250	$250
	Green Project Reserve	1	LS	$125	$125
	Project Closeout Documents	1	LS	$125	$125
				Subtotal Task 6	**$875**
	(Demolition)				
	Evironmental Review	1	LS	$250	$250
	Plans and Specifications	1	LS	$125	$125
	ATA Documents	1	LS	$250	$250
	Green Project Reserve	1	LS	$125	$125
	Project Closeout Documents	1	LS	$125	$125
				Subtotal Task 6	**$875**
			Lump Sum	**Total Task 6**	**$3,500**

TASK 7	**Public Participation**				
	Blue Sky Public Meeting	2	LS	$1,500	$3,000
	Urban County Council Status Update	2	LS	$1,500	$3,000
				Total Task 7	**$6,000**
	Engineering Services Total				**$87,200**

Resident Project Representation (If Requested)	$45/hr
Additional Design Fee for Class B Pump Station	$45,000
Additional Meetings, Hourly Rate	$135/hr

Appendix A

Required Affidavit

Equal Opportunity Agreement

Bell Engineering Affirmative Action Plan

Workforce Analysis Form

Affirmative Action Notice

MBE/WBE Participation Form

Vision Engineering DBE Certification

Statement of Good Faith Efforts

Firm Information

General Provision

AFFIDAVIT

Comes the Affiant, James K. Roberts, P.E., PLS, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is James K. Roberts, P.E., PLS and he/she is the individual submitting the proposal or is the authorized representative of Bell Engineering, the entity submitting the proposal (hereinafter referred to as "Proposer").

2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.

6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

continued on next page

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

Further, Affiant sayeth naught.

James K. Roberts

STATE OF Kentucky

COUNTY OF Fayette

The foregoing instrument was subscribed, sworn to and acknowledged before me by James K. Roberts, P.E., PLS on this the 22nd day of December, 2011.

My Commission expires: Oct 14 2013

David Ball

NOTARY PUBLIC, STATE AT LARGE

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.

- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.

- Section 503 of the Rehabilitation Act of 1973 states:

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

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

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

****

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

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

Bidders

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

_____ Bell Engineering

Signature *Name of Business*

AFFIRMATIVE ACTION PLAN FOR EQUAL EMPLOYMENT OPPORTUNITY AT BELL ENGINEERING

1. Policy

It is the policy of this firm to provide equal employment opportunity to all persons without regard to their race, color, religion, sex, age, veteran status, handicap, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program. The firm will assure that applicants are recruited and hired, and that employees are treated without regard to their race, color, religion, sex, age, veteran status, handicap, or national origin. Equal opportunity and equal consideration will be afforded to all applicants and employees in personnel actions which include recruiting and hiring, selection for training, promotion, fixing rates of pay or other compensation, transfer and layoff or termination. It is our intention, in the implementation of this policy, to provide full employment opportunities for members of minority groups. Furthermore, it is our policy to coordinate the affirmative action program directed at seeking personnel from minority groups for employment with the firm and to provide encouragement and direction to our staff to advance within the limits of each individual's capabilities.

2. Dissemination of Policy

Our equal employment opportunity is and will be communicated to all relevant audiences within and outside the firm. These include non-discrimination policy statements in our personnel manuals and memoranda, and employee information literature; posting of EEO posters on bulletin boards; periodic written and oral statements of policy from the firm to its management staff; discussion of policy and affirmative action plans in management meetings and development sessions; recruiting practices that will provide equal opportunity to all persons possessing requisite skills seeking employment with this firm.

3. Responsibility for Implementation of Policy

A firm officer will be responsible for the implementation of our affirmative action policy and will direct our equal employment opportunity program. His responsibilities will include: (1) developing policy statements, affirmative action programs, internal and external communication techniques; (2) assisting in the identification of problem areas; (3) assisting project engineers and project managers in arriving at solutions to problems; (4) designing and implementing audit and report systems that will measure the effectiveness of the program, indicate a need for remedial action, and determine the degree to which the goals and objectives of the firm's progress have been attained; (5) serving as liaison between the firm and enforcement agencies, minority organizations and community action groups; (6) keeping the management informed of the latest developments in the entire equal employment opportunity area.

4. Analysis of Firm Employment

The attached Table 1 provides a breakdown of total employment into job categories based on position description having equivalent pay grades. Also, the table contains minority and women employment per job category, overall percentage within our recruiting area, and the percentage of those possessing the necessary employment skills. Our recruiting area for engineers is nationwide while that for designers/planners, engineering technicians, inspectors, draftspersons, and economists is mostly state-wide. Beginning inspectors, draftspersons, administrative assistants and secretaries are recruited within the Standard Metropolitan Statistical Area.

In analyzing our utilization in each job category, we have arrived at the following conclusions:

a. Job Category: Consultant
Discussion: Consultants are long-term employees, presently retired from full-time service but still working part-time, providing a special expertise to the firm.
Conclusion: This is not an under-utilization area. In furthering our equal employment opportunity policy, we will continue to encourage and promote full opportunity to minority and women employees with the requisite skill and tenure to advance to this position.

b. Job Category: Principal
Discussion: Principals are the owners of the firm. Openings for these positions are created only through action of the Board of Directors. All principals own stock in the firm and any new principal will have to purchase available stock.
Conclusion: Because openings in this category are extremely limited, the establishment of specific goals cannot realistically be accomplished. In furthering our equal employment opportunity policy, we will encourage and promote full opportunity for minority and women employees with the requisite skill and tenure to advance to this position.

c. Job Category: Engineer
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 5.3 percent of the experienced work force.
Conclusion: This is not an under-utilization area. However, in furthering our equal employment opportunity policy, we will encourage and promote full opportunity for minority and women employees with the requisite skills and education.

d. Job Category: Architect
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 5.3 percent of the experienced work force.
Conclusion: This is not an under-utilization area. However, in furthering our equal employment opportunity policy, we will encourage and promote full opportunity for minority and women employees with the requisite skills and education.

e. Job Category: Designer/Planner
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 20.1 percent of the experienced work force.
Conclusion: When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills and education.

f. Job Category: Engineering Technician
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 20.1 percent of the experienced work force.
Conclusion: When an opening occurs we will encourage and promote full opportunity for minority and women employees with the requisite skills and education.

g. Job Category: Inspector/Operations Specialist
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 20.1 percent of the experienced work force.
Conclusion: When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills to fill such positions.

h. Job Category: Draftsperson
Discussion: Within the recruiting area, minorities possessing the requisite skills for this category represent approximately 23.7 percent of the experienced work force.
Conclusion: When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills to fill such positions.

i. Job Category: Accountant/Economist
Discussion: Within the recruiting area, minorities and women possessing the requisite skills for this position represent approximately 49.1 percent of the experienced work force. When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills to fill such positions.
Conclusion: This is not an under-utilization area.

j. Job Category: Administrative Assistant
Discussion: Within the recruiting area minorities and women possessing the requisite skills for this category represent approximately 49.1 percent of the experienced work force. When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills to fill such positions.
Conclusion: This is not an under-utilization area.

k. Job Category: Secretary
Discussion: Within the recruiting area minorities and women possessing the requisite skills for this category represent approximately 98.9 percent of the experienced work force. When an opening occurs, we will encourage and promote full opportunity for minority and women employees with the requisite skills to fill such positions.
Conclusion: This is not an under-utilization area.

5. Goals and Timetables

Because of the current business climate, we do not anticipate an increase in our total number of employees in the next six to 12 months. During this time it is expected that new employees will be hired only to replace those employees who resign or leave for other reasons. Any immediate goals in terms of specific numbers will be on the conservative side if we expect to realistically attain these goals. The largest turn-over of employment is in the job categories of draftspersons and secretaries, so our maximum emphasis of recruiting minorities will be in these categories.

Although primarily dependent upon the work load and the needs to fill vacancies, the immediate goals of this firm are to increase minority and women employment in the job categories of engineering technician, inspector/operations specialist, draftsperson and secretary.

The firm will strive to fill any vacancies in a manner that will meet the goals set forth as follows:

Position	New Minority Employees	Target Date
Secretary	1	1 year
Engineering Technician	2	2 years
Inspector/Operations Spec.	1	1 year
Draftsperson	1	1 year

These goals, together with 16 present minority and women employees, project a total minority employment by our firm of 20, for approximately 21 percent at the end of one year, and 21 for approximately 22 percent by the end of two years.

At every six-month period our goals will be reevaluated in light of business conditions and the success of our recruiting efforts. Our long-range goal is to employ a percentage of minorities and women with requisite skills at least equal to the percentage of minorities within our recruiting area.

6. Development and Execution of Program

a. Recruiting

Our recruiting program will be conducted in a manner to ensure we are reaching minority and women prospects. At such times that openings may occur within our staff, we will place notices of employment in appropriate media readily available to all persons seeking employment.

b. Training

We have previously hired minorities from the local technical institute and plan to utilize this source in the future. It is our present policy to provide on-the-job training for new employees. This policy is and will continue to be applicable to minority and women employees. As employees progress, they will be promoted to a higher position of responsibility and compensation commensurate to their skills and contributions.

c. Personnel Actions

Personnel actions of every type including hiring, upgrading, promotion, transfer, demotion, layoff, and termination will be periodically reviewed to ensure the action was taken without bias. During meetings with supervisory personnel, their actions will be reviewed to ensure their support of the firm's equal employment policy.

d. Community Relations

Representatives of the firm will cooperate with the appropriate agencies and groups within the community in the further development of community acceptance and adoption of nondiscrimination practices in employment.

7. Audit Report and Evaluate

The firm has instituted an audit and reporting system which consists of the following:

a. Job Openings

A list of applicants will be kept for each job opening. An informal record solely for statistical purposes will be maintained to identify minority and women applicants where practical. If the minority and women applicant is not hired, the reason will be recorded.

b. Separation

A record of separation and the reason of separation will be maintained and minority and women group employees will be specifically identified. A thorough check will be made to ensure that discrimination did not enter the separation.

c. Promotions

A record of promotions by employee name and category will be maintained with minority and women employees specifically identified. Again this information will be maintained solely for statistical purposes.

The firm member in charge will periodically review and evaluate the status of the affirmative action program, and will report at each meeting of the firm members and associates on the progress and success of our program.

8. Adoption of Policy

The Affirmative Action Plan for equal employment opportunity is hereby adopted the first day of January, 1997.

By _____
Roy L. Bohon, II
Secretary-Treasurer

By _____
James K. Roberts, P.E., PLS
Executive Vice President

Date December 22, 2011

WORKFORCE ANALYSIS FORM

Name of Organization: Bell Engineering **Date:** 12/22/2011

Categories	Total	White		Black		Other		Total	
		M	F	M	F	M	F	M	F
Administrators	4	2	2					2	2
Professionals	13	12	1					12	1
Superintendents	0	0	0					0	0
Supervisors	7	7	0					7	0
Foremen	12	12	0					12	0
Technicians	4	3	1					3	1
Protective Service	0	0	0					0	0
Para-Professionals	0	0	0					0	0
Office/Clerical	5	3	2					3	2
Skilled Craft	0	0	0					0	0
Service/Maintenance	0	0	0					0	0
Total:	45	39	6					39	6

Prepared by Roy L. Bohon, Chief Financial Officer
Name & Title

DIRECTOR, DIVISION OF CENTRAL PURCHASING
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
200 EAST MAIN STREET
LEXINGTON, KENTUCKY 40507

Parties who require assistance in developing an Affirmative Action Plan are encouraged to contact the Lexington-Fayette Urban County Government Division of Central Purchasing at 859/258-3320.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this contract be subcontracted to MBE/WBE's. The goal for the utilization of certified MBE/WBE's as subcontractors are recommended goals. Contractors who fail to meet such goals will be expected to provide written explanations to the EEO Officer and the Director of the Division of Central Purchasing of efforts they have made to accomplish the recommended goals and the extent to which they are successful in accomplishing the recommended goals will be a consideration in the procurement process.

For assistance in locating MBE/WBE Subcontractors contact the Betty Landrum at 859/258-3320 or by writing to the address listed below:

Betty Landrum, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street - 6th Floor
Lexington, Kentucky 40507

LFUCG MBE/WBE PARTICIPATION FORM
Bid/RFP/Quote Reference # RFP #45-2011 Blue Sky Pump Station and Force Main

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

MBE/WBE Company, Name, Address, Phone, Email	**Work to be Performed**	**Total Dollar Value Of the Work**	**% Value of Total Contract**
1. Vision Engineering Jihad Hallany, P.E. 3399 Tates Creek Road, Suite 250 Lexington, KY 40502 859/559-0516 jhallany@visionengr.com	Surveying Services	N/A	At least 10%
2.			
3.			
4.			

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.

Bell Engineering
Company

12/22/11
Date

By

Executive Vice President
Title

Mike W. Hancock, P.E.
Secretary
Kentucky Transportation Cabinet

Steven L. Beshear
Governor

COMMONWEALTH OF KENTUCKY

Transportation Cabinet

certifies that

VISION ENGINEERING, LLC

3399 Tates Creek Road, Suite 130, Lexington, KY 40502-7401

has met all eligibility requirements
to participate in the
Disadvantaged Business Enterprise Program

This certificate is issued pursuant to 49 CFR Part 26 and is subject to suspension or revocation.

October 30, 2014
Renewal Date

DBE Liaison Officer

Kentucky
UNBRIDLED SPIRIT

LFUCG STATEMENT OF GOOD FAITH EFFORTS
Bid/RFP/Quote # RFP #45-2011 – Blue Sky Pump Station & Force Main

By the signature below of an authorized company representative, we certify that we have utilized the following methods to obtain the maximum practicable participation by minority and women owned business enterprises on the project. Please indicate which methods you used by placing an X in the appropriate place.

_____ Attended LFUCG Central Purchasing Economic Inclusion Outreach Event

_____ Sponsored Economic Inclusion event to provide networking opportunities

__X__ Requested list of MBE/WBE subcontractors or suppliers from LFUCG Economic Engine

_____ Advertised for MBE/WBE subcontractors or suppliers in local or regional newspapers

__X__ Showed evidence of written notice of contracting and/or supplier opportunities to MBE/WBE firms at least seven days prior to the proposal opening date

_____ Provided copies of quotations submitted by MBE/WBE firms which were not used and/or responses from firms indicating they would not be submitting a quote

_____ Provided plans, specifications, and requirements to interested MBE/WBE subcontractors

__X__ Other
Please list any other methods utilized that aren't covered above.

Bell Engineering has included Vision Engineering as a part of our project team. Vision Engineering is a certified WBE and will perform at least 10% of the services provided by the Bell team on the Blue Sky Pump Station and Force Main project.

The undersigned acknowledges that all information is accurate. Any misrepresentations may result termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Bell Engineering
Company

12/22/11
Date


Company Representative

Executive Vice President
Title

From: David Schrader
To: Kendall, Megan
Date: 12/21/2011 3:23 PM
Subject: Fwd: RE: Blue Sky Pump Station
Attachments: mhh.pdf; JAH.pdf

David F. Schrader, P.E.
Vice President
Bell Engineering
2480 Fortune Drive, Suite 350
Lexington, KY 40509
Phone: 859-278-5412
Fax: 859-278-2911
Cell: 859-351-1263

>>> "Jihad Hallany" <jhallany@visionengr.com> 12/21/2011 3:16 PM >>>

David,
Please find the Vision Engineering fees for the following:

1- Force Main Survey ($22,500)
2- Plat/ Easement (18,000) and $ 3,000 for each additional plat
3- GIS Services ($7,500)
Thanks for your time

From: David Schrader [mailto:DSchrader@gwmail.hkbell.com]
Sent: Wednesday, December 21, 2011 11:17 AM
To: jhallany@visionengr.com
Subject: Blue Sky Pump Station

Jihad,

We need to document that Vision will be teaming with Bell Engineering on the Blue Sky Pump Station project. We would like for Vision to provide all surveying, easement preparation, plat preparation, and GIS mapping as required for the project. If you are interested in teaming with us on this project please respond as such.

Thank You,

David F. Schrader, P.E.

Vice President

Bell Engineering

2480 Fortune Drive, Suite 350

Lexington, KY 40509

Phone: 859-278-5412

Fax: 859-278-2911

Cell: 859-351-1263

Firm Submitting Proposal: Bell Engineering

Complete Address: 2480 Fortune Drive, Suite 350, Lexington, KY 40509
Street City Zip

Contact Name: David F. Schrader, P.E. Title: Vice President

Telephone Number: 859/351-1263 Fax Number: 859/278-2911

Email address: dschrader@hkbell.com

GENERAL PROVISIONS

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

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

2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.

3. Addenda: All addenda, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.

4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.

5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.

6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked “modifications of proposal”.

7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.

8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

9. Additional Information: While not necessary, the Respondent may include any

product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal.

10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.

11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.

12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

    A. Termination for Cause

    (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties

    (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.

    (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
        (a) Failure to perform the contract according to its terms, conditions and specifications;
        (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;

(c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
(d) Failure to diligently advance the work under a contract for construction services;
(e) The filling of a bankruptcy petition by or against the contractor; or
(f) Actions that endanger the health, safety or welfare of the LFUCG or its citizens.

B. At Will Termination

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

13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.

14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.

15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.

17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against the Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.

18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.

19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

Signature

12/22/14
Date

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/20/2011

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

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

PRODUCER	CONTACT NAME: Stephanie Casey
Al Torstrick Insurance Agency Inc 343 Waller Avenue Lexington KY 40504	PHONE (A/C, No, Ext): (859) 233-1461 FAX (A/C, No): (859) 281-9450 E-MAIL ADDRESS: scasey@altorstrick.com PRODUCER CUSTOMER ID #: 00003558

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
HK Bell Consulting Engineers Inc., DBA: Bell 2480 Fortune Dr, Ste 350 Lexington KY 40509	INSURER A: Netherlands	24171
	INSURER B: Indiana Insurance Company	22659
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 2011-2012 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC			BOP8089014	10/21/2011	10/21/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 50,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			BA8087215	10/21/2011	10/21/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) PIP-Basic Underinsured motorist	$ 1,000,000 $ $ $ $ $
B	X UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 0			CU8228158	10/21/2011	10/21/2012	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N/A If yes, describe under DESCRIPTION OF OPERATIONS below						WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $

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

CERTIFICATE HOLDER

(859) 258-3780

LFUCG
200 E Main St
Lexington, KY 40507

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Stephanie Casey/MJA

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/20/2011

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

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PRODUCER
The Underwriters Group, Inc.
1700 Eastpoint Parkway

P.O. Box 23790
Louisville KY 40223

CONTACT NAME:
PHONE (A/C, No, Ext): 502-244-1343 FAX (A/C, No): 502-244-1411
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hartford Accident & Indemnity	22357
INSURER B : XL Specialty Insurance Company	37885
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Howard K. Bell Consulting Engineers, Inc
2480 Fortune Drive, Suite 350

Lexington, KY 40509

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	CLAIMS-MADE OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	POLICY PRO-JECT LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS / NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A		33WECPX9023	02/01/2011	02/01/2012	X WC STATU-TORY LIMITS OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000
B	Professional Liability			DPR9695637	12/08/2011	12/08/2012	Each Claim	1,000,000
							Aggregate	2,000,000

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

CERTIFICATE HOLDER

LFUCG
200 East Main Street
Lexington, KY 40507

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Bruce W Ferguson

Lexington-Fayette Urban County Government
DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray
Mayor

Jane C. Driskell
Commissioner

ADDENDUM #1

RFP Number: **45-2011**

Date: December 16, 2011

Subject: **Engineering Services for New Blue Sky Pump Station/Force Main Construction & Existing WWTP Closure & Demolition**

Please address inquiries to:
Betty Landrum (859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

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

1) See attached Summary of Pre-Proposal Meeting held on December 12, 2011 as well as the PowerPoint Presentation, and Exhibits A and B.

Questions	Answers
Our firm is certified as a WBE by the state of Kentucky, WBENC and the LFUCG. If we are the primary proposer on this project, will our status as a certified WBE be considered in determining if we have met the MBE/WBE participation goals? Is MBE/WBE participation counted only through a subcontract?	Yes, a minority firm which is certified as a DBE by the state of Kentucky and as a WBE by WBENC can use their company's participation toward the MWBE goal for the contract. The company information and the percentage of the contract they will perform should be listed in the MWBE Participation document. No, the MWBE participation is counted for the entire project, not just for subcontracts.
Should the consultant submit fees for Class B or Class C Pump Station or Both?	LFUCG recommends separate fees for both Class B and Class C pump stations.
Are any environmental studies required for the project?	LFUCG is unaware of any required environmental studies but a determination by the Division of Water that the project is not eligible for a Categorical Exclusion may lead to a required Environmental Assessment. LFUCG recommends that the proposals reflect alternative cost estimates for: 1. Categorical Exclusion outcome 2. Environmental Assessment outcome Consultant should refer the Clean Water State Revolving Fund 2012 Handbook, as described in Task 1 of the published Scope of

	Services, for more information.
Two possible tie locations are mentioned. Should the consultant give a fee for each possible alternate?	Yes
Can you provide the closest street address or street intersection of the force main discharge point locations referenced in the RFP. The discharge points are 1) Sanitary Manhole EH4_894 and 2) East Hickman Pump Station.	Sanitary manhole EH4_894 is located at 3721 Richmond Road. Physically, it is located approximately 1,950 linear feet west of the Jacobson Park entrance, which is at the intersection of Athens – Boonesboro Road and Old Richmond Road. East Hickman Pump Station is located at 3316 Buckhorn Drive. (aka: Buckhorn and Alumni Drive intersection)
There are some concerns regarding the insurability of certain clauses highlighted therein. These include among others the Indemnification clause (Article 6.9.2) and the Safety and Loss Control clause (Article 6.9.6). Recognizing the importance of insurability to all parties bound by the agreement has there been any discussion with hopes of modifying these Articles in a mutually acceptable fashion?	This is currently under review and may be revised.
Task 6 Kentucky Infrastructure Authority states 'It is suggested that proposers provide individual lump sum costs for each item listed in Exhibit B – Generalized Deliverables for SRF Loan Projects.' Where can this Exhibit B be found?	Both Exhibits A and B were erroneously omitted from the original published scope. They are now provided with this addendum.

Brian Marcum, Director
Division of Central Purchasing

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

COMPANY: Bell Engineering

ADDRESS: 2480 Fortune Drive, Suite 350, Lexington, KY 40509

SIGNATURE OF PROPOSER:

RFP 45-2011 Pre-Proposal Meeting Summary
December 12, 2011

Charlie Martin, Director of the Division of Water Quality, gave the attached presentation. He noted that this project is really four projects:

1. Pump Station;
2. Force Main;
3. Tie in of existing service to the new pump station; and
4. Demolition of the existing treatment plant.

Mr. Martin introduced Steve Farmer as the project manager for Blue Sky. He said any questions or contacts until a selection is made should be through Purchasing—not Division of Water Quality staff.

Betty Landrum, Division of Purchasing, said the boiler plate is pretty standard; every attendee should sign the attendance sheet; she reiterated any questions or contact should be directed to her/Purchasing and not Division of Water Quality staff; and the deadline is the hour listed in the RFP—not one minute after. She noted the deadline for questions is December 14, 2011, at 9:00 a.m. and the answers will be posted by 5:00 p.m. on December 15, 2011. The proposals should be submitted no later than 2:00 p.m. on December 22, 2011, downtown at the Government Center, Division of Purchasing.

Mr. Martin noted in the presentation and restated it again before the questions started, that this project involves a grant and KIA loan, and that the consultant selected will be responsible for meeting and maintaining all the grant and loan requirements through design and construction. Mr. Martin mentioned that it is important to document carefully the degree of local employment. He also pointed out that Task 5.4 – reference to federally funded projects should be Task 6, not Task 3.16.

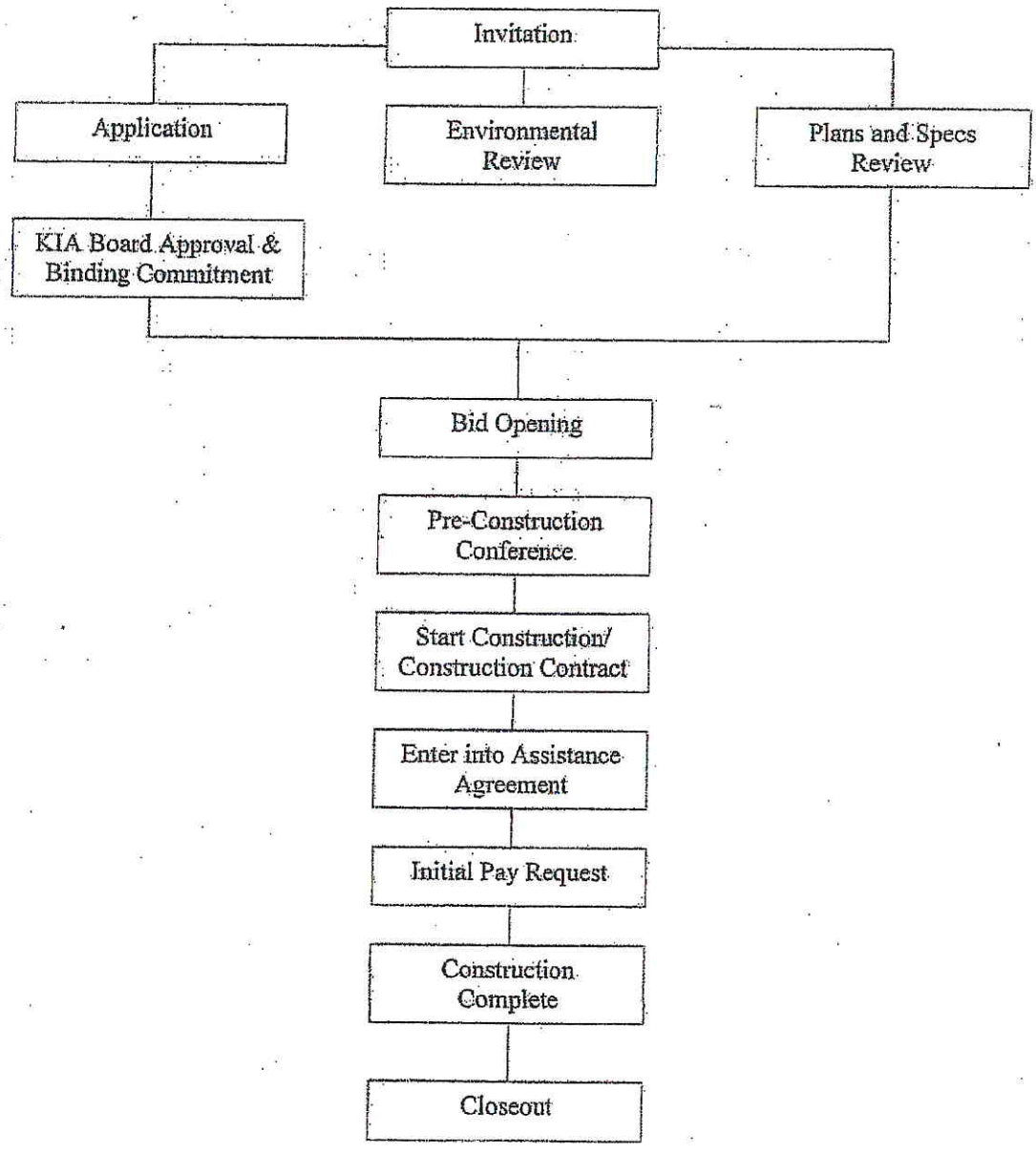
Mr. Martin also Section 3 stated that this contract is a lump sum contract, which is not correct. Mr. Martin clarified what the preferred proposal cost structure should be:

- Task 1 – lump sum
- Task 2 – lump sum
- Task 3 – lump sum except:
  i. T 3.7: Rock soundings – provide unit cost for soundings.
  ii. T 3.14: Plat preparation - since actual number of easements is currently unknown, provide unit cost per plat preparation.
- Task 4 – lump sum per bid (i.e. four separate costs for each separate bid as described in Task 4.1)
- Task 5 – lump sum per bid (i.e. four separate costs for each separate bid as described in Task 4.1)
- Task 6 – lump sum per bid (i.e. four separate costs for each separate bid as described in Task 4.1)
- Task 7 – lump sum for as described in the scope of services, estimated unit cost for each additional public presentation.

Eddie Mesta asked if there was a page limit on the proposals. Mr. Martin said no; however, he is interested in seeing a proposal that clearly documents a familiarity/understanding of this project/process—including the removal of the existing treatment plant, rather than a restatement of the scope. Harsha Wijesiri asked if the LFUCG GIS information would be available to the consultant selected. Mr. Martin said yes; however, since this plant was previously not an LFUCG property, the GIS information we have to date may not be super reliable. Joe Herman asked if there would be interviews, and Mr. Martin said that is not anticipated at this time.

Exhibit A

Flowchart for Clean Water Projects



GENERALIZED DELIEVERABLES FOR SRF LOAN PROJECTS
EXHIBIT B

ACTIVITY	FEE
ENVIRONMENTAL REVIEW	
Categorical Exclusion Submission / Approval	
Environmental Assessment Submission / Approval	
PLANS AND SPECIFICATIONS	
DOW Construction Permit Application / Approval	
DOW Plans & Specs Review / Responses	
Inclusion of Supplemental General Conditions	
SRF Site Certificate Completion	
ATA DOCUMENTS, PROCEDURES AND REPORTING	
Completion / Submission of Authority to Award (ATA) Package	
Bid Documents	
Davis - Bacon Wage Certification / Quarterly Compliance	
Preconstruction Coordination	
GREEN PROJECT RESERVE (GPR) GUIDANCE	
Develop Business Case using EPA GPR guidance	
PROJECT CLOSE OUT DOCUMENTS	
Final Pay Request Form, supporting invoices and DBE utilization forms - including all supporting invoices	
Certification letter to DOW stating that project was built in accordance with approved plans / specs.	
Initiation of Operation letter, signed by LFUCG	
As-builts to DOW	
Coordinate final inspection by DOW	
Lien release from Contractor	
Documentation of any final, adjusting change orders	
Submission of certificate of completion from LFUCG and consultant	

Lexington-Fayette Urban County Government
DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray
Mayor

Jane C. Driskell
Commissioner

CLARIFICATION #1

RFP Number: **45-2011**

Date: December 20, 2011

Subject: **Engineering Services for New Blue Sky Pump Station/Force Main Construction & Existing WWTP Closure & Demolition**

Please address inquiries to:
Betty Landrum (859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

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

Questions	Answers
The term "work" is included throughout the ESA, which may imply or infer that there is an expectation on the part of LFUCG that construction-type services and/or standards are being provided or will apply. Will LFUCG consider eliminating the term "work" or otherwise clarifying this issue?	LFUCG will consider this request but may not necessarily change or clarify this issue as part of a final ESA.
Section 6.2, page 6. Consultant wishes to clarify that if LFUCG reuses documents related to the ESA for another purpose not related to the services in the RFP that it will not be held responsible. Will LFUCG consider adding the following or a substantially similar statement to the end of this section "Any reuse of documents for any purpose other than the intended use shall be at OWNER's sole risk and without liability to CONSULTANT"?	LFUCG is agreeable to including additional language which would clarify that the Consultant is not liable should LFUCG use nonstandard components of drawings/plans on other LFUCG projects. However, there are components of this project and documentation that will be provided by the Consultant which the LFUCG anticipates using in future projects and for which LFUCG reasonably expects the Consultant to stand behind. For example, if LFUCG is requesting a feasibility assessment or flow numbers from the Consultant, LFUCG will be relying on that information in addressing future work/services and will not waive or release related rights or claims it has against the Consultant.
Section 6.7, page 7. Consultant indicates that there is a possibility that it may be subject to a Freedom of Information Act or Open Records Act request regarding the services. Will LFUCG consider adding a statement to this section clarifying that a consultant may release information if required by law?	LFUCG is agreeable to including language similar to the above in any final ESA, but will also require clarification language requiring notification of any such document requests.

Section 6.9.2, page 8. Consultant believes that the language is too broad and may be interpreted in a manner under which the underlying insurance would not cover the claim. Will LFUCG consider clarifying and/or amending this language?	LFUCG will consider this request but may not necessarily change the provision as part of a final ESA and would only do so if it believed it was ultimately obtaining sufficient protection.
6.9.5.1. Required insurance coverage. Is there a limitation on the type of professional liability insurance requested (i.e., may it be either occurrence based or claims made)?	As long as LFUCG retains the additional provisions pertaining to professional liability insurance included in the ESA it will accept either type of insurance.
Section 6.9.6. Consultant is concerned that it may be held liable for the actions of persons outside of its control under this provision. Will LFUCG consider amending or clarifying the language within this provision to address this concern?	LFUCG will consider this request but may not necessarily change the provision as part of a final ESA and would only do so if it believed it was ultimately obtaining sufficient protection.

Brian Marcum, Director
Division of Central Purchasing

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

COMPANY: Bell Engineering

ADDRESS: 2480 Fortune Drive, Suite 350, Lexington, KY 40509

SIGNATURE OF PROPOSER: