

Lexington-Fayette Urban County Government



Police Headquarters

200 East Main Street, Lexington, KY 40507

Response to Request for Proposal

Design/Install Mechanical Electrical Services
RFP #1-2012

February 10, 2012

Submitted by:



2350 Fortune Drive Lexington, KY 40509 (859)-514-7000



February 10, 2012

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

SUBJECT: RFP #1-2012 Design/Install Mechanical Electrical Services

Dear Mr. Marcum:

Harshaw Trane is pleased to submit the following response to the Lexington-Fayette Urban County Government's (LFUCG's) request for proposal (RFP). Harshaw Trane is uniquely qualified to respond to the needs of the Police Headquarters building having served many municipal customers including LFUCG as equipment, service, energy services, and controls providers. In all circumstances, Harshaw Trane strives to help customers determine, design, procure and install systems that optimize the life cycle performance of their facilities.

According to the RFP, determining a scope of work will actually be a part of the project deliverables. Therefore, minority participation, detailed project costs, schedules and identification of partners and subcontractors will be determined as the project progresses. However, the attached response attempts to demonstrate the value that Harshaw Trane would bring to this project as well as potential approaches to meeting all of the stated and implied project goals.

Harshaw Trane is the best value for LFUCG on this project because of its expertise as design build contractor on turnkey projects and as a controls and energy retrofit solution provider. Selecting Harshaw Trane would provide LFUCG a single source supplier for all three phases of the project with minimal use of subcontractors. Partnering directly with Harshaw Trane eliminates the soft costs associated with hiring a third party project administrator, designer or contractor.

Harshaw Trane believes that we can truly help LFUCG meet its business and facility needs at the lowest possible cost. Harshaw Trane's local presence, experience and expertise in building solutions are unmatched in the Kentucky marketplace. With our vast local resources of approximately 300 associates, we are confident in our ability to address your operating concerns and achieve your project goals and objectives. We are grateful for the opportunity to respond to the LFUCG Police Headquarters RFP.

Respectfully Submitted,

See 200

Eric, Wilson, LEED AP, CEM

Controls Sales Engineer





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Expertise and Technical Competence

Harshaw Trane Capabilities	Direct Provider	Partner	Not Provided
Project Energy Study	Х		
Engineering Design	Х	Χ	
Project Economic Analysis	X		
Savings Guarantee	X		
Project Financing	X	Χ	
Project Management	Χ		
HVAC System Training	X		
Energy Management Training	X		
Preventative Maintenance Services	Х		
Local Offices	X		
HVAC Repair Services	Х	×	
Emergency Services	Х		
Guarantee Monitoring	X		

One of our most recognized strengths is our application knowledge and commitment to share it with customers and partners. No matter what problem we are solving, our primary objective is to accomplish the client's goals while providing "comfort at the lowest total cost of ownership."

People

The following people are potential project team members:

Harshaw Trane Associate	Position
Tom Abele	Vice President of Business Development
Joe Winters	Lexington Operations Manager
Eric Wilson	Controls Sales Engineer
Anthony Wright	Energy Services Account Executive
Adam Pierce	Design Engineer
Niles Heier	Project Development Engineer
Mark Begle	Energy Engineer
Jim Sparks	Project Manager
Jon Lehr	Service Account Manager
Dave Hirschman	Controls Project Estimator
Tom Hedges	Intelligent Services Specialist
Scott Jarvis	Intelligent Services Specialist
Darrell Pittman	Controls Project Engineer

Detailed resumes for associates involved in the LFUCG project are available upon request.





Areas of Expertise

- Integration and interoperability of building automation systems
- Equipment, controls and parts sales
- Monitoring, verification and auditing of all guaranteed energy savings projects
- Comprehensive training programing and formal classes
- Full-time dedicated local project engineers and project managers
- Integrated and complex applied HVAC systems
- Factory equipment start-up
- Factory service
- Assigned account managers and service technicians
- Design and application of geothermal heat pump systems listed as approved provider by federal Department of Energy (DOE) Energy Service Performance Contracting (ESPC)
- Thermal energy storage
- Natatorium conditioning
- Building envelope windows and insulation
- Renewable energy systems

Associates Available

- 80+ Certified and Factory-Trained Technicians
- 16 Building Automation Specialists
- 11 Project Managers
- 2 Project Development Engineers
- 8 Energy Engineers
- 1 Auto-CAD Engineer
- 1 Graphics Designer

Qualifications of Associates

- 44 Degreed Engineers / 5 Licensed Professional Engineers
- 41 Certified Energy Managers
- 30 LEED Accredited Professionals
- 1 Certified Carbon Reduction Manager
- 2 Certified Energy Procurement Professionals
- 11 Project Managers PMBOK Training & Certification as well as KSHE Construction Certified
- 2 Certified Measurement & Verification Professionals
- 2 Certified Demand-Side Management Professionals
- 3 Certified Building Commissioning Professionals





Leader in the Industry

Harshaw Trane and many of its associates are members of United States Green Building Council (USGBC). Trane leads



the industry with over 700 LEED® (Leadership in Energy & Environmental Design) accredited professionals globally and Harshaw Trane has 30 LEED® accredited professionals locally. By leveraging our expertise in the HVAC equipment and controls industry, we have a unique understanding of facilities and how they operate. This ultimately provides a truly optimized facility that provides measurable results to owners.

ENERGY STAR Partner



Harshaw Trane is recognized as an ENERGY STAR partner of energy-efficient products and services. As a partner, Harshaw Trane helps building owners improve energy performance through upgrades and implementing proven

energy management strategies while earning the ENERGY STAR label for their buildings.

Intelligent Services

Please see appendix for more detailed information about Intelligent Services.

Harshaw Trane's Intelligent Services is a state-of-the-art, internet powered consulting, diagnostic and support service designed to assist building owners in the following major categories: Energy Management, Performance Monitoring, Health and Wellness, Technical Support Desk, Intelligent Dispatch, and Measurement and Verification.

The purpose of the Intelligent Services program is to:

- Analyze operational data and compare it to the design parameters of the HVAC system in order to determine if the facility is operating at peak efficiency with the lowest total cost of ownership.
- Validate and document the performance of the systems within the facility not only the equipment performance, but also the conditions that are being maintained in the occupied spaces such as temperature, humidity and indoor air quality (IAQ).
- Assist the LFUCG staff by providing them with the remote technical support during regular working hours (M-F, 8 am 5 pm EST, except major holidays). This will position Harshaw Trane as a partner to assist the LFUCG team to maintain optimum working conditions of the facility. The local team will have control capability through Intelligent Services, and Harshaw Trane will be there to assist and monitor on a 24 hour/7 day-a-week basis.
- Receive, analyze and troubleshoot critical alarms automatically and immediately to help eliminate system down time, reduce maintenance costs and prevent the escalation of system issues.





Integrated Comfort Systems Services

Please see appendix for more detailed information about ICS service agreements.

A building automation system is like any computer – The more effort put into updating software and creating backups, the longer the life of the system. An ICS service agreement provides basic building automation system services while providing additional "flex" time for owner training or owner requested system changes. This provides a hands-on approach to systematically and thoroughly training selected owner's staff to troubleshoot, diagnose and prevent problems, keep equipment operating at peak efficiency, reduce down time, catch minor issues before they become expensive major problems, and prolong the digital control system's life.

Experience

Over the past 35 years, Harshaw Trane has maintained a significant local presence in the traditional equipment and controls market, the service market, and the comprehensive owner-direct solutions market. Harshaw Trane is the largest and most comprehensive equipment supplier, controls supplier, and HVAC service company in the state. Over the last ten years, Harshaw Trane has executed more than \$250 million in performance contracting and turnkey solution projects. The following is only a small sample of reference projects. More details about each, including contact information, can be found in the appendix.

- Bullitt County Schools
- Keeneland
- Lexmark Building 200
- Rowan County Schools
- Fort Knox Army Base

Fort Knox is a prime example where Harshaw Trane demonstrated its local project experience as well as the ability to work with government agencies and meet important project deadlines. Harshaw Trane has directly managed the United States Army's Fort Knox energy savings totaling over \$130 million with an annual savings of \$10 million.

Harshaw Trane's LFUCG Projects

Main Street LFUCG Government Center

- Complete HVAC retrofit; air cooled chillers, fan coils, air handlers, controls
- Outside air optimization and static pressure reset controls strategies
- Multi-year phased project

LFUCG Family Care Center

- Controls retrofit/replacement solution
- Water source heat pump system





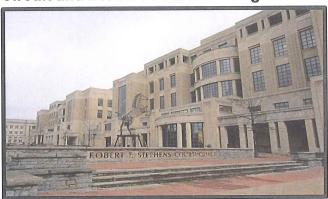




Downtown Arts Center

- Air handlers, VAV boxes
- Air cooled chiller
- New controls system
- Building purpose conversion

Circuit and District Court Buildings



- Trane EarthWise™ System
- New central plant, VAV boxes, custom air handlers
- Low temperature, low flow, high delta T system for more efficient pump, fan, and cooling tower operation

Ability to Meet Project Schedule

Based on an anticipated scope for the Police Headquarters, Harshaw Trane believes all three phases of the project could be completed in four months, one month for investigation and one month for scope and pricing generation. Two months would be a comfortable timeline for the execution of the anticipated scope of work at this time. Parts are readily available for a controls retrofit project and Harshaw Trane has the necessary manpower in technicians, project managers, engineers and designers for this project. Coordinating subcontractors and scopes will be the most time consuming portion of the project's execution and that would be handled by the assigned Harshaw Trane project manager.

Project Management Processes

Each controls, turnkey or energy solutions project that Harshaw Trane performs is assigned a dedicated project manager typically residing in the office nearest the project. Project managers create and update schedules in applicable software programs to remain focused on the big picture while driving through the daily details and ensuring a successful project for both the LFUCG and Harshaw Trane. Our project tracking, monitoring and recording capabilities are second to none. We





provide client assurance and can always answer your questions, because we know our tools provide an accurate picture of project status.

Although there are things that are common to most projects, each building and situation is different and, therefore, requires a unique coordination approach. Communication is crucial in the coordination process, and it all starts with our project manager. As the single point of contact, our project managers ensure that all pertinent information is communicated to everyone involved. This includes vendors, contractors, LFUCG facilities staff and building occupants. It is imperative that everyone is involved in the coordination process.

Project Manager Resources

Harshaw Trane's project managers have both local and national resources at their disposal to help ensure that the project is on time, on specification and on budget. When project timelines get tight, Harshaw Trane has the ability to pull project managers and technicians from any of its four offices outside of Lexington (Louisville, Evansville, Bowling Green and Fort Knox) to assist the assigned project manager in keeping the project on track.

Subcontract and Supplier Management

We objectively pre-screen and qualify experienced subcontractors. Following selection, we monitor performance to ensure our subcontractors have the highest expectations of their work. Harshaw Trane conducts weekly progress reviews with subcontractors to ensure timely, safe, high-quality and cost-effective project execution. All suppliers must pass our evaluation for financial disclosure and meet the requirements of our scorecard and metrics. Suppliers must also read and comply with our written code of conduct.

Local Employment

Harshaw Trane



Harshaw Trane, Lexington Office



Harshaw Trane, Louisville Headquarters





- Five local Harshaw Trane offices employing approximately 300 associates focused on the Kentucky and southern Indiana market. The Kentucky offices are strategically located in Lexington, Louisville, Fort Knox and Bowling Green. The fifth office is located in Evansville, Indiana.
- There are presently 42 Harshaw Trane professionals working out of the Lexington, Kentucky office.
- Harshaw Trane employs more than 80 service technicians and 44 degreed engineers serving Kentucky and southern Indiana.
- Locally, over the past two years, Harshaw Trane office performed approximately 85% of its business in the Commonwealth.

Trane

Harshaw Trane is a franchise of the Trane Company. Trane's factory in Lexington employs 867 people of which 301 are Fayette County residents. This factory is the largest air handler manufacturing plant in the world. Trane employees take great pride in seeing their local government install Trane equipment and control products in publicly-funded facilities. As with any manufacturer of this size, several other local companies serve as suppliers and partners to Trane and its Lexington plant. Some of these include: Thybar, Ruskin, Parker, KCC, and many more.

Total Local Payroll Tax	\$1,600,000			
Local Property Tax Paid	\$132,197 est. 2008			
Amount of Goods and Service Purchased in Central Kentucky, including Lexington	\$28,000,000 (approx.)			
Community Events and Support	 Member Chamber of Commerce Toys for Kids United Way God's Pantry Girl Scout Junior Achievement Habitat for Humanity Muscular Dystrophy fundraiser Community contributions through employee-led committee AHSRAE American Cancer Association AHA UK Hospital Board 			





Minority Participation

Please see attached minority and equal employment information.

Social responsibility and economic inclusion is an important business requirement for Harshaw Trane. We work pro-actively to develop and maintain a strong and vibrant business community through the direct employment of diverse individuals and the utilization of diverse businesses, subcontractors and suppliers. There are three pieces to Harshaw Trane's social responsibility and economic inclusion policy: employment diversity, subcontracting diversity and supplier diversity. In each case, Harshaw Trane endeavors to provide opportunities for minority-owned Small Business Enterprise (SBE), Historically Underutilized Business Zone Small Business (HZSB), Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), Veteran-Owned Small Business (VOSB) and Service Disabled Veteran-Owned Small Business (SDVOSB). As we do with other governmental and commercial organizations, we work to understand the Government's social responsibility and inclusion goals and objectives and, to the extent commercially feasible, support them.

Once a scope of work is determined during phase two of the LFUCG Police Headquarters project, Harshaw Trane will identify the work that minority subcontractors will perform and determine the associated total dollar value and percentage of participation on the project. Having clearly identified the scope of work to be performed by the MBE/WBE firm, we subsequently will be able to complete the MBE/WBE participation forms. For the anticipated scope of work at the LFUCG Police Headquarters, the goal of at least ten percent minority participation should be achieved. Harshaw Trane typically uses a subcontractor for the installation of control wiring on retrofit projects. On this project, the value of that subcontract is expected to be significantly higher than ten percent of the project execution costs. As described in the next section, if Harshaw Trane is selected, almost all of the project costs will be associated with the actual execution phase.

Identify quality certified MBE/WBE firms:

- Obtain a list of qualified certified MBE/WBE with background or experience in electrical contracting with a strong preference for temperature control experience/expertise and mechanical contracting capable of piping and sheet metal work. Marilyn Clark of LFUCG, Tyrone Tyra of Commerce Lexington, and Dee Dee Harbut of the Small Business Development Center were contacted on January 25, 2012, and a combined list of contractors was supplied by Marilyn Clark on January 26, 2012.
- Contact each of these MBE/WBE companies to inquire about their availability and interest in working on this project. At that time, a date and location of a bid solicitation meeting can be communicated.
- Obtain references from all subcontractors. Those highest rated will be contacted and interviewed for partnering on this project.





Participate in Opportunity Exchanges:

- Attend the Tri-State Minority Supplier Development Council (TSMSDC)
 Business Opportunity Fair offered in Louisville, Kentucky in an attempt to
 meet with MBE/WBE that perform the services for which we often
 subcontract. We understand this event to be a largely attended event with a
 significant exhibit hall. Our participation will likely be in an attendance roll
 with exhibit hall access in order to maximize our opportunity to target and
 meet all MBE/WBE exhibiting at the Opportunity Exchange.
- Obtain a list of the opportunity exchanges hosted by Commerce Lexington and attend those sessions in an attempt to meet with MBE/WBE that perform the services for which we often subcontract.

Participate in Minority Business Expo held in Lexington Kentucky:

 Harshaw Trane participated in this event last year as a Silver Level Sponsor, an Exhibitor and a participant in the One-on-One Sessions. We have found this event to be quite beneficial and have networked with some impressive MBE/WBE firms. Harshaw Trane plans to participate in the 2012 MBE with the same level of participation.

Host a Bid Solicitation meeting:

 Host a meeting in Lexington to solicit qualifications and invite each of the MBEs on the list to attend to communicate scope.

This particular project is not a large project with a sizable budget and many certified MBE/WBE firms may not be interested in participating on this project as a subcontractor. However, Harshaw Trane will make every effort to partner with an MBE/WBE firm on this RFP to achieve at least 10% participation. The groundwork covered under this plan will also be useful in diversifying larger scale future projects with LFUCG and other clients.





Estimated Cost of Services

Harshaw Trane is a direct provider of turnkey service, equipment, energy, and controls systems solutions. Using our extensive in-house capabilities, Harshaw Trane would perform the majority of work described in all three phases of the Police Headquarters project. This includes the implied payment processing and project managing portions of the implementation phase. While the majority of a typical controls project can be handled by Harshaw Trane's own engineers, estimators, technicians, project managers, and project administrators, Harshaw Trane does routinely hire subcontractors for areas that fall outside of its expertise.

As previously mentioned, for the project at the Police Headquarters, Harshaw Trane would likely subcontract the temperature controls system wiring to an electrician. In addition, a small amount of sheet metal and valve work would be subcontracted to a mechanical contractor. Also, if the project required the P.E. stamp of an engineer of record, depending on the scope which is yet to be determined, Harshaw Trane may choose to subcontract with a local consulting engineering firm instead of using our staff of PEs. Harshaw Trane carries a limited amount of errors and omissions insurance and partners with others where appropriate.

The investigation and design phases of the project are the reason Harshaw Trane has so many engineers, estimators, and certified energy managers on staff. Our organization customarily provides these services for customers at *no direct cost to the customer*. These portions of the project are accounted for as overhead costs of the actual project implementation. If LFUCG were to select Harshaw Trane for this project, as long as the third phase of the project was fully executed, there would be no costs associated with phases one and two. If for some reason the project stopped short of phase three, Harshaw Trane would anticipate reimbursement for the time spent in the investigation and design phases at rates established by Trane's GSA schedule agreement with the federal government. The current Trane GSA schedule is available upon request. Proper documentation would be provided prior to invoicing. For a typical project, the investigation and design fees would be approximately ten percent of the total project budget. For informational purposes, administration and coordination of the third phase typically accounts for fifteen percent of total project costs.

The implementation phase of the project would utilize Harshaw Trane's controls business unit resources. Harshaw Trane executes turnkey controls projects every day for the plan and spec, design build, owner direct, and performance contracting markets. Harshaw Trane is the best value for LFUCG on this project because of its expertise as a design build contractor on turnkey projects and as a controls and energy retrofit solution provider. Selecting Harshaw Trane would allow LFUCG to use more of the available funds to achieve visible results at the Police Headquarters rather than spending money on unseen design service fees and contractor mark-ups.





Summary

While the majority of investigation and recommendations will be completed upon selection, the following basic observations will steer Harshaw Trane's approach to this project if selected as the successful respondent:

- Replace the existing pneumatics with a functional and flexible direct digital control system to provide significant energy and operational savings.
- Repair the air handling units' economizers to restore the proper amount of outside air to the occupied spaces.
- Add a variable frequency drive to vary the airflow delivered to each box based on demand.
- With no way of modulating the airflow through the air handler, it can be safely assumed that the dual duct system is a mixing type where airflow through each box is constant, but the amount through the hot and cold duct vary in proportion to each other. This mixed type dual duct system is the least efficient type of dual duct system. There are cost-effective ways to minimize or remove mixing which would significantly reduce the energy used and improve comfort delivered by this system.
- LFUCG may want to consider adding Intelligent Services or an integrated comfort system service agreement to optimize the performance of the new system if funds are available after the basic controls retrofit.

Harshaw Trane's local presence, experience and expertise in building solutions are unmatched in the Kentucky marketplace. With our vast local resources of over approximately 300 associates, we are confident in our ability to address your operating concerns and achieve your project goals and objectives. Our commitment to sustainability through knowledge and innovative solutions will ensure the long-term efficient operation of LFUCG's Police Headquarters. At the heart of this response is our belief that we can truly help LFUCG meet its business and facility needs while optimizing building performance for life. Harshaw Trane appreciates the opportunity to respond to the LFUCG Police Headquarters RFP. We look forward to potentially expanding our mutually beneficial partnership.

Eric Wilson, Harshaw Trane Representative

Date

Anthony Wright, Harshaw Trane Representative

Date





Intelligent Services

1. Energy Management

Intelligent Services includes the installation of electronic meters onto the existing gas and electric services which will allow real time monitoring and trending of utility usage. The utility data is then processed by a software program that normalizes it for weather conditions, compares it against historical records and industry benchmarks to illustrate any changes in utility usage over similar time periods. Intelligent Services will also report any sudden increase or decrease in energy usage that could indicate system problems.

2. Performance Monitoring

Intelligent Services will collect data from the building automation system to generate performance exception reports. Data points that are monitored may include, but are not limited to, entering and leaving water temperature, supply air temperature, space temperature, air flow, and compressor start/stops. The collected data is analyzed by Intelligent Services and compared against the equipment design criteria and ASHRAE standards.

3. Air Filtration Monitoring

Intelligent Services provides real time performance monitoring of a sample of the HVAC system filters. Intelligent Services will collect airflow data to determine the optimal time to change filters. Trane will notify the customer when it is time to change filters and can even provide "just in time" delivery of filters from the Lexington Trane Parts and Distribution warehouse.

4. Asset Management

Measure and monitor chillers for run time, run speed, start/stops, temperature, and pressure, as applicable. The data will be analyzed and compared against ASHRAE standards for equipment age and maintenance history to determine the projected life expectancy of the equipment.

5. Health and Wellness

Measures indoor air quality attributes such as temperature and humidity and compares readings to established standards.

6. Technical Support Desk

Customer may contact an Intelligent Services technician directly by email or phone. The technician can provide technical support over the phone or access the customer's control system directly through the internet. The technical support desk is manned from 8:00 a.m. to 5:00 p.m. Eastern Standard Time, Monday through Friday, except holidays.

7. Intelligent Dispatch

The Intelligent Services program provides the capability to notify the client and/or facility personnel of critical alarms and assist them in providing a timely response to the alarm.

8. Monthly Analytics and Quarterly Consultation

Perform monthly analytics and quarterly consultations regarding energy management, performance monitoring, water treatment monitoring, and health and wellness performance.





Integrated Comfort System Services

System Evaluation

The controls evaluation is a comprehensive review of the BAS (building automation system). It is designed to allow the technician to thoroughly analyze the system operation, generate written reports, and provide recommendations and review with the owner operator. Review system event log with customer and establish corrective action plan, if required.

- Review all system alarms and discuss problems with operator.
- Review reports with operator and make recommendations for use, if required.
- Review energy management strategy with operator and advise enhancement.
- Review actual system operation versus original design Identify and document discrepancies.
- Review time schedules versus sequence of operation.
- Review reset schedules versus sequence of operation.
- Perform set point verification versus sequence of operation.
- Perform system database back up.

Software Upgrades

Customers will receive up to one software upgrade per year for control systems supplied by Trane as part of this project as they are released by the controls system manufacturer. This service allows the owner/operator to maintain the system, utilizing current up-to-date software operations and continue to enhance and optimize system performance.

- As software revisions (i.e. service packs, image files) are released, workstations will be upgraded at the next scheduled service visit.
- Assigned service technician and account manager will be responsible to make sure that subscription service sites are maintained and upgraded on an annual basis. This subscription service is based on one workstation only.
- Software installation does not cover issues related to computer system capacity or configuration issues.
- Maximum labor allowed is no more than the scheduled time per visit.
- Software upgrades do not include upgrades to higher platforms.

Trending Reports and Analysis

Trending consists of establishing a baseline utilizing current operating parameters for optimal HVAC system performance. Evaluation trends and reports will be set up to monitor specific operating parameters and set points in order to:

- Identify critical areas for measurement and verification
- Identify critical operating parameters
- Verify calibration of monitored sensing devices
- Verify system operation within established parameters



K-12 Performance Contracting Project Reference

Bullitt County Schools - Shepherdsville, Kentucky

Customer Profile

Bullitt County Schools is one of Kentucky's 10 largest school districts with 23 education buildings totaling approximately 1,800,000 square feet of space. District enrollment is approximately 12,000 students.

Customer Issues

- ▶ Imminent HVAC System Failures
- Comfort issues
- Excessive energy costs
- Limited bonding capacity
- System reliability
- Accountability
- Serious indoor air quality issues

Project Objective

Create a project that increases occupant comfort, improves efficiency, addresses deteriorating systems, and provides a single point of responsibility. Address imminent HVAC system failures at Nichols ES, Lebanon Junction ES, Cedar Grove ES and Hebron MS. Complete a district-wide lighting retrofit and implement a district-wide centralized building automation system with remote monitoring through Intelligent Services.

Project Scope and Results

- Complete HVAC retrofit at three elementary schools
- Complete HVAC retrofit at one Middle School
- Complete district lighting retrofit
- Comfort and air quality concerns addressed
- Installation of centralized building automation system
- No disruption to school during construction period
- Single point responsibility of construction
- Remote monitoring with Intelligent Services
- ▶ 20-Year PACT™ performance guarantee
- On time and in budget



Project Dollar Amount \$11,343,458

Source of Funds Energy/Operational Savings

Contract Terms 20-Year Guaranteed Savings

Guaranteed Annual Savings \$398,692

Project Dates/ScheduleNovember 2008 – December 2011 (est.)

Guarantee TermTBD after final completion

Reference Contact Keith Davis, Superintendent (502) 543-2271

Trane's Project Design Team Chris Jaggers, Justin Kubly & Mark Begle



Turnkey Controls Project Reference

Keeneland

Customer Profile

Twice a year guests come to Keeneland from across the country for race meets at the beautiful Keeneland racecourse. Keeneland is also a renowned Thoroughbred auction company.

Customer Issues

Keeneland knew that the reliability of their two decade old controls system was finite and that replacement parts were no longer available. Updating the controls system to 21st century technology and freeing operators from using a DOS based system to control one of the most important buildings on his campus also offered operational savings and peace of mind.



Project Objective

Replace the existing system level building controllers with the latest technology and reuse as much of the existing unit level controls as possible. Update all software and graphics and rewire portions of the communication link for better long term reliability.

Project Scope and Results

- Three new system level building controllers
- All new three dimensional floor plan and equipment graphics
- Made existing system completely web accessible
- Added existing buildings to the controls system
- On time and in budget

Project Dollar Amount: \$101,973

Contract Terms:
Not to exceed

Project Dates: Dec 2011 – Feb 2012

Customer Contact:

Eric Soard esoard@keeneland.com (859)-288-4281

Address

P.O. Box 1690 Lexington, KY 40592



Turnkey Project Reference

Lexmark International - Building 200

Year of Project: 2000 Airside, 2004 Chiller Plant, 2009-2012 ongoing controls improvements

Customer Profile

Lexmark International is a leading manufacturer of printer and communication products and accessories. Based in Lexington, KY, Lexmark maintains a large campus dedicated to research, design, and management for their worldwide operations.



Customer Issues

Facing a space renovation and new tenant to the space, the existing space HVAC system had deteriorated over time, causing high energy consumption and poor space comfort. With a deadline for occupancy established there was a very short time window to design & implement the new system.

Contact

Paul Ackerman Manager – Facilities Engineering (859) 232-3213

Address

740 New Circle Road Lexington, KY 40550

Project

Implement a fast track solution to renovate and replace the airside systems and add new controls in an operational building. Minimize disruptions to the operational facility during construction was imperative. Specific attention was given to the overall system efficiency without sacrificing comfort.

Project Scope and Results

- Retrofit & replacement of multiple air handlers
- Redesign & replacement of a large VAV system
- Installation of a DDC building automation system
- Modification of chilled water loop to resolve pumping issues
- Fast Track project delivered on-time, in budget, and with minimal disruptions



K-12 Performance Contracting Project Reference

Rowan County Schools - Morehead, Kentucky

Customer Profile

A school district in eastern Kentucky with seven education buildings totaling almost 400,000 square feet of space. District enrollment is approximately 3,300 students.

Customer Issues

- Aging HVAC infrastructure at High School
- Maintenance and reliability of HVAC
- Rising energy costs
- Limited capital funds
- Comfort issues
- Lack of HVAC control

Project Objective

Create a project that increases student comfort, addresses deteriorating facilities, and provides a single point of responsibility. Integrate all new systems into common building automation system.

Project Scope and Results

- HVAC system replacement at Rowan County High School
- Lighting retrofit
- Integration of HVAC building automation system
- Addressed maintenance and reliability issues of HVAC
- Minimal disruption to school operations during construction period
- Single point responsibility of construction
- ▶ 20-year PACT™ performance guarantee
- Sustainability program to ensure optimal building efficiency and performance
- Annual measurement & verification and training program
- On time and in budget



Project Dollar Amount \$3,895,850

Source of FundsEnergy/Operational Savings

Contract Terms20-Year Guaranteed Savings

Guaranteed Annual Savings \$154,709

Project Dates/Schedule
June 2010 – March 2011

Guarantee Term April 2011 – March 2031

Reference Contact

Mr. Marvin Moore, Superintendent Rowan County Schools 121 E. Second St. Morehead, KY 40351

*Trane's Project Design Team*Adam Pierce, Ernie Tacogue, Jim Walters



Federal Government Energy Savings Project Reference

Fort Knox Army Base

Customer Profile

Fort Knox encompasses an area of 170 square miles and has a population of 27,000. The base includes 1,100 government buildings and 3,000 family housing units. Fort Knox provides education and training for the Army's Armored Division. Buildings on the facility range in age from over 80-years-old to less than one year.

Customer Issues

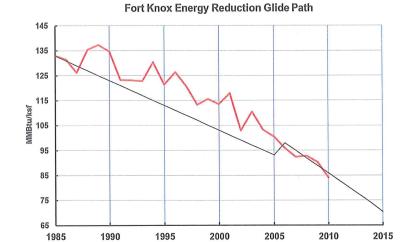
- ▶ Federal mandates on energy reduction 1992,
 2000 & 2005 Energy Policy Act
- ▶ Energy Independence and Security Act of 2007
- Base realignment challenges
- Aged facility infrastructure
- Inefficient buildings and equipment
- Rising energy costs
- Comfort issues and IAQ
- Lack of centralized building management

Project Objective

Develop solutions that address Fort Knox's federal mandate to decrease energy use by 30% by 2015. Reinvest energy savings to upgrade aged building infrastructure and inefficient systems. Manage HVAC systems base-wide through a common BAS platform. Improve comfort and IAQ for building occupants. Assist facility staff in maintenance and operations of HVAC systems.

Project Scope and Results

- Modernization of multiple buildings including HVAC, building envelope, lighting, domestic hot water, renewable energy, water conservation
- Installation of geothermal systems in 140 buildings and 5 million square feet of space
- Over 7 million square feet of building spaces under Tracer Summit building automation for alarming, scheduling, and energy management
- Over 230 buildings energy consumption monitored, trended, and reported
- Exceeded energy reduction goals with numerous recognitions and awards
- Improved comfort and IAQ
- Improved operational efficiencies
- On time and in budget



Project Dollar Amount \$160,000,000+ (Multiple Projects)

> **Source of Funds** Energy/Operational Savings

> > **Annual Savings** \$10,000,000+

Project Dates/Schedule
August 2001 - Current

Contract Dates
Ongoing

Reference Contact
R.J. Dyrdek
Fort Knox Energy Manager
IMSE-KNX-PW
Building 1110-B, Room 302
125 6th Ave., Suite 320
Fort Knox, KY 40121-5719
Office – (502) 624-4541
Cell – (270) 272-3856

Trane's Project Team
Tom Abele, Brandon Marcum,
Brian Kelly, Adam Pierce,
Greg Champ, Jason Volz, Adrienne Parsons

<u>AFFIDAVIT</u>

Comes the Affiant,	VV. Frank Harshaw	, and after being first
duly sworn, states under pena	lty of perjury as follows:	
	W. Frank Harshaw	
individual submitting the prope	osal or is the authorized re	presentative of <u>W. Frank</u>
Harshaw and Associates, In		
proposal (hereinafter referred		
2. Proposer will pay all taxes	s and fees, which are owe	d to the Lexington-Fayette
Urban County Government a		
the contract and will maintain		
during the life of the contract.	0	
adining and me of any community		
3. Proposer will obtain a Le	xington-Favette Urban Cou	unty Government business
license, if applicable, prior to a		,
mocrieo, ii applicable, pries es		
4. Proposer has authorized t	he Division of Central Purc	chasing to verify the above-
mentioned information with the		
County Council that taxes and		
not been obtained.		
not boom obtained.		
5. Proposer has not knowing	ılv violated anv provision of	the campaign finance laws
of the Commonwealth of Ken		
contract to the Proposer will		
of the Commonwealth.	not violate any proviolen of	and component memore round
of the commonwealth.		
6. Proposer has not knowing	ly violated any provision of	Chapter 25 of the
Lexington-Fayette Urban Co		
"Ethics Act."	Janey Government Godo	· Or Oromianoso, informi de
EUIIOS ACI.		

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.

W. Frank	Dentrare
STATE OF K	<u>Centucky</u>
COUNTY OFJe	efferson
before me by 10 day ofFe	nstrument was subscribed, sworn to and acknowledged W. Frank Harshaw on this the ebruary , 2012. expires: May 24, 2013

NOTARY PUBLIC, STATE AT LARGE

ANNE L. WATERMAN Notary Public-State at Large KENTUCKY My Commission Expires May 24, 2013

EQUAL OPPORTUNITY AGREEMENT

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.

Reuth Reid Harshaw Transe
Signature Name of Business

EQUAL OPPORTUNITY POLICY

It is the policy of Harshaw Trane (the "Company") to promote employment opportunities through positive, continuous programs of specific practices designed to ensure equal employment opportunity without regard to race, color, religion, sex, national origin, citizenship status, age, protected disability status, sexual orientation, genetic information, uniformed service (e.g., US Armed Forces or National Guard) or status as a Vietnam-era or special disabled veteran in accordance with applicable federal laws.

Accordingly, all employment decisions shall be consistent with the principles of equal employment opportunity (EEO).

In order to ensure practice of this policy, Ruth Reid, Human Resources Director, has Management's full support in seeing that the Company:

- Recruits, hires, trains, and promotes persons in all job titles, in a manner that ensures equal employment opportunities without regard to race, color, religion, sex, national origin, citizenship status, age, protected disability status, sexual orientation, genetic information, uniformed service (e.g., US Armed Forces or National Guard) or status as a Vietnam-era or special disabled veteran in accordance with applicable federal laws.
- Administers all personnel actions, including but not limited to compensation benefits, transfers, Company sponsored training, education, tuition assistance, and social and recreational programs in a manner that ensures equal employment opportunity without regard to race, color, religion, sex, national origin, citizenship status, age, protected disability status, sexual orientation, genetic information, uniformed service (e.g., US Armed Forces or National Guard) or status as a Vietnam-era or special disabled veteran in accordance with applicable federal laws.

The Company also will not tolerate any harassment of employees because of disability. Employees and applicants will not be subject to harassment, intimidation, threats, coercion, or discrimination because they have filed a complaint, assisted in any activity related to the administrations of Section 503 of the Rehabilitation Act of 1973, as amended, or exercised any other right protected by the Act.

Equal employment opportunity is not only the law; it is one of our Company's goals. To that end, every employee, especially those in management, must cooperate to achieve this goal. For purposes of equal employment programs, Ruth Reid reports directly to the President and CEO.

Frank Harshaw

President and CEO

WORKFORCE ANALYSIS FORM

Name of Organization: Harshaw Trane

Date: 02/07/2012

Categories	Total	Whi	ite	Lati	ino	Bla	ck	Oth	ier	Tot	al
		M	F	M		M	F	M	F	M	F
Administrators	10	8	2	0	0	0	0	0	0	8	2
Professionals	121	97	17	2	0	1	0	4	0	104	17
Superintendents	0	0	0	0	0	0	0	0	0	0	0
Supervisors	18	15	3	0	0	0	0	0	0	15	3
Foremen	0	0	0	0	0	0	0	0	0	0	0
Technicians	4	4.	0	0	0	0	0	0	0	4	0
Protective Service	0	0	0	0	0	0	0	0	0	0	0
Para-Professionals	0	0	0	0	0	0	0	0	0	0	0
Office/Clerical	22	3	19	0	0	0	0	0	0	3	19
Skilled Craft	79	79	0	0	0	0	0	0	0	79	0
Service/Maintenance	26	23	3	0	0	0	0	0	0	23	3
Total:	280	229	44	2	0	1	0	4	0	236	44

Prepared by:

Janet Thompson, PHR HR Generalist
Name & Title

WORKFORCE ANALYSIS FORM

Name of Organization: Harshaw Trane – LEX Office Date: 02/07/2012

Categories	Total	Wh	ite	Lati	ino	Bla	ck	Oth	ner	Tot	tal
		M	F	M		M	F	M	F	M	
Administrators	0	0	0	0	0	0	0	0	0	0	0
Professionals	21	18	1	1	0	1	0	0	0	20	1
Superintendents	0	0	0	0 ,	0	0	0	0	0	0	0
Supervisors	3	3	0	0	0	0	0	0	0	3	0
Foremen	0	0	0	0	0	0	0	0	0	0	0
Technicians	1	1	0	0	0	0	0	0	0	1	0
Protective Service	0	0	0	0	0	0	0	0	0	0	0
Para-Professionals	0	0	0	0	0	0	0	0	0	0	0
Office/Clerical	0	0	0 .	0	0	0	0	0	0	0	0
Skilled Craft	12	12	0	0	0	0	0	0	0	12	0
Service/Maintenance	5	4	1	0	0	0	0	0	0	4	1
Total:	42	38	2	1	0	1	0	0	0	40	2

Prepared by:

Janet Thompson, PHR HR Generalist
Name & Title

LFUCG MBE/WBE PARTICIPATION FORM

Bid/RFP/Quote Reference # RFP #1-2012 Design/Install Mechanical Electrical Svcs. 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	Work to be	Total Dollar Value	% Value of Total
Company, Name,	Performed	of the Work	Contract
Address, Phone,			
Email	THEFT	TTDIO	TBD
1.	TBD	TBD	IDD
TBD			
See Minority	N.		
Participation Section			
of the response for			
plan to meet at least			e e
10% MBE/WBE			
goal. This will be			
done in Phase C			
once scope of			
project is determined.			
determined.			
2.			
		К.,	
-			
3.			
		. *	

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.

Harshan Trane	Sor Zion Eric Wilson
Company Feb 10, 2012	Controls Sales Engineer
Date	Title

Firm Submitting Proposal: Harshaw Trane
Complete Address: 2350 Fortuse Dr Lexington KY 4050 Street City Zip
Contact Name: Eric Wilson Title: Controls Sales Engineer
Telephone Number: <u>857-514-7000</u> Fax Number: <u>857-514-7870</u>
Email address: cric. wilson of trans. 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 filing of a bankruptcy petition by or against the contractor; or
 - (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

B. At Will Termination

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

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.

- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.
- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

See Vien	2/10/12
Signature	Date