Office of the President June 8, 2010

### Members, Board of Trustees:

# **CAPITAL CONSTRUCTION REPORT**

<u>Recommendation</u>: that the capital construction report for the three months ending March 31, 2010 be accepted. This report refers only to projects that had activity within this quarter.

<u>Background</u>: Under House Bill 622 enacted by the 1982 Kentucky General Assembly, the University is authorized to enter into architectural, engineering, and related consultant contracts for the purpose of accomplishing capital construction at the University of Kentucky.

# For the period January 1, 2010 thru March 31, 2010:

# There were six new contracts this quarter:

Project 2302.0	Upgrade, Renovate, Improve or Expand Research Labs (Renovate Research	
	Labs in Chemistry-Physics Building)	
	Denham Blythe, \$1,382,093 (Construction)	
Project 2306.0	Renovate Third Floor Little Library	
	Pearson & Peters Architects, \$44,200 (Design)	
Project 2307.0	Renovate Nursing Building	
-	Stengel-Hill, \$150,000 (Design)	
Project 2309.0	Replace Wildcat Lodge Student Housing (Wildcat Coal Lodge)	
•	JRA Architects, \$554,253 (Design)	
	Codell Construction, \$398,000 (Construction)	
Project 2311.0	Renovate Parking Structure # 3 - Hospital	
·	Brown & Kubican, \$42,000 ( <i>Design</i> )	

# One contract was completed this quarter:

Project 2295.0 Renovate Koinonia House (aka Schmidt Vocal Art Center) Churchill McGee, \$888,439

# Forty Five change orders greater than \$25,000 were as follows:

Project 2234.0 Expand & Upgrade Livestock Disease Diagnostic Lab

- Add freestanding wall to top of retaining wall to increase height to 42" for added safety and improvement of site grading. (+) \$28,360
- Provide trailer for temporary relocation of the College of Ag. Pathologists during renovation of their current space. (+) \$35,910

# Project 2235.0

# Construct Biological Pharmaceutical Complex Building

- Provide necessary vent piping for the Steris autoclave. (+) \$40,430
- Modify site construction to maintain some parking at the Limestone/Leader corner lot. (+) \$29,493
- Revise the amphitheatre exterior steps for added safety. (+) \$27,382
- Modify the eyewash for added safety. (+) \$25,917

#### **Project 2239.0**

# **Construct Patient Care Facility**

- Provide for extended sleeves to allow for access without infringing on the cable tray. (+) \$109,869
- Modify the smoke dampers due to space restrictions. (+) \$31,104
- Provide for relocation of the 3" chilled water supply take off. (+) \$26,580
- Provide safety drain traps for the humidification steam generator during low pressure conditions. (+) \$71,292
- Replace pipe and steam traps on the clean steam generators. (+) 39,069
- Provide accommodations for future elevator equipment which would be disruptive once the hospital is operational. (+) \$46,192
- Revise various duct sizes and pipe routing. (+) \$49,407
- Provide and install a 40 foot mast to accommodate antennas. (+) \$138,921
- Provide lift-net Ethernet based control monitoring system of all new and future elevators. (+) \$66,388
- Relocate high pressure steam header in basement above chilled water pipes. (+) \$67,125
- Provide for supply and return to match the connections to the mains in the tunnel. (+) \$56,402
- Provide access hatches for future service and installation of equipment in the elevator machine room at the top of each tower. (+) \$37,489
- Provide temporary weather protection to contain winter heat (+) \$49,623
- Provide for adjustments to the ductwork to allow for installation of systems while maintaining ceiling height. (+) \$40,504
- Provide for a medical gas master alarm panel to allow for a UL rated system. (+) \$123,223
- Provide for revisions of the light fixture selection and layout. (+) \$34,574
- Provide for modifications of the VESDA smoke detection system. (+) \$82,634
- Provide for added data and power outlets necessary to use the upper cabinets in the patient wardrobes for IT equipment mounting. (+) \$229,299
- Provide additional power necessary for the final pneumatic tube system design. (+) \$108,706
- Provide for revision of the 6<sup>th</sup> floor ductwork and cable tray to allow for proper access. (+) \$136,321
- Provide for revision of the 7<sup>th</sup> floor ductwork and cable tray to allow for proper access. (+) \$115,641
- Provide for added power to the infrastructure to support additional UPS devices. (+) \$154,586
- Provide for replacement of tile in the ED due to color correction. (+) \$37,436

- Provide for re-routing of glycol and hot water piping on level 14 due to space constraints. (+) \$40,687
- Provide for revision of the location of 8 patient tracking monitors and addition of 7 locations for overhead tracking monitors. (+) \$50,973
- Provide for additional piping and electrical connections for dialysis equipment in 16 step down rooms. (+) \$102,822
- Provide for revision of domestic water piping to the steam pressure reducing stations for the domestic water heat exchangers. (+) \$88,311
- Provide 5" copper pipe in lieu of steel for heating hot water piping. (+) \$31.061
- Provide for an upgrade of dialysis boxes and added electrical connections for dialysis equipment. (+) 108,500
- Delete sprinklers from north and west canopies and add to south drive through canopy to assure greater coverage where vehicular traffic is located. (-) 26,766
- Provide for modification of the temporary basement offices to address code compliance. (+) \$136,040
- Provide for revised ductwork and piping to accommodate installation of all trades. (+) 52,662
- Provide plumbing and electrical services to five dialysis boxes in the ED. (+) \$40,734
- Provide revisions to power, lighting, and specialty lighting to accommodate art selections. (+) \$56,337

### Project 2239.32

PCF - Hospital - CUP Expansion

- Provide for various items of work related to the boiler installation that were not included in the contractor's original documents (+) \$25,745
- Provide for increased building temperature controls necessary to manage the high efficiency boiler operation. (+) \$54,881

### **Project 2297.1**

Digital Village Building 2

- Provide for installation of new cabling between the switch in the new manhole to the existing one to minimize shutdown and outage to the Hardymon Building. (+) \$37,930
- Adjust the allowance found in the photo-voltaic panel installation bid package due to bid savings. (-) \$32,042
- Provide for the revision of the communications duct bank and modification to the slope of storm line D. (+) \$46,491

Action taken:	☑ Approved	☐ Disapproved	Other

# CAPITAL CONSTRUCTION CONTRACTS QUARTERLY ACTIVITY REPORT

This report contains capital projects that have a dollar scope value of \$600,000 and above. The projects are listed in alphabetical order and contain the project number, the dollar scope, a brief description of the project work and information pertaining to the primary consultant's contract and the primary contractor's contract. This information includes:

<u>Consultant:</u> This section contains the name of the consultant, the contract number, the original contract amount, the total number of amendments, the cumulative amendment amount, the revised contract amount, and a notes section. The notes section will describe, in bold face type, all amendments to the consultant's contract for the current quarter.

<u>Contractor</u>: This section contains the name of the contractor, the contract number, the original construction contract amount, the total number of change orders, the cumulative change order amount, the revised contract amount, information on the low, high and number of bids, the percent of the contract completed, and a section for notes. The notes section will describe, in bold face type, all change orders greater than \$25,000 for the current quarter.

# Glossary

**Amendment:** refers to modifications or changes to the Consultant's contract with the University, usually the result of changes in the program or scope of a project caused by unforeseen conditions or at the request of the University.

**Change Order:** refers to modifications or changes to the Contractor's contract with the University, usually the result of conditions not anticipated by the contract documents, plans and/or specifications for the work.

Consultant: the entity, usually an architectural or engineering firm, with whom the University contracts and who has primary responsibility for providing services to design and to administer the contract for construction of a construction project. The prime consultant frequently employs the services of one or more sub-consultants in fulfilling its contractual obligation.

Contract administration: refers to the activities of the consultant during the construction phase of the project in which they verify that construction is in compliance with the requirements of the contract between the University and the contractor.

General Contractor: the entity, usually a general contractor but occasionally a trade contractor, with whom the University contracts and who has primary responsibility for completion the construction of a project. This "prime" contractor usually employs the services of various subcontractors (trade contractors) and vendors in fulfilling its contractual obligations.

**Feasibility Study:** refers to investigation, usually commissioned through an outside consultant, to advise the University of the merits of an anticipated construction project, and to evaluate and comment on matters such as need, probably cost, preliminary program issues, and so forth.

Gross square feet: the total area of the project, generally measured from the outside of exterior walls for all floors of the project, including mechanical spaces.

**H.B.C.:** refers to the Commonwealth of Kentucky Department of Housing, Buildings and Construction, the state agency having responsibility for review and approval of University construction projects to assure compliance with applicable building codes.

**Penthouse:** refers generally to the enclosure around roof mounted mechanical spaces in a project. Not considered occupied (or net assignable) space.

**Percent complete:** as used in the report refers to the expenditure to date divided by the total amount of the construction contract for the work.

**Net assignable square feet:** the usable area of the project excluding corridors, rest rooms, storage areas, mechanical spaces, etc.

**Phase:** The various stages of design and construction of a capital project, including:

- Programming phase: refers to the initial planning phase of a project, during which the University (with or without participation by a consultant) defines in detail the needs and requirements of a project. This program becomes the basis for consultant selection, fee negotiation, and design of the project.
- Schematic design (S/D or Phase 1): refers to the first formal phase of design by the consultant, in which a general design solution to project programmatic requirements is developed.
- Design development (D/D or Phase 2): refers to the second formal phase of design by the consultant, during which the schematic design is expanded to identify solutions to design issues in broad terms, sufficient to insure the stated programmatic needs can be met.
- Construction document phase (C/D or Phase 3): refers to the final phase of the design process in which the details and specific project requirements are identified and incorporated in a final set of biddable construction documents.
- Bidding phase: refers to the stage of a project during which proposals for construction are solicited, culminating in the award of one or more contracts for construction.
- Construction phase (or Phase 5): refers to the actual construction of the project by contractors.

**Scope:** The total estimated value of a capital project on completion, including all design, construction and administrative costs as well as the cost of capitalized furnishings and equipment.

Substantial Completion: refers to the time during construction, certified by the consultant, when the work is sufficiently complete for the University to occupy the facility for its intended use without significant interruption. Upon certification of substantial completion, the University assumes operational and maintenance responsibility and insurance liability for the project and the warranty period begins for most elements of the construction. Some work generally remains, including correction of minor punchlist items, before the work is certified finally complete.

**Trade Contractor:** Sub-contractors, or individual bid package contractors, who practice a specific, trade (electrical, painting, structural steel, for example)

# Major Projects Capital Project Management Division April 30, 2010

### Construct Biological Pharmaceutical Complex Building

Project Description:

The Biological Sciences/Pharmaceutical Complex, was authorized by the 2005 General Assembly and will construct a 281,000 gross square foot facility that includes some "shell space" to allow for the growing research needs. This "shell space" will be fitted out for research laboratories at a later date as university funds and/or grant dollars become available. This new building will provide the college with a state-of-the-art facility that will also allow the college to expand enrollment to address the shortage of pharmacists in Kentucky. The College of Pharmacy will relocate to this new facility and vacate their existing space. In addition to the current Pharmacy Building, college faculty members are housed in 10 buildings on and off campus.

Proiect Status:

Site work and Tunnel work achieved substantial completion this month. Project is complete with the exception of some last minute change order work.

### Construct Children's Garden at the Arboretum

Project Description:

The Children's Garden will be a safe 1.85 acres outdoor environment designed to help children 2 to 10 years old learn about plants and the environment. There will be an integrated combination of various "child-scaled" theme gardens, garden-like elements for experiential play, and gardens planted and maintained by children. This initial phase will construct the geographical features including rock escapements; the stream and pond; and some of the walks and plantings.

Project Status:

Work is complete on all waterway bases, liners and concrete coatings. Walkways are approximately 60% complete. Placement of decorative limestone in waterways and adjacent to waterways is ongoing. Stone work at entrance way is commencing. Electrical primary service is installed.

# **Construct Patient Care Facility**

Project Description:

The Hospital's present patient bed tower is over 40 years old. Although the space served patients well, the infrastructure is aging, and the facility can not accommodate rapidly developing technology. This project is providing the site location evaluation, building programming, planning, and design services for a new bed tower. The project design team is lead by GBBN with major sub consultants including AM Kinney, Ellerbe-Becket, Staggs and Fisher, Affiliated Engineers, THP Limited as well as a number of specialty consultants. This project will construct a new hospital addition to include patient beds, patient diagnostic and treatment areas, support areas, support facilities, medical equipment and infrastructure. The project also includes the replacement of the hospital parking garage and a connecting bridge to clear the site for the new hospital addition as well as land acquisition and utility relocation costs. The progress of all the components is listed below.

#### PCF – Building (BP #'s 3B, 4, 5 & 6):

Project Description:

This project includes:

- (BP #3B) Early Site Work
- (BP #4) The demolition of the existing Parking Structure # 4. The work will involve the start of all deep foundations up to the grade of the excavation.
- (BP #5) The construction of the new 1,022,000 gross square feet building's structural frame, fireproofing, exterior wall enclosure for all new building spaces, windows, exterior doors and roofs. Also included will be all exterior site improvements, civil design for roadways, drainage systems, landscaping, hardscape surfaces and walks.
- (BP #6) The interior fit-out partitions, interior finishes, doors and frames, ceilings, mechanical systems, electrical systems, technology systems, medical equipment and fire protection for approximately 490,000 occupiable square feet; and 532,000 square feet of shell space. The work also will include drawings and specifications for signage, interior furnishings and lighting.

### Project Status:

#### - Core and Shell (BP #5)

A time extension of 3 days was granted in February for inclement weather.

The infill precast panels at the west buck hoist and at the west tower crane location completed this month. Detailing continues on the east tower. The radius panels at the lobby area completed this month leaving only the infill panels at the east buck hoist and tower crane locations. Masonry work continued this month with the installation of the CMU and exterior stone veneer at the north lobby and garage areas. Work also resumed at the south area canopy walls and at the west buck hoist infill. The acoustical contractor continued light gauge metal framing at the ground floor south canopy and bridge locations. The fireproofing contractor continued fireproofing the tower structure steel. The east connector roof area is complete and they are currently working on level eight west. Most areas at the third level roof, bridge area, garage area and fifth level areas were completed. Roofing will continue around the towers in the select lower roof areas. The level 13 roof was stocked with all needed materials. The sealant contractor continues on the west and north elevations of the west tower with seal tape and joint sealants progressing to other elevations. The window contractor continues to work on window installations on the west tower. Work on the bridge window panels is completed across to the garage area. Work continues at the garage area windows. Louvers also resumed on the east elevation at levels three and four with framing and louver body installation. The installation of metal panels continued across the bridge on night shift completing the areas to the garage area. The field panels were also installed under the bridge area. The metal panels at the west fifth floor eyebrow were finished and caulked.

The elevator contractor is currently working on rails and platforms in elevators 02, 03, and 04. Elevator 07 is in the final stages in both the shafts and machine room. Elevator 02 was released for construction use in mid-April. The excavation contractors mobilized to the site performing site grading at the east, south and west areas. New curbs and gutters and sidewalks were installed at the northeast project area. New curbs and gutters were also installed at the east side getting ready for sidewalk installations. We are final testing and flushing the chilled water and glycol. Heating water commissioning is complete.

The BP 5 electrical work continues with installation of permanent feeds to the penthouse for the elevators. The podium bus duct is complete and the system energized. Tower bus duct began April 1. HVAC mechanical ductwork is complete on the third floor with final infills being made where the west tower crane was removed. Plenum detailing is ongoing and will complete in the upcoming weeks. We continue to program and startup AHU's throughout the third and fourth floors.

#### - Fit up (BP #6)

A time extension of 11 days was granted in March due to inclement weather.

Bid package 6 continues throughout the structure again this month. The interior trades continue to work through the ground floor in all areas. Below ceiling punch lists are ongoing in the emergency department areas. Currently about 95% of the ED has been punched. Currently Turner is working with the contractors to develop the detailed reverse phase schedule for the remainder of the building. Construction is ramping up on the ground level at the auditorium. The sixth level rough in is in full swing with the electrical pre fabricated boxes. The upper mechanical levels on 14, 15, and 16 are generating a lot of activity.

The acoustical contractor is working in many areas again this month. This contractor continues installing drywall, ceilings, ceiling pads, and curtain tracks on the ground floor in the ED and support areas. CCI is also framing on levels 1 and 2 for area D lobby work. Drywall was hung and finished in the upper level mechanical spaces. Cleveland is also installing elevator and stair shaft framing and drywall.

Woodford Builders (WBI) is currently installing materials in the ED. The operable wall has been installed in the conference room. The overhead doors were installed this month. WBI is installing swinging doors in the ED and are about 80% complete. The wood doors and hollow metal doors required for the ED turnover have been set into place. Hardware is being prepared at the shop and final hook ups are completed in the field.

The painting contractor is currently applying the final coat of paint in med gas zone 4. Martina Brothers is currently working on ceramic tile in the ED. Martina is preparing to move to the registration area following the ceiling installation and rough in. Terrazzo installation began in the existing hospital at the sterilizers in April. The flooring contractor is installing the PRT tile in the med gas zones in the ED. CDI is currently 85% complete with the PRT install. VCT began in early April at the connecting corridors. Carpet will be installed in the office areas in the ED. Detailing of HVAC duct systems will finish on the ground floor with focus on the sixth floor, rooftops fans have all been set and final tie-ins, spring isolators, and detailing is ongoing.

Installation of storm piping is substantially complete and the focus is now the jumping of the risers up through the towers. Fixture installation is wrapping up on the ground floor in the Emergency Department. Domestic hot water

heater hook up is ongoing in the basement mechanical room and startup was completed April 1. Domestic cold water is complete and booster pumps have been started.

Installation of electrical wiring is continuing throughout the building with final terminations and testing ongoing. Focus has shifted to the 14, 15th and 16<sup>th</sup> levels and the systems served from this area. Startup of the medical gas pumps and tie-in of the oxygen feed to the bulk tanks is complete and certification is being scheduled for this system.

### Digital Village, Building 2

Project Description:

This project consists of the design and construction of approximately 43,000 gross square feet of research space for the Center for Visualization and Virtual Environments as well as selected research activities in the Department of Computer Science and the Department of Electrical and Computer Engineering. The facility must be sufficiently flexible in design so that it can be easily adapted to support research into emerging areas of interest. The structure should provide flexible office space and support facilities. This project will pursue LEED Certification. *Project Status*:

Work continues to progress on the building and infrastructure. Concrete masonry blocks continue being laid in the basement. Structural steel has been completed with secondary steel nearing completion. Floor slabs have been poured and wall framing is progressing. Exterior wall sheathing has begun around the Theater space. Excavation has begun for chilled water, steam piping and electrical duct bank lines in front of the Craft Center. The date of substantial completion has been extended to Dec. 10, 2010 due to excessive weather delays.

### Expand Ophthalmology Clinic - Hospital

Project Description:

This project consists of renovating approximately 12,500 square feet of space on the third floor of the Kentucky Clinic, some of which is currently occupied by Neurosurgery, in order to expand the existing Ophthalmology Clinic (also located on the third floor of the Kentucky Clinic) into the vacated space. It also includes refurbishing the existing Ophthalmology Clinic space. This project will necessitate phased construction activities to include expansion into the additional space as well as a full refurbishment of the existing Ophthalmology Clinic. *Project Status*:

Meetings have been held to review conceptual plan options and to refine the space layout. Following approval of the conceptual plan, the overall space will be phased to allow incremental renovations to occur as funds become available. The first phase is to renovate the former Neurosurgery space. Early cost projections suggest a cost overrun for the first phase work. There are concerns that a renovation of only the former Neurosurgery space will provide operational problems with significant increased recurring staffing costs that will make use of the space cost prohibitive. As a result, the project has been put on hold while the hospital reviews project scope options. This project continues to be on hold.

# Expand & Upgrade Livestock Disease Diagnostic Lab

Project Description:

New space is needed for more than one veterinary pathologist to perform animal postmortem examinations in addition to renovation of current necropsy space. New space is also needed to add molecular biology/special procedures capabilities to the laboratory. New technology in the form of an alkaline hydrolysis digester is needed to replace an aging incinerator. The LDDC is an office and laboratory building with net assignable space of 3,860 square feet for offices and 28,100 square feet of laboratories and support space. It is proposed to add 6,300 and 1,200 square feet (net) of new laboratory and office space, respectively. An existing necropsy laboratory and support space will be renovated (2,000 square feet net). An aging incinerator is the present means of carcass disposal. An alkaline hydrolysis digester will be installed for carcass disposal after renovating 2,000 square feet (net) of space to contain the digester.

Project Status:

Work this month continues with mechanical and electrical installation. Roofing ,windows and doors continue being installed. Drywall and painting continues in Necropsy, Pathology and Receiving areas. Two 10,000 pound tissue digestors were shipped this month. Installation was delayed three weeks to complete coatings in the tank area. Three large tanks have been set within the digestor area. Receiving is on schedule and will be completed by mid-June 2010. Necropsy and Pathology have been delayed 1 month due to the digestor installation but will be completed prior to the World Equestrian Games. Due to Administration is scheduled to complete mid August 2010 and all renovations will complete by mid-February 2011. This includes the 21 day time extension for flooring

reinforcement. The storage tank facility at Woodford County farm continues with construction of the concrete tank. The site will be complete by mid-June 2010.

### Renovate Central Computing Facility

Project Description:

This project will entail replacing existing batteries and air conditioning units in the existing computing facility in McVey Hall to ensure sufficient power distribution and cooling for the next few years. UKIT will continue development of long term plans for a new facility.

Project Status:

The contractor has completed all remaining chilled water piping and tie in to expansion tank and air separator; completed all heat trace; charged chilled water system with propylene glycol; roughed in DX piping for remaining CRAC units; electrical outlets installed for XD system. The substantial completion date of the project was delayed by 14 days in January and again by 18 days in February due to delivery delay of the chiller. The chiller arrived this month and the TSI chiller and XD system start-up's occurred on April 13, and the Owner's training was provided on April 16. In the next 30 days, the contractors will complete the following: removal of the existing CRAC systems; installation of remaining new CRAC systems; installation of permanent pipe stands; and test and balance.

#### Renovate Nursing Building

Project Description:

This project will renovate and convert a covered patio on the third floor of the Nursing Building into student study and discussion space. Additionally, minor enhancements will be made in some fifth floor graduate student space. The project is fully funded from a U.S. Department of Health and Human Services, Health Resources and Services Administration grant.

Project Status:

The Design Development review meeting was held on April 20, with review comments provided by University team members. The bid documents were delivered on April 30, transmitted to Purchasing on May 4, with anticipated bid opening date of June 10. Substantial completion is scheduled for November, 2011.

#### Renovate Third Floor Little Library

Project Description:

This project will renovate and fit-up approximately 5,300 square feet of shelled space on the third floor of the Little Library. Prior to the library consolidations following completion of the W.T. Young Library, this space was used to house library materials. The renovated space will house the Center for Applied Information Technology, a suite of offices for the School of Library and information and two new classrooms, seating for 48, with smart technology. *Project Status:* 

Design is complete and project has been transmitted to Purchasing for bidding. Bids are to be received in late May.

# Renovate/Expand the Center for Applied Energy Research

Project Description:

The primary purpose of this project will be multi-phased project incorporating the following components: Mineral Process Lab Building - The initial phase of the project will require the construction of a 6,400 square foot support building. This new facility will permit the relocation of the existing mineral processing group, currently housed in the Center's main facility. The existing equipment will be relocated along with support space, offices and labs. Relocation of the Crushing Room - The existing Crushing Room is to be relocated into an existing facility originally built for dry storage of coal. Bio-fuels Highbay Lab Fit-up and Improvements - Renovated space, vacated by the Mineral Processes Lab in above, will allow for the development of a bio-fuels laboratory for production, characterization, and testing of biomass derived fuels, with a focus on biodiesel, bio-oils, and biomass derived Fischer-Tropsch liquids. The principle objective of this project is the establishment of a laboratory dedicated to the development of improved processes for biomass utilization, with the goal of supporting the development of the biofuels industry in Kentucky. Combustion High Bay Hoods - The existing Combustion/High Bay Lab will have a new bench top fume hood and a new walk-in hood installed with required ductwork and exhaust fans. *Project Status*:

Phase 1 - Final lab equipment and fume hoods for the Biofuels Highbay will occur in mid-May. Final connections to utilities will happen at that time.

Phase 2 – Awaiting approval of the building documents by the Department of Energy.

# Repair, Upgrade, Improve Building Systems - Hospital (Elevators Upgrade for KY Clinic)

Project Description:

This project encompasses refurbishing eight elevators in KY Clinic. The refurbishment includes replacing all cab finishes, lighting, major wear components, telephones, and controls. The elevators will be refurbished one at a time so as not to impact patient care. This project allows the Hospital to maximize elevator uptime and improve the aesthetics of the elevators. The Hospital relies on these systems for the efficient transfer of patients, visitors, supplies, and equipment.

Project Status:

Oracle Elevator has completed all submittals and received their materials. Elevators 7 & 8 and 1 & 2 have been refurbished, inspected and returned to service. Elevators, 4 & 6 have been taken out of service and are being refurbished. The project is on schedule at this time. Oracle is meeting all cleanliness standards for the clinic.

# Replace Emergency Generators & Fire Pump - UK Good Samaritan Hospital

Project Description:

The scope of this project will consist of the replacement or upgrades of the following equipment at the Good Samaritan Hospital: emergency generator, transfer switches, air handling unit #25, constant pressure water pumps, deareator tank, and a fire pump.

Project Status:

- Bid Package #1(Deareator Tank)

This project is substantially complete.

- Bid Package # 2 (Emergency Generators, Transfer Switches, AHU and a Fire Pump)

Exhaust piping has been installed; the main fuel tank and day tank have been set; removal of conduit and wiring to dead equipment is complete in generator room; transfer switches are set in place; EIFS is complete; shaft wall is complete; steps have been poured; louvers have been installed w/ductwork terminations complete from generator to louver opening; fuel/oil piping is complete; masonry work at the parapet wall is complete; fence installation at main fuel tank is complete.

# Replace Wildcat Lodge Student Housing (Wildcat Coal Lodge)

Project Description:

This project consists of the design and construction of a new housing facility of approximately 18,000 GSF to replace the existing Wildcat Lodge. The new facility is to house the UK men's basketball players in addition to other non-athlete students. The building will include a controlled main entryway, with combination living/bedroom spaces, a common space, with dining and gaming rooms. In addition, it will have a conference room and public restrooms in all common areas. The site will be located just east of the Joe Craft Center.

Project Status:

Phase 2, Design Development documents have been reviewed and approved. Phase review meetings were held on April 20 and 21. The Consultants' phase 2 estimate suggests the project is slightly over budget (\$54k+). With changes made during the design review meetings and further adjustments to the budget, the project appears to be within budget (the plaza space between the new Wildcat Coal Lodge and the Craft Center will be included as an alternate bid item). The project is on schedule and within budget.

# <u>Upgrade-Renovate-Improve or Expand Research Labs (Renovate Research Labs in Chemistry-Physics Building</u>

Project Description:

The space vacated by the relocation of the Chemistry and Physics libraries will be converted into research and research support space. This renovation will create three wet bench research labs to accommodate three new faculty lines in Chemistry, and one materials lab for Physics. The materials lab will be a multi-disciplinary lab that will be used by Chemistry, Physics and Engineering.

Project Status:

Wall Framing (100%), Electrical Demo (98%), HVAC Demolition (80%), Supply air duct (60%), Snorkel Exhaust Ducting (50%), Domestic Water Piping (10%), Air Piping (10%), Gas Piping (10%), Sanitary piping (20%), Controls Rough-in (30%), Reheat Coils installation (50%), Pipe insulation (0%), Duct insulation (25%), Hot water coil piping (50%), Drywall Installation (10%), Materials on-site, Electric Rough-in (60%), Sprinkler Removal (30%), Uni-strut (80%), Core drilling for lab utilities (50%), Saw cutting for new corridor openings (80%), Masonry removal for new openings (100%), Door Frame installation (80%) Knockdown frames on-site, Submittals (95%), Drywall hanging (80%), Drywall finishing (15%), and Floor prep for Resinous Floor (40%). In the next 30 days,

HVAC and plumbing installation will continue, drywall hanging and finishing will continue. Casework Fabrication, New Lighting, Ceiling and wall painting, Ceiling grid, VCT Flooring and Resinous Flooring Installation will all begin. Sprinkler installation will complete. Substantial completion scheduled for August 3, 2010.

### ARS - Agriculture Project

Project Description:

The Forage Animal Production Research Laboratory will serve the Forage Animal Production Research Unit for the USDA - ARS on the campus of the University of Kentucky. The mission of the FAPRU is to improve productivity, profitability, competitiveness and environmental sustainability of forage based enterprises within the transition zone of the Easter and Midwestern United States. Multidiciplinary teams to work to identify, evaluate, and manipulate genetic and physiological factors, using for the enhancement of food animal and equine health and performance in forage based enterprises as well as to improve forage plant persistence, quality, and production. Three to four story building with approximately 65,000 gross square feet of reasearch labs, equipment and support rooms, offices and conferences rooms. The program also includes approximately 12,000 gross square feet for greenhouses and head house.

Project Status:

A 95% Construction Documents review meeting is proposed for May 2010. Construction may begin as early as fall 2010 depending on availability of Federal funding.

# Construct CAER Laboratory Building #2

Project Description:

The University is the recipient of a grant award from the National Institute of Standards and Technology (NIST) as part of the 'America Recovery and Renewal Act' federal stimulus package to construct a new stand-alone laboratory building for the University of Kentucky Center for Applied Energy Research located at Spindletop Research Park. Portions of the laboratory facility will be specially equipped to accommodate battery-manufacturing R&D. In addition, other portions of the building will be specially equipped to accommodate research related to biomass energy and biofuels, electrochemical energy storage, and solar energy.

Project Status:

Consultant selection is complete and contract has been forwarded to Frankfort for review/approval in the May meeting. Design programming verification has commenced and Schematic Design will continue through April and into late May. Construction Manager has been selected and a contract is in process of being executed.

# Expand Coldstream Research Campus - Redundant Power Supply

Project Description:

The main electrical service to Coldstream Research Campus is currently supplied by Kentucky Utilities through a combination of overhead supply and underground distribution systems. The main 12KV power supply is delivered by an overhead circuit from Kentucky Utilities' IBM station. Several existing and future projects require that Coldstream Research Campus have a redundant electrical power supply available. The immediate redundant power needs are for the first building in the Lexhold Technology Center (under construction), Exstream Software buildings (under construction), the LFUCG Emergency Operations Center (being designed) and the UK Data Center (in design). In order to successfully market the Coldstream Research Campus in the future, separate and redundant power feeds will be essential.

Project Status:

Work by contractor is 100% complete and punch list corrections are ongoing. Work by KU is approximately 50% complete.

# Renovate 4th Floor Sanders-Brown Center

Project Description:

This project will consist of renovating approximately 9,000 square feet of research support space in the Sanders-Brown Center. This project will include retrofitting outdated, non-compliant research support space and the associated mechanical equipment to meet current regulatory requirements.

Project Status:

The four (4) short listed design teams were interviewed on April 13, with the Omni Architects/Jacobs Consultancy/Staggs& Fisher team as the top scoring team. A fee has been negotiated and contract is being processed. Programming is anticipated to start in early May, with schematic design following in mid-May. CM proposals are being reviewed.

# Construct Biological Pharmaceutical Complex Building

Project Number: 2235.00

Project Description:

\$134,998,323 Scope:

The Biological Sciences/Pharmaceutical Complex, was authorized by the 2005 General Assembly and will construct a 281,000 gross square foot facility that includes some "shell space" to allow for the growing research needs. This "shell space" will be fitted out for research laboratories at a later date as university funds and/or grant dollars become available. This new building will provide the college with a state-of-the-art facility that will also allow the college to expand enrollment to address the shortage of pharmacists in Kentucky. The College of Pharmacy will relocate to this new facility and vacate their existing space. In addition to the current Pharmacy Building, college faculty members are housed in 10 buildings on and off campus. Consolidation of the research and teaching expertise of the eighth ranked College of Pharmacy in the U.S. will further strengthen the instruction of students and research collaboration among faculty. The project is expected to be complete by December 2009.

Consultant: EOP Architects

Contract # A061150/A071060

Total Amendments to Date:

Original Contract Amount:

\$10,585,020

Cumulative Amendment Amount:

\$1,083,566

Describe all amendments:

Revised Contract Amount:

\$11,668,586

Amendment #1, 5/8/07, an increase of \$220,700, was approved for additional design services to provide an additional research floor as well as a new utility tunnel. This amendment also provides for wind tunnel testing as well as a specialized lighting consultant. Amendment #2, an increase of \$282,276, was approved for Structural engineers to redesign the foundation and sub-slab connections due to discovery of unforeseen solution channel to bedrock and to redesign the first floor from a steel frame to a concrete frame. Additionally the amendment was to design a Donor Recognition Program that will address the range of donor opportunities as outlined by the University, as well as a standard program of plaque recognition. Pinpoint Associates are to locate all underground utilities beginning with Parking Structure # 2, traveling on Washington Avenue and ending at Limestone Avenue. This amendment also provides for an independent third party consultant to provide for all Special and Material Testing as required by the construction documents and 2007 KBC. Amendment #3, 1/13/09, an increase of \$344,270 was approved for additional scope of work necessary to accommodate the fit-up of the fourth and fifth floors as a separate stand alone package. The amendment also provides for additional structural engineering services associated with the addition of an elevator machine room, reinforcement of chilled water pipe structure at the Utility Tunnel and expediting design and construction documents for Bid Package 4. Additional special inspection and testing services are also included as well as civil engineering services associated with the survey, plat and filing as necessary for the permanent closure of Leader Avenue. Amendment #4, 6/9/09, an increase of \$236,320 was approved for additional scope of work necessary to accommodate the pre-construction phase of the 4th and 5th floor fit-up, the 1st floor food services facility fit-up and construction documents for the mast arm traffic signal and the steam line extension design. No amendments this quarter.

Contractor: Messer Construction Co. (Construction Manager At-Risk) Note: This is a 'CM-At-Risk' contract.

The amount will be increased as subcontracts are bid and added. \*Messer's contract was awarded by RFP process.

Contract % complete was calculated using the estimated \$107 Million Construction Budget.

Contract # 4500007696

Original Contract Amount:

\$108,947,449

Total Change Orders to Date:

382

Cumulative Change Order Amount:

\$4,306,391

Low Bid:

Revised Contract Amount:

\$113,253,841

High Bid:

Contract Percent Complete:

99%

Number of Bids:

Describe all change orders greater than \$25,000.00:

Change Order # 1, 9/4/07, was approved for an increase of \$46,616 to provide additional excavation and a storm manhole. The design work for underslab perimeter drainage was completed after the excavation package was bid. Change Order # 4, 10/3/07 and increase of \$67,340 was approved to provide a 3 foot wide trench as part of Bid Package 1 instead of being included as scope of work in Bid Package 4. This will provide a possible cost

# Construct Biological Pharmaceutical Complex Building Change Orders greater than \$25,000 Cont...

savings due to the efficiency of the excavation contractor being on site. Change Order # 10, 2/1/08, was approved for an increase of \$29,633 to add compacted crushed stone fill across the basement floor area. The added stone will provide a work base for first floor slab construction scaffolding. Change Order # 17, 2/1/08, was approved for an increase of \$25,146 to provide depressed slabs at floors 3 and 5 for installation of Cold Rooms. This will allow for recessed floor at the cold rooms without a curb or ramp. Change Order # 18, 5/27/08, was approved for \$329,492 to provide additional canopy at the south side of the building. This was added to Bid Pack 3 instead of placed with Bid Pack 4 as originally planned. Keeping the steel with one trade contractor provided economy due to ease of coordination and additional mobilization costs. Change Order # 19, 2/1/08, was approved for an increase of \$121,994 to provide changes to the structural steel package due to design modifications in Bid Package 4. Change Order # 26, 5/29/08, was approved for \$43,186 to provide structural columns at the north side of the penthouse. Change Order # 29, 3/31/08, was approved for an increase of \$62,605 to provide re-bar revisions at locations of recessed base plates. Change Order #40, 7/25/08, was approved for an increase of \$118,200 to modify skin attachments and slab edges to remedy the conflict between existing structural steel and skin attachments. The conflict is due to the fast track nature of the bid packages. Modifications to skin attachments and slab edges are necessary to achieve the design intent. Change Order #43, 8/22/08, was approved for \$39,323.71 to increase one (1) penthouse distribution panel from 600A to 800A. This also increases the feeder to this panelboard and feeders to the modular chiller skid and dry cooler. Change Order # 53, 9/24/08, was approved for an increase of \$36,064 for necessary steel required at the window jambs. As a result of the fast track nature of the bid packages the steel package was bought prior to the design of the window details. Change Order # 55, 9/24/08, was approved for an increase of \$60,874 to provide revised openings at penthouse roof. This is a result of final coordination of the penthouse roof structure with the actual RTU/curbs provided. Change Order # 57, 10/14/08, was approved for an increase of \$31,978 to repair the roadway cuts along Washington Avenue where Columbia Gas has installed their new gas line. The work was originally contracted with Columbia Gas but is being moved to the Construction Manager's scope to provide uniform restoration of Washington Avenue asphalt work. Change Order # 58, 10/16/08, was approved for an increase of \$88,473 to provide for Washington Avenue communications manhole expansion due to concealed conditions regarding existing utilities. Change Order # 62, 11/11/08, was approved for an increase of \$29,298 to provide for a change in selected wood finish in public spaces to cherry versus beech in lab, support and research spaces. Change Order # 66, 10/21/08, was approved for an increase of \$27,627 to provide additional coordination between Bid Packs 2, 3 and 4. Change Order #74, 12/11/08, was approved for a decrease of \$30,500 to delete creation of the graphics programming on controls. The University will design it's own graphic screens. Change Order # 97, 3/3/09, was approved for an increase of \$136,955.83 to provide steel columns as required for the elevator structure. The contract documents did not adequately address all of the structural elements needed to accommodate the elevators. Change Order # 103, 3/4/09, was approved for an increase of \$34,234.30 to provide replacement of unsuitable soil at the site for the generator building expansion due to a differing site condition. Change Order # 106, 3/4/09, was approved for an increase of \$65,825.76 to revise tile and carpeting in order to maintain design consistency with the interior furnishings and finishes. This change also provides for a more durable floor in the higher traffic areas. Change Order # 107, 3/3/09, was approved for an increase of \$32,071.07 to provide cherry wood panels in lieu of metal panels at the sides of the media wall. The wood panels will provide a more uniform appearance to the proposed media wall in the atrium. Change Order # 117, 3/9/09, was approved for an increase of \$45,307 to provide for extension of gypsum board, on one or both sides of metal studs, to the deck above. Change Order # 104, 4/3/09, was approved for an increase of \$72,000 to provide alternate steam design as compared to the original bid due to value engineering during the post bid addendum negotiations. Change Order # 126, 5/5/09, was approved for an increase of \$45,307 to resolve conflict between mechanical circuit schedule and distribution panel schedules. Change Order # 127, 5/5/09, was approved for an increase of \$43,873 to provide additional coordination between the ceiling grid and the light fixture required to account for the actual size of the light fixture. Change Order # 134, 6/2/09, was approved for an increase of \$26,967 to provide the required service area above ceiling and to modify the sizing of HVAC and the communication installations allowing for revision in the atrium make-up air. Change Order # 141, 4/16/09, was approved for an increase of \$52,374 to provide modifications to the finish carpentry in the floor 1 and 2 auditoriums. Additionally, this change order provides modesty panels and wireways at each row of strip tables in all auditoriums. Change Order # 159, 4/24/09, was approved for an increase of \$166,314 to extend Construction Manager Services to allow the completion of the Vivarium due to bid package and steel delays. Change Order # 160, 4/30/09, was approved for an increase of \$80,706 to provide for increased cost for installation of the waterline by Kentucky American Water Company. Change Order # 164, 4/20/09, was approved for an increase of \$27,478 to convert storage room 501C to create an egress exit out of the Vivarium in order to meet KY Code requirements. Change Order # 196, 7/9/09, was approved for an increase of \$28,403 to provide a dedicated exhaust duct system and roof fan for basement Vivarium laundry dryers. Change Order # 222, 8/21/09, was approved for an increase of \$143,046 to provide alternate shaft caps at the tops of ten (10) shafts that extended upward through the building to the Penthouse Floor. Additionally, this change order includes structural walking surfaces above the rated assemblies and cement board

decking in lieu of fire retardant plywood. Change Order # 224, 8/21/09, was approved for an increase of \$58,339 for ceiling modifications at Floor 5 to construct beam wraps, to add a storefront smoke separation at the top of the atrium. and to add a large architectural grill with plenums above. Change Order # 228, 8/18/09, was approved for an increase of \$55,804 to provide ceiling modifications to include rulon cubes and the addition of plenum boxes and associated ductwork. Change Order # 231, 9/9/09, was approved for an increase of \$31,007 to relocate tower drives from the top of the tower to inside the CUP building. Change Order # 241, 10/5/09, was approved for an increase of \$36,707 for provision of a Local Area Network (LAN) connection to the Air Handlers in the Penthouse. Change Order # 242, 10/6/09, was approved for a decrease of \$31,759 to delete epoxy flooring in select rooms and replace with sealed concrete, and to delete epoxy wall coatings in select rooms and replace with block filler and paint. High performance coatings are not required in these rooms that are outside of the Vivarium. Change Order # 243, 10/6/09, was approved for a decrease of \$66,566 to delete select floor finishes on floor 5 and at the Penthouse. Because the area is a shell space, there is a potential for incompatibility between the sealed concrete and future floor finishes. The epoxy finish is also being deleted. Change Order # 248, 10/5/09, was approved for \$33,526 to provide a concrete retaining wall and associated foundation at the north side of the building entrance. Changes in the grade at the sidewalk, as well as a modification to the architectural catch basin are also provided for in this change. Change Order # 259, 10/5/09, was approved for \$49,837 to add a moisture emission sealer for the COP vivarium concrete floor. This will remedy high moisture content at the slab and create conditions within the manufacturer's requirements for the epoxy floor installation. Change Order # 282, 11/25/09, was approved for an increase of \$109,342 to reconfigure programming space to accommodate the newly announced Institute for Pharmaceutical Outcomes and Policy (IPOP). Change Order # 307, 11/25/09, was approved for an increase of \$261,125 to include fit-up of the Food Service area on the first floor. The "fit-out" consists of designed mechanical, electrical and plumbing systems/devices/finishes; wall, floor and ceiling finishes and casework/millwork. It does not include food service equipment. Change Order # 329, 1/28/10, was approved for an increase of \$40,430 to provide necessary vent piping to the outside from the three steam relief valves located on the Steris autoclave in the Vivarium. Change Order # 335, 2/23/10, was approved for an increase of \$29,493 to modify the site construction at the surface lot at the southeast corner of the site in order to maintain some parking at the Limestone/Leader corner lot. Change Order # 365, 2/23/10, was approved for an increase of \$27,382 to revise the amphitheatre exterior steps. Although the steps do meet code, it is feared that pedestrians may not be aware that there is a 12" seating step and could fall. Change Order # 378, 3/22/10, was approved for an increase of \$25,917 to modify the over the paddle-type eyewash provided to the drench hose type eyewash at the request of CoP faculty for additional student safety.

# Construct Children's Garden at the Arboretum

2303.00 Project Number:

**Project Description:** 

Scope: \$561,482

The Children's Garden will be a safe 1.85 acres outdoor environment designed to help children 2 to 10 years old learn about plants and the environment. There will be an integrated combination of various "child-scaled" theme gardens, garden-like elements for experiential play, and gardens planted and maintained by children. This initial phase will construct the geographical features including rock escarpments; the stream and pond; and some of the walks and plantings.

Consultant: M2D Design Group

Contract # A091040E #1

Total Amendments to Date:

Describe all amendments:

No amendments this quarter.

Contractor: Meyer Midwest

Contract # 4500036412

Total Change Orders to Date:

Low Bid:

\$407,000

\$479,620 High Bid:

Number of Bids: 2

Describe all change orders greater than \$25,000.00:

No change orders greater than \$25,000 this quarter.

Original Contract Amount:

Cumulative Amendment Amount:

Revised Contract Amount:

\$35,068

\$35,068

\$407,000

Original Contract Amount:

Cumulative Change Order Amount:

Revised Contract Amount:

\$407,000

42% Contract Percent Complete:

Construct Patient Care Facility 2239.0 Project Number: Scope: \$532,300,000

#### Project Description:

This project will construct a new hospital addition to include patient beds, patient diagnostic and treatment areas, support areas, support facilities, medical equipment and infrastructure. The project also includes the replacement of the hospital parking garage and a connecting bridge as well as land acquisition and utility costs. (Note: The project design scope at the present time is \$532 Million as has been discussed with the BOT.)

Consultant:

GBBN, Inc.

Contract#

A061080

Original Contract Amount:

\$30,400, 226 \$6,703,793

Cumulative Amendment Amount:

Total Amendments to Date: Describe all Amendments:

Revised Contract Amount:

\$37,104,019

Amendment # 1, 9/12/06, was approved for \$299,044 for additional design services required to design two additional floors for the parking garage. This amendment also provides for additional survey services associated with the rerouting of the ductbank; the addition of 12 receptor sources to be studied as part of the existing wind study; and the need for additional storm water modeling to review the impact on the new Patient Care Facility during heavy rain storm events. Amendment # 2, 2/13/07, was approved for additional design services associated with increased scope including but not limited to increased renovation of areas in the existing hospital (all phases); development of early bid packages for infrastructure and site utility packages and temporary emergency department access; development of on additional bed wing (all phases); development of partial cafeteria (all phases); design of fitup for two additional floors (shell only - all phases); design of a redundant communications feed (all phases); additional design services associated with security systems; development of design of Phase 1B air handlers (thru DD's) and additional design of costs associated with relocation and installation of above ground and underground fuel tanks (all phases). Also included is additional reimbursable services for added geotechnical rock investigation; additional site survey and added construction testing. Amendment # 3, 5/13/08, an increase of \$868,849 was approved for additional design services to include completion of the PCF Auditorium and construct a mock up in the College of Nursing. It also provides for 3D images and graphic design services for fund raising efforts as well as additional costs associated with preparing early and separate supplemental bid packages. Amendment # 4, 4/14/09 an increase of \$332,700 was approved for expanded design services to include completion of design of the surgery waiting expansion, the expansion of Children's Hospital entry, changes in the auditorium design, refining several infrastructure elements and further development of the gift shop case work. Amendment # 5, 6/9/09, an increase of \$72,151 was approved for implementation of a GIS facility management system to import and manage data associated with buildings and spaces, with the ability to expand for future inclusion of detail equipment, finishes and furniture data information. Amendment 6, 10/13/09, an increase of \$281,162 was approved for additional design services, additional renderings, revision of art work lighting and additional expenses for the donor recognition design as well as additional construction administration services for the added auditorium AV systems. No amendments this quarter.

Contractor:

Turner Construction Co.

Note: This is a 'CM-At-Risk' contract. The amount will be increased as sub-contracts are bid and added. \*Tumer's contract

was awarded by RFP process.

Total Change Orders to Date:

562

Original Contract Amount: Cumulative Change Order Amount: \$319,166,586 \$14,537,328

Low Bid: High Bid:

Revised Contract Amount:

\$333,703,914

Number of Bids:

Contract % complete:

73%

# Describe all change orders greater than \$25,000.00:

Change Order # 1, 6/4/07, was approved for an increase of \$91,344 to facilitate the procurement strategy and meet the project timeline. A portion of select infrastructure was transferred from Bid Pack 4A to the earlier Bid Pack 3B. Change Order #2, 5/31/07, was approved for an increase of \$65,296 to relocate the existing direct buried steam lines and pressurized drain found to be in conflict with the new tunnel. Since the lines must be moved they will be relocated into the new tunnel to make the lines accessible for maintenance. Change Order # 3, 7/11/07, was approved for an increase of \$58,928 to relocate an existing sanitary sewer manhole and associated lines to sanitary sewer manhole and associated lines to resolve underground utility conflicts. Change Order # 5, 9/6/07, was approved for an increase of \$49,439 to replace and relocate deteriorated and inaccessible 2 1/2" and 1 1/2" underground direct buried steam lines that were revealed upon excavation.

Change Order # 9, 10/3/07, was approved for \$2,840,457 to convert the TC-01 Sitework (RAM Engineering) Rock Allowance to an unspecified status. Ram will be responsible to remove all the rock associated with their scope of work for BP 3B and as defined by the Geotechnical Report. This is due to misinterpretation of site conditions. Actual rock removal quantities are greater than estimated quantities in the contract documents. Change Order # 10, 10/1/07, was approved for an increase of \$55,314 to convert the portion of the six existing sanitary and storm sewer lines that pass through the main tunnel to ductile iron to ensure that these lines don't rupture. The increase also provided for re-routing the existing water lines to avoid conflict with the new tunnel. Change Order # 11, 10/4/07, was approved for an increase of \$47,780 to replace and re-route the existing domestic water line as well as reroute the existing water main. Change Order # 13, 10/9/07, was approved for \$40,755 to relocate approximately 150' storm line and associated manhole due to conflict with the new Cooling Plant # 3 utility tunnel. Change Order # 21, 11/21/07, was approved for an increase of \$53,383 to convert the 7000KVA transformer from aluminum to copper windings, add an air switch to the transformer and add a medium voltage outdoor breaker with remote monitoring and control capability to all five electric substations. These changes were made to increase the efficiency of the system and to meet specifications of upcoming substation upgrades. Change Order # 23, 12/10/07, was approved for a decrease of \$48,383 to alter the installation of the cold water and the cold water return piping system to avoid conflict with sensitive boiler equipment. Change Order # 27, 12/5/07, was approved for an increase of \$144,844 to provide saw cutting

of the pedestrian walkway and walkway roofing instead of traditional hammering. The saw cutting method will reduce noise and vibration impacts to the adjacent Critical Care Facility. Change Order # 32, 1/18/08, was approved for an increase of \$33,072 to enlarge the existing emergency generator pads to support installation of new diesel generators due to changes in EPA regulations. Change Order # 34, 2/1/08, was approved for \$388,426 to provide additional construction manager's staff and general conditions due to an additional two floors being added to the Patient Care Facility. Change Order # 42, 3/20/08, was approved for an increase of \$128,502 to extend the limits of the blasting and excavation of rock in Bid Pack # 4 to accommodate the installation of sanitary line. The rock removal was originally intended for Bid Pack # 5, but will provide cost savings if moved to Bid Pack # 4. Early rock removal will also eliminate blasting after installation of foundation in Bid Pack # 4. Change Order # 43, 3/31/08, was approved for an increase of \$229,016 to increase the rock allowance due to greater rock quantities than anticipated. Change Order # 58, 4/23/08, a decrease of \$60,522 was approved to utilize the existing ductbank for the new conductors. The existing ductbank was lower than expected and did not interfere with the new storm tunnel. Change Order # 60, 4/23/08, was approved for \$34,827 to increase the ductbank from six to twelve conduits to match the size of the existing ductbank. Change Order # 66, 5/6/08, was approved for \$42,700 to offset new 36" chilled water lines. A 2" foam glass board insulation was put in place between the chilled water and high pressure steam line due to unexpected elevation. Change Order # 68, 6/4/08, was approved for \$39,794 to perform rock removal while classes are in session using a rock trenching machine so as not to disturb teachers, students and staff in the Ag. Science Bldg. Change Order #71, 5/7/08, was approved for \$47,571 to install four new handicap ramps and thermoplastic street marking to comply with ADA standards. Change Order #73, 6/6/08, was approved for \$37,090 to remove and replace water meter vault that is in the CP #3 tunnel excavation footprint due to location of hidden chilled water lines. Change Order # 85, 6/4/08, was approved for \$28,092 to revise alignment and depth of electrical ductbank that runs from Scott Street toward Electric Substation # 2, and revise the location of it's associated manhole. This will insure proper cover for manhole and ductbank when future changes are made in this area. Change Order # 90, 6/9/08, was approved for \$42,604 to install new ductbank at a depth greater than planned due to concealed high voltage ductbank. Change Order # 98, 7/3/08, was approved for an increase of \$62,263 to modify the tower crane foundation. This was required due to unsatisfactory rock with mud seams and factures found in the west tower crane location. Change Order # 102, 7/14/08, was approved for an increase of \$50,183 to increase the size of both main electrical duct banks. Change Order # 110, 7/30/08, was approved for an increase of \$25,219 to remove an additional 240 linear feet of bad soil on Scott Street that is unsuitable for the new duct bank. Excavated material will be replaced with flowable fill concrete. Change Order # 121, 8/25/08, was approved for an increase of \$32,912 to provide additional excavation for fuel tanks to meet required depth. Change Order # 127, 8/22/08, was approved for an increase of \$43,493 to perform additional excavation at area "A" shear wall/grade beam due to unsuitable rock. Excavated material will be replaced with 4000 psi concrete. Change Order # 128, 8/22/08, was approved for an increase of \$30,655 to perform additional excavation at area "B" shear wall/grade beam due to unsuitable bearing. Excavated material will be replaced with 4000 psi concrete. Change Order # 130, 9/9/08, was approved for an increase of \$27,914 to provide control of the control valves with a selector switch and indicator lights. The switch will allow the operator to select which tank to pull oil from. Change Order # 138, 9/22/08, was approved for \$40,322 to provide a larger drilling rig needed to sleeve and bore larger holes due to the composition of the subgrade. Change Order # 139, 9/22/08, was approved for \$27,303 to sawcut the CCC tunnel footers and slab as required for the 16" sanitary pipe to pass thru the tunnel. The pipe will be sleeved to prevent shearing and concrete and resteel placed around the sleeve. This is due to the existing sanitary pipe being lower than expected. Change Order # 143, 9/29/08, was approved for \$33,766 to excavate 6' to 7' below design elevation on the 12.3 line from Column Line D.1 to the southeast corner. Excavated material will be replaced with 4000 psi concrete and added resteel. This is due to found rock. Change Order # 159, 11/3/08, was approved for an increase of \$38,301 to offset the chilled water piping to avoid conflict with the communications tie-in to the cable tray. Change Order # 164, 11/26/08, was approved for an increase of \$34,881 to install a high pressure steam valve and a pump discharge valve in the main on the south side of the Gill Heart tap. This will reduce the outage to the Gill Heart building and the Critical Care to less than one day and will eliminate future outages. Change Order # 165, 11/26/08, was approved for an increase of \$73,079 to provide for additional removal of rock and soil and to provide additional concrete for the drilled piers. Found subsurface conditions required deeper piers than were required by contract. Change Order # 173, 1/20/09 was approved for and increase of \$39,957 to provide for additional cost required to bore under existing gas line for the new 24" sanitary main. The original gas line was not relocated by Columbia Gas as originally planned due to access issues. Change Order # 177, 3/2/09, was approved for an increase of \$51,550 to remove existing unsuitable soil where fuel tanks were removed. Backfill and compact will be added to grade. No change orders over \$25,000 this quarter.

BP # 5 Change Orders

Change Order # 2 BP # 5, 6/30/08, was approved for \$36,359 to provide and install 48" diameter sump pit and piping, for the existing subsurface groundwater. This addressed the field condition of ground water that has been observed in open excavations. Change Order # 4 BP # 5, 7/23/08, was approved for \$26,723 to provide two mock-ups of the architectural precast panels. Change Order # 7 BP # 5, 9/15/08, was approved for an increase of \$39,922 to provide concrete shear walls at Column Line 12/E-F and Column Line 12/L-M, ground level to underside of third level. Change Order # 8 BP # 5, 9/30/08, was approved for an increase of \$26,540 to add one (1) gate valve and three (3) triple duty offset butterfly valves to high pressure steam lines. The original design did not allow for a partial cut-off of steam supply to the building. Change Order # 20, BP # 5, 12/2/08, was approved for an increase of \$38,438 to provide concrete shear walls in accordance with the structural documents. The trade contractors scope descriptions failed to assign this task. Change Order # 24, BP # 5 2/6/09 was approved for an increase of \$27,389 to revise the medium voltage cable spec to meet published UK standard. Change Order # 26, BP # 5, 1/20/09 was approved for an increase of \$25,547 to provide additional doors to the freight elevators allowing access to these elevators from the exterior. Change Order # 27, BP # 5 1/20/09 was approved for an increase of \$29,111 to install 60 linear feet of 18" reinforced concrete pipe from the existing storm manhole to the new 12' diameter manhole. Change Order # 32, BP # 5, 2/10/09 was approved for an increase of \$75,511 to provide miscellaneous electrical revisions to Bid Pack 5 electrical systems to include new distribution panel and critical bus duct plugs.

Change Order # 45 BP # 5, 4/30/09, was approved for an increase of \$26,288 to add a medium voltage outdoor breaker with remote monitoring and control capability to all five substation breakers. This will increase the efficiency of the system. Change Order # 46 BP # 5, 4/30/09, was approved for an increase of \$25,931 to provide and install twelve (12) humidifier condensate pumps to provide for disposal of the condensate from the air handlers. Change Order # 47 BP # 5, 5/12/09, was approved for an increase of \$41,529 to add a low pressure steam pumping system to the basement level of the facility. These pumps are required for proper function of the system.

Change Order # 51 BP # 5, 5/29/09, was approved for an increase of \$228,937 to provide a compatible mating of the curtain wall and precast systems. This silicone tape allows for a water tight skin on the structure. Change Order # 52 BP # 5, 5/15/09, was approved for an increase of \$30,633 to re-route existing lines allowing for placing of structural column to support east connector. Change Order # 57 BP # 5, 6/1/09, was approved for an increase of \$29,521 to fund overtime payment for Baker Construction. This additional cost will be used to make up time lost due to weather delays in December 2008 and January 2009. These days will need to be made up to open the Emergency Department on the currently scheduled date. Change Order # 62 BP # 5, was approved for an increase of \$36,687 to fund overtime payment for Baker Concrete over four weeks in May to maintain schedule. Overtime work was required to maintain the concrete pour schedule due to inclement weather. Change Order # 65 BP # 5, was approved for an increase of \$47,723 to install backfill against the southeast and southwest corners of the Patient Care Facility. Change Order # 66 BP # 5, 6/26/09, was approved for an increase of \$26,436 to re-route existing sanitary sewer to allow for installation of bridge pier. Change Order # 63 BP # 5, 8/12/09, was approved for a increase of \$35,236 to allow for payment of shift premium to accelerate pan removal under the 4th and 5th decks. This will accelerate the work schedule. Change Order # 69 BP # 5, 7/2/09, was approved for an increase of \$27,497 to provide sidewalk stabilization during excavation for a pilaster. This change order also allows for removal and reinstallation of the distilled water line that conflicts with the new foundation. Change Order # 84 BP # 5, 9/2/09, was approved for an increase of \$43,756 to allow for a needed additional 2 feet of height to the Penthouse elevator. Change Order # 85 BP # 5, 9/7/09, was approved for an increase of \$67,697 to replace existing 18" ADS plastic storm pipe under the lobby area with 18" ductile iron pipe to meet code. Change Order # 86 BP # 5, 9/15/09, was approved for an increase of \$50,436 to fund the purchase and installation of fifty six control dampers required for proper functioning of the Air Handling Units that were purchased directly by UK. Change Order # 88, BP # 5, 10/2/09, was approved for an increase of \$69,965 to provide for payment of onsite personnel at the new Kentucky Labor Cabinet prevailing wage Change Order # 96, BP # 5, 10/16/09, was approved for a decrease of \$25,727 to delete flex connections note required for installation of the air handling units. Change Order # 99, BP # 5, 10/27/09, was approved for an increase of \$231,535 to furnish and install additional accessories, fitting, valves and controls for the heat exchangers. Change Order # 117, BP # 5, 12/9/09, was approved for an increase of \$27,631 to fund overtime work for the steel contractor in order to complete the necessary steel erection for the topping out ceremony. Change Order # 126, BP # 5, 1/11/10, was approved for an increase of \$109,869 to extend sleeves in all IDF/EIDF rooms in order to allow access to the sleeves from the floor below without infringing on the cable tray. Change Order # 132, BP # 5, 2/1/10, was approved for an increase of \$31,104 to add one 112 x 34 fire damper and modify two 112 x 34 fire smoke dampers in the outside air dampers on the fourth floor. The actuators for these dampers need to be internal due to space restrictions and access requirement. Change Order # 133, BP # 5, 2/10/10, was approved for an increase of \$26,580 to relocate the 3" chilled water supply take-off to the supply main on the discharge side of the chilled water pumps, so that it is located upstream of flow meter and will properly operate. Change Order # 139, BP # 5, 2/24/10, was approved for an increase of \$71,292 to provide safety drain traps to prevent condensate from backing up in the humidification steam generator tubes during a low pressure condition. Change Order # 142, BP # 5, 2/24/10, was approved for an increase of \$39,069 to replace pipe and steam traps on the clean steam generators that don't meet specifications. This cost will be deducted from the contract of the steam generator vendor. Change Order # 145, BP # 5, 3/1/10, was approved for an increase of \$46,192 to provide top of shaft/elevator control room sleeves and machine beams to accommodate future elevator equipment. The work will be done at this time to allow for significant modifications to the building structure which would be difficult and disruptive when the hospital is operational. Change Order # 147, 3/2/10, was approved for an increase of \$49,407 to revise various duct sizes and pipe routing at several locations on the 3rd and 4th floor mechanical rooms. Change Order # 148, BP # 5, 3/4/10, was approved for an increase of \$138,921 to provide and install 40 foot mast to accommodate 7 antennas. This includes all structural support, warning lights, and fire stopping required for proper installation of the 40 foot mast. Change Order # 149, BP # 5, 3/4/10, was approved for an increase of \$66,388 to provide lift-net ethernet based central monitoring system, software, and supporting infrastructure for monitoring of all new and future elevators in the PCF. Change Order # 150, BP # 5, 3/8/10, was approved for an increase of \$67,125 to relocate high pressure steam header in basement above chilled water pipes to eliminate trapped piping in order to prevent an unwanted trap. Change Order # 155, BP # 5, 3/17/10, was approved for an increase of \$56,402 to revise south supply and return 24" chilled water feeds into basement as required. This will reverse the supply and return to match the connections to the mains in the tunnel. Change Order # 156, BP # 5, 3/19/10, was approved for an increase of \$37,489 to furnish and install access hatches on the 15th and 16th floors for future service and installation of equipment in elevator machine rooms at the top of each tower.

#### BP # 6 Change Orders

Change Order # 1, BP # 6, 1/23/09 was approved for an increase of \$74,499 to increase booster pump capacity. Change Order # 2, BP # 6, 3/3/09 was approved for an increase of \$38,126 to allow for the installation of piping for dialysis systems on the 5th floor. Change Order # 3, BP # 6, 3/24/09 was approved for an increase of \$101,006 to utilize Densarmor exterior sheeting for the electric and data closets. This will allow for the installation of the materials prior to the roofing of the structure. This will enhance the schedule and allow the project to remain on track for the substantial completion of the emergency department. Change Order # 11 BP # 6, 5/21/09, was approved for an increase of \$320,823 to redesign to meet the State's interpretation of the KY plumbing code. Venting was added as well as the resizing of piping. Change Order # 12 BP # 6, 5/29/09, was approved for a decrease of \$50,620 to delete all Galley Equipment from the 8th Floor due to the decision to not fit-out the 8th floor in phase 1A. Change Order # 13 BP # 6, 6/1/09, was approved for an increase of \$33,352 to relocate the required power for the elevator machine room. Change Order # 19 BP # 6, 7/2/09, was approved for an increase of \$69,287 to fund the installation of ground bars and associated ground wiring in 110 locations data and electrical closets. Change Order # 37 BP # 6, 8/18/09, was approved for an increase of \$367,335 to install cast-in-place concrete anchors in the 6th floor to support the 5th floor MEP items. This work will drastically reduce the noise associated with the fit-out of the 5th floor which is scheduled to occur after the 6th floor is already occupied.

Construct Patient Care Facility Change Orders greater than \$25,000 Cont....

Change Order # 46 BP # 6, 8/28/09, was approved for an increase of \$28,293 to upgrade power, add a smart panel, and tie to the existing Tridium system for controls of exterior fountain system and site lighting. This allows for reduced maintenance costs and remote management of the exterior system. Change Order # 47 BP # 6, 8/28/09, was approved for an increase of \$127,027 to provide one Edgestar door controller per door. Change Order # 53 BP # 6, 9/21/09, was approved for an increase of \$29,323 to replace Luminaire type F55 with type F56. Change Order # 55 BP # 6, 9/21/09, was approved for an increase of \$191,975 to provide fit out of additional office spaces in the basement of the Patient Care Facility. Change Order # 56 BP # 6, 9/22/09, was approved for a decrease of \$80,087 to delete fiber and coax to work stations throughout the podium. Upon review of the function of the these work stations fiber and coax was deemed unnecessary. Change Order # 57 BP # 6, 9/29/09, was approved for an increase of \$626,061 to amend Turner's contract to allow for payment of prevailing wage rate determined by the Kentucky Labor Cabinet. The rates included in the original bid documents were increased by the State prior to contract signing. Change Order # 69, BP # 6, 10/16/09, was approved for an increase of \$101,492 to provide coax cable to service televisions in all patient rooms. Local cable services require coax instead of CAT6 cable. Change Order # 72, BP # 6, 10/16/09, was approved for an increase of \$351,828 to furnish and install 3,000 gallon concrete grease trap. This is required for the future fit-out of the kitchen and cafeteria. Installation at this time results in cost savings and lessens future impact on hospital operations. Change Order # 82, BP # 6, 10/26/09, was approved for an increase of \$38,299 to revise electric and data outlets due to staff changes made to increase the efficiency of the space. Additional cabling for the Hill-Rom system was also required. Change Order # 100, BP # 6, 12/14/09, was approved for an increase of \$66,196 to upgrade grounding of medium voltage electrical systems for both normal and emergency power from 7 switches to manholes E412 and E214E to provide a safe and reliable high voltage system. Change Order # 103, BP # 6, 11/24/09, was approved for an increase of \$36,720 to revise the route of one set of oxygen lines and to add offset to oxygen lines at all steam line expansion joints in the tunnel. This will create a more reliable androbust oxygen system. Change Order # 104, BP # 6, 11/24/09, was approved for an increase of \$58,594 to add additional unit heater and cabinet unit header DDC controls. Change Order # 105, BP # 6, 11/24/09, was approved for an increase of \$25,760 to provide the additional 120 Volt circuits needed for the operation of the smoke dampers. Change Order # 109, BP # 6, 11/23/09, was approved for an increase of \$52,082 to provide patient lift system with a rail in select Acute and Acute Isolation restrooms on the 6th and 7th floors. This will greatly improve patient care and reduce staff injuries. Change Order # 110, BP # 6, 11/24/09, was approved for an increase of \$44,339 to purchase dialysis boxes required for the 6th and 7th floor ICU patient rooms. Change Order # 111, BP # 6, 11/25/09, was approved for an increase of \$95,389 to provide raceways, electrical wiring and teledata wiring for wireless telemetry system. Change Order # 112, BP # 6, 11/25/09, was approved for a decrease of \$139,555 to reduce the number of drops and raceways for the wireless telemetry grid. ChangeOrder # 113, BP # 6, 11/24/09, was approved for an increase of \$38,833 to revise the main duct mains in basement areas A and C to allow for proper installation of mechanical systems. Change Order # 114, BP # 6, 12/9/09, was approved for an increase of \$27,464 to reroute existing electrical feeders that are located overhead in the hospital loading dock to allow for installation of new utilities. Change Order # 115, BP # 6, 12/9/09, was approved for an increase of \$53,632 to change power from 80/20 emergency to a normal 50/50 configuration in all patient rooms on the 6th and 7th floors for more dependability. Change Order # 117, BP # 6, 12/9/09, was approved for a decrease of \$64,113 to relocate data and power outlets, and make changes to light switching on the 6th and 7th floors. Change Order # 122, BP # 6, 12/15/09, was approved for an increase of \$207,802 to provide one additional data outlet and power receptacle in the wall at the head of the bed in each of the 128 patient rooms. Change Order # 125, BP # 6, 12/15/09, was approved for an increase of \$41,512 to provide conduit for the door access intercom system for the intercom device to the cable tray and to Intercom Master Panels throughout the project. Change Order # 134, BP # 6, 12/15/09, was approved for an increase of \$48,070 to upgrade and revise the HVAC, electrical services, and IT infrastructure to support additional equipment in the security/dispatch room. Change Order # 143, BP # 6, 12/15/09, was approved for an increase of \$36,860 to provide additional ventilation in the 4th floor CCC Mechanical tower to accommodate Swisslog equipment. Change Order # 144, BP # 6, 1/4/10, was approved for an increase of \$\$49,623 to provide temporary weather protection to contain winter heat in the podium. Change Order # 146, BP # 6, 1/4/10, was approved for an increase of \$40,504 to make adjustments to the ductwork to allow for installation of systems while maintaining ceiling height as required for proper utilization of the spaces. Change Order # 157, BP # 6, 1/14/10, was approved for an increase of \$123,223 to furnish and install one medical gas master alarm panel in Room H64 to allow for a UL rated system. Change Order # 161, BP # 6, 2/1/10, was approved for an increase of \$34,574 to revise the light fixture selection and lighting fixture layout for the up lights highlighting the eyebrow on the 5th and 12th floors of the structure. Change Order # 162, BP # 6, 2/1/10, was approved for an increase of \$82,634 to modify VESDA smoke detection system for lobby smoke exhaust. Change Order # 167, BP # 6, 2/4/10, was approved for an increase of \$229,299 to add data and power outlets associated with using the upper cabinet space in patient room wardrobes for iT equipment mounting space. Change Order # 168, BP # 6, 2/4/10, was approved for an increase of \$108,706 to provide additional power necessary for the final pneumatic tube system design. Change Order # 174, BP # 6, 2/16/10, was approved for an increase of \$136,321 to revise 6th floor ductwork and cable tray to include additional conduit runs in vicinity of the mechanical chases to allow for proper access to mechanical and electrical equipment. Change Order # 175, BP # 6, 2/16/10, was approved for an increase of \$115,641 to revise 7th floor ductwork and cable tray to include additional conduit runs in vicinity of the mechanical chases to allow for proper access to mechanical and electrical equipment. Change Order # 176, BP # 6, 2/23/10, was approved for an increase of \$154,586 to add power infrastructure to support additional UPS devices in all 32 EIDF rooms. Change Order # 177, BP # 6, 2/23/10, was approved for an increase of \$37,436 to remove and replace floor tile in the ED, and install colors per the revised color schedule. Change Order # 181, BP # 6, 2/23/10, was approved for an increase of \$40,687 to re-route glycol and hot water piping on level 14 due to unforeseen space constraints. Change Order # 183, BP # 6, 2/24/10, was approved for an increase of \$50,973 to revise the location of 8 patient tracking monitors and add 7 locations for overhead tracking monitors in the ED. Change Order # 188, BP # 6, 3/4/10, was approved for an increase of \$102,822 to add piping and electrical connections for dialysis equipment in 16 step down rooms to increase the flexibility of the patient rooms. Change Order # 192, BP # 6, 3/4/10, was approved for an increase of \$88,311 to revise domestic water piping to the steam pressure reducing stations for the four domestic water heat exchangers. Change Order # 194, BP # 6, 3/8/10, was approved for an increase of \$31,061 to provide 5" copper pipe in lieu of steel for heating hot water piping.

Construct Patient Care Facility Change Orders greater than \$25,000 Cont....

Change Order # 201, BP # 6, 3/12/10, was approved for an increase of \$108,500 to upgrade dialysis boxes and add electrical connections for dialysis equipment on the 6th and 7th floors. Change Order # 205, BP # 6, 3/17/10, was approved for a decrease of \$26,766 to remove sprinklers from north and west canopies and add sprinklers to south drive-through canopy. This assures greater coverage where vehicular traffic is located and reduces the chance of freezing in areas that are not required by code. Change Order # 207, BP # 6, 3/17/10, was approved for an increase of \$136,040 to modify the temporary basement offices to address code compliance. Change Order # 218, BP # 6, 3/25/10, was approved for an increase of \$52,662 to revise 3rd and 4th floor ductwork and piping to accommodate installation of all trades. Change Order # 221, BP # 6, 3/25/10, was approved for an increase of \$40,734 to provide plumbing and electrical services to five dialysis boxes in the ED. Change Order # 226, BP # 6, 3/29/10, was approved for an increase of \$56,337 to revise power, lighting, and specialty lighting throughout the lobby ground level and first level to accommodate selections of the art program.

### PCF - Hospital - CUP Expansion

Scope:

Project Number: 2239.32

**Project Description:** 

\$13,150,000

This is a portion of the larger Patient Care Facility Project (2239.0). The project includes an 18,000 square foot addition to the existing Central Utilities Plant on Press Avenue. The expansion will include provisions for two new 125,000 lb./hr boilers and additional chillers. The structure will include an enlarged cold well and basement in the cooling section. The boilers and supporting equipment will be installed under this project. Chiller purchases are not contemplated at this time.

Consultant: GBBN Inc.

See project 2239.0

Contract #

Total Amendments to Date:

Describe all amendments:

Original Contract Amount:

Cumulative Amendment Amount:

Revised Contract Amount:

Contractor: Messer Construction Co.

Contract # 4500008954

Total Change Orders to Date: 46

Low Bid:

\$9,474,000

\$10,400,000 High Bid:

Original Contract Amount:

\$9,474,000 \$783,937

Cumulative Change Order Amount:

\$10,257,937

Revised Contract Amount:

Contract Percent Complete:

99%

2 Number of Bids:

Describe all change orders greater than \$25,000.00:

Change Order # 4, 12/10/07, was approved for \$37,518 to provide required additional rock and soil drilling. Change Order # 7, 2/21/08, was approved for an increase of \$53,981 to provide temporary building heat until the new dearator and surge tank are installed. Change Order # 14, 7/23/08, was approved for an increase of \$28,219 to change the boiler water piping from ductile iron to schedule 80 black steel pipe. Change Order # 17, 7/10/08, was approved for an increase of \$26,270 to install new platform in the northwest corner of the CUP addition to provide greater accessibility and safer access to valves and equipment. Change Order # 21, 7/23/08, was approved for an increase of \$45,585 to provide for additional costs resulting from the late delivery of the boilers provided by the University and resulting complications which impacted items on the critical path. Liquidated damages collected from the boiler manufacturer will be applied to the compensation associated with this change order. Change Order # 30, 8/11/08, was approved for an increase of \$28,249 to relocate the new condensate pump from the BBSRB tunnel to the College of Pharmacy tunnel. Provide valving to allow the pump to pump in either direction. This change allows for more versatile operation of the campus steam system. Change Order # 34, 10/30/08, was approved for an increase of \$52,257 to provide and install pipe insulation for the new boiler feed water piping and the boiler blow-down piping. Change Order # 35, 11/3/08, was approved for an increase of \$34,693 to provide and install two wye strainers and to install and connect the stack gas analyzers and Horiba panels. Because the boilers were a direct purchase by the University this scope of work was not originally included in the contract documents. Change Order # 37, 2/2/09 was approved for \$26,661 to revise the Civil Site plan to provide greater security and improve the utilization of the grounds north of the new construction. Change Order # 44, 2/24/10, was approved for an increase of \$25,745 to perform various items of work related to the boiler installation not included in the contractor's original contract documents. Change Order # 45, 2/24/10, was approved for an increase of \$54,881 to install a new VFD for each of eight ventilation fans. The high efficiency boiler operation required increased building temperature control to manage the combustion process of the burners of the two boilers.

Digital Village Building 2

Project Number: 2297.10

Project Description:

\$18,669,725 Scope:

This project consists of the design and construction of approximately 43,000 gross square feet of research space for the Center for Visualization and Virtual Environments as well as selected research activities in the Department of Computer Science and the Department of Electrical and Computer Engineering. The facility must be sufficiently flexible in design so that it can be easily adapted to support research into emerging areas of interest. The structure should provide flexible office space and support facilities. This project will pursue LEED Certification.

Consultant: JRA Architects

Contract # A091110

Original Contract Amount:

\$1:409,934

Total Amendments to Date:

Cumulative Amendment Amount:

\$37,800

Describe all amendments:

Revised Contract Amount:

\$1,447,734

Amendment 1, 8/11/09, an increase of \$37,800 was approved to provide for the research and design of a photovoltaic system. No amendments this quarter.

Contractor: Congleton-Hacker \* Note: This is a 'CM-At-Risk" contract. The amount will be increased as subcontracts are bid and added. \*Congleton-Hacker's contract was awarded by RFP process. \*25 Trade subcontracts have been added to date

Original Contract Amount:

\$13,761,651

Contract # 4500031914 Total Change Orders to Date:

20

Cumulative Change Order Amount:

\$95,940

Low Bid:

Revised Contract Amount:

\$13,857,591

High Bid:

Contract Percent Complete:

28%

Number of Bids:

Describe all change orders greater than \$25,000.00:

Change Order # 14, 2/4/10, was approved for an increase of \$37,930 to install new cabling between the switch in the new manhole to the existing one to avoid splices in the existing cabling and to minimize the shutdown and outage time required for the electrical service to the Hardymon Building. Change Order # 15, 2/4/10, was approved for a decrease of \$32,042 to adjust the allowance found in the photo-voltaic panel installation bid package due to bid savings. Change Order # 19, 3/12/10, was approved for an increase of \$46,491 to revise the communications duct bank to the south and to modify the slope of storm line D. This will facilitate future duct bank tie-in without shutting down access to the parking lots north of College View.

# **Expand Ophthalmology Clinic - Hospital**

Project Number: 2301.00

**Project Description:** 

Scope: \$1,650,000

This project consists of renovating approximately 12,500 square feet of space on the third floor of the Kentucky Clinic, some of which is currently occupied by Neurosurgery, in order to expand the existing Ophthalmology Clinic (also located on the third floor of the Kentucky Clinic) into the vacated space. It also includes refurbishing the existing Ophthalmology Clinic space. This project will necessitate phased construction activities to include expansion into the additional space as well as a full refurbishment of the existing Ophthalmology Clinic.

Consultant: JRA Architects

Contract # A081140

Original Contract Amount:

\$249,078

Total Amendments to Date:

Cumulative Amendment Amount:

-

Describe all amendments:

Revised Contract Amount:

\$249,078

No amendments this quarter.

Contractor: No construction contract awarded to date.

Contract #

Total Change Orders to Date:

Low Bid:

High Bid:

Number of Bids:

Describe all change orders greater than \$25,000.00:

Original Contract Amount: Cumulative Change Order Amount: Revised Contract Amount: Contract Percent Complete:

# Expand & Upgrade Livestock Disease Diagnostic Lab

Project Number: 2234.00

Project Description:

Scope:

\$27,165,200

New space is needed for more than one veterinary pathologist to perform animal postmortem examinations in addition to renovation of current necropsy space. New space is also needed to add molecular biology/special procedures capabilities to the laboratory. New technology in the form of an alkaline hydrolysis digester is needed to replace an aging incinerator. The Livestock Disease Diagnostic Lab is an office and laboratory building with net assignable space of 3,860 square feet for offices and 28,100 square feet of laboratories and support space. It is proposed to add 6,300 and 1,200 square feet (net) of new laboratory and office space, respectively. An existing necropsy laboratory and support space will be renovated (2,000 square feet net).

Consultant: CMW, Inc.

Contract # A061100

Total Amendments to Date:

Original Contract Amount:

\$648,000

Cumulative Amendment Amount:

\$1,846,800

Revised Contract Amount:

\$2,494,800

Describe all amendments: Amendment #1, 12/12/06, was approved for \$90,000 to provide additional design services to accommodate a phased implementation consistent with the legislative budget action. Includes the additional design to study the new tissue digester effluent impact of the LFUCG Town Branch Wastewater Treatment Plant. Amendment # 2, 12/10/07, an increase of \$131,000 was approved for additional schematic design services to include multiple methods of animal carcass disposal including rendering, incineration and digestion. Amendment # 3,7/16/08, an increase of \$1,625,800 to provide all of the architectural and engineering services required to complete Schematic Design, Design Development, Construction Documents and Construction Administration phases for an estimated \$20,000,000 worth of construction at the existing UK Livestock Disease Diagnostic Center Facility. No amendments this quarter.

Contractor: Congleton-Hacker Company (Construction Manager-At-Risk)

Note: This is a 'CM-At-Risk' contract. The amount will be increased as subcontracts are bid and added.

\*Congleton-Hacker's contract was awarded by RFP process.

Contract # 4500026910

Original Contract Amount:

\$18,146,148

Total Change Orders to Date:

Cumulative Change Order Amount:

\$481,885

Low Bid:

67

Revised Contract Amount:

High Bid:

\$18,628,033

Contract Percent Complete:

68%

Number of Bids:

# Describe all change orders greater than \$25,000.00:

Change Order # 6, 8/21/09, was approved for an increase of \$45,000 to provide dense graded aggregate (DGA) fill under the building's concrete slabs. The DGA was incorrectly detailed and is required for correct construction of the building concrete slabs. Change Order # 19, 12/14/09, was approved for an increase of \$44,983 to select a better match to existing bricks than the proposed brick. The General Shale brick that was bid was deemed unacceptable in the project mock-up wall. Change Order # 35, 12/21/09, was approved for an increase of \$64,388 to provide temporary paving around Necropsy. This portion of the paving was purposefully deferred during bidding due to market fluctuation. Change Order # 49, 3/1/10, was approved for an increase of \$28,360 to add matching freestanding wall on top of retaining wall to create a min. 42" high wall. This prevents any chance of falling and improves site grading requirements adjoining the wall. Change Order # 56, 3/17/10, was approved for an increase of \$35,910 to provide for rental of a trailer necessary for the temporary relocation of UK College of Ag. pathologists. The pathologists must be temporarily relocated to allow for existing facility renovation work to proceed.

Renovate 4-H Camps

Project Number: 2310.00

**Project Description:** 

Scope: \$2,000,000

The College of Agriculture Cooperative Extension Service and 4-H Youth Development operate 4-H Camping Centers in Nicholas, Pulaski, Laurel and Hopkins counties. This project will renovate existing cabins by upgrading utility infrastructure, improving finishes, and installing energy effidient heating and air conditioning systems. The project also will include replacement of existing bunks and mattresses in all the camps. Additionally, a new cabin will be built that will house 28 campers and 4-H staff.

Consultant: Murphy & Graves

Contract # A101000BB

Original Contract Amount: Cumulative Amendment Amount: \$50,000

Total Amendments to Date:

Describe all amendments:

Revised Contract Amount:

\$50,000

No amendments this quarter.

Contractor: No construction contract awarded to date.

Contract #

Total Change Orders to Date:

Original Contract Amount: Cumulative Change Order Amount:

Low Bid:

Revised Contract Amount: Contract Percent Complete:

High Bid:

Number of Bids: Describe all change orders greater than \$25,000.00:

# **Renovate Central Computing Facility**

Project Number: 2304.00

**Project Description:** 

\$845,000 Scope:

McVey Hall is the current facility housing the central computing operations. It is imperative that some facility issues be addressed for UK Information Technology (UKIT) to continue to provide reliable service for mission critical IT systems. The power and air-conditioning problems in McVey Hall require immediate short-term investments to ensure sufficient cooling and power distribution for the next few years. This project will include reconfiguration and upgrading of existing cooling units, replacing of UPS units that are expiring and installation of back-up electricity and cooling equipment.

Consultant: CMTA Engineers

Contract # A091020P #1

Original Contract Amount:

\$48,500

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$48,500

No amendments this quarter.

Contractor: TP Mechanical

Contract # 4500036320

Original Contract Amount:

\$276,300

Total Change Orders to Date:

Cumulative Change Order Amount:

\$29,528

Low Bid: \$276,300 Revised Contract Amount:

\$305,828

High Bid: \$476,399

Contract Percent Complete:

73%

Number of Bids: 4

Describe all change orders greater than \$25,000.00:

# Renovate Koinonia House (aka Schmidt Vocal Art Center)

Project Number: 2295.00

**Project Description:** 

Scope: \$1,127,000

The project continues the renovation of the Vocal Arts Center, which houses the UK Opera Program. The facility was acquired by the University in 1991. At that time, some of the first floor was renovated, but the second floor of the building remained shelled space. The current project includes upgrades to the electrical and mechanical systems, installation of a sprinkler system, a new stairwell, and an elevator. The project also begins fitting out the second floor to address needs created by the recent growth of the Opera Program. The second floor will eventually include rehearsal rooms, teaching studios, classrooms, practice rooms, a dance studio, and office space for staff and graduate assistants. Following this initial phase, additional shell space remains for a later project or phase.

Consultant: Ross Tarrant Architects

Contract # A091090

Original Contract Amount:

\$98,000

Total Amendments to Date:

**Cumulative Amendment Amount:** 

\$98,000

Describe all amendments:

No amendments this quarter.

Contractor: Churchill-McGee, LLC

Contract # 4500033010

Original Contract Amount:

Revised Contract Amount:

\$887,300

Total Change Orders to Date: 26 Cumulative Change Order Amount:

\$2,139

\$887,300 Low Bid:

Revised Contract Amount:

\$889,439

High Bid: \$1,123,750 Contract Percent Complete:

100%

Number of Bids: 6

Describe all change orders greater than \$25,000.00:

No change orders greater than \$25,000 this quarter.

# Renovate Nursing Building

2307.00 Project Number:

Project Description:

\$1,883,970 Scope:

This project will renovate and convert a covered patio on the third floor of the Nursing Building into student study and discussion space. Additionally, minor enhancements will be made in some fifth floor graduate student space. The project is fully funded from a U.S. Department of Health and Human Services, Health Resources and Services Administration grant.

Consultant: Stengel-Hill Architecture

Contract # A101100

Original Contract Amount:

\$150,000

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$150,000

No amendments this quarter.

Contractor: No construction contract awarded to date.

Contract #

Total Change Orders to Date:

Original Contract Amount: Cumulative Change Order Amount:

Low Bid:

High Bid:

Revised Contract Amount: Contract Percent Complete:

Number of Bids:

Describe all change orders greater than \$25,000.00:

# Renovate Parking Structure #3 - Hospital

Project Number: 2311.00

Project Description:

\$635,000 Scope:

This project includes repairing the concrete topping on levels two and three; painting of pre-cast connections; installation of a new expansion joint at the structural slab transition; full depth slab repairs for levels four, five, and six; and application of an elastomeric waterproofing membrane on level six. These repairs are needed to protect the structure from moisture penetration and resulting deterioration of concrete and embedded metals.

Consultant: Brown & Kubican

Contract # A101030SS

Original Contract Amount: **Cumulative Amendment Amount:**  \$42,000

Total Amendments to Date:

Describe all amendments:

No amendments this quarter.

Revised Contract Amount:

\$42,000

Contractor: No construction contract awarded to date.

Contract #

Total Change Orders to Date:

Low Bid: High Bid:

Number of Bids:

Describe all change orders greater than \$25,000.00:

Original Contract Amount:

Cumulative Change Order Amount:

Revised Contract Amount: Contract Percent Complete:

Renovate Third Floor Little Library

Project Number:

2306.00

**Project Description:** 

\$1,000,000 Scope:

This project will renovate and fit-up approximately 5,300 square feet of shelled space on the third floor of the Little Library. Prior to the library consolidations following completion of the W.T. Young Library, this space was used to house library materials. The renovated space will house the Center for Applied Information Technology, a suite of offices for the School of Library and information and two new classrooms, seating for 48, with smart technology.

Consultant: Pearson & Peters

Contract # A101000DD

Original Contract Amount:

\$44,200

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

No amendments this quarter.

Revised Contract Amount:

\$44,200

Contractor: No construction contract awarded to date.

Contract #

Total Change Orders to Date:

Low Bid:

High Bid:

Number of Bids:

Original Contract Amount: Cumulative Change Order Amount:

Revised Contract Amount:

Contract Percent Complete:

Describe all change orders greater than \$25,000.00:

# Renovate/Expand the Center For Applied Energy Research

Project Number: 2286.10

**Project Description:** 

Scope:

\$2,000,000

The primary purpose of this project will be a multi-phased project incorporating the following components:

<u>Mineral Process Lab Building</u> - The initial phase of the project will require the construction of a 6,400 square foot support building. This new facility will permit the relocation of the existing mineral processing group currently housed in the centers main facility. The existing equipment support space, offices and labs will be relocated.

Relocation of the Crushing Room - The existing Crushing Room is to be relocated into an existing facility originally built

for dry storage of coal.

Biofuels High Bay Lab Fit-up and Improvements - Renovated space, vacated by the Mineral Processes Lab above, will allow for the development of a biofuels laboratory for production, characterization, and testing of biomass derived fuels, with a focus on biodiesel, bio-oils, and biomass derived Fischer-Tropsch liquids. The principle objective of this project is the establishment of a laboratory dedicated to the development of improved processes for biomass utilization, with the goal of supporting the development of the biofuels industry in Kentucky.

Combustion High Bay Hoods - The existing Combustion/High Bay Lab will have a new bench top fume hood and a new

walk-in hood installed with required ductwork and exhaust fans.

Consultant: Biagi, Chance, Cummins, London & Titzer

Contract # A091080

Total Amendments to Date:

Describe all amendments:

No amendments this quarter.

Contractor: Denham Blythe, Co.

Contract # 4500033050

Total Change Orders to Date: 14

Low Bid:

\$1,156,991

High Bid: \$1,544,000

Number of Bids: 6

Describe all change orders greater than \$25,000.00:

No change orders greater than \$25,000 this quarter.

Original Contract Amount: \$200,000

Cumulative Amendment Amount:

Revised Contract Amount:

\$2,00,000

\$1,156,991

Cumulative Change Order Amount:

Revised Contract Amount:

Original Contract Amount:

\$1,249,895

Contract Percent Complete:

95%

\$92,904

Renovate/Expand the Center for Applied Energy Research (Ph II)

Project Number: 2286.20

**Project Description:** 

Scope:

\$882,221

This project will construct a shell to house the Center for Applied Energry Research mini refinery.

Consultant: Denham Blythe

Contract # A101070

Original Contract Amount:

\$40,000

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$40,000

No amendments this quarter.

Contractor: No construction contract awarded to date.

Contract #

Original Contract Amount:

Cumulative Change Order Amount:

Total Change Orders to Date: Low Bid:

Revised Contract Amount:

Contract Percent Complete:

High Bid:

Number of Bids:

Describe all change orders greater than \$25,000.00:

# Repair, Upgrade, Improve Bldg. Systems - Hospital (Elevators Upgrade for KY Clinic)

Project Number: 2296.10

Project Description:

\$1,000,000 Scope:

This project seeks to upgrade the elevator cabs, elevator controls and elevator pumps for the five elevators located in Kentucky Clinic (includes Medical Plaza). This project allows the Hospital to provide maintenance and upgrades to prevent breakdowns in the system. The Hospital relies on these systems for the efficient transfer of patients, visitors, supplies, and equipment. Unplanned interruptions to these systems create customer service problems and additional personnel costs.

Consultant: N/A

Contract #

Original Contract Amount:

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

Contractor: Oracle Elevator - \* Awarded via RFP Process

Contract # 4500034540

Original Contract Amount:

\$833,835

Total Change Orders to Date:

Cumulative Change Order Amount:

\$5.992

Low Bid:

Revised Contract Amount:

\$839,827

High Bid:

Contract Percent Complete:

54%

Number of Bids:

Describe all change orders greater than \$25,000.00:

# Replace Emergency Generators & Fire Pump - UK Good Samaritan Hospital

Project Number: 2277.30

Project Description:

Scope:

\$2,025,550

This scope of this project will consist of the replacement or upgrades of the following equipment at the Good Samaritan Hospital: Emergency generator, transfer switches, air handling unit #25, constant pressure water pumps, deareator tank, and a fire pump.

Consultant: CMW, Inc.

Contract # A081150

Original Contract Amount:

\$140,000

Total Amendments to Date:

**Cumulative Amendment Amount:** 

\$8,200

Describe all amendments:

Revised Contract Amount:

\$148,200

Amendment 1, 11/11/08, and increase of \$8200 was approved for additional design services as required to provide location options for the emergency generators. No amendments this quarter.

Contractor: Messer Construction Co.

Contract # 4500035739

Original Contract Amount:

\$1,520,000

Total Change Orders to Date:

Cumulative Change Order Amount:

\$2,907

\$1,520,000 Low Bid:

Revised Contract Amount:

\$1,522,907

\$1,893,960 Hiah Bid:

Contract Percent Complete:

79%

Number of Bids: 4

Describe all change orders greater than \$25,000.00:

No change orders greater than \$25,000 this quarter.

# Replace Wildcat Lodge Student Housing (Wildcat Coal Lodge)

Project Number: 2309.00

**Project Description:** 

Scope:

\$7,000,000

This project consists of the design and construction of a new housing facility of approximately 18,000 GSF to replace the existing Wildcat Lodge. The new facility is to house the UK men's basketball players in addition to other non-athlete students. The building will include a controlled main entryway, with combination living/bedroom spaces, a common space, with dining and gaming rooms. In addition, it will have a conference room and public restrooms in all common areas. The site will be located just east of the Joe Craft Center.

Consultant: JRA Architects

Contract # A101090

Original Contract Amount:

\$554,253

Total Amendments to Date:

**Cumulative Amendment Amount:** 

\$554,253

Describe all amendments:

Revised Contract Amount:

No amendments this quarter.

Contractor: Codell Construction Company

Note: This is a 'CM-At-Risk' contract. The amount will be increased as subcontracts are bid and added.

\*Codell's contract was awarded by RFP process.

Contract # 4500038207

Original Contract Amount:

\$398,000

Total Change Orders to Date:

Cumulative Change Order Amount:

Low Bid:

Revised Contract Amount:

\$398,000

High Bid:

Contract Percent Complete:

Number of Bids:

Describe all change orders greater than \$25,000.00:

# Student Housing - Supporting Utility Plant Upgrades

Project Number: 2153.30

**Project Description:** 

Scope:

\$1,275,000

This project includes expanding the Virginia Avenue Central Utility Plant to accommodate future expansion in steam and chilled water capacity. The project was established in support of the Student Housing Project.

Consultant: AM Kinney

Contract # A041000GG

Original Contract Amount:

\$26,315

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$26,315

No amendments this quarter.

Contractor: English Boiler & Tube Inc.

\*English Boiler's contract was awarded by RFP process.

Contract # 4500008298

Original Contract Amount:

\$1,147,748

Total Change Orders to Date:

Cumulative Change Order Amount:

Low Bid:

Revised Contract Amount:

\$1,147,748

High Bid:

Contract Percent Complete:

99%

Number of Bids:

Describe all change orders greater than \$25,000.00:

No change orders greater than \$25,000.00 this quarter.

# Upgrade-Renovate-Improve or Expand Research Labs (Chemistry-Physics Building)

Project Number: 2302.00

**Project Description:** 

Scope:

\$2,080,000

The space vacated by the relocation of the Chemistry and Physics libraries will be converted into research and research support space. This renovation will create three wet bench research labs to accommodate three new faculty lines in Chemistry, and one materials lab for Physics. The materials lab will be a multi-disciplinary lab that will be used by Chemistry, Physics and Engineering.

Consultant: Omni Architects

Contract # A101060

Original Contract Amount:

\$186,000

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$186,000

No amendments this quarter.

Contractor: Denham Blythe

Contract # 4500037598

Original Contract Amount:

\$1,382,093

Total Change Orders to Date:

Cumulative Change Order Amount:

21%

Low Bid:

\$1,382,093

Revised Contract Amount: Contract Percent Complete: \$1,382,093

\$1,497,000 High Bid: Number of Bids: 9

Describe all change orders greater than \$25,000.00: