# FCR 7

Office of the President December 7, 2010

Members, Board of Trustees:

# CAPITAL CONSTRUCTION REPORT

<u>Recommendation</u>: that the Board of Trustees accept the capital construction report for the three months ending September 30, 2010. 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 of Kentucky is authorized to enter into architectural, engineering, and related consultant contracts for the purpose of accomplishing capital construction at the University.

For the period July 1, 2010 thru September 30, 2010:

There was one new contract this quarter:

Project 2307.0 Renovate Nursing Building

Messer Construction Co., \$1,298,000 (Construction)

One contract was completed this quarter:

Project 2286.1 Renovate/Expand the Center for Applied Energy Research

Denham Blythe Co., \$1,304,875

One amendment as follows:

Project 2307.0 Renovate Nursing Building

- Provide design services for the removal of the existing open exterior stair on the third floor exterior patio of the College of Nursing Building and for renovation of the first floor public restrooms. (+) \$18,500

#### Thirty four change orders greater than \$25,000 were as follows:

Project 2234.0 Expand & Upgrade Livestock Disease Diagnostic Lab

- Provide for changes needed to address the issue of excessive moisture in the soil around necropsy (+) \$40,187
- Provide for installation of a base coat of asphalt in additional areas onsite that were not initially included (+) \$32,794
- Provide coatings consistent with UK compliance standards for animal disinfection (+) \$226,148

**Project 2235.0** 

Construct Biological Pharmaceutical Complex Building

Provide additional bracing of pipe supports in the Utility Tunnel necessary for operation of the beam rollers (+) \$112,261

**Construct Patient Care Facility** 

- Provide for installation of a check valve in the bypass line between the hot water supply and the return at each of the units (+) \$52,938
- Furnish and install snubbers on the transformers that serve the two fire pumps (+) \$129,334
- Provide for an added panel, transformer and fused disconnect in the parking garage (+) \$26,160
- Provide for drainage of hot water system to relocate 15 valves of varying sizes (+) \$34,092
- Provide for relocation of various sanitary, waste and vent lines above high voltage gear (+) \$47,988
- Provide for revision of lobby design to accommodate design of the Main Donor Wall (+) \$59,470
- Provide for revision and expansion of the Rose Street Plaza landscaping (+) \$60,950
- Furnish and install automatic dampers and their controls for the atrium smoke exhaust fans (+) \$29,068
- Provide Icynene spray foam for fire protection in all pockets more than 12 inches in depth (+) \$58,718
- Re-route storm pipe in the ground lobby floor area including a portion of the underground piping (+) 36,213
- Provide labor and material to revise four steel reinforced concrete fan bases and provide four additional bases as well (+) \$48,310
- Revise the lobby rotunda lighting to include 25 additional fixtures and a remote control system (+) \$182,106
- Provide for a fabric change on the 6<sup>th</sup> and 7<sup>th</sup> floor Mechoshades to enhance function and durability (+) \$27,185
- Furnish and install of a lobby water feature to include the water feature, supporting electrical and pumping systems and control systems (+) \$80,283
- Provide for installation of conduit and cabling to accommodate nurse call device quantity and location changes (+) \$284,907
- Furnish and install 128 Marlite artwork panels and wall protection to accommodate the artwork for patient rooms (+) \$313,636
- Furnish and install additional trapeze hangers for life safety and emergency (+) \$26,145
- Provide materials necessary to protect the lobby stone floor during construction (+) \$68,306
- Furnish and install 120 V power connections required for twenty-four PTZ cameras (+) \$88,510
- Provide additional work in the laboratory required to complete the connections between the east connectors (+) \$57,683
- Provide 2 additional sets of filters for the Air Handling Units (+) \$76,752
  - Furnish and install electrical conduit and wiring associated with additional electrical and data outlets throughout the 6<sup>th</sup> and 7<sup>th</sup> floor to accommodate equipment (+) \$313,198

**Project 2239.0** 

Project 2239.7	Construct Patient Care Facility (Pavilion A, OR Suites and Support) - Construct a full scale mock-up of select O.R. spaces for owner review and
<b>D</b>	testing of equipment locations (+) \$29,377
Project 2297.1	<ul> <li>Digital Village Building 2</li> <li>Provide wireless access points to provide adequate networking capability within the building (+) \$31,228</li> </ul>
	- Provide the access control system required to properly manage the electronic locks as well as provide stand alone battery operated locks in all offices and public spaces (+) 75,530
	- Install new manholes for the building and vault pumped discharge (+) \$44,806
	- Provide resurfacing and repairing for the existing parking lot around the new utility vault west of the Digital Village (+) \$43,679
Project 2303.0	Construct Children's Garden at the Arboretum
D :	- Add the Quilt Fountain and the paving, drainage, pump/filter system, plumbing and electrical work associated with the feature (+) \$95,640
Project 2311.0	Renovate Parking Structure # 3 – Hospital
	<ul> <li>Provide crack repair on levels 5 and 6, pothole repair on 1<sup>st</sup> ramp, membrane placement on 5<sup>th</sup> level and complete full depth repair (+) \$68,970</li> </ul>
	- Repair issues found during renovations. Provide materials and labor for additional leveling surface on 5 <sup>th</sup> and 6 <sup>th</sup> floors, replace roof scuppers and downspout, repair roof at two stair towers (+) \$45,460
Project 2314.0	Upgrade, Renovate, Improve or Expand Research Labs (Fit-up 4 <sup>th</sup> and 5 <sup>th</sup> Floor COP)
	- Assign MultiVista a subcontract under Messer to provide construction documentation including photo sets with progression, detailed sets, and a
	pre-construction survey. (+) \$25,705
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 October 31, 2010

# 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:

Site work on the building pad is complete. Site utility work is ongoing as well as layout of temporary parking. Bid Package # 2 is out for bid now; bids are to be received on November 16th.

#### 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:

All punchlist work is complete. The contractor is awaiting delivery of final granite pieces for the Quilt Fountain.

# **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 (Now Complete)
- (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. (Now Complete)
- (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)

The final two precast panels at the lobby 2 area were installed this month completing the installation of the precast concrete panels. The masonry work activities for lobby 2 started with CMU installations. This work was followed

by stone installation in early October. The dry-stack stone work also continued on the curved landscape walls in the north lobby area. Erection of the lobby 2 structural steel continued with installation of decking and final details for the structural steel. The north entry canopy structure will arrive in early November. The light gauge framing at the north lobby and lobby 2 continued. The general trades contractor continued work at the 2nd and 3rd level roof at the north lobby/lobby 2 areas and completed the installation of the level 1 terrace pavers. The roofing contractor installed the green roof plants at the level 5 podium west, south and east roofing with work heading to the north roof area. The sealant contractor continued working toward completion of the east tower elevation work scope in early November. The window contractor continues to work on window and curtain wall installations on the east tower the west and core area are completed. The curtain wall installations on the east tower completed early October. The lobby windows are progressing north including installation of the first "high span" window unit. Lobby 2 2nd floor windows will be arriving next month. Final testing of the curtain wall units will be complete early November. The swing stage work (with 14 stages) continued on the west tower elevations with installation of the window trim, window caulking and tower eyebrow installations. Metal panel work will be starting at the north lobby next month. The elevator contractor continued working on elevator 01 rails and platforms. Doors and frame installation for elevators 01, 03, 04, 05 continued in the field. Machine room work continued for all car groups on level 14. The masonry contractor continued with installation of the curved landscape walls at the north lobby. Prep work also started for the lobby 2 SOG and SOMD areas. The site contractors continued with curb, gutter and sidewalks at the north area of the site. Planting work began on the west side of the site and will continue around the PCF according to the season guide. Stage 3 construction work completed in front of the Wethington Building less the plantings which will continue through November. All work on the north Rose Street Plaza with the exception of the landscaping completed during October. Curb and gutter and sidewalk installations completed this month along with underground utility work. The main asphalt installations also completed. The surface of old Rose was milled and replaced. The mechanical work is complete for all systems serving the emergency department and infrastructure is fully functional. Focus has shifted to the balance of the HVAC systems serving the lobby and 6th and 7th floors and remaining shell space. Commissioning activities have completed pending the final balance of the spaces on 6th and 7th floor and the lobby. Punchlist activities are ongoing and have completed in the basement and 3rd floors. - Fit up (BP #6)

The acoustical contractor continued working on several areas again this month including the lobby/auditorium; 6th and 7th floors; shaft and stair areas; and level 1 area. Gypsum board installations continued on the 6th floor and started on the 7th floors areas.

The general trade's contractor continued to install wood blocking on 6th/7th levels and stair shafts and lobby areas. This contractor also installed toilet accessories for the patient rooms on the 6th floor. The painting contractor continued work on the 6th and 7th floor patient rooms priming and painting the gypsum board walls. They also began sealing the floors of the level 3 mechanical room along with select basement room areas. Installation of ceramic tile on the 6th floor patient bathrooms continued. The flooring contractor completed the installation of several select VCT areas like stairs 3 and 7 and several basement room storage areas and hallways. Installation of the stone in the lobby ground level moving north and west from the half-round skylight continued. Installation also started on the first floor in area around the half-round skylight. Signage installed included all the way-finding signs around campus directing visitors to the hospital areas. Work continued on the bed tower floors with installation of the shell space lighting, fire protection and work in the electrical closets. HVAC system work for the 6th and 7th floor is ongoing. Piping for all reheat coils and shell space unit heaters continued. Installation of electrical wiring is continuing throughout the building with final terminations and final testing continuing. Final controls and power is ongoing throughout the building on the systems.

Commissioning of these systems is ongoing. Punchlist activities are ongoing, and inspections have been performed in the basement, 3rd and 4th floors.

#### Construct Patient Care Facility- OR Suites & Support

Project Description:

This project provides a new surgical suite to be constructed in the shell space of the new Patient Care Facility. The project includes construction of 8 operating rooms, 1 hybrid OR, with supporting spaces for surgical pathology, surgical pharmacy, anesthesiology, staff lounge and lockers, and pre-operative / post operative functions. Also included will be the construction of a new central sterile supply and associated elevators to serve the new surgery areas. In addition the project will supply a 63,000 CFM air handling unit to provide for the HVAC requirements of this area. The fit-up encompases an area of aproximately 66,000 SF.

#### Project Status:

This project is out for bid with trade bids due in November. GBBN Architects is the lead architect for the project. Turner Construction has been selected as the CM for the project. The expected completion date is Nov. 2011.

#### 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:* 

All work on the exterior of the building is nearing completion, as final glazing and composite walls panels finish out. Interior work is progressing. Painting has started on the 3rd floor. Drywall work is nearing completion on the 2nd floor and is in progress on the 1st floor. Data cables have been pulled on the 3rd floor. Terrazzo has been poured on the 3rd floor and polishing has begun. The rough mixture has been poured on the 2nd floor. The building is being finished from the 3rd floor down to allow the contractors to work themselves out of the building so as to perform minimal work over completed areas.

The contractors' on-site office and storage trailers have been removed from the site to allow preparation for site development work. Infrastructure work is nearing completion. Other than work inside the north east communications vault, only the sidewalks and final restoration of the parking lot remain to be done. The parking lot in front of the Craft Center has been reopened. The only parking area still closed is the section from the east side of the "B" entrance off College View eastward to the Digital Village Building. Final paving work is planned for mid-November.

The contractors feel they can complete the building by the end of December, however, the current schedule update projects a mid January, 2011 completion. Furniture has been ordered and should be ready for installation upon completion of the building.

#### 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:

Digester installation is complete. Performance test is scheduled through mid-November with training to follow after performance test. Renovation work continues in former necropsy, receiving and existing labs this month. Administration area is scheduled to complete Fall 2010 and all renovations will complete by mid-February 2011. The storage tank facility at Woodford County farm is complete and training was performed this month.

#### Guaranteed Energy Savings Performance Contract

Project Description:

An energy service company (ESCo), such as AMERESCO, provides comprehensive energy and water management analysis plans as well as energy and water-related capital improvement services. Enabled by Kentucky Revised Statute 56.774, energy savings performance contracting is a cost-effective process for energy upgrades. Energy service companies guarantee that utility savings generated by facility upgrades are sufficient to pay back the capital investment during the next twelve years. If the project does not provide these returns on the investment, the ESCo is responsible for the difference. No renovations that do not affect energy savings will be done as part of this initiative. This project will help meet the overall University goal, which is to decrease the university's overall energy demands by 10-15 percent.

Energy conservation measures in the project that will reduce the university's overall energy consumption include: Upgrades to lighting systems to the latest electric saving technology; fume hood controls in Chemistry/Physics; HVAC systems; steam and chiller plant controls; Installation of motor speed drives (VFD's) to save energy during mild weather conditions; Energy management software to monitor usage in real time; and automatic utility metering devices; Replacement of old plumbing fixtures to the latest water saving technology; Repair of pipe insulation; Behavioral modification programs to encourage energy conservation, tailored for campus and developed, implemented and measured to maximize effectiveness and initiate a culture of energy efficiency. *Project Status*:

Ameresco continues final design preparations and reviews this month. Bidding of all Energy Conservation Measures (ECMs) is scheduled for November 2010. Construction activities are to begin in the 61 Lexington campus buildings beginning December 2010 and continue through November 2011.

#### Renovate 4-H Camps

Project Description:

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 efficient 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.

Project Status:

Pre-construction meetings were held this month and work has begun at each of the four camps. Work is expected to be complete by December 31, 2010.

# 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 modified Design Development documents were electronically transmitted to the NIH on October 7; however, the University has not received review comments. The design team is continuing to complete the Phase III Construction Documents, which are scheduled to be delivered to the university on November 14th. This date is contingent upon receiving the Design Development review comments from the NIH.

#### **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:

All work on the 5th floor, and restrooms on the 1st floor are complete. Messer began demo on the 4th floor restroom on October 18th. Drywall hanging in the 3rd floor study space is complete with drywall finishing in progress. Prime painting has begun, locker installation is complete, wire pulling is 90% complete, ceiling grid installation has begun, and the column covers are installed. In the mechanical room, the new supply and exhaust fans were installed, as well as the breaker in the 1st floor electrical room that feeds the new 3rd floor panel. All remaining work on the 3rd floor patio and in the 4th floor restrooms is scheduled to be complete on December 3rd.

#### Renovate Parking Structure #3-Hospital

Project Description:

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. *Project Status*:

This project is substantially complete.

#### 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:* 

Work has commenced for new suite of offices as outlined in change order number 1, anticipated completion for late November.

#### Renovate/Expand the Center for Applied Energy Research – Phase 1 & Phase 2

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 – Complete.

Phase 2 – Final esitmates have been received for the construction documents. A review meeting is scheduled for mid-November and project should be transmitted for bid in early December.

# 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:

This project is substantially complete.

#### 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)

This project is substantially 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:

Bids were received on July 23rd with the combination of trade contract bids being significantly over budget. Various options have been explored to bring the project back within budget to include value engineering and redesign options. Due to time lost with the necessary value engineering and redesign efforts, it appears the building will not be ready to occupy until after the beginning of the 2012 spring semester. Athletics is reviewing the options to determine which best meets their goals and objectives for the project.

# <u>Upgrade</u>, Renovate, Improve or Expand Research Labs (Fit-up 4th and 5th Floor College of Pharmacy) Project Description:

The Biological / Pharmaceutical Complex is a new 286,000 s.f. academic / research building for the University of Kentucky College of Pharmacy. The Fourth and Fifth Floor Fit-Out items for the building include miscellaneous metals and stairs, rough and finish carpentry, wall systems, flooring systems, ceiling systems, doors, frames, hardware, coatings, specialized equipment, plumbing systems, fire protection systems, mechanical systems, electrical systems and communications and controls systems. Audio-visual fit-up includes wiring, sound systems, video systems and control systems.

Project Status:

All Construction Manager's trade package contracts have been awarded. The exterior lift/hoist has been constructed on the west elevation and is operational. Metal installation has begun on the 5th floor. All work is scheduled to be complete October 1, 2011. The steamline extension contract is currently being re-bid through the Construction Manager. Construction is anticipated to begin in December 2010 and continue through September 2011.

# <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:

This project is substantially complete.

#### **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:

Construction has been delayed until fall 2011 depending on availability of federal funding.

# Construct Equine Campus - Stallion Research Facility

Project Description:

This project will serve to renovate the former carriage house at Spindletop Farm for use as the Stallion Barn component of the Equine Reproductive Research Center. The renovations will include creation of laboratory space, semen processing and storage areas, holding stalls and a mating area. There will also be a conference room and viewing room. Restroom facilities that are ADA compliant are included. Infrastructure improvements include new electrical service, upgrades to water and sanitary systems and HVAC system installation.

# Project Status:

Final Construction Documents are to complete by mid-November with Bid and Award activities to follow. Construction is anticipated from February 2011 through June 2011.

# Renovate Nursing Building - Phase II

Project Description:

This project will renovate approximately 8,200 square feet on the sixth floor of the College of Nursing Building to accommodate the construction of a new 118 seat Computer Classroom and associated support space. The project will be funded by federal grant of \$1,287,000 from the U.S. Department of Health and Human Services and University funds.

Project Status:

A design advertisement was issued on October 28th and submittals are due on November 11th. The university's selection committee will meet on November 16th to short-list the firms that are best suited for this project. Interviews will be scheduled on November 30th.

# Renovate Old Pharmacy Building for Biology (Multi-Disciplinary Sciences Building)

Project Description:

The old Pharmacy building (now Multi-Disciplinary Sciences Building) will be used to provide teaching lab space for Biology, future research lab space for Biology and Chemistry, and office space to co-locate the Universisty's significant core of statistical expertise from the colleges of Arts and Sciences, Public Health and Medicine. This phase of the project will renovate approximately 18,120 squate feet on the first, second and third floors of the Multi-Disciplinary Sciences Building and will include the modification of the existing offices and the creation of additional offices, computer class labs, a Biology class lab and support spaces. The estimated scope of \$3.4 million will be funded from institutional fund balances.

Project Status:

Consultant Interviews will take place in early November. Upon completion of the interveiw process, the selection committee will choose a design firm and fee negotiations will begin immediately thereafter.

#### Renovate Track and Field Facility

Project Description:

The University of Kentucky's Shively Track, used by the men's and women's track and cross country teams, is over 30 years old and needs to be renovated. This project will renovate the existing track and field facility by providing new track and field surfaces, field event training areas, spectator seating, spectator amenities (concessions, restrooms, etc.), and equipment storage. The track is anticipated to be a nine-lane synthetic surface track. An athlete only practice throw area has been integrated into the site plane, creating safety for adjacent spectators as well as providing a proper environment for the training and warm up of student athletes. A practice runway is being incorporated with the javelin throw. This area would also accommodate visiting track teams during meet events. The architectural design and materials will be integrated to enhance the proximity to the design elements of the University's adjacent baseball stadium. The concession building will overlook the track so spectators standing in line will continue to have visual access to the event completion. A new storage facility will be located at the Cooperstown Road entry, and will be of sufficient size to store all track and field equipment. *Project Status:* 

The RFP for the Construction Manager has been advertised, with the CM selection anticipated to be complete by the end of November. Consultant and University representatives met with representatives from adjacent neighborhoods in a pre-design meeting November 4<sup>th</sup>. Issues and observations that should be considered during design were discussed.

#### Construct Biological Pharmaceutical Complex Building

Project Number: 2235.00

**Project Description:** 

Scope: \$134,998,323

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

Original Contract Amount:

\$10,585,020 \$1,162,526

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$11,747,546

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. Amendment 5, 5/11/10, an increase of \$78,960 was approved to provide additional design and associated construction administration services for design changes necessary to support the academic research and animal care functions of the building. This also provides for the addition of a graphic package. 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:

400

Cumulative Change Order Amount:

\$4,579,316

Low Bid:

Revised Contract Amount:

\$113,526,766

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...

sayings 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

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

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 amphitheater 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. Change Order # 384, 5/20/10, was approved for an increase of \$33,437 to remove existing single slide door and replace with a new bi-parting door system to allow adequate space for the DLAR animal cages . Change Order #385, 5/20/10, was approved for an increase of \$27,600 to provide a card reader, door position switch, and electric lock on door 198A1 in room 196. Change Order # 402, 7/21/10, was approved for an increase of \$112,261 to provide additional bracing of pipe supports in Utility Tunnel required to resist the necessary lateral force required for the beam rollers to roll.

#### Construct CAER Lab Bldg. #2

Project Number: 2312.01

**Project Description:** 

Scope: \$15,776,913

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. And other portions of the building will be specially equipped to accommodate research related to biomass energy and biofuels, electrochemical energy storage, and solar energy.

Consultant: Murphy+Graves Architects

Contract # A101110

Original Contract Amount:

\$1,645,000

Total Amendments to Date:

**Cumulative Amendment Amount:** 

Ψ1,0<del>1</del>0,000

Describe all amendments:

Revised Contract Amount:

\$1,645,000

No amendments this quarter.

Contractor: Turner Construction

Note: This is a 'CM-At-Risk" contract. The amount will be increased as subcontracts

are bid and added. \*Turner's contract was awarded by RFP process.

Contract # 4500039389

Original Contract Amount:

\$1,382,093

Total Change Orders to Date: 1

Cumulative Change Order Amount:

\$19,479

Low Bid:

Revised Contract Amount:

\$1,401,572

High Bid:

Contract Percent Complete:

1%

Number of Bids:

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

#### Construct Children's Garden at the Arboretum

Project Number: 2303.00

**Project Description:** 

Scope: \$729,724

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 Original Contract Amount: \$35,068

Total Amendments to Date: Cumulative Amendment Amount:

**Describe all amendments:** Revised Contract Amount: \$35,068

No amendments this quarter.

**Contractor:** Meyer Midwest

Contract # 4500036412 Original Contract Amount: \$407,000

Total Change Orders to Date: 6 Cumulative Change Order Amount: \$165,710

Low Bid: \$407,000 Revised Contract Amount: \$572,710

High Bid: \$479,620 Contract Percent Complete: 85%

Number of Bids: 2

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

Change Order # 5, 6/18/10, was approved for an increase of \$50,823 to replace the concrete pavers from behind the retaining wall at overlook with permeable pavers to better match future additions to the garden. Drainage pipes and associated structures were added as well to alleviate existing drainage issues outside the garden and to manage future needs inside the garden. Change Order # 6, 7/9/10, was approved for an increase of \$95,640 to add The Quilt Fountain and the paving, drainage, pump/filter system, plumbing, and electrical work associated with the feature.

**Construct Patient Care Facility** Project Number: 2239.0 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

Total Amendments to Date:

8

**Cumulative Amendment Amount:** 

\$7,919,660

Revised Contract Amount:

Describe all Amendments:

\$38,319,886

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. Amendment 7, 4/20/10, an increase of \$278,370 was approved to provide for additional design services for the Celebrate Kentucky Wall, Rose Street Plaza, the green roof, enabling work and a lobby fountain. The amendment also provides for additional reimbursable services. Amendment 8, 6/8/10, an increase of \$937,498 was approved to provide for the completion of design and the addition of construction administration services for the Patient Care Facility OR Fit-out project. It also provides for design thru phase 2 of the kitchen and cafeteria fit out of the PCF.

Contractor:

Turner Construction Co.

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

was awarded by RFP process.

Total Change Orders to Date:

782

Original Contract Amount:

\$319,492,345

Low Bid:

Cumulative Change Order Amount: Revised Contract Amount: \$20,050,921

Hiah Bid: Number of Bids:

Contract % complete:

\$339,543,266 86%

# 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. 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 rates. 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. Change Order # 168, BP # 5, 4/23/10, was approved for an increase of \$54,344 to relocate 16 fire/smoke damper actuators and add access doors as required to provide access for maintenance and yearly testing. Change Order # 171, BP # 5, 4/27/10, was approved for an increase of \$81,371 to furnish and install conduit and added control wiring from unit substations to remote Entellisys control stacks. Change Order # 185, BP # 5, 6/24/10, was approved for an increase of \$49,935 to route high pressure condensate from heating hot water and domestic hot water converters to high pressure return back to condensate pump. This enhances the reliability and safety of the building and campus steam system. Change Order # 187, BP # 5, 6/25/10, was approved for an increase of \$26,761 to provide additional hall position indicators for five elevators. Change Order # 191, BP # 5, 7/27/10, was approved for an increase of \$52,938 to install a check valve in the bypass line between the heating hot water supply and return at each of the units. Change Order # 198, BP # 5, 8/18/2010, was approved for an increase of \$129,334 to furnish and install snubbers on the transformers that serve the two fire pumps as a precautionary action to protect against future damage to the transformers.

#### 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 a decrease of \$73.319 to delete demolition of existing 36" storm drain and the new 36" storm line. Change Order # 45 BP # 6, 8/28/09, 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 occupied. Change Order # 46 BP # 6, 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. 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 and robust 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. Change Order # 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 from cable tray to Intercom Master Panels throughout the project. 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. 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. Change Order # 229, BP # 6, 4/7/10, was approved for an increase of \$31,569 to provide temporary doors and hardware for electrical rooms as required by the electrical inspector for final testing of the high voltage gear. Change Order # 234, BP # 6, 4/13/10, was approved for an increase of \$50,535 to add section of built-in curved seating, revise wall cap material, and add gaming area countertop to the pediatric waiting in the ED to support installation of patient gaming system. Change Order # 238, BP # 6, 4/14/10, was approved for an increase of \$93,626 provide the infrastructure and connections necessary to support University supplied uninterrupted power supplies in the IDF and EIDF rooms throughout the project. Change Order # 243, BP # 6, 4/22/10, was approved for an increase of \$76,602 to furnish and install condensate drains for two air handler units in electrical rooms on the fourth floor and insulate condensate drains throughout the building. Change Order # 244, BP # 6, 4/21/10, was approved for an increase of \$52,639 to revise ductwork in the 1st floor lobby to accommodate the radiused bulkhead to include extending the height of the plenums along the lobby exterior wall and installing revised linear grills. Change Order # 251, BP # 6, 4/21/10, was approved for an increase of \$74,208 to revise coring layout, poke thru devices, and electrical and technology raceways for Steelcase furniture in ED area. Change Order # 252, BP # 6, 4/21/10, was approved for an increase of \$74,097 to add temperature mixing valves to eyewashes and emergency showers on the ground, 6th and 7th floors. Change Order # 253, BP # 6, 4/21/10, was approved for an increase of \$30,041 to provide additional electrical connections as required for installation of 11 Swisslog blower units and one Swisslog transfer unit on the 4th floor. Change Order # 258 BP # 6, 4/23/10, was approved for an increase of \$425,593 to furnish and install waste plumbing and venting required for 64 patient rooms, staff rest rooms, staff break areas, and utility spaces on the 8th floor of the PCF. Completing this work at this time eliminates the need for access to the 7th floor, which will be occupied when the 8th floor fit-out construction starts. Change Order # 261, BP # 6, 4/27/10, was approved for an increase of \$68,333 to modify the fire alarm systems in the PCF, Gill Building, Critical Care Center and Chandler Hospital such that all buildings report to the new fire control center in the PCF. Change Order # 267, BP # 6, 4/29/10, was approved for an increase of \$35,307 to add additional plantings and ornamental fencing between the Agriculture Building and Emergency parking area to establish the boundary between the two. Change Order # 284, BP # 6, 5/18/10, was approved for an increase of \$28,790 to revise casework and countertop to add point of care testing station for Soiled Utility A00504. Change Order # 287, BP # 6, 5/13/10, was approved for an increase of \$38,906 to install dust shield covers on 164 drop in lights in the ED for infection control purposes. Change Order # 288, BP # 6, 5/13/10, was approved for an increase of \$47,608 to re-route storm piping, irrigation piping, and vent piping above the ceiling in the auditorium to allow for proper installation of mechanical equipment. Change Order # 301, BP # 6, 5/18/10, was approved for an increase of \$54,139 to convert two secure treatment rooms into isolation rooms by adding a new isolation exhaust fan on the 1st floor roof, within the chiller screen wall. Modify air balance and add room monitors for proper pressurization. Change Order # 327, BP # 6, 6/3/10, was approved for an increase of \$107,562 to provide temporary upright sprinkler heads where ceilings are not yet installed on the ground floor, and upgrade and extend several of the existing partitions to 2 hour walls for the phased turnover of the ED. Change Order # 328, BP # 6, 6/7/10, was approved for an increase of \$101,969 to add missing life safety power to 87 fire smoke dampers. Change Order # 332, BP # 6, 6/10/10, was approved for an increase of \$88,130 to revise metal stud layout, electrical work, duct work, floor and wall finishes to accommodate the "Celebrate Kentucky" wall design. The final design of the wall was not available when the construction documents were published. Change Order # 334, BP # 6, 6/11/10, was approved for an increase of \$42,212 to add various security hardware items to the ground floor ED which were not included in the original contract documents. Change Order #336, BP # 6, 6/11/10, was approved for an increase of \$34,217 to provide horizontal connections for 34 locations for the overhead paging system in the ED. The final design of the system was not selected by the end users prior to the submission of construction documents. Change Order # 340, BP # 6, 6/24/10, was approved for an increase of \$80,919 to add card readers, locking door hardware, exit button, door contact, key switch, shear locks, retractable latches and delayed egress controller to various doors in the ED to realize the required security and access control for imaging areas and med. storage rooms. Change Order # 343, BP # 6, 6/25/10, was approved for an increase of \$45,551 to include a new pathway and the abutting planting mounds for the green roof on the 5th floor roof. It includes the relocation of the excess Green Roof planting trays that are displayed by the new pathway and planting mounds. Change Order # 350, BP # 6, 6/25/10, was approved for an increase of \$89,093 to add one duplex outlet and change one duplex to quad outlet in 128 Acute Care and ICU Patient Rooms on the 6th and 7th floors. Change Order # 354, BP #6, 6/29/10, was approved for an increase of \$69,437 to modify street light bases and illuminated signs along Limestone St. to allow installation of exterior signs and street lighting.

Change Order # 363, BP # 6, 7/6/10, was approved for an increase of \$26,160 to add panel, transformer and fused disconnect in the parking garage to support lighting and receptacles in the bridge lobby. Change Order # 380, BP # 6, 7/27/10, was approved for an increase of \$34,092 to drain heating hot water system, and relocate 15 valves of varying sizes. This will facilitate requirement of fewer outages and disrupstions to patient care in future phases of construction. Change Order # 404, BP # 6, 8/6/10, was approved for an increase of \$47,988 to relocate various sanitary, waste, and vent lines that are above high voltage gear on the fourth floor, and place pans under any lines that cannot be moved in order to eliminate the threat to electrical gear below. Change Order # 405, BP # 6, 8/6/10, was approved for an increase of \$59,470 to revise lobby design to accommodate design of the Main Donor Wall. The design of the Donor Wall was not available when the project was bid. Change Order # 413, BP # 6, 8/11/10, was approved for an increase of \$60,950 to revise the Rose Street Plaza landscaping to include additional subsoil, planting medium, and plants as required to expand the landscaping plan. Change Order # 416, BP # 6, 8/11/10, was approved for an increase of \$29,068 to furnish and install automatic dampers and their controls for the atrium smoke exhaust fans. Change Order # 426, BP # 6, 8/18/10, was approved for an increase of \$58,718 to provide Icynene spray foam for fire protection in all pockets more than 12-inches in depth. Change Order # 433, BP # 6, 8/25/10, was approved for an increase of \$36,213 to reroute storm pipe in the ground floor lobby area including portion the underground piping. Change Order # 441, BP # 6, 8/30/10, was approved for an increase of \$48,310 to furnish the labor and material to revise four steel reinforced concrete fan bases, and povide four additional steel reinforced concrete fan bases on the fifteenth floor of the facility. Change Order # 442, BP # 6, 8/30/10, was approved for an increase of \$182,106 to revise the lobby rotunda lighting to include 25 additional Illumivision Light Wave fixtures and remote lighting control system. These lights will be installed in recesses in the rotunda. Change Order # 451, BP # 6, 9/7/10, was approved for an increase of \$27,185 to change fabric on the 6th and 7th floor Mechoshades to enhance function and durability of the shades in the inpatient areas. Change Order # 456, BP # 6. 9/7/10 was approved for an increase of \$80,283 to furnish and install all required elements to create a new lobby water feature to include the water feature, supporting electrical and pumping systems, control systems. Change Order # 462, BP # 6, 9/13/10, was approved for an increase of \$284,907 to install conduit and cabling to accommodate nurse call device quantity and location changes per approved Hill Rom drawings. Change Order # 465, BP # 6, 9/14/10, was approved for an increase of \$313,636 to furnish and install 128 Marlite artwork panels and Korogard wall protection with related trim on inpatient room walls at the head of the bed to accommodate the final selection of the artwork for patient rooms. Change Order # 467, BP # 6, 9/15/10, was approved for an increase of \$26.145 to furnish and install additional trapeze hangers for life safety and emergency. Change Order # 471, BP # 6, 9/15/10, was approved for an increase of \$68,306 to furnish and provide materials necessary to protect lobby stone floor during the construction process. Change Order # 475, BP # 6, 9/15/10, was approved for an increase of \$88,510 to furnish and install additional 120V power connections required for twenty-for PTZ cameras. Change Order # 477, BP # 6, 9/17/10, was approved for an increase of \$57,683 to provide additional work in the laboratory required to complete the connections between the east connector and to maintain and enhance operations of the Critical Care 6th floor laboratory. Change Order #481, BP #6, 9/22/10, was approved for an increase of \$76,752 to provide 2 additional sets of filters for AHU's that were not purchased with the equipment or from the HVAC contractor. Change Order # 485, BP # 6, 9/28/10, was approved for \$313,198 to furnish and install electrical conduit and wiring associated with additional electrical and data outlets throughout the 6th and 7th floors to accommodate owner furnished equipment and systems.

PCF - Hospital - CUP Expansion

Project Number: 2239.32

Project Description:

Scope: \$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

Original Contract Amount:

\$9,474,000

Total Change Orders to Date: 46

Cumulative Change Order Amount:

\$783,937

Low Bid: \$9,474,000

Revised Contract Amount:

\$10,257,937

High Bid: \$10,400,000

Contract Percent Complete:

99%

Number of Bids: 2

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

#### Construct Patient Care Facility (Pavilion A. OR Suites and Support)

Project Number: 2239.70

**Project Description:** 

Scope:

\$35,000,000

This project provides a new surgical suite to be constructed in the shell space of the new Patient Care Facility. The project includes construction of 8 operating rooms, 1 hybrid OR, with supporting spaces for surgical pathology, surgical pharmacy, anesthesiology, staff lounge and lockers, and pre-operative / post operative functions. Also included will be the construction of a new central sterile supply and associated elevators to serve the new surgery areas. In addition the project will supply a 63,000 CFM air handling unit to provide for the HVAC requirements of this area. The fit-up encompases an area of aproximately 66,000 SF.

Consultant: GBBN

Contract # A061080

Original Contract Amount:

Revised Contract Amount:

\$937,498

Total Amendments to Date: Describe all amendments: **Cumulative Amendment Amount:** 

\$937,498

No amendments this quarter.

Contractor: Turner 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. \*Turner's contract was awarded by RFP process.

Contract #

Original Contract Amount:

\$1,553,369

Total Change Orders to Date:

**Cumulative Change Order Amount:** 

\$29.377

Low Bid:

Revised Contract Amount:

\$1,582,746

High Bid:

Contract Percent Complete:

Number of Bids:

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

Change Order # 1, 8/30/10, was approved for an increase of \$29,377 to construct a full-scale mock-up of select O.R. spaces for Owner review and testing of equipment locations.

Digital Village Building 2

Project Number: 2297.10

**Project Description:** 

Scope: \$18,669,725

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

Original Contract Amount: Contract # A091110 **Cumulative Amendment Amount:**  \$1,409,934

Total Amendments to Date: 1

\$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

\$13,761,651 Contract # 4500031914 Original Contract Amount:

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

\$484,315

Low Bid:

Revised Contract Amount:

\$14,245,966

High Bid:

Contract Percent Complete:

78%

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 photovoltaic 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. Change Order # 30, 6/10/10, was approved for an increase of \$26,044 to provide for utility work on the west side of Memorial Coliseum due to found conditions. The existing Communications ductbank stub-out extends further than expected and is obstructing the installation of the piping. Change Order # 38, 8/23/10, was approved for an increase of \$31,228 to provide wireless access points within the building to provide adequate networking capability within the building. Change Order # 45, 8/24/10, was approved for an increase of \$75,530 to provide the access control system required to properly manage the electronic locks. In addition stand-alone battery operated locks were added to all offices and public spaces. Change Order # 46, 8/30/10, was approved for an increase of \$44,806 to include installing new manholes for the building pumped discharge and vault pumped discharge. This change also includes adding pump discharge to piping and master trap detail to sanitary manhole and also connecting the forced main and gravity sewer main to the new gravity sewer manhole. Change Order # 58, 9/28/10, was approved for an increase of \$43,679 to provide for resurfacing and repairing the existing parking lot around the new utility vault west of the Digital Village.

#### Expand & Upgrade Livestock Disease Diagnostic Lab

Project Number: 2234.00

**Project Description:** 

Scope: \$27,155,200

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

Original Contract Amount:

\$648,000

Total Amendments to Date: 3

**Cumulative Amendment Amount:** 

\$1,846,800

Describe all amendments:

Revised Contract Amount:

\$2,494,800

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.

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

Contract # 4500026910

Original Contract Amount:

\$18,146,148

Total Change Orders to Date:

136

Cumulative Change Order Amount:

\$1,243,774

Low Bid:

Revised Contract Amount:

\$19,389,922

High Bid:

Contract Percent Complete:

88%

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. Change Order #77, 4/21/10, was approved for an increase of \$43,516 to modify wall to provide additional stud cavity to conceal pipes and conduit. This also eliminates sloped cap and makes it flush for cleanability. Change Order # 91, 6/7/10, was approved for an increase of \$50,835 to provide mold resistant gypsum board in dry areas and moisture resistant gypsum board in wet areas. Change Order # 98, 7/20/10, was approved for an increase of \$40,187 to implement changes to address the issue of excessive moisture in the soil around necropsy. Change Order # 103, 7/27/10; was approved for an increase of \$32,794 to install base course of asphalt in remaining areas on site that were not included in the contract due to construction phasing and timing. Change Order # 105, 7/28/10, was approved for an increase of \$226,148 to proivde coatings consistent with UK compliance standards for animal disinfection.

# **Guaranteed Energy Savings Performance Contracts**

Project Number: 2288.00

**Project Description:** 

Scope: \$25,000,000

An energy service company (ESCo), such as AMERESCO, provides comprehensive energy and water management analysis plans as well as energy and water-related capital improvement services. Enabled by Kentucky Revised Statute 56.774, energy savings performance contracting is a cost-effective process for energy upgrades. Energy service companies guarantee that utility savings generated by facility upgrades are sufficient to pay back the capital investment during the next twelve years. If the project does not provide these returns on the investment, the ESCo is responsible for the difference. No renovations that do not affect energy savings will be done as part of this initiative. This project will help meet the overall University goal, which is to decrease the university's overall energy demands by 10-15 percent. Energy conservation measures in the project that will reduce the university's overall energy consumption include: Upgrades to lighting systems to the latest electric saving technology; fume hood controls in Chemistry/Physics; HVAC systems; steam and chiller plant controls; Installation of motor speed drives (VFD's) to save energy during mild weather conditions; Energy management software to monitor usage in real time; and automatic utility metering devices; Replacement of old plumbing fixtures to the latest water saving technology; Repair of pipe insulation; Behavioral modification programs to encourage energy conservation, tailored for campus and developed, implemented and measured to maximize effectiveness and initiate a culture of energy efficiency.

Consultant: N/A

Contract #

Total Amendments to Date:

Describe all amendments:

Original Contract Amount:

Cumulative Amendment Amount:

Revised Contract Amount:

Contractor: Ameresco inc

Contract # 4500042240

Total Change Orders to Date:

Low Bid:

High Bid:

Original Contract Amount:

\$24,675,589

\$24.675.589

Cumulative Change Order Amount:

Revised Contract Amount:

Contract Percent Complete:

Number of Bids:

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

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 efficient 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: \$50,000

Total Amendments to Date: Cumulative Amendment Amount:

Describe all amendments: Revised Contract Amount: \$50,000

No amendments this quarter.

Contractor: No construction contracts awarded to date.

Contract # Original Contract Amount:

Total Change Orders to Date: Cumulative Change Order Amount:

Low Bid: Revised Contract Amount: High Bid: Contract Percent Complete:

Number of Bids:

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

#### Renovate 4th Floor Sanders-Brown Center on Aging

Project Number: 2313.01

**Project Description:** 

Scope: \$6,428,471

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. The project is fully funded from an NIH Grant as part of the ARRA.

Consultant: Omni Architects

Contract # A101140 Original Contract Amount: \$562,119

Total Amendments to Date: Cumulative Amendment Amount:

**Describe all amendments:** Revised Contract Amount: \$562,119

No amendments this quarter.

Contractor: Messer Construction Co 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 # 4500040166 Original Contract Amount: \$382,695

Total Change Orders to Date: Cumulative Change Order Amount:

Low Bid: Revised Contract Amount: \$382,695

High Bid: Contract Percent Complete:

Number of Bids:

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

# Renovate Nursing Building

Project Number: 2307.00

**Project Description:** 

Scope: \$1,883,970

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:** 

\$18,500

Describe all amendments:

Revised Contract Amount:

\$168.500

Amendment 1, 7/20/10, an increase of \$18,500 was approved to provide additional design services for removal of the existing open exterior stair on the Third Floor Exterior Patio of the College of Nursing Building and to complete renovation of the first floor public restrooms.

Contractor: Messer Construction Co.

Contract # 4500040661

Original Contract Amount:

\$1,298,000

Total Change Orders to Date:

Cumulative Change Order Amount:

Low Bid: \$1,298,000 Revised Contract Amount:

\$1,298,000

\$1,568,000 High Bid:

Contract Percent Complete:

28%

Number of Bids: 10

Describe all change orders greater than \$25,000.00: No change orders greater than \$25,000 this quarter.

# Renovate Parking Structure #3 - Hospital

Project Number: 2311.00

**Project Description:** 

Scope: \$635,000

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:

\$42,000

Total Amendments to Date:

Cumulative Amendment Amount:

Describe all amendments:

Revised Contract Amount:

\$42,000

No amendments this quarter.

Contractor: Schnell Contractors inc

Contract # 4500039781

Original Contract Amount:

Contract Percent Complete:

\$296,200

Total Change Orders to Date:

Cumulative Change Order Amount:

\$114,430

\$283,700 Low Bid:

Revised Contract Amount:

\$410,630 82%

Number of Bids:

High Bid:

\$500,991

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

Change Order # 1, 9/3/10, was approved for an increase of \$68,970 to complete full depth repair, crack repair on levels 5 & 6; Pothole repair 1st ramp, and membrane placement on 5th level. Change Order # 2, 9/7/10, was approved for an increase of \$45,460 to provide materials and labor for additional leveling surface on 5th and 6th floors, replace roof scuppers and downspout, roof repair at two stair towers. These issues were found during renovation and considered a priority to repair.

#### Renovate Third Floor Little Library

Project Number: 2306.00

**Project Description:** 

Scope:

\$1,000,000

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 :

Revised Contract Amount:

\$44,200

No amendments this quarter.

Contractor: Denham-Blythe Company

Contract # 4500039790

Original Contract Amount:

\$551,694

Total Change Orders to Date:

\$551,694

Cumulative Change Order Amount: Revised Contract Amount:

High Bid: \$660,600

Low Bid:

Contract Percent Complete:

\$551,694 97%

Number of Bids: 11

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.

\$2,000.000

The primary purpose of this project will be a 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 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.

<u>Biofuels High Bay Lab Fit-up and Improvements</u> - 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 Original Contract Amount: \$200,000

Total Amendments to Date: Cumulative Amendment Amount:

Describe all amendments: Revised Contract Amount: \$200,000

No amendments this quarter.

Contractor: Denham Blythe, Co.

Contract # 4500033050 Original Contract Amount: \$1,156,991

Total Change Orders to Date: 20 Cumulative Change Order Amount: \$147,884

Low Bid: \$1,156,991 Revised Contract Amount: \$1,304,875

High Bid: \$1,544,000 Contract Percent Complete: 100%

Number of Bids: 6

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

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 Energy Research mini refinery.

Consultant: Denham Blythe

Contract # A101070

Original Contract Amount:

\$40,000

Total Amendments to Date:

**Cumulative Amendment Amount:** 

φ40,000

Describe all amendments :

Revised Contract Amount:

\$40,000

No amendments this quarter.

Contractor: No construction contract awarded to date.

Contract #

Original Contract Amount:

Total Change Orders to Date:

**Cumulative Change Order Amount:** 

Low Bid:

Revised Contract Amount:

High Bid:

Contract Percent Complete:

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:** 

Scope: \$1,000,000

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:

\$12,327

Low Bid:

Revised Contract Amount:

\$846,162

High Bid:

Contract Percent Complete:

96%

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:

\$74,895

Low Bid: \$1,520,000

Revised Contract Amount:

\$1,594,895

High Bid: \$1,893,960

Contract Percent Complete:

99%

Number of Bids: 4

Describe all change orders greater than \$25,000.00: No change orders greater than \$25,000 this quarter.

022

# 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:

\$6,239

Describe all amendments:

Revised Contract Amount:

\$560,492

**Amendment 1,** 5/11/10, an increase of \$6,239.33 was approved to provide phase 2 geotechnical exploration services as a reimbursable expenditure. **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:

\$534,999

Total Change Orders to Date: 1

Cumulative Change Order Amount:

\$7,585

Low Bid:

Revised Contract Amount:

\$542,584

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: Describe all amendments: **Cumulative Amendment Amount:** 

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 (Fit-up 4th and 5th Floor

Project Number: 2314.00

**Project Description:** 

Scope: \$28,000,000

The Biological / Pharmaceutical Complex is a new 286,000 s.f. academic / research building for the University of Kentucky College of Pharmacy. The Fourth and Fifth Floor Fit-Out items for the building include miscellaneous metals and stairs, rough and finish carpentry, wall systems, flooring systems, ceiling systems, doors, frames, hardware, coatings, specialized equipment, plumbing systems, fire protection systems, mechanical systems, electrical systems and communications and controls systems. Food Service Fit-out items include rough and finish carpentry, wall systems, flooring systems, ceiling systems, frames, hardware, coatings, plumbing systems, fire protection systems, mechanical systems, electrical systems and communications and control systems. Audio-visual fit-up includes wiring, sound systems, video systems and control systems.

Consultant: EOP Architects

Contract # A101120

Original Contract Amount:

Revised Contract Amount:

\$898,640

Total Amendments to Date:

**Cumulative Amendment Amount:** 

\$898,640

Describe all amendments: No amendments this quarter.

Contractor: Messer Construction Co.

Contract # 4500039714

Original Contract Amount:

\$16,551,760

Total Change Orders to Date:

Cumulative Change Order Amount:

\$25,705

Low Bid:

Revised Contract Amount:

\$16,577,465

High Bid:

Contract Percent Complete:

3%

Number of Bids:

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

Change Order #1, 9/17/10, was approved for an increase of \$25,705.13 to assign MultiVista under Messer's contract to provide construction documentation for the entire project to include project documentation (photo sets) with Progression and Detailed Sets, preconstruction site survey and slideshows.

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

Project Number: 2302.00

**Project Description:** 

Scope:

\$1,795,000

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 multidisciplinary 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:

\$19,479

Low Bid: \$1.382.093 Revised Contract Amount:

\$1,401,572

High Bid: \$1,497,000 Contract Percent Complete:

99%

Number of Bids: 9

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

10