UNIVERSITY OF KENTUCKY
Purchasing Division

CAPITAL CONSTRUCTION

Request for Proposal
UK-2069-20
Proposal Due Date – 05/15/2020

PAV HA Elevators 14 and 15 Renovation
REQUEST FOR PROPOSAL (RFP)

ATTENTION: This is not an order. Read all instructions, terms and conditions carefully.

PROPOSAL NO.: UK-2069-20
Issue Date: 04/10/2020
Title: PAV HA Elevators 14 and 15 Renovation
Purchasing Officer: Matt Spalding
Phone: 859-323-5405

IMPORTANT: PROPOSALS MUST BE RECEIVED BY: 05/15/2020 3 P.M. LEXINGTON, KY TIME.

NOTICE OF REQUIREMENTS
1. The University’s General Terms and Conditions and Instructions to Bidders, viewable at www.uky.edu/Purchasing/terms.htm, apply to this RFP. When the RFP includes construction services, the University’s General Conditions for Construction and Instructions to Bidders, viewable at www.uky.edu/Purchasing/cophome.htm, apply to the RFP.
2. Contracts resulting from this RFP must be governed by and in accordance with the laws of the Commonwealth of Kentucky.
3. Any agreement or collusion among offerors or prospective offerors, which restrains, tends to restrain, or is reasonably calculated to restrain competition by agreement to bid at a fixed price or to refrain from offering, or otherwise, is prohibited.
4. Any person who violates any provisions of KRS 45A.325 shall be guilty of a felony and shall be punished by a fine of not less than five thousand dollars nor more than ten thousand dollars, or be imprisoned not less than one year nor more than five years, or both such fine and imprisonment. Any firm, corporation, or association who violates any of the provisions of KRS 45A.325 shall, upon conviction, be fined not less than ten thousand dollars or more than twenty thousand dollars.

AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST
I hereby swear (or affirm) under the penalty for false swearing as provided by KRS 523.040:
1. That I am the offeror (if the offeror is an individual), a partner, (if the offeror is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the offeror is a corporation);
2. That the attached proposal has been arrived at by the offeror independently and has been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other Contractor of materials, supplies, equipment or services described in the RFP, designed to limit independent bidding or competition;
3. That the contents of the proposal have not been communicated by the offeror or its employees or agents to any person not an employee or agent of the offeror or its surety on any bond furnished with the proposal and will not be communicated to any such person prior to the official closing of the RFP;
4. That the offeror is legally entitled to enter into contracts with the University of Kentucky and is not in violation of any prohibited conflict of interest, including, but not limited to, those prohibited by the provisions of KRS 45A.330 to .340, and164.390;
5. That the offeror, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sale and use tax imposed by Chapter 139 to the extent required by Kentucky law and will remain registered for the duration of any contract award;
6. That I have fully informed myself regarding the accuracy of the statement made above.

SIGNED STATEMENT OF COMPLIANCE WITH CAMPAIGN FINANCE LAWS
In accordance with KRS45A.110 (2), the undersigned hereby swears under penalty of perjury that he/she has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky and that the award of a contract to a bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

CONTRACTOR REPORT OF PRIOR VIOLATIONS OF KRS CHAPTERS 136, 139, 141, 337, 338, 341 & 342
The contractor by signing and submitting a proposal agrees as required by 45A.485 to submit final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341 and 342 that have occurred in the previous five (5) years prior to the award of a contract and agrees to remain in continuous compliance with the provisions of the statutes during the duration of any contract that may be established. Final determinations of violations of these statutes must be provided to the University by the successful contractor prior to the award of a contract.

CERTIFICATION OF NON-SEGREGATED FACILITIES
The contractor, by submitting a proposal, certifies that he/she is in compliance with the Code of Federal Regulations, No. 41 CFR 60-1.8(b) that prohibits the maintaining of segregated facilities.

SIGNATURE REQUIRED: This proposal cannot be considered valid unless signed and dated by an authorized agent of the offeror. Type or print the signatory's name, title, address, phone number and fax number in the spaces provided. Offers signed by an agent are to be accompanied by evidence of his/her authority unless such evidence has been previously furnished to the issuing office.

DELIVERY TIME:
NAME OF COMPANY:
DUNS #

PROPOSAL FIRM THROUGH:
ADDRESS:
Phone/Fax:

PAYMENT TERMS:
CITY, STATE & ZIP CODE:
E-MAIL:

SHIPPING TERMS: F. O. B. DESTINATION PREPAID AND ALLOWED
TYPED OR PRINTED NAME:
WEB ADDRESS:

FEDERAL EMPLOYER ID NO.:
SIGNATURE:
DATE:
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1.0 DEFINITIONS

The term "addenda" means written or graphic instructions issued by the University of Kentucky prior to the receipt of proposals that modify or interpret the RFP documents by additions, deletions, clarifications and/or corrections.

The term "competitive negotiations" means the method authorized in the Kentucky Revised Statutes, Chapter 45A.085.

The terms "offer" or "proposal" mean the offeror’s/offerors’ response to this RFP.

The term "offeror" means the entity or contractor group submitting the proposal.

The term "contractor" means the entity receiving a contract award.

The term "purchasing agency" means the University of Kentucky, Purchasing Division, Room 322 Peterson Service Building, Lexington, KY 40506-0005.

The term "purchasing official" means the University of Kentucky’s appointed contracting representative.

The term "responsible offeror" means a person, company or corporation that has the capability in all respects to perform fully the contract requirements and the integrity and reliability that will assure good faith performance. In determining whether an offeror is responsible, the University may evaluate various factors including (but not limited to): financial resources; experience; organization; technical qualifications; available resources; record of performance; integrity; judgment; ability to perform successfully under the terms and conditions of the contract; adversarial relationship between the offeror and the University that is so serious and compelling that it may negatively impact the work performed under this RFP; or any other cause determined to be so serious and compelling as to affect the responsibility of the offeror.

The term "solicitation" means RFP.

The term "University" means University of Kentucky.
2.0 GENERAL OVERVIEW

2.1 Intent and Scope

This request for Proposal (RFP) is issued by University of Kentucky to select an offeror and product for the renovation of Elevators #14 and 15 to support the Chandler Medical Center Main Hospital and Critical Care Center located in Lexington, KY. This is a full renovation of the elevators as described in the drawings and specifications provided. The offeror is responsible for providing the University of Kentucky with a complete turnkey solution.

Offerors must respond to all mandatory response information in this RFP. If offeror cannot provide product or service requested they must so indicate.

Offerors must clearly identify in their response all costs to the university that are required to provide the products and services requested under this RFP. The University of Kentucky will not be responsible for cost not identified in the offerors proposal. Additional cost not anticipated in this RFP must be approved in writing by authorization of the University of Kentucky. All costing data will be contained in the offerors response as outlined in this document.

2.2 University Information

Since his arrival, President Eli Capilouto has set forth an ambitious agenda to extend and enhance our role as Kentucky’s land-grant and flagship research university. By focusing on infrastructure growth and improvement; creating opportunities for innovative teaching, learning, and academic excellence; fostering a robust research and creative scholarship enterprise; providing life-saving subspecialty care; empowering communities through service and outreach; and encouraging a transparent and shared dialogue about institutional priorities; the University of Kentucky will ensure a new century of promise for the people we impact.

Founded in 1865 as a land-grant institution adjacent to downtown Lexington, UK is nestled in the scenic heart of the beautiful Bluegrass Region of Kentucky. From its early beginnings, with only 190 students and 10 professors, UK’s campus now covers more than 918 acres and is home to more than 30,000 students and approximately 14,500 employees, including more than 2,300 full-time faculty. UK is one of a small number of universities in the United States that has programs in agriculture, engineering, a full complement of health colleges including medicine and pharmacy, law and fine arts on a single campus, leading to groundbreaking discoveries and unique interdisciplinary collaboration. The state’s flagship university consists of 17 academic and professional colleges where students can choose from more than 200 majors and degree programs at the undergraduate and graduate levels. The colleges are Agriculture, Food and Environment; Arts and Sciences; Business and Economics; Communication and Information; Dentistry; Design; Education; Engineering; Fine Arts; Graduate School; Health Sciences; Law; Medicine; Nursing; Pharmacy; Public Health; and Social Work. These colleges are supported by a modern research library system.

Research at the University of Kentucky is a dynamic enterprise encompassing both traditional scholarship and emerging technologies, and UK’s research faculty, staff and students are establishing UK as one of the nation’s most prolific public research universities. UK’s research enterprise attracted $285 million in research grants and contracts from out-of-state sources, which generated a $580 million impact on the Kentucky economy. Included in this portfolio is $153 million
in federal awards from the National Institutes of Health, non-NIH grants from the Department Health and Human Services, the National Science Foundation, Department of Energy, Department of Agriculture and NASA, among others. The National Science Foundation ranks UK’s research enterprise 44th among public institutions.

With more than 50 research centers and institutes, UK researchers are discovering new knowledge, providing a rich training ground for current students and the next generation of researchers, and advancing the economic growth of the Commonwealth of Kentucky. Several centers excel in the services offered to the public. The Gluck Equine Research Center is one of only three facilities of its kind in the world, conducting research in equine diseases.

The Center for Applied Energy Research is pursuing groundbreaking discovery across the energy disciplines. CAER staff are pioneering new ways to sustainably utilize Kentucky natural resources through carbon-capture algae technology, biomass/coal to liquid products and the opening of UK’s first LEED-certified research lab to support the development of Kentucky’s growing alternative energy industry. Among the brightest examples of UK’s investment in transformative research is the Markey Cancer Center. As a center of excellence and distinction at UK, Markey’s robust research and clinical enterprise is the cornerstone of our commitment to Kentucky – fundamental to our success in uplifting lives through our endeavors and improving the general health and welfare of our state – burdened by the nation’s highest rate of cancer deaths per 100,000 people. In 2013, Markey earned the prestigious National Cancer Institute-designation (NCI) – one of 68 nationally and the only one in Kentucky.

The University of Kentucky was awarded a $20 million Clinical Translational Sciences Award (CTSA) from the National Institutes of Health (NIH). As one of only 60 institutions with this research distinction, UK was awarded the CTSA for its potential in moving research and discovery in the lab into practical field and community applications. The CTSA and NCI are part of a trifecta of federal research grants that includes an Alzheimer’s Disease Center. UK is one of only 22 universities in the country to hold all three premier grants from NIH.

Established in 1957, the medical center at UK is one of the nation's finest academic medical centers and includes the University's clinical enterprise, UK HealthCare. The 569-bed UK Albert B. Chandler Hospital and Kentucky Children's Hospital, along with 256 beds at UK Good Samaritan Hospital, are supported by a growing faculty and staff providing the most advanced subspecialty care for the most critically injured and ill patients throughout the Commonwealth and beyond. Over the last several years, the number of patients served by the medical enterprise has increased from roughly 19,000 discharges to more than 36,000 discharges in 2014.

UK Chandler Hospital includes the only Level 1 Trauma Center for both adult and pediatric patients in Central and Eastern Kentucky. In addition, UK HealthCare recently opened one of the country's largest robotic hybrid operating rooms and the first of its kind in the region. While our new patient care pavilion is the leading healthcare facility for advanced medical procedures in the region, our talented physicians consult with and travel to our network of affiliate hospitals so Kentucky citizens can receive the best health care available close to their home and never need to leave the Bluegrass for complex subspecialty care.

UK’s agenda remains committed to accelerating the University’s movement toward academic excellence in all areas and gain worldwide recognition for its outstanding academic programs, its commitment to students, its investment in pioneering research and discovery, its success in building a diverse community and its engagement with the larger society. It is all part of the University’s fulfillment of our promise to Kentucky to position our state as a leader in American prosperity.
3.0 PROPOSAL REQUIREMENTS

3.1 Key Event Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of RFP</td>
<td>04/10/2020</td>
</tr>
<tr>
<td>Pre-Proposal Conference (Optional)</td>
<td>Zoom Meeting 04/23/2020 @ 10:00 AM</td>
</tr>
<tr>
<td></td>
<td>Walkthroughs by request only – week of 04/27/2020</td>
</tr>
<tr>
<td>Deadline for Written Questions</td>
<td>3 p.m. Eastern Time on 05/05/2020</td>
</tr>
<tr>
<td>RFP Proposals Due</td>
<td>3 p.m. Eastern Time on 05/15/2020</td>
</tr>
<tr>
<td>Offeror Presentations*</td>
<td>05/22/2020*</td>
</tr>
<tr>
<td>Contract Award*</td>
<td>05/26/2020*</td>
</tr>
</tbody>
</table>

*projected dates

3.2 Offeror Communication

To ensure that RFP documentation and subsequent information (modifications, clarifications, addenda, Written Questions and Answers, etc.) are directed to the appropriate persons within the offeror’s firm, each offeror who intends to participate in this RFP is to provide the following information to the purchasing officer. Prompt, thorough compliance is in the best interest of the offeror. Failure to comply may result in incomplete or delayed communication of addenda or other vital information. Contact information is the responsibility of the offeror. Without the prompt information, any communication shortfall shall reside with the offeror.

- Name of primary contact
- Mailing address of primary contact
- Telephone number of primary contact
- Fax number of primary contact
- E-mail address of primary contact
- Additional contact persons with same information provided as primary contact

This information shall be transmitted via fax or e-mail to:

Mr. Matt Spalding
Purchasing Division
University of Kentucky
322 Peterson Service Building
Lexington, KY 40506-0005
Phone: (859) 323-5405
Fax: (859) 257-1951
E-mail: matthew.spalding@uky.edu

All communication with the University regarding this RFP shall only be directed to the purchasing officer listed above.
3.3 **Pre-Proposal Conference**

A pre-proposal conference will be held via Zoom Meeting on 04/23/2020 at 10:00 am. The Zoom Meeting link will be provided with Addendum #1. This virtual meeting will allow prospective contractors an opportunity to ask questions and clarify the University’s expectations. This conference provides offerors an opportunity for oral questions.

The following items should be noted in reference to the pre-proposal conference:

- Attendance at the pre-proposal conference is optional. At this conference, the scope of services will be discussed in detail.

- Offerors are encouraged to submit written questions after the conference by the date listed in Section 3.1.

The University will prepare written responses to all questions submitted and make them available to all offerors. The questions and answers will be made part of the RFP and may become part of the contract with the successful contractor. Answers given orally at the conference are not binding.

**Site Walkthroughs** – Due to the challenges surrounding the COVID-19 pandemic, site walkthroughs will be scheduled by request only. All requests for site walkthroughs must be submitted in writing to matthew.spalding@uky.edu by the end of day, April 23, 2020, and will be scheduled the following week. Offerors are asked to only send one (1) representative if possible and comply with all social distancing recommendations.

3.4 **Offeror Presentations**

All offerors whose proposals are judged acceptable for award may be required to make a presentation to the evaluation committee.

3.5 **Preparation of Offers**

The offeror is expected to follow all specifications, terms, conditions and instructions in this RFP.

The offeror will furnish all information required by this solicitation.

Proposals should be prepared simply and economically, providing a description of the offeror’s capabilities to satisfy the requirements of the solicitation. Emphasis should be on completeness and clarity of content. All documentation submitted with the proposal should be bound in the single volume except as otherwise specified.

An electronic version of the RFP, in .PDF format only, is available through the University of Kentucky Purchasing Division web site: [www.uky.edu/purchasing/bidlist.htm](http://www.uky.edu/purchasing/bidlist.htm) and [www.ukplanroom.com](http://www.ukplanroom.com).
3.6 Proposed Deviations from the RFP

The stated requirements appearing elsewhere in this RFP shall become a part of the terms and conditions of any resulting contract. Any deviations therefrom must be specifically defined in accordance with the transmittal letter, Section 4.3 (d). If accepted by the University, the deviations shall become part of the contract, but such deviations must not be in conflict with the basic nature of this RFP.

Note: Offerors shall not submit their standard terms and conditions as exceptions to the University’s General Terms and Conditions. Each exception to the University’s General Terms and Conditions shall be individually addressed.

3.7 Proposal Submission and Deadline

Offeror must provide the following materials prior to 3 p.m. (Lexington, KY time) on the date specified in Section 3.1 and addressed to the purchasing officer listed in Section 3.2:

- **Technical Proposal**: Two (2) copies on electronic storage devices (USB or CD) (1 copy per storage device) each clearly marked with the proposal number and name, firm name and what is included (Technical Proposal) and one (1) printed original copy

- **Financial Proposal**: Two (2) copies on electronic storage devices (CD or USB) (1 copy per storage device) each clearly marked with the proposal number and name, firm name and what is included (Financial Proposal) and one (1) printed original copy

Note: Proposals received after the closing date and time will not be considered. In addition, proposals received via fax or e-mail are not acceptable.

The University of Kentucky accepts deliveries of RFPs Monday through Friday from 8 a.m. to 5 p.m. Lexington, KY time. However, RFPs must be received by 3 p.m. Lexington, KY time on the date specified on the RFP in order to be considered.

Proposals shall be enclosed in sealed envelopes to the above referenced address and shall show on the face of the envelope: the closing time and date specified, the solicitation number and the name and address of the offeror. The technical proposal shall be submitted in a sealed envelope and the financial proposal shall be submitted in a sealed envelope under separate cover. Both sealed envelopes shall have identical information on the cover, with the addition that one will state “Technical Information,” and the other, “Financial Proposal.”

Note: In accordance with the Kentucky Revised Statute 45A.085, there will be no public opening.

3.8 Modification or Withdrawal of Offer

An offer and/or modification of offer received at the office designated in the solicitation after the exact hour and date specified for receipt will not be considered.

An offer may be modified or withdrawn by written notice before the exact hour and date specified for receipt of offers. An offer also may be withdrawn in person by an offeror or an authorized representative, provided the identity of the person is made known and the person signs a receipt for the offer, but only if the withdrawal is made prior to the exact hour and date set for receipt of offers.
3.9 **Acceptance or Rejection and Award of Proposal**

The University reserves the right to accept or reject any or all proposals (or parts of proposals), to waive any informalities or technicalities, to clarify any ambiguities in proposals and (unless otherwise specified) to accept any item in the proposal. In case of error in extension or prices or other errors in calculation, the unit price shall govern. Further, the University reserves the right to make a single award, split awards, multiple awards or no award, whichever is in the best interest of the University.

3.10 **Rejection**

Grounds for the rejection of proposals include (but shall not be limited to):

- Failure of a proposal to conform to the essential requirements of the RFP.
- Imposition of conditions that would significantly modify the terms and conditions of the solicitation or limit the offeror’s liability to the University on the contract awarded on the basis of such solicitation.
- Failure of the offeror to sign the University RFP. This includes the Authentication of Proposal and Statement of Non-Collusion and Non-Conflict of Interest statements.
- Receipt of proposal after the closing date and time specified in the RFP.

3.11 **Addenda**

Any addenda or instructions issued by the purchasing agency prior to the time for receiving proposals shall become a part of this RFP. Such addenda shall be acknowledged in the proposal. No instructions or changes shall be binding unless documented by a proper and duly issued addendum.

3.12 **Disclosure of Offeror’s Response**

The RFP specifies the format, required information and general content of proposals submitted in response to this RFP. The purchasing agency will not disclose any portions of the proposals prior to contract award to anyone outside the Purchasing Division, the University’s administrative staff, representatives of the state or federal government (if required) and the members of the committee evaluating the proposals. After a contract is awarded in whole or in part, the University shall have the right to duplicate, use or disclose all proposal data submitted by offerors in response to this RFP as a matter of public record.

Any submitted proposal shall remain valid six (6) months after the proposal due date.

The University shall have the right to use all system ideas, or adaptations of those ideas, contained in any proposal received in response to this RFP. Selection or rejection of the proposal will not affect this right.
3.13 Restrictions on Communications with University Staff

From the issue date of this RFP until a contractor is selected and a contract award is made, offerors are not allowed to communicate about the subject of the RFP with any University administrator, faculty, staff or members of the board of trustees except: the purchasing office representative, any University purchasing official representing the University administration, others authorized in writing by the purchasing office and University representatives during offeror presentations. If violation of this provision occurs, the University reserves the right to reject the offeror’s proposal.

3.14 Cost of Preparing Proposal

Costs for developing the proposals and any subsequent activities prior to contract award are solely the responsibility of the offerors. The University will provide no reimbursement for such costs.

3.15 Disposition of Proposals

All proposals become the property of the University. The successful proposal will be incorporated into the resulting contract by reference.

3.16 Alternate Proposals

Offerors may submit alternate proposals. If more than one proposal is submitted, all must be complete (separate) and comply with the instructions set forth within this document. Each proposal will be evaluated on its own merits.

3.17 Questions

All questions should be submitted by either fax or e-mail to the purchasing officer listed in Section 3.2 no later than the date listed in Section 3.1.

3.18 Section Titles in the RFP

Section titles used herein are for the purpose of facilitating ease of reference only and shall not be construed to infer the construction of contractual language.

3.19 No Contingent Fees

No person or selling agency shall be employed or retained or given anything of monetary value to solicit or secure this contract, except bona fide employees of the offeror or bona fide established commercial or selling agencies maintained by the offeror for the purpose of securing business. For breach or violation of this provision, the University shall have the right to reject the proposal, annul the contract without liability, or, at its discretion, deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

3.20 Proposal Addenda and Rules for Withdrawal

Prior to the date specified for receipt of offers, a submitted proposal may be withdrawn by submitting a written request for its withdrawal to the University purchasing office, signed by the offeror. Unless requested by the University, the University will not accept revisions or alterations to proposals after the proposal due date.
4.0 PROPOSAL FORMAT AND CONTENT

4.1 Proposal Information and Criteria

The following list specifies the items to be addressed in the proposal. Offerors should read it carefully and address it completely and in the order listed to facilitate the University’s review of the proposal.

Proposals shall be organized into the sections identified below. The content of each section is detailed in the following pages. It is strongly suggested that offerors use the same numbers for the following content that are used in the RFP.

- Signed Authentication of Proposal and Statement of Non-Collusion and Non-Conflict of Interest Form
- Transmittal Letter
- Executive Summary and Proposal Overview
- Criteria 1 - Offeror Qualifications
- Criteria 2 - Services Defined
- Criteria 3 - Financial Proposal
- Criteria 4 - Evidence of Successful Performance and Implementation Schedule
- Criteria 5 - Other Additional Information

4.2 Signed Authentication of Proposal and Statements of Non-Collusion and Non-Conflict of Interest Form

The Offeror will sign and return the proposal cover sheet and print or type their name, firm, address, telephone number and date. The person signing the offer must initial erasures or other changes. An offer signed by an agent is to be accompanied by evidence of their authority unless such evidence has been previously furnished to the purchasing agency. The signer shall further certify that the proposal is made without collusion with any other person, persons, company or parties submitting a proposal; that it is in all respects fair and in good faith without collusion or fraud; and that the signer is authorized to bind the principal offeror.

4.3 Transmittal Letter

The Transmittal Letter accompanying the RFP shall be in the form of a standard business letter and shall be signed by an individual authorized to legally bind the offeror. It shall include:

- A statement referencing all addenda and written questions, the answers and any clarifications to this RFP issued by the University and received by the offeror (If no addenda have been received, a statement to that effect should be included.).

- A statement that the offeror’s proposal shall remain valid for six (6) months after the closing date of the receipt of the proposals.

- A statement that the offeror will accept financial responsibility for all travel expenses incurred for oral presentations (if required) and candidate interviews.

- A statement that summarizes any deviations or exceptions to the RFP requirements and includes a detailed justification for the deviation or exception.

- A statement that identifies the confidential information as described in Section 6.23.
4.4 **Executive Summary and Proposal Overview**

The Executive Summary and Proposal Overview shall condense and highlight the contents of the technical proposal in such a way as to provide the evaluation committee with a broad understanding of the entire proposal.

As part of the Executive Summary and Proposal Overview, Offeror shall submit with their response a summarized profile describing the demographic nature of their company or organization:

- When was your organization established and/or incorporated?
- Indicate whether your organization is classified as local, regional, national, or international.
- Describe the size of your company in terms of number of employees, gross sales, etc.
- Is your company certified as small business, minority-owned, women-owned, veteran-owned, disabled-owned, or similar classification?
- Include other demographic information that you feel may be applicable to the Request for Proposal submission.

4.5 **Criteria 1 - Offeror Qualifications**

The purpose of the Offeror Qualifications section is to determine the ability of the offeror to respond to this RFP. Offerors must describe and offer evidence of their ability to meet each of the qualifications listed below.

1. Provide certified audited financial statements including a full set of footnotes as follows:
   - For the past two (2) years, include at a minimum, income statements, balance sheets, and statements of changes in financial position or cash flow. If two (2) years of financial statements are not available, this information shall be provided to the fullest extent possible or the reasons why, if they are not available.
   - For a privately held company, when certified audited financial statements are not provided; a written statement from the company’s certified public accountant stating the financial condition, debt-to asset ratio for the past two (2) years and any pending actions that may affect the company's financial conditions.
   - If the Offeror has had a contract terminated for default in the last two (2) years, describe such incident. Submit full details for the default, including the other parties’ name, address, and phone number. Present the Offeror’s position on the matter. The University will evaluate the facts and may, at its sole discretion, reject the proposal on the grounds of the past experience. If the Offeror has experienced no such termination for default in the past five years, so indicate.
   - Offerors shall provide a three-year history of revenue streams associated with vendor provided services to other public institutions of similar size and scope of the University of Kentucky.

2. Submit an organizational chart showing your firm’s organization naming key personnel, their basic responsibilities, relationships and contact information.

3. Provide resumes for the key personnel who will be assigned to this project. Note that key personnel assignment may be a critical factor in the selection process, and no changes in key personnel assignment will be accepted without prior written agreement from the University.

4. Provide a brief narrative describing the history of your firm. Identify the number of Employees in your firm, Ownership and if the company has ever filed for bankruptcy, been in loan default, or if there are any pending liens, claims or lawsuits against the firm. If so, please explain.
5. Offeror must submit evidence that specifically describes their ability to have the resources available to assure meeting an aggressive implementation schedule.

6. Provide information as to any current or pending mergers, acquisitions, or divestiture that may affect the Offeror’s ability to perform this service.

7. Offers must submit evidence of their ability to execute an integrated telecommunications services solution of similar size and scope as defined in the RFP.

8. Offerors must provide a financial viability statement that explains their ability to maintain and sustain continuous operations throughout the life of the contract.

4.6 **Criteria 2 – Services Defined**

The following list specifies the items to be addressed in this section of your proposal. Please read it carefully and address it completely and in the order listed to facilitate the University’s review of your proposal.

1. The technical proposal must contain all work or project requirements necessary to assist the University in the renovation of UK Hospital PAV HA Elevators #14 and 15. Include a complete description of the proposed approach and methodology for the project, all project requirements, and the tasks required to accomplish the project. The plan must be in sufficient detail to convey to the evaluation team the Offeror’s knowledge of the subjects and skills necessary to complete this project.

2. Explain in narrative form your approach to this project. Discuss how your firm will provide the proposed services and technologies identified in Section 7.0. List within your proposal your response to all mandatory requirements listed in Section 7.0.

3. Describe the information and support that would be required from the University.

4. Identify any subcontractors which would be used during the contract period and describe their role(s).

5. Confirm that your proposal and price includes, at a minimum, all of the primary services stated in section 2.1.

4.7 **Criteria 3 – Financial Proposal**

The Financial Summary Form shall contain the complete financial offer made to the University using the format contained in Section 8.0. All financial information must be submitted in a sealed envelope under separate cover.

4.8 **Criteria 4 – Evidence of Successful Performance and Implementation Schedule**

1. The Offeror shall submit a list of projects with similar or related scope of work, which your firm has performed within the past two years including contact names, addresses, and telephone numbers. The University would prefer references of other similar campus installations and services. Please include information as to the size of the projects. The University specifically requests references where the offeror has provided the service in order to verify the level of service provided. The University reserves the right to use this information in the evaluation of these criteria.

2. Provide a detailed plan and schedule for how your proposal will be implemented. Include the development, installation, system optimization and training required. This plan and schedule shall be complete with a listing of the specific tasks and milestones required for the successful implementation of this proposal.

3. Identify what you see as the greatest danger to the successful completion of the work as described in this RFP and your firm’s approach to minimizing this risk.
4.9 **Criteria 5 – Other Additional Information**

Please provide any additional information that the Offeror feels should be considered when evaluating their proposal.

The offeror may present any creative approaches that might be appropriate. The offeror may also provide supporting documentation that would be pertinent to this RFP.
5.0 EVALUATION CRITERIA PROCESS

A committee of University officials appointed by the Chief Procurement Officer will evaluate proposals and make a recommendation to the Chief Procurement Officer. The evaluation will be based upon the information provided in the proposal, additional information requested by the University for clarification, information obtained from references and independent sources and oral presentations (if requested).

The evaluation of responsive proposals shall then be completed by an evaluation team, which will determine the ranking of proposals. Proposals will be evaluated strictly in accordance with the requirements set forth in this solicitation, including any addenda that are issued. The University will award the contract to the responsible offeror whose proposal is determined to be the most advantageous to the University, taking into consideration the evaluation factors set forth in this RFP.

The evaluation of proposals will include consideration of responses to the list of criteria in Section 4.0. Offerors must specifically address all criteria in their response. Any deviations or exceptions to the specifications or requirements must be described and justified in a transmittal letter. Failure to list such exceptions or deviations in the transmittal letter may be considered sufficient reason to reject the proposal.

The relative importance of the criteria is defined below:

**Primary Criteria**

- Offeror Qualifications
- Services Defined
- Financial Proposal
- Evidence of Successful Performance and Implementation

**Secondary Criteria**

- Other Additional Services

The University will evaluate proposals as submitted and may not notify offerors of deficiencies in their responses.

Proposals must contain responses to each of the criteria, listed in Section 4 even if the offeror’s response cannot satisfy those criteria. A proposal may be rejected if it is conditional or incomplete in the judgment of the University.
6.0 **SPECIAL CONDITIONS**

6.1 **General and Special Conditions**

The General and Special Conditions for this RFP are attached as Attachments B & C.

6.2 **Bonds, Affidavit and Contract Agreement**

The Payment/Performance Bonds, Affidavit and Contract Agreement between the university and contractor are attached as Attachments D & E. These are NOT required to be submitted with Technical or Financial Proposal, they serve only as reference. These documents will be a requirement of the successful offeror.

6.3 **Competitive Negotiation**

It is the intent of the RFP to enter into competitive negotiation as authorized by KRS 45A.085.

The University will review all proposals properly submitted. However, the University reserves the right to request necessary modifications, reject all proposals, reject any proposal that does not meet mandatory requirement(s) or cancel this RFP, according to the best interests of the University.

Offeror(s) selected to participate in negotiations may be given an opportunity to submit a Best and Final Offer to the purchasing agency. All information-received prior to the cut-off time will be considered part of the offeror’s Best and Final Offer.

The University also reserves the right to waive minor technicalities or irregularities in proposals providing such action is in the best interest of the University. Such waiver shall in no way modify the RFP requirements or excuse the offeror from full compliance with the RFP specifications and other contract requirements if the offeror is awarded the contract.

6.4 **Appearance Before Committee**

Any, all or no offerors may be requested to appear before the evaluation committee to explain their proposal and/or to respond to questions from the committee concerning the proposal. Offerors are prohibited from electronically recording these meetings. The committee reserves the right to request additional information.

6.5 **Additions, Deletions or Contract Changes**

The University reserves the right to add, delete, or change related items or services to the contract established from this RFP. No modification or change of any provision in the resulting contract shall be made unless such modification is mutually agreed to in writing by the contractor and the Chief Procurement Officer and incorporated as a written modification to the contract. Memoranda of understanding and correspondence shall not be interpreted as a modification to the contract.

6.6 **Contractor Cooperation in Related Efforts**

The University reserves the right to undertake or award other contracts for additional or related work to other entities. The contractor shall fully cooperate with such other contractors and University employees and carefully fit its work to such additional work. The contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor.
or by University employees. This clause shall be included in the contracts of all contractors with whom this contractor will be required to cooperate. The University shall equitably enforce this clause to all contractors to prevent the imposition of unreasonable burdens on any contractor.

6.7 **Entire Agreement**

The RFP shall be incorporated into any resulting contract. The resulting contract, including the RFP and those portions of the offeror’s response accepted by the University, shall be the entire agreement between the parties.

6.8 **Governing Law**

The contractor shall conform to and observe all laws, ordinances, rules and regulations of the United States of America, Commonwealth of Kentucky and all other local governments, public authorities, boards or offices relating to the property or the improvements upon same (or the use thereof) and will not permit the same to be used for any illegal or immoral purposes, business or occupation. The resulting contract shall be governed by Kentucky law and any claim relating to this contract shall only be brought in the Franklin Circuit Court in accordance with KRS 45A.245.

6.9 **Kentucky’s Personal Information Security and Breach Investigation Procedures and Practices Act**

To the extent Company receives Personal Information as defined by and in accordance with Kentucky’s Personal Information Security and Breach Investigation Procedures and Practices Act, KRS 61.931, 61.932 and 61.933 (the “Act”), Company shall secure and protect the Personal Information by, without limitation: (i) complying with all requirements applicable to non-affiliated third parties set forth in the Act; (ii) utilizing security and breach investigation procedures that are appropriate to the nature of the Personal Information disclosed, at least as stringent as University’s and reasonably designed to protect the Personal Information from unauthorized access, use, modification, disclosure, manipulation, or destruction; (iii) notifying University of a security breach relating to Personal Information in the possession of Company or its agents or subcontractors within seventy-two (72) hours of discovery of an actual or suspected breach unless the exception set forth in KRS 61.932(2)(b)2 applies and Company abides by the requirements set forth in that exception; (iv) cooperating with University in complying with the response, mitigation, correction, investigation, and notification requirements of the Act, (v) paying all costs of notification, investigation and mitigation in the event of a security breach of Personal Information suffered by Company; and (vi) at University’s discretion and direction, handling all administrative functions associated with notification, investigation and mitigation.

6.10 **Termination for Convenience**

The University of Kentucky, Purchasing Division, reserves the right to terminate the resulting contract without cause with a thirty (30) day written notice. Upon receipt by the contractor of a “notice of termination,” the contractor shall discontinue all services with respect to the applicable contract. The cost of any agreed upon services provided by the contractor will be calculated at the agreed upon rate prior to a “notice of termination” and a fixed fee contract will be pro-rated (as appropriate).
6.11 **Termination for Non-Performance**

**Default**

The University may terminate the resulting contract for non-performance, as determined by the University, for such causes as:

- Failing to provide satisfactory quality of service, including, failure to maintain adequate personnel, whether arising from labor disputes, or otherwise any substantial change in ownership or proprietorship of the Contractor, which in the opinion of the University is not in its best interest, or failure to comply with the terms of this contract;

- Failing to keep or perform, within the time period set forth herein, or violation of, any of the covenants, conditions, provisions or agreements herein contained;

- Adjudicating as a voluntarily bankrupt, making a transfer in fraud of its creditors, filing a petition under any section from time to time, or under any similar law or statute of the United States or any state thereof, or if an order for relief shall be entered against the Contractor in any proceeding filed by or against contractor thereunder. In the event of any such involuntary bankruptcy proceeding being instituted against the Contractor, the fact of such an involuntary petition being filed shall not be considered an event of default until sixty (60) days after filing of said petition in order that Contractor might during that sixty (60) day period have the opportunity to seek dismissal of the involuntary petition or otherwise cure said potential default; or

- Making a general assignment for the benefit of its creditors, or taking the benefit of any insolvency act, or if a permanent receiver or trustee in bankruptcy shall be appointed for the Contractor.

**Demand for Assurances**

In the event the University has reason to believe Contractor will be unable to perform under the Contract, it may make a demand for reasonable assurances that Contractor will be able to timely perform all obligations under the Contract. If Contractor is unable to provide such adequate assurances, then such failure shall be an event of default and grounds for termination of the Contract.

**Notification**

The University will provide ten (10) calendar days written notice of default. Unless arrangements are made to correct the non-performance issues to the University’s satisfaction within ten (10) calendar days, the University may terminate the contract by giving forty-five (45) days notice, by registered or certified mail, of its intent to cancel this contract.

6.12 **Funding Out**

The University may terminate this contract if funds are not appropriated or are not otherwise available for the purpose of making payments without incurring any obligation for payment after the date of termination, regardless of the terms of the contract. The University shall provide the contractor thirty (30) calendar days’ written notice of termination under this provision.
6.13 **Prime Contractor Responsibility**

Any contracts that may result from the RFP shall specify that the contractor(s) is/are solely responsible for fulfillment of the contract with the University.

6.14 **Assignment and Subcontracting**

The Contractor(s) may not assign or delegate its rights and obligations under any contract in whole or in part without the prior written consent of the University. Any attempted assignment or subcontracting shall be void.

6.15 **Permits, Licenses, Taxes**

The contractor shall procure all necessary permits and licenses and abide by all applicable laws, regulations and ordinances of all federal, state and local governments in which work under this contract is performed.

The contractor must furnish certification of authority to conduct business in the Commonwealth of Kentucky as a condition of contract award. Such registration is obtained from the Secretary of State, who will also provide the certification thereof. However, the contractor need not be registered as a prerequisite for responding to the RFP.

The contractor shall pay any sales, use, personal property and other tax arising out of this contract and the transaction contemplated hereby. Any other taxes levied upon this contract, the transaction or the equipment or services delivered pursuant hereto shall be the responsibility of the contractor.

The contractor will be required to accept liability for payment of all payroll taxes or deductions required by local and federal law including (but not limited to) old age pension, social security or annuities.

6.16 **Attorneys’ Fees**

In the event that either party deems it necessary to take legal action to enforce any provision of the contract and in the event that the University prevails, the contractor agrees to pay all expenses of such action including attorneys’ fees and costs at all stages of litigation.

6.17 **Royalties, Patents, Copyrights and Trademarks**

The Contractor shall pay all applicable royalties and license fees. If a particular process, products or device is specified in the contract documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the contract documents and the Contractor is responsible for payment of all associated royalties. To the fullest extent permitted by law the Contractor shall indemnify, hold the University harmless, and defend all suits, claims, losses, damages or liability resulting from any infringement of patent, copyright, and trademark rights resulting from the incorporation in the Work or device specified in the Contract Documents.

Unless provided otherwise in the contract, the Contractor shall not use the University’s name nor any of its trademarks or copyrights, although it may state that it has a Contract with the University.
6.18 **Indemnification**

The contractor shall indemnify, hold and save harmless the University, its affiliates and subsidiaries and their officers, agents and employees from losses, claims, suits, actions, expenses, damages, costs (including court costs and attorneys’ fees of the University’s attorneys), all liability of any nature or kind arising out of or relating to the Contractor’s response to this RFP or its performance or failure to perform under the contract awarded from this RFP. This clause shall survive termination for as long as necessary to protect the University.

6.19 **Insurance Approved by Risk Management 04/10/2020**

The successful Contractor shall procure and maintain, at its expense, the following minimum insurance coverages insuring all services, work activities and contractual obligations undertaken in this contract. These insurance policies must be with insurers acceptable to the University.

<table>
<thead>
<tr>
<th>COVERAGES</th>
<th>LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers’ Compensation</td>
<td>Statutory Requirements (Kentucky)</td>
</tr>
<tr>
<td>Employer’s Liability</td>
<td>$500,000/$500,000/$500,000</td>
</tr>
<tr>
<td>Commercial General Liability including operations/completed</td>
<td>$1,000,000 each occurrence</td>
</tr>
<tr>
<td>operations/products and contractual liability (including</td>
<td>(BI &amp; PD combined) $2,000,000 Products and</td>
</tr>
<tr>
<td>defense and investigation costs), and this contract</td>
<td>Completed Operations Aggregate</td>
</tr>
<tr>
<td>Business Automobile Liability covering owned, leased, or non-</td>
<td>$1,000,000 each occurrence</td>
</tr>
<tr>
<td>owned autos</td>
<td>(BI &amp; PD combined)</td>
</tr>
</tbody>
</table>

The successful contractor agrees to furnish Certificates of Insurance for the above described coverages and limits to the University of Kentucky, Purchasing Division. The University, its trustees and employees must be added as additional insured on the Commercial General Liability policy with regard to the scope of this solicitation. Any deductibles or self-insured retention in the above-described policies must be paid and are the sole responsibility of the contractor. Coverage is to be primary and non-contributory with other coverage (if any) purchased by the University. All of these required policies must include a Waiver of Subrogation (except Workers’ Compensation) in favor of the University, its trustees and employees.

6.20 **Method of Award**

It is the intent of the University to award a contract to the qualified offeror whose offer, conforming to the conditions and requirements of the RFP, is determined to be the most advantageous to the University, cost and other factors considered.

Notwithstanding the above, this RFP does not commit the University to award a contract from this solicitation. The University reserves the right to reject any or all offers and to waive formalities and minor irregularities in the proposal received.

6.21 **Reciprocal Preference**

In accordance with KRS 45A.494, a resident offeror of the Commonwealth of Kentucky shall be given a preference against a nonresident offeror. In evaluating proposals, the University will apply a reciprocal preference against an offeror submitting a proposal from a state that grants residency preference equal to the preference given by the state of the nonresident offeror. Residency and
non-residency shall be defined in accordance with KRS 45A.494(2) and 45A.494(3), respectively. Any offeror claiming Kentucky residency status shall submit with its proposal a notarized affidavit affirming that it meets the criteria as set forth in the above reference statute.

6.22 **Reports and Auditing** (Not Used)

6.23 **Confidentiality**

The University recognizes an offeror’s possible interest in preserving selected information and data included in the proposal; however, the University must treat such information and data as required by the Kentucky Open Records Act, KRS 61.870, et seq.

Information areas which normally might be considered proprietary, and therefore confidential, shall be limited to individual personnel data, customer references, formulae and company financial audits which, if disclosed, would permit an unfair advantage to competitors. If a proposal contains information in these areas and the offeror declares them to be proprietary in nature and not available for public disclosure, the offeror shall declare in the Transmittal Letter the inclusion of proprietary information and shall noticeably label as confidential or proprietary each sheet containing such information. Proposals containing information declared by the offeror to be proprietary or confidential, either wholly or in part, outside the areas listed above may be deemed non-responsive and may be rejected.

The University’s General Counsel shall review each offeror’s information claimed to be confidential and, in consultation with the offeror (if needed), make a final determination as to whether or not the confidential or proprietary nature of the information or data complies with the Kentucky Open Records Act.

6.24 **Conflict of Interest**

This Request for Proposal and resulting Contract are subject to provisions of the Kentucky Revised Statutes regarding conflict of interest and the University of Kentucky’s Ethical Principles and Code of Conduct (www.uky.edu/Legal/ethicscode.htm). When submitting and signing a proposal, an offeror is certifying that no actual, apparent or potential conflict of interest exists between the interests of the University and the interests of the offeror. A conflict of interest (whether contractual, financial, organizational or otherwise) exists when any individual, contractor or subcontractor has a direct or indirect interest because of a financial or pecuniary interest, gift or other activities or relationships with other persons (including business, familial or household relationships) and is thus unable to render or is impeded from rendering impartial assistance or advice, has impaired objectivity in performing the proposed work or has an unfair competitive advantage.

Questions concerning this section or interpretation of this section should be directed to the University purchasing officer identified in this RFP.

6.25 **Personal Service Contract Policies**

Pursuant to the Kentucky Model Procurement Code (Code), the Government Contract Review Committee (GCRC) of the Kentucky General Assembly may establish policies that govern personal service contracts. Under the Code, a personal service contract is an agreement whereby an individual, firm, partnership or corporation is to perform certain services requiring professional skill or professional judgment for a specified period of time at an agreed upon price.
A. Professional Service Rate Schedules:

The GCRC has established rate schedules for certain professional services and may impact any contract established under the Code. These rate schedules are located on the GCRC website at www.lrc.ky.gov/statcomm/Contracts/homepage.htm.

B. Invoicing of Personal Service Contracts:

The Kentucky Model Procurement Code was recently amended to establish conditions for invoicing for fees for personal service contracts. It states, “No payment shall be made on any personal service contract unless the individual, firm, partnership, or corporation awarded the personal service contract submits its invoice on a form established by the committee.” The Government Contract Review Committee has adopted a personal service contract invoice form that must be submitted as a condition of payment. A copy of the form is located on the GCRC website at www.lrc.ky.gov/statcomm/contracts/PSC%20INVOICE%20form.pdf.

6.26 Copyright Ownership and Title to Designs and Copy

The contractor and University intend this RFP to result in a contract for services, and both consider the products and results of the services to be rendered by the contractor hereunder to be a work made for hire. The contractor acknowledges and agrees that the work and all rights therein, including (without limitation) copyright, belongs to and shall be the sole and exclusive property of the University. For any work that is not considered a work made for hire under applicable law, title and copyright ownership shall be assigned to the University.

Title to all dies, type, cuts, artwork, negatives, positives, color separations, progressive proofs, plates, copy and any other requirement not stated herein required for completion of the finished product for use in connection with any University job shall be the property of and owned by the University. Such items shall be returned to the appropriate department upon completion and/or delivery of work unless otherwise authorized by the University. In the event that time of return is not specified, the contractor shall return all such items to the appropriate University department within one week of delivery.

6.27 University Brand Standards

The contractor must adhere to all University of Kentucky Brand Standards. University Brand Standards are maintained by the University Public Relations Office (UKPR) and can be viewed at http://www.uky.edu/prmarketing/brand-standards. Non-adherence to the standards can have a penalty up to and including contract cancellation. Only the UKPR Director or designee can approve exceptions to the University standards.

Graphics standards for the UK HealthCare areas are governed by UK HealthCare Clinical Enterprise Graphic Standards, found at: https://ukhealthcare.uky.edu/staff/brand-strategy.

Contractor warrants that its products or services provided hereunder will be in compliance with all applicable Federal disabilities laws and regulations, including without limitation the accessibility requirements of Section 255 of the Federal Telecommunications Act of 1996 (47 U.S.C. § 255) and Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d), and its implementing regulations set forth at Title 36, Code of Federal Regulations, Part 1194. For purposes of clarity, updated regulations under Section 508 standards now incorporate WCAG 2.0, and for purposes of
this agreement WCAG 2.0 Level AA compliance is expressly included. Contractor agrees to promptly respond to, resolve and remediate any complaint regarding accessibility of products or services in a timely manner and provide an updated version to University at no cost. If deficiencies are identified, University reserves the right to request from Contractor, a timeline by which accessibility standards will be incorporated into the products or services provided by Contractor and shall provide such a timeline within a commercially reasonable duration of time. Failure to comply with these requirements shall constitute a material breach of this Agreement and shall be grounds for termination of this Agreement.

Where any customized web services are provided, Contractor represents that it has reviewed the University’s Web Policy and all products or services will comply with its published standards.

Contractor will provide University with a current Voluntary Product Accessibility Template (VPAT) for any deliverable(s). If none is available, Vendor will provide sufficient information to reasonably assure the University that the products or services are fully compliant with current requirements.

6.28 Printing Statutes

The purchase of printing services for all state agencies is governed by Chapter 57 of the Kentucky Revised Statutes. Specifically, all printing must be awarded to the lowest responsive bidder and approved by the Governor of Kentucky. In compliance with these statutes, all printing must be provided by a contract established by the Purchasing Division.

6.30 Payment Terms

The University adheres to a strategic approach regarding payables management based on risk minimization, processing costs, and industry best practices. As such, suppliers and individuals doing business with the University will be paid based on the following protocol:

1. The University utilizes Payment Plus (e-payables) as its primary default form of payment. By enrolling in Payment Plus, suppliers can receive payments immediately (all invoices will be paid immediately upon confirmation of goods receipt and invoice). The process is electronic and the supplier receives real-time payment notices. Additional information regarding Payment Plus (and enrollment form) can be found at: https://www.uky.edu/ufs/payment-plus-supplier-enrollment-form.

2. Payments by check. Payment terms for check payments are Net-30.

3. Individuals receiving payments from the University that require ACH direct payments will only be processed under special circumstances as approved by the Controller’s office. Payment terms for ACH are Net-40.
7.0 SCOPE OF SERVICES

7.1 Detailed Services Defined

This request for Proposal (RFP) is issued by University of Kentucky to select an offeror and product for the renovation of Elevators #14 and 15 to support the Chandler Medical Center Main Hospital and Critical Care Center located in Lexington, KY. This is a full renovation of the elevators as described in the drawings and specifications provided. The offeror is responsible for providing the University of Kentucky with a complete turnkey solution.

7.2 Optional Services

7.2.1 Implementation of Services:

Offeror must provide the University of Kentucky representative all implementation plans including work schedule, and completion time.

7.2.2 Installation:

- The Contractor will confirm in writing that the delivered equipment matches the equipment lists from the purchase contract.
- The Contractor or his contractor will be responsible for all drilling. University of Kentucky is not responsible for any core drilling that may be required.
- All damages to the facility by the Contractor or his contractor will be the responsibility of the Contractor to correct at no cost to the University of Kentucky.

7.2.3 Design Plans and Supporting Documentation:

Contractor will deliver to University of Kentucky in accordance with mutually agreed upon timelines, equipment performance specifications, and related documents referenced, specified or contemplated in this RFP. Said documentation must incorporate, at minimum, the following:

- Product data sheets on all major components, including, but not limited to electrical specifications, mechanical specifications and instructions for installation, operation and maintenance, suitable for inclusion in maintenance manuals.
- Functional block diagrams that provide an overall system configuration with every device identified. Block diagrams or system-generated documentation will indicate the system configuration.
- Floor plans indicating raceway and wiring and other system components to be used in the system.

7.2.4 Acceptance Test Specifications:

Contractor must provide the exact scope, methodologies, procedures, and acceptance criteria for executing the acceptance tests to University of Kentucky. Said test plans must approved by University of Kentucky and incorporate, at minimum, the following:

- Test equipment used to verify that all components of the system are functioning per specified criteria.
- Test and acceptance plan to clearly demonstrate system functionality and compliance with the specified criteria.
Factory-authorized service representatives must be engaged where appropriate to supervise the field assembly and connection of components; and the pre-testing, testing, and adjustment of the system.

Upon completing the installation of the system, all integrated subsystems will be aligned, adjusted and balanced as part of the pretest plan. Pre-testing will ensure system conformance to the performance requirements. Any deficiencies observed in pre-testing will be corrected. Any malfunctioning or damaged items will be replaced with new and tested until satisfactory performance and conditions are achieved.

Upon completion of pre-tests, University of Kentucky representative will be notified a minimum of 3 days in advance of acceptance test performance. If so desired, background system pretests will be conducted in representative presence.

Upon satisfactory completion of system pretests, operational system testing will commence to ensure system conformance to requirements and specifications. The operational tests will include demonstration of system features and functionality, and coverage performance.

The University of Kentucky team will be allowed the opportunity to inspect the system to verify that subsystems, units and controls are properly labeled; and interconnecting wires and terminals are identified.

Any observed deficiencies indicated by tests or by University of Kentucky inspection will be rectified and completely retested. Work and materials required to correct deficiencies will be made at no expense to the University of Kentucky.

7.2.5 Codes and Standards:

The Contractor must comply with all codes and standards of the University of Kentucky, NFPA and FCC. The system must be fully in compliance with all federal, state and local government.

7.3 Payment/Performance Bonds and Affidavit (Attachment D)

1. The successful Contractor shall furnish a Performance and Payment Bond (example Attachment D) in an amount equal to one hundred percent (100%) of the base bid price as security for the faithful performance of this contract and the payment of all persons performing labor, including the payment of all unemployment contributions, which become due and payable under Kentucky Unemployment Insurance Law and furnishing materials in connection with this contract.

The successful Contractor shall be required to place all insurance coverage’s (Liability and Performance Bond) required by the laws of this State with a licensed resident local agent of Kentucky, who represents insurance companies authorized to do business in the State of Kentucky.

The successful contractor will be required to assure, by affidavit (example Attachment D), that all contractors and subcontractors employed, or will be employed, under the provisions of the contract shall be in compliance with Kentucky requirements for Worker’s Compensation Insurance according to KRS Chapter 342 and Unemployment Insurance according to KRS Chapter 341.
8.0 **FINANCIAL OFFER SUMMARY**

Offerors are to provide a fixed price for the services offered.

8.1 **Mandatory Services (Section 7.1)**

Please complete Attachment A - FORM OF PROPOSAL to satisfy this requirement.

8.2 **Optional Services (Section 7.2)**

Offerors must provide a bid on the optional services detailed in Section 7.2. The University shall, at its sole discretion, make the determination as to whether the optional service will be undertaken.

Please submit your bid on optional services by completing Section 7.2.

8.3 **Alternate Pricing**

In addition to the above financial offer, the offeror may submit alternative financial proposals, however the information requested above must be supplied and will be used for proposal evaluation purposes.

**Additional Financial Commitment**

In addition to the financial offers, please propose a financial commitment to assist the University. Options may include a signing bonus, scholarships, internships, commitment to hire University Graduates or a (%) percentage rebate.
UNIVERSITY OF KENTUCKY
CAPITAL CONSTRUCTION PROCUREMENT SECTION
FORM OF PROPOSAL

Project Title: PAV HA Elevators 14 & 15 Renovation

Purchasing Officer: Matt Spalding

NOTE: The following Form of Proposal shall be followed exactly in submitting a proposal for this work. If this copy is lost, an additional copy will be furnished upon written request to the authority issuing Contract Documents.

This Proposal is submitted by: ____________________________

(NAME AND ADDRESS OF BIDDER)

Date: ____________________________

Telephone: ____________________________

Email Address ____________________________

TO: BID CLERK

CAPITAL CONSTRUCTION PROCUREMENT
RM. 322 SERVICE BUILDING
411 SOUTH LIMESTONE
LEXINGTON, KY. 40506-0005

INVITATION TO BID: UK-2069-20

BID OPENING DATE: 05/15/2020

TIME 3:00 P.M. E.D.T.

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification.

The Bidder hereby acknowledges receipt of the following Addenda:

ADDENDUM NO. ________________ DATED ________________

ADDENDUM NO. ________________ DATED ________________

ADDENDUM NO. ________________ DATED ________________

(Here insert the number and date of any Addenda issued and received. If none has been issued and received, the word NONE should be inserted.)
Contractor Report of Prior Violations of Chapters 136, 139, 141, 337, 338, 341, and 342

Pursuant to KRS 45A.485, the Contractor shall, prior to the award of a Contract, reveal final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341, and 342 by the Contractor that have occurred in the previous five (5) year period.

This statute also requires for the duration of the Contract established, the Contractor be in continuous compliance with the provisions of Chapters 136, 139, 141, 337, 338, 341, and 342 that apply to the Contractor’s operations. The Contractor’s failure to reveal a final determination of a violation of KRS Chapters 136, 139, 141, 337, 338, 341, and 342, or failure to comply with any of the above cited statutes for the duration of the Contract shall be grounds for the cancellation of the Contract, and the disqualification from eligibility for future contracts for a period of two (2) years.

The Contractor, by signing and submitting a Bid on this Invitation, agrees as required by KRS 45A.485 to submit final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341, and 342 that have occurred in the previous five (5) years prior to the award of a Contract and agrees to remain in continuous compliance with the provisions of these statutes during the duration of any contract that may be established. Final determinations of any violations of these statutes, must be provided to the University by the successful Contractor prior to the award of a Contract.

LUMP SUM PROPOSAL

The Bidder agrees to furnish all labor, materials, supplies and services required to complete the Work, for the above referenced Project, for the Capital Construction Procurement Section, University of Kentucky, as described in the Specifications and Contract Documents and shown on the Drawings enumerated below and as modified by the Addenda listed above.

FOR THE LUMP SUM OF ________________________________ (USE WORDS)

_________________________ DOLLARS AND ______________________ CENTS.

(USE WORDS) (USE WORDS)

($____________________)

(USE FIGURES)
FORM OF PROPOSAL

AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);

2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. UK-2069-20 have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;

3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;

4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and is not in violation of any prohibited conflict of interest, including those prohibited by the provisions of KRS 164.390, and 45A.330 to 45A.340 and 45A.455;

5. This offer is good for 60 calendar days from the date this Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;

6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.

7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.

8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.

9. In accordance with KRS 45A.110(2), the undersigned hereby swears under penalty of perjury that he/she has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky and that the award of a contract to the bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

READ CAREFULLY - SIGN IN SPACE BELOW - FAILURE TO SIGN INVALIDATES BID

SIGNED BY_________________________ TITLE _______________________

PRINT NAME_________________________ FIRM _______________________

ADDRESS_____________________________ AREA CODE & PHONE ____________

FAX

CITY STATE ZIP CODE DATE____________________

EMAIL_____________________________________

FP-3
Please complete this form which is necessary for the University of Kentucky vendor database. Mark only one classification. Refer to "Definitions" for assistance in determining correct classification.

(01) Small Business       (06) Woman-Owned Large Business
(02) Large Business       (07) Disadvantaged Woman-Owned Small Business
(03) Disadvantaged Small Business
(04) Disadvantaged Large Business
(05) Woman-Owned Small Business
(07) Disadvantaged Woman-Owned Large Business
(08) Other

DEFINITIONS

(01) SMALL BUSINESS: A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.

(02) LARGE BUSINESS: A business concern that exceeds the small business size code standards established by SBA.

(03) DISADVANTAGED SMALL BUSINESS: A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.

(04) DISADVANTAGED LARGE BUSINESS: A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.

(05) WOMAN-OWNED SMALL BUSINESS: A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.

(06) WOMAN-OWNED LARGE BUSINESS: A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.

(07) DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS: A concern that meets the definition of both (03) and (05) above.

(08) DISADVANTAGED, WOMAN OWNED LARGE BUSINESS: A concern that meets the definition of both (04) and (06) above.

(09) OTHER: A concern that does not meet any of the above definitions.
THE FOLLOWING ITEMS ARE HEREWITH ENCLOSED AS REQUIRED BY KRS 45A.185

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.

2. List of Proposed Subcontractors and Unit Prices. (if required)

3. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.

4. List of Materials and Equipment.

5. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

   (Nine Digit Number)

6. DUNS NUMBER

   (Number)

BIDDER’S QUALIFICATIONS

The Commonwealth of Kentucky Model Procurement Code (KRS 45A.080) requires contracts to be awarded, “to the responsive and responsible bidder whose bid offers the best value” to the University of Kentucky. In order to determine if the Bidder has the experience, qualifications, resources and necessary attributes to provide the quality workmanship, materials and management required by the plans and specifications, the Bidder may be required to complete and submit the information requested on the University of Kentucky Contractor Bidder Determination of Responsibility questionnaire. Failure to provide the information requested on the questionnaire or failure to provide any additional submittals or information that may be requested to make this determination may be grounds for a declaration of non-responsibility with respect to the Bidder. A copy of the Contractor Determination of Responsibility questionnaire is available upon request to all Bidders.

TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

It is further agreed, that in the event this Proposal is accepted by the Owner and the undersigned shall fail to execute the Contract and furnish satisfactory Payment and Performance Bond within ten (10) consecutive calendar days from the date of notification of the award of the Contract, the Owner may at his option, determine that the undersigned has abandoned the Contract and thereupon, the Proposal shall become null and void and the Bid guarantee, check or Bid bond which accompanied it shall be forfeited and become the property of the Owner as liquidated damages for each failure and no protest pursuant to such action will be made. If the Undersigned shall execute the Contract, and furnish satisfactory Payment Bond and Performance Bond, it is understood that the Bid Guarantee or Bid Bond will be returned to the undersigned by the Owner.
UNIT PRICES

NOTE: Unit Prices shall include the furnishing of all labor, materials, supplies and services and shall include all items of cost, overhead and profit for the Contractor and any subcontractor involved, and shall be used uniformly without modifications for either additions or deductions. The Unit Prices as established shall be used to determine the equitable adjustment of the Contract Price in connection with changes, deletions or extra work performed under the Contract and the "Rules of Measurement" set forth in the General Conditions shall govern.

All Bidders will be required to complete and submit the following information. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.

The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.

<table>
<thead>
<tr>
<th>DESCRIPTION OF WORK</th>
<th>UNIT PRICE</th>
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FP-6
PRIMARY LIST OF PROPOSED SUBCONTRACTORS

All subcontractors are subject to the approval of the Capital ConstructionProcurement Section and Capital Project Management Division, University of Kentucky, Lexington, KY.

If certain branches of the Work are to be done by the Prime Contractor, so state.

The apparent low bidder will be required to complete and submit to the University the following information by twelve (12) noon of the first working day following the bid opening. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.

The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.

<table>
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<tr>
<th>DIVISION OF WORK</th>
<th>NAME AND ADDRESS OF SUBCONTRACTOR</th>
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FP-7
LIST OF MATERIALS AND EQUIPMENT

Each item listed under the different phases of construction must be clearly identified so that the Owner will definitely know what the Bidder proposes to furnish.

The use of a manufacturer's or dealer's name only, or stating "as per Plans and Specifications," will not be considered as sufficient identification.

Where more than one "Make" or "Brand" is listed for any one item, the Owner has the right to select the one to be used.

The apparent low bidder will be required to complete and submit to the University the following information by twelve (12) noon of the first working day following the bid opening. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.

The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.

ITEM   MATERIALS AND EQUIPMENT   BRAND OR MANUFACTURER
IDENTIFICATION OF MINORITY SUBCONTRACTORS AND MATERIAL SUPPLIERS

Participation of Minority and Women owned Contractors and businesses.

The University of Kentucky encourages and supports the participation of minority and women owned businesses.

1. Minority and Women Subcontractors

2. Minority and Women Material Suppliers

SUPERINTENDENT

In accordance with Article 17 of the General Conditions a full-time superintendent will be required on this project. Below, please list the superintendent your firm will employ on this project. The successful Bidder will be required to furnish a resume of the superintendents’ qualifications and or past projects.

List the Superintendent’s Name

Revised 3/22/06

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GENERAL CONDITIONS OF THE CONTRACT  
FOR CONSTRUCTION BY A GENERAL CONTRACTOR  
University of Kentucky  
Capital Construction Division

These General Conditions are binding upon the General Contractor and all Sub-contractors as each are subject to the provisions contained herein.

ARTICLE 1 - DEFINITIONS

1.1 Wherever used in these General Conditions or in other Contract Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:

1.1.1 ARCHITECTS SUPPLEMENTAL INSTRUCTIONS (ASI) - The term “ASI” means a written order issued by the Consultant that clarifies or interprets the Contract Documents, that orders minor changes in the Work, that does not require an adjustment in either cost or time, and that does not require a Change Order.

1.1.2 BUSINESS DAY – The term “Business Day” means a Calendar Day that is not a Saturday, Sunday or legal holiday in Fayette County, Kentucky.

1.1.3 CALENDAR DAY - The term "Calendar Day" means a day of twenty-four hours measured from midnight to the next midnight.

1.1.4 CHANGE ORDER - The term "Change Order" means a written order to the General Contractor, signed by the Owner and issued after the execution of the Contract, directing a change in the Work or an adjustment in the Contract Amount or the Contract Time. A Change Order may be an agreed change by the General Contractor and the Owner or it may be a unilateral change by the Owner.

1.1.5 CONSULTANT - The term "Consultant" means the person and/or entity, whether singular or plural, either Architect, Engineer or other Consultant, who is or are identified as such in the Contract Documents.

1.1.6 CONTRACT - The term “Contract” means the Contract between Owner and General Contractor and consists of all Contract Documents as defined in Article 1.1.8 of these General Conditions.

1.1.7 CONTRACT AMOUNT - The term "Contract Amount" means the sum stated in the Agreement which represents the total amount payable by the Owner to the General Contractor for the performance of the Work under the Contract Documents, plus or minus adjustments as provided for in the Contract Documents or by approved Change Orders.

1.1.8 CONTRACT DOCUMENTS - The "Contract Documents" include the Agreement of Contract between the Owner and the General Contractor (the "Agreement"); the General Conditions; the Special Conditions; the General Contractor's Form of Proposal; the General Contractor's Bonds; the Specifications, Drawings and Addenda for the construction of the Project; and any Change Orders issued after execution of this Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and any Sub-contractor, or any person or entity other than the General Contractor. Documents not included or expressly contemplated in this Article do not, and shall not, form any part of the Contract for Construction. Without limiting the generality of the foregoing, shop drawings and other submittals from the General Contractor or its Sub-contractors and suppliers do not constitute a part of the Contract Documents. Except as otherwise provided, where these Contract Documents obligate the General Contractor to certain responsibilities or require the General Contractor to perform certain actions, the General Contractor may require these same responsibilities and/or actions of one or more Sub-contractors. However, assignment of such responsibilities or actions to one or more Sub-contractors shall not be construed to relieve the General Contractor of its obligation to the University under this contract.

1.1.9 CONTRACT TIME - The term "Contract Time", unless otherwise provided, means the specified number of consecutive Calendar Days following the stipulated commencement of the Work as stated in the Work Order, plus or minus adjustments as provided for by approved Change Orders, within which the General Contractor must complete the Work.

General Conditions  
General Contractor

Rev August 2019 3
Contractor shall complete the Work required by the Contract and shall achieve certification of substantial and final completion.

1.1.10 GENERAL CONTRACTOR or (GC) - The term "General Contractor" or “GC” means the person or entity who will or has entered into a contract with the Owner that assumes the risk for construction of the Project as the general contractor, and who will provide consultation and collaboration regarding the construction during and after design of the Project. The GC shall execute and hold all construction Sub-contracts and Purchase Orders for the Project.

1.1.11 KRS REFERENCES - Reference to “KRS” means the "Kentucky Revised Statutes" adopted by the Commonwealth of Kentucky, including all laws that may have been revised, amended, supplemented or new laws enacted.

1.1.12 OWNER - The term "Owner" means the University of Kentucky, a statutory body corporate existing pursuant to Sections 164.100 et seq. of the Kentucky Revised Statutes.

1.1.13 PROJECT - The term "Project" means the total construction of the Work performed under the Contract Documents, which may be the whole or a part, and which may include construction by the Owner or by separate contracts.

1.1.14 PROJECT MANAGER - The term "Project Manager", when used alone, means the Owner's representative responsible for administration and management of the Project. The Owner's Project Manager during construction shall be the designated University of Kentucky Capital Projects Management Project Manager that is in charge of the Project. The term “General Contractor’s Project Manager” or “GC Project Manager” means the individual employed by the General Contractor who is assigned to the Project to provide overall management during both the design and construction phases of the Project, and who has total responsibility for the successful completion of the Project

1.1.15 PROVIDE - The term "Provide," as used throughout the specifications, shall mean furnish, install and pay for.

1.1.16 SHOP DRAWINGS - The term "Shop Drawings" means drawings, diagrams, schedules, and other data specially prepared for the Work by the General Contractor or any Sub-contractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

1.1.17 SUBSTANTIAL COMPLETION - The term "Substantial Completion" is the point at which, as certified in writing by the Owner, a project is at the level of completion, in strict compliance with the contract, where (a) necessary approval by public regulatory authorities (and by other authorities having jurisdiction or as identified in Article 11.2, as necessary) has been given; (b) the Owner has received all required warranties and documentation, and (c) the Owner may enjoy beneficial use or occupancy and may use, operate, and maintain the project in all respects, for its intended purpose. Partial use or occupancy shall not necessarily result in the project being deemed substantially complete and shall not be evidence of Substantial Completion. In order for the Owner to enjoy beneficial use or occupancy and use, operate, and maintain the project in all respects, for its intended purpose, the stage or progress of the Work or a designated portion thereof shall be sufficiently complete, accessible, operable and usable, and all parts, systems and site Work shall be 100% complete, cleaned and available for the Owner’s full use without interruption in accordance with the Contract Documents, including but not limited to the provisions of Article 28 of these General Conditions. The Work will not be considered acceptable for Substantial Completion review until all Project systems included in the Work are operational as designed and scheduled, all designated or required governmental inspections and certifications have been made and approvals provided to the Owner, designated instruction of the Owner’s personnel in the operation of systems has been completed, and all final finishes within the Contract Documents are in place. In general, the only remaining Work shall be minor in nature so that the Owner and/or the Owner’s tenants could occupy the Project on that date and the completion of the Work by the General Contractor would not materially interfere or hamper the Owner’s or the Owner’s tenants' normal business operations. As a further condition of Substantial Completion acceptance, the General Contractor shall certify in writing that all remaining Work, the same being solely of a “punch list” nature, will be completed within thirty (30) consecutive Calendar Days.
following the date of Substantial Completion.

1.17.1 The parties agree that “substantial completion” as defined in Article No. 2 of the Agreement and Article 1 of the General Conditions, as extended by approved Change Order(s) pursuant to Article 18.1 of the General Conditions, shall be the “date of completion specified in the contract” for purposes of KRS 45A.250(2).

1.18 SUB-CONTRACTOR - The term "Sub-contractor" means the person, company, corporation, joint venture or other legal entity with whom the General Contractor has executed a Contract for a portion of the Work.

1.19 WORK - The term "Work" means the scope of construction and services required by the Contract Documents and all approved Change Orders, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the General Contractor to perform and complete the General Contractor's obligations under the Contract in an expeditious, orderly and workmanlike manner. The Work may constitute the whole or a part of the Project.

1.20 WORK ORDER - The term "Work Order" means a written notice by the Owner to the General Contractor authorizing the General Contractor to commence Work under the Contract and establishing the beginning date from which the time for Substantial and Final Completion shall be established.

1.21 UNIT PRICE - The term "Unit Price" means the amount per unit of measurement for materials or services as described in the bid documents.

ARTICLE 2 - CONSULTANT

2.1 The Consultant will be the Owner’s representative during construction and until the Work is complete. The Consultant will advise and consult with the Owner. The Owner's instructions to the General Contractor may be forwarded through the Consultant.

2.2 The Consultant will regularly, but no less frequently than monthly, visit the site to become familiar with the progress of the Work, the quality of the Work being provided and to determine if the Work is proceeding in accordance with the Contract Documents. On the basis of these on-site inspections, the Consultant will inform the Owner of the progress of the Work, will advise the Owner of any defects and deficiencies observed in the Work and, when appropriate, will certify to the Owner that the Work in place equals or exceeds the amount requested by the General Contractor on all applications for progress payments.

2.2.1 If applicable for the Work, the Consultant will verify to the Owner that the General Contractor is performing erosion prevention and sediment control inspections as required by the Kentucky Division of Water Construction General Permit (KYR10) at least once every 7 days and shall include the findings in the site visit reports.

2.3 The Consultant will be the interpreter of the requirements of the drawings and specifications and any changes made to the drawings and specifications.

2.4 Claims, disputes, and other matters in question that arise relating to the execution or the progress of the Work shall be referred in writing to the Consultant by the General Contractor. The Consultant will provide a response in accordance with and subject to the provisions of Article 38 of these General Conditions.

2.5 The Consultant will have the authority to reject Work which does not conform to the Contract Documents or to the required level of quality and performance.

2.6 The Consultant will review and approve, or take other appropriate action upon receipt of the General Contractor's submittals such as Shop Drawings, product data, and samples. The review of submittals will be for general conformance with the design concept of the work, and for compliance with the information provided by the Contract Documents. Such review will not relieve the General Contractor of any responsibility for errors or
omissions in submittals, and will in no way constitute a waiver of or change to the requirements of the Contract Documents.

2.6.1 The Consultant’s review and response will be completed with reasonable promptness with a goal of ten (10) business days or less. The Consultant’s review of a specific item shall not indicate approval of an assembly of which the item is a component.

2.7 The Consultant will prepare Change Orders for the Owner to direct changes in the Work. Minor changes in the Work, not involving modifications to the contract cost or completion times and that are consistent with the purpose of Work, may be directed by the Consultant through Architectural Supplemental Instructions (ASI).

2.9 When requested by the General Contractor, the Consultant will conduct inspections to determine if the Project is at the level of completion required by and in strict compliance with the Contract such that the Owner may enjoy beneficial use or occupancy and may use, operate, and maintain the project in all respects, for its intended purpose, as further defined in the Contract. If the level of completion warrants, the Consultant will confirm that all necessary approvals by public regulatory authorities or other authorities having jurisdiction have been given, will confirm that the Owner has received all required warranties and documentation, will recommend dates for certification of Substantial Completion and Final Completion by the Owner, and will complete and submit the Notice of Termination of coverage under the KPDES General Permit for Storm Water Discharges Associated with Construction Activity.

2.10 The General Contractor will accept direction for the Work on the Project only from the Owner's Project Manager or from the Consultant. Requests for information from the General Contractor shall be directed to the Consultant.

ARTICLE 3 - CORRELATION AND INTENT OF CONTRACT DOCUMENTS

3.1 Execution of the Contract by the General Contractor is a representation that the General Contractor has or shall thoroughly and carefully examine the site of the Work; shall timely investigate all conditions which can affect the Work or its cost, including but not limited to availability of labor, materials, supplies, water, electrical power, roads, access to the site, uncertainties of weather, water tables, the character of equipment and facilities needed to perform the Work, and local conditions under which the Work is to be performed; and further, that the General Contractor shall ensure that the documents issued for bidding by Sub-contractors reflect the results of this investigation and are adequate to complete the Work. It is the responsibility of the General Contractor to be familiar with and comply with all Federal, State, and local laws, ordinances, and regulations which might affect those engaged in the Work, and to be familiar with the materials, equipment, or procedures to be used in the Work, or which in any other way could affect the completion of the Work. The General Contractor shall carefully study and compare the Contract Documents with each other and with other information provided to the General Contractor by the Consultant or the Owner pursuant to the Contract Documents and shall notify the Owner and the Consultant in writing of any errors, inconsistencies or omissions in the Contract Documents recognized by the General Contractor. Any failure to properly familiarize itself with the proposed Work shall not relieve the General Contractor from the responsibility for completing the Work in accordance with the Contract Documents.

3.2 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the General Contractor. Labor or materials which are reasonably inferable from the Contract Documents and which are necessary to produce the desired result, even though not specifically mentioned in the Contract Documents, shall be included in the Work at no additional cost to the Owner.

3.3 In the event a question arises regarding the meaning or intent of the Contract Documents, the General Contractor shall report it by preparing an RFI in eCommunication® to the Consultant. The Consultant shall furnish, with reasonable promptness and with a goal of three (3) business days and by whatever means as may be appropriate, additional instructions necessary for the proper execution of the Work. All such drawings and instructions shall be consistent with the Contract Documents, true developments thereof, and reasonably inferable therefrom. The Work shall be executed in conformity therewith and the General Contractor shall do
no Work without proper drawings and instructions. Items indicated on drawings as "N.I.C." or "Not In Contract" are shown for explanation purposes only and are not to be included in this Contract.

3.4 The Contract Documents are complementary, and what is required by one shall be binding as if required by all. In case of conflicts between the various documents, the order of precedence will be as follows: (1) Addenda, (2) Special Conditions, (3) General Conditions, (4) Technical provisions of the Specifications and (5) Drawings.

3.5 Any notice to the General Contractor from the Owner regarding this Contract shall be in writing and delivery and service of such notice shall be considered complete when sent by certified mail to the General Contractor at General Contractor's last known address. Such notice may also, at the Owner's election, be hand-delivered to the General Contractor or the General Contractor's authorized representative.

ARTICLE 4 - PRE-CONSTRUCTION CONFERENCE

4.1 Following the execution of the Contract, a pre-construction conference will be held. Representatives of the Capital Project Management Division, Consultant, General Contractor, and all major Sub-contractors shall be present to discuss the time for construction, methods and plan of operation, authority of the Consultant, procedures for handling shop drawings, progress estimates and requests for payments, and other relevant issues. The time and location of this meeting will be the responsibility of the General Contractor in consultation with the Consultant, Owner and other interested parties.

4.2 Environmental aspects of the project, including erosion prevention and sediment control (EPSC) and storm water management shall be discussed during this conference. The Group shall discuss the Storm Water Pollution Prevention Plan (SWPPP) to ensure that all parties understand the requirements. During this meeting the responsibility for reading the rain gage on a daily basis will be established. The Contractor will identify the initial measures to be installed prior to land disturbing activities beginning. Any modifications to the SWPPP due to constructability issues should be discussed at this conference.

ARTICLE 5 - SHOP DRAWINGS

5.1 The General Contractor shall submit a shop drawing and product sample submittal schedule to the Consultant establishing dates for the submission of Shop Drawings and product samples prior to the submittal of the General Contractor's first application for payment for construction phase services. The schedule shall have been coordinated with all Sub-contractors and material suppliers as well as the General Contractor’s construction schedule and shall allow for adequate and reasonable time for review of the samples and submittals by the Consultant. The General Contractor shall be responsible for compliance with the submittal schedule and shall insure that the Submittal Schedule is maintained in order to accurately reflect the status of processing all required submittals.

5.2 The General Contractor shall review product samples and shop drawings for compliance with the requirements of the Contract Documents, and shall submit them to the Consultant in accordance with submittal procedure and schedule established. The General Contractor's review and submittal to the Consultant of any shop drawing or sample shall constitute a representation to the Owner and Consultant that a) the General Contractor has determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or assumes full responsibility for doing so, and that b) each shop drawing or sample has been reviewed or coordinated with the requirements of the Work and the Contract Documents. Shop drawings and submittal requirements shall not be deemed satisfied until approvable documents are received by the Consultant. Incorrect or incomplete submittals will be returned to the General Contractor without action. No claim for additional time or extension of the contract will be considered if such claim is the result of failure by the General Contractor to provide correct, accurate, complete and approvable submittals.

5.3 The Consultant will review submittals with reasonable promptness, and take appropriate action or return submittals to the General Contractor for corrections as may be required. The General Contractor shall make any corrections required by the Consultant for compliance with the Contract and shall return the required number of corrected copies of shop drawings and resubmit new samples until approved. The General
Contractor shall direct specific attention, in writing, or on resubmitted shop drawings, to revisions other than the corrections called for by the Consultant on previous submissions.

5.4 Where a shop drawing or sample submission is required by the specifications, no related Work shall be commenced until the submission has been accepted in writing by the Consultant. The review and acceptance shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The acceptance of a separate item will not indicate acceptance of the assembly in which the item functions. A copy of each accepted shop drawing and product sample shall be kept in good order by the General Contractor at the site and shall be made available to the Consultant on request.

5.5 The Consultant's acceptance of Shop Drawings or samples shall not relieve the General Contractor from the responsibility for any deviations from the requirements of the Contract Documents unless the General Contractor has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any acceptance by the Consultant does not relieve the General Contractor from responsibility for errors or omissions in the Shop Drawings.

ARTICLE 6 - LAYING OUT WORK

6.1 The General Contractor will secure all data at the site of the building such as grades of lot, convenience of receiving and sorting material, location of public services, and other information which will have a bearing proposals or on the execution of the Work and shall address these issues in the preparation of scopes of work for the Subcontract bid packages. No allowance shall be made for failure of the General Contractor to obtain such site information prior to submitting their proposal or to include such information in the Subcontract bid packages, and no adjustment to the General Contractor’s Contract amount or stipulated time for completion shall be allowed when due to failure by the General Contractor to do so.

6.2 The General Contractor shall be responsible for all lines, levels and measurements of all Work executed under the Contract. The General Contractor shall verify the figures before laying out the Work and will be held responsible for any error resulting from failure to do so. Working from lines and levels established by the property survey or by other Contract Documents, and as shown in relation to the Work, the General Contractor will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on the site as needed to properly locate each element of the entire Project. The General Contractor shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. The General Contractor shall advise Sub-contractors and trades persons performing Work of marked lines and levels provided for their use in layout work. The General Contractor shall verify layout information shown on drawings as required for the Work.

6.3 The General Contractor shall be responsible for coordination of the installation of all elements of the Work, including preparation of coordination drawings if required by the Contract Documents or deemed necessary by the General Contractor for performance of the Work.

6.4 If any encroachments are made by the General Contractor or any Sub-contractor on any adjacent property, the General Contractor shall, at the General Contractor’s expense, and within thirty (30) Calendar Days after written notice from the Owner or the Consultant, correct any encroachments and obtain approval from the owner of such adjacent property for any encroachments that cannot be feasibly corrected. The General Contractor shall not be entitled to any adjustment to the Contract Amount or the Contract Time as a result of any such encroachment or the correction thereof.

ARTICLE 7 - PLANS, DRAWINGS, SPECIFICATIONS AND RECORD DRAWINGS

7.1 Unless otherwise provided in the Contract Documents, the Owner will furnish the General Contractor free of charge one electronic or reproducible copy of the Drawings and Specifications for execution of the Work. The General Contractor shall pay for the cost of duplication of all sets required over and above this amount.
7.2 The cost of additional plans, specifications and official contract documents for use by Sub-contractors for bidding and for construction shall be borne by the General Contractor or by the Sub-contractors. Arrangements for orders and payment for plans, specifications and other contract documents must be made with Lynn Imaging, Lexington, Kentucky (http://www.ukplanroom.com) or by phone at 1.800.888.0693 or 859.255.1021) before a set of documents will be issued.

7.3 The General Contractor shall keep one copy of all Contract Documents, including Drawings, Specifications and Shop Drawings on the site, in good order. A qualified representative of the General Contractor shall record on these documents, from day to day as Work progresses, all changes and deviations from the Contract Documents. Prior to Substantial Completion, the General Contractor shall complete and turn over to the Consultant the As-Built drawings, with a digital copy (in PDF format) submitted to the Owner simultaneously. The As-Built drawings shall consist of a set of drawings which indicate all field changes that were made to adapt to field conditions, changes resulting from Change Orders and all concealed and buried installations of piping, conduit and utility services. All buried and concealed items, both inside and outside the facility, shall be accurately located on the As-Built drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The As-Built drawings shall be clean and all changes, corrections and dimensions shall be given in a neat and legible manner in a contrasting color. For any changes or corrections in the Work which are made subsequent to the Substantial Completion Inspection, revisions shall be made to the As-Built drawings and submitted to the Consultant prior to final payment. Approval of the final payment request shall be contingent upon compliance with these provisions.

7.4 All drawings, specifications and copies thereof, furnished by the Consultant to the Owner, are the property of the University of Kentucky. They shall not be used by the Consultant, General Contractor, or any Sub-contractor or Supplier on any other Project.

ARTICLE 8 - TEMPORARY UTILITIES

8.1 The General Contractor shall provide and pay for, unless modified in the Special Conditions, all temporary conveniences including, but not limited to, wiring, lighting, power and electrical outlets, heat, water, and sanitary facilities required for construction. In the event the Owner elects to make available, at no cost to the General Contractor, the electric power required for construction activities, the electric power supplied shall not be utilized as a means to provide temporary heat or for welding.

8.2 The General Contractor is responsible for paying all utility costs, whether the costs are from an outside utility company or from the University, for utility services used in the course of completing the Work. The General Contractor shall provide temporary heating, ventilation, telephones, water, electricity, portable gas, lighting for the Work, safety lighting, security lighting, and trash removal/dumpster service for both General Contractor and Sub-contractor use during the Project. Work and safety lighting shall be provided continuously during working hours. Security lighting shall be provided at all hours of darkness.

ARTICLE 9 - MATERIALS, EQUIPMENT, APPLIANCES, AND EMPLOYEES

9.1 Unless otherwise provided in the Contract Documents, the General Contractor shall provide and pay for all materials, labor and personnel, tools, equipment, construction equipment and machinery, utilities, supplies, appliances, transportation, taxes, temporary facilities, licenses, permits and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and the proper execution and completion of the Work safely, without damage to persons and property, and in compliance with all applicable law. The General Contractor shall furnish, erect, maintain, and remove at the completion of the Contract, all temporary installations as may be required during the construction period.

9.2 Immediately following the execution of each of the sub-contracts, the General Contractor shall determine the source of supply for all materials required under that sub-contracts and the length of time required for their delivery, and shall assure that orders are placed for such materials in sufficient time to assure delivery to the site so that such materials are available to be incorporated into the Work when needed to comply with the schedule of Work.
9.3 The General Contractor shall immediately notify the Consultant in writing of any known problems with the procurement, fabrication or ordering of any materials. Unless changes are approved in writing by the Consultant, the General Contractor will not be excused for delays in securing materials specified.

9.4 The General Contractor or Sub-contractors shall not place purchase orders or issue contracts for materials, supplies, equipment and services necessary to complete this Project using the name of the University of Kentucky. All orders placed by the General Contractor that are related to this Project must use the name of the General Contractor or Sub-contractor placing the order. The use of the University of Kentucky's name for ordering purposes is strictly prohibited. Payment for all goods and services required for the completion of the Work is the sole responsibility of the General Contractor. Any invoices received at the University that are related to this Project will be immediately forwarded to the General Contractor. Copies of these invoices will be made and placed in the General Contractor's file and proof must be provided that these invoices have been paid in full prior to the processing of the next scheduled application for progress payment.

9.5 The route for delivery of all materials to the Project shall be coordinated with the Owner's Project Manager.

9.6 The General Contractor shall be responsible for the proper and adequate storage of materials and equipment. Unless otherwise provided in the Contract Documents, all materials shall be of good quality and new. Workmanship and materials supplied and incorporated into this Work shall be of first quality. The General Contractor, if required, shall furnish satisfactory evidence as to the kind and quality of materials.

9.7 The General Contractor shall at all times enforce strict discipline and good order among all employees and Sub-contractors. The conduct of all individuals performing Work or operations related to the Work is the responsibility of the General Contractor. The consumption of alcohol or drugs on the job by any workers is strictly prohibited. Any individual apprehended under the influence of alcohol or drugs on the premises at any time shall be subject to automatic removal from the Project by the General Contractor, the Consultant or the Owner. Improper conduct of any kind will not be permitted and may result in the offending individual, Sub-contractor or General Contractor being barred from the Owner's premises. The General Contractor shall not permit the employment on the Project of any person unfit or not skilled in the Work assigned.

ARTICLE 10 - ROYALTIES AND PATENTS

10.1 The General Contractor shall pay all royalties and license fees. If a particular process, product or device is specified in the Contract Documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the Contract Documents and the General Contractor is responsible for payment of all associated royalties. The General Contractor hereby agrees to indemnify, defend and hold the Owner, and any subsidiary, parent, or affiliates of the Owner, or other persons or entities designated by the Owner, and their respective directors, officers, agents, employees and designees (collectively, the “Indemnities”) harmless from all losses, claims, liabilities, injuries, damages and expenses, including attorneys’ fees and legal expenses, that the Indemnities may incur as a result of the General Contractor’s failure to strictly comply with its obligations under this Paragraph 10.1.

ARTICLE 11 - SURVEYS, PERMITS, REGULATIONS, AND STANDARD CODES

11.1 The Owner will furnish only such surveys that are specifically required by the Contract Documents. Approvals, assessments, and easements for permanent structures or permanent changes in existing structures shall be secured and paid for by the Owner, unless otherwise specified. All required utility tap-on fees shall be secured and paid for by the General Contractor, or included in a sub-contract, including the Lexington-Fayette Urban County Government (LFUCG) sewer tap-on fee. All construction permits, where required by local ordinances, except excavation permit, shall be obtained by the General Contractor, but no fee shall be charged to or paid by the General Contractor as the Owner is exempt from such charges. A Contractor's license fee for doing business in the locale, if applicable, shall be paid for by the General Contractor.

11.2 All branches of Work shown on the plans and specifications shall be executed in strict compliance with all state and federal regulations and codes, with all national codes, and with the requirements of both ADA and JCAHO when applicable.
11.3 The Contractor, on projects disturbing 1 acre or more, or projects less than 1 acre that are part of a large common development plan, including grading, clearing, excavation, material laydown or other earth moving activities, shall assure full compliance with the requirements of the KYR10 and shall:

11.3.1 File a Notice of Intent (KPDES FORM eNOI-SWCA) with the Kentucky Division of Water and copy the UKCPM Project Manager and Water Quality Manager prior to the start of any excavation, grading or site development work.

11.3.2 The permittee (contractor) shall develop a Stormwater Pollution Prevention Plan (SWPPP) based on the Erosion Prevention and Sediment Control Plan (EPSC) as a minimum design standard. Ensure all requirements of KYR10 are fully addressed in the SWPPP. **Once the SWPPP is written, forward a copy to the Capital Projects Project Manager and to the Water Quality Manager for approval. Work cannot begin until SWPPP is approved and permit coverage obtained.**

11.3.3 Install BMP’s such as, basins, traps, drainage, and sediment barriers before beginning land disturbing activities, including the construction entrance/exit. Once prevention measures have been installed, grading can commence. In the event a new construction entrance is added to the site, this new entrance must be built according to the EPSC design details with a wheel wash, a water supply and a sediment catch basin for washed wheel sediment.

11.3.4 Maintain all measures in working condition. Perform maintenance activities identified during inspections prior to the next rain event. Remove sediment from BMPs when 1/3 the storage volume has been filled.

11.3.5 Stabilize disturbed areas within 14 days of inactivity or reaching final grade on any portion of the site according to permit requirements.

11.3.6 Inspect the site every 7 calendar days and after each rainfall of 1/2" or more. Document site conditions, rainfall, maintenance activities needed and performed, stabilization needed and performed, and where new measures are needed. Discuss deficiencies with UK Project Manager and Water Quality Manager and note on the SWPPP Inspection Sheets.

Per the KPDES Permit, Section 2.1.7. “Inspections – Permittee Conducted”. “Inspections shall be performed by personnel knowledgeable and skilled in assessing conditions at the construction site that could impact storm water quality and assessing the effectiveness of erosion prevention measures, sediment control measures, and other site management practices chosen to control the quality of the storm water discharges. Inspectors shall have training in storm water construction management such as Kentucky Erosion Prevention & Sediment Control (KEPSC), Certified Professional in Stormwater Quality (CPSWQ), Certified Erosion, Sediment and Stormwater Inspector (CESSWI), or other similar training.”

Inspections shall include a tour of the total site and verification that all BMPs are performing as constructed. Inspector shall certify that all observations are correct as stated and sign and date the inspection form.

11.3.7 Keep Permit, SWPPP, weekly/rain event inspections sheets in binder in construction trailer. Any BMP change/alteration from SWPPP and EPSC plan must be noted on the EPSC and SWPPP.

11.3.8 **No soil and sediment shall leave the construction site. BMPs shall be repaired immediately if failure has occurred. No Mud shall be permitted on any street. All entrances/exits shall have a means by which to wash wheels. If an entrance/exit does not have a wheel wash, that exit shall not be used in muddy conditions. If for any reason mud is tracked offsite, the area must be cleaned in such a way as to prevent sediment from entering the storm sewer system. The use of tractor brooms solely will not be permitted.**

11.3.9 When it is necessary to dewater an excavation, proper BMPs must be implemented. Dewatering filter bags must be sized and used according to manufacturer’s requirements and Standard Operating Procedures for Dewatering Bags.
11.3.10 UK (the MS4) routinely inspects sites for compliance with the EPSC/SWPPP. Any deficiencies noted become record for the Kentucky Division of Water and shall be remedied/installed as soon as site conditions are favorable but no more than 7 days from the inspection date.

11.3.11 At the conclusion of the project and all bare areas, slopes and ditches are 70% vegetated with the permanent ground cover, the contactor shall notify the UK Project Manager and Water Quality Manager and request a final site inspection prior to filing a “Notice of Termination (NOT) with the state. This inspection verifies that Construction BMPs can be removed, and Post-Construction BMPs are in place and functioning.

11.3.12 Failure of the site contractor (permittee of the KPDES Permit) to timely comply with requirements of KPDES, the Construction Manager shall inform the site contractor that a third party contractor shall be retained to remediate all BMP deficiencies immediately, and all third party costs shall be passed to the permittee of the KPDES Permit. Any fines or other costs resulting from failure to comply, levied against the Owner will be assessed against the Construction Manager’s or General Contractor’s funds.

11.3.13 Refer to 334000S01 STORM DRAINAGE UTILITIES – Information for Consultants & Contractors.

11.3.14 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard.

11.4 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard.

11.5 The General Contractor shall furnish a final occupancy permit from the proper agency or agencies as required.

11.5 The General Contractor shall, by provision within each applicable sub-contract or by inclusion in the lump sum fee proposed to the Owner, insure the payment of all sales, consumer, use and similar taxes for materials, equipment and supplies incorporated into the Work, by unless otherwise specified in the bid documents.

ARTICLE 12 - PROTECTION OF WORK, PROPERTY, AND PUBLIC

12.1 The General Contractor shall continuously maintain adequate protection of all Work from damage and shall protect the Owner's property from injury or loss arising in connection with this Contract. Except as otherwise covered by Builder’s Risk insurance, the General Contractor shall pay for any such damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. The General Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.

12.2 In an emergency affecting the safety of life, or of the Work, or of adjoining property, the General Contractor, without special instruction or authorization from the Consultant or the Owner, is obligated to act to prevent such threatened damage, loss or injury.

12.3 The General Contractor shall maintain fire protection as required by the Kentucky Building Code. Access to the Project site and surrounding buildings for local fire truck access must be maintained during construction. The General Contractor shall maintain construction to allow access to new, existing or temporarily relocated standpipes, fire hydrant connections and fire alarm communication panels pursuant to Section 3018.8 of the Kentucky Building Code. If the General Contractor utilizes the Owner's fire protection equipment, the General Contractor shall replace any such materials lost, consumed or misplaced during the Contract period. The General Contractor is responsible for any false alarms caused by dust created in the Work area or dust traveling to areas beyond the Work area due to inadequate dust protection barriers. Should there be a need for any existing or newly installed fire alarm system, or parts of a system that requires service, to be removed from service or disconnected, prior approval must be obtained from the Owner and the General Contractor shall immediately provide alternate protection such as a fire watch until such systems are returned to Rev August 2019 12 General Conditions General Contractor
full normal operations. When work or service is completed on a disabled fire alarm system, the Owner shall be immediately notified so the system can be placed in service.

12.4 The General Contractor and Sub-contractors are responsible for the security of their own materials, tools and equipment at the Project site.

12.5 The General Contractor shall provide to the Owner's Project Manager a key to General Contractor's field office or job trailer.

ARTICLE 13 - BLASTING

13.1 Blasting is not allowed unless permission is granted in the Special Conditions. Should blasting be allowed by the Special Conditions, it shall be completed in accordance with all laws, regulations, ordinances and instructions contained in the Special Conditions.

ARTICLE 14 - CONSTRUCTION AND SAFETY DEVICES

14.1 The General Contractor shall provide safety controls for protection of the life and health of employees and visitors. The General Contractor will utilize precautionary methods for the prevention of damage to property, materials, supplies, and equipment, and for avoidance of work interruptions in the performance of this Contract. In order to provide such safety control, the General Contractor shall comply with all pertinent provisions of the Kentucky Fire Prevention Code, Kentucky Building Code, Kentucky Labor Cabinet's Division of Occupational Safety and Health Program Construction Standards and Federal Occupational Safety and Health (Construction) Standards that are in effect at the time the Contract is entered into and during the period in which the Contract is to be performed.

14.2 The General Contractor shall provide a written safety program which includes all pertinent written specialty standards such as, but not limited to, Control of Hazardous Energy Sources (Lockout/Tagout), Hazard Communications Program, First Aid, Blood Borne Pathogen Program, Respirator Use Program and Hearing Conservation Program. The General Contractor shall require all Sub-contractors to have an effective written safety program or be required to follow the General Contractor's written safety program.

14.3 The General Contractor shall maintain an accurate record of and shall report to Kentucky Labor Cabinet's Division of Occupational Safety and Health in the manner and on the forms prescribed by that Division, exposure data and all accidents resulting in death, traumatic injury, occupational disease. The General Contractor shall maintain an accurate record of and shall report to the Owner's Project Manager, any damage to property, materials, supplies, and equipment incident to Work under this Contract.

14.4 The Kentucky Labor Cabinet's Division of Occupational Safety and Health may notify the General Contractor of any noncompliance with the foregoing provisions. The General Contractor shall, upon receipt of such notice, immediately correct the cited conditions. Notice delivered to the General Contractor or the General Contractor's representative at the site of the Work shall be deemed sufficient for this purpose. If the General Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the Work until satisfactory or corrective action has been taken. Failure or refusal to comply with the order will be grounds for reducing or stopping all payments due under the Contract to the General Contractor. No part of the construction time lost due to any such stop order shall be cause for, or the subject of a claim for, extension of time or for additional costs or damages by the General Contractor.

14.5 The General Contractor or any Sub-contractor shall immediately contact the University of Kentucky's Department of Occupational Health and Safety through the Owner’s Project Manager should they be selected for an inspection by the Kentucky Occupational Safety and Health Compliance Division.

14.6 Compliance with the provisions of the foregoing sections by Sub-contractors shall be the responsibility of the General Contractor.

14.7 Nothing in the provisions of this Article 14 shall prohibit the U.S. Department of Labor or the Kentucky Department of Labor Division of Occupational Safety and Health from enforcing pertinent
14.8 The General Contractor shall take all necessary precautions for the safety of employees on the Work, and shall comply with all applicable provisions of federal, state, and municipal safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the Work is being performed. If the General Contractor or any Sub-contractor has questions related to the health or safety required by their written safety program, they should contact the Kentucky Labor Cabinet Occupational Safety and Health Program Division of Education and Training. The General Contractor shall designate a responsible member of the on-site Work force as the safety officer and shall report to the Consultant and to the Owner the name of the person selected. The duties of the safety officer include the enforcement of safety regulations.

ARTICLE 15 - HAZARDOUS MATERIALS

15.1 If the General Contractor encounters material reasonably believed to be or suspected to be asbestos containing material, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the following procedures must be followed:

15.1.1 The General Contractor shall immediately stop Work in the affected area and notify the Owner's Project Manager. The Owner’s Project Manager will contact the Owner's Environmental Health and Safety unit to arrange for collection of samples, review of existing data, or other testing necessary to confirm the presence of hazardous materials. The Owner’s Project Manager will notify the General Contractor in writing of the results. Until that notification is received, the Work must not continue in the affected area.

15.1.2 If the material is confirmed to be asbestos, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the Owner will take appropriate action to remove the material before the General Contractor can continue Work in the affected area.

15.1.3 The General Contractor shall not be required to perform any Work related to asbestos, lead, polychlorinated biphenyls, or other hazardous material. The General Contractor is advised that certain classes of building materials (thermal system insulation, sprayed or troweled surfacing materials, and resilient flooring) installed before 1981 are required by law to be treated as asbestos containing until proven otherwise. These presumed asbestos containing materials must not be disturbed without confirmation from the Owner that asbestos is not present.

15.2 The Owner, the General Contractor, and Sub-contractors will be under the requirements of the OSHA Hazard Communication Standard (29) CFR 1910.1200. The General Contractor and Sub-contractors must provide their own written Hazard Communication Program. The Hazard Communication Standard must include: (1) A list of the hazardous chemicals to which the General Contractor's employees may be exposed; (2) Statement of the measures that General Contractor's employees and Sub-contractors may take to lessen the possibility of exposure to the hazardous materials; (3) The location of and access to the MSDS's related to the hazardous chemicals located in the Work area; (4) Procedures that the General Contractor's employees and Sub-contractors are to follow if they are exposed to hazardous chemicals above the Permissible Exposure Limit (PEL). Material Safety Data Sheets (MSDS) may be reviewed upon request by the General Contractor or any Sub-contractor as they pertain to the Work areas of the Project. Photocopies of the MSDS's may be made by General Contractor at its expense.

15.3 The General Contractor and Sub-contractors shall provide the Owner with a list of any hazardous materials that will be used on the job site that may be exposed to the Owner's employees. The General Contractor and Sub-contractors shall provide the Owner with copies of Material Data Sheets for materials to be used.

15.4 It is the policy of the Owner that PCB containing equipment will be treated by the General Contractor and the Owner in a manner that conforms to the intent of all applicable laws and regulations (primarily 40 CFR Part 761). The following procedures shall be followed by the General Contractor and Sub-contractors while present on the Owner's Project or other property: (1) Only authorized, trained personnel may inspect, repair, or maintain PCB transformers; and (2) No combustible materials may be stored within a PCB transformer room or
within five meters of a PCB transformer. Such materials include, but are not limited to, paints, solvents, plastic, paper, and wood. The General Contractor shall not use rooms containing PCB transformers for storage rooms, staging areas, job site offices or break rooms. Violation of this policy may be grounds for dismissal of the offending General Contractor and/or Sub-contractor from the Project. All PCB transformers at the University of Kentucky are identified by a PCB label as defined in federal regulations. If the General Contractor should have a question as to the location of a PCB transformer, it should contact the Owner's Project Manager.

15.5 The General Contractor shall ensure that NO asbestos-containing materials (including but not limited to: drywall, joint compound, roof mastic and floor tile adhesive) will be install on any University project without prior written approval of the University’s Environmental Health and Safety Division. Additionally, the General Contractor shall submit MSDS sheets and have prior approval before installing any materials that contains hazardous substances or could pose an environmental hazard. If any environmental hazardous materials are installed without written approval of the University, the General Contractor will be responsible for all material replacement cost, all removal and all other associated damages. Any materials removed shall be taken out in accordance with all applicable federal, state and local regulations.

ARTICLE 16 - INSPECTION OF WORK

16.1 Inspections, tests, measurements or other acts of the Consultant are for the sole purpose of assisting the Consultant in determining if the Work, materials, rate of progress, and quantities comply with the Contract Documents. These acts or functions shall not relieve the General Contractor from performing the Work in full compliance with the Contract Documents, nor relieve the General Contractor from any of the responsibility for the Work assigned to it by the Contract Documents. No inspection by the Consultant shall constitute or imply acceptance. Approval of material is general and shall not constitute waiver of the Owner's right to demand full compliance with Contract Documents.

16.2 All Work completed and all materials incorporated for the Project are subject to inspection by the Owner, the Consultant or their representatives to determine conformance with the Contract Documents. The Owner, Consultant and their representatives shall at all times have access to the Work whenever it is in preparation or progress. The General Contractor shall provide, at no additional cost to the Owner, any facilities necessary for sufficient and safe access to the Work to complete any inspections required. The Consultant shall be given timely notification in order to arrange for the proper inspections to be performed on any Work outside of the normal working day or week. If the Consultant provides the General Contractor with a list of construction milestones that require inspection, the General Contractor shall provide the Consultant with at least five (5) Business Days written notice prior to the commencement of Work with respect to such milestone in order to permit the Consultant time to coordinate an inspection of the commencement of the applicable Work.

16.2.1 Normal Work hours are defined as a period between 7:00 a.m. and 5:00 p.m. Monday through Friday. The General Contractor shall notify the Owner's Project Manager at least one working day prior to performance of any Work for permission to do any Work during non-normal Work hours.

16.3 If this Contract, the Specifications, the Consultant's instructions, laws, ordinances, or any public authority require any Work to be specially inspected, tested or approved, the General Contractor shall give the Consultant timely notice of the readiness of the Work for inspection. The Consultant shall promptly make all required inspections. If any portion of the Work should be covered contrary to the request of the Consultant, or to the requirements specifically expressed in the Contract Documents, the Work must be uncovered for inspection and observation and shall be uncovered and replaced at the General Contractor's expense.

16.4 If any other portion of the Work has been covered, which the Consultant has not specifically requested to observe prior to being covered, the Consultant, with the Owner's approval, may request to see such Work and it shall be uncovered by the General Contractor. If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement shall be charged to the Owner by appropriate Change Order. If such uncovered Work is not in accordance with the Contract Documents, the General Contractor shall pay all costs for uncovering and replacement of such Work.
ARTICLE 17 - SUPERINTENDENT - SUPERVISION

17.1 The General Contractor shall completely and thoroughly direct and superintend the Work in accordance with the highest standard of care for the General Contractor's profession so as to ensure expeditious, workmanlike performance in accordance with requirements of the Contract Documents. Except as otherwise dictated by specific requirements of the Contract Documents, the General Contractor shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures. The General Contractor shall be responsible for the acts and omissions of all Sub-contractors and persons directly or indirectly employed by the General Contractor in the completion of the Work. The General Contractor shall be responsible for coordinating and scheduling all portions of the Work unless the Contract Documents give other specific instructions. The General Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by the activities of the Consultant in the administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the General Contractor.

17.2 The General Contractor shall have a competent superintendent on the Project site at all times during the process of the Work. The superintendent shall have authority to act on the General Contractor's behalf with regard to all aspects of performance of this Contract. The superintendent shall have such assistants with individual specialized competencies as may be necessary to fully understand and oversee all aspects of the Work. The General Contractor shall also provide administrative, supervisory and coordinating personnel required to fully perform the Work and for interfacing the Work with other work of the Project. The superintendent and all assistants shall be physically fit for their work and capable of going to all locations where Work is being performed. A communication given to the superintendent shall be binding on the General Contractor. Immediately after the award of Contract, the General Contractor shall submit to the Consultant a list of General Contractor's employees and consultants, including names, positions held, addresses, telephone numbers and emergency contact numbers.

17.3 The superintendent assigned shall not be changed except under the following circumstances:
(1) Where the superintendent ceases to be employed by the General Contractor, in which case the General Contractor shall give timely written notice to the Owner of the impending change of the superintendent and a reasonable explanation for the change; or (2) Where the Owner or the Consultant have reasonable grounds for dissatisfaction with the performance of the superintendent and give written notice to the General Contractor of the grounds. In either case, the General Contractor shall obtain prior written approval from the Owner of the qualifications of the proposed replacement superintendent. Such prior approval will not be unreasonably withheld.

17.4 If the Owner or Consultant determines that the superintendent is not performing, or is incompetent to perform the required Work, the Owner may direct the General Contractor to remove the superintendent from the Project and replace the superintendent with an employee who has the necessary expertise and skills to satisfactorily perform the Work.

ARTICLE 18 - CHANGES IN THE WORK

18.1 The Owner, at any time after execution of the Contract, may make changes within the general scope of the Contract or issue additional instructions, require additional Work, or direct the deletion of Work. The Owner's right to make changes shall not invalidate the Contract or relieve the General Contractor of any obligations under the Contract Documents. All such changes to the Work shall be authorized in writing by Change Order and shall be executed under the conditions of the Contract Document. Any adjustment of the Contract Amount or Time of Completion, as may be appropriate, shall be made only at the time of ordering such change. Change order proposals based on a reservation of rights, whether for additional compensation to be determined at a later date or for an extension of time to be determined at a later date, will not be considered for approval and shall be returned to the General Contractor without action.

18.2 The cost or credit resulting from a change in Work shall be determined in one or more of the following ways:

18.2.1 By unit prices named in the Contract or additional unit prices subsequently agreed upon;
18.2.2 By agreement on a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;

18.2.3 By an amount agreed upon by the General Contractor and the Owner as a mutually acceptable fixed or percentage fee.

18.3 All lump sum proposals shall include a detailed cost breakdown satisfactory to the Consultant and to the Owner for each component of Work indicating both labor and material costs. In computing labor costs, the hourly labor rates shall not exceed a mutually agreeable combined hourly labor rate plus fringe benefits negotiated with the Owner based on a presentation of acceptable documentation by the GC. For the purposes of this Article, the term “fringe benefits” shall mean those funds transferred irrevocably to a third party for payment/distribution. In addition, there may be added by the Sub-contractor an amount agreed upon, but not to exceed ten percent (10%) of the actual cost, for overhead and profit. The GC may also add a mark-up only for bonds and insurance and that mark-up shall not exceed the combined percentage for bonds and insurance stated in the GC “Financial Proposal Summary”. This cost breakdown shall be submitted to the Consultant promptly and with a goal of seven (7) Calendar Days or less after receipt of the proposal request.

18.4 If none of the above methods are mutually agreed upon or if the General Contractor does not respond promptly, a change may be made by unilateral determination by the Owner and/or the Consultant of reasonable costs or savings attributable to the change, including a reasonable allowance for overhead and profit. If this method is utilized, the General Contractor shall promptly proceed with the Work involved in the change upon receipt of a written order signed by the Owner. In such case, the General Contractor shall keep and present an itemized accounting of labor, equipment, material and other costs, in such form as may be prescribed by the Consultant.

18.5 In determining the cost or credit to the Owner resulting from a change, the allowances for all overhead (including home office and field overhead) and profit combined, shall be negotiated and shall not exceed (15%) fifteen percent.

18.6 In all cases where Change Orders are determined by unit prices set forth in the Contract Documents, no amount is to be added for additional overhead and profit.

18.7 The General Contractor shall keep and present in such form as the Consultant may direct, a correct account of all items comprising the net cost of such Work, together with vouchers. The determination of the Consultant and/or the Owner shall be final upon all questions of the amount and cost of extra Work and changes in the Work, and it shall include in such cost, the cost to the General Contractor of all materials used, the cost of all labor (including social security, old age and unemployment insurance, fringe benefits to which the employee is entitled, and Workers Compensation insurance), and the fair rental of all machinery used upon the extra Work, for the period of such use, which was upon the Work before or which shall be otherwise required by or used upon the Work before or after the extra Work is done. If the extra Work requires the use of machinery not already on the Project site, or to be otherwise used upon the Work, then the cost of transportation of such machinery to and from the Project site shall be added to the fair rental value. Transportation costs shall not be allowable for distances exceeding one hundred (100) miles.

18.8 The General Contractor shall not include or allow to be included in the cost of change in the Work any cost or rental of small tools, or any portion of the time of the General Contractor or the superintendent, or any allowance for the use of capital, or for the cost of insurance or bond premium or any actual or anticipated profit, or job or office overhead. These items are considered as being covered under the added amount for general overhead addressed in Article 18.3

18.8.1 The Owner will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.

18.9 Pending final determination of value, partial payments on account of changes in the Work may be made on recommendation of the Consultant. All Change Orders shall be in full payment and final settlement of
18.10 The Consultant may authorize minor changes in the Work which do not involve additional cost or extension of the Contract Time, and which are not inconsistent with the intent of the Contract Documents. Such changes shall be made by an ASI issued by the Consultant, and shall be binding on the Owner and the General Contractor. The General Contractor shall carry out such orders promptly. If the General Contractor should claim that an ASI involves additional cost or delay to the completion of the Work, the General Contractor shall give the Consultant written notice thereof within ten (10) Calendar Days after receipt of the written ASI. If this notification does not occur, the General Contractor shall be deemed to have waived any right to claim or adjustment to the contract sum or to the contract completion time.

18.10.1 If the General Contractor claims that any instructions by the Consultant involve additional cost or time extension, the General Contractor shall give the Consultant written notice thereof within ten (10) Calendar Days after the receipt of such instructions and before proceeding to execute the change in Work. The written notice shall state the date, circumstances, whether a time extension will be requested, and the source of the order that the General Contractor regards as a Change Order. Unless the General Contractor acts in accordance with this procedure, any oral order shall not be treated as a change and the General Contractor hereby waives any claim for an increase of the Contract amount or extension of the contract time.

18.11 Requests for extension of time related to changes in the Work shall be submitted in accordance with the requirements of Article 21 of these General Conditions

ARTICLE 19 - RULES AND MEASUREMENTS FOR EXCAVATION

19.1 If applicable, the following Rules and Measurements shall apply to the use of Unit Prices for the excavation portion of the Work:

19.1.1 Except as provided in this Article 19 for arbitrary measurements, the quantity of excavation shall be its in-place volume before removal.

19.1.2 No allowance will be made for excavating additional material of any nature taken out for the convenience of the General Contractor beyond the quantity computed under these "Rules and Measurements."

19.1.3 The quantities of excavation shall be computed from instrument readings taken by the Consultant’s representative in vertical cross sections located at such intervals that will assure accuracy.

19.1.4 "Trench Excavation" for pipes shall arbitrarily be assumed to be two feet (2') wider than the outside diameter of the pipe barrel and with sides vertical.

19.1.5 The quantities shall be computed from plan size, or if there are no drawings, from actual measurements of the Work in place.

19.1.6 Each unit price shall cover, among other things, engineering (surveying) costs and keeping excavating dry.

19.1.7 Earth excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surface of the ground to the neat lines of the bottom of the structure.

19.1.8 Rock excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surfaces of the rock to the neat lines of the bottoms of the structures or the actual elevation of the rock ledge.

19.1.9 Rock excavation for pipelines trenches, unless otherwise provided for in the Specifications, shall be measured as follows: An arbitrary width of 18 inches plus the nominal diameter of the pipe multiplied by the depth from the surface the rock to six (6) inches below the invert for pipe 24 inches in diameter or less and eight (8) inches below the invert for all pipe greater than 24 inches in diameter. No additional compensation will be
allowed for excavation for bell holes, gates or other purposes. The measurement of rock excavation for manholes shall be in accordance with Section 19.1.8 above.

19.1.10 Unclassified excavation shall be measured in the same manner as earth excavation.

ARTICLE 20 - CONCEALED CONDITIONS

20.1 The Contract Drawings show the approximate location of the existing and new utility lines. These lines have been identified and located as accurately as possible using available information. The General Contractor is responsible for verifying all actual locations. If utilities require relocation or rerouting that is not shown or indicated to be relocated or rerouted, the General Contractor shall contact and cooperate with the Consultant to make the required adjustments. Any request for change in the Contract Amount by the General Contractor shall be made pursuant to Article 18 of the General Conditions.

20.2 If any charted or uncharted utility service is interrupted by activities of the General Contractor or the General Contractor’s Sub-contractor(s) for any reason, the General Contractor shall work continuously to restore service to the satisfaction of the Owner.

20.2.1 If any charted utility service, or any uncharted utility service the existence of which could have been discovered by careful examination and investigation of the site of the Work by the General Contractor, is interrupted by activities of the General Contractor or the General Contractor’s Sub-contractor(s) for any reason, the entire cost to restore service to the satisfaction of the Owner shall be paid by the General Contractor. Should the General Contractor fail to proceed with appropriate repairs in an expedient manner, the Owner reserves the right to have the work/repairs completed and the cost of such work/repairs deducted from the monies due or to become due to the General Contractor pursuant to Article 22 of the General Conditions.

20.3 The General Contractor shall promptly, but in no case more than ten (10) Calendar Days from the time of discovery, and before the conditions are disturbed, notify Consultant in writing of:

20.3.1 Subsurface or latent physical conditions or any condition encountered at the site which differ materially from those indicated in the Contract Documents and which were not known by General Contractor or could not have been discovered by careful examination and investigation of the site of the proposed Work;

20.3.2 Unknown and unexpected physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered in the locale or generally recognized as inherent in the Work provided for in this Contract or,

20.3.3 Concealed or unknown conditions in an existing structure which are at variance with the conditions indicated by the Contract Documents, which are of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, and which were not known by the General Contractor and could not have been discovered by careful examination and investigation of the site of the Work.

20.4 The Consultant shall promptly investigate the conditions discovered. If the Consultant finds that conditions, which are materially different from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, were not known by the General Contractor, and could not have been discovered by careful examination and investigation of the site of the Work, have caused or would cause a material increase or decrease in the General Contractor's cost of construction or the time required for performance of any part of the Work under this contract, the Consultant will recommend and the Owner will make an equitable adjustment in the Contract Amount and/or the time allotted for performance in the Contract Documents. Failure by the General Contractor to provide written notice to the Owner of such claims for additional compensation or time for performance within ten (10) Calendar Days of discovery of such conditions shall constitute a waiver by the General Contractor of the right to make such claims. The Owner will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.
20.5 If the Consultant determines that changed conditions do not exist or are not materially different and no adjustment in the Contract Amount or time is warranted, the General Contractor shall continue performance of the Contract as directed by the Consultant. No claim by the General Contractor under this clause shall be allowed unless the required written notice is given and the Consultant is given adequate opportunity to investigate the conditions encountered prior to disturbance. The failure of the General Contractor to give the Consultant proper notice of a differing site condition shall not affect the Owner's right to an equitable adjustment of the contract price or time if there is a decrease in the Contract Amount or time required to perform the Work.

ARTICLE 21 - DELAYS AND EXTENSION OF TIME

21.1 It is agreed that time is of essence for each and every portion of this Contract and where additional time is allowed for the completion of the Work or any part of the Work under this Contract, the new time limit fixed by such time extension shall be of the essence of this Contract. An extension of time shall not be cause for extra compensation under this Contract, except as set forth in Article 21.10 below.

21.2 The General Contractor will, subject to the provisions of Articles 21.7, 21.8 and 21.9 below, be granted an extension of time and/or relief from liquidated damages when the delay in completion of the Work is due to:

21.2.1 Any preference, priority, or allocation order duly issued by the government;

21.2.2 Unforeseeable causes beyond the control and without the fault or negligence of the General Contractor including, but not limited to, acts of God, or of the public enemy, acts of the Owner, acts of another contractor in the performance of a contract with the Owner, floods, epidemics, quarantine restrictions, strikes, and freight embargoes.

21.2.2.1 For such delays which stop all work on the Project for thirty (30) Calendar Days or more, the General Contractor shall be authorized at its discretion to remove its people from the site and return when the normal progress of the work may continue.

21.2.3 Regardless of the cause of a delay, the General Contractor shall expend all reasonable effort to mitigate the impact of any delay.

21.2.4 Requests for additional time due to delays in transportation or due to failures of suppliers shall not be considered for approval.

21.3 Requests for extensions of time and/or relief from liquidated damages, except for weather related claims, shall be made in writing not later than ten (10) Calendar Days after the beginning of the delay. Requests for extension of time or relief from liquidated damages shall be stated in numbers of whole Calendar Days.

21.4 Except as otherwise provided in the Contract Documents, extensions of the contractually required completion dates may be granted for unusually bad weather on the Project. Unusually bad weather as used herein means daily temperature or precipitation that exceeds the normal weather recorded and expected for the locality and/or the season or seasons of the year. For the purposes of this contract, it is mutually agreed that the following chart accurately defines the number of days in each month on which bad weather can reasonably be anticipated to impact weather dependent construction operations, and the General Contractor shall anticipate this normal seasonal weather in the development of the Project baseline schedule.

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For the purpose of this Contract, “unusually bad weather” shall be interpreted as either 1) those days in a given month on which rainfall was 0.10 inch or more that exceed the number of days shown in the row for “Precip” or 2) those days in a given month on which maximum temperature was 32 degrees F or below that exceed the number of days shown in the row for “Max Temp”, whichever is greater.

21.4.1 Requests for extension of time due to unusually bad weather that could not reasonably have been anticipated at the time of execution of the Contract shall be made in writing not later than the tenth calendar day of the month following the month in which the delay occurred.

21.4.2 Requests for an extension of time due to unusually bad weather shall be considered for approval only if it is shown that a) the unusual weather event delayed work on a specific weather dependent activity or activities that had been planned to be underway on the date(s) on which the weather event occurred, as shown in the most recent update to the Project schedule that had been submitted to the Owner prior to the date of the event, and b) only if the delay to that activity or activities is shown to be the proximate cause of a corresponding delay to the contractually required completion dates for the Project shown in the most recent update to the Project schedule. The actual dates on which the delay(s) occurred must be stated and the specific activities that were directly impacted must be identified. In the event of concurrent delays, only those activities actually impacting contractually required completion dates will be considered in evaluating the merit of a delay request. Time extensions will not be considered if such adjustments do not exceed the total or remaining “float” associated with the impacted activities at the time of delay as shown in the most recent update to the Project schedule, nor for concurrent delays not caused by the Owner.

21.4.3 In anticipation of the possibility of delay due to unusually bad weather, the General Contractor shall identify those activities in the baseline schedules, and those activities subsequently added to updated schedules, that might reasonably be expected to be delayed by such weather.

21.4.4 Delays caused by unusually bad weather shall be incorporated in the Project schedule when the schedule is next updated by showing actual dates and/or percent complete for those activities that were impacted by the unusually bad weather as well as the effects of any effort to mitigate such delays. When claims are submitted for time extensions resulting from more than one occurrence of unusually bad weather during a month, the Project schedule shall be updated to reflect such separate events sequentially so that the impact of each subsequent occurrence is shown on an adjusted Project schedule that includes all prior claims for additional time.

21.5 In addition to the requirements of Article 21.7 and Article 21.8 below, any request for an extension of time for strikes or lockouts shall be supported by a written statement of facts concerning the strike including, but not limited to, the dates, the craft(s) affected, the reason for the strike, efforts to resolve the dispute, and efforts to minimize the impact of the strike on the Project.

21.6 Approval of time extensions for changes in the Work will depend upon the extent, if any, to which the changes cause delay in the completion of the various elements of construction. The Change Order granting the time extension may provide that the Contract Time will be extended only for those specific elements so delayed and that other Work will not be altered.

21.7 The Contract Time will only be adjusted for causes specified above. Extensions of time will only be approved if the General Contractor provides justification supported by the Project schedule or other acceptable data that 1) such changes are, in fact, on the critical path and extend the contractually required completion dates, and 2) the General Contractor has expended all reasonable effort to minimize the impact of such changes on the construction schedule. No additional extension of time will be granted subsequently for claims having the basis in previously approved extensions of time.

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21.8 In support of requests for an extension of time not caused by unusual inclement weather, and concurrently with the submittal of any such request, the General Contractor shall submit to the Consultant and the Owner a written impact analysis showing the influence of each such event on contractually required completion dates as shown in the updated Project schedule most recently submitted to the Owner prior to the event. The analysis shall include a partial network diagram showing a sequence of new or revised activities and/or durations that are proposed to be added to the existing schedule including related logic (a “fragnet”). This impact analysis and the fragnet shall include the new activities and/or activity revisions proposed to be added to the existing schedule and shall demonstrate the claimed impact on the critical path and the contractually required completion dates. The General Contractor will not be granted an extension of time and/or relief from liquidated damages when the delay to completion of the work is attributable to, within the control of, or due to the fault, negligence, acts, or omissions of the General Contractor and/or the General Contractor’s contractors, subcontractors, suppliers, or their respective employees and agents. Time extensions will not be considered in the event such adjustments do not exceed the total or remaining “float” associated with the impacted activities at the time of delay, nor for concurrent delays not caused by the Owner. In the event of concurrent delays, only that event actually impacting contractually required completion dates will be considered in adjusting the schedule and evaluating the merit of a delay claim. Requests for an extension of time which are not supported by this information shall not be considered for approval.

21.9 Approved extensions of time not caused by unusual inclement weather shall be incorporated in a revised schedule at the time of approval. No subsequent requests for time extension will be considered unless all previous approved time extensions have been incorporated in the Project schedule on which the requests are based.

21.10 Except as provided for in Article 21.10.1 through 21.10.3 below, no payment or compensation shall be made to the General Contractor and extensions of the time fixed for completion of the Contract shall be the General Contractor’s sole remedy for any and all delays, hindrances, obstructions or impacts in the orderly progress of the Work.

21.10.1 In addition to the provisions of Articles 18.3 above, and subject to the requirements of Article 21.8 and 21.8.1 above, if the Owner orders changes to the scope of Work for the Project that extend the then current contractually required completion dates of the Project, the General Contractor shall be entitled to reimbursement for job site, general conditions and staffing costs associated with such delay.

21.10.2 If delays, hindrances, impacts or obstructions of the General Contractor’s performance of the Contract are in whole or in part within the control of the Owner and, subject to the requirements of Article 21.8 and 21.8.1, extend contractually required completion dates of the Project, the General Contractor shall be entitled to reimbursement for job site, general conditions and staffing costs for that portion of the costs caused by acts or omissions of the Owner.

21.10.3 Such reimbursements shall not include consequential or similar damages, exemplary damages, damages based on unjust enrichment theory, formula based delay claims, or any element of home office overhead.

ARTICLE 22 - CORRECTION OF WORK BEFORE FINAL PAYMENT

22.1 The General Contractor shall promptly remove from the site and replace any material and/or correct any Work found by the Consultant to be defective or that fails to conform to the requirements of the Contract, whether incorporated in the Work or not, and whether observed before or after Substantial or Final Completion. The General Contractor shall bear all costs of removing, replacing or correcting such Work or material including the cost of additional professional services necessary, and the cost of repairing or replacing all Work of separate contractors damaged by such removal or replacement.

22.2 The Consultant will notify the General Contractor and the Owner immediately upon its knowledge that additional services will be necessary. The Owner may consent to accept such nonconforming Work and materials with an appropriate adjustment in the Contract Amount. Otherwise, the General Contractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by
such removal or replacement. If the General Contractor fails to commence and continue to correct non-conforming Work within a reasonable time as determined by the Consultant, the Owner may without limitation of other rights available to the Owner and without prejudice to other remedies, take any necessary action to make the necessary corrections. If the Owner makes required corrections for non-conforming Work or materials, a Change Order will be issued reflecting an equitable deduction from the Contract Amount. This amount will be deducted from payments due to the General Contractor or, if no additional payments are due, General Contractor or the General Contractor's surety shall be responsible for payment of this amount.

ARTICLE 23 - CORRECTION OF WORK AFTER FINAL PAYMENT

23.1 Neither the final certificate of payment nor any provisions in the Contract Documents shall relieve the General Contractor of responsibility for materials and equipment incorporated into the Work that fail to meet specification requirements, or for use of faulty materials or poor quality workmanship. If within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be defective or not in accordance with the requirements of the Contract Documents, the General Contractor shall correct it promptly after receipt of written notice from the Owner to do so. The General Contractor shall correct any defects due to these conditions and pay for any damage to other Work resulting from their use. Nothing contained in this clause shall be construed to establish a period of limitation with respect to any obligation of the General Contractor under the Contract including, but not limited to, Warranties. The obligation of the General Contractor under this section shall be in addition to and not in limitation of any obligations imposed by special guarantees or warranty required by the Contract, given by the General Contractor, or otherwise recognized or prescribed by law.

23.2 In addition to being responsible for correcting the Work and removing any non-conforming Work or materials from the job site, the General Contractor shall bear all other costs of bringing the affected Work into compliance with the Contract requirements. This includes costs of any required additional testing and inspection services, Consultant's services and any resulting damages to other property or to work of other contractors or of the Owner.

23.3 If the General Contractor fails to correct nonconforming Work within a reasonable time as determined by the Consultant, the Owner may take necessary actions to make the necessary corrections. If the Owner makes required corrections for nonconforming Work or materials after Final Payment to the General Contractor, the Owner shall be entitled to recover all amounts for such corrections, including costs and attorney's fees, from General Contractor or surety.

ARTICLE 24 - TERMINATION OF CONTRACT FOR CONVENIENCE OF OWNER

24.1 The Owner, by written notice to the General Contractor, may terminate this Contract in whole or in part when it is in the interest of the Owner, at the sole discretion of the Owner. In such case, the General Contractor shall be paid for all Work in place and a reasonable allowance for profit and overhead on Work done, provided that such payments shall not exceed the total Contract price as reduced by the value of the Work as yet not completed. The General Contractor shall not be entitled to profit and overhead on Work not performed.

ARTICLE 25- OWNER'S RIGHT TO STOP WORK

25.1 If the General Contractor fails to correct defective Work as required, or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner by written notice may order the General Contractor to stop the Work or any portion of the Work, until the cause for the order has been eliminated to the satisfaction of the Owner. The Consultant may stop Work without written notice for 24 hours whenever in its professional opinion such action is necessary or advisable to insure conformity with the Contract Documents. The General Contractor shall not be entitled to an adjustment in the Contract Time or Amount under this clause in the event such stoppages are determined to be the fault of the General Contractor or its Sub-contractor(s). The right of the Owner or Consultant to stop Work shall not give rise to a duty on the part of the Owner or Consultant to exercise this right for the benefit of the General Contractor or others.
ARTICLE 26 - TERMINATION OF CONTRACT FOR DEFAULT ACTION OF GENERAL CONTRACTOR

26.1 In addition to its rights under Articles 24 and 25, the Owner may terminate the contract upon the occurrence of any one or more of the following events:

26.1.1 If the General Contractor refuses or fails to prosecute the Work (or any separable part thereof) with such diligence as will insure its completion within the agreed upon time; or if the General Contractor fails to complete the Work within such time;

26.1.2 If the General Contractor is adjudged a bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the General Contractor or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the General Contractor, or if a trustee or receiver is appointed for the General Contractor or for any of the General Contractor's property on account of the General Contractor's insolvency, and the General Contractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within 10 days of receipt of a request for assurance from the Owner;

26.1.3 If the General Contractor repeatedly fails to supply sufficient qualified supervision of the work, or repeatedly fails to ensure that Sub-contractors supply adequate supervision, suitable materials or equipment, or adequate numbers of skilled workmen and supervision to the Work;

26.1.4 If the General Contractor repeatedly fails to make prompt payments to Sub-contractors or suppliers at any tier, or for labor, materials or equipment;

26.1.5 If the General Contractor disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;

26.1.6 If the General Contractor disregards the authority of the Consultant or the Owner;

26.1.7 If the General Contractor performs Work which deviates from the Contract Documents, and neglects or refuses to correct rejected Work; or

26.1.8 If the General Contractor otherwise violates in any material way any provisions or requirements of the Contract Documents.

26.2 Once the Owner determines that sufficient cause exists to justify the action, the Owner may terminate the Contract without prejudice to any other right or remedy the Owner may have, after giving the General Contractor and its Surety three (3) Calendar Days notice by issuing a written Declaration of Default. The Owner shall have the sole discretion to permit the General Contractor to remedy the cause for the contemplated termination without waiving the Owner's right to terminate the contract.

26.3 In the event that the Contract is terminated, the Owner may demand that the General Contractor's Surety take over and complete the Work on the Contract. The Owner may require that in so doing, the General Contractor's Surety not utilize the General Contractor in performing the Work. Upon the failure or refusal of the General Contractor's Surety to take over and begin completion of the Work within twenty (20) Calendar Days after the demand, the Owner may take over the Work and prosecute it to completion as provided below.

26.3.1 In the event that the Contract is terminated and the General Contractor's Surety fails or refuses to complete the Work, the Owner may take over the Work and prosecute it to completion in accordance with the laws of the Commonwealth, by contract or otherwise, and may exclude the General Contractor from the site. The Owner may take possession of the Work and of all of the General Contractor's tools, appliances, construction equipment, machinery, materials, and plant which may be on the site of the Work, and use the same to the full extent they could be used by the General Contractor, without liability to the General Contractor. At the Owner’s sole discretion, the Owner has the right to take assignment of any or all portions of the contract work in order to prosecute the completion of the Work. In exercising the Owner's right to prosecute the completion of the Work, the Owner may also take possession of all materials and equipment stored at the site or
for which the Owner has paid the General Contractor but which are stored elsewhere, and finish the Work as the Owner deems expedient. In such case, the General Contractor shall not be entitled to receive any further payment until the Work is finished.

26.3.2 If the unpaid balance of the Contract Price exceeds the direct and indirect costs and expenses of completing the Work including compensation for additional professional and Consultant services, such excess shall be used to pay the General Contractor for the cost of the Work it performed and a reasonable allowance for overhead and profit. If such costs exceed the unpaid balance, the General Contractor or the General Contractor's Surety shall pay the difference to the Owner. In exercising the Owner's right to prosecute the completion of the Work, the Owner shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and the Owner shall not be required to obtain the lowest figure for Work performed in completing the Contract. In the event that the Owner takes bids for remedial Work or completion of the Project, the General Contractor shall not be eligible for the award of such Contract.

26.3.3 The General Contractor shall be liable for any damage to the Owner resulting from the termination or the General Contractor's refusal or failure to complete the Work, and for all costs necessary for repair and completion of the Project above the amount of the Contract. The General Contractor shall be liable for all attorney's fees, costs and expenses incurred by the Owner to enforce the provisions of the Contract.

26.3.4 If liquidated damages are provided in the Contract and the Owner terminates the Contract, the General Contractor shall be liable for such liquidated damages, as provided for in Article 29.2 and 29.3 below, until Substantial Completion and Final Completion of the Work are achieved.

26.3.5 In the event the Contract is terminated, the termination shall not affect any rights of the Owner against the General Contractor. The rights and remedies of the Owner under this Article are in addition to any other rights and remedies provided by law or under this Contract. Any retention or payment of monies to the General Contractor by the Owner will not release the General Contractor from liability.

26.3.6 In the event the Contract is terminated under this Article, and it is determined for any reason that the General Contractor was not in default under the provisions of this Article, the termination shall be deemed a Termination for Convenience of the Owner pursuant to Article 24 and the rights and obligations of the parties shall be determined in accordance with Article 24.

ARTICLE 27 - SUSPENSION OF WORK

27.1 The Owner or the Consultant may, at any time and without cause, order the General Contractor in writing or cause the General Contractor to suspend, delay or interrupt all or any part of the Work for such period of time as the Owner may determine to be appropriate for its convenience. Adjustment may be made for any increase in the Contract time necessarily caused by such suspension or delay, in accordance with Article 21.

ARTICLE 28 - TIME OF COMPLETION

28.1 The General Contractor shall begin the Work on the date of commencement as specified in the Work Order. All time limits stated in the Contract Documents are of the essence of the Contract. The end of the Contract Time shall be the date specified on the approved certificate of Substantial Completion. The time for completion set forth in the Contract is a binding part of the Contract upon which the Owner may rely in planning the use of the facilities to be constructed and for all other purposes.

28.2 Substantial Completion is defined in Article 1.1.17 of these General Conditions. Only incidental corrective Work under punch lists and final cleaning (if required) for Owner's full use shall remain for Final Completion. The ability to occupy or utilize shall include regulatory authority approval unless regulatory approval is delayed due to actions of the Owner or the Consultant. When the Owner accepts and occupies a portion of the Project, the operation, maintenance, utilities, and insurance of that portion of the Project becomes the responsibility of the Owner.

28.3 The date of Substantial Completion shall be that date certified by the Owner, in accordance with the following procedures, that the Work is sufficiently complete to occupy or utilize as defined above.
28.3.1 When the General Contractor considers the entire Work is substantially complete as defined in Article 1.1.17 of these General Conditions, and is ready for its intended use, the General Contractor shall notify the Consultant in writing and request an inspection. The declaration and request shall be accompanied by a list prepared by the General Contractor of those items of Work still to be completed or corrected. The failure of the General Contractor or Consultant to include any item or items, which are not completed or which need correction, on such list shall not alter the responsibility of the General Contractor to complete all Work in accordance with the Contract Documents.

28.3.2 The Consultant shall, within a reasonable time after receipt of notification from the General Contractor of a declaration of Substantial Completion and request for inspection, make such inspection. Prior to the Substantial Completion Inspection and within sufficient time to allow the Consultant's review, the General Contractor shall submit all As-Built drawings, Notice of Termination, catalog data, complete operating and maintenance instructions, manufacturer specifications, certificates, warranties, written guarantees and related documents required by the contract. The Consultant shall review said documents for accuracy and compliance with the Contract Documents and incorporate them into complete operating instructions and deliver them to the Owner.

28.3.3 If the Consultant considers the Work substantially complete, the Consultant shall recommend that the Owner prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion and the responsibilities between the Owner and General Contractor for security, maintenance, heat, utilities and insurance, if not otherwise provided for in the Contract Documents, and a tentative list of items to be completed or corrected, and shall fix the time within which the General Contractor shall complete the items listed therein. This time shall not exceed thirty (30) Calendar Days unless otherwise provided for in the Work Order. The Certificate of Substantial Completion shall be submitted to the Consultant and General Contractor for their written acceptance of the responsibilities assigned to them in the certificate. The Project shall not be deemed substantially complete until the certificate is issued. If, after making the inspection, the Consultant does not consider the Work substantially complete, the Consultant will notify the Owner and the General Contractor in writing, giving the reasons therefore.

28.4 Operation and Maintenance Manual Deliverables. In anticipation and preparation of completion of the Work and the closing out of the Project, and to facilitate training of the Owner’s personnel in the maintenance and operation of the new installations, the Contractor shall comply with the requirements of Article 8.7 of the Special Conditions. (For the purposes of this article, air test and balance reports may be submitted at a later date with the request for certification of substantial completion.) These manuals shall be submitted to the Consultant for approval, and subsequently forwarded to the Owner's Project Manager by or before the time construction is 75% complete, as reflected by the Contractor’s most recently submitted Application for Payment.

28.4.1 The provisions of Article 30.11 notwithstanding, if the General Contractor meets the requirements of Article 28.4 above with respect to timely submittal of approvable Operation and Maintenance manuals and provided the project construction is 1) at least 75% complete and 2) is equal to or ahead of the approved progress schedule and 3) the Work completed is in compliance with the requirements of the contract documents, the Owner, at the sole discretion of the Director, Capital Projects Management Division may reduce the retainage to (5%) of the current Contract Amount.

28.4.2 In the event the General Contractor fails to submit acceptable O&M manuals prior to reaching 75% completion, it is agreed that the Owner at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Owner to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.

28.5 Project Close Out. When the General Contractor considers that all Work required by the Contract is 100% complete, including correction of any remaining punch list work or deficiencies, the General Contractor shall notify the Consultant in writing and request a final inspection. The Consultant, upon receipt of written notice from the General Contractor that the Work is complete and is ready for final inspection and acceptance, will promptly make such inspection and when the Consultant finds the Work completed and acceptable under the Contract Documents and the Contract fully performed, the Consultant will so notify the General Contractor in writing to submit, and will certify to the Owner a final Certificate for Payment submitted in accordance with
Articles 30.9 and 30.9.1 of these General Conditions. If the General Contractor does not complete the punch items within the time designated, the Owner retains the right to have these items corrected at the expense of the General Contractor including all architectural, engineering and inspection costs and expenses incurred by the Consultant and the Owner, and to deduct such costs and expenses from the funds being held in retainage. The Owner shall not be required to release the retainage until such items have been completed.

ARTICLE 29 - LIQUIDATED DAMAGES

29.1 The Owner and the General Contractor recognize and agree that time is of the essence of this Contract and that the Owner will suffer financial loss if the Work is not completed within the time specified in the Contract plus any extensions that may be allowed. The parties further recognize the delays, expense and difficulties involved in proving the actual loss suffered by the Owner should the Work not be completed on time. The Owner and the General Contractor agree on the amounts stated as liquidated damages in the Agreement. The Owner and General Contractor agree that the amount stated as liquidated damages are not intended to be penalties.

29.2 Should the General Contractor fail to satisfactorily complete the Work under Contract on or before the date stipulated for Substantial Completion, as adjusted by approved Change Orders, if any, the General Contractor will be required to pay liquidated damages to the Owner for each consecutive Calendar Day that the Owner is deprived of full use of the area beyond the date specified unless otherwise stipulated elsewhere by Owner. After the date for Substantial Completion has been certified by the Owner, the General Contractor shall cease to owe liquidated damages until the date established for Final Completion.

29.3 If Final Completion is not achieved by the date established for Final Completion, as adjusted by approved Change Orders, if any, liquidated damages in the amount stipulated in the Agreement will become due and collectable. The Contract will be considered complete and Final Completion shall be deemed to have occurred when all Work has been completed in compliance with the Contract Documents and the Certificate of Final Completion has been issued by the Owner. No deduction or payment of liquidated damages will, in any degree, release the General Contractor from further obligations and liabilities to complete the entire Contract. Permitting the General Contractor to continue and finish the Work, or any part of it, after expiration of the Contract Time, shall in no way constitute a waiver on the part of the Owner of any liquidated damages due under the Contract.

ARTICLE 30 - PAYMENT TO THE GENERAL CONTRACTOR

30.1 Payments on account of this Contract shall be made monthly as Work progresses. The General Contractor shall submit to the Consultant, in the manner and form prescribed, an application for each payment, and, if required, receipts or other vouchers showing payments made for materials and labor, including payments to Sub-contractors. All payments shall be subject to any withholding or retainage provisions of this contract. All pay request documents, except the final payment, shall be submitted in whole dollar amounts. All payment applications from the General Contractor shall include line items for overhead, profit and general condition costs.

30.2 The Consultant shall, within ten (10) Business Days after receipt of each application for payment, certify approval of payment in writing to the Owner and present the application to the Owner, or return the application to the General Contractor indicating in writing its reasons for refusing to approve payment. The Owner, provided no exception is taken to the application for payment submitted by the Consultant, will issue payment on or within thirty (30) Business Days from the date received from the Consultant. A reasonable delay on the part of the Owner in making payment to the General Contractor for any given payment shall not be grounds for breach of Contract. The Consultant may refuse to approve the whole or any part of any payment if it would be incorrect to make such presentation to the Owner.

30.3 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored at an off jobsite location agreed to in writing by the Owner that meets the manufacturer’s requirements for the stored material and not-comingled with other material, the General Contractor shall furnish the following:
30.3.1 A list of the materials consigned to the Project (which shall be clearly identified), giving the place of storage, together with copies of invoices.

30.3.2 Certification that all items have been tagged for delivery to the Project and that they will not be used for any other purpose.

30.3.3 A letter from the Surety indicating that the Surety agrees to the arrangements and that payment to the General Contractor shall not relieve either the General Contractor or its Surety of their responsibility to complete the Work.

30.3.4 Evidence of adequate insurance listing the Owner as an additional insured covering the material in storage.

30.3.5 Evidence that representatives of the Consultant have visited the General Contractor's place of storage and checked all items listed on the General Contractor's certificate. They shall certify, insofar as possible, that the items are in agreement with the Specifications and approve their incorporation into the Project.

30.4 The Owner will pay 80% of the invoiced value less retainage for materials stored off site providing the above conditions are met.

30.5 The General Contractor's signature on each subsequent application for payment shall certify that all previous progress payments received on account of the Work have been applied to discharge in full all of the General Contractor's obligations reflected in prior applications for payment.

30.6 Each payment made to the General Contractor shall be on account of the total amount payable to the General Contractor and the General Contractor warrants and guarantees that the title to all materials, equipment and Work covered by the paid partial payment shall become the sole property of Owner free and clear of all encumbrances. Nothing in this Article shall be construed as relieving General Contractor from the sole responsibility for care and protection of materials, equipment and Work upon which payments have been made or restoration of any damaged Work or as a waiver of the right of Owner to require fulfillment of all terms of the Contract Documents.

30.7 Prior to submitting the first application for payment, the General Contractor shall submit to the Consultant and the Owner for approval a detailed breakdown of the Contract Amount pursuant to CSI specification divisions, divided so as to facilitate payment and correlated to the schedule required by General Conditions Article 32 of the Contract Documents. The total value of all activities shall add up to the Contract Amount. When approved by the Consultant and the Owner, this schedule shall be used as a basis for General Contractor's applications for payment and may be used by the Owner to determine costs or credits resulting from changes in the Work. Failure to obtain the approval of the Schedules of Values shall be a basis for withholding payment to the General Contractor.

30.8 Retainage – The Owner will retain ten percent (10%) of the General Contractor’s progress payments until fifty one percent (51%) of the construction project has been completed. Thereafter, if the Work is fully in compliance with the requirements of the Contract and except as provided for in Article 28.4.1 above, the Owner shall retain five percent (5%) of the total contract amount until Substantial Completion and acceptance of all Work covered by this Contract, as collateral security to insure successful completion of the Work. For the purposes of this Article, the term “in full compliance” shall mean 1) that the progress of the Work is equal to or ahead of that predicted by the Project Baseline schedule and 2) the Work completed is in compliance with the requirements of the contract documents. Subsequent to the issuance of the Substantial Completion Certificate and depending upon the cost involved for the completion and/or correction of punch list items, the Consultant may recommend to the Owner an adjustment to the amount being held as retainage and, if approved by Owner, the amount of retainage may then be reduced and a sufficient sum retained by Owner to assure completion of the remaining unfinished Work. Retainage reduction as provided for in this Article 30.8 is contingent upon the General Contractor and/or Sub-contractors being on or ahead of the approved progress schedule and on verification by the Consultant that the Work completed is in compliance with the requirements of the contract documents.
30.8.1 In addition to the retainage set forth above, the Owner may withhold from any monthly progress payments or nullify any progress payments in whole or in part as necessary to protect the Owner from loss on account of:

30.8.1.1 Defective Work which has not been remedied or completed Work which has been damaged requiring correction or replacement, or

30.8.1.2 Action required by the Owner to correct Defective Work or complete Work which the General Contractor has failed or refused to correct or complete, or

30.8.1.3 Failure of the General Contractor to perform any of its obligations under the Contract, or

30.8.1.4 Failure of the General Contractor to make payment properly to Sub-contractors; suppliers of material, services or labor; or to reimburse the University for utilities or other services as provided for in the Contract;

30.8.1.5 Amounts to be withheld as liquidated damages for failure to complete the Project in the allotted Contract time.

30.8.2 When the Owner is satisfied that the General Contractor has remedied any such deficiency, payments shall be made of the amount being withheld on the next scheduled application for payment.

30.9 Final Payment – When all Work is completed and acceptable and the Contract is fully performed, the General Contractor will be directed to submit a final payment application for certification and the entire balance shall be due and payable upon a certification of completion by the Consultant that the Work is in accordance with the Contract Documents.

30.9.1 Upon issuance of the Certificate of Final Completion by the Owner and submittal by the General Contractor of all required documents and releases, all retained amounts shall be paid to the General Contractor as part of the Final Payment. By accepting such payment, the General Contractor certifies that all amounts due or that may become due to any Sub-contractor, any Consultant of the General Contractor, or any vendors or material suppliers, have been paid or will be paid from the proceeds of the final payment; and that, further, there are not liens, claims or disputes involving the Owner or the Consultant that are outstanding or unresolved.

30.10 The General Contractor shall promptly pay each Sub-contractor and material supplier upon receipt of payment from the Owner the amount to which said Sub-contractor and supplier is entitled, reflecting the percentage actually retained from payments to the General Contractor on account of such Sub-contractor's work. The General Contractor shall, by an appropriate Agreement with each Sub-contractor and material supplier, require each Sub-contractor and supplier to make payments to their sub-contractors, vendors and suppliers in similar manner.

30.10.1 The Consultant may, on request, furnish to any Sub-contractor or material supplier information regarding the percentages of completion applied for by the General Contractor and the action thereon by the Consultant.

30.10.2 Neither the Owner nor the Consultant shall have any obligation to make payment to any Sub-contractor or material supplier except as may otherwise be required by law.

ARTICLE 31 - AUDITS

31.1 The General Contractor’s Trade Contractors’, sub-contractors’ and/or vendor’s “records” shall upon reasonable notice be open to inspection and subject to audit and/or reproduction during normal business working hours as may be deemed necessary by the Owner at its sole discretion. Such audits may be performed by an Owner’s representative or an outside representative engaged by the Owner. The Owner or its designee may conduct such audits or inspections throughout the term of this contract and for a period of three years after final payment, or longer if required by law. Owner’s representative may (without limitation) conduct verifications such as counting employees at the Construction Site, witnessing the distribution of payroll,
verifying information and amounts through interviews and written confirmations with General Contractor’s employees, field and agency labor, Trade Contractors and vendors.

31.2 “Records” as referred to in this Contract shall include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, superintendents’ reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in the Owner’s judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract Document. Such records shall include hard copy, as well as computer readable data if it can be made available, written policies and procedures; time sheets; payroll registers; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating work sheets; correspondence; change order files (including documentation covering negotiated settlements); back charge logs and supporting documentation; invoices and related payment documentation; general ledger; records detailing cash and trade discounts earned; insurance rebates and dividends; and any other General Contractor or contractor records which may have a bearing on matters of interest to the Owner in connection with the General Contractor’s dealings with the Owner (all foregoing hereinafter referred to as the “records”) to the extent necessary to adequately permit evaluation and verification of any or all of the following:

- Compliance with Contract requirements for deliverables;
- Compliance with approved plans and specifications;
- Compliance with Owner’s business ethics expectations;
- Compliance with Contract provisions regarding the pricing of change orders;
- Accuracy of General Contractor representations regarding pricing of invoices; and
- Accuracy of General Contractor representations related to claims submitted by the General Contractor or its payees.

31.3 The General Contractor shall require all payees (examples of payees include Trade Contractors, Subcontractors, vendors, and/or material suppliers) to comply with the provisions of this Article by including the requirements hereof in a written contract agreement between the General Contractor and payees. Such requirements to include flow-down right of audit provisions in contracts with payees will also apply to Subcontractors and Sub-subcontractors, material suppliers, etc. The General Contractor will cooperate fully and will cause all related parties and all of the General Contractor’s Trade Contractors and/or subcontractors (including those entering into lump sum subcontracts) to cooperate fully in furnishing or in making available to Owner from time to time whenever requested, in an expeditious manner, any and all such information, materials and data.

31.4 Owner’s authorized representative or designee shall have reasonable access to the General Contractor’s facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this contract and shall provide adequate and appropriate work space in order to conduct audits in compliance with this Article. The General Contractor and its payees agree bear their costs and expenses relating to any inspections and audits.

31.5 If an audit inspection or examination in accordance with this Article discovers any fraud or misrepresentation, or discloses overpricing or overcharges (of any nature) by the General Contractor to the Owner, in addition to making adjustments for the overcharges, the reasonable actual cost of the Owner’s audit shall be reimbursed by the General Contractor. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the General Contractor’s invoices and/or records shall be made within Ninety (90) Calendar Days from presentation of the Owner’s findings to the General Contractor.

31.6 The provisions of Articles 31.1, 31.2 and 31.5 notwithstanding, the Owner shall have the right to conduct inspections and audits of any matter relating to the Contract Documents or the Work, which shall be for the Owner’s sole benefit and shall not relieve the General Contractor, its sureties, contractors, subcontractors suppliers and their respective employees and agents of any obligations under the Contract Documents.

31.7 Any audits or inspections under Article 31 shall not constitute a waiver of any right the Owner has to accounting or discovery of records in the possession, custody or control of the General Contractor, its sureties, contractors, subcontractors, vendors and their respective employees and agents.
ARTICLE 32 - PROGRESS & SCHEDULING

32.1 The schedules submitted for this Project shall be prepared using Primavera P6 scheduling software. If approved by the University, and at the sole discretion of the University, schedules submitted in other versions of Primavera scheduling software (Primavera Contractor saved in .xer format, Primavera SureTrak or Primavera P3) may be converted to Primavera P6 format by the University for review purposes. However, the University will not be responsible for any inaccuracies that may result from such conversions.

3.2 The schedules submitted for this Project shall coordinate Work in accordance with all schedules included in the Owner’s approved Program. Construction work shall be scheduled and executed such that operations of the University are given first priority. This applies particularly to outages and restriction of access.

32.2.1 The schedules submitted for this Project shall not exceed time limits established for the Project. Schedules which reflect a duration less than the Contract Time are for the convenience of the General Contractor and shall not be the basis of any claim for delay or extension of time.

32.2.2 Schedules shall be revised at appropriate intervals as required by the condition of the Work and the Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

32.2.3 The General Contractor shall also submit a payment schedule indicating the percentage of the Contract Amount and the amount of the anticipated monthly payments that will be requested as the Project proceeds.

32.2.4 The Owner may withhold approval of all or a portion of progress payments until the progress payment schedule and construction schedule have been submitted by the General Contractor.

32.3 The General Contractor shall prepare and keep current, for the Consultant's approval, a separate schedule of submittals coordinated with the General Contractor's CPM construction schedule that provides reasonable time for the Consultant to review the submittals.

32.4 The General Contractor shall cause the work to be performed pursuant to the most recent schedules.

ARTICLE 33 - USE OF COMPLETED PORTIONS

33.1 Upon mutual Agreement between the Owner, General Contractor, and Consultant, the Owner may use a completed portion of the Project after an inspection is made. Such possession and use shall not be deemed as acceptance of any Work not completed in accordance with the Contract Documents, nor shall such possession and use be considered to alter warranty obligations or cause any warranty period to commence prior to Substantial Completion.

ARTICLE 34 - INDEMNIFICATION

34.1 To the fullest extent permitted by law, the General Contractor shall indemnify and hold harmless the Owner, its consultants, and their respective employees and agents from and against all claims, damages, losses and expenses, including attorney's fees, provided that any such claim, loss, damage or expense: (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (b) is caused in whole or in part by any negligent act or omission of the General Contractor, any Sub-contractor or material supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This basic obligation to indemnify shall not be construed to nullify or reduce other indemnification rights which the Owner, its consultants, and their respective employees and agents would otherwise have.

34.2 The General Contractor shall also indemnify and hold harmless the Owner, its consultants, and their respective employees and agents from any claims relating to the Project brought against the Owner, its consultants, and their respective employees and agents by any Sub-contractor unless such claims are due to the gross negligence or misconduct of the Owner or Consultant.
34.3 In any and all claims against the Owner its consultants, and their respective employees and agents, by any employee of the General Contractor, any Sub-contractor, any one directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the General Contractor or any Sub-contractor under Worker's Compensation acts, disability benefit acts or other employee benefit acts.

34.4 The obligations of the General Contractor under this Article shall not extend to the liability of the Consultant, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Consultant, his agents or employees, provided such giving or failure to give is the primary cause of injury or damage.

ARTICLE 35 - INSURANCE

35.1 The General Contractor shall furnish the Owner the Certificates of Insurance or other acceptable evidence that insurance is effective, and guarantee the maintenance of such coverage during the term of the Contract. Each policy of insurance, except Workers Compensation, shall name the University of Kentucky and the directors, officers, trustees and employees of the University as additional insured on a primary and non-contributory basis as their interest appears. Waiver of subrogation in favor of the University of Kentucky shall apply to all policies. Any endorsements required to validate such waiver of subrogation shall be obtained by the General Contractor at the General Contractor’s expense.

35.2 The General Contractor shall not commence, nor allow any Sub-contractor to commence Work under this Contract, until the Owner has reviewed the certificates and approved coverages and limits as satisfying the requirements of the bidding process.

35.3 Workers' Compensation and Employers' Liability Insurance. The General Contractor shall acquire and maintain Workers’ Compensation insurance with Kentucky’s statutory limits and Employers’ Liability insurance as defined in the Special Conditions for all employees who will be working at the Project site. In the event any Work is sublet, the General Contractor shall require any Sub-contractor to provide proof of this insurance for the Sub-contractors' employees, unless such employees are covered by insurance provided by the General Contractor.

35.4 The General Contractor shall either require each Sub-contractor to procure and maintain insurance of the type and limits stated during the terms of the Contract, or insure the activities of such Sub-contractors under a blanket form as described below:

35.4.1 Commercial General Liability Insurance. The General Contractor shall acquire and maintain a Broad Form Comprehensive General Liability (CGL) Insurance Policy including premises - operations, products/completed operations, blanket contractual, broad form property damage, real property fire legal liability and personal injury liability coverage. The Insurance Policy must be on an "occurrence" form only, unless approved by the Owner. Contractual liability must be endorsed to include defense costs. Products and completed operations insurance must be carried for two years following completion of the Work. Policies which contain Absolute Pollution Exclusion endorsements are not acceptable. Coverage must include pollution from "hostile fires". Where required by the risks involved, Explosion, Collapse and Underground (XCU) coverages shall be added by endorsement. If the work involved requires the use of helicopters, a separate aviation liability policy as defined in the Special Conditions will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits as defined in the Special Conditions will be required.

35.4.1.1 The limits of liability shall not be less than defined in the Special Conditions.

35.4.2 Comprehensive Automobile Liability Insurance. The General Contractor shall show proof and guarantee the maintenance of insurance to cover all owned, hired, leased or non-owned vehicles used on the Project. Coverage shall be for all vehicles including off the road tractors, cranes and rigging equipment and
include pollution liability from vehicle upset or overturn. Policy limits shall not be less than defined in the Special Conditions.

35.4.3 Excess or Umbrella Liability Insurance. The General Contractor shall acquire and maintain a policy of excess liability insurance in an umbrella form for excess coverages over the required primary policies of broad form commercial general liability insurance, business automobile liability insurance and employers' liability insurance. This policy shall have a minimum as defined in the Special Conditions for each occurrence in excess of the applicable limits in the primary policies. The excess liability policy shall not contain an absolute pollution exclusion and shall include coverages for pollution that may occur due to hostile fires and vehicle upset and overturn. The limits shall be increased as appropriate to cover any anticipated special exposures.

35.5 Builders Risk Insurance. The General Contractor shall purchase and maintain an “all risk” Builder’s Risk Insurance policy upon the Work at the site to the full insurable value thereof. Such insurance shall include interests of the Owner, General Contractor, and all Sub-contractors and of their subcontractors. It shall insure against perils of fire, extended coverage, vandalism and malicious mischief. General Contractor’s work performed, and materials to be incorporated into the project and stored on the jobsite, will be covered. Builder’s Risk does not include temporary buildings, or General Contractor or General Contractor’s tools, equipment, or trailers and contents.

35.6 Insurance Agent and Company Insurance as required in the bidding process of the Project shall be written according to applicable state law in Kentucky. The policies shall be written by an insurer duly authorized to do business in Kentucky in compliance with KRS: 304.1-100 and -.110.

ARTICLE 36 - PERFORMANCE AND PAYMENT BONDS

36.1 The General Contractor shall furnish a Performance Bond in the form provided in the Contract Documents in the full amount of the Contract Amount as security for the faithful performance of the Contract. The General Contractor shall also furnish a Payment Bond in the form provided in the Contract Documents in the full amount of the Contract Amount for the protection of all persons performing labor or furnishing materials, equipment or supplies for the General Contractor or its Sub-contractors for the performance of the Work provided for in the Contract, including security for payment of all unemployment contributions which become due and payable under Kentucky Unemployment Insurance Law.

36.2 Each bond furnished by the General Contractor shall incorporate by reference the terms of the Contract as fully as though they were set forth verbatim in such bonds. In the event the Contract Amount is adjusted by Change Order, the penal sum of both the performance bond and the payment bond shall be deemed increased by like amounts.

36.3 The performance and payment bonds shall be executed by a surety company authorized to do business in the Commonwealth of Kentucky, and the contract instrument of bonds must be countersigned by a duly appointed and licensed resident agent.
ARTICLE 37 - DAMAGED FACILITIES

37.1 The General Contractor shall repair or replace, at no expense to the Owner, any damaged section of existing buildings, paving, landscaping, streets, drives, utilities, watersheds, etc. caused by Work performed under the Contract or incidental thereto, whether by the General Contractor's own forces, Sub-contractors or by material suppliers. Such repair or replacement shall be performed by craftsmen skilled and experienced in the trade or craft for the original Work.

37.2 Water damage to the interior of any building caused by Work performed under the Contract or incidental thereto, whether by the General Contractor’s own forces, Sub-contractors, or by material suppliers, and whether occurring in a new or existing building, shall be repaired by the General Contractor at the General Contractor’s expense, and any materials damaged inside the building, including personal property, shall be repaired or replaced at the full replacement cost by the General Contractor at the General Contractor’s expense.

37.3 For existing buildings, the General Contractor, along with the Owner's Representative and Consultant, will tour the Project site to evaluate existing conditions and determine any existing damage before any Work on this Contract is done.

37.4 Should the General Contractor fail to proceed with appropriate repairs in an expedient manner, the Owner reserves the right to have the Work/repairs completed and deduct the cost of such Work/repairs from amounts due or to become due to the General Contractor. If the Owner deems it not expedient to repair the damaged Work, or if repairs are not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

ARTICLE 38- CLAIMS & DISPUTE RESOLUTION

38.1 All General Contractor's claims and disputes shall be referred to the Consultant for review and recommendation. All claims shall be made in writing to the Consultant and Owner, not more than ten (10) days from the occurrence of the event which gives rise to the claim or dispute, or not more than ten (10) days from the date that the General Contractor knew or should have known of the claim or dispute. Unless the claim is made in accordance with these requirements, it shall be waived. Any claim not submitted before Final Payment shall be waived. The Consultant shall render a written decision within fifteen (15) days following receipt of a written demand for the resolution of a claim or dispute.

38.2 The Consultant's decision shall be final and binding on the General Contractor unless the General Contractor submits to the Consultant and the Project Manager a written notice of appeal within fifteen (15) Calendar Days of the Consultant’s decision. The General Contractor must present within fifteen (15) Calendar Days of the notice to appeal a narrative claim in writing with complete supporting documentation. After receiving the written claim, the Project Manager will review the materials relating to the claim and may meet with the Consultant and/or the General Contractor to discuss the merits of the claim. The Project Manager will render a decision within thirty (30) Calendar Days after receiving the written claim and supporting documentation. The decision of the Project Manager shall be final and binding pending further appeal as provided for in Article 39. If the Consultant or the Project Manager do not issue a written decision within thirty (30) calendar days after receiving the claim and supporting documentation, or within a longer period as may be established by the parties to the Contract in writing, then the General Contractor may proceed as if an adverse decision had been received.

38.3 If the Project Manager does not agree with the Consultant's decision on a claim by the General Contractor, the Project Manager shall notify the General Contractor and the Consultant and direct the General Contractor to perform the Work about which the claim was made and the General Contractor shall proceed with such Work in accordance with the Project Manager's instruction. If the General Contractor disagrees with a
decision of the Project Manager concerning a General Contractor's claim, the General Contractor shall proceed
with the Work as indicated by the Project Manager's decision.

38.4 The General Contractor shall continue to diligently pursue Work under the Contract pending resolution
of any dispute, and the Owner shall continue to pay for undisputed work in place.

ARTICLE 39 - CLAIMS FOR DAMAGE

39.1 Should either party to the Contract suffer damage because of wrongful act or neglect of the other party,
or of anyone employed by them, or others for whose act they are legally liable, or other controversy arising
under the Contract, such claim or controversy shall be made in writing to the other party within thirty (30) days
after the first occurrence of the event. Prior to the institution of any action in court, the claim or controversy
(together with supporting data) shall be presented in writing to the Director of the Capital Project Management
Division at the University of Kentucky ("Director") or his designee for the University of Kentucky. The
Director, or designee, is authorized, subject to any limitations or conditions imposed by regulations, to settle,
comprise, pay, or otherwise adjust the claim or controversy with the General Contractor. The Director, or
designee, shall promptly issue a decision in writing. A copy of the decision shall be mailed or otherwise
furnished to the General Contractor. The decision rendered shall be final and conclusive unless the General
Contractor files suit pursuant to KRS 45A.245. If the Director, or designee, does not issue a written decision
within one hundred and twenty (120) days after written request for a final decision, or within a longer period as
may be established by the parties to the Contract in writing, then the General Contractor may proceed as if an
adverse decision had been received.

39.2 Any legal action on the Contract shall be brought in the Franklin Circuit Court and shall be tried by the
Court sitting without a jury. All defenses in law or equity, except the defense of government immunity, shall be
preserved to the Owner. The Owner shall recover from the General Contractor all attorney's fees, costs and
expenses incurred to the extent the Owner prevails in defending or prosecuting each claim in litigation of
disputes under the Contract. The Owner is the prevailing party under this provision and is entitled to recover
attorneys' fees, costs and expenses on a claim-by-claim basis to the extent the Owner successfully defeats or
prosecutes each claim. A recovery of a net judgment by the General Contractor shall not be determinative of
the Owner’s right to recover attorneys’ fees, expenses and costs. Rather, such a determination shall be made
based on the extent that the Owner successfully defends or prosecutes each distinct claim in litigation under the
Contract, even if the Owner does not prevail on every claim. The General Contractor shall be liable to the
Owner for all attorney's fees, costs and expenses incurred by the Owner to enforce the provisions of the
Contract.

ARTICLE 40 - LIENS

40.1 The filing and perfection of liens for labor, materials, supplies, and rental equipment supplied on the
Work are governed by KRS 376.195 et seq.

40.2 Statements of lien shall be filed with the Fayette County Clerk and any action to enforce the same must
be instituted in the Fayette Circuit Court, pursuant to KRS 376.250 (2).

40.3 The lien shall attach only to any unpaid balance due the General Contractor for the improvement from
the time a copy of statement of lien, attested by the Fayette County Clerk, is delivered to the Owner, pursuant to
the provisions of KRS 376.240.

ARTICLE 41 - ASSIGNMENT

41.1 Neither party to the Contract shall assign the Contract, or any portion thereof without the prior written
consent of the other, which consent may be granted or withheld in the granting party’s sole and absolute
discretion. The General Contractor shall not assign any amount or part of the Contract or any of the funds to be
received under the Contract unless the General Contractor has the prior written approval of the Owner (which
approval may be granted or withheld in the Owner’s sole and absolute discretion) and the Surety on the General
Contractor's bond has given written consent to any such assignment.
ARTICLE 42 - SEPARATE CONTRACTS

42.1 The Owner reserves the right to enter into other Contracts in connection with the Project or to perform any work with the Owner's forces in the normal sequence of the work as depicted in the then current construction schedule. Except for work performed by University personnel, such contracts shall be assignable to the General Contractor and shall contain the same terms and conditions as the contracts between the General Contractor and the Sub-contractors. The General Contractor will be entitled to a maximum of 7% total fee on the value of such assigned contracts. The General Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate its Work with theirs in such manner as the Consultant may direct.

42.2 Should the General Contractor cause damage to any separate contractor on the Work, and the separate contractor sues the Owner on account of any damage alleged to have been so sustained, the General Contractor shall be responsible for all costs, attorney’s fees and expenses incurred by the Owner for defending such proceedings unless the Owner prevails on behalf of the General Contractor in which case fees and expenses will be the responsibility of the separate contractor and if any judgment against the Owner arises therefrom, the General Contractor shall pay or satisfy it and shall pay all costs, attorney’s fees and expenses incurred by the Owner.

42.3 If any part of the General Contractor's Work depends upon the work of any other separate contractor, the General Contractor shall promptly report to the Consultant any observed defects in such work that render it unsuitable for proper execution connection. The failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the work, except as to defects which may develop in the other contractor's work after the execution of the work.

42.4 Whenever work being done by the Owner's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various parties involved shall be established by the Owner to secure the completion of the various portions of the Work in general harmony.

ARTICLE 43 - GENERAL CONTRACTOR/SUB-CONTRACTOR RELATIONSHIP

43.1 The General Contractor is fully responsible to the Owner for the acts and omissions of the Sub-contractors and of persons either directly or indirectly employed by them. The General Contractor is responsible for the acts and omissions of persons employed directly by the General Contractor and for the coordination of the Work, including placement and fittings of the various component parts. No claims for extra costs as a result of the failure to coordinate the Work, or by acts or omissions of the various Sub-contractors, will be paid by the Owner.

43.2 Except as otherwise provided in these Contract Documents, the General Contractor agrees to bind every Sub-contractor by the terms and conditions of the Contract Documents as far as applicable to their portion of the Work. Upon request, the General Contractor shall provide copies of any subcontracts and purchase orders to the Owner or Consultant.

43.3 The General Contractor shall make no substitution or change in any Sub-contractor listed and accepted by the Consultant or Owner except as approved in writing by the Owner. The General Contractor shall not employ any Sub-contractor or supplier against whom the Owner or the Consultant has made reasonable and timely objection.

43.4 Nothing contained in the Contract Documents shall create any contractual relationship between the Owner and any Sub-contractor, Trade Contractor or Supplier, nor shall the General Contractor include any language in their contracts with any Sub-contractor, Trade Contractor and/or Supplier that might Imply such a relationship. The General Contractor is hereby notified that it is the General Contractor's contractual obligation to settle disputes between Sub-contractors, Trade Contractors, and/or Suppliers. Neither the Owner nor the Consultant will settle disputes between the General Contractor and any Sub-contractor, Trade Contractor, and/or Supplier or between Sub-contractors, Trade Contractors, and/or Suppliers.
43.4.1 The Owner does not waive sovereign immunity under KRS 45A.245(1) for any claim or claims made by parties not having a written contract with the University of Kentucky.

43.4.2 Third party and/or flow-through type claims, from Sub-contractors and/or suppliers or any other entity not having a written contract directly with the University, are specifically prohibited by this Contract and no provision of the General Contractor’s contracts with such entities shall indicate otherwise.

43.4.3 The General Contractor shall indemnify and hold harmless the Owner and its agents and employees from any claims relating to the Project brought against the Owner by any of the General Contractor’s Sub-contractors or suppliers, or between their sub-contractors or suppliers.

ARTICLE 44 - CASH ALLOWANCE

44.1 The General Contractor is to provide or require the Sub-contractor(s) to include in the Contract Amount all costs necessary to complete the Work. Costs based on “allowances” shall be permitted only for objectively quantifiable material items and only with the prior written approval of the Owner.

ARTICLE 45 - PROJECT SITE LIMITS

45.1 The General Contractor shall confine the apparatus, the storage of materials, and the operations of Workmen to Project site limits indicated in the Contract Documents and as permitted by law, ordinances, and permits, and shall not unreasonably encumber the site with materials and equipment.

ARTICLE 46 - CLEAN UP

46.1 The General Contractor shall at all times keep the premises free from accumulation of waste material or rubbish caused by the operations in connection with the Work. All corridors and exit doors must be kept clear at all times. All exit ways, walks, and drives must be kept free of debris, materials, tools and vehicles.

46.2 At the completion of the Work, and prior to final inspection and acceptance, the General Contractor shall remove all remaining waste materials, rubbish, General Contractor’s construction equipment, tools, machinery, and surplus materials and shall leave the Work in a clean and usable condition, satisfactory to the Consultant and the Owner. If the General Contractor fails to clean up as provided in the Contract Documents, the Owner may perform the cleaning tasks and charge the cost to the General Contractor.

ARTICLE 47 - POINTS OF REFERENCE

47.1 The General Contractor shall carefully preserve bench marks, reference points and stakes, and in case of willful or careless destruction, the General Contractor shall be charged with the resulting expense of replacement and shall be responsible for any mistake that may be caused by their loss or disturbance.

ARTICLE 48 - SUBSTITUTION - MATERIALS AND EQUIPMENT

48.1 Reference to or the listing of items to be incorporated in the construction without referring to any specific article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number shall be interpreted as establishing the general intent of the Contract and the general standard of quality for that item.

48.2 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, with the words "or equal", shall be interpreted as establishing a minimum standard of quality, and shall not be construed as limiting competition.

48.2.1 Substitution of other equipment and materials as “or equal” to items named in the specifications will be allowed provided the proposed substitution is approved by the Consultant and will perform the functions called for by the general design, be similar and of equal quality to that specified and be suited to the same use and
capable of performing the same function of that specified. The Contractor has the burden to prove equality of any substitution requested.

48.3 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, without the words “or equal”, shall be interpreted as defining an item or source that has after careful consideration been determined by the University as necessary to be compliant with, and/or to function properly within, the University operational system. No substitutions will be allowed.

48.3.1 In the event the Contract Documents contain specific reference to two (2) or more items as described in Article 48.3, any of those listed will be acceptable.

48.4 Substitution of equipment and materials previously submitted by the Contractor and approved by the Consultant will be considered only for the following reasons:

48.4.1 Unavailability of the materials or equipment due to conditions beyond the control of the supplier.

48.4.2 Inability of the supplier to meet Contract Schedule.

48.4.3 Technical noncompliance to specifications.

48.5 In substituting materials or equipment, the Contractor assumes responsibility for any changes in systems or modifications required in adjacent or related work to accommodate such substitutions, despite consultant approval, and all costs associated with the substitution shall be the responsibility of the Contractor. The Consultant shall be reimbursed by the Contractor for any architectural or engineering revisions required as the result of such substitutions.

48.6 Inclusion of a certain make or type of materials or equipment in the Contractor's bid proposal shall not obligate the Owner to accept such materials or equipment if they do not meet the requirements of the Contract Documents and any such substitutions in the preparation of the bid without written approval shall be at the sole risk of the Contractor.

ARTICLE 49 - TEST AND INSPECTION

49.1 Regulatory agencies of the government having jurisdiction may require any Work to be inspected, tested or approved. The General Contractor shall assume full responsibility therefore, pay all costs in connection therewith, unless otherwise noted, and furnish the Consultant the required certificates of inspection, testing or approval.

49.2 The General Contractor shall give the Consultant timely notice of readiness of the Work for all inspections, tests or approvals.

49.3 The technical specifications may indicate specific testing requirements to be performed by the General Contractor. Unless otherwise provided in the Contract Documents, the cost of all such testing shall be the responsibility of the General Contractor. Testing shall be completed using a testing facility or laboratory approved by the Owner.

49.4 The costs of all inspection fees as may be required to construct and occupy the Work shall be the responsibility of the General Contractor.

ARTICLE 50 - WARRANTY

50.1 The General Contractor warrants to the Owner and the Consultant that all materials and equipment furnished under this Contract shall be new and in accordance with the requirements of the Contract Documents, and that all Work shall be of good quality, free from faults and defects and in conformance with the Contract Documents. If required by the Consultant or the Owner, the General Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the General Contractor requests approval of a
substitution of material or equipment, the General Contractor warrants that such installation, construction, material, or equipment will equally perform the function for which the original material or equipment was specified. The General Contractor explicitly warrants the merchantability, the fitness for a particular purpose, and quality of all substituted items in addition to any to any warranty given by the manufacturer and/or supplier. Approval of any such substitution is understood to rely on such warrant of performance. Prior to the Substantial Completion inspection, the General Contractor shall deliver to the Consultant all warranties and operating instructions required under the Contract or to which the General Contractor is entitled from manufacturers, suppliers, and Sub-contractors. All warranties for products and materials incorporated into the Work shall begin on the date of Substantial Completion. The warranty provided in this Article 50 shall be in addition to and not a limitation of any other warranty or remedy required by law or by the Contract Documents, and such warranty shall be interpreted to require the General Contractor to replace defective material and equipment and re-execute defective Work which is disclosed to the General Contractor by or on behalf of the Owner within a period of one (1) year after Substantial Completion of the entire Work in addition to other warranty obligations beyond one (1) year from Substantial Completion as provided for by law or by the Contract Documents.

50.2 Neither the final payment, any provision in the Contract Documents nor partial or entire use or occupancy of the premises by the Owner shall constitute an acceptance of Work not done in accordance with Contract Documents or relieve the General Contractor or its Sureties of liability with respect to any warranties or responsibilities for faulty materials and workmanship. The General Contractor or its sureties shall remedy any defects in Work and any resulting damage to Work at the General Contractor’s own expense. The General Contractor shall be liable for correction of all damage resulting from defective Work. If the General Contractor fails to remedy any defects or damage, the Owner may correct Work or repair damages and the cost and expense incurred in such event shall be paid by or be recoverable from the General Contractor or the surety. The Owner will give notice of observed defects with reasonable promptness.

50.3 The General Contractor shall guarantee that labor, material, and equipment will be free of defects for a period of one (1) year from the date shown on the Certificate of Substantial Completion unless special conditions or additional warranty periods are required by the contract pursuant to Article 23 in addition to warranty obligations which extend beyond one year from Substantial Completion. The Owner will give notice of observed defects with reasonable promptness. Expendable items and wear from ordinary use are excluded from this warranty.

50.4 Should the General Contractor be required to perform tests that must be delayed due to climate conditions, it is understood that such tests will be accomplished by the General Contractor at the earliest possible date with provisions of the general warranty beginning upon satisfactory completion of said test. The responsibility of the General Contractor under this Article will not be abrogated if the Owner should elect to initiate final payment. If the Owner initiates final payment, consent of General Contractor's surety acknowledging that Work not yet tested is required. The General Contractor shall warrant that the entire Project will conform to the Contract Documents.

50.5 In addition to the foregoing, the General Contractor shall warrant for a period of one (1) year that all buildings and other improvements constructed as a part of the Work shall be watertight and leak proof at every point and in every area. The General Contractor shall, immediately upon notification by or on behalf of the Owner of water penetration, determine the source of water penetration and, at the General Contractor’s expense, (a) do any work to be necessary to make such buildings or improvements watertight and (b) repair and replace any other damaged material, fences and furnishings damaged as a result of such water penetration and return the buildings or other improvements to their original condition.

50.6 The General Contractor shall address and resolve to the Owner’s satisfaction any warranty claims made by or on behalf of the Owner during the above described warranty period and all repairs and replacements made by the General Contractor pursuant to this Article 50 shall be warranted by the General Contractor, on the terms set forth in this Article 50, for a period of time commencing upon the completion of such repairs and replacements and ending on the later of (a) the expiration of the one (1) year warranty period provided for above or (b) six (6) months after the date such repair or replacement is completed.

50.7 All costs, attorney's fees and expenses incurred by the Owner as a result of the General Contractor's failure to honor any warranty for the Work shall be paid by or recoverable from the General Contractor.
ARTICLE 51 - PREVAILING WAGE LAW REQUIREMENTS (NO LONGER USED AS OF 1/9/2017)

ARTICLE 52 - APPRENTICES

52.1 Apprentices (for all classifications of work) shall be permitted to work only under an apprenticeship agreement approved by the Kentucky Supervisor of Apprenticeship and by the Kentucky Apprenticeship and Training, United States Department of Labor.

ARTICLE 53 - GOVERNING LAW

53.1 This Contract and all issues and disputes arising out of this Contract shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Kentucky without consideration of its conflicts of laws principles.

ARTICLE 54 - NONDISCRIMINATION IN EMPLOYMENT

54.1 During the performance of the Contract, the General Contractor agrees as follows:

54.1.1 The General Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or disability in employment. The General Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, or disability in employment. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The General Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

54.1.2 The General Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the General Contractor; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin or disability in employment.

54.1.3 The General Contractor will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the General Contractor's commitments under this Article, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

54.2 Failure to comply with the above nondiscrimination clause constitutes a material breach of Contract.

ARTICLE 55 - AFFIRMATIVE ACTION; REPORTING REQUIREMENTS

55.1 The General Contractor and any Sub-contractor is exempt from any affirmative action or reporting requirements, under the Kentucky Equal Employment Opportunity Act of 1978, KRS 45.550 to KRS 45.640 “The Act", if any of the following conditions are applicable:

55.1.1 The sub-contract awarded is in the amount of two hundred and fifty thousand dollars ($250,000.00) or less, and the amount of the sub-contract is not a subterfuge to avoid compliance with the provisions of the Act;

55.1.2 The General Contractor or Sub-contractor utilizes the services of fewer than eight (8) employees during the course of the Contract;

55.1.3 The General Contractor or Sub-contractor employs only family members or relatives;

55.1.4 The General Contractor or Sub-contractor employs only persons having a direct ownership interest in the business and such interest is not a subterfuge to avoid compliance with the provisions of The Act.

55.2 The General Contractor and any Sub-contractor, not otherwise exempted, shall:
55.2.1 For the length of the Contract, hire minorities from within the drawing area to satisfy the agreed upon goals and timetables. Should the union with which the General Contractor or Sub-contractor have collective bargaining agreements be unwilling to provide sufficient minorities to satisfy the agreed upon goals and timetables, the General Contractor and Sub-contractors shall hire minorities from other sources within the drawing area;

55.2.2 The equal employment provisions of The Act may be met in part by the General Contractor contracting to a minority contractor or Sub-contractor. A minority contractor, Sub-contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

55.2.3 Each General Contractor shall, for the length of the Contract, furnish such information as required by The Act and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to its employment practices and Work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with The Act and such rules, regulations and orders issued pursuant thereto.

55.3 If the General Contractor is found to have committed an unlawful practice against a provision of The Act during the course of performing under this Contract, a subcontract covered under The Act, the Owner may cancel or terminate the Contract, conditioned upon a program for future compliance approved by the Owner. The Owner may also declare such General Contractor ineligible to submit proposals on further contracts until such time as the General Contractor complies in full with the requirements of The Act.

55.4 Any provisions of The Act notwithstanding, no General Contractor shall be required to terminate an existing employee, upon proof that employee was employed prior to the date of the Contract, nor hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

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ARTICLE 01 GENERAL INFORMATION

1.1 These Special Conditions are intended to modify, supplement, or delete from, applicable Articles of the General Conditions.

1.2 Where any Article of the General Conditions is supplemented by these Special Conditions, the Article shall remain in effect and the supplement shall be added thereto.

1.3 Where Special Conditions conflict with General Conditions, provisions of the Special Conditions take precedence.

ARTICLE 02 FIELD CONDITIONS

2.1 General Contractor will secure all data at the site of the building such as grades of lot, convenience of receiving and sorting material, location of public services, and other information which will have a bearing proposals or on the execution of the Work and shall address these issues in the preparation of their bid. No allowance shall be made for failure of the General Contractor to obtain such site information prior to submitting their proposal, and no adjustment to the General Contractor’s Contract amount or stipulated time for completion shall be allowed when due to failure by the General Contractor to do so.

ARTICLE 03 (NOT USED)

ARTICLE 04 CONSULTANT

4.1 Wherever in these Contract Documents reference is made to the Consultant, it shall be understood to mean BCCLT Consulting Engineers or their duly authorized representatives. (See Article 2 of the General Conditions.)

ARTICLE 05 GEOTECHNICAL REPORT

5.1 No subsurface or geotechnical survey information is available at this time.

ARTICLE 06 TIME FOR COMPLETION

The time for Substantial Completion as further defined in Article 1 of the General Conditions shall be One Hundred Eighty (180) consecutive calendar days from the date of commencement as specified in the Work Order letter, and Final Completion shall be Thirty (30) days thereafter.

ARTICLE 07 LIQUIDATED DAMAGES

7.1 Should the General Contractor fail to achieve Substantial Completion of the Work under this Contract on or before the date stipulated for Substantial Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of Two Hundred Fifty ($250.00) for each consecutive calendar day that Substantial Completion has not been met. See Article 3 of the Agreement.

7.2 Should the General Contractor fail to achieve Final Completion of the Work under this Contract on or before the date stipulated for Final Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of Five Hundred ($500) for each consecutive calendar day until Final Completion is reached. See Article 3 of the Agreement.
ARTICLE 08 SUBMITTALS AND SHOP DRAWINGS

8.1 SUBMISSIONS - GENERAL
8.1.1 The General Contractor shall submit each set of Shop Drawings, product data, samples, and test
and/or certification reports as a separate item in UK E-Communication®. Projects not utilizing UK E-
Communication® must submit all items electronically to the Consultant and the UK Project Manager and
Administrative Coordinator.

8.1.2 All sample selections for color shall be submitted for approval at the same time. Color selections
shall not be submitted individually.

8.1.3 Any deviation from the Contract Documents shall be noted on the transmittal form comment
section.

8.1.4 All submittals are to be reviewed by the General Contractor for compliance with the Contract
Documents before submission for approval. All submittals are to be initiated by the General Contractor.
Submittals made directly to the Consultant by sub-contractors, manufacturers or suppliers will not be
accepted or reviewed.

8.1.5 Re-submittals shall conspicuously note all changes from earlier submissions. Special notation by
the General Contractor shall be made to any changes other than those in response to the Consultant's
review.

8.1.6 Manufacturers shall, when requested by the Consultant, submit test reports prepared by reputable
firms or laboratories certifying as to performance, operation, construction, wearability, etc., to support
claims made by the manufacturer of the equipment or materials proposed for inclusion in the Work.
General Contractor shall also submit a list of three (3) installations where said equipment or materials have
been in service for a minimum of five (5) years.

8.2 SUBMISSIONS - REVIEW
8.2.1 Review of submittals is only for compliance with the design concept and the contract documents.
THE CONSULTANT SHALL NOT BE RESPONSIBLE FOR CHECKING DEVIATIONS FROM
CONTRACT DOCUMENT REQUIREMENTS OR CHANGES FROM EARLIER SUBMISSIONS NOT
SPECIFICALLY NOTED.

8.2.2 The following shall be verified prior to making submittals:

Field Measurements, Field Construction Criteria, Catalog numbers and similar data, Quantities
and Capacities, and Compliance with requirements, including verification of all dimensions,

8.2.3 Review Stamp designations shall be as follows:

8.2.3.1 “NET = No Exceptions Taken”: Proceed with the Work, no corrections needed.

8.2.3.2 "FC= Furnish as Corrected": Proceed with the Work, noting the corrections/conditions of the
approval.

8.2.3.3 "RR = Revise and Resubmit": Do not proceed with the Work, as the submittal does not comply
with the Contract Documents. Revisions to the submittal are required for approval. On projects utilizing
UK E-Communication, “Send Back a Step” is used in lieu of “Revise and Resubmit”

8.2.3.4 "R = Rejected": Do not proceed with the Work, the submittal is rejected.

8.3 SUBMISSIONS - SPECIAL PROVISIONS
8.3.1 In making a submittal, the General Contractor shall be deemed to be making the following representations:

8.3.1.1 The General Contractor understands and agrees that he shall bear full responsibility for the products furnished. The General Contractor expressly warrants that products described in the attached submittal will be usable and that they conform to the Contract requirements unless specifically noted otherwise.

8.3.1.2 The General Contractor understands and agrees that, without assuming design responsibility, he expressly warrants that products described in the attached submittal are capable of being used in accordance with the intent of the design documents and that they conform to the Contract requirements unless specifically noted otherwise.

8.3.1.3 The General Contractor acknowledges that the Owner will rely on the skill, judgment, and integrity of the General Contractor as to conformance requirements and subsequent usability.

8.4 SHOP DRAWING AND PROCUREMENT SUBMITTAL LOG

8.4.1 The General Contractor, within ten (10) days after the Pre-Construction meeting, shall begin uploading submittals using UK E-Communication®, to generate a log fixing the dates for submission of Shop Drawings, special order material items, certifications, guarantees, and any other items required to be submitted to the Consultant for review, approval or acceptance. Projects not utilizing UK E-Communication® will submit a Shop Drawing Log provided by the Owner during the Pre-Construction Meeting.

8.4.2 The log shall track all submittals to date. The updated log shall then be reviewed and discussed at each progress meeting to determine items that may impact the construction schedule.

8.5 Shop Drawings

8.5.1 The General Contractor shall review, approve, and submit Shop Drawings to the Consultant, in accordance with the Consultant's Shop Drawing & Procurement Submittal Log or UK E-Communication®, as herein detailed. By approving and submitting Shop Drawings, the General Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

8.5.2 The General Contractor shall submit Shop Drawings required for the Work and the Consultant will review and take appropriate action. The review and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of a separate item will not indicate approval of the assembly in which the item functions.

8.5.3 The General Contractor shall make any corrections required by the Consultant for compliance to the Contract and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The General Contractor shall direct specific attention, in writing, or on resubmitted Shop Drawings, to revisions other than the corrections called for by the Consultant on previous submissions. The General Contractor's stamp of approval on any shop drawing or sample shall constitute a representation to Owner and Design Consultant that the General Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or he assumes full responsibility for doing so, and that he has reviewed or coordinated each shop drawing or sample with the requirements of the Work and the Contract Documents.

8.5.4 Where a shop drawing or sample submission is required by the specifications, no related Work shall be commenced until the submission has been approved by the Design Consultant. A copy of each approved shop drawing and each approved sample shall be kept in good order by the General Contractor at the site and shall be available to the Consultant.
8.5.5 The Consultant's approval of Shop Drawings or samples shall not relieve the General Contractor from his responsibility for any deviations from the requirements of the Contract Documents unless the General Contractor has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any approval by the Consultant shall not relieve the General Contractor from responsibility for errors or omissions in the Shop Drawings.

8.5.6 All submittals are to be submitted electronically by the contractor. Shop Drawings submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed. Workflow in UK E-Communication® will be established during the workflow meeting. Each individual Shop Drawing shall have its respective specification number and description highlighted.

8.5.7 Where Shop Drawings include fire alarm, communication systems schematics, sprinkler systems, etc., a sepia of each drawing shall be submitted to the Consultant as part of the "Record" set of drawings.

8.6 SUBMISSIONS - SAMPLES

8.6.1 Office samples shall be of sufficient size and quantity to clearly illustrate functional characteristics of the product with integrally related parts and attachment devices, and full range of color, texture, and pattern.

8.6.2 Products shall not be used until the sample has been submitted to and approved by the Consultant.

8.6.3 A minimum of two (2) samples are required to be submitted to the Consultant for review and approval and will be distributed as follows:

   a) One (1) to be retained by the University;
   b) One (1) to be returned to the Design Consultant;
   c) An additional sample or samples may be submitted, at the General Contractor's option, for distribution to a third party.

8.6.4 Field samples (block, brick, etc.) of materials to be constructed at the site shall be submitted for review as required by the individual section of the Contract Documents.

8.7 SUBMISSIONS - OPERATION AND MAINTENANCE MANUALS

8.7.1 The University requires a minimum of one (1) bound copies and one (1) digital copy of the final installation, training, operation, maintenance, and repair manuals to be turned over to the Owner's Project Manager and approved for content by the Consultant by or before the time construction is 75% complete. Projects utilizing e-Communication will create digital copy from the Document Library (Closeouts) in e-Communication. The Closeout Log must contain individual line items for each physical copy submitted with corresponding PDF attachments. Operation and maintenance manuals and materials, where specified, for mechanical and electrical equipment and for operating items other than mechanical and electrical equipment must be submitted in PDF format with a separate PDF file for each item. In the event the General Contractor fails to provide these required electronic submittals prior to reaching seventy-five (75%) completion, it is agreed that the Owner at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Owner to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.

8.7.2 Manuals provided must be of sufficient detail to enable the Owner or others to install, calibrate, train, operate, maintain, service and repair every system, subsystem, and/or piece of equipment installed on or as part of this Contract. Closeout Documents submitted through UK E-Communication® shall be
scanned and submitted in color. Mark-ups must be made using visible color when printed. Each manual must contain:

8.7.2.1 Project Title, Project number, Location, dates of submittals, names, addresses and phone number for the Consultant, General Contractor, and General Contractor's Sub-contractors;

8.7.2.2 An Equipment Index that includes vendor’s names, addresses, and telephone numbers for all equipment purchased on the Project;

8.7.2.3 Emergency instructions with phone numbers and names of contact persons on warranty items shall be uploaded to UK E-Communication®;

8.7.2.4 Copies of each system's air balancing record and each system's hydronic balancing record (1) physical copy and (1) digital copy in eCommunication;

8.7.2.5 Copy of valve tag list;

8.7.2.6 Copy of As-Built temperature control system drawings and components and sequence of operation;

8.7.2.7 Original copies of the following provided by the manufacturer:

<table>
<thead>
<tr>
<th>Installation manuals</th>
<th>Instruction Manuals</th>
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<tr>
<td>Training manuals</td>
<td>Calibration manuals</td>
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<tr>
<td>Service Manual</td>
<td>Operation manuals</td>
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<td>Parts list</td>
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<tr>
<td>Reviewed Shop Drawings</td>
<td>Wire list</td>
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<td></td>
<td>Keying Bit List</td>
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8.7.2.8 Any Computer, Micro controller, and/or Microprocessor equipped equipment installed shall be provided with source code copies of all software and firmware (prom, EPROM, ROM, other) supplied on this Contract; and

8.7.2.9 Copies of all inspection and guarantee certificates, manufacturers' warranties with the University of Kentucky listed as the Owner for all equipment provided and/or installed.

8.7.2.10 All manuals shall be as follows: Bound in hard cover three(3) ring (D-type) binder, 1", 1.5" or 2" maximum, indexed and in CSI format, tabbed (4,5,8 or 16th cut), no more than 80% binder fill, white vinyl, presentation type with clear vinyl view cover on front, back and spine and with pockets on front and back. Maximum drawing size in binder shall be folded 11"x17" and shall be hole punched and reinforcements added. Do not put drawings in pockets. Top of all drawings shall be at top or spine side of the manual. Complete drawings must be viewed without opening rings. Provide binders as manufactured by Universal Office Products, Des Plaines, IL. 1"(S# B2-20742), 1.5"(B2-20744), or 2"(B2-20746) or equal.

8.7.2.11 If the binder includes manuals from any single vendor covering several different model numbers, the model used on the Project must be highlighted.

8.7.2.12 Included in the front of the "Operation and Maintenance Manual" shall be a copy of the Interior and Exterior Finish plan and Schedule listing all finish materials, the manufacturer, the finish color, and the manufacturer's paint number.

8.7.2.13 Photograph album containing photos and negatives or digital images (.pdf format) showing buried utilities and concealed items shall be included.
8.8 SUBMISSIONS – AS-BUILT SET OF DRAWINGS

8.8.1 The General Contractor shall submit one (1) electronic copy of As-Built set of drawings in .pdf format indicating all deviations of construction as originally specified in the Contract Documents. These As-Built Drawings will compile information from the General Contractor as well as all Sub-contractors. The General Contractor shall provide a qualified representative to update the As-Built set of drawings as construction progresses. As-Builts submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed.

8.8.2 The General Contractor shall provide and utilize a camera to photograph the installation of buried utilities and concealed items. The General Contractor shall provide standard 3 1/2” x 5” photographs with negatives, or digital images (.jpeg format), which shall be submitted as part of the Operation and Maintenance Manuals submission. These photos should be mounted in a bound album with labeling as to subject of photo, date, and Project. Such album is to be kept at job site with the As-Built set of drawings until submittal of same.

8.8.3 Approval of the Final Payment request will be contingent upon compliance with these provisions. The General Contractor's As-Built set of drawings shall be delivered to the Consultant at their completion so that the Consultant may make any changes on the original contract drawings.

8.9 SUBMISSIONS - SAP EQUIPMENT LIST

8.9.1 Complete equipment list for use with SAP software in electronic spreadsheet format. Data is to be provided in Uniformat format with the information being provided for individual locations as noted in Attachment A – Uniformat Component List. Information is to be provided as follows (PPDMC or CPPD will provide blank Excel spreadsheets in electronic form for use in compiling the information, if desired).

8.9.2 All materials that require preventative maintenance (PM) are listed as in Attachment A. The equipment list is to be provided in Excel spreadsheet format and is to include the information listed in Attachment B.

8.9.3 Required maintenance procedure listing each work task in Excel spreadsheet format as shown in Attachment C.

8.9.4 Required frequency of maintenance for the work tasks outlined in 8.9.3 above and included in the Attachment C spreadsheet.

8.9.5 Listing of maintenance parts and items: i.e. filters, lubricants, etc. for each work task listed in 8.9.3 above.

8.10 SUBMISSIONS – MAINTENANCE MATERIALS

8.10.1 If specified, Maintenance/Replacement Materials, Spare Parts, and special maintenance tools for proper maintenance shall be provided by the General Contractor.

ARTICLE 09 PLANS, DRAWINGS, AND SPECIFICATIONS

9.1 The successful General Contractor can purchase any number of sets of plans and specifications from Lynn Imaging, Lexington, Kentucky (http://www.ukplanroom.com/ or phone Lynn Imaging @ 1.800.888.0693 or 859.255.1021). The General Contractor will be required to pay Lynn Imaging for the cost of duplication for all sets required.

9.2 All drawings, specifications and copies thereof, prepared by the Consultant, are the property of the University of Kentucky. They are not to be used on other Work.
ARTICLE 10 PROGRESS MEETINGS

10.1 In addition to specific coordination and pre-installation meetings for each element of Work, and other regular Project meetings held for other purposes, progress meetings will be held as outlined at the Preconstruction Meeting. Each entity then involved in planning, coordination or performance of Work shall be properly represented at each progress meeting. The following areas will be covered at each progress meeting: current status of work in place, General Contractor’s review of upcoming work (1 month look ahead), schedule status, upcoming outages, new outage requests, shop drawings due from contractors, shop drawings being reviewed, outstanding RFI’s, outstanding proposed change orders, change orders, new business, As-Built updated, close-out documents status, defective work in place issues, review “pencil copy” of payment application, safety issues and new business or other issues not covered above. With regard to schedule status, discuss whether each element of current work is ahead of schedule, on time, or behind schedule in relation with updated progress schedule; determine how behind-schedule Work will be expedited, and secure commitments from entities involved in doing so; discuss whether schedule revisions are required to ensure that current Work and subsequent Work will be completed within Contract Time; and review everything of significance which could affect the progress of the Work.

10.2 General Contractor shall prepare and submit at each progress meeting an updated schedule indicating Work completed to date and any needed revisions.

10.3 With the express purpose of expediting construction and providing the opportunity for cooperation of affected parties, progress meetings will be held and attended by representatives of:

(1) The Owner's Project Manager
(2) The Consultant.
(3) General Contractor.
(4) Sub-contractors.
(5) Others requested to attend (as deemed necessary by CPMD).
(6) Physical Plant Division Representative

10.4 A location near the site will be designated where such progress meetings will be held. Participants will be notified of the dates and times of the meetings by the Consultant.

ARTICLE 11 CONSTRUCTION SCHEDULE – BAR CHART

11.1 The General Contractor shall prepare construction schedules as a bar chart, with separate divisions for each major portion of the work, and in sufficient detail to identify the plan and sequence of construction to be followed in meeting the requirements of the Contract. Schedules shall include divisions for Work to be accomplished remote from the central construction site, e.g. utilities from outside the construction site to the site for chilled water, steam, electrical, communications, and/or fire service. Such Work shall be scheduled so that disruption resulting from construction will be minimized. Start dates and completion dates for such Work must be maintained and completed in the shortest reasonable time. The sequence of listings shall follow the Table of Contents of the Specifications. Maximum sheet size shall be 30” x 42”. The schedule shall show the complete sequence of construction, by activity, with dates for beginning and completion of each element of the Work.

11.1.1 For projects requiring a bar chart schedule instead of a Critical Path Method (CPM) schedule, the following Articles of the General Conditions are amended as follows:

11.1.2 Article 21.4.2 of the General Conditions to the Contract is amended to read as follows:

21.4.2 Requests for an extension of time due to unusually bad weather shall be considered for approval only if it is shown that a) the unusual weather event delayed work on a specific weather sensitive activity or activities that had been planned to be underway on the date(s) on which the weather event occurred, as shown in the most recent update to the Project schedule that had been submitted to the Owner prior to the date of the event and b) that the delay to that activity or activities is shown to be the proximate cause of a corresponding delay to the contractually required
completion dates for the Project that were shown in the most recent update to the Project schedule. The actual dates on which the delay(s) occurred must be stated and the specific activities that were directly impacted must be identified. In the event of concurrent delays, only those activities actually impacting the Project contractually required completion dates will be considered in evaluating the merit of a delay request and in adjusting the schedule. Time extensions will not be considered for concurrent delays not caused by the Owner. Requests for an extension of time which are not supported by this information shall not be considered for approval by the Owner.

11.1.3 Article 21.4.3 of the General Conditions to the Contract is amended to read as follows:

21.4.3 In anticipation of the possibility of delay due to unusual bad weather, the General Contractor shall identify those activities in the schedules, and those activities subsequently added to updated schedules, that might reasonably be expected to be delayed by bad weather.

11.1.4 Article 21.7 of the General Conditions to the Contract is amended to read as follows:

21.7 The Contract Time will only be adjusted for causes specified above. Extensions of time will only be approved if the General Contractor can provide justification supported by the Project schedule or other acceptable data that such changes extend the contractually required date of Substantial Completion, and that the General Contractor has expended all reasonable effort to minimize the impact of such changes on the construction schedule. No additional extension of time will be granted subsequently for claims having the basis in previously approved extensions of time.

11.1.5 Article 21.8 of the General Conditions to the Contract is amended to read as follows:

21.8 In support of requests for an extension of time not caused by unusual inclement weather, and concurrently with the submittal of any such request, the General Contractor shall submit to the Consultant and the Owner a written impact analysis showing the influence of each such event on contractually required completion dates as shown in the updated Project schedule most recently submitted to the Owner prior to the event. The analysis shall include the sequence of new or revised activities and/or durations that are proposed to be added to the existing schedule including related logic. This impact analysis shall include the new activities and/or activity revisions proposed to be added to the existing schedule and shall demonstrate the claimed impact on the contractually required completion dates. The General Contractor will not be granted an extension of time and/or relief from liquidated damages when the delay to completion of the work is attributable to, within the control of, or due to the fault, negligence, acts, or omissions of the General Contractor and/or the General Contractor’s contractors, subcontractors, suppliers, or their respective employees and agents. Time extensions will not be considered for concurrent delays not caused by the Owner. In the event of concurrent delays, only that event actually impacting contractually required completion dates will be considered in adjusting the schedule and evaluating the merit of a delay claim. Requests for an extension of time which are not supported by this information shall not be considered for approval.

11.1.6 Article 32.1 of the General Conditions to the Contract is amended to read as follows:

32.1 The General Contractor shall prepare and submit to the Owner and the Consultant a bar-chart type construction schedule for the Work. The schedules shall include all activities necessary for performance of the work showing the duration and the planned start and finish dates for each activity. The schedules shall include, but not be limited to, submittal processing, fabrication and delivery of materials, construction, testing, clean-up, work and/or materials to be provided by the Owner, dates and durations for major utility outages requiring coordination with the Owner and the Owner’s operations, and significant milestones related to the completion of the Project.

11.2 The schedule shall be submitted to the Consultant and to the Owner for review within thirty (30) calendar days after the date established for the start of Work on the Project as stated in the official Work
Order and Notice to Proceed. Review will be only for general conformance to the requirements of the contract. Review comments and/or acceptance of the Contractor’s schedule shall not relieve the Contractor of any obligation for compliance with all requirements of the Contract Documents. Such review and comments shall not constitute interference with the Contractor’s means and methods of construction, which shall remain solely the responsibility of the Contractor.

11.3 Schedules shall be revised no less frequently than monthly to coincide with regular monthly Project progress meetings and submission of Applications for Payment and shall be updated to indicate progress of each activity to the date of submittal, the projected completion of each activity, any activities modified since previous submittal, any major changes in scope, and all other identifiable changes, and further shall be accompanied by a narrative report to define problem areas, anticipated delays, impact on the progress of the Work, and to report corrective action taken or proposed.

11.4 Initial schedules shall be submitted within thirty (30) calendar days after the date established in Notice to Proceed. After review, required revisions to the schedule shall be completed and incorporated in the schedule within ten (10) calendar days. Up-dated Progress Schedules shall be submitted with each Application for Payment. Submissions must include one (1) opaque reproduction and one (1) electronic copy (disk or CD) along with a transmittal letter.

11.5 Copies of reviewed Schedules are to be provided to the job site file and, as appropriate, to subcontractors, suppliers, and other concerned entities, including separate contractors. Recipients are to be instructed to promptly report, in writing, problems anticipated by projections shown in schedules.

11.6 The processing of all progress payments is contingent upon the submission of updated schedules.

11.7 The processing of all Change Orders requesting a time extension to the contract are contingent upon the submission and approval of a revised schedule demonstrating that the change order does impact the date of completion for the entire project. Time extension requests associated with Change Orders that do not impact the date of completion for the entire project will be rejected.

ARTICLE 12 WALK-THROUGH

12.1 After the "Work Order" is issued but before Work by the General Contractor is started, a walk-through of the area is required to document the condition of the space, surfaces, or equipment. It is the responsibility of the General Contractor to schedule the walk-through with the Owner’s Project Manager, the Consultant, and other interested parties.

12.2 During the walk-through, General Contractor shall identify all damaged surfaces or other defective items that exist prior to construction.

12.3 The walk-through shall be attended by Owner’s Project Manager, a Representative of the user of the facility, the General Contractor and the Consultant.

12.4 Written documentation of the walk-through is to be provided by the Consultant with copies distributed to all parties. Polaroid type color photographs are to be provided and labeled by General Contractor and one (1) copy of such photographs are to be given to Consultant. (Digital photos in a .jpg format are acceptable if submitted on digital media storage) All parties attending the walk-through agree on the list of damages.

ARTICLE 13 OWNER’S CONSTRUCTION REPRESENTATIVE (NOT USED)
ARTICLE 14 FIELD OFFICE

14.1 General Contractor shall make his own provision for field office for his own personnel and for incidental use by their Sub-contractors. Quantity and location are subject to approval of the Consultant and the Owner's Project Manager.

14.2 General Contractor is not required to provide a field office for use by the Owner or Consultant.

ARTICLE 15 TELEPHONE SERVICE

15.1 General Contractor shall arrange through UKIT Communications and Network Systems for installation of on-site phone, internet and other communications services. Telephone service during the length of construction shall be paid for by the General Contractor. (Cell phone/Nextel service in lieu of UKIT Communications and Network Systems phone service may be utilized at General Contractor’s option.)

ARTICLE 16 CONSTRUCTION FENCE

16.1 Construction fencing will be designed and erected around job sites where there is a possibility of injury to employees, students or the public. Special precautions must be taken to protect the visually impaired, disabled, children and others using the University facilities. During active excavation/trenching operations, fencing shall be erected to prevent unauthorized entry into the site. All fencing shall comply with the current requirements of the International Building Code except where the following requirements are more stringent.

16.1.1 All job site perimeter fencing within 5 feet of a walkway, street, plot line, or public right-of-way shall be 8 feet in height. Perimeter fencing that blocks sidewalks must include signs directing pedestrians to a safe walkway or crosswalk. Signage may be attached to the fence, but may also be required to inform pedestrians of sidewalk closures and detours prior to arriving at the closed area. General Contractor shall provide electrical pedestrian and general lighting along the top rail of the perimeter of the construction site fence to provide a minimum illumination level of 1.5 foot candles. Pedestrian and perimeter fence lighting shall be installed in conduit, raceway, and/or pathway system properly supported to the perimeter fence. Open or flexible cabling will not be acceptable.

16.1.2 All job site perimeter fencing more than 5 feet from a walkway, street, plot line, or public right-of-way shall be a minimum of 6 feet in height unless International Building Code requirements are more restrictive due to the height of the structure and setback.

16.1.3 All fencing shall be of a woven material such as chain link or a solid type fence. Fencing shall include gates required for construction operations. Gates shall be lockable with both the General Contractor's lock, and a lock provided by the Owner. Lock by Owner shall be keyed for the University Best GA key core. All locks to be “daisy-chained” to provide access to the Owner.

16.1.4 It shall be the General Contractor's responsibility to determine the proper quality of materials and methods of installation of the fencing, with the understanding that it must be maintained in good condition, good appearance, rigid, plumb, and safe throughout the construction period. The fence does not have to be new material. The fence is to be erected on fence posts securely anchored in the ground. Provide a top bar or, with prior approval of the owner, a wire shall be run through the top of the fence and attached to the end posts. A tension control device shall be installed as necessary. Use of sandbags, concrete weights, stakes, etc. to hold fence posts in place are not allowed. Penetrations in pavement or landscape walking surfaces may not be made without the approval of the owner. Any damage caused by the fence installation shall be repaired in a manner satisfactory to the owner. When fencing is to remain in place for six (6) months or more a green fabric mesh must be provided for the full height and length of the fence. Fabric should be omitted for one (1) section of fencing where blind corners occur or at pedestrian/vehicle intersections.
16.1.5 The General Contractor shall be responsible for removing and replacing any fence sections and/or posts necessary for access to the site on a daily basis. The General Contractor shall police such conditions to assure the fence and posts are reset in a timely manner and are specifically in place at the close of the working day.

16.1.6 If the General Contractor fails to comply with the requirements of this Article 16, the Owner may proceed to have the work done and the General Contractor shall be charged for the cost of the Work done by unilateral deductive change order.

16.1.7 Plastic construction fencing is not acceptable as a perimeter protection fence.

ARTICLE 17 PROJECT SIGN

17.1 No signs, except those attached to vehicles or equipment, may be displayed without permission from the Consultant and the Owner's Project Manager. No political signs will be permitted.

ARTICLE 18 PARKING

18.1 The University of Kentucky will make available for purchase by the General Contractor up to four (4) parking permits. The category of parking permit and location of parking is determined by the Director, Parking and Transportation Services, or a designee. Parking permits may be purchased by the General Contractor to be used by the Contractor and/or the Contractor's subcontractors and employees during the construction period. The cost of each permit is based on the pro-rata annual cost and may be purchased from Parking Services, 721 Press Avenue, after the Contract is executed. Necessary documents required to purchase the passes will be available at the Pre-Construction Conference.

18.2 The Director, Parking and Transportation Services, or a designee will determine if parking is available for employees of the Contractor and subcontractors in the K lots at Commonwealth Stadium or elsewhere on Campus. The Contractor will be given thirty (30) days notice should conditions change that will affect parking at the designated parking area and it is necessary to relocate parking or terminate parking privileges. If parking is available, permits may be purchased from Parking Services, 721 Press Avenue at the appropriate monthly cost.

ARTICLE 19 SANITARY FACILITIES

19.1 Restroom facilities in one of the surrounding buildings will be designated at the Pre-Construction Meeting for use by the General Contractor's workforce during construction. The designated restroom(s) and areas accessible to General Contractor must be kept clean and neat during construction. Failure to keep them clean will result in the General Contractor being required to provide portable toilets at his cost at the site. Drinking water shall be provided from an approved safe source so piped or transported as to be kept clean and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing governing health regulations.

ARTICLE 20 RULES OF MEASUREMENT

20.1 Rules of Measurement shall be established by the Consultant in the field. Actual measurement shall be taken in the field. These amounts shall become binding upon the General Contractor and be adjusted as before mentioned.

20.2 The General Contractor shall pay for and coordinate through the Consultant and/or the Owner's Project Manager all associated Work by utility companies including relocation of utility poles, installation of new street lights, relocation of overhead or underground lines, and any other Work called for on the Plans and in the Specifications.
ARTICLE 21 ALLOWANCES (NOT USED)

ARTICLE 22 SEQUENCE OF CONSTRUCTION

22.1 All materials and equipment are to be brought into the project site from the approved staging location and are not to be brought through the existing buildings or loading docks. Any and all exceptions shall be approved by, and closely coordinated with, the Owner’s Project Manager in advance of scheduling or performing the work.

22.1.1 The General Contractor shall coordinate any road and sidewalk closings, utility disruptions, etc. which will affect the use of the existing building(s) with the Owner's Project Manager prior to commencing that Work.

22.2 The adjacent buildings and public areas will remain in use and the Owner shall have access to the existing building(s) throughout the duration of the Project. The General Contractor shall coordinate construction activity to assure the safety of those who must cross the Project site and shall provide and maintain the necessary barriers and accommodations for a completely safe route of accessibility. The General Contractor is to insure that all exits provide for free and unobstructed egress. If exits must be blocked, prior arrangements must be made with the Owner's Project Manager.

22.3 The General Contractor shall cooperate with the Owner to minimize inconvenience to, or interference with normal use of existing buildings and grounds by staff, students, other Contractors, or the public. General Contractor shall conduct operations to prevent damage to adjacent building structures and other facilities and in such a manner to protect the safety of building's occupants.

22.4 Special effort shall be made by the General Contractor to prevent any employee from entering existing buildings for reasons except construction business. In particular, use of toilets, drinking fountains, vending machines, etc. is strictly prohibited.

ARTICLE 23 CRANE & MATERIAL HOIST OPERATIONS

23.1 General Contractor shall provide appropriate barriers around crane and material hoist to protect pedestrian-and vehicular traffic around operating area. When crane is operating or moving, flag men provided by General Contractor shall be utilized to prevent pedestrian and vehicular traffic from crossing the pathway of crane lift. General Contractor's flag men shall coordinate these activities with the appropriate security personnel.

23.2 Cranes and material hoists shall be safely secured and inaccessible during non-operating hours. General Contractor shall coordinate operation or erection of a crane or material hoist in the vicinity of the Medical Center with Medical Center Aeromedical Operations (Med-evac helicopter).

23.3 Any damage to trees, shrubs or plant material at the placement of crane or material hoist shall be repaired by tree surgery or replaced as directed by Consultant.

ARTICLE 24 UTILITIES

24.1 This Article modifies Article 8 of the General Conditions. The Owner will provide water and electricity for this Project. The General Contractor shall provide for all temporary taps, hoses, lines, boxes, lighting and installation of the same for construction operations. Electricity shall not be used for heating purposes. In the event that the General Contractor is wasteful with these utilities, the Owner shall charge the General Contractor accordingly.

24.2 UTILITY OUTAGES

24.2.1 Interruption of Utilities and Services: No utilities or services may be interrupted without full consent and prior scheduling of the Owner. Owner approval is required in writing for each disruption.
24.2.1.1 ENTIRE BUILDING OUTAGE

The Owner's Project Manager is the General Contractor’s contact with the University for requesting Utility Outages. The Owner's Project Manager will contact the proper departments and divisions within the University and receive approval from those units prior to allowing a planned outage to occur. The established standard within the University Departments and Divisions of an entire building or group of buildings shall be three weeks written notice. The written notice shall include the type of utility to be interrupted, reason for outage, length of outage, what will be affected by the outage and a statement of whether or not the materials are on hand to complete the Work. If a specific time is desired for the outage it should be included. The Owner's Project Manager will insure that all parties affected are contacted and that a time which is least disruptive to all parties is selected. At the appointed outage time, Work shall begin and proceed continuously with all required manpower until Work is complete at no added cost to the University. The Owner's Project Manager will then notify all affected departments or divisions.

24.2.1.2 SECTION OF A BUILDING OUTAGE

The Owner's Project Manager is the General Contractor’s contact with the University for requesting Utility Outages. The Owner's Project Manager will contact the proper departments and divisions within the University and receive approval from those units prior to allowing a planned outage to occur. The established standard within the University Departments and Divisions of a section of a building shall be a written request one week prior to outage. The written request shall include the type of utility to be interrupted, when the outage is desired, reason for outage, length of outage, and what will be affected by the outage. The Owner's Project Manager will insure that all parties affected are contacted and that a time which is least disruptive to all parties is selected. At the appointed outage time Work shall begin and proceed continuously with all required manpower until Work is complete at no added cost to the University. The Owner's Project Manager will then notify all affected departments or divisions.

ARTICLE 25 CLEANING AND TRASH REMOVAL

25.1 The General Contractor shall keep clean the entire area of new construction and shall keep streets used as access to and from the site free of mud and debris.

25.2 All exit ways, walks, drives, grass areas, and landscaping must be kept free from debris, materials, tools and vehicles at all times. Trim weeds and grass within the site area.

25.3 Upon completion of the Work, General Contractor shall thoroughly clean and re-sod grass areas damaged to match existing areas.

25.4 The General Contractor shall be responsible for removal from the site of all liquid waste or other waste (i.e. hazardous, toxic, etc.) that requires special handling on a daily basis.

25.5 Dumpsters will be provided and maintained by the General Contractor.

25.6 During Work at the Project site, the General Contractor shall clean and protect Work in progress and adjoining Work on a continuing basis. General Contractor shall apply suitable protective covering on newly installed Work where needed to prevent damage or deterioration until the time of Substantial Completion. General Contractor shall clean and perform maintenance on newly installed Work as frequently as necessary through remainder of construction period.

25.7 The General Contractor shall be responsible for daily cleaning of spillage's and debris resulting from his and his Sub-contractor's operations, (includes removal of dust and debris from wall cavities), and for providing closed, tight fitting (dustproof if required), waste receptacles to transport construction debris from the work area to the dumpster. Broom clean all floors no less than once a week. The General Contractor shall empty such receptacles into the trash container when full or when directed to be emptied by the Consultant and/or Owner's Project Manager, but not less than weekly. The use of hospital waste and trash receptacles is strictly prohibited, except as otherwise provided by the project specifications.
25.8 Failure to comply with the above requirements shall be cause for stopping work until the condition is corrected.

ARTICLE 26 BLASTING (NOT USED)

ARTICLE 27 CUTTING AND PATCHING - NEW AND EXISTING WORK

27.1 New Work - Cutting and patching shall be done by craftsmen skilled and experienced in the trade or craft that installed or furnished the original Work. Repairs shall be equal in quality and appearance to similar adjacent Work and shall not be obviously apparent as a patch or repair. Work that cannot be satisfactorily repaired shall be removed and replaced.

27.2 Existing Construction - Refer to Architectural, Mechanical, and Electrical drawings for cutting and patching. All new Work shall be connected to the existing construction in a neat and workmanlike manner, presenting a minimum of contrast between old and new Work. Do all patching of the existing construction as may be required for the new construction to be done. Necessary patching, closing of existing openings, repairing and touching up shall be included as required for a proper, neat and workmanlike finished appearance. Any existing item that is to remain and is damaged during construction shall be replaced at the General Contractor's expense.

ARTICLE 28 UNRELATED PROJECTS

28.1 Unrelated construction Projects may be under way in the vicinity of this Project or the site utility work during the course of the Work related to this Project. The General Contractor for this Project must coordinate with any other contractors regarding overlapping areas. See Article 42 - Separate Contracts of the General Conditions.

ARTICLE 29 OWNER SUPPLIED MATERIALS (NOT USED)

ARTICLE 30 REMOVED ITEMS (NOT USED)

ARTICLE 31 INTERIOR ENCLOSURE AND DUST ENCAPSULATION

31.1 Areas under construction or renovation shall be separated from occupied areas by suitable temporary enclosures furnished, erected and maintained by the General Contractor. Temporary enclosures shall be dust and smoke tight and constructed of non-combustible materials to prohibit dirt and air borne dust from entering occupied spaces. General Contractor to review with Consultant ways to provide ventilation for dust generated by demolition and fumes/vapors produced during installation of new materials.

31.2 General Contractor is responsible for coordinating with the Owner’s Project Manager any equipment to be turned off prior to erecting temporary enclosures.

31.3 General Contractor shall protect all exhaust diffusers, equipment and electrical devices from the collection of dust. All areas shall be checked and cleaned prior to final acceptance of Work.

31.4 Dust and debris from Work operations shall be held to a minimum.

31.5 General Contractor shall construct temporary dust partitions at locations and as detailed on drawings. Closures used for dust barricade shall be constructed of non-combustible materials, (metal studs and gypsum board or fire retardant plywood).

31.6 General Contractor shall provide additional devices and materials and required to contain dust within Work area and protect personnel during course of Work.
31.7 Areas of minor renovation, consisting of the removal of doors and frames, blocking of openings, and other limited Work shall be separated by a dust partition of fire retarded polyethylene on studs.

31.8 Existing corridor doors may serve as dust barriers, except if removed for refinishing. In such cases, temporary wood doors must be substituted until original doors are replaced.

31.9 The General Contractor may assume existing walls which extend full height, floor to structure, shall be deemed appropriate to contain air borne dust. Cover any voids or penetrations.

31.10 Doors or windows in the perimeter walls surrounding the Project work area shall be sealed off with protective materials in a manner to prohibit dust from escaping the work area. These shall be left in place until all work creating dust is completed. Protective materials shall consist of fire retardant wood, metal studs, gypsum board or flame resistant plastic.

31.11 Entry passage to Work area shall be sealed off with zippered plastic opening or other acceptable means which allows periodic entry and closure of barricade closure.

31.12 Install and maintain a “sticky mat” on the floor in locations where construction crews leave the construction area and prior to entering ANY existing space in the building.

31.13 Install and maintain a temporary floor covering in any and all elevators being utilized for this project.

ARTICLE 32 UKIT COMMUNICATIONS AND NETWORK SYSTEMS

32.1 The communications wiring is to be provided, installed and terminated by the General Contractor using a certified and approved communications contractor. All work shall be done in compliance with the latest UKIT Communications and Network Systems Standards, and closely coordinated with UKIT-Communications and Network Systems.

ARTICLE 33 EMERGENCY VEHICLE ACCESS

33.1 Emergency Vehicle Access must be maintained during construction. The General Contractor shall coordinate with the local Fire and Emergency Medical Services department(s) that would respond to an emergency during the initial start up of construction to ensure a complete understanding of their requirements.

ARTICLE 34 SMOKE DETECTORS / FIRE ALARM SYSTEMS- EXISTING AND/OR NEW FACILITIES

34.1 General Contractor shall protect all smoke detectors in Work areas to prevent false alarms. The General Contractor will be responsible for any false alarm caused by dust created in their Work areas or dust traveling to areas beyond the Work past inadequate protection barriers. If there is a need for an existing or newly installed fire alarm system or parts of that system to be serviced, turned off, or disconnected, prior approval must be obtained from the Owner's Project Manager and notification given to the Campus Dispatch Office. The General Contractor must follow the procedure outlined for Utility Outages and any documented costs charged by the responding fire department due to a false alarm shall be paid by the General Contractor. As soon as all Work is completed, notification must be given to the Owner's Project Manager and to the Campus Dispatch Office prior to reactivation of the system. Prior to Final Payment to the General Contractor, all protected smoke detectors will be uncovered and tested.

34.1.1 When the function of any fire alarm, detection or suppression system is impaired, a temporary system shall be provided. General Contractor shall provide daily reports indicating the Superintendent has walked through the project at the end of each work period, to satisfy himself there are no present conditions that may result in an accidental fire. Portable fire extinguishers shall be on site during this time. The General Contractor is responsible for inspecting and testing any temporary systems on a monthly basis.
ARTICLE 35 SURVEYS, RECORDS, and REPORTS

35.1 General: Working from lines and levels established by property survey, and as shown in relation to the Work, the General Contractor will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on site as needed to properly locate each element of the entire Project. The General Contractor shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. General Contractor shall advise Sub-contractors performing Work of marked lines and levels provided for their use in layout of Work.

35.2 Survey Procedures: The General Contractor shall verify layout information shown on drawings, as required for his own Work. As Work proceeds, surveyor shall check every major element for line, level, and plumb (as applicable), and maintain an accurate Surveyor's log or Record Book of such checks available for General Contractor or Design Consultant's reference at reasonable times. Surveyor shall record deviations from required lines and levels, and advise Design Consultant or General Contractor promptly upon detection of deviations exceeding indicated or recognized tolerances. The General Contractor shall record deviations which are accepted (not corrected) on Record Drawings.

ARTICLE 36 TOBACCO PRODUCTS PROHIBITED

36.1 For areas located within Fayette County, Kentucky, the use of all tobacco products is prohibited on all property that is owned, operated, leased, occupied, or controlled by the University. “Property” for purposes of this paragraph includes buildings and structures, grounds, parking structures, enclosed bridges and walkways, sidewalks, parking lots, and vehicles, as well as personal vehicles in these areas. To view the Lexington campus boundaries: http://www.uky.edu/TobaccoFree/files/map.pdf.

36.2 For areas not located within Fayette County, Kentucky, smoking is prohibited in all owned, operated, leased, or controlled University buildings and structures, parking structures, enclosed bridges and walkways, and vehicles. Smoking is also prohibited outside buildings and structures within 20 feet of entrances, exits, air intakes, and windows, unless further restricted by division policy.

36.3 General Contractor employees violating this prohibition will be subject to dismissal from the Project.

36.4 For the full Administrative Regulation see University AR 6:5. http://www.uky.edu/Regs/files/ar/ar6-5.pdf

ARTICLE 37 ALTERNATES

37.1 Alternate(s) will be accepted in the sequence of the Alternates listed on the Bid Form, and the lowest Bid Sum will be computed on the basis of the sum of the base Bid and any alternates accepted, within the budgeted amount.

37.2 Schedule of Alternates:

1. None at this time

ARTICLE 38 FIELD CONSTRUCTED MOCK UPS (NOT USED)

ARTICLE 39 PROJECT COORDINATION VIA COMPUTER (NOT USED)
ARTICLE 40 HOT WORK PERMITS

40.1 All work involving open flames or producing heat and/or sparks in occupied buildings on the University of Kentucky campus will require the General Contractor to obtain approval to perform “Hot Work” on site. This includes, but is not limited to: Brazing, Cutting, Grinding, Soldering, Thawing Pipe, Torch Applied Roofing, and Cadwelding. A copy of the Hot Work Permit and the Hot Work Permit Procedure will be passed out at the Preconstruction Conference for the General Contractor’s use.

ARTICLE 41 INSURANCE

See Request for Proposal Document: Section 6.19 Insurance

ARTICLE 42 KEY ACCESS

42.1 If Construction Cores are NOT utilized, then one set of keys for access to the renovation project area will be provided to the General Contractor by the University’s Project Manager. The General Contractor assumes responsibility for the safekeeping of the key(s) and its use. When leaving the renovation area all doors must be secured.

42.2 All keys must be returned to the University’s Project Manager upon completion of project work as one of the requirements for Final Payment. Failure to return the keys may require re-keying of all doors in the work area up to and including the entire building if master keys are issued. The cost of re-keying of the door(s) accessed by the key(s) will be subtracted from the remaining contract dollars including contract retainage.

42.3 All lost or stolen keys must be reported immediately to the University’s Project Manager.

ARTICLE 43 CEILING CLEARANCE

43.1 Work above ceiling: All work above an area with lay-in ceiling must be coordinated and installed so there is a minimum of 4” between the top of the ceiling grid runners and bottom of the installation. Installation shall not obstruct equipment access space or equipment removal space. Also, conduit and pipe attached to the wall must be above the 4” minimum level.

43.2 Coordination Between Trades: Request and examine all drawings and specifications pertaining to the construction before installing above ceiling work. Cooperate with all other contractors in locating piping, ductwork, conduit, openings, chases, and equipment in order to avoid conflict with any other contractor’s work. Give special attention to points where ducts or piping must cross other ducts and piping, and where ducts, piping and conduit must fur into the walls and columns. Make known to other trades intended positioning of materials and intended order of work. Determine intended position of work of other trades and intended order of installation.

ARTICLE 44 METAL ANCHORS

44.1 All anchoring devices utilized to secure materials to the building shall be metal. Plastic or plastic expansion components shall not be used. This shall include all fasteners for mechanical/electrical hangers.
ARTICLE 45 CONTRACTOR/SUPERINTENDENT EXPERIENCE

45.1 The General Contractor and Superintendent are required to have a minimum of five (5) years of construction experience in the past 10 years in fully operating hospitals.

ARTICLE 46 LOADING DOCK

Contractor will adhere to all provisions outlined in 010000S03 Article 46 of the Medical Center Project Manual for General Contractor.

ARTICLE 47 CONSTRUCTION PATH

Contractor will adhere to all provisions outlined in 010000S03 Article 47 of the Medical Center Project Manual for General Contractor.

ARTICLE 48 HOSPITAL PROJECT PROCEDURE

Contractor will adhere to all provisions outlined in 010000S03 Article 48 of the Medical Center Project Manual for General Contractor.

ARTICLE 49 WORKING HOURS/ACCESS: FOR MEDICAL CENTER/HOSPITAL

Contractor will adhere to all provisions outlined in 010000S03 Article 49 of the Medical Center Project Manual for General Contractor.

ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY

Contractor will adhere to all provisions outlined in 010000S03 Article 50 of the Medical Center Project Manual for General Contractor.

ARTICLE 51 HOSPITAL CONSTRUCTION CERTIFICATION

Contractor will adhere to all provisions outlined in 010000S03 Article 51 of the Medical Center Project Manual for General Contractor.

ARTICLE 52 APPEARANCE

Contractor will adhere to all provisions outlined in 010000S03 Article 52 of the Medical Center Project Manual for General Contractor.

ARTICLE 53 HIPAA (The Health Insurance Portability and Accountably Act)

Contractor will adhere to all provisions outlined in 010000S03 Article 53 of the Medical Center Project Manual for General Contractor.

ARTICLE 54 SAFETY & FIRE PROCEDURES

Contractor will adhere to all provisions outlined in 010000S03 Article 54 of the Medical Center Project Manual for General Contractor.

ARTICLE 55 INTERIM LIFE SAFETY MEASURES (ILSM)

Contractor will adhere to all provisions outlined in 010000S03 Article 55 of the Medical Center Project Manual for General Contractor.
UNIVERSITY OF KENTUCKY
CAPITAL CONSTRUCTION PROCUREMENT SECTION

PAYMENT BOND

Bond Number: [NUMBER]

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the University of Kentucky (the “Owner”) and [CONTRACTOR’S NAME] (the “Principal”) have entered into a contract for the construction of Project: UK-2069-20 PAV HA Elevators 14 & 15 Renovation, with the contract price or amount of $[AMOUNT] (the “Project”);

WHEREAS, the Principal is required to furnish a payment bond for the protection of all persons performing, supplying, or furnishing labor, materials, equipment, or supplies to the contractor or its subcontractors for the performance of the work provided for in the contract, including security for payment of all unemployment contributions which become due and payable under Kentucky unemployment insurance law, in an amount equal to one hundred percent (100%) of the original contract price or amount, executed by a surety company authorized to do business in the Commonwealth of Kentucky, and satisfactory to the Commonwealth; and

WHEREAS, [SURETY’S NAME] (the “Surety”), a surety company authorized to do business in the Commonwealth of Kentucky, has agreed to issue such bond.

NOW, THEREFORE, for the value received and intending to be legally bound hereby, the Principal and Surety agree to the following terms and conditions of this obligation:

1. Recitations: The recitals above are true and substantive parts of this instrument.

2. Definitions: The following terms are defined for the purposes of this instrument:

   (a) Bond means this instrument and the terms and conditions of the Contract (as defined herein), both express and implied, which are incorporated herein by reference and constitute a part of this instrument to the same extent and effect as though copied verbatim herein, and are legally binding on the Principal and Surety including the obligations of the Surety provided therein.

   (b) Claimants means all persons having just and lawful claims for (i) labor, materials, services, insurance, supplies, machinery, equipment, rentals, fuels, oils, implements, tools, appliances, and any other items of whatever nature, furnished for, used or consumed in the prosecution of the work called for by the Contract, whether lienable or non-lienable and whether or not permanently incorporated in said work; (ii) pension, welfare, vacation, and other supplemental employee benefit contributions payable under collective bargaining agreements with respect to persons employed upon said work; and (iii) federal, state, and local taxes and contributions required by law to be withheld and paid with respect to the employment of persons upon said work.
(c) **Contract** means that certain agreement dated [DATE] for the construction of Project: UK-2069-20 PAV HA Elevators 14 & 15 Renovation, all documents that comprise the agreement, any documents incorporated therein by reference, and any Contract Changes (as defined herein).

(d) **Contract Change** means any change order, change of time, extension of time, amendment, modification, addition, or other alteration, material or otherwise, to the Contract, the contract price or amount, the work to be performed under the Contract, or the specifications accompanying same.

3. **Guaranty:** The Principal and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner, as obligee of the Bond, to pay all Claimants having just and lawful claims (as defined above). The Principal and Surety likewise guarantee the faithful payment of the prevailing hourly wage as set forth in the schedule incorporated into the bid documents unless the Project is exempt from the prevailing wage requirements of KRS 337.505 through 337.550.

4. **Bond Amount:** The bond amount is $[AMOUNT], which shall be increased automatically by Contract Changes to the contract price or amount and shall not limit the Surety’s obligation or liability under the Bond for paying attorney fees, costs, or other legal expenses incurred by the Owner, which may be in excess of the bond amount as increased.

5. **Defeasance:** Except as provided by the Contract, the Principal and Surety shall have no obligations under the Bond if the Principal during the original term of the Contract, any extensions thereof which may be granted by the Owner with or without notice to the Surety, the guaranty period, the warranty period, and other periods limited only by statutes of limitation (a) promptly pays all Claimants; (b) satisfies all claims and demands incurred under the Contract; and (c) fully indemnifies and saves harmless the Owner from all costs, damages, attorney fees, consultant fees, and other expenses that it may suffer by reason of the Principal’s failure to do so. The Bond will otherwise remain in full force and effect.

6. **Amendment:** The Bond, including without limitation the Bond Amount, will be deemed amended, automatically and immediately without separate or written amendments hereto, upon any Contract Changes. The Principal and Surety agree to be bound by any Contract Changes. The Surety waives notice of any Contract Changes.

7. **Interpretation:** The Bond will be interpreted and enforced in accordance with Kentucky law. The Principal and Surety agree that they have taken part in drafting the Bond, which will not be construed against or in favor of any other party on the basis of drafting. To the extent that this instrument contradicts the Contract, the Contract will control.

8. **Beneficiaries:** The Principal and Surety agree that (a) the Bond will insure to the benefit of the Owner and all Claimants having just and lawful claims (as defined above) (collectively the “Beneficiaries”), whether or not they have any direct contractual relationship with the Principal; (b) the Beneficiaries may maintain independent actions upon this Bond in their own names; and (c) no final settlement between the Owner and Principal will abridge the right of other Beneficiaries with unsatisfied claims.
IN WITNESS WHEREOF, the Principal and Surety, by their duly authorized representatives, have executed this instrument, which is effective as of [DATE].

ATTEST:
WITNESSES: PRINCIPAL

Witness as to PRINCIPAL
By

Witness as to PRINCIPAL
Title

ATTEST:
WITNESSES: SURETY

Witness as to SURETY
By

Witness as to SURETY
Attorney-in-Fact
UNIVERSITY OF KENTUCKY
CAPITAL CONSTRUCTION PROCUREMENT SECTION

PERFORMANCE BOND

Bond Number: [NUMBER]

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the University of Kentucky (the “Owner”) and [CONTRACTOR’S NAME] (the “Principal”) have entered into a contract for the construction of Project UK-2069-20 PAV HA Elevators 14 & 15 Renovation, with the contract price or amount of $[AMOUNT] (the “Project”);

WHEREAS, the Principal is required to furnish a performance bond for the faithful performance of the contract in an amount equal to one hundred percent (100%) of the contract price or amount as it may be increased, executed by a surety company authorized to do business in the Commonwealth of Kentucky, and satisfactory to the Commonwealth; and

WHEREAS, [SURETY’S NAME] (the “Surety”), a surety company authorized to do business in the Commonwealth of Kentucky, has agreed to issue such bond.

NOW, THEREFORE, for the value received and intending to be legally bound hereby, the Principal and Surety agree to the following terms and conditions of this obligation:

1. Recitations: The recitals above are true and substantive parts of this instrument.

2. Definitions: The following terms are defined for the purposes of this instrument:

   (a) **Bond** means this instrument and the terms and conditions of the Contract (as defined herein), both express and implied, which are incorporated herein by reference and constitute a part of this instrument to the same extent and effect as though copied verbatim herein, and are legally binding on the Principal and Surety including the obligations of the Surety provided therein.

   (b) **Contract** means that certain agreement dated [DATE] for the construction of Project: UK-2069-20 PAV HA Elevators 14 & 15 Renovation, all documents that comprise the agreement, any documents incorporated therein by reference, and any Contract Changes (as defined herein).

   (c) **Contract Change** means any change order, change of time, extensions of time, amendment, modification, addition, or other alteration, material or otherwise, to the Contract, the contract price or amount, the work to be performed under the Contract, or the specifications accompanying same.

3. Guaranty: The Principal and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner, as obligee of the Bond, for the full and faithful performance of the Contract and any Contract Changes. The Principal and Surety likewise guarantee the faithful performance of the prevailing hourly wage as set forth in the schedule incorporated into the bid documents unless the Project is exempt from the prevailing wage requirements of KRS 337.505 through 337.550.
4. **Bond Amount:** The bond amount is $[AMOUNT], which shall be increased automatically by Contract Changes to the contract price or amount and shall not limit the Surety’s obligation or liability under the Bond for paying attorney fees, costs, or other legal expenses incurred by the Owner, which may be in excess of the bond amount as increased.

5. **Defeasance:** Except as provided by the Contract, the Principal and Surety shall have no obligations under the Bond if the Principal during the original term thereof, any extensions thereof which may be granted by the Owner with or without notice to the Surety, the guaranty period, the warranty period, and other periods limited only by statutes of limitation (a) well, truly, and faithfully performs its duties to the Owner; (b) performs the Contract; (c) satisfies all claims and demands incurred under the Contract; (d) fully indemnifies and saves harmless the Owner from all costs, damages, attorney fees, consultant fees, and other expenses that it may suffer by reason of the Principal’s failure to do so; and (e) reimburses and repays the Owner all such expenses and outlay, without limitation, which the Owner may incur in making good any default. The Bond will otherwise remain in full force and effect.

6. **Amendment:** The Bond, including without limitation the Bond Amount, will be deemed amended, automatically and immediately without separate or written amendments hereto, upon any Contract Changes. The Principal and Surety agree to be bound by any Contract Changes. The Surety waives notice of any Contract Changes.

7. **Interpretation:** The Bond will be interpreted and enforced in accordance with Kentucky law. The Principal and Surety agree that they have taken part in drafting the Bond, which will not be construed against or in favor of any other party on the basis of drafting. To the extent that this instrument contradicts the Contract, the Contract will control.

**IN WITNESS WHEREOF,** the Principal and Surety, by their duly authorized representatives, have executed this instrument, which is effective as of [DATE].

**ATTEST:**
**WITNESSES:**

Witness as to PRINCIPAL
By
Title

ATTEST:
**WITNESSES:**

Witness as to SURETY
By
Attorney-in-Fact
AFFIDAVIT

Comes the affiant and after having been duly sworn states as follows:

1. That affiant is the contractor awarded a contract by the University of Kentucky on Project: UK-2069-20 PAV HA Elevators 14 & 15 Renovation.

2. That all contractors and subcontractors employed, or that will be employed, under the provisions of this contract are in compliance with Kentucky requirements for Workers' Compensation Insurance according to KRS Chapter 342 and Unemployment Insurance according to KRS Chapter 341.

Further, the affiant sayeth naught.

By: ______________________________

Title: ______________________________

Contractor: ______________________________

State of ________________

County of ________________

Subscribed and sworn to before me by ______________________________ on this __________ day of ________________, 2020.

My commission expires ______________________________

_____________________________
Notary Public, State at Large
AGREEMENT BETWEEN
UNIVERSITY OF KENTUCKY
AND CONTRACTOR

THIS AGREEMENT, made the ______ day of ________________ 2020 by and between ____________________________________ ("Contractor"), and the UNIVERSITY OF KENTUCKY, ("Owner"), is to bind the parties hereeto to the principles and terms set forth herein, and shall be binding upon the parties hereeto.

WITNESSETH, that the Contractor and Owner for the consideration hereinafter named, agree as follows:

ARTICLE No. 1  SCOPE OF WORK:

PROJECT PAV HA Elevators 14 and 15 Renovation

The Scope of Work consists of the Request for Proposal, UK-2069-20, dated April 10, 2020; the Contractor’s Form of Proposal dated May 15, 2020, including Addendums 1,2,3 etc, the General Conditions, the Special Conditions, the Contractor’s Bonds and Insurance and Affidavit, the Specifications, the Drawings including Supplemental Drawings and Change Orders issued after execution of the Contract for the Work described in Article No. 1 of this Agreement, all of which are incorporated in and made a part thereof of reference, and which shall be binding upon the Contractor and Owner.

The Specifications and Drawings for this Work include the following:

Specifications:

DIVISION 13 - SPECIAL CONSTRUCTION

13931 Fire Protection Piping Systems

DIVISION 14 – CONVEYING EQUIPMENT
14010 General Provisions
14210 Elevator System Refurbishment

DIVISION 16 – ELECTRICAL

16121 Wiring Systems – 600 Volts and Under
16131 Raceway System
16411 Enclosed Switches and Circuit Breakers
16491 Fuses
ARTICLE No. 2  TIME OF COMPLETION:

The Contractor must begin Work specified by the written Work Order from the Owner. Substantial Completion shall be One Hundred Eighty (180) calendar days after the stipulated commencement date with Final Completion being Thirty (30) calendar days after the date of Substantial Completion.

ARTICLE No. 3  LIQUIDATED DAMAGES:

It is mutually understood and agreed by and between the parties hereto that time is of the essence in the performance of this contract and that the Owner, the University of Kentucky, will sustain substantial monetary and other damages in the event of a failure or delay by the Contractor in the completion of the Work. It is further understood and agreed upon and made part of this Contract that the Work must be begun, performed, and completed without delay by the Contractor and if the Contractor fails to begin, perform without interruption, and complete said Work in due and proper time, the Contractor may be declared in default of this Agreement. If the Work is not substantially complete within the time required in Article No. 2 of this Agreement, the Contractor shall pay to the Owner, as liquidated damages for delay and not as a penalty, the sum of Two Hundred Fifty Dollars ($250) for each and every day after the date of Substantial Completion until the date of actual Substantial Completion.

If the Work is not finally completed within the time required in the preceding Article No. 2 of this Agreement, the Contractor shall pay to the Owner, as liquidated damages for delay and not as a penalty, the sum of Five Hundred Dollars ($500) for each and every day after the date of Final Completion until the date of actual Final Completion. In no event shall the Contractor be required to pay more than the sum of Two Hundred Fifty Dollars ($250) per day for each and every day after the date of Final Completion until the date of actual Final Completion. In no event shall liquidated damages for delay in Final Completion be due before the date required for Final Completion in Article No. 2 of this Agreement. This provision for liquidated damages is intended to compensate the Owner for delay only and shall not preclude the Owner from making claims for other damages.

If the Work is not commenced by the Contractor at the time specified in Article No. 2 of this Agreement, then the Contractor and its surety or sureties shall be liable for and pay to the Owner all damages sustained by reason of such failure or breach of contract and the Owner may immediately relet the Work.
ARTICLE No. 4 THE CONTRACT AMOUNT:

Subject to additions and deductions for Change Orders made in accordance with the Contract Documents, the Owner shall pay the Contractor as full consideration for the Contractor’s satisfactory performance of the Contract obligations the sum of $_________ Dollars ($_________).

ARTICLE No. 5 SPECIAL NOTICE:

The Contractor hereby certifies that it is fully informed of the conditions relating to construction and labor under which the Work under this Agreement is to be performed, and agrees that it shall employ, methods and means in carrying out the Work so as not to interfere with or interrupt the Work of any other Contractor working on/or adjacent to the site for this Work.

IN WITNESS WHEREOF this Agreement is executed in two (2) counterparts, each one of which shall be deemed an original and adequate proof of this Agreement, on the date and year first herein before written.

WITNESS: CONTRACTOR:_________________________

______________________________ Company Name

______________________________ BY:__________________

______________________________ Title:__________________

Approved for Legality and Form Recommended By: 

APPROVED:_____________________

______________________________

Director of Purchasing
March 20, 2020

TO:       UK Facilities Partners

FROM:    Mary Vosevich
          Vice President and Chief Facilities Officer

SUBJ:    COVID-19 On-Site Work Rules

As we continue to navigate the challenges of the COVID-19 pandemic, we thank you for your continued support and partnership. While our goal is to maintain some sense of business continuity and keep work and projects moving forward as necessary, the safety of our students, patients and employees is paramount. We ask that you and your teams adhere, at a minimum, to the following on-site rules in support of the social distancing mandate and to ensure your safety and that of our community.

- Stay contained to your area that you are assigned
- Bring your lunch; eat lunch in your assigned area or go off site
- Come to campus in clean clothes
- All employees should have some form of identification
- Check daily recommendations from CDC
- If you have been exposed to a known COVID-19 patient, you will be required to leave the premises and will not be allowed to work for the CDC recommended 14 days
- If you have been asked to self-isolate by any local or state public health department, you will be required to leave the premises and will not be allowed to return until you have self-isolated for the CDC recommended 14 days
- Follow any on-site screening processes
- Practice ‘social distancing’
- Limit face-to-face contact

We sincerely appreciate your understanding and patience during this evolving situation. Many of you have already reached out with proactive plans, which is a testament to the dedication of your teams to the University of Kentucky. We will communicate new information and processes as they are available. Please keep your UK point of contact informed of any changes with your staff and don’t hesitate to reach out with any questions or concerns.
Amend Article 10.3 of the Special Conditions to read:

10.3 With the express purpose of expediting construction and providing the opportunity for cooperation of affected parties, progress meetings will be held and attended by representatives of:

(1) The Owner's Project Manager
(2) The Consultant.
(3) General Contractor.
(4) Sub-contractors.
(5) Others requested to attend (as deemed necessary by CPMD).
(6) Hospital Representative
(7) Medical Center Physical Plant Representative

Amend Article 24.2.1.2 of the Special Conditions to read:

24.2.1.2 SECTION OF A BUILDING OUTAGE

The Owner's Project Manager is the General Contractor’s contact with the University for requesting Utility Outages. The Owner's Project Manager will work with PPDMC as outlined below to facilitate the outage. The established standard within the University Departments and Divisions of a section of a building shall be a written request prior to outage in the time frames noted below. The written request shall include the type of utility to be interrupted, when the outage is desired, reason for outage, length of outage, and what will be affected by the outage.

24.2.1.2.a. Minor outages require three working days advance notice. Major outages require a two week minimum notice. Giving such notice does not guarantee the outage will occur on the date requested. (HVAC, RO Water, Security, Pneumatic)

24.2.1.2.b. PPDMC has an Outage Coordinator who will research and record all the pertinent information necessary to schedule the outage. PPD employees, departments, operations, etc. will be notified by the Outage Coordinator about the pending outage.

24.2.1.2.c. The Outage Coordinator will document the work necessary to schedule, noting any difficulties that cannot be solved.

24.2.1.2.d. The Outage Coordinator will schedule the outage and notify contractor. If outage cannot be scheduled, they will notify appropriate parties.

24.2.1.2.e. The Outage Coordinator will make all notifications to affected personnel and will alert the proper staff so necessary preparations can be made within the affected areas.

24.2.1.2.f. When work has been completed, the Outage Coordinator, or his designate, will notify affected personnel that the system is back in service.

24.2.1.2.g. Contractors DO NOT have the authority to turn utilities off or on. This should only be done by the PPDMC Outage Coordinator.
Amend Article 33 of the Special Conditions to read:

**ARTICLE 33 EMERGENCY VEHICLE AND FIRE TRUCK ACCESS**

33.1 Access to the Medical Center Loading Dock must be maintained during construction for local fire truck access to the fire alarm annunciator panels located adjacent to the loading dock. General Contractor shall coordinate with the local fire department that would respond to an alarm during the initial start up of construction to ensure a complete understanding of their requirements.

The following Articles are in addition to, and take precedence over the provisions of the Special conditions for the Project.

**ARTICLE 46 LOADING DOCK**

46.1 All demolition materials will be brought through the loading dock to the dumpster.

46.2 All new material and equipment, except for items requiring use of the front entry, shall be delivered to the main loading dock.

46.3 The loading dock shall be the primary access for construction workers. Construction workers shall use stairway near the designated elevator.

**ARTICLE 47 CONSTRUCTION PATH**

47.1 Elevator No. 14/15 as indicated in Drawings, may be used by construction workers and material access EXCEPT during the hours of N/A.

47.2 All materials and equipment are to be brought into the hospital through elevator no. 14/15, except for large equipment and casework. General Contractor shall identify time and schedule to allow accessing such items through Dock 2, and shall coordinate same with the Owner's Project Manager.

**ARTICLE 48 HOSPITAL PROJECT PROCEDURE:**

48.1 This Project involves part of a fully functioning Hospital and teaching facility. During the construction of the new Work and all renovation, the Hospital is to remain fully functioning. No service offered by the Hospital will be allowed to be interrupted. This will require careful scheduling and consultation with the Owner and the Consultant. The Hospital will attempt to cooperate as much as possible but their need to provide full medical care will supersede any construction aspect.

48.2 The General Contractor shall organize his Work so that the Work shall cause a minimum of interference and disturbance to the Owner. A major portion of the Work will occur in the Elevator Penthouse on the 9th Floor. The remaining work is in each Elevator Lobby; Ground Floor through the 8th Floor. This will require anticipation and careful scheduling of any noisy work an access.

48.3 Coordination shall occur between the General Contractor and the Owner regarding access to areas outside of the immediate designated construction areas, including access to room’s adjacent horizontal, or vertical that the General Contractor may need to access in order to run/connect utilities. Coordination for access shall be discussed in the monthly Progress Meetings as required by Article 10 of these Special Conditions. General Contractor shall also provide to the Owner written notice, one week prior to the anticipated need for access. Approval for access to the adjacent areas must be received by the General Contractor, prior to final scheduling of the Work. Failure to notify the Owner of the need for access will
result in the stoppage of Work in the area for which access is required until approval is obtained. Any additional cost for such stoppage will be the General Contractor's responsibility.

48.4 No live electrical wiring, including temporary lighting, may be left exposed in areas of public or staff access.

48.5 In no instance may a corridor be blocked or its clear width reduced to less than 4'0".

48.6 "NOISY WORK": The General Contractor shall utilize tools or equipment of low velocity or drilling to limit the noise generated from Work which will be disruptive to patients. Any hammer drilling and impact type tools/equipment which are to be utilized in the Work by the General Contractor shall be strictly limited. Falling materials that damage ceilings, walls, pipes, and equipment shall become the General Contractor's responsibility to repair and/or replace at no cost to the Owner.

48.7 The General Contractor is hereby advised that any noisy Work which is disruptive will be required to stop upon notice from Owner's Project Manager. General Contractor will be notified by Owner's Project Manager when noisy Work can resume. General Contractor shall notify Owner's Project Manager 48 hours prior to the start of any noisy Work.

- Noisy work shall be performed after 6:00 p.m. and before 7:00 a.m.
- Perimeter wall construction around the Work Area shall be erected after 6:00 p.m. and before 7:00 a.m.
- All bulky materials shall be delivered after 6:00 p.m. and before 7:00 a.m.

ARTICLE 49 WORKING HOURS/ACCESS: FOR MEDICAL CENTER/HOSPITAL

49.1 Normal Work hours are defined as a period between 7:00 a.m. to 5:00 p.m., Monday through Friday. General Contractor shall notify Owner's Project Manager one working day prior to performance of any Work for permission to do any Work during non-normal Work hours.

ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY

50.1 Security badges will be required for all construction personnel at General Contractor's cost of $15.00 each from Hospital Security located in Pavilion A room A.00.807. Badges for Good Samaritan can be obtained in the Human Resources Office at the Good Samaritan Hospital, Room B102, for vendors working at Good Samaritan Hospital. Each badge will contain a picture, name and firm name. A UKHC identification badge must be worn on the upper torso at all times when working on UKHC property. No pins or labels shall be attached.

If you report to work without your badge, you must proceed to the Security Office in Pavilion A room A.00.807 or Good Samaritan Human Resources Office B102 to purchase a temporary badge. If your badge is lost or stolen, report it to Security, 859-323-6946, immediately. The contractor or employee must pay for all badges. Cash or check only is accepted for payment. New badges are $15.00 and must be renewed annually with $15.00 annual renewal fee.

50.2 The General Contractors and subcontractors are responsible for the security of their own materials, tools, and equipment on the project site. The Owner is not responsible for theft or vandalism to any such materials, tools, or equipment. The General Contractor shall coordinate with Medical Center Security prior to entering spaces other than Contraction Limits.

50.3 This General Contractor shall assist in providing workers schedule to Medical Center Security personnel when it is evident his workmen will have access to unsecured areas within the building after normal work hours.
50.4 This General Contractor shall secure the Project Limits for safety of building users working in adjacent spaces.

50.5 Any General Contractor having a field office or job trailer shall provide a key to the Owner's Project Manager, only to be used in the case of fire or security emergency.

50.6 The Owner will provide construction cores for keying during the life of the project and permanent cores at conclusion of construction. Hardware supplier to coordinate with University Key Shop.

50.7 Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

50.8 Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide Owner with one set of keys.

ARTICLE 51 – HOSPITAL CONSTRUCTION CERTIFICATION

51.1 This Project involves working in a fully functioning Hospital. Individuals responsible for the work occurring on the site should be thoroughly familiar with the hazards and procedures associated with construction in the healthcare environment.

51.2 All superintendents and foremen for the General Contractor and the Mechanical and Electrical sub-contractors shall be required to hold at least one (1) of the certifications listed below from the associated organizations prior to working in the UK Albert B. Chandler Hospital or UK Good Samaritan Hospital. Any other trade contractor with more than four (4) individuals working on the site at one (1) time shall have one individual who holds at least one of the certifications listed below from the associated organizations prior to working in the UK Albert B. Chandler Hospital or UK Good Samaritan Hospital.

Healthcare Construction Certificate - American Society for Healthcare Engineers
Certified Healthcare Contractor – Kentucky Society of Healthcare Engineers

51.3 Should the required certifications not be in effect at the date of the work order, the University project manager may, at his or her discretion, grant a grace period for the required training.

ARTICLE 52 – APPEARANCE

52.1 All contracted vendors performing work for The University of Kentucky HealthCare facilities must dress in a professional manner. A company uniform is preferred; however, if one is not provided, dress shall include work pants and a work shirt. All hats must either have the company logo or be a solid color with no logo. Casual sportswear such as blue jeans, shorts, sweat suits, t-shirts, or tank tops are not approved apparel. Clothing must be clean, and without rips or tears. The attire is intended to portray the image of well-groomed, professional individuals.

Failure to comply can lead to the vendor being asked to leave the premises until the issues have been resolved.

ARTICLE 53 - HIPAA (The Health Insurance Portability and Accountably Act)

53.1 While working on the University of Kentucky Medical Center you will encounter patients or research and must follow the HIPPA guidelines. We must protect the well being of patients, families and
visitors as well as any and all research projects that are vital to the University. You shall respect the privacy of our patients, their families and any research that you may encounter while on campus.

For a complete understanding of the HIPAA Rules & Regulations please visit: http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.

**ARTICLE 54 – SAFETY & FIRE PROCEDURES**

54.1 Paging Codes

The UK HealthCare facilities use specific codes to alert staff about hazards or potential hazards in the area, and to call designated staff to action. These codes are designed to communicate information to those that need it without unduly alarming patients and visitors. All persons working in the facility are to take the appropriate action should a code be announced. Designated staff members have assigned roles in response to these codes. You may be asked to stop work and secure your area in response to any of these codes.

A list of pertinent codes are outlined below:

- **Code Black**: Bomb/Bomb Threat
- **Code Blue**: Medical Emergency (adult or pediatric)
- **Code Pink**: Infant or Child abduction
- **Code Red**: Fire
- **Code Silver**: Active Shooter
- **Code Yellow**: Disaster plan activation (internal or external)
- Assistance please (location): Uncontrolled individual

54.2 Fire Procedures

54.2.a. Fire Notification

UK HealthCare has a fire prevention program to protect patients, visitors, and staff from the dangers of fire. As a part of your orientation to this facility, please locate the fire alarms, extinguishers, and evacuation routes within or adjacent to the project site.

If fire, smoke, or excessive heat is detected within the UK HealthCare facilities, the fire notification system is activated. You will hear chimes over the paging system, followed by “code red” and the location of the alarm. In addition, the alarm system is activated periodically for fire drills and system testing.

When an alarm is activated, smoke and fire doors throughout the building will close. Staff will close doors to patient rooms, clear corridors, and implement other response procedures.

In all UK HealthCare facility buildings with exception of the Hospitals you must evacuate immediately when the fire alarm sounds. In the Hospitals, you will be able to remain in the project site throughout the response. Please listen carefully to the overhead paging announcements for instructions that might affect you. If an order is given to evacuate, please secure the project site and exit the building.

54.2.b. Your Role in Fire Response

As a Contractor, you have a role in fire response.

If you discover a fire in your area:

- Rescue anyone in immediate danger, if possible.
- Activate the nearest fire alarm and call 911.
54.2.c. Building Life Safety Features

UK HealthCare facilities are constructed with many life safety features to protect building occupants from fire. You must know the location of the following:

- Fire Alarms
- Fire Extinguishers
- Emergency Exits
- Evacuation Routes
- Medical Gas Valves for the area in which you are working. Contractors/vendors are NEVER to close medical gas valves

If any life safety system must be taken out of service, you must coordinate the outage with the PPD Project Manager and the PPD Outage Coordinator prior to beginning work. You must put in place a temporary but equivalent system approved by the Campus Fire Marshall.

The UK HealthCare Medical Facilities are composed of smoke and fire compartments designed to contain the hazard should a fire break out. If a rated fire, smoke, or corridor wall is penetrated, you must patch the wall using a UL listed firestop assembly the day that the penetration is made.

ARTICLE 55 - Interim Life Safety Measures (ILSM)

The University of Kentucky has established an Interim Life Safety Program (ILSM) to manage safety hazards that could be created by construction, renovation, internal disaster, or other alteration to UK HealthCare buildings or grounds.

A review will be done for every project and will be implemented when a life safety code deficiency or other hazard places building occupants at significant risk. When life safety systems are impaired, the Hospital Safety Officer, Contractor, or designee, will use established criteria to evaluate the risk and to implement appropriate ILSM to compensate for these deficiencies.

When construction or renovation poses other significant safety hazards, the safety officer and contractor or designee will implement other safety measures appropriate to the situation.

Planning for Interim Life Safety Measures

The Hospital Environment of Care Committee has approved criteria to be used to help determine appropriate ILSM to implement when a life safety code deficiency is identified.

The Hospital Safety Officer, or designee, will participate in or review documentation from project development, pre-construction, and construction progress meetings to ensure that safety issues and concerns are identified and addressed proactively, whenever possible.

UK project manager will notify the Hospital Safety Officer prior to the start of any construction or renovation project and prior to the start of a new project phase. The Key project participants will identify safety issues, concerns, and methods of maintaining a safe work environment.

The Safety Officer and UK staff will regularly inspect all construction sites. The Safety Surveillance Team will conduct regular building inspections to identify risks and hazards.
Criteria for Implementation of Interim Life Safety Measures (ILSM) at the University of Kentucky HealthCare Facilities.

In general, the Safety Officer or designee will use the criteria below to determine appropriate interim life safety measures. In all cases, additional measures may be taken, if warranted, to protect the building’s occupants.

When the integrity of an exit access, exit, or discharge area is altered or compromised:

- Ensure free and unobstructed exit
- Ensure escape route for construction workers
- Provide additional training for UK staff and signage when alternative exits are designated
- Increase debris removal schedule to reduce building’s flammable and combustible load to lowest feasible level
- Conduct at least two fire drills per shift per quarter
- When the integrity of a building’s defend-in-place compartments/features (fire barriers, smoke barriers, floor slabs, corridor wells) are significantly compromised
- Ensure that construction partitions are smoke-tight and built of noncombustible or limited combustible materials

When a building’s fire alarm, detection, and/or suppression systems are impaired:

- Implement temporary but equivalent, fire alarm, detection, or suppression systems
- Inspect and test temporary systems monthly
- Ensure that construction partitions are smoke tight and built of noncombustible or limited combustible materials
- Provide additional fire-fighting equipment & train staff to use

When temporary sources of ignition (cutting, welding, plumber’s torch) are involved:

- Initial contractor will provide hot work permit and follow its guidelines
- Ensure free and unobstructed exits
- Ensure fire alarm, detection, and suppression systems are in working order
- Provide additional fire-fighting equipment (a fire extinguisher every 50 feet) and train staff to use
- Decrease combustible load to lowest feasible level

When large quantities of combustibles or debris are present or involved:

- Increase debris removal schedule
- Provide additional fire-fighting equipment (a fire extinguisher every 50 feet) and train staff to use
- Ensure that construction partitions are smoke tight and built of noncombustible or limited combustible material

Infection Control

When an employee is working in any patient care area or on any patient care equipment, he/she must follow the standard precautions outlined below:
• Wear gloves when there is a possibility that you will touch any body substances or equipment contaminated by body substances (blood, urine, feces, wound drainage, oral secretions, sputum, and vomitus.)
• Wear a fluid resistant gown, masks and/or goggles when there is any possibility that your eyes, mucous membranes or clothing will be splashed or sprayed by body substances or exposure to contaminated equipment.
• During construction/renovation projects or in situations when plumbing is inadvertently interrupted, it is recommended that personnel wear appropriate personal protective equipment. Traffic must be restricted from this area.
• Discard all personal protective clothing in accordance with standard precautions.
• Wash hands thoroughly with antibacterial soap immediately following work.
• Eating, drinking and smoking are restricted to designated areas.

Infection Control Policy for construction at the University of Kentucky Healthcare Facilities

It is the policy of the University of Kentucky HealthCare to prevent illness in patients related to construction dust and airborne fungi. This document spells out requirements that contractors with University of Kentucky Chandler and Good Samaritan Hospital and in-house workers should follow in order to minimize risks of construction to our patients.

Classification of Jobs:

Class I: These projects do not generate appreciable dust or airborne particulate matter. Examples include minor plumbing, electrical, carpentry and duct work; some aesthetic improvements; installation of phones, computers, gas and TV hook-up lines in existing conduits, etc.

Class II: These projects generate dust or other airborne particulate matter and hence require barrier precautions. Examples include construction of new walls; construction of new rooms; major utility changes; major equipment installation; demolition of wallboard; plaster, ceramic tile, ceiling and floor tile removal; removal of windows; removal of casework, etc. Routine maintenance where dust is produced in patient care areas is included. These projects must follow construction standards for the hospital.

Sequence of Events:

UK project manager will work with the Infection Control Department to determine if the project is Class I or Class II based on an ICRA (Infection Control Risk Assessment) evaluation completed by the Infection Control Department.

The project manager should invite a representative of Infection Control to the initial design meeting for the project (and other meetings as appropriate).

The ICRA will be posted on the job site and must be adhered to throughout the project unless otherwise determined by the Infection Control Representative.

Ventilation System

• All ventilation systems to operating rooms, recovery rooms, delivery rooms, newborn nurseries and special care units will have a HEPA filtered clean air supply. These systems will be maintained and serviced according to the established preventive maintenance programs to assure clean air supply.

• Patient rooms which house patients with air-borne infections (requiring negative pressure) will be inspected according to the preventive maintenance program to prevent the spread of potential air-borne pathogens.
• Personnel performing routine maintenance or repairing ventilation systems of negative pressure should wear a NIOSH approved respirator.

• Personnel entering rooms housing known or suspected TB patients are required to wear a properly fitted NIOSH approved respirator.

Aspergillus

Aspergillus are a microbial contaminant which can cause serious complications for patients who are susceptible or in a high risk category. Most nosocomial airborne mold infections are caused by aspergillus; species. This species is widely distributed in our natural environment and can grow on almost anything. When ceilings or walls are disturbed, or activity associated with normal renovations or maintenance, it results in airborne disbursements of particulate matter (dust), which may carry aspergillus spores and infect patients.

UK and its contractors will make every effort to minimize the release of aspergillus in high risk areas. Renovation in or adjacent to high risk areas will be controlled through proper separation and HEPA air flow filtering to reduce the potential dangers to patients. The method used to control dust control must be reviewed by and approved by the Infection Control Department. High risk areas are defined as follows:

Any area a patient with an immune compromised system will be put in additional harm’s way by your service or act of service.

No major construction shall occur in the Transplant Clinic without involvement of the Transplant Department Director. The area must be vacated of patients before any such work can occur.

Procedure:

• Before construction begins contact Infection Control at 859-323-4609.
• Proceed cautiously when removing or installing ceiling tiles in the high risk areas.
• On major construction/renovation, air tight partitions shall separate the renovation site from other space occupied by patients. The barrier shall be tested for tightness. Ventilation leading from the area being renovated should be blocked at its point of exit from the room.
• HEPA filtration of air will be required
• Whenever possible, create a negative air flow on the construction/renovation site.
• Keep the work area as clean and dust free as possible.
• Ensure that infection control measures are in effect.
• Use sticky mats outside of barrier.

Infection Control Oversight

• Infection Control must inspect work site before demolition/construction begins.
• Infection Control will make periodic visits to work site to ensure compliance ICRA standards.
• Contractors will receive information and education about Infection Control Standards at the preconstruction meeting
### ARTICLE 8.7.3 Attachment A – Uniformat Component List

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PAV HA
Elevators 14 & 15 Upgrade

Rev. December 2019
**ARTICLE 8.7.3 Attachment B – Equipment List Spreadsheet Data Categories**

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<td>Contains Asbestos?</td>
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<td>Contains PCBs?</td>
<td></td>
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<tr>
<td>Motor Frame</td>
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<tr>
<td>Motor Style</td>
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<td>Motor RPM</td>
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<td>Fan CFM</td>
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<td>Value</td>
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<tr>
<td>Pump GPM</td>
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<tr>
<td>Pump Outlet</td>
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<td>Motor FLA</td>
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<td>Belts</td>
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<tr>
<td>Filters</td>
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ARTICLE 8.7.3 Attachment C - Example Preventative Maintenance Procedures

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<th>Description</th>
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<th>Frequency</th>
<th>Maintenance Procedure</th>
<th>Maintenance Parts &amp; Items</th>
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<td>AHU-1</td>
<td>M-12345</td>
<td>Monthly</td>
<td>Check Belts</td>
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<td>M-12345</td>
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<td>Grease type xyz</td>
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<td>Air Handling Unit</td>
<td>AHU-1</td>
<td>M-12345</td>
<td>Annually</td>
<td>Replace Belts</td>
<td>Belt model abc-123</td>
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<tr>
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<td>M-98765</td>
<td>Monthly</td>
<td>Check Belts</td>
<td></td>
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</table>

The blue highlighted column will be filled in by PPDMC.
INDEX

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13931 Fire Protection Piping Systems

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16411 Enclosed Switches and Circuit Breakers
16491 Fuses
SECTION 13931 - FIRE PROTECTION PIPING SYSTEMS

PART 1   GENERAL

1.1   SCOPE. This section includes the furnishing and installation of a complete and operable fire protection system serving the elevator pit. The work shall be complete in every detail including, but not limited to, the following:

1.1.1  Connection of fire protection line to the water main. Including furnishing and installing all monitored valves and flow switches, etc.

1.1.2  Providing all piping and accessories for an automatic sprinkler system for the elevator pit.

1.1.3  Providing complete drawings for submittal and approval of the Fire Marshal's office.

1.2   AUTHORITIES AND AGENCIES. All work shall be installed with the approval and/or acceptance of the following:

1.2.1  Kentucky Department of Housing, Buildings and Construction.

1.2.2  Local Fire Department

1.2.3  Owner Underwriter

1.3   PERMITS AND FEES. All permits, fees and any other charges required for the installation or construction of any of this work shall be obtained and paid for by the Contractor.

1.4   SUBMITTALS. Provide submittals to the Authority having jurisdiction. Contractor shall obtain all approvals prior to commencement of any work.

1.5   SHOP DRAWINGS AND RELATED SUBMITTALS

1.5.2  Corrections or comments made on the shop drawings during the Engineer's review do not relieve the Contractor from compliance with the Drawings and Specifications. The Engineer's review of shop drawings is only for general conformance with design concept and general compliance with the information given in the Contract Documents. The Contractor's responsibility includes, but is not limited to, confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.

1.5.3  Shop drawings, consisting of manufacturer's catalog data, dimensional data, and specification data shall be submitted on the following:

1.5.3.1  Valves, Sprinklers
1.5.3.2  Flow Switch, Monitoring Switch
1.5.3.3  Complete Fabrication Shop Drawings
1.5.3.4  Authority Having Jurisdiction
1.5.4 Certificate of Approval shall be submitted on the following:
1.5.4.1 Valves, Sprinklers
1.5.4.2 Flow Switch, Monitoring Switch
1.5.4.3 Authority Having Jurisdiction

1.5.5 Certificate of Materials shall be submitted on the following:
1.5.5.1 Valves, Sprinklers.
1.5.5.2 Flow Switch, Monitoring Switch

PART 2 PRODUCTS

2.1 General. All materials, equipment, valves, and devices installed and/or furnished under this section shall be listed and/or approved for use in the fire protection installation by Underwriter's Laboratories "Fire Protection Equipment Directory," and the Indiana Department of Fire and Building Services. (Kentucky Building Code)

2.2 Materials. Pipe and fittings shall be non-galvanized and of the materials and specifications listed.

<table>
<thead>
<tr>
<th>Size</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Ground</td>
<td>Schedule 40 Black Steel pipe ASTM A135 or A53; or Schedule 10 Black Steel ASTM A135 as listed in NFPA 13.</td>
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</tbody>
</table>

2.2.2 Fittings.

<table>
<thead>
<tr>
<th>Size</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Ground</td>
<td>Screwed fittings shall be cast iron, 175 lb. class, black, in accordance with ANSI B16.4 or malleable iron, 150 lb. class, black, in accordance with ANSI B16.3 or welded fittings shall be steel standard weights, black, ANSI B16.9, ANSI B16.25, ASTM A234, ANSI B16.5 and ANSI B16.11 or grooved couplings and mechanical fittings shall be malleable iron, 500 psi working pressure, ASTM A 47, couplings gasket material shall be butyl rubber, grooved coupling and mechanical fittings shall be tested and listed by UL/FM; or flanged fittings shall be cast iron short body Class 125, black, ANSI B16.1. Flanged bolts shall be hexagon head machine bolts with heavy semi-finished hexagon head nuts, cadmium plated, ANSI B18.2.</td>
</tr>
</tbody>
</table>

2.2.3 Union.

<table>
<thead>
<tr>
<th>Size</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>175 pound cast iron screwed extra heavy pattern ANSI B16.4</td>
</tr>
</tbody>
</table>
2.2.4 **Gate Valves.** Gate valves shall be rising stem, outside screw and yoke type; iron body and bronze or brass trim; solid wedge bronze or brass disc and steel hand wheel, flanged inlet and outlet; rated for water working pressure of 175 p.s.i.g.; monitoring switch shall be provided with SPST normally closed contacts; valve shall have capability of being repacked while under pressure; Kennedy, Nibco, or approved equal.

2.2.5 **Ball Valves.** Ball valves shall be bronze ball type with threaded ends, teflon stem packing seals, teflon seats, "T" handle for 1" and smaller, operated lever for 1-1/2" and larger, and blowout proof silicone bronze stem. Valves shall be rated 300 p.s.i.g. water working pressure.

2.2.6 **Water Flow Switch.** Sprinkler flow switch shall be a paddle type with an adjustable time delay mechanism between the paddle operated stem and alarm initiating contacts to absorb brief water movement caused false alarms created by water hammer, surges; and pressure variation and tamper switch to prevent unauthorized personnel from removing the cover and tampering with the mechanism. The sprinkler alarm flow switch shall be furnished with one (1) normally closed alarm contact with one (1) normally open shunt contact. Sprinkler flow switch shall be Potter or approved equal.

2.2.7 **Sprinklers.** Sprinklers shall be wet type fusible link of style Sidewall as required for the particular application; nominal 1/2 inch discharge orifice; ordinary temperature range unless otherwise required by Code.

2.2.8 **Sprinkler Head Guards.** Sprinkler guards shall be installed.

PART 3  EXECUTION

3.1 **Standards.** The fire protection system shall be designed and installed per NFPA 13 for light/ordinary hazard occupancy to comply with the following standards and/or codes of the latest issue.

3.1.1 **NFPA Standard No. 13, Sprinkler Systems**

3.1.2 **City building code and local ordinances**

3.1.3 **Kentucky Building Code.**

3.2 **Verification of Dimensions.** The Contractor shall be responsible for the coordination and proper relation of his work to the building structure and to the work of all trades. The Contractor shall visit the premises and thoroughly familiarize himself with all details of the work and working conditions, to verify dimensions in the field, and to advise the Engineer of any discrepancy before performing any work. Materials and equipment shall fit into the space allotted without interference to building features or other equipment and with adequate and acceptable clearances allowed for entry, servicing and maintenance.

3.3 **Drains.** Contractor shall slope pipe and install auxiliary drains and main drains in the Fire Protection system in accordance with NFPA 13.

3.4 **Signs.** Red enameled signs with white lettering shall be installed at each control valve, drain line, inspector's test station, alarm horn, etc., with appropriate nomenclature as approved by the Engineer. Signs shall be fastened with screws or supported with braided chrome chains.
3.5 Operations and Maintenance Instructions. Prior to acceptance, the Contractor shall furnish the Architect with operations and maintenance instructions manuals. Manuals shall include complete descriptions, catalog cuts, diagrams, drawings, and other descriptive data covering the proper testing, operation, and maintenance of each type of system installed, and the necessary information for ordering replacement parts. The Contractor shall also provide detailed verbal instruction covering the necessary and recommended testing, operating, and maintenance procedures for the system to the Owners maintenance personnel.

3.6 INSPECTION AND TESTING.

3.6.1 All inspections, examinations, and tests required by the authorities and/or agencies specified by Part 1 of this section shall be arranged and paid for by the Contractor as necessary to obtain complete and final acceptance of the fire protection system. The Contractor shall deliver certificates of all such inspections to the Architect.

3.6.2 Testing for the sprinkler system shall be as prescribed by NFPA Standard No. 13.

3.7 GUARANTEE AND INSPECTION SERVICE.

3.7.1 The entire fire protection installation shall be guaranteed for a period of one year. This guarantee shall include defective equipment, materials, and workmanship. The Contractor under this guarantee shall replace all defective equipment, materials, and workmanship. The guarantee period shall begin upon acceptance of the entire system by the Owner.
SECTION 14010 - GENERAL PROVISIONS

1. GENERAL

1.1 These general provisions and all the subsequent sections of this Specification shall form the complete Elevator System Specification for the project, and includes the furnishing of all labor, equipment, tools, supervision, materials, technical design services, shop drawings, appliances, and related items as required and specified to install and place in satisfactory operation, complete, compatible, and fully operable elevator system.

1.2 All reference to "this Contractor", "Systems Contractor", "Elevator System Contractor", etc., in these Specifications shall mean any contractor or subcontractor performing work under the Elevator System Division of these Specifications.

1.3 Temporary electricity shall be provided as indicated under the "General Requirements" of the Specifications.

1.4 The Elevator System installation shall be made in strict conformance with the latest edition and supplements in force at the time of bid opening of the National Electrical Code, ANSI/ASME A17.1 (American Standard Safety Code for Elevators and Escalators), and ANSI/ASME A17.3, the Rules and Regulations of the Kentucky Building Code and Kentucky State Fire Marshall’s Office, the applicable Standards of the National Fire Protection Association, and applicable requirements of the Occupational Safety and Health Act of the United States Department of Labor. All materials and equipment employed shall be approved by and bear the label of Underwriters' Laboratories, Inc., where such labeling is made available by any manufacturer for said materials or equipment. All codes and regulations applicable shall be considered as jointly governing and the requirements of either and all will prevail. If it occurs that Drawings conflict with any applicable code, then this Contractor shall immediately bring same to attention of Engineer or his representative for resolvement.

1.5 The Drawings are generally diagrammatic and indicate the general design and arrangement of the proposed work. The exact and final location of all the elevator equipment, and other systems, unless specifically dimensioned on the Drawings, shall be subject to existing conditions of the building and subject to the approval of the Engineer. The contractor shall be responsible for the final location of his particular equipment to suit field conditions encountered and to avoid interferences without extra cost to the Owner or the Engineer.

1.6 Following completion, a certificate of approval shall be secured from the local code enforcement authority and delivered to the Engineer.

2. EQUIPMENT CONNECTION AND WIRING

2.1 Unless specifically noted otherwise on the Drawings or elsewhere in the Specifications, all elevator control wiring and all elevator equipment connections shall be provided by the Elevator Contractor. Conduit and power wiring shall conform to the requirements of 16000 sections.

3. MATERIALS AND EQUIPMENT

3.1 General. Materials and equipment shall be furnished as specified in this section and each individual elevator section of these Specifications and shall be in strict accordance with applicable ANSI, ASME, ASTM, NESC, NEMA, IEEE, UL, NEC, OSHA and NFPA standards,
codes, and specifications. Applicable codes, standards, and manufacturers’ products referred to in these Specifications shall establish minimum requirements for materials and equipment furnished for this installation.

4. INSTALLATION

4.1 Assembly and installation of equipment shall be in strict accordance with manufacturer's installation instructions. Equipment shall be securely anchored in place. Care shall be exercised to correctly orient equipment before securing in place.

4.2 Cutting, Fitting, and Patching

4.2.1 The Elevator System Contractor shall do all cutting and drilling of masonry, steel, wood, or iron work and all fitting necessary for the proper installation of all elevator system equipment and materials included in the Specifications or governed thereby.

4.2.2 No cutting or drilling of the structure, of any kind, shall be done without first obtaining permission from the Engineer. All cutting and drilling shall be done under the supervision of the Contractor in strict accordance with instructions furnished by the Engineer.

4.2.3 All patching and finishing shall be done by the Contractor whose work has been affected (masonry, plastering, painting, etc.). Each such Contractor shall be reimbursed by the Elevator System Contractor when his cutting or drilling makes such patching and finishing necessary.

5. PERMITS, CERTIFICATES, LAWS, AND ORDINANCES

5.1 The Elevator System Contractor shall, at his own expense, procure all permits, certificates, and licenses required of him by law for the execution of his work. He shall comply with all Federal, State, and local laws, ordinances, rules and regulations relating to the performance of the work.

6. INSPECTION

6.1 The Elevator System Contractor shall, at his own expense, furnish elevator inspection as required by the local code enforcing agency, when applicable. The Contractor shall notify the Elevator Inspector in writing upon the start of the job and a copy of the notice shall be sent to the Engineer. The Contractor shall furnish certificates of final approval by the Elevator inspector and the Fire Marshal’s office and final payment shall be withheld until he has presented the Engineer with the aforementioned certificates of approval.

7. CODES AND STANDARDS

7.1 Following is a list of abbreviations for codes and standards which are referred to in the Specifications. Where such reference is made, the code or standard becomes a part of these Specifications as if the code or standard were included herein. Reference is always to the latest edition of the code or standard unless otherwise specifically noted.

ADA - Americans with Disabilities Act
ANSI - American National Standards Institute, Inc.
ASME - American Society of Mechanical Engineers
ASTM - American Society for Testing and Materials
IEEE - Institute of Electrical and Electronics Engineers
8. GUARANTEES AND WARRANTIES

8.1 This Contractor shall guarantee all equipment, apparatus, materials, and workmanship entering into the Contract to be the best of its respective kind, and shall replace all parts at his expense which are defective within one year from final acceptance of the work by the Engineer. Items of equipment which may have longer guarantees shall have warranties and guarantees completed, in order, and in effect at the time of final acceptance of the work by the Engineer. This Contractor shall furnish all such warranties and guarantees at the time of final acceptance of the work.

9. SUBMITTAL

9.1 Submittal data shall include specification data, such as metal gauges, finishes, optional accessories; even though such equipment and materials may be as specified. In addition, the submittal data shall include performance (certification) data, wiring diagrams where applicable, accurate dimensional data, and a recommended spare parts list. Outline or dimensional drawings alone are not acceptable.

9.2 No installation shall be done until accepted equipment submittals are in the hands of the Contractor. It shall be this Contractor's responsibility to obtain accepted drawings and to make all installation in the neatest and most workmanlike manner possible.

9.3 In general, normal catalog information (with the particular items underlined or otherwise denoted as being the submitted item) will be accepted as submittal data. Installation, operating and maintenance instructions must be that information specifically applicable to the items furnished, which is ordinarily supplied with the equipment to the Owner, for any modifications indicated. Submittal data sheets which indicate several different model numbers, figure numbers, optional accessories, or installation arrangements shall be clearly marked to indicate the specific items of equipment being furnished. Submittal data must be complete for each piece of equipment; piecemeal data will not be processed.

9.4 It shall be noted that acceptance of shop drawings by the Engineer applies only to general design, arrangement, type, capacity, and quality. Such acceptance does not relieve the Contractor of the responsibility for furnishing the proper equipment.

END OF SECTION
SECTION 14210 - ELEVATOR SYSTEM REFURBISHMENT

1. SCOPE

1.1 This section of the Specification includes, but is not limited to, the furnishing of all labor, equipment, tools, supervision, materials, technical design services, shop drawings, and related items as required for the refurbishment of the University of Kentucky Chandler PAV CCC Elevators 12 and 13.

1.2 Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

2. REFERENCES

2.1 Applicable Codes (Latest Edition):


2.1.3 Americans with Disabilities Act – Accessibility Guidelines (ADAAG).

2.1.4 National Fire Protection Association (NFPA 70).

2.1.5 NFPA 70 – National Electrical Code (NEC).


2.1.7 Earthquake provisions as required by local code.

2.1.8 Local codes.

2.1.9 Authorities having jurisdiction.

2.1.10 ASME A17-1 and ASME 17-3.

2.1.11 University Kentucky Standards.

3. NON-PROPRIETARY EQUIPMENT, PARTS, AND CONTROLS

3.1 The University of Kentucky does not have in-house maintenance personnel and therefore relies upon contractor(s) to maintain the equipment. The maintenance contractor is acquired through a bid process and is not necessarily the original equipment manufacturer or installer. Therefore, it is required that, for specific items indicated, University of Kentucky approved and non-proprietary equipment, parts, and controls items (including circuit boards, chips, diagnostic tools, etc.) be bid and installed. Approved and acceptable non-proprietary controls, tools, passwords, equipment, parts, and training necessary to service the elevator be provided to the University of Kentucky by the manufacturer and/or the Contractor.
3.2 An elevator manufacturer and/or their suppliers may bid for and if successful furnish and install their as-designed elevator systems for installation in University of Kentucky buildings or construction projects. With their bid documents there must be submitted a statement that there are no proprietary parts or equipment in the elevator system(s) and that they are meeting the intent of this standard (i.e. that any and/or all parts, materials, maintenance drawings, maintenance tools, circuit boards, etc. will be available to the University and/or its elevator service provider(s) at the prevailing wholesale market prices at the time of need. The following statement will be part of elevator bid requests to satisfy the requirement of this item -

“The undersigned bidder/company hereby agrees that no proprietary situations will be imposed as to the providing to the University’s elevator service providers any maintenance drawings, equipment, parts, or control items (including circuit boards, chips, diagnostic tools, etc.), etc. required for the maintenance and upkeep of the elevators provided on this project. Further, the items will be sold to the University’s elevator service providers at current wholesale costs and without undue delay.”

4. SPECIAL REQUIREMENTS BY UK FIRE MARSHAL

4.1 When emergency power is provided for the elevator system, the elevator(s) shall be tested under FULL load on the generator. This would include all emergency lighting and other emergency loads connected to the generator.

4.2 Fireman’s Service shall be tested under emergency power conditions.

4.3 Verify Fireman Service priority floor designation with the UK Fire Marshal’s office.

4.4 Provide a UK Fire Marshal approved lockable secure storage box on the Priority 1 floor for the fireman’s service key(s).

5. DESCRIPTION OF WORK

5.1 Provide new elevator finishes as described on architectural drawing.

5.2 Replace elevator system controllers with microprocessor type.

5.3 Replace hoist drive motor with Variable Voltage Variable Frequency (VVVF) Elevator Rated Motor.

5.3.1 The drive shall be capable of varying the torque on the motor during acceleration and deceleration.

5.3.2 The drive shall be capable of on-site programming the volts per Hertz acceleration and deceleration ride profiles to adjust the ride quality to drive control characteristics.

5.3.3 The flux vector drive shall control AC induction motors through the use of a high resolution, dual channel optical reader.

5.3.4 The flux vector drive shall be capable of delivering 100-percent rated motor torque from base speed down to zero speed.

5.3.5 The flux vector drive shall not use DC injection for slowdown braking.
5.3.6 The flux vector drive shall be adjustable to achieve the required current motor voltage and frequency so as to match the characteristics of the hoist motor.

5.3.7 The drive shall not create excessive audible noise in the elevator motor.

5.3.8 The drive shall be capable of delivering sufficient current to accelerate the elevator to contract speed at the rated load. The drive shall provide speed regulation within 3-percent during all phases of acceleration, deceleration and leveling.

5.3.9 Power Conversion and Regulation Unit: Provide solid-state motor drive. Solid state units shall be designed to limit current, suppress airborne or structural noise, and shall limit the electrical distribution system to a maximum of 3-percent. This shall include compensation for harmonic distortion, power factor, flicker and line notching. The Contractor/Installer shall be responsible for furnishing any electrical changes or upgrades required if power conversion system other than specified is provided. Provide 40 durometer double deflection neoprene mounts sized for a static deflection under load of minimum 3/16-inch for mounting the unit.

5.4 Replace geared traction machines and deflector sheaves as indicated.

5.5 Machine Beams: Review existing conditions and provide steel beams, channels and bearing plates to support machine, governors and rope hitches as required for a complete installation. Include any required clip angles; tie rods, etc. as required. Where beams project above machine room slab provide metal decking as required by Code to eliminate any tripping hazard. Provide vibration sound isolation to eliminate structure-borne sound being transmitted to the building. Select isolators to compress a minimum of 0.1-inches under load.

5.5.1 Deflector Sheaves: Where required, provide cast iron machined and grooved for diameter of ropes and supported by an “A Frame” type mounting. Provide cable guards designed to withstand shock and prevent ropes from leaving their proper grooves. All bearings are to be shielded or sealed.

5.5.2 Sleeves and Guards: Provide sleeves projecting 4-inches above concrete slabs for holes in machine room floor. Provide guards for sheaves and ropes.

5.6 Replace hoist ropes in each of the elevators.

5.7 Replace governor, associated governor ropes and tail sheaves.

5.8 Replace guide roller assemblies on car and counterweight.

5.9 Provide elevator pit ladders, light switches and GFI receptacles to meet Elevator Code requirements, if required.

5.10 Recondition guide rails in hoist way, if required.

5.11 Replace car safety devices to meet current Codes.

5.12 Upgrade existing inspection station located above car to meet current OSHA Requirements.

5.13 Upgrade elevator systems control fixtures and hardware to meet requirements of the Americans with Disabilities Act (ADA) and use LED Technology.
5.14 Provide complete replacement for the interior finish of the elevator cars, complete with new steel floor plate and finished ceiling with lighting.

5.15 Replace traveling cables for each car and associated hardware.

5.16 Replace door operators, door hangers, clutch, rollers and associated hardware.

5.17 Provide safety door beam detector.

5.18 Replace hoist way door tracks and door interlocks and door guides.

5.19 Install door jamb Braille at every elevator hall door.

5.20 Replace emergency fireman phone jacks in elevators.

5.21 Provide new doors and electrostatically paint.

5.22 Adjust door equipment.

5.23 New elevator shall match the existing elevator speed.

5.24 Field check and repair as required fireman services for the elevator system. Provide interface to the fire alarm panel for elevator recall. Add fire alarm modules as required to meet latest Code Requirements.

5.25 Provide counter weight buffers.

5.26 Attachment of total system to building structure.

5.26.1 Structure is existing. If additional structure is required it is to be provided by the elevator trade contractor.

5.27 Rigging from hoisting points for installation of equipment.

5.28 Acceptance testing: by local authorities.

5.29 Integration of control and technology systems: Hard wiring and point of presence coordination at cabs and machine rooms.

5.30.1 Security and access control including video monitoring.

5.31.2 Emergency power operation.

5.31.3 Building Control Systems Integration.

5.31.4 Fire and emergency protocol operation.

5.31.5 Telecommunication systems.

5.31.6 Vertical transportation systems remote monitoring.

5.31.7 Other monitoring systems identified by Owner.
6. QUALITY ASSURANCE

6.1 The Elevator Contractor shall have previous experience renovating a minimum of (2) two elevator systems with at least (10) ten floors each in an active healthcare facility within the last 2 years. The experience shall include work similar to this project as described in paragraph 2. The Contractor shall provide with bid a list of projects, descriptions, and references that would satisfy the experience requirements as stated in this paragraph.

6.2 The Elevator Contractor shall have a factory trained mechanic on site to supervise the installation of equipment for this project. This mechanic shall be certified by the elevator equipment manufacturer of this project to install the elevator controllers. The mechanics’ certification and resume shall be submitted with bid.

6.3 The service mechanics certification, resume, address and telephone number of the service office shall be submitted with bid. An answering service is not considered as a service office. Response time for personnel will be a strict 15 minutes to rescue trapped passenger. 1 hour for maintenance call or repair.

6.4 The Elevator Contractor shall provide a 24-hour telephone answering service (not a machine) for all calls after normal office hours for the warranty and maintenance work of the equipment installed in this project.

6.5 The equipment manufacturer for the door protection system and elevator controllers shall be distributed by the manufacturer on a nation-wide basis. System that requires proprietary maintenance tool or diagnostic is not acceptable.

6.6 The installation and equipment of this project shall comply with the latest edition and applicable requirements of the "American Standard Safety Code for Elevators and Escalators" (ANSI A17.1) published by the American Society of Mechanical Engineers, the National Electrical Code, applicable NFPA codes, the Kentucky Building Code and specifically with sections relating to electrical work and elevators.

6.7 Permits and Inspections. The Elevator Contractor shall obtain and pay for necessary Municipal or State inspections and permits and make such tests as called for by the regulations of such authorities. These tests shall be made in the presence of the authorized representatives of such authorities.

6.8 Guarantee. The Elevator Contractor shall guarantee the materials and workmanship of the apparatus installed by him under this specification; and that he will make good any defects, which may develop within one year from date of final acceptance.

6.9 Safety Provisions. The Elevator Contractor shall supply all necessary materials, labor, equipment, and tools as required to install, maintain and remove safety and protection devices and systems as necessary to protect the building occupants, the public, and construction personnel as well as all existing building components adjacent to or within the existing elevators during all work. All damage to existing work and property within or adjacent to the existing elevators shall be repaired or replaced by the Elevator Contractor at no additional expense to the Owner.

6.10 Coordination. The Elevator Contractor shall coordinate all work sequences and material installation with the Engineer and the Owner to allow for the minimum length of time for work to be performed on site. The Contractor shall plan his work in such a manner that once an elevator is removed from service, all work has to be completed before the elevator can be
returned to service. When in-car work is performed the Elevator Contractor shall position the car at a floor designated by the Owner and perform all work at that location.

7. TEMPORARY SERVICE

7.1 Should service of any elevator be required for other contractors to install work such as sprinklers, smoke alarms, heat detectors, conduits and other work related to elevator hoist way, or for any other reason, before completion and final acceptance, obtain permission in writing from Engineer and elevator manufacturer and meet the following conditions:

7.1.1 Comply with safety regulations of agencies referenced herein and in Section 01010.

7.1.2 Coordinate with temporary hoisting specified in Section 01500. User shall sign the elevator manufacturer’s temporary acceptance form and be bound by terms and conditions thereof.

7.1.3 Pay costs of personnel, special inspections, and any additional equipment required for temporary use of elevators.

7.1.4 Do not overload or abuse elevators or related equipment.

7.1.5 Repair damages or replace with new if directed by Engineer

7.1.6 Extend warranty starting on date of acceptance of elevators by Engineer. Termination of use of elevators if after date of Substantial Completion.

8. ELECTRIC SERVICE

8.1 Power: 208-volts, 3-phase, 60 hertz. Contractor/Installer to verify.

8.2 Lighting: 120-volts, 1-phase, 60-hertz.

9. MATERIALS AND EQUIPMENT

9.1 ADA COMPLIANCE. The elevator car equipment and signal fixtures shall be replaced to comply with ADA. The work includes but not limited to the following:

9.1.1 The elevator system shall have an automatic self-leveling feature that will bring each car to floor landings within a tolerance of 1/8 inch of floor landing under rated loading to zero loading conditions.

9.1.2 Hall call station buttons shall be centered at 42 inch above finish floor with visual signals to indicate call is registered and answered. Replace all Hall call station buttons with vandal resistant type with tamper proof screws that are ¾ inch diameter and with #4 stainless steel finish unless otherwise noted. Hall call buttons shall be raised. Station shall be compatible with the existing elevator equipment to remain. Each intermediate station shall consist of two L.E.D. illuminated pushbuttons with raised direction arrow, one for the up direction and the other for the down direction. Each station shall contain an illuminated pushbutton with raised direction arrow. The buttons shall be illuminated to indicate that a call has been registered at that floor for the indicated direction.

9.1.2.1 Hall call stations shall be manufactured by GAL Manufacturing Corp. or equal.
9.1.3 Provide Hall Position Indicator on each floor for each elevator. Hall position indicator shall be LED type with Hall Lanterns. Hall Lanterns with vandal resistant type with #4 stainless steel finish and visible/audible signal at each hoistway entrance. This Hall Lantern shall indicate which car is answering a call. The audible signal shall sound once for UP, twice for DOWN. Hall Lanterns shall be mounted at least 72 inches above lobby floor and the visual element shall be at least 2 ½ inches in the smallest dimension.

9.1.4 Provide raised and Grade 2 Braille characters for floor designations on both jambs at each Hoistway entrance. The characters shall be located at centerlines 60 inches above each floor level, raised 1/32 inch minimum. The characters shall be upper case type and 2 inches high.

9.1.5 Replace Car control panel buttons with vandal resistant type with #4 stainless steel finish. The control buttons shall be designated by Braille, minimum 5/8 inch high but no higher than 2 inches. Car control buttons shall be located between 35 inches and 48 inches above elevator floor.

9.1.6 Replace visual car position indicators (CPI) to provide audible and visual indication as the car passes or stop at a floor. The CPI shall have #4 stainless steel finish.

9.1.7 Door and signal timing for hall calls shall comply with ADA requirements.

9.1.8 Door delays for car calls shall comply with ADA requirements.

9.1.9 Two-Way Communication

9.1.9.1 The device shall consist of a single pushbutton, automatic dialer with appropriate indicator lights, and all other essential features necessary to comply with ADA. The existing phone in each elevator may be re-used.

9.1.9.2 The emergency phone shall be mounted flush on the back of a hinged door at the bottom portion of the in-car control panel and locked with a straight bit key. The key number will be supplied with the approved shop drawings by the University.

9.1.9.3 The communication device shall be as manufactured by Ramtel model RR833-OEM (rev 5/28/14) to match the existing elevator emergency communication system including remote location indicator and other existing features now in use.

9.1.9.4 A stand-alone flush box-type device is not to be used without approval of the Owner.

9.1.9.5 The face plate shall have, including but not necessarily limited to:

     EMERGENCY PHONE
     UNIVERSITY OF KENTUCKY
     (include UK logo)

Other information and instructions on the faceplate are as provided by the Ramtec/Ramtel communication device.

9.1.10 Contractor shall provide a dedicated phone line for each elevator car.

9.2 Control System. The elevator system shall have a microprocessor based and software oriented control system including but not limited to controllers and group controllers. The control system shall be compatible with the existing elevator equipment being used during
renovation. The control system shall use a centralized control scheme with all control functions located in the elevator machine room. The microprocessor software package shall be factory written. However, the programming shall be flexible and allow programming to match operational requirements. The control system shall be located in a single, self-supporting, floor mounted cabinet installed in the existing elevator machine room. The control system cabinet shall include built-in climate control.

9.2.1 Duplex Selective Collective:

9.2.1.1 With two cars in service, one car shall normally park at the main floor (“home car”) with doors open., The other car (“free car”) shall park at landing last served with doors closed.

9.2.1.2 The free car shall answer hall calls above or below the landing at which the car is standing, except main floor hall calls.

9.2.1.3 When the free car is clearing calls, the home car shall respond to:

9.2.1.3.1 A call registered on the home car buttons.

9.2.1.3.2 An up hall call from the landing below the free car while the free car is traveling up.

9.2.1.3.3 An up or down call registered from the landing above the free car while it is traveling down.

9.2.1.3.4 Inability of the free car to clear all hall calls within approximately 40 seconds.

9.2.1.4 Registration of car call button shall cause the car to start. The car shall respond to its own car calls and corridor calls, in the direction of travel, and in order in which the landings are reached.

9.2.1.5 Only one car shall stop in response to any one-hall call. The first car to complete all calls shall return to the main floor.

9.2.1.6 The car shall remain at the arrival floor for an adjustable interval to permit passenger transfer. Doors shall close after a predetermined interval, unless the car is parked at the main floor, after opening unless closing is interrupted by car door reversal device or door open button in car.

9.2.1.7 Delayed Car Protection: The system shall automatically disassociate a car from the Duplex system in the event the car is delayed for a predetermined time. The car shall be automatically restored to the Duplex System when the cause of the delay has been eliminated.

9.2.1.8 Programmed Door Control: Separate adjustable times shall be provided for each car to establish minimum passenger transfer time for car stops, intermediate floor hall call stops and lobby floor stops. All timing shall be computerized to coincide with traffic demands.

9.2.1.9 Designated Parking: The system shall provide for cars to park as designated by the Duplex system or park at its last call.

9.2.1.10 Ascending Car Overspeed and Unintended Car Movement Protection: Provide operation to prevent the elevator from striking the hoistway overhead or unintended car movement per the requirements of the code.
9.2.2 Failure of any single magnetically operated switch, contactor, or relay to release in the intended manner; the failure of any static control device, speed measuring circuit, or speed pattern generating circuit to operate as intended; the occurrence of a single accidental ground or short circuit; shall not permit the car to start or run if any hoistway door or gate interlock is unlocked or if any hoistway door or car door or gate contact is not in the made position. Furthermore, while on car top inspection or hoistway access operation, failure of any single magnetically operated switch, contactor or relay to release in the intended manner; the failure of any static control device to operate as intended; or the occurrence of a single accidental ground, shall not permit the car to move even with the hoistway door locks and car door contacts in the closed or made position.

9.2.3 An out of service timer (T.O.S) shall be provided to take the car out of service if the car is delayed in leaving the landing while there are calls existing in the system (timer shall be adjustable).

9.2.4 Door protection timers shall be provided for both the opening and closing directions, which will protect the door motor and will help prevent the car from getting stuck at a landing. The door open protection timer shall cease attempting to open the door after a predetermined time in the event that the doors are prevented from reaching the open position. In the event that the door closing attempt fails to make up the door locks after a predetermined time, the door close protection timer shall reopen the doors for a short time. If, after a predetermined number of attempts, the doors cannot successfully be closed, the doors shall be opened and the car removed from service.

9.2.5 A minimum of four different door standing open times shall be provided. A car call time value shall predominate when only a car call is canceled. A hall call time value shall predominate whenever a hall call is canceled. In the event of a door reopen caused by the safety edge, photo eye, etc., a separate short door time value shall predominate. A separate door standing open time shall be available for lobby return.

9.2.6 If the doors are prevented from closing for longer than a predetermined time, door nudging operation shall cause the doors to move at slow speed in the closed direction. A buzzer shall sound during the nudging operation.

9.2.7 The control system shall provide field programmability of specific timer values (i.e., door times, etc.). The value of these timers may be viewed and/or altered through use of the on-board switches and pushbuttons.

9.2.8 The control system shall provide programmable parking operation, lobby operation, time activated or demand activated dispatching configurations including but not limited to lobby up peak traffic, down peak traffic, and up peak traffic.

9.2.9 The elevator control system shall include load weighing device which, when the particular car is filled to an adjustable percentage of the capacity load, shall cause the car to bypass the landing calls but not car calls.

9.2.10 The elevator control system shall include an anti-nuisance call control. The control system shall evaluate the number of people on the car and compare that value to the number of car calls registered. If the number of car calls exceeds the number of people by a field programmable value, than the car calls shall be canceled after the first call has been answered.

9.2.11 The control system shall use a device to establish incremental car position to an accuracy of .1875" (4.76 mm) or better utilizing a quadrature signal for the entire length of the hoistway.
9.2.12 The elevator control system shall use the optimized velocity profile in a dual-loop feedback system based on car position, speed and distance feedback. A velocity feedback device (tachometer or encoder) shall permit continuous comparison of car speed with the calculated velocity profile to provide accurate control of the acceleration and deceleration right up to and including the final stop, regardless of direction of travel or load in the car.

9.2.13 Hospital Emergency (Code Blue) Operation:

9.2.13.1 Provide a spring return momentary contact two-position key switch within each hall station.

9.2.13.2 Key switch shall have its “OFF” and “ON” positions identified on a blue bezel. The key shall be removable only in the “OFF” position.

9.2.13.3 Provide a blue LED indicator on all group Hall Call station that will illuminate when a car is in code blue operation.

9.2.13.4 Provide a timing feature that shall return the elevator to operation if the Code Blue switch within the elevator is not activated within 30 seconds.

9.2.13.5 Momentary contact of the key switch in the “ON” position summons the nearest elevator to that designated floor.

9.2.13.6 Upon arrival the attendant activates a two-position key switch within the car operating panel.

9.2.13.7 Key switch shall have its “OFF” and “ON” positions identified on a blue bezel. The key shall be removable only in the “OFF” position.

9.2.13.8 Activation if the car key switch places the elevator in the Independent Service mode.

9.2.13.8.1 Elevator is removed from normal operation.

9.2.13.8.2 Control is from car buttons only.

9.2.13.9 Car shall not respond to hall calls.

9.2.13.9 The elevator then proceeds to the requested floor.

9.2.13.9.1 The car key switch in the “OFF” position deactivates the operation.

9.2.14 Central Monitoring System:

9.2.14.1 The elevator is to be connected to the existing Tridium Building Automation System. All associated hardware, software, cabling and conduit for a complete connection to the system is to be included as part of the elevator contract. UK MCPD will provide the programming at the existing headend to interface with the BAS. Refer to following table for points that will be interfaced to the Tridium System:
## Object List

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Alarmable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor</td>
<td>A1</td>
<td>N</td>
</tr>
<tr>
<td>Controller Power</td>
<td>B1</td>
<td>Y</td>
</tr>
<tr>
<td>Controller Communications</td>
<td>B1</td>
<td>Y</td>
</tr>
<tr>
<td>Up Direction</td>
<td>B1</td>
<td>N</td>
</tr>
<tr>
<td>Down Direction</td>
<td>B1</td>
<td>N</td>
</tr>
<tr>
<td>Door Open</td>
<td>B1</td>
<td>N</td>
</tr>
<tr>
<td>Door Closed</td>
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<td>N</td>
</tr>
<tr>
<td>In Normal Service</td>
<td>B1</td>
<td>N</td>
</tr>
<tr>
<td>Inspection Service</td>
<td>B1</td>
<td>N</td>
</tr>
<tr>
<td>Independent Service</td>
<td>B1</td>
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</tr>
<tr>
<td>Fire Service</td>
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</tr>
<tr>
<td>Safety Circuit</td>
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</tr>
<tr>
<td>Door Fully Open and Locked at the Same Time</td>
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<td>Y</td>
</tr>
<tr>
<td>Bypass System Fault</td>
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</tr>
<tr>
<td>Door Lock Relay Fault</td>
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</tr>
<tr>
<td>Door Zone Relay Fault</td>
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</tr>
<tr>
<td>Emergency Stop Relay Fault</td>
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</tr>
<tr>
<td>Inspection Switch Fault</td>
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<td>Stop Relay Fault</td>
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<tr>
<td>Door Lock System Fault</td>
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</tr>
<tr>
<td>Governor Contact System Fault</td>
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<td>Front Door Limit System Fault</td>
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<td>Rear Door Limit System Fault</td>
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<td>Contactor Drop System Fault</td>
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<tr>
<td>Unintended Movement System Fault</td>
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<tr>
<td>Car Stop Bypass Relay Fault</td>
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<tr>
<td>Drive Fault</td>
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</tr>
<tr>
<td>Down Relay Fault</td>
<td>B1</td>
<td>Y</td>
</tr>
<tr>
<td>Up Relay Fault</td>
<td>B1</td>
<td>Y</td>
</tr>
</tbody>
</table>
9.2.16 The car controller shall include a minimum of one serial port for display terminal communication. The display terminal shall be used to view and alter the individual car operating parameters such as jerk, acceleration, deceleration, contract speed, leveling distances, etc. Remote configuration of individual car operating parameters shall be permitted when the car controller is attached to a CRT/modem and an established protocol has been followed.

9.2.17 A special event calendar shall record approximately 500 noteworthy events or faults of a particular car. They shall be displayed in chronological order for examination or review. Data displayed shall include the type of event or fault, the date and time it occurred, the position counter value and the status of various flags at the time of the occurrences.

9.2.18 Specialized diagnostic devices used to check the operation of the microprocessor and not permanently attached to the controller, shall be provided as part of the contract and shall become University property.

9.2.18.1 Diagnostic tools or devices requiring “reloading” or “recharging” by the manufacturer shall not be used on a University of Kentucky project.

9.2.19 The elevator control system Controller shall be by Smartrise Engineering Inc., or approved equal.

9.3 Car Design.

9.3.1 Keys and switches.

9.3.1.1 Provide switches for lights, service or inspection. Keys should be removable for lights in all positions; keys should be removable only in the normal positions for temporary use functions. Provide cylinders with removable core as specified by the University.

9.3.1.2 Provide a two-speed fan switch; key should be removable in all positions; Provide cylinder with removable core as specified by the University.

9.3.1.3 Provide each car-operating panel with an emergency stop key switch, key should be removable in all positions; Provide cylinder with removable core as specified by the University.

9.3.1.3.1 Position the cylinder near the bottom of the pushbuttons with the key removable in either position and with one set of normally closed contacts.

9.3.1.3.2 Mark the switch with etched, engraved, or embossed “ON” and “OFF”.

9.3.1.4 Where special key switches or card readers and/or other devices are used to lock out particular floor and/or functions -

9.3.1.4.1 Wire controls so as not to interfere with Fire Service operation.

9.3.1.4.2 Provide inactive push buttons for each floor even if a key switch, card reader, and/or other devices are required.

9.3.2 Fireman Service Controls

9.3.2.1 In-car Fireman Service Controls shall be in a reachable, recessed, and in a locked panel in the control panel and at the top portion of the panel.
9.3.2.1.1 Engrave, etch, or emboss fire service instructions inside the fixture cover in accordance with ASME A17.1a.

9.3.2.1.2 Keying options will be specified by the University.

9.3.3 Provide each car-operating panel with special language etched, engraved, or embossed pertaining to the posting of the Elevator Permit and the Capacity of the elevator.

9.3.4 Car Control Panel. Replace Car Control Panel in each of the cars. The station shall be installed in such a manner to provide optimum viewing and accessibility. The lowest module shall contain the "door open," "door close," "emergency stop switch," and alarm button. Intermediate modules shall contain L.E.D. illuminated floor buttons which will illuminate when a call is registered and will remain illuminated until the call is answered. The top module shall contain the required switches. All raised floor indications and handicap symbols shall be located immediately adjacent to the floor buttons and fully integrated in the module design. No applied symbols shall be allowed. There shall be no floor indications or symbols on the buttons.

9.4 Hoist way Cables. Replace hoist way cables for all cars.

9.4.1 Hoisting ropes shall be designed for elevator service, with flexible construction traction steel with lubricated fiber core; sized and provided with number of strands to suit loading imposed. Ropes shall be free of kinks and displaced or broken wires. Provide sheet metal and angle iron guards at openings in machine room floor and as required to protect personnel from accidental contact.

9.5 Governors and Safety Devices: Replace governors, safety devices and ropes.

9.5.1 Provide emergency stop switch at elevator pit next to each ladder to stop elevator on emergency.

9.6 Provide additional controller and relay to sequence each elevator automatically on emergency power upon normal power failure. Modify existing relays as required.

9.7 Elevator Geared Traction and Equipment:

9.7.1 Replace present geared traction machines completely.

9.7.2 Replace all drive motors with new motors.

9.7.3 All Drive Motors shall be designed for Elevator Operation.

9.7.4 Provide a complete new brake system, complete with pins, and brake with OEM approved linings.

9.8 Performance: Rated speed shall not vary more than 5% under all loads.

9.9 Hoist way Equipment: Miscellaneous holes shall be patched, ledges over 2 inch shall be beveled as required to meet ANSI Code Requirements.

9.9.1 Inserts: Inspect, tighten, repair inserts as necessary to ensure a smooth safe ride.

9.9.2 Supports: Inspect all machine, deflector, governor, buffer, and related supports and fastenings.
9.9.3 Guide Rails: Inspect, clean, align, tighten rails to comply with ASME A17.1. File surfaces for smooth even ride. Plumb rails to existing building conditions.

9.9.4 Buffers: Inspect, clean, repair, flush, fill, lube, and paint buffers.

9.9.5 Counterweight and Guard: Provide new counterbalance to meet current Codes.

9.10 Terminal Stops:

9.10.1 Provide new upper and lower normal terminal stopping devices in hoistway to automatically stop car and counterweight from any speed attained in normal operation within top and bottom overtravels, independent of operating device, final terminal stopping devices, and buffers.

9.10.2 Provide new final terminal stopping devices for elevators arranged to automatically stop car and counterweight within top clearance and bottom overtravel independently of operation of normal terminal stopping devices, but with buffer operative. When operated, final terminal stopping device shall prevent further normal operation.

9.10.3 Provide and install a second stop switch and locate existing stop switch as required by code for each elevator.

9.10.4 Wiring:

9.10.4.1 Conductors: Provide copper insulated wiring with flame retarding and moisture resisting outer cover. Install in galvanized metal wire ways and raceways. Conductors from shaft riser to door interlocks shall be SF 2 type or equal, maximum operating temperature 392-degrees F. All terminations shall be insulated to maintain integrity of wiring. Flexible conduit may be used for short connections. Provide 10-percent conductors throughout.

9.10.4.2 Trail Cables: UL labeled fire and moisture resistant outer braid and steel supporting strand. In addition to elevator control circuits provide four pairs of shielded RS-485 communication wires and car lighting circuits.

9.10.4.2.1 PER UK REQUIREMENTS; PROVIDE TWO (2) CAT-6A CABLES WITHIN THE TRAVELER.

9.10.4.3 Provide Security Reader wiring. Prevent cables from rubbing or chafing against hoist way or car items.

9.10.5 Data/Communications:

9.10.5.1 Furnish data line terminated in a telephone jack in each elevator equipment room.

9.10.5.2 Furnish two (2) telephone lines in each elevator equipment room. One line is to be used for the emergency call system and one line is to be used for a remote monitoring system. The University will be responsible for activation of the telephone lines.

9.10.5.2 The elevator is to be connected to the existing Tridium Building Automation System. All associated hardware, software, cabling and conduit for a complete connection to the system is to be included as part of the elevator contract. Connection is to be made via BacNet/IP, BacNet/MSTP or Modbus protocols.
9.11 **Traveling Cables:** Provide new traveling cables designed for elevator service in accordance with NFPA 70, and suspend, anchor and run so that strain on individual cable connectors is minimized and connections to terminal blocks are free of strain. Pad or shield areas that contact hoistway construction. Color code each conductor and indelibly label each terminal connection. Provide (5) sets of spare travel cable for future use.

9.12 **Governors & Safety Devices:** Furnish and install new governors and safety devices suitable for duty involved. Provide new governor ropes.

9.13 **Door beam detector** shall have cross beams.

9.14 **Door operator equipment** that includes drive operator, hangers, locks, closures, etc. shall be as manufactured by GAL Manufacturing Corp.

9.15 **Elevator cab floors** shall be terrazzo.

9.15.1 **Epoxy-Resin Terrazzo:** Comply with NTMA's "Terrazzo Specifications and Design Guide" and manufacturer's written instructions for matrix and aggregate proportions and mixing.

9.15.1.1 **Products:** Subject to compliance with requirements, provide one of the following:
- General Polymers Corporation; Terrazzo 1100.
- Key Resin Company; Key Epoxy Terrazzo.
- Master Terrazzo Technologies LLC; Morricite.
- Quadrant Chemical Corporation; Quadset Epoxy Terrazzo.
- TEC Specialty Construction Brands, Inc.; Tuff-Lite Epoxy Terrazzo.
- Terrazzo & Marble Supply Companies; Terroxy Resin Systems.
- Thickness: 1/4 inch nominal.
- Custom Mix Color and Pattern: As selected by architecture from manufacturers full range.

9.15.2 **Materials:**

9.15.2.1 **Flexible Reinforcing Membrane:** Manufacturer's resinous membrane for substrate-crack preparation and reflective-crack reduction.

9.15.2.1.1 Reinforcement: Fiberglass scrim.

9.15.2.2 **Primer:** Manufacturer's product recommended for substrate and use indicated.

9.15.2.3 **Epoxy-Resin Matrix:** Manufacturer's standard recommended for use indicated and in color required for mix indicated.

9.15.2.3.1 **Physical Properties without Aggregates:**

9.15.2.3.1.1 Hardness: 60 to 85 per ASTM D 2240, Shore D.

9.15.2.3.1.2 Minimum Tensile Strength: 3000 psi per ASTM D 638 for a 2-inch specimen made using a "C" die per ASTM D 412.

9.15.2.3.1.3 Minimum Compressive Strength: 10,000 psi per ASTM D 695, Specimen B cylinder.

9.15.2.3.1.4 Chemical Resistance: No deleterious effects by contaminants listed below after seven-day immersion at room temperature per ASTM D 1308.
.1 Distilled water.
.2 Mineral water.
.3 Isopropanol.
.4 Ethanol.
.5 0.025 percent detergent solution.
.6 1.0 percent soap solution.
.7 10 percent sodium hydroxide.
.8 10 percent hydrochloric acid.
.9 30 percent sulfuric acid.
.10 5 percent acetic acid.

9.15.2.3.2 Physical Properties with Aggregates: For resin blended with Georgia white marble, ground, grouted, and cured per requirements in NTMA's "Terrazzo Specifications and Design Guide"; comply with the following:

9.15.2.3.2.1 Flammability: Self-extinguishing, maximum extent of burning 1/4 inch per ASTM D 635.
9.15.2.3.2.2 Thermal Coefficient of Linear Expansion: 0.0025 inch/inch per deg F for temperature range of minus 12 to plus 140 deg F per ASTM D 696.

9.15.2.4 Aggregates: Comply with NTMA gradation standards for mix indicated and contain no deleterious or foreign matter.

9.15.2.4.1 Abrasion and Impact Resistance: Less than 40 percent loss per ASTM C 131.
9.15.2.4.2 24-Hour Absorption Rate: Less than 0.75 percent.
9.15.2.4.3 Dust Content: Less than 1.0 percent by weight.

9.15.2.5 Finishing Grout: Resin based.

10. EXECUTION

10.1 Execution of Building and Contract Documents

10.1.1 The Contractor shall examine the supporting structure and the conditions under which the work shall be installed and notify the Owner of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the installation until unsatisfactory conditions have been corrected and are acceptable.

10.1.2 Verify dimensions of supporting structure at the site by accurate field measurements. The work shall be accurately fabricated and fitted to the structure. Contractor shall be satisfied by review of the working drawings and field observation that the clearances and the alignments are proper for the installation of this work.

10.1.3 Coordinate works with the work of other trades, and provide items to be placed during the installation at the proper time to avoid delays.

10.1.4 The Contractor shall review the drawings and verify all conditions for proper installation of this work. Verify the size of all electrical feeders and related equipment and furnish all equipment for proper operation.
10.2 Installation

10.2.1 Fully comply with manufacturer’s written instructions.

10.2.2 Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts designed to effectively prevent transmission of vibrations to structure and thereby eliminate sources of structure-borne noise emanating from elevator system.

10.2.3 Lubricate operating parts of systems as recommended by manufacturers.

10.3 Adjusting, Cleaning, Lubrication and Painting

10.3.1 Perform the following work prior to final testing and acceptance.

10.3.1.1 Adjust all equipment for optimum performance, including controllers, motors, drives, landing systems, hoist way switches, door operating equipment and safety equipment to achieve the required performance levels.

10.3.1.2 Thoroughly clean all equipment areas free of all dust, dirt, debris and excessive oil and grease.

10.3.1.3 Lubricate all equipment in accordance with manufacturer’s guidelines.

10.3.1.4 Patch and paint exposed work soiled or damaged during installation. Repair to match adjoining work prior final acceptance.

10.3.1.5 Clean the elevator pit and machine room.

11. TESTING

11.1 Perform all acceptance tests as required and recommended by Code and also perform other tests, if any, as required by governing regulations. Advise the Engineer, Owner and Inspection Department of governing agencies in advance of dates and times that tests are to be performed on the elevator.

11.2 Acceptance Testing: Upon nominal completion of each elevator refurbishment and before permitting use of elevator (either temporary or permanent), perform acceptance tests as outlined in ASTM A17.1. That inspection procedure shall form a part of final inspection. Furnish all test instruments and materials required at time of final inspection to determine compliance of work with contract requirements. Perform the following tests.

11.2.1 Full Load - Run Test: Subject elevator to full specified rated load run continuously for one hour. During test, stop car at all floors in both travel directions for standing periods of 10 sec. per floor.

11.2.2 Speed Test: Determine actual elevator speed in both directions with full contract load and no load in car. Proceed and follow full load-run tests with tests. Measure speed by applying tachometer to car hoist cables. Measured speed of car with all loads in any direction shall be within 5% of specified rated speed.

11.2.3 Car Leveling Tests: Test leveling devices at all floors for accuracy with no load and full load, in both directions. Verify compliance within specification limits both before and after full load-run tests.
11.2.4 Emergency Operation Test: Perform functional tests of Fireman’s Service & Emergency Power recall systems.

11.2.5 Car & Counterweight Safety and Governor Test: Test as specified in ANSI/ASME A17.1. Full load and 125% overload tests are required.

11.2.6 Oil Buffer Tests: Test oil buffers for car and counterweight as specified in ANSI/ASME A17.1.

11.2.7 Performance Standards: Demonstrate that the elevators, as refurbished, meet the following performance criteria: (NEII Vertical Transportation Standards 1994 Supplement)

- Acceleration: 5 Ft/Sec\(^2\) with initial ramp of 0.5-0.75 seconds.
- Deceleration: 5 Ft/Sec\(^2\) with initial ramp of 0.5-0.75 seconds.
- Max. Jerk Rate: Less than 8 Ft/Sec\(^3\)
- Vertical Vibration: Less than 15 mg
- Horizontal Vibration - S/S: Less than 12 mg peak to peak within 1-10 mz.
- Horizontal Vibration - F/B: Less than 25 mg peak to peak within 1-10 mz.
- Stopping Zone ± ½”
- Performance Time: Less than 9.5 sec.
- Door Opening Time: Less than 2.0 sec.
- Door Sound: Less than 45 dbA measured in elevator lobby 10 feet from elevator doors.
- Sound in Car Rated Speed: Less than 50 dbA measured 5 feet above cab floor.
- Sound in Stopped Car w/Fan On: Less than 50 kdA measured 5 feet above cab floor.
- Sound in Machine Room: Less than 80 dbA measured 3 feet above equipment.

12. INSTRUCTION

12.1 Engage a factory-authorized service representative to train Owner’s maintenance personnel to operate, adjust, and maintain elevator(s). Provide at least 8 hours of instruction schedule over a minimum of two separate sessions on different days.

12.2 Check operation of each elevator with Owner’s personnel present and before date of Substantial Completion. Determine that operation systems and devices are functioning properly.

12.3 Check operation of each elevator with Owner’s personnel present not more than one month before end of warranty period. Determine that operation systems and devices are functioning properly.

12.4 Upon completion of all work, the Contractor shall provide an instruction period. Instructions shall be given by competent supervisory personnel and shall apply to actual field conditions. The instructions shall cover, but shall not be limited to the following:

12.4.1 Operation of elevators under emergency conditions, maintenance, adjustment, troubleshooting and diagnostic procedures.

12.4.2 Operation of elevator fire recall system and tenant security system.

12.4.3 Operation of elevator communication, door reversal device, etc.
13. MAINTENANCE DATA

13.1 Wiring diagrams: Provide one complete set of schematic wiring diagrams for each elevator. Diagrams shall match every circuit of elevator system. When elevators have been completely adjusted, changes shall be noted on schematic wiring diagrams and three new complete sets given to Owner. They also shall include a complete list of symbols and relays and a write-up on their functions. Prints shall be property of Owner. Do not stamp prints: “Property of elevator company.”

13.2 Parts Book: Provide a complete parts book. Book shall have elevator equipment listed with a description, a picture and a current part number. It shall include a print(s) of controller (relay panel, starter panel, selector panel) to show apparatus and their exact location. Number apparatus on these prints; include number in parts book for proper identification. Include the following: job name, address, voltages, major equipment, features of elevator, type of door equipment, type of safeties, and names of superintendent and field personnel who have installed equipment. Include a list of parts and quantity needed for stocking. Book shall be property of Owner. Do not stamp: “Property of elevator company”.

13.3 Maintenance manual and lubrication charts: Provide a maintenance manual which shall include a troubleshooting section, lubrication charts and proper lubricant to be used, including an alternate (other than elevator manufacturer’s product).

13.4 Solid state equipment: Along with solid state equipment being installed, if there are any special tools, manuals or equipment of any kind needed to either maintain or adjust equipment, they shall be available for either rent or purchase by Owner. These items shall be made available upon request with no longer than a 90-day waiting period. Elevator company shall also guarantee in wiring that equipment will not become obsolete for a period of not less than 20 years, mainly including solid state boards. Solid state equipment shall also have a delivery of no longer than 90 days.

14. SHOP DRAWINGS AND RELATED SUBMITTALS

14.1 Submittals shall be made in accordance with paragraph 9 of Section 14010.

14.2 Corrections or comments made on the shop drawings during the Engineer's review do not relieve the Elevator Contractor from compliance with the Drawings and Specifications. The Engineer's review of shop drawings is only for general conformance with design concept and general compliance with the information given in the Contract Documents. The Elevator Contractor's responsibility includes, but is not limited to, confirming and correlation all quantities and dimensions, selecting fabrication process and techniques and construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.

14.3 Shop drawings, consisting of manufacturer's catalog data, dimensional data, and specification data shall be submitted on the following:

14.3.1 Microprocessor Control System.
14.3.2 Control Panel.
14.3.3 Hall call stations.
14.3.4 VVVF Elevator rated motors.
14.3.5 Infrared door protection system
14.3.6 Car Position Indicators
14.3.7 Emergency Communication Equipment
14.3.8 Hall Lanterns
14.3.9 Hall Position Indicators
14.3.10 Braille Floor Designation
14.3.11 Car Control Panel Elevation

END OF SECTION
SECTION 16121 - WIRING SYSTEMS - 600 VOLTS AND UNDER

1. GENERAL

1.1 This section specifies the material, installation, and performance requirements for the wiring systems which operate at 600 volts or less.

1.2 Reference to manufacturers by name, make or catalog number shall be interpreted as establishing a minimum standard of quality and shall not be construed as limited competition. If only one manufacturer’s product is acceptable, it will be so stated.

1.3 All quantities of each item of specified material and equipment shall be provided by one manufacturer.

2. MATERIAL AND EQUIPMENT

2.1 The wire and cable as specified herein shall be in accordance with the standards and codes applicable to the types of wire being used.

2.2 Insulated Conductors.

2.2.1 Conductors shall be the types listed herein.

2.2.1.1 Building wires shall be types THHN, THWN, and XHHW.

2.2.2 Conductors No. 8 and smaller shall be solid. Larger conductors shall be stranded.

2.2.3 Type THHN shall be 600 volts, heat resistant thermoplastic insulated, nylon jacketed, single conductor copper cable and shall be rated 90 degrees C maximum conductor temperature in damp and dry locations.

2.2.4 Type THWN shall be 600 volts, heat and moisture resistant thermoplastic insulated, nylon jacketed single conductor copper cable and shall be rated 75 degrees C maximum conductor temperature in wet and dry locations.

2.2.5 Type XHHW shall be 600 volts, cross-linked synthetic polymer insulated, single conductor copper cable and shall be rated 90 degrees C maximum conductor temperature in damp and dry locations and shall be rated 75 degrees C maximum conductor temperature in wet locations.

2.3 Wire connectors shall have a flame retardant thermoplastic shell and plated steel, square wire springs. Connectors shall be rated 105 degrees C. Wire connectors shall be Thomas & Betts “Freespring” series or equal.

2.4 Cable ties shall be self-locking nylon type. Cable ties shall be Thomas & Betts series 13-239 or equal.

2.5 Wire and cable shall be manufactured with material selection tests as described in ASTM D3291 and EN 50497 to prevent plasticizer exudation from PVC insulated and sheathed cables.

2.6 Electrical tape shall be 7 mil flame retardant vinyl. Tape shall be rated 105 degrees C. Electrical tape shall be 3M “Super 33+” or equal.
3. INSTALLATION

3.1 Branch circuit and feeder conductors shall not be smaller than #12 AWG.

3.2 Control circuit conductors shall not be smaller than #14 AWG.

3.3 Feeder conductors and #8 and larger insulated conductors used for branch circuits shall be type THWN or XHHW.

3.4 Control circuit conductors shall be type THWN or XHHW.

3.5 All joints between conductors shall be made with wire connectors. Splices shall be in boxes and shall be accessible.

3.6 No wiring shall be pulled until construction is such that there is no danger of moisture entering open raceways. Protect all openings with caps or plugs until final connections are made. Conduit shall be swabbed clean before pulling conductors.

3.7 No thermoplastic conductors shall be pulled through raceways at ambient temperatures below 33°F.

3.8 All insulated bushings shall be installed before pulling conductors.

3.9 All wiring in panel gutters, pull boxes, and other accessible enclosures shall be tied and bundled with cable ties.

3.10 Wiring shall be installed continuously between terminal points indicated or dictated by field conditions without intermediate splices or taps unless specifically authorized by the Engineer. Splices shall be made only in junction or terminal boxes.

3.11 Feeder cables shall be spliced only at tap points. Splices of any other nature shall not be permitted.

3.12 Conductors shall not be subject to pulling tension in excess of 50 percent of yield strength of conductor. Pulling lugs shall be attached to conductor with a sleeve or grip over the cable sheath to prevent slipping the insulation.

3.13 Where terminals and splices are taped with insulation tape, apply a minimum of two layers of electrical tape, half-lapped.

4. SHOP DRAWINGS AND RELATED SUBMITTALS.

4.1 Submittals shall be made in accordance with paragraph “SUBMITTAL” of Section 14010.

4.2 Corrections or comments made on the shop drawings during the Engineer's review do not relieve the Contractor from compliance with the Drawings and Specifications. The Engineer's review of shop drawings is only for general conformance with design concept and general compliance with the information given in the Contract Documents. The Contractor's responsibility includes, but is not limited to, conforming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.
4.3 Shop drawings consisting of manufacturer's catalog data shall be submitted on the following:

4.4 Wire, each type.

END OF SECTION
SECTION 16131 - RACEWAY SYSTEMS

1. GENERAL

1.1 This section specifies the material, installation, and performance requirements for the following:

1.1.1 Electrical metallic tubing (EMT)

1.1.2 Flexible conduit

1.1.3 Outlet boxes, junction boxes, and pull boxes

1.1.4 Fittings

1.1.5 Hangers

1.2 Reference to manufacturers by name, make, or catalog number shall be interpreted as establishing a minimum standard of quality and shall not be construed as limited competition. If only one manufacturer’s product is acceptable, it will be so stated.

1.3 All quantities of each item of specified material and equipment shall be provided by one manufacturer.

2. MATERIAL AND EQUIPMENT

2.1 Conduit.

2.1.1 All exposed and concealed conduit shall be EMT unless noted otherwise.

2.1.2 All metallic conduit shall be tubular mild steel, circular in cross section, and of uniform wall thickness. Aluminum conduit will not be permitted.

2.1.3 Electrical metallic tubing (EMT) shall be galvanized on the outside by the electro-galvanizing process. The interior surface shall have a zinc, enamel, or other suitable corrosion-resistant coating. Electrical metallic tubing shall conform with the requirements of Underwriter’s Laboratories Standard UL 797, ANSI C80.3, and Federal Specification WW-C-563.

2.1.4 Flexible Conduit.

2.1.4.1 Flexible steel conduit shall be of the single strip type, mild steel, continuous length of uniform weight and thickness.

2.1.4.2 The steel strip shall be galvanized by the hot dip process and then shaped into interlocking convolutions.

2.1.4.3 Liquid tight flexible steel conduit shall have a neoprene jacket.

2.1.4.4 Flexible steel conduit shall conform with the requirements of Underwriter’s Laboratories Standard UL 1 and Federal Specification WW-C-566.
2.1.4.5 Liquid tight flexible steel conduit shall conform with the requirements of Underwriters’ Laboratories Standard UL 360.

2.2 Outlet Boxes, Junction Boxes, and Pull Boxes.

2.2.1 Outlet boxes shall be manufactured of stamped steel with a hot dipped galvanized finish and shall have a minimum depth of 1-1/2 inches.

2.2.2 Boxes in concrete construction shall be approved concrete type.

2.2.3 Weatherproof outlet boxes shall be cast malleable iron type with threaded hubs and vellumoid gasket.

2.2.4 Junction boxes shall be square stamped steel with a blank cover. Pull boxes shall be manufactured of code gauge steel with either a hinged or screw type cover.

2.2.5 Outlet boxes and junction boxes shall conform with the requirements of Underwriters’ Laboratories Standard 514 and NEMA Standard OS 1.

2.2.6 Pull boxes shall conform with the requirements of Underwriters’ Laboratories Standard UL 50.

2.3 Conduit Fittings.

2.3.1 Electrical Metallic Tubing (EMT).

2.3.1.1 Couplings and Connectors for EMT shall be compression for 2 inches and smaller conduit. Set screw or compression may be used for 2 1/2 inch and large conduit.

2.3.1.2 Compression type EMT couplings shall be zinc plated steel or malleable iron. Compression type EMT couplings shall be Thomas & Betts series 5120 or approved equal.

2.3.1.3 Compression type EMT connectors shall be zinc plated steel or malleable iron. Compression type connectors shall have a nylon insulated throat and shall have a hardened steel locknut. Compression type EMT connectors shall be Thomas & Betts series 5123 or approved equal.

2.3.1.4 Set screw type EMT couplings shall be zinc plated steel. Set screw type couplings shall have hardened steel set screws and shall be concrete tight without tape. Set screw type EMT couplings shall be Thomas & Betts series TK-121 or approved equal.

2.3.1.5 Set screw type EMT connectors shall be zinc plated steel. Set screw type connectors shall have a nylon insulated throat, shall have a hardened steel locknut and set screw, and shall be concrete tight without tape. Set screw type EMT connectors shall be Thomas & Betts series TC-721 or approved equal.

2.3.2 Flexible Conduit.

2.3.2.1 Straight connectors shall be zinc plated steel or malleable iron. Connectors shall be the squeeze type, shall have an insulated throat, and shall have a hardened steel locknut. Straight connectors shall be OZ/Gedney series C and 24 or approved equal.
2.3.2.2 EMT to flexible conduit connector shall be zinc plated steel or malleable iron. Connectors shall be the compression type on the EMT end and squeeze type on the flexible conduit end. EMT to flexible conduit connectors shall be OZ/Gedney series 9050 or approved equal.

2.3.3 Liquid Tight Flexible Conduit.

2.3.3.1 Straight connectors shall be zinc plated steel or malleable iron. Connectors shall be the compression type, shall have a sealing ring and insulated throat, and shall have a hardened steel locknut. Straight connectors shall be Thomas & Betts series 5331 or approved equal.

2.3.3.2 Sealing gaskets shall consist of an oil resistant and moisture resistant rubber seal bonded to a stainless steel retainer. Sealing gaskets for liquid tight flexible conduit fittings shall be Thomas & Betts series 5262 or approved equal.

2.4 Hangers.

2.4.1 One hole straps for electrical metallic tubing shall be steel and shall be Thomas & Betts series 4159 or equal.

2.4.2 Conduit clamps shall be steel and shall be Steel City series 6H or equal.

2.4.3 Conduit beam clamps shall be Thomas & Betts series 690 or equal.

2.4.4 Beam clamps shall be zinc plated malleable iron, shall have hardened steel cup-point set screw, shall be tapped in base and back, and shall be Steel City series 500 or equal.

2.4.5 Adjustable beam clamps shall be steel and shall be Thomas & Betts series 700, or equal.

2.4.6 Trapeze hangers, fabricated from standard steel channel sections, hanger rods, support clamps, and conduit clamps shall be Unistrut P-1000 with pipe clamps P-1100 and P-1400 series, or equal.

3. INSTALLATION

3.1 Conduit.

3.1.1 Metallic conduit shall be electrical metallic tubing unless specified otherwise.

3.1.2 Flexible Metal Conduit.

3.1.2.1 Final connection to all motors and other equipment subject to movement or vibration shall be made with flexible metal conduit. Length of flexible conduit shall not exceed 36 inches.

3.1.2.2 Flexible metal conduit in wet locations shall be the liquid tight type.

3.1.3 The minimum conduit size shall be 3/4 inch.

3.1.4 Conduit shall be run with smooth, easy bends. Exposed conduit shall be run parallel or perpendicular to walls, ceilings, beams, and columns. Concealed conduit may be run at angles other than parallel or perpendicular to building lines but shall be grouped in a neat and workmanlike manner. Dissimilar angles and crisscross arrangement will not be acceptable.
3.1.5 Conduit bends and elbows shall be long-sweep, large radii when required by cable manufacturer.

3.1.6 Conduit, whether concealed or exposed, shall be adequately supported in accordance with the National Electrical Code requirements and good practice. Conduit shall be securely fastened in place within 3 feet of each outlet box, junction box, cabinet, or fitting and shall be supported at least every 10 feet.

3.1.7 Single runs of conduit shall be fastened to walls with one-hole straps or conduit clamps and to beams or trusses with beam clamps.

3.1.8 Parallel runs of conduit shall be grouped and fastened to walls with wall brackets of steel channel or knee-braced angles and to beams and trusses with adjustable beam clamps or trapeze hangers.

3.1.9 Trapeze hangers shall be supported by steel rods of sufficient diameter to support conduit from joists or concrete construction. Where desired or required, conduit may be double mounted on trapeze hangers. Wherever possible, conduit shall be top mounted on trapeze hangers with each conduit individually clamped to trapeze hangers.

3.1.10 Where conduits are run vertically, approved riser clamps, brackets, or other means shall be utilized to support conduit at 8'-0" center to center, maximum.

3.1.11 No conduit shall be supported by the equipment to which it is connected.

3.1.12 For concrete construction, utilize adjustable concrete inserts for fasteners except that expansion anchors shall be used for heavy loading conditions and power driven devices may be used for light loading conditions. Utilize beam clamps for fastening to steel joists and beams.

3.1.13 Perforated band iron, piano wire, or steel wire hangers will not be permitted as conduit hangers or supports. Conduit shall not be hung from wire supporting ceiling grid systems.

3.1.14 Conduit shall not be secured directly to other piping. Conduit parallel with or crossing uninsulated hot water or steam pipes shall be separated from them by 12 inches if parallel, or 6 inches if crossing. Where these lines are insulated, conduit parallel with or crossing under them shall clear the insulated surface by 2 inches.

3.1.15 All conduit shall be swabbed and cleaned before pulling wire.

3.1.16 Metallic conduit systems shall be electrically continuous in their entirety.

3.1.17 All conduit shall be capped before concrete is poured.

3.2 Outlet Boxes, Pull Boxes, and Junction Boxes.

3.2.1 Outlet boxes shall be provided for all devices.

3.2.2 Pull boxes or junction boxes shall be provided at all points of splicing and tapping.

3.2.3 Square cornered boxes shall be provided in block and brick wall construction.
3.2.4 Boxes and supports shall be fastened to wood with wood screws or screw-type nails of equal holding strength with bolts and expansion shields on concrete or brick, with toggle bolts on hollow masonry block and with screws or welded studs on steel work.

3.2.5 Threaded studs driven in by powder charge and provided with lock washers and nuts, or nail-type nylon anchors, may be used in lieu of wood screws, expansion shields or machine screws.

3.2.6 Outlet boxes in lay-in ceilings shall be supported by bar hangers anchored to the ceiling construction.

3.2.7 Connections between outlet boxes on the opposite sides of a wall shall be made with conduit employing the use of two 90 degree bends from box to box.

3.3 Fittings

3.3.1 Fittings shall be installed in all raceways at terminating points, couplings, and expansion joints.

3.3.2 In wet locations, a sealing bushing shall be provided between the enclosure and the locknut on the exterior of the box.

3.3.3 When terminating liquid tight flexible conduit in a sheet metal enclosure, provide a sealing gasket between the connector and the box.

3.3.4 Expansion fittings with bonding jumpers shall be provided at concrete expansion joints.

4. SHOP DRAWINGS AND RELATED SUBMITTALS.

4.1 Submittals shall be made in accordance with paragraph “SUBMITTALS” of Section 14010.

4.2 Corrections or comments made on the shop drawings during the Architect's review do not relieve the Contractor from compliance with the Drawings and Specifications. The Architect's review of shop drawings is only for general conformance with design concept and general compliance with the information given in the Contract Documents. The Contractor's responsibility includes, but is not limited to, confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.

4.3 Shop drawings consisting of manufacturer's catalog data shall be submitted on the following:

4.3.1 Conduit, each type.

END OF SECTION
SECTION 16411 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

1. GENERAL

1.1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

2. SUMMARY

2.1 Section Includes:

2.1.1 Fusible switches.
2.1.2 Molded-case circuit breakers (MCCBs).
2.1.3 Enclosures.

3. SUBMITTALS

3.1 Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include nameplate ratings, dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.

3.1.1 Enclosure types.
3.1.2 Current and voltage ratings.
3.1.3 Short-circuit current ratings (interrupting and withstand, as appropriate).

4. MAINTENANCE MATERIAL SUBMITTALS

4.1 Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

4.1.1 Fuses: Three of each size and type.

5. WARRANTY

5.1 Manufacturer’s Warranty: Manufacturer and Installer agree to repair or replace components that fail in materials or workmanship within one year from date of Substantial Completion.
6. PRODUCTS

6.1 Source Limitations: Obtain enclosed switches and circuit breakers, overcurrent protective devices, components, and accessories, within same product category, from single manufacturer.

6.2 Product Selection for Restricted Space: Drawings indicate maximum dimensions for enclosed switches and circuit breakers, including clearances between enclosures, and adjacent surfaces and other items. Comply with indicated maximum dimensions.

6.3 Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by an NRTL, and marked for intended location and application.

6.4 Comply with NFPA 70.

7. FUSIBLE SWITCHES

7.1 Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

7.1.1 Eaton.
7.1.2 General Electric Company.
7.1.3 SIEMENS Industry, Inc.; Energy Management Division.
7.1.4 Square D; by Schneider Electric.

7.1.5 Type HD, Heavy Duty:

7.1.5.1 Single throw.
7.1.5.2 Three pole and single pole as indicated.
7.1.5.3 240-V ac.
7.1.5.4 UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate indicated fuses.
7.1.5.6 Lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

7.1.6 Accessories:

7.1.6.1 Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
7.1.6.2 Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
7.1.6.3 Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are specified.
7.1.6.4 Lugs: Mechanical type, suitable for number, size, and conductor material.
8. MOLDED-CASE CIRCUIT BREAKERS

8.1 Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

8.1.1 Eaton.
8.1.2 General Electric Company.
8.1.3 SIEMENS Industry, Inc.; Energy Management Division.
8.1.4 Square D; by Schneider Electric.

8.1.5 Circuit breakers shall be constructed using glass-reinforced insulating material. Current carrying components shall be completely isolated from the handle and the accessory mounting area.

8.1.6 Circuit breakers shall have a toggle operating mechanism with common tripping of all poles, which provides quick-make, quick-break contact action. The circuit-breaker handle shall be over center, be trip free, and reside in a tripped position between on and off to provide local trip indication. Circuit-breaker escutcheon shall be clearly marked on and off.

8.1.7 The maximum ampere rating and UL, IEC, or other certification standards with applicable voltage systems and corresponding interrupting ratings shall be clearly marked on face of circuit breaker. Circuit breakers shall be 100 percent rated.

8.1.8 MCCBs shall be equipped with a device for locking in the isolated position.

8.1.9 Lugs shall be suitable for 140 deg F (60 deg C) rated wire on 125-A circuit breakers and below.

8.1.10 Standard: Comply with UL 489 with interrupting capacity to comply with available fault currents.


8.1.11 Features and Accessories:

8.1.11.1 Standard frame sizes, trip ratings, and number of poles.
8.1.11.2 Lugs: Mechanical type, suitable for number, size, trip ratings, and conductor material.
8.1.11.3 Application Listing: Appropriate for application.
8.1.11.4 Shunt Trip: Trip coil energized from separate circuit, with coil-clearing contact.
8.1.11.5 Auxiliary Contacts: One SPDT switch with "a" and "b" contacts; "a" contacts mimic circuit-breaker contacts, "b" contacts operate in reverse of circuit-breaker contacts.
9. ENCLOSURES

9.1 Enclosed Switches and Circuit Breakers: UL 489, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.

9.2 Enclosure Finish: The enclosure shall be finished with gray baked enamel paint, electrodeposited on cleaned, phosphatized steel (NEMA 250 Type 1).

9.3 Operating Mechanism: The circuit-breaker operating handle shall be directly operable through the front cover of the enclosure (NEMA 250 Type 1). The cover interlock mechanism shall have an externally operated override. The override shall not permanently disable the interlock mechanism, which shall return to the locked position once the override is released. The tool used to override the cover interlock mechanism shall not be required to enter the enclosure in order to override the interlock.

10. EXAMINATION

10.1 Examine elements and surfaces to receive enclosed switches and circuit breakers for compliance with installation tolerances and other conditions affecting performance of the Work.

10.2 Proceed with installation only after unsatisfactory conditions have been corrected.

11. ENCLOSURE ENVIRONMENTAL RATING APPLICATIONS

11.1 Enclosed Switches and Circuit Breakers: Provide enclosures at installed locations with the following environmental ratings.

11.1.1 Indoor, Dry and Clean Locations: NEMA 250, Type 1.

12. INSTALLATION

12.1 Coordinate layout and installation of switches, circuit breakers, and components with equipment served and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

12.2 Install individual wall-mounted switches and circuit breakers with tops at uniform height unless otherwise indicated.

12.3 Install fuses in fusible devices.

12.4 Comply with NFPA 70 and NECA 1.
13. IDENTIFICATION

13.1 Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.

13.2 Label each enclosure with engraved metal or laminated-plastic nameplate.

14. FIELD QUALITY CONTROL

14.1 Perform tests and inspections.

14.2 Tests and Inspections for Switches:

14.2.1 Visual and Mechanical Inspection:

14.2.1.1 Inspect physical and mechanical condition.
14.2.1.2 Inspect anchorage, alignment, grounding, and clearances.
14.2.1.3 Verify that the unit is clean.
14.2.1.4 Verify blade alignment, blade penetration, travel stops, and mechanical operation.
14.2.1.5 Verify that fuse sizes and types match the Specifications and Drawings.
14.2.1.6 Verify that each fuse has adequate mechanical support and contact integrity.
14.2.1.7 Inspect bolted electrical connections for high resistance.
14.2.1.8 Verify correct phase barrier installation.
14.2.1.9 Verify lubrication of moving current-carrying parts and moving and sliding surfaces.

14.2.2 Electrical Tests:

14.2.2.1 Perform resistance measurements through bolted connections with a low-resistance ohmmeter.
14.2.2.2 Compare bolted connection resistance values to values of similar connections. Investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
14.2.2.3 Measure contact resistance across each switchblade fuseholder. Drop values shall not exceed the high level of the manufacturer's published data. If manufacturer's published data are not available, investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
14.2.2.4 Perform insulation-resistance tests for one minute on each pole, phase-to-phase and phase-to-ground with switch closed, and across each open pole. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1 from the NETA ATS.
14.2.2.5 Investigate values of insulation resistance less than those published in Table 100.1 or as recommended in manufacturer's published data.
14.2.2.6 Measure fuse resistance. Investigate fuse-resistance values that deviate from each other by more than 15 percent.
14.3 Tests and Inspections for Molded Case Circuit Breakers:

14.3.1 Visual and Mechanical Inspection:

14.3.1.1 Verify that equipment nameplate data are as described in the Specifications and shown on the Drawings.
14.3.1.2 Inspect physical and mechanical condition.
14.3.1.3 Inspect anchorage, alignment, grounding, and clearances.
14.3.1.4 Verify that the unit is clean.
14.3.1.5 Operate the circuit breaker to ensure smooth operation.
14.3.1.6 Inspect bolted electrical connections for high resistance.
14.3.1.7 Inspect operating mechanism and contacts.

14.3.2 Electrical Tests:

14.3.2.1 Perform resistance measurements through bolted connections with a low-resistance ohmmeter. Compare bolted connection resistance values to values of similar connections. Investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
14.3.2.2 Perform insulation-resistance tests for one minute on each pole, phase-to-phase and phase-to-ground with circuit breaker closed, and across each open pole. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1 from the NETA ATS. Investigate values of insulation resistance less than those published in Table 100.1 or as recommended in manufacturer's published data.
14.3.2.3 Perform a contact/pole resistance test. Drop values shall not exceed the high level of the manufacturer's published data. If manufacturer's published data are not available, investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.

14.3.2.3.1 Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

14.3.3 Enclosed switches and circuit breakers will be considered defective if they do not pass tests and inspections.

15. ADJUSTING

15.1 Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.

END OF SECTION
SECTION 16491 - FUSES

1. GENERAL

1.1 This section specifies the material, installation, and performance requirements for fuses.

1.2 Reference to manufacturers by name, make, or catalog number shall be interpreted as establishing a minimum standard of quality and shall not be construed as limiting competition. If only one manufacturer’s product is acceptable, it will be so stated.

1.3 All fuses shall be provided by one manufacturer.

2. MATERIAL AND EQUIPMENT

2.1 All fuses shall be current limiting with 200,000 amperes interrupting capacity, and shall be certified by Underwriters' Laboratories, Inc., to have interrupting capacities adequate and proper for the system in which they are placed.

2.2 Fuses 600 ampere and smaller shall be Underwriter's Laboratories, Inc., Class RK-5.

2.2.1 Class RK-5 fuses shall have standard dimensions, and shall be dual-element, time delay type. Fuses shall be Bussman Type FRN-R or FRS-R, Littelfuse Type FLN-R or FLS-R, or approved equal.

3. INSTALLATION

3.1 No fuses shall be installed in the equipment until the installation is complete, including thorough cleaning, tightening of all electrical connections, and inspection of all ground and grounding conductors. Fuses shall not be shipped installed in equipment and shall not be shipped to job site until equipment and systems are ready to be energized.

3.2 UL Class RK-5 fuses shall be installed in all fusible switches.

3.3 Three spare fuses for each size and type of fuse installed shall be furnished and turned over to the Owner.

3.4 A fuse identification label showing the fuse size and type shall be placed inside the door of each fused switch.

3.5 Provide fuse reducers where fuse clips are spaced larger than the fuse size required.

3.6 After all tests have been completed, all fuses necessary for the complete system shall be installed.

4. SHOP DRAWINGS AND RELATED SUBMITTALS.

4.1 Submittals shall be made in accordance with paragraph “SUBMITTAL” of Section 14010.

4.2 Corrections or comments made on the shop drawings during the Engineer's review do not relieve the Contractor from compliance with the Drawings and Specifications. The Engineer's review of shop drawings is only for general conformance with design concept and general compliance with the information given in the Contract Documents. The Contractor's responsibility
includes, but is not limited to, confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.

4.3 Shop drawings, consisting of manufacturer's catalog data shall be submitted for Class RK-5 fuses.

END OF SECTION