

Request for Proposal UK-2137-21 Proposal Due Date – 02/04/2021

Student Center Dining Facilities Expansion Controls for 2nd and 3rd Floor Fit-up

Project #2530.0

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UNIVERSITY OF KENTUCKY Purchasing Division

REQUEST FOR PROPOSAL (RFP)

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

PROPOSAL NO.: UK-2137-21 Issue Date: 01/07/2021 Title: #2530.0 Student Center Dining Facilities Expansion Controls for 2nd and 3rd Floor Fit-up Purchasing Officer: Matt Spalding Phone: 859-323-5405 RETURN ORIGINAL COPY OF PROPOSAL TO: UNIVERSITY OF KENTUCKY PURCHASING DIVISION 411 S LIMESTONE ROOM 322 PETERSON SERVICE BLDG. LEXINGTON, KY 40506-0005

IMPORTANT: PROPOSALS MUST BE RECEIVED BY: 02/04/2021 @ 3 P.M. LEXINGTON, KY TIME.

NOTICE OF REQUIREMENTS

- 1. The University's General Terms and Conditions and Instructions to Bidders, viewable at <u>www.uky.edu/Purchasing/terms.htm</u>, apply to this RFP. When the RFP includes construction services, the University's General Conditions for Construction and Instructions to Bidders, viewable at <u>www.uky.edu/Purchasing/ccphome.htm</u>, 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 Proposal 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 PROPOSAL 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:
- 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;
- That I have fully informed myself regarding the accuracy of the statement made above.

SWORN 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.

<u>CERTIFICATION OF NON-SEGREGATED FACILITIES</u> 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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8	Safety Program
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10	Accounting Procedures
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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 RFP is for the Instrumentation and Controls scope of work related to the Student Center Dining Expansion. The successful vendor's offer will be incorporated as an allowance into a subsequent Mechanical Contractor Bid for the Fit Up of the Second and Third floor of the Student Center Expansion. The successful vendor will contract with the Mechanical Contractor to complete their scope of work.

Refer to the drawings, specifications, Attachment A- General Conditions, Attachment B- Special Conditions for specific details.

The overall scope is as follows.

Contractor shall provide and furnish all hardware required for a fully functional control system per UK Standards and the project Drawings and Specifications. The equipment included in this Fit-Up included Variable Air Volume Boxes with hot water reheat and associated wall mounted thermostats.

2.2 Background Information

The Student Center Dining Expansion previously bid to construct the addition and fit-up the firstfloor dining hall and install the building air handling unit. This project will fit-up space created within the first phase. The duct mains are already installed to the second and third floor.

2.3 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.

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.

2.4 Supplier Diversity and Procurement

The University of Kentucky is committed to serve as an advocate for diverse businesses in their efforts to conduct business. Diverse Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled.

The University is committed to increasing the amount of goods and services acquired from businesses owned and controlled by diverse persons to 10% of all procurement expenditures.

The University expects its suppliers to support and assist in this effort.

Among the University's goals for DBE participation in procurement are:

- To ensure the absence of barriers that reduce the participation of diverse suppliers
- Educate vendors on "how to" do business with the University
- Support diverse vendors seeking to do business with the University in the areas of goods, services, construction, and other areas of procurement
- Encourage participation of qualified diverse vendors by directing them to agencies that can benefit from their product or service
- Provide resources for diverse vendors
- Sponsor events to assist diverse vendors in becoming active, responsible, and responsive participants in the University's purchasing opportunities

For additional information regarding how diverse suppliers may participate in this Request for Proposal, submit any questions to the Purchasing Officer as indicated in Section 3.2 by the Deadline for Written Questions date.

3.0 PROPOSAL REQUIREMENTS

3.1 Key Event Dates

Release of RFP	01/07/2021
Pre-Proposal Conference (Optional)	N/A
Deadline for Written Questions	3 p.m. Eastern Time on 01/21/2021
RFP Proposals Due	3 p.m. Eastern Time on 02/04/2021
Offeror Presentations*	02/05/2021
Contract Award*	Week of 02/08/2021

*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: <u>matthew.spalding@uky.edu</u>

All communication with the University regarding this RFP shall only be directed to the purchasing officer listed above.

3.3 <u>Pre-Proposal Conference</u>

A pre-proposal will not be held.

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 <u>Preparation of Offers</u>

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

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:** One (1) copy on an electronic storage device (CD or USB) (1 copy per storage device) each <u>clearly marked</u> with the proposal number and name, firm name and what is included (Technical Proposal) and two (2) printed copies in a single package, separate from the Financial Proposal.
- **Financial Proposal:** One (1) copy on an electronic storage device (CD or USB) (1 copy per storage device) each <u>clearly marked</u> with the proposal number and name, firm name and

what is included (Financial Proposal) and two (2) printed copies in a single package, separate from the Technical Proposal.

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 <u>Rejection</u>

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 <u>Questions</u>

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 <u>Proposal Information and Criteria</u>

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 <u>Signed Authentication of Proposal and Statements of Non-Collusion and Non-Conflict of</u> 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 <u>Transmittal Letter</u>

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:

- 1. When was your organization established and/or incorporated?
- 2. Indicate whether your organization is classified as local, regional, national, or international.
- 3. Describe the size of your company in terms of number of employees, gross sales, etc.
- 4. Is your company certified as small business, minority-owned, women-owned, veteran-owned, disabled-owned, or similar classification?
- 5. Include other demographic information that you feel may be applicable to the Request for Proposal submission.
- 6. Offeror shall describe in detail their company's commitment to diversity, equity, and inclusion. Information shall be provided as to the number of diverse individuals that the vendor employees as well as a description of vendors efforts to do business with Diverse Business Enterprises as they conduct their own business. In additional, please indicate the diversity nature of your company as well as ownership race/ethnicity.

Check One Only	Diverse Business Description (If Diverse Business, determine the classification that is the best description)	Internal Code
	Minority Owned (only)	10
	Veteran Owned and Small Business	100
	Minority and Woman and Small Business	110
	Minority and Woman and Veteran-Owned Business	120
	Minority and Veteran and Small Business	130
	Woman and Veteran and Small Business	140
	Minority and Woman and Veteran-Owned Small Business	150
	Woman Owned (only)	20
	Small Business (only)	30
	Veteran Owned (only)	40
	Minority and Woman Owned	50
	Minority and Small Business	60
	Minority and Veteran-Owned	70
	Woman Owned and Small Business	80
	Woman and Veteran-Owned	90
	Diversity not indicated	999

Race/Ethnicity	Check One
Asian	
Black/African American	
Hispanic or Latino	
Native American	
Native Hawaiian/Pacific Islander	
White	
Other	

4.5 <u>Criteria 1 - Offeror Qualifications</u>

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) Sequence of Operations Adherence (explain all deviations and exactions)
- 2) Equipment Specifications Compliance (explain all deviations and exactions)
- 3) Delivery- ability to meet construction schedule and execute in a phased manner.

4.6 <u>Criteria 2 – Services Defined</u>

Please refer to the Scope of Service and provide the information required. Include a complete spare parts listing and recommended spare parts list that the owner should keep in inventory.

Address and explain your compliance, deviations, and exceptions with regards to the Scope of Work. This includes the Specifications and Special Conditions.

4.7 <u>Criteria 3 – Financial Proposal</u>

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

Please provide and outline with descriptions as to the overall process that your company would use in the expected deliverable. This includes all events from award, submittal process, changes made during coordination, internal design and engineering, procurement of materials from suppliers, actual build times, factory testing, shipping/delivery, and any field installation values/advantages you feel your equipment adds, start-up, reaction time to investigate performance/functional issues, training, assistance during commissioning, training, as-built drawings, warranty, and turnover to owner.

4.9 <u>Criteria 5 – Other Additional Information</u>

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.

Offeror shall describe in detail their company's commitment to diversity, equity and inclusion. Information shall be provided as to the number of diverse individuals that the vendor employees as well as a description of vendors efforts to do business with Diverse Business Enterprises as they conduct their own business.

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

Please refer to and incorporate within the Offer then attached General Conditions and Special Conditions for these services. If there are conflicting information, between the documents and the sections listed below, the more stringent shall apply to this RFP.

6.2 Effective Date

The effective date of the contract shall be the date upon which the parties execute it and all appropriate approvals, including that of the Commonwealth of Kentucky Government Contracts Review Committee, have been received.

6.3 <u>Competitive Negotiation</u>

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 <u>Governing Law</u>

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 <u>Kentucky's Personal Information Security and Breach Investigation Procedures and</u> <u>Practices Act</u>

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 <u>Termination for Convenience</u>

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 <u>Termination for Non-Performance</u>

<u>Default</u>

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 <u>Royalties, Patents, Copyrights and Trademarks</u>

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

See General Conditions and Special Conditions

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 <u>Reciprocal Preference</u>

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 <u>Reports and Auditing</u>

The University, or its duly authorized representatives, shall also have access to any books, documents, papers, records or other evidence which are directly pertinent to this contract for the purpose of financial audit or program review.

In the event that successful Contractor(s) does not meet the reporting requirements based on the terms and conditions herein, the contract is subject to cancellation or termination.

6.23 <u>Confidentiality</u>

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 (<u>www.uky.edu/Legal/ethicscode.htm</u>). 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.

PROPOSAL NO. UK-2137-21

6.25 <u>Personal Service Contract Policies</u> (NOT APPLICABLE)

6.26 <u>Copyright Ownership and Title to Designs and Copy</u> (NOT APPLICABLE)

- 6.27 <u>University Brand Standards</u> (NOT APPLICABLE)
- 6.28 <u>Printing Statutes</u> (NOT APPLICABLE)

6.29 <u>Requirement for Contract Administration Fee</u> (NOT APPLICABLE)

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

Refer to project Drawings and Specifications

7.2 Optional Services

Not Applicable

PROPOSAL NO. UK-2137-21

8.0 FINANCIAL OFFER SUMMARY

Offerors are to provide a fixed price for the services offered. Complete Tab 3 Scope of Work.

8.1 <u>Mandatory Services (Section 7.1)</u>

Please complete and attach Section 7.1 to provide support for your firm fixed price Proposal.

Provide pricing for the scope of work fully described within this document. A scope letter shall be submitted with the bid to indicate what has been included in this price.

UNITS	Price
Student Center Dining Expansion Controls Fit-up (2 nd and 3 rd Floor)	

Indicate the Proposal price below in writing in dollars and cents.

UK IMPROVE STUDENT CENTER SPACE 2-DINING FACILITIES EXPANSION PROJECT UK PROJECT 2530.0

Attachment "A" ADDITIONAL PROVISIONS

A. GENERAL

Attachment A – Additional Provisions and Attachment B – (Technical) Scope of Work go together to define the requirements of this Subcontract. Attachment A is a more of a general Summary of the Contract Documents, Price, etc., while Attachment B is the Trade Specific (technical) Scope of Work.

The Additional Provisions and Scope of Work is intended to be general in nature. The intention is to have this Subcontractor perform all related work shown on the Contract Documents other than those items specifically indicated below to be excluded. The Additional Provisions and Scope of Work takes precedence over the Drawings & Specifications in the event of a conflict in trade assignment or responsibility. By accepting this contract, the Subcontractor is verifying that the plans and specifications clearly identify the Subcontractor's work.

The terms "Sub-contractor", "Trade contractor" & "Contractor" will be used interchangeably throughout the contract documents. A Sub-contractor, Trade contractor or contractor has a contract with Turner Construction Company, the Construction Manager. This Trade Contractor is responsible for all contract documents (specifications, drawings and scope of work).

B. <u>CONTRACT DOCUMENTS</u>

- Contract Drawings UK Gatton Student Center Expansion (Dining Facilities) BP #1, 2, 3- UK Project # 2530.0 as prepared by OMNI Architects, dated December 2019.
- Project Manual, prepared by Turner Construction & Omni Architects. Volumes One (1) through Two (2) UK Gatton Student Center Expansion (Dining Facilities) BP #1, 2, 3
- Addendum #_1_ dated <u>05/27/2020</u> prepared by Turner

C. ADDITIONAL CONTRACT DOCUMENTS

- Attachment "B" Trade Contractor ____ Scope of Work
- Project General Requirements
- Attachment "C" Project Safety Program dated January 15, 2018
- Attachment "D" CCIP Manual dated December 19, 2019
- Attachment "E" Accounting Procedures
- Attachment "F" Percentage Markup Sheet
- Attachment "G" Project Schedule
- Attachment "H" Reserved for future Bid packages
- Attachment "I" Project Logistics Plan
- Attachment "J" Project Site Sod Locations
- Attachment "K" Pre-Bid Instructions
- Project General Conditions
- Project Special Conditions
- Note: The General Building Permit will be provided by the others (architect). Obtain all other required permits; submit copies to the Construction Manager.
- Note: This Trade Contractor is required to sign Turner form 36 subcontract agreement included in the scope of work manual, which takes precedence over the General & Special Conditions
- All "Additional Contract Documents" have either been provided to Subcontractor, or are attached to this contract. Signature of Contract by Subcontractor indicates receipt and acceptance of these documents as part of the Contract.

D. CONSTRUCTION SCHEDULE

- Refer to Project Milestone schedule (ATTACHMENT "G") included in project manual.
- Shift work, multiple mobilizations, and out of sequence work will be required. It is imperative that all milestones be met. The Bidders shall include all necessary costs, including, but not limited to, premium time, shift work, out of sequence work, etc. to meet these milestones.
- Due to the critical nature of the schedule, the Trade Contactor must supply the Construction Manager a detailed plan for his production on the project within 20 calendar days of Contract Award. Please note that this plan must be compatible and complimentary to the Project Schedule. Plan shall include the following items:

UK IMPROVE STUDENT CENTER SPACE 2-DINING FACILITIES EXPANSION PROJECT UK PROJECT 2530.0

Attachment "A" ADDITIONAL PROVISIONS

- A. Starting, peak, and final manpower requirements, including subcontractors. Include production rates if requested
- B. Shift work plan.
- C. Number of Foremen
- D. Anticipated lead times and permit approval.
- E. The Trade Contractor shall work with the Construction Manager and Contractors in "Pull Planning" and the 6-week look-ahead schedule, including manpower information, on a weekly basis. Compliance is a prerequisite for payment.

E. WORK INCLUDED

Refer to Attachment "B" – Scope of Work

F. SPECIAL REQUIREMENTS

- <u>Sales/Use Tax Status</u>: Refer to "Instruction to Bidders" of Bid Manual for details. This project is taxable, all applicable taxes in your bid.
- <u>Prevailing Wage:</u> N/A, not required.
- <u>Insurance Program</u>: This Project shall utilize a Contractor Controlled Insurance Program ("CCIP"). Refer to attachment D of Bid Manual for details, instructions, etc.
- <u>Retainage</u>: <u>If job is Kentucky (any job)</u> Retainage Conditions shall be in accordance with the "Fairness in Construction Act" of 2007. Namely, Retainage for all Subcontractors shall be 10% until both the Project <u>and</u> the Subcontractor achieves 50% completion. At that point, retainage for all Subcontractors shall be reduced to 5% of Total Contract Value.
- <u>E&O Insurance:</u> N/A
- <u>Builders Risk:</u> (policy by Turner). Refer to Project General Requirements document for details including responsibility for deductible. Any such event occurring upon the Work site, covered under Builder's Risk policy and for which a claim is filed, the causing subcontractor shall be held responsible to incur the deductible cost of this policy in its entirety for said occurrence.
- Application for Payment: Unless otherwise directed or authorized, in writing, by Contractor, all Applications for Payment and all supporting documents (including but not limited to lien waivers, sworn statements, and the like) for Subcontractor and its sub-subcontractors and suppliers, shall be in electronic format and shall be submitted to Contractor using the Textura-CPM[™] payment management system. Subcontractor shall be responsible for the fees and costs owed associated with Subcontractor's use of the Textura-CPM[™] payment management system. Subcontractor shall include a similar provision in its sub-subcontracts and purchase orders. Fees to Subcontractors are calculated as 0.22% (22 basis points) of contract value, with no minimum fee and a maximum fee of \$3,750. Fees to Subcontractors' sub-subcontractors and suppliers are a fixed fee of \$100 per sub-subcontractor or supplier contract.
- <u>Turner Accelerated Payment Program</u> The attached KENTUCKY Rider Accelerated Payment Program amends and supplements your Agreement with Turner and provides you the opportunity to enroll in the Program through Textura CPM and receive accelerated payments from Turner on your invoices. Formal enrollment into the Program can then be accomplished via the Textura CPM system. Additional information and Program benefits are included in the attached Turner Accelerated Payment Program summary. You may be contacted by a representative from Turner or Textura who can provide additional information on the Program and answer questions you may have or you may call Textura at 1-866-TEXTURA (839-8872) with any questions.
- <u>OSHA 30 Hour Certification</u>: All subcontractors must have completed an OSHA 30 hour class. One person
 must be certified for all contracts under \$5M, and two people must be certified for contracts over \$5M. <u>The
 30 hour certified person(s) must be on-site 100% of the time</u>. This OSHA 30 hour certification must be
 updated through Turner's 1.5 hour Safety Update Training every two years through Turner University.
- <u>Stormwater Compliance:</u> If this project is required to obtain an NPDES permit per the EPA, all subcontractors working on the site will be required to attend the Turner Stormwater Subcontractor Orientation and Pre-Plan meeting prior to beginning work, and weekly coordination meetings. Furthermore, Subcontractors involved in earth moving/disturbing activities (excavation, foundation or utility)

UK IMPROVE STUDENT CENTER SPACE 2-DINING FACILITIES EXPANSION PROJECT UK PROJECT 2530.0

Attachment "A" ADDITIONAL PROVISIONS

trenching/excavation, grading, landscaping, paving, on site batch plant) or those responsible for installing or maintaining BMP's will be required to take the online Turner Stormwater Subcontractor Short Course Intro into Erosion and Sediment Control prior to attending the preconstruction meeting. The person or persons taking this online course must have a regular presence on the project. All subcontractors must comply with the requirements of the Stormwater Permit.

- Asbestos/ Lead Awareness: N/A
- <u>Waste Tracking Requirements:</u> Subcontractor who includes removal of waste from the project site ("dumpsters") as part of their scope of work, will submit all waste data using TurnerTracker account (monthly cost paid by subcontractor or their waste hauler). Data must be entered into the Online Waste Tracking system by the fifth (5th) day of the month following the invoice period. Subcontractor shall make every effort to maximize percentage of material recycled.

All Subcontractors shall comply with the project Construction Waste Plan. This may include sorting your construction waste and placing it in appropriate dumpsters (either co-mingled or site-sorted) per the project CWP. All subcontractors are required to recycle to the maximum extent possible per the terms of the Subcontract Agreement

• <u>MBE/WBE participation</u>: Refer to MBE/WBE Participation Goals document for details regarding the project inclusion program and/or goals for the University of Kentucky.

G. WORK EXCLUDED

Refer to Attachment "B" - Scope of Work

H. <u>ALTERNATE PRICES</u>

Refer to Attachment "B" - Scope of Work for Description of Alternate

I. <u>ALLOWANCES</u>

Refer to Attachment "B" - Scope of Work for Description of Allowances. Contract Prices INCLUDES Allowances

J. UNIT PRICES

Refer to Attachment "B" - Scope of Work for Description of Unit Prices

K. CONTRACT PRICE SUMMARY

Base Bid Amount Adjustments	\$
CONTRACT TOTAL	\$

By execution of this Agreement, Subcontractor agrees that Subcontractor's proposal, including all quantities, terms, and conditions, is Null and Void. This Subcontract Agreement details the terms of the Agreement, and shall be the primary reference point for clarifications of issues during course of project.

END OF ADDITIONAL PROVISIONS

Attachments:

Attachment B - Scope of Work for this Subcontract Agreement

Attachment "B" SCOPE OF WORK RFP – CONTROLS

UNIVERSITY OF KENTUCKY CAPITAL CONSTRUCTION PROCUREMENT SECTION RFP - HVAC CONTROLS

Project No. 2530.0 Project Title: UK STUDENT CENTER DINING EXPANSION

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 OFFEROR)

Date:_____

Telephone:_____

TO: OFFER CLERK UNIVERSITY OF KENTUCKY CAPITAL CONSTRUCTION

> PROCUREMENT RM. 322 SERVICE BUILDING LEXINGTON, KY. 40506-0005

REQUEST FOR PROPOSAL: UK-2137-21

PROPOSAL DUE DATE: February 04, 2021

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

The Offeror, in compliance with your Request for Proposal 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. Offeror understands that successful offeror will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Offeror hereby acknowledges receipt of the following Addenda:

ADDENDUM NO	DATED
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.)

NOTE: IN ADDITION TO THE SPECIFIC TRADE FORM OF PROPOSAL EACH SUBCONTRACTOR MUST ALSO SUBMIT FORMS FOUND IN THE SUPPLEMENTAL FORM OF PROPOSAL SECTION.

Attachment "B" SCOPE OF WORK RFP – CONTROLS

UK PROJECT 2530.0

FORM OF PROPOSAL

AUTHENTICATION OF OFFER AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST I hereby certify:

- 1. That I am the Offeror (if the Offeror is an individual), a partner in the Offeror (if the Offeror is a partnership), or an officer or employee of the offering corporation having authority to sign on its behalf (if the Offeror is a corporation);
- 2. That the submitted Offer or Offers covering Capital Construction Procurement Section Invitation No. CCK-2470-20 have been arrived at by the Offeror 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 Offer, designed to limit independent offering or competition; as prohibited by provision KRS 45A.325;
- 3. That the contents of the Offer or Offers 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 Offer or Offers and will not be communicated to any such person prior to the official opening of the Offer or Offers;
- 4. That the Offeror is legally entitled to enter into the contracts with the University of Kentucky and Turner Construction Company 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 Offer 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 Offer 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 Offer Amount.
- 7. Unless otherwise exempted by KRS 45.590, the Offeror 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 offering 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 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 the Offeror 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 OFFER

SIGNED BY				TITLE	
PRINT NAME				FIRM	
ADDRESS				AREA CODE & PHONE	
			FAX		
CITY	STATE	ZIP CODE			
DATE				EMAIL	

Attachment "B" SCOPE OF WORK RFP – CONTROLS

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LUMP SUM PROPOSAL

The Offeror 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.

RFP – CONTROLS

FO	R THE LUMP SUM OF						
			(USE WORDS)				
		DOLLARS AND		CENTS.			
	(USE WORDS)		(USE WORDS)				
(\$) OFFEROR MUST TURN IN OF	FER BREAKOUT SHEET WIT	H THIS FORM OF PROPOSAL			
	(USE FIGURES)						
AL	LTERNATES – NONE						
os		e Date of Prop					
1.	Bid Bond or Certified Check in	n an amount not less than five per	ccent (5%) of total Offer.				
2.	Authentication of Offer and Statement of Non-Collusion and Non-Conflict of Interest.						
3.		perative that you furnish your Fee e processing of purchase orders is		n Number in the space provided below.			
		(Nine	Digit Number)				
4.	Form of Proposal Supplement	al Information					

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 Offeror will be required to furnish a resume of the superintendent's qualifications and or past projects.

List the Superintendent's Name

Attachment "B" SCOPE OF WORK RFP – CONTROLS

OFFER BREAKOUT

Fill in the following breakdown of costs included in your base offer. Each item is to include labor, material & equipment. These will not be considered unit prices nor will the numbers listed here limit obligations required in the offer documents. It will be used only to aid in verifying completeness of the offers.

DESCRIPTION OF WORK	COST INCLUDED IN OFFER
Controls Engineering & layout, Permits & Fees, Shop drawings and submittals	\$
Controls Valves, Dampers, Flow Stations, Components	\$
Control Panels, Conduit, Wire	\$
Controls Instrumentation	\$
Controls Test & Balance Coordination	\$
Controls Graphics and Commissioning Coordination	\$
Variable Frequency Drives (VFD)	\$
Firestopping, Safety and Housekeeping	\$
Remaining work not listed above, Overhead & Profit (not to exceed 10% of proposal)	\$
TOTAL OFFER AMOUNT (SHOULD MATCH PROPOSAL)	\$
Cost of Performance and Payment Bond	\$
DO NOT INCLUDE THIS COST IN YOUR OFFER	

Attachment "B" SCOPE OF WORK RFP – CONTROLS

UNIVERSITY OF KENTUCKY CAPITAL CONSTRUCTION PROCUREMENT SECTION FORM OF PROPOSAL

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 Offerors will be required to complete and submit the following information <u>with the offer</u>. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being offer.

<u>KY FAIRNESS ACT: UNIT PRICES SHALL BE SUBJECT TO REVIEW / ADJUSTMENT AT TIME OF</u> <u>OFFER REVIEW / AWARD BASED ON "NET COST" CONCEPT. PROVIDE DETAIL BREAKDOWN 24</u> <u>HOURS AFTER OFFER.</u>

HOURLY RATES	-	Fringes	Burden (Ins/taxes/other) ((if) Pier Diems)	(SUM) (ST)	<u>UNIT (</u> (SUM) (T&1/2)	(SUM)	OH/P % (5%)

Attachment "B" SCOPE OF WORK RFP – CONTROLS

FORM OF PROPOSAL SUPPLEMENTAL INFORMATION

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

NOTE: MUST BE SUBMITTED WITH THE OFFER SUBMITTAL. Failure to comply will result in rejection of Offeror's Proposal.

<u>Contractor Report of Prior Violations of</u> <u>Chapters 136,139, 141, 337, 338, 341, and 342</u>

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 Offer 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.

BUSINESS CLASSIFICATION

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	(08)Disadvantaged Woman-Owned
(04)Disadvantaged Large Business	Large Business (09)Other

(05) Woman-Owned Small Business

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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 offering, 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.

OFFEROR'S QUALIFICATIONS

The Commonwealth of Kentucky Model Procurement Code (KRS 45A.080) requires contracts to be awarded, "to the responsive and responsible Offeror whose offer offers the best value" to the University of Kentucky. In order to determine if the Offeror has the experience, qualifications, resources and necessary attributes to provide the quality workmanship, materials and management required by the plans and specifications, the Offeror may be required to complete and submit the information requested on the University of Kentucky Contractor Offeror 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 nonresponsibility with respect to the Offeror. A copy of the Contractor Determination of Responsibility questionnaire is available upon request to all Offerors.

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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 Offer guarantee, check or Offer 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 Offer Guarantee or Offer Bond will be returned to the undersigned by the Owner.

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. <u>Goal</u> is 10% MBE/WBE

1. Minority and Women Subcontractors

2. Minority and Women Material Suppliers

This proposal includes _____% certified MBE participation This proposal includes _____% certified WBE participation

If your firm has no minority or women owned subcontractors or suppliers, it is required that you complete the list of minority and/or women owned businesses below. List the names of firms that were solicited to offer the project and describe why they were not successful (i.e. not low offer, did not respond, etc).

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Attachment "B" **SCOPE OF WORK RFP – CONTROLS**

RECORD OF MBE/WBE SOLICITATION

Certifies that the following

OFFEROR'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Offer No. _____ The following firms were not selected for use on this project for the reasons stated in the **RESULT** column.

This list of Minority or Women owned firms is to be executed and submitted as a part of the Offeror's Proposal. Failure to comply will result in rejection of Offeror's Proposal.

FIRM NAME	MBE/WBE	WORK ITEMS SOLICITED	RESULT: NO RESPONSE OR NOT LOW OFFEROR

Signature

Date

Title

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LIST OF MATERIALS AND EQUIPMENT

The apparent low Offeror will be required to furnish this information within 24 hours of offer submittal. Failure to comply will result in rejection of Offeror's Proposal.

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

CONTRACTOR NAME & ADDRESS:

The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being offer.

ITEM MATERIALS AND EQUIPMENT

BRAND OR MANUFACTURER

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PRIMARY LIST OF PROPOSED SUBCONTRACTORS

The apparent low Offeror will be required to furnish this information within 24 hours of offer submittal. Failure to comply will result in rejection of Offeror's Proposal.

All subcontractors are subject to the approval of the Capital Construction Procurement 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.

CONTRACTOR NAME & ADDRESS:

DIVISION OF WORK

NAME AND ADDRESS OF SUBCONTRACTOR

Scope of Work

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Attachment A – Additional Provisions and Attachment B – (Technical) Scope of Work go together to define the requirements of this Subcontract. Attachment A is a more of a general Summary of the Contract Documents, Price, etc, while Attachment B is the Trade Specific (technical) Scope of Work.

The work of this Agreement shall include, but not be limited to, all labor, materials, apparatus, hoisting, rigging, tools, equipment, plant, supplies, accessories, samples, submittals, shop drawings, certifications, engineering, layout, transportation, storage, supervision, temporary construction, special services, contributions, insurance, taxes (unless specifically excluded by the Contract Documents), compliance with all governing agencies (city, county, state, federal and others as may be required), permits, fees, all other services and facilities and other items necessary for the performance of the **HVAC Controls Instrumentation Work** as shown, detailed and/or implied in the contract documents outlined in the General Scope of Work.

The Scope of Work Document is being provided for your use as a general guideline. Please note, this Document is not all-inclusive. It is this Subcontractor's responsibility to provide a complete offer, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Offer Manual, etc). It is this Subcontractor's responsibility for the entire scope of this Offer Package and coordination between all trades.

E. WORK INCLUDED - SCOPE-SPECIFIC ITEMS

1) <u>Trade Specifications Specifically Included, but not limited to the following:</u>

DIVISION 25 – BUILDING AUTOMATION SYSTEM (ALL SECTION)

- a) Offeror shall also include referenced specification sections listed in above specification sections as necessary to furnish complete work of this trade
- b) Subcontractor includes all work indicated in specification COMPLETE, unless this scope of work specifically and clearly excludes a portion of a specification.
- 2) Contract Price is LUMP SUM. There shall be NO additional labor and material escalations allowed.
- 3) Examination of Site Subcontractor warrants that they have sufficiently reviewed the project site to inform themselves of all items about existing site that are relevant to their work, and the cost of their work.
- 4) Include protection of all adjacent structures during performance of this work. Plan for protection of adjacent structures must be part of the overall plan submitted for approval prior to start of work.
- 5) SITE LOGISTICS: Refer to the Site Logistics plans included in the Contract Documents. Delivery trucks are to be scheduled with Turner at least one (1) week in advance.
- 6) Subcontractor **change order requests** shall be provided with sufficient detail (as acceptable to Turner) to allow for satisfactory review. Subcontractor shall be allowed a maximum mark up for overhead and profit per the markup provisions included in the Subcontract Agreement, or as clarified in Contract Documents above.
- 7) Subcontractor understands that time is of the essence in the prosecution of Work under this agreement.
- 8) <u>Verify layout provided by others</u>. Where this subcontractor is performing work using layout provided by others, this subcontractor shall perform sufficient verification of that layout to reasonably ascertain the validity of that layout. Any deficiencies (or suspected deficiencies found) shall be reported to Turner immediately to allow corrections as needed before start of work by this subcontractor.
- 9) All Subcontractors must be licensed as required by local, State, or Federal jurisdiction required for work of this trade in this project location.
- 10) This Subcontractor will comply with Turner's corporate safety policy and comply with Site Specific Safety Plan that will include but is not limited to 100% tie-off above 6 feet, 100% Safety Glasses, High Visibility Vests or High Vis style T-Shirts with reflective strips, 100% glove policy, Ladders Last Policy and Nothing Hits the

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Attachment "B" SCOPE OF WORK RFP – CONTROLS

Ground. If you are unfamiliar with any of these policies please ask to see the policy prior to submitting your offer. Failure to be familiar with these policies will not exclude you from complying with them.

- 11) **Refer to Project General Work Requirements**" in volume one of the project manual. Any costs for work scope items listed in this section shall be included in your lump sum offer. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum offer price.
- 12) Condoc keynote legend will dictate your scope of work unless noted otherwise.
- 13) This Trade Contractor shall include all materials, labor, tools, and equipment required to install a complete and functioning HVAC Controls Instrumentation systems including but not limited to all scope of work noted in Drawings and Specifications
 - a) Provide all required controls and instrumentation devices including, but not limited to: control valves, flow meters, water pressure differential taps, flow switches, thermal wells, thermal and pressure sensors, current sensors, actuators, air flow monitoring stations, control dampers, etc. as needed for a complete and operational system. Provide coordination of locations of all control devices and device wells/taps with Mechanical, Plumbing and Electrical trade contractors.
 - b) Coordinate and provide all required connections, components, control devices, dampers and accessories, etc. needed for a complete installation of VAV's, Terminal Units, Exhaust Fans and Fan Coil Unit Controls. This contractor shall also furnish all control programing, cabling, etc.
 - c) Connect to **existing systems** and coordinate with systems installed in this contract. This includes, but not limited to, FSDs, Control Panels, Security Panels, VFDs, Air Valves, Terminal Boxes, etc.
 - d) This Contractor **will provide all raceways and cables**, etc. for a complete HVAC controls system, including connections to devices provided by other contractors; smoke detectors, elevators, lighting control panels, etc.
 - e) This contractor to **provide all conduits and wire** necessary for CAT6A cabling required for network communications. Termination at EIDF Closet and activation of network to be provided **by others**.
 - f) This contractor is to provide Ten (10) additional command points for use by the construction manager. This shall include a complete integration into the project controls system as if needed for the construction. This shall include all wiring, controllers, JACE/NAE capacity and anything required to properly tie these points into the system.
 - g) This contractor will provide all required technician support for all Commissioning of the HVAC, Fire Alarm, Security and Lighting Control Systems.
 - h) This Contractor shall provide and install all VFDs for all new equipment. This includes start-up, commissioning, and warranty. This includes all necessary accessories for a complete installation. Power supply and single point connection to equipment to be by others.
 - i) This contractor will provide complete detailed point's lists as needed for Graphics Programming by UKMC PPD. Provide all required technician/programmer time necessary for coordination of point's lists, field installation specific notes for addresses and locations, point to point testing information and other information needed for coordination of and completion of the HVAC Controls System Graphics.
 - j) This Contractor shall provide ALL Tridium interfaces, programming, naming conventions per UKMC PPD, etc. complete for ALL HVAC Controls, Lighting Control, and other representative systems other than the fire alarm system. UKMC PPD to create and complete graphics, this contractor to provide all nodes, interface signatures and addresses for the graphics development. Coordinate with UKMC PPD and Construction Manager to turn over complete and functioning Tridium system integration.
 - i. Coordinate with TC-22 (Electrical/Integrated Tech.) to provide complete operating Tridium systems. Fire alarm programming and interface to Tridium is by TC-22 Electrical.
 - ii. Points shall be named using the following format:

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Building Floor RoomNumber System SubSystem Component ShortName Function

- iii. Reference instrumentation drawings for additional details regarding points list and details. The controls
- iv. Contractor is to utilize the entire drawing and specification set as a whole to formulate controls sequence.

F. CONSTRUCTION SCHEDULE

Contract Price is based on the project schedule included in Offer Manual and as clarified within these Additional Provisions.

G. WORK EXCLUDED

This Scope of Work shall exclude the following

1) Payment & Performance Bond

H. ALTERNATE PRICES

Alternates shall be complete for providing only the Work with no other credits. All alternate prices are to be priced as stand-alone alternates. Any number of alternates, or no alternates, may be accepted as part of this Work.

1) None

I. <u>ALLOWANCES</u>

1) None

The above allowances are to be included in the base offer/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Offer/Subcontract Price. Only direct Labor and Material costs authorized in writing by the Construction Manager after approval by the Owner are to be charged to the Allowance. Progress Payments will be made against Allowance expenditures, based on approved monthly invoices & writing Allowance Authorization from the Construction Manager/Owner. Any unused funds remaining in these allowances will be credited back to the Project.

J. UNIT PRICES

The following unit prices are applicable for changes in the Work. The unit prices are for Work complete and in place and include all costs such as material, labor, equipment, freight, taxes, insurance, fringe benefits, and overhead and profit. Also include costs for coordination with other trades work where applicable. In the event the unit prices quoted exceed industry standards or fair market value, the Turner reserves the right to request pricing for changes at cost plus allowable mark-up for overhead and profit or a lump-sum under the terms of the Agreement

- 1) <u>Labor Rates</u> Submit detailed labor rates to Turner Project Manager for approval. Detail shall show all fringes, benefits, taxes, insurance, markups, and any other add-ons to allow verification of rate.
 - See "Form of Proposal" (Offer Form) for offer day information. The apparent low Offeror will submit detailed breakdown with-in 24 hours after offer day.
- 2) <u>Equipment Rates</u> Submit detailed rates for equipment that may be used on project, and may be part of change order pricing.

END OF TECHNICAL SCOPE OF WORK

PROJECT GENERAL REQUIREMENTS

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F. GENERAL WORK REQUIREMENTS

- 1. The terms "**provide**" and "furnish and install" will be used interchangeably throughout the contract documents. If a trade contractor is to only "install", the work scopes and other contract documents will state as such.
- 2. All Trade Contractors shall provide **full time supervision** while its forces are working on this Project. The Trade Contractors' jobsite supervision shall be experienced in his trade and be capable and have authority to make decisions regarding costs, manpower, and schedule. The Trade Contractors shall obtain the approval of the Construction Manager of his job management personnel prior to their assignment to the Project. Trade Contractors' supervision and management personnel shall not be changed without prior approval of the Owner or Construction Manager.
- 3. TC-011 Site General Trades Contractor will be responsible for general **dewatering and/or snow** removal required until June 30, 2021. This would apply to areas outside of the building that are to be used for "staging", material stocking, and other deliveries. This would also apply to the landing platform, any stair towers, and project walkways.
 - A. All Trade Contractors are responsible for dewatering required to install their scope of work. See individual scopes for specific details.

4. Work hour details for this Project's existing areas:

- A. Normal work activities to occur in and around the project limits as indicated shall be completed during "1st shift" work hours between 7AM and 5PM.
 - 1. Weekend work to consist of standard working hours as well.
- B. Any work to take place in surrounding buildings or systems that will affect adjacent buildings to be coordinated with Construction Manager and Owner, can occur on off-shift work hours.
 - 1. Any MEPT tie-ins outside of the construction areas will occur on off-shift work hours. Coordinate with Construction Manager on scheduling.
- C. All deliveries will be coordinated with Construction Manager
 - 1. Hours of delivery will need to be coordinated with student traffic and Student Center business. Major deliveries should be scheduled from 7am 9am or after 4pm.
- 5. All contractors shall review the documents to understand what work is included.
- 6. Reference the **site logistics** plans for access roadways and a staging area for use by all Trade Contractors. Any additional roads, grading, and or staging areas required beyond what is indicated will be the responsibility of the Trade Contractor requiring it and all costs included in the proposal amount.
- 7. **Storage** of bulk amounts of materials and equipment is restricted due to limited space on the jobsite and within the limitations of the staging area. Trade Contractors must schedule and cycle no more material than can be installed in-place within a two-week or less period. Moving of materials stored inside the staging areas will be necessary and the Trade Contractors shall promptly respond to any request from the Construction Manager to move material. Trade Contractors shall include required costs for off-site storage and any additional handling of materials involved with offsite storage.
- 8. **Fuel storage** on site is NOT allowed and fueling procedures must comply with applicable regulations, Project Safety Plan and receive the Construction Managers approval. There will be no fuel storage permitted inside the building.
- 9. ALL Trade Contractors shall participate in the construction of on-site mock-ups as specified and/or indicated by the documents and/or noted elsewhere (pre-project mockups). This shall include providing of materials required for this trade contract scope of work, coordinating with other trade contractors with regard to sequencing of installations and protection of materials etc..., furnishing shop drawings and /or setting drawings and so on. Materials for in place or interim stipulated mock-ups shall be secured in advance of normal procurement to allow for ALL trade contractor installations, owner/designer and user reviews and evaluations, meetings, approvals and directive if applicable. Mockups are understood to start with construction of wall and arrangement of rough-in through complete room finishes.

In the event mockups are not stipulated; in place mockups shall be constructed at the outset in stages for quality control and ascetics. Notify the Construction Manager in writing for sign-off.

PROJECT GENERAL REQUIREMENTS

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- 10. Access to/from the **existing site** by emergency departments is to be maintained at all times. It shall be the responsibility of the Trade Contractors to ensure that all road entrances, exits, fire lanes, building entrances, etc. are not blocked by the progress of its work, its deliverymen or contractors in their employ. This is inclusive of providing temporary access and protection including, but not limited to temporary walks, overhead protection, barricades, signage, etc. Temporary provisions are to be in accordance with UK standards. This access and protection shall be to the satisfaction of the Construction Manager.
- 11. The Avenue of Champions entrance/exit will be used as the main **construction entrance/exit**. See logistics plan.
- 12. Trade Contractors are to provide all **street permits**, bonds, police details, flagman, off-duty police, street/lane closure permits, traffic control, and barricades as required to complete the work. This includes deliveries of material. Roadways and driveways may not be blocked without prior approval. Furnish copies of all permits to the Construction Manager.
- 13. All **deliveries requiring a crane** will require an approved lifting plan per Turner's safety plan and must be approved by Construction Manager. Allow four (4) weeks minimum prior to the crane arriving onsite to gain these approvals.
- 14. Trade Contractors shall not order or **consign** materials for the project in the name of the Owner, Architect or Turner. Turner Reserves the right to reject all such shipments received in this manner. Deliveries must be coordinated with the Construction Manager a minimum of (48) hours prior to receipt on site. Any material deliveries without notice will be given access on an "as available" basis. Also reference Turner's standard subcontractor contract 36 article VI.
- 15. Trade Contractors are responsible to **protect** all adjacent properties and structures, including lawn and planting areas as required to execute the work. Trade Contractors will be responsible for immediately replacing/repairing any damage to existing utilities, existing structures, lawn and planting beds in or outside of the building limits caused by the trade contractor's workforce.
- 16. It is the responsibility of the Trade Contractors to contact the local **utility locating** service and have all utilities located prior to mobilizing heavy equipment used for lifting or hoisting. The Trade Contractors should also contact the Owner (UK), through the Construction Manager, and have all UK owned utilities located as well.
- 17. This project is in and around existing campus facilities. **Utilities or services**, including pavement to the Owner's facilities (and surrounding facilities) must be protected and maintained 100% of the time when possible (as determined by the Owner, Consultant, or Construction Manager). All costs associated with the work required to maintain service shall be the responsibility of the Trade Contractor performing the associated work. Trade Contractors are responsible to immediately repair any utility damaged or disrupted during the course of its work whether the utility be known or unknown. If the utility is unknown, the Trade Contractor(s) making the repair will be compensated for the work. If the utility is known, the Trade Contractor(s) is responsible and liable for any and all costs of repairs. Failure to immediately repair damaged utilities per the requirements of the utility Owner will result in the work being performed by others at the Trade Contractor's expense. Repair work shall begin immediately and be continuous (24/7) until the service is restored. All costs associated with this work to repair known utilities are the responsibility of the Trade Contractor. If unknown utilities are discovered, they must be reported to the Construction Manager in writing who will in turn investigate with the assistance of the Engineer and Owner.
- 18. All Trade Contractors must submit an **Outage Request** Log for all anticipated utility outages within 10 days of Contract Award. Submit individual Outage Requests a minimum of 2 weeks prior to the requested outage. Major outages may require more coordination, and must be submitted 6- 8 weeks in advance. Trade Contractors should coordinate with each other to avoid duplicating Outage requests. Include the costs for premium labor for cut-ins, switchovers and other operations requiring interruption to the daily operation of the Project Site as well as the Owner's adjacent facilities.
- 19. It is the responsibility of each Trade Contractor to make certain that all of its Work performed under the Construction Contract is **in accordance** with all applicable laws, statutes, ordinances, codes, and regulations. Trade Contractors shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority with jurisdiction over the performance of the Work. Contractor shall promptly pay all fees, taxes, deposits, charges, penalties, or interest that may be claimed against or paid by Owner/Construction Manager due

PROJECT GENERAL REQUIREMENTS

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to any failure to comply with any such laws, statutes, ordinances, codes, or regulations (including those pertaining to permits, licenses, or notices). This shall include any and all professional engineering fees required.

- 20. Trade Contractors must provide all necessary fasteners, **supports**, and attachments for the installation of their own work. Trade Contractors must submit to the Construction Manager for approval by the A/E, the means and methods in which they plan on attaching hanger/supports to concrete decks.
 - A. Note: All hangers, supports, etc. from 3rd floor or mechanical roof cannot be supported from the metal deck.
- 21. Trade Contractors must provide any and all **fire stopping** and/or joint sealants required for the scope of their work (Unless otherwise noted) including but not limited to penetrations, slab edge conditions, adjoining surfaces, etc. To the satisfaction of the governing authority, the drawings, and specifications.
 - A. All trade contractors completing fire stopping work shall include all necessary **repair and replacement of destructive testing** by the inspection agency performing inspections required in the current HBC code section 1705.16. This includes any labor, new materials, and equipment to re-install and fire stopping to meet code and UK compliance.
 - B. An in-place mock-up of each type of floor and wall penetration Firestop is required to demonstrate materials and quality. Do not proceed with the work until the mock ups have been approved. This is required of each Trade Contractor installing fire stopping.
 - i. TC-014 to include a temporary drywall partition of 3-5/8" metal stud framing with 5/8" gyp green board on both sides for mock-up wall. Wall should be 4'x8' in size and self-standing.
- 22. Trade Contractors are responsible for the layout and installation of all "Core Drilling" required for its work, including Controlled Access Zones (CAZ) below. Provide sleeve (core drilling) installation drawings for approval. Include in these drawings size, quantity and location of all sleeves. The installation of the sleeves and penetrations shall be **coordinated** with the other contractors. No core drilling of concrete beams and/or pan joist will be permitted. Trade Contractors will be responsible for any coring, cutting, patching, or supports required for the installation of its work. Sleeves shall be cored upon the approval of the Structural Engineer. Any and all <u>unused</u> sleeves shall be dowelled and concrete in-filled by the Trade Contractor not requiring the penetration; this includes any spalled concrete necessary repair as a result of penetration(s).
- 23. Trade Contractors are to provide all **sleeves** required to complete their respective work scopes. Sleeve size and location to be coordinated and approved by structural and/or MEP engineer(s). Sleeves and block-outs or openings are to be furnished and delivered along with a dimensioned layout drawing to the concrete foundations and/or masonry contractor. Sleeves to be installed by concrete foundations and/or masonry contractor; MEP's will position/install all drywall partition and other sleeves. Include inspection of installed sleeves prior to concrete pour and observation during concrete pour. Include sealing of sleeve and pipe/conduit after piping installation is complete. TC is required to utilize **Link-Seal** at any utilities passing through/into interior building spaces include grouting and waterproofing as required to complete installation. Include applicable fire stopping systems where needed. If it was not practical to install sleeves into cast concrete walls, manholes and or footings, then provide a detailed plan for approval of complete core drilling of existing or placed concrete installations and seal after installation.
- 24. <u>Survey and building control</u> TC-001 Site Excavation contractor will establish benchmarks & survey control for the project. TC-003 Concrete contractor will also maintain and continue established benchmarks and will establish new survey control on the completed structure for others to use. TC-014 Drywall & Ceilings contractor is to maintain existing survey control, establish benchmark(s) and new control points for existing building and new building areas in advance of partition layout. TC-014 Drywall & Ceilings to provide and maintain layout at all floors once SOG and SOMD are poured.
- 25. Trade Contractors shall be responsible for the **restoration/repair** of any existing finishes that become damaged during the course of work including but not limited to: existing brick, masonry, historical building elements, fireproofing/fire stopping material; drywall patching, paint/primer of walls and block, chair rail, doors, ceiling tile, plants and planting beds, paint/primer touch up of steel and/or patching of any concrete as the result of the attachment of the clips, hangers, supports, and any other similar items required by the performance of the Work.
- 26. Trade Contractors must employ the proper trades and provide **composite crews** if necessary to perform this Scope of Work and to avoid jurisdictional disputes.

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- 27. Trade Contractors will comply with all requirements of the Contract Documents as to **Contract Close-Out**, including, but not limited to, Operation and Maintenance data, system training, and project record documents. **O&M Manuals**, training schedules and preliminary as-builts are due to the Construction Manager prior to 70% trade contractor complete progress billing. The Trade Contractor will be required to submit a form that certifies that all systems, equipment, fire-stopping comments and incorporated products furnished by the Trade Contractor are complete and operational for the purpose for which the system or product were intended. Each Trade Contractor is responsible to video all start up and training. This video must be of "professional quality" (no cell phone videos) and submitted to the Construction Manager in proper format as part of the Contract Closeout Documents.
- 28. Trade Contractors shall maintain, at the site of the Work, **as-built drawings**, which will be updated on a weekly basis showing actual installation and all changes in the Work. These drawings will be legibly identified as "Record Documents", with changes noted in a legible, concise and explanatory manner in <u>red ink</u>. The Record Documents are subject to review by the Construction Manager on a weekly basis. Any contractor not keeping a current record of the changes made to its Work on the Record Documents will be subject to having Progress Payments withheld until all changes are brought current to the satisfaction of the Construction Manager. Final As-Built Record Documents must be submitted to the Construction Manager in electronic format. As-built drawings and photos shall be reviewed by the Construction Manager prior to covering the work. <u>Once a month</u> each trade contractor will transfer as-built dimensional information to the construction manager's on-site as-built set of documents. Partition, room wall cavity photos will be taken coordinate with construction manager.
- 29. Trade Contractors are responsible to survey and inspect all **substrate work** performed by others prior to starting its own work. Any and all discrepancies, out of tolerance work, or otherwise unacceptable work must be reported the Construction Manager in writing prior to the start of work. The start of work indicates acceptance of the substrate material.
- 30. Each Trade Contractors acknowledges that their Work must be **coordinated** with the work of other trades and further agrees to coordinate his shop drawings, details, and submittals with those of other trades to ensure proper installation of all materials in accordance with the Project Schedule.
- 31. Each Trade Contractor shall **protect** their own Work and materials adjacent to their work until accepted by the Architect, Engineer, Construction Manager and the Owner. Trade Contractors shall be responsible for replacing, repairing, or the expense to repair, any damage caused by the performance of their Contract Work. In the event damages occur to existing work and is unidentifiable to a specific trade, all repairs and replacement costs will be distributed equally to all trades working in that area.
- 32. Each Trade Contractors, upon notice, shall correct all **deficiencies** in a timely manner before proceeding with the next sequence of Work. Trade Contractors shall be financially liable for any delays to the Project or other contractors due to their deficiencies or the untimely correction of their deficiencies.
- 33. Each Trade Contractor requiring temporary protection or **temporary heat** to complete its work in accordance with the Plans, Specifications and Project Schedule is required to provide the protection and/or heating.
 - A. TC-007 Masonry Trade Contractor, shall provide enclosures and/or protection and temporary heat (including fuel) in conjunction with scaffolding and masonry industry guidelines for both hot and cold weather. Cover top of wall when applicable. Coordinate and accommodate Spray foam insulation contractor.
 - B. Temporary cooling for Core & Shell and/or renovation is NOT provided until activation of air handlers. TC-011 General Trades is to provide ten (10) 48" drum fans for limited air movement for duration of project.
 - C. TC-011 General Trades Contractor will be responsible to provide temporary heating of the building from November 2020 through January 201. This will consist of having three (3) radiant heaters per floor capable of heating each floor (no open flame heating). TC-011 will provide weather tight reinforced poly at all façade openings for condition space. TC-008 Curtain Wall will remove all weather tight poly when installing curtain wall system.
 - D. TC-021 Mechanical Contractor to have fully operational AHU for conditioning of space by Dec 1st 2020.
- 34. The Fire Alarm contractor (via project Electrical Contractor) will be responsible to provide, protect, and remove (when no longer required) **heat sensors and annunciation devices** for all the work, material transport, and material storage areas associated with this project meeting UK requirements. Installation will start within 10 days of SOMD

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being installed. Fire Alarm contractor to provide include necessary programming for the detectors to be monitored by building management system.

- 35. Each trade contractor is to provide their own **drinking water**.
- 36. Obtain any and all required licenses including a **Contractor's license** fee for doing business in the locale. Provide copies of the license to the Construction Manager.
- 37. Upon request, Trade Contractors must provide the Construction Manager with field copies of **latest referenced standards**.
- 38. This project will utilize a **LEAN scheduling** approach to fully-develop this project's scheduling details. All contractors will be required to participate in reverse-phase, pull-planning scheduling secessions to develop and schedule the construction work. Project Managers, Superintendents and key foreman will be required to participate in these secessions. Participants are expected to come prepared with work scopes broken down into components knowing their scope details, manpower requirements, and expected durations. Trade Contractors will be expected to create, update, and execute weekly work plans (WWP) in accordance to the project schedule. WWP's will be reviewed as a group at the daily stand-up meetings.
- 39. Each Trade Contractor shall submit a **submittal schedule** to The Construction Manager within 7 calendar days of Contract award. Submittal submission must begin within 14 days of Contract award or sooner if required to maintain the Project Schedule. Schedule shall include material lead times. Please note that all submittals must be sent to Turner Construction's jobsite office for review. Include the costs for any postage required. Submittals will be in accordance with the <u>Special Conditions Article 8</u>.
- 40. All Trade Contractors' Superintendents and foremen are required to have **cell phones** compatible for reception in in and around the project areas for daily contact. All Trade Contractors are required to have at least **one (1) I-Pad or other Wi-Fi compatible tablets.** I-pads will be used for review of electronic drawings and other project information in the field along with electronic punch lists and project execution via Autodesk BIM 360. All superintendents are required to have company provided email contact for project correspondence.
- 41. The Contract Price shall be based on a normal forty (40) hour workweek i.e. **first shift** but may be staggered, Monday Friday. All work to be performed for tie-ins to existing utilities/services shall be figured at a rate outside the normal (40) hour workweek. All tie-in work shall be scheduled with written approval and coordinated with Turner's Superintendent. Unless Turner's Project Superintendent issues written instruction/agreement otherwise, if the a contractor works beyond the eight (8) hours per day, five (5) days per week normal work period, they shall bear all added costs. Trade Contractors shall notify Turner's Project Superintendent by 12:00 PM (noon) 2-days before the requested overtime to allow time to make proper arrangements. Overhead and profit markup shall not be permitted on premium time costs or on shift work premiums.
- 42. Office and storage trailer(s) will be permitted onsite per the site logistics arrangement. Trade Contractors TC-008, 011, 014, 020, 021, 022 will be allowed "conex office" type offices in the "double stack" arrangement. Coordinate with construction manager for approval to install onsite project office.
 - A. TC-014 Drywall and Ceilings contractor will provide three (3) temporary installations on level 3 for the BP-03 contractors. Construction to be 3-5/8" metal studs with 5/8" board unfinished on single side with temp door and frame, size to be 15'x15'
 - B. TC-008, 011, 014, 020, 021, 022 will be provided with an area to provide a double decker conex box for material and jobsite office. Conex Box can be 8'x40' maximum. Material to be lower box and office on 2nd floor. Each contractor will be responsible for all cost associated with rental, drop-off/pickup, lifting of top box, electrical supply, etc.
 - C. TC-011 to provide treated wood material & labor to build stairs, handrail and 4'x6' landing at top unit of conex box for # conex box systems. This contractor to include material and labor for installation and tear down when directed by Construction Manager.
 - Contact Micah Jerome, Crown Stair for prefabricated stair system
- 43. The Construction Manager's **copier**, telephones, and computers are <u>not</u> for the use of Trade Contractors. A public Wi-Fi is provided by the University for contractor internet access.
- 44. The Trade Contractors must attend all required **meetings** as follows:

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- A. The weekly Work Plan meeting for overall job coordination. Attendance is mandatory for all Trade Contractor <u>Superintendents and foreman</u>. All attendees must have the authority to make decisions and commitments. Meetings will held in concert with daily-stand up meetings. TC's are expected to prepare and update WWP's weekly in concert with the required master schedule and area schedules information.
- B. Monthly **Project Safety Meeting**; this includes a mandatory <u>stretch & flex program</u>. Additional supplemental meetings will be held due to incidents, field safety violations, etc. by this or other trade contractors / tiered subcontractors. **Monthly Safety Committee** Meeting: Each Trade Contractor will have the responsibility to provide an individual to attend the Monthly Safety Committee Meeting. This individual should be considered a competent employee that is able to represent the Trade Contractors' scope of work by having at least 5 years in the trade. The purpose of this meeting is to provide an opportunity to disseminate project safety related information and to receive the helpful feedback from the tradesmen in the field.
- C. Daily Stand-up meetings (at the end or start of each shift). Attendance is mandatory for all Trade Contractor <u>Superintendents and/or Foreman</u>. These meetings are currently held at **2:00 PM**, but are subject to change.
- D. Reverse phase schedule meetings. Attendance is mandatory for all applicable Trade Contractors and will be held at the Construction Manager's discretion.
- E. Separate mechanical, electrical, and specialty coordination meetings will be held on the jobsite as often as required to facilitate progress of the work.
- F. Quality Assurance / Quality Control Program (QA/QC): The construction manager intends to hold a once a month QA/QC meeting. This meeting may be selective with trade contractor PM's and foreman invites for focus on topic. The intent is to limit the meeting to one hour. The option of several meetings is possible with small groups on differing divisions of work. Trade contractors will be required to provide a specific quality control plan for said division of work. We can focus of QA/QC in the specifications, manufacturer's data, mock-up, sign-off sheets, applicable testing and jurisdiction authorities, inspections, deficiency list, special care and protection, peer reviews, sequencing of work and turnover, etc.
- G. Any Meeting as required by the Owner, Architect, or Construction Manager.
- 45. While working on-site, Trade Contractors shall fill out Construction Manager's **Daily Construction Report (DCR)** form & labor utilization form. These forms are to be delivered to the jobsite (Turner Superintendent interacting with Trade Contractor) office by no later than 10:00 am the following business day. Failure to perform this duty shall result in delay of payment until all reports have been received. The daily report may be available via electronic format for completion of same.
- 46. Each contractor will be responsible for the **security** of his own stored material, job office, equipment, tools, etc.
- 47. Project signs or **advertisements** of any nature, including job offices shall not be installed on the jobsite or structure without preapproval of Construction Manager and the Owner. In general, identification lettering of company offices shall be six inches or less; location(s) still must be preapproved by the construction manager and the owner.
- 48. All Trade Contractors shall include work **made necessary** by field conditions that may not be shown in the Contract Documents but that are apparent during an inspection of the construction site. Trade Contractors must familiarize themselves with the jobsite prior to starting work.
- 49. PROJECT MANAGEMENT SOFTWARE (eCommunications)
 - A. All Trade Contractors will be required to have an Internet connection, a working email address (checked daily) and utilize E-Communications, the University of Kentucky's web based project management system.
 - B. All Trade Contractors will be required to utilize E-Communication as required by the University and the Construction Manager. This shall include, but not be limited to: RFI's, daily communication, submittal tracking, etc.
 - C. Communication forwarded via E-Communication will be binding as if sent via traditional methods.
 - D. ALL Trade Contractors will be required to submit initial and ALL "later" approved submittals and shop drawings as a scanned electronic file for E-Communication. Exceptions will be at the Construction Manager's and Owner's discretion. The file format will be at the discretion of the Owner and the Construction Manager. If a Trade Contractor fails to comply with this provision, they will be responsible for all costs incurred by the Construction Manager to have said drawings and submittals scanned. Refer to <u>Special Conditions</u> for additional detail. Reference General Conditions for number of "copies".

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- 50. CLEAN UP
 - A. Trade Contractors are responsible to perform clean up on a continuous basis. This cleaning shall at no time be less than once per day. Each and every work area must have all trash, debris & scrap removed and properly disposed of, all materials neatly stacked and easily moved by pallet jack or roller cart and the floor broom swept on a daily basis. Each Trade Contractor is required to maintain sufficient brooms, shovels and sweeping compound on site to keep his work area clean. If daily cleanup and rubbish removal are not performed to the satisfaction of Turner Construction, cleanup and rubbish removal will be performed by others and all costs will be back charged to the at fault Trade Contractor's contract. Cleanup operations shall not 'wait' until end of the week. Trade Contractors will include all costs for daily cleanup in the contract price.
 - B. At no time shall the streets, building, or areas that surround the work be in a disorderly or dirty condition.
 - C. All private and public paved roadways, parking areas, service roads, etc., are to be kept free of mud, debris, etc., resulting from equipment or vehicles performing the work of this Contract, in compliance with local city Ordinances. All Trade Contractors are responsible to include in their contract price dust and mud control, traffic control and roadway cleaning. All Trade Contractors are responsible to clean streets of any debris or spillage of any material as a result of the performance of their work as directed by Turner Construction. Scraping streets 'clean' with a backhoe is not acceptable debris control. All street cleaning conducted must be swept clean in addition to scraping up of large debris. All paved areas are to be kept "broom clean" at all times. Failure to do so may result in serious fines imposed on each violating Trade contractor. Any charges directed at Turner Construction by others, due to the fact that this procedure is not being implemented, will be back charged to the offending Trade Contractor. Dust control measures shall be provided by all trade contractors as necessary for their work.
 - D. Burning of trash is NOT permitted.
 - E. The project General Trades contractor TC-011 will provide all dumpsters for project debris per 017419 Construction Waste Management and Disposal from June 1, 2020 through final project completion. Locations for construction debris will be coordinated with Turner Construction. <u>All crating materials must be</u> <u>disassembled and/or flattened prior to placement in dumpsters</u>. All demolished items must be removed in dumpsters or trucks provided by the contractor removing the items. Any materials that require special care and/or disposal shall remain the contractor's obligation to dispose of. All concrete spoils will be the responsibility to have hauled away with respect to contract work.
 - F. Each Trade Contractor shall include providing 2.5% of all onsite work force hours including all subcontractors for contribution to a composite cleanup crew for general building cleaning. Work clean-up shall be scheduled and directed with man-hours recorded by the Construction Manager. This clean-up is unidentifiable and broom sweeping. Each Trade Contractor is <u>still</u> responsible for trash and debris associated with their work. Each Trade Contractor is responsible for transporting (including all necessary equipment) their trash and debris to an onsite ground level dumpster provided by others. Each Trade Contractor is responsible to clean-up their debris surrounding the dumpster. Total estimated man hours are to be provided at time of enrollment of the CCIP.
 - G. All Trade Contractors are required to perform a final cleaning of its work and the jobsite.
 - H. All contractors are expected to perform cleanup associated with their work scope. It is each Trade Contractor's responsibility to remove debris resulting from their direct operations in the site dumpster. Trash removal will be a daily task per the detailed schedule that all contractors will be required to participate and complete.

51. INSPECTIONS

- A. The Trade Contractors shall coordinate, in a timely manner, all city, county, state, or other inspections as required for the completion of its Work in accordance with the Project Schedule.
- B. The Trade Contractors shall cooperate with and include the costs of all labor and materials required to assist the Owner's testing/inspection agency with inspections and gathering of samples and assistance in access to the specific locations of tests/inspections, and demonstrations. Initial costs for testing laboratory shall be by others if so noted in documents. Costs for re-test due to noncompliance shall be borne by the offending Trade Contractor. A minimum of 24 hours' notice must be given to the testing agency for testing required during normal working hours. If testing is required on weekends, 48 hours' notice is required.
- C. Coordinate with the Owner's Testing/Inspection Agency as required by the specifications.
- D. The Trade Contractors will cooperate with and demonstrate system operation and safety compliance with the local building and fire inspectors as needed and required for building occupancy. All associated costs, inclusive of after-hours inspections, are the responsibility of the Trade Contractor installing the system.

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- 52. All demolished items specified to be **salvaged** must be removed and secured without damage. The Trade Contractors must coordinate and deliver to the Owner per the Construction Manager's direction. Multiple handling may be required and must be performed at no additional cost.
- 53. **TC-011 General Trades** to include \$6,000 for project reproduction / production of temporary wayfinding, safety signage, and other project communications.
- 54. **TC-011 General Trades** to provide one (1) full-time **Yard Boss/Logistics Manager (from 5/01/20 until 04/1/21) for normal shift of five (5) 8 hour days/week and (1) 8 hour day for (standard work week)**. The intent for this person to be in early and stay late for off hour deliveries. Saturday's, Sundays, and off hour shifts are not planned. These duties for the "**yard boss**" responsibilities are typically, but not limited to: Responsibility to develop and maintain site security and delivery schedule, assist with building trash removal. The Construction Manager will provide format for schedule to be maintained by this individual. Logs and schedules are to be submitted to Turner at the Daily Stand up meeting on a daily basis for approval and coordination with all trades. <u>Each Trade Contractor is to schedule with this individual all deliveries</u>. The yard boss will be responsible for coordinating all deliveries, and site security limited to the loading area, delivery area, dumpster area, and student walkway area. This individual will be responsible for cleanup of the loading area, dumpster area, and delivery area. The yard boss will be responsible for all dumpster delivery and pick up. The intent is for this person to be same person daily i.e. not a different person each day, etc.
 - A. TC-011 will provide one (1) telescoping forklift (10-ton with outriggers) and (1) tracked skid steer with smooth bucket and sweeper attachment for a duration starting on May 01, 2020 through April 1, 2021 including all maintenance, repairs, fuel, etc. Base the minimum specifications on telescoping forklift JLG G10-55 model (w/ enclosed cab). Base the minimum specification on tracked skid steer on CAT 259D3 (w/ enclosed cab). TC-011 General Trades will use telescopic forklift & skid steer for general project assistance. The Yard Boss will be performing general loading/unloading for all subcontractors BP-03.
 - B. When this person is not actively managing site logistics or deliveries they will be expected to assist with building trash removal, site clean-up, project fence repair, etc. as directed by the Construction Manager.
 - i. This individual when not responsible for site logistics will be utilized for basic jobsite needs consisting of cleaning, general carpentry skills, etc. to be directed by the Construction Manager. This individual should come to site with general carpentry tools to perform basic jobsite needs.
- 55. **TC-011** General Trades Contractor to maintain all site perimeter fencing as indicated by site logistics plan and remove when requested by Construction Manager.
 - A. Please note that there will be a mixture of Jersey Barrier Fencing, post set in ground, and weighted fencing to accommodate site logistics. This contractor to include all filling of fence poles, including patching of poles set in asphalt or concrete.
 - B. TC-011 to provide removal of all fencing and jersey barriers when directed by Construction Manager. All jersey barrier to be returned to rental company at project completion.
 - C. TC-011 to include any relocation of jersey barrier fencing as required by project.

56. USE OF PREMISES – PARKING & TRANSPORTATION:

- A. Contractor **parking** is <u>NOT</u> permitted on the job site, or the Student Center Parking Lot, or on the University of Kentucky Campus. Turner cannot guarantee that UK will issue passes to any lots on the University campus. Parking is at the discretion of the bidding contractor.
- B. Any and all parking permitting costs or parking violations shall be borne by the Trade Contractors.

57. USE OF PREMISES CAMPUS:

- A. Trade Contractors are expressly forbidden to enter existing campus buildings except for specific construction purposes. Restrooms, drinking fountains, vending machines, gift shop and food service areas are <u>NOT</u> for Contractor use.
- B. Trade Contractor communications with University Staff, Faculty and students is strictly forbidden.
- C. "Catcalling" or otherwise harassing University Staff, Faculty, Students, or the general public is strictly forbidden. Noncompliance with this provision is grounds for immediate dismissal from the jobsite. Additionally, the tradesperson and Trade Contractor may be subject to legal action.

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- 58. All Trade Contractors must fully comply with the Construction Manager's **Safety Plan** (included in this manual as **attachment 'C')**, and all federal, state, and local safety ordinances. The Trade Contractor must also submit a formal written project specific safety plan that is complimentary to the Construction Manager's Safety Plan. In addition, all Trade Contractors shall provide a competent safety person to monitor all aspects of the Trade Contractors' work in accordance with the Safety Plan. All workers must go through Safety Orientation prior to commencing work. Safety Orientations will be held Mondays and Wednesdays at **7:15 am** (pending staggered shift(s)) in the Turner jobsite office. All Trade Contractor "Principals" are required to attend a monthly safety jobsite walkthrough at the Construction Manager's discretion. In order to work on this project, a negative drug test is required prior to starting work. For "**Drug project testing requirements**", refer to Turner safety program.
- 59. All trade contractors are to be responsible to ensure at the end of each day's work shift the building perimeter is **secure and locked down**.
- 60. All Applications for Payment and all supporting documents (including but not limited to lien waivers, sworn statements, and the like) for Subcontractor and its sub-subcontractors and suppliers, shall be in electronic format and shall be submitted to Contractor using the <u>Textura-CPM™</u> payment management system. Subcontractor shall be responsible for the fees and costs owed associated with Subcontractor's use of the Textura-CPM™ payment management system. Subcontractor shall include a similar provision in its sub-subcontracts and purchase orders. Fees to Subcontractors are calculated as 0.22% (22 basis points) of contract value, with no minimum fee and a maximum fee of \$3,750. Fees to Subcontractors' sub-subcontractors and suppliers are a fixed fee of \$100 per sub-subcontractor or supplier contract.
- 61. CONTRACTOR CONTROLLED INSURANCE PROGRAM (CCIP)

The project will incorporate a Contractor Controlled Insurance Program (CCIP) as described in the CCIP Manual included in the Project Manual. The Lump Sum Base Bid amount should <u>not</u> include on-site worker's compensation costs, commercial general liability, or excess liability costs for this work, in accordance with the CCIP Manual. Trade Contractors are responsible for & must provide evidence of automobile insurance and offsite general liability & worker's compensation. Trade Contractors must submit required forms to be enrolled in the CCIP with their bid.

- A. All sub tier contractors will be required to enroll in the CCIP program.
- B. Contractors to review specific work scopes requirements for corporate insurance in lieu of CCIP program.

62. PAYMENT AND PERFORMANCE BONDS

The base bid should NOT include Payment and Performance Bonds. Provide, for reference, the additional cost to provide them on the Bid Breakout sheet (page 4).

Builder's Risk Insurance is provided by the Construction Manager per the terms of the General Conditions Article 35.5. Unless otherwise provided for through agreement, the Trade Contractor experiencing any loss claimed under the builders risk policy shall be responsible for that loss up to the amount of the deductible. Trade Contractor(s) may provide their own coverage for amounts up to the deductible. Refer to the General Conditions, Article 35.5 for deductible limits.

- 63. All equipment is to be equipped with high efficiency, durable construction exhaust purifiers ('Scrubbers"). Each Trade Contractor is responsible for providing and maintaining (including filter changes) scrubbers for each piece of equipment. No gas or diesel equipment to be used inside the building. Equipment should be electric or propane with exhaust scrubbers as mentioned above.
- 64. All contractors shall review **delivery access routes** and include any temporary removal/relocation of existing to transport their materials and equipment.
- 65. Smaller **floor openings**: the respective trade providing opening will cover with reinforced secured plywood. Mark "hole" and maintain as required. Small opening metal deck cutouts will be by respective trade requiring opening; respective trade contractors will comply with OSHA requirements during and after alterations.
 - A. Floor covers shall be constructed in such a manner to avoid any random kicking off, and elevated high enough to control lifts, etc... from running over them. These covers should be anchored to the concrete floor. Note ALL sleeves" are elevated 1-1/2" above rough slab.
 - B. Leading Edge perimeter and/or opening(s) assignment:
 - 1. TC-001 Site Excavation provide, maintain and remove when no longer required retention shoring guardrail system.

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- 2. TC-003 Concrete Trade Contractor is to provide before and after wood guardrail to safeguard leading edge in conjunction with site excavation, concrete and structural steel work. Provide maintain and remove when no longer required; alter as necessary.
- 3. TC-008 Curtain Wall Contractor will remove guardrail systems installed by TC-004 Structural Steel Contractor. TC-008 to remove all temporary weather protection at openings for their work. During removal, TC-008 to maintain safety measures at leading edges.
- 4. TC-014 Drywall Contractor will remove guardrail systems installed by TC-004 Structural steel contractor at location for their work. During removal, TC-014 to maintain safety measures at leading edges.
- 5. TC-007 Masonry Contractor will remove guardrail systems installed by TC-004 Structural steel contractor at location for their work. During removal, TC-007 to maintain safety measures at leading edges.
- 6. TC-018 Elevator Trade Contractor to maintain guardrail system around all elevator pit and associated work areas. Remove when no longer required.
- 66. **TC-001 Site Excavation** contractor is to furnish and install, maintain, and remove when no longer required 20# fire extinguishers with free standing stands for exterior area work zones in accordance with Turner Construction safety program and OSHA standards. This contractor to provide from project start thru May 1, 2020. Reference Attachment "C" for Safety Plan.
- 67. **TC-011 General Trades** contractor is to furnish and install, maintain, and remove when no longer required 20# fire extinguishers with free standing stands with eye wash station and first aid kit (use FireMate FM01 for basis of model) for area work zones in accordance with Turner Construction safety program and OSHA standards. This contractor to provide from May 1, 2020 thru project completion. Reference Attachment "C" for Safety Plan.
- 68. **Dumpsters** for the entire project for general construction debris from commencement of work through completion is as listed below. Note: This includes selective demolition except as noted below.
 - A. **TC-002 Site General Trades** will provide dumpsters per specification section 017419 with all required "pulls" for general construction debris ONLY in accordance with the published Scopes of Work. Please note the reporting requirements to sort debris for the purpose of recycling. Multiple dumpsters can be supported onsite or trash can be sorted off-site. Provide dumpsters from **project start until May 30, 2020**.
 - B. **TC-011 General Trades** will provide dumpsters per specification section 017419 with all required "pulls" for general construction debris ONLY in accordance with the published Scopes of Work. Please note the reporting requirements to sort debris for the purpose of recycling. Multiple dumpsters can be supported onsite or trash can be sorted off-site. Provide dumpsters from **June 1, 2020 until project completion**. Include removal dumpster covers to conform with SWPPP requirements.
 - C. Locations for construction debris will be coordinated with Turner Construction. <u>All crating materials must be</u> <u>disassembled and/or flattened prior to placement in dumpsters.</u> All demolished items must be removed in dumpsters or trucks provided by the contractor removing the items. Any materials that require special care and/or disposal shall remain the contractor's obligation to dispose of.
- 69. **TC-011 General Trades contractor** will provide **twelve** (12) (minimum 55 gallon Rubbermaid drum) **trash cans** for miscellaneous trash (not construction materials) from the entire project for <u>general construction debris</u> from commencement of work through project substantial completion. Coordinate with Turner Superintendent for locations.
- 70. **TC-011 General Trades Contractor** will <u>furnish</u> (repair or replace when necessary) **ten (10)** mobile one cubic yard (min.) "covered" **trash carts** for removal of construction debris materials from building. Each contractor is responsible to transport their material debris into the on-site dumpster; this includes cleanup of your materials around the dumpster. Transport empty trash cart back to respective floor. Trash carts will remain for the duration of the project or as no longer required.
- 71. All contractors who have installations shall provide manpower for all concrete placements (**pour watch**) to ensure work is in place and undisturbed throughout the placement of concrete. Include premium time as necessary to ensure coverage during all concrete placements. Protect all underground work, including stub-ups to ensure work is intact at the time of concrete placement.

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- 72. Temporary facilities (toilets) for this project will be located outside within the jobsite area.
 - A. **TC-002 Site General Trades Contractor** will provide and maintain (cleaning minimum once per week or twice weekly if needed) three (3) port-o-lets for the project site, from project start through May 30, 2020.
 - B. **TC-011 General Trade Contractor** will provide and maintain (cleaning minimum once per week or twice weekly if needed) six (6) port-o-lets for the project site & (1) dedicated women's port-o-let with combination lock, (3) Hand washing stations from June 1, 2020 through project completion.
- 73. The amount of material stored on site at any given time should be limited to what can be installed in a **two week** period. This will be strictly enforced.
- 74. **Restore** all roads, planting beds, and walks outside the limits as related to your work of the construction area that is disturbed during construction. This work includes but not limited to: concrete paving, asphalt paving, curbs & gutters, islands, aprons, striping, planting beds, etc.
- 75. A special effort is to be made to provide the necessary protection to keep oil (from lifts, equipment, etc.) off of all floor areas. The offending Trade Contractor will be responsible for any clean-up required due to inadequate protection.
- 76. All personnel will be required to wear a high **visibility vest or shirt**, while inside the construction zone. This requirement will remain in effect until the construction manager waves the requirement.
- 77. **Temporary Utility Installations** for the project site and structures. Specified TC shall also include costs to maintain installations for the duration of this contract:
 - A. <u>TC-002 Site General Trades</u> contractor to provide **temporary power and data** to Construction manager temporary offices as specified in their work scope. Temporary install and support as required to maintain safe installation. Coordinate with construction manager. Include conduit, conductors, disconnects, and supports as needed. **Include costs** for all associated fees, taps, meters, and usage for the duration of this contract
 - B. <u>TC-022 Electrical contractor</u> to provide **temporary site lighting** for the interior project building and site temporary site lighting for all excavation and laydown areas. Illuminate site with a minimum of 5 foot-candles for all work areas and 30 foot-candles at First Aid Station, allowing for safety during dark and night time hours, with a minimum of 10 foot-candles. It is acceptable to mount lighting on existing buildings for this purpose. Seal and patch any holes created by temporary lighting.
 - C. <u>TC-022 Electrical</u> to provide two (2) **temporary mobile power stations** per floor for scheduled work. Include one (1) 208v, 50 amp connection per floor. TC-022 to provide (2) 208v, 50 amp connections for construction equipment on 1st floor, this is in addition to the power stations.
 - D. <u>TC-020 Plumbing</u> to provide **temporary water** at a location on exterior of building coordinate with Turner Construction.
 - a. Provide and maintain two (2) spigots (in addition to one from TC-002) one on East side of building and one on south side of building.
 - E. <u>TC-020 Plumbing Contractor</u> shall install and maintain a minimum of a **3/4**" **temporary water service** at the interior of the project work area include two (2) locations. Include all necessary materials, including backflow preventers at these connections. Include costs for removal of the entire temporary water system at end of project or when directed by the Construction Manager. This Trade Contractor shall provide and maintain temporary service throughout the project from contract award through removal of the temporary water system.
 - a. This contractor to include all tabs, taps, meters, valves, etc.
 - b. This contractor to include (1) fountain/bottle filler stations for use by project. Include all labor and material for installation and removal when directed by the Construction Manager.
 - F. <u>TC-020 Plumbing Contractor</u> shall provide adequate water source connection for fire proofing pump equipment.
 - G. <u>TC-020 Plumbing Contractor</u> install and maintain two (2) "mop sink" maintenance type basins with a temporary sanitary and water connections. Take temporary drain to nearest stack location
- 78. **The University of Kentucky campus** is tobacco free. "Use of all tobacco products is prohibited in all owned, operated, leased or [health care] controlled university buildings, grounds, parking structures, enclosed bridges and

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walkways, sidewalks, parking lots and vehicles, as well as personal vehicles in these areas." "Tobacco includes cigarettes, pipes, snuff, chewing tobacco, etc."

There are tobacco treatment centers such as the Local health departments (Fayette county Health Department 859-288-2327), 1-800-quit-now. For listings "go to the UKhealthcare.uky.edu to find a link to a statewide listing of tobacco programs."

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via CONSTRUCTION MANAGER AT RISK CONTRACT University of Kentucky Capital Construction Division

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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY A CONSTRUCTION MANAGER AT RISK University of Kentucky Capital Construction Division

These General Conditions are binding upon the Construction Manager 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 ARCHITECT'S 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 ChangeOrder.

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 Construction Manager, 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 Construction Manager 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 ContractDocuments.

1.1.6 CONSTRUCTION MANAGER or CONSTRUCTION MANAGER AT RISK (CM) - The term "Construction Manager" or "Construction Manager at Risk" (CM) 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 construction manager, and who will provide consultation and collaboration regarding the construction during and after design of the Project. The CM shall execute and hold all construction Trade Contracts and Purchase Orders for the Project.

1.1.7 CONTRACT - The term "Contract" means the Contract between Owner and Construction Manager (and therefore all Trade Contractors) and consists of all Contract Documents as defined in Article 1.1.10 of these General Conditions.

1.1.8 CONTRACT AMOUNT - The term "Contract Amount" means the sum stated in the Agreement which represents the total amount payable by the Owner to the Construction Manager 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.

1.1.9 CONTRACT DOCUMENTS - The "Contract Documents" include the Agreement of Contract between the Owner and the Construction Manager (the "Agreement"); the Request for Proposal; the General Conditions; the Special Conditions; the Construction Manager's Form of Proposal; the Construction Manager's Bonds; the Specifications, Drawings and Addenda for the construction of the Project which are to be used for bidding of the bid pack/Trade Contracts; 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 Construction Manager. 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 Construction Manager 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 Construction Manager to certain

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responsibilities or require the Construction Manager to perform certain actions, the Construction Manager 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 Construction Manager of its obligation to the University under this contract.–

1.1.10 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 Trade Contractor shall complete the Work required by the Contract and shall achieve certification of substantial and final completion.

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 "CM Project Manager" means the individual employed by the Construction Manager 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 Trade Contractor or any Sub-contractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

SUBSTANTIAL COMPLETION - The term "Substantial Completion" is the point at which, as 1.1.17 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 Trade Contractor(s) 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 Construction Manager shall certify in writing that all remaining Work, Rev August 2019 4 **General Conditions** the same being solely of a "punch list" nature, will be completed within thirty (30) consecutive Calendar Days following the date of Substantial Completion.

1.1.17.1 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).

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

1.1.19 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 Trade Contractor(s) to perform and complete the Construction Manager's obligations under the Contract in an expeditious, orderly and workmanlike manner. The Work may constitute the whole or a part of the Project.

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

1.1.21 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 Construction Manager may be forwarded through the Consultant.

2.2 The Consultant will regularly, but no less frequently that 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 Construction Manager on all applications for progress payments.

2.2.1 If applicable for the Work, the Consultant will verify to the Owner that the Trade Contractor(s) 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 Construction Manager by the Trade 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 Trade Contractor(s)'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 Trade Contractor(s) of

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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 often (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 Architect's Supplemental Instructions (ASI).

2.8 When requested by the Construction Manager, the Consultant will conduct inspections to determine if the Project is at the level of completion required by and is 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.

2.9 The Construction Manager 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 Trade Contractor(s) shall be directed to the Consultant.

ARTICLE 3 - CORRELATION AND INTENT OF CONTRACT DOCUMENTS

3.1 Execution of the Contract by the Trade Contractor(s) is a representation that the Trade Contractor(s) has or shall thoroughly and carefully examine the site of the of 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 Construction Manager shall insure 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 Trade Contractor(s) 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 Trade Contractor(s) shall carefully study and compare the Contract Documents with each other and with other information provided to the Trade Contractor(s) by the Construction Manager, 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 Trade Contractor(s). Any failure to properly familiarize itself with the proposed Work shall not relieve the Trade Contractor(s) 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 Trade Contractor(s). All 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 Trade Contractor(s) 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 Construction

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Manager 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 Construction Manager 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 Construction Manager at Construction Manager's last known address. Such notice may also, at the Owner's election, be hand-delivered to the Construction Manager or the Construction Manager'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, Construction Manager, 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 Construction Manager 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 Construction Manager 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 Trade Contractor(s) shall submit a shop drawing and product sample submittal schedule to the Construction Manager establishing dates for the submission of Shop Drawings and product samples prior to the submittal of the Trade Contractor(s)'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 Construction Manager's construction schedule and shall allow for adequate and reasonable time for review of the samples and submittals by the Consultant. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s)'s review and submittal to the Consultant via the Construction Manager of any Shop Drawing or sample shall constitute a representation to the Owner and Consultant that a) the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) for corrections as may be required. The Trade Contractor(s) 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 Rev August 2019 7 General Conditions

Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) from the responsibility for any deviations from the requirements of the Contract Documents unless the Trade Contractor(s) 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 Trade Contractor(s) from responsibility for errors or omissions in the Shop Drawings.

ARTICLE 6 - LAYING OUT WORK

6.1 The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s)'s Contract amount or stipulated time for completion shall be allowed when due to failure by the Trade Contractor(s) to do so.

6.2 The Trade Contractor(s) shall be responsible for all lines, levels and measurements of all Work executed under the Contract. The Trade Contractor(s) shall verify all dimensions 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) shall advise Sub-contractors and trades persons performing Work of marked lines and levels provided for their use in layout work. The Trade Contractor(s) shall verify layout information shown on drawings as required for the Work.

6.3 The Trade Contractor(s) 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 Trade Contractor(s) for performance of the Work.

6.4 If any encroachments are made by the Trade Contractor(s) or any Sub-contractor on any adjacent property, the Trade Contractor(s) shall, at the Trade Contractor(s)'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 Trade Contractor(s) 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 Construction Manager free of charge one electronic or reproducible copy of the Drawings and Specifications for execution of the Work. The Trade Contractor(s) 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 Trade Contractor(s) or by the Sub-contractors.

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Arrangements for orders and payment for plans, specifications and other contract documents must be made with Lynn Imaging, Lexington, Kentucky (<u>http://www.ukplanroom.com</u>) or by phone at 1.800.888.0693 or 859.255.1021) before a set of documents will be issued.

7.3 The Trade Contractor(s) shall keep one copy of all Contract Documents, including Drawings, Specifications and Shop Drawings on the site and in good order. A qualified representative of the Trade Contractor(s) shall record on these documents, from day to day as Work progresses, all changes and deviations from the Contract Documents. Prior to Substantial Completion, each Trade Contractor (via Construction Manager) 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, Construction Manager, or any Sub-contractor or Supplier on any other Project.

ARTICLE 8 - TEMPORARY UTILITIES

8.1 The Trade Contractor(s) 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 Trade Contractor(s), 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) and Sub-contractor use during the Project per the project work scopes. 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contracts, the Trade Contractor(s) shall determine the source of supply for all materials required under that Trade Contract 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 Trade Contractor(s) shall immediately notify the Consultant in (via the Construction Manager) writing of any known problems with the procurement, fabrication or ordering of any materials. Unless changes

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are approved in writing by the Consultant, the Trade Contractor(s) will not be excused for delays in securing materials specified.

9.4 The Trade Contractor(s) 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 Trade Contractor(s) that are related to this Project must use the name of the Trade Contractor(s) 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 Trade Contractor(s). Any invoices received at the University that are related to this Project will be immediately forwarded to the Trade Contractor(s). Copies of these invoices will be made and placed in the Trade Contractor(s)'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 Trade Contractor(s) 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 Trade Contractor(s), if required, shall furnish satisfactory evidence as to the kind and quality of materials.

9.7 The Trade Contractor(s) 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 Trade Contractor(s). 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 Construction Manager, the Consultant or the Owner. Improper conduct of any kind will not be permitted and may result in the offending individual, Sub-contractor or Trade Contractor(s) being barred from the Owner's premises. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) is responsible for payment of all associated royalties. The Trade Contractor(s) 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 Trade Contractor(s)'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 Trade Contractor(s), 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 Trade Contractor(s), but no fee shall be charged to or paid by the Trade Contractor(s) 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 Trade Contractor(s).

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

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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.

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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 (permitee 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 permitee of the KPDES Permit. Any fines or other costs resulting from failure to comply, levied against the Owner will be assessed against the site contractor's or General Constructor'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 Construction Manager shall furnish a final occupancy permit from the proper agency or agencies as required.

11.6 The Trade Contractor(s) shall, by provision within each applicable subcontract 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 Trade Contractor(s) 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 Trade Contractor(s) shall pay for any 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 Trade Contractor(s) 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 Trade Contractor(s), 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 Trade Contractor(s) shall maintain fire protection as required by the Kentucky Building Code. Access to the Project site and surrounding buildings for local fire truck access during construction must be maintained. The Trade Contractor(s) 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 Trade Contractor(s) utilizes the Owner's fire protection equipment, the Trade Contractor(s) shall replace any such materials lost, consumed or misplaced during the Contract period. The Trade Contractor(s) 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 Trade Contractor(s) shall immediately provide alternate protection such as a fire watch until such systems are returned to 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 Trade Contractor(s) and Sub-contractors are responsible for the security of their own materials, tools and equipment at the Project site.

12.5 The Construction Manager shall provide to the Owner's Project Manager a key to Construction Manager'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 Trade Contractor(s) shall provide safety controls for protection of the life and health of employees and visitors. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Construction Manager shall require all Sub-contractors to have an effective written safety program and be required to follow the Construction Manager's written safety program.

14.3 The Construction Manager 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, or occupational disease. The Construction Manager shall maintain an accurate record of and shall report to the Owner's Project Manager, any damage to property, materials, supplies, or equipment incident to Work under this Contract.

14.4 The Kentucky Labor Cabinet's Division of Occupational Safety and Health may notify the Trade Contractor(s) of any noncompliance with the foregoing provisions. The Trade Contractor(s) shall, upon receipt of such notice, immediately correct the cited conditions. Notice delivered to the Trade Contractor(s) or the Trade Contractor(s)'s representative at the site of the Work shall be deemed sufficient for this purpose. If the Trade Contractor(s) fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the Work until satisfactory 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 Trade Contractor(s). 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 Trade Contractor(s).

14.5 The Trade Contractor(s) or any Sub-contractor shall immediately contact the University of Kentucky's Department of Occupational Health and Safety through the Construction 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 Trade Contractor(s).

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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 occupational safety and health standards as authorized under Federal or State Occupational Safety and Health Standards.

14.8 The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) shall immediately stop work in the affected area and notify the Owner's Project Manager (via the Construction 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 Construction Manager 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 Trade Contractor(s) can continue Work in the affected area.

15.1.3 The Trade Contractor(s) shall not be required to perform any Work related to asbestos, lead, polychlorinated biphenyls, or other hazardous material. The Trade Contractor(s) 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 Construction Manager, the Trade Contractor(s), and Sub-contractors will be under the requirements of the OSHA Hazard Communication Standard (29) CFR 1910.1200. The Trade Contractor(s) 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 Trade Contractor(s)'s employees may be exposed;

(2) Statement of the measures that Trade Contractor(s)'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 Material Safety Data Sheets (MSDS's) related to the hazardous chemicals located in the Work area; (4) Procedures that the Trade Contractor(s)'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 may be reviewed upon request by the Trade Contractor(s) or any Sub-contractor as they pertain to the Work areas of the Project. Photocopies of the MSDS's may be made by Trade Contractor(s) at its expense.

15.3 The Trade Contractor(s) and Sub-contractors shall provide the Construction Manager and Owner with a list of any hazardous materials that will be used on the job site. The Trade Contractor(s) and Sub-contractors shall provide the Owner with copies of Material Data Sheets for all such materials to be used.

15.4 It is the policy of the Owner that PCB containing equipment will be treated by the Construction

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15.5 The Trade Contractor(s) shall ensure that NO asbestos-containing materials (including but not limited to: drywall, joint compound, roof mastic or 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) from performing the Work in full compliance with the Contract Documents, nor relieve the Trade Contractor(s) 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 Trade Contractor(s) 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 Construction Manager with a list of construction milestones that require inspection, the Trade Contractor(s) 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 Trade Contractor(s) 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 the Specifications, the Consultant's instructions, laws, ordinances, or any public authority require any Work to be specially inspected, tested or approved, the Trade Contractor(s) shall give the Consultant (via the Construction Manager) 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 Trade Contractor(s)'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

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it shall be uncovered by the Trade Contractor(s). 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 Trade Contractor(s) shall pay all costs for uncovering and replacement of such Work.

ARTICLE 17 - SUPERINTENDENT - SUPERVISION

17.1 The Trade Contractor(s) shall completely and thoroughly direct and superintend the Work in accordance with the highest standard of care for the Trade Contractor(s)'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 Trade Contractor(s) shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures. The Trade Contractor(s) shall be responsible for the acts and omissions of all Sub-contractors and persons directly or indirectly employed by the Trade Contractor(s) in the completion of the Work. The Trade Contractor(s) shall be responsible for coordinating and scheduling all portions of the Work unless the Contract Documents give other specific instructions. The Trade Contractor(s) 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 Trade Contractor(s).

17.2 The Trade Contractor(s) 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 Trade Contractor(s)'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 Trade Contractor(s) 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 Trade Contractor(s). Immediately after the award of Contract, the Trade Contractor(s) shall submit to the Consultant a list of Trade Contractor(s)'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 Trade Contractor(s), in which case the Trade Contractor(s) 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 Trade Contractor(s) of the grounds. In either case, the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) via the Construction Manager 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 Trade Contractor, Construction Manager 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. 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.

18.3.1 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 CM. 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.

18.3.2 The CM is entitled to a mark-up for bonds and insurance on all change orders. For change orders coded "End User Requested Changes" or "Other Owner Requested Changes" the CM may add overhead & profit in addition to the bonds and insurance referenced above. The mark-ups shall not exceed the combined percentage for overhead and profit, bonds, and insurance stated in the CM's "Financial Proposal Summary". These mark-ups will not be added to the individual change orders but will be reconciled by amendment at the completion of the project and/or on an annual basis for those projects exceeding 12 months in duration.

18.4 If none of the above methods are mutually agreed upon or if the Trade Contractor(s) does not respond promptly, a change may be made by unilateral determination by the Construction Manager, 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 Trade Contractor(s) shall promptly proceed with the Work involved in the change upon receipt of a written order signed by the Owner. In such case, the Trade Contractor(s) 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 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.

18.6 The Trade Contractor(s) 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 Construction Manager 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 shall be added to the fair rental value. Transportation costs shall not be allowable for distances exceeding one hundred (100) miles.

18.7 The Trade Contractor(s) 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 Trade Contractor(s) 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

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18.8 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 all claims for direct, indirect and consequential costs, including all items covered and affected. Any such claim not presented by the Trade Contractor(s) for inclusion in the Change Order shall be waived.

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 Trade Contractor(s). The Trade Contractor(s) shall carry out such orders promptly. If the Trade Contractor(s) should claim that an ASI involves additional cost or delay to the completion of the Work, the Trade Contractor(s) shall give the Consultant via the Construction Manager written notice thereof within ten (10) Calendar Days after receipt of the written ASI. If this notification does not occur, the Trade Contractor(s) 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 Trade Contractor(s) claims that any instructions by the Consultant involve additional cost or time extension, the Trade Contractor(s) shall give the Consultant via the Construction Manager 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 Trade Contractor(s) regards as a Change Order. Unless the Trade Contractor(s) acts in accordance with this procedure, any oral order shall not be treated as a change and the Construction Manager 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.

18.12 Prior to final payment, the Construction Manager shall provide to the Owner a full accounting of executed change orders by and between the Construction Manager and the Trade Contracts. The Construction Manager shall also provide a reconciliation of that accounting against the executed change orders by and between the Owner and the Construction Manager.

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 Trade Contractor(s) 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

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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 Trade Contractor(s) 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 Trade Contractor(s) shall contact and cooperate with the Consultant to make the required adjustments. Any request for change in the Contract Amount by the Trade Contractor(s) 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 Construction Manager or the Construction Manager's Trade contractor(s) for any reason, the Trade Contractor(s) 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 Trade Contractor(s), is interrupted by activities Trade Contractor(s) for any reason, the entire cost to restore service to the satisfaction of the Owner shall be paid by the Trade Contractor(s). Should the Trade Contractor(s) 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 Trade Contractor(s) pursuant to Article 22 of the General Conditions.

20.3 The Trade Contractor(s) 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 via the Construction Manager 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s), 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 Trade Contractor(s)'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 Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) shall continue performance of the Contract as directed by the Consultant. No claim by the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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

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20 General Conditions Trade Contractors under Construction Manager at Risk – Modified by TCCO 12/2019 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 Trade Contractor(s) shall anticipate this normal seasonal weather in the development of the Project baseline schedule.

Mean Number of Days When	Jan.	Feb	Mar.	Apr	May	Jun.	Jul.	Aug	Sep	Oct	Nov.	Dec.
Max Temp 32° or Below	9	6	1	0	0	0	0	0	0	0	1	5
Precip. Is 0.10 Inch or Greater	7	6	9	7	8	8	8	6	5	5	7	7

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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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.

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 Trade Contractor(s) shall submit to the Consultant and the Owner via the Construction Manager 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 Trade Contractor(s) 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 Construction Manager and/or the Construction Manager'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 Trade Contractor(s) and extensions of the time fixed for completion of the Contract shall be the Trade Contractor(s)'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 and 18.3.1 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 Trade Contractor(s) 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 Trade Contractor(s)'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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) via the Construction Manager 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 Trade Contractor(s) 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 Trade Contractor(s) 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 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 Trade Contractor(s) or, if no additional payments are due, Trade Contractor(s) or the Trade Contractor(s)'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 Trade Contractor(s) of responsibility for materials and equipment incorporated into the Work that fails to meet specification requirements, or for the 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 Trade Contractor(s) shall correct it promptly after receipt of written notice from the Owner to do so. The Trade Contractor(s) 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 Trade Contractor(s) under the Contract including, but not limited to, warranties. The obligation imposed by special guarantees or warranties required by the Contract, given by the Trade Contractor(s), 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s), the Owner shall be entitled to recover all amounts for such corrections, including costs and attorney's fees, from Trade Contractor(s) via the Construction Manager or surety.

ARTICLE 24 - TERMINATION OF CONTRACT FOR CONVENIENCE OF OWNER

24.1 The Owner, by written notice to the Trade Contractor(s), 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 Trade Contractor(s) 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

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as yet not completed. The Trade Contractor(s) shall not be entitled to profit and overhead on Work not performed.

ARTICLE 25- OWNER'S RIGHT TO STOP WORK

25.1 If the Trade Contractor(s) 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 Trade Contractor(s) via Construction Manager 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) or others.

ARTICLE 26 -TERMINATION OF CONTRACT FOR DEFAULT ACTION OF TRADE CONTRACTOR(S)

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 Trade Contractor(s) 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 Trade Contractor(s) fails to complete the Work within such time;

26.1.2 If the Trade Contractor(s) is adjudged a bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Trade Contractor(s) 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 Trade Contractor(s), or if a trustee or receiver is appointed for the Trade Contractor(s) or for any of the Trade Contractor(s)'s property on account of the Trade Contractor(s)'s insolvency, and the Trade Contractor(s) or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within ten (10) days of receipt of a request for assurance from the Owner;

26.1.3 If the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;

26.1.6 If the Trade Contractor(s) disregards the authority of the Consultant or the Owner;

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

26.1.8 If the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s)'s Surety take over and complete the Work on the Contract. The Owner may require that in so doing, the Trade Contractor(s)'s Surety not utilize the Trade Contractor(s) in performing the Work. Upon the failure or refusal of the Trade Contractor(s)'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 Trade Contractor(s)'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 Trade Contractor(s) from the site. The Owner may take possession of the Work and of all of the Trade Contractor(s)'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 Trade Contractor(s), without liability to the Trade Contractor(s). 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 Trade Contractor(s) but which are stored elsewhere, and finish the Work as the Owner deems expedient. In such case, the Trade Contractor(s) 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 Trade Contractor(s) for the cost of the Work it performed and a reasonable allowance for overhead and profit. If such costs exceed the unpaid balance, the Trade Contractor(s) or the Trade Contractor(s)'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 Contractor(s) shall not be eligible for the award of such Contract.

26.3.3 The Trade Contractor(s) shall be liable for any damage to the Owner resulting from the termination or the Trade Contractor(s)'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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s). 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 Trade Contractor(s) via the Construction Manager by the Owner will not release the Trade Contractor(s) from liability.

26.3.6 In the event the Contract is terminated under this Article, and it is determined for any reason that the Trade Contractor(s) 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 Trade Contractor(s) in writing or cause the Trade Contractor(s) 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.

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ARTICLE 28 - TIME OF COMPLETION

28.1 The Trade Contractor(s) 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 actual 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 Trade Contractor(s) 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 Construction Manager shall notify the Consultant in writing and request an inspection. The declaration and request shall be accompanied by a list prepared by the Construction Manager of those items of Work still to be completed or corrected. The failure of the Construction Manager 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 Construction Manager 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 Construction Manager 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 Trade Contractor(s) 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 Construction Manager 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 Trade Contractor(s) 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 Construction Manager 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 Construction Manager in writing

28.4 <u>Operation and Maintenance Manual Deliverables</u>. 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 Trade Contractor(s) shall comply with the requirements of Article 8.7 of the Special Conditions₇ (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 Trade Contractor(s) 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 not less than three percent (5%) of the current Contract Amount. In the event the Trade Contractor(s) 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 <u>Project Close Out.</u> When the Trade Contractor(s) considers that all Work required by the Contract is 100% complete, including correction of any remaining punch list work or deficiencies, the Trade Contractor(s) shall notify the Consultant via the Construction Manager in writing and request a final inspection. The Consultant, upon receipt of written notice from the Construction Manager that the Work is complete and is ready for final inspection and acceptance, will promptly make such inspection and if the Consultant finds the Work completed and acceptable under the Contract Documents and the Contract fully performed, the Consultant will notify the Construction Manager in writing to submit, and will certify to the Owner a final Certificate for Payment in accordance with Articles 30.9 and 30.9.1 of these General Conditions. If the Trade Contractor(s) 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 Trade Contractor(s) 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, Construction Manager, and the Trade Contractor(s) 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 Trade Contractor(s) agree on the amount stated as liquidated damages in the Agreement. The Owner and Trade Contractor(s) agree that the amount stated as liquidated damages are not intended to be penalties.

29.2 Should the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) from further obligations and liabilities to complete the entire Contract. Permitting the Trade Contractor(s) 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 CONSTRUCTION MANAGER

30.1 Payments on account of this Contract shall be made monthly as Work progresses. The Construction Manager 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

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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 Construction Manager 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 Construction Manager 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 Construction Manager 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 Trade Contractor(s) via the Construction Manager must furnish the following:

A list of the materials consigned to the Project (which shall be clearly identified), giving the place of 30.3.1 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 Trade Contractor(s) shall not relieve either the Construction Manager 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 Construction Manager have visited the Trade Contractor(s)'s place of storage and checked all items listed on the Trade Contractor(s)'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.

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

30.6 Each payment made to the Trade Contractor(s) shall be on account of the total amount payable to the Trade Contractor(s) and the Trade Contractor(s) 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 Trade Contractor(s) 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 Within thirty (30) Calendar Days of the award of any Trade Contracts, and prior to submitting the next application for payment, the Trade Contractor(s) shall submit to the Consultant and the Owner for approval a detailed breakdown of the Contract Amount including all trade contracts that have been awarded as of the date of that application for payment 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 Trade Contractor(s)'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 Trade Contractor(s).

30.8 Retainage - The Owner will retain ten percent (10%) of the Construction Manager and Trade Contractor(s)'s progress payments, including amounts claimed for construction management fee 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 Trade Contractor(s) 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 Trade Contractor(s) has failed or refused to correct or complete, or

30.8.1.3 Failure of the Trade Contractor(s) to perform any of its obligations under the Contract, or

30.8.1.4 Failure of the Construction Manager 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 Trade Contractor(s) 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 Construction Manager 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. Final change order reconciliation as per Article 18.12 must be provided prior to final payment.

30.9.1 Upon issuance of the Certificate of Final Completion by the Owner and submittal by the Construction Manager and Trade Contractor(s) of all required documents and releases, all retained amounts shall be paid to the Construction Manager as part of the Final Payment. By accepting such payment, the Construction Manager certifies that all amounts due or that may become due to any Sub-contractor, any Consultant of the Construction Manager, 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 Construction Manager shall promptly pay each Sub-contractor and material supplier upon receipt

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The Consultant may, on request, furnish to any Sub-contractor or material supplier information regarding the percentages of completion applied for by the Construction Manager 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 Subcontractor or material supplier except as may otherwise be required by law.

ARTICLE 31 - AUDITS

31.1 The Construction Manager'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 Construction Manager'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 Construction Manager or contractor records which may have a bearing on matters of interest to the Owner in connection with the Construction Manager'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 Trade Contractor(s) representations regarding pricing of invoices; and

Accuracy of Trade Contractor(s) representations related to claims submitted by the Construction Manager or its payees.

31.3 The Construction Manager shall require all payees (examples of payees include Trade Contractors, Sub-contractors, 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 Construction Manager 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 Construction Manager will cooperate fully and will cause all related parties and all of the Construction Manager'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 Construction

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Manager'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 Construction Manager 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 Trade Contractor(s) to the Construction Manager and/or Owner, in addition to making adjustments for the overcharges, the reasonable actual cost of the Owner's audit shall be reimbursed to the Owner by the Trade Contractor(s). Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Trade Contractor(s)'s invoices and/or records shall be made within Ninety (90) Calendar Days from presentation of the Owner's findings to the Construction Manager.

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 Trade Contractor(s), 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 Trade Contractor(s), its sureties, contractors, subcontractors, vendors and their respective employees and agents

ARTICLE 32 - PROGRESS & SCHEDULING

32.1 If requested by the Owner during the Design Phase of the Project, and working in cooperation with the Owner and the Consultant(s), the Construction Manager shall prepare a Critical Path Method (CPM) type Design Phase schedule incorporating design phase and review activities through completion of the design and bidding of the Trade Contracts, shall include in this Design Phase schedule the broad categories of Work to be accomplished in the subsequent implementation of the design and construction of the Project, and shall modify and update this Design Phase schedule as necessary to reflect the actual status and then current plan for the Project.

32.2 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 using earlier versions of Primavera scheduling software (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.

32.2.1 Prior to bidding Trade Contracts, the Construction Manager shall prepare and submit to the Owner and the Consultant a preliminary CPM construction schedule for the Work that will be included in the Project bidding documents.

3.2.2.2 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.

32.2.3 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 Construction Manager and shall not be the basis of any claim for delay or extension of time.

32.2.4 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.

32.2.5 The Construction Manager 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

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32.2.6 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 Construction Manager.

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

32.4 The Trade Contractor(s) shall cause the work to be performed pursuant to the most recentschedules.

ARTICLE 33 - USE OF COMPLETED PORTIONS

33.1 Upon mutual Agreement between the Owner, Construction Manager, 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 Trade Contractor(s) shall indemnify and hold harmless the Owner, Construction Manager, 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 Construction Manager, 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 Trade Contractor(s) shall also indemnify and hold harmless the Owner, Construction Manager, 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 Construction Manager, 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 Trade Contractor(s) or any Sub-contractor under Worker's Compensation acts, disability benefit acts or other employee benefit acts.

34.4 The obligations of the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) at the Trade Contractor(s)'s expense. Reference Turner CCIP

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program for additional details.

35.2 The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s).

35.4. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 <u>Builders Risk Insurance</u>. The Construction Manager 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, Construction Manager, and all Sub-contractors and of their subcontractors. It shall insure against perils of fire, extended coverage, vandalism and malicious mischief. Trade Contractor(s)'s work performed, and materials to be incorporated into the project and stored on the jobsite, will be covered. Any such event occurring upon the Work Site covered under this policy and for which a claim is filed, <u>the causing trade contractor shall held responsible to incur the deductible cost of this policy in its</u> <u>entirety for said occurrence per below costs.</u> Builder's Risk does not include temporary buildings, or Trade Contractor(s) or Trade Contractor(s)'s tools, equipment, or trailers and contents. Deductibles applied per OCCURANCE:

\$ 10,000: Base Rate

\$ 50,000: Water Damage, Gross Negligence

\$100,000: Flood, Earthquake, Windstorm, Costal Windstorm

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 Construction Manager 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 Construction Manager 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 Construction Manager 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 Construction manager 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 Trade Contractor(s) 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 Trade Contractor(s)'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 Trade Contractor(s)'s own forces, Sub-contractors, or by material suppliers, and whether occurring in a new or existing building, shall be repaired by the Trade Contractor(s) at the Trade Contractor(s)'s expense, and any materials damaged inside the building, including personal property, shall be repaired or replaced at the full replacement cost by the Trade Contractor(s) at the Trade Contractor(s)'s expense.

37.3 For existing buildings, the Trade Contractor(s), 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 Trade Contractor(s) 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 Trade Contractor(s). 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 Trade Contractor(s)'s claims and disputes shall be referred to the Consultant via the Construction Manager for review and recommendation. All claims shall be made in writing to the Consultant and to the Owner's Project Manager not more than ten (10) days from the occurrence of the event which gives rise to the Rev August 2019 34 General Condition claim or dispute, or not more than ten (10) days from the date that the Trade Contractor(s) 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.

38.1.1 The provisions of Article 43.2 notwithstanding, claims and disputes between the Construction Manager and any Sub-contractor or supplier shall not be referred to the Consultant except to request interpretation and/or clarification of the intent of the plans or specifications. Such claims and disputes between the Construction Manager and any Sub-contractor shall be resolved between those parties as required by Article 43.4 of these General Conditions.

38.2 The Consultant's decision shall be final and binding on the Trade Contractor(s) unless the Trade Contractor(s) submits to the Consultant via the Construction Manager and the Owner's Project Manager a written notice of appeal within fifteen (15) Calendar Days of the Consultant's decision. The Trade Contractor(s) must present within fifteen (15) Calendar Days of such 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s), the Project Manager shall notify the Trade Contractor(s) vis the Construction Manager and the Consultant and direct the Trade Contractor(s) to perform the Work about which the claim was made and the Trade Contractor(s) shall proceed with such Work in accordance with the Project Manager's instruction. If the Trade Contractor(s) disagrees with a decision of the Project Manager concerning a Trade Contractor(s)'s claim, the Trade Contractor(s) shall proceed with the Work as indicated by the Project Manager's decision.

38.4 The Trade Contractor(s) 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 if other controversy should arise 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. 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 Trade Contractor(s). The Director, or designee, shall promptly issue a decision in writing. A copy of the decision shall be mailed or otherwise furnished to the Trade Contractor(s). The decision rendered shall be final and conclusive unless the Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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

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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 Trade Contractor(s) 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 Trade Contractor(s) 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 (5).

40.3 The lien shall attach only to any unpaid balance due the Trade Contractor(s) 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 Trade Contractor(s) shall not assign any amount or part of the Contract or any of the funds to be received under the Contract unless the Construction Manager 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 Construction Manager'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 Construction Manager and shall contain the same terms and conditions as the contracts between the Construction Manager and the Sub-contractors. The Construction Manager will be entitled to a maximum of three percent (3%) overhead and profit on the value of such assigned contracts. The Construction Manager 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) in which case fees and expenses will be the responsibility of the separate contractor and if any judgment against the Owner arises therefrom, the Trade Contractor(s) 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 Trade Contractor(s)'s Work depends upon the work of any other separate contractor, the Trade Contractor(s) shall promptly report to the Consultant via the Construction Manager 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.

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ARTICLE 43 - CONSTRUCTION MANAGER/SUB-CONTRACTOR RELATIONSHIP

43.1 The Construction Manager is fully responsible to the Owner for the acts and omissions of the Subcontractors and of persons either directly or indirectly employed by them. The Construction Manager is responsible for the acts and omissions of persons employed directly by the Construction Manager 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 Construction Manager 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 Construction Manager shall provide copies of any subcontracts and purchase orders to the Owner or Consultant.

43.3 The Construction Manager 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 Construction Manager shall not employ any Sub-contractor or supplier against whom the Owner or the Consultant has made reasonable and timely objection. The Construction Manager (CM) will not be allowed to self-perform work or bid on any of the proposed work categories unless a subcontractor fails to perform and upon prior approval by the Universities authorized representatives."

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 Construction Manager include any language in their contracts with any Sub-contractor, Trade Contractor and/or Supplier that might Imply such a relationship. The Construction Manager is hereby notified that it is the Construction Manager'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 Construction Manager and any Sub-contractor, 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 Construction Manager's contracts with such entities shall indicate otherwise.

43.4.3 The Construction Manager 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 Construction Manager's Sub-contractors or suppliers, or between their sub-contractors or suppliers.

ARTICLE 44 - CASH ALLOWANCE

44.1 The Construction Manager 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 Construction Manager 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 Trade Contractor(s) 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 Trade Contractor(s) shall remove all remaining waste materials, rubbish, Trade Contractor(s)'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 Trade Contractor(s) fails to clean up as provided in the Contract Documents, the Owner and Construction Manager may perform the cleaning tasks and charge the cost to the Trade Contractor(s).

ARTICLE 47 - POINTS OF REFERENCE

47.1 The Trade Contractor(s) shall carefully preserve bench marks, reference points and stakes, and in case of willful or careless destruction, the Trade Contractor(s) 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 Trade Contractor(s) 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 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 Trade Contractor(s) 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 Trade Contractor(s) assumes responsibility for any changes in systems or modifications required in adjacent or related work to accommodate such substitutions,

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despite consultant approval, and all costs associated with the substitution shall be the responsibility of the Trade Contractor(s). The Consultant shall be reimbursed by the Trade Contractor(s) 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 Trade Contractor(s)'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 Trade Contractor(s).

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 Trade Contractor(s) 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 Trade Contractor(s) shall give the Consultant via the Construction Manager 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 Trade Contractor(s). Unless otherwise provided in the Contract Documents, the cost of all such testing shall be the responsibility of the Trade Contractor(s). 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 Trade Contractor(s).

ARTICLE 50 - WARRANTY

50.1 The Trade Contractor(s) 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 Trade Contractor(s) shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the Trade Contractor(s) requests approval of a substitution of material or equipment, the Trade Contractor(s) warrants that such installation, construction, material, or equipment will equally perform the function for which the original material or equipment was specified. The Trade Contractor(s) explicitly warrants the merchantability, the fitness for a particular purpose, and quality of all substituted items in addition 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 Trade Contractor(s) shall deliver to the Consultant all warranties and operating instructions required under the Contract or to which the Trade Contractor(s) 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 Trade Contractor(s) to replace defective material and equipment and reexecute defective Work which is disclosed to the Trade Contractor(s) 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 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 Trade Contractor(s) or its Sureties of liability with respect to any warranties or responsibilities for faulty materials and workmanship. The Trade Contractor(s) or its sureties shall remedy any defects in Work and any resulting damage to Work at the Trade Contractor(s)'s own expense. The Trade Contractor(s) shall be liable for correction of all damage resulting from defective Work. If the Trade Contractor(s) fails to remedy any defects or damage, the Owner may correct Work orrepair

damages and the cost and expense incurred in such event shall be paid by or be recoverable from the Trade Contractor(s) or the surety. The Owner will give notice of observed defects with reasonable promptness.

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

50.5 In addition to the foregoing, the Trade Contractor(s) 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 Trade Contractor(s) shall, immediately upon notification by or on behalf of the Owner of water penetration, determine the source of water penetration and, at the Trade Contractor(s)'s expense, (a) do any work necessary to make such buildings or improvements watertight and (b) repair and replace any other damaged material, finishes and furnishings damaged as a result of such water penetration and return the buildings or other improvements to their original condition.

50.6 The Trade Contractor(s) 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 Trade Contractor(s) pursuant to this Article 50 shall be warranted by the Trade Contractor(s), 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 Trade Contractor(s)'s failure to honor any warranty for the Work shall be paid by or recoverable from the Trade Contractor(s).

ARTICLE 51 - PREVAILING WAGE LAW REQUIREMENTS (NO LONGER USED AS OF 1/9/17)

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 Trade Contractor(s) agrees as follows:

54.1.1 The Trade Contractor(s) will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or disability in employment. The Construction

Manager 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 Trade Contractor(s) 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 Trade Contractor(s) will, in all solicitations or advertisements for employees placed by or on behalf of the Trade Contractor(s); 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 Trade Contractor(s) 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 Trade Contractor(s)'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 Construction Manager 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 Trade Contract awarded is in the amount of two hundred and fifty thousand dollars (\$250,000.00) or less, and the amount of the Trade Contract is not a subterfuge to avoid compliance with the provisions of the Act;

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

55.1.3 The Construction Manager or Sub-contractor employs only family members or relatives;

55.1.4 The Construction Manager 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 Construction Manager 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 Trade Contractor(s) or Sub-contractor have collective bargaining agreements be unwilling to provide sufficient minorities to satisfy the agreed upon goals and timetables, the Trade Contractor(s) 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 Trade Contractor(s) 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 The Trade Contractor(s) 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 by the contracting agency and the department to all books and records pertaining to its employment practices and Work sites for purposes of investigation to ascertain compliance with The Act and such rules, regulations and orders issued pursuant thereto.

55.3 If the Trade Contractor(s) is found to have committed an unlawful practice against a provision of The Act during the course of performing under this Contract, a Trade Contract or 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 Trade Contractor(s) ineligible to submit proposals on further contracts until such time as the Trade Contractor(s) complies in full with the requirements of The Act.

55.4 Any provisions of The Act notwithstanding, the Trade Contractor(s) shall not be required to terminate an existing employee, upon proof that employee was employed prior to the date of the Contract, nor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

END OF DOCUMENT

UNIVERSITY OF KENTUCKY SPECIAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY TRADE CONTRACTORS

via CONSTRUCTION MANAGER AT RISK CONTRACT

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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 PERMITS AND FEES

The Lexington Fayette Urban County Government (LFUCG) Sewer Tap Fee shall be secured and paid for by the appropriate Trade Contractor(s). The sewer tap fee is for all projects, regardless of type, is presently calculated by the LFUCG.

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 Omni Architects, Lexington, KY, or their duly authorized representatives. (See Article 2 of the General Conditions.)

ARTICLE 05 GEOTECHNICAL REPORT

5.1 The Sub-Surface Geotechnical Report is being prepared by S&ME, Inc., Lexington, KY. The report will be made available upon receipt for information purposes only and is not a part of the Contract Documents. The Boring Logs, if any, will be included for the Trade Contractor(s)'s information but do not represent a warranty of subsurface conditions. Neither the Owner nor the Consultant will be responsible for interpretations or conclusions drawn from this report by the Trade Contractor(s). This data is made available solely for the convenience of the Trade Contractor(s).

ARTICLE 06 TIME FOR COMPLETION

6.1 The time for Substantial Completion as further defined in Article 1 of the General Conditions shall be 525 consecutive calendar days from the date of award of the first trade contract as specified in the Work Order letter, and Final Completion shall be 30 days thereafter.

ARTICLE 07 LIQUIDATED DAMAGES

7.1 Should the Trade Contractor(s) 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 One Thousand One Hundred Eighty Three Dollars (\$1,183.00) for each consecutive calendar day that Substantial Completion has not been met. See Article 3 of the Agreement.

7.2 Should the Trade Contractor(s) 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 Seven Hundred Seventy Three Dollars (\$773.00) for each consecutive calendar day until Final Completion is reached. See Article 3 of the Agreement.

ARTICLE 08 SUBMITTALS AND SHOP DRAWINGS

8.1 SUBMITTALS - GENERAL

8.1.1 The Trade Contractor(s) shall submit each set of Shop Drawings, product data, samples, and test and/or certification reports and samples as a separate item in <u>UK E-Communication[®]</u>. <u>Projects not utilizing UK E-Communication[®] must submit all items electronically to the Consultant and the UK Project Manager and Administrative Coordinator.</u>

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 Construction Manager for compliance with the Contract Documents before submission for approval. All submittals are to be initiated by the Trade Contractor(s). 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 Trade Contractor(s) shall be made to any changes other than those made 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. Trade Contractor(s) 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 Trade Contractor(s) shall be deemed to be making the following representations:

8.3.1.1 The Trade Contractor(s) understands and agrees that he shall bear full responsibility for the products furnished. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) acknowledges that the Owner will rely on the skill, judgment, and integrity of the Trade Contractor(s) as to conformance requirements and subsequent usability.

8.4 SHOP DRAWING AND PROCUREMENT SUBMITTAL LOG

8.4.1 The Construction Manager 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 Trade Contractor(s) shall review, approve, and submit Shop Drawings to the Construction Manager (and therefore 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s)'s stamp of approval on any shop drawing or sample shall constitute a representation to Owner and Design Consultant that the Trade Contractor(s) has either

determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar date, 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 Construction Manager 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 Trade Contractor(s) from his responsibility for any deviations from the requirements of the Contract Documents unless the Trade Contractor(s) 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 Trade Contractor(s) 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 to be retained by the University;
- b) One to be returned to the Design Consultant;
- c) An additional sample or samples may be submitted, at the Trade Contractor(s)'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 Trade Contractor(s) 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. Manuals 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, Construction Manager, and Construction Manager's Sub-contractors;

8.7.2.2 An Equipment Index that includes vendors' 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:

Installation manuals	Instruction Manuals		
Training manuals	Calibration manuals		
Service Manual	Operation manuals		
Parts list	Repair manuals		
Reviewed Shop	Wire list		
Drawings	Keying Bit List		

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 (Dtype) 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 one 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 Trade Contractor(s) 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 Construction Manager as well as all Sub-contractors. The Trade Contractor(s) 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 Trade Contractor(s) shall provide and utilize a camera to photograph the installation of buried utilities and concealed items. The Trade Contractor(s) shall provide standard 3 1/2" x 5" photographs <u>with negatives</u>, 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 Construction Manager'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 Trade Contractors shall complete the required equipment lists 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 (MCPPD 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 Trade Contractors.

ARTICLE 8.9 Attachment A – Uniformat Component List

SAP Object Type No.	Component Name			
D5030.0232	Access Control Panel			
D3050.0110	Air Conditioning Comp Rm Unit			
D3030.0610	Air Conditioning Compressor			
D3030.0620	Air Conditioning Condensing Unit			
D3050.0120	Air Conditioning Pkg Rooftop Unit			
D3050.0130	Air Conditioning Pkg Terminal Unt			
D3030.0630	Air Conditioning Split System			
D3050.0140	Air Conditioning Unit Package			
D3050.0150	Air Conditioning Unit Window			
D3050.0710	Air Curtain / Heater			
D2090.0120	Air Dryer			
D3010.0443	Air Eliminator			
D3040.0110	Air Handling Unit			
D5090.0220	Auto Transfer Switch - Electrical			
	Automatic Door Operator			
D2020.0330	Backflow Preventers			
D3020.0110	Boiler, Steam System			
D5030.0241	Camera			
D5030.0231	Card Access System			
D3030.0300	Chiller, Reciprocate			
E1090.0250	Chutes & Collectors			
D5010.0510	Circuit Breaker Panel			
F1020.0230	Clean Rooms			
F1020.0240	Cold Storage Rooms			
D2090.0110	Compressor, Air			
D3060.0250	Controls, Building System			
E1090.0317	Cooler, Commercial			
D3030.0510	Cooling Tower, Packaged			
D2010.1300	Copper Silver Ion Equipment			
D4090.0510	Dampers Fire			
D4090.0500	Dampers Fire/Smoke			
D4090.0520	Dampers Smoke			
D3050.0400	Dehumidifiers			
D2090.0200	Deionized Water System			
E1090.0391	Dishwasher, Commercial			
B2030.0160	Door, Auto Entrance			

B2030.0100	Door, Exterior Entrance
C1020.0330	Door, Fire Separate
C1020.0320	Door, Smoke Partition
D2010.0800	Drinking Fountain
D5010.0350	Electric Switchboard
E1030.0310	Elevator, Dock Leveler
D1090.0120	Elevator, Dumbwait Electric
D1090.0130	Elevator, Dumbwait Hydraulic
D1010.0140	Elevator, Hydraulic Freight
D1010.0120	Elevator, Hydraulic Passenger
D1010.0230	Elevator, Platform Lift
D1010.0240	Elevator, Sidewalk Lift
D1010.0130	Elevator, Traction Freight
D1010.0110	Elevator, Traction Passenger
D1010.0220	Elevator, Wheelchair Lift
D2010.1100	Emergency Eyewash
D2010.1000	Emergency Eyewash/Shower
D5090.0810	Emergency Generator
D2010.1200	Emergency Shower
D3050.0600	Energy Recovery Unit
F1020.0260	Environmental Unit
D3040.0120	Fan
D3050.0520	Fan Coil Unit
D3040.0122	Fan, Axial
D3040.0121	Fan, Centrifugal
D3040.0410	Fan, Exhaust
D5030.0141	Fire Alarm Annunciator
D5030.0134	Fire Alarm AV Devices
D5030.0139	Fire Alarm Door Holder
D5030.0144	Fire Alarm Duct Detector
D5030.0133	Fire Alarm Heat Detectors
D5030.0136	Fire Alarm Horns
D5030.0131	Fire Alarm Panel
D5030.0135	Fire Alarm Pull Station
D5030.0137	Fire Alarm Signal Speaker
D5030.0132	Fire Alarm Smoke Detectors
D5030.0130	Fire Alarm System
D5030.0138	Fire Alarm Visual Signal Dev
D4030.0200	Fire Blanket & Cabinet
D4030.0100	Fire Extinguisher Cabinet

			
D4030.0300	Fire Extinguisher Wheeled		
D4090.0300	Fire Extinguishing System, Clean		
D4090.0200	Fire Extinguishing System, CO2		
D4090.0400	Fire Extinguishing System, Dry Chemical		
D4090.0100	Fire Extinguishing System, Foam		
D4090.0000	Fire Extinguishing System, Other		
G3010.0310	Fire Hydrant		
E1090.0330	Food Cooking Equipment		
E1090.0310	Food Stor/Prep Equipment		
D2090.0400	Fuel Oil System		
D3040.0460	Fume Hood System		
D3020.0310	Furnaces		
D2030.0260	Grease Trap		
D3050.0580	Heat Exchanger		
D2020.0260	Heater Domestic Water		
D3050.0521	Heater, Cabinet Unit		
D3050.0581	Heater, Cast Iron Radiator		
D3050.0530	Heater, Fin Tube Radiation		
D3050.0540	Heater, Induction Unit		
D3050.0560	Heater, Unit		
D3050.0570	Heater, Unit Vent		
F1040.0700	Heliport System		
E1090.0340	Hood/Vent Equip		
D3050.0300	Humidifier		
E1090.0380	Ice Machines		
D5020.0330	Light, Emergency Exterior		
D5020.0230	Light, Emergency Interior		
D5020.0231	Light, Exit		
E1020.0831	Medical Air Compressor		
E1020.0900	Medical Gas Alarm		
E1020.1000	Medical Gas Area Alarm		
E1020.0840	Medical Gas Auto Pressure Switch		
E1020.0834	Medical Gas Manifold		
E1020.0835	Medical Gas N2O		
E1020.0839	Medical Gas Outlet		
E1020.0837	Medical Gas Shut-off Valve		
E1020.0830	Medical Gas System		
E1020.0838	Medical Nitrogen		
E1020.0810	Medical Sterilizer Equipment		
E1020.0832	Medical Vacuum Pump		

D5010.0711	Motor Control Center		
D5010.0720	Motor, Electric		
D5030.0431	Nurse Call System		
E1090.0210	Packaged Incinerator		
D3010.0550	Packaged Solar Equipment		
D5030.0420	Paging Systems		
C1010.0180	Partition Fire Rated		
C1010.0190	Partition, Smoke		
D1090.0141	Pneumatic Tube Blower		
D1090.0142	Pneumatic Tube Station		
D1090.0140	Pneumatic Tube System		
D1090.0143	Pneumatic Tube Transfer Unit		
D3010.0430	Pump		
D3030.0710	Pump, Air Source Heat		
D3010.0432	Pump, Chilled Water		
D2020.0222	Pump, Domestic Hot Water Recirculation		
D2020.0221	Pump, Domestic Water Booster		
D4010.0111	Pump, Fire		
D3010.0431	Pump, Heating Water		
D4010.0112	Pump, Jockey Fire		
D3030.0720	Pump, Rooftop Heat		
D3010.0433	Pump, Steam		
D2040.0270	Pump, Sump		
D2030.0330	Pump, Waste		
D2020.0220	Pump, Water Booster		
D3030.0730	Pump, Water Heat		
E1090.0315	Refrigerator/Freezer, Commercial		
D3040.0123	Return Air Fan		
D2090.1200	Reverse Osmosis System		
D3030.0420	Scroll Chiller		
D4010.0300	Sprinkler, Combo System		
D4010.0400	Sprinkler, Deluge System		
D4010.0200	Sprinkler, Dry-Pipe		
D4020.0100	Sprinkler, Standpipe		
D4010.0100	Sprinkler, Wet-Pipe		
D3050.0310	Steam Generator		
D5010.0840	Switchgear, Medium Voltage		
D3010.0441	Tank, Expansion Compressor		
D2020.0310	Tank, Expansion Domestic		
D2020.0320	Tank, Expansion Reheat		

D2090.0410	Tank, Fuel Oil
D3010.0444	Tank, Steam Flash
D5010.0210	Transformer, Low-Volt 2nd
D5010.0410	Transformer, Low-Volt Inter
D5010.0110	Transformer, Main
D3020.0150	Trap, Steam
D5090.0110	UPS - Computer
D5090.0120	UPS - Other
D2090.1310	Vacuum Pump
D3010.0435	VFD - Pump
D3040.0190	VFD HVAC
D5010.0850	VFD/VSD
E1090.0316	Walk-in-Refrigerator
D2090.0210	Water Softener Equipment
D3010.0490	Water Treatment Equipment

Uniformat	
Component ID	
Component Name	
Description	
Name	
	MCPPD or CPPD will enter this
Equipment No.	data
Model No.	
Room Location	
	MCPPD or CPPD will enter this
Functional Location	data
Manufacturer	
Supplier	
Installing Contractor	
Serial No.	
Main Waste Cart	MCPPD or CPPD will enter this
Main Work Center	data MCPPD or CPPD will enter this
Comments(30 char's)	data
	MCPPD or CPPD will enter this
Critical	data
ICALL Code	MCPPD or CPPD will enter this
JCAH Code	data MCPPD or CPPD will enter this
Patient Room?	data
	MCPPD or CPPD will enter this
Vendor ID	data
Vendor Type	MCPPD or CPPD will enter this data
	MCPPD or CPPD will enter this
Vendor - Other Info	data
	MCPPD or CPPD will enter this
Equipment Life	data
Area Serviced	
Contains Lead?	
Contains Asbestos?	
Contains PCBs?	
Motor Frame	
Motor Style	
Motor HP	
Motor Phase	
Motor Volts	
Motor RPM	

ARTICLE 8.7.3 Attachment B – Equipment List Spreadsheet Data Categories

Fan CFM	
Fan RPM	
Fan Static	
Fan Type	
Fan RPM 2	
Pump Head	
Pump Inlet	
Pump GPM	
Pump Outlet	
Motor Oper Amps	
	MCPPD or CPPD will enter this
Condition	data
Disconnect Location	
Motor FLA	
Belts	
Filters	

Description	Name	Equipment No.	Frequency	Maintenance Procedure	Maintenance Parts & Items
Air Handling Unit	AHU-1	M-12345	Monthly	Check Belts	
Air Handling Unit	AHU-1	M-12345	Quarterly	Grease bearings	Grease type xyz
Air Handling Unit	AHU-1	M-12345	Annually	Replace Belts	Belt model abc-123
Air Handling Unit	AHU-2	M-98765	Monthly	Check Belts	

ARTICLE 8.7.3 Attachment C - Example Preventative Maintenance Procedures

The blue highlighted column will be filled in by MCPPD or CPPD.

ARTICLE 09 PLANS, DRAWINGS, AND SPECIFICATIONS

9.1 The successful Construction Manager will receive TWO (2) sets of plans and specifications. Trade Contractor(s) will be required to pay for cost of duplication for all sets required over and above this amount. Payments for Plans, Specifications and Official Contract Documents must be made to Lynn Imaging, Lexington, Kentucky (<u>http://www.ukplanroom.com/</u> or Phone Lynn Imaging @ 1.800.888.0693 or 859.255.1021) before a set of documents will be issued.

9.2 The University will provide $\underline{\text{TWO}(2)}$ sets of the 'Official Contract Documents' book to the successful Construction Manager. One set is to be for his office and the other set is for the jobsite.

9.3 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, CM'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 Construction Manager 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) Construction Manager.
- (4) Subcontractors.
- (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 CRITICAL PATH METHOD (CPM) SCHEDULE

11.1 Construction Manager shall prepare Critical Path Method (CPM) type schedules in accordance with General Conditions Article 32 with separate divisions for each major portion of the Work or operation. 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 using earlier versions of Primavera scheduling software (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. All schedule submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format.

11.1.1 CPM schedules shall be based on generally accepted good practices for the development of construction schedules including limited use of long activity durations, long total float values or relationships based on leads or lags. Schedules shall include all activities necessary for performance of the work showing logic (sequences, dependencies, etc.) and duration of each activity. The schedules shall provide information for all elements of the Work in sufficient detail to accurately demonstrate the relative importance of each activity to the successful completion of the Project including but not necessarily limited to the following.

- a) Activities to be performed by the University or the Design Team.
- b) Activities describing time sensitive submittals and submittal processing.

- c) Activities describing fabrication and delivery of key materials or equipment.
- d) Activities to identify equipment start-up and testing, system commissioning, and Owner training.
- e) Activities to identify Owner Furnished /Contractor Installed and Owner Furnished / Owner Installed material or equipment.
- f) Activities to denote all required inspections by the Owner or Design Team, and inspections by state or local agencies including receipt of necessary Certificate(s) of Occupancy.
- g) Activities to identify all dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.
- h) Activities to identify all contractually mandated constraints. Non-contractual constraints shall not be included in the Initial or Final Baseline schedules without explanation. Non-contractual constraints are for the convenience of the Trade Contractor(s), shall not be a basis for delay claims, and may be temporarily removed by the University when schedules and updates are reviewed.
- i) Software coding of each activity to identify the applicable Phase; area and/or sub area where the work occurs; the trade subcontractor or party responsible for completion of the activity; whether the activity is a design activity, a bidding or procurement activity, a submittal activity, or a construction activity; and whether the activity is potentially weather dependent.
- j) The University may, at its sole discretion, also require that each activity be coded to indicate the section of the Technical Specifications that applies to the work.

11.1.2 Schedules shall include divisions for Work to be accomplished remote from the central construction site, (for example, modular or prefabricated units to be constructed off-site, or utilities to the site from outside the construction site such as chilled water, steam, electrical, communications, and fire service). Such Work shall be scheduled so that disruption resulting from construction will be minimized. Start dates and completion dates for utility construction must be maintained and completed in the shortest reasonable time.

11.2 An Initial Baseline Schedules shall be submitted to the Consultant and to the Owner within thirty (30) calendar days after award of the first bid Package or trade contract, and shall include detailed information regarding Work to be performed during the first ninety (90) days of the Project as well as milestone dates based on hammock or Level of Effort type activities that identify all major elements of the remainder of the Work. Any necessary revisions to the Initial Baseline Schedule shall be completed prior to submittal of the Final Baseline Schedule.

11.3 The Final Critical Path Baseline Schedule shall be submitted to the Consultant and to the Owner within seventy five (75) calendar days after award of the first bid Package or trade contract, shall be consistent with the information contained in the Initial Baseline Schedule prepared in accordance with Article 11.2 above, shall be a complete and comprehensive description of the Construction Manager's plan to complete the Work

in accordance with the Contract, shall include all activities necessary to complete the Work, and shall show the complete sequence of construction by activity, with dates for beginning and completion of each element of construction as well as an indication of whether the activity might reasonably be delayed or impacted by bad weather. Subschedules shall be provided as may be necessary to define critical portions of the entire schedule.

11.3.1 If the Project is to be constructed in multiple phases or using multiple Bid Packages, the date for the start of work on each phase of the Project shall be the date on which the University approves the award of the first Trade Contract for work in that phase or Bid Package.

11.3.2 A separate schedule including decision dates for selection of finishes and delivery dates for Owner furnished items, if any, shall be provided showing submittal dates for Shop Drawings, product data, and material samples, as appropriate.

11.3.3 A separate schedule shall be provided identifying dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.

11.3.4 Activities, including Outages, which require action by or which are the responsibility of, the Owner or the Consultant under the terms of the Contract shall be properly indicated, and the responsible party shall be identified in the CPM schedule.

11.4 The Consultant will review schedules only for compliance with the intent of the Contract Documents. Such review shall not relieve the Trade Contractor(s) of any responsibility for compliance with the provisions of the Contract nor shall such review or any review comments constitute an amendment or modification of the Contract requirements. The Trade Contractor(s) shall be solely responsible for the means and methods to be employed to assure constructions proceeds in accordance with the submitted schedule and for identifying all necessary activities, establishing activity sequencing and assigning activity durations and relationships to assure that the CPM schedule is an accurate and comprehensive description of the plan for the Work.

11.5 Up-dated progress schedules shall be submitted to the Consultant and to the Owner concurrently with each Application for Payment to indicate progress on each remaining activity as of the last working day prior to the date of the submittal and the projected completion date of each activity. Updated CPM schedules shall show the accumulated percentage of completion of each activity, and total percentage of Work completed, as of the data date of the update. Each submittal of an update to the schedule shall include a narrative report that identifies and explains activities modified since the previous submittal, major changes in scope and other identifiable changes, problem areas, anticipated delays and impact on the schedule, and shall describe corrective action taken or proposed, and its effect. Schedules will be uploaded in UK E-Communication®'s Schedules Item Log.

11.6. Submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format along with a transmittal letter and related narrative report.

11.7 Copies of updated CPM 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, any problems anticipated in meeting the projected dates shown in the schedules.

11.8 The processing of all progress payments is contingent upon the submission of an updated CPM schedule. Only payment for bonds and limited Construction Manager mobilization costs will be approved for processing prior to receipt of the Initial and Final Baseline schedules

11.9 The processing of all change orders requesting a time extension to the contract is subject to the terms of Article 21 of the General Conditions to this Contract and is contingent upon the submission of a CPM schedule showing that the change order does indeed impact the contractually required completion dates for the Work. Time extensions for Change Orders that do not impact the contractually required completion dates for the Work will not be considered.

11.10 All time extensions shall be negotiated and made full, equitable and final, and incorporated in a revised CPM schedule at the time of Change Order issuance. No reservation of rights shall be allowed.

11.11 Float available in the schedule at any time shall not be considered for the exclusive use of either party to the contract, but will be a resource available to both the Owner and the Construction Manager. No time extensions will be granted for a delay unless the delay impacts the Project critical path as shown in the updated Project schedule most recently submitted to the Owner prior to the event, consumes all available float or contingency time, and extends the Work beyond the then current Contract completion date(s).

ARTICLE 12 WALK-THROUGH

12.1 After the "Work Order" is issued but before Work by the Construction Manager 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 Trade Contractor(s) to schedule the walk-through with the Owner's Project Manager, the Consultant, and other interested parties.

12.2 During the walk-through, Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s) 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

No office will be required for a UK project representative.

13.2 No office for a Resident Inspector will be required for this project.

ARTICLE 14 FIELD OFFICE

14.1 Construction Manager shall make his own provision for field office for his own personnel and for incidental use by their Subcontractors and the Owner's Representatives. Quantity and location are subject to approval of the Consultant and the Owner's Project Manager.

14.2 Construction Manager is not required to provide a dedicated field office for use by the Owner or Consultant.

ARTICLE 15 TELEPHONE SERVICE

15.1 Trade Contractor(s) 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 Trade Contractor(s). (Cell phone/Nextel service in lieu of UKIT Communications and Network Systems phone service may be utilized at Trade Contractor(s)'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. The appropriate Trade Contractor(s) 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 Construction Manager'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 "daisychained" to provide access to the Owner.

16.1.4 It shall be the Trade Contractor(s)'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 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 section of fencing where blind corners occur or at pedestrian/vehicle intersections.

16.1.5 The Trade Contractor(s) shall be responsible for removing and replacing any fence sections and/or posts necessary for access to the site on a daily basis. The Trade Contractor(s) 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 Trade Contractor(s) fails to comply with the requirements of this Article 16, the Owner may proceed to have the work done and the Trade Contractor(s) 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 The Trade Contractor(s) shall furnish, install and maintain a Project sign during this Project. This sign shall be 4' x 8' x 3/4" exterior grade plywood mounted on 4" x 4" posts. Design shall be as provided by the Owner at a later date and shall include the name of the Owner, Project, Consultant, and Trade Contractor(s).

17.2 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 not make available for purchase by the Trade Contractor(s) any parking permits.

18.2 Not Used

ARTICLE 19 SANITARY FACILITIES

19.1 At the beginning of the Project, before any Work is started, the Trade Contractor(s) shall furnish, install and maintain ample sanitary facilities for the workforce. Permanent toilets in the existing building shall not be used during construction of the Project. Drinking water shall be provided from an approved safe source, 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 Trade Contractor(s) and be adjusted as before mentioned.

20.2 The Trade Contractor(s) 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

21.1 As stated in the General Conditions to the Contract, the Trade Contractor(s) shall have included in the Contract Amount all costs necessary to complete the Work. Costs based on "allowances" shall be permitted only for objectively quantifiable items and only

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with the prior written approval of the Owner. No allowances shall have been included in the calculation of the Construction Manager's fixed fee quotation in par. 8.0 of the RFP.

21.2 Costs based on allowances may be included in Subcontract bid packages only with the prior written approval of the Owner, and only for objectively quantifiable material items.

21.3 Any allowance amounts included in a Subcontract bid package, but not expended for the approved task during the course of the work of that Subcontract, shall be deducted from the Trade Contractor via the Construction Manager's contract by Change Order. Any additional amounts necessary to pay for additional cost of an allowance in a Subcontract bid package shall be funded from the Construction Contingency Fund.

21.4 The University of Kentucky has entered into a price contract agreement with SimplexGrinnell for procurement of fire alarm and security systems. SimplexGrinnell will provide an allowance for this project which may include Fire Alarm Equipment and Security Equipment, including all required cable/wire, labor to install cable and wire and terminations of SimplexGrinnell supplied devices and panels. SimplexGrinnell will be a sub-contractor under a trade contract.

21.4.1 The Construction Manager shall include an allowance of <u>\$ TBD (see work scope)</u> for the work by SimplexGrinnell in the appropriate trade contractor's scope of work.

21.4.2 The electrical contractor is to provide and install conduits and back boxes/junction boxes. All conduits will include a pull string. SimplexGrinnell will furnish and install all fire alarm and security equipment and wiring. The CM shall work with the design consultants to determine the correct allowance amount to be included in the contract documents for all SimplexGrinnell work.

ARTICLE 22 CONSTRUCTION CONTINGENCY FUNDS

22.1 The Owner shall include an amount in the Project construction budget not to exceed one percent (1%) of the total cost of the construction, including the Construction Manager's fixed fee, as a Construction Contingency Fund. The following are general / typical categories of changes to the Work that may, with the Owner's prior written specific approval, be funded from this source:

22.1.1 Reasonable errors & omissions in the Construction Manager's bidding and scoping processes;

22.1.2 Reasonable costs associated with schedule recovery that is not a direct result of the construction managers or a trade contractor's failure to perform;

22.1.3. Any costs or expenses incurred by the Construction Manager, for provision of management services necessary to complete the Project in an expeditious and economical

manner consistent with the Contract for Construction and the best interests of Owner, that were not included in the Construction Manager's General Conditions Cost as submitted in the original fee proposal

22.1.4 Amounts necessary to fund cost overruns in approved allowance items within Subcontract bid packages, as described in Article 21.3, above.

ARTICLE 23 SEQUENCE OF CONSTRUCTION

23.1 Trade Contractor(s) shall coordinate with the Construction Manager, Consultants and Owner's representatives all sequences of work that may have impact on occupied parts of the existing building (to include building and utility services).

23.2 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.

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

23.3 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 Trade Contractor(s) 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 Trade Contractor(s) is to insure that all exits provide for free and unobstructed egress. If exits must be blocked, then prior arrangements must be made with the Construction Manager and Owner's Project Manager.

23.4 The Trade Contractor(s) shall cooperate with the Owner in minimizing inconvenience to, or interference with normal use of existing buildings and grounds by staff, students, other Contractors, or the public. Trade Contractor(s) 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.

23.5 Special effort shall be made by the Trade Contractor(s) 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 24 CRANE & MATERIAL HOIST OPERATIONS

24.1 Trade Contractor(s) 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 Trade Contractor(s) shall be utilized to prevent pedestrian and vehicular traffic from crossing pathway of crane lift. Trade Contractor(s)'s flag men shall coordinate these activities with the appropriate security personnel.

24.2 Crane and material hoist shall be safely secured and inaccessible during nonoperating hours. Trade Contractor(s) 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).

24.3 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 25 UTILITIES

25.1 When the various building systems are energized and connected to Owner's utility systems, but prior to turnover to and occupancy by the Owner, the Trade Contractor(s) is responsible to reimburse the Owner for Owner furnished utilities. These utilities include but not limited to steam, chilled water, domestic water, and electricity, provided by the Owner up to the date of Substantial Completion. Reimbursement will be payable monthly via a deductive change order to the contract. Unit costs for campus are as follows:

25.1.1 Steam is \$15.00/million BTU (1000 lb.) condensate measured through the building condensate meter (all condensate is to be returned).

25.1.2 Chilled Water is \$11.00/million BTU (1000 lb.) measured through the building BTU meter.

25.1.3 Electricity is \$0.08/KWH measured through the building electric meter.

25.1.4 Water is supplied by Kentucky American Water Company (KAWC). Trade Contractor(s) shall pay KAWC directly until the Owner's beneficial occupancy date. The Trade Contractor(s) shall pay KAWC directly for fire service.

25.1.5 Trade Contractor(s) shall furnish gas meter and Columbia Gas Company directly for service until the until the Owner's beneficial occupancy date.

25.1.6 Trade Contractor(s) shall obtain from and pay UKIT Communications and Network Systems for the use of telephone services.

25.2 UTILITY OUTAGES

25.2.1 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.

ENTIRE BUILDING OUTAGE. The Owner's Project Manager is the 25.2.1.1 Trade Contractor(s)'s contact with the University via the Construction Manager 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.

25.2.1.2 SECTION OF A BUILDING OUTAGE. The Owner's Project Manager via the Construction Manager is the Trade Contractor(s)'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 26 CLEANING AND TRASH REMOVAL

26.1 The Trade Contractor(s) 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.

26.2 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.

26.3 Upon completion of the Work, Trade Contractor(s) shall thoroughly clean and resod grass areas damaged to match existing areas.

26.4 The Trade Contractor(s) 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.

26.5 Dumpsters will be provided and maintained by the indicated Trade Contractor(s).

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

26.7 The Trade Contractor(s) shall be responsible for daily cleaning of spillage's and debris resulting from his and his Subcontractor'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 Trade Contractor(s) 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 the Owner's waste and trash receptacles is strictly prohibited, except as otherwise provided by the Project specifications.

26.8 Failure to comply with the above requirements shall be cause for stopping work until the condition is corrected.

ARTICLE 27 BLASTING

27.1 There shall be no blasting under any conditions on University of Kentucky property unless specified in these Special Conditions.

ARTICLE 28 CUTTING AND PATCHING - NEW AND EXISTING WORK

28.1 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.

28.2 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 completed. 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 Trade Contractor(s)'s expense.

ARTICLE 29 UNRELATED PROJECTS

29.1 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 Trade Contractor(s) for this Project must coordinate with any other contractors regarding overlapping areas. See Article 42 - Separate Contracts of the General Conditions.

ARTICLE 30 OWNER SUPPLIED MATERIALS

30.1 Owner, in an effort to expedite this Project, has pre-ordered certain long lead time items. The following is the list of material that has been pre-ordered:

1. To Be Determined.

30.2 All Pre-Ordered Material was specified to be shipped to the **Student Center**. It will be the Trade Contractor(s)'s responsibility to receive and off load the Pre-Ordered Material. If there is damage to the Pre-Ordered Material, then the Trade Contractor(s) is to notify the Owner's Project Manager immediately so that the Owner can seek replacement material.

ARTICLE 31 REMOVED ITEMS

31.1 The following is a list of items to be turned over to the Owner by the Trade Contractor(s) after removal by the Construction Manager. If there are additional items listed in the drawings to be turned over to the Owner, but not listed here, it shall be construed as being listed here.

1. Salvage of any existing items to be removed shall be coordinated with the University prior to disposal.

31.2 All items which are identified to be turned over to the Owner must be treated with the utmost of care and protected from damage during removal and transport.

31.3 Materials to be turned over to the Owner by the Trade Contractor(s) shall be delivered to a warehouse within a five (5) mile radius of the Project site. (Any salvaged items to be taken to the Vaughn Warehouse off Versailles Rd., or to a location to be determined at a later date.

ARTICLE 32 INTERIOR ENCLOSURE AND DUST ENCAPSULATION

32.1 Areas under construction or renovation shall be separated from occupied areas by suitable temporary enclosures furnished, erected and maintained by the Trade Contractor(s). 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. Trade Contractor(s) to review with Consultant ways to provide ventilation for dust generated by demolition and fumes/vapors produced during installation of new materials.

32.2 Trade Contractor(s) is responsible for coordinating with the Owner's Project Manager any equipment to be turned off prior to erecting temporary enclosures.

32.3 Trade Contractor(s) 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.

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

32.5 Trade Contractor(s) shall construct temporary dust partitions at locations and as detailed on drawings. Closures used for dust barricades shall be constructed of <u>non-combustible materials</u>, (metal studs and gypsum board or fire retardant plywood).

32.6 Trade Contractor(s) shall provide additional devices and materials as required to contain dust within Work area and protect personnel during course of Work.

32.7 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.

32.8 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.

32.9 The Trade Contractor(s) may assume existing walls which extend full height of floor shall be deemed appropriate to contain air borne dust. Cover any voids or penetrations.

32.10 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.

32.11 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.

32.12 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.

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

ARTICLE 33 UKIT COMMUNICATIONS AND NETWORK SYSTEMS

33.1 The communications wiring is to be provided, installed and terminated by the Trade Contractor(s) 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 34 EMERGENCY VEHICLE ACCESS

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

ARTICLE 35 SMOKE DETECTORS / FIRE ALARM SYSTEMS- EXISTING AND/OR NEW FACILITIES

35.1 Trade Contractor(s) shall protect all smoke detectors in Work areas to prevent false alarms. The Trade Contractor(s) 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 Trade Contractor(s) 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 Trade Contractor(s). 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 Trade Contractor(s), all protected smoke detectors will be uncovered and tested.

35.2.1 When any fire alarm, detection or suppression system is impaired, a temporary system shall be provided. Trade Contractor(s) 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 Trade Contractor(s) is responsible for inspecting and testing any temporary systems on a monthly basis.

ARTICLE 36 SURVEYS, RECORDS, and REPORTS

36.1 General: Working from lines and levels established by property survey, and as shown in relation to the Work, the Trade Contractor(s) 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 Trade Contractor(s) 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. Trade Contractor(s) shall advise Sub-contractors performing Work of marked lines and levels provided for their use in layout of Work.

36.2 Survey Procedures: The Trade Contractor(s) 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 Trade Contractor(s) or Design Consultant's reference at reasonable times. Surveyor shall record deviations from required lines and levels, and advise Design Consultant or Trade Contractor(s) promptly upon detection of deviations exceeding indicated or recognized tolerances. The Trade Contractor(s) shall record deviations which are accepted (not corrected) on Record Drawings.

ARTICLE 37 SMOKING IS PROHIBITED

37.1 For areas located within Fayette County, Kentucky, the use of <u>all</u> 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.

37.2 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.

37.3 Trade Contractor(s)'s employees violating this prohibition will be subject to dismissal from the Project.

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

ARTICLE 38 ALTERNATES

38.1 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.

38.2 Schedule of Alternates:

Fit-out of the second floor shall be included as an alternate bid item.

ARTICLE 39 FIELD CONSTRUCTED MOCK UPS

39.1 Exterior Finishes

39.1.1 After sample selection but prior to ordering exterior finish materials, Trade Contractor(s) shall accumulate enough material samples to erect sample wall panels to further verify selection made for color and textural characteristics, and to represent completed Work for qualities of appearance, materials and construction including sample masonry units (face and back-up wythes, plus accessories), window units, roofing finish, etc. to provide a complete representation of the exterior facade for approval by the Consultant; build mock-ups to comply with the following requirements:

39.1.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work.

39.1.3 Locate mock-ups at location as reviewed and approved by the Architect and University's Project Manager, generally within 10 feet of existing building, parallel to existing face of building, and exposed to sunlight during daylight hours. Mock-Up to be reviewed twice, one in direct sunlight and one in shade to confirm color characteristics of samples.

39.1.4 Mock-ups Size(s) for the following types shall be approximately 6' long by 4' high by full thickness.

Each type of exposed Work.

39.1.5 Protect mock-ups from the elements with weather resistant membrane.

39.1.6 Retain mock-ups during construction as a standard for judging completed Work. When directed by the University's Project Manager or by the Consultant, demolish mock-ups and remove from the site.

39.2 Interior Finishes

39.2.1 After sample selection but prior to ordering interior finish materials, Trade Contractor(s) shall accumulate enough material samples to erect sample to further verify selection made for color and textural characteristics, and to represent completed Work for

qualities of appearance, materials and construction; include samples of <u>interior finishes</u>, <u>including paint</u>, <u>wood stain</u>, <u>vinyl wallcovering</u>, <u>flooring and ceiling materials</u> to provide a complete representation for approval by the Consultant; build mock-ups to comply with the following requirements:

39.2.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work. Mock-ups may be on newly installed wall surfaces.

39.2.3 Locate mock-ups with adequate illumination for observation under intended light levels.

39.2.4 Retain mock-ups during construction as a standard for judging completed Work. When directed by the University's Project Manager or by the Consultant, remove mock-ups from site or incorporate into the completed work.

ARTICLE 40 PROJECT COORDINATION VIA COMPUTER

40.1 The Construction Manager and Subcontractors are required to have an active email account to facilitate coordination of the project during construction and warranty.

40.2 To facilitate project construction coordination between the Consultant, the Construction Manager, Subcontractors, and the University of Kentucky as the Owner, UK Capital Project Management Division (CPMD) is hosting an Internet/ Web-based Project Management System (WPMS) to help improve project communication and collaboration. The Consultant shall participate in the use of the WPMS (UK E-Communication® or other system at the Owner's discretion) providing collaboration between Owner, the Consultant and selected contractors.

40.2.1 Owner shall provide the Construction Manager and Subcontractors with user accounts and appropriate training for the web-based project management tool.

40.2.2 Utilization of, and training in the use of, the WPMS will be arranged for and supervised by Owner.

40.2.3 Participation of Trade Contractor(s) is mandatory; others as determined by Owner.

40.2.4 All participants are required to have access to the internet and the Microsoft Internet Explorer browser (version 5.0 or higher). A broadband connection to the internet (e.g. Cable modem, ISDN, DSL) is recommended, but not required.

40.2.5 The WPMS shall be utilized for the following functions, as a minimum: Posting Project Files, AE Amendments, Architect's Supplemental Information (ASI's), Closeouts, Consultant Invoices, Contracts, Defective Work in Place, Meeting Minutes, Payment Applications, Proposed Change Orders – Change Orders (PCO to CO's), Punch

Lists, Reports (Contractor Daily Reports, Field Reports, Commissioning Reports), RFIs, SAP Equipment List, Schedules, and Submittals. The Document Library (Bid set Plans, Specifications and Addenda will be uploaded by Lynn Imaging.

40.2.6 Site camera monitors may be included at Owner's discretion.

40.2.7 Utilization of the WPMS shall be implemented by the Owner's representative.

40.2.8 Use of the system will provide consistent, real-time information for decision making. Additionally, all project data entered into the system will be archived to facilitate project record keeping. It is anticipated that proper use of the WPMS will improve efficiency of communications and reduce project related paperwork and clerical workload.

40.2.9 The Trade Contractor(s) and Consultant shall submit complete close-out and submittal logs in E-Communication, or WPMS, including description of all deliverables to be submitted by the construction manager or trade contractors during Phase 3, Construction Documents Phase.

ARTICLE 41 HOT WORK PERMITS

41.1 All work involving open flames or producing heat and or sparks in occupied buildings on the University of Kentucky campus will require the Trade Contractor(s) 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 Cad welding. A copy of the Hot Work Permit and the Hot Work Permit Procedure will be listed in the project safety manual for the Trade Contractor(s)'s use.

ARTICLE 42 INSURANCE

42.1 Employers' Liability Insurance. Reference project CCIP manual and information.

42.2.1 Commercial General Liability Insurance. If the work involved requires the use of helicopters, a separate aviation liability policy with limits of liability of \$100,000,000 will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits of \$5,000,000 will be required.

42.2.1.1 The limits of liability shall not be less than \$2,000,000 each occurrence combined single limits for bodily injury and property damage. If split limits are used, they shall not be less than \$2,000,000 for each person and each occurrence and \$1,000,000 for property damage.

42.2.2 Comprehensive Automobile Liability Insurance. Policy limits shall not be less than \$2,000,000 for combined single limits for bodily injury and property damage for each occurrence. As an alternative, split limits of not less than \$1,000,000 for bodily injury and \$500,000 for property damage for each occurrence shall be maintained.

42.2.3 Excess or Umbrella Liability Insurance. This policy shall have a minimum of \$3,000,000 combined single limits for bodily injury and property damage for each occurrence in excess of the applicable limits in the primary policies.

42.2.4 Workers' Compensation- Statutory Requirements (Kentucky). Reference project CCIP manual and information.

ARTICLE 43 KEY ACCESS

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

43.2 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.

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

ARTICLE 44 CEILING CLEARANCE

44.1 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.

44.2 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 45 METAL ANCHORS

45.1 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 46 LOADING DOCK

NOT USED.

ARTICLE 47 CONSTRUCTION PATH

NOT USED.

ARTICLE 48 HOSPITAL PROJECT PROCEDURE

NOT USED.

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

NOT USED.

ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY

NOT USED.

ARTICLE 51 HOSPITAL CONSTRUCTION CERTIFICATION

NOT USED.

ARTICLE 52 APPEARANCE

NOT USED.

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

NOT USED.

ARTICLE 54 SAFETY & FIRE PROCEDURES

NOT USED.

ARTICLE 55 INTERIM LIFE SAFETY MEASURES (ILSM)

NOT USED.

ARTICLE 56 TREE PROTECTION STANDARDS

Contractor will adhere to all provisions outlined in 010000S02 Tree Protection Standards.

ARTICLE 57 CONTRACTOR/SUPERINTENDENT EXPERIENCE

NOT USED.

This Agreement, made as of the <u>SDS</u> day of <u>SDS</u> in the year <u>SDS</u> by and between CONTRACTOR and <u>SDS</u> (See Subcontract Data Sheet for this Item and all other Items marked SDS) (hereinafter called the Subcontractor).

Witnesseth, that the Subcontractor and Contractor agree as follows:

Description of Work ARTICLE I. The Subcontractor shall perform and furnish all the work, labor, services, materials, plant, equipment, tools, scaffolds, appliances and other things necessary for <u>SDS</u> (Hereinafter called the Work) for and at the <u>SDS</u> (Hereinafter called the Project), located on premises at <u>SDS</u> (Hereinafter called the Premises), as shown and described in and in strict accordance with the Plans, Specifications, General Conditions, Special Conditions and Addenda thereto prepared by <u>SDS</u> (Hereinafter called the Architect) and with the terms and provisions of the General Contract (hereinafter called the General Contract) between Contractor and <u>SDS</u> (Hereinafter called the Owner) dated <u>SDS</u> and in strict accordance with the Additional Provisions, page(s) <u>SDS</u> annexed hereto and made a part hereof.

Plans & Specifications

Contract Documents **ARTICLE II.** The Plans, Specifications, General Conditions, Special Conditions, Addenda and General Contract hereinabove mentioned, are available for examination by the Subcontractor at all reasonable times at the office of Contractor; all of the aforesaid, including this Agreement, being hereinafter sometimes referred to as the Contract Documents. The Subcontractor represents and agrees that it has carefully examined and understands this Agreement and the other Contract Documents, has investigated the nature, locality and site of the Work and the conditions and difficulties under which it is to be performed and that it enters into this Agreement on the basis of its own examination, investigation and evaluation of all such matters and not in reliance upon any opinions or representations of Contractor, or of the Owner, or of any of their respective officers, agents, servants, or employees.

With respect to the Work to be performed and furnished by the Subcontractor hereunder, the Subcontractor agrees to be bound to Contractor by each and all of the terms and provisions of the General Contract and the other Contract Documents, and to assume toward Contractor all of the duties, obligations and responsibilities that Contractor by those Contract Documents assumes toward the Owner, and the Subcontractor agrees further that Contractor shall have the same rights and remedies as against the Subcontractor as the Owner under the terms and provisions of the General Contract and the other Contract Documents has against Contractor with the same force and effect as though every such duty, obligation, responsibility, right or remedy were set forth herein in full. The terms and provisions of this Agreement with respect to the Work to be performed and furnished by the Subcontractor hereunder are intended to be and shall be in addition to and not in substitution for any of the terms and provisions of the General Contract and the other Contract and the other Contract and the other Contract or be performed and furnished by the Subcontractor hereunder are intended to be and shall be in addition to and not in substitution for any of the terms and provisions of the General Contract and the other Contract Documents.

This Subcontract Agreement, the provisions of the General Contract and the other Contract Documents are intended to supplement and complement each other and shall, where possible, be thus interpreted. If, however, any provision of this Subcontract Agreement irreconcilably conflicts with a provision of the General Contract and the other Contract Documents, the provision imposing the greater duty or obligation on the Subcontractor shall govern.

Contractor hereby advises, and the Subcontractor hereby acknowledges, that Contractor in administering this subcontract will be utilizing an information systems infrastructure to process, deliver, and share and/or, at times, to apply electronic signatures to execute certain project documentation through electronic means. As part of the implementation of this infrastructure, the Subcontractor will be given individual, secure log on codes to access the Contractor systems presenting this electronic information. The Subcontractor hereby agrees that such electronic access and the ability of the subcontractor to print out such electronic documents will be in lieu of requiring the delivery of the contents of such electronic documents on printed or paper based media directly to Subcontractor by Contractor or through means of outside third-party services. Delivery of such electronic documents to Subcontractor will be deemed to have occurred when access to the document is made available to Subcontractor in the infrastructure.

At times, Contractor may, through this electronic infrastructure system, initiate Subcontract Change Order documents that will require that the Subcontractor review and approve or reject each such document applying its electronic signature to the approved document on the Contractor software and thereafter, Contractor will apply the electronic signature of its authorized personnel to execute the approved document and electronically deliver the fully executed document to the Subcontractor. The Subcontractor agrees and acknowledges that granting its on-line approval and electronically executing a Subcontract Change Order also affixes the Subcontractor's electronic signature to such document and in so doing it is agreeing that each such document, when electronically countersigned by Contractor, are valid and authentic and enforceable obligations of both parties and to honor and be bound by such documents as if they had been prepared on hard copy and contained the manually applied autograph signatures of the Subcontractor's and Contractor's authorized personnel. Subcontractor hereby agrees to establish, continuously use and maintain a robust and effective Security System/ID and Passwords to protect its identity when addressing and/or signing any electronic contract related documentation issued or exchanged pursuant to this Article.

Optionally, Contractor may use paper documents, where the Subcontractor reviews the proposed paper document and, if it approves, it manually affixes its autograph signature to the paper document and physically returns the signed paper document to Contractor who completes the execution by applying either its autograph or electronic signature to the Subcontract Change Order and a copy of the executed Subcontract Change Order showing the presence of both signatures is physically delivered to the Subcontractor and such Subcontract Change Order shall likewise be deemed by both parties to be valid and authentic and enforceable obligations of both parties.

Contractor may from time to time issue policies or directives applicable to electronic communications, electronic infrastructure and electronic data and Subcontractor shall comply with such policies and directives whether issued as part of this Subcontract or hereafter, and the cost and expense of such compliance shall be borne by the Subcontractor.

Time of Performance & Completion **ARTICLE III.** The Subcontractor shall commence the Work when notified to do so by Contractor and shall diligently and continuously prosecute and complete the Work and coordinate the Work with the other work being performed on the Project, in accordance with those project schedules as may be issued from time to time during the performance of the Work and any other scheduling requirements listed in this Agreement, so as not to delay, impede, obstruct, hinder or interfere with the commencement, progress or completion of the whole or any part of the Work or other work on the Project, and in such a manner as necessary or requested by Contractor from time to time to ensure that Contractor satisfies its obligations in a timely manner under the General Contract.

Planning & Scheduling

The Subcontractor shall participate and cooperate in the development of schedules and other efforts to achieve timely completion of the Work providing information for the scheduling of the times and sequence of operations required for its Work to meet Contractor's overall schedule requirements, shall continuously monitor the project schedule so as to be fully familiar with the timing, phasing and sequence of operations of the Work and of other work on the Project, and shall execute the Work in accordance with the requirements of the project schedule including any revisions thereto. Subcontractor shall abide by all requirements of the General Contract relating to the submission of schedule and other information related to the performance of Subcontractor's Work not less than 14 days prior to the time when Contractor is required to provide such materials to Owner under the General Contract, except where Contractor directs otherwise. Subcontractor shall, at no additional cost, provide updates, additional or further detailed schedules and other information as frequently and in whatever form Contractor may request, including but not limited to (1) manpower and cost loaded schedules; (2) information related to its operations as a whole, including but not limited to identifying lower tier subcontractors and suppliers and the status of payments to such subcontractors and suppliers; (3) unions and related benefit funds associated with labor used in the performance of the Work; (4) credit sources and banks providing financing or loans in connection with the performance of the Work or Subcontractor's operations as a whole and any covenants and requirements imposed upon Subcontractor in connection therewith and the status of Subcontractor's compliance with such covenants and requirements; and (5) the status of orders, fabrication and delivery of materials and arrangements for the provision of labor. The foregoing information shall include names and contact information, and Subcontractor acknowledges and agrees that Contractor may contact any persons or entities as it deems necessary to verify or obtain such information.

Subcontractor shall establish and maintain a reasonable accounting system by which records are kept that enable Contractor to readily identify all of Subcontractor's expenses, costs, payments (including to its workers, subcontractors and suppliers, unions, and benefit funds), obligations, budgets, and other financial information related to the Work or this Subcontract. Such records shall include, but not be limited to, all accounting records, written policies and procedures, subcontract files for all tiers, payment vouchers, ledgers, cancelled checks, contract amendments, change order information, insurance documents, and other similar information. Contractor shall have the right to audit, examine, and make copies of all such records (whether written, electronic or another format) as Contractor may determine, and Subcontractor shall facilitate and cooperate with Contractors efforts in this regard. Subcontractor shall impose similar obligations on its subcontractors and vendors to ensure that comparable records kept and Contractor has the right to audit, examine and copy those records.

Delays by Subcontractor

Subcontracto

Overtime

Should the progress of the Work or of the Project be delayed, disrupted, hindered, obstructed, or interfered with by any fault or neglect or act or failure to act of the Subcontractor or any of its officers, agents, servants, employees, subcontractors or suppliers so as to cause any additional cost, expense, liability or damage to Contractor including legal fees and disbursements incurred by Contractor (whether incurred in defending claims arising from such delay or in seeking reimbursement and indemnity from the Subcontractor and its surety hereunder or otherwise) or to the Owner or any damages or additional costs or expenses for which Contractor or the Owner may or shall become liable, the Subcontractor and its surety shall and does hereby agree to compensate Contractor and the Owner for and indemnify them against all such costs, expenses, damages and liability.

If the progress of the Work or of the Project be delayed by any fault or neglect or act or failure to act of the Subcontractor or any of its officers, agents, servants, employees, subcontractors or suppliers, then the Subcontractor shall, in addition to all of the other obligations imposed by this Agreement upon the Subcontractor in such case, and at its own cost and expense, work such overtime as may be necessary to make up for all time lost in the completion of the Work and of the Project due to such delay. Should the Subcontractor fail to make up for the time lost by reason of such delay, Contractor shall have the right to cause other Subcontractors to work overtime and to take whatever other action it deems necessary to avoid delay in the completion of the Work and of the Project, and the cost and expense of such overtime and/or such other action shall be borne by the Subcontractor.

Contractor, if it deems necessary, may direct the Subcontractor to work overtime and, if so directed, the Subcontractor shall work said overtime and, provided that the Subcontractor is not in default under any of the terms or provisions of this Agreement or of any of the other Contract Documents and the direction to work overtime was not due in whole or in part to any fault or failure of Subcontractor, Contractor will pay the Subcontractor only for such actual additional wages paid, if any, at rates which have been approved by Contractor plus taxes imposed by law on such additional wages, plus workers' compensation insurance, liability insurance and levies on such additional wages if required to be paid by the Subcontractor to comply with Subcontractor's obligations under this Agreement. Subcontractor acknowledges that in the event that it may intend to pursue a claim of inefficiency, loss of productivity or other similar or related request for additional compensation, Subcontractor may rely only on evidence indicating the actual inefficiency, loss of productivity or other similar or studies or any other evidence that do not exclusively rely on and pertain to the Work performed at the Project shall be used or in any way considered, in whole or in part, in connection with the resolution of such a claim, whether by Contractor or any forum for dispute resolution.

ARTICLE IV. The sum to be paid by Contractor, out of funds received from the owner, to the Subcontractor for the satisfactory performance and completion of the Work and of all of the duties, obligations and responsibilities of the Subcontractor under this Agreement and the other Contract Documents shall be <u>SDS</u> (Hereinafter called the Price) subject to additions and deductions as herein provided.

The Price includes all Federal, State, County, Municipal and other taxes imposed by law and based upon labor, services, materials, equipment or other items acquired, performed, furnished or used for and in connection with the Work, including but not limited to sales, use and personal property taxes payable by or levied or assessed against the Owner, Contractor or the Subcontractor. Where the law requires any such taxes to be stated and charged separately, the total price of all items included in the Work plus the amount of such taxes shall not exceed the Price.

On or before the last day of each month the Subcontractor shall submit to Contractor, in the form required by Contractor, a written requisition for payment showing the proportionate value of the Work installed to that date, from which shall be deducted: a reserve of <u>SDS</u>; all previous payments; all amounts and claims against Subcontractor, by Contractor or any third party, for which Subcontractor is responsible hereunder; and all charges for services, materials, equipment and other items furnished by Contractor to or chargeable to the Subcontractor; and the balance of the amount of such requisition, as approved by Contractor and the Architect and for which payment has been received by Contractor from the Owner, shall be due and paid to the Subcontractor on or about the fifteenth (15th) day of the succeeding month or in accordance with the Contract Documents.

Progress Payments

Price

Contractor shall have the right, at its sole discretion, to issue payments to Subcontractor by way of joint checks to Subcontractor and suppliers and/or vendors of Subcontractor, and Subcontractor agrees to cooperate fully in facilitating the making of such joint payments.

Payments in General The obligation of Contractor to make a payment under this Agreement, whether a progress or final payment, or for extras or change orders or delays to the Work, is subject to the express condition precedent of payment therefor by the Owner. *Given that Subcontractor is to be paid exclusively out of dollars paid by the Owner and only if such payment is made by Owner, Subcontractor understands and accepts the risk of non-payment by the Owner.* If Contractor has provided payment or performance bonds or a combination payment and performance bond, the obligation of Contractor and its Surety under any of those bonds to make any payment (whether a progress payment or final payment) to a claimant on that bond is similarly subject to the express condition precedent of payment therefor by the Owner.

The Subcontractor shall submit with its first requisition for payment a detailed schedule showing the breakdown of the Price into its various parts for use only as a basis of checking the Subcontractor's monthly requisitions.

Contractor reserves the right to advance the date of any payment (including the final payment) under this Agreement if, in its sole judgment, it becomes desirable to do so.

The Subcontractor agrees that, if and when requested to do so by Contractor, it shall furnish such information, evidence and substantiation as Contractor may require with respect to the nature and extent of all obligations incurred by the Subcontractor for or in connection with the Work, all payments made by the Subcontractor thereon, and the amounts remaining unpaid, to whom and the reasons therefor.

Final Payment

Final payment to the Subcontractor shall be made only with funds received by Contractor from the Owner, the Construction Lender or the Owner's Agent as final payment for Work under the General Contract. Final payment to Contractor by the Owner shall be an express condition precedent that must occur before Contractor shall be obligated to make final payment to the Subcontractor. In addition, final payment by Contractor to the Subcontractor shall not become due and payable until the following other express conditions precedent have been met: (1) the completion and acceptance of the Work by Contractor and the Architect; (2) provision by the Subcontractor of evidence satisfactory to Contractor that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished, or incurred for or in connection with the Work; (3) execution and delivery by the Subcontractor, in a form satisfactory to Contractor of a general release running to and in favor of Contractor and the Owner; and (4) complete and full satisfaction of all claims, demands and disputes, and all obligations and responsibilities of Subcontractor, arising out of or related to the Subcontract, including those as between Contractor and Subcontractor as well as those between Subcontractor and any third party. Should there be any such claim, obligation or lien or unsatisfied obligation or responsibility whether before or after final payment is made, the Subcontractor shall pay, refund or deliver to Contractor (1) all monies that Contractor and/or the Owner shall pay in satisfying, discharging or defending against any such claim, obligation or lien or any action brought or judgment recovered thereon and all costs and expenses, including legal fees and disbursements, incurred in connection therewith; and (2) such amounts as Contractor or Owner shall, in their sole discretion, determine to be an amount sufficient to protect Contractor and Owner therefrom (in lieu of payment of such amounts, Subcontractor may, at Owner's and Contractor's sole discretion, deliver a bond satisfactory to Contractor and Owner). Such refund and payment shall be made within ten (10) days of request by Contractor to Subcontractor for same. The final payment shall be due within forty (40) days after all of these express conditions precedent have been met.

Liens by Others

If any claim or lien is made or filed with or against Contractor, the Owner, the Project, the Premises or the Project funds by any person claiming that the Subcontractor or any subcontractor or other person under subcontract to Subcontractor, or any person or entity employed or engaged by or through Subcontractor at any tier, has failed to make payment for any labor, services, materials, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work, or if any such claim or lien is filed or presented, or if Contractor, in good faith, believes that such a claim or lien may be filed or brought, or if at any time there shall be evidence of such nonpayment or of any claim or lien for which, if established, Contractor or the Owner might become liable and which is chargeable to the Subcontractor, or if the Subcontractor or any subcontractor or other person under subcontract to Subcontractor, or any person or entity employed or engaged by or through Subcontractor at any tier causes damage to the Work or to any other work on the Project, or if the Subcontractor fails to perform or is otherwise in default under any of the terms or provisions of this Agreement, Contractor shall have the right (A) to retain from any payment then due or thereafter to become due an amount which it deems sufficient to (1) satisfy, discharge and/or defend against any such claim or lien or any action which may be brought or judgment which may be recovered thereon, (2) make good any such nonpayment, damage, failure or default, and (3) compensate Contractor and the Owner for and indemnify and hold them harmless against any and all losses, liability, damages, costs and expenses, including legal fees and disbursements, which may be sustained or incurred by either or both of them in connection therewith ; and (B) to demand that Subcontractor provide, within ten (10) days of Contractor's request therefore, proof to the satisfaction of Contractor and Owner that such non-payment, claim or lien has been fully satisfied, dismissed and discharged. Upon the failure of Subcontractor to fulfill the requirements of a demand issued by Contractor pursuant to subsection (B) above, Contractor may, in such manner as Contractor may in its sole discretion determine, secure the satisfaction, dismissal and discharge of such claim, by payment or otherwise, and Subcontractor shall within ten (10) days of demand therefore, be liable for and pay to Contractor all amounts (including legal fees and disbursements) incurred or suffered by Contractor or Owner arising out of or related thereto. Contractor shall, in addition, have the right to apply and charge against the Subcontractor so much of the amount retained as may be required for the foregoing purposes. Subcontractor further agrees to indemnify, hold harmless and defend Contractor and Owner, upon demand, for any and all such claims, liens, and the costs, expenses (including legal fees and disbursements), damages and liabilities arising out of or related thereto. Subcontractor acknowledges (1) that discharge of such liens or claims by bond imposes liability upon a surety and Contractor, and (2) that Contractor is not required to discharge such lien or claims by bond when exercising its rights hereunder. Subcontractor agrees that should there be any amounts due or which may become due to Subcontractor in connection with any other subcontracts between Contractor and Subcontractor or other obligations that Contractor may have to Subcontractor, Contractor shall be entitled to withhold payment under such other subcontract or obligations to the extent that Contractor believes that the unpaid balance of this Subcontract may not be adequate to satisfy Subcontractor's obligations to Contractor hereunder.

Effect of Payment No payment (final or otherwise) made under or in connection with this Agreement shall be conclusive evidence of the performance of the Work or of this Agreement, in whole or in part, and no such payment shall be construed to be an acceptance of defective, faulty or improper work or materials nor shall it release the Subcontractor from any of its obligations under this Agreement; nor shall entrance and use by the Owner constitute acceptance of the Work or any part thereof. The failure of

Freight

Charges &

Shipments

Dimensions

Shop

Drawings

Contiguous

Work

Subcontractor to fully perform and satisfy any or all obligations set forth in this Article IV shall constitute a default, entitling Contractor to take action as described in Article XI.

Subcontractor acknowledges and agrees that to the extent that payments received by Subcontractor include amounts for Work performed by subcontractors to Subcontractor or services or materials provided to Subcontractor by suppliers, vendors, workers employed by or through Subcontractor, all such payments received by Subcontractor shall be deemed to have been received by Subcontractor as trustee with those entitled to receive payment from Subcontractor as beneficiaries of such amounts, and Subcontractor shall hold such funds separately and utilize such amounts only for the purpose of making payment to these beneficiaries. In the event that Subcontractor subsequently determines that a beneficiary is not entitled to receipt of payment, Subcontractor shall return such unpaid funds to Contractor.

Extension ARTICLE V. Should the Subcontractor be delayed, obstructed, hindered or interfered with in the commencement. prosecution or completion of the Work by any cause including but not limited to any act, omission, neglect, negligence or default of of Time & Delays Contractor or of anyone employed by Contractor or by any other contractor or subcontractor on the Project, or by the Architect, the Owner or their contractors, subcontractors, agents or consultants, or by damage caused by fire or other casualty or by the combined action of workers or by governmental directive or order in no way chargeable to the Subcontractor, or by any extraordinary conditions arising out of war or government regulations, or by any other cause beyond the control of and not due to any fault, neglect, act or omission of the Subcontractor, its officers, agents, employees, subcontractors or suppliers, then except where the General Contract has specific requirements at variance with the foregoing, in which case the requirements of the General Contract shall govern, the Subcontractor shall be entitled to an extension of time for a period equivalent to the time lost by reason of any and all of the aforesaid causes; provided, however, that the Subcontractor shall not be entitled to any such extension of time unless the Subcontractor (1) notifies Contractor in writing of the cause or causes of such delay, obstruction, hindrance or interference within forty eight (48) hours of the commencement thereof and (2) demonstrates that it could not have anticipated or avoided such delay, obstruction, hindrance or interference and has used all available means to minimize the consequences thereof. Subcontractor acknowledges that provision of such notice is an essential condition precedent to Subcontractor's rights in connection with any such delays, obstructive hindrances or interferences to Contractor's ability to fully identify, and expeditiously, address and avoid such cause or causes, and, accordingly, Subcontractor expressly waives all rights with respect to any such cause or causes for which notice hereunder was not provided. Notwithstanding the foregoing, if the General Contract is at variance with granting such time extension, then the provisions of the General Contract shall control.

The Subcontractor agrees that it shall not be entitled to nor claim any cost reimbursement, compensation or damages for any delay, obstruction, hindrance or interference to the Work except to the limited extent that Contractor has actually recovered corresponding cost reimbursement, compensation or damages from the Owner under the Contract Documents for such delay, obstruction, hindrance or interference, and then only to the extent of the amount, if any, which Contractor on behalf of the Subcontractor, actually received from the Owner on account of such delay, obstruction, hindrance or interference. Notwithstanding any term or provision herein to the contrary, Subcontractor expressly waives and releases all claims or rights to recover lost profit (except for profit on work actually performed), recovery of overhead (including home office overhead), and any other indirect damages, costs or expenses in any way arising out of or related to the Agreement, including the breach thereof by Contractor, delays, charges, acceleration, loss of efficiency or productivity disruptions and interferences with the performance of the work.

It shall be an express condition precedent to any obligation on the part of Contractor to make payment of any such cost, reimbursement, compensation or damages to the Subcontractor hereunder that Contractor shall first be determined to be entitled to such compensation on behalf of the Subcontractor and then receive such payment from Owner, and Subcontractor expressly acknowledges that Contractor is not obligated or required to pursue Subcontractor claims as against Owner if Contractor, in its sole discretion, after review of Subcontractor's claim, has deemed the claim to lack merit in whole or in part.

The Subcontractor agrees that it shall contribute a fair and proportionate share of the costs of advancing the claims of the Subcontractor for delay, including but not limited to legal and other professional fees.

ARTICLE VI. The Subcontractor in making or ordering shipments shall not consign or have consigned materials, equipment or any other items in the name of Contractor. Contractor is under no obligation to make payment for charges on shipments made by or to the Subcontractor but may, at its option, pay such charges, in which case the Subcontractor shall reimburse Contractor for the amount of such payments plus a service charge of twenty-five percent (25%) of the amount so paid.

ARTICLE VII. Notwithstanding the dimensions on the Plans, Specifications and other Contract Documents it shall be the obligation and responsibility of the Subcontractor to take such measurements as will ensure the proper matching and fitting of the Work covered by this Agreement with contiguous work.

The Subcontractor shall prepare and submit to Contractor such shop drawings as may be necessary to describe completely the details and construction of the Work. Approval of such shop drawings by Contractor and/or the Architect shall not relieve the Subcontractor of its obligation to perform the Work in strict accordance with the Plans, Specifications, the Additional Provisions hereof and the other Contract Documents, nor of its responsibility for the proper matching and fitting of the Work with contiguous work and the coordination of the Work with other work being performed on the site, which obligation and responsibility shall continue until completion of the Work.

The Subcontractor's submission of a shop drawing to Contractor shall constitute the Subcontractor's representation, upon which Contractor may rely, that the Subcontractor has reviewed the submission for accuracy and compliance with all Contract Documents and that wherever engineering is required to be performed, same has been performed by a qualified and licensed engineer. Furthermore, the review of the Shop Drawing by Contractor shall not constitute an undertaking by Contractor to identify deficiencies in the submission, that being an undertaking within the sole responsibility of the Subcontractor.

Should the proper and accurate performance of the Work hereunder depend upon the proper and accurate performance of other work not covered by this Agreement, the Subcontractor shall carefully examine such other work, determine whether it is in fit, ready and suitable condition for the proper and accurate performance of the Work hereunder, use all means necessary to discover any defects in such other work, and before proceeding with the Work hereunder, report promptly any such improper conditions and defects to Contractor in writing and allow Contractor a reasonable time to have such improper conditions and defects remedied. Should Subcontractor fail to comply with the requirements of this Article, Subcontractor shall bear all costs

Interpretation of Plans & Specifications

Change

Orders,

Additions

& Deductions

incurred by Contractor, Owner and other subcontractors, and shall not be entitled to extensions of time and adjustments in Price, that could have been avoided by Subcontractor's compliance with the requirements of this Article.

ARTICLE VIII. The Work hereunder is to be performed and furnished under the direction and to the satisfaction of both the Architect and Contractor. The decision of the Architect as to the true construction, meaning and intent of the Plans and Specifications shall be final and binding upon the parties hereto. Contractor will furnish to the Subcontractor such additional information and Plans as may be prepared by the Architect to further describe the Work to be performed and furnished by the Subcontractor shall conform to and abide by the same.

The Subcontractor shall not make any changes, additions and/or omissions in the Work except upon written order of Contractor as provided in Article IX hereof.

ARTICLE IX. Contractor reserves the right, from time to time, whether the Work or any part thereof shall or shall not have been completed, to make changes, additions and/or omissions in the Work as it may deem necessary, upon written order to the Subcontractor. The value of the work to be changed, added or omitted shall be stated in said written order and shall be added to or deducted from the Price.

The value of the work to be changed, added or omitted shall be determined by the lump sum or unit prices, if any, stipulated herein for such work. If no such prices are stipulated, such value shall be determined by whichever of the following methods or combination thereof Contractor may elect:

- (a) By adding or deducting a lump sum or an amount determined by a unit price agreed upon between the parties hereto.
- (b) By adding (1) the actual net cost to the Subcontractor of labor in accordance with the established rates, including required union benefits, premiums the Subcontractor is required to pay for workmen's compensation and liability insurance, and payroll taxes on such labor, (2) the actual cost to the Subcontractor of materials and equipment and such other direct costs as may be approved by Contractor less all savings, discounts, rebates and credits, (3) an allowance of <u>SDS</u> for overhead on items (1) and (2) above, and (4) an allowance of <u>SDS</u> for profit on items (1), (2) and (3) above.

Should the parties hereto be unable to agree as to the value of the work to be changed, added or omitted, the Subcontractor shall proceed with the work promptly under the written order of Contractor from which order the stated value of the work shall be omitted, and the determination of the value of the work, if not resolved in the normal course, shall be addressed pursuant to the dispute resolution procedures in accordance with Article XVIII.

In the case of omitted work Contractor shall have the right to withhold from payments due or to become due to the Subcontractor an amount which, in Contractor's opinion, is equal to the value of such work until such time as the value thereof is determined by agreement or by the Architect as hereinabove provided.

All changes, additions or omissions in the Work ordered in writing by Contractor shall be deemed to be a part of the Work hereunder and shall be performed and furnished in strict accordance with all of the terms and provisions of this Agreement and the other Contract Documents. Subcontractor accepts the responsibility to keep its surety informed of all such modifications to its contract. The obligations of Subcontractor and Subcontractor's Surety shall not be reduced, waived or adversely affected by the issuance of such change orders, additions or deductions even if Subcontractor fails to inform Surety of same and Contractor shall not be required to obtain consent of the Surety to such modifications.

Subcontractor shall provide Contractor with written notice of any circumstance or direction given by Contractor which Subcontractor may regard as a change, addition and/or omission or which may otherwise serve as the basis for a request for an increase in Price or extension of time within 5 days of the receipt of the direction or the occurrence of the event giving rise to such a request. Such written notice shall provide a full explanation of the circumstances or direction and the extent of the increase and extension sought, including a detailed breakdown and analysis supporting such request. Failure of the Subcontractor to provide such written notice shall constitute a waiver of Subcontractor's right to any such increase or extension.

Subcontractor acknowledges that the General Contract may include provisions whereby Contractor is required to provide notice, information, reports and analyses in the event that Contractor intends to pursues or which may affect Contractor's right's to an extension of time or increase in Contractor's price to the Owner, whether by way of change order or otherwise, and that the failure to provide such notice, information, reports and analyses may result in a waiver or forfeiture of the right to such an extension or increase. Accordingly, Subcontractor agrees that Subcontractor shall provide all such notices, information, reports and analyses to Contractor, in the same form, content and manner as Contractor is required to provide to Owner under the General Contract in the event that Subcontractor intends to pursue an extension of time or increase in Price. Subcontractor shall provide all such notices, information, reports and analyses to Contractor not later than 3 business days prior to the time by which Contractor must submit corresponding notice, information, reports and analyses to Owner so that Contractor can pursue like extensions and /or increases in Contractor's price from the Owner. Subcontractor acknowledges that its failure to comply with the terms of this paragraph may result in the loss of or prejudice to Contractor's ability to receive adjustments and extensions time from Owner. Subcontractor therefore agrees that it shall be deemed to have waived and forfeited all such rights in the event that it fails to provide notice, information, reports and analyses to Contractor as required by this Article. The terms and provisions of the paragraph are neither intended to relieve Subcontractor of the obligation to provide timely notices, information, reports and analyses, nor to extend shorter durations, required by the Contract Documents.

Notwithstanding the forgoing, the Subcontractor agrees that it shall not be entitled to nor claim any cost reimbursement, compensation, damages or extensions of time attributable to any changes, additions and/or omissions directed by Contractor except to the limited extent that Contractor has actually recovered corresponding cost reimbursement, compensation, damages or extensions of time from the Owner under the Contract Documents for such changes, additions and/or omissions and then only to the extent of the amount, if any, which Contractor on behalf of the Subcontractor, actually received from the Owner on account of such delay, obstruction, hindrance or interference. The preceding sentence shall not apply in a situation in which Contractor directed the performance of changes, additions and/or omissions by Subcontractor notwithstanding express language in the General Contract clearly indicating that Contractor is not entitled to recover a corresponding cost reimbursement, compensation, damages or extensions of time from the Owner.

Inspection & Defective Work

Failure to

Prosecute, etc.

ARTICLE X. The Subcontractor shall at all times provide sufficient, safe and proper facilities for the inspection of the Work by Contractor, the Architect, and their authorized representatives in the field, at shops or at any other place where materials or equipment for the Work are in the course of preparation, manufacture, treatment or storage. The Subcontractor shall, within twenty-four (24) hours after receiving written notice from Contractor to that effect, proceed to take down all portions of the Work and remove from the premises all materials whether worked or unworked, which the Architect, Contractor, Owner or any of its design consultants shall condemn as unsound, defective or improper or as in any way failing to conform to this Agreement or the Plans, Specifications or other Contract Documents, and the Subcontractor, at its own cost and expense, shall replace the same with proper and satisfactory work and materials on by the taking down, removal or replacement thereof.

ARTICLE XI. Should the Subcontractor at any time, whether before or after final payment or completion of the Work. refuse or neglect to supply a sufficiency of skilled workers or materials of the proper quality and quantity, or fail in any respect to prosecute the Work with promptness and diligence, or cause by any act or omission the stoppage, impede, obstruct, hinder or delay of or interference with or damage to the work of Contractor or of any other contractors or subcontractors on the Project, or fail in the performance of any of the terms and provisions of this Agreement or of the other Contract Documents, or should the Architect, Contractor, Owner or any of its design consultants, determine that the Work or any portion thereof is not being performed in accordance with the Contract Documents, or should there be filed by or against the Subcontractor a petition in bankruptcy or for an arrangement or reorganization, or should the Subcontractor become insolvent or be adjudicated a bankrupt or go into liquidation or dissolution, either voluntarily or involuntarily or under a court order, or make a general assignment for the benefit of creditors, or otherwise acknowledge insolvency, then in any of such events, each of which shall constitute a default hereunder on the Subcontractor's part, Contractor shall have the right, in addition to any other rights and remedies provided by this Agreement and the other Contract Documents or by law, at one time or in phases at Contractor's discretion, after three (3) days written notice to the Subcontractor mailed or delivered to the last known address of the latter. (a) to perform and furnish through itself or through others any such labor or materials for all or any portion of the Work and to deduct the cost thereof from any monies due or to become due to the Subcontractor under this Agreement, (b) to terminate the employment of the Subcontractor for all or any portion of the Work, and/or (c) enter upon the premises and take possession, for the purpose of completing all or any portion of the Work,, of all materials, equipment, scaffolds, tools, appliances and other items thereon as Contractor may select, all of which the Subcontractor hereby authorizes Contractor to employ and/or communicate with any person or persons in connection with the completion of the Work and/or to provide all the labor, services, materials, equipment and other items required therefor. In case of Contractor taking action under this Article, including termination of the employment of the Subcontractor, the Subcontractor shall not be entitled to receive any further payment under this Agreement until the Work shall be wholly completed to the satisfaction of Contractor, Owner and the Architect and shall have been accepted by them, at which time, if the unpaid balance of the amount to be paid under this Agreement shall exceed the cost and expense incurred by Contractor in completing the Work, such excess shall be paid by Contractor to the Subcontractor; but if such cost and expense shall exceed such unpaid balance, then the Subcontractor and its surety, if any, shall pay the difference to Contractor. Such cost and expense shall include, not only the cost of completing the Work to the satisfaction of Contractor and the Architect and of performing and furnishing all labor, services, materials, equipment, and other items required therefore, but also all losses, damages, costs and expenses, (including legal fees and disbursements incurred in connection with reprocurement, in defending claims arising from such default and in seeking recovery of all such cost and expense from the Subcontractor and/or its surety), and disbursements sustained, incurred or suffered by reason of or resulting from the Subcontractor's default. Should Contractor take action by effectuating the provisions of this paragraph, and should it subsequently be determined that such action, including a termination effectuated by the terms of this Article, was improper, such termination shall be treated as a termination for convenience pursuant to Article XX below. Subcontractor hereby transfers and assigns to Contractor the all rights under agreements that Subcontractor may have with subcontractors to Subcontractor, suppliers and vendors in connection with the Work or the Project, which transfers and assignments may be accepted at Contractor's sole discretion in the event that Contractor has taken action under this Article. Subcontractor agrees to fully cooperate with Contractor in pursuing Contractor's rights hereunder and that Contractor shall not be required to defer or delay action taken pursuant to this Article during the pendency of any review, investigation, evaluation or assessment by Subcontractor or its surety.

It is recognized that if the Subcontractor institutes or has instituted against it a case under Title 11 of the United States Code (Bankruptcy Code), such event could impair or frustrate the Subcontractor's performance of this Agreement. Accordingly, it is agreed that upon the occurrence of any such event, Contractor shall be entitled to request of Subcontractor or its trustee or other successor adequate assurances of future performance. Failure to comply with such request within ten (10) days of delivery of the request shall entitle Contractor, in addition to any other rights and remedies provided by this Agreement or by law, to terminate this Agreement. Pending receipt of adequate assurances of performance and actual performance in accordance herewith, Contractor shall be entitled to perform and furnish through itself or through others any such labor, materials or equipment for the Work as may be necessary to maintain the progress of the Work and to deduct the cost thereof from any monies due or to become due to the Subcontractor under this Agreement or if there has been a default and the Subcontractor is unable to give adequate assurance that it will perform as provided in this Agreement or otherwise is unable to comply with the requirements for assuming this Agreement under the applicable provisions of the Bankruptcy Code.

Subcontractor, in addition to any other rights available to Contractor hereunder, agrees to indemnify, hold harmless and defend Contractor from and against any and all claims, demands, suits, damages, judgments, liabilities, costs and expenses (including legal fees and disbursements) arising out of or related to Subcontractor's breach of any term of the Agreement.

Loss or Damage to Work **ARTICLE XII.** Contractor shall not be responsible for any loss or damage to the Work to be performed and furnished under this Agreement, however caused, until after final acceptance thereof by Contractor and the Architect, nor shall Contractor be responsible for loss of or damage to materials, tools, equipment, appliances or other personal property owned, rented or used by the Subcontractor or anyone employed by it in the performance of the Work, however caused.

Builder's Risk Contractor or Owner shall effect and maintain All-Risk Builder's Risk insurance in accordance with the Contract Insurance Documents upon all Work, materials and equipment incorporated in the Project and all materials and equipment on or about the Premises intended for permanent use or incorporation in the Project or incident to the construction thereof, the capital value of which is included in the cost of the Work, but not including any contractors' machinery, tools, equipment or other personal property owned, rented or used by the Subcontractor or anyone employed by it in the performance of the Work.

A loss insured under Contractor or the Owner's All-Risk Builder's Risk insurance shall be adjusted by the Contractor or the Owner as fiduciary and made payable to Contractor or the Owner as fiduciary for the Insureds, as their interests may appear. Contractor or the Owner shall pay Subcontractors their just shares of insurance proceeds received by Contractor or the Owner, and by appropriate agreements, written where legally required for validity, and shall require Subcontractors to make payments to their subcontractors in a similar manner.

ARTICLE XIII. The Subcontractor shall, at its own cost and expense, (1) keep the Premises free at all times from all waste materials, packaging materials and other rubbish accumulated in connection with the execution of its Work by collecting and depositing said materials and rubbish in locations or containers as designated by Contractor from which it shall be removed by Contractor from the Premises without charge, (2) clean and remove from its own Work and from all contiguous work of others any soiling, staining, mortar, plaster, concrete or dirt caused by the execution of its Work and make good all defects resulting therefrom (3) at the completion of its Work in each area, perform such cleaning as may be required to leave the area "broom clean", and (4) at the entire completion of its Work, remove all of its tools, equipment, scaffolds, shanties and surplus materials. Should the Subcontractor fail to perform any of the foregoing to Contractor's satisfaction, Contractor shall have the right to perform and complete such work itself or through others and charge the cost thereof to the Subcontractor.

Ethics & Compliance

Cleaning Up

ARTICLE XIV. The Subcontractor shall obtain and pay for all necessary permits and licenses pertaining to the Work and shall comply with all Federal, State, Municipal and local laws, ordinances, codes, rules, regulations, standards, orders, notices and requirements, including but not limited to those relating to safety, storm water management, discrimination in employment, fair employment practices, immigration laws or equal employment opportunity, and whether or not provided for by the Plans, Specifications, General Conditions, or other Contract Documents, without additional charge or expense to Contractor and shall also be responsible for and correct, at its own cost and expense, any violations thereof resulting from or in connection with the performance of its Work. Each requisition for payment shall constitute a representation and warranty that Subcontractor is in compliance with applicable law.

The Subcontractor shall at any time upon demand furnish such proof as Contractor may require showing such compliance and the correction of such violations. The Subcontractor agrees to save harmless and indemnify Contractor from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, costs and expenses, including legal fees and disbursements, caused or occasioned directly or indirectly by the Subcontractor's failure to comply with any of said laws, ordinances, rules, regulations, standards, orders, notices or requirements or to correct such violations therefore resulting from or in connection with the performance of Work.

The Immigration and Nationality Act as amended by the Immigration Reform and Control Act of 1986 (IRCA) makes it illegal for employers to knowingly hire persons who are not authorized to work in the United States. For all employees, employers are required to complete an Employment Eligibility Verification form I-9 which requires the prospective employee to produce documentation that establishes identity and employment eligibility. For more information visit www.uscis.gov, or speak to your attorney. Each subcontractor is solely responsible for properly completing Employment Eligibility Verifications for their own employees.

Subcontractor acknowledges represents and warrants that Subcontractor is aware of and understands IRCA, that Subcontractor is in compliance with IRCA, and that Subcontractor is not knowingly employing workers who are not authorized to work in the United States. Subcontractor agrees that Subcontractor will not employ any worker under this subcontract for whom Subcontractor has not completed and maintained I-9 verification. Subcontractor agrees that if Subcontractor acquires knowledge (constructive or otherwise, including receipt of a "no match" letter from Social Security Administration) indicating that one of Subcontractor's workers on this project may not be authorized to work in the United States, despite Subcontractor having status and take appropriate action which may include termination of employment. Subcontractor represents and warrants that they will not subcontract to or utilize labor sources that it knows or has reason to know violate IRCA.

Contractor has a longstanding reputation for honesty and integrity in its business dealings and for its corporate policies promoting lawful and ethical behavior. Contractor is committed to upholding that reputation and has adopted a Standard of Business Conduct Policy Statement which governs the actions of all of its employees. Pursuant to that Policy Statement, Contractor employees are prohibited from accepting bribes or kickbacks in any form and, further, are prohibited from accepting goods or services provided by a subcontractor, supplier or vendor for the personal benefit of the employee, his or her relatives, or any entity in which the employee or his or her relatives has a personal interest. This prohibition includes, but is not limited to; work performed on an employee's residence and applies regardless of whether the beneficiary of the goods or services pays for them. Therefore, if the Subcontractor offers or provides a bribe or kickback to any employee, or offers or provides goods or services to any employee, his or her relatives, or any entity in which the employee, his or her relatives, or any entity in which the employee or his or her relatives, or any entity or person associated with the project that Subcontractor believes violates any applicable law, rule or regulation. Subcontractor's violation of any of the foregoing shall be considered as Subcontractor's failure to perform its obligations under the terms and conditions of this Agreement. Such failure shall be considered adequate and justifiable grounds for Contractor to effectuate its rights and remedies under the provisions of Article XI of this Agreement.

The provisions of this Article must be incorporated into any subcontract Subcontractor enters into in connection with the performance of the Work.

Labor to be Employed ARTICLE XV. The Subcontractor shall not employ workers, means, materials or equipment or assign work in any manner which may cause strikes, work stoppages or any disturbances by workers employed by the Subcontractor, Contractor or other contractors or subcontractors on or in connection with the Work or the Project or the location thereof. The Subcontractor agrees that all disputes as to jurisdiction of trades shall be adjusted in the manner or by a process that Contractor may require,

Taxes &

Patents

Disputes

including, if Contractor so requires, in accordance with any plan for the settlement of jurisdictional disputes to which Contractor may be bound in connection with the Project which may be in effect either nationally or in the locality in which the Work is being done. Subcontractor agrees that it shall assign work consistent with any such plan and shall be bound and abide by all such adjustments and settlements of jurisdictional disputes, provided that the provisions of this Article shall not be in violation of or in conflict with any provisions of law applicable to the settlement of such disputes. Should the Subcontractor fail to carry out or comply with any of the foregoing provisions, Contractor shall have the right, in addition to any other rights and remedies provided by this Agreement or the other Contract Documents or by law, after three (3) days written notice mailed or delivered to the last known address of the Subcontractor, to terminate this Agreement or any part thereof or the employment of the Subcontractor for all or any portion of the Work, and, for the purpose of completing the Work, to enter upon the Premises and take possession, in the same manner, to the same extent and upon the same terms and conditions as set forth in Article XI of this Agreement.

The Project or General Contract may be subject to Federal prevailing wage requirements, such as the Davis-Bacon Act or the Walsh-Healy Act, or other similar laws, statutes or requirements at a state or local level. Subcontractor shall strictly comply with all applicable prevailing wage laws, statutes or requirements and shall maintain such records as necessary to establish the amount of wages and other compensation paid to workers in connection with the Project and shall submit to Turner, as a condition for payment, certified payrolls in the form prescribed by any such laws, regulations or requirements. Subcontractor expressly agrees that the indemnification obligations set forth in Article XIV of this Agreement shall apply to any violations by Subcontractor of any such laws, statutes or regulations and the failure to maintain records as required herein.

ARTICLE XVI. The Subcontractor for the Price herein provided, hereby accepts and assumes exclusive liability for and Contributions shall indemnify, protect and save harmless Contractor and the Owner from and against the payment of:

- 1. All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the Unemployment Insurance Law of any State, Federal Social Security Act, Federal, State, County and/or Municipal Tax Withholding Laws, or any other law, measured upon the payroll of or required to be withheld from employees, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.
- 2. All sales, use, personal property and other taxes (including interest and penalties thereon) required by any Federal, State, County, Municipal or other law to be paid or collected by the Subcontractor or any of its subcontractors or vendors or any other person or persons acting for, through or under it or any of them, by reason of the performance of the Work or the acquisition, ownership, furnishing or use of any materials, equipment, supplies, labor, services or other items for or in connection with the Work.
- 3. All pension, welfare, vacation, annuity and other union benefit contributions payable under or in connection with labor agreements with respect to all persons, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

In furtherance of, and in addition to the agreements, duties obligations and responsibilities of the Subcontractor with respect to the payment of sales, use, personal property and other taxes set forth in Articles IV and XVI of this Agreement, the Subcontractor agrees to reimburse and otherwise indemnify Contractor and the Owner for any expenses, including legal fees and litigation arising from, or related to the Subcontractor's failure to pay any sales, use, personal property or other taxes based upon labor, services, materials, equipment or other items acquired, performed, furnished or used for or in connection with the Work.

ARTICLE XVII. The Subcontractor hereby agrees to indemnify, protect and save harmless Contractor and the Owner from and against any and all liability, loss or damage and to reimburse Contractor and the Owner for any expenses, including legal fees and disbursements, to which Contractor and the Owner may be put because of claims or litigation on account of infringement or alleged infringement of any letters patent or patent rights by reason of the Work or materials, equipment or other items used by the Subcontractor in its performance.

ARTICLE XVIII. The parties recognize that problems and disputes between them may occur and that it is preferable for them to reach an amicable resolution of same without the need to resort to formal dispute resolution procedures. In that regard, they each pledge to participate in good faith in voluntary and non-binding Alternate Dispute Resolution (ADR) procedures in the form of a mediation conducted by a neutral mediator, or such other form as the parties otherwise agree, as a condition precedent to addressing the dispute in any other forum unless Contractor agrees in writing to waive this condition precedent. The procedure for requesting such an ADR shall begin with a written notice of request for ADR delivered by one party hereto to the other. Within 14 days following the receipt of such notice, lead representatives of Subcontractor and Contractor shall meet in an effort to resolve the dispute. In the event that the dispute remains unresolved after the lead representatives meeting, a meeting shall take place between the President of Subcontractor and the General Manager or Operations Manager of Contractor within 20 days thereafter. In the event that the dispute remains unresolved after the President/Manager meeting, the parties shall proceed with ADR procedures described in the Article. However, in the event that such disputes are not resolved by mediation or another ADR procedure as Contractor and the Subcontractor may agree then such disputes shall be resolved any of following forums selected at Contractor's sole discretion either (1) the forum pursuant to which disputes between the Owner and Contractor are to be resolved under the terms of the General Contract, (2) arbitration administered by the American Arbitration Association under the rules pertinent to construction disputes then applicable or (3) in litigation. Furthermore, the Subcontractor agrees that Contractor shall have the exclusive right to join the Subcontractor as a party in any dispute resolution procedure (including without limitation ADR procedures, binding arbitration or other judicial or non-judicial proceeding) in which Contractor may be involved arising out of or in connection with the Project, together with such other subcontractors or parties as may be appropriate, where in the judgment of Contractor the issues in dispute are related to the work or performance of the Subcontractor. In the event that relevant law limits or precludes Contractor's sole discretion in selecting the forum, then the dispute shall be resolved in litigation, unless the Subcontractor is to be joined by Contractor in a proceeding with Owner, in which case the forum shall be as stated in the General Contract. Furthermore, the Subcontractor expressly agrees to waive its right to trial by jury in any dispute involving Contractor and or Contractor's surety. Subcontractor further agrees that in the event that it suffers damages, cost or expenses or otherwise intends to pursue a recovery that arises out of or relates to the performance of work by another subcontractor to or under Contractor, Subcontractor's sole remedy shall be as against that responsible subcontractor and Subcontractor shall not pursue a remedy from Contractor.

Subcontractor shall continue with the diligent performance of Work pursuant to this Subcontract and follow and abide by directions and instructions issued by Contractor during the pendency of any dispute, including dispute resolution procedures, ADR procedures, arbitration or litigation.

All claims, suit or demands by Subcontractor as against Contractor or Owner shall be brought within the earlier of one year following Subcontractor's achieving substantial completion for the Subcontractor's Work or within one year of Contractor's notice of default in the event that Contractor has taken any action in accordance with Article XI, and Subcontractor hereby agrees that all relevant statutes of limitations shall be deemed reduced to such time period, to the fullest extent permitted by law.

Mechanics' Liens & Claims To the fullest extent permitted by law, Subcontractor for itself and for its subcontractors, laborers and materialmen and suppliers and all others directly or indirectly acting for, through or under it or any of them covenants and agrees that no liens or claims, whether a mechanics' lien or an attested account or otherwise, will be filed or maintained against the Project or Premises or any part thereof or any interests therein or any improvements thereon, or against any monies due or to become due from the Owner to Contractor or from Contractor to the Subcontractor, for or on account of any work, labor, services, materials, supplies, equipment, or other items performed or furnished for or in connection with the Work, and the Subcontractor for itself and its Subcontractors, laborers, and materialmen and suppliers and all others above mentioned does hereby expressly waive, release and relinquish all rights to file or maintain such liens and claims and agrees further that this waiver of the right to file or maintain such liens and shall apply as well to work, labor and services performed and materials, supplies, supplies, supplies, equipment and other items furnished under any change order or supplemental agreement for extra or additional work in connection with the Project as to the Original Work covered by this Agreement.

If any subcontractor, laborer, materialman or supplier of the Subcontractor or any other person directly or indirectly acting for, through or under it or any of them files or maintains a lien or claim, whether a mechanics' lien or an attested account or otherwise, a mechanic's lien or claim against the Project or Premises or any part thereof or any interests therein or any improvements thereon or against any monies due or to become due from the Owner to Contractor or from Contractor to the Subcontractor, for or on account of any work, labor, services, materials, supplies, equipment or other items performed or furnished for or in connection with the Work or under any change order or supplemental agreement for extra or additional work in connection with the Project, the Subcontractor agrees to cause such liens and claims to be satisfied, removed or discharged at its own expense by bond, payment or otherwise within ten (10) days from the date of the filing thereof, and upon its failure to do so Contractor shall have the right, in addition to all other rights and remedies provided under this Agreement and the other Contractor chooses, at the entire cost and expense of the Subcontractor (such cost and expense to include legal fees and disbursements). The Subcontractor agrees to indemnify, protect and save harmless Contractor and the Owner from and against any and all losc, damages, liability, costs and expenses, including legal fees and disbursements, which Contractor and/or the Owner may sustain or incur in connection therewith.

Assignment & Subletting

ARTICLE XIX. To the fullest extent permitted by law, Subcontractor agrees that it shall not assign, sell, transfer, delegate or encumber any rights, duties or obligations arising under this Agreement including, but not limited to, any right to receive payments hereunder, without the prior written consent of Contractor in its sole discretion and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments. In the event Subcontractor assigns, sells, encumbers or otherwise transfers its right to any monies due or to become due under this Agreement as security for any loan, financing or other indebtedness (hereafter "Assignment"), notification to Contractor of such Assignment must be sent by certified mail, return receipt requested, to the Purchasing Manager in charge of the business unit responsible for the construction of the Project and the Assignment shall not be effective as against Contractor until Contractor provides its written consent to such Assignment. Subcontractor agrees that any such Assignment shall not relieve the Subcontractor of any of its agreements, duties, responsibilities or obligations under this Agreement and the other Contract Documents and shall not create a contractual relationship or a third party beneficiary relationship of any kind between Contractor and such assignee or transferee. Subcontractor further agrees that all of Contractor's defenses and claims arising out of this Agreement with respect to such Assignment are reserved unless expressly waived in writing by a duly authorized corporate officer. Subcontractor or Owner has or may sustain or incur in connection with such Assignment.

Termination for Convenience ARTICLE XX. Contractor shall have the right at any time and for any reason, by written notice to the Subcontractor, to terminate this Agreement without cause and require the Subcontractor to cease work hereunder. In the event of such a termination for convenience, the Subcontractor shall be entitled to payment pursuant to the terms of the Agreement only for all Work performed as of the date of termination, together with reasonable costs of demobilization and such other reasonable costs as may be encountered by the Subcontractor and directly attributable to such termination provided that such amount shall be entitled to provide by all amounts for which Subcontractor is liable or responsible hereunder. However, the Subcontractor shall only be entitled to profit on that portion of the Work actually performed and approved for payment to the date of termination together with retainages held upon payments made prior thereto. Subcontractor waives any claim for loss of anticipated profits or other damages in the event Contractor exercises this clause.

ARTICLE XXI. The Subcontractor hereby guarantees the Work to the full extent provided in the Plans, Specifications, General Conditions, Special Conditions and other Contract Documents.

The Subcontractor shall expeditiously remove, replace and/or repair at its own expense and at the convenience of the Owner any faulty, defective or improper Work, materials or equipment existing or discovered within one (1) year from the date of the acceptance of the Project as a whole by the Architect and the Owner or for such longer period as may be provided in the Plans, Specifications, General Conditions, Special Conditions or other Contract Documents.

Without limiting the generality of the foregoing, the Subcontractor warrants to the Owner, the Architect and Contractor, and each of them, that all materials and equipment furnished under this Agreement will be of first class quality and new, unless otherwise required or permitted by the other Contract Documents, that the Work performed pursuant to this Agreement will be free from defects and that the Work will strictly conform with the requirements of the Contract Documents. Work not conforming to such requirements, including substitutions not properly approved and authorized, shall be considered defective. All warranties contained in this Agreement and in the Contract Documents shall be in addition to and not in limitation of all other warranties or remedies required and/or arising pursuant to applicable law. Failure of Subcontractor to honor and satisfy the foregoing and any other warranties or guarantees required of the Subcontractor under the Contract Documents, shall constitute a default by Subcontractor

ARTICLE XXII. The Subcontractor agrees that the prevention of accidents to workmen and property engaged upon or in the vicinity of the Work is its responsibility. The Subcontractor agrees to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, codes, standards, orders, notices and requirements concerning safety as shall be applicable to the Work, including, among others, the Federal Occupational Safety and Health Act of 1970, and the Clean Water Act, as

Accident Prevention & Other Policies

Guarantees

amended, and all standards, rules, regulations and orders which have been or shall be adopted or issued thereunder, and with the safety standards established or imposed during the progress of the Work by Contractor. When so ordered, the Subcontractor shall stop any part of the Work which Contractor deems potentially unsafe, noncompliant or in violation until corrective measures satisfactory to Contractor have been taken, and the Subcontractor agrees that it shall not have nor make any claim for damages growing out of such stoppages. Should the Subcontractor neglect to take such corrective measures, Contractor may do so at the cost and expense of the Subcontractor and may deduct the cost thereof from any payments due or to become due to the Subcontractor. Failure on the part of Contractor to stop unsafe practices shall in no way relieve the Subcontractor of its responsibility therefor.

This Subcontractor acknowledges the receipt of "Contractor's "Corporate Safety, Health and Environmental Policy", "Substance Abuse Policy", "Equal Employment Opportunity" policy and "Policy Statement on Harassment." Subject to applicable law this Subcontractor further agrees to be bound to these policies as a part of the supplemental and special conditions to the contract for construction of the project, including any amendments or modifications of such policies that Contractor may issue at any time. Subcontractor further acknowledges that Contractor endeavors to employ on its projects robust programs with respect to safety and storm water management, as well as compliance with relevant laws and regulations, including, without limitation, OSHA and the Clean Water Act. Such programs may include aggressive measures and requirements, such as reporting, training of personnel and inspections that may be considerably above and beyond minimum standards. Subcontractor agrees to comply with any and all requirements Contractor may impose in connection with such programs and policies, whether as part of this Subcontract or hereafter, and the cost and expense of such compliance shall be borne by the Subcontractor.

In the event that hazardous substances of a type of which an employer is required by law to notify its employees are being used or stored on the site by the Subcontractor, the Subcontractor's subcontractors and anyone directly or indirectly employed or otherwise retained by them or either of them, the Subcontractor shall immediately provide written notice of the chemical composition thereof (including, without limitation, a copy of the applicable Material Safety Data Sheet) to Contractor in sufficient time to permit compliance with such laws by Contractor, other subcontractors and other employers on the site. In the event that the Subcontractor encounters on the site material reasonably believed to be hazardous substances (including, without limitation, asbestos or polychlorinated biphenyl) which has not been rendered harmless, the Subcontractor shall immediately stop Work in the area affected and immediately report the condition to Contractor in writing. Work in the affected area shall resume when such hazardous substances have been rendered harmless or removed as determined by Contractor in its sole and absolute discretion. To the extent of Subcontractor's responsibilities hereunder, Subcontractor does indemnify and save harmless Contractor from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, cost and expenses, including legal fees and disbursements, caused or occasioned directly or indirectly by the Subcontractor in regard to such hazardous substances.

ARTICLE XXIII. Throughout this Agreement, the "Indemnified Party (ies)" means Contractor, the Owner, any party required to be indemnified pursuant to the General Contract, and any of their respective officers, agents, servants, or employees, and affiliates, parents and subsidiaries. Except as otherwise provided below, the Subcontractor hereby assumes the entire responsibility and liability for any and all actual or potential damage or injury of any kind or nature whatsoever (including death, business interruption or loss of use resulting therefrom) to all persons and entities, whether employees of the Subcontractor, or any tier of the Subcontractor or otherwise, or to all property or as a result of a perceived risk of such damage or injury (including actions taken to avoid or contain such actual or potential damage or injury, whether required or incurred by a public authority or otherwise); caused by, resulting from, arising out of or occurring in connection with the execution of the Work, or in preparation for the Work, or any extension, modification, or amendment to the Work by change order or otherwise. Should any claims for such actual or potential damage or injury (including death resulting therefrom) be made or asserted, whether or not such claims are based upon an Indemnified Party's alleged active or passive negligence or participation in the wrong or upon any alleged breach of any statutory duty or obligation on the part of an Indemnified Party, the Subcontractor agrees to indemnify and save harmless the Indemnified Party from and against any and all such claims and further from and against any and all loss, cost, expense, liability, damage, penalties, fines or injury, including legal fees and disbursements, that the Indemnified Party may directly or indirectly sustain, suffer or incur as a result thereof. However, this Article shall not be construed in any way to require the Subcontractor, its agents, and its employees to indemnify the Indemnified Party for damages because of property damage or bodily injury caused by or resulting from the Indemnified Party's own negligence. When the Subcontractor has the obligation to indemnify the Indemnified Party, the Subcontractor agrees to and does hereby assume, on behalf of the Indemnified Party, the defense of any action at law or in equity which may be brought against the Indemnified Party upon or by reason of such claims and to pay on behalf of the Indemnified Party, upon demand, the amount of any judgment that may be entered against the Indemnified Party in any such action. In the event that any such claims, loss, cost, expense, liability, damage, penalties, fines or injury arise or are made, asserted or threatened against the Indemnified Party, Contractor shall have the right to withhold from any payments due or to become due to the Subcontractor an amount sufficient in its judgment to protect and indemnify the Indemnified Party from and against any and all such claims, loss, cost, expense, liability, damage, penalties, fines or injury, including legal fees and disbursements, or Contractor in its discretion may require the Subcontractor to furnish a surety bond satisfactory to Contractor guaranteeing such protection, which bond shall be furnished by the Subcontractor within five (5) days after written demand has been made therefor.

In furtherance to but not in limitation of the indemnity provisions in this Agreement, Subcontractor hereby expressly and specifically agrees that its obligation to indemnify, defend and save harmless as provided in this Agreement shall not in any way be affected or diminished by any statutory or constitutional immunity it enjoys from suits by its own employees or from limitations of liability or recovery under worker's compensation laws.

IN THE EVENT THAT THE LAW OF THE STATE IN WHICH THE PROJECT IS LOCATED (OR OTHER APPLICABLE LAW) LIMITS THE INDEMNITY OBLIGATIONS OF THE SUBCONTRACTOR, THEN THE INDEMNITY OBLIGATIONS OF THE SUBCONTRACTOR SHALL BE ENFORCED TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, AND THIS ARTICLE SHALL BE CONSTRUED TO CONFORM TO SUCH LAW.

Assumption of Liability & Indemnity

Insurance

ARTICLE XXIV. Insurance.

A. Required Insurance

Before commencing the Work, the following insurance coverages from insurance companies satisfactory to Contractor shall be in place and maintained until completion and final acceptance of the Work:

- 1. WORKERS' COMPENSATION in accordance with laws of the State in which the Work is situated, and EMPLOYERS' LIABILITY INSURANCE in the amount of \$1,000,000.
- 2. COMMERCIAL GENERAL LIABILITY INSURANCE INCLUDING COMPLETED OPERATIONS, CONTRACTUAL LIABILITY INSURANCE AGAINST THE LIABILITY ASSUMED HEREINABOVE, and including INDEPENDENT CONTRACTOR'S LIABILITY INSURANCE if the Subcontractor sublets to another all or any portion of the Work, Personal Injury Liability, Broad Form Property Damage (including completed operations), and Explosion, Collapse and Underground Hazards, with the following minimum limits:(Coverage shall be equivalent to current ISO Occurrence Form). No exclusions or restrictions for Crane usage will be permitted.
 - \$ <u>SDS</u> /Occurrence
 - \$ <u>SDS</u> General Aggregate

Subcontractor has elected to obtain the above insurance coverages set forth in paragraphs 1 and 2 above in the manner set forth in the Subcontractor Election A, B or C (with Subcontractor Election B having a further coverage option that is stated in, and may be elected by checking, Sub-Part B-1) that is checked below (Note: only one of Subcontractor Election A, B or C is to be selected, however Subpart B-1 may also be selected but only if Subcontractor Election B is selected):

SDS Subcontractor Election A). The above insurance coverages shall be provided by insurance companies selected by the Subcontractor. Contractor shall have the right, without limitation, to reject any insurance company selected by Subcontractor that has an A.M. Best rating of less than A or Standard and Poor's rating of less than AA or a Moody's rating of less than Aa. This insurance coverage shall include Products and Completed Operations coverage which Subcontractor agrees to maintain for a period equal to the statute of repose in the state in which the project is located. Subcontractor further agrees that it shall require each of its sub-subcontractors to provide the above insurance coverages subject to the terms and conditions set forth below. All costs are included in the Price and are to be paid by the Subcontractor.

or

SDS Subcontractor Election B). The above insurance coverages shall be provided through a consolidated insurance program that insures Subcontractor and its eligible lower tier subcontractors, which program has been made available to Subcontractor by Contractor, as described and with limits of liability, terms and conditions set forth in the Contract Documents, including, but not limited to, the CCIP Manual, and Subcontractor agrees to all terms and conditions therein, and makes all representations and warranties, associated therewith. Subcontractor acknowledges and agrees i) that insurance costs will be incurred to provide the above insurance costs in the Price and paying such costs directly, the Price does not include insurance costs for the above insurance coverages, iii) that it is more convenient and efficient for Contractor to pay such insurance costs on Subcontractor's and Subcontractor to pay such insurance premiums on Subcontractor's behalf and Subcontractor's eligible lower tier subcontractor to pay such insurance

SDS Sub-Part B-1 to Subcontractor Election B. By checking this further election, Subcontractor agrees that it has selected Subcontractor Election B with respect to providing the above insurance coverages for eligible lower tier subcontractors engaged by or through Subcontractor to the extent permitted by the Contract Documents (including the CCIP Manual), however, Subcontractor agrees that as to Subcontractor itself, the above insurances will be provided by Subcontractor in accordance with the terms and conditions of Subcontractor Election A above. Accordingly, Subcontractor itself shall be deemed an "Excluded Party" with respect to the consolidated insurance program as described in the Contract Documents (including the CCIP Manual). Any other "Excluded Party" lower tier subcontractors (if applicable) with respect to the consolidated insurance program arranged by Contractor shall be required to procure their own insurance coverages at their expense. For Subcontractor's lower tier subcontractors that are not an "Excluded Party", the above insurance coverages shall be provided through the consolidated insurance program as described in Subcontractor Election B to the extent permitted by the Contract Documents (including the CCIP Manual).

Subcontractor represents and warrants that all amounts, information and data that Subcontractor and its lower tier subcontractors has provided or will provide in connection with CCIP applications and other related forms and documents, including estimated payroll and insurance costs, are, or shall be when submitted, true and accurate. Subcontractor represents and warrants that the amount of estimated unburdened payroll (payroll without benefits or overtime, unless the overtime portion is included as required by the regulations of the State in which the project is located) actually used by Subcontractor and its eligible lower tier subcontractors in calculating the Price is \$ <u>SDS</u> ("Initial Payroll Estimate" or "Estimated On-Site Payroll") (if Sub-Part B-1 is elected, this amount only pertains to Subcontractor's eligible lower tier subcontractors). Subcontractor further agrees that all such amounts, data and information, including the estimated unburdened payroll amount used to calculate the Price, shall be to subject to audit and verification if Contractor or the CCIP Administrator elects to do so and Subcontractor

agrees to cooperate fully and provide documents and other records requested in connection with such audit and verification and to cause its lower tier subcontractors to do the same. Subcontractor acknowledges that such amounts, information and data or such other amounts as verified in accordance with the CCIP Manual or through audit may be used to calculate final and interim cost adjustments to the Price and/or payments to Subcontractor (at Contractor's discretion) as described in the CCIP Manual. Contractor and the CCIP Administrator shall not be required to use any amount greater than the foregoing "Estimated On-Site Payroll" as the unburdened payroll amount when calculating such adjustments for Subcontractor and its lower tier subcontractors as described in the CCIP Manual.

or

<u>SDS</u> Subcontractor Election C). The above insurance coverages shall be provided through an Owner Controlled Insurance Program (OCIP) as described and with limits of liability set forth in the Contract Documents and Subcontractor agrees to all terms, and makes all representations and warranties, associated therewith.

Subcontractor acknowledges that if any of the above insurance coverages are provided through a consolidated program arranged pursuant to Subcontractor Election B, Subcontractor Election B-1 or Subcontractor Election C, such coverage will not apply to any operations off of the premises (as defined in the CCIP Policy or Manual or OCIP Policy or Manual) and Subcontractor shall provide and maintain the above insurance coverages with respect to off-premises operations. Subcontractor further agrees that in the event that the insurance coverage provided by a consolidated insurance program (Subcontractor Election B or C) is cancelled prior to the completion of the Work, subcontractor shall provide the insurance coverage (set forth in paragraphs 1 and 2). Subcontractor further acknowledges and represents i) that it was not required to select any particular election provided for above and was free to choose Subcontractor Elections available for this Project and has chosen the election selected above, and iii) that Subcontractor for the satisfied itself that the Subcontractor Election checked above is preferable to Subcontractor for reasons of convenience, economics and/or coverage afforded.

3. COMMERCIAL AUTOMOBILE LIABILITY INSURANCE covering all owned, non-owned and hired automobiles used in connection with the Work, with the following minimum limits:

Combined Single Limit \$ <u>SDS</u> /accident

- ALL RISK CONTRACTOR'S EQUIPMENT INSURANCE COVERAGE shall be provided by all Subcontractors utilizing a crane or other equipment in connection with the performance of the Work and insured to the full value of equipment.
- B. Insurance Conditions

The following terms and conditions are applicable to all insurance:

Before commencing the Work, the Subcontractor shall furnish a certificate(s), satisfactory to Contractor from each insurance company showing that the above insurances (1, 2 Subcontractor Election A, 3 and CGL operations off of the premises under 2 Subcontractor Election B and C, and 4) are in force, stating policy numbers, dates of expiration, and limits of liability thereunder, and further providing that should any of the described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. Subcontractor shall advise Contractor of the amount of any Deductible or Self-Insured Retention that exists on any policies of insurance on the face of the certificates provided. Subcontractor shall be responsible for and agrees to pay and/or reimburse Contractor for any such Deductible or Self-Insured Retention.

The Subcontractor shall name the Indemnified Parties and such other entities as may be reasonably requested as additional insureds under the policies of insurance listed in paragraph A maintained by the Subcontractor (with the exception of Workers Compensation insurance), whether during the performance of the Work or any time thereafter. The coverage to be provided to the additional insureds shall be for all liability arising out of the Work. Subcontractor will submit a certificate of insurance and a copy of endorsements to the insurance policies listing all parties required to be named by Subcontractor as additional insureds. Subcontractor hereby waives all rights of recovery from Contractor and the Indemnified Parties, including but not limited to rights of subrogation, with respect to any matter, claim or suit that is required to be covered by insurance to be maintained by Subcontractor pursuant to the Contract Documents.

It is expressly agreed by and between Subcontractor and Contractor that all insurance, whether issued on a primary or excess basis, afforded the additional insureds shall be primary insurance to any other insurance available to the additional insureds and that any other insurance carried by the additional insureds shall be excess of all other insurance carried by the Subcontractor and shall not contribute with the Subcontractor's insurance. Subcontractor further agrees that the amount of insurance available to Contractor and the additional insureds shall be for the full amount of the loss up to policy limits of liability and shall not be limited to the minimum requirements of this Subcontractor. Subcontractor further agrees to provide endorsements on its insurance policies that shall state the foregoing; however, Subcontractor's failure to provide such endorsement shall not affect Subcontractor's agreement hereunder.

If the Subcontractor fails to procure and maintain such insurance, if required, Contractor shall have the right, but not the obligation, to procure and maintain said insurance for and in the name of the Subcontractor and the Subcontractor shall pay the cost thereof and shall furnish all necessary information to make effective and maintain such insurance or at Contractor's option, Contractor may offset the cost incurred by Contractor against amounts otherwise payable to Subcontractor hereunder. Subcontractor further agrees that in the event of such failure to procure and maintain such insurance, Subcontractor shall be liable for all amounts which would have been payable pursuant to the insurance required by this Subcontract. If, in Contractor's discretion, Contractor is concerned that any insurance company selected by Subcontractor has, at any time, faced diminished financial strength or that the insurance company may no longer provide the same level of financial strength (such as a decline in an A. M. Best, Standard and Poor's or Moody's rating), Contractor may require that Subcontractor provide replacement insurance coverage through an insurance company satisfactory to Contractor.

IN THE EVENT THAT THE LAW OF THE STATE IN WHICH THE PROJECT IS LOCATED (OR OTHER APPLICABLE LAW) LIMITS THE ADDITIONAL INSURED COVERAGE THAT CONTRACTOR MAY REQUIRE FROM SUBCONTRACTOR, THEN SUBCONTRACTOR SHALL BE REQUIRED TO OBTAIN ADDITIONAL INSURED COVERAGE TO THE FULLEST EXTENT OF COVERAGE AND LIMITS ALLOWED BY APPLICABLE LAW AND THIS CONTRACT SHALL BE READ TO CONFORM TO SUCH LAW.

ARTICLE XXV. The Subcontractor shall furnish to Contractor a performance bond in the amount of \$<u>SDS</u> and a separate payment bond in the amount of \$<u>SDS</u> the form and contents of such bonds and the Surety or Sureties thereon to be satisfactory to Contractor. Such bonds shall be furnished to Contractor within ten (10) calendar days after Subcontractor has executed this Agreement or within such other time period agreed to by Contractor in writing. In the event Subcontractor fails to furnish such bonds to Contractor within the time period as hereinabove provided, such failure shall constitute a default under this Agreement in which event Contractor shall have all of the rights and remedies provided in Article XI hereof with respect to default on the part of Subcontractor including, without limitation, the right to terminate this Agreement.

Without limiting the responsibilities of Subcontractor and its Surety under the terms of this Agreement, Subcontractor and its Surety hereby agree to promptly pay all lawful claims of subcontractors, materialmen, laborers, persons, firms or corporations for labor or services performed or materials, supplies, machinery equipment, rentals, fuels, oils, tools, appliances, insurance and other items furnished, used or consumed in connection with the prosecution of the Work provided for in said Subcontract and any and all modifications thereof, and shall indemnify and save harmless Contractor of and from all liability loss, damage and expense, including interest, costs and attorney fees, which Contractor and/or its Surety may sustain by reason of Subcontractor's or its Surety's failure to do so.

Subcontractor and its Surety hereby agree to execute and deliver to Contractor when requested in connection with the issuance of change orders under this Agreement, Rider "A" amendments (or other documents as Contractor may require) increasing the amount (Penal Sum) of the Payment and Performance Bonds furnished by the Subcontractor. The reasonable premiums or other charges paid by the Subcontractor for the procurement of the Rider "A" amendments will be paid as a change to this Agreement.

Severability

Bonds

Business Enterprise Compliance **ARTICLE XXVI.** In the event that any provision or any part of a provision of this Agreement shall be finally determined to be superseded, invalid, illegal or otherwise unenforceable pursuant to applicable laws by an authority having jurisdiction, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provisions or parts of provisions of this Agreement, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

ARTICLE XXVII. In the event that the Project or General Contract is subject to any federal, state, or local program(s) requiring Contractor or its subcontractors to meet certain goals or commitments with regard to the award of subcontracts or supply contracts to small and/or disadvantaged businesses, including but not limited to minority owned, woman owned, veteran owned and local businesses, then the provisions of this Article shall apply. Subcontractor acknowledges that: a) the Federal Small Business Program applies if the General Contract is a direct federal government contracts (*i.e.*, contracts awarded by a federal executive agency); b) the Disadvantaged Business Enterprise Program applies to projects that are funded in whole or in part with federal funds, including those funded through a grant awarded to the Owner; c) there are state and local programs that may apply to public projects that are funded by a state or local government; and d) these programs have different eligibility requirements as well as different methods of counting small business, minority, and other designated categories of participation at all subcontracting levels. Subcontractor agrees that it shall fully understand and comply with the rules and regulations of all such programs to the fullest extent applicable to the General Contract, Subcontract or this Agreement.

If Subcontractor is or otherwise satisfies the qualifications or requirements of any of the following, or if Subcontractor has in any way represented or given Contractor reason to believe that such is the case: (a) a small business under the Federal Small Business Program (i.e., a small business, a small disadvantaged business (SDB), a HUBZone small business, a service-disabled veteran-owned small business (SDVOSB), a veteran-owned small business (VOSB), or a women-owned small business (WOSB)) (hereinafter collectively referred to as an "SBE"); (b) a Disadvantaged Business Enterprise (DBE), Minority Owned Business Enterprise (MBE), or Woman Owned Business Enterprise (WBE), or the functional equivalent under federal, state, or local law (hereinafter collectively referred to as a "DBE"); or (c) a category or status designated by state or local authorities which otherwise classifies or designates certain business entities, collectively referred to as Local Business Enterprises (LBEs); then Subcontractor acknowledges, represents, agrees and warrants that: (i)Subcontractor in fact has such status and has obtained all required federal, state, or local certifications of such status; (ii) Contractor is relying upon such representation and status to fulfill any and all SBE, DBE or LBE goals or commitments Contractor has made to the Owner and/or a government agency or as otherwise required of Contractor; (iii) Subcontractor shall maintain its status as an SBE, DBE or LBE throughout the performance of the subcontract or purchase order; (iv) Subcontractor immediately shall notify Contractor if there is a change in Subcontractor's status as an SBE, DBE or LBE; (v) Contractor has engaged Subcontractor based on Subcontractor's representation that Subcontractor shall perform in such a manner that 100% of Subcontractor's Work and 100% of the Subcontract value shall be eligible for credit towards Contractor's goals and commitments with regard to the award of subcontracts to SBEs, DBEs and/or LBEs; (vi) Subcontractor shall perform in such a manner that Contractor shall be eligible to receive credit towards Contractor's goals and commitments regarding the award of subcontracts to SBEs, DBEs, and/or LBEs for 100% of the Subcontract value; (vii) Subcontractor will not engage in any effort or take any action that would prevent Contractor from receiving 100% credit; (viii) Subcontractor shall engage in a genuine commercially useful function as defined by law and shall not act as a pass-through to sub-subcontractors, suppliers, or vendors who are not SBEs, DBEs or LBEs; (ix) Subcontractor will not engage in any effort to create the appearance of SBE, DBE or LBE legitimacy or participation when in fact it does not exist; and (x) if Subcontractor awards any of its work through sub-subcontract, purchase order, or otherwise, to an SBE, DBE or LBE, then Subcontractor will do so only in a manner that does not affect the ability to receive credit as described above for 100% of the Subcontract value, including awarding same only to SBE, DBE or LBE sub-subcontractors, suppliers, or vendors if and to the extent necessary to achieve this result.

B. If Subpart A. of this Article is not applicable to Subcontractor, then Subcontractor acknowledges and agrees that the obligations and commitments assumed by Contractor with regard to the award of subcontracts to SBEs, DBEs and/or LBEs, have likewise been assumed by Subcontractor pursuant to this Agreement, including but not limited to meeting or exceeding the same percentage or other requirements or goals for each separate category of SBE, DBE and/or LBE employment in connection with the performance of the Work and satisfying all obligations and responsibilities with respect to reporting and documenting same.

C. The provisions of this Subparagraph C. shall be applicable to all Subcontractors. If or when Subcontractor awards any of its work through sub-subcontract, purchase order, or otherwise, to an SBE, DBE or LBE, to the extent permitted or required by this Agreement, then Subcontractor further acknowledges, represents, agrees and warrants that Subcontractor shall: (i) verify that such SBE, DBE or LBE has such status and has obtained all required federal, state, or local certification of such status; (ii) require its SBE, DBE or LBE sub-subcontractors, suppliers, or vendors to maintain their status as an SBE, DBE or LBE throughout the performance of their sub-subcontract, purchase order, or other agreement; (iii) immediately notify Contractor if there is a change in a sub-subcontractor's, supplier's, or vendor's status as an SBE, DBE or LBE; (iv) require all SBE, DBE or LBE sub-subcontractors, suppliers, or vendor's status as an SBE, DBE or LBE sub-subcontractors, suppliers, or vendor's status as an SBE, DBE or LBE; (v) ensure that all SBE, DBE or LBE sub-subcontractors, suppliers, or vendor's are not acting as a pass-through to another sub-subcontractor, supplier, or vendor who is not a SBE, DBE or LBE; and (vi) not permit a sub-subcontractor, supplier, or vendor to engage in any effort to create the appearance of SBE, DBE or LBE egitimacy or participation when in fact it does not exist.

Subcontractor agrees that: (i) Contractor, or its authorized representative, shall have access to and the right to examine and audit all of Subcontractor's records relating to Subcontractor's Work under this Agreement including, but not limited to, lowertier subcontracts, equipment leases, purchase orders, and other agreements with third parties; (ii) Subcontractor and its subsubcontractors, vendors and suppliers shall submit any forms, certifications or documents required by Contractor relating to participation on the Project, regardless of whether such forms or documents have been requested or required by the Owner; (iii) failure to honor and comply with any of the terms or conditions of this Article and/or its failure to comply with any applicable law relating to the award of subcontracts to SBEs, DBEs and/or LBEs shall constitute a material breach of this Agreement; (iv) submission by Subcontractor of a monthly requisition for payment or invoice shall constitute a certification by Subcontractor that each and every representation and warranty set forth in this Article is and remains truthful, accurate, and complete, and that Subcontractor is in full compliance with the terms and conditions of this Article, as of the date such requisition or invoice is submitted to Contractor; (v) Contractor may rely on these certifications in making payment to Subcontractor and in making like representations to others; (vi) Contractor shall have the right to withhold payment from Subcontractor if Contractor has reasonable grounds to believe that Subcontractor is not in full compliance with its obligations set forth in this Article; and (vii) that Subcontractor shall include a provision in all agreements with its sub-subcontractors, vendors and suppliers, whereby such subsubcontractors, vendors and suppliers acknowledge and agree to conduct their operations and affairs in a manner that ensures that Subcontractor is not in violation of any provision in this Article and to provide forms, certifications and documents as required by Contractor or this Article.

U.S. Government Prime Contract Prime Contract ARTICLE XXVIII. In the event that the General Contract under which this Subcontract is being issued is a General Contract between Contractor and the United States Government or an agency thereof, additional Federal Acquisition Regulation ("FAR") and agency FAR supplemental provisions are applicable to this Agreement. Such FAR and agency FAR supplemental provisions are contained on the attached document entitled "Federal Supplement" and such provisions are hereby incorporated by reference herein as if set forth at length herein. Subcontractor hereby ratifies and re-affirms its Subcontractor Certifications and Disclosures that Subcontractor signed and submitted with its proposal submitted earlier to Contractor and such Certifications and Disclosures are hereby incorporated herein by reference as if set forth at length herein.

Entire Agreement ARTICLE XXIX. This Agreement constitutes the entire agreement between the parties hereto. No oral representations or other agreements have been made by Contractor except as stated in the Agreement. This Agreement may not be changed in any way except as herein provided, and no term or provision hereof may be waived by Contractor except in writing signed by its duly authorized officer or agent. Subcontractor acknowledges and represents that it has completed and submitted to Contractor a prequalification questionnaire, that all statements therein and in the attachments to such questionnaire were true, accurate and complete, and remain true, accurate and complete, and that Contractor has relied on truthfulness, accuracy and completeness of such statements and the contents of the attachments thereto in deciding to enter into this Agreement. The marginal descriptions of any term or provision of this Agreement are for convenience only and shall not be deemed to limit, restrict or alter the content, meaning or effect thereof.

The said parties, for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of all of the terms and provisions herein contained.

In Witness Whereof the parties to these presents have hereunto set their hands as of the day and year first above written.

	SUBCONT	RACTOR		CONTRACTOR	
By:	<u>SDS</u>		By:	<u>SDS</u>	
Official title:	<u>SDS</u>				
Witness:	<u>s</u>	SDS	Witness:	<u>SDS</u>	
Subcontractor's Fe	deral Employ	ers Identification Nu	umber (FEIN)	<u>SDS</u>	
Subcontractor's Sta	ate Unemploy	ment Ins. No.		<u>SDS</u>	
Subcontractor's Lic	ense No.	SDS	ster No. for State in which the Wo	. ,	
Subcontractor's Sta			r State or locality in which the Wo	ork is to be performed)	



Introduction

As the leader in the construction industry, Turner Construction Company (also referred to as Turner) is committed to promoting a proactive safety program, which will lead to the establishment of a positive safety culture among all project employees. Every effort will be made to integrate the use of safe work practices into daily work activities performed by trade contractors and their employees. Our approach is to realize the benefits of Living Injury Free Everyday[®] (L.I.F.E.). This will be achieved with thorough preplanning and daily vigilance. By planning for safe and efficient production, incidents that may cause suffering to a person or increase cost to the project will be eliminated or minimized.

Project Managers, Superintendents, Assistant/Area Superintendents, Safety Representatives, and Foreman are the key individuals responsible for implementing and maintaining an effective safety program. Each of these individuals must ensure personnel working under their control are provided the tools and knowledge to work safely, and are performing their tasks in a safe manner.

It is the responsibility of each worker to follow every precaution in their Daily Pre-Task Plan to protect them and their fellow workers.

Each subcontractor and lower tier subcontractor is solely responsible for the safety of their employees and/or visitors as required by the rules described in this Program, OSHA requirements, and all local, state, and federally recognized standards and codes.

All contractors and subcontractors are responsible to train and educate their employees, and/or visitors on the contents, requirements and policies contained within this Program.

Project Description

The Student Center will be further expanded to the east side of the building to increase the dining seating capacity by 350 seats at the lower level and will add greatly needed office space on the second floor. The total expansion will be roughly 23,300 GSF, including roughly 10,000 GSF of office space on the second floor.

Key Project Staff

- A. Project Executive David Opalka
- B. Project Manager Ben Noble
- C. Purchasing Agent Tom Gries
- D. Project Engineer Stephanie Sharp
- E. Project Superintendent Austin Stivers
- F. Environmental, Health and Safety Director Brandon Herdman
- G. Project Safety & Environmental Manager Mathew Cardani

Responsibilities

Turner Project Safety Superintendent



- Enforce compliance by all parties with principle of the Project Safety Program.
- Assist all Subcontractors in pre-planning their operations to prevent personal injury or property damage to employees, other contractor's employees or to the public.
- Chair safety meetings.
- Review and enforce the recommendations of the Project Safety Coordinator job safety tours and of the toolbox meeting minutes.
- Conduct periodic safety tours of their own, to assure compliance.

Turner Safety Coordinator

- Investigate incidents and direct the elimination of hazardous conditions.
- Make at least a weekly formal safety tour and submit copy to responsible party for action.
- Evaluate the safety of the project daily.
- Gather facts on accidents and thefts for action by the Project Safety Superintendent.
- Periodically attend trade and subcontractor toolbox meetings.
- Distribute and post all safety meeting minutes, safety bulletins and incident data.
- Prepare minutes of project safety meetings.
- Issue safety bulletins for the project.

Subcontractor Safety Superintendent and Foreman

Subcontractor Safety Superintendent and all subcontractors must have completed an OSHA 30 hour for construction class. One person must be certified for all contracts under \$5M, and two people must be certified for contracts over \$5M. The 30 hour certified person(s) must be on-site 100% of the time. This OSHA 30 hour certification must be within the past two years of the award of subcontract; if not the subcontract employee must be re-certified through Turner's online TKN Training Course titled, *Turner Safety Refresher*.

- The Subcontractor Safety Superintendent must be identified before subcontractors start work. If the subcontractor's contract value is \$5M or greater and/or the subcontractor will have 25 employees or more on site, including sub tiers, for more than two weeks, they must provide a <u>full time</u> Safety Coordinator who:
 - 1. Is qualified to recognize safety hazards; and
 - 2. Has the authority to take corrective action; and
 - 3. Possesses current certifications in first aid, CPR and AED; and
 - 4. Possesses a recent OSHA 30-hour Construction card (within the last two years or has taken Turner's Safety Refresher); and
 - 5. Has an academic degree in safety, ASP, CHST, or CSP designation, <u>OR</u> has a minimum three (3) years of prior work history as a designated construction safety coordinator.

Turner reserves the right to approve or deny the subcontractor's fulltime safety personnel for each project.

• At a minimum each contractor will designate one Foreman for each 10 employees. Once a contractor has three Foremen, one will be designated as a non-working Foreman as far as working with their tools. Additional specific requirements may be identified in a Contractor's scope of work. Generally, if there is a conflict between this document and the scope of work the most stringent will take



precedence. The Business Unit Safety Director reserves the right to evaluate and determine what is best for the safety of the project.

- 1. At a minimum the Subcontractor Safety Superintendent will be requested to:
 - a) Ensure their employees attend jobsite orientation before start of work on the project.
 - b) Take the lead in recognition and abatement of hazardous situations.
 - c) Conduct a daily "Safety Huddle" prior to the start of each shift and submit a Daily <u>Pre Task Plan</u> (PTP) (Form 03) each morning prior to the start of work.
 - d) Perform and document weekly safety inspections (1 per week at minimum).
 - e) Conduct at least one monthly safety tour with your Safety Director and submit findings to Turner.
 - f) Ensure that Competent Persons submit, at a minimum, the below listed safety inspections at the designated frequency to the Turner Project Superintendent or Safety Manager. Note: An OSHA 30-hour Construction card alone does not satisfy OSHA requirements for a competent person.

Inspection	<u>Frequency</u>	Form #
Fall Protection	Before Each Shift	10
Excavations	Before Each Shift	11
Scaffold	Before Each Shift	13
Crane Inspections	Before Each Shift	14
Confined Space	Before Each Shift	15
Hot Work	Before Each Shift	16
Heavy Equipment	Before Each Shift	17
GFCI	Weekly	18
Personnel Hoist	Per OSHA Regulations	19
Dig Permit	Before Each Shift	21
Tools Box Talks & Report	Weekly	

- g) Conduct and document toolbox meetings on a weekly basis.
- h) Issue minutes of the weekly toolbox meeting to Turner.
- i) Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.
- j) Each subcontractor, regardless of tier, is to submit in writing toolbox meeting minutes containing the following:
 - (1) Name of subcontractor and date.
 - (2) Name of Subcontractor Safety Superintendent.
 - (3) Name of employees attending.
 - (4) Name of employees onsite not attending.
 - (5) Number of employees on their payroll that day.



- (6) Subjects discussed.
- (7) Safety observations of employees.
- k) Attend project safety meetings.
- I) Enforce disciplinary measures when need arises for their employees.

1st Violation

Verbal or written warning to employee and their Supervisor.

2nd Violation

Suspension from job, until retrained by a third party and verbal or written notice to employer.

3rd Violation

Permanent removal from jobsite.

Note: Gross disregard for policy or procedures, as determined by Turner, can result in immediate removal from the project.

- m) Each subcontractor is responsible for all of their subcontractors and suppliers, regardless of tier, compliance with the Project Safety Program.
- 2. Employees / Employers
 - a) Perform their work to prevent accidents to themselves, fellow workers, and property.
 - b) Use Personnel Protection Equipment as required, to meet all Turner, federal, state and local requirements.
 - c) Alert supervisors to dangerous situations.
 - d) Cooperate with principles of the Project Safety Program.
 - e) Utilize all tools and equipment in a safe manner and in accordance with manufacturer's recommendations.
 - f) Complete project safety orientation before starting work on the jobsite.
 - g) Acknowledge and abide by the project enforcement rules.

1st Violation

Verbal or written warning to employee and their Supervisor.

2nd Violation

Suspension from job, until retrained by a third party and verbal or written notice to employer.

3rd Violation

Permanent removal from jobsite.

Note: Gross disregard for policy or procedures, as determined by Turner, can result in immediate removal from the project.

3. Visitors



Any person not directly involved with the onsite construction of this Project must not enter the site without first going to Turner's job office, signing a visitor's release, obtaining a hard hat and safety glasses which is to be returned to Turner. All visitors must adhere to Turner Project Safety Program and be 18 years of age or older.

General Requirements

Employee / Visitor Access

All employees and visitors must satisfy the following drug and orientation provisions before being permitted access to this project site:

- Employees must produce a drug screen card or similar document as verification of having successfully met the pre-employment requirements contained in the drug program for this project. Those not possessing such can undergo testing at the on-site medical office or designated clinic before reporting for employee orientation. The cost of drug screening test will be at the expense of the subcontractor.
- 2. Employees must complete the project's safety orientation at which time they will register personal, drug testing, and training information. Employees will be issued a hard hat sticker or equivalent identification upon completion of the orientation process. Identification must be displayed at all times while on the project.
- 3. Visitors will be required to obtain visitation approval and be escorted by an assigned employee.

Pre-planning

Contractors are required to produce Site Specific Safety Plans and Job Hazard Analyses ((JHAs) (Form 01)) for each major task they plan to perform. These documents are required to be submitted to Turner at the first pre-construction meeting.

A daily Pre Task Plan ((PTP) (Form 03)) must be submitted each day of work on the project. Each PTP must clearly and thoroughly document specific work activities, identification of hazards associated with these tasks, and the specific countermeasures employees will put in place to prevent or control the hazard(s) within each task.

The JHA and PTP will be used as a primary means of accident prevention. Each work crew is required to participate in the development and review of applicable PTPs for their work in the huddle with their Foreman, prior to the start of each work shift. Each work crew will facilitate a mandatory stretch and flex in combination with their morning huddles.

Hazard Communication



As a minimum, the subcontractor shall incorporate all the basic principles of the Project Safety Program into their Safety Program. The above shall also include the subcontractor's Hazard Communications Program with SDS (Safety Data Sheets) to be provided before start of work. Each month subcontractors will provide an updated list of the hazardous materials they have on the project by submitting a Chemical Inventory (Form 12) to the Project Superintendent or Project Safety Manager.

The subcontractor is responsible for maintaining an updated binder of their respective SDSs on the project and will make them immediately available for review upon employee, Turner or any other request. This can be an electronic binder or system as long as the documents are immediately available.

Safety Data Sheets must be referenced and included in daily PTPs as a means of identifying proper personal protective equipment as well as other control measures including spill response and first aid measures. No work is permitted without first having all necessary equipment and controls for the chemical being used on the project.

Silica

Exposure to respirable crystalline silica must be evaluated by each work crew during their daily PTPs. Exposure control plans for each crew must be developed and documented on the PTP, prior to starting work, under the direction of a designated silica competent person. Considerations must be made to control exposures to the workers immediately performing the work as well as other workers or people in the area. The generating/exposing Subcontractor is responsible to ensure that all persons in the work area and members of the general public are not exposed to the hazards of silica.

Fall Protection

All work performed at or above 6 feet will be done in conjunction with positive fall protection 100% of the time, including but not limited to, loading and unloading trailers and the leading edge of excavations.

At no time shall a Safety Monitor or Attendant be used as a means of fall prevention.

Each contractor is responsible for protecting its own employees by using conventional means of fall protection such as standard guardrails or perimeter cables. The ongoing maintenance and daily inspection of this protection must also be included. If a contractor's employee cannot be protected by conventional methods, then adequate pre-planning must be conducted to provide for anchorage points capable of withstanding 5000 lbs. in combination with a safety harness and self-retracting lanyard.

Perimeter protection should <u>never</u> be used as an anchorage point unless it has been designed by a Professional Engineer (PE) to withstand such force.

If warning lines are used it must be maintained at least 15 feet from the leading edge for all subcontractors. The warning line height must be between 34" & 39" from the walking/working surface. The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet. After erected, the stanchions must be secured from tipping due to wind, etc.



100% tie off is required when working from articulating personnel platforms.

Subcontractors are required to follow the manufacturer's recommendations for fall prevention when working from a scissorlift. Typically this means a full body harness and a restraint lanyard connected to the lift's designated attachment point. Subcontractors must refer to the equipment manual and specify whether a fall prevention or restraint system will be utilized in their daily PTPs.

All floor openings exceeding 2 inches in diameter shall be covered, barricaded, or otherwise protected. Covers shall be designed to withstand twice the weight of workers, equipment, and materials. Covers shall be secured against displacement horizontally and vertically. All covers must be clearly marked with the words "HOLE" or "COVER" and beveled or flush to prevent trip hazards.

Each contractor employee exposed to fall hazards must be trained in the recognition of fall hazards, the avoidance of fall hazards, the purpose, use, and requirements of conventional fall protection methods, and the use, inspection, and care of harnesses, lanyards, and rescue devices.

Since contractors are experts at their specialized trades, they shall provide Turner with their own projectspecific Fall Prevention Plan, to include rescue, which describes the methods they intend to use to provide adequate fall protection for each contractor's specific operations and to comply with OSHA Subpart M, and Turner's six foot rule.

Guardrails

All cable guardrails must be a minimum $\frac{1}{2}$ " diameter steel cable. All cable guardrails must be looped connections with three cable clamps on each side of the connection. Open eye turnbuckles are not permitted. Guardrails made of 2x4's shall not have any nails protruding. Guardrails cannot be made of metal studs.

PPE

Subcontractor must provide their employees with all necessary personal protection equipment and tools, and enforce their use as required by the Safety Program, as well as federal, state and local codes and regulations.

Hard Hats

Each Subcontractor shall enforce the wearing of ANSI 289.1-1981 approved hard hats and Eye Protection (ANSI 287.1) during the total construction of this project, and shall immediately remove anyone from their forces not complying with this requirement.

Cowboy hard hats, aluminum/metal hard hats, and bump caps are not permitted on Turner Construction Company projects. Employees exposed to electrical voltages of 600 V or greater shall wear hard hats that meet the requirements of ANSI Z89.2 type hard hats.

Safety Glasses and Face Protection



Safety glasses (minimum eye protection)

- Safety glasses with fixed side shields must be worn at all times on the project. All safety eyewear must meet the requirements of ANSI Z-87.1
- Dark safety glass lenses are not permitted inside of buildings, in enclosed areas, or at night.

Goggles or spoggles

• Goggles or spoggles must be worn (instead of safety glasses) when working above shoulder and no falling debris is expected. Examples of these type of activities include installing ceiling tile, pulling wire, etc.

Face shield plus safety glasses

• Where employees are performing work that could potentially cause materials to become flying objects such as, but not limited to, chipping, welding, grinding, cutting, drilling, chiseling, and using powder-actuated tools they shall utilize a face shield in addition to safety glasses.

<u>Clamp-on full face shield plus unvented goggles or spoggles</u>

• A full face shield that clamps tightly onto the brim of the hard hat <u>and</u> unvented safety goggles or spoggles that fit snuggly against the skin must be worn when drilling, cutting, or performing other above shoulder activities that create falling debris as well as when performing interior demolition activities.

*For all scenarios above, please refer to manufacturer and Safety Data Sheet (SDS) for specific eye and face protection requirements.

Clothing & Hi-Vis Vests

All personnel shall wear shirts with sleeves and long trousers.

No shorts or tennis shoes of any kind will be permitted on this project.

High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway.

Foot Protection

All Turner employees, subcontractors and visitors are required to wear, at a minimum, closed toe, sturdy shoes or boots.

Revision Date: December 5, 2018



ASTM-rated safety toe shoes or boots, or toe guards must be worn when using jackhammers, tampers or similar equipment which could be dropped or landed on a worker's toes / feet. ASTM-rated Safety shoes or boots must also be worn by masons, drillers, pile driving, steel erectors, and riggers due to the hazards inherent with their work.

Hand and Arm Protection

All Turner employees, subcontractors and visitors are required to wear ANSI cut level 4 (at a minimum, unless the competent person determines that the use of protective gloves for a specific activity creates a greater hazard) protective gloves 100% of the time on this project. A competent person for each trade or group of employees is expected to identify and specify (include in daily PTPs) the appropriate glove that best mitigates the potential hazard presented to their employees.

Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e. cut-rated sleeves, etc.). These operations shall be identified on the JHA and PTP.

First Aid and CPR

Each subcontractor must have their own adequate first aid kit and at least one qualified first aid and CPR-trained employee onsite full time. The name of this person, along with copies of their current certification cards, shall be submitted to Turner prior to beginning any work. Prior to expiration of such certification, the employee is required to become re-certified.

Respiratory Protection

Respiratory protection is required to meet all federal, state and local OSHA regulations.

Respirators are to be worn when employees are working with or are exposed to gases, fumes, vapors or dusts above the OSHA-permissible exposure limit (PEL) or when an oxygen-deficient atmosphere exists.

- Respirator users must be trained in use, selection, maintenance, storage and inspection prior to use. It is the responsibility of contractor management to train its employees.
- Respirator users must have a fit test conducted prior to wearing a negative pressure respirator. It is the responsibility of the contractor to conduct the test and to enforce a facial hair policy.

Lock Out / Tag Out (LOTO)

A Lock Out / Tag Out program must be submitted by any subcontractor, per OSHA standards 29 CFR 1910.147.

Nothing Hits the Ground



Fabrication

All material fabrication shall be performed at a work station between 30 and 39 inches off the floor.

Work stations shall be mobile and include a fire stop directly behind all chop saws.

Rubbish containers shall be mobile and located directly adjacent to the work station.

The subcontractor is to furnish all mobile rubbish containers for their work.

Housekeeping

All rubbish shall be disposed of as it is generated and be immediately placed in subcontractorprovided mobile rubbish containers.

Cordless power tools are required unless the subcontractor can demonstrate a hardship or need to use tools with power cords.

The subcontractor is required to elevate off the ground all power cords in order to minimize tripping hazards on walking/working surfaces. Cords, hoses and welding leads must be kept off the floor at least 8 feet high in walkways, aisles, stairs and access points. Suspension of cords will be by non-conductive means only such as plastic S-hangers or wooden cord trees.

Debris is not allowed to be consolidated on the floor.

Material Handling and Storage

Materials may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells.

All tools and materials must be tethered where there is a risk of materials falling or being dropped, including during a lifting operation, unless the project team determines an exclusion zone must be established. The exclusion zone must be constructed of hard barriers such as wood or metal guardrail systems, cable wire rope or chain, red plastic chain, or similar material. Danger and caution tape will not be accepted for use in exclusion zone construction. Exclusion zone must be maintained during work and have legible Danger signage posted along the perimeter. The size of the exclusion zone must consider deflection or arc of the falling material. All tools, materials, or equipment which have the potential to breach the perimeter protection must be positively secured back to the worker or structure through the use of tool lanyards or synthetic rope (natural fiber rope is not permitted). Lanyards or ropes must be appropriately sized for the weight of the tool, material or equipment. Anchorages must be snap-hook, carabineer, shackle or similar device that provides positive locking. The use of knots to secure lanyards is not permitted. Subcontractors must evaluate the size and weight of any object which will be secured to a worker's wrist, belt, etc. to ensure it will not cause injury in the event it is dropped.

All material laydown areas must be coordinated and designated by Turner.

Material must be stored to promote mobility of material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material must be palletized to allow for easy mobility using a pallet jack.

"Just in Time" delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week.



Heavy material such as glass and drywall must be loaded so as not to overload the structure. The subcontractor is required to do a floor loading analysis for submission to Turner PM/ PE for review.

Steel Erection

Fall protection shall be used above 6 feet in conjunction with 100% positive fall protection. At no time shall a Safety Monitor or Attendant be used as a means of fall protection. A site-specific erection and fall protection plan must be submitted prior to start of erection.

A guardrail system, tie-off system, or netting must be used.

The area below steel erection activities must be barricaded to prevent access by unauthorized personnel.

Guardrail cables of one-half inch wire rope or the equivalent shall be installed at 42 & 21 inches high, around the perimeter of each floor and all interior floor openings during erection. These cables shall be maintained to OSHA requirements by the erector until the erector is offsite. The erector and fabricator are responsible for providing means for erecting cable (i.e. pre-punch columns, angle iron). Toe boards at least 3.5 inches high must be provided and all perimeter cabling must be flagged at 6 foot intervals.

A hoisted steel member shall not be released until it is anchored by at least two bolts at each connection.

Tag lines must be used to control loads.

Multiple lift rigging ("Christmas Treeing") may be used when limited to a maximum of 3 members.

Personnel are prohibited from climbing columns, walking on beams, traversing the trusses and sitting on top of columns unless fall protection is provided.

Tools and containers for rivets, bolts or welding rods must be secured to prevent falling.

The erector is responsible to determine if extra plumbing equipment is needed, and provide as needed.

The steel fabricator/steel erector will assume all responsibility for adequate lay down and erection site conditions beyond the Site Logistics Plan.

Confined Space

Confined space entry procedures must be submitted and approved by Turner's Business Unit EH&S Director prior to the start of work where they are required per 29 CFR 1926 Subpart AA, 29 CFR 1910.146, and /or host facility requirements. The more stringent rule will always apply.

Entering or knowledge of entry into a confined space without all appropriate planning and permits is a zero tolerance issue for Turner Construction and will be dealt with appropriately.

Turner Construction requires onsite rescue services for all permit-required confined spaces. Subcontractors must provide Turner's Business Unit EH&S Director with rescue service team credentials, which must be approved, prior to entry.

Before beginning work, each contractor must ensure their designated confined space competent person identifies each space, evaluates the space to determine its classification (permit-required, alternative entry or non-permit-required), and provides appropriate pre-planning documentation including a



written confined space program, employee training records, equipment type and service records, rescue provisions, communications, and permitting as applicable.

Turner considers all confined spaces to be permit-required spaces until a competent person can provide Turner with documentation adequate to support alternative or non-permit provisions per Turner's *Confined Spaces in Construction* policy.

All permit-required confined space work will require a mandatory pre-planning meeting with Turner project staff as well as a documented *Project-Specific Confined Space Procedure* that must identify the following, at minimum: Job-specific safety analysis, atmospheric testing, assigned duties, unauthorized entry, rescue equipment and emergency services, entry permit, training, respiratory protection, and hot work safety.

All confined space entries require the use of Turner's Confined Space Entry Permit which must be approved and signed prior to daily entry.

Excavations

Prior to any digging a "Dig Permit" (Form 21) must be obtained and the utility protection services (811) must be contacted.

Excavations greater than 4 feet in depth shall utilize protective systems (i.e. trench shields, sloping, benching, or shoring) at all times to protect employees against potential cave-ins.

A competent person must be identified and their certification submitted to Turner prior to the start of work. A competent person will be on-site during all excavation work to determine the soil type and its stability by performing one visual and one manual test in accordance with 29 CFR 1926, Subpart P Appendix A and submit an Excavation Safety Checklist (Form 11) to the Project Superintendent prior to each shift.

Subcontractors must develop a written plan to protect excavations they create on the project. Plans must be reviewed and approved by the Turner project team prior to start of work and must include provisions for safe access points, such as portable stairs.

All hydraulic shoring fluid must be environmentally-friendly.

Ground Fault Circuit Interrupters (GFCI)

All 120-volt single phase 15 & 20-ampere receptacles shall have approved GFCI's.

The electrical contractor must turn in written verification (Form 18) that they have tested all GFCI receptacles once each month, at minimum.

Temporary Lighting

All temporary lighting shall be run with sheathed multi-conduction wire. No single strand wiring is allowed. Temporary lighting must never be put on the same circuit as temporary or permanent receptacles; temporary lights must be on a dedicated circuit and cannot be used for power.



Temporary lighting must be at least 8' off the ground and provide a minimum of 5 candle feet in each area of the project.

Burning, Welding and Cutting

Hot Work is defined as any work using open flames or sources of heat that could ignite materials in the work area. Examples of hot work are:

- Welding
- Burning
- Brazing
- Propane smoldering
- Oxyacetylene cutting
- Grinding ferrous metals
- Considerations for unattended temporary heating must be evaluated and approved by the Senior Operations Lead and Business Unit Safety Director

Before beginning hot work, contact the project superintendent or designated safety personnel to have a Hot Work Permit issued (Form 16). Permits are issued for the specific job being done, and for a specific time period. The time period is usually for the working shift, but may never exceed twenty-four hours. No hot work is permitted without prior approval from the project superintendent or superintendent designee.

The following precautions must be ensured during all hot work activities:

20 pound dry chemical, type ABC fire extinguisher(s) in place.

Proper PPE is available and utilized.

Sprinklers are in service.

Cutting and welding equipment is in good repair.

Precautions within 35 feet of work

Flammables and combustibles have been removed from a 35 ft. perimeter of the hot work area.

Floors are swept clean of combustibles.

Combustible floors are wet down, covered with damp sand or fire-resistant blankets.

Flammable liquids removed; other combustibles, if not removed, protected with fire-resistive tarpaulins or metals shields.

Potential explosive atmosphere has been evaluated and eliminated.

All wall and floor openings have been protected.

Fire-resistive tarpaulins suspended beneath work.

Work on Walls or ceilings

Construction is noncombustible and without combustible covering or isolation.

Combustibles moved away from other side of wall.



Work on Enclosed Equipment

Enclosed equipment cleaned of all combustibles

Containers purged of flammable liquids.

Fire Watch

Fire Watch will be provided during and for at least 60 minutes after work and during any coffee or lunch breaks.

Fire Watch is supplied with suitable extinguishers (20 pound, dry chemical, type ABC unless otherwise specified due to project hazards).

Fire Watch is trained in use of this equipment, in sounding alarm and in emergency evacuation procedures.

Fire Watch persons must be designated by a red safety vest only when acting as a Fire Watch.

Misc.

Cylinders shall be secured in an upright position at all times.

Oxygen and acetylene cylinders not in use must be separated by 20' or ½ hour fire rated wall with regulators removed and caps in place.

Flash back protection must be provided by an approved device to prevent flame from passing into the fuel gas system.

The welder must wear the welding hood attached to the hard hat. It is not acceptable to wear the hood without the hard hat.

Hearing Protection

Hearing protection must be used to meet OSHA standards, this Safety Program, Federal, State and Local Codes and Regulations. A generalized guideline to follow is if the worker would need to raise his/her voice to communicate in an area or while operating a piece of equipment, hearing protection (muffs or plugs) should be worn. Adequate training must be provided by contractor per OSHA requirements.

General Safety Rules

Horseplay of any kind is absolutely forbidden on the project site.

Do not walk or stand under or beside suspended loads.

When discarding boards, always remove protruding nails or bend them down.

The use, possession, sale, transfer or purchase of alcohol, illegal drugs controlled substances on this project is prohibited.

To the maximum extent permitted by applicable law, the possession on Company premises or while on duty of firearms, clubs, explosives, or other weapons that could be used to cause harm to personnel or property, other than that used to perform specific construction activities. This would include Turner projects and client-owned buildings and facilities we work in, project-provided parking areas, and while in the execution of work duties.



It is each employee's responsibility to be familiar with emergency safety equipment in the area which they are working.

To prevent impalement of personnel, exposed reinforcing rods and other materials that could cause impalement must be provided with protection such as rebar caps, 2 x 4 lumber, etc. The use of mushroom caps is not permitted for impalement hazards.

Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.

Manufacturer requirements/ recommendations for equipment or the Turner Safety Program must be followed (whichever is more stringent).

No headphones, IPods, radios, etc. are permitted on the job.

All tobacco products, smokeless tobacco products, and e-cigarettes (nicotine or no nicotine) are prohibited in all Turner offices, project offices, warehouses, and on projects. The project or office can designate smoking areas that must comply with all ADA, state, and municipal regulations. Certain owners may also have non-smoking policies and Turner employees, subcontractors and visitors will comply with those policies fully.

Man baskets such as those utilized from fork truck type vehicles are not allowed on Turner projects.

Glass containers are not permitted on site.

No hoist shall be placed into service on a Turner project until it has been inspected and the supplemental reports are submitted to Turner.

Lift support struts are required to be in place and operational on the lids of all gang / job boxes.

Wall / Floor Openings

Once a contractor begins his work directly above, below, or within eighteen inches (18") of a floor or perimeter opening, that contractor is to maintain the protection of that opening.

Unmarked Pipes

In renovation and/or alternation work, identification of unmarked pipes must be made prior to any demolition or work being performed.

Public Areas

All work performed in or adjacent to public spaces will be required to have barricades separating the public from the work. Public protection should be a minimum of 6' tall and installed in a manner that does not create an additional hazard such as tripping, and capable of sustaining, without failure, high winds and wind gusts. Warning signs must be posted approximately every 100' of linear fence to inform the public of hazards. All public areas are to be kept clean/clear of debris at all times.

Safety Meetings



Onsite employees shall attend safety meetings as scheduled by the owner or Turner Construction Company and the time and cost will be the responsibility worker's employer.

Hand Tools

Inspect all tools before using. Never use defective tools.

Keep hand tools in good condition – sharp, clean, oiled, dressed and not abused.

Keep tools subject to impact (chisels, caulking irons and star drills) dressed to avoid flying spalls from "mushrooming." Use tool holders.

Do not force tools beyond their capacity or use "cheaters" to increase their capacity.

Do not use tools for pry-bars unless it is an actual pry-bar.

Do not leave tools on scaffolds, ladders or overhead working spaces.

Do not throw tools from one location to another, from one employee to another or drop them to lower levels.

ANSI cut level 5 gloves (at minimum) must be worn when using box cutters and utility knives.

Portable Power Tools

Portable power tools must not be operated unless the employee is trained in their use.

Electrical power tools must be double insulated or shall be of an approved system that contains three wires with a ground.

Guards or shields must be installed on all power tools before use.

Electrical power tools are not be used in explosive atmospheres unless the tool is approved for service in a hazardous location.

Pneumatic-powered tools are to be secured to the hose by positive means to prevent the tool form becoming accidentally disconnected. Radiator-type hose clamps are not permitted on hoses.

Pneumatic hose sections must be wired together at each coupling connection.

Operators of powder-actuated tools must be authorized, must possess valid credentials, and wear proper personnel protective equipment.

All defective power tools must be taken out of service immediately and tagged defective.

All hammer drills and rotary hammers must have integrated technology such as a safety clutch that will stop the drill bit rotation should the drill bind in a hole. An example of this is Hilti's anti-torque control (ATC).

Extension Cords

Extension cords must be of the three-wire type with ground plug.

Only round, heavy-duty (type S, SJO, SJTW, ST, SO and STD), minimum 14 gauge cords are permitted.

Extension cords and cables must be protected from traffic or sharp corners.

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Cords must be kept out of walkways and other areas where they present trip hazards. See "Nothing Hits the Ground."

Electrical connections, cables, etc. must be kept away from water or damp surfaces.

Inspection and testing of cords shall be performed as required by OSHA 1926.404.

Bad cords must be taken out of service and tagged defective and repaired or removed from jobsite.

All cords must be stored and put away after use (i.e. not coiled up on the floor).

Turner does not allow extension cords to be connected in series.

Equipment

Each contractor employee has the responsibility to inspect equipment before use. Defective equipment must be tagged with a "Defective – Do Not Use" tag and taken out of service.

Know the limitations of the equipment used and do not exceed those limits.

Ladders and Scaffolds

Ladder use on Turner Construction projects will be allowed only when it has been determined by Project Manager and Turner's Business Unit EH&S Director that it is unfeasible to use all other options to complete the task.

If it is determined that a ladder is the only means of performing the job at elevated height, a ladder permit must be submitted prior to starting work. At no time will a ladder be on site without a current permit and safety checklist.

Use of job built ladders is prohibited on Turner Construction Projects. Temporary stair towers or prefabricated stairs shall be used to access different building levels.

Only fiberglass, type 1A (at a minimum) ladders will be used. Platform ladders are preferred.

Procedures for identifying and responding to all tasks that require the use of a device that allows work from a height:

• Prior to beginning work, the subcontractor or superintendent (for self-perform work) shall evaluate all tasks that require individuals to work at elevated heights. It is the expectation that these tasks will be performed using methods other than a ladder. Use of lifts and portable scaffold devices shall be the preferred method to perform this type of work.

If it is determined that a ladder must be used:

- The subcontractor shall complete the Turner Construction Ladder Use Permit and have it reviewed and approved by the Turner Superintendent.
- Workers must maintain three points of contact at all times when ascending and descending a ladder. If this cannot be done, worker must tie off at any height.
- When working at a height greater than four (4) feet, 100% fall protection is required. A retractable lanyard is the only option in this case.
- Prior to starting work each shift, The Turner Construction Ladder Safety Inspection Checklist shall be completed and affixed to all ladders.
- Platform ladders shall be the ladder of choice, when permitted, on Turner Construction projects.



• Prior to using a ladder, the Turner Superintendent will review and approve the Job Hazard Analysis, Pre Task Plan, and Ladder Use Permit.

Scaffolds

All persons and scaffolds are to be built under the supervision of a Competent Person and meet the specifications required by 29 CFR 1926.451. 100% fall protection at six foot shall be provided regardless of the type of scaffold during all phases of construction.

Lean-to scaffolds are prohibited.

The Competent Person shall inspect scaffolds daily and submit a completed Scaffold Inspection Checklist (Form 23) to the Project Superintendent daily.

All scaffolding must have an inspection tag.

All mobile scaffolds must have rails at heights of four (4) feet or more and the wheels locked when in use.

Scaffolding shall be erected with one of the following: base plates, screw jacks or casters, on sound, rigid footing.

Use of concrete block for footing is not permitted.

Scaffolding greater than 4 feet, must be equipped with handrails, midrails, toe boards, and deck boards.

Cross bracing shall not be used as handrails.

A body harness must be worn and properly tied off on any scaffold platform greater than six feet in height and not equipped with standard handrails, midrails, or decking.

Scaffold planks must extend a minimum of 6" but no more than 12" over the end supports and be of scaffold-grade lumber. All scaffold boards that do not extend over the centerline of their support by at least 6" are to be cleated on each end.

Provide an access for all scaffolds. Climbing the side of scaffolding is not permitted unless the scaffold is designed with a built-in ladder.

Scaffolds must be tied off or stabilized with outriggers when the height is more than three times the smaller dimension of the length or the width. Scaffolds must be tied off horizontally every 30 feet.

Suspended scaffolding, such as swinging stages, boastswain (bos'n) chairs, floats and needle beams, requires special approval by the Business Unit EH&S Director before use.

While using suspended scaffolding, attach and secure a safety harness before stepping on the platform and do not remove it until clear of the scaffold. Tie off to an independent lifeline or building structure. Use one lifeline per person.

Signs, Signals, and Barricades

At locations where potential hazards exist, contractor personnel shall be responsible for posting, installing, and maintaining signs, signals, and barricades to detour the passage of persons or vehicles. There should be a limited use of caution or danger tape. Subcontractors installing danger or caution tape are responsible for maintaining for the duration of their work, or as long as the hazard exists, and



removing immediately after. Turner prefers hard barricades with appropriate signage is to be used in situations where entry is prohibited or requires special permission. Danger signs are to be posted to communicate a potentially dangerous, do not enter situation. Caution signs are to be posted in areas where entry is allowed but caution must be followed.

All barricades must be 42 inches high.

Contractor employees shall obey all signs, signals, and barricades which are posted to warn of potential or existing hazards.

Flagmen must wear red or orange vests, and the flags must be red or orange and at least eight inches square.

The selection and use of signs and tags shall be in conformance with ANSI requirements.

Tape of any kind is not permitted for use as fall protection nor swing radius delineation. Leading edge awareness for fall protection must be perimeter warning flags or a hard barrier, a minimum of 15 feet away from the leading edge. The swing radius of cranes and other equipment must be a hard material such as red-colored, plastic chain.

Rigging

Any contractor performing rigging must have a qualified rigger.

If the wire rope sling is missing its identification marking, consistent with the latest ASME B 30.09 standard the sling must be removed from service until the identification markings are reaffixed.

The qualified rigger shall inspect all rigging prior to each shift.

Safety latches must be installed on all hooks (shakeout hooks are an exception).

Do not leave unsecured or unattended suspended loads.

Use softeners when possible, to obtain a "bite" on material being rigged.

Inspect wire rope slings for frays, kinks, and worn spots before each use. Do not exceed safe working capacity.

Inspect fiber rope slings for broken fibers, wear, and deteriorated inner and outer strands prior to use. Do not use fiber rope slings where fumes, vapors, sprays, mist and corrosive chemicals are present. The use of chains is not allowed.

Destroy damaged slings immediately. Except for steel erection, multiple lift rigging ("Christmas Treeing") of any material is prohibited.

Compressed Air

Hoses and coupling must be checked daily before use. All hose couplings must be provided with positive locking device.

Compressed air used for cleaning purposes must not exceed 30 psi.

Hose and coupling connections must be safety-wired together.

Compressed air is not to be used for blowing material off you or others.



Compressor must be equipped with shut off valve.

Power Industrial Trucks and Power-Operated Equipment

Trucks and Automobiles

Jobsite speed limits and other regulatory signs must be obeyed.

Pedestrians always have the right of way.

Seatbelts must be worn at all times when riding in a vehicle equipped with seatbelts.

Riding on the side, on the tailgate, or in the bed of a pickup truck is prohibited.

All vehicles used during a project for contract activities must have reverse signal alarms.

Flaggers and spotters must be provided for cranes and vehicles in congested areas and when backing up. Flaggers must be certified in the jurisdiction where the work is being performed. The worker must have the card on their person when flagging.

Heavy equipment (i.e. dozers, scrapers, back hoes, etc.) shall be inspected by the operator prior to each shift. A completed Equipment Inspection Form (Form 17) shall be submitted to the Project Superintendent daily.

The use of a mobile phone while operating any power-industrial trucks or power-industrial equipment is strictly prohibited.

When loading and unloading materials, equipment, and products from trucks we must have:

- Proper pre-planning.
- Use spotters.
- Proper training of the workers.
- Selection of the right equipment to load/unload the material or equipment.
- Established controlled or restricted access zone for workers around the area.
- Engaged the driver in the activity.

The driver must be in full view to a forklift operator at all times. All loading or unloading activity must stop if the driver cannot be seen, or needs to enter the exclusion zone to inspect a load. Alternatively, if it is safe to do so, the operation can allow the driver to stay in the truck cab during loading and unloading

Establish a restricted access zone around the truck to prohibit entry into the load/unload area. The zone must be equal to the area needed to load/unload plus ten feet around the entire truck area.

Workers on the ground within the zone should never be on the opposite side of a truck from a forklift while it is loading or unloading material.

Cranes

All cranes must use anti-two blocking devices, as specified in ANSI B30.5 for each load hoisting line. Cranes must be operated in compliance with 29CFR1926.1400 and the requirements listed in the Turner Crane Pre-Plan Checklist.



Crane Inspections - Annual certificate of inspection (by a third party) must be on file on site prior to operation of <u>any crane</u>. In addition, the following inspections are required:

Mechanical parts of any crane must be inspected by the operator (Form 14) and given to the Turner Superintendent prior to each shift and monthly.

All Cranes must be inspected by a Third Party Qualified Person after being assembled, whenever any components are modified or repaired, involved in an incident, and annually. If the crane was disassembled then reassembled on site, a third party inspection must be performed and documented after reassembly. This does not include attaching a jib to a mobile crane.

Tower Cranes must be inspected during erecting, climbing (e.g. "jumping").or dismantling activities by a Qualified Person. Additionally a Registered Professional Engineer must verify that the host structure is strong enough to withstand forces imposed on it by braces, anchorages, and supporting floors.

Cranes are to be operated within the design limits specified by the manufacturer.

All crane operators must be certified by an independent testing agency approved by the National Commission for the Certification of Crane Operators. (NCCO)

All Riggers and Signalers are to be "Qualified" riggers and "Qualified" Signal persons and must be designated by wearing a hard hat cover and/or a designated high-vis vest that is solely different than those worn throughout the rest of the project.

The rated load capacity of the crane is never to be exceeded.

Rated load capacities, recommended operation speeds, and special hazard warnings or instructions shall be posted conspicuously on all equipment.

All accessible areas within the radius of the counterweight swing must be barricaded to limit access.

Cranes, hoists, boom trucks and derricks shall not be installed or operated within 20' of any power line unless lines have been de-energized and grounded, or other options per OSHA 1926.1407 are implemented.

Personnel are prohibited from riding on the hook of the "headache" ball.

The use of personnel hoists must be approved by Turner's EH&S Director after the subcontractor has proven there is no other practical safer means.

All OSHA requirements must be followed when using personnel baskets.

Outriggers must be fully extended and on firm ground.

Crane inspections must be conducted on equipment per the OSHA standards. These inspections and the competent person are the responsibility of the crane owner and the contractor providing the crane.

The use of a mobile phone while operating a crane is strictly prohibited.

Tower, rough terrain and crawler crane operations must have an operable anemometer to measure onsite wind speeds during work. This can be a crane-mounted unit or a handheld device.

Crane appurtenances that exceed 200 above the ground shall be marked and lighted, unless an exemption is received from the FAA.



Mobile Elevated Work Platforms (MEWPs)

All scissor lifts and boom lifts shall have an approved shroud or guard over the joystick/controls, or a timeout feature on the lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary-guard technology.

Prior to mobilizing, all Mobile Elevated Work Platforms must be inspected to ensure compliance with Turner requirements. MEWP's (scissor lifts, aerial boom lifts, and knuckle booms) must have dual action controls to be approved for use. Dual action controls require that there be two separate actions to activate the lift. If a MEWP arrives on site and does not have dual action controls, then it must remain inoperable until a dual action control is installed. The dual action control may consist of a button that must be depressed in order for the controls to operate, or a toggle switch that must be activated prior to operating the MEWP controls (The toggle switch must automatically return to the center when released).

Subcontractors are required to complete a daily inspection sheet for all mobile elevated work platforms. The inspection includes operational and physical parameters for operation of the equipment being inspected. The inspection form must be posted in a visible location during operations and a copy made available to Turner upon request.

Field modifications are not allowed on aerial lifts.

Only trained and authorized individuals may operate aerial lifts.

When a lift is delivered to the project, the rental company or the owner of the lift shall inspect the lift & provide documentation the lift is safe to operate onsite. The lift shall be free from any physical defects in new or like new condition with all the safety placards present. The operator's manual and inspection documentation shall be included.

Employees must use personal fall arrest systems (PFAS) when working from boom platforms. Employees shall follow the manufacturer's recommendations for the type of (PFAS) when working from an aerial lift. At a minimum, employees shall follow the manufacturer's recommendations for the type of fall arrest/restraint when working from a scissors lift. If scissorlifts are equipped with an attachment point provided by the manufacturer for a restraint system, they are to be used. The intent of this protection is to keep workers within the confines of the passive protective system (rails) so the shortest length of lanyard that allows the task to be completed and keep the worker confined to the walking/working surface is required. Note: These attachment points are not designed as fall protection anchorages.

Never climb above the work platform. Employees must keep both feet on the floor of the basket and not stand on the railing or toe board during operation. If it has been determined by the subcontractor's competent person that there are no feasible means to access an area without leaving the basket of a scissor lift, a modified Pre-Task Plan must be completed as well as a Fall Protection Plan. This plan must be completed by the competent person with details of the anchorage point outside the scissor lift and above the employee's head. Any worker engaged in the activity should be active in the preplanning of the modified plan. All workers involved must review and sign off on the plan. This must be reviewed with Turner's Superintendent. Each work activity and area will require their own PTP and Fall Protection Plan.



A dedicated spotter is required any time a scissor lift must be moved in an elevated state or when operated in congested areas. Spotters will be responsible for ensuring that the area around the MEWP and the travel path are free of obstruction and clear of equipment and personnel.

Mobile Elevated Work Platform Use in High Lift Situations (applies to boom lifts with an operating platform height of 30' and above) require the following:

A dedicated JHA shall be developed for each activity operating a MEWP above 30'.

A system for managing the affected area below the basket and movement of the MEWP's is necessary to decrease the risk of struck-by hazards.

If any of the workers in the Aerial Boom Lifts are incapacitated and incapable of descending, a rescue may be required. Due to the nature of this type of work, it is prudent to establish an emergency response plan which has redundancy built into it.

Boom lifts cannot be operated by the basket controls without first depressing a covered, protected foot switch. This causes the operator to be intentional about basket movement and reduces the risk of incidental operations.

The lifts should have a pressure-actuated auto shut-off across the controls which shuts down the equipment to prevent entrapment.

A dedicated ground spotter (with no other collateral duties) shall be in place whose duties are as follows:

- Visually verify and communicate via two-way radio that all obstructions are clear of the path of travel at the ground level.
- Visually verify that all obstructions are clear while basket is moving.
- The ground spotter shall be responsible for no more than 1 Controlled Access Zone (CAZ).
- Additional spotters will be required if MEWP's will need to be operated/relocated simultaneously within 1 CAZ (Approximate size and dimension of CAZ is below).

Spotter Logistics:

- If 2 or more lifts are required to operate simultaneously, each operator/spotter team will utilize their own dedicated radio channel.
- The Spotter shall not use a cell phone, head phones or other devices which may distract them from their duties.
- The Spotter shall have stop work authority.
- The spotter shall wear, at a minimum, a Class II high visibility vest, shirt or jacket.
- The Spotter/operator team shall perform a "radio" check prior to the commencement of the activity and every 30 minutes thereafter if no communications occur during that time frame.
- Operation of MEWP from the basket is prohibited without prior communication with the spotter and an "All Clear" is given.

Other Traffic at base of operating MEWP:



- A Controlled Access Zone will be established in the affected areas of the MEWP operation to include the base and working zone beneath the platform.
- The CAZ should be constructed with physical barriers such cable, wire rope or chain, or flagging. Danger, Caution tape and spray-painted lines will not be accepted.
- The CAZ must be secured from tipping and signed every 30'. The size of the CAZ must consider deflection or arc of the falling material.
- Each CAZ will be adequately sized to have a 15' buffer zone on each side of the MEWP to include under the platform.
- Each CAZ will hold no more than 3 boom lifts.
- No other equipment or vehicle will be allowed to operate within a dedicated CAZ.

A 30' Wide dedicated path of travel for vehicles and other equipment shall be established using rope, traffic cones, delineators or other clear markings which safely guide other equipment and vehicles around the MEWP CAZ.

Any changes in the path of travel must be approved by the Turner Superintendent.

Boom lifts shall not operate within or over the traffic zone.

The Spotter shall monitor vehicle traffic and shall have authority to stop work and or vehicle traffic.

Emergency Response

There shall be, at a minimum, (2) two MEWP's on site when working in excess of 85 vertical feet. This is to ensure that one could assist another which has the capability to reach the basket in the event of an emergency. Exceptions include when there is a means of safely reaching the platform via catwalk or other elevated surface, or when there is a means to reach the platform from above via rope, slings or other climbing type equipment.

The Spotter shall be trained on how to safely use the ground controls. The ground controls shall be tested prior to work occurring each day and/or shift.

The Local Fire Department Shall be invited to the project site to review conditions and site activities which may have the potential for a "Vertical Rescue" in the event of an emergency.

The emergency response number shall be conspicuously posted.

Turner, the Fire Department and Dispatch shall determine a key phrase or word which indicates that a "Vertical Rescue Team" is required. (These teams have specialized training and equipment to respond to high rescue conditions.)

Workers on the ground shall stay out of the CAZ and communicate with the spotter if entrance is needed.

A Stop Work must immediately be called when any deviations are observed with fall protection.



Identify and discuss task which have the potential for falling tools, materials and/or debris. Do not start work until procedures are in place to prevent the loss of tools or equipment (tethering or other means) and/or a Controlled Access Zone is established.

Workers should avoid positioning themselves, and their equipment, in a line of fire where they could be struck by falling, flying or moving objects from the overhead platform.

Utilize tag lines to maintain positive control of objects being removed or hoisted to ensure the object does not come in contact with the lift.

Industrial Vehicles

The Company has determined that certain powered industrial vehicles are utilized at its projects and has developed this policy to establish the procedures that must be followed for the use of such vehicles at the Company's projects. Provide for proper equipment selection, inspection and operation of certain powered industrial vehicles, including but not limited to All Terrain Vehicles (ATV) or Quads, Three Wheeler, Four Wheeler, Gators, Mules, and all other similar vehicles. Only vehicles that have previously been approved by the Operations Manager and Business Unit EH&S Director for use at its projects may be utilized at the Company projects and must be in compliance with the policy. This policy also applies to vehicles owned and operated by Subcontractors and Subcontractor employees. All vehicles covered under this policy are to be scheduled to Turner's property plant and equipment (contractor's) policy. It is the responsibility of the jobsite accountants to properly report all equipment under this policy.

All vehicles with the following features (in combination) are prohibited from all Turner projects:

Typically carry one rider;

Have no rollover protection or seat belts; and

Have a handlebar similar to a motorcycle for navigation.

These vehicles may be commonly referred to as All-Terrain Vehicles (ATV), Quads, Three Wheelers, or Four Wheelers (or other similar equipment). This prohibition includes vehicles owned by subcontractors as well.

Follow OSHA 29 CFR 1910.178, Powered Industrial Trucks, as applicable.

All personal (owned by an individual) All-Terrain Vehicles (ATV's), Quads, Three Wheelers, Four Wheelers, Mules, Gators, or other similar equipment are prohibited on all Turner Projects.

All authorized drivers must complete training as follows:

Manufacturer requirements (as coordinated through the dealership of the equipment) for the safe operation of the vehicle including use of personal protective equipment, authorized surfaces for operation of the vehicle, weight restrictions, and other operational conditions.

Follow OSHA 29 CFR 1910.178 Powered Industrial Trucks.

This training shall be written formally into the Project Specific Safety Plan by the project team, approved by the Business Unit EH&S Director.

A documented sign-off for the authorized driver must be a part of the training manual provided with the training.



Drones

Turner's policy on drone use is they should only be used as a last resort. If there are other means available to inspect, survey and document jobsite conditions, they should be used in lieu of a drone.

Drones are only permitted with an approved "Drone Use Approval Request Form."

All drones must be operated by a third party who is licensed by the FAA and insured per Turner's insurance policy guidelines.

Housekeeping

Housekeeping at the project site is the responsibility of each individual and housekeeping hazards will not be tolerated. The following rules are enforced at all facilities:

Keep work areas in a neat and orderly manner. Keep exits and emergency escape route unobstructed.

Dispose of cigarette stubs in butt cans. Smoke only in designated areas.

Store and contain materials so that the area is fire safe.

Daily cleanup is required by each contractor.

Subcontractor Injury Reporting Requirements

If an employee is injured:

Provisions shall be made by each Contractor for immediate and proper first aid, and/or doctor treatment, for every work injury.

Turner Construction Company is to be notified immediately.

An accident investigation is to be conducted with a written report of the findings and any photos copied to Turner immediately.

One copy of all Workers' Compensation Accident reports involving Contractor's employees shall be promptly forwarded to Turner Construction Company.

Contractors will be individually responsible to notify Federal, State and local authorities in the event of a death and/or multiple injuries. Notify OSHA within eight hours of fatality or hospitalization of three or more employees.

Total man-hours worked and lost time due to accidents on this project must be turned into Turner on a monthly basis.

Turner Construction Company's Project Superintendent is to be notified immediately.

Send Public Liability Report to your insurance carrier promptly and forward one copy of the report to Turner Construction Company.

Submit injury statistics to Turner including OSHA 300 log on a monthly basis.



Fire Prevention

Shanties:

Are to be constructed using only fire retardant materials and all glass is to be wire glass. As a minimum, any lumber used in shanty construction shall meet the American Wood Preserves Associations Standard C1, C20, and C27, and shall bear certificates of performance.

All materials shall have a flame spread rating no greater than 25 (ASTM Standard E84) with no evidence of progressive combustion for at least 30 minutes.

All shanties shall be located at least 10 feet from materials which present extraordinary fire hazards.

Each shanty shall have at least one (1) 20# ABC fire extinguisher.

Rubbish shall not be permitted to accumulate within an adjacent area to any shanty.

No oily clothes, oily rags, nor fuels, shall be stored in shanties.

All shanties shall be constructed in such a manner that shanty fire shall cause no damage to permanent construction and installations.

Each subcontractors is responsible for installing and maintaining a combination smoke and carbon monoxide detector in their shanty.

Electric heaters, if permitted on the project, must be equipped with hi temp shut down and tip-over protection. Electric heaters are not permitted to be operated while unattended.

All temporary electric must be in accordance with all existing codes.

Storage of any material within 10 feet of fire hydrants is strictly prohibited.

Work areas shall be monitored on a regular basis to prevent accumulation of material.

No motors or machinery shall be left running during non-working hours except as specifically directed by Turner.

All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable codes, rules, and regulations.

All tarps, blankets, and poly shall be of fire retardant material.

Each contractor is required to provide fuel tank containment equal to 110% of tank capacity.

No open burning or fires shall be permitted on site. Anyone doing so is subject to immediate dismissal.

No solid fuel (i.e. coke, etc.) shall be permitted on site.

Standpipe system shall be kept as close as possible to progress of the structure and prevented from freezing.

Fire extinguishers shall be a minimum of 20# ABC type and placed and maintained on the job in conspicuous locations according to OSHA requirements. Fire extinguishers must be affixed in a location to prevent damage from water or other materials. These fire extinguishers shall not be moved or discharged except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal. Use of carbon tetrachloride extinguishers is prohibited.

All gas bottles such as propane, oxygen and acetylene shall be properly supported and stored and tied in a vertical position in areas designated by Turner. All stored bottles shall be capped.



All gas bottles in use shall be tied in the vertical position and capped at the end of the working day.

All oxygen and acetylene in use shall be in a proper cart with an attached fire extinguisher.

All "HOT WORK" procedures will be followed.

Fire Response:

Appropriate action is the key to the prevention of loss of life and property damage. This action in the first minute is worth tons of water 10 minutes later.

If a fire occurs, notify the local fire department (telephone number is posted at all the phones) and Turner.

Evacuate area of fire immediately.

Extinguish fire with a non-combustible such as sand or an available fire extinguisher. Only those individuals with adequate training will be permitted to extinguish incipient fires. Those individual with no training are required to evacuate and proceed to the predestined meeting area.

Building L.I.F.E.

Building L.I.F.E. (Living Injury Free Everyday)[®] is a continuous improvement process with an upstream focus on risk and the systems which produce risk. The program endeavors to produce a bottom-up safety culture driven by increased worker engagement in safety and planning processes. Building L.I.F.E.[®] (BL) places an emphasis on optimizing human performance, anchored by a focus on observation & feedback. The outcome of implementing the BL Model is a culture-shift in worker attitudes toward teamwork and proactive safety involvement. Below are the three primary goals associated with BL and the processes supporting each goal:

- <u>Systems Focused Approach</u> Integrate the BL "systems model" into key processes such as preplanning, performance evaluation and incident analysis. Move preplanning farther upstream. Sharpen our focus on risk analysis and reduction. Involving those "closest to the risk" in preplanning.
 - a. BL JHA The JHA has been the standard Turner pre-planning tool thus far. With BL, the JHA has evolved into the BL JHA which places a focus on risk & the system factors which drive that risk. Subcontractors complete the form ahead of the pre-construction meeting and submit to Turner. The Turner project team (safety & operations) reviews the quality of the BL JHA and push back if the assessment is not deemed to be of adequate quality. At the pre-construction meeting, Turner will review the final BL JHA and facilitate a discussion with the subcontractor to see if risk can be further reduced (with additional controls). As an option, this may include a Turner facilitated Residual Risk Reduction (R3) step which involves quantified risk assessment. Again, the main difference between standard Turner JHAs and the BL JHA is the focus on reducing risk (frequency, likelihood, severity), and the systems which drive that risk (environment, capability, motivation).
 - b. Pre-Task Plans (PTP) This is traditional and effective Turner short-range planning tool is still used but is now supplemented with the Daily Huddle. PTP frequency can be locally



determined as either daily or weekly. It should be noted that if weekly is the option selected, and the risk changes during the course of the week, a new PTP is required.

- a. Rapid Improvement Events Conduct Rapid Improvement Event analysis with front line workers at regular intervals, where they have an opportunity to (using the BL JHA as a starting point) examine work process and look for improvements (risk, efficiency or quality).
- c. Daily Huddles The Daily Huddles are designed for each subcontractor to conduct a meaningful, two-way discussion of anticipated risk & planned controls on a daily basis. The pattern of Huddle dialog (bottom-up) should be What are our key activities today? What are the key risks we need to be thinking about? What controls do we need in place to protect? Note those controls need to include physical safeguards, training/procedural safeguards, and required actions (behavior) to keep the task safe.
- d. BL Root Cause In short, we're looking to incorporate the three systems circles (environment, capability, motivation) into our root cause analysis, whether we're looking at an incident, a near miss, or even an "at-risk" observation.
- e. BIM/Safety Integration Where BIM Models are available, the project team should work with the BIM engineer recognize and analyze risk and to pre-plan for safety. BIM should be used to develop safety and logistics plans.
- Engage the Workers To facilitate a culture-change at our projects toward partnering and proactive safety engagement, the project team, including subcontractor supervision, needs to continuously seek out opportunities for front line workers to participate in, and contribute to, the safety process. Each subcontractor should feel free to add creative opportunities, but the primary opportunities are:
 - a. BL JHA & PTP Review Once mobilization ramps up, each subcontractor should have the front line workers review the JHA (could be done in a tool box talk format), and ask them to add missing pieces, contribute new ideas, etc. The key is participation. The same holds true for PTPs getting the workers involved in the process.
 - b. Daily Huddles This is the primary opportunity for front-line workers to be part of the safety process. An effective two-way daily discussion of risk & control plans will be essential to successful Building L.I.F.E.[®]. Huddles supplement the PTP process.
 - c. 5-Worker Lunches Provides another venue for workers to be involved and have a voice into safety management.
 - d. Observation Circles Great opportunities to get front line workers involved in the work process (not just safety), at regular intervals.
 - e. Safety Perception Surveys and Safety Observation and Recognition (SOAR) stations allow the workforce to provide us a "report card" on what's working and what's not.
- 3. <u>Optimizing Human Performance</u> In order to help optimize (safety) performance, the Building L.I.F.E.[®] process employs a number of tools to achieve continual improvement.
 - a. Coaching Training This is aimed at Turner and subcontractor leadership, and is designed to help them become better safety coaches during their planned & unplanned observation opportunities. Training will include how to better understand what drives



better safety performance (behavior), and how to conduct meaningful safety observations.

Daily Feedback - aspects include a focus on feedback and a formal process for Safety Coaching and Observation (SCO) (also in Predictive Solutions). The project team will be required to participate in helping build safe work habits out on the project by making observations, driving the feedback process and using the Safety Coaching Observation (SCO) form. The SCO form elevates the importance and knowledge of "Critical Safe Behaviors" associated with high frequency and severity injuries. The purpose of feedback is two-fold. Feedback builds safe work habits by providing more positive reinforcement for safe observations while giving us the opportunity to coach at-risk behavior.

Stretch and Flex

All subcontractor employees are required to participate in a Stretch and Flex Program on this project. A stretch and flex will be facilitated by each subcontractor's superintendent or designee at a central location, every morning, prior to start of work. All employees are required to participate but only to their level of comfort.

Drug-Free Workplace Policy

Importance of Policy to Turner Core Values

To help insure a safe, healthy, and productive work environment for the Employees of The Turner Corporation, Turner Construction Company and all subsidiaries (collectively known as "Company or Turner"), and other persons on Turner projects or at Turner Facilities, and to protect Company property and ensure efficient operations, Turner has adopted a policy of maintaining a workplace free of drugs and alcohol.

Policy Summary

All Turner Employees and Other Workers are prohibited from using, possessing, distributing, dispensing, manufacturing, or being under the influence of illegal substances and from abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. Turner is committed to this Policy on substance abuse to maintain a safe environment for all Turner Employees and Other Workers. This Policy establishes guidelines for acceptable and unacceptable behavior in connection with working on behalf of Turner. Turner will not tolerate substance abuse in violation of this Policy.

Persons to Whom Policy Applies

This Policy specifically applies to all Turner Employees, Other Workers, and any and all employers of Other Workers working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.



Turner Employees means all persons employed directly by Turner, whether staff management, corporate, or trade. This includes employees at any and all Turner Facilities, including business centers, offices and construction worksites.

Other Workers means all other persons, not directly employed by Turner, working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. This includes all contractors, subcontractors, consultants, construction managers, and their respective employees or agents working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. The term "Other Worker" includes, but is not limited to, craft personnel, management personnel, temporary and/or consultants.

This Policy is non-discriminatory and applies equally to all Turner Employees, Other Workers, and their respective employers, as defined above, working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.

Applicable Definitions

- Adulterated Specimen A specimen that contains a substance that is not expected to be present in human urine, or contains a substance expected to be present, but which is at a concentration so high that it is not consistent with human urine, which will obstruct the testing process or results.
- Accident/Incident A work-related event which results in personal injury to a Turner Employee or Other Worker or to any other person, damage to property or the workplace, or which could have resulted in personal injury or damage to property or the workplace. An Accident/Incident includes, but is not limited to, any Accident/Incident on Turner Property or at a Turner Facility which results in:
 - a) A fatality;
 - b) Bodily injury requiring a visit to any medical provider
 - c) Vehicular and/or equipment damage in apparent excess of \$1,000;
 - d) Non-vehicle property damage in apparent excess 1,000; or
 - e) Any work-related event that could have resulted in any of the above.
- Alternative Program An Alternative Program is a substance abuse program administer by an entity other than Turner under procedure equal to or more stringent than this Policy and which has been approved and accepted by Turner as an alternative or reciprocal substance abuse testing program.
- Alternative Program Administrator The individual responsible for drug and alcohol testing and related procedures for all Turner Employees and/or Other Workers covered under an Alternative Program.
- Annual Screen A drug screen which Turner may require of any Turner Employee or Other Worker on a yearly basis in addition to any other screen that was given in the previous twelve month period.



- Chain of Custody The protocol followed when submitting specimens for drug and alcohol testing. This protocol assures that there is no opportunity for contamination or switching of samples. Elements include signed and witnessed forms, sealed and initialed containers, and couriers requiring a receipt.
- Collection Site A place where individuals provide specimens of their urine to be analyzed for the presence of alcohol. This site may or may not be owned and/or operated by the laboratory that actually analyzes the specimen.
- Confirmatory Test When testing for drugs, this is the second analytical procedure performed to confirm the presence of a specific drug/metabolite in a urine specimen. This procedure uses a more sophisticated technique (e.g. Gas Chromatography / Mass Spectrometry, EBT) to ensure reliability and accuracy. With breath testing for alcohol, the Confirmatory Test is conducted on an EBT which has the capability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device.
- Consent Written consent for testing is required for all tests. A Donor will be asked to give written consent immediately prior to submitting a drug or alcohol test.
- Covered Site A particular Turner Project or Turner Project or Turner Facility selected for random testing by a Third Party Provider.
- Cut-off Level A pre-determined amount of drug metabolite, measured in nanograms (ng) per milliliter (ml) of urine, which dictates whether a tested specimen is negative or positive. As to alcohol, a pre-determined amount of blood alcohol content, which dictates whether a tested specimen is negative or positive. For example, a test would be declared positive if the amount of drug/metabolite or blood alcohol content were equal to or above the Cut-Off Level.
- Designated Jobsite Turner Representative Turner Employee who is the designated representative on a particular Turner Project or at a Turner Facility responsible for coordinating drug and alcohol testing and related procedures.
- Diluted Sample A specimen with creatine and specific gravity values that is lower than expected for human urine. This type of test will always be sent with MRO comments stating, "Recollection suggested no fluids three (3) hours prior to test." A Donor providing a Diluted Sample will be retested within twenty-four (24) hours and in no case more than forty-eight hours after the Diluted Sample was obtained.
- Donor a Turner Employee or Other Worker giving a urine, breath, blood, or saliva (which is only used for alcohol testing) sample for drug or alcohol testing.
- Medical Review Officer (MRO) A licensed physician responsible for receiving laboratory results generated by a substance abuse screening program who has knowledge of substance abuse disorders and who received appropriate medical training to interpret and evaluate a worker's medical history and other relevant biomedical information. The MRO is certified by either the American Association of Medical Review Officers (AAMRO) or the American College of Occupational and Environmental Medicine (ACOEM).



- Medical Examination An examination conducted by a duly licensed medical provider.
- Negative Test Result A negative screening is obtained if: (1) the screen test indicated the absence of legal or illegal substances below the screen limit, or (2) the screen test indicates the presence of legal or illegal substances in excess of the screen limit but the confirming test indicates the absence of legal or illegal substances below the confirming limits
- Other Workers All other person, not directly employed by Turner, working on a Turner Project, at a Turner Facility, or working on or otherwise engaged in Turner business. This includes all contractors, subcontractors, consultants, construction managers, and their respective employees or agents working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. The term "Other Worker" includes, but is not limited to, craft personnel, management personnel, temporary personnel and/or consultants.
- Positive Test Result (Alcohol)- A Positive Test Result (Alcohol) is obtained if a Confirmatory Test indicates the presence of alcohol at or in excess of the Cut-Off Level of 0.04% blood alcohol content.
- Positive Test Result (Drugs) A Positive Test Result (Drugs) is obtained if the MRO has verified that the test results contain illegal substances at or above the standard Cut-Off Levels of any of the substances tested and for which there is no valid medical or other explanation.
- Post-Accident/Incident Testing A drug or alcohol test which may be conducted following the occurrence of an Accident/Incident.
- Quick / Instant Test A test that is a qualitative one-step immunochromatographic test panel for the detection of Cannabinoids (THC), Opiates, Amphetamines, Cocaine, Phencyclidine (PCP), Barbiturates, Benzodiazepines, Propoxyphene, and Methamphetamines 3, 4-Methylenedioxymethamphetamine drugs and/or their metabolites in human urine. This test provides only a preliminary analytical result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. This device includes a Lateral Flow (LATFLO) Adulterant Strip (LFAS) for the visual determination of Specific Gravity, Nitrite, Oxidants, and pH to evaluate human urine specimens for adulteration prior to drugs of abuse urine testing.
- Random- A system of drug testing imposed without individualized suspicion that a particular individual is using illegal substances. Random drug testing consists of unannounced substance abuse screens of particular groups or individuals selected through a neutral randomizing system.
- Refusal to Test When a Donor refuses to provide a urine, breath, saliva or (on occasion) blood sample upon reasonable request from Turner or from the employer of an Other Worker, based on any circumstances in the "Types of Testing" Section.
- Reasonable Suspicion- Reasonable Suspicion of drug or alcohol abuse is based on objective evidence about the Turner Employee's or Other Worker's conduct in the workplace that would cause a reasonable person to believe that the individual is demonstrating signs of impairment. In most cases, the objective evidence giving rise to Reasonable Suspicion will be observed by at least



two (2) Turner Employees or Other Workers, but recognizing that in certain circumstances the observation may be made by only one (1) such person. Examples of objective evidence include, but are not limited to, odors, difficulty in maintaining balance, slurred speech, erratic or atypical behavior.

- Screen or Screening The initial drug or alcohol test given to screen out potential substance abusers. After the initial screen, a Confirmatory Test will be performed on any Positive Results to verify the initial Screen.
- Screening For Cause Drug or alcohol screen which may be ordered when a Turner Employee's or Other Worker's Fitness for Duty is in question or following treatment in a drug or alcohol treatment program.
- Split Specimen Testing When a urine sample is taken for drug screen testing, the specimen is split and one part is used for initial testing and the remainder of the specimen is reserved for additional retesting.
- Substance Abuse and Mental Health Services Administration (SAMHSA) A federal government agency, which certifies substance abuse laboratories.
- Substance Abuse Administrator A Turner designated employee and/or his or her designees responsible for the coordination, implementation and administration of this Policy.
- Substituted Test A Substituted Test is a urine sample with creatine and specific gravity values that are so diminished that they are not consistent with human urine. This could indicate evidence of a substance other than the Donor's urine being substituted for the urine screen. This type of verified result is reported as a Refusal to Test, which is treated the same way as a Positive Test Result.
- Third Party Provider A neutral third party company engaged by Turner or an approved Alternative Program Administrator to manage drug and alcohol testing and to design and/or implement random selection procedures and systems.
- Turner Employee All persons employed directly by Turner, whether staff, corporate, or trade. This includes employees at any and all Turner Facilities, including business centers, offices, and construction worksites.
- Turner Project or Turner Facility A project or facility which Turner owns, operates, manages, or over which Turner exercises control, including state, federal or other contracts held by Turner, and to which this Policy applies.
- Turner Property Includes, but not is not limited to, all Turner owned or leased buildings, parking lots, recreation areas, vehicles, equipment, desks, lockers, furnishings, and equipment wherever located. It may also include state property at construction projects over which Turner exercises control.



- Termination- In the case of a Turner Employee, Termination shall mean termination of employment by Turner. In the case of an Other Worker, Termination shall mean a ban from working at or on a Turner Project or Turner Facility in any capacity to which this Policy applies.
- Verified Positive Test Result A test result that was positive on an initial immunoassay test or alcohol test, confirmed by a Confirmatory Test using a Gas Chromatography/Mass Spectrum assay for drugs or EBT device for alcohol, and reviewed and verified by the MRO in accordance with this Policy.
- Voluntary Assistance Any Turner Employee who feels that he or she has a drug, alcohol, or related issue is encouraged to seek professional help. Turner can refer such Turner Employee to seek voluntary professional assistance. Assistance given to the Turner Employee shall be kept strictly confidential.

Scope and Application

All persons or entities covered by this policy understand and agree that Alternative Programs may be utilized as required by law, contract, or insurance agreement and they will comply with such other Alternative Programs where applicable.

During orientation/training Turner may accept, from Other Workers, substance abuse testing cards, badges, or proof of Negative Test Results within the last twelve (12) months, provided by the respective Other Worker's employer or trade union. All Other Workers reporting to work on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, without substance abuse testing cards, badges, or proof of a Negative Test Results (and ID), will not be permitted to work unless and until such proof is demonstrated. Turner reserves the right to require retesting if there is no proof of Negative Test Results within the last twelve (12) months.

Additionally, Turner will work with any union representing Turner Employees or Other Workers covered by this Policy.

This Policy includes pre-employment, post- Accident/Incident, reasonable suspicion, re-employment, medical examination, annual and random testing, to the extent permissible by law.

Strict Adherence to Policy Required of Turner Employees, Other Workers and Their Respective Employers

Every Turner Employee and Other Worker is responsible for reviewing and understanding this Policy. As a condition of employment, all Turner Employees must abide by this Policy. With respect to Other Workers, Continued work and engagement on Turner Projects is conditioned on strict adherence to this Policy or an acceptable Alternative Program.

Any and all employers of Other Workers must ensure full compliance with any and all aspects of this Policy or an acceptable Alternative Program, including the compliance of their respective employees.



Designation and Responsibilities of the Substance Abuse Administrator

Turner will designate a Substance Abuse Administrator to be responsible for the administration and implementation of this Policy. Among other things, the Substance Abuse Administrator will:

- Have primary responsibility for the coordination, implementation, and administration of this Policy;
- Coordinate all testing with any appropriate Third Party Provider(s);
- Receive the test results from the MRO and notify the Designated Jobsite Turner Representative and Safety Personnel of the drug results, and notify the tested Turner Employee or Other Worker and the Other Worker's employer of the results; and
- Assure the reliability and confidentiality of testing processes and procedures.

General Substance Abuse Rules

- 1. Using, possessing, distributing, dispensing, manufacturing, or being under the influence of illegal substances, and/or abusing chemicals or controlled substances while working on a Turner Project at a Turner Facility, or while working on or otherwise engaged in Turner business, is strictly prohibited.
- 2. Legally prescribed drugs may be permitted, provided that the drugs are prescribed to the Turner Employee or Other Worker by an authorized medical practitioner for current use by the Turner Employee or Other Worker and provided that such legally prescribed drugs do not prevent the safe performance of such person's essential job functions. Please see "Prescription Drugs" for further information.
- 3. The possession or use of alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business is prohibited. Turner sponsored or approved meetings/functions are exempt from this rule. However, this does not relieve Turner Employees or Other Workers from possessing or using alcohol responsibility and safely in such situations.
- 4. Refusing to report for or submit consent to drug or alcohol testing is prohibited and may be treated as if a Positive Test Result had been obtained.
- 5. Adulteration or Substitution of a test is prohibited.

Confidentiality

All substance abuse testing will be performed with concern for each Turner Employee's or Other Worker's personal privacy, dignity, and confidentiality. Each Turner Employee and Other Worker will be required to sign a consent and chain of custody form, assuring proper documentation and accuracy. Turner Employee testing records shall not be maintained in personnel files. Records may be kept at the project level for that particular project. Turner Employees shall have the right to a copy of their drug testing results within a reasonable amount of time following a request. Other Workers shall contact the Substance Abuse Administrator if they wish to have a copy of their drug testing



results. All actions taken under this Policy will be confidential and disclosed only to those with a need to know.

Protections Related to Drug Screen Testing

- A formal Chain of Custody will be established for every drug test.
- Initial samples (or a split portion thereof) that test non-negative will be retested for verification with a Confirmatory Test, using the Gas Chromatography/Mass Spectrometry ("GC/MS") test,
- GC/MS Positive Test Results will be communicated to the MRO,
- The MRO will receive the GC/MS Positive Test Results and convey the fact of a Verified Positive Test Result to the Substance Abuse Administrator and to the Donor tested.
- Turner Employees or Other Workers who test positive may, within twenty-four (24) hours of being advised of the results, request a retest of the original split-specimen sample by a different SAMHSA certified laboratory, at the Turner Employee's or Other Worker's expense.
- No drug or alcohol test will be conducted without the Turner Employee's or Other Worker's consent. The Donor shall be required to sign a consent form. Refusal to give consent shall be cause for removal/barring from the Turner Project or Turner Facility and may be treated as if a Positive Test Result had been obtained.

Testing Procedures

Procedures for Drug Screen Testing

Urine specimens will be analyzed for the presence of all or some of the following:

- Cannabinoids (Marijuana)
- Cocaine
- Opiates
- Amphetamines
- Phencyclidine
- Barbiturates
- Benzodiazepenses
- Proporyphene
- Methadone

Each employee must provide documentation of a current (within the last 12 months, 9-panel test (at minimum) from a SAMHSA approved testing authority (or test per union bargaining agreement).

Documentation of testing is required before the employee will be permitted to work on the project.

The following chart illustrates the Cut-Off Levels for some of the drugs tested:



Drug	EMIT Screen (ng/ml)	GC/MS Confirmation (ng/ml)
Amphetamines	1,000	500
Cannabinoids (Marijuana/THC)	50	15
Cocaine	300	150
Opiates	2,000	2,000
Phencyclidine (PCP)	25	25

Appropriate Cut-Off Levels for all other drugs tested will be determined by the SAMHSA approved laboratory conducting the testing and the Medical Review Officer.

- Urine drug screen specimens may be collected on-site by a SAMHSA approved laboratory or at an offsite medical facility or clinic. In general, Donors will be permitted to give a urine specimen in privacy and without being observed by collection site personnel. However, a Donor forfeits this right whenever there is a reason to believe that he/she may alter or substitute a specimen.
- 2. For on-site drug tests, Turner Employees and Other Workers will be tested using the Quick/Instant Test Drug Test. This system provides results in five (5) minutes.
- 3. If the Donor does not provide a sufficient amount of urine for a drug test, he/she must drink up to forty (40) ounces of fluid, distributed reasonably through a period of up to three (3) hours, or until the Donor has provided a sufficient urine specimen. If the Donor refuses to make the attempt to provide a new urine specimen or leaves the area where the collections are being done this will be considered a Refusal to Test. If the Donor has not provided a sufficient specimen within three (3) hours of the first attempt. The collector will discontinue the collection and notify the Substance Abuse Administrator and/or Designated Jobsite Turner Representative or Alternative Program Administrator. After consulting with the MRO, the Donor will be directed to obtain within five (5) business days, an evaluation from a licensed physician. If the Donor proves that he or she has a medical condition that has, or with a high degree of probability could have precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as "Cancelled" and no further action will be taken. A medical condition includes an ascertainable physiological condition (e.g., a urinary system dysfunction) or a medically documented pre-existing psychological disorder, but does not include unsupported assertions of "situational anxiety" or dehydration. If there is not an adequate basis for determining that a medical condition has, or with a high degree of



probability could have, precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as Refusal to Test.

- 4. Urine substance abuse screens and preliminary testing may be performed on-site. A SAMHSA approved laboratory will confirm on-site screens that test non-negative. All urine samples will be split-specimen tests, ensuring that any required or requested retests can be done using the original sample. A Confirmatory Test will use GC/MS to ensure reliability and accuracy.
- 5. Before a Donor's test result will be confirmed positive for drugs, the Donor will be given the opportunity to speak with a MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result. If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result will not be reported to Turner until the Confirmatory Test has been completed and the MRO has consulted with the Turner Employee or Other Worker regarding any legitimate medical explanations. Since the Policy is first and foremost concerned with the safety, the Donor whose results are pending will not be allowed on-site until this process is complete.
- 6. Diluted Samples occur when a Donor drinks large amounts of fluids before the drug test, or adds water to the specimen so that it is harder to detect drug abuse. Donors may innocently drink too many fluids before the drug test in order to be able to give a sample. This can be avoided by telling the Donor not to drink more than twenty-four (24) ounces within three (3) hours of the drug test. It is the responsibility of the Donor to provide Turner with an undiluted sample that can be tested. Turner's Policy regarding Diluted Samples is to retest the Donor one (1) additional time. Ideally, the Turner Employee or Other Worker should be retested within twenty-four (24) hours of receiving the results from the MRO, and in no case more than forty-eight (48) hours after the Diluted Sample was obtained, if the Donor provides a second Diluted Sample, the MRO will conduct a medical interview with the Donor. During the interview process, if it is determined that there is no legitimate medical reason; the Donor's test will be treated as a Positive Test Result.
- 7. A Verified Positive Test Result shall mean that the verified results are above standard Cut-Off Levels and that there is not a medically valid reason for the result. Any Turner Employee or Other Worker who tests positive for drugs, and who believes the test results are incorrect, may request a test of the original specimen at his/her own cost within twenty-four (24) hours. An equally qualified laboratory shall perform the retest. If the retest is negative, a third test of the original split specimen shall be completed by a third laboratory to confirm or deny the previous test results. A toxicologist and MRO will review all data for a final determination. If



it is determined that the initial confirmation screen was incorrect, the Turner Employee or Other Worker shall be allowed to resume work.

- 8. If the Confirmatory Test or retest for drugs is negative, Turner shall pay the Turner Employee for any lost time that may have occurred and reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest for drugs is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the that was borne by the Other Worker.
- 9. Turner Employees who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Positive Test Result, may only be returned to work if certain criteria are met (as outlined below in the "Possible Re-Employment with Turner" Section). In all cases, there is no guarantee of re-employment.

Procedures for Alcohol Testing

- 1. A Department of Transportation (DOT) approved saliva testing device or "hand held" Breathalyzer unit or equivalent device, similar to those used by law enforcement for field sobriety tests, will be used for the initial alcohol screen. In cases where a "hand held" Breathalyzer is used for initial alcohol screen, a saliva testing device must be used for the Confirmatory Test. Saliva or alcohol screen collections by breath or their equivalent may be performed on-site. Any initial screens at or in excess of 0.02% blood alcohol content will be tested with a Confirmatory Test performed after a waiting period of at least fifteen (15) minutes, but not more than thirty (30) minutes. A SAMHSA approved laboratory will confirm on-site screens that test non-negative with a Confirmatory Test using an EBT that has the ability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device. Any Confirmatory Tests at or in excess of 0.04% blood alcohol content will be considered a Positive Test Result (Alcohol). If a Confirmatory Test shows a blood alcohol content at or above 0.02% but below 0.04%, the Donor will be suspended from safety-sensitive functions for at least twenty-four (24) hours following administration of the test. A Confirmatory Test at or above 0.02% but below neither 0.04% will not be considered either a Negative Test Result nor a Positive Test Result (Alcohol).
- 2. Before a Donor's test result will be confirmed as a Positive Test Result (Alcohol), the Donor will be given the opportunity to speak with Turner's MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result (Alcohol). If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result (Alcohol) will not be reported to Turner until the Confirmatory Test has been completed and the MRO has consulted with the Donor regarding any legitimate medical explanations. Since the Policy is first and foremost



concerned with safety, the Donor whose results are pending will not be allowed on-site until this process is complete.

- 3. A Positive Test Result (Alcohol) shall mean alcohol levels are officially recognized as demonstrating alcohol intoxication at or in excess of 0.04% blood alcohol content. Any Turner Employee or Other Worker who tests positive for alcohol, and who believes the test results are incorrect, may request a retest of the original specimen of saliva at his/her own cost within twenty-four (24) hours. An equally qualified laboratory shall perform the retest. If the retest is negative, a third test shall be completed by a third laboratory to confirm or deny the previous test results. A toxicologist and MRO will review all data for a final determination. If it is determined that the initial confirmation screen was incorrect, the Donor shall be allowed to resume work.
- 4. If the Confirmatory Test or retest for alcohol is negative, Turner shall pay Turner Employee for any lost time that may have occurred any reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the Other Worker.
- 5. Turner Employees or Other Workers who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Positive Test Result, may only be returned to work if certain criteria are met. In all cases, there is no guarantee of re-employment.

Cost of Testing

Turner will pay the cost of the initial screen and Confirmatory Test for testing Turner Employees under this Policy. The employers of Other Workers are responsible for the cost of screening and confirmation required under this Policy, to include random testing. Any Donor who tests positive and believes that the initial screen test results are incorrect may request a retest at his or her own cost.

Refusal to Consent or Submit to/Report for Test When Directed

Any Turner Employee who refuses to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed from the Turner Project or Turner Facility and will be terminated, with no possibility or reemployment. Other Workers who refuse to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed from the Turner Project or Turner Facility, will further be barred from any subsequent work on Turner Projects or at Turner Facilities, and their Employer will be notified.

Prescription Drugs

Reporting to and being at work under the influence of prescribed or over-the-counter drugs, where such use prevents a Turner Employee or Other Worker from performing his or her essential job functions, or poses a safety risk to him or her and/or other Turner Employees or Other Workers



property, or which has the potential to cause an Accident/Incident, is prohibited. Turner Employees or Other Workers taking a prescription or over-the-counter drug are personally responsible for confirming with their physicians that they may safely perform any job duties while taking such items. Turner Employees or Other Workers taking a legal substance that could impair their safe work <u>must</u> advise their immediate supervisor.

Types of Testing

To the extent consistent with applicable federal, state and local laws, a Turner Employee or Other Worker may be required to undergo a screening test for the use of illegal and non-prescription drugs, alcohol, or other substances under any of the following (or other) circumstances which may be determined by Turner management under this Policy:

- 1. Pre-employment After a confidential offer of employment or prior to admission to a Turner Project. All potential Turner Employees will be tested after a conditional offer of employment but prior to the employment commencing. Potential Turner Employees who obtain a Positive Test Result will not be permitted to work on Turner Projects, at Turner Facilities, or otherwise engage in Turner business. The conditional offer of employment will be rescinded and such potential Turner Employees will not subsequently be considered for any other Turner employment opportunities. If a former Turner Employee returns to employment with Turner following an absence longer than one (1) year, Turner will retest such Turner Employee with pre-employment testing prior to the re-employment commencing (former Turner Employees who are re-employed following a violation of this Policy and rehabilitation, however will be tested as outlined on page 12 in "Re-Employment" Testing). All Other Workers will be tested by their employer(s) prior to beginning any work on a Turner Project, at a Turner Facility, or working on or otherwise engaging in Turner business. However, during orientation/training, Turner may accept, from Other Workers, substance abuse testing cards, badges, or proof of Negative Testing Results from the last twelve (12) months provided by the respective Other Worker's employer or trade union. Turner reserves the right to require retesting if there is no proof of Negative Test Results within the last twelve (12) months.
- Post-Accident/Incident When a Turner Employee or Other Worker is involved in an Accident/Incident (as defined above in "Applicable Definitions"). If the Turner Employee or Other Worker is treated in a medical facility which fails to collect a specimen for testing, Turner may require the Turner Employee or Other Worker to be tested within thirty-two (32) hours of the event. A Positive Test Result may result in the denial of Workers' Compensation for an injury resulting from the Accident/Incident.
- 3. Reasonable Suspicion When there is reasonable suspicion, satisfactory to Turner management, to believe that a Turner Employee or Other Worker is using, possessing, distributing, dispensing, manufacturing, or is under the influence of illegal substances or abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner facility, or while working on or otherwise engaged I Turner business, or when there is reasonable suspicion satisfactory to Turner management to believe that the Turner Employee or Other Worker has reported to work under the influence of illegal drugs, unauthorized controlled substances, alcohol or other intoxicants which could affect the safety of others or of property.



- 4. Medical Examination As part of any medical examination or fitness for duty examination provided or required by Turner.
- 5. Re-Employment Upon re-employment or re-instatement to a Turner Project, at a Turner Facility, or to work on Turner business following a violation of this Policy and rehabilitation as outlined on page 18 in "Possible Re-Employment with Turner." Further testing will occur without prior notice for a period of eighteen (18) months following re-employment or re-instatement.
- 6. Annual When Turner requires screening on a yearly basis.
- 7. As needed As required by Turner/Owner Agreements, other applicable agreements, contractual obligation or government regulation.
- 8. Random Turner will conduct Random Testing as follows:
 - Random Testing will be conducted at a predetermined frequency, to be reasonably spaced throughout the calendar year. At least five percent (5%) of Turner Employee will undergo Random Testing on an annual basis. Unless subject to an acceptable or negotiated Alternative Program, all Turner Projects and/or Turner Facilities will be subject to Random Testing. Included in the testing pools will be Turner Employees and Other Workers on any Covered Site. All random selections and test processing will be administered by the Third Party Provider(s) selected by Turner. However, when applicable, the terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested will control. Costs associated with random testing will be the responsibility of each respective contractor.
 - Covered Sites will be assigned to testing pools distinguished by job-type criteria agreed upon by Turner management. A random number generator will be used to generate a set of random numbers corresponding to specific Covered Sites. When a selection occurs, Turner Projects or Turner Facilities that are available for selection will be put on a run list. At the time of selection, the Third Party Provider's computerized program will randomly assign generated numbers to Turner Projects or Turner Facilities in each group or pool. The selected lists will be managed by the Third Party Provider and the Substance Abuse Administrator. All Turner Projects and Turner Facilities will be eligible each time random testing occurs, regardless of having been selected previously, unless state or local laws or regulations provide for a different frequency of testing.
 - The Third Party Provider will schedule an on-site collector to be dispatched to the selected Covered Site on the arranged date and time, unannounced to the personnel at the Covered Site selected. All available Turner Employees or Other Workers on the selected Covered Site are subject to testing at the date and time of the scheduled random testing. As stated above, the percentage of individuals selected for testing may depend on the requirements of the particular testing pool from which the selection is generated, or on any Alternative Programs or state or federal contracts governing the Covered Site. Any Turner Employee or Other Worker not present at the selected Covered Site for any legitimate business reason (e.g., vacation, illness, business travel, etc.) will be considered unavailable for testing. A Turner Employee or Other Worker visiting a selected Covered Site for any reason at the time the random testing is scheduled, will be considered eligible and subject to Random Testing.

Company-Provided Education and Training



General Provisions

In conjunction with its commitment to a drug free workplace, Turner will provide education or ensure such education is provided to all Turner Employees, Other Workers and their respective employers where required by law. This education will cover substance abuse issues and is intended to help reduce the risk of Accidents/Incidents caused by drugs and/or alcohol. Supervisors will receive additional training which will help them identify and help employees who show signs of alcohol or drug use.

Education for All Turner Employees and Other Workers

Prior to working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, all Turner Employees and Other Workers will receive at least one (1) hour of educational awareness training. This training will focus on problems in the workplace and preventing workplace Accidents/Incidents caused by substance abuse.

Additional Training for Supervisors

Prior to working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, all Turner Employees or Other Workers who are in a supervisory or management position will receive at least one (1) hour of <u>additional</u> training. This additional training will focus on identifying substance abuse problems in the workplace and how to handle such problems in and appropriate manner.

Penalties

Violation of any of the rules associated with this Policy may result in disciplinary action up to and including termination of employment for Turner Employees or the future inability to work on Turner Projects or Turner Business for Other Workers. The following penalties exist for violation of this Policy:

Violation	First Offense	Second Offense
Possession of illegal / illicit drugs or paraphernalia	Turner Employees- Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re- employment. Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects of at Turner Facilities and Employer notified.	N/A. N/A.
Distribution of drugs/paraphernalia	Turner Employees-Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re- employment.	N/A.



	Other Workers – Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified.	N/A.
Use of Illegal Drugs or Alcohol Abuse (Upon discovery via actions or testing)	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re- employment testing. Clean screen required prior to re-employment and continued testing over the eighteen (18) months following re-instatement.	Termination, with no possibility of re- employment.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	N/A.
Use of Illegal Drugs or Alcohol Abuse (Per voluntary request by Turner Employee for help)	Turner Employee-Immediate removal from Turner Project or Turner Facility. Re- instatement upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to returning to work and continued testing over the eighteen (18) months following the return to work.	Termination with no possibility of re- employment.
	Other Workers-Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	N/A.
Under the Influence of Drugs or Alcohol at Work	Turner Employee-Immediate removal from Turner Project or Tuner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-	Termination, with no possibility of re- employment.



	employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following re-instatement.	
	Other Workers-Immediate removal from Turner Project or Turner Facility, Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers must approach their respective employers.	N/A.
Failure to Report Use of Over the Counter Prescription Drugs	Turner Employees-Discipline, up to and including termination, with no possibility or re-employment.	Termination, with no possibility of re- employment.
Which Affect Performance	Other Workers-Discipline, up to and including being barred from any subsequent work on Turner Projects or at Turner Facilities, and Employer notified.	Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified.
Positive Test Following Accident/Incident	Turner Employee-Immediate removal from Tuner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re- employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following re-instatement. May be ineligible for Worker's Compensation.	Termination with no possibility of re- employment.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	N/A.



Refusal to Consent or Submit to/Report for Test When Directed	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination, with no possibility of re- employment.	N/A.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at a Turner Facility and Employer notified.	N/A.

Notwithstanding the stated penalties, Turner reserves the right to discipline, up to and including termination, any Turner Employee and/or to ban Other Workers from any Turner Project and/or Turner Facility.

Notification of Authorities

In addition to all other remedies or penalties, Turner may report information concerning possession or distribution of any illegal drugs or unauthorized controlled substances to law enforcement officials will cooperate fully in the prosecution and/or conviction of any violators of the law.

Employees Convicted of Drug Offenses

Turner Employees or Other Workers must, as a condition of continued employment, notify their "Operations Manager" or employer, respectively, of any conviction of a criminal drug offense within five (5) days after said conviction. IF an employer is notified, then that employer shall notify the Turner Operations Manager immediately. If the Turner Employee or Other Worker convicted of the criminal drug offense is working on federal contract or grant, Turner will notify the Federal Contracting Agency of criminal drug convictions within thirty (30) days after Turner has received notice. Any Turner Employee or Other Worker so convicted must satisfactorily complete a Turner approved drug rehabilitation program and agree to periodic testing any time thereafter, before Re-Employment or a lift on a ban from working the federal contract will be considered. Failure to report such a conviction and/or participate in a drug rehabilitation program may result in disciplinary action, up to and including, suspension, barring, and/or termination.

Employee Assistance Program: Rehabilitation and Treatment

Turner is committed to helping Turner Employees who seek help from Turner for substance or alcohol abuse problems prior to any drug/alcohol testing or Accidents/Incidents.

Any Turner Employee who feels that he or she has a drug or alcohol related problem is encouraged to seek professional help. If a Turner Employee voluntarily notifies a supervisor or manager before testing that he or she may have a drug or alcohol problem, Turner will counsel the Turner Employee



voluntarily seeking such help. Such person will be provided with a list of employee assistance vendors. Any such action by a Turner Employee shall be kept strictly confidential.

In certain circumstances, Turner Employees who have violated this Policy may also be referred to Turner's Employee Assistance Program ("EAP") and be eligible for a leave of absence and reinstatement (for those Turner Employees who have voluntary requested help from Turner for the use of illegal drugs or alcohol abuse). Further details regarding the EAP may be found in Turner's Summary Plan Description ("SPD") or by visiting <u>www.turnerbenefits.com</u> and clicking on "Plan Details." In addition, a Turner Employee may contact the EAP directly by dialing 1-877-887-6266 and following the instructions.

Please refer to the Penalties Chart on pages 14-16 for the consequences and re-instatement and reemployment rights for various drug and alcohol violations.

If treatment necessitates a leave of absence, accrued vacation, or sick leave time, an unpaid leave of absence may be used, pursuant to the limitations of those respective policies.

Other Workers are not eligible for Turner's EAP. Such a benefit may be provided by Other Worker's respective employers.

Possible Re-Employment with Turner

Employment with Turner is an at-will employment relationship. There is never a guarantee of reemployment with Turner.

Turner Employees who are terminated from working on a Turner Project or at Turner Facility following certain Violations, including Use of Illegal Drugs or Alcohol (Upon discovery via actions or testing), Use of Illegal Drugs or Alcohol (Per voluntary request by Turner for help), Under the Influence of Drugs or Alcohol at Work, and Positive Test Following Accident/Incident may be returned to work only if following criteria are met:

- The Turner Employee works with an EAP counselor as detailed above and/or successfully completes and provides proof of completing a Turner Certified/Recognized Substance Abuse Rehabilitation Program at their own expense or at the expense of an Alternative Program Administrator if such Alternative program has an accepted program in place;
- The Turner Employee submits a written request to the Business Unit EH&S Director and Loss Control for approval prior to his/her return to work. A copy of the certificate of completion of the program must be attached;
- The Turner Employee submits to a re-employment drug test which has a Negative Test Result; and
- The Turner Employee consents and submits to additional testing without prior notice for a period of eighteen (18) months following re-employment or re-instatement, with all tests having a Negative Test Result.



Summary

Turner reserves the right to add or change this Program, as deemed necessary, to maintain the safety of the project personnel, property and environment.

The Project Safety Program is designed to proactively manage, control and eliminate incidents throughout the construction process.

This Program is to be used in conjunction with the Turner Corporation Subcontractor Substance Abuse Program as well as the Subcontractor's Safety Program(s). The more stringent element of each program shall supersede the other and will be followed unless otherwise directed by Turner.

Turner Construction Company expects full cooperation of all contractors, regardless of tier, in monitoring, supervising, and enforcing the Project Safety Program.

It is mandatory that all contractors, regardless of tier, engaged in work on this project, comply with Turner's Project Safety Program, as well as all Federal, State, and local safety codes and regulations.

Each subcontractor/contractor is responsible to follow the Turner Corporation Subcontractor Substance Abuse Program.

All contractors are responsible for training their employees in the recognition of hazards which could result in illness or injury. Training must include procedures for proper elimination or control of said unsafe conditions.

Good safety practices carried out on this project will produce a safe and healthful workplace for all employees.

Neglecting safety is neglecting job responsibilities.



Subcontractor Agreement & Signature

We are in receipt of, and will cooperate and comply with all elements contained within, Turner's Project Safety Program.

A copy of this Program will be provided and discussed with all project personnel we assign to this project, prior to working on the project.

ompany Name:
ompany Representative's Name (please print):
ompany Representative's Signature:
ompany Representative's Title:
oday's Date:



Turner Construction Company

Contractor Controlled Insurance Program (CCIP)

UK Student Center Dining Expansion Lexington, KY

CCIP Insurance Manual

Adherence to the Provisions of this Manual is a Requirement of Your Contract

This Manual Dated: December 19, 2019

TURNER CONTRACTOR CONTROLLED INSURANCE PROGRAM

Insurance Manual

UK Student Center Dining Expansion

Project Location:

Lexington, KY

Turner Business Unit: Cincinnati 250 West Court St., Cincinnati, OH 45202 Telephone: 513.721.4224

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Section

CCIP Overview

Welcome to the Turner Contractor Controlled Insurance Program (CCIP). Turner Construction Company (Turner) has purchased the coverage and is therefore the Sponsor of the CCIP. A CCIP is a coordinated insurance program where Turner provides specified coverage for enrolled contractors performing work at the project site. Turner Surety and Insurance Brokerage (TSIB) is the administrator for the CCIP.

About This Insurance Manual

This insurance manual (Manual) provides information about bidding procedures, contact information, coverages provided by the CCIP, insurance coverage required of enrolled and excluded Subcontractors, the CCIP enrollment process and claim procedures. The manual also provides information about participant responsibilities and obligations.

This Manual:

- Generally describes the structure of the CCIP
- Provides answers to basic questions about the CCIP
- Identifies responsibilities and obligations of the various parties involved in the Project
- Provides a basic description of CCIP coverage (CCIP coverage is determined exclusively by the terms of the CCIP insurance policies)
- Sets forth insurance requirements for project Subcontractors
- Sets forth enrollment requirements
- Describes audit and administrative procedures

This Manual does not:

- Provide complete information about coverages and policy exclusions
- Provide coverage interpretations
- Provide answers to specific claims questions

Refer questions about the CCIP, its coverage or administration to the contact provided in the Project Directory in Section 2.

Advisory

The information in this Manual is intended to outline the CCIP. CCIP coverage is provided as set forth in the CCIP insurance policies. If any conflict exists between this Manual and the CCIP insurance policies, the CCIP insurance policies will govern.

Notify Your Agent/Broker

It is important that you immediately notify your insurance agent(s) or broker(s) about your participation in the CCIP so they can consider your exposures and arrange your coverage in consideration of the CCIP. You can provide them a copy of this Manual. Your insurance representative should review the scope and limitations of the CCIP coverage since CCIP coverage only applies to work performed at the project site, after the inception date of your enrollment into this program.

Most liability policies include an exclusion for work covered by a controlled insurance program (CIP) or CCIP (often referred to as a "Wrap" exclusion). It is important for you and your agent or broker to fully understand the scope of the CIP exclusion on your policy and how it may apply to your operations or activities. You should ask your insurance agent or broker to endorse your liability coverage to be excess and contingent over the CCIP coverage provided by this Program. Any additional coverage you may wish to purchase will be at your option and expense.

Bid Instructions

You are required to prepare your bid to **exclude** the cost of your insurance for onsite workers' compensation, employer's liability, and primary and excess general liability. You must calculate the cost of insurance to be removed from your bid based on your current insurance rates at the time of bid. Turner may modify bidding and insurance cost identification procedures as necessary based on the specific project requirements.

Section

2

CCIP Project Directory

CCIP Administration

SUBCONTRACTOR CONTACT:

Turner Surety and Insurance Brokerage Wrap-Up Services35 Nutmeg Drive, Suite 300Trumbull, CT 06611Service Center Wrap AdministratorDirect: 203.945.1765Brandon McLawhonE-Mail: rmclawhon@tsibinc.com

E-Mail: mclawnon@tsibinc.

REGIONAL PROGRAM MANAGER:

Turner Surety and Insurance Brokerage Melissa Jarrett

Direct: 256.665.1300 E-Mail: mjarrett@tsibinc.com

TURNER CONSTRUCTION COMPAN PROJECT TEAM	<u> </u>
Project Manager –	Telephone: 859.509.2398
Ben Noble	Direct: PM's Cell #
	E-Mail: bnoble@tcco.com
SITE SAFETY MANAGER -	Telephone: (786) 390-6434
Mathew Cardani	Direct: Safety's Cell #
	E-Mail: mcardani@tcco.com
PROJECT SUPERINTENDENT -	Telephone: (513) 904-7631
Austin Stivers	Direct: Superintendent's Cell #
	E-Mail: astivers@tcco.com
PROJECT ENGINEER -	Telephone: (513) 316-3845
Stephanie Sharp	Direct: Project Engineer Cell #
	E-Mail: stsharp@tcco.com
CLAIM COORDINATOR -	Telephone : (513) 404-1060
Emily Viltrakis	Direct: Claim's cell #
,	E-Mail: email
CCIP COORDINATOR-	Telephone: phone
CCIP coordinator	Direct: CCIP Coord's cell #
	E-Mail: eviltrakis@tcco.com

Section

3

Project Definitions

The following list includes key CCIP definitions.

CCIP:	A "CCIP," or Contractor Controlled Insurance Program, is a coordinated insurance program providing certain coverages, as defined herein, for Turner and Enrolled Parties performing Work at the Project Site.
CCIP Coverage:	Workers' compensation and employer's liability insurance, commercial general liability insurance, and excess liability insurance as detailed in the CCIP insurance policies for the benefit of Turner and Enrolled Parties performing Work at the Project Site.
CCIP Administrator:	The party that provides administration services for the CCIP. Turner Surety and Insurance Brokerage ("TSIB") is the CCIP Administrator.
CCIP INSURER:	The insurance company(s) named on a policy or certificate of insurance. Liberty Mutual is the CCIP Insurer for workers' compensation, employer's liability and primary general liability.
CCIP Sponsor:	The party that purchases the CCIP. Turner Construction Company ("Turner" or "Turner Construction") is the sponsor for the CCIP.
CALIFORNIA AFFIRMATION AUDIT	The CA Workers Compensation Insurance Rating Bureau (WCIRB) routinely audits insurers' use of limiting and restricting endorsements to ensure compliance with CA regulations. Title 10 of the California Code of Regulations requires insurers to obtain written documentation from the policyholder confirming that other coverage is in place (or is lawfully uninsured/self-insured) for the employees, operations, and locations excluded by a limiting and restricting endorsement. The CA WCIRB completes affirmation audits to ensure compliance with Title 10.
California Limiting and Restricting Endorsements	A limiting and restricting endorsement is defined under the California Code as "an endorsement that excludes from coverage some portion of workers' compensation liability for which the employer is required to secure payment pursuant to the Labor Code." They include officer, operations, and location exclusions. For Enrolled contractors, this applies to offsite operations.
CONTRACTOR PORTAL:	The website used by all contractors to manage their participation in the CIP.
Eligible Parties/Eligible Subcontractor:	Parties performing labor or services at the Project Site who are not Excluded Parties and are eligible to enroll in the CCIP.

PROJECT DEFINITIONS

ENROLLED PARTIES/ENROLLED SUBCONTRACTOR OR SUB-SUBCONTRACTOR:

enrollment.

EXCLUDED PARTIES/EXCLUDED At the discretion of Turner, or subject to state regulations, the following parties are SUBCONTRACTOR OR SUBexcluded from (not eligible for) enrollment in the CCIP: SUBCONTRACTOR: (1) Hazardous materials remediation, removal and/or transport companies and their consultants; (2) Any Subcontractor performing structural demolition which is the moving or relocating of load bearing beams, columns, or walls; (3) Architects, engineers, soil testing engineers, surveyors, and their consultants; (4) Vendors, suppliers, fabricators, material dealers, truckers, haulers, drivers and others who merely transport, pickup, deliver, or carry materials, personnel, parts or equipment or any other items or persons to or from the Project Site; (5) Subcontractors, and any of their respective Sub-subcontractors, who do not perform any actual labor on the Project Site; (6) Mobile crane owners and/or operators whose sole scope of work involves the lifting or placement of materials or equipment for other Contractors/Subcontractors of any tier; (7) Building implosion Subcontractors of any tier, or Subcontractors of any tier involved with blasting or the use of explosives; (8) Window washing systems (davit type systems or equivalent). (9) Any Subcontractor of any tier involved with Exterior Insulation Finishing Systems (EIFS) (10) Any other Subcontractor of any tier which Turner, at its sole discretion (and as permitted by law), chooses to exclude from enrollment. (11) In NYC, Local 3 Electricians **PROJECT SITE:** The project location (designated in this Manual and more fully identified in the Subcontract Agreement) and adjacent or nearby areas as defined in the project documents where incidental operations are performed, excluding permanent locations of any insured party. Includes only those persons, firms, joint venture entities, corporations, or other parties that SUBCONTRACTOR: enter into a direct contractual agreement with Turner to perform Work at the Project Site. SUB-SUBCONTRACTOR: Includes only those persons, firms, joint venture entities, corporations, or other parties of any tier that enter into a Sub-subcontract Agreement with a Subcontractor or Subsubcontractor of any tier to perform Work at the Project Site. A written agreement between Turner Construction and the Subcontractor. SUBCONTRACT / SUBCONTRACT AGREEMENT: SUB-SUBCONTRACT / SUB-A written agreement between Subcontractors of any tier. SUBCONTRACT AGREEMENT: SUBCONTRACTOR AND SUB-The cost, at current corporate insurance rates, to provide insurance required by the SUBCONTRACTOR INSURANCE COST (I.E., Subcontract Agreement or Sub-subcontractor Agreement if the CCIP was not provided. INSURANCE COST):

Those Eligible Parties or Eligible Subcontractors who have submitted all necessary

enrollment information as detailed in Section 6, have been accepted and enrolled into the CCIP and have received a Welcome Letter and Certificate of Insurance as evidence of

PROJECT DEFINITIONS Verified Insurance Cost:	The Subcontractor or Sub-subcontractors Insurance Cost that has been verified by the CCIP Administrator.
VERIFIED BLENDED PAYROLL RATE:	The composite rate determined by dividing an Enrolled Party's total Verified Insurance Cost by the Enrolled Party's estimated payroll multiplied by 100. The Verified Blended Payroll Rate is expressed as per \$100 of payroll. The Verified Blended Payroll Rate formula equals (Verified Insurance Cost / Estimated Payroll) * 100.
FINAL INSURANCE COST ADJUSTMENT:	An adjustment to the subcontract price that Turner, at their sole discretion, can make in the event of an underestimate of payroll.
Work:	Operations or activities, as fully described in the Subcontract Agreement or Sub- subcontractor Agreement, performed at the Project Site.
Work Description:	This project includes the expansion of the newly constructed Student Center. It includes a three story addition with the primary use being for commercial dining and food services.
Liberty Mutual Health Care Network (HCN)	Turner provides medical care for work related injuries for enrolled subcontractors through the Liberty Health Care Network (HCN) for the State of Texas and California. Documentation regarding the Liberty HCN is available upon written request or at the Turner jobsite.
	State law requires Turner to provide covered employees with a notice of network requirements and obtain a signed acknowledgement form from each covered employee at the following times: 1) within 3 days of hiring a new employee and 2) at the time Turner receives notification of an injury. All materials are available in English, Spanish, and Vietnamese. Other languages are available upon request.

Section

4

CCIP Insurance Coverage

This Section provides a brief description of coverage provided by the CCIP. Participants should refer to the actual CCIP insurance policies for details about coverage, exclusions and limitations.

Disclaimer

Neither Turner nor TSIB assumes any obligation to provide insurance other than that specified in this Manual and the CCIP insurance policies. Turner's arranging of CCIP coverages shall in no way relieve or limit, or be construed to relieve or limit, Subcontractor or any of its Sub-subcontractors of any responsibility, liability, or obligation imposed by the Subcontract Agreement or by law, including without limitation any indemnification obligations which Subcontractor or any of its Sub-subcontracted entity thereunder. Turner reserves the right at its option, without obligation to do so, to arrange other insurance coverage of various types and limits provided that such coverage is not less than that specified in the Subcontract Agreement.

Overview

As the Contractor Controlled Insurance Program (CCIP) sponsor, Turner has arranged with TSIB for this Project to be insured under Turner's CCIP. Eligible Parties performing labor or services at the Project Site are eligible to enroll in the CCIP unless they are an Excluded Party or a Party No Longer Covered by the CCIP. The CCIP provides workers' compensation and employer's liability insurance, commercial general liability insurance, and excess liability insurance for the benefit of Enrolled Parties, as summarily described below, in connection with the performance of the Work (CCIP Coverage). CCIP Coverage shall cover only Enrolled Parties. Enrolled Parties are Turner, Eligible Subcontractors, and Eligible Sub-subcontractors of any tier and such other persons or entities as Turner at its sole discretion may designate who enroll in the CCIP and are provided a Welcome Letter and Certificate of Insurance as evidence of enrollment.

Excluded Parties and Parties No Longer Covered by the CCIP

Excluded Parties and Parties No Longer Covered by the CCIP are not granted any insurance coverage under the CCIP. **Excluded Parties and Parties No Longer Covered by the CCIP** must meet the insurance requirements in the Subcontract Agreement and outlined in Section 5, and provide evidence of coverage to Turner and TSIB.

Excluded Parties and Parties No Longer Covered by the CCIP shall require each of its Sub-subcontractors to obtain and maintain the insurance coverage specified in the Sub-Subcontract Agreement and outlined in Section 5. <u>Excluded</u> <u>Contractors are to confirm there are no Wrap-Up Exclusions on their policies and must provide a copy of any Wrap-Up Exclusion endorsements for review with the COI.</u>

Evidence of CCIP Coverage

The CCIP Administrator will provide a Certificate of Insurance evidencing CCIP Coverage to include workers' compensation, general liability, and excess liability insurance to each Enrolled Party. Each Enrolled Party will be included as a named insured to the CCIP general liability insurance policy and excess liability policies. Liberty Mutual will furnish other documents including claim forms, and posting notices to each Enrolled Party. A copy of the primary General Liability policy can be obtained upon Subcontractor's written request to the CCIP Administrator. Copies of Excess/Umbrella policies are

not available.

Description of CCIP Coverage

The summary descriptions of the CCIP Coverage in this Manual are not intended to alter or amend the actual CCIP Coverage. Rather, the CCIP Coverage and exclusions summarized in this Manual are set forth in full detail in their respective insurance policy forms. In the event any provision of this Manual conflicts with the CCIP insurance policies, the provisions of the actual CCIP insurance policies shall govern.

CCIP Coverage shall apply only to Enrolled Parties and only for those operations or activities performed at the Project Site in connection with the Work.

CCIP Coverage Summary

Turner will furnish the following CCIP Coverage to Enrolled Parties performing Work at the Project Site.

Workers' Compensation and Employer's Liability

A separate workers' compensation policy will be issued to each Enrolled Party.

Coverage:		<u>Limits:</u>
Part One -	Workers' Compensation	Statutory Limit
		Annual Limits
Part Two -		Per Enrolled Party
	Bodily Injury by Accident, each accident	\$2,000,000
	Bodily Injury by Disease, each employee	\$2,000,000
	Bodily Injury by Disease, policy limit	\$2,000,000

Does not cover the offsite operations of any Enrolled Party.

Primary insurance for all covered occurrences at the Project Site.

How to Obtain a Copy of Your Workers' Compensation Policy

Approximately sixty (60) days after you enroll and receive your Welcome Letter and Certificate of Insurance, a copy of your workers' compensation policy and or endorsement to the policy, will be uploaded into the Contractor Portal. Please refer to Section 8 (Contractor Portal Instructions) for how to login to the Portal. If after ninety (90) days your policy is not posted, or if you have problems navigating through the Portal, please contact the Wrap Administrator listed in the CCIP Project Directory in Section 2 for assistance.

Commercial General Liability

A single general liability policy will be issued for all Enrolled Parties. Each Enrolled Party will be a named insured on the CCIP general liability policy.

Coverage: Third party bodily injury, property damage liability and personal and advertising liability per the policy terms, conditions and exclusions.

	Limits of Liability
Primary Policy:	Shared by All Enrolled Parties
General Aggregate Per Project	\$10,000,000
Completed Operations Aggregate Per Project	\$10,000,000
Each Occurrence Limit	\$5,000,000
Fire Damage Legal Liability (any one fire)	\$100,000
Medical Expense Limit (any one person)	\$5,000

<u>Terms</u>

- General liability insurance issued on an Insurance Services Office (ISO) form or its equivalent.
- Provides primary coverage for all covered occurrences at the Project Site.
- Does not provide coverage to any insured party, vendor, supplier, off-site fabricator, material dealer or other party for any product manufactured, assembled or otherwise worked upon away from the Project Site.
- Does not cover offsite operations or activities of any Enrolled Party.
- Completed Operations coverage is extended with a single non-reinstated aggregate limit for the period beginning from the earliest occurrence of (i) when the Project is put to its intended use, (ii) project completion, or (iii) CCIP policy termination, and ending after the earlier occurrence of (a) ten (10) years or (b) the expiration of the applicable statute of repose established per the civil code or statute of the state where the Project is located. Consult your Insurance Professional and/or legal counsel for additional information regarding the statute of repose for the state where the Project is located.

Excess Liability

A tower of Excess Liability coverage will be issued, covering all Enrolled Parties.

	Limits of Liability
	Shared by All Enrolled Parties
Each Occurrence Limit (Combined Single Limit)	\$100,000,000
Completed Operations Aggregate (Shared limit with other Projects)	\$100,000,000
Annual General Aggregate Limit (Shared limit with other Projects)	\$100,000,000

Coverage NOT Provided by the CCIP

The CCIP does not provide all coverage that may be needed by an Enrolled Party for their Work at the Project Site. Notably, the CCIP does not provide automobile coverage, professional liability, pollution liability or coverage for any Enrolled Party's rented, owned, leased or borrowed equipment or materials not included for inclusion in the project. Enrolled Parties should consult with their agent(s) or broker(s) to arrange any coverage that may be needed in addition to the CCIP.

Section

5

Subcontractor Insurance Requirements

Subcontractors of any tier are required to provide and maintain coverage to protect against losses that occur away from the Project Site or that are otherwise not covered under the CCIP. All Certificates of Insurance must be submitted to the CCIP Administrator prior to start of Work at the Project Site.

The required coverage must protect the Subcontractor, Turner, the Project Owner, and all others as required by the Subcontract Agreement. Liability may arise from the Subcontractor of any tier's operations performed away from the Project Site, from operations performed by Excluded Parties or Parties No Longer Covered by the CCIP or from operations or activities not covered by the CCIP. Insurance coverage must be maintained for the duration defined in the Subcontract Agreement.

Enrolled Parties

Enrolled Parties are to provide evidence of workers' compensation, general liability and excess or umbrella liability insurance for its offsite activities, automobile liability (both onsite and offsite activity), and any other insurance required by the insurance specifications in the Subcontract Agreement or Sub-subcontractor Agreement. See Section 3 for the definition of Enrolled Parties.

Excluded Parties and Parties No Longer Covered by the CCIP

Excluded Parties and Parties No Longer Covered by the CCIP must provide evidence of workers' compensation, general liability, excess/umbrella liability, automobile liability, and any other insurance as per the insurance specifications in the Subcontract Agreement for all activities both on and off the Project Site. See Section 3 for the definition of Excluded Parties and Parties No Longer Covered by the CCIP.

Proof of Required Coverage

Subcontractors shall provide an acceptable Certificate of Insurance and copies of Additional Insured endorsements as proof of compliance with the insurance requirements to the CCIP Administrator prior to start of Work at the Project Site and within three (3) days of any renewal, change or replacement of coverage.

Subcontractors are responsible for collecting, monitoring and retaining copies of their Sub-subcontractors' Certificates of Insurance. Turner, at its sole discretion, may request copies of Sub-subcontractor's Certificates of Insurance and/or Additional Insured endorsements to ensure compliance with the requirements of this Manual. Turner reserves the right to disapprove the use of Subcontractors or Sub-subcontractors unable to meet the insurance requirements or who do not meet other Turner policy requirements.

Sample Certificate of Insurance

A sample of an acceptable Certificate of Insurance that includes the requirements for waiver of subrogation, primary and noncontributory language and additional insured status is provided in Section 9 of this CCIP Insurance Manual.

Insurance Requirements

Subcontractor and their Sub-subcontractors shall obtain and maintain, and shall require each of its Sub-subcontractors to obtain and maintain, the insurance coverage specified in this Section and in each Subcontract Agreement in a form and from insurance companies reasonably acceptable to Turner. The insurance limits may be provided through a

combination of primary and excess policies, including the umbrella form of policy. Each policy required under this Section, except for workers' compensation and professional liability, shall name The Turner Corporation, Turner Construction Company, Owner, their respective officers, agents and employees, and any additional entities as Turner may request as additional insureds. Coverage is to be afforded on a primary and non-contributory basis with respect to any other insurance available to the additional insured. The additional insured endorsement utilized for the General Liability policy must provide coverage as broad as that available under the ISO CG 20 10 07 04 and CG 20 37 07 04 or their equivalent endorsement(s). The insurance obtained by Subcontractor and any Sub-subcontractor shall not contain any wrap-up exclusion or wrap-up excess endorsement that would bar or limit available coverage where the Subcontractor or Sub-subcontractor away from the CCIP, or in instances where liability arises out of work performed by an enrolled Subcontractor shall be primary to, and not contribute with, any CCIP insurance in any circumstance where the Named Insured is not enrolled in the CCIP or in instances where liability arises out of work performed by an enrolled Subcontractor away from the CCIP jobsite (i.e., off-site activities).

In the event that the law of the state in which the project is located (or other applicable law) limits the indemnity obligations of the Subcontractor, then the indemnity obligations of the Subcontractor shall be enforced to the fullest extent permitted by applicable law, and this Manual shall be read to conform to such law.

Blanket Certificate of Insurance and Blanket Additional Insured Endorsement

A so-called blanket Certificate of Insurance is a certificate that applies to all work versus a Certificate of Insurance that refers to a specific project. A blanket additional insured endorsement does not identify a specific additional insured but instead provides coverage to various additional insureds as detailed in the endorsement language. A blanket Certificate of Insurance and blanket additional insured endorsement conforming to Turner's policies may be used for this project. Questions regarding Turner's allowance of blanket Certificates of Insurance and blanket endorsements should be directed to Turner's Procurement Agent for the project.

Waiver of Claim / Waiver of Subrogation. Where permitted by law, Subcontractor hereby waives all rights of recovery against Turner, Owner, the other additional insured parties, the CCIP Administrator, their respective officers, agents, or employees, and any other contractor, Subcontractor, or Sub-subcontractor performing Work or rendering services on behalf of Turner in connection with the planning, development and construction of the Project because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason. Where permitted by law, Subcontractor shall also require that all Subcontractor's insurance coverage related to the Work include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against the same parties referenced immediately above in this Section. Subcontractor shall require similar written express waivers and insurance clauses from each of its Sub-subcontractors. A waiver of claim / waiver of subrogation (as the case may be) shall be effective even if the party from which the claim against has been waived (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

Insurance Requirements for Activities or Operations Not Insured Under the CCIP

Refer to your Contract/Subcontract Agreement for limits and coverages.

Required Insurance Summary

Workers' Compensation and Employer's Liability

- Enrolled Parties will provide evidence of workers' compensation insurance coverage for all activities away from the Project Site.
- Excluded Parties and Parties No Longer Covered by the CCIP will provide evidence of workers' compensation insurance coverage for all activities at and away from the Project Site.

		Limits of Liability
Part One -	Workers' Compensation	Statutory Limit
Part Two -	Employer's Liability	Annual Limits
	Bodily Injury by Accident, each accident	\$1,000,000
	Bodily Injury by Disease, each employee	\$1,000,000
	Bodily Injury by Disease, policy limit	\$1,000,000

CALIFORNIA PROJECTS:

The CA Workers Compensation Insurance Rating Bureau (WCIRB) routinely audits insurers' use of limiting and restricting endorsements to ensure compliance with CA regulations. Title 10 of the California Code of Regulations requires insurers to obtain written documentation from the policyholder confirming that other coverage is in place (or is lawfully uninsured/self-insured) for the employees, operations, and locations excluded by a limiting and restricting endorsement. The CA WCIRB completes affirmation audits to ensure compliance with Title 10.

A limiting and restricting endorsement is defined under the California Code as "an endorsement that excludes from coverage some portion of workers' compensation liability for which the employer is required to secure payment pursuant to the Labor Code." They include officer, operations, and location exclusions. For Enrolled contractors, this is coverage away from the project site.

In order to comply with Title 10 of the California Code, if enrolled, you must confirm existence of Workers Compensation, away from the project site by entering your current workers compensation coverage information and checking the affirmation box on the Contractor Portal. If exempt, you must also check the affirmation box to verify you are lawfully uninsured/self-insured.

Commercial General Liability/Umbrella or Excess Liability

- Enrolled Parties shall provide evidence of general liability insurance for off-site activities with Turner and other required parties named as additional insured (ISO CG 20 10 07 04 and CG 20 37 07 04 version or their equivalent) to the policy. Coverage will apply away from the Project Site.
- Excluded Parties and Parties No Longer Covered by the CCIP shall provide evidence of general liability insurance applicable to this Project Site and must name Turner and other required parties named as additional insured (ISO CG 20 10 07 04 and CG 20 37 07 04 version or their equivalent) to their policy. Coverage will apply both onsite and offsite.

The required commercial general liability insurance shall include completed operations, contractual liability insuring against the liability assumed herein, , personal injury liability, broad form property damage (including completed operations), and explosion, collapse and underground hazards, with the following minimum limits:

Combined Single Limit

Limits of Liability As stipulated in Article XXIV of the Subcontract Agreement, in the Invitation to Bid, or as otherwise instructed by Turner.

Coverage shall be equivalent to the current ISO occurrence form. The required commercial general liability/umbrella liability Insurance shall not contain any wrap-up exclusions or wrap-up excess endorsements that would bar or limit coverage in instances where the Subcontractor or Sub-subcontractor is not enrolled in the CCIP (i.e., is an Excluded Party or Party No Longer Covered by the CCIP) or where liability arises out of work performed by an Enrolled Party away from the CCIP jobsite (i.e., involving offsite activities).

Completed Operations Coverage

Refer to your Contract/Subcontract Agreement for coverage and limits.

Automobile Liability

Refer to your Contract/Subcontract Agreement for coverage and limits.

Property Insurance

The CCIP does not provide coverage for Subcontractor's or Sub-subcontractor's personal property. Subcontractors of any tier must provide their own insurance for owned, leased, rented and borrowed equipment, whether such equipment is located at a Project Site or in transit. Subcontractors of any tier are solely responsible for any loss or damage to their personal property including, without limitation, property or materials created or provided under the Subcontract Agreement or Sub-subcontract Agreement until installed at the Project Site, Subcontractor tools and equipment, scaffolding and temporary structures.

Watercraft and Aircraft Liability

The CCIP does not provide watercraft or aircraft liability insurance. The operator of any watercraft or aircraft of any kind must maintain liability insurance naming Turner, the Owner, and others as required, and the respective Subcontractor as an additional insured with primary and non-contributory wording. In addition, the limit of liability must be satisfactory to Turner. Such project-specific insurance requirements will be indicated in the Subcontract Agreement.

Professional Liability

The CCIP does not provide professional liability insurance. All professional service firms must provide professional liability insurance appropriate for their profession. Architect and engineering firms must provide insurance covering liability arising out of design errors and omissions. Professional liability insurance requirements will be indicated in the Subcontract Agreement.

Pollution Liability

The CCIP does not provide pollution liability insurance. A Subcontractor who's Work involves removal or treatment of hazardous materials will provide and maintain contractor's pollution liability insurance. Such coverage will specifically schedule the type of work defined in the Subcontract. Such project-specific insurance requirements will be indicated in the Subcontract Agreement Form.

Limits of Liability

The limits of liability shown for the insurance required of the Subcontractors and Sub-subcontractors are minimum limits only and are not intended to restrict the liability imposed on the Subcontractors for work performed under their Subcontract.

Cancellation Notice

Each Certificate of Insurance shall contain evidence that notice of cancellation will be provided to the certificate holder for cancellation or material change in coverage. The Certificate of Insurance must also include an endorsement allowing such notice attached to the Certificate for each applicable policy.

Deductible, Self-Insured Retention (SIR) and Coverage Reduction Notification

The Certificate of Insurance shall list all insurance carried by the Subcontractor or Sub-subcontractor for the coverage specified above and shall state the full policy limits, even if the limits exceed the amounts required above. All deductibles and/or self-insured retentions and all reductions in coverage from the standard policy forms shall be disclosed on the Certificate of Insurance. Turner reserves the right to reject the insurance obtained by the Subcontractor or Sub-subcontractor if the deductible or SIR exceeds a certain amount.

Section 6

Subcontractor Responsibilities and Obligations

Throughout the course of the Project, Subcontractors of any tier will be responsible for reporting and maintaining certain records as outlined in this Section.

The Subcontractors of all tiers required to cooperate with Turner, the insurance carrier(s), and the CCIP Administrator in all aspects of CCIP operation and administration.

Notice to Out-Of-State Subcontractors of Any Tier

All out-of-state Subcontractors of any tier are advised to contact the workers' compensation department in the state where the project is located regarding requirements and compliance with the local workers' compensation laws and regulations. Check to make sure that your primary workers' compensation policy reciprocates in the state where the project work is being performed.

Identifying and Verifying Insurance Costs

Under the CCIP, Turner provides certain insurance (CCIP Coverage) for Enrolled Parties for Work performed at the Project Site and pays the premium for the CCIP Coverage. Accordingly each Enrolled Party will be required to identify the amount of Insurance Cost that was removed from its bid and submit copies of its policy documents to the CCIP Administrator for verification. The CCIP Administrator will provide you with the insurance cost calculation once all documents have been provided. This is done by accessing the Contractor Portal and uploading all required documents through the portal.

As part of the enrollment process Eligible Subcontractors of any tier are required to upload insurance policy pages that document their coverage and insurance rates using the Contractor Portal on the CCIP website. Required documentation includes the following pages from the workers' compensation, general liability and umbrella or excess liability policies as follows:

- Declaration or Information Page
- Rate Page(s)
- Experience Modification Verification (Workers' Compensation only)

If the Subcontractor is "self-insured", carries a deductible or declares a dividend credit for its workers' compensation and/or general liability program, then the following must also be provided:

- Deductible Page(s)
- Summary-5 Years of loss history for entities that retain losses
- Summary-5 Years of audited payroll by annual total

Umbrella or excess liability policies that are "flat rated" will be converted to a rating basis that matches the general liability policy and pro-rated for this project in order to include a value for it in the Insurance Cost calculation. Deductible credits will not be allowed for retroactively rated programs, including LRARO programs, in order to reflect the contractor's loss fund for the program(s).

Enrolled Parties must also provide their estimated reportable payroll (follow the statutory guidelines in the state the

project is located as to what is reportable) for that portion of the Work that will be performed at the Project Site (Initial Payroll Estimate) and projected subcontract amount on the Contractor Portal.

Once the Initial Payroll Estimate and all policy documents are submitted and reviewed, the CCIP Administrator will review the information to verify the Insurance Cost. The CCIP Administrator will perform an Insurance Cost calculation based upon estimated payroll, contract volume and the rating information from the policy pages. The CCIP Administrator will apply discounts and modifiers in the order used by the insurance carrier and shown on the policy pages.

The Verified Insurance Cost, along with the Verified Blended Payroll Rate, will be available to the Enrolled party, and Turner, via the Contractor Portal. The Verified Blended Payroll Rate is determined by dividing the Enrolled Party's total Verified Insurance Cost by the Enrolled Party's Estimated On-Site Payroll as detailed in the Contractor Portal. The Verified Blended Payroll Rate is expressed as per \$100 of on-site labor payroll. (Verified Blended Payroll Rate = Verified Insurance Cost / Estimated Initial Payroll * 100). Once established, the Verified Blended Payroll Rate is set for the life of the Enrolled Party's performance of Work on site.

Until each Subcontractor or Sub-subcontractor submits all required documentation to enable verification and calculation of the Subcontractor of any tier's Insurance Cost, an Insurance Cost of up to, but not greater than 10% of the contract value may be assigned by Turner. Failure to submit the required documentation may result in a higher Final Insurance Cost Adjustment, if applicable.

Deductible and/or Dividend Credits

If Subcontractor or Sub-subcontractor fails to submit the required information summarized above, the CCIP Administrator will make one (1) written request via email for the information. If the required information is not received by the CCIP Administrator within seven (7) days of the written request, the Subcontractor or Sub-subcontractor's Verified Insurance Cost and Verified Subcontractor Blended Payroll Rate will be calculated without any deductible and/or dividend credit. The Verified Insurance Cost and Verified Subcontractor Blended Payroll Rate may not be recalculated if Subcontractor submits the required information at a later date. Failure to submit the required documentation may result in a higher Final Insurance Cost Adjustment, if applicable.

Change Order Procedures

Enrolled Subcontractors of any tier are required to price all change orders to <u>exclude</u> their Insurance Cost for CCIP Coverage and must provide an estimate of payroll, including any payroll estimates for Eligible or Enrolled Sub-subcontractors for Work to be performed under the change order, must be provided to Turner.

Adjustments for Subcontractor Insurance Costs

Upon completion of the Work, Turner, at its sole discretion, unless subject to state regulations, may direct the CCIP Administrator to calculate the Subcontractor's additional Insurance Cost, and Turner may deduct such costs from future payments, based on the following formula:

Final Insurance Cost Adjustment Formula:

- Total Reported or Audited Payroll (including all Change Order Work)
- Minus Initial Payroll Estimate
- Minus Change Order Payroll Estimate(s)
- Equals Payroll Overrun
- Times Verified Blended Payroll Rate (\$10 per \$100 of payroll)
- Equals Final Insurance Cost Adjustment

At Turner's sole discretion, the Final Insurance Cost Adjustment may include any or all Final Insurance Cost Adjustments resulting from Sub-subcontractors as follows:

Subcontractor's Final Insurance Cost AdjustmentPlusSum of all Sub-subcontractor's Final Insurance Cost AdjustmentsEqualsSubcontractor's Final Insurance Cost Adjustment

Turner will deduct the Final Insurance Cost Adjustment from the Subcontract price. Subcontractors are solely responsible for recovering Final Insurance Cost Adjustments from its Sub-subcontractors of any tier.

Interim Insurance Cost Adjustment

Turner, at its option, may choose to perform an interim Insurance Cost adjustment should an Enrolled Party's reported payroll exceed the Initial Payroll Estimate for the Work.

Assignment of Premiums

Since Turner pays the cost of the CCIP Coverage as described above, all Enrolled Parties are required to assign to Turner all adjustments, refunds, premium discounts, dividends, costs or any other monies due from the CCIP insurer(s). The assignment is part of the online enrollment application. Subcontractors will ensure that its Sub-subcontractors of any tier execute such an assignment.

Withholding of Payments

In the event a Turner audit of a Subcontractor's (of any tier) records reveals a discrepancy in the insurance, payroll, safety, or any other information required by the Subcontract Agreement, or reveals the inclusion of any Insurance Cost in any payment for the Work, Turner shall have the right to withhold or deduct from the Subcontract price all such Insurance Cost amounts. If the Subcontractor or its Sub-subcontractor fail to timely comply with the provisions of this Manual, Turner may withhold any payments due Subcontractor and its Sub-subcontractors until such time as they have met the requirements of the CCIP as outlined this Manual.

Failure to submit any information required by the CCIP may result in the withholding of payments by Turner until required documentation is received.

Enrollment Procedures

ENROLLMENT IS NOT AUTOMATIC

The Application for Enrollment is required to be completed online via the Contractor Portal. See Section 8 for instructions. Section 2 of this manual provides the Wrap Administrator's contact information if you require or need assistance.

Each Subcontractor and Sub-subcontractor shall provide details about its Sub-subcontractors as necessary for CCIP enrollment. The information requested on the online Application for Enrollment is mandatory for enrollment. The online application must be completed through the Contractor Portal, and CCIP coverage subsequently confirmed by the CCIP Administrator, prior to Mobilization or the start of Work to obtain CCIP Coverage. A separate online Application for Enrollment is required for each Eligible Sub-subcontractor of any tier that performs Work at the Project Site.

The CCIP Administrator will issue to each Enrolled Party a Welcome Letter and a CCIP Certificate of Insurance acknowledging acceptance of the applicant into the CCIP.

Fines for Late Enrollments / Late Reporting

Should the insurance carrier(s) or any regulatory agency assess a fine or penalty for late enrollment and/or late reporting, Turner reserves the right to assess these fines to the Subcontractor. This reservation of rights applies whether fines and/or penalties are due to a Subcontractor or any of its Sub-subcontractors. If a fine or penalty is assessed to a Sub-subcontractor, the prime tier Subcontractor is solely responsible for recovering the fine or penalty amount from its Sub-subcontractor(s).

Payroll Reports

Each Enrolled Party is required to submit payroll and work hour information each month using the Contractor Portal, See Section 8. Enrolled Parties must report payroll expended at the Project Site for each applicable workers' compensation classification that was included in the Subcontractor's Application for Enrollment.

A monthly payroll report must be submitted for each month, including months where there was zero payroll or work hours, until completion of the Work under each Subcontract. For those Subcontractors performing Work under multiple Subcontract Agreements, a separate monthly payroll report is required for each Subcontract.

The monthly payroll report should include reportable payroll for all CCIP qualified employees, including onsite supervisors and onsite clerical personnel. Please follow the required Statutory Guidelines in the state the project is located as to what is reportable.

This is in addition to any federal, state or local requirements for your project. Example: LCP tracker, certified payroll reports.

All payrolls submitted for this project should be excluded from the payroll submitted to your corporate insurance carrier(s) to avoid paying premiums for exposures covered by the Turner CCIP. The Certificate of Insurance issued to you for coverage can be used to provide evidence of your enrollment in the Turner CCIP to your corporate insurance carriers.

Insurance Company Payroll Audit

Each Enrolled Party is required to maintain payroll records for each Subcontract. Such records must allocate payroll by workers' compensation classification(s). Please follow the required Statutory Guidelines in which the project is located. It is important that you properly classify payrolls, as these are reported to the rating bureau for promulgation of future experience modifiers for your firm.

All Enrolled Parties shall make available their books, vouchers, contracts, documents, payroll records, certified copies of insurance coverages, declaration pages of coverages, certificates of insurance, underwriting data, insurance cost information, prior loss history information, safety records or history, OSHA citations, or such other data or information as Turner, the CCIP Administrator, CCIP Insurers including the CCIP Insurer Auditors, or other Turner Representative may request in the administration or payroll audit of the CCIP, or as required by this Manual. Availability of records must be for a reasonable time during the policy period, any extension, or during a final audit period as required by the insurance policies.

Modified Alternate Duty Program

Subcontractor and its Sub-subcontractor(s) must provide a modified return to work program for any of its injured employees insured under workers' compensation as part of the CCIP. Failure to provide reasonable accommodations to an injured worker will result in a penalty assessment to the Subcontractor of any tier of \$1,500 weekly until such time as the injured worker is returned to work. Subcontractors are responsible for the assessments of their Sub-subcontractors. Job expectations are defined as outlined in the Position Description for each Trade. Turner and the CCIP insurer will determine reasonable accommodations.

Claim Reporting

Subcontractor and its Sub-subcontractor(s) must **immediately** report all injuries, occupational-related illnesses, property damage or near misses to the Site Designated Employee. All Subcontractors of any tier will instruct employees and other personnel to report, **within 24 hours**, all accidents and occurrences of any type to the Project Designated Employee. **Failure to immediately report a claim or incident to the Turner Site Designated Employee may result in a \$5,000 penalty.**

CCIP Closeout and Audit Procedures

When a Subcontractor has completed its Work at the Project Site and no longer has onsite workers, the Subcontractor must complete and submit the Work Completion Form electronically via the Contractor Portal. The Work Completion form should be e-signed by Turner for all Subcontractors and e-signed by the Subcontractors for all Sub-subcontractors of any tier. Note: Subcontractor electronic Completion Form closes out all Sub-subcontractors. The form will be used to initiate the final audit of payroll and man-hours by the CCIP insurance carrier. If you return to work at the site before the CCIP is terminated, you must notify Turner immediately to re-instate or be issued a new policy.

Turner will not release final retention payment until all necessary CCIP forms and documents have been submitted and accepted by the CCIP Administrator for Subcontractor and all of its Sub-subcontractors as well as all other requirements of the Subcontract Agreement. Any outstanding general liability obligations for which the Subcontractor of any tier is responsible but unpaid will be considered at the time of closeout.

CCIP Termination or Modification

Turner reserves the right to terminate or modify the CCIP or any portion thereof, or modify this Manual. If Turner exercises this right, Subcontractors will be provided written notice as required by the terms of their individual Subcontract Agreements. At its option, Turner may procure alternate coverage or may require the Subcontractors to procure and maintain alternate insurance coverage.

Upon written notice, Turner may, for any reason, modify the CCIP Coverage, discontinue the CCIP, or request that Subcontractor or any of its Sub-subcontractors withdraw from the CCIP. Upon such notice, Subcontractor and/or one or more of its Sub-subcontractors, shall obtain and thereafter maintain replacement insurance. The form, content, limits of liability, cost, and the insurer issuing such replacement insurance shall be subject to Turner's approval. The final cost of such insurance shall not exceed the amount of the applicable Subcontractor Insurance Cost, or its pro rata portion, as described elsewhere in this document.

Subcontractor's CCIP Obligations

Subcontractor shall:

- (1) Incorporate the terms of this Manual in all Sub-subcontract Agreements.
- (2) Within five (5) days of execution of the Subcontract Agreement, or no less than forty five (45) days before Mobilization onsite, enroll in the CCIP and maintain enrollment in the CCIP, and ensure that Subcontractor's eligible Sub-subcontractors enroll in the CCIP and maintain enrollment in the CCIP within five (5) days of sub-subcontracting or no less than forty five (45) days before Mobilization.
- (3) Comply with all of the administrative, safety, claims management, insurance, and other requirements contained in

this Manual, the CCIP insurance policies, and the Subcontract Agreement.

- (4) Provide each of its Sub-subcontractors with a copy of this Manual and ensure Sub-subcontractor compliance with the provisions of this Manual, the CCIP insurance policies, and the Subcontract Agreement. The failure of (a) Turner to include this Manual in the bid documents, or (b) Subcontractor to provide each of its eligible Sub-subcontractors with a copy of it shall not relieve Subcontractor or any of its Sub-subcontractors from any of the obligations contained therein.
- (5) Provide timely evidence of required insurance to Turner and the CCIP Administrator.
- (6) Subcontractor shall access the Contractor Portal and upload copies of its workers' compensation, general liability and umbrella or excess rates, deductible endorsement/page (if applicable), and other requirements set forth in Section 6 to verify the Insurance Cost calculation.
- (7) Be solely responsible for the recovery of any Sub-subcontractor Insurance Cost attributable to such Subsubcontractors' eligibility for participation in the CCIP. If unit pricing is the basis for the Subcontract price, Turner may, at its option, apply a "per unit" Subcontractor Insurance Cost where appropriate.
- (8) Notify the CCIP Administrator and Turner's Designated Employee of all Sub-subcontracts awarded (first tier and subsequent tiers). Accordingly, Subcontractor shall cause all Sub-subcontractors to submit an online Application for Enrollment and all documents required to verify their Insurance Cost.
- (9) Provide estimated onsite payroll amount for itself and its eligible or enrolled Sub-subcontractors for its Work. Subsequently identify estimated onsite payroll for each Change Order request.
- (10) Acknowledge, and require all of its Sub-subcontractors to acknowledge in writing, that Turner and the CCIP Administrator are not agents, partners or guarantors of the insurance companies providing coverage under the CCIP ("CCIP Insurer") and that Turner is not responsible for any claims or disputes between or among Subcontractor, its Sub-subcontractors, and any CCIP Insurer(s). Any type of insurance coverage or limits of liability in addition to the CCIP coverages that Subcontractor or any Sub-subcontractor requires for its or their own protection, or that is required by applicable laws or regulations, shall be Subcontractor's or its Sub-subcontractor's sole responsibility and expense and shall not be billed to Turner or the Owner.
- (11) Cooperate fully with the CCIP Administrator and the CCIP Insurers, as applicable, in its or their administration of the CCIP.
- (12) Notify the CCIP Administrator immediately of any insurance cancellation or non-renewal of Subcontractor's and Subsubcontractor's required insurance and any subsequent reinstatement of coverage.
- (13) At Turner's discretion, be required to pay a sum of up to \$5,000 of each occurrence, including court costs, attorney's fees and costs of defense for bodily injury or property damage to the extent losses payable under the CCIP General Liability Policy are attributable to Subcontractor's Work, acts or omissions, or the Work, acts or omissions of any of Subcontractor's Sub-subcontractors, or any other entity or party for whom Subcontractor may be contractually or legally responsible.
- (14) Acknowledge that Turner shall pay the costs of premiums for the CCIP coverages on behalf of all Enrolled Parties and will receive or pay, as the case may be, all adjustments to such costs, whether by way of dividends, retroactive adjustments, return premiums, other moneys due, audits or otherwise. Accordingly, each Subcontractor and each of its Sub-subcontractors agrees to assign to Turner the right to receive all such adjustments.

Subcontractor Representations and Warranties to Turner

Subcontractor represents and warrants to Turner, on behalf of itself and its Sub-subcontractors:

- (1) That all information it submits to Turner and/or the CCIP Administrator shall be accurate and complete.
- (2) That they have had the opportunity to read this Manual request, read and analyze a copy of the CCIP general liability policy and that they understand the CCIP Coverage.

Duty of Care

Nothing contained in this Manual shall relieve the Subcontractor or any of its Sub-subcontractors of their respective

obligations to exercise due care in the performance of their duties in connection with the Work and to complete the Work in strict compliance with the Subcontract Agreement.

Conflicts

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In the event of a conflict, the provisions of the Subcontract Agreement and its other related Subcontract Agreement shall supersede the provisions of this Manual. Likewise, in cases of conflict regarding CCIP Coverage, the provisions of the policies supersede the provisions of this Manual.

Section

Claim Procedures

This section describes basic procedures for reporting various types of claims: Workers' Compensation, Liability, and damage to the project.

General Procedures

Subcontractors and Sub-subcontractors (of any tier) must immediately report, within 24 hours, *all* accidents and occurrences of any type, including near misses, to the Site Designated Employee.

While all injuries and property damage must be reported immediately, the following list identifies losses which could represent substantial exposure. It is essential that the Site Designated Employee be notified immediately of the following events so that a comprehensive investigation can be initiated at once:

- Any injury for which an ambulance is called
- Injury to head or neck
- Possible injury to back or spinal cord
- Unconscious employee
- Possible blindness
- Amputation of limbs
- Fatality
- Heart attack or stroke
- Hospitalization
- Property damage estimated over \$1,000
- Near Misses

Subcontractors may be assessed a \$5,000 penalty for any claim not reported immediately or within 24 hours of occurrence.

Investigation Assistance

Subcontractors and Sub-subcontractors (of any tier) will assist in the investigation of any accident or occurrence involving injury to persons or property. Involved parties will cooperate with CCIP insurers or representatives by securing and giving evidence and obtaining the participation and attendance of witnesses required for the adjustment, investigation and defense of any claim or suit.

Workers' Compensation Claims

The main responsibility of any party is first to see that an injured worker receives immediate medical care. Next, the party should immediately notify the Site Safety Manager or Project Superintendent.

Subcontractors' and Sub-subcontractors' onsite personnel will follow these procedures if any employee is involved in an accident or occurrence resulting in bodily injury:

- 1. Contact designated first aid/medical personnel and transport the injured party to the onsite first aid or medical facility, as necessary.
- 2. Report all injuries or occupational-related illnesses immediately to the Employer's Project Supervisor and Turner's

Designated Employee.

- 3. Supply the injured party with a Medical Information Claim Folder, which shall include Turner's 90 Day Modified Alternate Duty Program, from the Turner Designated Employee.
- 4. Provide for Modified Alternate Duty based upon the work abilities given to the injured party from the treating physician.
- 5. Immediately send all subsequent medical return to work notes, inquiries or correspondence about an injured party to the Turner Designated Employee. No injured party will be allowed on a job site unless they have provided the proper return to work note, either full duty or modified duty.

Liability Claims

Subcontractors must immediately report all accidents or occurrences at the Project Site involving death, injury, or damage to property of non-employee personnel (the public, tenants, and visitors) to the Turner Designated Employee. As soon as the onsite personnel become aware of the accident or occurrence, they must:

- 1. Take appropriate emergency measures to prevent additional injury or damage, including contacting police and fire authorities.
- 2. Immediately send all subsequent inquires or correspondence about an insured loss or claim, including a summons or other legal documents, to the Site Designated Employee immediately.

Any involved party should *not* voluntarily admit liability or responsibility and should cooperate with Turner and the CCIP insurer representatives in the accident investigation. The accident should not be discussed with anyone other than Turner Personnel, CCIP insurer representatives, or legal counsel retained on Turner's and/or the Enrolled Party's behalf.

Property Claims

Any damages to your Work or the Work of any other Subcontractors of Sub-subcontractors (of any tier) should be immediately reported to the Project Site Designated Employee.

Automobile Claims

Automobile Insurance is not provided under the CCIP. It is the sole responsibility of each party to report accidents/claims involving their automobiles to their own insurers.

HOWEVER, all accidents occurring in or around the Project Site must be reported to Turner's Site Designated Employee. Accident investigations will occur and focus on liability arising out of the project construction activities that could result in future claims (i.e. due to the conditions of the roads, etc.). Each involved party shall cooperate in the investigation of all automobile accidents.

Pollution Claims

The CCIP general liability policy may provide some coverage for sudden and accidental pollution **but only if the incidents are discovered and reported promptly in writing.** Any known or suspected pollution incidents must be immediately reported to the Turner Site Designated Employee for investigation.

Joint Representation

In the event legal representation is required to defend parties insured under this CCIP, absent an actual conflict of interest between two or more insureds, the insurer shall have the right to retain one counsel to represent all such insureds in any action or proceeding in which more than one insured is joined.

An insured has an actual conflict, and is entitled to separate counsel, only in the following circumstances:

a. the CCIP insurer has issued a reservation of its rights to one, but not all, insureds joined in such action or proceeding;

- b. a CCIP insurer's reservation of rights issued to one insured contains reservations different that a reservation issued to another insured(s) joined in such action or proceeding; or
- c. adequate, unexhausted limits of CCIP insurance are not available for the damages sought in such action or proceeding.

Any insured with an actual conflict of interest may waive that conflict.

Enrollment in this CCIP program shall be deemed a waiver of any conflict which does not meet the above definition of an actual conflict. As a condition of enrollment in this CCIP program, all insureds agree to perform any additional acts required to effectuate the waiver of any conflict which does not meet the above definition of an actual conflict.

Waiver of Insured Cross-Claims

As a condition of enrollment in this CCIP program, no insured shall be entitled to make a cross-claim (or any similar legal claim) against another insured if that cross-claim arises from "bodily injury", "property damage" or "personal injury" to which this CCIP's insurance applies and for which there is adequate unexhausted limits of insurance to pay damages in any such proceeding. Enrollment in this CCIP program shall be deemed a waiver of such claims. As a condition of enrollment in this CCIP program, all insureds agree to perform any additional acts required to effectuate the waiver of any such claim. This paragraph shall not apply to any suit or claim necessary to trigger CCIP coverage.

Availability of Claims Data

Turner has made claims data available to all CCIP Enrolled Parties. Data is accessible through the Contractor Portal of the CCIP Website also known as WrapWorks. Claim data is updated no less than quarterly. Claims are associated with each Subcontract.

If you know your User ID and Password, then please proceed to the Contractor Portal: https://wrapup.vuewrapup.com/contractorportal

If you do not have a User ID and Password, then proceed to the Contractor Portal and click "**Register Me**". Note: You will need to know your Federal ID (FEIN) as you will need to enter it (with the dash) into the Contractor Portal. Your User ID and Password information will be emailed to you.

Please direct all claim related questions to the Turner Claim Coordinator/Claim Manager or Program Manager listed in Section 2, CCIP Project Directory.

Section

8

Contractor Portal Instructions

Contractor Portal Web Address: https://wrapup.vuewrapup.com/contractorportal

Please have your documents in hand and ready to upload - This will speed up the process.

*** MUST BE UPLOADED ***

- Your Rate Pages from your Workers Compensation, General Liability and Excess/Umbrella Policies, and Deductible Endorsement (if applicable)
- Your Non-CIP Certificate of Insurance (offsite COI) along with required endorsements

If you know your User ID and Password, then please proceed.

If you do not have one, then click on "**Register Me**". You will need to know your Federal ID (with the dash). Your User ID and Password information will be emailed to you.

wrapworks	
Welcome to VUE Wrap-Up™ Contractor Portal! WrapWorks (5M) is customized to allow you to quickly enroll in your CIP program and manage all of your current projects. You can Penter Monthly Payroll Upload your Declaration & Rate Pages Project Close Out Unew your Subcontractor's CIP account View Non-Compliant Items Mon User? Click Register Me. Mew User? Click Register Me. Mew to Login/Register	Already registered user? Enter your User Name Enter your Petoword Enter your Petoword Enter your Petoword

Welcome to the 1, 2, 3s of wrapworks

I am on a CIP Project What do I do? **BASIC FLOW CHART – Easy as 1,2,3** Everything is completed online via the Contractor Portal: <u>https://wrapup.vuewrapup.com/contractorportal</u>

Step 1

Complete Enrollment – <u>Coverage will not start until you are enrolled.</u> Answer ALL questions – You must check a Primary Contact and Address. (This is the person who will receive all correspondence) Enter any lower tier contractors you will have working for you.

Step 2

Upload ALL Required Documents (Name them appropriately)

- Rate Pages (Declaration pages) for all applicable lines of coverage: Workers' Compensation, General Liability and Excess/Umbrella (This supports your insurance cost entered for this contract).
- 2. Non-CIP Certificate of Insurance (offsite COI) with applicable Endorsements for Ongoing and Completed Operations as per sample in Manual.

Step 3

Report Payroll promptly, the date following the end of the month worked

All days need to be accounted for from the Start of your Enrollment date (Policy Start Date) until your contract is complete.

This is not certified payroll – Only man hours/gross and reportable payroll.

Got Missing Items? Print the Compliance Status Report by Contract. This will tell you exactly what is missing from each category: Enrollment / ICW / Payroll / Non-CIP COI / Closeout

Section

9

Forms

This Section contains the forms needed for administration of the CCIP.

Exhibit 1 SAMPLE E Certificate of Insurance

WC Form 1 Turner's 90 Day Modified Alternate Duty Program

Workflow for Turner's Alternate Duty Program

Authorization for the Release of Protected Health Information

For assistance in providing required information, please contact the Turner Surety and Insurance Brokerage Service Center. See Section 2 (CCIP Project Directory) for the TSIB Wrap Administrator.

EXHIBIT1-SAMPLE Certificate of Insurance

PLEASE EMAIL TO: COL@WRAPWORKS.NET

DATE (MM/DD/YYYY)

CERTIFICATE OF LIABILITY INSURANCE

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

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, WAIVED, subject to the terms and conditions of the policy, certai certificate holder in lieu of such endorsement(s).					-		
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Insurance Agency's/Brokerage's Name			P	PHONE FAX			
And Address			Ē	A/C, No, Ext): -MAIL		(A/C, No):	
And Address				ADDRESS: PRODUCER	$ \rightarrow / / /$		
			c	CUSTOMER ID #:			
INSURED					INSURER(S) AFFOND	ING CJVEPAGE	NAIC #
				NSUPEN A:			
Subcontractor's Name and Address				NSURL'R B:	\rightarrow		
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COVERAGES CERI	IFICATE NU	UMP.ER:	/	NSORI R E:	\sim —	REVISION NUMBER:	
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If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE POLICY LIMIT	\$1.000,000
			Policy	,		Limit equal to Full Coverage of Subcontract	
OTHER: EQUIPMENT FLOATER			Numbe	er		machinery, equipment, tools, & temporary to become a permanent part of the Work	y structures not designed
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach Additional Remarks Schedule if more space is required):							
All projects involving Turner Construction Company, its wholly owned subsidiaries or parent organization. Additional Insureds include: Turner Construction Company and all other parties as required by any written agreement. In the event that the project is a CCIP in which we are enrolled, then Workers' Compensation and General Liability shell early only on the second seco							
shall apply only to offsite operations.							
Additional Insureds are on a Primary and Non-contributing basis on the General Liability (ISO endorsement CG 20 10 07 04 and CG 20 37 07 04 or their equivalent), Automobile and Excess/Umbrella Liability Policies. Waiver of Subrogation in favor of Additional Insureds applies to all policies.							
Policies Waiver of Subrogation in favor of Additional Insureds applies to all policies		lorsement	CG 20 10	07 04 and CG 20 37 07	04 or their equiva	llent), Automobile and Excess/Umb	rella Liability
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EMAIL TO: COI@WRAPWORKS.NET Attention: Brandon McLawhon

ACORD 25 (2014/01)

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AUTHORIZED REPRESENTATIVE

WC Form 1—Turner's 90 Day Modified Alternate Duty Program RETURN TO WORK PROGRAM – Turner Construction Company CCIP

Purpose:

TURNER Construction Company is committed to providing a safe work place for both its employees and the subcontractors' employees; facilitating prompt quality medical care in the event of a work related injury; and pursuing modified alternate duty to minimize the risks and financial burdens to its workforce.

TURNER Construction Company has established a return to work (RTW) program which is expected to be implemented by each subcontractor. Each subcontractor will provide a 90 day Modified Alternate Duty Program for an employee who has sustained a work related injury or illness and is medically unable to perform all or any part of his / her normal duties during all or any part of the normal workday or shift.

This applies to all Contractors on the project. The policy must include, but not be limited to:

- 1. All work related injuries will be reported to your supervisor and TURNER Construction Company immediately.
- 2. All injured employees will be provided with an approved medical treatment facility listing where appropriate, or a recommended panel listing. If there is any doubt as to where to go for treatment, the injured employee must contact TURNER Construction Company.
- 3. Subcontractors need to communicate to the injured employee and treating physician TURNER Construction Company's 90 Day Modified Alternate Duty Program and facilitate Modified Alternate Duty with the treating physician and the employee.
- 4. Modified Alternate Duty assignments must comply with all medical limitations outlined by the treating physician so that injury or aggravation does not occur.
- 5. Project Managers, Supervisors and Foreman all must be informed of the modified alternate duty assignment, length of alternate duty, and the restrictions and responsible for the adherence.
- 6. Failure of a Subcontractor to provide reasonable Modified Alternate Duty to an injured worker will result in a \$1500 weekly assessment against the Subcontractor until the injured employee is returned to work in either a modified alternate duty position or full duty.
- 7. The injured employee must provide the Project Managers, Supervisors and Foreman copies of all return to work notes, either modified duty or full duty.
- 8. The injured employee is not to assume normal work activities unless they have presented medical documentation releasing them to their normal duties to TURNER.
- 9. No injured employee on modified alternate duty will be allowed to work more than forty (40) hours per week or holidays.
- 10. The injured employee will remain on the project where the injury occurred while on Modified Alternate Duty or be transferred to another Project if the current Project's work phase is completed.

Responsibilities:

The following will define the reporting responsibilities of each party involved in the CIP for Return to Work.

Injured Employee – A successful return to work program requires the cooperation and accountability of all your employees. Accordingly, each subcontractor must ensure that its employees satisfy the following obligations:

- 1. Attended all training sessions.
- 2. Participate in all morning safety huddles.
- 3. Review and sign all Pre-Task Plans
- 4. Report all injuries, even minor incidents, immediately within established reporting protocols.
- 5. Work closely with managers / supervisors and communicate all necessary information regarding their ability to return to work.
- 6. Provide the treating physician with the information necessary to help them determine how and when they can return to work.
- 7. Work within their medical stated limitations as outlined by their treating physician.
- 8. Help co-works stay focused and provide a positive environment when they return to modified alternate duty.

Supervisor / Manager – Supervisors / Managers play a key role in the success of the return to work program. They must be willing to implement and manage the program. Accordingly, each subcontractor must ensure that its supervisors and managers satisfy the following obligations:

- 1. Understand and support TURNER'S written policies / procedures and maintain a listing of Position Descriptions as outlined by TURNER.
- 2. Facilitate treatment procedures with injured employee and ensure that they have received a copy of information regarding claim handling information/contacts.
- 3. Complete the Accident Investigation Form immediately after the incident and send to TURNER.
- 4. Coordinate Modified Alternate Duty with the injured employee and TURNER once they are aware and have received medical documentation outlining the injured employee's work abilities.
- 5. Monitor the injured employee's progress on modified alternate duty and provide weekly updates to the TURNER Claim Manager.

TURNER Claim Coordinator – The Claim Manager is the major communication link between the employee, the supervisor, the site safety personnel, the medical provider and relevant CIP Insurance Carrier. Accordingly, the Turner Claim Manager will satisfy the following obligations:

- 1. Understand and promote Turners Return to Work Program.
- 2. Field and answer questions regarding the Return to Work Program.
- 3. Ensure that all injuries / incidents are reported promptly to the CIP Insurance Carrier.

- 4. Follow up for medical documentation regarding work abilities and facilitate return to work in the modified alternate duty program where appropriate.
- 5. Maintain communication with the injured worker, treating physician and supervisor to ensure that the injured worker is working within their medical abilities.
- 6. Evaluate the modified alternate duty at a maximum of 30 day intervals.
- 7. Record and report progress and concerns to management at least quarterly.

CIP Insurance Carrier Team – Are responsible for the daily claim handling guidelines outlined in their Special Account Instructions.

- 1. Coordinate medical care and return to work issues.
- 2. Contact and communicate with the injured worker.
- 3. Contact and communicate with the treating physician on an ongoing basis.
- 4. Manage issues related to claim file resolution.
- 5. Analyze losses and recommend corrective action.

Work Flow for Turner's Modified Alternate Duty Program

The following charts outline the workflow guidelines for each anticipated return to work scenario and define the expectations of each involved party. It is imperative that all injured workers receive proper medical treatment and that they are not returned to work without proper medical documentation releasing them to either modified duty or full duty.

NO LOST TIME w/ ONE TIME OFFICE VISIT

Employee	Sustains Incident and reports immediately to their Supervisor
Supervisor	Supervisor reports Incident to Turner Site Safety / Field Supervisor immediately
Turner Site Safety / Field	Upon Incident notification, gives Employee claim handling information/contacts and facilitates medical treatment where appropriate.
Supervisor	Calls in Incident to the appropriate Turner Claims Manager.
Employee	Seeks immediate medical treatment where appropriate.
	Gives the treating physician the claim handling information/contacts.
	Receives from the treating physician a return to work note indicating full duty.
	Immediately provides the Site Safety / Field Supervisor a copy of the medical note.
Site Safety / Field	Immediately emails medical note to CIP Claim Team and Turner Claim Manager.
Supervisor	Verifies with Supervisor that Employee has actually returned to job site.
	Once verified, immediately provides information to Turner Claim Manager.
Employee	Returns to work full duty.
Turner Claims Manager	Advises CIP Claim Adjuster of RTW status of Employee.
-	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
CIP Claim Adjuster	Creates claim file upon receipt of report.
	Completes claim handling protocols as outlined in Special Service Instructions.

NO LOST TIME w/ ON GOING TREATMENT

Employee	Sustains Incident and reports immediately to their Supervisor
Supervisor	Supervisor reports Incident to Site Safety / Field Supervisor immediately
Turner Site Safety /	Upon Incident notification, gives Employee claim handling information/contacts and facilitates medical treatment where appropriate.
Superintendent	Calls in Incident to the appropriate Turner Claim Manager.
Turner Claim Manager	Turner Claim Manager communicates with the CIP Claim Adjuster to ensure that medical treatment is being provided where appropriate.
Employee	Seeks immediate medical treatment where appropriate.
	Gives the treating physician the claim handling information/contacts.
	Receives from the treating physician a return to work note indicating full duty.
	Immediately provides the Site Safety / Field Supervisor a copy of the medical note.
Turner Site Safety /	Immediately emails medical note to Turner Claim Manager.
Superintendent	Verifies with Supervisor that Employee has actually returned to job site.
	Once verified, immediately provides information to Turner Claim Manager.
Employee	Returns to work full duty.
Turner Claim Manager	Advises CIP Claim Adjuster of RTW status of Employee.
	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
CIP Claim Adjuster	Creates claim file upon receipt of report.
	Completes claim handling protocols as outlined in Special Service Instructions.
Employee	Follows up with medical treatment as outlined by treating physician.
	At the end of each office visit, provides the Site Safety / Field Supervisor with a copy of the doctor's note regarding RTW and further
	treatment.
Turner Site Safety /	Immediately emails all medical notes to Turner Claim Manager and CIP Claim Adjuster.
Superintendent	Verifies with Supervisor that Employee is still working.
	Continues to provide information to Turner Claim Manager upon verification of RTW.
Turner Claim Manager	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
	Monitors RTW status of Employee.
CIP Claim Adjuster	Continues to follow up with treating physician to monitor medical treatment and RTW status.

RELEASED TO MODIFIED ALTERNATE DUTY w/ CONTINUED TREATMENT

Employee	Sustains Incident and reports immediately to their Supervisor
Supervisor	Supervisor reports Incident to Site Safety / Superintendent immediately
Turner Site Safety /	Upon Incident notification, gives Employee claim handling information/contacts and facilitates medical treatment where appropriate.
Superintendent	Calls in Incident to the appropriate Turner Claim Manager.
Turner Claim Manager	Turner Claim Manager communicates with the CIP Claim Adjuster to ensure that medical treatment is being provided where
	appropriate.
Employee	Seeks immediate medical treatment where appropriate.
	Gives the treating physician the claim handling information/contacts.
	Receives from the treating physician a return to work note indicating work restrictions.
	Immediately provides the Site Safety / Field Supervisor a copy of the medical note noting work restrictions.
Site Safety / Field	Immediately emails medical note to Turner Claim Manager.
Supervisor	Coordinates Modified Alternate Duty for Employee with the Employee's supervisor and with the Turner Claim Manager.
	Once modified duty outlined, immediately provides information to Turner Claim Manager.
Employee	Returns to work modified alternate duty.
Turner Claim Manager	Advises CIP Claim Adjuster of RTW status of Employee.
	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
CIP Claim Adjuster	Creates claim file upon receipt of report.
	Completes claim handling protocols as outlined in Special Service Instructions.
	CIP Claim Adjuster immediately sends written verification via Certified Mail to Employee and a copy to Turner Claim Manager of
	Modified Alternate Duty provided by Site once contacted by Site verifying modified duty provided.
Employee	Follows up with medical treatment as outlined by treating physician.
	At the end of each office visit, provides the Site Safety / Field Supervisor with a copy of the doctor's note regarding RTW and further

	treatment.
Turner Site Safety /	Immediately emails all medical notes to Turner Claim Manager.
Superintendent	Verifies with Supervisor that Employee is still working with medical work abilities.
	Continues to provide information to Turner Claim Manager upon verification of RTW.
Turner Claim Manager	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
	Monitors RTW status of Employee.
CIP Claim Adjuster	Continues to follow up with treating physician within 24 hours of each office visit to monitor medical treatment / discharge and
	facilitate full duty return to work.
Employee	Is released to RTW full duty.
	Immediately provides Site Safety / Field Supervisor with a copy of the full duty RTW note.
	Returns to work full duty.
Turner Site Safety /	Immediately emails medical note to Turner Claim Manager.
Superintendent	Verifies with Supervisor that Employee has actually returned to work full duty.
	Once verified, immediately provides information to Turner Claim Manager.
Turner Claim Manager	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt.
	Verifies full duty RTW status of Employee.
CIP Claim Adjuster	Continues to follow up with treating physician within 24 hours of each office visit to monitor medical treatment / discharge and verify
	full duty return to work.

Note to Turner Claim Manager: Notify CIP Insurance Carrier's Claim Department when an employee returns to work and if they fail to return when released by the treating doctor. The employee's Modified Alternate Duty will end when:

- 1. released to regular work
- 2. employee returns in another capacity
- 3. employee has exceeded 90 day program for modified alternate duty
- 4. employee quits or is terminated for reasons unrelated to the injury
- 5. worker's compensation claim is closed
- 6. company withdraws the modified duty assignment

Note to Supervisors – You are to keep track of all modified alternate duty activity and report the progress of each injured employee weekly to the Turner Claim Manager. You shall also provide copies of all medical releases, agreements, notes, etc. to the Turner Claim Manager and keep a copy to maintain accurate records for the OSHA 300 log. Failure to provide appropriate modified alternate duty will result in a penalty assessment of \$1500 weekly for each week the injured employee has not returned to work.

OUT OF WORK w/ ON GOING TREATMENT

Employee	Sustains Incident and reports immediately to their Supervisor
Supervisor	Supervisor reports Incident to Site Safety / Field Supervisor immediately
Turner Site Safety /	Upon Incident notification, gives Employee claim handling information/contacts and facilitates medical treatment where appropriate.
Superintendent	Calls in Incident to Turner Claim Manager.
Turner Claim Manager	Turner Claim Manager communicates with the CIP Claim Adjuster to ensure that medical treatment is being provided where appropriate.
Employee	Seeks immediate medical treatment where appropriate. Gives the treating physician the claims handling information/contacts. Receives from the treating physician indicating out of work. Immediately provides the Site Safety / Field Supervisor a copy of the medical note noting out of work.
Turner Site Safety / Superintendent	Immediately emails medical note to Turner Claim Manager. Discusses Modified Alternate Duty program with Employee and Supervisor.
Employee	Returns home to follow treatment protocols.
Turner Claim Manager	Advises Liberty Mutual of RTW or Out Of Work status of Employee. Faxes all medical notes and documentation to Liberty Mutual upon receipt.
CIP Claim Adjuster	Creates claim file upon receipt of report. Completes claim handling protocols as outlined in Special Service Instructions. CIP Claim Adjuster immediately follows up with treating physician to discuss Modified Alternate Duty Program and verify work abilitie using approved Physical Capabilities Form and verifying that treating physician has copy of Employee's Position Description.
Employee	Follows up with medical treatment as outlined by treating physician. At the end of each office visit, provides the Site Safety / Field Supervisor with a copy of the doctor's note regarding RTW and further treatment. Maintains weekly contact with Supervisor and Turner Claim Manager regarding treatment and expected RTW.
Turner Site Safety /	Immediately emails all medical notes to Turner Claim Manager.
Superintendent	Continues to provide information to Turner Claim Manager upon verification of RTW.
Turner Claim Manager	Emails all medical notes and documentation to CIP Claim Adjuster upon receipt. Monitors RTW status of Employee. Maintains weekly contact with Employee. Discusses Modified Alternate Duty options w/ CIP Claim Adjuster on Weekly basis.
CIP Claim Adjuster	Continues to follow up with treating physician within 24 hours of each office visit to monitor medical treatment / discharge and facilitate full duty / modified duty return to work.
Employee	Is released to modified duty. See Modified Alternate Duty Table.
Turner Site Safety / Superintendent	See Modified Alternate Duty Table.
Turner Claim Manager	See Modified Alternate Duty Table.
CIP Claim Adjuster	The CIP Claim Adjuster immediately sends written verification via Certified Mail to Employee and a copy to the Turner Claim Manager of Modified Alternate Duty provided by Site once contacted by Site verifying modified duty provided. Continues to follow up with treating physician within 24 hours of each office visit to monitor medical treatment / discharge and verify full duty return to work. See Modified Alternate Duty Table.

Note to all Parties – Lost time ends when the injured employee is returned to their pre-injury position or when / if the injured employee refuses appropriate work offered consistent with the medical work abilities

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Employee: Claim#:

AUTHORIZATION FOR THE RELEASE OF PROTECTED HEALTH INFORMATION

I HEREBY AUTHORIZE THE USE OR DISCLOSURE OF HEALTH INFORMATION ABOUT ME AS DESCRIBED BELOW:

- 1) Person(s) or group(s) of persons authorized to use or disclose the information: Any physicians, medical practitioners, hospitals, clinics, HMOs, long-term care facilities, medical or medically-related facilities, pharmacies, insurance companies, Plan Sponsor/Administrator, governmental agency and any insurance support organization.
- 2) Person(s) or group(s) of persons authorized to collect or otherwise receive the information: The particular Company in the Liberty Mutual Group of companies to which I am submitting a claim and its authorized representatives, agents and/or employees, nurse case managers, my employer, the attorneys of my employer, and any other Liberty Mutual Group companies, inclusive of Helmsman Management Services LLC, including organizations providing claims management services.
- **3)** Description of information that may be used or disclosed: This Authorization specifically includes the release of all information related to my physical and mental health and my insurance policies and claims, including, but not limited to, those containing diagnosis, treatments, prognosis, prescription drug information, alcohol or drug abuse or information regarding communicable or infectious conditions, including HIV/AIDS. I am hereby notified and I further authorize the Liberty Mutual Group of companies, its representatives, agents, and/or employees acting on its behalf, to have direct, verbal or written contact and communication with my medical practitioners, who have knowledge of my health as disclosed or gained through the physician-patient relationship, without my presence, as it relates to my claim. In conjunction with this, I also authorize any treating medical practitioner to review any additional materials provided to them.
- 4) The information will be used or disclosed only for the following purpose(s): For purposes of investigating, evaluating and processing my claim.

STATEMENTS OF UNDERSTANDING & ACKNOWLEDGMENT:

- I understand that information used or disclosed pursuant to this authorization could be subject to redisclosure as necessary by the recipient and, if so, may not be subject to federal or state law protecting its confidentiality.
- I understand that I may revoke this authorization in writing at any time by sending a written revocation to the Company in the Liberty Mutual Group of companies to which I have submitted a claim, except to the extent that action has been taken in reliance on this authorization, or to the extent that other law provides the Company with the right to contest a claim. I also understand that the revocation of this authorization will not affect uses and disclosures of my health information for purposes of treatment, payment and health care operations.

- I understand that authorizing the disclosure of this health information is voluntary and the provision of health care services to me is not conditioned on whether I sign this authorization. If I choose not to sign this authorization, insurance coverage or claim payments may be denied or delayed.
- This authorization shall remain in force for 24 months from the date of signature, except to the extent applicable state law imposes or allows a different duration. The information obtained under this authorization will be retained in accordance with the Company's standard retention policy and applicable law.
- I understand that I may request a copy of this authorization.

Printed Name of Individual or Personal Representative:

Signature: _____

Address: ______

Date of Birth: _____

Description of Authority of Personal Representative:

Signature Date: _____ (Date of Signature is the authorization effective date)

NOTE: PLEASE SIGN AND RETURN BOTH PAGES OF THIS FORM.

A copy of this authorization will be considered as valid as the original.

Re: University of Kentucky – Dining Facility Contract No. 191150 Lexington KY

To Whom It May Concern:

Please find enclosed the billing package for the Interventional project. This package contains the following:

- Billing Schedule
- Application/Waiver for Billings (to be submitted via Textura)
- AIA G703 Application Continuation Sheet (submitted via Textura)
- JCC2 Waiver/JCC3 Waiver/JCC4 Waiver (tier subs/suppliers due by the 3oth of each month, available on request)
- Bill of Sale/Deed of Lease (for offsite Stored Materials, available on request)
- Loss Payable Endorsement (for offsite Stored Materials, available on request)
- W-9

Your Schedule of Values on Form G703 shall be sent to the Project Manager/Superintendent at the jobsite for approval prior to submission of the first application. All pencil copies shall also be submitted via Textura per the attached billing schedule. These dates will be subject to change monthly depending upon Pencil Review meeting dates with Owner/Architect. You will be notified via Textura/email on when to submit. Please be advised that there will be no grace period honored submission of billings. If payment applications are not submitted via Textura on or before the dates on the Billing Schedule (subject to change monthly), payment will not be processed for that month. These will need to be billed the following month. In the current economic conditions, Turner will not delay payments to all subcontractors as a result of late submissions from a few. Please help us get you paid! Waivers of Lien are also needed from any and all second and subsequent tier subcontractors and/or materialmen. Please note that some forms require to be notarized.

If you are not a current vendor of ours then the W-9 form needs to be completed and returned to me on or before the date of your first application for payment.

All payments shall be in accordance with the terms of your subcontract and deposited via wire thru Textura.

Turner may from time to time to contact your lower tier subs for payment verification.

Please complete and return a signed copy of this letter to the address shown below, and provide an accounting contact and phone number so we will know whom to contact concerning billing matters.

If you have any questions regarding the above, please contract me at (513) 721-4224.

Very truly yours, TURNER CONSTRUCTION COMPA 1. Macnt Sherry L. Macht Accounting Manager Received by Date

Subcontractor Company:		_
Accounting Contact:		
Telephone Number:	Fax Number:	

University of Kentucky CONTRACT NO. 191150

2020 CONTRACTOR BILLING SCHEDULE

Pay Apps Due via <u>Textura</u>

Pay App Review w/ Owner & Arch.

January 17, 2020 February 14, 2020 March 19, 2020 April 17, 2020 June 19, 2020 July 17, 2020 August 14, 2020 September 18, 2020 October 16, 2020 November 13, 2020 January 15, 2021 February 12, 2021 March 19, 2021 January 20, 2020 February 24, 2020 March 30, 2020 April 27, 2020 May 25, 2020 June 29, 2020 July 27, 2020 August 24, 2020 August 24, 2020 October 28, 2020 November 23, 2020 December 28, 2020 January 25, 2021 February 22, 2021

Note....these dates are subject to change depending upon pencil meeting with the owner/architect. You will be notified via Textura email when the draw is open and when it will close.

SUBCONTRACTOR APPLICATION	FOR PAYMENT DAT	E:
TO: TURNER CONSTRUCTION COMPANY 250 West Court Street, Suite 300W Cincinnati, Ohio 45202	FROM: (Subcontractor)	
PH: (513)721-4224;Fax: (513) 721-2561	Telephone No.:	
PROJECT: University of Kentucky Dining Facility	<u> </u>	
Contract No. 191150		
Original Subcontract Sum \$\$0.00	Total Completed & Stored to Date	\$\$0.00
Approved Change Orders to Date \$\$0.00	Less Retainage at%	\$\$0.00
(Through Change Order #)	Total Earned Less Retainage	\$\$0.00
Subcontract Sum to Date \$\$0.00	Less Previous Certificates for Payment	\$\$0.00
	Current Payment Due	\$\$0.00
	Balance to Finish (including retainage)	\$\$0.00_
The undersigned certifies that is has performed labor and has furn for Payment in accord with the subcontract documents. It has paid payment due to the undersigned will be utilized to fund and pay all project described above within 10 days of receipt of the "Current P	all amounts due for work covered by previous of its subcontractors, materialmen, and labor for	Applications, and the current
The undersigned acknowledges thatTURNER CONSTRUCT representations made in this application.	CTION COMPANY will make payment h	ereunder in reliance upon the
Subcontractor:	Da	ate:
By:	т. т	itle:
Subscribed and sworn to before me this	day of, 200 .	
Notary Public:	My Commission Expires:	
WAIN The undersigned, for and in consideration of payment made to the and surrender any and all lien or claim or right to lien, to the date of with the above described Project.	/ER OF LIEN undersigned as a result of this Application, doe of this waiver, for labor, material and/or services	es hereby waive, release s furnished in connection
Subcontractor:	D	ate:
		itle:
Subscribed and sworn to before me this	day of, 200 .	

Notary Public:

My Commission Expires:

ATTACHMENT "F" Percentage Markup and Procedures Applicable to Work Added to or Deleted from the Original Contract Requirements

LUMP SUM

Predetermined Lump Sum Contract Work is to be based upon the estimated "Net Actual Cost" plus (for additions) and less (for credits) the following Percentages for Overhead and Profit.

, <u> </u>	LABOR & MATERIAL	SUBLET WORK
Additions:	OH & P <u>5%</u>	OH & P <u>5%</u>
Omissions/Credits:	OH & P <u>5%</u>	OH & P <u>5%</u>

TIME AND MATERIAL

Contract Work, authorized by Turner in advance to be performed on a Time and Material Basis, is to be based upon the "Net Actual Cost" plus the following Percentages for Overhead and Profit:

	LABOR & MATERIAL	<u>SUBLET WORK</u>
Additions:	OH & P <u>5%</u>	OH & P <u>5%</u>

GENERAL

- 1. Submission of estimates and costs shall be itemized in a form satisfactory to Turner to permit ready analysis and evaluation. On time and material work, daily reports (in duplicate and showing all field and shop labor expended and/or material delivered) shall be submitted to Turner. Invoices shall be submitted monthly.
- 2. No overhead and profit will be permitted on premium time.
- 3. Percentages shall apply to net differences in quantities for adds and deducts.
- 4. Net Actual Cost
 - A. Labor:
 - 1. Wages of labor, including foremen, engaged in work and directly on the Subcontractor's payroll.
 - 2. Engineering and drafting performed at the Site with Turner's prior approval.
 - 3. Fringe Benefits established by governing trade organizations.
 - 4. Federal Old Age Benefits, Federal and State Unemployment Taxes.
 - 5. Net actual premium paid for Public Liability, Workers' Compensation, Property Damage, and any other forms of insurance required by Turner.

B. Material:

- 1. Net cost of construction materials and supplies (FOB Job Site, where applicable) including applicable Sales and/or Use taxes, trade and cash discounts.
- 2. Costs of a special nature, approved in advance by Turner, such as for riggers, labor, transportation, equipment rentals, royalties, permits, and other expenses of this general nature.

C. Sublet Work:

- 1. Net cost to the Subcontractor of work sublet by him.
- 5. Percentages shall include the following overhead costs:
 - A. Supervision and executive expenses.
 - B. Small tools, scaffolding, blocking, shores, appliances, etc. and the expense of maintaining same.
 - C. Administrative expenses, clerical, etc., both at the Job Site and in the Subcontractor's Office.
 - D. Taxes and any bonds required to be paid by the Subcontractor, but not included under the aforementioned Net Actual Costs.
- 6. Percentage markup for overhead and profit for Sub Subcontractors shall be limited to the above listed percentages also.

Initial

Turner _____ Subcontractor _____

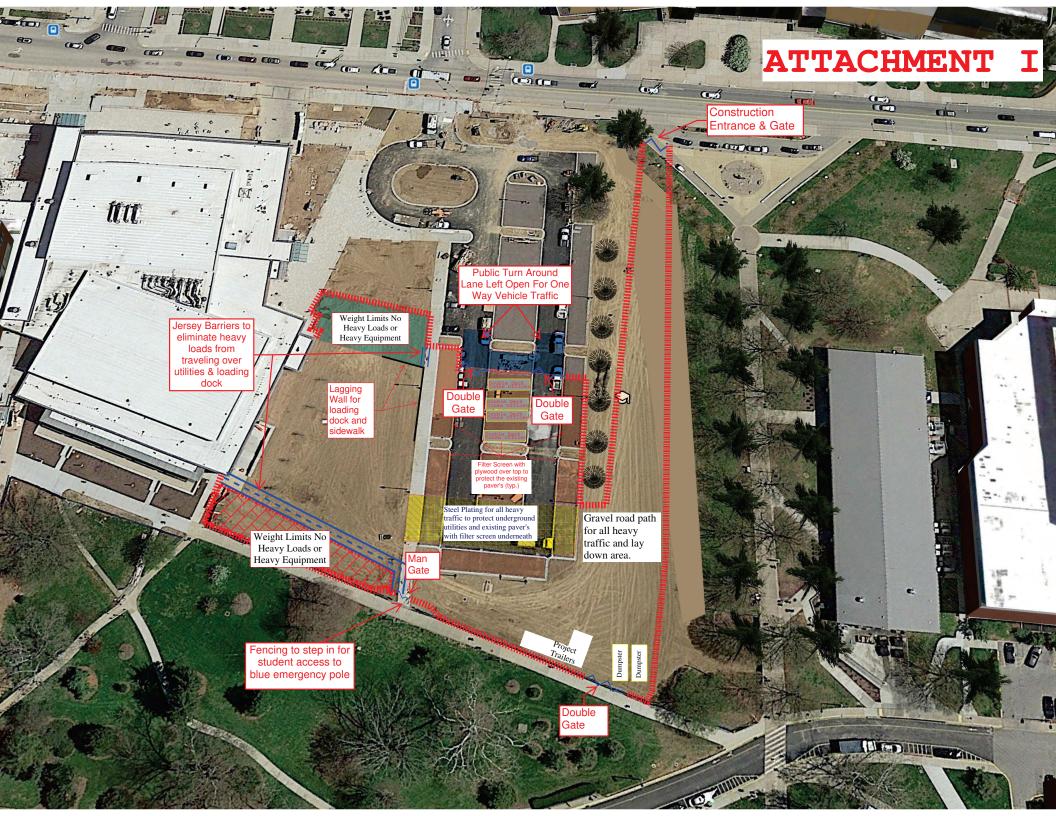
UK SC 2 3 Floor						Page 1 of 2					Run Date 11-Dec-20 10:59							
Activity ID	Activity Name	Orig	Rem Dur	%	Start	Finish	Total Float		020	F - 1-	2021 Mar Apr May Jun Jul Aug Sep Oc							
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	2nd & 3rd Floor Fit-Out Bid Schedule															1 1 1		
Mileston	les	140	140		21-Dec-20	08-Jul-21	15	ı										
MS-100	NTP - Construction Manager	0	0	0%	21-Dec-20		15	ı	NTP - Construction	-	1					1 1 1		
MS-200	NTP - Trade Partners	1	1	0%	18-Jan-21	18-Jan-21	0	ı		- Trade Pa						1 1 1		
MS-300	Start Fit-Out Construction	0	0	0%	01-Feb-21		1	ı		Start Fit-C	Out Construe	ction						
MS-400	Trade Parter - HBC Finals Due	1	1	0%	08-Jul-21	08-Jul-21	15	ı			1 1 1 1			I Trade	Parter - HBC F	nals Due		
Pre-Con	struction	5	5		14-Dec-20	18-Dec-20	15	ı										
PRE-100	100% CD Documents Due to CM	0	0	0%	14-Dec-20		0	ı 🔶	100% CD Document	ts Due to C	М							
PRE-110	CM to Finalize Scopes of Work	5	5	0%	14-Dec-20	18-Dec-20	0	ı 🕨	CM to Finalize Soc	opes of Wo	rk					1 1		
PRE-120	Project Estimate Reconcilation	4	4	0%	15-Dec-20	18-Dec-20	15	F	Project Estimate R	Reconcilatio						8		
Contract	ting	28	28		21-Dec-20	29-Jan-21	1	1			 							
CTR-100	Bid Period	14	14	0%	21-Dec-20	11-Jan-21	0	ı	Bid Peri	od								
CTR-200	Pricing Due to CM	0	0	0%	12-Jan-21	12-Jan-21	0	ı	I Pricing	Due to CM	 					1 1 1		
CTR-300	Post Bid Review	3	3	0%	13-Jan-21	15-Jan-21	0	ı	Post E	Bid Review								
CTR-400	CO - Processing	10	10	0%	18-Jan-21	29-Jan-21	1	ı		CO - Proce	essing					 		
Submitta		30	30		19-Jan-21	01-Mar-21	0	ı			 					1		
SUB-100	Contractor Submittals	15	15	0%	19-Jan-21	08-Feb-21	0	ı		Contra	ctor Submit	tals				1	1	
SUB-200	Arch Submittal Approval	15	15	0%	09-Feb-21	01-Mar-21	0	ı			1	mittal Approval		1 1 1		a 8 8		
	ion & Delivery	45	45			19-Apr-21	26	ı								1 1 1		
	Fabricate and Deliver HW Frames	15	15	0%	16-Feb-21	08-Mar-21	0	ı			Eabric	ate and Deliver HW Frame						
FAB-110	Fabricate and Deliver Custom Ceilings	35	35	0%	02-Mar-21	19-Apr-21	10	¦						om Ceilings				
FAB-120	Fabricate and Deliver Storefront	30	30	0%	02-Mar-21	12-Apr-21	11	ı				Fabricate and De	1					
FAB-130	Fabricate and Deliver Doors	35	35	0%	02-Mar-21	19-Apr-21	26	ı			, 	Fabricate and	i	i				
FAB-140	Fabricate and Deliver Casework & Tops	35	35	0%	02-Mar-21	19-Apr-21	20	ı			· · · · · · · · · · · · · · · · · · ·	Fabricate and		1		1 1 1		
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L2C-100	Install MEP OH Rough-In	35	35	0%	01-Feb-21	19-Mar-21	31	ı	Ι		1	nstall MEP OH Rough-In						
L2C-110	Install Interior Framing & Drywall Top-Out	25	25	0%	01-Feb-21	05-Mar-21	1	ı	-		1	nterior Framing & Drywall T	op-Out					
L2C-120	MEP In-Wall Rough-In	20	20	0%	08-Feb-21	05-Mar-21	1	ı			1	-Wall Rough-In				, , ,		
L2C-130	In-Wal Inspection/Reviews	10	10	0%	22-Feb-21	05-Mar-21	1	<mark>.</mark>			In-Wal	In spection/Reviews				 		
L2C-140	Install Gypsum Board Drywall & Finish	25	25	0%	09-Mar-21	12-Apr-21	0	ı				Install Gypsum B						
L2C-150	Prime & 1st Coat Walls, Misc. Interior Finished	10	10	0%	13-Apr-21	26-Apr-21	1	ı			1 1 1			Misc. Interior F	in ished	1 1 1		
L2C-160		15	15	0%	13-Apr-21	03-May-21	0	ı			1 1 1	Install W						
L2C-170		15	15	0%	27-Apr-21	17-May-21	1	ı					stall Terrazzo	1				
L2C-180	Install Storefront	20	20	0%	27-Apr-21	24-May-21	1	ı			 		Install Store	1				
L2C-190	Install Ceiling Grid, Light Fixtures, MEP Devices	20	20	0%	04-May-21	01-Jun-21	0	ı					1	eiling Grid, Ligh	1			
L2C-200	Install Arch Casework/Millwork	25	25	0%	18-May-21	22-Jun-21	1	ı					1	Install Arch Ca	1	чĸ		
L2C-210	Install Soft Flooring	15	15	0%	18-May-21	08-Jun-21	1	ı			 		i.	Il Soft Flooring	i.			
L2C-220	Install Door/Equipment/Final Details	10	10	0%	25-May-21	08-Jun-21	1	ı						II Door/Equipme	ent/Final Detail	5 		
L2C-230	OH MEP Inspections	2	2	0%	02-Jun-21	03-Jun-21	0	¦ -						P Inspections	ling Dodo Trim	oto		
L2C-240	Install Ceiling Pads, Trim, etc.	20	20	0%	04-Jun-21	01-Jul-21	0	ı			1 				ling Pads, Trim			
L2C-250	Misc. Work to Complete/Final Paint, Rough Clean, etc.	20	20	0%	09-Jun-21	07-Jul-21	1				1			IVIISC. V	Vork to Comple	ere/Final Pa	nt, Rou	
	al Work													Ctores	Date 14-De	a 20	. <u> </u>	
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Completed Milestone



UK SC 2 3 FI	oor					Page 2	of 2							Run Date	11-Dec-20	10:59					
Activity ID Activity Name Or			Rem	%		Finish	Total	2020			2021										
		Dur	Dur	Comp	I		Float	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct			
3rd Floo	r	111	111		01-Feb-21	07-Jul-21	1														
L3C-100	Install MEP OH Rough-In	35	35	0%	01-Feb-21	19-Mar-21	31				<u> </u>	nstall MEP OH	Rough-In								
L3C-110	Install Interior Framing & Drywall Top-Out	25	25	0%	01-Feb-21	05-Mar-21	1			<u> </u>	Install I	nterior Framine	g & Drywall T	op-Out	 	 					
L3C-120	MEP In-Wall Rough-In	20	20	0%	08-Feb-21	05-Mar-21	1				MEP In	-Wall Rough-Ir	า								
L3C-130	In-Wal Inspection/Reviews	10	10	0%	22-Feb-21	05-Mar-21	1				📩 In-Wal	Inspection/Re	views								
L3C-140	Install Gypsum Board Drywall & Finish	25	25	0%	09-Mar-21	12-Apr-21	0					Insta	II Gypsum Bo	oard Drywall &	Finish						
L3C-150	Prime & 1st Coat Wals, Misc. Interior Finished	10	10	0%	13-Apr-21	26-Apr-21	1						Prime & 1st	coat Walls , M	lisc. Interior F	in ish ed					
L3C-160	Install Wal Tile	15	15	0%	13-Apr-21	03-May-21	0						📙 Install W	al Tile			1 1 1				
L3C-170	Install Terrazzo	15	15	0%	27-Apr-21	17-May-21	1		· · · · · · · · · · · · · · · · · · ·			[ln:	stall Terrazzo	1						
L3C-180	Install Storefront	20	20	0%	27-Apr-21	24-May-21	1							Install Storefr	pnt						
L3C-190	Install Ceiling Grid, Light Fixtures, MEP Devices	20	20	0%	04-May-21	01-Jun-21	0							Install Cei	ing Grid, Ligh	t Fixtures, ME	P Devices				
L3C-200	Install Arch Casework/Millwork	25	25	0%	18-May-21	22-Jun-21	1								stall Arch Ca	sework/Millwo	ork				
L3C-210	Install Soft Flooring	15	15	0%	18-May-21	08-Jun-21	1							Install S	Soft Flooring		- - - - -				
L3C-220	Install Door/Equipment/Final Details	10	10	0%	25-May-21	08-Jun-21	1							Install I	oor/Equipme	ent/Final Detai	Ś				
L3C-230	OH MEP Inspections	2	2	0%	02-Jun-21	03-Jun-21	0							OH MEP	Inspections						
L3C-240	Install Ceiling Pads, Trim, etc.	20	20	0%	04-Jun-21	01-Jul-21	0								Install Ceil	ing Pads, Trim	, etc.				
L3C-250	Misc. Work to Complete/Final Paint, Rough Clean, etc.	20	20	0%	09-Jun-21	07-Jul-21	1								Misc. W	ork to Compl	ete/Final Pair	nt, Rough			
Start-Up	& Commissioning	10	10		02-Jul-21	16-Jul-21	9														
COM-100	HVAC T&B/Programming	10	10	0%	02-Jul-21	16-Jul-21	9								HVA	C T&B/Progra	amming				
COM-200	Commissioning	10	10	0%	02-Jul-21	16-Jul-21	9								Con	nmissioning					
COM-300	End User Training	5	5	0%	02-Jul-21	09-Jul-21	14								End Us	er Training					
Turnover		40	40		02-Jul-21	27-Aug-21	0														
TUR-100	Construction Clean	5	5	0%	02-Jul-21	09-Jul-21	0								Constr	uction Clean					
TUR-200	Run Punchlist	2	2	0%	09-Jul-21	12-Jul-21	0								📕 Run F	unchlist	1 1 1				
TUR-300	Perform Punchlist	10	10	0%	13-Jul-21	26-Jul-21	0									Perform Pund	hlist				
TUR-400	Final Cleaning	5	5	0%	23-Jul-21	29-Jul-21	0									Final Cleani	ng				
TUR-500	UK 2nd & 3rd Floor Substancial Completion	1	1	0%	30-Jul-21	30-Jul-21	0									UK 2nd & 3	d Floor Sub	stancial C			
TUR-600	UK 2nd & 3rd Floor Final Completion	20	20	0%	02-Aug-21	27-Aug-21	0					 					UK 2nd & 3r	rd Floor Fi			
TUR-700	UK Start Move-In	0	0	0%		27-Aug-21	0						 			♦	UK Start Mo	νve-In			





DBE Participation Goals

PART 1 - GENERAL

- 1.1 The University of Kentucky requests all potential contractors to make a concerted effort to include Diverse Business Enterprises (DBE's) as subcontractors or suppliers in their bids.
- 1.2 Toward that end, the University of Kentucky has established 10% of total procurement costs as a Goal for participation of Diverse Business Enterprises on this contract.
- 1.3 It is therefore a request of each Bidder to include in its bid, 10% for DBE participation and other requirements as outlined in this section.

PART 2 - PROCEDURES

- 2.1 The successful bidder will be required to report to the University of Kentucky, the dollar amounts of all purchase orders submitted to DBE subcontractors and suppliers for work done or materials purchased for this contract.
- 2.2 Replacement of a DBE subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another DBE Firm; subject to approval by the University of Kentucky.
- 2.3 For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
 - A. The University of Kentucky, Facilities Management Contractor/Supply chain Coordinator (859-257-3204)
 - B. Tri-State Minority Supplier Development Council in Louisville, KY (502-625-0135)
 - C. The Kentucky Cabinet for Economic Development, Small & Minority Business Division in Frankfort, KY (502-564-2064)
 - D. The Office of Equal Employment Opportunity, Contract Compliance Division in Frankfort, KY (502-564-2874)
- 2.4 The University of Kentucky will make every effort to notify interested DBE subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

004539B01

PART 3 - DEFINITIONS

3.1 Diverse Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled. MBE, WBE, Veterans, Disable Veterans and Disabled make up Diverse Business Enterprises (DBE).

PART 4 - OBLIGATION OF BIDDER

- 4.1 The bidder shall make a Good Faith Effort to achieve the Participation Goal for DBE subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 4.2 Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 4.3 The Form of Proposal includes a section entitled "Identification of Diverse Business Enterprise Subcontractors and Material Suppliers". The Advertisement for Bid includes a section entitled "Diverse Business Enterprise Participation". The Determination of Responsibility includes a section entitled "Participation of Diverse Business Enterprise owned contractors and businesses". The applicable information must be completed and submitted as outlined.

4.4 Failure to submit this information as requested may be cause for rejection of the bid.

PART 5 - DOCUMENTATION REQUIRED

- 5.1 The prime contractor must provide the University of Kentucky with a "DBE percent of contract report "detailing subcontracting activity within 90 days of prime contract award. Projects containing multiple bid packs will update reports within 90 days of contract award throughout project duration. The report shall reflect the total dollar amount awarded to all DBE subcontractors (including suppliers) utilized under this contract.
 - a. Prime Contractors will report the following items individually to satisfy reporting requirements
 - i. Project Name, UK Project Number, and UK CPMD Project Manager assigned to the project
 - ii. Total dollar value of the prime contract with the University of Kentucky
 - iii. Total dollar value of all contracts assigned to DBE firms
- 5.2 Bidders not reaching the Goal must submit both the "DBE percent of contract report "and a written statement documenting their Good Faith Effort to do so (If bid includes no DBE participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder may submit the following as proof of Good Faith Efforts to meet the Participation Goal:

004539B01

- A. Advertisement by the bidder of DBE Contracting opportunities associated with this bid in at least two (2) of the following:
 - 1. A periodical in general circulation throughout the region
 - 2. A Minority-Focused periodical in general circulation throughout the region
 - 3. A Trade periodical aimed at the DBE community in general circulation throughout the region
 - 4. Bidder shall include copies of dated advertisement with his submittal
- B. Evidence of written notice of contracting opportunities to at least five (5) DBE firms serving the construction industry at least seven (7) days prior to the bid opening date.
- C. Copies of quotations submitted by DBE firms which were not used due to uncompetitive pricing or other factors and/or copies of responses from firms that were contacted indicating that they would not be submitting a bid.
- D. Documentation of Bidder's utilization of the agencies identified to help locate potential DBE firms for inclusion on the contract including responses from agencies.
- E. Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. "Record of DBE Solicitation" and other required documentation of Good Faith Efforts are to be submitted with the bid, if participation Goal is not met.

004539B01

University of Kentucky – Capital Project Management DBE Percent of Contract Report

1)	Identification of Participating DBEs
	Project Name / Number:
	UK Project Manager:
	Total Contract Value:

DBE Name, Address & Phone	Work to be Performed	Dollar Value of Work	% Value of Total Contract
1.		\$	%
2.		\$	%
3.		\$	%
4.		\$	%

The undersigned submits the above list of DBE firms to be used in accomplishing the work contained in this Bid.

Company: _____

 By:	

Date: _____ Title: _____

004539B01 DBE Participation Goals Dated: 11/2020 Applies to: All Projects University of Kentucky Page 4 of 5

UNIVERSITY OF KENTUCKY CAPITAL CONSTRUCTION PROCUREMENT SECTION

CONTRACTOR/BIDDER DETERMINATION OF RESPONSIBILITY

1. Purpose

The Commonwealth of Kentucky Model Procurement Code (KRS 45A.080) requires that a contract be awarded to the lowest responsive and responsible bidder whose bid offers the best value. KRS 45A.070(6) defines "Responsible bidder or offeror "as" a person who has the capability in all respects to perform fully the contract requirements and the integrity and reliability which will assure good faith performance," and "Best value" as "a Procurement in which the decision is based on the primary objective of meeting the specific business requirements and best interests of the Commonwealth." The information requested in this document is to be used to evaluate the "responsibility" by verifying the apparent low bidder:

- (a) Has adequate financial resources (in working capital and bonding capacity) in relation to the scope and dollar amount of the project or the ability to secure such resources;
- (b) Has the experience, organization, technical qualification, available personnel resources, and has or can acquire the equipment necessary to perform the scope of work bid;
- (c) Is able to comply with the required performance schedule or completion date, taking into account existing commitments (i.e. capacity); and
- (d) Has a satisfactory record of performance, integrity, judgment and skills to complete the project bid.

The information provided must verify that the bidding firm has a sufficient level of expertise, experience, financial stability, and personnel resources to qualify the firm as being "responsible" prior to proceeding with an award of Contract. The determination of the firm's capability and responsibility will be made as fairly and honestly as possible using a reasonable exercise of sound judgment and discretion in the review of information provided or otherwise secured through references or other sources.

2. Application Submittal

The low responsive Bidder must complete the information requested by typing or clearly printing responses in ink. All information requested must be provided. If a question does not apply, insert "NA" for not applicable. The University of Kentucky reserves the right to request supplemental information to fully determine responsibility of the Bidder. The Bidder agrees to provide supplemental information, if requested by the University.

3. Insurance Requirements

The Successful Bidder will be required to provide proof of insurance indicating current liability coverages, including workers compensation, with limits equal to or exceeding the amounts required by the bid documents. Additionally, builders risk coverage equal to the Contract amount will be required of the successful contractor.

*NOTE: Pursuant to KRS 45A. 110, except as otherwise provided under the Open Records Act and any other applicable law, the Bidder has the right of nondisclosure to the public of certain information required by this submittal. If the Bidder wishes nondisclosure of certain information, he/she shall enclose the confidential information in a separate envelope marked <u>CONFIDENTIAL</u> and forward it with the information and other

005000B03 DETERMINATION OF RESPONSIBILITY Dated: 11/2020 Applies to: All Projects University of Kentucky

submittals required by this document. If this is not done, he/she waives the right of nondisclosure of this information and the signing of the Bid Proposal shall constitute written waiver of that right. Revised 06/16/98

*Note: The contractor offering the apparent low bid will be required to either have on file with the University or supply the information required by Part I of this submittal within twenty-four (24) hours of the bid opening. If the information required by Part I is on file with the University and is current and accurate, only the information requested by Part II will be completed and submitted by the apparent low bidder. All bidders must update and keep current all previously submitted "on file" Part I information.

Davit I

	Contractor/Bidder Responsibility Determination Information Submittal				
1.	Name of Firm				
2.	Mailing Address Tax () City, State, Zip				
3.	Contact Person				
4.	Type of Firm() Corporation() Partnership() Sole Proprietorship() Individual() Joint Venture() Other (Explain)				
5.	If your firm is a corporation, provide the following:				
6.	Date of Incorporation State of Incorporation				
	States where corporation is authorized to conduct business				
	Attach proof that corporation is in good standing with the Kentucky Secretary of State.				
6.	If your firm is an individual or partnership, provide the following:				
	Date of organization				
	If a partnership, is it limited or general?				
	Name and address of all partners and specify their respective partnership participation, i.e., lin general, managing.				

	escribe the type(s) of construction	on and project management expertise off
<i>se additional pages if req</i> ey persons (partners, ow ssibilities or authority t	<i>quired)</i> yners, officers and directors). In typically delegated to partners,	nclude any other persons who have du
Person	Position/title	<u>% Ownership</u>
	ur company. <u>use additional pages if req</u> ues y persons (partners, own sibilities or authority the second s	tse additional pages if required) rey persons (partners, owners, officers and directors). In nsibilities or authority typically delegated to partners ization chart of the key individuals in the firm.

- 11. Has any key person with the firm ever been convicted of any state or federal crime (excluding traffic violations), including but not limited to embezzlement, theft, bribery, falsification or destruction of records, receipt of stolen property, criminal anti-trust violations or bid-rigging? _____Yes, ____No If yes, attach an explanation.
- 12. Has a civil court issued a judgment of \$10,000 or more against the firm in the past five years? _____Yes, _____No If yes, attach an explanation.

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	pending lawsuit with a potential damage alleged of \$10,000 or more? If yes, attach an explanation.
•	m been terminated from or failed to complete any contract? If yes, attach an explanation.
15. How many years has the firm be	en in business?yearsmonths
16. Performance and Payment Bond	S

Surety Company Name	
Street Address	
City, State, Zip	
Phone Number ()	Fax ()
Local Bond Agency	
Kentucky Licensed Agent	
Street Address	
City, State, Zip	
Phone Number ()	Fax ()
17. Current level of bonding capacity authorized by the sure	ety.
Single Limit \$Aggregate	Limit \$
18. Bank Reference	
Bank Name	
Street Address	

Street Address				 	
City, State, Zip					
Phone Number ()	Fax ()		
Contact Person					

NOTE: The apparent low bidder will be required to complete and submit to the University the following information by twelve (12) noon of the second working day following the bid opening or other time as may be established during the post bid review of the bid submittal. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.

PART II Contractor/Bidder Responsibility Determination Information Submittal

Ар	ated: 11/2020 pplies to: All Projects niversity of Kentucky	
00	05000B03 DETERMINATION OF RESPONSIBILITY	Page 4 of 14
3.	Contact Person	
2.	Mailing Address City, State, Zip	
_	Business Phone ()Telefax ()
	City, State, Zip County	
1.	Street Address	
1.	Name of Firm	

- 4. The information previously submitted under Part I of this document is current and accurate and no changes to Part I are necessary at this time. _True_____False If False, the bidder shall submit with the Part II submittal corrections as required to update the Part I information.
- 5. In the space provided below, describe the type(s) of construction and project management expertise offered by your company to substantiate the company's experience in the type of project, type of construction, or the management of the type of construction required for this project. You should indicate a detailed plan to execute and manage this project, as well as any technological planning systems employed.

(use additional pages if required)

6 List the name and title of the <u>home office</u> administrative project manager who will be assigned and responsible for this project. A current resume of this individual shall be attached to this submittal. The resume should include a list of projects for which this project manager has been responsible within the past five (5) years.

Name of Manager ______ Title _____

7. List the name and title of the <u>on-site</u> manager that will be assigned and responsible for this project. A current resume of this individual shall be attached to this submittal. This resume should include a list of projects for which this manager has been responsible within the past five (5) years.

Name of Project Manager ______ Title _____

8. List the name and title of the <u>on-site</u> project superintendent who will be assigned and responsible for this project. A current resume of this individual shall be attached to this submittal. This resume should include a list of projects for which this superintendent has been responsible within the past five (5) years.

Name of Project Superintendent ______ Title _____

9. How many full-time, non-labor employees does the firm currently have?

10. How many full-time, labor/trade employees does the firm currently have?_____

- 11. What is your firm's average annual dollar volume of work for the past five (5) years? \$_____
- 12. List below, by specification section, the work you plan to complete with your own work force or with subcontractors. In the blanks provided please indicate the specification section and "O" for own forces and "S" for subcontracted work.

Spec. Section	"O" or" S"	Spec. Section	"O" or "S"	Spec. Section	"O" or" S"
13. What perc	entage of the	total work do %	you estimate	will be performe	ed with your own work forc

- 14. How long has the firm been engaged in the type contracting required by this project? _____years______ months
- 15. List below five of your most recently <u>completed</u> projects that demonstrate your ability to complete the type work required by the project being bid. (NOTE: The inability to list five such projects will not necessarily prevent a determination of responsibility.)

A.	Project Title	Owner
	Contract Amount	Completion date
	Owner Phone Number ()	Fax ()
	Name of Owner Contact	
	Architect/Engineer	Phone No.()
	Brief description of your firm's work and re	esponsibility in this project.

Project Title	Owner
Contract Amount	Completion date
Owner Phone Number ()	Fax ()
Name of Owner Contact	
Architect/Engineer	Phone No.()
Brief description of your firm's work a	and responsibility in this project.
Project Title	Owner
Contract Amount	Completion date
Owner Phone Number ()	Fax ()
Name of Owner Contact	
Architect/Engineer	Phone No.()
Brief description of your firm's work a	and responsibility in this project.
Project Title	Owner
Contract Amount	Completion date
	Fax ()

Architect/Engineer	Phone No.()	
Brief description of your firm's work	and responsibility in this project.	
Project Title	Owner	
Contract Amount	Completion date	
Owner Phone Number ()	Fax ()	
Name of Owner Contact		
Architect/Engineer	Phone No.()	
	Phone No.()	
Architect/Engineer	Phone No.()	
Architect/Engineer	Phone No.()	
Architect/Engineer	Phone No.()	
Architect/Engineer Brief description of your firm's work	Phone No.() a and responsibility in this project.	
Architect/Engineer Brief description of your firm's work	Phone No.() a and responsibility in this project.	 o complete
Architect/Engineer Brief description of your firm's work	Phone No.() a and responsibility in this project.	 > complete
Architect/Engineer Brief description of your firm's work	Phone No.()	 complete
Architect/Engineer Brief description of your firm's work	Phone No.()	 complete

•	Owner			
Contract Amount	Completion date			
Owner Phone Number ()	Fax ()			
Name of Owner Contact				
Architect/Engineer	Phone No.()			
Brief description of your firm's work and responsibility in this project.				
	Owner			
Contract Amount	Completion date			
Owner Phone Number ()	Fax ()			
Name of Owner Contact				
Architect/Engineer	Phone No.()			
Brief description of your firm's work and responsibility in this project.				
	Owner			
Project Title	Owner Completion date			
Project Title Contract Amount				

	and responsibility in this project.
Due 1 4 T 41 -	0
	Owner
Contract Amount	Completion date
Owner Phone Number ()	Fax ()
Name of Owner Contact	
	Phone No.()
Brief description of your firm's work a	and responsibility in this project
biter description of your firm's work a	nd responsionity in this project.

17. Participation of Diverse Business Enterprises owned contractors and businesses.

Diverse Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled. MBE, WBE, Veterans, Disable Veterans and Disabled make up Diverse Business Enterprises, DBE

It is the goal of the University of Kentucky that at least 10% of the contract dollar amount be completed by DBE owned contractors and businesses.

The University requests that all DBE Suppliers be documented according to ethnic origin as categorized below or if they are woman owned:

- Asian
- Black/African American
- Hispanic or Latino
- Native American
- Native Hawaiian/Pacific Islander
- White
- Other

University of Kentucky

Provide in the spaces below those contracts that will be issued to DBE contractors and material suppliers upon award of a contract. Under "Contractor/Vendor Classification" use the above list for ethnic origin or if a woman owned business, list as such.

ontractor/Vendor ClassificationContract Amount ontractor/ Supplier Address wner Phone Number () Fax () ume of Owner Contact ief description of the Subcontractor/Material supplier work or responsibility on this project.		
wner Phone Number () Fax ()		
ame of Owner Contact		
ief description of the Subcontractor/Material supplier work or responsibility on this project.		
Brief description of the Subcontractor/Material supplier work or responsibility on this project.		
Name Subcontractor/Material Supplier		
ontractor/Vendor ClassificationContract Amount		
ontractor/ Supplier Address		
vner Phone Number () Fax ()		
ume of Owner Contact		
ief description of the Subcontractor/Material supplier work or responsibility on this project.		

C.	Name Subcontractor/Material Supplier			
	Contractor/Vendor Classification Contract Amount			
	Contractor/ Supplier Address			
	Owner Phone Number () Fax ()			
	Name of Owner Contact			
	Brief description of the Subcontractor/Material supplier work or responsibility on this project.			
D.	Name Subcontractor/Material Supplier			
	Contractor/Vendor Classification Contract Amount			
	Contractor/ Supplier Address			
	Owner Phone Number () Fax ()			
	Name of Owner Contact			
	Brief description of the Subcontractor/Material supplier work or responsibility on this project.			
E.	Name Subcontractor/Material Supplier			
	Contractor/Vendor Classification Contract Amount			
	Contractor/ Supplier Address			
	Owner Phone Number () Fax ()			
	Name of Owner Contact			

Brief description of the Subcontractor/Material supplier work or responsibility on this project.

Attach additional pages as required.

- 17A Calculation of Total Participation by Contractor/Supplier Classification from this DBE (Ethnic Minority) list and list women owned businesses separately:
 - Asian
 - Black/African American
 - Hispanic or Latino
 - Native American
 - Native Hawaiian/Pacific Islander
 - White
 - Other

DBE (Ethnic) Contract Amount		DBE (Women) Contract Amount		
1	<u>\$</u>	1	\$	
2.	\$	2.	\$	
3	\$	3	<u>\$</u>	
4	\$	4	<u>\$</u>	
5	\$	5	<u>\$</u>	
6	<u>\$</u>	6	\$	
7	\$	7	<u>\$</u>	
8	\$	8	<u>\$</u>	
9. <u> </u>	<u>\$</u>	9	\$	
10	<u>\$</u>	10	<u>\$</u>	
TOTAL	\$	TOTAL	\$	

17B Total DBE (Minority) Owned Percentage

 Total DBE (Minority) Owned Amount from above \$_______

 Amount
 bid \$_______
 Equals______%.

17C. Total DBE (Women) Owned Percentage

 Total DBE (Women) Owned Amount from above \$_______

 Amount
 bid \$______Equals____%.

17D. If the total dollar amount of these contracts do not exceed 10.9% for minority owned and 6.9% for women owned contractors and suppliers you must provide documentation of your efforts to meet the established goal of participation.

We made the following efforts to involve Diverse Business Enterprise Owned Contractors and material suppliers on this project. (List efforts made and attach proof of these efforts)

Certification and Signature:

I hereby certify that I am an authorized principal of the firm and I:

1. Have read, and understand the reason for submitting this information;

2. Agree, upon request, to provide any additional information that may be necessary for determination of contractor responsibility;

- 3. Will, upon request, provide complete financial statements within five business days;
- 4. Swear or affirm that all information provided on this submittal is true;
- 5. Understand that if any of the responses are found to be materially untrue, the firm will be ineligible to be awarded a contract.

Your signature on this document is a sworn statement to the University of Kentucky. This document must be signed by the firm's CEO, president, vice-president, partner or sole owner.

Under penalties of perjury, I hereby swear or affirm, warrant and represent that the above answers and information have been personally provided by me, and that I have the authority to execute this document on behalf of this firm.

Signature	2		
Name			
Title			
State of) County of)			
Subscribed and sworn to before me on thi	s	day of	, 199, by
			acting for and on behalf of
(name)	(office held		
(firm)			
		Notary Public My Commissio	, Kentucky

BID BOND

	Bond #
KNOW ALL MEN BY THESE PRESENTS; that .	(Name of Subcontractor)
a	ffices located at
(Address)	
as Principal (hereinafter "Principal"), and	
a corporation with hor	
(Address)	
(hereinafter "Surety"), are held and firmly bound unto The Univ	versity of Kentucky
(hereinafter "Obligee"), in the sum of	
(Enter dollar amount required or percent of Bid price) for the part themselves, and their respective heirs, administrators, executors, severally, firmly by these presents.	yment whereof Principal and Surety bind
WHEREAS, the Principal has submitted to Obligee a ce 19 for the performance of	
× •	· · · · · · · · · · · · · · · · · · ·
	(neremaner Bld).

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Obligee

shall accept the Bid of Principal and the Principal shall in accordance with the terms of such Bid:

1) enter into a contract with the Obligee;

2) furnish a bond for the faithful performance of such contract and for the payment of all persons performing labor or furnishing materials in connection therewith; and

3) shall in all other respects perform the agreement created by the acceptance of such Bid.

Then this obligation shall be null and void; otherwise it shall remain in full force and effect.

(Impress Corporate Seal)

	,Principal (Name of Subcontractor /Principal)
ATTEST:	By: (Officer) Title
(Impress Corporate Seal)	Surety (Name of Surety)
ATTEST:	By:(Attorney-in-Fact)

NOTE: An original Power of Attorney bearing same date as Bond must be attached.

ACKNOWLEDGMENT

STATE OF	:	
	:	ss.
COUNTY OF	:	

On this	day of		, before me	
appeared				
	, t	o me known, who ł	being by me duly swor	n, did depose
and say that he resided in	1			; that
he is the		Officer) of the corpo	oration described in an	d which
executed the foregoing E	SID BOND (herei	nafter "Instrument') as Subcontractor/Pri	ncipal; that
he knew the seal of said	corporation; that f	the seal affixed to t	he foregoing instrume	nt is the
corporate seal of said con	rporation; and that	t the foregoing inst	rument was signed, sea	aled and
delivered by him on beha	alf of said corpora	ation by its authorit	y duly given as the vol	luntary act
and deed of said corpora	tion.	-		-

IN WITNESS WHEREOF, the said......(Name of Officer) has subscribed and sworn to the foregoing oaths before me, and I have hereunto set my hand and affixed my official seal the day and year first above written.

(SEAL)

Notary Public

My Commission Expires:

SECTION 250200 - CONTROLS

PART 1 - GENERAL

A. RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions, General Mechanical Provisions and General Requirements, Division 1 Specification Sections apply to the work specified in this section.

B. DESCRIPTION OF WORK:

This work shall be Bid as a stand-alone project with the University making the final selection based upon their RFP process. The successful bid shall be assigned to the Mechanical Contractor for the Second and Third Floor fit-up.

The Controls contractor shall provide all hardware, controls, wiring, programming, and software for a fully functioning controls system per the following Specification. The VAV boxes shall be provided by the Mechanical Contractor. The reheat control valve and controller shall be by the Controls contractor along with thermostats.

Furnish a BACnet system compatible with existing University systems. All building controllers, application controllers, and all input/output devices shall communicate using the protocols and network standards as defined by ANSI/ASHRAE Standard 135-2001, BACnet. This system shall communicate with the University of Kentucky Facility Management's existing BACnet head-end software using BACnet/IP at the tier 1 level and BACnet/MSTP at the tier 2 level. No gateways shall be used for communication to controllers installed under section. BACnet/MSTP or BACnet/IP shall be used for all other tiers of communication. No servers shall be used for communication to controllers installed under this section. If servers are required, all hardware and operating systems must be approved by the Facilities Management Controls Engineering Manager and/or the Facilities Management Information Technology Manager.

All Building Automation Devices should be located behind the University firewall, but outside of the Medical Center Firewall and on the environmental VLAN.

Provide all necessary hardware and software to meet the system's functional specifications. Provide Protocol Implementation Conformance Statement (PICS) for Windows-based control software and every controller in system, including unitary controllers. These must be in compliance with Front End systems PICS and BIBBS and attached Tridium PICS and BIBBS. Provide all hardware and software to backup, restore, troubleshoot and install system. Software, backups, unitary, and ASC files shall be delivered to UEM (Utilities & Energy Management) for archiving purposes.

It is the contractor's responsibility to ensure that the University of Kentucky Facilities Management's head-end system's licensed device/point count is increased to accommodate the number of devices and/or points that are added to fulfill the contractor's obligation to meet the requirements of the project.

Prepare individual hardware layouts, interconnection drawings and software configuration from project design data.

Design, provide, and install all equipment cabinets, panels, data communication network cables needed, and all associated hardware.

Provide and install all interconnecting cables between supplied cabinets, application controllers, and input/output devices.

Provide complete manufacturer's specifications for all items that are supplied. Include vendor name of every item supplied.

Provide supervisory specialists and technicians at the job site to assist in all phases of system installation, startup, and commissioning.

Provide a comprehensive operator, administrator and technician training program as described herein.

Provide as-built documentation, programming software for use site wide, electronic copies of all diagrams, and all other associated project operational documentation (such as technical manuals on approved media, the sum total of which accurately represents the final system.

Furnish, install, and fit-up in complete working order, with all accessories required, the automatic temperature control and monitoring systems shown on the Drawings and specified herein. The systems shall be properly connected, piped and wired in a manner conforming to the laws, ordinances and codes now in force in the Commonwealth of Kentucky.

The controls and all listed I/O points from this project shall communicate with the University of Kentucky Facilities Management's existing BACnet software head-end station using BACnet/IP. All BACnet points shall be exposed to the University of Kentucky Facilities Management's head-end station. Graphics will be installed by UEM on the head-end system. All point and device names shall comply with the University Facilities Management standards and shall be approved before and included in the shop drawings submittal. Cooperate with the Owner (UEM) to ensure that all specified points and alarms communicate and operate on the head-end system. All point and device names shall comply with the University Facilities Management standards (format listed below, consult Utilities and Energy Management (UEM) for the correct abbreviations) and shall be included in the shop drawings submittal for review and approval. Point naming conventions and formats are listed further in this specification in the Direct Digital Controls Equipment section. Refer to University Standard 230553S02 for the AHU Naming Convention.

Related to the alarms, the contractor is to set up the alarm parameters specified by the system sequences of operations without enabling the alarms. Contractor is to provide a list of points containing alarm extensions to Owner (UEM). UEM will be responsible for doing the alarm names, alarm texts and enabling the alarm points provided on the list.

All work must be coordinated and scheduled with the UEM Controls group prior to any work being done on site.

Provide all conduit required. All control wiring shall be installed in conduit. Control wiring may not be installed in the communications cable tray.

Thermostats: Each terminal unit requires a thermostat for operation, unless specifically indicated on the Drawings to be slaved to another unit. Slaved terminal units shall be controlled to match the CFM and discharge air temperature of the master unit. Thermostat locations have been identified on the Drawings to the extent possible, but all such locations may not be shown. Provide the required thermostats whether or not shown on the Drawings. For those thermostats not shown on the Drawings, work out an acceptable location with the Architect/Engineer. Thermostats are to be provided with no doors.

Provide DDC controls for the air terminal units. Provide electronic operators controlled and monitored by direct digital control systems which shall include, but not be limited to, air handling systems, pumps, terminal units, etc.

The control equipment shall be complete and shall include, but not be limited to, all necessary valves, damper operators, pipe, fittings, etc.

Electronic Control System installer must physically demonstrate to Owner and Owner's representatives (UEM) via software simulations that the proposed building automation system and control sequences will function as outlined in the contract documents prior to field implementation.

Provide VFD's as specified in other sections.

The control and monitoring system for this project shall be made up using standard materials, equipment and components regularly manufactured for systems of this type. The system shall be complete in every respect and shall be a functioning system.

Electrical power wiring and interlock wiring for all controls, signal devices, equipment, alarms, etc., shall be in accordance with diagrams and instructions from the supplier of the systems. All power and control wiring, conduit and wiring connections required for the complete installation, including wiring to smoke dampers and combination fire/smoke dampers and their motors, shall be provided by this Contractor in accordance with Electrical specification requirements. Controls shall be on emergency power.

Refer to other Mechanical Division sections for installation of instrument wells, valve bodies, and dampers in mechanical systems; not work of this section.

C. QUALITY ASSURANCE:

Manufacturer: Subject to compliance with requirements, manufacturers offering controls that may be incorporated into the work at Tier 1 BACnet/IP include the following:

Vykon Johnson Controls Alerton

Subject to compliance with requirements, manufacturers offering controls that may be incorporated into the work at Tier 2 BACnet/MSTP include the following:

Honeywell Johnson Controls Alerton Distech

Acceptable controls manufacturers shall include any controls manufacturers which utilize a BACnet protocol in accordance with the specification. If the bidding manufacturer is not listed above, documentation for approval as an equal must be submitted 10 days prior to the bid opening date to allow for evaluation by the university.

Installing Contractor: Installing controls contractors must comply with the following requirements:

The installing systems integration contractor has been in the business of installing BACnet controls for the last 5 years minimum. In addition, the installing systems integration contractor needs to demonstrate with documentation that they have provided the controls in a minimum of (3) hospital or university renovation projects of similar size and scope where they utilized a BACnet system.

The systems integration contractor must have on staff the following number of key personnel as a minimum, each with a minimum of 5 years of related BACnet controls installation experience: Project Manager - 2, Controls Applications Engineer - 2, Programmer - 2, Installation Supervisor - 2, Controls Technician - 5.

Prefer contractor staff to include Niagara Tridium AX/N4 certified technicians.

Contractor to have experience with successful integrations of controls with Niagara Tridium systems.

Contractor to have a minimum of 3 years of installation history with the brand of controls being bid.

Contractor must have a help desk operation or staff available for phone contact 24/7 for providing technical support to university staff. Call forward and emergency service numbers are not acceptable during normal business hours.

Codes and Standards:

Electrical Standards: Provide electrical components of pneumatic control systems which have been UL-listed and labeled, and comply with NEMA standards.

NFPA Compliance: Comply with NFPA 90A "Standard for the installation of Air Conditioning and Ventilating Systems" where applicable for controls and control sequences.

Kentucky Building Code: Comply with requirements where applicable for controls.

Provide products of the temperature control system with the following agency approvals:

UL-916; Energy Management Systems
UL-873; Temperature Indication and Regulating Equipment
UL-864; Subcategories UUKL, OUXX, UDTZ; Fire Signaling and Smoke Control Systems
CSA; Canadian Standards Association
FCC, Part 15, Subpart J., Class A Computing Devices

All products shall be labeled with the appropriate approval markings. System installation shall comply with NFPA, NEMA, NEC, Local and National Codes.

D. SUBMITTALS:

Product Data: Submit manufacturer's technical product data for each control device furnished, indicating dimensions, capacities, performance and electrical characteristics, and material finishes, also include installation and start-up instructions.

- A. Shop Drawings, Product Data, and Samples
 - 1. Each submittal shall have a cover sheet with the following information provided: submittal ID number; date; project name, address, and title; BAS Contractor name, address and phone number; BAS Contractor project manager, quality control manager, and project engineer names and phone numbers.
 - 2. Each submittal shall include the following information.
 - a. BAS riser diagram showing all DDC controllers, network repeaters, and network wiring.
 - b. One-line schematics and system flow diagrams showing the location of all control devices.
 - c. Points list for each DDC controller, including: Tag, Point Type, System Name, Object Name, Expanded ID, Display Units, Controller Type, Address, Cable Destination, Module Type, Terminal ID, Panel, Slot Number, Reference Drawing, and Cable Number. The initial shop drawing submittal for review needs to include all point names meeting the naming convention outlined in this specification for UEM approval at the shop drawing phase prior to the contractor beginning any programming.
 - d. Vendor's own written description for each sequence of operations, to include the following:
 - Sequences shall reference input/output and software parameters by name and description.
 - The sequences of operations provided in the submittal by the BAS Contractor shall represent the detailed analysis needed to create actual programming code from the design documents.
 - Points shall be referenced by name, including all software points such as programmable setpoints, range limits, time delays, and so forth.
 - The sequence of operations shall cover normal operation and operation under the various alarm conditions applicable to that system.

- e. Detailed Bill of Material list for each panel, identifying: quantity, part number, description, and associated options.
- f. Control Damper Schedules. This spreadsheet type schedule shall include a separate line for each damper and a column for each of the damper attributes, including: Code Number, Fail Position, Damper Type, Damper Operator, Blade Type, Bearing Type, Seals, Duct Size, Damper Size, Mounting, and Actuator Type.
- g. Control Valve Schedules. This spreadsheet type schedule shall include a separate line for each valve and a column for each of the valve attributes, including: Code Number, Configuration, Fail Position, Pipe Size, Valve Size, Body Configuration, Close off Pressure, Capacity, Valve CV, Calc CV, Design Pressure, Actual Pressure, and Actuator Type.
- h. Cataloged cut sheets of all equipment used. This includes, but is not limited to, the following: DDC panels, peripherals, sensors, actuators, dampers, and so forth.
- i. Range and scale information for all transmitters and sensors. This sheet shall clearly indicate one device and any applicable options. Where more than one device to be used is on a single sheet, submit two sheets, individually marked.
- j. Hardware data sheets for all local access panels.
- k. Software manuals for all applications programs to be provided as a part of the programming devices, and so forth for evaluation for compliance with the performance requirements of this Specification.
- 1. The controls contractor shall include their BACnet PICS and BIBB statements (as described in ASHRAE 135-2001) for each device.
- 3. BAS Contractor shall not order material or begin fabrication or field installation until receiving authorization to proceed in the form of an approved submittal. BAS Contractor shall be solely responsible for the removal and replacement of any item not approved by submittal at no cost to the Owner.
- 4. Submittal shall have approved point names.

Maintenance Data: Submit maintenance instructions and spare parts lists for each type of control device. Include that type data, product and shop drawings in maintenance manual.

Operation and Maintenance Instructions:

This contractor shall prepare an electronic Operations Manual entitled "Automatic Temperature Control and Monitoring Systems Operation and Maintenance Data." Manual shall be PDF files with separate PDFs for each of the items noted below.

Each manual shall contain the following information:

Name and address of Consulting Engineer, Contractor, and index of equipment, including vendor (name and address).

Complete brochures, descriptive data and parts list, etc., on each piece of equipment, including all approved shop drawings.

Complete maintenance and operating instructions, prepared by the manufacturer, on each major piece of equipment, including preventative maintenance instructions.

Complete shop drawing submittal on temperature and monitoring controls including control diagrams updated to reflect "as-built" conditions.

All wiring and component schematics necessary for Owner (UEM) to troubleshoot, repair and expand the system.

All manuals shall be submitted to the Engineer prior to final inspection of the building.

Provide a laminated copy mounted in a sleeve on the outside of the panels for the controls sequences pertinent to equipment supplied by that specific controls panel.

Controls Program Backup: At the end of the project, the contractor is to supply digital back-up copies of all final complete operating controls programs. These shall be delivered to UEM for archiving purposes.

E. DELIVERY, STORAGE AND HANDLING:

Provide factory shipping cartons for each piece of equipment and control device. Maintain cartons while shipping, storage and handling as required to prevent equipment damage and to eliminate dirt and moisture from equipment. Store equipment and materials inside and protect from weather.

PART 2 - PRODUCTS

A. DIRECT DIGITAL CONTROL SYSTEM

General: This specification defines the minimum hardware and performance requirements for a computer-based building automation system to be furnished and installed.

B. SCOPE OF WORK:

System Requirements:

Contractor shall provide all equipment, engineering and technical specialist time to check the installation required for a complete and functioning system. The contractor shall furnish and install all interconnecting system components. Components to include, but not be limited to: power line conditioners, field panels, sensors, motor starter interfaces, and any other hardware items not mentioned above but required to provide the Owner with a complete workable system.

Any feature or item necessary for complete operation, trouble-shooting, and maintenance of the system in accordance with the requirements of this specification shall be incorporated, even though that feature or item may not be specifically described herein. This shall include hardware and software.

All materials and equipment used shall be standard components, regularly manufactured for this and/or other systems and not custom designed especially for this project. All systems and components shall be thoroughly tested and proven in actual use.

Input/Output Summary:

The system as specified shall monitor, control and calculate all of the points and functions as listed in the Input/Output Summary.

System Start-Up and Acceptance:

Upon completion of the installation, the BAS Contractor shall start-up the system and perform all necessary testing and debugging operations. An acceptance test in the presence of the Owner's representative shall be performed. The vendor shall check all sensors that exhibit any problems or faulty reading. When the system performance is deemed satisfactory in whole by UEM, the system parts will be accepted for beneficial use and placed under warranty. The BAS Contractor is to be available for system commissioning at the end of the installation when requested by the Engineer and/or Owner. The contractor is to also be available for seasonal commissioning for the other seasons beyond the initial commissioning.

This Contractor shall work with the Owner (UEM), who is developing the graphics, to ensure that all points report, function and alarm as required on the BACnet head-end system. The Contractor will also work with the Project Manager or CNS/MCIS to obtain all necessary IP's and Ethernet drops needed for BACnet panel. The Owner (UEM) will assign all BACnet/IP instance numbers and all BACnet/MSTP network numbers for use by the Contractor. All BACnet/IP devices will report directly to the head-end system.

UEM will be performing their own complete point by point evaluation as part of this project, independently of the commissioning activity. This will occur during the warranty period of the project.

Facilities Management's Instruction:

The BAS Contractor shall provide two copies of an electronic version of the operator's manual describing all operating and routine procedures to be used with the system. This user's manual should contain subjects such as: standard operation, error message explanations, software usage, commands, system troubleshooting, etc. The Contractor shall also provide wiring schematics for all system components.

The BAS Contractor shall instruct the Owner's designated representatives in these procedures during the start-up and test period. The duration of the instruction period shall be no less than four (4) hours during two 2 hour sessions. These instructions are to be conducted during normal working hours at the Owner's convenience and are to be prearranged with the Owner. The owner can request this training any time within the one year warranty period and may request any number of classes adding up to the total number of hours. The contractor shall provide an hourly unit price for additional on-site training.

The instructions shall consist of both hands-on at the job site and classroom training at a classroom location on the University of Kentucky campus coordinated with the Project Manager and UEM.

Upon completion, the attendees shall be able to operate the system and implement system changes including start-up, boot load, add point to the data base, enter messages, and down line load field units.

Prior to the scheduling of the sessions, an agenda outlining the training topics must be submitted for approval. Agenda items shall include, but not be limited to, the following topics:

- 1) Explanation of control sequences. Include which sensors are used and how output device operates.
- 2) Explanation of control drawings and manuals, including symbols, abbreviations, and overall organization.
- 3) Walk-through of project to identify controller locations and general routing of network cabling.
- 4) Review of operation and maintenance of hardware devices including air compressor, air dryers, controllers, instruments, and sensors. Include schedule for routine maintenance.
- 5) Programming Application Specific Controllers
 - (a) Backing up and Restoring Application Specific Programming
 - (b) Adding/Deleting/Editing points on Application Specific controllers
 - Troubleshooting Application Specific controllers (inputs/outputs/logic/master slave relationships/bus issues)
- 6) Programming Building Specific Controllers
 - (a) Backing up and Restoring Building Specific Controllers Programming
 - (b) Adding/Deleting/Editing points on Building Specific Controllers controllers
 - (c) Troubleshooting Building Specific Controllers controllers (inputs/outputs/logic/network issues)
- 7) How to use tools and cables

Warranty:

The system including all hardware and software components shall be warranted for a period of one year when the system performance is deemed satisfactory in whole by UEM. The system parts will be accepted for beneficial use and placed under warranty at that time. A Certificate of Occupancy does not initiate the control system warranty. Any defects in materials and workmanship arising during this warranty period shall be corrected without cost to the Owner.

All applicable software as detailed in this specification shall be updated by the BAS Contractor free of charge during the warranty period. This will ensure that all system software will be the most up-to-date software available from the BAS Contractor.

C. DIRECT DIGITAL CONTROL (DDC) EQUIPMENT

System Software

All software required for monitoring, modifying, configuring and backup for the system shall be embedded in the controller and accessible via VT terminal, hyper-terminal or the web. This software shall allow any computer with access (and security) to the University's network to perform the work described above using a web browser or provided software. No software upgrades should be required unless provided at no additional cost to the customer. The software version used for installation of any new devices must either be at the current software version used on the University Facilities Management campus at the current JAVA version or the new software at the most current JAVA version must be installed on all devices and the current system prior to the installation of the new devices. All software is to also operate on the latest version of Microsoft Windows operating system. All configuration and programming tools required for the upgraded version must be provided at the time of installation.

Provide a USB, standard RS-232 9 pin female, Bluetooth, RJ11, RJ12 or RJ45 connection for on-site access.

BACnet Conformance

Building Controller shall as a minimum support MS/TP and Ethernet BACnet LAN types. It shall communicate directly via these BACnet LANs as a BACnet device and shall support simultaneous routing functions between all supported LAN types. Global controller shall be a BACnet conformance class 3 device and support all BACnet services necessary to provide the following BACnet functional groups:

- 1. Clock Functional Group
- 2. Files Functional Group
- 3. Reinitialize Functional Group
- 4. Device Communications Functional Group
- 5. Event Initiation Functional Group

Please refer to end of this section for a complete list of the services that must be directly supported to provide each of the functional groups listed above. All proprietary services, if used in the system, shall be thoroughly documented and provided as part of the submittal data.

Standard BACnet object types supported shall include as a minimum: Analog Value, Binary Value, Calendar, Device, File, Group, Notification Class, Program and Schedule object types. Alarms should also be setup on this system with limits. All proprietary object types, if used in the system, shall be thoroughly documented and provided as part of the submittal data.

The Building Controller shall comply with Annex J of the BACnet specification for IP connections. This device shall use Ethernet to connect to the IP internetwork. It must support interoperability on the campus area network and function as a BACnet Broadcast Management Device (BBMD) and/or a BACnet router.

Building Controller (B-BC)

General

Building Controller (B-BC) shall be minimum 16 bit microcomputer based, utilizing a multi-tasking, multi-user operating system.

The B-BC controllers shall permit the simultaneous operation of all control, communication facilities management and operator interface software, as programmed by the Contractor or User. Modification of the on-board B-BC controller database shall be performed on-line using the built-in software. Systems which require the B-BC to be removed from service while DDC control sequences are modified shall not be acceptable.

B-BC controllers shall utilize true floating point arithmetic capabilities.

All B-BC controllers shall have open licensing to connect to existing UK UEM Tridium BACnet BAS.

Databases and Memory Back-Up

All programming defining the functions to be performed by the B-BC, including but not limited to application programs and point database within each B-BC, shall be protected from loss due to power failure for a minimum of 72 hours. All database and backup shall be provided to the UK UEM Controls group.

Service Ports

B-BC controllers shall be equipped with a minimum of one operator service port for the connection of a laptop computer. The service port shall be either a built-in standard RS-232 data terminal port, USB port, CAT5 cable or RJ11/12 connection.

Connection of a service device, to a service port, shall not cause the B-BC controller to lose communications with its peers or other networked device controllers.

Display and Readout Capability

The B-BC controller shall additionally provide diagnostic LED indication of device transmit and receive data communications for all communication port and peripheral ports, normal operation, abnormal operation and control relay operation indication.

Manual/Auto Control and Notification

The B-BC controller shall provide commanded override capability from the built-in operator interface. Such overrides shall be annunciated to the head-end station. Such overrides shall be valid as long as power is applied to the controller.

Adjustments

Every control panel shall provide adjustments for the functions specified. In general, adjustments shall be provided for all setpoints used by controllers within each control panel. In addition, adjustments shall be provided for throttling ranges, mixed air damper minimum positions, or other items as specified. Adjustments shall be integral to each individual B-BC. The built-in operator interfaces shall allow the easy execution of the adjustment through named identifiers within the B-BC. From a single B-BC user interface, any other B-BC shall be accessible and full adjustment capabilities shall be provided.

B-BC Naming Convention

B-BC devices shall be named using the following naming convention:

B-BC devices shall be named using the following format: BuildingName_BuildingNumber_Floor_RoomNumber_B-BC Device Type OR BuildingNumber_BuildingName_Floor_RoomNumber_B-BC Device Type

All B-AAC points shall be named using the following format: Building_Floor_RoomNumber_Device Type_Equipment ShortName_Function

Examples:

A B-BC device located in the Pavilion HA mechanical room HA4001 would be named as follows:

PAVHA_0293_04_HA4001_JACE

An exhaust fan status point for a fan in Pavilion HA mechanical room HA3001 fed directly from the above panel would be named as follows:

PAVHA_03_HA3001_HVA_EF1_STAT

For function short names and building short names and numbers, contact the University Controls Engineering Department.

Advanced Application Controller (B-AAC)

General

Controls shall be microprocessor based, Advanced Application Controllers (B-AAC's). B-AAC's shall be provided for Air Handling Units, packaged Rooftops, primary and secondary pumping loop systems and other applications as shown on the drawings. B-AAC's shall be based on a minimum 16 bit microprocessor working from software program memory which is physically located in the B-AAC. The application control program shall be resident within the same enclosure as the input/output circuitry which translates the sensor signals. All input/output signal conversion shall be performed through a minimum of a 10 bit A to D converter. All input points shall be universal in nature allowing their individual function definition to be assigned through the application software. All unused input points must be available as universally definable at the discretion of the owner. If the input points are not fully universal in nature, unused points must be equal in quantity between Analog Inputs and Digital Inputs.

All B-AAC controllers shall have open licensing to connect to existing UK UEM Tridium BACnet BAS.

Contractor shall provide a minimum of one B-AAC controller per air handling or mechanical system as shown on the drawings.

The BAS contractor shall provide and field install all B-AAC's specified under this section. Mechanical equipment manufacturers desiring to provide B-AAC' type controls as factory mounted equipment, shall provide a separate bid for their products less all controls, actuators, valve assemblies and sensors, which are specified to be provided by the BAS/Temperature control contractor.

All input/output signals shall be directly hardwired to the B-AAC. Troubleshooting of input/output signals shall be easily executed with a volt-ohm meter (VOM). As a result of this intent, it is specified that power line carrier systems, or other systems which command multiple outputs over a single pair of wires, shall not be utilized.

B-AAC's shall be in continuous direct communication with the network which forms the facility wide Building Automation System. The B-AAC's shall communicate with the B-BC at a minimum baud rate of 9,600 baud.

Non-Volatile Memory

All control sequences programmed into the B-BC shall be stored in non-volatile memory, which is not dependent upon the presence of a battery, to be retained. Power failures shall not cause the GDC memory to be lost, nor shall there be any need for batteries to be recharged or replaced to maintain the integrity of the controller database. The B-BC shall allow for the creation of unique application control sequences. Systems that only allow selection of sequences from a library or table are not acceptable. All control sequences shall be fully programmable at the B-AAC, allowing for the creation and editing of an application control sequence, while at the unit.

The B-AAC shall be provided with an interface port (standard RS232 data terminal port or USB port) for a laptop computer. The interface port shall allow the laptop to have full functionality as described above. From the interface port or *network terminal, the laptop shall be able to directly access any B-AAC or B-ASC in the* network.

The B-AAC shall provide an input/output point trending utility that is capable of accumulating 48 analog point samples and 10 digital point samples, per Input/Output point. Each sample shall be taken on a user defined interval, ranging from 1 second to 255 hours per sample. The digital readings shall be on a change of state occurrence for the digital points. All samples shall be recorded with the engineering units for the value, along with a time and date identifier for each sample taken. The samples shall be protected against loss due to power interruptions through a battery or capacitor backup method for a minimum of 30 days.

Systems unable to provide the above capability shall provide for the individual Input/Output point trending at the B-BC. Specifics as to how each B-AAC point will be trended, at the B-BC, shall be provided in the submittal documents. Included in the explanation shall be the sample intervals, the memory allocation in the B-BC and the number of B-AAC's per B-BC that can be expected.

The B-AAC shall provide LED indication of transmit/receive communications performance, as well as for the proper/improper operation of the controller itself.

The B-AAC shall be provided with a battery backed time clock that is capable of maintaining the time of day and calendar for up to thirty days, upon loss of power to the B-AAC, without loss of setting. The battery for the time clock shall be replaceable by the customer. The B-AAC shall be provided with integral time schedules; as a minimum, two seven day schedules with eight on/off periods per day shall be provided. Holiday override of weekly schedules shall be provided for pre-scheduling of holidays, for the year in advance.

Controller Location

To simplify controls and mechanical service troubleshooting, the B-AAC shall be capable of being mounted directly in or on the controls compartment of the air handling system. The B-AAC shall be housed in a NEMA 1 enclosure to accommodate direct mounting on the equipment to be controlled. The B-AAC shall be constructed in a modular orientation such that service of the failed components can be done quickly and easily. The modular construction should limit the quantities of printed circuit boards to a maximum of two. All logic, control system, power supply and input/output circuitry shall be contained on a single plug-in circuit board. When required to replace a printed circuit board, it shall not be necessary to disconnect any field wiring. This shall allow all controls maintenance and troubleshooting to be made while at the air handling unit. The B-AAC shall be directly wired to sensory devices, staging relays or modulating valves for heating and cooling.

Every controller and control panel shall be labeled with a lamacoid plate permanently secured to the device. Sticky tape or glued labels are not acceptable. The labeling shall describe the device and include related information such as MAC address, IP address, BACnet Instance numbers, etc.

All power feeds shall be clearly identified and shall include panel number, breaker and electrical panel location if not in the same room.

For compatibility to the environment of the air handling unit, B-AAC's shall have wide ambient ratings. B-AAC's shall be rated for service from -40 DegF (Degrees Fahrenheit) to 140 DegF.

Contractor shall submit description of location of B-AAC's on all mechanical and air handling equipment.

B-AAC Naming Convention

B-AAC devices shall be named using the following naming convention:

B-AAC devices shall be named using the following format: Building_Floor_RoomNumber_B-AAC Device Type_Equipment Short Name

All B-AAC points shall be named using the following format: Function

Examples:

An Air Handler controller in the Pavilion HA mechanical room HA4001 for AHU7 would be named as follows:

PAVHA_04_HA4001_HVA_AHU7

The mixed air temperature point for the above system would be named as follows:

MAT

Therefore, when this point is learned, the entire point name will be:

PAVHA_04_HA4001_HVA_AHU7_MAT

For function short names and building short names and numbers, contact the University Controls Engineering Department.

Application Specific Controller (B-ASC)

General

Controls shall be microprocessor based Application Specific Controller (B-ASC). B-ASC's shall be provided for Unit Ventilators, Fan Coils, Heat Pumps and other applications as shown on the drawings. B-ASC's shall be based on a minimum 16 bit microprocessor working from software program memory which is physically located in the B-ASC. The application control program shall be resident within the same enclosure as the input/output circuitry which translates the sensor signals. All input/output signal conversion shall be performed through a minimum of a 10 bit A to D converter.

Contractor shall provide a minimum of one B-ASC controller per unitary system as shown on the drawings.

The BAS contractor shall provide and install all B-ASC's specified under this section.

All input/output signals shall be directly hardwired to the B-ASC. Troubleshooting of input/output signals shall be easily executed with a volt-ohm meter (VOM). As a result of this intent, it is specified that power line carrier systems, or other systems which command multiple outputs over a single pair of wires, shall not be utilized.

B-ASC's shall be in continuous, direct communication with the network which forms the facility wide building automation system. The B-ASC's shall communicate with the B-BC at a baud rate of no less than 38,400 baud.

Non-Volatile Memory

All control sequences programmed into the B-ASC shall be stored in non-volatile memory, which is not dependent upon the presence of a battery, to be retained. Power failures shall not cause the B-ASC memory to be lost, nor shall there be any need for batteries to be recharged or replaced to maintain the integrity of the controller database. The B-ASC shall allow for the creation of unique application control sequences.

The B-ASC shall be provided with the ability to interface with a laptop computer. The interface port shall be provided at the wall sensor or within the unitary equipment. Connection to the wall sensor must be a standard RJ-45 or USB port.

The B-ASC shall provide an input/output point trending utility that is capable of accumulating 48 analog point samples and 10 digital point samples per Input/Output point. Each sample shall be taken on a user defined interval, ranging from 1 second to 255 hours per sample. The digital readings shall be on a change of state occurrence for the digital points. All samples shall be recorded with the engineering units for the value, along with a time and date identifier for each sample taken.

Systems unable to provide the above capability shall provide for the individual input/output point trending at the B-BC. Specifics as to how each B-ASC point will be trended, at the B-BC, shall be provided in the submittal documents. Included in the explanation shall be the sample intervals, the memory allocation in the B-BC and the number of B-ASC's per B-BC that can be expected.

Controller Location

To simplify controls and mechanical service troubleshooting, the B-ASC shall be mounted directly in the controls compartment of the unitary system. The B-ASC shall be provided with a sheet metal or polymeric enclosure that is constructed of material allowing for the direct mounting within the primary air stream, as defined by UL-465. The direct mounting shall allow all controls maintenance and troubleshooting to be made while at the unitary equipment. The B-ASC shall be directly wired to sensory devices, staging relays or modulating valves for heating and cooling.

For compatibility to the environment of the unitary equipment, B-ASC shall have wide ambient ratings. B-ASC's shall be rated for service from 32 DegF (Degrees Fahrenheit) to 140 DegF.

Contractor shall submit description of location of B-ASC's on all mechanical and unitary equipment.

B-ASC Naming Convention

B-ASC devices shall be named using the following naming convention:

B-ASC devices shall be named using the following format: Building_Floor_RoomNumber_B-ASC Device Type

All B-ASC points shall be named using the following format: Function

Examples:

A VAV controller in the Pavilion HA room HA498 would be named as follows:

PAVHA_04_HA498_VAV

The discharge air temperature point for the above room would be named as follows:

DAT

Therefore, when this point is learned, the entire point name will be:

PAVHA_04_HA498_VAV_DAT

For function short names and building short names and numbers, contact the University Controls Engineering Department.

CONTROL PANELS

Panelboard shall contain all instruments and accessories. Provide each item of equipment with an engraved nameplate. Panelboard shall be wall-mounted or stand-mounted and shall be completely enclosed.

As far as is practical, the control components for each system shall be grouped. Provide each group of components with identification.

The entire panelboard shall be pre-wired and brought to a main terminal strip. All relays, switches, etc., shall be installed, furnished and wired on panelboard. Clearly mark each terminal strip as to which wire from which component is to be connected.

Fabricate panels of 0.06-inch- (1.5-mm-) thick, furniture-quality steel or extruded-aluminum alloy, totally enclosed, with hinged doors and keyed lock, with manufacturer's standard shop-painted finish and color.

Panel-Mounted Equipment: Temperature and humidity controllers, relays, and automatic switches; except safety devices. Mount devices with adjustments accessible through front of panel.

Door-Mounted Equipment: Flush-mount (on hinged door) manual switches, including damper-positioning switches, changeover switches, thermometers, and gages.

Graphics: Color-coded graphic, laminated-plastic displays on doors, schematically showing system being controlled, with protective, clear plastic sheet bonded to entire door.

SENSORS

Electronic Sensors used in air ducts or liquid lines shall utilize non-adjustable RTD or thermostat sensing elements with + or -0.36° F, accuracy and stability of at least + or -0.05° F per year. All sensors used in liquid line shall be provided with separable stainless steel immersion wells. Averaging sensors shall be a minimum of five (5) feet in length, and shall be installed in such a manner so as to sense representative sample of the medium being controlled.

Equipment Operation Sensors: As follows:

Status Inputs for Fans: Differential-pressure switch with adjustable range set to 175 percent of rated fan static pressure. A hawkeye sensor should also be provided so that the owner knows if belts are lost or fans are running backwards.

Status Inputs for Electric Motors: Current-sensing relay with current transformers, adjustable and set to 175 percent of rated motor current.

Digital-to-Pneumatic Transducers: Convert plus or minus 12-V dc pulse-width-modulation outputs (preference is 4-20mA or 0-10 Volts), or continuous proportional current or voltage to 0 to 20 psi (0 to 138 kPa).

Damper Position Indication: Potentiometer mounted in enclosure with adjustable crank-arm assembly connected to damper to transmit 0 to 100 percent damper travel.

SENSOR INPUT AND OUTPUT DEVICES:

The following sensors and devices, or their equivalents, shall be considered acceptable. Other sensors and devices required for this specification are outlined in their respective subsystem.

Analog sensing elements for remote indication shall be independent of local pneumatic sensors used for local control loops.

System Accuracy: The system shall maintain an end-to-end accuracy for one year from sensor to operator's console display for the application specified.

Electronic

TYPE

APPLICATION	BAS, HVAC, BTU, Boiler Control	
STANDARD	100 or 1000 ohm platinum wire wound RTD element Standard J (3 wire) configuration European curve, Alpha = .00385 Ohms/Ohm/deg.C., meets DIN SID 43760 Wire in conduit	
MECHANICAL	1/4" stainless steel sheath	
SPACE TEMPERATURE	Sensor housing to be similar in appearance to existing thermostats except that thermometers are not required. Similarity to be Owner's decision. Locate on an outside wall if possible.	
DUCT TEMPERATURE	Standard lengths 5.5", 11.5" and 17.5"	
	Other lengths with owner's written approval.	
	Locate in central area of airstream at minimum of 18" from reheat coil.	
	1/2" NPT mounting thread and flange and conduit connection.	
	Glass encapsulated element unless otherwise approved.	
THERMOWELL Drilled	brass or stainless steel or brass fitting with stainless steel sheath built-up well with Owner approval.	
	Glass encapsulated element unless otherwise approved.	
	3/4" process connection with drilled wells.	
	1/2" NPT process connection on built-up wells.	
	Insertion into measured medium - $1'' + 1/2''$ diameter of pipe.	
	Cast iron connector head - 1/2" NPT process connection and conduit connection.	
	Rated thermowell pressure $= 250$ psi.	
ELEMENT ACCURACY	must meet .1% DIN and the DIN 43760 standard.	
OVERALL ACCURACY	+ .75 deg.F. for thermowell ele. on 4" or larger pipes.	
	+ .5 deg.F. for thermowell ele. on 8" or larger pipes.	
OVERALL RANGE	+ .5 deg.F. for thermowell ele. on 8" or larger pipes.-20% to 120% of possible operating conditions.	

GENERAL NOTE If wires from RTD probe to DGP are to be more than 200 feet long, provide extra large cast iron connector head (nominal size 2-11/16 x 1/4) or junction box to accommodate a resistance to 4-20 mA convertor transmitter.

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STANDARD	Pressure Sensor	
TYPE	Electronic with LVDT element.	
APPLICATION	4-20 mA Output (2 wire) Wire in conduit Input voltage 10-35 volts DC Loop resistance greater than or equal t	to 500 ohms
MECHANICAL	0)- 30 PSI)-100 PSI)-200 PSI
	1/2" NPT input thread and conduit con Provide differential inputs unless othe Provide an air filter on unused different Provide with a NEMA 4 watertight en Min. rate pressure - 150% FS proof an	nnection. erwise approved. ntial ports. nclosure unless otherwise approved.

OVERALL ACCURACY + 0.5% F.S. including Linearity, hysteresis and repeatability.

ACCURACY NOTE: If pressure transducer is used to calculate flow with a pilot tube, then the accuracy of the pressure sensor should be dictated by the overall accuracy requirement of the system and would probably require a high accuracy sensor.

This section covers all new transducers provided. All new transducers provided shall be of the following type:

INPUT		OUTPUT
1.	Temperature (deg.F.) Temperature (deg.F.)	4-20 mA, 2 wire 100 ohm platinum wire RTD
2.	Pressure	4-20 mA, 2 wire
3.	Flow Instantaneous	4-20 mA, 2 wire
4.	Flow Integrated	Pulse 10 PPS Max A25 msec open (min.) 40 msec closed (min.)
5.	KW Instantaneous	4-20 mA, 2 wire
6.	KWH - Integrated	Pulse – 10 PPS Max A25 msec open (min.) 40 msec closed (min.)

Digital inputs from devices with isolated, dry type contacts (no grounds, no voltage) of either normally open (N.O.) or normally closed (N.C.) configuration. Live contact inputs, those that have voltage present, shall be provided with isolating devices to meet dry contact requirement.

THERMOSTATS:

Room Thermostats: Provide room thermostats that work in conjunction with the B-AAC and B-ASC terminal unit

controllers. Thermostats shall have visible thermometers, setpoint indication and exposed setpoint adjustment in all areas except public spaces. Thermostats are to have push buttons on the front face for adjusting the temperature setpoints. Thermostats are to have no doors.

In cases where a single room sensor is to be shared by multiple controllers the slave box reheat control valves and dampers shall be individually controlled to track the discharge temperature of the master unit. The Master shall be identified locally and on the FMS.

An RJ-11 type connection to serial port shall allow a local portable operator or programmer's terminal to access all program blocks and attributes for complete programmability.

Room Thermostat Accessories: As follows:

Insulating Bases: For all thermostat installations.

Thermostat Guards: Locking transparent-plastic mounted on separate base.

Adjusting Key: As required for device.

Aspirating Boxes: Where indicated for thermostats requiring flush installation.

DAMPERS:

Provide automatic control dampers as indicated, with damper frames not less than 13-gage galvanized steel. Provide mounting holes for enclosed duct mounting. Provide damper blades not less than formed 16-gage galvanized steel, with maximum blade width of 8".

Secure blades to 1/2" diameter zinc-plated axles using zinc-plated hardware. Seal off against spring stainless steel blade bearings. Provide blade bearings of nylon and provide thrust bearings at each end of every blade. Construct blade linkage hardware of zinc-plated steel and brass. Submit leakage and flow characteristics plus size schedule for controlled dampers.

Do not exceed maximum 48"x48" damper size. For sizes larger then this maximum in either dimension, use multiple dampers with a separate operator for each damper. Do not link separate dampers together.

Operating Temperature Range: From -20 degrees to 200 degrees F. (-29 degrees to 93 degrees C.). The occupant shall have an operation local range of 68 degrees and 74 degrees on rooms with Occupancy sensors.

For standard applications as indicated, provide parallel or opposed blade design (as selected by manufacturer's sizing techniques) with inflatable steel blade edging, or replaceable rubber seals, rated for leakage less than 10 CFM/sq.ft. of damper area, at differential pressure of 4" w.g. when damper is being held by torque of 50 inch-pounds.

Smoke Dampers: Provide smoke and combination fire/smoke dampers in accordance with applicable requirements of Specification Section "Ductwork Accessories".

ACTUATORS:

Electric Valve and Damper Motors: Size each motor to operate dampers or valves with sufficient reserve power to provide smooth modulating action or 2-position action as specified.

For reheat coils in branch ductwork and heating coils for air terminal units and fan terminal units, provide non-spring return, fully proportional, floating valve actuators.

For all other applications, provide permanent split-capacitor or shaded pole type motors with gear trains completely oil-immersed and sealed. Equip spring-return motors, with integral spiral-spring mechanism. Furnish entire spring mechanism in housings designed for easy removal for service or adjustment of limit switches, auxiliary switches, or feedback potentiometer.

Equip motors for outdoor locations and for outside air intakes with "O ring" gaskets designed to make motors completely weatherproof, and equip with internal heaters to permit normal operation at -40 degrees F. (-40 degrees C.)

Provide separate motor for each outside air, return air and exhaust air damper. Do not link dampers with different functions together on one damper motor.

Provide separate motor for each damper when overall damper size exceeds 48" in either dimension. Do not link different dampers together on one damper motor.

Binary backed-up motors are not acceptable.

MISCELLANEOUS:

Wells for Pipe Mounted Sensor: Wells shall have minimum working pressure of 150 WOG psig. Wells shall be brass or stainless steel.

Lightning Protection: All electric/electronic equipment supplied must be internally or externally lightning/transient surge voltage protected on all external power feeder and input/output connections which are subject to surge voltage transients. Provide high speed clamping elements which meet IEEE. STD. 472 (SWC) on all digital or analog date channels.

Pressure Instruments:

Differential Pressure and Pressure Sensors: Sensors shall have 4-20 mA output proportional signal with provisions for field checking. Sensors shall withstand up to 150% of rated pressure, without damaging device. Accuracy shall be within 2% of full scale.

Pressure Switches: Pressure switches shall have repetitive accuracy of +2% of range and withstand up to 150% of rated pressure. Sensors shall be diaphragm or bourdon tube design. Switch operation shall be adjustable over operating pressure range. Switch shall have application rated Form C, snap-acting, self-wiping contact of platinum alloy, silver alloy or gold plating.

Current Sensing Relays: Relays shall monitor status of motor loads. Switch shall have self-wiping, snap-acting Form C contacts rated for application. Setpoint of contact operation shall be field adjustable.

Low Voltage Wiring: Control wiring for analog functions shall be 18 AWG minimum with 600 volt insulation, twisted and shielded, 2 or 3 wire to match analog function hardware.

Low Voltage Wiring: Wiring for electric or electronic circuits less than 25 volts shall be cabling manufactured for express use in air plenums. The plenum cable shall be 24 gauge or larger as required, tinned copper, Teflon insulated, twisted pairs, shielded or unshielded, as required, a color coded, overall tape wrap, with transparent Teflon jacket, 150V., NEC725, Class 2 classified for use in air plenum non-conduit signaling application.

Manual Override Switches: In case of failure of the DDC system, provide override switches to operate fans, pumps, air handling units, cooling tower, heat exchangers, etc., manually in local interface control panel. Also for temperature and pressure control provide switches to allow supply temperatures, water temperatures, supply air pressure and fans to be manually regulated. All switches shall be located in locked panel to prevent unauthorized use of the manual override switches.

PART 3 - EXECUTION

INSPECTION:

Examine areas and conditions under which control systems are to be installed. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

INSTALLATION OF AUTOMATIC TEMPERATURE CONTROLS

General: Install systems and materials in accordance with manufacturer's instructions, roughing-in drawings and details shown on the Drawings.

CONTROL WIRING:

Contact the project manager for all required Ethernet connections for this project.

Install control wiring, without splices between terminal points, color-coded. Install in neat workmanlike manner, securely fastened. Install in accordance with National Electrical Code. Install wiring in electrical conduit in all areas. All controls conduit shall be green in color.

Conceal conduit, except in mechanical rooms and areas where other conduit and piping are exposed.

Install all control wiring with color-coded wire in $\frac{3}{4}$ " minimum size conduit. Wire gauge to be in accordance with National Electrical Code.

Connect electrical components to wiring systems and to ground as indicated and instructed by manufacturer. Tighten connectors and terminals, including screws and bolts, according to equipment manufacturer's published torque-tightening values for equipment connectors. Where manufacturer's torqueing requirements are not indicated, tighten connectors and terminals according to tightening requirements specified in UL 486A.

POWER WIRING:

Provide power wiring and conduit to air terminal units (if required) and to smoke dampers and combination fire/smoke dampers and their damper motors.

Furnish and install power cabling and conduit for temperature controls panels and equipment from emergency power panels. Each temperature control panel shall be connected to a separate circuit. Conduits shall connect to panels at the locations directed by the Contractor under Division 26. Final connection in the power panels shall be by Temperature Control Contractor in coordination with Division 26 Contractor.

MISCELLANEOUS:

Software Programming: All software programs shall be programmed by this Contractor.

Installation of Mechanical Devices: Refer to Mechanical Division sections for installation of valve bodies, control wells and dampers; not work of this section.

ADJUSTMENT AND SERVICE:

After completion of the installation, the automatic temperature control manufacturer shall regulate and adjust all thermostats, control valves, motors, and other equipment provided under his contract and shall place them in complete operating condition, subject to approval by the Engineer and Owner.

This shall include but not be limited to "tuning" of all control systems. Systems shall be tuned for decaying wave response and minimal overshoot of setpoint. Contractor is to not leave any system in an Auto Tune mode.

Room temperature controls shall have one temperature setpoint with less than a 0.5°F between calculated heating and cooling temperatures.

This Contractor shall work with Balancing Contractor to provide verification of CFM reading from the DDC terminal unit controllers.

Final adjustment shall be performed by specially trained personnel in direct employ of manufacturer of primary temperature control system.

After completion of installation, perform the following:

Installation.

Check proper installation and connection of each control device. Verify electric power.

Verify each sensor and actuator connection to field computer.

Field Computer Operation.

Point Test.

- check of wiring of each sensor and actuator end-to-end
- verify calibration of each sensor.
- verify manual operation of each actuator.

Local loop control.

- bring each local loop under control.
- check response to upset, change in setpoint.
- check full and partial load operation.

Supervisory functions.

- verify time clock schedules.
- verify reset control.

Verify communication with each field device.

- perform end-to-end sensor and actuator checks.
- verify that the database is correct.

Test other software.

Trend Logging. Report Generation. Remote Access. System Documentation.

Verify proper operation of every control point in the presence of the Engineer. Include point-by-point checkout.

The control manufacturer shall provide a period of free service extending through one complete heating season and one complete cooling season, after acceptance of the control system, and shall report the condition of the control equipment to the Owner and the Architect.

PART 4 - SEQUENCE OF OPERATION:

Refer to the drawings for sequences.

GENERAL AHU NOTE:

Upon tripping of the freezestat, the heating control valve is to modulate to maintain a heating plenum space temperature of 3 degrees F(adj) less than the specific unit DAT setpoint. Example: For unit with 55 DAT setpoint, plenum temperature is to control to 52 degrees.

All AHUs shall be programmed to restart on their own without any software lockout reset required.

Reference University Standard 230553S02 for the AHU naming convention.

BACnet Protocol Implementation Conformance Statement:

The controls contractor shall include their BACnet PICS and BIBB statements (as described in ASHRAE 135-2001) for their BACnet Interface with their shop drawings. The interface shall comply with the following as a minimum.

Vendor Name: Tridium, Inc.

Product Family: Niagara Framework, including N4 Web Supervisor, JACE 6XX at Release 3.8, JACE 8xxx at release 4.6 or greater using the most current version of JAVA or HTML 5. All control work associated with this project must be fully compatible with this version of Tridium such that all alarms, points, etc. communicate and clear alarms seamlessly with the existing system.

Description: This product family provides bi-directional communication between the Tridium Niagara Framework and a BACnet system operating at BACnet Conformance Class 3, over Ethernet media.

BACnet Protocols are documented in Appendices A, B & C.

REQUIRED SUBMITTALS:

The following chart is supplied for the benefit of the Owner, Architect, Engineer and contractor to assure a complete submission of required information. It is a reference listing of documents required by the Specifications under this Section. Refer to Specifications Section - General Provisions for the general requirements of submittals.

ITEM	SHOP DRAWING	M&O MANUAL	PARTS LIST	WRITTEN DESCRIPTION
Control equipment	Х	Х	Х	
Control systems	Х			
Control sequence				Х
"As-builts" drawings	Х	Х	Х	
Frequency drives	Х	Х	Х	
Air terminal units	X	X	X	
I/O Summary Charts	X			

Print and Save Excel I/O Summary Sheet in Spec Directory (Add general IO Point list)

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Appendix A – Vykon Niagara Compatibility Statement (NiCS)



VYKON Niagara^{AX} Compatibility Statement (NiCS) Includes all VYKON branded JACE and Software Products

VYKON Niagara^{AX} Compatibility Statement (NiCS)

Includes all VYKON branded JACE and Software Products

The following information describes Tridium's VYKON branded Niagara^{AX} product licensing.

Tridium's VYKON AX branded products utilizes an open access licensing procedure. VYKON AX branded products can be connected to and managed by any Niagara based tools or systems without the need to modify the license. This means the end user does not have to authorize changes to a VYKON AX license for another systems integrator to gain access to the system. The end user does need to have the necessary user names and passwords installed by the original system integrator so they can be used by another Niagara trained system integrator.

The following is an explanation of the VYKON licensing scheme.

BrandID

Every licensed station and tool has a Brand Identifier (BrandID). This field holds a text descriptor that the OEM chooses as the identifier for its product line. Each station or tool can have only one BrandID entry.

Tridium's VYKON products have the following:

BrandID - VYKON

Station Compatibility In

This field is a list of brands that this local station will allow Niagara AX data to come in from. Simply stated from the point of view of a JACE, "this is the list of brands that can I can accept data from". Tridium's VYKON products contain:

Station Compatibility In - All (In the actual license ALL is define by an *)

Note: The compatibility fields can contain; a single brand "ABC", a list of multiple brands "ABC, XYZ", no brand

"None" or all brands "All".

Station Compatibility Out

This field is a list of brands that this local station will allow Niagara AX data to be shared with. Simply stated, "This is the list of brands that I can share data with". Tridium's VYKON products contain:

Station Compatibility Out - All







Tool Compatibility In

This field is a list of brands that this station will allow to be connected to it for engineering of its application. Simply stated, "This is the list of brands that can engineer me". Tridium's VYKON products contain:

Tool Compatibility In - All

Tool Compatibility Out

This field is a list of brands that this tool is allowed to connect to and engineer. Simply stated, "This is the list of brands that I can engineer". Tridium's VYKON products contain:

Tool Compatibility Out - All

As long as VYKON branded products are purchased by the end user any Tridium Certified (TCP) system integrator can provide support for the end user without the need for the owner to be involved in the licensing process. For more information on Niagara Connectivity and Security visit our website library at: http://www.vykon.com/cs/library/white_papers

Management Contacts:

Scott Boehm Director, VYKON Automation Energy Security Sboehm@tridium.com

Ed Merwin Director, VYKON Automation Energy Security Ed.merwin@tridium.com

3951 Westerre Parkway Suite 350 Richmond, VA 23233 804-747-4771



V-NICS-092009

Appendix B – Tridium Niagara 3.8 BACnet PICS



β951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 USA 1.804.747.4771 Phone 1.804.747.5204 Fax

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TRIDIUM NIAGARA^{AX} 3.8 BACnet PICS

BACnet Protocol Implementation Conformance Statement

Date: August 31, 2016 Vendor Name: <u>Tridium</u> Product Name: <u>Niagara AX BACnet Integration</u> Product Model Number: Tridium JACE models Application Software Version: 3.8.112 or higher Firmware Revision: 3.8.112.1 or higher BACnet Protocol Revision: 7

Product Description:

Niagara AX provides the ability to view, monitor, and control BACnet devices over IP, raw Ethernet, or MS/TP media. Devices, points, schedules, alarms, and logs can be learned and managed from Niagara AX. In addition, Niagara points, schedules, histories, and alarming can be exposed to BACnet for monitor and control by foreign BACnet clients.

BACnet Standardized Device Profile (Annex L):

□ BACnet Advanced Operator Workstation (B-AWS)
 □ BACnet Operator Workstation (B-OWS)
 □ BACnet Operator Display (B-OD)
 □ BACnet Building Controller (B-BC)
 □ BACnet Advanced Application Controller (B-AAC)
 □ BACnet Application Specific Controller (B-ASC)
 □ BACnet Smart Sensor (B-SS)
 □ BACnet Smart Actuator (B-SA)

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Tridium NiagaraAX-3.8 BACnet PICS



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Additional BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing	Device & Network Management
DS-RP-A, B	DM-DDB-A, B
DS-RPM-A, B	DM-DOB-A, B
DS-WP-A, B	DM-DCC-B
DS-WPM-A, B	DM-RD-B
DS-COV-A, B	DM-TS-B
DS-COVU-A, B	DM-UTC-B
DS-V-A	DM-LM-A, B
DS-M-A	DM-BR-B
DS-COVP-B	DM-ANM-A
	DM-ADM-A
	DM-ATS-A
	DM-MTS-A
Alarm & Event Management	Trending
Alarm & Event Management AE-N-A, -I-B	Trending T-VMT-A, I-B, -E-B
-	5
AE-N-A, -I-B	T-VMT-A, I-B, -E-B
AE-N-A, -I-B AE-ACK-A, B	T-VMT-A, I-B, -E-B T-ATR-A, B
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B	T-VMT-A, I-B, -E-B T-ATR-A, B
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B	T-VMT-A, I-B, -E-B T-ATR-A, B
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B AE-INFO-B	T-VMT-A, I-B, -E-B T-ATR-A, B
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B AE-INFO-B AE-VN-A	T-VMT-A, I-B, -E-B T-ATR-A, B
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B AE-INFO-B AE-VN-A AE-VM-A	T-VMT-A, I-B, -E-B T-ATR-A, B T-V-A
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B AE-INFO-B AE-VN-A AE-VN-A Scheduling	T-VMT-A, I-B, -E-B T-ATR-A, B T-V-A Network Management
AE-N-A, -I-B AE-ACK-A, B AE-ASUM-B AE-ESUM-B AE-INFO-B AE-VN-A AE-VN-A Scheduling SCHED-A, I-B, -E-B	T-VMT-A, I-B, -E-B T-ATR-A, B T-V-A Network Management

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Segmentation Capability:

Feature	Supported	Window size
Transmit Segmented Messages	yes	10
Receive Segmented Messages	yes	any

Standard Object Types Supported:

- The CreateObject and DeleteObject services are not supported, so no objects are dynamically creatable or deletable through BACnet service requests, although these objects are dynamically creatable and deletable through Niagara.
- No general range restrictions exist; however, certain specific applications may have specific range restrictions.
- · All potentially available properties are listed for each object type.
- Optional properties are listed in *italics*. Not all instances support all optional properties.
- Writable properties are listed in **bold**. Any range limitations are expressed in
 parentheses following the property name.

Notes from Table

- The File_Size property of File objects is only writable if the underlying system file is changeable.
- The Setpoint property of Loop objects is writable only if the setpoint is not linked from within Niagara.
- The Recipient_List property of the Notification Class object will maintain entries that are internally configured within Niagara.
- The List_Of_Object_Property_References property of the Schedule object will maintain entries that are internally configured within Niagara.
- The Priority_For_Writing property of Schedule objects is not important for internal Niagara operation, as the priority at which a point is commanded is determined by the input to which the Schedule output is linked.
- These Trend Log object properties are not writable if the backing history for the exported Trend Log is a Niagara-generated history. If the history is created as a BACnet Trend Log, then they are writable.
- Trend Logs in Niagara use internal triggering and are either COV or Interval. So the Log_Interval property cannot be written from BACnet.

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Object Type	Pro	operties
Analog Input	Object_Identifier Object_Name Object_Type Present_Value Description Device_Type Status_Flags Event_State Reliability Out_Of_Service Units Min_Pres_Value Max_Pres_Value	Resolution COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps
Analog Output	Object_Identifier Object_Name Object_Type Present_Value Description Device_Type Status_Flags Event_State Reliability Out_Of_Service Units Min_Pres_Value Max_Pres_Value Resolution	Priority_Array Relinquish_Default COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps
Analog Value	Object_Identifier Object_Name Object_Type Present_Value Description Status_Flags Event_State Reliability Out_Of_Service Units Priority_Array Relinquish Default	COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps

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Object Type	Properties	
	Object_Identifier Object Name	Change_Of_State_Time
	Object Type	Change_Of_State_Count (0)
	Present Value	Time_Of_State_Count_Reset
	Description	Elapsed_Active_Time (0)
	Device Type	Time_Of_Active_Time_Reset
Binary Input	Status Flags	Time_Delay
Dinary input	Event State	Notification_Class
	Reliability	Alarm_Value
	Out Of Service	Event_Enable
	Polarity	Acked_Transitions
	Inactive Text	Notify_Type
	Active Text	Event_Time_Stamps
	-	
	Object_Identifier	Time_Of_State_Count_Reset
	Object_Name	Elapsed_Active_Time (0)
	Object_Type	Time_Of_Active_Time_Reset
	Present_Value	Minimum_Off_Time
	Description	Minimum_On_Time
	Device_Type	Priority_Array
D : D · ·	Status_Flags	Relinquish Default
Binary Output	Event_State	Time Delay
	Reliability	Notification Class
	Out_Of_Service	Feedback_Value
	Polarity	Event Enable
	Inactive_Text	Acked Transitions
	Active_Text	Notify_Type
	Change_Of_State_Time	Event Time Stamps
	Change_Of_State_Count (0)	
	Object_Identifier	Elapsed Active Time (0)
	Object_Name	Time Of Active Time Reset
	Object_Type	Minimum_Off_Time
	Present_Value	Minimum On Time
	Description	Priority Array
	Status_Flags	Relinquish Default
Binary Value	Event_State	Time Delay
	Reliability	Notification_Class
	Out_Of_Service	Alarm Value
	Inactive_Text	Event Enable
	Active_Text	Acked Transitions
	Change_Of_State_Time	Notify_Type
	Change_Of_State_Count (0)	Event_Time_Stamps
	Time_Of_State_Count_Reset	Drom_1me_stamps
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BACnet PICS





Object Type	Properties		
	Object_Identifier	Description	
Calendar	Object_Name	Present_Value	
	Object_Type	Date_List	
	Object_Identifier	Segmentation_Supported	
	Object_Name	Max_Segments_Accepted	
	Object_Type	Local_Time	
	System_Status	Local_Date	
	Vendor_Name	UTC_Offset	
	Vendor_Identifier	Daylight_Savings_Status	
	Model_Name	APDU_Segment_Timeout	
	Firmware_Revision	APDU_Timeout	
Device	Application_Software_Revision	Number_Of_APDU_Retries	
	Location	Max_Master	
	Description	Max_Info_Frames	
	Protocol_Version	Device_Address_Binding	
	Protocol_Revision	Database_Revision	
	Protocol_Services_Supported	Configuration_Files	
	Protocol_Object_Types_Supported	Last_Restore_Time	
	Object_List	Backup_Failure_Timeout	
	Max_APDU_Length_Accepted	Active_COV_Subsriptions	
	Object_Identifier	File_Size ¹	
File	Object_Name	Modification_Date	
	Object_Type	Archive	
(Stream Access Only)	Description	Read_Only	
	File_Type	File_Access_Method	

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Object Type	Properties		
Loop	Object_Identifier Object_Name Object_Type Present_Value Description Status_Flags Event_State Reliability Out_Of_Service Output_Units Manipulated_Variable_Reference Controlled_Variable_Reference Controlled_Variable_Reference Controlled_Variable_Value Controlled_Variable_Value Controlled_Variable_Value Controlled_Variable_Units Setpoint_Reference Setpoint ² Action Proportional_Constant	Proportional_Constant_Units Integral_Constant Integral_Constant Derivative_Constant Derivative_Constant_Units Bias Maximum_Output Minimum_Output Priority_For_Writing COV_Increment Time_Delay Notification_Class Error_Limit Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	
Multi-state Input	Object_Identifier Object_Identifier Object_Name Object_Type Present_Value Description Device_Type Status_Flags Event_State Reliability Out Of Service	Number_Of_States State_Text Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event Time Stamps	
Multi-state Output	Object_Identifier Object_Identifier Object_Name Object_Type Present_Value Description Device_Type Status_Flags Event_State Reliability Out_Of_Service Number Of States	State_Text Priority_Array Relinquish_Default Time_Delay Notification_Class Feedback_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	

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Object Type	Properties		
Multi-state Value	Object_Identifier Object_Name Object_Type Present_Value Description Status_Flags Event_State Reliability Out_Of_Service Number_Of_States	State_Text Priority_Array Relinquish_Default Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event Time Stamps	
Notification Class	Object_Identifier Object_Name Object_Type Description	Notification_Class Priority Ack_Required Recipient_List ³	
Schedule	Object_Identifier Object_Name Object_Type Description Effective_Period Weekly_Schedule Exception_Schedule	Schedule_Default List_Of_Object_Property_References ⁴ Priority_For_Writing ⁵ Status_Flags Reliability Out_Of_Service	
Trend Log	Object_Identifier Object_Name Object_Type Description Log_Enable ⁶ Start_Time Stop_Time Log_DeviceObjectProperty Log_Interval ^{6, 7} COV_Resubscription_Interval Client_COV_Increment Stop_When_Full Buffer_Size	Log_Buffer Record_Count (0) ⁶ Total_Record_Count Notification_Threshold Records_Since_Notification Last_Notify_Record Event_State Notification_Class Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	

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Data Link Layer Options:

☑ BACnet IP, (Annex J)
☑ BACnet IP, (Annex J), Foreign Device
☑ ISO 8802-3, Ethernet (Clause 7)
□ ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
□ ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s)
☑ MS/TP master (Clause 9), baud rate(s): <u>9600, 19200, 38400, 76800</u>
□ MS/TP slave (Clause 9), baud rate(s): <u>9600, 19200, 38400, 76800</u>
□ MS/TP slave (Clause 9), baud rate(s): <u>9600, 19200, 38400, 76800</u>
□ MS/TP slave (Clause 9), baud rate(s): <u>9600, 19200, 38400, 76800</u>
□ MS/TP slave (Clause 9), baud rate(s): <u>9600, 19200, 38400, 76800</u>
□ MS/TP slave (Clause 10), baud rate(s): <u>9600, 19200, 19200, 19200, 19200, 19200</u>
□ Point-To-Point, EIA 232 (Clause 10), baud rate(s): <u>9600, 19200, 19200</u>
□ Doint-To-Point, modem, (Clause 10), baud rate(s): <u>9600, 19200</u>
□ LonTalk, (Clause 11), medium: <u>9600, 19200</u>
□ Other:

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) ⊠Yes □ No

Networking Options:

☑ Router, Clause 6 - Routing configurations: Ethernet-IP, Ethernet-MS/TP, IP-MS/TP
 □ Annex H, BACnet Tunneling Router over IP
 ☑ BACnet/IP Broadcast Management Device (BBMD)
 □ Does the BBMD support registrations by Foreign Devices? ☑ Yes □ No

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

🗵 ANSI X3.4	□ IBM [™] /Microsoft [™] DBCS	🗵 ISO 8859-1
🗵 ISO 10646 (UCS-2)	ISO 10646 (UCS-4)	□ JIS C 6226

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

This product supports communications between BACnet and any third-party system to which Niagara can connect. Contact Tridium for a list of supported protocols.

9 of 9 Tridium NiagaraAX-3.8 August 31, 2016 BACnet PICS Appendix C – BACnet Testing Laboratories Product Listing



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 136 is the responsibility of BACnet International (BI). BTL is a registered trademark of BI.

BACnet Testing Laboratories Product Listing

This product has been tested at a qualified BACnet Testing Laboratory and found to comply with all the necessary interoperability requirements in place on the published test date. This listing represents the tested capability of the Listed Product. For information on additional functionality that was not covered in the test process, refer to the Manufacturer's PICS statement on the BI website.

Listing Information

Vendor		Listing Status
Tridium, Inc. 3951 Westerre Parkway, Suite 350 Richmond, VA 23233 USA		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of July 2009 Revision 7 (135-2008)		July 2011

Product Name	Model Number(s)	Software Version
Niagara AX Supervisor with BACnet B-AWS	S-AX-AWS	3.6.35

Device Profiles

Profile	Model Numbers	
BACnet Advanced Workstation (B-AWS)	S-AX-AWS	

BIBBs Supported

	ReadProperty-A	DS-RP-A
	ReadProperty-B	DS-RP-B
	ReadPropertyMultiple-A	DS-RPM-A
	ReadPropertyMultiple-B	DS-RPM-B
	WriteProperty-A	DS-WP-A
	WriteProperty-B	DS-WP-B
Data Sharing	WritePropertyMultiple-A	DS-WPM-A
-	WritePropertyMultiple-B	DS-WPM-B
	COV-A	DS-COV-A
	View-A	DS-V-A
	Advanced View-A	DS-AV-A
	Modify-A	DS-M-A
	Advanced Modify-A	DS-AM-A

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	Alarm and Event-Notification-A	AE-N-A
ľ	Alarm and Event-ACK-A	AE-ACK-A
	Alarm and Event-View Notifications-A	AE-VN-A
Alarm and Event	Alarm and Event-Advanced View Notifications-A	AE-AVN-A
Management	Alarm and Event-View and Modify-A	AE-VM-A
	Alarm and Event-Advanced View and Modify-A	AE-AVM-A
	Alarm and Event-Alarm Summary View-A	AE-AS-A
	Alarm and Event-Event Log View and Modify-A	AE-ELVM-A
	Scheduling-View and Modify-A	SCHED-VM-A
Scheduling	Scheduling-Advanced View and Modify-A	SCHED-AVM-A
5	Scheduling-Weekly Schedule-A	SCHED-WS-A
	Trending-View-A	T-V-A
Trending	Trending-Advanced View and Modify-A	T-AVM-A
renuing	Automated Trend Retrieval-A	T-AVM-A
	Automated Trend Retrieval-A	I-ATR-A
	Dynamic Device Binding-A	DM-DDB-A
-	Dynamic Device Binding-B	DM-DDB-B
	Dynamic Object Binding-A	DM-DOB-A
	Dynamic Object Binding-B	DM-DOB-B
	Automatic Device Mapping-A	DM-ADM-A
	Automatic Network Mapping-A	DM-ANM-A
	Time Synchronization-A	DM-TS-A
Device and Network Management	Time Synchronization-B	DM-TS-B
	UTC Time Synchronization-A	DM-UTC-A
	UTC Time Synchronization-B	DM-UTC-B
	Automatic Time Synchronization-A	DM-ATS-A
	Manual Time Synchronization-A	DM-MTS-A
	DeviceCommunicationControl-A	DM-DCC-A
	DeviceCommunicationControl-B	DM-DCC-B
	ReinitializeDevice-A	DM-RD-A
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-A	DM-BR-A
	Restart-A	DM-R-A
	Object Creation and Deletion-A	DM-OCD-A
	List Manipulation-A	DM-LM-A
	List Manipulation-B	DM-LM-B

Object Type Support

Device		
	Device	

Data Link Layer Options

Media	Options
BACnet/IP (Annex J)	BBMD
Ethernet	

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Networking Options

Networking Functionality	Media	
Router	BACnet/IP (Annex J) – Ethernet	

Character Set Support

ANSI X3.4 ISO 10646 (UCS-2)

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END OF CONTROLS