



## INVITATION FOR BIDS

CCK-2564.0-5-24

Construct Health Education Building

BP-01C Early Site Setup package

ADDENDUM #1

01/22/2024

**IMPORTANT: BID AND ADDENDUM MUST BE RECEIVED BY: 01/30/2024 @ 3:00 P.M. LEXINGTON, KY TIME**

Bidder must acknowledge receipt of this and any addendum as stated in the Invitation for Bids.

### **ITEM #1: BIDDER NOTICES**

- The "Bid Opening Date" has been moved extended to 01/30/2024. The location and time for submission of the bids has not changed.

### **ITEM #2: QUESTIONS & ANSWERS AND MODIFICATIONS TO ORIGINAL BID DOCUMENTS**

- Refer to and incorporate within your offer the enclosed Questions and Responses, and additional information from the project team.

**OFFICIAL APPROVAL**  
**UNIVERSITY OF KENTUCKY**

**SIGNATURE**

*Ken Scott*

01/22/2024

Contracting Officer / (859) 257-9102

\_\_\_\_\_  
\_\_\_\_\_  
Typed or Printed Name

University of Kentucky  
Purchasing Division  
322 Peterson Service Building  
Lexington, KY 40506-0005

*An Equal Opportunity University*

**UK Construct Health Education Building**  
**ADDENDUM No. 1**  
**CCK-2564.0-5-24**  
**1/22/2023**

**Item No. 01** Re: Replace "Attachment A" 3A Page with attached revised "Attachment A"

**Item No. 02** Re: Form of Proposal TC-005, Arborist and Tree Pruning, Attachment B, Use attached revised scope of work.

**Item No. 03** Re: Form of Proposal TC-006, Surveying, Attachment B, Use attached revised scope of work.

**Item No. 04** Re: Form of Proposal TC-007, Demo and Abatement, Attachment B, Use attached revised scope of work.

**Item No. 05** Re: Form of Proposal TC-008, Early Site General Trades, Attachment B, Use attached revised scope of work.

**Item No. 06** Re: Form of Proposal TC-009, Site Electric, Attachment B, Use attached revised scope of work.

**Item No. 07** Revise Project General Requirements Document item number 44B to read:

- 44B. Provide specification section 01 7419.01 (COMPLETE) with the exception of debris generated by Demolition and Abatement Contractor. Please note the requirements to sort debris for the purpose of recycling. ~~Trash shall be sorted off site due to project site constraints.~~ In addition to the (2) general debris dumpsters, **TC-008 Early Site General Trades** shall provide (2) additional 30-yd dumpsters (Total of 4 dumpsters) for recyclable material (i.e. wood, metal, etc). Include all required pulls for 39 weeks. (ADD #1)

**Item No. 08** Revise Project General Requirements Document to add item 44C:

- 44C. If a contractor will be generating any concrete, asphalt, or CMU waste, that contractor is responsible for providing a dedicated recycling dumpster for that material. Each contractor shall provide receipts, weight tickets, and manifests indicating receipt and acceptance of recyclable waste by recycling and processing facilities. (ADD #1)

**Item No. 09** Revise Project General Requirements Document item number 60E to read:

- 60E. Include (2 3 (ADD #1)) 30' rolling gates, (1) 40' rolling gate (consisting of (2) 20' sections) and (4) 4' man-gates as shown on site logistics plan all with padlocks keyed alike.

**Item No. 10** Revise Project General Requirements Document item number 64, to remove the following:

64. ~~This machine may be used by other trades as necessary for their respective scope of work as directed by the CM.~~ (ADD #1)

**Item No. 11** Revise Project General Requirements Document to add item number 71:

71. **TC-008 Early Site General Trades** shall provide a **Lunch and Break Area Tent** for the project site. General tent location shown on SK-002.3. Coordinate details, pricing, and contracting with Chris Hill with Sunbelt Rentals at 901-570-0183; chris.hill3@sunbeltrentals.com.
- A. Assume tent shall to be 49' x 49' x 10' (2400 sqft). Exact footprint is subject to change pending site evaluation.
  - B. Tent shall include proper life safety measures including (4) double doors, exit signs, and fire extinguishers.
  - C. Tent shall include at minimum (2) 400-watt LED lights per truss.
  - D. Tent shall be climate controlled with (1) 25-ton HVAC unit with 72 Kw heat
  - E. TC-008 to provide all installation and setup costs and carry rental for 39 weeks.
  - F. Rental for the remainder of the project after 39 weeks and dismantling costs will be captured in a future bid package.
  - G. Include all maintenance of tent throughout duration of rental. Provide semi-annual inspections and service of the structure and related equipment.
  - H. Provide a 60' x 75' x 6" deep compacted DGA base to act as the "floor" of the tent structure.

- I. **TC-009 Site Electric** shall provide all required power for exit signs, lights, and HVAC unit.  
Assume the following electrical load:
1. (4) LED Lights and (4) Exit Signs @ 120V 1A each
  2. (1) HVAC @ 460V/3, MCA=102 and MOCP=110 (72kw heat) (ADD #1)

**Item No. 12** Add Attachment N "Turner Subcontractor Onboarding"

**Item No. 13** Replace Sketch SK-003 "Fence Plan" with new SK-003 document.

**Item No. 14** Add Sketch SK-009 "Alternate Temporary Electrical Phasing"

**Item No. 15** See answers to all submitted questions.

**Item No. 16** JRA Architects Addendum No. 01 – include all work scope items, clarifications, etc. as detailed consistent with your trade contract work scope document.

## 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. CONTRACT DOCUMENTS

- Contract Drawings – University of Kentucky Health Education Building #2564.0 as prepared by JRA Architects
- Project Manual, prepared by Turner Construction & JRA Architects. – University of Kentucky Health Education Building
- Addendum #\_\_ dated \_\_\_\_ prepared by Turner
- Addendum #\_\_ dated \_\_\_\_ prepared by Turner
- Addendum #\_\_ dated \_\_\_\_ prepared by Turner
- Addendum #\_\_ dated \_\_\_\_ prepared by Turner

### C. ADDITIONAL CONTRACT DOCUMENTS

- Attachment “B” – Trade Contractor \_\_\_\_ Scope of Work
- Project General Requirements
- Project General Conditions
- Project Special Conditions
- Turner Subcontract Form 36
- Attachment “C” Project Safety Program
- Attachment “E” Accounting Procedures
- Attachment “F” Percentage Markup Sheet
- Attachment “G” Project Schedule
- Attachment “I” Lean Subcontract Exhibit
- Attachment “J” Electronic Agreement
- Attachment “K” CCIP Manual dated November 15<sup>th</sup>, 2023
- Attachment “L” UK HEB Tree Protection Standard
- Attachment “M” Construction Waste Management and Disposal
- Attachment “N” Turner Subcontractor Onboarding (ADD #1)
- Sketches SK-002 through SK-009 (ADD #1)
- 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.
- All contractors shall refer to Attachment N for the Subcontractor Onboarding Instructions. Contractors are encouraged to complete this process prior to bid opening, as it will expedite contracting with Turner. (ADD #1)



**Attachment "A"**  
**ADDITIONAL PROVISIONS**

**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:
  - 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**

- Sales/Use Tax Status: Refer to "Instruction to Bidders" of Bid Manual for details. This project is taxable, all applicable taxes in your bid.
- Prevailing Wage: N/A, not required.
- Insurance Program: This Project shall utilize a Contractor Controlled Insurance Program ("CCIP"). Refer to attachment D of Bid Manual for details, instructions, etc.
- Retainage: If job is Kentucky (any job) – 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 and the Subcontractor achieves 50% completion. At that point, retainage for all Subcontractors shall be reduced to 5% of Total Contract Value.
- E&O Insurance: N/A
- Builders Risk: (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 a minimum fee of \$50 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.
- Turner Accelerated Payment Program - 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.

**Attachment “A”  
ADDITIONAL PROVISIONS**

- OSHA 30 Hour Certification: 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. The 30 hour certified person(s) must be on-site 100% of the time. This OSHA 30 hour certification must be updated through Turner’s 1.5 hour Safety Update Training every two years through Turner University.
- Stormwater Compliance: 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 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**
- Waste Tracking Requirements: 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

- MBE/WBE participation: Refer to MBE/WBE Participation Goals document for details regarding the project inclusion program and/or goals for the University of Kentucky.
- No-Idling Standard: Trade partner agrees to comply with Turner’s No-Idling Standard. All trade partner vehicles within the project site fence (including, but not limited to, transportation and construction equipment, delivery trucks and personal or company trucks) shall not idle. The only allowable exceptions to the standard are as follows:
  1. Ambient air temperature exceeds 85°F or falls below 32°F (or as defined by local or regional temperature limits, whichever is stricter)
  2. Engine idling is required for the function of auxiliary equipment (i.e. cranes, concrete pumps, etc.)

▪ **Additional Subcontract Agreement Article Pertaining to Harassment**

This agreement includes and acknowledges the addition of the following Article as if inserted immediately following the Ethics and Compliance Article of this agreement as follows:

**New Article XV: Harassment**

It is the goal of Contractor to promote a work environment at the Project that is free from harassment of any kind. Contractor has ZERO TOLERANCE for harassment, including harassment on the basis of race, sex, gender, gender identity, gender expression, transgender status, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, religious creed, citizenship, marital status (including registered domestic partners), parental status, physical disability, mental disability, medical condition, genetic information, military or veteran status (including protected veteran status), or any other characteristic or status protected by law. Subcontractor agrees to be bound by the Policy Statement on Harassment referenced in Article XXII below, and any violation or suspected violation of such policy by Subcontractor or any of its officers, agents, servants, employees, subcontractors or suppliers 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. Subcontractor shall actively promote a harassment-free work environment among its officers, agents, servants, employees, subcontractors, and suppliers.

**G. WORK EXCLUDED**

**Attachment “A”  
ADDITIONAL PROVISIONS**

Refer to Attachment “B” – Scope of Work

**H. ALTERNATE PRICES**

Refer to Attachment “B” – Scope of Work for Description of Alternate

**I. ALLOWANCES**

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	\$
<u>Adjustments</u>	_____

<b>CONTRACT TOTAL</b>	<b>\$</b>
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**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**  
**TC-005 – Arborist and Tree Pruning**

UNIVERSITY OF KENTUCKY  
CAPITAL CONSTRUCTION PROCUREMENT SECTION  
FORM OF PROPOSAL TC-005 Arborist and Tree Pruning

Project No. 2564.0 Project Title: UK Construct Health Education Building

Purchasing Officer: Ken Scott

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

This Proposal is submitted by: \_\_\_\_\_

(NAME AND ADDRESS OF BIDDER)

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

TO: BID CLERK  
UNIVERSITY OF KENTUCKY  
CAPITAL CONSTRUCTION

INVITATION TO BID: CCK-2564.0-5-24

BID OPENING DATE: January 30<sup>th</sup>, 2024 (ADD #1)

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

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

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Bidder understands that successful bidder will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Bidder 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**  
**TC-005 – Arborist and Tree Pruning**

FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. **CCK-2564.0-5-24** have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;
3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;
4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and 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 Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;
6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.
7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.
8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.
9. In accordance with 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 bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

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

SIGNED BY \_\_\_\_\_ TITLE \_\_\_\_\_

PRINT NAME \_\_\_\_\_ FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ AREA CODE & PHONE \_\_\_\_\_

\_\_\_\_\_  
CITY STATE ZIP CODE FAX \_\_\_\_\_

DATE \_\_\_\_\_ EMAIL \_\_\_\_\_

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

LUMP SUM PROPOSAL

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

**TC-005 Arborist and Tree Pruning**

FOR THE LUMP SUM OF \_\_\_\_\_

(USE WORDS)

\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.

(USE WORDS)

(USE WORDS)

(\$ \_\_\_\_\_) **BIDDER MUST TURN IN BID BREAKOUT SHEET WITH THIS FORM OF PROPOSAL**

(USE FIGURES)

ALTERNATES – NONE

Current Experience Modification Rating \_\_\_\_\_

OSHA Incident Rates: Recordable \_\_\_\_\_ Date of Proposal \_\_\_\_\_

**THE FOLLOWING ITEMS ARE HEREWITH ENCLOSED AS REQUIRED BY KRS 45A.185:**

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.
2. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.
3. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

\_\_\_\_\_  
(Nine Digit Number)

4. Form of Proposal Supplemental Information
5. TC-\_\_\_\_\_ Bid Breakout sheet (from Attachment 'B')

**SUPERINTENDENT**

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

List the Superintendent's Name \_\_\_\_\_

**Bidder Contact Information**

Please provide the information for the person who is needed to contact with any questions dealing with this bid below:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

A post bid review will be held for this scope of work on **February 2<sup>nd</sup>, 2024 @ 9:00 A.M. E.D.T. (ADD #1)** in the Turner Field Office. All parties (prime and subcontractors) are required to attend in person.

Attachment "B"  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

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

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

HOURLY RATES:

UNIT PRICE

Classification	Base rate	Fringes	Burden	(if	(SUM)	(SUM)	(SUM)	OH/P %
			(Ins/taxes/other)	(Pier Diems)	(ST)	(T&1/2)	(DT)	(5%)
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## Attachment "B"

## SCOPE OF WORK

## TC-005 – Arborist and Tree Pruning

BID BREAKOUT

Fill in the following breakdown of costs included in your base bid. 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 bid documents. It will be used only to aid in verifying completeness of the bids.

DESCRIPTION OF WORKCOST INCLUDED IN BID

Pre-construction Evaluation &amp; Report

\$ \_\_\_\_\_

Pre-construction Pruning

\$ \_\_\_\_\_

Pruning and Maintenance during Construction

\$ \_\_\_\_\_

Bi-Weekly Site Visit &amp; Report

\$ \_\_\_\_\_

Fertilizer, Disease &amp; Pest Control, and Irrigation Allowance

\$ ~~15,000~~ \$10,000 (ADD #1)

Document Control Server Allowance

\$ 3,000 (ADD #1)

Safety

\$ \_\_\_\_\_

Remaining work not listed above, Overhead &amp; Profit

\$ \_\_\_\_\_

TOTAL BID AMOUNT (SHOULD MATCH PROPOSAL)

\$ \_\_\_\_\_

Cost of Performance and Payment Bond

\$ \_\_\_\_\_

DO NOT INCLUDE THIS COST IN YOUR BID



Attachment "B"  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

*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 **Arborist and Tree Pruning 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 bid, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Bid Manual, etc.). It is this Subcontractor's responsibility for the entire scope of this Bid Package and coordination between all trades.

**E) WORK INCLUDED - SCOPE-SPECIFIC ITEMS**

- 1) Trade Specifications Specifically Included, but not limited to the following:

**DIVISION 01 – GENERAL REQUIREMENTS (ALL SECTIONS)**

**ATTACHMENT "L" TREE PROTECTION STANDARDS (COMPLETE)**

- a) This Trade Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Division 1 specifications and the use of the Construction Documents as a whole.
  - b) Subcontractor includes all work indicated in specification, 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 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 (SK-002) 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) Verify layout provided by others. 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** contained in Attachment C of this RFP.
  - 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 bid. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum bid price.

## Attachment "B"

## SCOPE OF WORK

## TC-005 – Arborist and Tree Pruning

- 12) All unloading, distribution, staging, hoisting, rigging, scaffolding, lifts, platforms, scissor lifts, boom lifts, planking, guying, sheeting, shoring, dewatering, bracing transportation, access for material, equipment and personnel required to perform this work is included in this contract.
- 13) This Subcontractor is responsible to repair any asphalt, roadway, curb/gutter, granite and sidewalk outside the area of demolition that is damaged by this Contractor, his Subcontractors, or haulers.
- 14) ~~Include any site & street cleaning related to work performed by this scope. Include street sweeping equipment equivalent to Laymor Sweepmaster 300 series, Broce BW260 series, or equal. Provide street cleaning as necessary, with a minimum of twice daily for the duration of this contract. Provide power sweeping and scrubbing of all paved areas, sidewalks, etc. soiled as a result of the work to the satisfaction of the Construction Manager. This Trade Contractor must clean all adjacent streets and maintain as if there were no construction site in the area. Huguelet Drive, University Drive, Veterans Drive any other impacted streets must be swept daily for the duration of this contract. Street must be immediately swept and cleaned if there is excessive tracking as determined by the Construction Manager. Any and all costs associated with street cleaning, inclusive of permits and fines will be the responsibility of this Trade Contract. (ADD #1)~~
- 15) This contractor shall provide **Arborist and Tree Pruning services** (COMPLETE) as shown on the Contract Documents, and in accordance with Attachment "L" Tree Protection Standards which includes but is not limited to:
- The Arborist performing this work shall conform with all guidelines and regulations within the UK Tree Protection Standards dated 05/2017.
  - The Arborist performing the work onsite shall be an ISA Certified Arborist, experienced in the principles of tree protection and maintenance during construction activities.
  - All licenses and certifications are to be provided at or prior to the submission of the bid.
  - The Arborist shall conduct a thorough preconstruction evaluation and provide an Arborist Report for all trees and plants on and adjacent the project site per 56.1.9 in Attachment "L" Tree Protection Standards. This report needs to be completed, submitted, and approved by the owner by 2.1.24. Reference Attachment "G" Bid Schedule. The preconstruction report shall be compiled and submitted by a Registered Consulting Arborist® (RCA) with American Society of Consulting Arborists or an ISA Board Certified Master Arborist. In addition the report shall contain:
    - Recommendations for tree and plant protection fencing.
    - Recommendations for protection of root zones and above ground tree parts and plants.
    - Recommendations for pruning of existing trees and plants.
    - Recommendations for all insect and disease control.
    - Recommendations for maintenance of existing trees and plants including irrigation during the construction period as recommended by the Arborist Report.
    - Recommendations for maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
    - Appraisal Value of all trees to remain.
  - A pre-construction meeting with the Owner's Representative and Construction Manager will take place at least seven (7) days before beginning work to review any questions the Arborist may have regarding the work, administrative procedures during construction and project work schedule. Prior to this meeting, the Arborist shall mark all trees and plants to remain and or be removed as indicated in the construction documents for review and approval by the Owner's Representative.
  - The Arborist shall include the following throughout the project:
    - Monitoring the installation of tree and plant protection fencing installed by others **as part of this project both inside and outside the site fencing (ADD #1).**
    - Monitoring installation protection of root zones and above ground tree parts and plants installed by others **as part of this project both inside and outside the site fencing (ADD #1).**

## Attachment "B"

## SCOPE OF WORK

## TC-005 – Arborist and Tree Pruning

1. Assume 6 weeks of daily monitoring (8 hrs per day) during landscape/hardscape work. This is in addition to the bi-weekly site visits.

~~iii. Monitoring removal of trees during demolition phase of work by others. (ADD #1)~~

- iv. Provide all labor and material for pruning of existing trees and plants that are shown to remain on the contract documents (reference C200 Note 1) to the furthest extent possible without causing damage to the trees and plants. Pruning will occur after acceptance of arborist report and acceptance from UK at the following timelines:

1. At the start of construction (prior to demo of existing buildings). For the trees along University Dr. ~~and next to the Dimock Building (ADD #1)~~ with branches that are within the project site, it is the intent to prune the trees back for the full height of the tree to the existing curb line that is within the project site fence.
2. ~~Three (3)~~ Two (2) (ADD #1) additional prunings throughout the project duration as directed by the CM.

- v. Provide all labor and material for insect and disease control.
- vi. Provide maintenance of existing trees and plants including irrigation & fertilizing during the construction period as recommended by the Arborist Report.
- vii. Monitoring the removal of tree protection fencing and other protection from around and under trees and plants by others.
- viii. Clean up, dispose, and remove from site all materials and debris from pruning operations.

- g. This Contractor shall remove the trees indicated in the documents per ~~Note #6~~ **Note #6B (ADD #1) on C200**. This Contractor shall have the removal and grinding of these stumps **as indicated on note #6A and #6B on C200 (ADD #1)**. Include utilizing a utility locating service prior to removal of stumps. Utility locating services must be provided by independent contracting services utilizing underground radar detection. Include removal of all "mulch" from the stump removal process from the project site.
- h. In addition to the activities listed above the Arborist shall conduct bi-weekly (every other week) site visits to review tree conditions, tree protection fencing, and root zone protection. These visits shall commence at project mobilization and end at completion of project landscape and hardscape work. Reference Attachment "G" Bid Schedule. A written report shall be submitted from each visit to the Construction Manager within 3 days of the site visit. Any items that are an immediate threat to any trees shall be promptly reported to the Construction Manager during the site visit.
- i. All pruning, branch tie back, tree removal, root pruning, and fertilizing required shall be performed by or under the direct supervision of an ISA Certified Arborist. Submit aforementioned individual's qualifications for approval by the Owner's Representative.
- j. All applications of pesticide or herbicide shall be performed by a person maintaining a current state license to apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all required state licensing certificates including applicable chemical applicator licenses.
- k. The Arborist shall include all materials, labor, tools, and equipment required to provide survey information, pruning, irrigation, pesticide, herbicide and fertilizing operations as required.

- 16) This Contractor must provide evidence of its Professional Liability Policy including a minimum single limit of \$3,000,000 per occurrence, indicating the per claim limits, and the deductible amount per claim.

**F. CONSTRUCTION SCHEDULE**

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

**G. WORK EXCLUDED**

This Scope of Work shall exclude the following:

- 1) Payment & Performance Bond

Attachment "B"  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

- 2) Installation and Maintenance of Tree Protection Fencing.
- 3) Installation and Maintenance of Root Protection.
- 4) Post Construction Maintenance Period.

**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. Indicate Add/Deduct Price on the BID FORM

- 1) None

**I. ALLOWANCES**

The following Allowances **are to be included in the base bid**:

- |   |                     |                   |
|---|---------------------|-------------------|
| 1) Fertilizer, Disease & Pest Control, and Irrigation Allowance | <del>\$15,000</del> | \$10,000 (ADD #1) |
| 2) Document Control Server Allowance                            |                     | \$3,000 (ADD #1)  |

The above allowances are to be included in the base bid/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Bid/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) Labor Rates - 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" (Bid Form) for bid day information. The apparent low bidder will submit detailed breakdown with-in 24 hours after bid day.
- 2) Equipment Rates – 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

## Attachment "B"

## SCOPE OF WORK

## TC-005 – Arborist and Tree Pruning

**FORM OF PROPOSAL**  
**SUPPLEMENTAL INFORMATION**

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

NOTE: MUST BE SUBMITTED WITH THE BID SUBMITTAL.

**Failure to comply will result in rejection of Bidder's Proposal.**Contractor Report of Prior Violations of  
Chapters 136, 139, 141, 337, 338, 341, and 342

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

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

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

## 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  
Large Business(04)\_\_\_ Disadvantaged Large  
Business

(09)\_\_\_ Other

(05)\_\_\_ Woman-Owned Small Business

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

**DEFINITIONS**

- (01) **SMALL BUSINESS:** A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.
- (02) **LARGE BUSINESS:** A business concern that exceeds the small business size code standards established by SBA.
- (03) **DISADVANTAGED SMALL BUSINESS:** A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.
- (04) **DISADVANTAGED LARGE BUSINESS:** A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.
- (05) **WOMAN-OWNED SMALL BUSINESS:** A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.
- (06) **WOMAN-OWNED LARGE BUSINESS:** A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.
- (07) **DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS:** A concern that meets the definition of both (03) and (05) above.
- (08) **DISADVANTAGED, WOMAN OWNED LARGE BUSINESS:** A concern that meets the definition of both (04) and (06) above.
- (09) **OTHER:** A concern that does not meet any of the above definitions.

**BIDDER'S QUALIFICATIONS**

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

TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

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

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. Goal 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 bid the project and describe why they were not successful (i.e. not low bid, did not respond, etc).

Attachment "B"  
**SCOPE OF WORK**  
**TC-005 – Arborist and Tree Pruning**

**RECORD OF MBE/WBE SOLICITATION**

\_\_\_\_\_ Certifies that the following  
BIDDER'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Bid 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 Bidder's Proposal. Failure to comply will result in rejection of Bidder's Proposal.

<u>FIRM NAME</u>	<u>MBE/WBE</u>	<u>WORK ITEMS SOLICITED</u>	<u>RESULT: NO RESPONSE OR NOT LOW BIDDER</u>

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



**LIST OF MATERIALS AND EQUIPMENT**

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

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

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

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

CONTRACTOR NAME & ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC-\_\_\_\_\_  
(INSERT NUMBER)

SCOPE OF WORK: \_\_\_\_\_  
(INSERT NAME OF TRADE CONTRACT)

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

ITEM	MATERIALS AND EQUIPMENT	BRAND OR MANUFACTURER
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**PRIMARY LIST OF PROPOSED SUBCONTRACTORS**

The apparent low bidder will be required to furnish this information within 24 hours of bid submittal. Failure to comply will result in rejection of Bidder'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: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC - \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF BID CATEGORY)

DIVISION OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR
_____	_____
_____	_____
_____	_____
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**Attachment "B"**  
**SCOPE OF WORK**  
**TC-006 – Surveying**

UNIVERSITY OF KENTUCKY  
 CAPITAL CONSTRUCTION PROCUREMENT SECTION  
 FORM OF PROPOSAL TC-006 Surveying

Project No. 2564.0      Project Title: UK Construct Health Education Building

Purchasing Officer: Ken Scott

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

This Proposal is submitted by: \_\_\_\_\_  
 (NAME AND ADDRESS OF BIDDER)

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

TO:      BID CLERK      INVITATION TO BID: CCK-2564.0-5-24

UNIVERSITY OF KENTUCKY  
 CAPITAL CONSTRUCTION

BID OPENING DATE: January 30<sup>th</sup>, 2024 (ADD #1)

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

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

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Bidder understands that successful bidder will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Bidder 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**  
**TC-006 – Surveying**

FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. **CKK-2564.0-5-24** have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;
3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;
4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and 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 Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;
6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.
7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.
8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.
9. In accordance with 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 bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

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

SIGNED BY \_\_\_\_\_ TITLE \_\_\_\_\_

PRINT NAME \_\_\_\_\_ FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ AREA CODE & PHONE \_\_\_\_\_

\_\_\_\_\_  
CITY STATE ZIP CODE FAX \_\_\_\_\_

DATE \_\_\_\_\_ EMAIL \_\_\_\_\_

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-006 – Surveying**

LUMP SUM PROPOSAL

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

**TC-006 Surveying**

FOR THE LUMP SUM OF \_\_\_\_\_  
 (USE WORDS)

\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
 (USE WORDS) (USE WORDS)

(\$ \_\_\_\_\_) **BIDDER MUST TURN IN BID BREAKOUT SHEET WITH THIS FORM OF PROPOSAL**  
 (USE FIGURES)

ALTERNATES – NONE

Current Experience Modification Rating \_\_\_\_\_

OSHA Incident Rates: Recordable \_\_\_\_\_ Date of Proposal \_\_\_\_\_

**THE FOLLOWING ITEMS ARE HERewith ENCLOSED AS REQUIRED BY KRS 45A.185:**

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.
2. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.
3. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

\_\_\_\_\_  
 (Nine Digit Number)

4. Form of Proposal Supplemental Information
5. TC-\_\_\_\_ Bid Breakout sheet (from Attachment 'B')

**SUPERINTENDENT**

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

List the Superintendent's Name \_\_\_\_\_

**Bidder Contact Information**

Please provide the information for the person who is needed to contact with any questions dealing with this bid below:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

Attachment "B"  
**SCOPE OF WORK**  
***TC-006 – Surveying***

A post bid review will be held for this scope of work on **February 1<sup>st</sup>, 2024 @ 9:00 A.M. E.D.T. (ADD #1)** in the Turner Field Office. All parties (prime and subcontractors) are required to attend in person.

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 This Contractor and any subcontractor involved, and shall be used uniformly without modifications for either additions or deductions. The Unit Prices as established shall be used to determine the equitable adjustment of the Contract Price in connection with changes, deletions or extra work performed under the Contract and the "Rules of Measurement" set forth in the General Conditions shall govern.

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

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

HOURLY RATES:						UNIT PRICE		
Classification	Base rate	Fringes	Burden	(if)	(SUM)	(SUM)	(SUM)	OH/P %
			(Ins/taxes/other)	(Pier Diems)	(ST)	(T&1/2)	(DT)	(5%)
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Attachment "B"  
**SCOPE OF WORK**  
**TC-006 – Surveying****BID BREAKOUT**

Fill in the following breakdown of costs included in your base bid. 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 bid documents. It will be used only to aid in verifying completeness of the bids.

**DESCRIPTION OF WORK****COST INCLUDED IN BID**

Property survey verification	\$ _____
Perimeter building line/gridlines	\$ _____
Site control points/monuments	\$ _____
Column offsets and benchmark elevations at each floor	\$ _____
Pourstop/shaft survey at each floor	\$ _____
Electronic drawings/documentation	\$ _____
Safety	\$ _____
Document Control Server Allowance	\$ 3,000 (ADD #1)
Overhead & Profit (not to exceed 10% proposal)	\$ _____

---

**TOTAL BID AMOUNT (SHOULD MATCH PROPOSAL)**

\$ \_\_\_\_\_

Cost of Performance and Payment Bond

\$ \_\_\_\_\_

**DO NOT INCLUDE THIS COST IN YOUR BID**



Attachment "B"  
**SCOPE OF WORK**  
**TC-006 – Surveying**

*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 **Surveying** 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 bid, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Bid Manual, etc.). It is this Subcontractor's responsibility for the entire scope of this Bid Package and coordination between all trades.

**E) WORK INCLUDED - SCOPE-SPECIFIC ITEMS**

- 1) Trade Specifications Specifically Included, but not limited to the following:

**DIVISION 01 – GENERAL REQUIREMENTS (ALL SECTIONS)**

- a) This Trade Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Division 1 specifications and the use of the Construction Documents as a whole.
  - b) Subcontractor includes all work indicated in specification, 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 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 (SK002) 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) Verify layout provided by others. 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** contained in Attachment C of this RFP.

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-006 – Surveying**

- 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 bid. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum bid price.
- 12) This Contractor performing the work onsite shall be a licensed surveyor in the State of Kentucky, experienced in the principles of site control and building layout. Additionally, This Contractor shall provide a resume of previously completed projects similar in size and scope to the UK Health Education Building project.
- 13) All licenses and certifications are to be provided prior to award of contract.
- 14) This Contractor must provide evidence of its Professional Liability Policy including a minimum single limit of \$3,000,000 per occurrence, indicating the per claim limits, and the deductible amount per claim.
- 15) Prior to the start of work in the field, This Contractor and crew will attend a pre-construction conference with the Turner Project Manager and/or Project Superintendent. At this meeting, lines of communication and reporting will be established along with a discussion and review the responsibilities of This Contractor.
- 16) A current property survey is included in the contract documents. An electronic copy will be provided by the Architect or Owner for This Contractor's use.
- 17) Contractor shall first verify the property survey in the field, checking accuracy of all pertinent survey datum information along with all critical tie in points. All points will be verified horizontally and vertically.
- 18) All verification work as described above will be shown by This Contractor on a drawing stamped with the Surveyor's registration indicating any discrepancies found, and submitted to the Construction Manager. This contractor shall also reproduce a new .dwg file with existing pertinent survey datum information along with all critical tie in points, new benchmarks, new monuments, new control points, etc...to the Construction Manager for distribution to other trades for layout. As control points are added, new .pdf and .dwg files need to be updated.
- 19) Upon resolution of any discrepancies, This Contractor will set perimeter grid lines or building lines as determined by the Construction Manager. This will occur both, prior to and after demolition activities.
- 20) This Contractor shall include all materials, labor, tools, and equipment required provide survey information and documents as listed. This includes but is not limited to: Site fence layout, site control points, monuments, benchmark elevations, column offsets, perimeter edge & pourstop survey.
- 21) Include 110 man hours for survey crew (w/equipment) in addition to the scope listed herein.
- 22) Include 25 man hours for draftsman/CADD tech (w/equipment) in addition to the scope listed herein.
- 23) This Contractor shall provide layout for the project construction fence and/or limits of disturbance. This will be defined after award of the surveying contract.
- 24) This Contractor will provide a minimum of 6 "offsite" monuments and 3 monuments within the site with coordinate values and an elevation. A site benchmark will also be provided within the project limits and reviewed with the Construction Manager.
  - a. This contractor shall provide and install these monuments. Monuments are to be a minimum of 8" diameter of concrete set a minimum of 36" below grade. Top of monument to be flush with adjacent grade. Include all costs for utility locates and necessary potholing (hydroexcavation) or hand digging per Turner policies. Utility locating services must be provided by independent contracting services.
- 25) This Contractor shall provide a minimum of 8 column line double offsets at each floor, as well as a benchmark elevation on a minimum of 8 column lines at an even foot above the finished floor. This item will be reviewed in detail with the Construction Manager upon the award of the surveying contract.
- 26) All monuments, benchmarks, column offsets, etc. are to be labeled and etched in substrate material.
- 27) This Contractor shall provide an as-built survey of all stair wells, elevator shafts and the stair well foundations, and 50% of all MEPFP shaft openings. The required deliverable for the as-built reports will be a marked up .pdf showing the deltas between the design and as-built data.

Attachment "B"  
**SCOPE OF WORK**  
**TC-006 – Surveying**

- 28) This Contractor shall provide an as-built survey of all perimeter pour stops including: at each column line, midpoint between columns and every turn point. The required deliverable for the as-built reports will be a marked up .pdf showing the deltas between the design and as-built data.
- 29) This Contractor shall provide an as-built survey prior to relocation of existing retaining walls and concrete walks between Dimock Building and Combs Cancer Research Building. Intent is to provide enough data in order to re-install in same location(s) and elevations as existing. This includes elevations, locations, and coordinates for others to re-layout as to put back everything per existing conditions. Include setting of any necessary targets or MAG Nails with N/E/Z coordinates for others to utilize. Reference SK-007 for location. A .dwg file and a .pdf file shall be turned over to Construction Manager for others to use.
- 30) This Contractor to provide electronic survey data and reports in both .pdf and .dwg formats. Each deliverable will be used in a survey package and will require title blocks and all pertinent information of the survey data collected. Electronic files to be submitted to Construction Manager within 3 days of surveying.
- 31) Include 10 separate trips to stake grade with elevations and cut/fill marks. Quantity and locations to be determined by the CM.

**F. CONSTRUCTION SCHEDULE**

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

**G. WORK EXCLUDED**

This Scope of Work shall exclude the following

- 1) Payment & Performance Bond
- 2) Layout for others

**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. Indicate Add/Deduct Price on the BID FORM

- 1) None

**I. ALLOWANCES**

The following Allowances **are to be included in the base bid**:

- 1) **Document Control Server Allowance** **\$ 3,000 (ADD #1)**

The above allowances are to be included in the base bid/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Bid/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) Labor Rates - 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" (Bid Form) for bid day information. The apparent low bidder will submit detailed breakdown with-in 24 hours after bid day.

Attachment "B"  
**SCOPE OF WORK**  
**TC-006 – Surveying**

- 2) Equipment Rates – 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

**FORM OF PROPOSAL**  
**SUPPLEMENTAL INFORMATION**

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

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

Contractor Report of Prior Violations of  
Chapters 136, 139, 141, 337, 338, 341, and 342

Pursuant to KRS 45A.485, This 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 This Contractor that have occurred in the previous five (5) year period.

This statute also requires for the duration of the Contract established, This Contractor be in continuous compliance with the provisions of Chapters 136, 139, 141, 337, 338, 341, and 342 that apply to This Contractor's operations. This 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.

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

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  
Large Business

(04)\_\_\_ Disadvantaged Large  
Business

(09)\_\_\_ Other

(05)\_\_\_ Woman-Owned Small Business

Attachment "B"  
**SCOPE OF WORK**  
*TC-006 – Surveying*

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-006 – Surveying**

**DEFINITIONS**

- (01) **SMALL BUSINESS:** A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.
- (02) **LARGE BUSINESS:** A business concern that exceeds the small business size code standards established by SBA.
- (03) **DISADVANTAGED SMALL BUSINESS:** A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.
- (04) **DISADVANTAGED LARGE BUSINESS:** A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.
- (05) **WOMAN-OWNED SMALL BUSINESS:** A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.
- (06) **WOMAN-OWNED LARGE BUSINESS:** A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.
- (07) **DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS:** A concern that meets the definition of both (03) and (05) above.
- (08) **DISADVANTAGED, WOMAN OWNED LARGE BUSINESS:** A concern that meets the definition of both (04) and (06) above.
- (09) **OTHER:** A concern that does not meet any of the above definitions.

**BIDDER'S QUALIFICATIONS**

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

Attachment “B”  
SCOPE OF WORK  
TC-006 – Surveying

TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

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

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. Goal is 10% MBE/WBE

1. Minority and Women Subcontractors

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2. Minority and Women Material Suppliers

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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 bid the project and describe why they were not successful (i.e. not low bid, did not respond, etc).

Attachment "B"  
**SCOPE OF WORK**  
**TC-006 – Surveying**

**RECORD OF MBE/WBE SOLICITATION**

\_\_\_\_\_ Certifies that the following  
BIDDER'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Bid 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 Bidder's Proposal. Failure to comply will result in rejection of Bidder's Proposal.

<u>FIRM NAME</u>	<u>MBE/WBE</u>	<u>WORK ITEMS SOLICITED</u>	<u>RESULT: NO RESPONSE OR NOT LOW BIDDER</u>

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



**LIST OF MATERIALS AND EQUIPMENT**

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

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

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

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

CONTRACTOR NAME & ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC- \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF TRADE CONTRACT)

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

ITEM	MATERIALS AND EQUIPMENT	BRAND OR MANUFACTURER
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**PRIMARY LIST OF PROPOSED SUBCONTRACTORS**

The apparent low bidder will be required to furnish this information within 24 hours of bid submittal. Failure to comply will result in rejection of Bidder'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: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC - \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF BID CATEGORY)

DIVISION OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
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Attachment "B"  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**

UNIVERSITY OF KENTUCKY  
CAPITAL CONSTRUCTION PROCUREMENT SECTION  
FORM OF PROPOSAL TC-007 Demo & Abatement

Project No. 2564.0 Project Title: UK Construct Health Education Building

Purchasing Officer: Ken Scott

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

This Proposal is submitted by: \_\_\_\_\_

(NAME AND ADDRESS OF BIDDER)

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

TO: BID CLERK  
UNIVERSITY OF KENTUCKY  
CAPITAL CONSTRUCTION

INVITATION TO BID: CCK-2564.0-5-24

BID OPENING DATE: January 30<sup>th</sup>, 2024 (ADD #1)

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

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

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Bidder understands that successful bidder will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Bidder 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**  
**TC-007 – Demo & Abatement**  
FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. **CCK-2564.0-5-24** have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;
3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;
4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and 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 Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;
6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.
7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.
8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.
9. In accordance with 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 bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

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

SIGNED BY \_\_\_\_\_ TITLE \_\_\_\_\_

PRINT NAME \_\_\_\_\_ FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ AREA CODE &amp; PHONE \_\_\_\_\_

\_\_\_\_\_  
CITY STATE ZIP CODE FAX \_\_\_\_\_

DATE \_\_\_\_\_ EMAIL \_\_\_\_\_

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**  
LUMP SUM PROPOSAL

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

**TC-007 Demo & Abatement**

FOR THE LUMP SUM OF \_\_\_\_\_  
 (USE WORDS)

\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
 (USE WORDS) (USE WORDS)

(\$ \_\_\_\_\_) **BIDDER MUST TURN IN BID BREAKOUT SHEET WITH THIS FORM OF PROPOSAL**  
 (USE FIGURES)

ALTERNATES – NONE

Current Experience Modification Rating \_\_\_\_\_

OSHA Incident Rates: Recordable \_\_\_\_\_ Date of Proposal \_\_\_\_\_

**THE FOLLOWING ITEMS ARE HEREWITH ENCLOSED AS REQUIRED BY KRS 45A.185:**

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.
2. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.
3. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

\_\_\_\_\_  
 (Nine Digit Number)

4. Form of Proposal Supplemental Information
5. TC-\_\_\_\_\_ Bid Breakout sheet (from Attachment 'B')

**SUPERINTENDENT**

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

List the Superintendent's Name \_\_\_\_\_

**Bidder Contact Information**

Please provide the information for the person who is needed to contact with any questions dealing with this bid below:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

A post bid review will be held for this scope of work on **February 5th, 2024 @ 10:00 A.M. E.D.T. (ADD #1)** in the Turner Field Office. All parties (prime and subcontractors) are required to attend in person.

Attachment "B"  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**  
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 Bidders will be required to complete and submit the following information with the bid. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.*

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

HOURLY RATES:

					<u>UNIT PRICE</u>			
Classification	Base rate	Fringes	Burden	(if)	(SUM)	(SUM)	(SUM)	OH/P %
			(Ins/taxes/other)	(Pier Diems)	(ST)	(T&1/2)	(DT)	(5%)
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Attachment "B"  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**  
**BID BREAKOUT**

Fill in the following breakdown of costs included in your base bid. 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 bid documents. It will be used only to aid in verifying completeness of the bids.

<u>DESCRIPTION OF WORK</u>	<u>COST INCLUDED IN BID</u>
Engineering/Submittal and Layout	\$ _____
Mobilizations; Permits and Fees	\$ _____
Abatement Work for Kelley Hall	\$ _____
Abatement Work for Annex #5	\$ _____
Demolition Work for Kelley Hall	\$ _____
Demolition Work for Annex #5	\$ _____
Unforeseen Demo & Abatement Allowance	\$ 30,000 _____
Document Control Server Allowance	<u>\$ 3,000 (ADD #1)</u>
General Work Requirements	\$ _____
Remaining work not listed above, Overhead & Profit	\$ _____

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TOTAL BID AMOUNT (SHOULD MATCH PROPOSAL)	\$ _____
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Cost of Performance and Payment Bond	\$ _____
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**DO NOT INCLUDE THIS COST IN YOUR BID**

## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

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 **Demo & Abatement** 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 bid, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Bid Manual, etc.). It is this Subcontractor's responsibility for the entire scope of this Bid Package and coordination between all trades.

**E) WORK INCLUDED - SCOPE-SPECIFIC ITEMS**

- 1) Trade Specifications Specifically Included, but not limited to the following:

**DIVISION 01 – GENERAL REQUIREMENTS (ALL SECTIONS)****DIVISION 2 – EXISTING CONDITIONS****SECTION 02 4116 – STRUCTURE DEMOLITION**

- a) This Trade Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Division 0 and Division 1 specifications and the use of the Construction Documents as a whole.
  - b) Subcontractor includes all work indicated in specification, 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 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) Verify layout provided by others. 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** contained in Attachment C of this RFP.
  - 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 bid. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum bid price.



## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

- 12) This contractor is required for their full time superintendent to be onsite at all times to assist in the coordination of the project. This person is to have no labor responsibilities onsite.
- 13) All unloading, distribution, staging, hoisting, rigging, scaffolding, lifts, platforms, scissor lifts, boom lifts, planking, guying, sheeting, shoring, dewatering, bracing transportation, access for material, equipment and personnel required to perform this work is included in this contract.
- 14) This Subcontractor is responsible to repair any asphalt, roadway, curb/gutter, granite and sidewalk outside the area of demolition that is damaged by this Contractor, his Subcontractors, or haulers.
- ~~15) Include any site & street cleaning related to work performed by this scope. Street sweeping equipment will be provided by General Trades Contractor for use by this contractor. Provide power sweeping and scrubbing of all paved areas, sidewalks, etc. soiled as a result of this scope of work to the satisfaction of the Construction Manager. This Trade Contractor must clean all adjacent streets and maintain as if there were no construction site in the area. Huguelet Drive, University Drive, Veterans Drive any other impacted streets must be swept daily for the duration of this contract. Streets must be immediately swept and cleaned if there is excessive tracking as determined by the Construction Manager. Any and all costs associated with street cleaning, inclusive of permits and fines will be the responsibility of this Trade Contract. (ADD #1)~~
- 16) Ensure all utilities are shut off and capped prior to demolition work. Coordinate with Site Electrical Trade Contractor.
- 17) This contractor shall provide their own dumpsters and containers for this scope of work.
- 18) Temporary Provision:
- Provide underground radar detection for underground utility location prior to demo activities occurring.
  - Contractor shall secure and provide all necessary city, county and state permits for demolition, abatement, and hauling operations.
  - Provide any necessary lighting and power requirements for demolition and abatement operations. Temporary site power for the project may NOT be available or in proximity for demolition operation.
  - Provide erosion control, and daily maintenance as required for this work. This includes but is not limited to the protection of existing yard drains, storm water inlets, curb inlet's, destabilized slopes, etc. Reference contract documents for BMP's and Storm Water Pollution Prevention specifications.
    - Site BMPs (silt fence, waddles, inlet protection, etc...) will be set up by the General Trades Contractor. This contractor shall repair, replace, and maintain any BMPs that are disturbed as part of this scope of work.
  - Contractor(s) will assist in opening, monitoring, and closing of construction gates during operations.
  - Provide certified and trained flagman when hauling-out and during all equipment mobilization operations.
  - No contractor parking onsite. Limited company support and service vehicles only.
  - There will be no temporary water source on-site at the time of this scope of work. Contractor to procure the meter and pay for water consumption from fire hydrant(s) around the site.
- 19) This contractor shall provide **EXISTING HAZARDOUS MATERIAL REMOVAL/ABATEMENT** (COMPLETE) of Kelley Hall and Medical Annex #5 as shown on the Contract Documents, and in accordance with section 02 4116 and 01 3126 which includes but is not limited to:
- Mobilize to site and perform visual inspection of the existing conditions. Report any found or differing conditions to the included test reports
  - Reference the documents and report prepared by S&ME for Hazardous Materials Assessment for materials for known materials to be abated as part of this scope of work.
    - This contractor shall assume any like materials as those identified should be considered hazardous.
    - Hazardous material waste and universal waste disposed in accordance with state and federal regulations.
  - This contractor is to prepare and submit for review all plans and certifications, etc. required by the EPA, OSHA, Turner Construction policies, and all other governing bodies. The goal at the completion of this

## Attachment "B"

## SCOPE OF WORK

**TC-007 – Demo & Abatement**

abatement work is to receive a 100% clean letter certifying a safe work environment for the scheduled construction work.

- i. The remediation subcontractor will provide a written remediation plan to Turner to eliminate the environmental risk and fully satisfy Turner, state, federal, and OSHA requirements for performing the work. Plan to be reviewed by CM for approval.
- d. This contractor shall include costs to retain a 3<sup>rd</sup> party Environmental Consultant/Industrial Hygienist for the duration of this work scope. The 3<sup>rd</sup> party shall review work plans, processes, and the field work. This 3<sup>rd</sup> party shall also confirm that the remediation is complete and provide a full Clean Letter for the project area confirming zero hazardous materials remain. Comply with all local and State regulations, codes, and laws.
- e. This contractor to include the following details from Turner's asbestos program elements. Please make sure to review and incorporate into your abatement plan. Discuss any conflicts or details where your work plan will not be in accordance.
  - i. **Permissible Exposure Limit** - Workplace exposure must be limited to 0.1 fibers per cubic centimeter of air (0.1 f/cc), averaged over an eight-hour work shift. The excursion or short-term limit is one fiber per cubic centimeter of air (1 f/cc) averaged over a sampling period of 30 minutes.
  - ii. **Exposure Monitoring** - Daily monitoring is required until the exposure drops below the action level (0.01 f/cc). Daily monitoring is not required where employees are using supplied-air respirators operated in the positive pressure mode.
  - iii. **Methods of Compliance** - The exposures shall be controlled using engineering controls, to the extent feasible. Where engineering controls are not feasible to meet the exposure limit, they must be used to reduce employee exposures to the lowest levels attainable and must be supplemented by the use of respiratory protection.
  - iv. **Personal Protective Equipment** - For any employee exposed to airborne concentrations of asbestos that exceed the PEL, the use of protective clothing such as coveralls or similar full-body clothing, head coverings, gloves, and foot covering is required. Wherever the possibility of eye irritation exists, face shields, vented goggles, or other appropriate protective equipment must be provided and worn. In construction, there are special regulated-area requirements for asbestos removal, renovation, and demolition operations. These provisions include a negative pressure area, decontamination procedures for workers, and a "competent person" with the authority to identify and control asbestos hazards. The standard includes an exemption from the negative pressure enclosure requirements for certain small scale, short duration operations provided special work practices prescribed are followed.
  - v. **Regulated Areas** - Regulated areas must be established where the 8-hour time weighted average (TWA) or 30-minute excursion values for airborne asbestos exceed the prescribed permissible exposure limits. Only authorized persons wearing appropriate respirators can enter a regulated area. In regulated areas, eating, smoking, drinking, chewing tobacco or gum, and applying cosmetics are prohibited. Warning signs must be displayed at each regulated area and must be posted at all approaches to regulated areas.
  - vi. **Hygiene Facilities and Practices** - Clean change rooms must be furnished by the abatement contractor for employees who work in areas where exposure is above the TWA and/or excursion limit. Two lockers or storage facilities must be furnished and separated to prevent contamination of the employee's street clothes from protective work clothing and equipment. Showers must be furnished so that employees may shower at the end of the work shift. Employees must enter and exit the regulated area through the decontamination area. The equipment room must be supplied with impermeable, labeled bags and containers for the containment, and disposal of contaminated protective clothing and equipment. Lunchroom facilities for those employees must have a positive pressure, filtered air supply and be readily accessible to employees. Employees must wash their hands and face prior to eating, drinking, or smoking. The subcontractor must ensure that employees do not enter lunchroom facilities with protective work clothing or equipment unless surface fibers have been removed from the clothing or equipment. Employees may not smoke in work areas where they are occupationally exposed to asbestos.

## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

- vii. **Accidental Exposure** - In the event Presumed Asbestos Containing Material (PACM) has been uncovered or discovered on a Turner project, the superintendent is required to shut the job down or the portion of the project where the exposure has occurred, evacuate the area, regulate the area, and notify the Owner for further instructions. Turner can hire a consulting firm to test the suspect material.
- viii. **Medical Examination** - Medical examinations must be made available annually for workers exposed above the action level or excursion limit for 30 or more days per year or who are required to wear negative pressure respirators; chest X-rays are at the discretion of the physician.
- ix. **Respirators** - Respirators will be required to protect against the particular substance encountered according to Turner Construction's Respiratory Protection Program.
  - Prior to a respirator being used, the employee must be medically cleared to wear a respirator (including dust masks) and fit-tested in accordance with 29 CFR 1910.134 and Turner Construction's Respiratory Protection Program.
  - Employees must have documented training for respiratory protection. In addition to the medical clearance above, for any employee who is required to wear a respirator for exposure 30 or more days a year, the employee must have an initial medical exam including x-ray, Pulmonary Function Test, and other requirements, along with ongoing periodic medical surveillance (typically every 3 years).
  - Records of the medical exams and any exposure monitoring records of operations are to be kept by the employer. Respirators are "seal dependent", and thus the users must be "fit tested" annually and clean shaven where the respirator seals to the face.
- x. **Labels and Signage** - Caution labels must be placed on all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers.
- xi. **Training Requirements** - All individuals performing class III asbestos work are required to be trained according to the regulations of the state in which the work occurs.
- xii. **Recordkeeping** - The employer must keep an accurate record of all measurements taken to monitor employee exposure to asbestos. This record is to include: the date of measurement, operation involving exposure, sampling and analytical methods used, and evidence of their accuracy; number, duration, and results of samples taken; type of respiratory protective devices worn; name, social security number, and the results of all employee exposure measurements. This record must be kept for 30 years.

20) This contractor shall provide **STRUCTURE DEMOLITION (COMPLETE)** of Kelley Hall and Medical Annex #5 as shown on the Contract Documents and in accordance with section 02 4116 which includes but not limited to:

- a. This contractor shall be responsible for Waste Management Plan and all disposal of demo debris per section 01 7419 Construction Waste Management and Disposal (COMPLETE) as related to this scope of work.
- b. This contractor shall investigate existing utilities servicing the buildings to be removed. Develop a cut, cap, and make safe plan to be reviewed with CM prior to work occurring. Once approved by CM, cut, cap, and make safe all utilities prior to building demolition. This includes gas, steam, domestic water, CHW, fire protection, storm, sanitary etc... Utilities shall be cut, capped and removed 5' outside of the existing building structure. Cutting and capping of utilities shall be done by a licensed plumber, pipefitter, or sprinkler fitter, or other professional.
  - i. NOTE: Site Electrical Trade Contractor will cut and make safe electrical and fiber feeds to Kelley Hall and Annex #5. Site Electrical Contractor will re-route new fiber to facilitate Kelley Hall demolition.
  - ii. Include cutting and capping/plugging 5' outside the existing building limits any existing storm and sanitary lines that come out of the building. Cap additional branch lines from building. Mark capped locations and provide an as-built drawing.

## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

- iii. Reference MU-101 (note PD8) and MU-501. This contractor shall use a licensed plumber who has knowledge working on UK's campus to perform the work as indicated on MU-501 for the Kelley and Dimock steam vault. All work as indicated in this steam vault is by this contractor in order to make safe the steam at Kelley Hall for demolition. Demo of the concrete and pipes as indicated by notes 5 and 2 will be by others. Coordinate disconnection of permanent utilities with Owner to minimize downtime. This will included a fully detailed shutdown plan for work that is to be completed. Include any night shift work to limit impact to the operations. Plan will include a complete risk assessment and schedule with activities identified in 30 minute increments from shut down to re-energize. All outages are to be submitted via UK's outage request website.
- c. Include complete removal of foundations, spread footings, CMU walls, column pads, grade beams, elevator pits, slab-on-grade, and deep foundations (piers).
  - i. Backfill existing footings and deep foundations (drilled piers) with like soil to top of existing footing or deep foundation elevations. Reference SK-008 for approximate areas and location of basement.
  - ii. After demolition of Kelley Hall, where the existing steam tunnel tied in, this contractor provide a fully weather and water tight cover or cap to seal the steam tunnel where it met Kelley Hall. The intent is to seal off the existing tunnel as to not let water or weather infiltrate the existing vault. (ADD #1)
- d. Include statement of any Refrigerant Recovery per 02 4116
- e. Include complete removal of any adjoining structures such as ramps, HVAC units, steps, docks, bike racks, etc...
- f. Include removal of any bollards and signage around these two structures. Turn signs over to the University.
- g. This contractor shall provide existing conditions survey that complies with section 01 3233 Photographic Documentation. This survey will be submitted for record per section 02 4116.
- h. Reference Attachment SK-004 Salvage Items List for items to be salvaged and delivered to the owner within a 5-mile radius of the project site. Include all loading, trucking, and unloading. Salvaged items are to be neatly labeled and if applicable boxed up.
- i. Project is directly adjacent to Whitney Hendrickson Cancer Building and patient parking. Provide pre demo particulate count prior to demolition of structure and during demolition operations. This work shall be performed by a 3<sup>rd</sup> party certified test and balance contractor. Include a total of five (5) continuous monitoring devices (ADD #1). Confirm monitoring points with CM before proceeding with raining the structure. Tests shall be documented and submitted for record.
  - i. Contractor shall provide all dust control as outlined below.
    - 1. The Contractor shall maintain and control airborne dust below 10 mg/m<sup>3</sup> at the perimeter work area during demolition, and associated site activities.
    - 2. The Contractor shall provide regular and adequate moisture during operations to prevent dust emissions and migration.
    - 3. Fugitive dust generated on-site shall not be permitted to migrate past the Project Limits boundary.
    - 4. The Contractor shall conduct air monitoring using methods and procedures that will adequately demonstrate that dust emission in the work area is below 10 mg/m<sup>3</sup> during activities.
    - 5. ~~The Contractor shall conduct air monitoring using methods and procedures that will adequately demonstrate that dust emission in the work area is below 10 mg/m<sup>3</sup> during activities.~~ The Contractor shall conduct ambient air monitoring at the perimeter of the demolition site and have air samples analyzed by NIOSH Method 0500 to measure airborne levels of particulates. (ADD #1)
    - 6. The Contractor shall report the results of the perimeter air monitoring to the Project Superintendent on a daily basis, beginning on day 3 of the project.

## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

7. If the results of the perimeter air monitoring exceed the specified criteria of 10 mg/m<sup>3</sup> the Contractor shall implement improved dust control measures.
8. Monitoring device shall be capable of monitoring for lead, asbestos, and silica levels during demolition activities to ensure that project is under the permissible exposure limits. (ADD #1)
  - ii. Provide continuous wetting debris at point of disturbance up to ½ hour minimum prior to start and ½ hour after completion. Operation to be overseen by full time dedicated laborer.
  - iii. Prior to demo and abatement activities, provide and secure non damaging filter media or such at all louver(s) at all buildings adjacent to project site. Specifically ANY louver(s) on the Whitney Hendrickson Building. Maintain daily during active work days. Filter media cannot restrict air flow. MERV 8 Standards UL Class 900 orange 1" thick.
- j. Temporary fencing to be installed and maintained for this scope of work during all demolition activities (site fencing by others).
  - i. After the demolition of Kelley Hall, this contractor shall provide new fencing to protect any areas of disturbance from demolition activities. Any areas where foundations and footings were removed need to be sloped to the greatest extent possible to eliminate any steep "drop-offs". Include fencing to protect from any fall hazard locations per Turner Safety Policy.
- k. After the demolition of Annex #5, this contractor shall backfill any basement, areas where foundations were removed, and the general footprint of the existing building and bring flush to existing grade. Backfill shall consist of #2 stone capped with 6" of DGA and compacted to withstand construction traffic.
- l. Remove any tree stumps that are near any of the buildings to be demolished as part of this contract. Trees will be cut down by others.
- m. Reference drawing MU-101. This contractor to include complete removal and disposal of existing abandoned stem vault indicated by note PD15. Include backfilling the area of removal with #2 stone capped with 6" of DGA and compacted to facilitate construction traffic. Verify vault is abandoned prior to removal.
- n. This contractor shall protect the existing electrical "PM50" switch at the NW corner of Kelley Hall, and the existing electrical transformer to the West of Medical Annex #5 during demolition activities. Reference EU101 and EU102. At a minimum, protection shall consist of concrete jersey barriers to protect the sides and a road plate rested on the barriers to protect the top of the electrical equipment. This equipment must remain in place during the scope of this work. Remove barrier and road plates from the project upon completion of this scope.
- o. This Subcontractor, **their Abatement Subcontractor (ADD #1)**, and/or the Subcontractor's Consultant performing this design, is required to provide, evidence, and maintain general liability insurance in an amount not less than **\$5,000,000** per occurrence and **\$10,000,000** aggregate coverage.
- p. Provide vibration monitoring for the duration of this scope of work for the mobile PET/CT unit that is adjacent to the site. Monitoring functions shall have capabilities to alert if a certain threshold is exceeded and be able to produce data for real time analysis. Monitoring needs to be set up and operational one week prior to the start of demolition activities. (ADD #1)
- q. Salvage twelve (12) light fixtures and bulbs and associated whips within Kelley Hall to be turned over to CM for re-use. (ADD #1)

**F. CONSTRUCTION SCHEDULE**

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

**G. WORK EXCLUDED**

This Scope of Work shall exclude the following

- 1) Payment & Performance Bond
- 2) Demolition asphalt, curbs, sidewalks, hardscapes, etc...

Attachment "B"  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**

- 3) Demolition of any trees.
- 4) Cutting and make safe building electric and communications.
- 5) Re-route of existing fiber line prior to Kelley Building demolition.

**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. Indicate Add/Deduct Price on the BID FORM

- 1) None

**I. ALLOWANCES**

The following Allowances **are to be included in the base bid**:

- |   |                          |
|---|--------------------------|
| 1) Unforeseen Demo and Abatement Allowance  | \$ 30,000                |
| 2) <b>Document Control Server Allowance</b> | <b>\$ 3,000 (ADD #1)</b> |

The above allowances are to be included in the base bid/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Bid/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) Labor Rates - 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" (Bid Form) for bid day information. The apparent low bidder will submit detailed breakdown with-in 24 hours after bid day.
- 2) Equipment Rates – 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

Attachment "B"  
**SCOPE OF WORK**  
**TC-007 – Demo & Abatement**  
**FORM OF PROPOSAL**  
**SUPPLEMENTAL INFORMATION**

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

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

Contractor Report of Prior Violations of  
Chapters 136, 139, 141, 337, 338, 341, and 342

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

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

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

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<br>Small Business |
| (03)___Disadvantaged Small<br>Business | (08)___Disadvantaged Woman-Owned<br>Large Business |
| (04)___Disadvantaged Large<br>Business | (09)___Other                                       |
| (05)___Woman-Owned Small Business      |  |

**Attachment "B"**  
**SCOPE OF WORK**  
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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 bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.
- (02) **LARGE BUSINESS:** A business concern that exceeds the small business size code standards established by SBA.
- (03) **DISADVANTAGED SMALL BUSINESS:** A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.
- (04) **DISADVANTAGED LARGE BUSINESS:** A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.
- (05) **WOMAN-OWNED SMALL BUSINESS:** A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.
- (06) **WOMAN-OWNED LARGE BUSINESS:** A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.
- (07) **DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS:** A concern that meets the definition of both (03) and (05) above.
- (08) **DISADVANTAGED, WOMAN OWNED LARGE BUSINESS:** A concern that meets the definition of both (04) and (06) above.
- (09) **OTHER:** A concern that does not meet any of the above definitions.

**BIDDER'S QUALIFICATIONS**

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



## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

## TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

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

## 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. Goal is 10% MBE/WBE

## 1. Minority and Women Subcontractors

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## 2. Minority and Women Material Suppliers

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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 bid the project and describe why they were not successful (i.e. not low bid, did not respond, etc).

## Attachment "B"

## SCOPE OF WORK

## TC-007 – Demo &amp; Abatement

**RECORD OF MBE/WBE SOLICITATION**\_\_\_\_\_  
Certifies that the following

BIDDER'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Bid 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 Bidder's Proposal. Failure to comply will result in rejection of Bidder's Proposal.

<u>FIRM NAME</u>	<u>MBE/WBE</u>	<u>WORK ITEMS SOLICITED</u>	<u>RESULT: NO RESPONSE OR NOT LOW BIDDER</u>

\_\_\_\_\_  
Signature\_\_\_\_\_  
Date\_\_\_\_\_  
Title

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

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

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

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

CONTRACTOR NAME & ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC- \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF TRADE CONTRACT)

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

ITEM	MATERIALS AND EQUIPMENT	BRAND OR MANUFACTURER
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The apparent low bidder will be required to furnish this information within 24 hours of bid submittal. Failure to comply will result in rejection of Bidder'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:

TRADE CONTRACT: TC - (INSERT NUMBER)

SCOPE OF WORK: (INSERT NAME OF BID CATEGORY)

DIVISION OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR

Attachment "B"  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

UNIVERSITY OF KENTUCKY  
CAPITAL CONSTRUCTION PROCUREMENT SECTION  
FORM OF PROPOSAL TC-008 EARLY SITE GENERAL TRADES

Project No. 2564.0      Project Title: UK Construct Health Education Building

Purchasing Officer: Ken Scott

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

This Proposal is submitted by: \_\_\_\_\_  
(NAME AND ADDRESS OF BIDDER)

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

TO:    BID CLERK  
      UNIVERSITY OF KENTUCKY  
      CAPITAL CONSTRUCTION

INVITATION TO BID: CCK-2564.0-5-24

BID OPENING DATE: January 30<sup>th</sup>, 2024 (ADD #1)

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

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

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Bidder understands that successful bidder will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Bidder 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**  
**TC-008 – Early Site General Trades**

FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. **CCK-2564.0-5-24** have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;
3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;
4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and 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 Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;
6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.
7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.
8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.
9. In accordance with 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 bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

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

SIGNED BY \_\_\_\_\_ TITLE \_\_\_\_\_

PRINT NAME \_\_\_\_\_ FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ AREA CODE & PHONE \_\_\_\_\_

\_\_\_\_\_  
CITY STATE ZIP CODE FAX \_\_\_\_\_

DATE \_\_\_\_\_ EMAIL \_\_\_\_\_

Attachment "B"  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

LUMP SUM PROPOSAL

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

**TC-008 Early Site General Trades**

FOR THE LUMP SUM OF \_\_\_\_\_  
 (USE WORDS)

\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
 (USE WORDS) (USE WORDS)

(\$ \_\_\_\_\_) **BIDDER MUST TURN IN BID BREAKOUT SHEET WITH THIS FORM OF PROPOSAL**  
 (USE FIGURES)

ALTERNATES – NONE

Current Experience Modification Rating \_\_\_\_\_

OSHA Incident Rates: Recordable \_\_\_\_\_ Date of Proposal \_\_\_\_\_

**THE FOLLOWING ITEMS ARE HERewith ENCLOSED AS REQUIRED BY KRS 45A.185:**

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.
2. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.
3. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

\_\_\_\_\_  
 (Nine Digit Number)

4. Form of Proposal Supplemental Information
5. TC-\_\_\_\_\_ Bid Breakout sheet (from Attachment 'B')

**SUPERINTENDENT**

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

List the Superintendent's Name \_\_\_\_\_

**Bidder Contact Information**

Please provide the information for the person who is needed to contact with any questions dealing with this bid below:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

Attachment "B"

**SCOPE OF WORK**

***TC-008 – Early Site General Trades***

A post bid review will be held for this scope of work on **February 6<sup>th</sup>, 2024 @ 9:00 A.M. E.D.T. (ADD #1)** in the Turner Field Office. All parties (prime and subcontractors) are required to attend in person.



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

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

HOURLY RATES:						UNIT PRICE		
Classification	Base rate	Fringes	Burden	(if)	(SUM)	(SUM)	(SUM)	OH/P %
			(Ins/taxes/other)	(Pier Diems)	(ST)	(T&1/2)	(DT)	(5%)
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Attachment "B"  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

**BID BREAKOUT**

Fill in the following breakdown of costs included in your base bid. 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 bid documents. It will be used only to aid in verifying completeness of the bids.

<b><u>DESCRIPTION OF WORK</u></b>	<b><u>COST INCLUDED IN BID</u></b>
Engineering and Layout; Shop Drawings and Submittals	\$ _____
Mobilizations; Permits and Fees	\$ _____
Photographic Documentation	\$ _____
Erosion Control (SWPPP)	\$ _____
Temporary Construction (Drives & Walkways)	\$ _____
Fencing	\$ _____
Site Management (Yard Boss and Equipment)	\$ _____
Temporary Restrooms	\$ _____
Waste Management	\$ _____
Temporary Construction Signage Allowance	\$ <del>7,500</del> 10,000 (ADD #1)
Dimock CM Office Fit Out Allowance	\$ <del>30,000</del> 40,000 (ADD #1)
Jobsite Video Monitoring Allowance	\$ 55,000 (ADD #1)
Document Control Server Allowance	\$ 3,000 (ADD #1)
Safety and Housekeeping	\$ _____
General Work Requirements	\$ _____
Remaining work not listed above,	
Overhead & Profit (not to exceed 10% proposal)	\$ _____

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TOTAL BID AMOUNT (SHOULD MATCH PROPOSAL) \$ \_\_\_\_\_

Cost of Performance and Payment Bond \$ \_\_\_\_\_

**DO NOT INCLUDE THIS COST IN YOUR BID**

Attachment "B"  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

*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 **General Trades 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 bid, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Bid Manual, etc.). It is this Subcontractor's responsibility for the entire scope of this Bid Package and coordination between all trades.

**E) WORK INCLUDED - SCOPE-SPECIFIC ITEMS**

- 1) Trade Specifications Specifically Included, but not limited to the following:

**DIVISION 01 – GENERAL REQUIREMENTS (ALL SECTIONS)**

- 01 3119 – Existing Condition Information (as applicable to this scope)
- 01 3126 – Existing Hazardous Material Information (as applicable to this scope)
- 01 3132 – Geotechnical Data (as applicable to this scope)
- 01 3233 – Photographic Documentation (COMPLETE)
- 01 7419.01 – Construction Waste Management and Disposal (COMPLETE)

**DIVISION 31 – EARTHWORK (ALL SECTIONS) (As applicable to this scope of work)**

- a) This Trade Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Division 0 and Division 1 specifications and the use of the Construction Documents as a whole.
  - b) Subcontractor includes all work indicated in specification, 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 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) Verify layout provided by others. 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.

## Attachment "B"

## SCOPE OF WORK

## TC-008 – Early Site General Trades

- 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) Due to the complexity of this scope of work, contractor is required for their full time superintendent to be onsite at all times to assist in the coordination of the project. This person is to have no labor responsibilities onsite. They shall be management only.
- 11) 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 Ground. If you are unfamiliar with any of these policies please ask to see the policy prior to submitting your bid. Failure to be familiar with these policies will not exclude you from complying with them.
- 12) **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 bid. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum bid price.
- 13) This contractor is to provide **PHOTOGRAPHIC DOCUMENTATION** as outlined in specification 01 3233. This includes the following:
- a. **For the following scope of work, contact Matthew Rolfe ([m.rolfe@multivista.com](mailto:m.rolfe@multivista.com); 614-352-0555) with Multivista for pricing and contracting. (ADD #1)**
    - i. Provide a preconstruction **as-built** survey of all existing conditions prior to the commencement of any construction activities. Survey should show existing conditions of all building facades, access routes, window openings, entrances, landscaping, pavement, retaining walls, stairs, roof, etc. This is to include properties and structures outside of, but adjacent to the construction limits. Survey is to include photographs, narrative and video. Submit survey to Construction Manager for project records.
    - ii. ~~Provide four (4) aerial photos per month for 9 months.~~ Provide twenty (20) bi-weekly aerial photos/UAV trips. Trips to include panoramas, still photos, and a map of the entire site at each trip. (ADD #1)
    - iii. ~~Provide site progression photos at minimum once per week and as directed by the CM for 39 weeks~~ Provide twenty (20) bi-weekly (every other week) exterior progression shoots of the building/site. (ADD #1)
- 14) ~~Provide (2) cameras with 24/7 video monitoring via Earthcam to be mounted on adjacent buildings. Cameras shall have PTZ, time-lapse, and live feed capabilities. (ADD #1)~~
- 15) ~~Furnish (2) cameras with solar panels via Earthcam for use as site security monitoring. Mounting locations to be coordinated with Construction Manager. Include all installation costs. Costs for recording services will be by others. (ADD #1)~~
- 16) This contractor to provide all **erosion control** measures as outlined on SK-006 for Phase 1 BMPs. This includes providing, installing, maintaining, and replacing when needed all shown inlet protection, wattles, silt fence, construction entrances, etc. All site BMPs shall be installed prior to the commencement of any construction activities unless directed otherwise by the CM. This Trade Contractor must perform all erosion control work required by all local, state, and federal regulations including **Storm Water Pollution Prevention Plan (SWPPP)** requirements. Reference C101 for inlet protection, wattle, silt fence, and construction entrance details. Construction entrances shall be level with adjacent ground. Any asphalt and earth removal required for the installation of any stone construction entrances is this contractor's responsibility. Include saw cutting of all asphalt to be removed at construction entrances. This contractor is to perform weekly maintenance of all SWPPP BMPs; and shall conduct inspections, repairs, and documentation to Turner after all rain events greater than one-quarter inch of rain. Utilize Turner reporting form and file all completed reports with construction manager within one day after the rain event. The management of all site erosion control and the site SWPPP is this contractor's responsibility for 39 weeks.
- a. This contractor must meet all requirements outlined in **specification 31 2001** including all certifications, trainings, permits, etc.
- 17) This contractor to include \$5,000 for **site dust control**.

## Attachment "B"

## SCOPE OF WORK

## TC-008 – Early Site General Trades

- 18) This contractor to provide **temporary tree protection** in accordance with the University of Kentucky Tree Protection Standards and Arborist Report. For all trees noted on C200 as existing to remain, this contractor is to provide, install, and maintain tree protection fencing. If extents of tree protection fencing are not defined on the drawings, the limit shall be the drip line of each tree.
- a. This contractor to include \$5,000 for **additional tree protection** measures.
- 19) This contractor to include \$20,000 for miscellaneous utility pot holing as directed by the CM.
- 20) This contractor to supply two (2) onsite first-aid boxes and two (2) AEDs with once per month service using Cintas for 9 months. Coordinate with CM for locations.
- 21) Provide and install plywood protection over the windows on the east side of Dimock.
- 22) Provide 400 lineal feet of **temporary roadway** to be used for travel around the site as directed by the CM. Assume road to be 12' wide. Roads shall consist of geogrid, 6" of #2 stone, and 4" of compacted DGA. Include undercut of 6" for full 400'.
- 23) This contractor to include **all work shown on Sheet C400** for rework of fire hydrants, fire department connections, and associated water lines. See Notes 1 through 5 on Sheet C400 for additional info and include all required excavation, thrust blocks, and concrete work.
- a. All demolition, rework, and new installations must be completed by a licensed plumber experienced in this type of work. Include and permits and fees associated with the work indicated.
- b. All utility outages associated with this are to be coordinated with UK and Construction Manager and comply with requirements outlined in the General Conditions.
- c. If required, shoring must be engineered and stamped by a Professional Engineer. Any excavation deeper than 4'-0" will require an engineered trenchbox/shoring plan prior to excavation. Include rock excavation as estimated by the Geotechnical Report included in the contract Documents. This work is inclusive of exploratory work specified in the General Work Requirements.
- d. For areas inside site limits, backfill and compaction with suitable material to original elevation. For, excavation outside site limits, disturbed areas must be returned to original condition. Spoils are to be removed and stored off site and/or properly disposed of.
- e. Utilize hydro-excavation for all potholing unless approved by Construction Manager.
- 24) This contractor is to include **plywood enclosures for (2) tower cranes**.
- a. Assume enclosure to be 5' wider than tower and be 16' tall.
- b. Include plywood door with hinges, latch and keyed lock (ADD #1)
- 25) This contractor is to provide Qty. (4) **Crane Signs** - Furnish and deliver qty. (4) sets of 45" tall channel letters mounted to 2"x2" raw aluminum tubing frame. Letters to have blue trimcap and returns. Letters to be illuminated with white LED and to have waterproof box mounted to back with 15' primary. Final sign design to be approved by CM. (ADD #1)

**F. CONSTRUCTION SCHEDULE**

Contract Price is based on the project schedule included in the bid 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.

Indicate Add/Deduct Price on the BID FORM

## Attachment "B"

**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

- 1) None

**I. ALLOWANCES**

The following Allowances **are to be included in the base bid**:

- |  |                                      |
|--|--------------------------------------|
| 1) Temporary Construction Signage Allowance  | \$ <del>7,500</del> 10,000 (ADD #1)  |
| 2) Dimock CM Office Fit Out Allowance        | \$ <del>30,000</del> 40,000 (ADD #1) |
| 3) <b>Jobsite Video Monitoring Allowance</b> | \$ 55,000 (ADD #1)                   |
| 4) <b>Document Control Server Allowance</b>  | \$ 3,000 (ADD #1)                    |

The above allowances are to be included in the base bid/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Bid/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) Labor Rates - 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" (Bid Form) for bid day information. The apparent low bidder will submit detailed breakdown with-in 24 hours after bid day.
- 2) Equipment Rates – 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

Attachment "B"  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

**FORM OF PROPOSAL**  
**SUPPLEMENTAL INFORMATION**

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

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

Contractor Report of Prior Violations of  
Chapters 136, 139, 141, 337, 338, 341, and 342

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

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

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

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<br>Small Business |
| (03)___ Disadvantaged Small<br>Business | (08)___ Disadvantaged Woman-Owned<br>Large Business |
| (04)___ Disadvantaged Large<br>Business | (09)___ Other                                       |
| (05)___ Woman-Owned Small Business      |   |

**Attachment "B"**  
**SCOPE OF WORK**  
**TC-008 – Early Site General Trades**

**DEFINITIONS**

- (01) **SMALL BUSINESS:** A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.
- (02) **LARGE BUSINESS:** A business concern that exceeds the small business size code standards established by SBA.
- (03) **DISADVANTAGED SMALL BUSINESS:** A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.
- (04) **DISADVANTAGED LARGE BUSINESS:** A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.
- (05) **WOMAN-OWNED SMALL BUSINESS:** A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.
- (06) **WOMAN-OWNED LARGE BUSINESS:** A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.
- (07) **DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS:** A concern that meets the definition of both (03) and (05) above.
- (08) **DISADVANTAGED, WOMAN OWNED LARGE BUSINESS:** A concern that meets the definition of both (04) and (06) above.
- (09) **OTHER:** A concern that does not meet any of the above definitions.

**BIDDER'S QUALIFICATIONS**

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



TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

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

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. Goal 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 bid the project and describe why they were not successful (i.e. not low bid, did not respond, etc).

## Attachment "B"

## SCOPE OF WORK

## TC-008 – Early Site General Trades

**RECORD OF MBE/WBE SOLICITATION**

\_\_\_\_\_ Certifies that the following  
BIDDER'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Bid 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 Bidder's Proposal. Failure to comply will result in rejection of Bidder's Proposal.

<u>FIRM NAME</u>	<u>MBE/WBE</u>	<u>WORK ITEMS SOLICITED</u>	<u>RESULT: NO RESPONSE OR NOT LOW BIDDER</u>

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**LIST OF MATERIALS AND EQUIPMENT**

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

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

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

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

CONTRACTOR NAME & ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC- \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF TRADE CONTRACT)

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

ITEM	MATERIALS AND EQUIPMENT	BRAND OR MANUFACTURER
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**PRIMARY LIST OF PROPOSED SUBCONTRACTORS**

The apparent low bidder will be required to furnish this information within 24 hours of bid submittal. Failure to comply will result in rejection of Bidder'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: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRADE CONTRACT: TC - \_\_\_\_\_ SCOPE OF WORK: \_\_\_\_\_  
(INSERT NUMBER) (INSERT NAME OF BID CATEGORY)

DIVISION OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
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**Attachment "B"**  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

UNIVERSITY OF KENTUCKY  
 CAPITAL CONSTRUCTION PROCUREMENT SECTION  
 FORM OF PROPOSAL TC-009 - Site Electric

Project No. 2564.0      Project Title: UK Construct Health Education Building

Purchasing Officer: Ken Scott

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

This Proposal is submitted by: \_\_\_\_\_  
 (NAME AND ADDRESS OF BIDDER)

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

TO: BID CLERK  
 UNIVERSITY OF KENTUCKY  
 CAPITAL CONSTRUCTION

INVITATION TO BID: CCK-2564.0-5-24

BID OPENING DATE: January 30<sup>th</sup>, 2024 (ADD #1)

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

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

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Bidder understands that successful bidder will enter into a contract with Turner Construction Company utilizing Turner's Subcontract Agreement Form 36 without modification.

The Bidder 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**  
**TC-009 - Site Electric**  
FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. CCK-2564.0-5-24 have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;
3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;
4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and 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 Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;
6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.
7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.
8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.
9. In accordance with 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 bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

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

SIGNED BY \_\_\_\_\_ TITLE \_\_\_\_\_

PRINT NAME \_\_\_\_\_ FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ AREA CODE &amp; PHONE \_\_\_\_\_

\_\_\_\_\_  
FAX \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

DATE \_\_\_\_\_ EMAIL \_\_\_\_\_

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**  
LUMP SUM PROPOSAL

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

**TC-009 - Site Electric**

FOR THE LUMP SUM OF \_\_\_\_\_  
 (USE WORDS)

\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
 (USE WORDS) (USE WORDS)

(\$ \_\_\_\_\_) **BIDDER MUST TURN IN BID BREAKOUT SHEET WITH THIS FORM OF PROPOSAL**  
 (USE FIGURES)

**ALTERNATE No. 1**

**Provide pricing for work shown on "SK-009 Alternate Temporary Electrical Phasing" and as outlined below:**

- a) Hand expose existing empty conduits at UE10 tie-in point as shown on SK-009.1. Note: There will be live feeds within this existing duct bank at the time this work takes place.
- b) Extend empty conduits at UE10 tie-in point to new work. Leave conduits un-encased for approximately 10'. Upon direction of CM, this contractor will come back at a future date to re-excavate and complete concrete duct bank installation.
- c) Remove temporary feeder cable after all new work has been completed and energized.
- d) It is the intent that this work start being coordinated immediately upon notice to proceed.

**ADD \$ \_\_\_\_\_**

(ADD #1)

**Current Experience Modification Rating \_\_\_\_\_**

**OSHA Incident Rates: Recordable \_\_\_\_\_ Date of Proposal \_\_\_\_\_**

**THE FOLLOWING ITEMS ARE HEREWITH ENCLOSED AS REQUIRED BY KRS 45A.185:**

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.
2. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.
3. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

\_\_\_\_\_  
 (Nine Digit Number)

4. Form of Proposal Supplemental Information
5. TC-\_\_\_\_\_ Bid Breakout sheet (from Attachment 'B')

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

**SUPERINTENDENT**

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

List the Superintendent's Name \_\_\_\_\_

**Bidder Contact Information**

Please provide the information for the person who is needed to contact with any questions dealing with this bid below:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

A post bid review will be held for this scope of work on **February 2<sup>nd</sup>, 2024 @ 1:00 P.M. E.D.T. (ADD #1)** in the Turner Field Office. All parties (prime and subcontractors) are required to attend in person.



Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**  
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 Bidders will be required to complete and submit the following information with the bid. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.*

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

HOURLY RATES:

UNIT PRICE

Classification	Base rate	Fringes	Burden	(if)	(SUM)	(SUM)	(SUM)	OH/P %
			(Ins/taxes/other)	(Pier Diems)	(ST)	(T&1/2)	(DT)	(5%)
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Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**  
**BID BREAKOUT**

Fill in the following breakdown of costs included in your base bid. 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 bid documents. It will be used only to aid in verifying completeness of the bids.

**DESCRIPTION OF WORK****COST INCLUDED IN BID/MANHOURS INCULDED IN BID**

Engineering & layout	\$ _____
Shop drawings and submittals, Coordination drawings	\$ _____
Permits & Fees	\$ _____
Mobilizations	\$ _____
Site Electric Demolition	\$ _____
Site Electric Installations	\$ _____
Dimock Fiber Refeed	\$ _____
Temporary Site Electric Installations	\$ _____
Ductbank/Manholes	\$ _____
Additional Potholing Allowance	\$ _____ 20,000
Additional GPR Allowance	\$ _____ 7,500
Temporary Electrical Consumption	\$ _____ 20,000 (ADD #1)
Document Control Server Allowance	\$ _____ 3,000 (ADD #1)
Remaining work not listed above, Overhead & Profit	\$ _____

---

**TOTAL BID AMOUNT (SHOULD MATCH PROPOSAL)**

\$ \_\_\_\_\_

Cost of Performance and Payment Bond

\$ \_\_\_\_\_

**DO NOT INCLUDE THIS COST IN YOUR BID**

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

*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 **Site Electric** 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 bid, including all work for this trade indicated on ALL of the contract documents (include plans, specifications, Bid Manual, etc.). It is this Subcontractor's responsibility for the entire scope of this Bid Package and coordination between all trades.

**E) WORK INCLUDED - SCOPE-SPECIFIC ITEMS**

- 1) Trade Specifications Specifically Included, but not limited to the following:

**DIVISION 01 – GENERAL REQUIREMENTS (ALL SECTIONS)**

Section 01 4120 – STRUCTURAL INSPECTIONS (ADD #1)

**DIVISION 2 – EXISTING CONDITIONS**

Section 02 4116 – STRUCTURE DEMOLITION

**DIVISION 3 – CONCRETE**

Section 03 3000 – CAST-IN-PLACE CONCRETE (ADD #1)

**DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

Section 07 1326 – SELF ADHERING SHEET WATERPROOFING (ADD #1)

**DIVISION 26 – ELECTRICAL (COMPLETE)**

Section 26 0501 - GENERAL PROVISIONS - ELECTRICAL

Section 26 0502 - SCOPE OF THE ELECTRICAL WORK

Section 26 0503 - SHOP DRAWINGS, LITERATURE, MANUALS, PARTS LISTS, AND  
SPECIAL TOOLS

Section 26 0505 - DEMOLITION, RESTORATION AND SALVAGE

Section 26 0508 - COORDINATION AMONG TRADES, SYSTEMS INTERFACING AND  
CONNECTION OF EQUIPMENT FURNISHED BY OTHERS

Section 26 0513 - MEDIUM VOLTAGE CABLES

Section 26 0543 - UNDERGROUND DUCTS AND RACEWAYS

Section 26 1300 - MEDIUM VOLTAGE SWITCHGEAR

**DIVISION 31 – EARTHWORK**

Section 31 2000 - EARTH MOVING

Section 31 2001 - STORM WATER POLLUTION PREVENTION PLAN

Section 31 2319 - DEWATERING

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

- a) This Trade Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Division 0 and Division 1 specifications and the use of the Construction Documents as a whole.
  - b) Subcontractor includes all work indicated in specification, 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 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) Verify layout provided by others. 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** contained in Attachment C of this RFP.
  - 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 bid. Some work items are listed for specific trade contractors and they shall include those costs in their respective total lump sum bid price.
  - 12) All unloading, distribution, staging, hoisting, rigging, scaffolding, lifts, platforms, scissor lifts, boom lifts, planking, guying, sheeting, shoring, dewatering, bracing transportation, access for material, equipment and personnel required to perform this work is included in this contract.
  - 13) This Subcontractor is responsible to repair any asphalt, roadway, curb/gutter, granite and sidewalk outside the area of demolition that is damaged by this Contractor, his Subcontractors, or haulers.
  - 14) This Trade Contractor include all materials, labor, tools, and equipment required to install complete and functioning site electric, telecom and low voltage systems. Including, but not limited to: demo & removal, raceways, concrete reinforcing and concrete accessories for manholes, ductbanks and pads. Include cabling, terminations, switches, testing, materials and equipment. Include excavation, backfill, and compaction as detailed herein and per contract documents. Coordinate with all other contractors on installations.
  - 15) This contractor shall follow the work sequence as outlined on EU001.
  - 16) This contractor shall cut, cap, and make safe all electrical feeds to Kelley Hall and Annex #5 to facilitate the demolition of these structures.
    - a. This contractor shall be responsible for note **ED10** on **EU101**. This contractor shall provide all power required to maintain existing site lighting, manhole power, and other site equipment.
  - 17) Include demolition of all "like" existing systems associated with this work scope as shown on the contract documents and project manuals. Include any temporary means required to maintain integrity of systems. Include all demolition of any site lighting, power, equipment feeds, security, low voltage, etc. systems as shown on contract documents. Remove all conductors from old ductbanks. Coordinate sequencing with construction manager. At conclusion of cut-over to new ductbank service, remove all feeders from old duct bank and demo ductbanks as indicated in contract documents. This contractor to include all manhole, inlet, etc. adjustments as detailed on the contract

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

documents. No ductbanks, manholes, vaults, etc. are to be abandoned in place unless specifically indicated in the contract documents.

- 18) Coordinate connection/disconnection of permanent utilities with Owner to minimize downtime. This will include a fully detailed shutdown, testing and energize plan for work that is to be completed. Include any night shift work to limit impact to the operations. Plan will include a complete risk assessment and schedule with activities identified in 30 minute increments from shut down to re-energize. All outages are to be submitted via UK's outage request website.
- 19) It shall be the responsibility of this contractor to coordinate the installation of this work with the utility companies, other contractors working on the Project and the engineer as needed to verify or determine size and routing of services being installed by this contractor.
- 20) Include all ductbanks and manholes as shown on contract documents. This contractor to include all excavation, backfill, concrete, reinforcement, core drilling, raceways, etc. required to complete the installation per the contract documents. Include required shoring and/or trench box(s) to safely install the work. This contractor to locate all existing utilities via GPR and hydro-excavation "potholing" of all utilities in areas of excavation prior to trench excavation of new ductbank.
- a. This contractor shall be responsible for all cast in place manholes. Reference **EU202 Note UE18 as well as S700 and S701 (ADD #1)**. Include all necessary traffic control, shoring, street permits, concrete removal, rock removal, etc... to complete this work. Reference Geotech report for approximate rock elevations.
    - i. Include all special inspections as outlined in **Specification 01 4120 STRUCTURAL INSPECTION**. Note: This contractor shall retain the inspection agency for all special inspections as required for this scope of work. (ADD #1)
    - ii. Include all waterproofing (COMPLETE) as outlined in **Specification 07 1326 SELF-ADHERING SHEET WATERPROOFING**. Include all necessary free draining backfill as part of section and scope of work. (ADD #1)
  - b. Contractor shall provide all ladders, vents, covers, covers for vents, fans, sump pumps and discharge lines, etc... per EU500 for a complete Power Manhole. Discharge sump line out of manhole for future bid package to tie onto.
  - c. This contractor shall include demolition, removal and haul off of all abandoned utilities, piping, ductbank, etc. within the excavations for new utilities. (ADD #1)
  - d. This contractor shall include all waterproofing as indicated on documents. See EU500. (ADD #1)
  - e. This contractor shall include all grounding. (ADD #1)
  - f. Sequencing of manhole and ductbank installation to be coordinated with Construction Manager. (ADD #1)
- 21) This contractor is to include all hydro-excavation as required for installation of this scope at existing utilities.
- 22) Include coordination of locations for all ductbanks, manholes, switchboards, switches, transformers, etc. with construction manager to avoid temporary installations for tower cranes, buckhoist, etc. **Include ductbank, conduit, wire, etc. for relocation of switch PM501-1A up to 50' from location shown on drawings. (ADD #1)**
- 23) For the excavation and backfill work contained in this work scope -- backfill must be imported granular material. Shoring must be engineered and stamped by a Professional Engineer. Any excavation deeper than 4'-0" will require an engineered trenchbox/shoring plan prior to excavation. Include rock excavation as estimated by the Geotechnical Report included in the contract Documents. This work is inclusive of exploratory work specified in the General Work Requirements. Protect all underground work, including stub-ups to ensure work is intact at time of concrete placement. Backfill and compaction with suitable material to proper subgrade elevation is included in this Contract. Spoils are to be removed and stored off site and/or properly disposed of. At the conclusion of this work, the subgrade shall be re-graded to a level acceptable to the Construction Manager. Reference 01 7419.01 Construction Waste Management and Disposal.
- 24) Exercise care to preserve material below and beyond the limits of excavation. Where excavation is carried out, through error, below indicated grade or beyond the lines of excavation, backfill to the indicated grade and compact with approved fill at no additional cost to the Owner, and at the direction of the Engineer or Geotechnical Consultant.

Attachment "B"  
SCOPE OF WORK  
TC-009 - Site Electric

- 25) All excavations shall be returned to match adjacent conditions. All excavations within project site are to be backfilled and capped with a minimum of 12" deep of compacted DGA (98%) to match adjacent elevations.
- 26) This contractor shall include installation and demo of all communication cabling as indicated in the contract documents. This includes cut, cap, and safe off any communication cabling going to Annex #5 and Kelley Hall.
- a. Specifically, this contractor shall provide 12-strand single-mode and 12-strand OM1 fiber optic cabling per note **UE22** on **EU202**. This work shall occur prior to the demolition of Kelley Hall. Personnel pulling fiber shall be certified under the BICSI installation certification program.
  - b. Include demolition of communication ductbanks as indicated on drawings. Ref. scope item #23 for backfill requirements. (ADD #1)
- 27) This contractor is to provide temporary fencing around all open excavations. Include removal of all fencing once excavation is returned to safe condition.
- 28) This contractor is to provide all safe entry and extraction for confined space work inside any manhole per Turner safety policy.
- 29) Site BMPs ~~within the site fence, (ADD #1)~~ (silt fence, waddles, inlet protection, etc...) will be set up by the General Trades Contractor. This contractor shall repair, replace, and maintain any BMPs that are disturbed as part of this scope of work. ~~This Contractor to include all SWPP & silt fence measures for work outside of site fence. (ADD #1)~~
- 30) Include concrete wash out box for this scope of work. Washout box to be dumpster type and relocatable. Include monitoring and disposal of all waste.
- ~~31) Include any site & street cleaning related to work performed by this scope. Street sweeping equipment will be provided by General Trades Contractor for use by this contractor. Provide power sweeping and scrubbing of all paved areas, sidewalks, etc. soiled as a result of this scope of work to the satisfaction of the Construction Manager. This Trade Contractor must clean all adjacent streets and maintain as if there were no construction site in the area. Huguelet Drive, University Drive, Veterans Drive any other impacted streets must be swept daily for the duration of this contract. Streets must be immediately swept and cleaned if there is excessive tracking as determined by the Construction Manager. Any and all costs associated with street cleaning, inclusive of permits and fines will be the responsibility of this Trade Contract. (ADD #1)~~
- 32) This contractor to include all dewatering for this scope of work. ~~Include all SWPP requirements for dewatering. (ADD #1)~~
- 33) This contractor is to provide pullstring in all conduits.
- 34) This contractor is to include all road closure, traffic control and permits required to install fully functioning systems.
- 35) Include any additional protections as listed in Arborist report and UK Tree Standards (Attachment "L") when working at or near existing trees. General protection provided others.
- 36) All excavation within the canopies of remaining trees shall be by air excavator to minimize damage to roots. Refer to UK Tree Standards (Attachment "L") for other requirements.
- 37) Include all permits & fees required to complete this work.
- 38) This contractor shall pay all tap fees, utility connection costs, meter fees, extension and development charges.
- 39) This contractor shall positively identify all circuits supplying site lighting, manhole power, and other site equipment. This contractor shall provide temporary construction power and connections to all lights, manholes and equipment to maintain operation for the duration of this project.
- 40) Perform all electrical testing of new and existing electrical systems as outlined in the Contract Documents required to verify correct system operation including proper coordination of system interruption ratings. Adjust all breaker trip settings as recommended by the coordination study being performed by this Trade Contractor.
- 41) This Trade Contractor is required to label and identify all panels, circuits, devices, etc., associated with this contract as required by the design documents.
- 42) Include temporary protection of all new and existing final at or above grade site electric elements, including manholes and quazite boxes.

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

- 43) Coordinate layout of all underground work that is part of this scope with, all other utilities, drilled piers, foundations, temporary crane pads and buckhoist pad locations.
- 44) Provide review of all electric manholes for identification of connections, KO's, splice points, and ductbank elevations. Provide drawing showing this information.
- 45) This contractor to turn over all equipment (new, replacement and existing) as indicated in the contract documents. Equipment to be labeled and turned over on pallets and delivered to Owner's stock location within 10 mile radius of project site.
- 46) Include coordination and access for all inspections.
- 47) Maintain and submit as a final record documentation reporting the results of all tests performed. Tests shall be categorized by the system and by the type of test performed. All testing documentation shall be submitted in a form acceptable to the Construction Manager and Architect/Engineer.
- 48) This Trade Contractor include all materials, labor, tools, and equipment required to install **temporary electric service & lighting** systems as follows. **This contractor shall provide all maintenance as needed for all temporary electrical services for 39 weeks. (ADD #1)**

**Temporary Electric Service**

- a. Provide temporary site electric service. Coordinate locations with construction manager.
- b. Include (1) 1000 amp 480/277v 3 phase 4 wire NEMA 3R service at west (from Switch PM501-1A).
- c. Include (1) 1000 amp 480/277v 3 phase 4 wire NEMA 3R service at south (from PM124-1).
- d. Provide (1) 15kv Medium Voltage switch at each service location. Total (2) switches. Coordinate with the Construction Manager. Include concrete pad. Connect and terminate to existing feed.
- e. Include metering at each service location.
- f. Provide (1) 12,470v 3ph to 480/277v 3ph 4w Medium Voltage Transformer at each service location. Total (2) Medium Voltage Transformers. Coordinate with the Construction Manager. Include concrete pad. Include terminations.
- g. Furnish and install (1) 5 inch conduit from each medium voltage switch (Switch PM501-1A and Switch PM124-1) to its respective medium voltage transformer.
- h. From each medium voltage transformer location, install conduit and cabling (as required by code and UK standards) to each Switchboard as listed in Note 1.
- i. Contractor to install (4) 4" underground conduits from each service switchboard to within 3' of building perimeter. Include concrete pad for switchboard.
- j. Service Entrance Aluminum cable to be used where required by code. All other areas to be Aluminum Cable per code requirements.
- k. Provide temporary power for (2) tower cranes: assume 480 volt, 3 phase , 350 amp for each. Include all required equipment, underground conduit, wiring, etc. to provide power from temporary switchboard to disconnect at tower crane base. Include disconnect switch and tower crane power connections at future date. Include remobilization as required. **Include wiring for tower crane signage – total of 4 signs. (ADD #1)**
- l. Include 100A 120/208v outdoor rated power panel at each crane base. Provide (3) GFCI 120V quad outlets at each panel.
- m. Include temporary power for all existing site lighting, devices, manholes, equipment, vaults, etc. as indicated in contract documents.
- n. All trenching to be included.
- o. Include power and terminations for guard shack (lighting, HVAC and convenience power), temporary toilet trailer (HVAC and lighting), break tent (lighting, HVAC and convenience power) and **(5) cameras as required. (ADD #1)**
- p. Include power and terminations for automatic powered rolling gate (Gate 2).

**Temporary Lighting**



**Attachment "B"**  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

- a. Provide temporary LED lighting on top of the temporary site perimeter fencing to illuminate areas for safety and for site access during dark work hours. Lighting is to be installed in such a manner to avoid "dark spots" along fencing and site areas. Include photocell sensor(s) for these lights.
  - b. Provide adjustable lighting as required mounted on/at existing Dimock building and tower cranes to illuminate entire site for safety and for site access during dark work hours. Include photocell sensor(s) for these lights.
  - c. Provide temporary LED lighting at sidewalk overhead protection along University Ave. Illuminate Sidewalk areas for safety and for site access during dark hours. Lighting is to be installed in such a manner to avoid "dark spots". Wiring to be in conduit routed on top of overhead protection. Include photocell(s) sensor for these lights. Provide a minimum of 5 foot-candles at all sidewalks.
  - d. Provide temporary LED lighting in break tent (approx. 30' x 60'). Provide a minimum of 5 foot-candles.
  - e. Include 300 journeyman hours and \$10,000 for materials/equipment to be used toward the installation of temporary electric and temporary telecom.
- 49) This Contractor to provide electronic as-built survey for all ductbanks and manholes. Reports are to be in both .pdf and .dwg formats. Provide N/E/Z coordinates at all changes in direction and at a minimum of every 20 lineal feet. Electronic files to be submitted to Construction Manager within two (2) weeks after of surveying.
- 50) **This Contractor to include 2" conduit for future site lighting as shown on 2/EU500. (ADD #1)**

**F. CONSTRUCTION SCHEDULE**

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

**G. WORK EXCLUDED**

This Scope of Work shall exclude the following:

- 1) Payment and 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.

Indicate Add/Deduct Price on the BID FORM

- 1) **Alternate 01 - Alternate Temporary Electrical Phasing per SK-009 (ADD #1)**

**I. ALLOWANCES**

The following Allowances **are to be included in the base bid**:

- |  |                          |
|--|--------------------------|
| 1) Additional Hydro-excavation             | \$20,000                 |
| 2) Addition Ground Penetrating Radar (GPR) | \$7,500                  |
| 3) <b>Temporary Electrical Consumption</b> | <b>\$20,000 (ADD #1)</b> |
| 4) <b>Document Control Server</b>          | <b>\$3,000 (ADD #1)</b>  |

The above allowances are to be included in the base bid/Subcontract Price. All overhead and profit related to the Work performed under each Allowance is to be included in the Base Bid/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.



Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

**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) Labor Rates - 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" (Bid Form) for bid day information. The apparent low bidder will submit detailed breakdown with-in 24 hours after bid day.
- 2) Equipment Rates – 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

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**  
**FORM OF PROPOSAL**  
**SUPPLEMENTAL INFORMATION**

THE FOLLOWING INFORMATION PERTAINS TO ALL TRADE CONTRACTORS

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

Contractor Report of Prior Violations of  
Chapters 136, 139, 141, 337, 338, 341, and 342

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

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

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

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<br>Small Business |
| (03)___Disadvantaged Small<br>Business | (08)___Disadvantaged Woman-Owned<br>Large Business |
| (04)___Disadvantaged Large<br>Business | (09)___Other                                       |
| (05)___Woman-Owned Small Business      |  |

Attachment "B"  
**SCOPE OF WORK**  
**TC-009 - Site Electric**

**DEFINITIONS**

- (01) **SMALL BUSINESS:** A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.
- (02) **LARGE BUSINESS:** A business concern that exceeds the small business size code standards established by SBA.
- (03) **DISADVANTAGED SMALL BUSINESS:** A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.
- (04) **DISADVANTAGED LARGE BUSINESS:** A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.
- (05) **WOMAN-OWNED SMALL BUSINESS:** A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.
- (06) **WOMAN-OWNED LARGE BUSINESS:** A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.
- (07) **DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS:** A concern that meets the definition of both (03) and (05) above.
- (08) **DISADVANTAGED, WOMAN OWNED LARGE BUSINESS:** A concern that meets the definition of both (04) and (06) above.
- (09) **OTHER:** A concern that does not meet any of the above definitions.

**BIDDER'S QUALIFICATIONS**

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

Attachment “B”  
SCOPE OF WORK  
TC-009 - Site Electric

TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

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

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. Goal is 10% MBE/WBE

1. Minority and Women Subcontractors

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2. Minority and Women Material Suppliers

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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 bid the project and describe why they were not successful (i.e. not low bid, did not respond, etc).

## Attachment "B"

## SCOPE OF WORK

## TC-009 - Site Electric

**RECORD OF MBE/WBE SOLICITATION**\_\_\_\_\_  
Certifies that the following

BIDDER'S NAME

Minority/Women-Owned firms were contacted to solicit pricing as subcontractors/suppliers for Invitation to Bid 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 Bidder's Proposal. Failure to comply will result in rejection of Bidder's Proposal.

<u>FIRM NAME</u>	<u>MBE/WBE</u>	<u>WORK ITEMS SOLICITED</u>	<u>RESULT: NO RESPONSE OR NOT LOW BIDDER</u>

\_\_\_\_\_  
Signature\_\_\_\_\_  
Date\_\_\_\_\_  
Title

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

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

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

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

CONTRACTOR NAME & ADDRESS:

TRADE CONTRACT: TC- (INSERT NUMBER)

SCOPE OF WORK: (INSERT NAME OF TRADE CONTRACT)

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

ITEM	MATERIALS AND EQUIPMENT	BRAND OR MANUFACTURER

The apparent low bidder will be required to furnish this information within 24 hours of bid submittal. Failure to comply will result in rejection of Bidder'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:

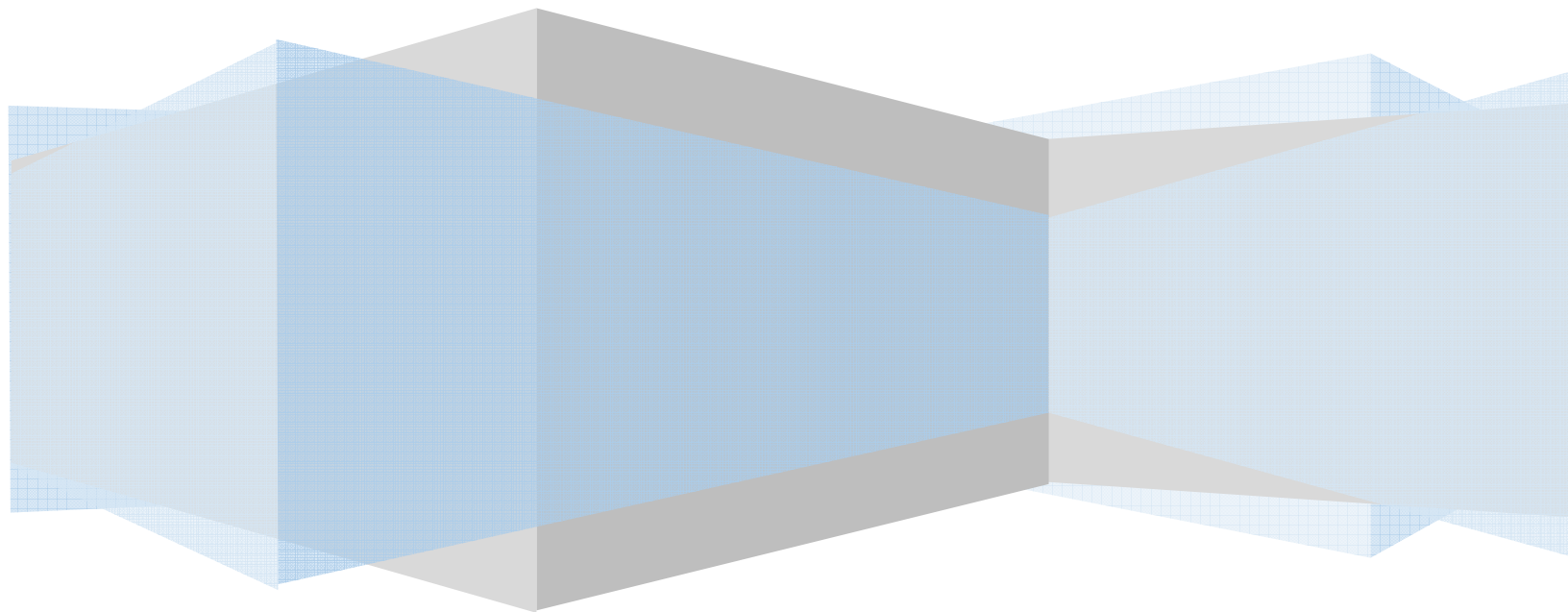
TRADE CONTRACT: TC - (INSERT NUMBER)

SCOPE OF WORK: (INSERT NAME OF BID CATEGORY)

DIVISION OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR

# Vertikal Subcontractor Navigation Guide

Version 001: March 2023





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## Introduction

Welcome to Turner's third-party onboarding platform, managed and secured by Vertikal RMS, Inc. Here are a few things to note before proceeding:

1. The term "Hiring Client" is the equivalent of the Turner Construction or SourceBlue Business Unit(s) (BU) where a company submits the Onboarding form and supporting documents to for review.
2. A user account must have a unique email address.
3. For confidentiality and security reasons, a sole proprietor with their social security number as their tax identification cannot use the Onboarding platform. Please contact the local BU for assistance.
4. Be prepared to upload a current W9 or country-specific tax form equivalent and other supporting documents. See a complete list of required documents below.
5. Register with your legal "Company Name" as shown on your company tax returns. DO NOT reference a "dba" name.
6. If a company requires more than one user account, email [servicedesk@tcco.com](mailto:servicedesk@tcco.com) to request additional user accounts. The email must include the following:
  - o A copy of your W9 or country-specific tax equivalent form
  - o The user's first and last name
  - o User's telephone number; and
  - o Unique email address not already in use
7. Although one hiring client is selected at registration as the primary Business Unit to receive the notification when your prequal is submitted, you can choose additional Business Units within the form. We suggest reaching out to the other selected hiring clients with notice of application submission, providing those Procurement departments the opportunity to review your application as well.

**\*Please note if you have already completed Turner's onboarding process, you don't have to complete it again\***

## Required Documents

Before starting the Onboarding process, gather the following documentation to expedite the completion of the application and be ready to upload where indicated:

<ul style="list-style-type: none"><li>• Copy of W9 form or country-specific tax equivalent</li><li>• List of company license numbers</li><li>• List of state/province sales tax numbers</li><li>• List of state unemployment insurance numbers(if applicable)</li><li>• List of current projects</li><li>• List of recently completed projects</li><li>• Current financial statement</li><li>• Under-represented Business Enterprise (UBE) certification information</li><li>• Bank information (upload a Line of Credit letter from the bank)</li><li>• Dun and Bradstreet information</li><li>• Surety information (upload a letter from Surety indicating per project and aggregate bonding limits)</li><li>• Three supplier references</li><li>• Three contractor references</li><li>• Insurance policy information (upload a current sample certificate and additional insured endorsements forms)</li></ul>	<ul style="list-style-type: none"><li>• Copy of your Safety Program</li><li>• Independent verification letter supporting your EMR (US entities only) with the effective date (MM/DD/YEAR) for the last three years*</li><li>• Safety Data and/or OSHA 300 logs from the last three years*</li><li>• EGS Program</li><li>• Published environmental targets</li><li>• Modern slavery and human trafficking statement and / or policy</li><li>• Business Ethic Policy</li></ul> <p>*Ontario companies, please provide: WISR, CAD7, and WISB Clearance Certificate</p> <p>*British Columbia companies, please provide: Worksafe BC Clearance Letter, WSBC Employer's Report, and Evidence of notices issued by WSBC &amp; company response for the past 3 years</p>
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## Create an Account

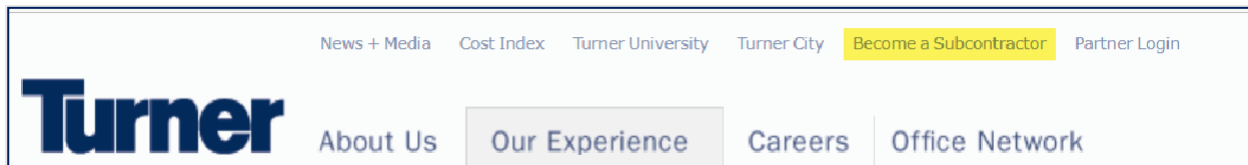
There are two ways a company can create a user account:

- By visiting [www.turnerconstruction.com](http://www.turnerconstruction.com) and completing the "Subcontractor **Application** Form" process; or
- By the link in a hiring client's email invitation to complete the "Subcontractor **Registration** Form" process.

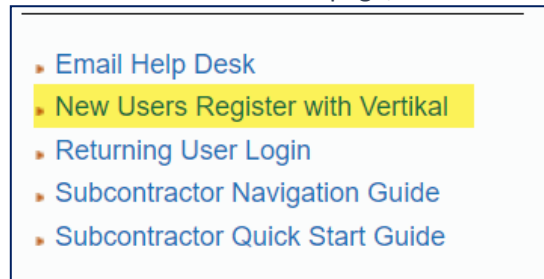
These methods have minor differences, but both follow the same processing guidelines. See below for additional information.

The "Subcontractor Application Form"

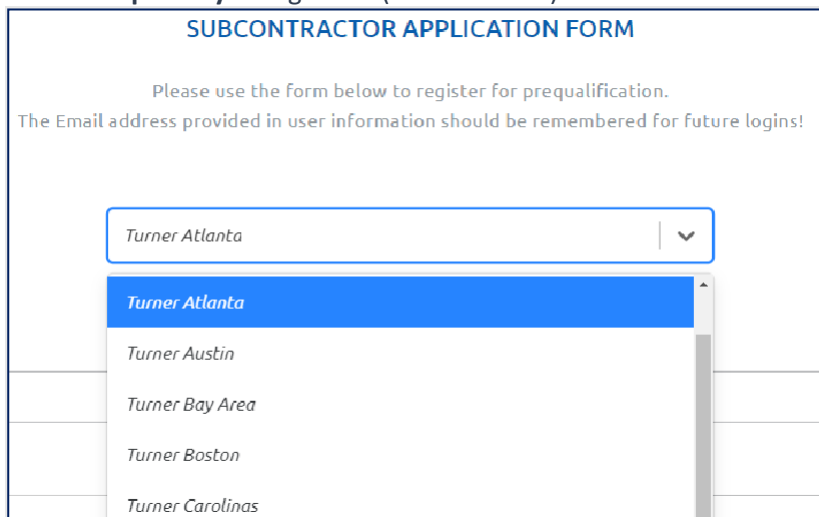
1. Go to [turnerconstruction.com](https://turnerconstruction.com) and click **Become a Subcontractor**.



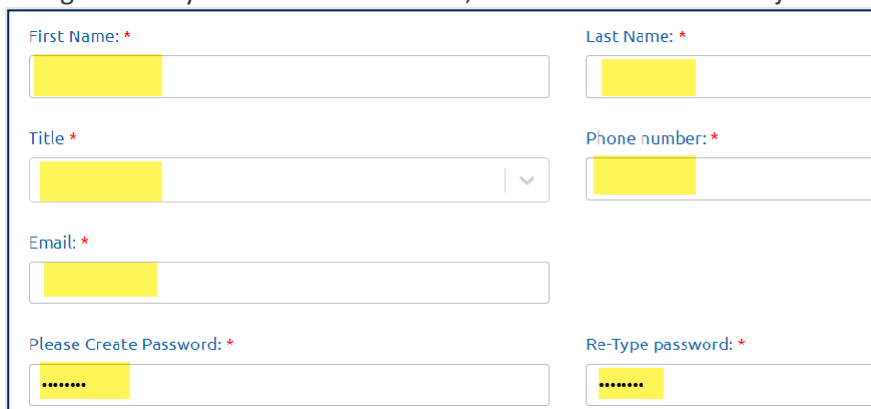
2. Scroll to the bottom of the page, and click "New Users Register with Vertikal."



3. Select the **primary** hiring client (Business Unit) to submit the Onboarding form and documents to review.



4. Begin entering your user-specific information. This user will have access to the Onboarding form with this hiring client. If your title does not exist, select a title in the same job family.



5. Enter your company's legal name as it appears on your W-9 or country-specific tax equivalent form. Refer to the information on page 2 for detailed instructions.

Legal Name of Company: \*

Company Name ABC

(per your W-9 or country specific equivalent)

Note: For a disregarded entity company,

- Register with the disregarded entity name and tax identification number.
- One main disregarded entity branch office can register as the "headquarters office."
- Upload a W9 or country-specific tax equivalent form with the following:
  - The holding company's legal name on line 1 with their tax identification number listed on Part I; and
  - The disregarded entity's name, without reference to a "dba," on line 2 with their tax identification number. See the example below.

**Form W-9**  
(Rev. October 2018)  
Department of the Treasury  
Internal Revenue Service

**Request for Taxpayer Identification Number and Certification**

► Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

**Holding Company Name**

2 Business name/disregarded entity name, if different from above

**Disregarded Entity Name - DE Tax ID ##-####**

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3).

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

**Social security number**

or

**Employer identification number**

**Part II Certification**

6. For the **Main Trade**, please select the most general description of your company's trade and up to four additional trades from the predefined list.

Legal Name of Company: \*

Company Name ABC

(per your W-9 or country specific equivalent)

Main Trade \*

Select...

Second Trade

Select...

Third Trade

Select...

Fourth Trade

Select...

Fifth Trade

Select...

7. Enter your company's **headquarters** address, **not** a branch office. For international companies, **FIRST** change the **Country** before entering the **State/Province**.

State / Province: \*

Select...

Country: \*

United States

City: \*

Anytown

Address: \*

123 Main Street

Postal Code: \*

\*\*\*\*\*

Tax ID \*

00-0000000

8. For US companies, enter your nine-digit tax identification number without the dash "-". For Canadian companies, enter your fifteen-digit Sales Tax Registration Number (GST). The format must be **#####RT####**.

Country: * <input type="text" value="United States"/>	Country: * <input type="text" value="Canada"/>
Address: * <input type="text" value="123 Main Street"/>	Address: * <input type="text" value="123 Main Street"/>
Tax ID * <input type="text" value="11-1111111"/>	Sales Tax Reg. Number (GST) * <input type="text" value="11111111RT0001"/>

9. Please review Vertikal's user agreement, check the "I agree to the User Agreement" box, and click **Submit** to proceed.

You must agree to our **User Agreement** before continuing

☒ I agree to the User Agreement

**SUBMIT**

The "Subcontractor Registration Form"

Use the registration link in the email you received to access Turner's third-party Onboarding platform. Follow the guidelines outlined in the **Subcontractor Application Form** instructions. Because the hiring client sent you an invitation, item No 2 from the above does not apply.

With the successful registration, you will see the pop-up below. Click **Accept**, and you'll be redirected to your company's Subcontractor Onboarding Account.

**Success**

The registration was successful. Please log in and complete the prequalification process.

**Accept**

If registration is unsuccessful, the pop-up below will appear; email [servicedesk@tcco.com](mailto:servicedesk@tcco.com) with a copy of your W9 or country-specific tax equivalent form and request additional assistance.

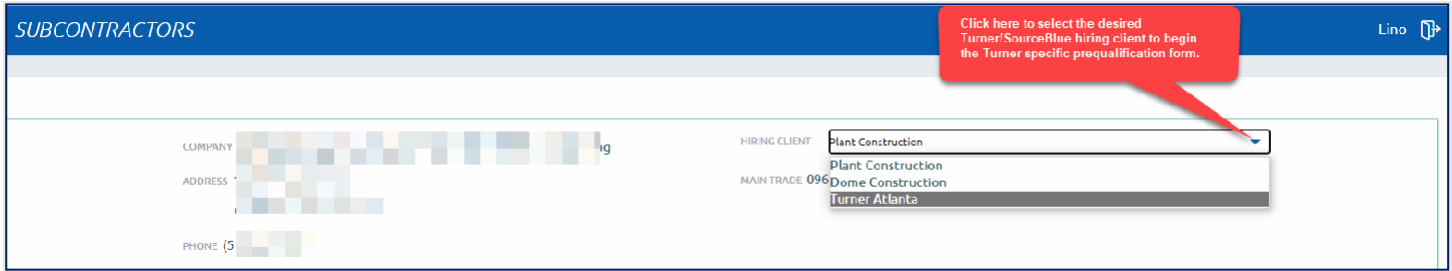
**Error**

The company is already registered with "Turner Atlanta", please contact your admin.

**Accept**

## Subcontractor Onboarding Account

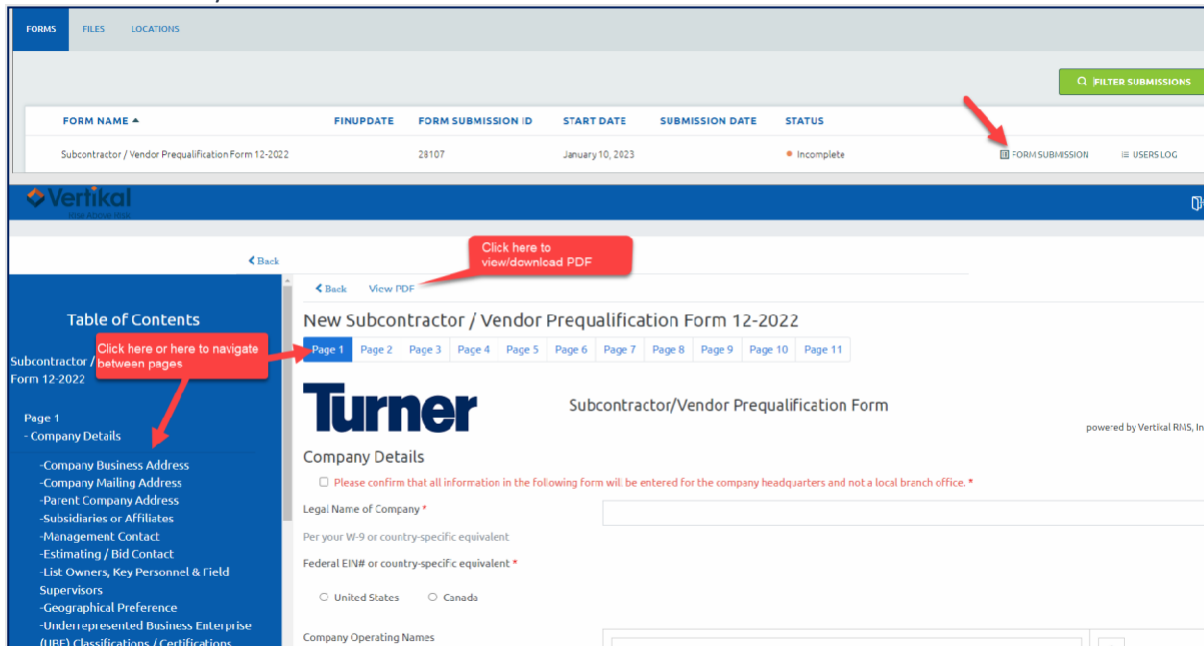
After completing the registration process successfully, you will be redirected to your company's Onboarding account. If your company already utilizes Vertikal's Onboarding platform with another general contractor ("Hiring Client"), click the arrow next to the Hiring Client to toggle and select the desired Turner/ SourceBlue hiring client to complete and submit Turner's specific-Onboarding form.



## Complete the Onboarding Form

The system auto-saves your entries every two minutes. However, a best practice is to click **Save** at the end of each page before proceeding further.

1. Click the **Form Submission** button of the most recent form with the status "**Incomplete**."
2. Start entering data into the form.
3. At the bottom of the page, click **Save** and **Next**.
4. Click **View PDF** if you want to download a PDF version of the form.



5. When clicking the **Next** button, the page will freeze if a required field is missed, or a document is not uploaded. Scroll up to review the missed required field or document to resolve and proceed to the next page.

Supervisors

- Geographical Preference
- Underrepresented Business Enterprise (UBE) Classifications / Certifications

Page 2

- Safety Details

Page 3

- For Canadian Companies Only

Page 4

- Trade Details
- Union Information

### Underrepresented Business Enterprise (UBE) Classifications / Certifications

**Do you have any UBE classification? \***

☐ Yes ☐ No

*Do you have any UBE classification? is required*

**Did you graduate from Turner's School of Construction Management? \***

☐ Yes ☐ No

*Did you graduate from Turner's School of Construction Management? is required*

Save
Next

Before you can proceed to the next page, all fields with an asterisk must be filled

Click "Save" at the bottom of each page before moving to a new page

6. To upload a file, you can drag and drop files or click the **Browse** button to select a file. The max file size is 30 MB.

Please attach your company's W-9 or country specific equivalent. British Columbia: Provide a sample Invoice showing GST/HST Number & Legal Name. Ontario: Provide a Form 1000 or Sample Invoice showing HST number & Legal Name. \*

File Name	Size
<div style="display: flex; align-items: center;"> <span style="font-size: 1.2em; margin-right: 5px;">✕</span> <span>File 2.pdf</span> </div> <div style="border: 1px dashed #ccc; height: 20px; margin-top: 5px;"></div> <div style="background-color: red; color: white; padding: 2px 5px; margin-top: 5px;">Delete file</div>	33.35 kB

Drop files to attach, or [browse](#)

Click here to upload a file

7. After completing all the required fields and uploading documents where indicated, complete the **Certification** section and click **Submit Form**.

Page 1
Page 2
Page 3
Page 4
Page 5
Page 6
Page 7
Page 8
Page 9
Page 10
Page 11

### Certification

We hereby certify that we have answered all of the above questions in a truthful, accurate, and complete manner to assure that our answers (including those answers that may have been copied in from an earlier submission) are not in any respect false or misleading either by expressing ourselves in a misleading or ambiguous manner or omitting information and we also certify that all attachments submitted by us in connection with this prequalification are true, accurate, and full copies of the original documents that are in our possession. We recognize that Turner will be relying on the truthfulness and accuracy of our responses to this questionnaire and all the contents of the attachments hereto in deciding whether to permit us to bid as well as in any awards or work that may be made to our Company. Additionally, we agree to promptly notify Turner in writing of any events or circumstances that make any of the foregoing answers, attachments, or representations untrue, incomplete, or inaccurate in any material respect.

This prequalification has been reviewed by the following officer of our company prior to submittal.

Officer: \*

Date: \*

Title: \*

Save
Cancel
Previous
Submit Form

Once submitted, the form and uploaded files are locked from further edits or deletions. If additional modifications are needed, the hiring client(s) can unlock the form for you to edit and resubmit.

8. If the submission is successful, the below message will show. Click **OK** to exit the form and get back to the home page.

✓

This form was successfully submitted. Turner Atlanta has been notified. No further action is required at this time.

OK

## Upload / Download Files

After submitting a form, you can upload additional files if needed.

1. Go to the **Files** tab.
2. Click the **Upload File** button.
3. Select the new file for upload.
4. Check the box if this is a financial file (Financial Statement) to restrict viewing to limited users in the Vertikal system.
5. If the file belongs to a specific Onboarding Form, select the form in the drop-down.
6. Add a brief file description, such as the file name.
7. Click **Upload File**.

The screenshot shows the 'UPLOAD NEW FILE' form. It includes a file selection area with a callout 'Click to select/upload a file'. Below this is a checkbox for 'This file contains financial data' with a callout 'Check this box to identify a confidential file'. There is a dropdown menu for 'Please select a Form this file belongs to:' with a callout 'If the file is to a specific form, use the dropdown. Otherwise, no action is needed.' and a text area for 'File Description:' with a callout 'Enter a brief description of file'. An 'UPLOAD FILE' button is at the bottom right.

To view or download files, use the following steps below:

1. If you want to open one individually file, click **View**.
2. If you want to download multiple files at once, mark the files you wish to download and then click **Download**.

The screenshot shows the 'FILES' tab with a table of uploaded files. A red circle '1' points to the checkboxes in the first column. A red circle '2' points to the 'DOWNLOAD' button in the top right corner.

	FILE NAME	FILE DESCRIPTION	UPLOAD DATE	EXPIRATION DATE	UPLOAD TYPE
<input checked="" type="checkbox"/>	Bank Credit Letter.docx	Field Name:BankCreditLetterAttachment	September 14, 2022 @ 22:05:51	N/A	Form
<input checked="" type="checkbox"/>	elM09J021-09J022.pdf	Field Name:elM09J021-09J022Attachment	September 14, 2022 @ 21:46:34	N/A	Form
<input checked="" type="checkbox"/>	Financial PDF File.pdf	Field Name:FinAuditReviewAttachment	September 14, 2022 @ 21:57:37	N/A	Form
<input type="checkbox"/>	OSHA Log - 2020.xlsx	Field Name:OSHA2020AttachmentBefore	September 14, 2022 @ 21:48:54	N/A	Form

## Change Your User Information

To change your user information, first, log into Vertikal. Click your name in the top right corner of the screen. And click the **Update Information – here** button.

To update your password, click **Edit Password**. Click **Save User** to save your changes and exit the window.

To return to the Main Page, click the Vertikal logo at the top left of the screen.



Vertical PROFILE

Click "Vertical" to return to the main dashboard

Click name to update user profile

Update Information - here

Associated Subcontractors

**EDIT USER**

Role: Subcontractor

First Name: [Redacted] Last Name: [Redacted]

Email: [Redacted] Phone #: [Redacted]

Full Password

SAVE USER Cancel

### Onboarding Form Renewal – Auto-Fill From Option

The **completed** Onboarding form itself is valid for 24 months. In the **"Forms"** tab, if you only have a form with **"Complete"** status, **NO** action is needed on the prequal form.

At the time of renewal, a system-generated email will be sent to all applicants' company staff with a user account. Click on the URL link in the renewal email to access the login page to begin the renewal process.

The **Auto-Fill Form** option will show automatically if the renewal is eligible to autofill specific fields in the new form. If the auto-fill option is unavailable, complete the form from the beginning.

1. Click **Auto-Fill Form**.
2. Select the **Turner** Hiring Client's Onboarding form from which you want to copy data.
3. Click **Auto-Fill From** on the current **Complete** form.

FORMS FILES LOCATIONS

FILTER SUBMISSIONS

FORM NAME	FINUPDATE	FORM SUBMISSION ID	START DATE	SUBMISSION DATE	STATUS		
Turner Subcontractor / Vendor Prequalification Form		21847	September 14, 2022	September 14, 2022	Complete	FORM SUBMISSION	USERS LOG
Turner Subcontractor / Vendor Prequalification Form		21854	September 16, 2022		Incomplete	FORM SUBMISSION	USERS LOG

PLEASE SELECT ELIGIBLE FORM TO COPY DATA PREVIOUSLY SUBMITTED TO DIFFERENT HIRING CLIENT

Hiring Client: [Select Hiring Client] [Select Hiring Client] [Turner Atlanta]

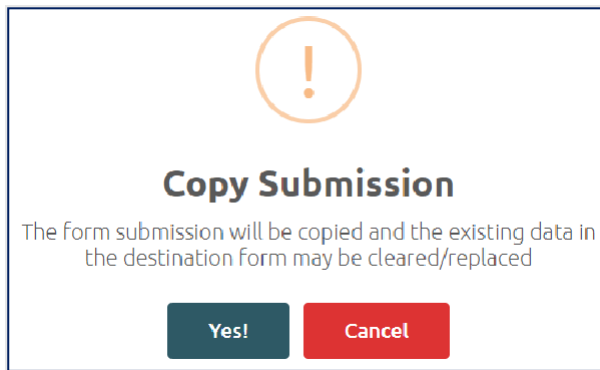
No results found for this search criteria

PLEASE SELECT ELIGIBLE FORM TO COPY DATA PREVIOUSLY SUBMITTED TO DIFFERENT HIRING CLIENT

Hiring Client: [Turner Atlanta]

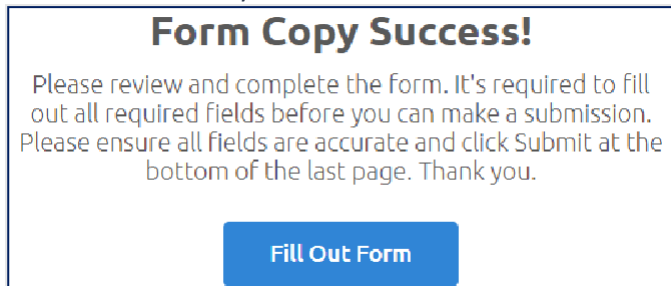
NAME	SUBMISSION DATE	STATUS	
Turner Subcontractor / Vendor Prequalification Form	September 14, 2022	Complete	AUTO-FILL FROM

4. Click **Yes** to confirm you want to copy data from the selected source form.



5. Click **Fill Out Form** for the system to take you to the new form with eligible pre-filled data fields populated. Please review all auto-populated data to ensure no changes need to be made, complete any cleared field with updated information, and upload new files where applicable before submitting the renewal form for review.

Note: The fields may take a few seconds to load with the copied data.



**CRITICAL: If you are not ready to complete the renewal form, the company name and tax id must be entered at the bare minimum, and click the SAVE button. Failure to enter/save new information clears the auto-filled fields. If the auto-filled areas cleared when you log back in, you can either perform the auto-fill form process again or complete the prequal from scratch.**

#### Yearly Documentation Renewal

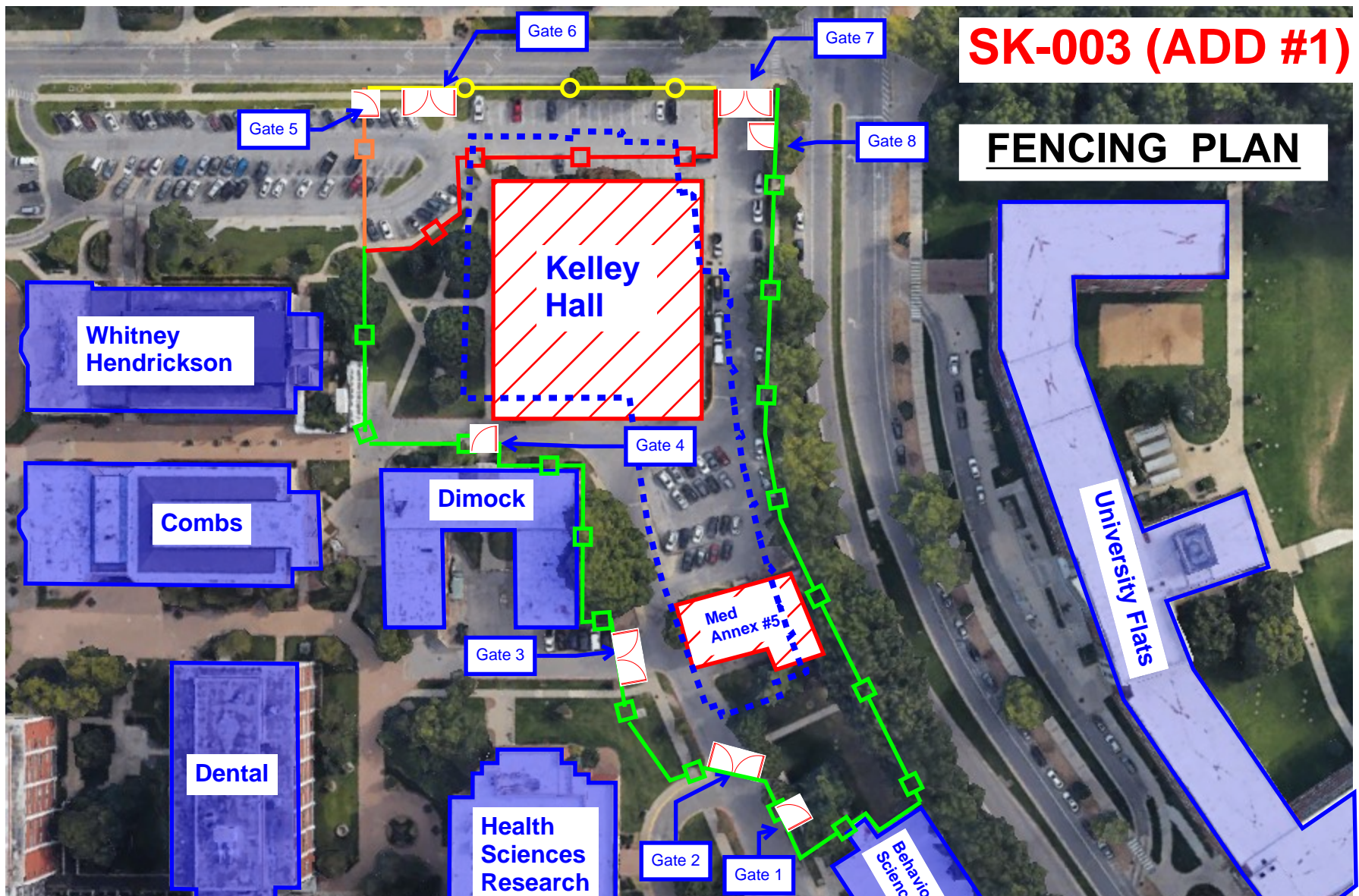
Information such as your company's financial statements, EMR, UBE certifications, etc., may require yearly renewal. At the time of renewal for these specific documents, an automated email from Vertikal will be sent as a reminder to all user accounts associated with your company with instructions to upload the renewal documents. Follow the instructions in the email to upload the updated file(s) to support renewal.

The hiring client will email your company for other files, such as OSHA logs if needed.

**\*\*\* END \*\*\***

**SK-003 (ADD #1)**

## FENCING PLAN



Type A - Continuous 2'h x 2'w bin blocks with 6' high chainlink fence mounted to top of blocks (8' total height) Phase 1 & 2 (ADD #1)



Swinging Man Gate



Type B - Continuous water filled barriers with top mounted fence. (8' total height) Phase 1 & 2



Rolling Gate



Type B - Continuous water filled barriers with top mounted fence. (8' total height) Phase 1



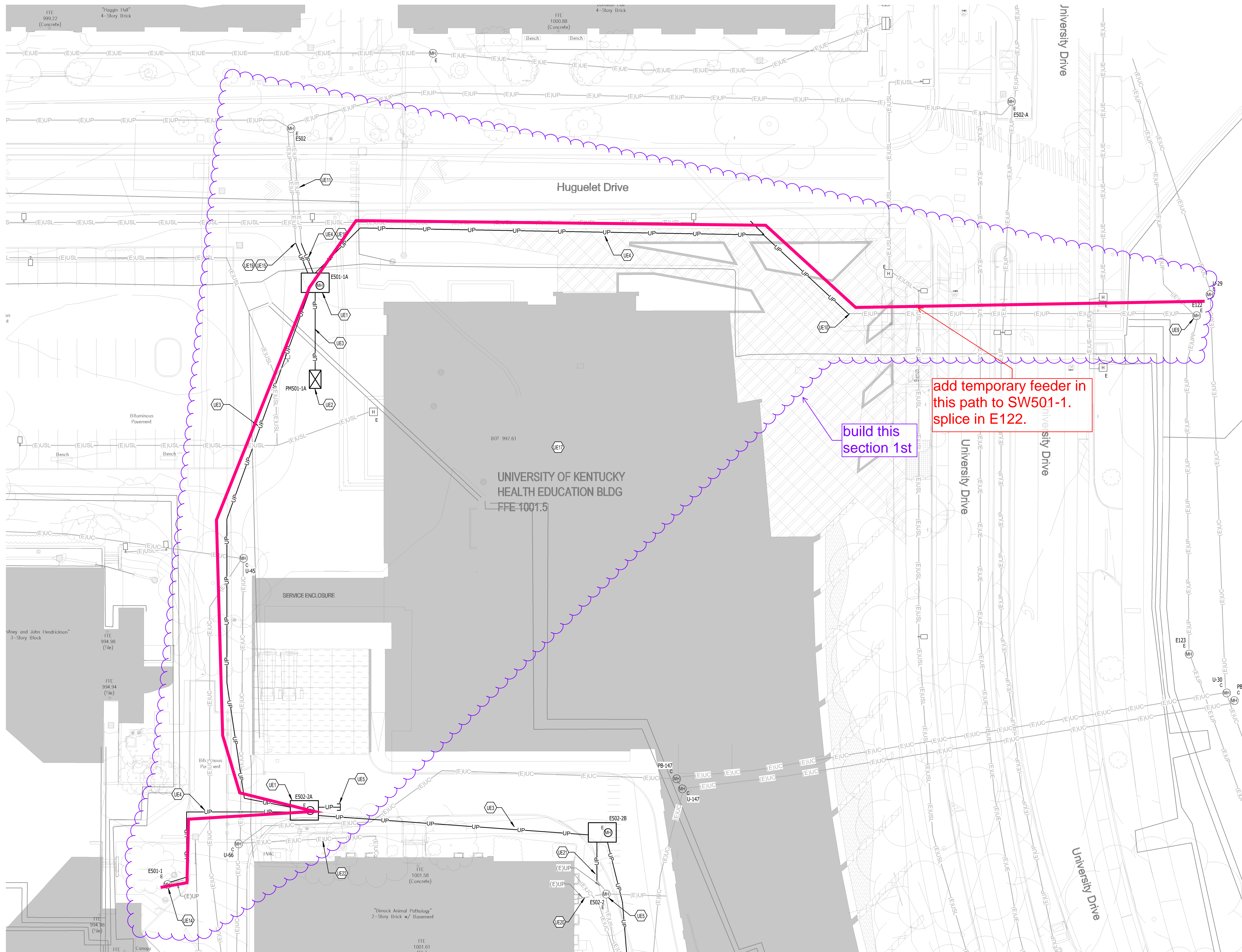
Type B - Continuous 8'h chainlink fence with driven fence post (max post spacing 8' o.c.) Phase 2



Type C - Continuous 8'h chainlink fence with driven fence post (max post spacing 8' o.c.) Phase 2



SK-009.1

SITE UTILITY PLAN - AREA A - ELECTRICAL  
NEW WORK

1 SCALE: 1" = 20'-0"

## ELECTRICAL SITE NOTES

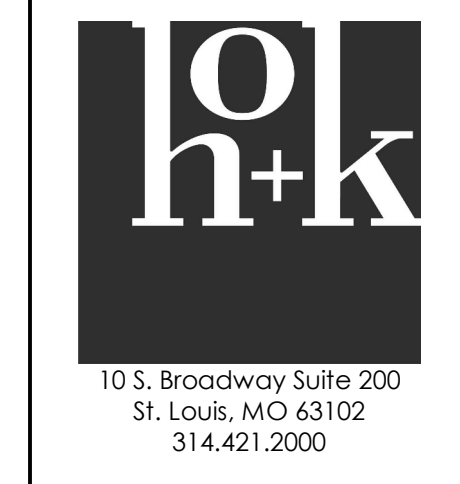
- A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.
- B REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLANS, APPROPRIATE MECHANICAL & ELECTRICAL PLANS FOR SERVICE CONTINUATION, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL, WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.
- C FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- D WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
- E LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.
- F PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILITY STANDARDS SHALL TAKE PRECEDENCE.
- G UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE UNIVERSITY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
- H PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE. EXTEND CONDUIT A MINIMUM OF 6" ABOVE GRADE.
- I PROVIDE SURVEY DATA INCLUDING DEPTH, FOR ALL TERMINATION POINTS AND CHANGES IN ELEVATION, SLOPE OR DIRECTION DATA SHALL BE IN THE FORMAT NECESSARY FOR INCLUSION IN THE UNIVERSITY'S GIS SYSTEM.
- J CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. AFTER RACEWAY INSTALLATION AND PRIOR TO CONCRETE PLACEMENT, NO CONCRETE OR BACKFILL SHALL BE DONE WITHOUT EXPLICIT APPROVAL OF OWNER AND ENGINEER.
- K CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- L COORDINATE UNDERGROUND ELECTRICAL WITH ALL LANDSCAPING AND FENCING. ADJUST ELECTRICAL LINES TO AVOID CONFLICTS. REFER TO LANDSCAPING FOR FURTHER INFORMATION. AVOID ROUTING UNDERGROUND CONDUITS UNDER ROADWAYS OR PARKING LOTS. CROSS ROADWAYS WITH UNDERGROUND CONDUITS AT 90 DEGREES WHERE POSSIBLE.
- M PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT, AND THE BUILDING OPERATORS AT LEAST ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE IN WRITING AND INSURE THAT THEY DO NOT DELAY WORK.
- N THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE ONLY.
- O THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.
- P THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE OTHER UTILITIES, THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
- Q CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- R REATTACH ALL TAPS AND TRANSFORMERS AS TO MAINTAIN EXISTING PHASE CONNECTIONS.
- S CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DOWNSTREAM SERVICE FROM REMOVED EQUIPMENT ON SITE, INCLUDING BUT NOT LIMITED TO SITE LIGHTING, TRANSFORMERS, ETC.
- T REMOVE ALL ASSOCIATED PULLBOXES, CONDUIT AND CONDUCTORS FOR DEVICES/FIXTURES/ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UCN).
- U COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.
- V COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- W REFER TO THE MEDIUM-VOLTAGE WORK SEQUENCE FOR ORDER OF NEW WORK AND DEMOLITION. THE CONTRACTOR SHALL DEVELOP A DETAILED WORK PROCEDURE FOR REVIEW. OBTAIN APPROVAL FROM THE ENGINEER AND THE UNIVERSITY PRIOR TO BEGINNING ANY WORK. DURATION OF OUTAGES AND LOSS OF REDUNDANT SOURCES IS TO BE MINIMIZED.
- X ALL EXCAVATION WITHIN THE CANOPIES OF REMAINING TREES SHALL BE BY AIR EXCAVATOR TO MINIMIZE DAMAGE TO ROOTS. REFER TO THE UNIVERSITY'S TREE PROTECTION REQUIREMENTS FOR OTHER REQUIREMENTS.

## TAGGED NOTES

- UE1 PROVIDE NEW POWER MANHOLE AND ACCESSORIES/FITTINGS PER DETAIL AND UK SPECIFICATIONS. PROVIDE 2" CONDUIT STUBOUT FOR MANHOLE POWER CIRCUIT. MANHOLE LIGHTS, FAN AND PUMP ARE TO BE OPERATIONAL ON TEMPORARY POWER PRIOR TO PLACING MEDIUM-VOLTAGE CABLE IN SERVICE. POWER CIRCUIT WILL BE REEFED FROM THE NEW BUILDING IN A FUTURE BID PACKAGE. PROVIDE 2" SUMP PUMP DISCHARGE PIPE TO NEAREST STORMWATER CATCH BASIN, MINIMUM 18" BPS.
- UE2 PROVIDE NEW 6-WAY 12KV PAD-MOUNT SWITCH AND PAD. CONTRACTOR SHALL UTILIZE UNIVERSITY STOCK SWITCHES FOR INITIAL INSTALLATION DUE TO DELIVERY TIMES. TURN OVER REPLACEMENT SWITCHES TO THE OWNER UPON DELIVERY.
- UE3 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH SIX 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE4 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH FOUR 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE5 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS. STUB DUCT 5' FROM MANHOLE AND CAP FOR EXTENSION TO NEW BUILDING IN A FUTURE BID PACKAGE.
- UE9 EXISTING SWITCH SW122, LOCATED IN MANHOLE E122, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE10 UTILIZE EXISTING DUCTBANK TO PROVIDE NEW CABLE FROM NEW PM501-1A TO EXISTING SW122 AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE11 UTILIZE EXISTING DUCTBANK TO PROVIDE NEW CABLE FROM NEW PM501-1A TO EXISTING JUNCTION IN E502 AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE14 EXISTING SWITCH SW501-1, LOCATED IN MANHOLE E501-1, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE15 INTERCEPT EXISTING EMPTY DUCTBANK BETWEEN MANHOLES E502 AND E502-1. REROUTE DUCT TO NEW MANHOLE E501-1A AND INSTALL NEW FEEDER TO SWITCH PM501-1A AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE16 INTERCEPT EXISTING DUCTBANK BETWEEN MANHOLES E502 AND E501 AFTER CABLE REMOVAL. REROUTE DUCT TO NEW MANHOLE E501-1A.
- UE17 FUTURE HEALTH EDUCATION BUILDING.
- UE19 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH FOUR 4" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE20 PROVIDE AND INSTALL NEW 12,470V FEEDER CONSISTING OF (3) #40 (15KV) AND (1) #40 (600V) GROUND FROM REPLACEMENT SWITCH PM501-1A TO THE EXISTING DIMMCK ANIMAL PATHOLOGY MAIN ELECTRICAL GEAR. UTILIZE EXISTING UNDERGROUND PATHWAY BETWEEN MANHOLE E502-2 AND THE BUILDING. UTILIZE EXISTING PATHWAY IN THE BUILDING.
- UE21 PRIOR TO THE REMOVAL OF EXISTING CABLE TO E502-2, PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS FROM E502-28. CONDUITS SHALL TIE-IN TO EXISTING TWO OPEN 5" CONDUITS FROM MANHOLE E502-2.
- UE22 PRIOR TO THE DEMOLITION OF KELLY BUILDING, PROVIDE NEW 12-STRAND SINGLE-MODE AND 12-STRAND OM3 FIBER OPTIC CABLE FROM BOSCOMWORTH BUILDING. CABLE SHALL BE ROUTED IN EXISTING PATHWAY FROM ANIMAL PATHOLOGY, U-66, U-45, U-153 AND TERMINATE IN ROOM 115 OF THE BOSCOMWORTH BUILDING. CABLE SHALL TERMINATE ON THE ENTRANCE SERVICE RACK OF THE ANIMAL PATHOLOGY BUILDING.

3225 Summit Square Place, Suite 200  
Lexington, Kentucky 40509  
859.252.6781

RESERVED FOR AHJ STAMP

BP-01B DEMO, SITE UTILITIES (PH1)  
UNIVERSITY OF KENTUCKY  
HEALTH EDUCATION BUILDING  
UNIVERSITY OF KENTUCKY  
LEXINGTON, KENTUCKY

## ELECTRICAL

PROJECT XKSM21  
DATE 10/20/2023

REVISIONS		
No.	Description	Date

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THAT OF THE PROJECT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS FOR ANY OTHER PROJECTS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

SITE UTILITY PLAN AREA A -  
MEP NEW WORK

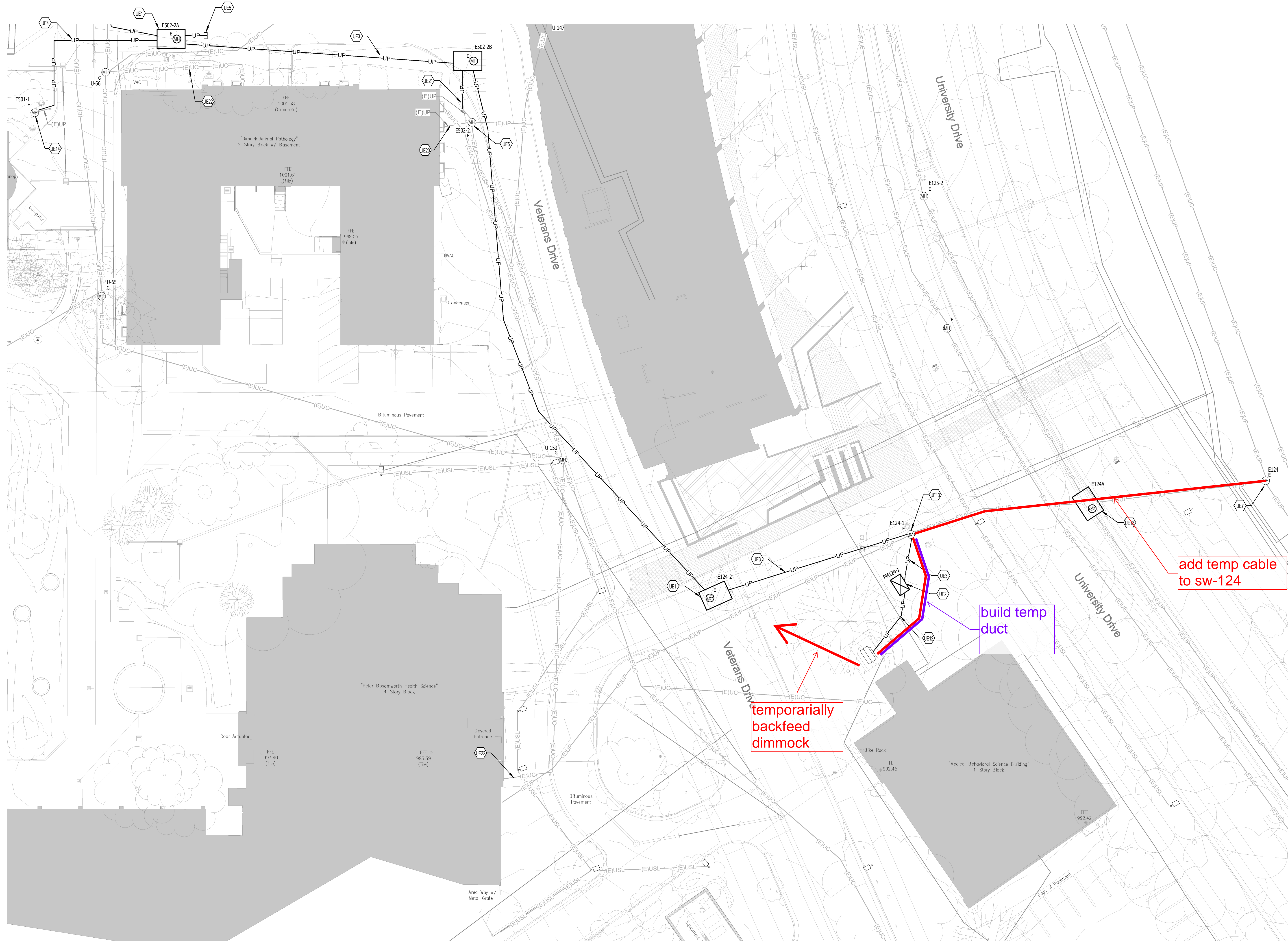
EU201

COPYRIGHT 2023 - JRA, INC.

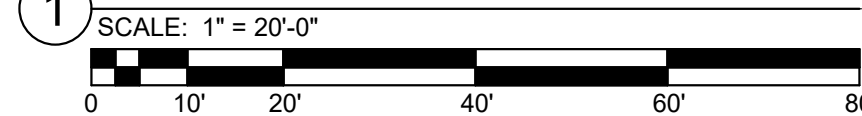


SK-009.2

Autodesk Docs\2021070 - UK Health Education Building\XKSM21 MEP SITE.dwg



SITE UTILITY PLAN - AREA B - ELECTRICAL  
NEW WORK



ELECTRICAL SITE NOTES

- A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.
- B REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLAN(S), APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL, WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.
- C FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- D WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
- E LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.
- F PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILITY STANDARDS SHALL TAKE PRECEDENCE.
- G UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE UNIVERSITY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
- H PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE. EXTEND CONDUIT A MINIMUM OF 6' ABOVE GRADE.
- I PROVIDE SURVEY DATA INCLUDING DEPTH, FOR ALL TERMINATION POINTS AND CHANGES IN ELEVATION, SLOPE OR DIRECTION. DATA SHALL BE IN THE FORMAT NECESSARY FOR INCLUSION IN THE UNIVERSITY'S GIS SYSTEM.
- J CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. AFTER RACEWAY INSTALLATION AND PRIOR TO CONCRETE PLACEMENT, NO CONCRETE OR BACKFILL SHALL BE DONE WITHOUT EXPLICIT APPROVAL OF OWNER AND ENGINEER.
- K CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- L COORDINATE UNDERGROUND ELECTRICAL WITH ALL LANDSCAPING AND FENCING. ADJUST ELECTRICAL LINES TO AVOID CONFLICTS. REFER TO LANDSCAPING PLANS FOR FURTHER INFORMATION. AVOID ROUTING UNDERGROUND CONDUITS UNDER ROADWAYS OR PARKING LOTS, CROSS ROADWAYS WITH UNDERGROUND CONDUITS AT 90 DEGREES WHERE POSSIBLE.
- M PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT, AND THE BUILDING OPERATORS AT LEAST ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE IN WRITING AND INSURE THAT THEY DO NOT DELAY WORK.
- N THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE ONLY.
- O THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.
- P THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE OTHER UTILITIES, THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
- Q CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- R REATTACH ALL TAPS AND TRANSFORMERS AS TO MAINTAIN EXISTING PHASE CONNECTIONS.
- S CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DOWNSIDE SERVICE FROM REMOVED EQUIPMENT ON SITE, INCLUDING BUT NOT LIMITED TO SITE LIGHTING, TRANSFORMERS, ETC.
- T REMOVE ALL ASSOCIATED PULLBOXES, CONDUIT AND CONDUCTORS FOR DEVICES/FIXTURES/ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON).
- U COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.
- V COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- W REFER TO THE MEDIUM-VOLTAGE WORK SEQUENCE FOR ORDER OF NEW WORK AND DEMOLITION. THE CONTRACTOR SHALL DEVELOP A DETAILED WORK PROCEDURE FOR REVIEW. OBTAIN APPROVAL FROM THE ENGINEER AND OWNER PRIOR TO BEGINNING ANY WORK. DURATION OF OUTAGES AND LOSS OF REDUNDANT SOURCES IS TO BE MINIMIZED.
- X ALL EXCAVATION WITHIN THE CANOPIES OF REMAINING TREES SHALL BE BY AIR EXCAVATOR TO MINIMIZE DAMAGE TO ROOTS. REFER TO THE UNIVERSITY'S TREE PROTECTION REQUIREMENTS FOR OTHER REQUIREMENTS.

TAGGED NOTES

- UE1 PROVIDE NEW POWER MANHOLE AND ACCESSORIES/FITTINGS PER DETAIL AND UK SPECIFICATIONS. PROVIDE 2" CONDUIT STUB FOR MANHOLE POWER CIRCUIT. MANHOLE LIGHTS, FAN AND PUMP ARE TO BE OPERATIONAL ON TEMPORARY POWER PRIOR TO PLACING MEDIUM-VOLTAGE CABLE IN SERVICE. POWER CIRCUIT WILL BE REFEED FROM THE NEW BUILDING IN A FUTURE BID PACKAGE. PROVIDE 2" SUMP PUMP DISCHARGE PIPE TO NEAREST STORMWATER CATCH BASIN, MINIMUM 18" BFG.
- UE2 PROVIDE NEW 6-WAY 12KV PAD-MOUNT SWITCH AND PAD. CONTRACTOR SHALL UTILIZE UNIVERSITY STOCK SWITCHES FOR INITIAL INSTALLATION DUE TO DELIVERY TIMES. TURN OVER REPLACEMENT SWITCHES TO THE OWNER UPON DELIVERY.
- UE3 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH SIX 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE4 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH FOUR 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE5 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS. STUB DUCT 5' FROM MANHOLE AND CAP FOR EXTENSION TO NEW BUILDING IN A FUTURE BID PACKAGE.
- UE7 EXISTING SWITCH SW124, LOCATED IN MANHOLE E124, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE12 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 4" CONDUITS. EXTEND DUCT FROM NEW MANHOLE TO EXISTING PAD-MOUNT TRANSFORMER. REPLACE TRANSFORMER FEEDER AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE13 INTERCEPT EXISTING FEEDER FROM SW124 TO THE BOSOMWORTH BUILDING IN THIS MANHOLE. REROUTE TO NEW SWITCH PM124-1 AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE14 EXISTING SWITCH SW501-1, LOCATED IN MANHOLE E501-1, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- UE18 PROVIDE NEW POWER MANHOLE AND ACCESSORIES/FITTINGS PER DETAIL AND UK SPECIFICATIONS. THIS MANHOLE SHALL BE CAST-IN PLACE. COORDINATE EXACT LOCATION AND ORIENTATION TO INCORPORATE THE EXISTING DUCTBANKS. LOCATE MANHOLE AT THE CROSSING POINT OF THE TWO PRIMARY DUCTS SHOWN. REMOVE CONCRETE ENCASUREMENT OF EXISTING DUCTS WITHIN THE MANHOLE AND CUT CONDUIT BACK TO MANHOLE WALL. COORDINATE WITH UKPD TO DEENERGIZE FEEDERS WITHIN THIS DUCT DURING CUTTING. PROTECT CABLE DURING CUTTING. PROVIDE BELL ENDS FOR ALL CONDUIT. PROVIDE RACKING FOR EXISTING CABLE AS NECESSARY FOR SUPPORT. INTERCEPT FOR MANHOLE POWER CIRCUIT AND CONNECT MANHOLE DEVICES TO EXISTING CIRCUIT. PROVIDE 2" SUMP PUMP DISCHARGE PIPE TO NEAREST STORMWATER CATCH BASIN, MINIMUM 18" BFG.
- UE20 PROVIDE AND INSTALL NEW 12470V FEEDER CONSISTING OF (3) #4/0 (15KV) AND (1) #4/0 (600V) GROUND FROM REPLACEMENT SWITCH PM501-1A TO THE EXISTING DIMMOCK ANIMAL PATHOLOGY MAIN ELECTRICAL GEAR. UTILIZE EXISTING UNDERGROUND PATHWAY BETWEEN MANHOLE E502-2 AND THE BUILDING. UTILIZE EXISTING PATHWAY IN THE BUILDING.
- UE21 PRIOR TO THE REMOVAL OF EXISTING CABLEING TO E502-2, PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS FROM E502-2B. CONDUITS SHALL TIE-IN TO EXISTING TWO OPEN 5" CONDUITS FROM MANHOLE E502-2.
- UE22 PRIOR TO THE DEMOLITION OF KELLY BUILDING, PROVIDE NEW 12-STRAND SINGLE-MODE AND 12-STRAND OM1 FIBER OPTIC CABLEING FROM BOSOMWORTH BUILDING. CABLEING SHALL BE ROUTED IN EXISTING PATHWAY FROM ANIMAL PATHOLOGY, U-66, U-65, U-153 AND TERMINATE IN ROOM 115 OF THE BOSOMWORTH BUILDING. CABLEING SHALL TERMINATE ON THE ENTRANCE SERVICE RACK OF THE ANIMAL PATHOLOGY BUILDING.

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RESERVED FOR AHJ STAMP



BP-01B DEMO, SITE UTILITIES (PH1)

UNIVERSITY OF KENTUCKY  
HEALTH EDUCATION BUILDING  
UNIVERSITY OF KENTUCKY  
LEXINGTON, KENTUCKY



ELECTRICAL

PROJECT XKSM21  
DATE 10/20/2023

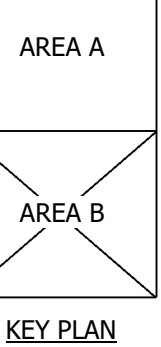
REVISIONS		
No.	Description	Date

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

SITE UTILITY PLAN AREA B -  
MEP NEW WORK

EU202

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CCK-2564.0-5-24 Question and Response Log Question Deadline		
#	Question	Response
1	For TC-008 Early Site General Trades, is an 8’ driven post fence per UK standards required in addition to the concrete barriers along University Drive as described in Item 60E of the General Work Requirements for all trade contracts – Health Education Building document?	No. The intent is for the jersey barriers to satisfy the UK fence standards. Installing both fences will not be necessary.
2	Is the Site Fence on SK-005 (see highlighted below) in addition to the water filled jersey barriers “at all other locations” required by Item 60E of the General Work Requirements for all trade contracts – Health Education Building document and as already shown on Sheet C100, SK-002.1 and SK-002.2?	SK-005 should not be used for project site fencing. Reference SK-002 & SK-003 for fence types and locations.
3	Will a rubber track, compact loader with a collector broom suffice for the full-time street sweeping equipment in lieu of the Laymor Sweepmaster 300 as described below for the TC-008 Early Site General Trades package.	No. Dedicated street sweeping equipment is required.
4	The restroom trailer as described below will cost more than \$75,000 for the TC-008 Early Site General Trades package. Will traditional temporary construction toilets be considered in lieu of the restroom trailer for the TC-008 Early Site General Trades package?	No. Provide restroom trailer per documents.
5	For the dumpsters to be included in the TC-008 Early Site General Trades package scope of work (see below), can the CM provide a specified numbers of “pulls” to be included as an allowance? Additionally, no Central Kentucky dumpster services offer off-site trash sorting per Item 44B.	Number of pulls will not be specified.  See update General Requirements in Addendum #1 for updated trash sorting requirements.
6	TC-007 – Demo & Abatement 20) i.; As it relates to the permiteter air monitoring, shall demolition contractors perform air monitring as ‘real-time monitoring’ or ‘cassettes’? ‘Real-Time’ air monitor provides instant results for air samples as oppsed to the ‘cassette’ sample monitor method which requires 24 to 48 hours to provide air sample results. We feel the ‘real-time’ air monitring is best suited for this application and project location, please confirm. i. Project is directly adjacent to Whitney Hendrickson Cancer Building and patient parking. Provide pre demo particulate count prior to demolition of structure and during demolition operations. This work shall be performed by a 3 <sup>rd</sup> party certified test and balance contractor. Confirm monitoring points with CM before proceeding with raining the structure. Tests shall be documented and submitted for record. i. Contractor shall provide all dust control as outlined below. 1. The Contractor shall maintain and control airborne dust below 10 mg/m3 at the perimeter work area during demolition, and associated site activities. 2. The Contractor shall provide regular and adequate moisture during operations to prevent dust emissions and migration. 3. Fugitive dust generated on-site shall not be permitted to migrate past the Project Limits boundary. 4. The Contractor shall conduct air monitoring using methods and procedures that will adequately demonstrate that dust emission in the work area is below 10 mg/m³ during activities. 5. The Contractor shall conduct air monitoring using methods and procedures that will adequately demonstrate that dust emission in the work area is below 10 mg/m³ during activities. 6. The Contractor shall report the results of the perimeter air monitoring to the Project Superintendent on a daily basis, beginning on day 3 of the project. 7. If the results of the perimeter air monitoring exceed the specified criteria of 10 mg/m³ the Contractor shall implement improved dust control measures.	Confirmed. Provide real-time monitoring.
7	Regarding allowances: If only a portion or none of the allowance is used, would the contractor have to credit any overhead and profit amount to UK or just the amount of the allowance? There is specific language that does not allow overhead and profit to be considered when billing against an allowance and that the contractor is supposed to include the overhead and profit in the base bid so that is what prompted the question.	Contractors will be required to credit back any remaining unused allowances.
8	Regarding spec section 010000S02 -Tree Protection Standards; is the “ARBORIST” trade category responsible to provide all of the work shown in this section for trees that are to remain?	No, TC-005 Arborist is responsible for their Scope of Work "Attachemnt B".
9	If a trade contractor installs tree protection fence for some of the duct bank work that is “off site” does that make him responsible for the all of the work shown in this section for that particular tree?	Contractors are responsible for protection of trees affected by their scope of work incuding removal of protection once complete.
10	Does the “ARBORIST” trade package include the work shown in tree protection standards for the “off site” electric duct bank work where trees are encountered?	Yes. See updated TC-005 Scope of Work in Addendum #1.
11	Will the “ARBORIST” trade package do air knife work for excavations close to an existing tree that is to remain?	No. Arborist will only perform monitoring activities for other contractor's excavation work.
12	Reference Scope of Work TC-009/Temporary Lighting Note e. Are the 300 manhours and \$10,000 material/equipment that are to be included for additional work not spelled out in the contract documents?	Yes.

13	Do the power gates require any pathways for low voltage/data?	Yes. Include additional pathway for LV.
14	Will all material and equipment (including maintenance) associated with the temporary electric be turned over to another trade contractor at the posted finish date on the schedule for BP-01C?	This contractor shall assume maintenance of all temporary electrical systems through October 31, 2024.
15	What trade contractor is responsible for the salvage items listed in the division 26 spec?	See updated specification 260505 in Adendum #1.
16	Is Southwire an acceptable manufacture for medium voltage cable?	Southwire is an acceptable manufacturer.
17	Is Raychem an acceptable manufacture for medium voltage terminations and splices?	Raychem is an acceptable manufacturer.
18	Have locations been determined for the 2 temporary services?	No. Locations to be coordinated with CM.
19	When is the temporary electric required to be energized? Leadtime on equipment may be an issue.	Temporary power for site lighting will be needed by March 1, 2024.
20	What breakers are required in each 1,000-amp 480V switchboard?	TC-009 to design a complete temporary power and lighting system consisting of all equipment, breakers, feeders, submittals, drawings, etc. Specific information regarding breaker sizes beyond what is found in the bid documents is not known at this time.
21	Will the disconnects required for the tower cranes be supplied by the crane provider?	No. TC-009 shall provide the tower crane disconnects.
22	Will power to the guard shack be a single point connection to an exterior disconnect?	Yes. TC-009 to provide the exterior disconnect.
23	Will power to the toilet trailer be a single point connection to an exterior disconnect?	Yes. TC-009 to provide the exterior disconnect.
24	Please confirm whether or not Turner will be bidding to self-perform any bid packages. (Note: if no such decision has been made we are requesting a notice when the decision is final in time for us to prepare our bid which is contingent on not competing with the CM).	Turner will not be pursuing self perform in the Bid Package.
25	Please confirm all BP-01C electrical supply/connections for the items furnished by TC-008 (e.g., guard shack, restroom trailer, automatic gate operators) will be by TC-009 (not explicitly listed in TC-009 scope).	Confirmed. All connections by TC-009.
26	General Requirements, #54. Considering the project is not within an enclosed space, will "exhaust scrubbers" be necessary?	Yes. Due to proximity of cancer facility patients and equipment.
27	General Requirements, #60.E: Please clarify if the site "rolling" gates are actually intended to be "swing" gates as depicted on SK logistics plans. (Note: both styles are automatic operator capable, but slide gates require additional side clearance (a single 30' gate requires 45' for storage of the open gate) which may not be suitable for limited site area and layout.	Assume rolling gates as shown on SK-003.
28	General Requirements, #60.E: Please clarify quantity of gates for each phase. Scope and SK logistics plans conflict on quantities of both styles of gates.	See Addendum #1 updated SK-003.
29	General Requirements, #60.E: Please confirm only Phase 2 site fencing is to remain at completion.	Confirmed. Phase 1 site fence to be removed after Phase 2 fence is installed.
30	Is the sidewalk canopy system (#60.E.3.) to remain beyond this phase? If so, will the system be rented from the provider in the next phase or will it become the property of UK?	Canopy to remain beyond this phase and shall not be rented.
31	General Requirements, #60 & SK-103: A "Bin Block" fence system is shown to be located on a sloped bank that contains the exposed roots of trees lining University Drive. Assuming excavation will not be possible, what are the acceptable methods for leveling this area? Also, the Bin Block section are 2'Hx2'Wx6'L and weigh in excess of 3600lbs. Is this ground pressure in the root zone acceptable to UK? If not, what are the acceptable methods of root protection and which TC will provide these measures?	Utilize water filled jersey barriers along University Dr. See Addendum #1 updated SK-003.
32	General Requirements, #60.E.7: Will the custom fence screening described as being provided by the Owner "when made available" mean the design or the screen itself? If supplied by contractor, please provide details about the graphic type, number of colors, extent of the graphic (i.e., continuous of a single panel) or provide an example for bidding purposes?	The screen will be provided by the owner.
33	General Requirements, #63.A: Please clarify if "Yard Boss Office" is for contract duration or to remain at completion of BP-01C. If to remain, will the system be rented from the provider in the next phase or will it become the property of UK?	It is the intent that the Yard Boss Office/Guard Shack does not remain at the end of this package.
34	General Requirements, #64: TC-008 to provide street sweeper which "may be used by other trades". Will other trades be responsible for damages to the equipment? Will the CM assume comprehensive coverage associated with the usage by other trades or will each TC be required to carry suitable coverage? (Note: Gen Req #43.C states every TC responsible for roadway cleaning required by their own work, with Gen Req #64 General Trades responsible for general cleaning of non-descript dirt. Please clarify whether TC-008 daily street cleaning scope requirements are intended to be in addition to cleaning by all TC.	TC-008 to provide all street sweeping equipment and services. Verbiage regarding other trades usage of equipment will be removed in Addendum #1.
35	General Requirements, #65.B: Is direct connection of restroom trailer to water and sanitary allowed if bidding contractor carries installation and usage costs? This will save a considerable sum of periodic emptying of holding tanks and filling of water supply tanks.	This is permissible given that bidding contractor includes all costs associated with install including but not limited to any required excavation, plumbing, tap fees, usage costs, repair of existing installations to original conditions, tree protection, etc.
36	TC-008, #22: Please clarify if ordinary non-woven geotextile fabric is acceptable or if "geogrid" (such as Tensar) is required.	Geogrid is required.

FOR THE PROJECT TITLED:

**Michael D Rankin MD Health Education Building**  
**UK Project No. 2564.0-5-24 BP-01C Early Site Setup**  
**JRA Project No. 202170**  
University of Kentucky  
Lexington, Kentucky

To: Prospective Bidders

From: JRA Architects  
3225 Summit Square Place, Suite 200  
Lexington, KY 40509

Project Contact: D. Robert Deal, AIA, LEED AP

The Addendum will form a part of the Contract Documents and modifies the original Bidding Documents dated December 2023.

Bidders must acknowledge receipt of this Addendum in the space provided on the Form of Proposal. Failure to do so may subject the bidder to disqualification.

Bidding Documents, including the Drawings and Specifications, are amended as described herein.

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#### **ADDENDUM ITEMS:**

##### **ITEM NO. 1.01**

Refer to the Electrical Specifications – Section 260505

- A. Replace the originally issued Specification 260505 dated 10/23 with the attached Specification 260505 revised 1/24.

##### **ITEM NO. 1.02**

Refer to the Electrical Specifications – Section 260513

- B. Paragraph 2.1. Southwire and Raychem are approved manufacturers.

##### **ITEM NO. 1.03**

Refer to the Electrical Specifications – Section 261300

- C. Paragraph 2.3. The new switches procured in this project shall exactly match the ones advanced by the University. These switches are S&C 936602R1-P6Z5 as follows: Volts: 15.5 Amperes: 600 Color: Olive Green --Vista Underground Switchgear-- Outdoor Distribution-- Manual Model 660. Opt. P6 - R1 Style 5 / 6-Way Mild Steel Pad Mounted Enclosure - Olive Green 15.5 Kv 12.5 Ka  
Opt. Z5 - 6-Way Copper Main Bus 15.5 Kv

##### **ITEM NO. 1.04**

Refer to the Electrical Drawings – Sheet EU202

- D. Refer to the attached replacement Sheet EU202 for revised ductbank routing and notes.

##### **ITEM NO. 1.05**

Refer to the Electrical Drawings – Sheet EU500

- E. Manhole General Notes, note 15. For clarification – the requirement for delegated structural design only applies to precast structures. For cast-in-place manholes, the Electrical Contractor shall coordinate with project Structural Engineer who will provide detailed construction drawings.



**ITEM NO. 1.06**

Add Specification Section 014120 – STRUCTURAL INSPECTION.

**ITEM NO. 1.07**

Add Specification Section 033000 – CAST IN PLACE CONCRETE.

**ITEM NO. 1.08**

Add Specification Section 071326 – SELF ADHERING SHEET WATERPROOFING.

**ITEM NO. 1.09**

Add Sheets S-700 – ELEC. VAULT GENERAL NOTES & TYPICAL DETAILS.

**ITEM NO. 1.10**

Add Sheets S-701 – ELECTRICAL VAULT PLANS AND SECTIONS.

**ITEM NO. 1.11**

Replace Sheet C200 – SITE DEMOLITION PLAN. Reference attached revised drawing sheet C200, coded notes 6A & 6B. As the plan indicates, some trees have been cut by the Owner, leaving only the stump/roots to be removed by this contract. Other trees remain to be completely removed by this contract.

**END OF ADDENDUM NO. 1.00**

**SECTION 260505- DEMOLITION RESTORATION AND SALVAGE****PART 1 - GENERAL****1.1 RELATED REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 01 Specification Sections, and Section 260501 "General Requirements for Electrical Systems" apply to this Section.

**1.2 SUMMARY**

- A. This section covers all demolition, restoration, and salvage required to perform the electrical work indicated on the drawings, specified and/or as required to complete the project. It is the intent of this section of work to remove all existing electrical equipment, materials, etc. which are not required for the completed building and to restore any and all finished surfaces to their original type and conditions. To accomplish these requirements, the Contractor(s) shall, at his own expense, engage the services of others already performing finish work on this project as appropriate. All work shall be completed to the satisfaction of the Architect/Engineers whose decisions shall be final. This requirement shall apply to all restoration work whether indicated or specified.

**1.3 DEFINITIONS**

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and re-installed.
- B. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, clean and prepare for reuse, and reinstall where indicated.
- C. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed or salvaged, or removed and reinstalled.
- D. Demolish: Completely remove and legally dispose of off-site.
- E. Recycle: Recovery of demolition waste for subsequent processing in preparation for reuse.
- F. Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner. Include fasteners or brackets needed for reattachment elsewhere.

**1.4 SUBMITTALS**

- A. Inventory: Submit a list of items to be removed and salvaged and deliver to Owner prior to start of demolition.
- B. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective electrical demolition operations. Submit before the Work begins.

**1.5 MATERIALS OWNERSHIP**

- A. Except for items or materials to be reused, salvaged, reinstalled or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option but in compliance with ordinances and regulations related to the materials being disposed.

**1.6 PROJECT CONDITIONS**

- A. On-site storage or sale of removed items or materials is not permitted.

**1.7 COORDINATION**

- A. Demolition schedule shall not interfere with Owner's on-site operations and operations of adjacent occupied buildings.
- B. Review requirements of General Demolition Contractor and work performed by other trades that rely on demolition of electrical circuitry or equipment to allow for structural demolition or removal of equipment.
- C. Review areas where existing electrical circuitry and/or equipment is to remain in place may require protection.
- D. Coordinate with utility providers to disconnect existing services and make structures safe for mass demolition.
- E. Coordinate with utility providers to remove/relocate existing facilities located within the construction site as necessary to permit excavation and progress of construction.
- F. Coordinate with the university's information Technology Services department for deactivation of all facilities supplied by cabling and infrastructure that is indicated for removal.

**1.8 QUALITY ASSURANCE**

- A. Regulatory Requirements: Comply with governing EPA notifications regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

**PART 2 - PRODUCTS**

- A. NOT USED

**PART 3 - EXECUTION****3.1 EXAMINATION AND RECORDING OF EXISTING CONDITIONS**

- A. Contractor is responsible for submitting photos and documenting existing conditions to Owner prior to commencing demolition. Systems and equipment found to be defective after demolition has commenced shall be repaired or replaced by Contractor at no additional cost to Owner.
- B. Notify Construction Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged. Use photographs to document conditions.

**3.2 PROTECTION**

- A. Comply with governing laws, codes, and regulations governing fire protection and environmental protection during electrical demolition operations.
- B. Existing Utilities: maintain existing utilities and building services and protect from damage during demolition operations.
  - 1. All adjacent areas need to remain in operation and services to other areas outside area of construction need to be maintained during demolition.
  - 2. Disconnect electrical power and communications only to the items of equipment or the panelboard that is identified for removal under the selective electrical demolition scope.
  - 3. Provide temporary services during interruptions to existing utilities or building services as acceptable to Owner and Authorities Having Jurisdiction.
- C. Protect lighting fixtures, exit signs, fire alarm devices, communications devices, etc. that are to remain in place from damage during demolition and construction operations. Exposed fixtures and devices shall have a plastic bag or other suitable covering affixed over the item to protect from dust and paint splatters.
- D. Provide and maintain temporary partitions, dust control barrier, and ventilation per owner's dust control plan.
- E. Temporary enclosures and protection shall be removed by the Contractor upon completion of the electrical demolition work unless otherwise directed by the Construction Representative.

**3.3 GENERAL REQUIREMENTS**

- A. Demolish and remove existing construction in the area of work to the extent required by new construction unless noted otherwise.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.
- C. The Contractor shall be responsible for the removal and/or relocation of any electrical equipment, fixtures, devices, appurtenances, etc. which may, in the course of construction, interfere with the installation of any new and/or relocated Architectural, Mechanical, Electrical, Structural or Fire Protection Systems whether indicated or not.

- D. Where components of any system in this contractor's scope of work are to be reused, the contractor shall test those components prior to removal and record the state of functionality and condition of the components as tested. These records shall be provided to the owner or engineer upon request. In the absence of these records, all components removed shall be assumed functional at the time of removal. Any device subsequently found to be non-functioning or in unsuitable condition for reuse shall be replaced at the expense of the contractor.
- E. Conduit containing circuits which are to be retained shall remain in place, unless otherwise indicated or required.
- F. Wiring for existing circuits which must be rerouted, or which are partially abandoned, shall be reconnected to service the outlets/loads remaining on the circuit.
- G. All wiring for a circuit which is to be removed or abandoned shall be removed back to the panel which supplied the circuit.

### **3.4 PATCHING AND REPAIRS**

- A. Unless otherwise indicated, the Contractor shall be responsible for the patching and repairing of all holes, etc. in the ceiling, wall and floors where electrical equipment is removed.
- B. All damages to buildings, utilities, and services to remain in place shall be promptly repaired at no cost to the Owner.
- C. Where an existing utility or building service is interrupted, the contractor shall work continuously, providing premium time, to repair and restore service.
- D. Demolish concrete and masonry in small sections, cutting at junctures with construction to remain.
- E. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
- F. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- G. All holes or openings in floors, walls or ceilings resulting from electrical demolition shall be properly sealed with material similar to the adjacent surface/finish.
  - 1. Patch holes in concrete floors and ceilings where conduits are removed using non-shrink epoxy grout or concrete material to match existing surfaces and construction.
  - 2. Patch holes in walls and partitions where conduits are removed to match existing construction and finish.
- H. All rough edges of openings created by electrical demolition shall be promptly patched to create a finished surface.
- I. Maintain the fire rating of all floors, walls, partitions and ceilings when patching.

### **3.5 SALVAGED ITEMS**

- A. Items noted to be salvaged shall be cleaned and packed or crated as appropriate for protection. The items shall be stored in a secure area until delivery to Owner. Transport items to storage area designated by Owner. Protect items from damage during transport and storage.

### **3.6 RE-INSTALLED ITEMS**

- A. Items noted to be removed and re-installed shall be carefully removed, cleaned, and repaired to functional condition adequate for intended reuse.
- B. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment.
- C. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

### **3.7 EXISTING ITEMS TO REMAIN**

- A. Protect construction indicated to remain against damage and soiling during selective electrical demolition.
- B. When permitted by Construction Representative, items may be removed to a suitable, protected storage location during selective electrical demolition and reinstalled in their original locations after selective electrical demolition operations are complete.

### **3.8 DISPOSAL**

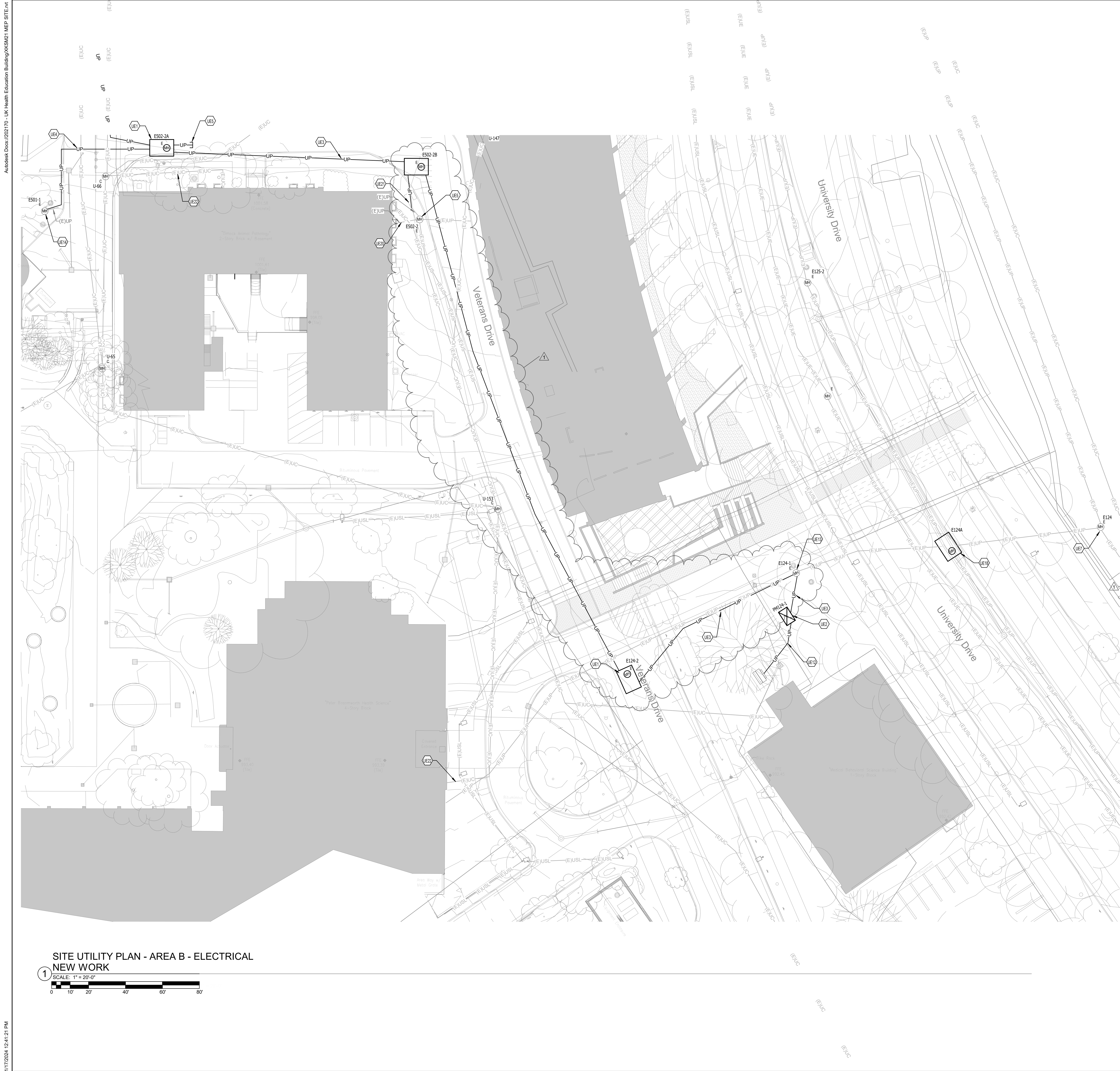
- A. Transport demolished materials off Owner's property and dispose of legally in accordance with Federal, State, and local laws and regulations.
- B. Lamps: Legally dispose of lamps in accordance with EPA guidelines.
  - 1. Contractor shall be responsible for the careful removal of all lamps and fluorescent tubes without breakage from existing lighting fixtures.
  - 2. Lamps removed from fluorescent, metal halide, mercury vapor, and sodium fixtures that do not have green end caps shall be placed by the Contractor in cardboard boxes. The Contractor shall label each box with type and quantity of lamps in each box and seal the box. Boxes shall be properly disposed of.
  - 3. Broken, fluorescent, metal halide, mercury vapor, and sodium lamps without green end caps shall be immediately and carefully cleaned up by the Contractor, placed in a 55 gallon steel drum and properly disposed of by the Contractor

### **3.9 CLEANING**

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

## **END OF SECTION**





SITE UTILITY PLAN - AREA B - ELECTRICAL  
NEW WORK

1 SCALE: 1" = 20'-0"

- ### ELECTRICAL SITE NOTES
- A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.
- B REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLAN(S), APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL, WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.
- C FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- D WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
- E LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.
- F PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILITY STANDARDS SHALL TAKE PRECEDENCE.
- G UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE UNIVERSITY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
- H PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE. EXTEND CONDUIT A MINIMUM OF 6" ABOVE GRADE.
- I PROVIDE SURVEY DATA INCLUDING DEPTH, FOR ALL TERMINATION POINTS AND CHANGES IN ELEVATION, SLOPE OR DIRECTION. DATA SHALL BE IN THE FORMAT NECESSARY FOR INCLUSION IN THE UNIVERSITY'S GIS SYSTEM.
- J CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. AFTER RACEWAY INSTALLATION AND PRIOR TO CONCRETE PLACEMENT, NO CONCRETE OR BACKFILL SHALL BE DONE WITHOUT EXPLICIT APPROVAL OF OWNER AND ENGINEER.
- K CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- L COORDINATE UNDERGROUND ELECTRICAL WITH ALL LANDSCAPING AND FENCING. ADJUST ELECTRICAL LINE/PIPE TO AVOID CONFLICTS. REFER TO LANDSCAPING PLANS FOR FURTHER INFORMATION. AVOID ROUTING UNDERGROUND CONDUITS UNDER ROADWAYS OR PARKING LOTS. CROSS ROADWAYS WITH UNDERGROUND CONDUITS AT 90 DEGREES WHERE POSSIBLE.
- M PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, AND THE BUILDING OPERATORS AT LEAST ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE IN WRITING AND INSURE THAT THEY DO NOT DELAY WORK.
- N THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE ONLY. O THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.
- P THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIFIED EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE OTHER UTILITIES, THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
- Q CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- R REATTACH ALL TAPS AND TRANSFORMERS AS TO MAINTAIN EXISTING PHASE CONNECTIONS.
- S CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DOWNSTREAM SERVICE FROM REMOVED EQUIPMENT ON SITE, INCLUDING BUT NOT LIMITED TO SITE LIGHTING, TRANSFORMERS, ETC.
- T REMOVE ALL ASSOCIATED PULLBOXES, CONDUIT AND CONDUCTORS FOR DEVICES/FIXTURES/ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON).
- U COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.
- V COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- W REFER TO THE MEDIUM-VOLTAGE WORK SEQUENCE FOR ORDER OF NEW WORK AND DEMOLITION. THE CONTRACTOR SHALL DEVELOP A DETAILED WORK PROCEDURE FOR REVIEW. OBTAIN APPROVAL FROM THE ENGINEER AND OWNER PRIOR TO BEGINNING ANY WORK. DURATION OF OUTAGES AND LOSS OF REDUNDANT SOURCES IS TO BE MINIMIZED.
- X ALL EXCAVATION WITHIN THE CANOPIES OF REMAINING TREES SHALL BE BY AIR EXCAVATOR TO MINIMIZE DAMAGE TO ROOTS. REFER TO THE UNIVERSITY'S TREE PROTECTION REQUIREMENTS FOR OTHER REQUIREMENTS.

### TAGGED NOTES

- U1 PROVIDE NEW POWER MANHOLE AND ACCESSORIES/FITTINGS PER DETAIL AND UK SPECIFICATIONS. PROVIDE 2" CONDUIT STUBOUT FOR MANHOLE POWER CIRCUIT. MANHOLE LIGHTS, FAN AND PUMP ARE TO BE OPERATIONAL ON TEMPORARY POWER PRIOR TO PLACING MEDIUM-VOLTAGE CABLE IN SERVICE. POWER CIRCUIT WILL BE REFEED FROM THE NEW BUILDING IN A FUTURE BID PACKAGE. PROVIDE 2" SUMP PUMP DISCHARGE PIPE TO NEAREST STORMWATER CATCH BASIN, MINIMUM 18" BFG.
- U2 PROVIDE NEW 6-WAY 12KV PAD-MOUNT SWITCH AND PAD. CONTRACTOR SHALL UTILIZE UNIVERSITY STOCK SWITCHES FOR INITIAL INSTALLATION DUE TO DELIVERY TIMING. TURN OVER REPLACEMENT SWITCHES TO THE OWNER UPON DELIVERY.
- U3 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH SIX 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN. ALL CONDUIT SHALL BE SLOPED TO DRAIN INTO MANHOLES. CONTRACTOR SHALL POSITIVELY LOCATE ALL UTILITY CROSSINGS AND LAYOUT DUCT ELEVATIONS ACCORDINGLY.
- U4 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH FOUR 5" AND ONE 2" CONDUIT. PROVIDE UTILITY MARKERS AT ALL CROSSINGS AND TURNS. PROVIDE FEEDERS AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- U5 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS. STUB DUCT 5' FROM MANHOLE AND CAP FOR EXTENSION TO NEW BUILDING IN A FUTURE BID PACKAGE.
- U7 EXISTING SWITCH SW124, LOCATED IN MANHOLE E124, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- U12 PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 4" CONDUITS. EXTEND DUCT FROM NEW MANHOLE TO EXISTING PAD-MOUNT TRANSFORMER. REPLACE TRANSFORMER FEEDER AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- U13 INTERCEPT EXISTING FEEDER FROM SW124 TO THE BOSOMWORTH BUILDING IN THIS MANHOLE. REROUTE TO NEW SWITCH PM124-1 AS SHOWN ON THE ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- U14 EXISTING SWITCH SW501-1, LOCATED IN MANHOLE E501-1, REPLACE FEEDER TO SWITCH AS SHOWN ON ONE-LINE DIAGRAM AND MEDIUM-VOLTAGE SEQUENCING PLAN.
- U18 PROVIDE NEW POWER MANHOLE AND ACCESSORIES/FITTINGS PER DETAIL AND UK SPECIFICATIONS. THIS MANHOLE SHALL BE CAST-IN-PLACE. COORDINATE EXACT LOCATION AND ORIENTATION TO INCORPORATE THE EXISTING DUCTBANKS. LOCATE MANHOLE AT THE CROSSING POINT OF THE TWO PRIMARY DUCTS SHOWN. REMOVE CONCRETE ENCASEMENT OF EXISTING DUCTS WITHIN THE MANHOLE AND CUT CONDUIT BACK TO MANHOLE WALL. COORDINATE WITH UKPD TO DE-ENERGIZE FEEDERS WITHIN THIS DUCT DURING CUTTING. PROTECT CABLE DURING CUTTING. PROVIDE BELL ENDS FOR ALL CONDUIT. PROVIDE RACKING FOR EXISTING CABLE AS NECESSARY FOR SUPPORT. INTERCEPT FOR MANHOLE POWER CIRCUIT AND CONNECT MANHOLE DEVICES TO EXISTING CIRCUIT. PROVIDE 2" SUMP PUMP DISCHARGE PIPE TO NEAREST STORMWATER CATCH BASIN, MINIMUM 18" BFG.
- U20 PROVIDE AND INSTALL NEW 12470V FEEDER CONSISTING OF (3) #4/0 (13KV) AND (1) #4/0 (600V) GROUND FROM REPLACEMENT SWITCH PM501-1A TO THE EXISTING DIMMICK ANIMAL PATHOLOGY MAIN ELECTRICAL GEAR. UTILIZE EXISTING UNDERGROUND PATHWAY BETWEEN MANHOLE E502-2 AND THE BUILDING. UTILIZE EXISTING PATHWAY IN THE BUILDING.
- U21 PRIOR TO THE REMOVAL OF EXISTING CABLE TO E502-2, PROVIDE NEW CONCRETE ENCASED DUCTBANK WITH TWO 5" CONDUITS FROM E502-2B. CONDUITS SHALL TIE-IN TO EXISTING TWO OPEN 5" CONDUITS FROM MANHOLE E502-2.
- U22 PRIOR TO THE DEMOLITION OF KELLY BUILDING, PROVIDE NEW 12-STRAND SINGLE-MODE AND 12-STRAND OM1 FIBER OPTIC CABLE FROM BOSOMWORTH BUILDING. CABLE IN EXISTING PATHWAY FROM ANIMAL PATHOLOGY, U-66, U-65, U-153 AND TERMINATE IN ROOM 115 OF THE BOSOMWORTH BUILDING. CABLEING SHALL TERMINATE ON THE ENTRANCE SERVICE RACK OF THE ANIMAL PATHOLOGY BUILDING.

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RESERVED FOR AHJ STAMP



BP-01B DEMO, SITE UTILITIES (PH1)

UNIVERSITY OF KENTUCKY  
HEALTH EDUCATION BUILDING  
UNIVERSITY OF KENTUCKY  
LEXINGTON, KENTUCKY



### ELECTRICAL

PROJECT	XKSM21	
DATE	10/20/2023	
REVISIONS		
No.	Description	Date
1	ADDENDUM 1	01/18/2024

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT.

SITE UTILITY PLAN AREA B -  
MEP NEW WORK

EU202

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**SECTION 01 4120 – STRUCTURAL INSPECTION****PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Structural Inspections are additional to testing and inspection requirements which may be shown elsewhere in the specifications and on the drawings.
- B. The Inspection Agency shall conduct inspections under the supervision of a qualified professional engineer licensed in the State of Kentucky (Inspector).
- C. The Inspection Agency shall be subject to approval by the Structural Engineer of Record.
- D. **The Inspection Agency shall be retained by the Trade Contractor.** Costs for reinspection and retesting, should discrepancies be found, shall be provided at no extra cost to Owner.

**1.3 QUALITY ASSURANCE**

- A. Certification Authorities: Certification Authorities providing certification which may be applicable to Project include:
  - 1. American Concrete Institute (ACI).
  - 2. National Institute of Certified Engineering Technology (NICET).
- B. Inspection Agency Qualifications: To qualify for acceptance, an independent testing agency must demonstrate to Structural Engineer of Record's satisfaction, based on evaluation of agency-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying the Work.
  - 1. Each inspector performing work on the Project shall be qualified to perform inspections for the particular type of construction or operation requiring inspection. Certification Authorities providing certification applicable to Project include, but are not limited to, the following:
    - a. Concrete Construction
      - 1) Use of design mix – ACI Level 2, NICET Level 1, or ICC Reinforced Concrete Special Inspector (RCSI).
      - 2) Material verifications, sampling of fresh concrete – ACI Level 2, NICET Level 1 (concrete), or ICC Reinforced Concrete Special Inspector (RCSI).
      - 3) Reinforcing inspection – NICET Level 2 (concrete) or ICC Reinforced Concrete Special Inspector (RCSI).
      - 4) Adhesive dowel inspection.
    - b. Soils and Rock Bearing Materials



- 1) NICET Level 2 (soils).
  2. Available Inspection Agency: Subject to compliance with requirements, Inspection Agencies that may perform Inspection Work include, but are not limited to, the following:
    - a. CSI of Kentucky, 858 Contract Street, Lexington, KY 40505  
(859) 309-6021
    - b. S&ME, Inc. 2020 Liberty Road, Suite 105, Lexington, KY 40505  
(859) 293-5518
    - c. Terracon, 2460 Palumbo Drive, Lexington, KY 40509  
(502) 365-9701
  3. For Inspection Agencies not listed herein, submit qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Engineers and owners, and other information specified. Engineer reserves the right to accept or reject Inspection Agency candidates based on the past experience, knowledge, and capacity of the proposed candidate. Inspection Agency shall be approved by Engineer prior to hiring by Trade Contractor.
- C. Inspector Qualifications: A professional engineer who is legally authorized to practice in the State of Kentucky and who is experienced in providing testing and inspection services of structure system types similar to this Project in material, design, and extent.

## PART 2 – EXECUTION

### 2.1 INSPECTION OF CONCRETE CONSTRUCTION

- A. Periodically verify the use of the proper design mix.
- B. Verify use of proper grade and ASTM designation of reinforcing steel.
- C. Perform periodic inspection on placement, spacing, clear cover, number, and splice lap lengths of reinforcing steel.
- D. Monitor concrete quality by means of site and laboratory tests. The Inspection Agency is authorized to reject plastic concrete not conforming to specifications. Immediately inform the Contractor, the Construction Manager, and the Structural Engineer of inadequacies in concrete quality. Sampling and testing for quality control during concrete placement shall include the following:
  1. Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
    - a. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
    - b. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.

- c. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  - d. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below or 80 deg F and above, and one test for each set of composite sample.
  - e. Compression Test Specimen: ASTM C 31; one set of four standard 6" diameter by 12" or five standard 4" diameter by 8" cylinders for each compressive-strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens except when field-cured test specimens are required.
  - f. Compressive-Strength Tests: ASTM C 39; test one specimen at 7 days, two 6"x12" or three 4"x8" specimens tested at 28 days, and one specimen retained in reserve for later testing if required. Additional cylinder tests (such as at 14 days) for contractor convenience and scheduling shall be paid for by the Contractor. A compressive-strength test shall be the average compressive strength from a set of specified number specimens obtained from same composite sample and tested at age indicated.
  - g. When frequency of testing will provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.
  - h. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing the in-place concrete.
  - i. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
2. Test results shall be posted to Ecomm (online University of Kentucky project management software) within 48 hours of testing. Reports of compressive-strength tests shall contain the Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as the sole basis for acceptance or rejection.
- F. Additional Tests: The testing agency will make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by Engineer. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.
- G. Adhesive Dowels Inspection: Periodically inspect drilled-in adhesive dowels as follows: Verify adhesive product and expiration date of each type and size of anchor dowels in accordance with recommendations of the Anchor Manufacturer. The Structural Inspector shall verify the initial installations of each type and size of the anchor by construction personnel on site. Subsequent installations of the same anchor type and size by the same construction personnel are permitted to be performed in the absence of the Special Inspector.

## 2.2 INSPECTION OF SOILS

- A. Inspect the existing site soil conditions, fill placement, and load-bearing requirements for compliance with the recommendations of the approved geotechnical investigation report.
- B. During placement and compaction of the engineered fill material, verify that the material being used, maximum lift thickness, and in-place dry density comply with the recommendations of the approved geotechnical report.
  - 1. Testing agency to inspect and test subgrades and each fill or backfill layer.
- C. Vault Base Slab Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Engineer.
- D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 6938, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:
  - 1. Vault Wall Backfill: At each compacted backfill layer, at least 1 test for each 100 feet or less of wall length, but no fewer than 2 tests.

## 2.3 REPORT REQUIREMENTS

- A. Inspector shall keep records of all inspections.
- B. The Inspector shall post inspection reports to Ecomm (online University of Kentucky project management software) weekly as construction progresses.
- C. Inform Construction Manager of all discrepancies immediately for correction.
  - 1. Document in writing correction of discrepancies.
  - 2. If discrepancies are not corrected, the discrepancies shall be brought to the attention of the Code Official and the Structural Engineer prior to the completion of that phase of the work.
- D. Submit a final report of inspections documenting completion of all required Structural Inspections and correction of any discrepancies noted in inspections to the Structural Engineer. Final report shall be prepared by, sealed, and signed by the Inspector and shall include a complete list of materials and work inspected during the course of the project.

**END OF SECTION 01 4120**

**SECTION 03 3000 – CAST-IN-PLACE CONCRETE****PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section specifies cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes. This section applies to concrete work shown on the structural drawings. See Division 32 for site concrete.
- B. Cast-in-place concrete includes the following:
  - 1. Concrete mudmats.
  - 2. Vault including top, walls, base and manhole.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section "Structural Inspection."
  - 2. Division 7 Section "Self Adhering Sheet Waterproofing."
  - 3. Division 31 Section "Earth Moving" for preparation and excavation of foundations and stone drainage fill.
- D. Coordination: Unless other satisfactory agreements are specifically entered into by contractors concerned, all miscellaneous iron and steel, sleeves, anchors, etc., required by work of other contractors, will be furnished and installed by such other contractors with the cooperation of this contractor.

**1.3 DEFINITIONS**

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

**1.4 ACTION SUBMITTALS**

- A. General: Furnish submittals in quantity, format, and other Conditions of the Contract and as specified in Division 1 of the Project Manual.
- B. Design Mixtures: For each concrete mixture with laboratory test reports for the following data. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
  - 1. Method used to determine the proposed mix design (per ACI 301, Section 4).
  - 2. Gradation and quantity of fine and coarse aggregates.
  - 3. Proportions of all ingredients including all admixtures added either at the time of batching or at the job site. Indicate amounts of mixing water to be withheld for later addition at Project site.
  - 4. Water/cement ratio and water/cementitious ratio.

5. Slump – ASTM C143.
  6. Certification and test results of the total water-soluble chloride ion content of the design mix – FHWA RD-77 or AASHTO T 260-84.
  7. Air content of freshly mixed concrete by the pressure method, ASTM C231, or the volumetric method, ASTM C173.
  8. Unit weight of concrete – ASTM C138.
  9. Strength at 7- and 28-days for structural concrete– ASTM C39. Document strength on basis of previous field experience or trial mixtures, per ACI 301 Section 4. Submit strength test records, mix design materials, conditions, and proportions for concrete used for record of tests, standard calculation, and determination of required average compressive strength.
  10. Complete and include Structural Engineer's standard mix design submittal form for each mix. A blank copy is included at the end of this section.
- C. Steel Reinforcement Shop Drawings: Fabrication and placing drawings for reinforcement detailing, fabricating, bending, and placing concrete reinforcement. Comply with ACI SP-066(04) "ACI Detailing Manual" showing bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement. Include special reinforcing required for openings through concrete structures.
1. Shop drawing resubmittals are reviewed for conformance with review marks only. Any changes or questions originating on a resubmittal shall be clearly clouded.
- D. Product Data: For proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, waterstops, curing compounds, and others if requested by Engineer.
- E. Drawings showing proposed construction joint locations.

## 1.5 INFORMATIONAL SUBMITTALS

- A. General: Furnish submittals in quantity, format, and other Conditions of the Contract and as specified in Division 1 of the Project Manual.
- B. Laboratory test reports for concrete materials or material certificates in lieu of material laboratory test reports. Material certificates shall be signed by Manufacturer and Contractor, certifying that each material item complies with or exceeds specified requirements. Provide certification from admixture manufacturers that chloride content complies with specification requirements.

## 1.6 QUALITY ASSURANCE

- A. Codes and Standards: Comply with provisions of the following codes, specifications, and standards, except where more stringent requirements are shown or specified. Each contractor having reference to ACI Documents shall maintain copies of same on project site.

### AMERICAN CONCRETE INSTITUTE

1. ACI 117-10 – Specifications for Tolerances for Concrete Construction and Materials.
2. ACI 211.1-91 – Standard Practice for Selecting Proportions Normal, Heavyweight and Mass Concrete (Reapproved 2009).
3. ACI 301-10 – Specification for Structural Concrete.
4. ACI 302.1R-04 – Guide for Concrete Floor and Slab Construction.
5. ACI 304.2R-96 – Placing Concrete by Pumping Methods (Reapproved 2008).

6. ACI 305R-10 – Guide to Hot Weather Concreting.
7. ACI 306R-10 – Guide to Cold Weather Concreting.
8. ACI 308R-01 – Guide to Curing Concrete (Reapproved 2008).
9. ACI 309R-05 – Guide for Consolidation of Concrete.
10. ACI 311.1R-07 – ACI Manual of Concrete Inspection.
11. ACI 318-14 – Building Code Requirements for Structural Concrete and Commentary.
12. ACI 347-04 – Guide to Formwork for Concrete.
13. SP-66 – ACI Detailing Manual.

CONCRETE REINFORCING STEEL INSTITUTE (CRSI):

1. CRSI – Manual of Standard Practice.
  2. CRSI RB4.1 – Supports for Reinforcement Used in Concrete (2014a)
  3. CRSI – Placing Reinforcing Bars (2011)
- B. Qualifications of Workers: Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper execution of the work required by this Division.
- C. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94 requirements for production facilities and equipment.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver steel reinforcement and concrete to Project site in such quantities and at such times to ensure continuity of installation.
- B. Store materials to permit easy access for inspection and identification. Keep steel reinforcement off ground by using pallets, platforms, dunnage, or other supports and spacers.
- C. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- D. Store waterstops and packaged materials in sealed containers with manufacturer's labels intact. Place under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.

PART 2 – PRODUCTS

2.1 FORM MATERIALS

- A. Forms for Exposed (Smooth) Finish Concrete: Exterior-grade high-density overlay (Class 1 or better), medium-density overlay (Class 1 or better with mill-release agent treated and edge sealed), or Structural1 or Class 1 (B-B or better, mill oiled and edge sealed) plywood panels complying with DOC PS1; or new metal-framed and metal faced panels; or other acceptable panel-type materials to provide continuous, straight, and smooth exposed surfaces. Furnish in largest practicable sizes to minimize number of joints.
- B. Forms for Unexposed, Rough-Formed Finish Concrete: Plywood, lumber, metal or another acceptable material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Chamfer Strips: Non-staining dressed wood, metal, PVC, or rubber strips;  $\frac{3}{4}$  by  $\frac{3}{4}$  inch, minimum, and as shown on Drawings; in longest practical lengths.

- D. Form-Release Agent: Commercially formulated form-release agent with maximum volatile organic compounds (VOCs) not to exceed those allowable by jurisdictional regulations that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
  - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- E. Form Ties (Standard): Factory-fabricated, adjustable-length, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of plastic concrete on forms, prevent form deflection, and to prevent spalling of concrete upon removal.
  - 1. Furnish units that leave no corrodible metal closer than 1 inch to the plane of the exposed concrete surface.
  - 2. Furnish ties that, when removed, leave holes no larger than 1 inch in diameter in concrete surface.
  - 3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.
- F. Form Joint Tape: Compressible foam tape; pressure sensitive; AAMA800, "Specification 810.1, Expanded Cellular Glazing Tape"; minimum ¼ inch thick.
- G. Form Joint Sealant: Elastomeric sealant complying with ASTM C920, Type M or S, Grade NS, that adheres to form joint substrates.
- H. Sealer: Penetrating, clear, polyurethane wood form sealer formulated to reduce absorption of bleed water and prevent migration of set-retarding chemicals from wood.

## 2.2 REINFORCING MATERIALS

- A. Reinforcing Bars: ASTM A 615, Grade 60, deformed.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
  - 1. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

## 2.3 CONCRETE MATERIALS

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
  - 1. Portland Cement: ASTM C 150, Type I. One brand of cement shall be used throughout Project duration unless otherwise acceptable to Engineer.
  - 2. Fly Ash: ASTM C 618, Class F or C, except maximum loss on ignition: 3%.
  - 3. Slag Cement: ASTM C 989, Grade 100 or 120.
  - 4. Blended Hydraulic Cement: ASTM C 595, Type IS, portland blast-furnace slag, Type IP, portland-pozzolan, Type IL, portland-limestone, or Type IT, ternary blended cement.

5. Silica Fume: ASTM C 1240, amorphous silica.
- C. Normal-Weight Aggregates: ASTM C 33 Class 3S coarse aggregate or better, graded, and as specified. Provide aggregates from a single source for exposed concrete.
1. For exposed exterior surfaces, do not use fine or coarse aggregates that contain substances considered deleterious or that cause spalling or surface discoloration due to oxidation.
  2. Fine Aggregate to be free of materials with deleterious reactivity to alkali in cement.
- D. Water: ASTM C 1602 and potable.
- E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
1. Water-Reducing Admixture: ASTM C 494, Type A.
  2. Retarding Admixture: ASTM C 494, Type B.
  3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
  4. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
  5. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
  6. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
  7. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.
  8. Air-Entraining Admixture: ASTM C 260.
- F. Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete and complying with ASTM C 494, Type C.
1. Manufacturers: Subject to compliance with requirements manufacturers offering products that may be incorporated into the work include, but are not limited to the following:
    - a. BASF Corporation; Construction Systems.
    - b. Euclid Chemical Company; an RPM company.
    - c. GCP Applied Technologies, Inc.
    - d. RussTech Admixtures, Inc.
    - e. Sika Corporation.
- G. Non-Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, non-set-accelerating, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.
1. Manufacturers: Subject to compliance with requirements manufacturers offering products that may be incorporated into the work include, but are not limited to the following:
    - a. BASF Corporation; Construction Systems.
    - b. GCP Applied Technologies Inc.
    - c. RussTech Admixtures, Inc.
    - d. Sika Corporation.

## 2.4 RELATED MATERIALS



- A. Self-Expanding Rubber Strip Waterstops: Manufactured rectangular or trapezoidal strip, bentonite-free hydrophilic polymer-modified chloroprene rubber, for adhesive bonding to concrete, 3/8 by 3/4 inch.
  - 1. Manufacturers: Subject to compliance with requirements manufacturers offering products that may be incorporated into the work include, but are not limited to the following:
    - a. GCP Applied Technologies Inc.
    - b. Sika Greenstreak.
- B. Bonding Agent: ASTM C 1059, Type II, nonredispersible, acrylic emulsion or styrene butadiene.
- C. Cartridge Injection Acrylic Adhesive (for reinforcing dowels): two-component material for use in concrete. Anchor to be approved for use with cracked concrete per AC308.
  - 1. Acrylic resin adhesive, suitable for use on dry or damp surfaces. Available Products: Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:
    - a. HIT HY 200 V3 System, Hilti.
    - b. AC 200+, DeWalt/ Powers.
    - c. AT-XP System, Simpson/Strong-Tie.
  - 2. Epoxy adhesive, suitable for use on oversized, cored, and wet holes and in submerged applications. Available Products: Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:
    - a. EPCON G5 System, ITW Red Head.
    - b. HIT RE500 V3 System, Hilti.
    - c. PE 1000+, DeWalt/Powers.
    - d. SET-XP Epoxy System, Simpson/Strong-Tie.

## 2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. General: All non-dissipating compounds shall be certified by curing compound manufacturer to not interfere with bonding of floor covering. Where liquid floor treatment or colored stain system is used, provide material recommended by the manufacturer of the treatment for use in a compatible, integrated system.
- E. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete for temporary protection from rapid moisture loss.
  - 1. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

- a. BASF Corporation.
  - b. ChemMasters, Inc.
  - c. Dayton Superior.
  - d. Euclid Chemical Company.
  - e. Kaufman Products, Inc.
  - f. L&M Construction Chemicals, Inc.
  - g. Lambert Corporation.
  - h. Metalcrete Industries.
  - i. RussTech Admixtures, Inc. (EVRT)
  - j. Sika Corporation.
  - k. SpecChem, LLC.
  - l. W. R. Meadows, Inc.
- F. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
  1. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
    - a. BASF Corporation.
    - b. ChemMasters, Inc.
    - c. Dayton Superior.
    - d. Euclid Chemical Company.
    - e. Kaufman Products, Inc.
    - f. L&M Construction Chemicals, Inc.
    - g. Lambert Corporation.
    - h. SpecChem, LLC.
    - i. W. R. Meadows, Inc.

## 2.6 PROPORTIONING AND DESIGNING MIXES

- A. Prepare design mixes for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field data methods, or both, according to ACI 301. Mix proportions shall be established so that the concrete can be placed readily without segregation into forms and around reinforcement under anticipated placement conditions. Use an independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures. Trial batch and field experience tests shall have been performed within 24 months of submittal date. Use mix design submittal form included at the end of this section.
  1. Do not use the same testing agency for field quality control testing.
- B. Submit written reports to Engineer of each proposed concrete mix type at least 15 days prior to start of Work. Do not begin concrete production until proposed mix designs have been reviewed by Engineer. The approved mix designs shall be used throughout this project unless changes are approved by the Engineer prior to use.
- C. Cementitious Materials: Supplier shall coordinate surface treatment compatibility with cementitious materials. Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
  1. Fly Ash: 20 percent for Type F or 25% for Type C except for lean or flowable backfill.
  2. Combined Fly Ash and Pozzolan: 25 percent.
  3. Slag Cement: 50 percent.
  4. Combined Fly Ash or Pozzolan and Slag Cement: 50 percent portland cement minimum, with fly ash or pozzolan not exceeding 25 percent.

5. Silica Fume: 10 percent.
  6. Combined Fly Ash, Pozzolans, and Silica Fume: 35 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
  7. Combined Fly Ash or Pozzolans, Slag Cement, and Silica Fume: 50 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
1. Use water-reducing, high-range water-reducing, or plasticizing admixture in concrete as required for placement and workability and in all pumped concrete, and concrete required to be watertight.
  2. Use accelerating and retarding admixtures at Contractor's discretion to control set time when required by extreme temperatures or humidity, or other adverse placement conditions. Use accelerating admixture in concrete slabs placed at ambient temperatures below 35 deg F.
  3. Use corrosion-inhibiting admixture in concrete mixtures.
- E. The minimum compressive strength measured 28 days after placement ( $f'_c$ ), minimum cementitious content, slump, maximum water/cementitious content ratio (W/C), and air content of the concrete for each portion of the structure shall be as follows:
1. Mix Type 1. Concrete Backfill and Mudmats. Normal-weight concrete.
    - a. Minimum Design Compressive Strength: 4,000 psi.
    - b. Minimum Cementitious Material: 505 lbs/cy.
    - c. Slump Limit: N/A.
    - d. Air Content: Natural.
  2. Mix Type 2. Vault Concrete (walls, top slab, base slab, and manhole curb). Normal-weight concrete.
    - a. Minimum Compressive Strength: 5,000 psi.
    - b. Minimum Cementitious Material: 564 lbs/cy.
    - c. Maximum W/C Ratio: 0.40.
    - d. Water Reducing Admixture: Optional.
    - e. Slump Limit: 4 inches or not more than 8 inches after adding admixture to 2-to-3-inch slump concrete, plus or minus 1 inch.
    - f. Air Content: 5.5 percent for 1 ½-inch maximum aggregate.  
6.0 percent for 1-inch maximum aggregate.  
6.0 percent for ¾-inch maximum aggregate.  
7.0 percent for ½-inch maximum aggregate
- F. Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant, as accepted by Engineer. Laboratory test data for revised mix design and strength results must be submitted to and accepted by Engineer before using in Work.

## 2.7 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

## 2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.
  - 1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
  - 2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
  - 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

### PART 3 – EXECUTION

#### 3.1 GENERAL

- A. Coordinate the installation of joint materials, vapor retarder/barrier, and other related materials with placement of forms and reinforcing steel.

#### 3.2 FORMWORK INSTALLATION

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied until concrete structure can support such loads.
- B. Construct formwork so concrete members and structures are of correct size, shape, lines, alignment, elevation, position, level, plumb, and dimension and indicated. Maintain formwork construction tolerances and surface irregularities within limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
  - 1. Class A, 1/8-inch tolerances for smooth-formed concrete surfaces exposed to view.
  - 2. Class D tolerances for earth formed foundation elements (Vault base slab). Tolerance applies as a variation inward towards reinforcing only. No tolerance limit away from reinforcing applies.
  - 3. Class C, 1/2-inch tolerances for other concrete surfaces.
- D. Solidly butt joints and provide backup at joints to prevent cement paste from leaking.
- E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses, and the like for easy removal.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and contours in finished surfaces. Provide and secure units to support screed strips using strike-off templates or compacting-type screeds.

- G. Provide temporary openings for cleanouts and inspections where interior area of formwork is inaccessible before and during concrete placement. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Form openings, chases, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, and other features required in the Work. Chamfer exposed corners and edges at exterior corners and edges of permanently exposed concrete and as indicated, to produce uniform smooth, straight lines and tight edge joints.
- I. Provisions for Other Trades: Provide openings in concrete formwork to accommodate work of other trades. Determine size and location of openings, recesses, and chases from trades providing such items. Accurately place and securely support items built into forms.
- J. Earthen forms may be used for footings and foundation elements when ground is stable and capable of resisting erosion and fluid pressure of wet concrete without sloughing. All tolerances and clear covers shall be maintained. Excavation shall be clean of all loose soil and mud along bottom and sides.
- K. Use selected materials to obtain required finishes.
- L. Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before placing concrete. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- M. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.
  - 1. Do not allow excess form-coating material to accumulate in forms or come into contact with in-place concrete surfaces against which fresh concrete will be placed.
  - 2. Do not spray reinforcing with form oil.
  - 3. Coat steel forms with a nonstaining, rust-preventative material. Do not use rust-stained steel form-facing material.

### 3.3 INSTALLING EMBEDDED ITEMS

- A. Place and secure anchorage devices, anchor rods, and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, diagrams, templates, instructions, and directions furnished with items to be embedded.
- B. Aluminum conduit shall not be installed in concrete.

### 3.4 REMOVING AND REUSING FORMS

- A. Formwork not supporting weight of concrete, such as sides of walls, and similar parts of the work, may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete must first be sufficiently hard to not be damaged by form-removal operations, and provided curing and protection operations shall be maintained.
  - 1. Remove forms only if shores and other vertical supports have been arranged to permit removal without loosening or disturbing shores.
- B. Formwork supporting weight of concrete, such as beam soffits, joists, slabs, and other structural elements, may not be removed in less than 14 days and until concrete has attained at least 75 percent of its 28-day design compressive strength. Determine potential

compressive strength of in-place concrete by testing field-cured specimens representative of concrete location or members.

1. Cantilevered construction shall be shored for a minimum of 28 days after being placed.
- C. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent as specified for new formwork.
- D. When forms are reused, clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joint to avoid offsets.

### 3.5 SHORING AND RESHORING INSTALLATION

- A. Comply with ACI 318 and ACI 301 for design, installation, and removal of shoring and reshoring.

### 3.6 STEEL REINFORCEMENT INSTALLATION

- A. General: Comply with Concrete Reinforcing Steel Institute's (CRSI) "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Deliver reinforcement to job site bundled, tagged and marked. Use waterproof tags indicating bar size, length, and mark corresponding to placing drawings.
- C. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials that reduce or destroy bond with concrete.
- D. When permitted, field bend bars cold, except during cold weather when moderate heating is necessary to avoid brittle failures.
- E. Accurately position, support, and secure all bar reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum coverages as indicated for concrete protection.
  1. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations.
  2. Walls with reinforcing mats on each face shall have bent U-bar spacers tied to each mat to hold spacing between mats. U-bar spacers shall be minimum #3 bars spaced a maximum of 6 feet on center horizontally and vertically with a row of bars placed at the top of any wall over 4 feet tall.
  3. All walls shall have chairs or bolsters placed between reinforcing mat(s) and both form faces spaced a maximum of 6 feet on center to maintain clear cover.
- F. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- G. Do not tack weld crossing reinforcing bars.
- H. Construction tolerances shall be in accordance with ACI 117 and the following:
  1. For member depths 12" and smaller, tolerance on concrete cover shall be the smaller of -3/8" and  $-(1/3) \times [\text{specified cover}]$ .
  2. For member depths larger than 12", tolerance on concrete cover shall be the smaller of -1/2" and  $-(1/3) \times [\text{specified cover}]$ .
  3. At formed soffits, tolerance on concrete cover shall be -1/4".

4. Tolerance for longitudinal location of bends and ends of reinforcement:
  - a. At discontinuous ends of brackets and corbels,  $\pm 1/2"$ .
  - b. At discontinuous ends of other members,  $\pm 1"$ .
  - c. At other locations,  $\pm 2"$ .

### 3.7 PLACING ADHESIVE SYSTEM

- A. General: Clean all holes per manufacturer instructions to remove loose material and drilling dust prior to installation of adhesive. Holes may be dry, damp or wet. Inject adhesive into holes proceeding from the bottom of the hole and progressing toward the surface in such a manner as to avoid introduction of air pockets in the adhesive. Follow manufacturer recommendations to ensure proper mixing of adhesive components. Sufficient adhesive shall be injected in the hole to ensure that the annular gap is filled to the surface. Remove excess adhesive from the surface. Shim anchors with suitable device to center the anchor in the hole. Do not disturb or load anchors before manufacturer specified cure time has elapsed.
  1. Drill holes with rotary impact hammer drills using carbide-tipped bits and core drills using diamond core bits. Drill bits shall be of diameters as specified by the anchor manufacturer. Unless otherwise shown on the Drawings, all holes shall be drilled perpendicular to the concrete surface.
  2. Cored Holes: Where anchors are to be installed in cored holes, use core bits with matched tolerances as specified by the manufacturer. Acrylic Adhesive Anchors shall not be installed in core drilled holes.
  3. Embedded Items: Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Exercise care in coring or drilling to avoid damaging existing reinforcing or embedded items. Notify the Engineer if reinforcing steel or other embedded items are encountered during drilling.
  4. Observe manufacturer recommendations with respect to installation temperatures for cartridge injection adhesive anchors and capsule anchors.
  5. Perform anchor installation in accordance with manufacturer instructions.

### 3.8 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints in Reinforced Structure and Foundations: Locate and install construction joints so they do not impair strength or appearance of the structure, at locations indicated or otherwise as acceptable to Engineer.
  1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
  2. Form continuous keyways as indicated. Embed keys at least 1-1/2 inches into concrete. Provide keyways 1/3 the member thickness, or 3 1/2" minimum, in walls, footings, and between walls and footings centered in the member thickness unless shown otherwise. Provide keyways 1/2 member width by 1/2 member depth in grade beams, beams, and columns and between grade beams / beams and supporting members centered in the member unless shown otherwise.
  3. Locate horizontal joints in walls at underside of top slabs and at the top of base slabs.
  4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Provide waterstops in construction joints in all vault walls below grade and as indicated.

### 3.9 WATERSTOP INSTALLATION

- A. Install in construction joints and at other joints indicated to form a continuous diaphragm. Install in longest lengths practicable. Protect exposed waterstops during progress of the Work.
  - 1. Locate waterstop within joint relative to face and reinforcing as per manufacturer's printed instructions. Location varies with manufacturer. Location shown on drawings is diagrammatic only. Do not locate waterstop within shear key.
  - 2. Support and protect exposed waterstops during progress of Work.
  - 3. Cut ends square, using a razor knife or circular saw equipped with a carbide tipped blade. Weld splices per manufacturer's recommendations.
  - 4. Field-fabricate joints in waterstops according to manufacturer's printed instructions.
- B. Concrete surfaces to receive bonded waterstop shall be reasonably smooth with either a formed or float finish. Where such a concrete surface is scheduled to be rough to facilitate interlocking with the adjacent concrete placement, a 2" wide ribbon of flat surface shall be tooled into the concrete surface to facilitate the proper installation of waterstop. Any irregularities in the concrete surface that would interfere with the waterstop being placed in intimate contact with the concrete surface shall be ground smooth prior to installation.
- C. Install waterstop per manufacturer's recommended installation instructions with primer and/or adhesive as required.

### 3.10 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. General: Comply with ACI 304, "Guide for Measuring, Mixing, Transporting, and Placing Concrete," and as specified. Concrete delivery tickets shall show:
  - 1. Batch number.
  - 2. Mix by number with cement content in pounds and maximum size aggregate.
  - 3. Admixtures.
  - 4. Air content.
  - 5. Slump.
  - 6. Time dispatched and discharged.
  - 7. Date.
  - 8. Contractor.
  - 9. Ready Mix Supplier.
  - 10. Project Name and Address.
  - 11. Volume of Concrete.
- C. Do not add water to the concrete mix during delivery, at Project site, or during placement unless approved by the Construction Manager's representative, noted on the delivery ticket with the amount of water, and signed by the Construction Manager's representative. The maximum water/cement ratio of an approved mix design shall not be exceeded.
  - 1. When the ambient air temperature is between 80 and 90 degrees Fahrenheit, one (1) gallon of water per cubic yard of concrete may be added at the job site to compensate for water evaporation during transit.
  - 2. When the ambient air temperature exceeds 90 degrees Fahrenheit, two (2) gallons of water per cubic yard of concrete may be added at the job site to compensate for water evaporation during transit.
  - 3. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.



- D. Discharge concrete within 1 ½ hours after water has been added to the cement, unless a longer time has been authorized by the Engineer. During hot weather or other conditions contributing to a quick stiffening of the concrete, the Engineer may require discharge in less than 1 ½ hours.
- E. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation. Do not allow concrete to drop more than 5 feet or from a height which allows concrete to fall against reinforcing.
1. Deposit concrete in forms in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints. Do not subject concrete to any procedure that will cause segregation. Deposit concrete as near as possible to the final position to avoid segregation.
  2. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete complying with ACI 301.
  3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix to segregate.
- F. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
1. Consolidate concrete during placement operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
  2. Maintain reinforcement in proper position on chairs during concrete placement.
  3. Screed slab surfaces with a straightedge and strike off to correct elevations.
  4. Slope surfaces uniformly to drains where required.
  5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.
- G. Cold-Weather Placement: When air temperature is expected to fall below 40 degrees Fahrenheit (4 deg C) within the first 72 hours after concrete placement, comply with provisions of ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When mean daily air temperature is expected to fall below 40 deg F (4 deg C) for more than three successive days after concrete placement, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature at point of placement as follows:
    - a. Not less than 55 deg F (13 deg C) or more than 75 deg F (24 deg C) for concrete sections less than 12 inches in the least dimension (width or thickness).
    - b. Not less than 50 deg F (10 deg C) or more than 70 deg F (21 deg C) for concrete sections 12 inches or greater in the least dimension (width or thickness).

2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise accepted in mix designs.
- H. Hot-Weather Placement: When hot weather conditions exist that would impair quality and strength of concrete, place concrete complying with ACI 305.1 and as specified.
1. Cool ingredients before mixing to maintain concrete temperature at time of placement to below 90 deg F (32 deg C). Mixing water may be chilled or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  2. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedding in concrete.
  3. Fog spray forms, reinforcing steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without puddles or dry areas.
  4. Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, as acceptable to Engineer.
- I. Pumping Concrete: Grout used to prime a pump shall not be placed in the forms of any concrete exposed to view in the final structure. Concrete shall not be pumped through pipe made of aluminum or aluminum alloys.

### 3.11 FINISHING FORMED SURFACES

- A. Smooth-Formed Finish: Provide a smooth-formed finish on formed concrete surfaces exposed to view in non-public rooms (storage, mechanical rooms, etc.) or to be covered with a coating or covering material applied directly to concrete. This is an as-cast concrete surface obtained with selected form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes, honeycombing over 1/4" in depth, and other defective areas. Remove fins and other projections exceeding 1/8" in height by rubbing down or grinding off until completely removed and smoothed.
- B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike-off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

### 3.12 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Float Finish: Apply float finish to monolithic slab surfaces to receive trowel finish and other finishes as specified; slab surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo; and where indicated.
1. After screeding, consolidating, and leveling concrete slabs, do not work surface until ready for floating. Begin floating, using float blades or float shoes only, when surface water has disappeared, or when concrete has stiffened sufficiently to permit operation of power-driven floats, or both. Consolidate surface with power-driven floats or by hand-floating if area is small or inaccessible to power units. Cut down high spots and fill low spots. Uniformly slope surfaces to drains. Immediately after leveling, refloat surface to a uniform, smooth, granular texture.

- C. Trowel and Fine Broom Finish: At exposed surfaces of base slabs, apply a float finish and then an initial trowel finish as specified, then immediately follow by slightly scarifying the surface with a fine broom.

### 3.13 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures for passage of work by other trades, unless otherwise shown or directed, after work of other trades is in place. Mix, place, and cure concrete as specified to blend with in-place construction. Provide other miscellaneous concrete filling shown or required to complete Work.

### 3.14 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Compatibility: Use membrane curing compounds that will not affect surfaces to be covered with finish materials applied directly to concrete.
- C. For cold-weather protection during curing, comply with ACI 306.1 and the following:
  - 1. All freshly placed concrete shall be kept from freezing for the following periods:
    - a. 3 days for all concrete with an air entraining admixture.
    - b. 4 days for all concrete without an air entraining admixture.
  - 2. A cumulative curing time of seven days at a minimum surface temperature of 50 degrees F (10 degrees C) shall be provided or until concrete has attained 75% of its design strength. This shall be followed by cooling of concrete in a gradual transition to surrounding conditions. The temperature drop during this period shall not be at a rate exceeding 2 degrees F per hour until the outside or surrounding temperature is reached.
  - 3. When concrete is placed under conditions of cold weather concreting (defined as a period when the mean daily temperature drops below 40 degrees F for more than three successive days), take additional precautions as specified in "Cold Weather Concreting" by the American Concrete Institute (ACI Report 306) when placing, curing, monitoring and protecting the fresh concrete.
- D. For hot-weather protection during curing, comply with ACI 301 and the following:
  - 1. When concrete is placed under conditions of hot weather concreting, provide extra protection of the concrete against excessive placement temperatures and excessive drying throughout the placing and curing operations. Hot weather is defined as air temperature which exceeds 80 degrees F or any combination of high temperature, low humidity and/or high wind velocity that causes a rate of evaporation in excess of 0.2 pounds per square foot per hour as determined by Figure 2.1.5 of ACI Report 305. Hot weather curing is required if these conditions occur within a 24-hour period after completion of concrete placement.
  - 2. Forms, reinforcing and the air shall be cooled by water fog spraying immediately before placing concrete.
  - 3. Immediately following screeding, protect concrete by applying the specified evaporation retarder in accordance with the recommendations of the manufacturer.
- E. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during

finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

- F. Formed Surfaces: Cure formed concrete surfaces, including walls, columns, sides and underside of beams, supported slabs, and other similar surfaces, by moisture curing with forms in place for 7 days or until forms are removed. If forms are removed within the first 7 days, continue moisture curing without forms for the balance of the 7-day curing period.
  - 1. For vertical surfaces, after the concrete has hardened and while the forms are still in place, the form ties shall be loosened and water shall be applied to run down the inside of the form to keep the concrete wet.
  - 2. After formwork has been removed from vertical surfaces, keep surface continuously wet by water spray or water-saturated absorptive cover.
- G. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
  - 1. Cure interior and exterior slab surfaces exposed to deicing salts and slabs where the finish flooring is not compatible with curing compounds by Moisture Curing.
- H. Cure concrete according to ACI 308.1 by one or a combination of the following methods:
  - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    - a. Water.
    - b. Continuous water-fog spray.
    - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
  - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
    - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
  - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

### 3.15 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Engineer. Remove and replace concrete that cannot be repaired and patched to Engineer's approval. Repair exposed formed and slab surfaces only with specific prior approval by Engineer (cutting, grinding, and patching of these surfaces will generally be prohibited).
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1-part portland cement to 2-1/2 parts fine aggregate passing a No. 16 sieve, and a 50:50 mixture of acrylic or styrene butadiene-based bonding admixture and water. Use only enough liquid as required for handling and placing.

- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried.
  2. Cut tie rods and bolts flush with the surface and drill out to minimum depth of 1 inch below the surface.
  3. Fill through wall tie holes with nonmetallic, shrinkage-resistant grout to within 1 1/2" of wall face using a grout bag or other similar means to completely fill the void. Fill any remaining tie hole, including holes from snap-off type form ties, with patching mortar or cone plugs secured in place with bonding agent.
  4. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar matches surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
  5. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Engineer.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
  2. After concrete has cured at least 14 days, correct high areas by grinding smooth (at covered slabs only) any surface defects that would telegraph through applied floor covering system.
  3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
  4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
  5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
  6. Repair defective areas, except random cracks to be covered with covering capable of bridging and concealing crack and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
  7. Repair random cracks to be covered with covering capable of bridging and concealing crack and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose

particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

8. Repair random cracks in exposed concrete slab on grade by fully removing and replacing slab between existing control or construction joints. Drill and install dowel bars between new and existing slab as directed by Engineer.
  9. Repair random cracks in exposed suspended concrete slab by fully removing and replacing slab as directed by Engineer. Slab replacement shall extend to third point of framing infill bay and girder span at composite beam systems.
- E. Perform structural repairs of concrete, subject to Engineer's approval, using epoxy adhesive and patching mortar.
- F. Repair methods not specified above may be used, subject to acceptance of Engineer.

### 3.16 QUALITY CONTROL

- A. Trade Contractor shall employ an independent testing and inspection agency that meets the requirements of ASTM E329 to perform inspections and tests and to prepare test reports. The agency will monitor concrete quality by means of site and laboratory tests. They will be authorized to reject plastic concrete not conforming to specifications. Failure to detect any defective materials shall not prevent later rejection when such defect is discovered, or obligate the Engineer or Owner for final acceptance.
1. See Section 01 4120 – Structural Inspections and Contract Drawings for testing and inspection to be performed.
  2. Test results will be reported in writing to the Engineer, ready-mix producer and Construction Manager within 24 hours after tests.
  3. Additional Tests: The testing agency will make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by Engineer.

**END OF SECTION 03 3000**

BROWN + KUBICAN, PSC  
STRUCTURAL ENGINEERS

CONCRETE MIX DESIGN SUBMITTAL FORM

Project: \_\_\_\_\_  
City, State: \_\_\_\_\_  
Trade Contractor: \_\_\_\_\_  
Concrete Contractor: \_\_\_\_\_  
Mix Design Number: \_\_\_\_\_  
Concrete Strength (Mix Type): \_\_\_\_\_  
\_\_\_\_\_  
Use (describe): \_\_\_\_\_

Design Mix Information

Check  
one  
Based on Standard Deviation Analysis ☐  
Based on Trial Mix Laboratory Test Data ☐

Design Characteristics

Density	<input type="text"/>	pcf
Strength	<input type="text"/>	psi (28 days)
Air	<input type="text"/>	%
Slump	<input type="text"/>	inches

*If trial mixes are used, the Mix Design is proportioned to achieve  $f'_{cr} = f'_c + 1200$  psi  
(1400 psi for strength higher than 5000 psi at 28 days)*

Materials

	Type	Source	Specific Gravity	Weight (lb.)	Absolute Vol. (cu. ft.)
cement					
flyash					
silica fume					
coarse aggregate					
fine aggregate					
water					
other ( )					
			Total		27.0 cu. ft.

Water/Cementitious Ratio (W/C) = \_\_\_\_\_ % (lbs. water /lbs. cementitious)

### Admixtures

	Manufacturer	Dosage (oz./cwt)
water reducer		
air entraining agent		
high range water reducer		
non-corrosive accelerator		
other ( )		

Slump before high range water reducer = \_\_\_\_\_ inches

Slump after high range water reducer = \_\_\_\_\_ inches

### Standard Deviation Analysis (field experience records)

Number of test cylinders evaluated: \_\_\_\_\_ Standard deviation (s): \_\_\_\_\_

k-factor:

Number of Tests	k
15	1.16
20	1.08
25	1.03
≥30	1.00

Required avg. compressive strength (≤5000 psi: Max [ $f'_c + 1.34ks$ ,  $f'_c + 2.33ks - 500$ ])

(>5000 psi: Max [ $f'_c + 1.34ks$ ,  $0.9f'_c + 2.33ks$ ]): \_\_\_\_\_

Actual avg. compressive strength: \_\_\_\_\_

(Refer to ACI 301 for standard deviation calculation – attach copies of laboratory test reports)

### Trial Mix Laboratory Test Data

	Mix #1 (w/c= )		Mix #2 (w/c= )		Mix #3 (w/c= )	
Age	Date	Compressive Strength	Date	Compressive Strength	Date	Compressive Strength
7 days		psi		psi		psi
7 days		psi		psi		psi
28 days		psi		psi		psi
28 days		psi		psi		psi
28 days average	NA	psi	NA	psi	NA	psi

(Refer to ACI 301 for trial mix procedure – attach copies of laboratory test reports)

### Required Attachments

	Please check
Coarse aggregate gradation report	
Fine aggregate gradation report	
Laboratory test reports (strength tests)	
Admixture compatibility certification letters	

### Ready Mix Supplier

Name and Address:

\_\_\_\_\_

Phone: \_\_\_\_\_ Miles from project: \_\_\_\_\_ Date: \_\_\_\_\_



**SECTION 07 1326 – SELF ADHERING SHEET WATERPROOFING****PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes application of self adhering sheet waterproofing at earth side of concrete vault base, walls, and top.
  - 1. Sheet bentonite.
  - 2. Rubberized-asphalt sheet waterproofing.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 03 300 "Cast-In-Place Concrete."

**1.3 PERFORMANCE REQUIREMENTS**

- A. Provide waterproofing that prevents the passage of water.

**1.4 SUBMITTALS**

- A. General: Furnish submittals in quantity, format, and other Conditions of the Contract and as specified in Division 1 of the Project Manual.
- B. Product Data: For each material and type of application required include product specifications and manufacturer's written installation instructions and recommendations. Include manufacturer's written instruction for evaluating, preparing, and treating substrate, technical data, and tested physical and performance properties of waterproofing.
- C. Warranty: Specimen of standard waterproofing warranty.

**1.5 QUALITY ASSURANCE**

- A. Installer Qualifications: Engage an experienced installer who is specialized in installing bentonite waterproofing systems similar to those required for this Project and who is licensed by or otherwise acceptable to manufacturer of primary materials.
- B. Manufacturer Qualifications: Engage a firm experienced in manufacturing a bentonite waterproofing system similar to that indicated for this Project and with a record of successful in-service performance.
- C. Single-Source Responsibility: Obtain self adhering sheet waterproofing system through one source from a single manufacturer. Obtain accessory products used in conjunction with self adhering sheet waterproofing from sources acceptable to self adhering sheet waterproofing manufacturer.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials to Project site in manufacturer's original unopened and undamaged containers labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- B. Store materials in a dry, protected, well-ventilated space and within the temperature range required by the waterproofing manufacturer.
- C. Remove and replace self-adhering sheet waterproofing materials that have been prematurely exposed to moisture or that cannot be applied within their stated shelf life.
- D. Store rolls according to manufacturer's written instructions.
- E. Protect stored materials from direct sunlight.

## 1.7 PROJECT CONDITIONS

- A. Weather Limitations: Do not apply waterproofing materials to surfaces where ice or frost is visible.
  - 1. Unless otherwise noted by product manufacturer, bentonite clay products in membrane form may be placed on damp surfaces. Do not apply bentonite waterproofing materials in areas with standing water.
  - 2. Do not apply rubberized-asphalt waterproofing to a damp or wet substrate.
- B. Comply with manufacturer's written instructions regarding weather conditions before and during waterproofing installation, condition of the substrate to receive waterproofing, and protection of the installed waterproofing system.

## 1.8 WARRANTY

- A. Manufacturer's Warranty: Written warranty, signed by waterproofing manufacturer agreeing to replace waterproofing material that does not comply with requirements or that does not remain watertight during specified warranty period.
  - 1. Warranty does not include failure of waterproofing due to failure of substrate prepared and treated according to requirements or formation of new joints and cracks in substrate exceeding 1/16 inch in width.
  - 2. Warranty Period: Five years after date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:
  - 1. Bentonite Sheet Waterproofing
    - a. MiraCLAY; Carlisle Coatings and Waterproofing.
    - b. Swelltite; CETCO.
    - c. Voltex; CETCO.
    - d. Paraseal; TREMCO Commercial Sealants & Waterproofing.
    - e. CLAY-TITE; W. R. Meadows, Inc.
  - 2. Rubberized-Asphalt Sheet Waterproofing

- a. VM60; American Hydrotech, Inc.
- b. MiraDRI 860/861; Carlisle Coatings and Waterproofing.
- c. Bituthene; GCP Applied Technologies.
- d. Mel-Rol; W. R. Meadows, Inc.
- e. Polyguard 650; Polyguard Products, Inc.
- f. TW-60; Tamko Roofing Products, Inc.

## 2.2 MATERIALS, GENERAL

- A. Granular Bentonite: Sodium bentonite clay containing a minimum of 90 percent montmorillonite (hydrated aluminum silicate), with a minimum of 90 percent passing a 20-mesh (850-micrometer) sieve.
- B. Bentonite Mastic: Trowelable consistency, bentonite compound, specifically formulated for application at joints and penetrations.
- C. Wall-to-Footing Bentonite Joint Strip: Manufacturer's standard 2-inch diameter, water-soluble tube containing approximately 1.5 lb/ft of bentonite, hermetically sealed, designed specifically for placing on wall footings at line of joint with exterior base of wall.

## 2.3 COMPOSITE BENTONITE MEMBRANE (for vault base slab)

- A. Composite Membrane: Minimum 90-mil thick membrane consisting of a 20-mil thick geomembrane liner bonded to 70 mils of bentonite with a 1.5 mil thick, water-soluble film.

## 2.4 RUBBERIZED-ASPHALT SHEET WATERPROOFING (for vault walls and top slab)

- A. Rubberized-Asphalt Sheet: 60-mil thick, self-adhering sheet consisting of 56 mils of rubberized asphalt laminated to a 4-mil thick, polyethylene film with release liner on adhesive side and formulated for application with primer or surface conditioner that complies with VOC limits of authorities having jurisdiction.
  - 1. Physical Properties: As follows, measured per standard test methods referenced:
    - a. Tensile Strength: 250 psi minimum; ASTM D412, Die C, modified.
    - b. Ultimate Elongation: 300 percent minimum; ASTM D412, Die C modified.
    - c. Low-Temperature Flexibility: Pass at minus 20 deg F; ASTM D 1970.
    - d. Crack Cycling: Unaffected after 100 cycles of 1/8-inch movement; ASTM C 836.
    - e. Puncture Resistance: 40 lbf minimum; ASTM E 154.
    - f. Hydrostatic-Head Resistance: 150 feet minimum; ASTM D 5385.
    - g. Water Absorption: 0.15 percent weight-gain maximum after 48-hour immersion at 70 def F; ASTM D 570.
    - h. Vapor Permeance: 0.05 perms; ASTM E96, Water Method.

## 2.5 INSTALLATION ACCESSORIES

- A. General: Furnish auxiliary materials recommended by waterproofing manufacturer for intended use and compatible with sheet waterproofing.
  - 1. Furnish liquid-type auxiliary materials that comply with VOC limits of authorities having jurisdiction.

- B. Surface Conditioner: Liquid, waterborne surface conditioner recommended for substrate by manufacturer of sheet waterproofing material.
- C. Sheet Strips: Self-adhering, rubberized-asphalt composite sheet strips of same material and thickness as sheet waterproofing.
- D. Liquid Membrane: Elastomeric, two-component liquid, cold fluid applied, trowel grade or low viscosity.
- E. Substrate patching Membrane; Low-viscosity, two-component, asphalt-modified coating.
- F. Protection Board: Provide products recommended by waterproofing manufacturer to suit Project. Available types include the following:
  - 1. 1/4-inch thick semi-rigid board with mineral-reinforced asphaltic core laminated between an asphalt-saturated felt liner on one side and a weather-coated glass-mat liner covered with a bond-breaking film on the other.
  - 2. 1/16-inch thick puncture-resistant, multilayer, water-permeable, flexible board consisting of pressure-bonded cellulose fibers.
- G. Termination Bar: Extruded- or formed-aluminum bars with upper flange to receive sealant.
- H. Non-Woven-Geotextile-Faced, Molded-Sheet Drainage Panel: Manufactured composite subsurface drainage panels consisting of a nonwoven, needle-punched geotextile facing with an apparent opening size not exceeding No. 70 sieve laminated to 1 side and a polymeric film bonded to the other side of a 3-dimensional, nonbiodegradable, molded-plastic-sheet drainage core, with a vertical flow rate of 15 gpm.
- I. Plastic Sheets: Polyethylene sheeting complying with ASTM D4397, thickness as recommended by waterproofing manufacturer to suit application, but at least 6 mils thick.
- J. Fasteners: Casehardened nails or hardened-steel, powder-actuated fasteners. Depending on manufacturer's written requirements, provide 1/2- or 1-inch diameter washers under fastener heads.
- K. Adhesive: Water-based adhesive used to secure membrane to both vertical and horizontal surfaces.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrate preparations affecting performance of bentonite waterproofing.
  - 1. For the record, prepare a written report, endorsed by Installer, listing conditions detrimental to performance of bentonite waterproofing.
  - 2. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Verify that substrate is complete and that all work that will penetrate waterproofing is complete and rigidly installed. Verify locations of waterproofing termination.

### 3.2 PREPARATION

- A. Coordinate work in the vicinity of waterproofing to ensure proper conditions for installing the waterproofing system and to prevent damage to the waterproofing after installation.
- B. Formed Concrete Surfaces: Remove fins and projections. Fill voids, rock pockets, form-tie holes, and other defects with bentonite mastic or cementitious patching material according to manufacturer's written instructions.
- C. Horizontal Concrete Surfaces: Remove debris, standing water, oily substances, mud, and similar substances that could impair the bonding ability of the concrete or the effectiveness of the waterproofing. Fill voids, cracks greater than 1/8 inch, honeycomb areas, and other defects with bentonite mastic or cementitious patching material according to manufacturer's written instructions.
- D. Excavation Retention System or Stable Excavation: If water is seeping, use plastic sheets or other suitable means to prevent wetting the bentonite waterproofing. Fill minor gaps and spaces 1/8-inch wide or wider with wood, metal, concrete, or other appropriate filling material. Cover or fill large voids and crevices with cement mortar according to manufacturer's written instructions.

### 3.3 INSTALLATION, GENERAL

- A. Install waterproofing and accessories according to manufacturer's written instructions, standard details, and recommended practices.
  - 1. Apply linear joint-sealing tubes, bentonite mastic, or both at changes of plane, construction joints in substrate, projections, and penetrations.
  - 2. Apply granular bentonite around penetrations in horizontal surfaces according to manufacturer's written instructions.
- B. Construction Joints: Protect construction joints with bentonite preformed flexible waterstop strips. Either place concrete directly over flexible strips or press strips into preformed cavities. Comply with manufacturer's written instructions for using preformed flexible waterstop strips where joint waterproofing is not otherwise indicated.
- C. Install wall-to-footing bentonite continuously at base of wall waterproofing (on footing, against wall) according to manufacturer's written instructions.
- D. Protect waterproofing from damage and wetting before and during subsequent construction operations. Repair punctures, tears, and cuts according to manufacturer's written instructions.
- E. Apply sealants to comply with requirements specified in Division 7 Section "Joint Sealants" and manufacturer's written instructions.

### 3.4 COMPOSITE BENTONITE MEMBRANE INSTALLATION

- A. Vault base slab: Install waterproofing over a 2" minimum thickness concrete "mud-mat" placed below the proposed slab.
  - 1. Install waterproofing lengthwise along vault, lapping edges a minimum of 2 inches.
  - 2. Secure membrane to mud-mat with adhesive or washer-headed fasteners, as required to prevent movement of waterproofing during reinforcement and concrete placement above.
  - 3. Extend waterproofing out past slab extents. After installation of concrete, turn slab waterproofing up along face of footing and turn over top edge of vault base.

### 3.5 RUBBERIZED-ASPHALT SHEET APPLICATION

- A. Apply primer to substrates at required rate and allow to dry. Limit priming to areas that will be covered by sheet waterproofing in same day. Reprime areas exposed for more than 24 hours.
- B. When ambient and substrate temperatures range between 25 and 40 deg F, install self-adhering, rubberized-asphalt sheets produced for low-temperature application. Do not use low-temperature sheets if ambient or substrate temperature is higher than 60 deg F.
- C. Vertical vault walls: Apply liquid membrane around penetrations and form continuous 2-inch cant at intersection of footings and walls.
  - 1. Starting at the lowest point, lap slab membrane over wall membrane, and turn up wall. Install a layer of sheet waterproofing horizontally, extending a minimum of 6 inches onto the footing. Lap membrane ends and edges a minimum of 2 1/2 inches.
  - 2. Overlap and seal seams and stagger end laps to ensure watertight installation.
  - 3. Apply continuous sheets over sheet strips bridging substrate cracks, construction, and contraction joints.
- D. Vault top slab: Install waterproofing after installation of wall waterproofing and substantial backfill of vault sides.
  - 1. Install waterproofing lengthwise along vault, lapping edges a minimum of 2 1/2 inches.
- E. Seal exposed edges of sheets at terminations not concealed by metal counterflashings or ending in reglets with mastic and sealant.
- F. Repair tears, voids, and lapped seams in waterproofing not complying with requirements. Slit and flatten fishmouths and blisters. Patch with sheets extending 6 inches beyond repaired areas in all directions.
- G. Protection Board and Drainage Sheet
  - 1. Install protection board course along vault top and sides with butted joints over properly installed waterproofing before starting subsequent construction operations.
  - 2. Install drainage sheet over protection board in accordance with manufacturer's recommendations. Cover drain tile at bottom of wall with drainage sheet.
  - 3. Use adhesives that do not penetrate waterproofing. Lap edges and ends of geotextile to maintain continuity. Protect installed molded-sheet drainage panels during subsequent installation.
- H. Protect waterproofing from damage and wear during remainder of construction project.

### 3.6 FIELD QUALITY CONTROL

- A. Correct deficiencies in or remove waterproofing that does not comply with requirements, repair substrates, and reapply waterproofing.
- B. Testing of watertightness, at Contractor's expense, may be required to determine compliance of corrected Work with requirements.

**END OF SECTION 07 1326**



## GENERAL NOTES

DESIGN STRESS LIVE LOADS	
AASHTO H20-44 DESIGN TRUCK LOAD	
ROAD SURCHARGE	250 PSF
EARTH EQUIVALENT FLUID PRESSURE	60 PCF
DESIGN STRESSES	
CONCRETE (STRENGTH DESIGN) MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS	
VAULT WALLS, TOP, BASE, AND MANHOLE CURBS	f <sub>c</sub> = 5,000 PSI
REINFORCING BARS (ASTM A615 GRADE 60)	f <sub>y</sub> = 60,000 PSI
ANGLES, PLATES AND BARS (ASTM A36)	f <sub>y</sub> = 50,000 PSI
SOIL BEARING PRESSURE FOR FOUNDATIONS (ASSUMED)	2,000 PSF

## GENERAL

- THE REQUIREMENTS OF THESE GENERAL NOTES APPLY UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES THAT MAY EXIST.
- ANY DISCREPANCIES BETWEEN STRUCTURAL AND MECHANICAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE MECHANICAL AND STRUCTURAL ENGINEER.
- DO NOT SCALE DRAWINGS.
- THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION AND IS THEREFORE DEPENDENT UPON TOP SLAB AND ATTACHMENT TO THE SHEAR WALLS FOR STABILITY AND FOR RESISTANCE TO LATERAL EARTH PRESSURE. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY BRACING REQUIRED TO PROPERLY CONSTRUCT THE STRUCTURE UNTIL THESE ELEMENTS ARE COMPLETE AND CAPABLE OF PROVIDING THIS SUPPORT.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS TO CONSTRUCT THE STRUCTURE, INCLUDING VERIFICATION OF LOAD CAPACITY OF THE STRUCTURE, NEW OR EXISTING, TO SUPPORT CONSTRUCTION ACTIVITIES, EQUIPMENT, ETC. AND FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED. DAMAGE TO THE STRUCTURE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE CORRECTED BY THE RESPONSIBLE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- SHOP DRAWINGS MUST BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION.
- ELEVATIONS SHOWN ON STRUCTURAL DRAWINGS ARE IDEALIZED ELEVATIONS BASED ON CONCRETE THICKNESS AND SLOPES SHOWN ON DRAWINGS AND DO NOT ACCOUNT FOR CAMBER. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO COORDINATE ANY CAMBER OF THEIR WORK WITH OTHER TRADES AND ADJUST ELEVATIONS AS NECESSARY TO ACCOUNT FOR DEAD LOAD DEFLECTION AND THIS CAMBER.
- WALL OPENINGS AND TERMINATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE DIAGNOSTIC ONLY. WALL TERMINATIONS AND OPENING JAMBS, HEADS, AND SILLS SHALL BE CONSTRUCTED AS SHOWN ON THE MECHANICAL DRAWINGS. IF THE MECHANICAL DRAWINGS DO NOT INCLUDE DETAILS FOR ANY OF THESE CONDITIONS, CONSULT WITH MECHANICAL ENGINEER FOR DIRECTION.
- DETAILS NOT SPECIFICALLY INDICATED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.

## FOUNDATION CONSTRUCTION

- FOUNDATIONS ON THIS PROJECT ARE DESIGNED IN ACCORDANCE WITH RECOMMENDATIONS MADE BY S&ME, INC., GEOTECHNICAL ENGINEERS, IN THEIR REPORT DATED AUGUST 20, 2023 AND ADDENDUM DATED OCTOBER 13, 2023. THE GEOTECHNICAL REPORT IS PROVIDED AS REFERENCE INFORMATION AVAILABLE TO BIDDERS BUT IS NOT PART OF THE CONTRACT DOCUMENTS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL REPORT.
- ALL FOOTINGS MUST BE SUPPORTED ON BEDROCK OR UNDISTURBED SOIL CAPABLE OF SUPPORTING THE DESIGN LOADS WITHOUT APPRECIABLE SETTLEMENT. IN GRANULAR SOILS (SANDS AND GRAVEL), THE SOIL SHALL BE MECHANICALLY TAMPED TO A HARD SURFACE IMMEDIATELY PRIOR TO PLACING FOOTING.
- LOCATE EXISTING UNDERGROUND UTILITIES IN AREAS OF CONSTRUCTION. COORDINATE WITH UTILITY COMPANIES FOR ANY SHUT-OFF REQUIREMENTS OF STILL-ACTIVE LINES.
- WHEN EXCAVATIONS APPROACH THE GROUND WATER LEVEL, THE WATER LEVEL SHALL BE LOWERED BY AN ACCEPTABLE DEWATERING SYSTEM SO THAT THE WATER LEVEL IS MAINTAINED CONTINUOUSLY A MINIMUM OF 2'-0" BELOW THE EXCAVATION.
- BEFORE BACKFILL, ALL WALLS MUST BE ADEQUATELY BRACED. DO NOT PLACE BACKFILL AGAINST VAULT WALLS UNTIL VAULT TOP STRUCTURE IS IN PLACE.
- FOUNDATION CONCRETE SHALL BE PLACED IMMEDIATELY FOLLOWING EXCAVATION. A CONCRETE (4,000 PSI) MUD MAT SHALL BE PLACED OVER THE PREPARED BEARING MATERIALS.
- CONTRACTOR SHALL EXERCISE CAUTION THAT DENSE GRADED AGGREGATE BLANKET BELOW FLOOR SLAB DOES NOT BECOME SATURATED DURING CONSTRUCTION. CONTRACTOR SHALL CAST FLOOR SLAB OR PROVIDE TEMPORARY PROTECTION FOR SUBGRADE UNTIL SLAB IS CAST TO PREVENT WATER INFILTRATION INTO SUBGRADE.

## CONCRETE CONSTRUCTION

- ALL CONCRETE CONSTRUCTION TO BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 301, ACI 318 AND ACI DETAILING MANUAL.
- FURNISH BAR SUPPORTS WHERE NECESSARY DURING CONSTRUCTION.
- PROVIDE PLASTIC, PLASTIC-COATED (NOT PLASTIC-TIPPED) OR STAINLESS STEEL CHAIRS IN ALL CONCRETE EXPOSED TO VIEW IN COMPLETED STRUCTURE.
- PROVIDE PIPE SLEEVES AND INSERTS IN CONCRETE WORK WHERE REQUIRED. SEE MECHANICAL DRAWINGS.
- WELDING OF REINFORCING BARS (INCLUDING TACK WELDING) IS NOT PERMITTED. PROVIDE HORIZONTAL KEYWAYS IN CONSTRUCTION JOINTS IN SUPPORTED SLABS, WALLS, AND WALL FOOTINGS. MINIMUM 1 1/2" DEPTH WITH HEIGHT EQUAL TO ONE-THIRD OF MEMBER DEPTH, UNLESS OTHERWISE SHOWN OR NOTED.
- ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 45 DEGREES. MINIMUM CHAMFER TO BE 1/2".
- BEND ALL HORIZONTAL WALL AND FOOTING BARS 1'-0" AROUND CORNERS OR PROVIDE CORNER BARS WITH 2'-0" LAP.
- PROVIDE FOUNDATION DOWELS FOR ALL WALLS SAME SIZE AND SPACING AS VERTICAL STEEL.
- USE AIR-ENTRAINED ADMIXTURE IN ALL CONCRETE.
- USE CORROSION-INHIBITING ADMIXTURE IN ALL CONCRETE. SEE SPECIFICATION.
- SPLICES: ALL REINFORCING SPLICES SHALL BE AS TENSION LAP, U.N.O.
- LAP ALL COMPRESSION SPLICES 30 BAR DIAMETERS OF THE LARGER BAR.
- LAP ALL TENSION SPLICES (ALL SPLICES EXCEPT COLUMN SPLICES, U.N.O.) IN ACCORDANCE WITH THE FOLLOWING TABLE. MODIFY LENGTHS AS NOTED:

BAR SIZE	CONCRETE COMPRESSIVE STRENGTH	1. INCREASE SPLICE LENGTH BY THE FOLLOWING:	2. NOTE: INCREASED LENGTHS ARE ACCUMULATIVE.
#3	3,000 PSI	19"	
#4	4,000 PSI	25"	
#5	5,000 PSI	22"	
#6		31"	
#7		37"	
#8		48"	
#9		62"	
#10		78"	

- CONCRETE PROTECTION FOR REINFORCEMENT:
  - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. COVER: 3"
  - CONCRETE EXPOSED TO EARTH OR WEATHER. NO. 6 THROUGH NO. 18 BARS: 2" NO. 18 BAR, W/1 OR D/1 WIRE AND SMALLER. 1 1/2"
  - NO STRUCTURAL ELEMENTS TO BE IN CONTACT WITH GROUND SLABS AND WALLS. NO. 11 BAR AND SMALLER: 1"

## ROOF, FLOOR, OR WALL OPENINGS

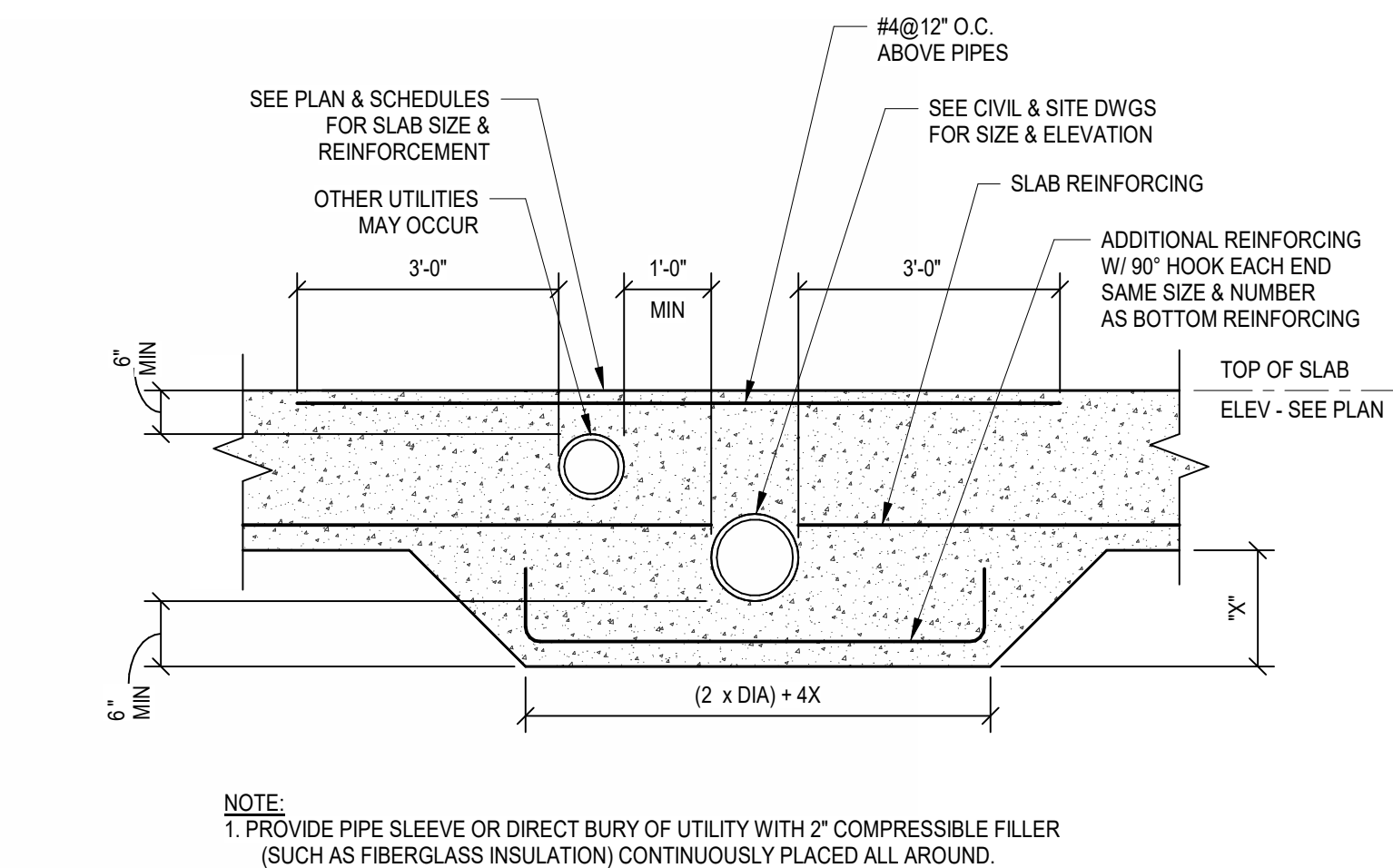
- THE CONTRACTOR SHALL VERIFY AND COORDINATE THE NUMBER, SIZE, AND LOCATION OF ALL SLEEVES AND OPENINGS REQUIRED FOR MECHANICAL OR ELECTRICAL ITEMS.
- SLEEVES AND OPENINGS SHALL BE LOCATED IN A MANNER THAT WILL MAINTAIN THE STRUCTURAL INTEGRITY OF THE ROOF, FLOOR, OR WALL SYSTEM.
- NO STRUCTURAL ELEMENTS ARE TO BE CUT UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.

## STRUCTURAL INSPECTION

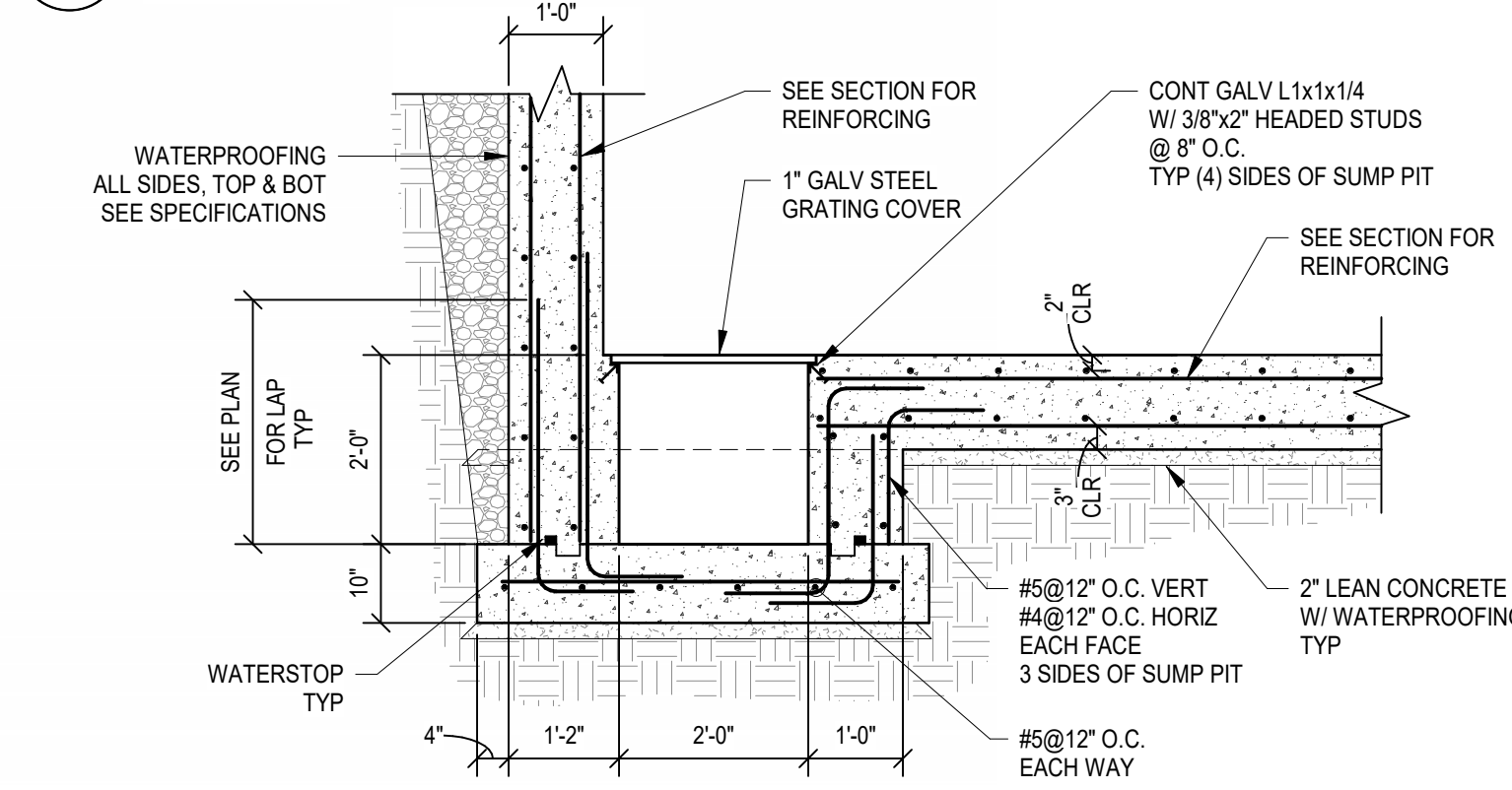
AN APPROVED INDEPENDENT TESTING LABORATORY, **Hired by the Trade Contractor**, SHALL PROVIDE INSPECTION AND TESTING SERVICES PER ASTM E329. REPORTS OF INSPECTION AND TESTING SHALL BE SENT TO THE ARCHITECT. SUCH INSPECTION AND TESTING SHALL INCLUDE:

- CONCRETE: MIX DATA, DAILY POUR REPORTS, CYLINDER TESTS, SLUMP, ENTRAINMENT, AIR TESTS, AND TEMPERATURE.
- REINFORCEMENT: PLACEMENT, TYPE, AND SIZE.
- FOUNDATIONS: BEARING SURFACE.

NOTE: THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DESIGNING, SUPPLYING, AND INSTALLING ALL TEMPORARY SHORING NECESSARY TO INSTALL NEW STRUCTURAL ELEMENTS. THE DESIGN OF THE SHORING MUST BE DONE BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF KENTUCKY. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT (FOR THEIR RECORDS) TEMPORARY SHORING DRAWINGS (PLANS AND ANY NECESSARY DETAILS), SEALED, SIGNED AND DATED BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

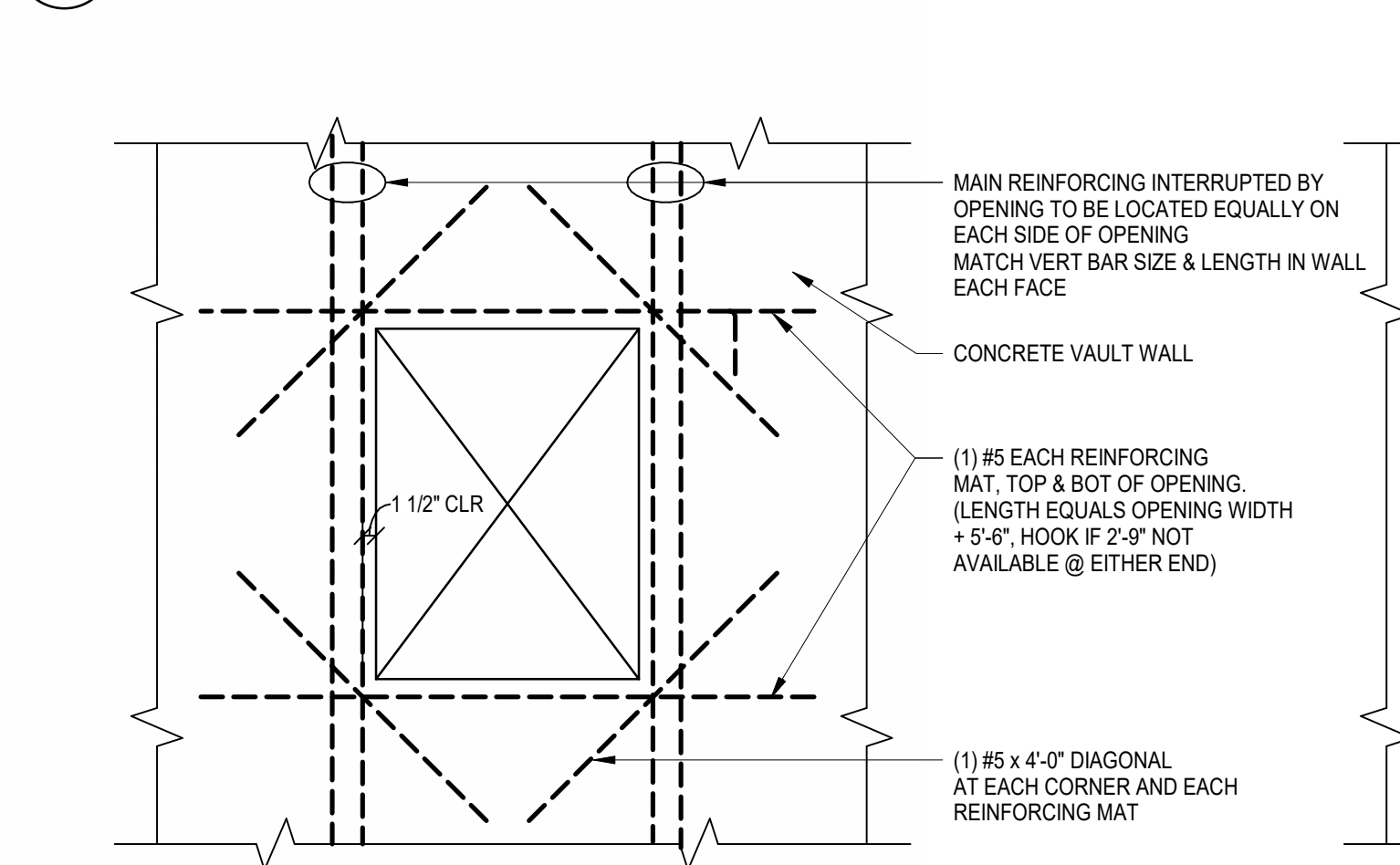


**A** TYPICAL FOOTING PENETRATION/SLEEVE DETAIL  
NOT TO SCALE

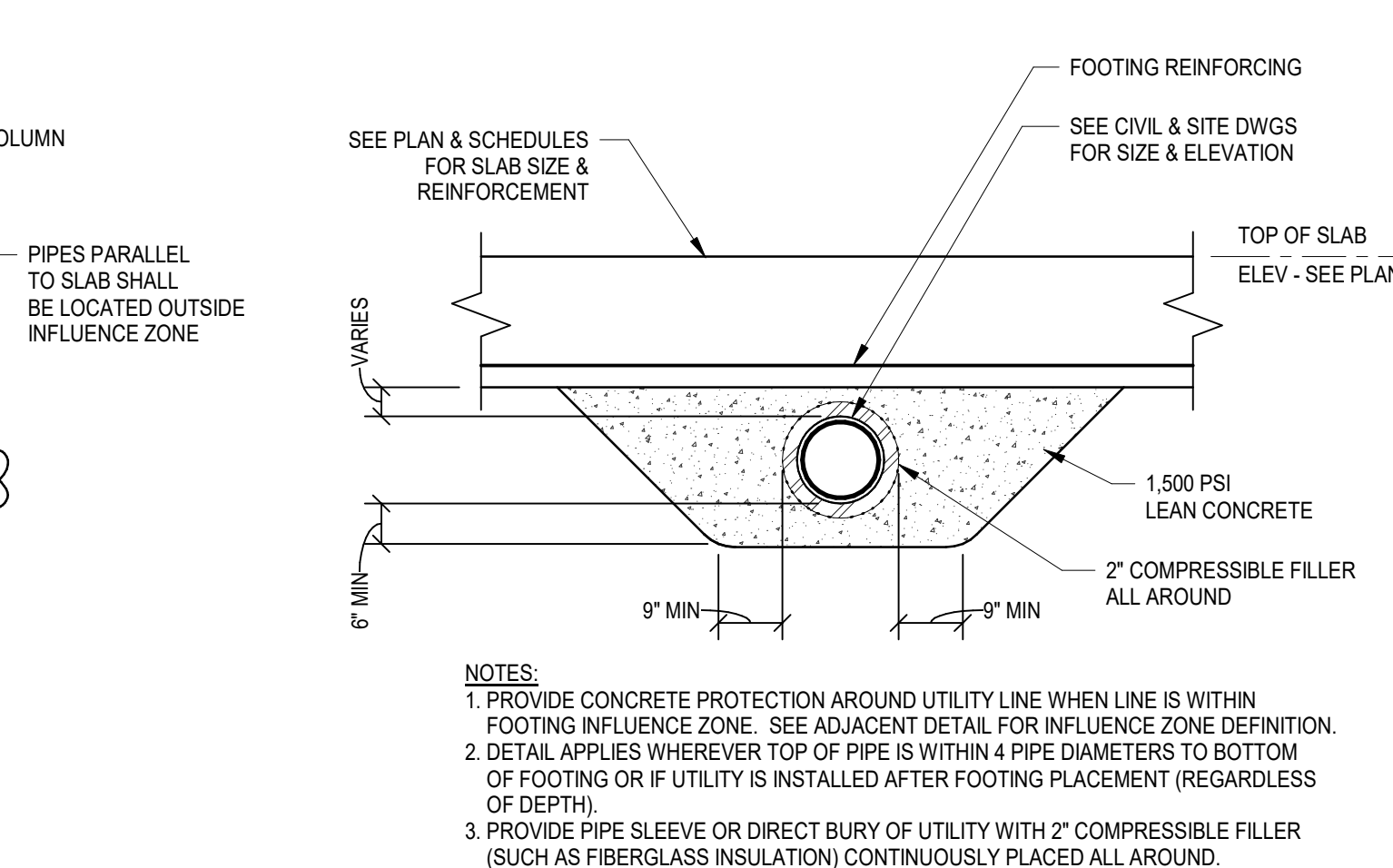
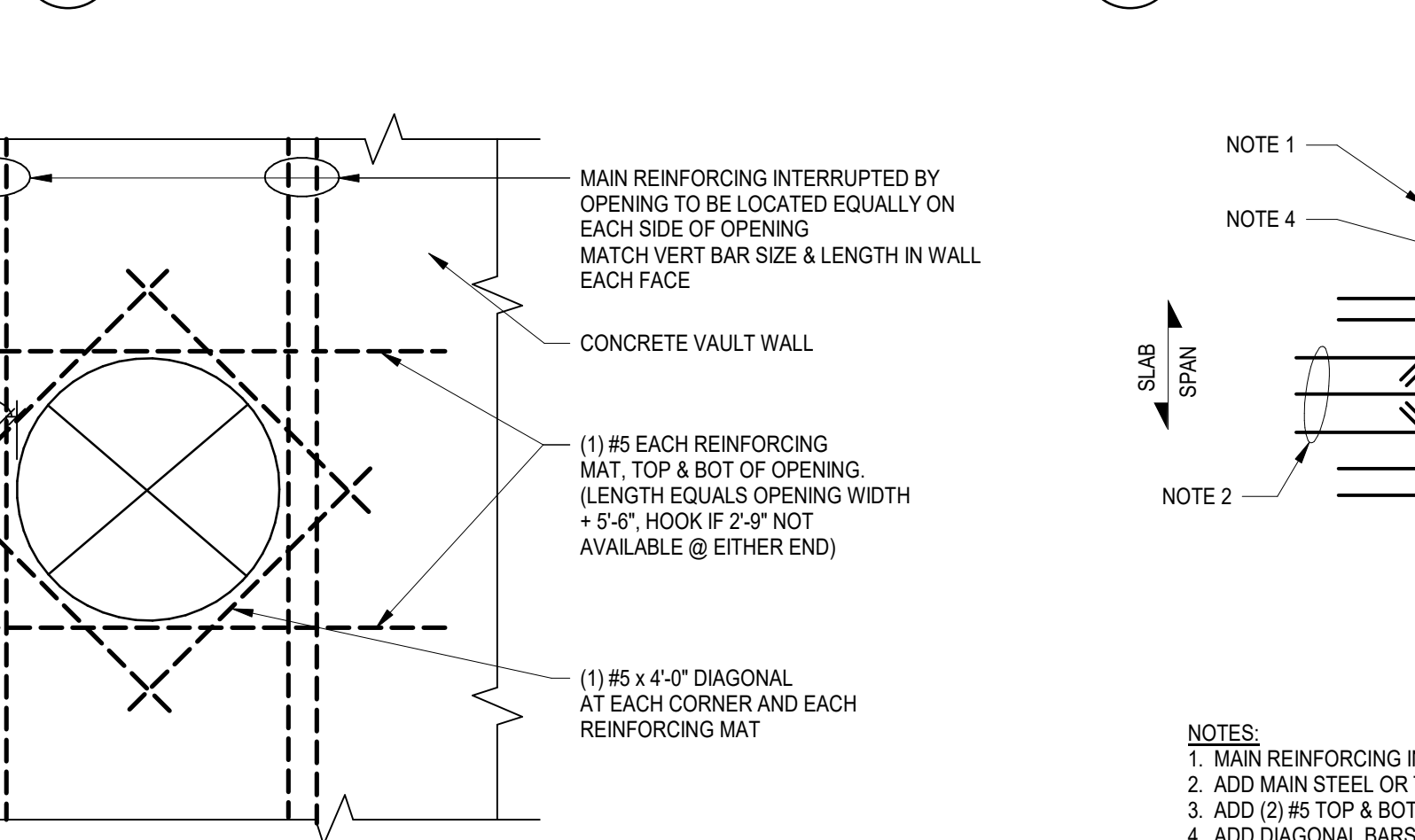


**B** TYPICAL UTILITY LINE BELOW BOTTOM SLAB DETAIL  
NOT TO SCALE

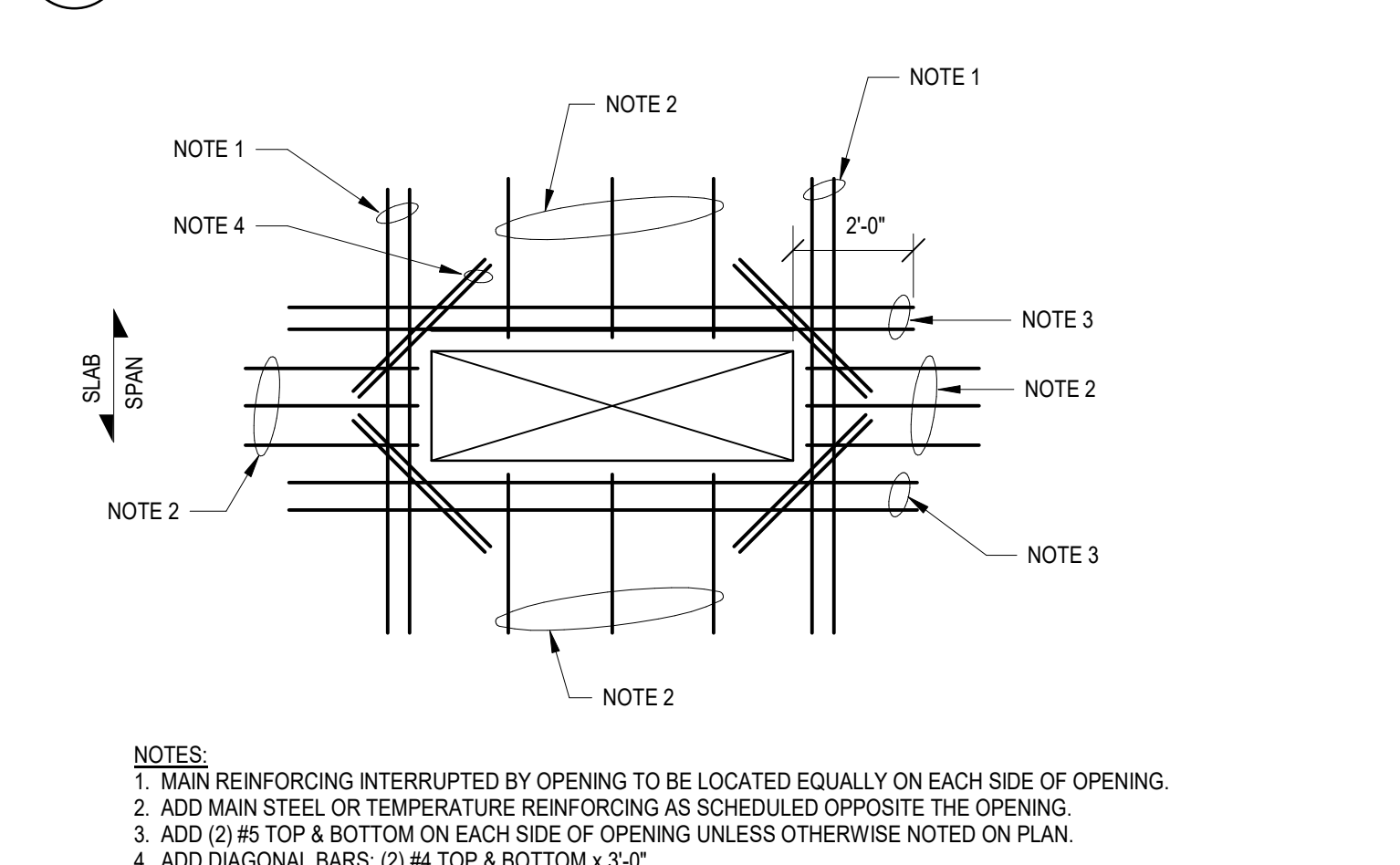
**C** TYPICAL SUMP PIT DETAIL  
NOT TO SCALE



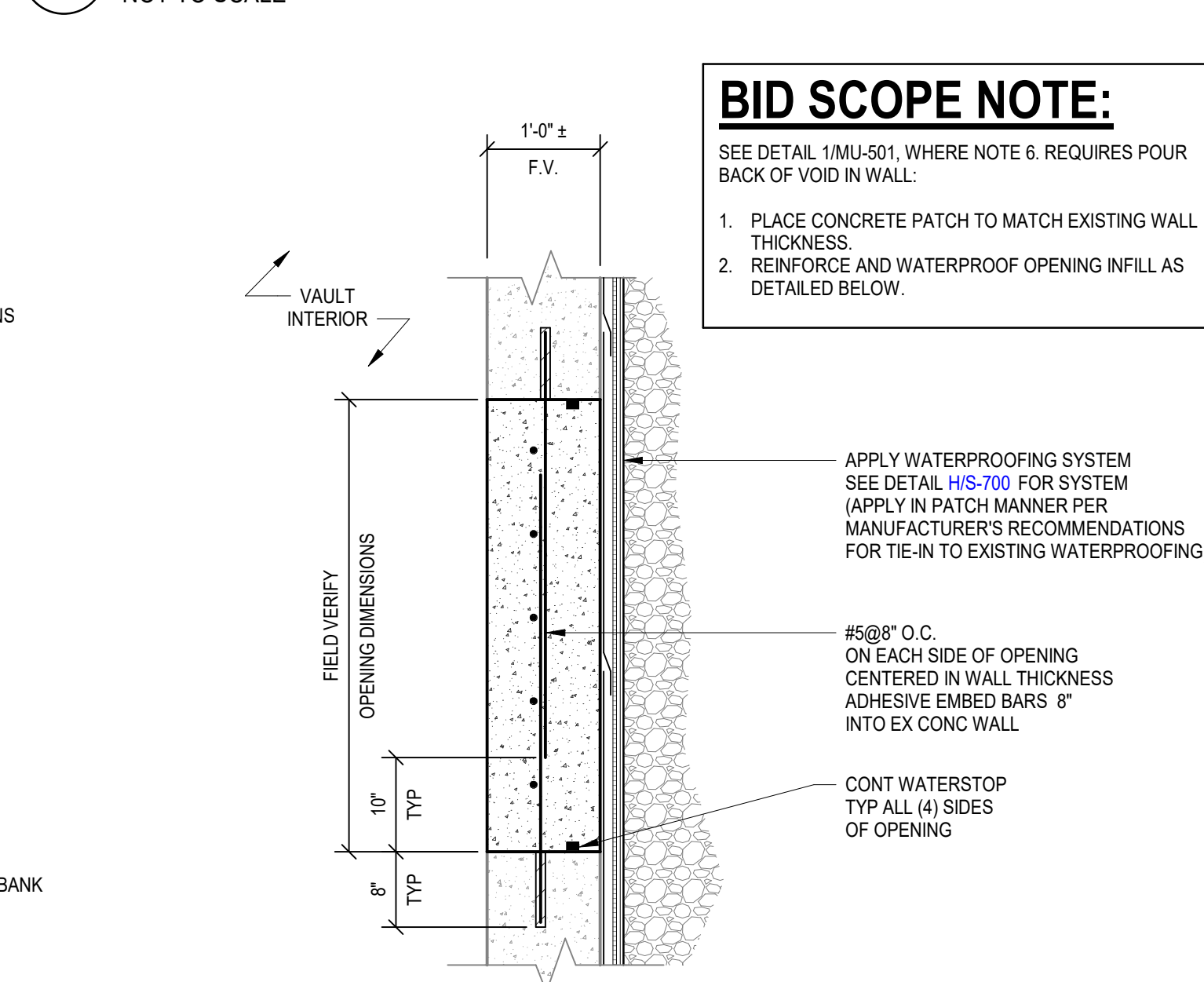
**D** TYPICAL SLAB ON GRADE JOINT AT RE-ENTRANT CORNER  
NOT TO SCALE



**E** TYPICAL CONCRETE WALL REINFORCING DETAIL  
NOT TO SCALE



**G** REINFORCING AT VAULT TOP OPENINGS  
NOT TO SCALE



## BID SCOPE NOTE:

- SEE DETAIL 11M-501, WHERE NOTE 6 REQUIRES POUR BACK OF VOID IN WALL.
- PLACE CONCRETE PATCH TO MATCH EXISTING WALL THICKNESS.
- REINFORCE AND WATERPROOF OPENING INFILL AS DETAILED BELOW.

**K** STEAM VAULT WALL PATCH - KELLY & DIMMOCK  
NOT TO SCALE



**H** TYPICAL WATERPROOFING DETAIL  
NOT TO SCALE



**J** TYPICAL WATERPROOFING DETAIL AT EXIST DUCT BANK  
NOT TO SCALE



## STRUCTURAL ABBREVIATIONS

APA	AMERICAN PLYWOOD ASSOCIATION
ARCH	ARCHITECTURAL
BL E	BRICK LEDGE ELEVATION
BOT	BOTTOM
BTWN	BETWEEN
CANT	CANTILEVER BEAM
C.F.S.	COLD-FORMED STEEL
C.I.P.	CAST-IN-PLACE
C.J.P.	COMPLETE JOINT PENETRATION
CLP	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
D	DEEP
DET	DETAIL
D.G.A.	DENSE GRADED AGGREGATE
D.WGS	DRAWINGS
EA	EACH FACE
E.F.	ELEVATION
ELEV	ELEVATION
EMBED	MINIMUM EMBEDMENT DEPTH INTO SUBSTRATE
E.O.S.	EDGE OF SLAB
E.W.	EACH WAY
EX	EXISTING
EXP	EXPANSION
F.F.E.	FINISHED FLOOR ELEVATION
F.R.C.	FIBER REINFORCED CONCRETE
F.R.P.	FIBER REINFORCED POLYMER
F.R.T.	FIRE RESISTANCE TREATED
F.S.	FAR SIDE
FTG	FOOTING
F.V.	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED

HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
IC F	INSULATED CONCRETE FORM
LBS	POUNDS
L.D.H.	LONG DIMENSION HORIZONTAL
L.D.V.	LONG DIMENSION VERTICAL
LVL	LAMINATED VENEER LUMBER
MANUF	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
M.E.P.	MECHANICAL/ELECTRICAL/PLUMBING
MIN	MINIMUM
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.P.H.	OPPOSITE HAND
P.A.F.	POWDER ACTUATED FASTENER
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
P.J.P.	PARTIAL JOINT PENETRATION
PL	PLATE
PL	RADIUS
REINFC	REINFORCEMENT
R.T.U.	ROOF TOP UNIT (MECHANICAL)
S.C.	SLIP CRITICAL
SIM	SIMILAR
S.O.G.	SLAB ON GRADE
SP	COLUMN SPLICE
S.S.	STAINLESS STEEL
STD	STANDARD
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WIDE
W.W.F.	WELDED WIRE FABRIC

## MATERIAL LEGEND

	CRUSHED STONE
	NATIVE EARTH / ENGINEERED FILL
	CONCRETE
	FLOWABLE FILL

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## STRUCTURAL

PROJECT	202170	
DATE	01.18.24	
REVISIONS		
No.	Description	Date
2	BP-01C - Add. 1	01/18/24

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING FROM ANY UNAUTHORIZED REUSE, CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

## ELEC. VAULT GENERAL NOTES & TYPICAL DETAILS

**S-700**

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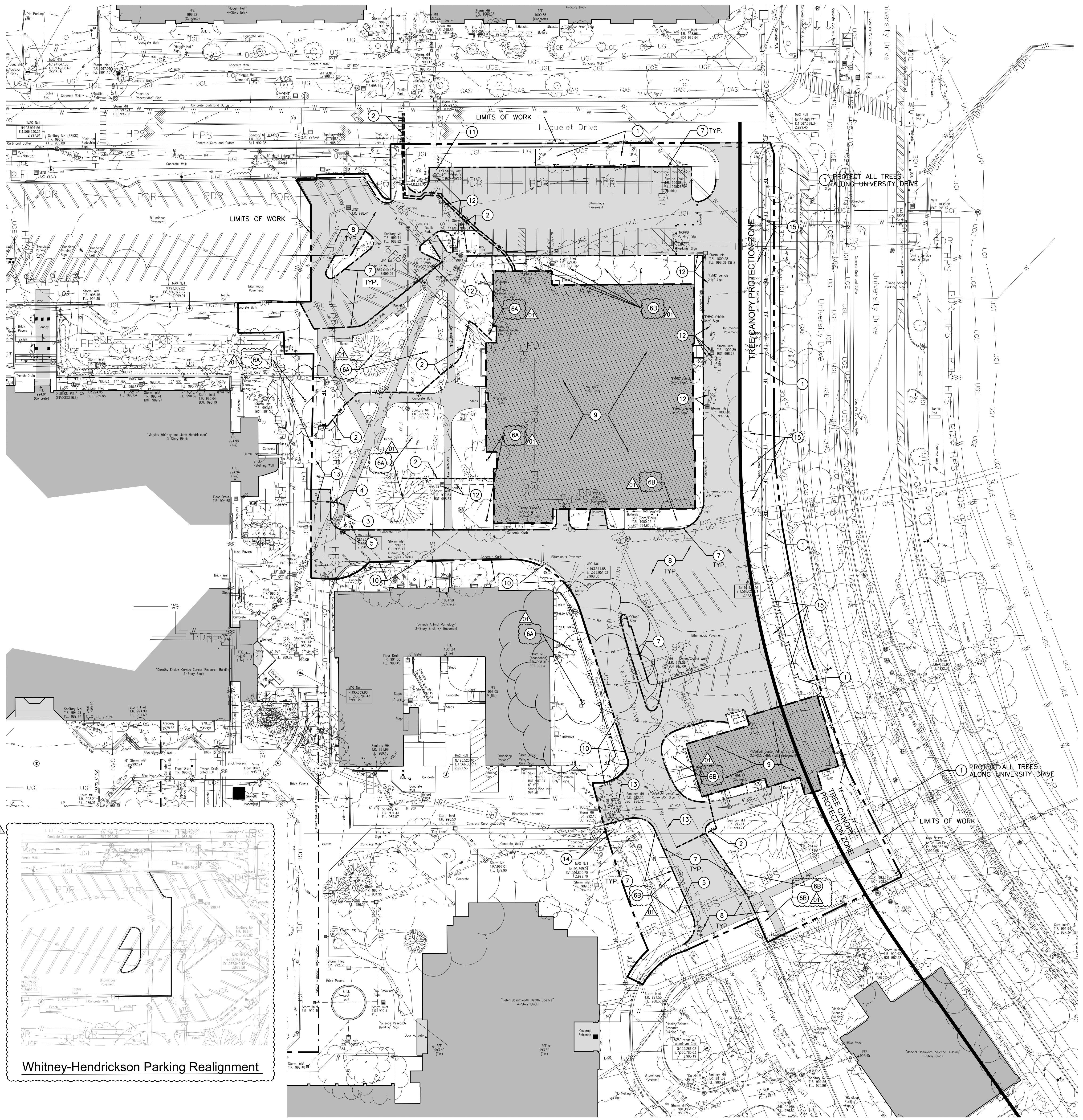
1. SEE TAG NOTE "U18" ON SHEET E2102 FOR ELECTRICAL, VULT LOCATION & ORIENTATION ON SITE. INFORMATION SHOWN ON SHEETS S-700 & S-701 SHALL BE USED FOR THIS VULT ONLY.
2. COORDINATE WITH H.E.P. DRAWINGS, INCLUDING SHEET E5050, FOR COMPONENTS AND ACCESSORIES REQUIRED FOR VULT (LADDER, ELECTRICAL COMPONENTS, VENTS, ETC.)
3. EXCAVATE BEDROCK IF ANY, AS REQUIRED TO INSTALL VULT. THE OWNER AND ENGINEER OF RECORD MAKE NO CLAIM AS TO THE ACTUAL TOP OF ROCK ELEVATION.
4. BACKFILL VULT EVENLY AROUND ALL SIDES SO THAT GRADE DIFFERS BY NO MORE THAN 2 FEET.
5. VULT SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS CURED TO ITS MINIMUM 28-DAY COMPRESSIVE STRENGTH. SEE SPECIFICATIONS FOR ALL CONCRETE MINIMUM COMPRESSIVE STRENGTH REQUIREMENTS.
6. BEFORE BACKFILL, ALL WALLS MUST BE ADEQUATELY BRACED. DO NOT PLACE BACKFILL AGAINST WALLS UNTIL VULT TOP STRUCTURE IS IN PLACE.
7. OPENINGS AND PENETRATIONS ARE NOT SHOWN FOR CLARITY. SEE MECHANICAL DRAWINGS FOR OPENING AND PENETRATION LOCATIONS AND DETAILS. SLEEVE ALL PENETRATIONS THROUGH WALLS OR SLABS LARGER THAN 10" SEE DET F-570 FOR REINFORCING AROUND OPENINGS IN WALLS MINIMUM 12" CONCRETE REQUIRED BETWEEN PENETRATIONS.
8. SEE SHEET S-720 FOR GENERAL NOTES & TYPICAL DETAILS.



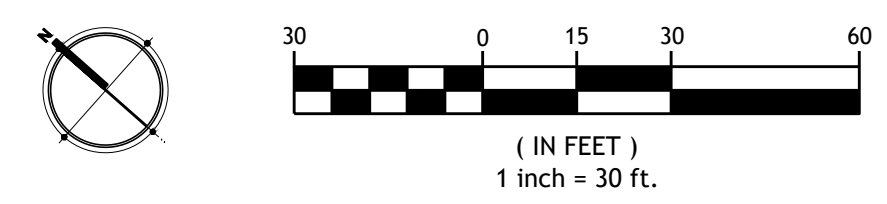
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Site Demolition Plan



SITE DEMOLITION NOTES

1. PROVIDE UK STANDARD TREE PROTECTION FENCING FOR ALL EXISTING TREES THAT ARE NOT DESIGNATED TO BE REMOVED WITHIN THE CONSTRUCTION LIMITS. EXTREME CAUTION IS TO BE USED WITH EXISTING TREES ALONG UNIVERSITY DRIVE. A TREE CANOPY PROTECTION ZONE IS DELINEATED FOR THE TREES ALONG UNIVERSITY DRIVE. EXISTING PAVEMENT WITHIN THIS ZONE SHALL REMAIN AS A WORKING SURFACE DURING BUILDING CONSTRUCTION. IT WILL BE REMOVED AT COMPLETION OF BUILDING FACADE, AT WHICH TIME ADDITIONAL TREE PRESERVATION MEASURES WILL COMMENCE WITH NEW SITE WORK.
2. THE EXISTING FEATURES SHOWN ARE A COMPILED OF DATA AS OBTAINED BY ENDRIS ENGINEERING. CARMAN MAKES NO ASSURANCES REGARDING THE ACCURACY OF THE DATA OR THE VERACITY OF DATA SUPPLIED BY OTHERS OR SHOWN ON THE SUBSEQUENT DRAWINGS. THE SOURCE OF THE SITE SURVEY IS: ENDRIS ENGINEERING.
3. ALL EXISTING SITE FEATURES ARE SHOWN AS ACCURATELY AS REASONABLY POSSIBLE AND BELIEVED TO BE CORRECT. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES IN THE ALIGNMENT OR LOCATION OF ANY FEATURE, THE LANDSCAPE ARCHITECT/CIVIL ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND NECESSARY ADJUSTMENTS WILL BE MADE IN THE FIELD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE PROJECT LIMITS FOR ANY SITE DEMOLITION AND SHALL BE RESPONSIBLE FOR MAINTAINING ANY AND ALL WORK WITHIN THE LIMITS OF THE WORK AS DESIGNATED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ENCROACHMENT BEYOND THE LIMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS, PERMISSIONS, EASEMENTS, ETC TO UTILIZE AREAS BEYOND THE PROJECT LIMITS.
5. CONTRACTOR SHALL LOCATE ALL UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO DEMOLITION WORK EITHER BY UTILIZATION OF B.U.D. OR A 3RD PARTY UTILITY LOCATE COMPANY. COSTS FOR ESTABLISHING THE LOCATION OF EXISTING UTILITIES SHALL BE THE COST OF THE CONTRACTOR.
6. CONTRACTOR SHALL OBTAIN DEMOLITION PERMITS FROM ANY AUTHORITY HAVING LOCAL JURISDICTION INCLUDING LOCAL, STATE OR FEDERAL AGENCIES, IF NECESSARY, AND PAY ALL ASSOCIATED FEES INCLUDING DISPOSITION FEES OR COSTS.
7. THE CONTRACTOR SHALL ESTABLISH TRAFFIC CONTROL AND SIGNAGE AS REQUIRED BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PROVIDE TEMPORARY BARRICADES, TRAFFIC BARRELS, AND FLAGGERS AS NECESSARY FOR CREW AND MOTORIST SAFETY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY STREET CLOSURES, DETOURS, ETC. WITH AUTHORITIES HAVING JURISDICTION AND GOVERNING AGENCIES OF STREETS, PARKING AREAS OR ROADS.
8. IDENTIFICATION OF MATERIAL TO BE REMOVED/DEMOLISHED IS PROVIDED AS A CONVENIENCE TO THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR OBSERVING SITE AND PLANS TO COORDINATE DEMOLITION WITH ALL PROPOSED WORK. FAILURE TO IDENTIFY A MATERIAL REQUIRING REMOVAL/DEMOLITION IN ORDER FOR NEW WORK TO BE COMPLETED DOES NOT RELIEVE THE CONTRACTOR OF BEING RESPONSIBLE FOR PERFORMING THE NECESSARY WORK.
9. ASPHALT AND/OR CONCRETE REMOVED AS A RESULT OF UTILITY/STORM DEMOLITION THAT IS OUTSIDE OF PROJECT LIMITS IS TO BE RESTORED TO MATCH THE EXISTING SURFACE PRIOR TO SURFACE DEMOLITION.
10. DURING CONSTRUCTION, THE WORK AREA SHALL BE KEPT CLEAR OF DEBRIS. ALL DEMOLISHED MATERIALS NOT DESIGNATED TO BE TURNED OVER TO THE OWNER SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER. CONTRACTOR SHALL PAY ALL HAULING, LANDFILL EXPENSES AND OBTAIN ANY NECESSARY PERMITS TO DO SO.
11. PERMETER CONSTRUCTION LIMITS FENCE SHALL CONSIST UK STANDARD CONSTRUCTION FENCING. LIMITS TO BE DETERMINED BY CONSTRUCTION MANAGER.
12. CONTRACTOR TO PROTECT EXISTING TREES OUTSIDE OF CONSTRUCTION LIMITS. NO MATERIAL IS TO BE STORED WITHIN A TREE DRIP LINE.
13. ALL EXISTING SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO PAVING, CURBING, SIDEWALKS, UTILITIES, AND LANDSCAPING SCHEDULED TO REMAIN SHALL BE PROTECTED OR REPLACED IF DAMAGED.
14. SEE SITE UTILITY DRAWINGS FOR RELOCATION OF UTILITY FACILITIES.
15. CONTRACTOR RESPONSIBLE FOR OBSERVATION OF SITE PRIOR TO BIDDING TO DETERMINE QUALITY, QUANTITY, AND VALUE OF ITEMS TO BE DEMOLISHED AND REMOVED.
16. COORDINATE UTILITY DEMOLITION WITH CORRESPONDING MEP DRAWINGS, SITE UTILITY PLAN AND APPROPRIATE UTILITY COMPANY.
17. EXISTING AGGREGATE MATERIAL SHALL BE REMOVED AS NECESSARY TO ACCOMMODATE NEW ASPHALT. EXISTING AGGREGATE MAY BE REUSED IF CLEAN AND FREE OF SOIL AND APPROVED BY OWNER OR LANDSCAPE ARCHITECT/CIVIL ENGINEER.
18. SAWCUT EDGES OF PAVEMENT, CURBS AND WALLS TO REMAIN IN CLEAN STRAIGHT LINES.
19. REMOVE ALL SHRUBS, GROUND COVER, MULCH, ETC. WITHIN LIMITS OF CONSTRUCTION. REMOVE ONLY TREES DESIGNATED FOR REMOVAL. NO ORGANIC MATERIAL (IE. ROOTS, MULCH, GRASSES, TOPSOIL) SHALL REMAIN IN SOIL THAT WILL BE USED FOR STRUCTURAL BACKFILL FOR BUILDINGS, PAVEMENTS, ETC.
20. SEE MEP DRAWINGS FOR DEMOLITION OF ELECTRIC, STEAM, CHILLED WATER, SANITARY SEWER, COMMUNICATION, AND GAS FACILITIES. CONTRACTOR IS TO CONTACT UTILITY COMPANIES TO COORDINATE ANY WORK INVOLVING PUBLIC UTILITIES, INCLUDING ELECTRIC, COMMUNICATIONS, WATER, GAS, ETC. UTILITY LINES SHOULD BE REMOVED, NOT ABANDONED IN PLACE UNLESS NOTED OTHERWISE.
21. ALL STORM SEWER LOCATED WITHIN LIMITS OF WORK, SHALL BE REMOVED, NOT ABANDONED IN PLACE. UNLESS NOTED AS OTHERWISE DEMOLITION OF FACILITIES THAT SERVE OTHER ADJACENT OFF-SITE AREAS OR BUILDINGS WILL NEED TO BE PHASED IN ORDER TO KEEP THEM ON-LINE UNTIL REPLACEMENT FACILITIES ARE CONSTRUCTED. FACILITIES THAT ARE NECESSARY TO DEWATER THE SITE DURING CONSTRUCTION SHALL REMAIN UNTIL NEW FACILITIES ARE CONSTRUCTED.
22. SEE MEP DEMOLITION DRAWINGS FOR SANITARY SEWER REMOVAL/RELOCATION.
23. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY PROTECT ALL STRUCTURES SCHEDULED TO REMAIN AND NOT BE DEMOLISHED OR TO PROTECT UNTIL SUCH TIME THAT STRUCTURE IS SCHEDULED TO BE DEMOLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO DAMAGED STRUCTURES. THIS ALSO INCLUDES REPAIRS TO EXISTING ROADS AND SIDEWALKS.
24. THE CONTRACTOR RESPONSIBLE FOR SITE DEMOLITION SHALL VERIFY THE PRESENCE OF ANY UNDERGROUND STORAGE TANKS (UST) THAT MAY OR MAY NOT BE LOCATED ON THE SITE THAT MAY CONFLICT WITH ANY SITE OR BUILDING DEMOLITION. KNOWN UNDERGROUND STORAGE TANKS ARE REGISTERED AT <http://wstate.ky.gov/UST/Pages/default.aspx>. THE CONTRACTOR SHALL CROSS-CHECK SITE SURVEYS, GEOTECHNICAL REPORTS OR ENVIRONMENTAL REPORTS FOR ACKNOWLEDGED OR REGISTERED UNDERGROUND STORAGE TANKS. SHOULD THIS DEMOLITION PLAN, OTHER REPORTS OR UST DATABASE LISTINGS INDICATE THE PRESENCE OF ANY UST, THE CONTRACTOR SHALL TAKE ANY AND ALL PRECAUTIONS TO PROTECT THE TANK AND THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGE, INCLUDING ANY ENVIRONMENTAL REMEDIATION AS A RESULT OF THE DAMAGE.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EQUIPMENT FOR WATERING INCLUDING THE COST OF DEMOLITION OF BUILDINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EQUIPMENT FOR WATERING INCLUDING THE COST OF WATER THAT MAY BE CHARGED FOR USING MUNICIPAL WATER SUPPLIES FROM FIRE HYDRANTS, ETC.
26. THIS SITE DEMOLITION PLAN DOES NOT SPECIFY OR SPECIFY SHORING THAT MAY BE REQUIRED DURING SITE DEMOLITION SO THAT ADJACENT AREAS ARE PROTECTED FROM DAMAGE, COLLAPSE, ETC. SHOULD THE CONTRACTOR DETERMINE THAT SHORING IS REQUIRED FOR ADJACENT AREA PROTECTION OR TO PREVENT ENCROACHMENT OF DEMOLITION OUTSIDE OF PROJECT LIMITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING PROPER SHORING MEANS, METHODS AND DESIGN PER LOCAL REGULATIONS OR PER REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION INCLUDING THE SHORING TYPE AND IF NECESSARY THE PREPARATION OF SHORING PLANS BY A LICENSED STRUCTURAL ENGINEER PER OSHA REQUIREMENTS.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ANY OVERHEAD UTILITY LINES THAT MAY CONFLICT WITH ANY ASPECT OF THE SITE DEMOLITION AND SHALL BE RESPONSIBLE FOR SAFE OPERATION OF EQUIPMENT AND PERSONNEL THAT MAY CONFLICT WITH ANY OVERHEAD UTILITY SERVICES.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ANY LOCAL NOISE ORDINANCES OR UK REQUIREMENTS THAT MAY RESTRICT THE TYPE OF DEMOLITION EQUIPMENT OR TIMES OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXTENT, IF ANY, OF LOCAL NOISE ORDINANCES ASSOCIATED WITH CONSTRUCTION OR DEMOLITION ACTIVITIES.
29. SHOULD THE SITE DEMOLITION REQUIRE ANY EARTH EXCAVATION AND SHOULD THE PROJECT REQUIRE THE OBSERVATIONS OF A CULTURAL RESOURCE OR ARCHAEOLOGICAL CONSULTANT, THE CONTRACTOR SHALL FULLY COOPERATE WITH THE OWNER/CONSULTANT TO ALLOW THE CONSULTANT ACCESS TO ANY EXCAVATIONS TO DETERMINE IF THERE ARE ANY PRE-HISTORICAL OR HISTORICAL FINDINGS THAT NEED TO BE DOCUMENTED OR PRESERVED.
30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL UTILITIES THAT ARE OR MAY BE CONNECTED TO THE DEMOLISHED FACILITIES ARE DISCONNECTED BY CONTACTING ALL APPLICABLE UTILITY COMPANIES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DISCONNECT COST ASSOCIATED WITH EACH AND ALL UTILITIES THAT MAY SERVE THE PROPERTY OR FACILITY THAT IS BEING DEMOLISHED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR DETERMINING THESE COSTS DURING THE BIDDING PHASE AND SHALL INCLUDE THESE DISCONNECT COSTS IN THEIR COSTS SO THE OWNER WILL NOT INCUR COSTS AT A LATER DATE.

CODED SITE DEMOLITION NOTES

KEY	DESCRIPTION
1	PROTECT EXISTING TREE. TREE PROTECTION FENCE TO BE UTILIZED.
2	REMOVE EXISTING WATERLINE
3	REMOVE FIRE DEPARTMENT CONNECTION FOR WHITNEY-HENDRICKSON AFTER NEW FIRE DEPARTMENT CONNECTION IS OPERATIONAL
4	REMOVE EXISTING 6" FIRE LINE AFTER NEW FIRE DEPARTMENT CONNECTION IS OPERATIONAL
5	REMOVE FIRE HYDRANT AND WATER VALVE AFTER NEW FIRE HYDRANT IS OPERATIONAL
6A	GRIND STUMP AND REMOVE ALL DELETERIOUS ROOTS
6B	REMOVE EXISTING TREE, GRIND STUMP AND REMOVE ALL DELETERIOUS ROOTS
7	REMOVE CURB
8	CONCRETE OR ASPHALT PAVEMENT TO BE REMOVED. REMOVE ALL BASE MATERIALS ASSOCIATED WITH PAVEMENT
9	BUILDING TO BE DEMOLISHED, INCLUDING FOUNDATIONS AND ALL ASSOCIATED WALLS/STRUCTURES
10	CURB TO BE PROTECTED
11	PLUG STORM WATER PIPE TO PREVENT DOWNSTREAM FLOW.
12	REMOVE STORM WATER PIPE OR STRUCTURE
13	PROTECT EXISTING WATERLINE
14	PROTECT EXISTING STORM UTILITY
15	MAINTAIN ASPHALT AND CURB WITHIN TREE CANOPY PROTECTION ZONE UNTIL SUCH TIME THAT THE CONSTRUCTION MANAGER DETERMINES THAT IT SHALL BE REMOVED. SEE SITE DEMOLITION NOTE #1 THIS SHEET

SITE DEMOLITION LEGEND

- TF — TREE PROTECTION FENCING
- WATERLINE TO BE REMOVED
- CURB TO BE REMOVED
- TREE PROTECTION ZONE
- CONCRETE OR ASPHALT TO BE REMOVED
- BUILDING TO BE DEMOLISHED
- REVISION NOTE



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NOT FOR CONSTRUCTION

RESERVED FOR AHJ STAMP

**CARMAN**  
LANDSCAPE ARCHITECTURE  
URBAN PLANNING  
CIVIL ENGINEERING

BP-01A & BP-01B  
**UNIVERSITY OF KENTUCKY**  
**HEALTH EDUCATION BUILDING**  
UNIVERSITY OF KENTUCKY - BLDG NO. 0724  
1148 UNIVERSITY DRIVE, LEXINGTON, KENTUCKY

CIVIL

PROJECT	202170	
DATE	10.20.23	
REVISIONS		
No.	Description	Date
1	Addendum 1	01.18.24

THE ARCHITECT HAS TRANSFERRED ANY ELECTRONIC VERSIONS OF THESE DRAWINGS TO THE CLIENT. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT REGARDING ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

**SITE DEMOLITION PLAN**

**C200**

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