Bidding Addendum

Addendum No. 01 dated 23 August 2022 for the Appalachian State University Holmes Convocation Center Stair Repair Project SCO Contract ID#: 22-24212-01A (Wiley|Wilson Commission Nos: 222079).

To: All Bidding Offerors

From: Appalachian State University

This Addendum contains the listed attachments and forms as part of the bidding documents and modifies the Project Manual and Drawings, as noted below. All of the listed Specifications, Drawings, and Other items indicated below have been provided to the various plan rooms and can be downloaded from the Wiley|Wilson website at Bid Info - Wiley|Wilson (wileywilson.com) (www.wileywilson.com/bid-info).

Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject bidder to disqualification.

Specifications:

- 1. Advertisement for Bids Replace the Advertisement for Bids provided in the Project Manual with the attached version containing the updated bid date.
- 2. Form of Proposal Replace the Form of Proposal provided in the Project Manual with the attached version that contains additional unit pricing.
- 3. Supplementary General Conditions The attached Supplementary General Conditions are to be included into the Project Manual and will become part of the construction documents.
- 4. Specification Section 012100 Allowances The attached specification section 012100 Allowances is to be included into the Project Manual and will become part of the construction documents.
- 5. Specification Section 012200 Unit Prices Replace the Unit Prices specification section 012200 provided in the Project Manual with the attached version which contains additional unit pricing.
- 6. Specification Section 030130 Maintenance of Cast-In-Place Concrete Replace the Maintenance of Cast-In-Place Concrete specification section 030130 provided in the Project Manual with the attached specification version.

Drawings:

1. None.

Other:

- 1. A copy of the bidder questions and responses has been included in this Addendum.
- 2. A copy of the sign-in sheet from the pre-bid site visit has been included with this Addendum.

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- 1. Form of Proposal Replace the Form of Proposal provided in the Project Manual with the attached version that contains additional unit pricing.
- 2. Supplementary General Conditions The attached Supplementary General Conditions are to be included into the Project Manual and will become part of the construction documents.
- 3. Specification Section 012100 Allowances The attached specification section 012100 Allowances is to be included into the Project Manual and will become part of the construction documents.
- 4. Specification Section 012200 Unit Prices Replace the Unit Prices specification section 012200 provided in the Project Manual with the attached version which contains additional unit pricing.
- 5. Specification Section 030130 Maintenance of Cast-In-Place Concrete Replace the Maintenance of Cast-In-Place Concrete specification section 030130 provided in the Project Manual with the attached specification version.

Drawings:

1. None.

Other:

- 1. A copy of the bidder questions and responses has been included in this Addendum.
- 2. A copy of the sign-in sheet from the pre-bid site visit has been included with this Addendum.

WILEY|WILSON

APPALACHIAN STATE UNIVERSITY HOLMES CONVOCATION CENTER STAIR REPAIR

COMMISSION NO. 222079.00

1

ADVERTISEMENT FOR BIDS

Sealed proposals will be received until 2:00 p.m. local time on Wednesday, August 31, 2022 at the

Planning, Design and Construction office, Appalachian State University, 2458 Hwy 105 S., Boone, NC

28607 for the construction of Holmes Convocation Center – Stair Repairs, Code 42130, Item 305-4A05,

ID # 22-24212-01A, at which time and place bids will be opened and read.

There will be a **non-mandatory** project site walk at 2:00 p.m. on Thursday, August 18, 2022. Meet at the

base of the northwest stair at the Holmes Convocation Center, 111 River Street, Boone, NC 28607.

Contact W. Brett Scantlin, PE (scantlinwb@appstate.edu, 828-262-8856) if you are interested in attending

this additional site walk but you have an issue getting to the site or with the scheduled time.

Complete plans and specifications for this project can be obtained from Scott Francis, PE, c/o

Wiley|Wilson, 5540 Centerview Drive, Suite 311, Raleigh, North Carolina, 27606. Please contact Scott

Francis at 434-455-3225 or by e-mail at sfrancis@wileywilson.com during normal office hours to request

plans and specifications.

Plans and specifications are available as PDF files electronically and can be obtained from the designer at

no cost. Hard copies of plans are available for a plan deposit of \$100.00 which is refundable upon return

of complete sets in good, usable condition within 10 calendar days after the bid date.

"Appalachian State University encourages participation by MWBE firms and supports UNC system's

policy of ensuring and promoting opportunities for minority businesses."

The state reserves the unqualified right to reject any and all proposals.

Jeff Pierce, PE, CEM, CEFP

Director Planning, Design & Construction

Appalachian State University

Boone, NC

ADVERTISEMENT FOR BIDS

FORM O	FPROPOSAL
Holmes Convocation Center Stair Repair	Contract:
Appalachian State University	Bidder:
Code: 42130 Item 305-4A05 ID #22-24212-01A	Date:
principals is or are named herein and that no other pers contract to be entered into; that this proposal is made wit bid or proposal; and that it is in all respects fair and in go he has examined the site of the work and the contract doc prior to the opening of bids; that he has satisfied himsel that he and his subcontractors have fully complied wit Section 2.(c) of Session Law 2013-418, codified as N.C.	
The Bidder proposes and agrees if this proposa	·
	rough Appalachian State University
in the form of contract specified below, to furni apparatus, means of transportation and labor n	ish all necessary materials, equipment, machinery, tools, necessary to complete the construction of
Holmes Convoc	cation Center Stair Repair
in full in complete accordance with the plans entire satisfaction of the State of North Carolina	, specifications and contract documents, to the full and a, and the
Appalachian State	University and Wiley Wilson
with a definite understanding that no money videoral Conditions and the contract document	will be allowed for extra work except as set forth in the s, for the sum of:
SINGLE PRIME CONTRACT:	
Base Bid:	Dollars(\$)
General Subcontractor:	Plumbing Subcontractor:
Lic	Lic
Mechanical Subcontractor:	Electrical Subcontractor:
Lic	Lic
GS143-128(d) requires all single prime bidders to identify their	subcontractors for the above subdivisions of work. A contractor whose bid is

accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except (i) if the listed subcontractor's bid is later determined by the contractor to be non-responsible or non-responsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or (ii) with the approval of the awarding authority for good cause shown by the contractor.

<u>ALTERNATES:</u>
Should any of the alternates as described in the contract documents be accepted, the amount written below shall be the amount to be "added to" or "deducted from" the base bid. (Strike out "Add" or "Deduct" as appropriate.)

SCO-Proposal Form 2013 1 of 4 <u>Alternate No. G-1</u> Add remedial repairs to stair structure identified as South East Stair in drawings. This includes work shown on S-105, S-106, S-205, S-206, and S-207 of the construction drawings.

No. 2 Removal and Install Topping Slab – Landings Square Feet Unit Price (\$) No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)	Alternate G-1 (ADD)	1 Bid:		_Dollars(\$)
Mechanical Subcontractor: Lic Lic Lic Alternate No. G-2 Add the replacement of the existing brick capstones to the retaining walls along is structures with a precast concrete capstone per detail E on sheet S-501 of the construction drawings. Alternate G-2 Bid: (ADD) Dollars(\$) General Subcontractor: Plumbing Subcontractor: Lic Lic Lic Mechanical Subcontractor: Electrical Subcontractor: UNIT PRICES Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically note prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the wo accordance with the contract documents. No. 1 Concrete Crack Repair Linear Feet Unit Price (\$) No. 2 Removal and Install Topping Slab – Landings Square Feet Unit Price (\$) No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)	General Subco	ontractor:	Plumbing Subcontracto	or:
LicLicLicLicLic		Lic		Lic
Alternate No. G-2 Add the replacement of the existing brick capstones to the retaining walls along structures with a precast concrete capstone per detail E on sheet S-501 of the construction drawings. Alternate G-2 Bid: (ADD) Dollars(\$) General Subcontractor: Lic Lic Mechanical Subcontractor: Electrical Subcontractor: Lic Lic UNIT PRICES Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically note prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the wo accordance with the contract documents. No. 1 Concrete Crack Repair Linear Feet Linear Feet Unit Price (\$) No. 2 Removal and Install Topping Slab – Landings Square Feet Unit Price (\$) No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)	Mechanical Su	ubcontractor:	Electrical Subcontracto	or:
structures with a precast concrete capstone per detail E on sheet S-501 of the construction drawings. Alternate G-2 Bid: (ADD) Dollars(\$) General Subcontractor: Lic Lic Lic Lic Lic Lic Lic UNIT PRICES Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically note prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the wo accordance with the contract documents. No. 1 Concrete Crack Repair Linear Feet Unit Price (\$) No. 2 Removal and Install Topping Slab – Landings Square Feet Unit Price (\$) No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)		Lic		Lic
General Subcontractor: Lic Lic Lic Mechanical Subcontractor: Lic Lic Mechanical Subcontractor: Lic Lic Lic Lic Lic Lic Lic Lic				
Lic		2 Bid:		_Dollars(\$)
Mechanical Subcontractor: Lic Lic Lic Lic Lic Lic Lic UNIT PRICES Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically note prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the wo accordance with the contract documents. No. 1 Concrete Crack Repair Linear Feet Unit Price (\$) No. 2 Removal and Install Topping Slab – Landings Square Feet Unit Price (\$) No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)	General Subco	ontractor:	Plumbing Subcontracto	or:
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No. 3 Remove and Install Topping Slab – Stairs Square Feet Unit Price (\$)	No. 1 <u>Conc</u>	rete Crack Repair	<u>Linear Feet</u>	Unit Price (\$)
	No. 2 Remo	oval and Install Topping Slab – Land	ings Square Feet	Unit Price (\$)
No. 4 Concrete Tread Repair Cubic Feet Unit Price (\$)	No. 3 Remo	ove and Install Topping Slab – Stairs	Square Feet	Unit Price (\$)
	No. 4 <u>Concr</u>	rete Tread Repair	Cubic Feet	Unit Price (\$)
No. 5 Concrete Spall Repair Square Feet Unit Price (\$)	No. 5 <u>Conc</u>	rete Spall Repair	Square Feet	Unit Price (\$)
No. 6 <u>Sealant Replacement</u> <u>Linear Feet</u> <u>Unit Price (\$)</u>	No. 6 <u>Seala</u>	ant Replacement	<u>Linear Feet</u>	Unit Price (\$)
No. 7 Precast Concrete Cap Stone Linear Feet Unit Price (\$)	No. 7 <u>Preca</u>	ast Concrete Cap Stone	<u>Linear Feet</u>	Unit Price (\$)
No. 8 Nonskid Adhesive Nosing Strips Linear Feet Unit Price (\$)	No. 8 <u>Nonsl</u>	kid Adhesive Nosing Strips	<u>Linear Feet</u>	Unit Price (\$)

The bidder further proposes and agrees hereby to commence work under this contract on a date to be specified in a written order of the designer and shall fully complete all work thereunder within the time specified in the Supplementary General Conditions Article 23. Applicable liquidated damages amount is also stated in the Supplementary General Conditions Article 23.

MINORITY BUSINESS PARTICIPATION REQUIREMENTS

<u>Provide with the bid</u> - Under GS 143-128.2(c) the undersigned bidder shall identify <u>on its bid</u> (Identification of Minority Business Participation Form) the minority businesses that it will use on the project with the total dollar

SCO-Proposal Form 2013 2 of 4

value of the bids that will be performed by the minority businesses. <u>Also</u> list the good faith efforts (Affidavit **A**) made to solicit minority participation in the bid effort.

NOTE: A contractor that performs all of the work with its <u>own workforce</u> may submit an Affidavit (**B**) to that effect in lieu of Affidavit (**A**) required above. The MB Participation Form must still be submitted even if there is zero participation.

<u>After the bid opening</u> - The Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low bidder, the bidder shall then file within 72 hours of the notification of being the apparent lowest bidder, the following:

An Affidavit (**C**) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is <u>equal to or more than the 10% goal</u> established. This affidavit shall give rise to the presumption that the bidder has made the required good faith effort and Affidavit **D** is not necessary;

* OR *

<u>If less than the 10% goal</u>, Affidavit (**D**) of its good faith effort to meet the goal shall be provided. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.

Note: Bidders must always submit <u>with their bid</u> the Identification of Minority Business Participation Form listing all MB contractors, <u>vendors and suppliers</u> that will be used. If there is no MB participation, then enter none or zero on the form. Affidavit A **or** Affidavit B, as applicable, also must be submitted with the bid. Failure to file a required affidavit or documentation with the bid or after being notified apparent low bidder is grounds for rejection of the bid.

SCO-Proposal Form 2013 3 of 4

Proposal Signature Page

The undersigned further agrees that in the case of failure on his part to execute the said contract and the bonds within ten (10) consecutive calendar days after being given written notice of the award of contract, the certified check, cash or bid bond accompanying this bid shall be paid into the funds of the owner's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash or bid bond accompanying this proposal shall be returned to the undersigned.

Respectfully submitted this day of	
(Name of firm or c	orporation making bid)
·	
WITNESS:	By:
	· ·
(Proprietorship or Partnership)	Name: Print or type
	Title(Owner/Partner/Pres./V.Pres)
	(Owner/Partner/Pres./V.Pres)
	Address
ATTEST:	
By <u>:</u>	License No
Title: (Corp. Sec. or Asst. Sec. only)	Federal I.D. No.
(33.)	Email Address:
(CORPORATE SEAL)	
Addendum received and used in computing bid:	
Addendum No. 1 Addendum No. 3	Addendum No. 5 Addendum No. 6
Addendum No. 2 Addendum No. 4	Addendum No. 6 Addendum No. 7

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SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

AND SUPPLEMENTARY GENERAL CONDITIONS

The following Supplementary Instructions to Bidders and Supplementary General Conditions modify, delete from or add to the Instructions to bidders and General Conditions of the Contract Form OC-15 (Twenty-Third Edition - Revised March 2002), Where any article of the

Instructions to Bidders or General Conditions is modified or any paragraph, sub-paragraph or clause thereof is modified or deleted by these Supplements, the unaltered provisions of that article, paragraph, or sub-paragraph or clause shall remain in effect.

MODIFICATIONS OF THE GENERAL CONDITIONS

ARTICLE 1-DEFINITIONS

(REPLACE PARAGRAPH .a WITH THE FOLLOWING):

a. The Supplementary General Conditions together with the General Conditions of the Contract, the Drawings, the Technical Specifications, the Agreement, all Addenda, and all Modifications compose the Contract Documents, all of which shall apply to all branches of the work with equal force.

The following are the Drawings and Specifications which form a part of the contract:

(I) Drawings: See Index on Drawings Cover Sheet

(2) Specifications: See Table of Contents

b. Revise as follows: The Owner is Appalachian State University.

ARTICLE 5- SHOP DRAWINGS, SUBMITTALS SAMPLES, DATA

(REPLACE THE 1st SENTENCE IN PARAGRAPH a. WITH THE FOLLOWING):

After the notice to proceed, the prime contractor shall submit a schedule for anticipated submission of all shop drawings, product data, samples, and similar submittals to the Designer.

ARTICLE 6- WORKING DRAWINGS AND SPECIFICATIONS AT THE JOB SITE

(ADD PARAGRAPH c. AS FOLLOWS):

c. Contractor shall be responsible for furnishing to the Architect/Engineer one set of the project (record) drawings marked up to show all changes made in the project during the period of construction.

ARTICLE 11 - PROTECTION OF THE WORK, PROPERTY AND THE PUBLIC

(REPLACE PARAGRAPHS a. b. and e. AS FOLLOWS):

- a. The contractor shall be responsible for any damage to the owner's property, or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages. They shall be responsible for and pay for any damages caused to the owner. All contractors shall have access to the project at all times.
- b. Any work damaged through the lack of proper protection or from any other cause, shall be repaired or replaced without extra cost to the owner.
- e. The contractor shall protect against damage or injury resulting from falling materials and he shall maintain all protective devices and signs throughout the progress of the work.

(DELETE PARAGRAPH d.)

ARTICLE 12 - SEDIMENTATION POLLUTION CONTROL ACT OF 1973 (DELETE ENTIRE ARTICLE)

ARTICLE 16 - SUBCONTRACTS AND SUBCONTRACTORS

(ADD PARAGRAPH e. as FOLLOWS):

- e. Each Contractor shall be responsible to monitor, police and control its employees and its subcontractors with regard to the following:
 - -No guns or weapons allowed on the project site.
 - -No drugs or alcohol allowed on the project site.
 - -Clothing. language and actions shall not be abusive, lewd or offensive to the general public on or near the project site.

ARTICLE 23- TIME OF COMPLETION, DELAYS, EXTENSION OF TIME

Paragraph 23a. (ADD 1., 2. AND 3. AS FOLLOWS):

1. The contractors shall commence work to be performed under this agreement on a date to be specified in a written Order to Proceed from the architect/engineer and shall complete all work as stated below:

Final Completion: All work of all Prime Contracts must be Finally Complete on or before the date listed below:

- (240) Calendar Days after Notice to Proceed.
- 2. It is expressly understood and agreed by and between the Contractor and the Owner, that the Contract Time defined above for completion of the work is a reasonable time for completion of same, taking into consideration the usual industrial conditions prevailing in this locality.

3. The Owner and Contractor recognize that time is of the essence to this Agreement and that the Owner will suffer financial loss if the Work is not completed within the times specified in these Supplementary General Conditions; plus extensions thereto. Both parties also recognize the delays, difficulties and expense involved in proving, in a legal or arbitration proceeding, the actual loss suffered by the Owner if the Work is not completed on time. Accordingly, in lieu of requiring such proof, the Owner and Contractor agree that as liquidated damages for delay (But not as a penalty) the Contractor shall pay to the Owner for each day in excess of the term allowed for <u>Final Completion</u> of the Work, the Contractor shall pay to the Owner the sum of \$500.00 as liquidated damages. Final Completion Liquidated Damages will continue until the Work is finally complete.

ARTICLE 25-FINAL INSPECTION, ACCEPTANCE, AND PROJECT CLOSEOUT

(ADD Paragraph 25g. AS FOLLOWS):

g. Refer to Section 017700 – 'CLOSEOUT PROCEDURES' for additional and more specific requirements.

ARTICLE 34-MINIMUM INSURANCE REQUIREMENTS

"This insurance shall include the interests of the owner, the contractor, subcontractors and (REPLACE THE 2ND SENTENCE IN PARAGRAPH c. WITH THE FOLLOWING):

subsubcontractors in the work and shall insure against risks of direct physical loss - (all perils)."

ARTICLE 38- USE OF PREMISES

(ADD PARAGRAPH e. f. & g. AS FOLLOWS):

- e. Automobile parking on the site is restricted. Delivery trucks, contractor's vehicles, workmen's autos, and all other parking connected with the project must be within the project limits. No areas are available on site for those purposes outside of designated limits, except by purchasing a parking permit from the Parking and Traffic Department.
- f. Smoking is prohibited on or near the jobsite, as mandated by Chapter I30A, Article 23 of the General Statutes.
- g. Schedule placement and operation of combustion engine driven equipment away from private property and building intakes. Coordinate with the Owner to prevent air contamination into buildings.

ARTICLE 41-CLEANING UP

(ADD Paragraph 41 -d. & e. AS FOLLOWS):

d. <u>Waste Disposal</u>: Do not burn waste materials. Burning on the project site is not permitted. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile,

harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully. Comply with regulations of authorities having jurisdiction.

e. Refer to Section 017419 for additional more specific requirements.

END OF SUPPLEMENTARY INSTRUCTIONS TO BIDDERS AND SUPPLEMENTARY GENERAL CONDITIONS

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SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Quantity allowances.

C. Related Requirements:

1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

1.2 INFORMATIONAL SUBMITTALS

A. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.3 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials under allowance shall be included as part of the Contract Sum and not part of the allowance.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

ALLOWANCES 012100 - 1

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Quantity Allowance: Include 300 sf of concrete spall repair at 1 inch deep following the procedures indicated on sheet S-502 of the drawings.
- B. Allowance No. 2: Quantity Allowance: Include 170 linear ft. of concrete crack repair following the procedures indicated in Detail D on Sheet S-501 of the drawings.
- C. Allowance No. 3: Quantity Allowance: Include 720 sf. of cementitious coating removal and replacement at the stair landings following the procedures indicated in Detail B on Sheet S-501 of the drawings.
- D. Allowance No. 4: Quantity Allowance: Include 1260 sf. of cementitious coating removal and replacement at the stairs following the procedures indicated in Detail B on Sheet S-501 of the drawings.
- E. Allowance No. 5: Quantity Allowance: Include 200 cu. ft. of concrete nosing and tread repair following the procedures indicated on Detail F on Sheet S-501 of the drawings.
- F. Allowance No. 6: Quantity Allowance: Include 510 linear ft. of sealant between the top of the concrete wall and brick cap.

END OF SECTION 012100

ALLOWANCES 012100 - 2

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

1.2 DEFINITIONS

A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1 Concrete Crack Repair:
 - 1. Description: Concrete crack repair by pressure injection of epoxy. See drawings for additional information.

UNIT PRICES 012200 - 1

- 2. Unit of Measurement: Linear Feet.
- B. Unit Price No. 2 Removal and Installation of Cementitious Topping Slab Landings:
 - 1. Description: Removal of existing topping slab down to sound concrete, preparation of surface, and installation of new cementitious topping slab. See drawings for additional information.
 - 2. Unit of Measurement: Square Feet.
- C. Unit Price No. 3 Removal and Installation of Cementitious Topping Slab Stairs:
 - 1. Description: Removal of existing topping slab down to sound concrete, preparation of surface, and installation of new cementitious topping slab. See drawings for additional information.
 - 2. Unit of Measurement: Square Feet.
- D. Unit Price No. 4 Concrete Tread Repair:
 - 1. Description: Removal of unsound concrete down to sound base, preparation of surface, and installation of new concrete repair mortar. See drawings for additional information.
 - 2. Unit of Measurement: Cubic Feet.
- E. Unit Price No. 5 Concrete Spall Repair:
 - 1. Description: Removal of unsound concrete down to sound base, preparation of surface, and installation of new concrete repair mortar. See drawings for additional information.
 - 2. Unit of Measurement: Square Feet at 1" depth.
- F. Unit Price No. 6 Sealant Replacement:
 - 1. Description: Removal and replacement of sealant between wall and brick.
 - 2. Unit of Measurement: Linear Feet
- G. Unit Price No. 7 Precast Concrete Cap Stone:
 - 1. Description: Precast concrete cap stone installed along the top of the existing site walls along the exterior stairs. See drawings for additional information.
 - 2. Unit of Measurement: Linear Feet.
- H. Unit Price No. 8 Nonskid Adhesive Nosing Strips:
 - 1. Description: Nonskid adhesive nosing strips, 4" wide meeting NSFI 101-A High Traction and OSHA 1910.24 and 1910.26 intended for outdoor application, installed along the nosing of each stair tread.
 - 2. Unit of Measurement: Linear Feet.

END OF SECTION 012200

UNIT PRICES 012200 - 2

SECTION 030130 - MAINTENANCE OF 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 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Removal of deteriorated concrete and subsequent replacement and patching.
- 2. Epoxy crack injection.
- 3. Corrosion-inhibiting treatment.
- 4. Coatings and sealers.
- 5. Composite structural reinforcement.

1.3 ALLOWANCES

- A. Allowances for maintenance of cast-in-place concrete are specified in Section 012100 "Allowances."
- B. Field quality-control testing is part of testing and inspecting allowance.

1.4 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 012200 "Unit Prices."
 - 1. Unit prices apply to authorized work covered by estimated quantities. Unit prices apply to authorized work covered by estimated quantities.
 - 2. Unit prices apply to authorized additions to and deletions from the Work as authorized by Change Orders.
- B. General: Unit prices include the cost of preparing existing construction to receive the work indicated and costs of field quality control required for units of work completed.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

- 1. Review methods and procedures related to concrete maintenance including, but not limited to, the following:
 - a. Verify concrete-maintenance specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Materials, material application, sequencing, tolerances, and required clearances.
 - c. Quality-control program.
 - d. Coordination with owner's schedule and building occupants.

1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, chemical composition, physical properties, test data, and mixing, preparation, and application instructions.
- B. Samples: Cured Samples for each exposed product and for each color and texture specified, in manufacturer's standard size appropriate for each type of work.

1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For concrete-maintenance specialist and manufacturers.
- B. Material Certificates: For each type of portland cement and aggregate supplied for mixing or adding to products at Project site.
- C. Product Test Reports: For each manufactured bonding agent, cementitious patching mortar, crack-injection adhesive, coating and sealer, for tests performed by manufacturer and witnessed by a qualified testing agency.
- D. Field quality-control reports.
- E. Quality-Control Program: Submit before work begins.

1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Each manufactured bonding-agent packaged patching-mortar crack-injection-adhesive corrosion-inhibiting-treatment coating and -sealer manufacturer shall employ factory-authorized service representatives who are available for consultation and Project-site inspection and on-site assistance.
- B. Concrete-Maintenance Specialist Qualifications: Engage an experienced concrete-maintenance firm that employs installers and supervisors who are trained and approved by manufacturer to apply packaged patching-mortar, crack-injection adhesive, corrosion-inhibiting treatments, coatings, and sealers to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-

service performance. Experience in only installing or patching new concrete is insufficient experience for concrete-maintenance work.

- 1. Field Supervision: Concrete-maintenance specialist firm shall maintain experienced full-time supervisors on Project site during times that concrete-maintenance work is in progress.
- C. Quality-Control Program: Prepare a written plan for concrete maintenance to systematically demonstrate the ability of personnel to properly perform maintenance work, including each phase or process, protection of surrounding materials during operations, and control of debris and runoff during the Work. Describe in detail materials, methods, equipment, and sequence of operations to be used for each phase of the Work.
- D. Mockups: Build mockups to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Concrete Removal and Patching: Remove and repair one full stair landing 1 and area of wall spalling over at least 3 stair treads.
 - 2. Epoxy Crack Injection: Perform epoxy crack injection in two separate areas, each at least 24 inches (1200 mm) long.
 - 3. Horizontal Traffic Coating: Apply coating over one full stair landing.
 - 4. Vertical Wall Coating: Apply an approximately 50 sq. ft. area of wall coating.
 - 5. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 6. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.
- B. Store cementitious materials off the ground, under cover, and in a dry location.
- C. Store aggregates covered and in a dry location; maintain grading and other required characteristics and prevent contamination.

1.10 FIELD CONDITIONS

- A. Environmental Limitations for Epoxies: Do not apply when air and substrate temperatures are outside limits permitted by manufacturer. During hot weather, cool epoxy components before mixing, store mixed products in shade, and cool unused mixed products to retard setting. Do not apply to wet substrates unless approved by manufacturer.
 - 1. Use only Class A epoxies when substrate temperatures are below or are expected to go below 40 deg F (5 deg C) within eight hours.

- 2. Use only Class A or B epoxies when substrate temperatures are below or are expected to go below 60 deg F (16 deg C) within eight hours.
- 3. Use only Class C epoxies when substrate temperatures are above and are expected to stay above 60 deg F (16 deg C) for eight hours.
- B. Cold-Weather Requirements for Cementitious Materials: Comply with manufacturer's instructions for cold weather or the following procedures if manufacturer does not specify cold weather requirements:
 - 1. When air temperature is below 40 deg F (5 deg C), heat patching-material ingredients and existing concrete to produce temperatures between 40 and 90 deg F (5 and 32 deg C).
 - 2. When mean daily air temperature is between 25 and 40 deg F (minus 4 and plus 5 deg C), cover completed Work with weather-resistant insulating blankets for 48 hours after repair or provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) within the enclosure for 48 hours after repair.
 - 3. When mean daily air temperature is below 25 deg F (minus 4 deg C), provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) within the enclosure for 48 hours after repair.
- C. Hot-Weather Requirements for Cementitious Materials: Protect repair work when temperature and humidity conditions produce excessive evaporation of water from patching materials. Provide artificial shade and wind breaks, and use cooled materials as required. Do not apply to substrates with temperatures of 90 deg F (32 deg C) and above. Refer to manufacturer's instructions for additional requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: For repair products, obtain each color, grade, finish, type, and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.

2.2 BONDING AGENTS

- A. Epoxy-Modified, Cementitious Bonding and Anticorrosion Agent: Manufactured product that consists of water-insensitive epoxy adhesive, portland cement, and water-based solution of corrosion-inhibiting chemicals that forms a protective film on steel reinforcement.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Master Builders Solutions MasterEmaco P 124.
 - b. Sika Corporation Armatec-110 EpoCem.
- B. Mortar Scrub Coat: Mix consisting of 1 part portland cement and 1 part fine aggregate complying with ASTM C144 except 100 percent passing a No. 16 (1.18-mm) sieve.

2.3 PATCHING MORTAR

- A. Patching Mortar Requirements:
 - 1. Only use patching mortars that are recommended by manufacturer for each applicable horizontal, vertical, or overhead use orientation.
 - 2. Coarse Aggregate for Patching Mortar: ASTM C33/C33M, washed aggregate, Size No. 8, Class 5S. Add to patching-mortar mix only as permitted by patching-mortar manufacturer.
- B. Cementitious Patching Mortar: Packaged, dry mix for repair of concrete.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved equal:
 - a. Master Builders Solutions.
 - 1) MasterEmaco T-1061
 - b. Sika Corporation.
 - 1) SikaQuick Ez Patch
 - 2) SikaQuick 1000
 - 2. Compressive Strength: Not less than 5000 psi (34.5 MPa) at 28 days when tested according to ASTM C109/C109M.

2.4 EPOXY CRACK-INJECTION MATERIALS

- A. Epoxy Crack-Injection Adhesive: ASTM C881/C881M, bonding system Type IV, free of VOCs.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved equal:
 - a. Master Builders Solutions MasterInject 1380.
 - b. Sika Corporation Sikadur Crack Fix.
 - 2. Capping Adhesive: Product manufactured for use with crack-injection adhesive by same manufacturer.
 - 3. Color: Provide epoxy crack-injection adhesive and capping adhesive that blend with existing, adjacent concrete and do not stain concrete surface.

2.5 COATING AND SEALER MATERIALS

- A. Cementitous Coating for Horizonal Applications: protective polymer-modified cementitious coating and acrylic top coat.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved equal:
 - a. Sika Corporation

- 1) Sikagard FlexCoat
- 2) Sikagard FlexCoatATC.
- 2. Color: As selected by Architect from full range of industry colors.

B. Wall Coatings:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved equal:
 - a. Master Builders Solutions.
 - 1) MasterProtect HB 200
 - 2) MasterProtect FL 746
 - b. Sika Corporation
 - 1) SikaGard 552 W Primer
 - 2) SikaGard 550W.
- 2. Color: As selected by Architect from full range of industry colors.

2.6 MISCELLANEOUS MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I, II, or III unless otherwise indicated.
- B. Water: Potable.

2.7 MIXES

- A. General: Mix products, in clean containers, according to manufacturer's written instructions.
 - 1. Do not add water, thinners, or additives unless recommended by manufacturer.
 - 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovel or trowel as unit of measure.
 - 3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.
- B. Mortar Scrub Coat: Mix dry ingredients with enough water to provide consistency of thick cream.
- C. Dry-Pack Mortar: Mix required type(s) of patching-mortar dry ingredients with just enough liquid to form damp cohesive mixture that can be squeezed by hand into a ball but is not plastic.
- D. Concrete: Comply with Section 033000 "Cast-in-Place Concrete."

PART 3 - EXECUTION

3.1 CONCRETE-MAINTENANCE SPECIALIST

- A. Concrete-Maintenance Specialist Firms: Subject to compliance with requirements, firms that may perform concrete maintenance include, but are not limited to, the following:
 - 1. Richmond Primoid, Richmond, VA
 - 2. Tendon Systems, LLC, Suwanee, GA

3.2 CONCRETE MAINTENANCE

- A. Have concrete-maintenance work performed only by qualified concrete-maintenance specialist with at least 10 years experience.
- B. Comply with manufacturers' written instructions for surface preparation and product application.

3.3 EXAMINATION

- A. Notify Architect seven days in advance of dates when areas of deteriorated or delaminated concrete and deteriorated reinforcing bars will be located.
- B. Locate areas of deteriorated or delaminated concrete using hammer or chain-drag sounding and mark boundaries. Mark areas for removal by simplifying and squaring off boundaries. At columns and walls make boundaries level and plumb unless otherwise indicated.
- C. Pachometer Testing: Locate at least three reinforcing bars using a pachometer, and drill test holes to determine depth of cover. Calibrate pachometer using depth of cover measurements, and verify depth of cover in removal areas using pachometer.
- D. Perform surveys as the Work progresses to detect hazards resulting from concrete-maintenance work.

3.4 PREPARATION

- A. Ensure that supervisory personnel are on-site and on duty when concrete maintenance work begins and during its progress.
- B. Protect persons, motor vehicles, surrounding surfaces of building being repaired, building site, plants, and surrounding buildings from harm resulting from concrete maintenance work.
 - 1. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

- 2. Use only proven protection methods appropriate to each area and surface being protected.
- 3. Provide temporary barricades, barriers, and directional signage to exclude public from areas where concrete maintenance work is being performed.
- 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of concrete maintenance work.
- 5. Contain dust and debris generated by concrete maintenance work and prevent it from reaching the public or adjacent surfaces.
- 6. Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment that ensure that such water will not create a hazard or adversely affect other building areas or materials.
- 7. Protect floors and other surfaces along haul routes from damage, wear, and staining.
- 8. Provide supplemental sound-control treatment to isolate removal and dismantling work from other areas of the building.
- 9. Neutralize and collect alkaline and acid wastes for disposal off Owner's property.
- 10. Dispose of debris and runoff from operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.
- C. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is in working order.
 - 1. Prevent solids such as aggregate or mortar residue from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from concrete maintenance work.
 - 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.
- D. Preparation for Concrete Removal: Examine construction to be repaired to determine best methods to safely and effectively perform concrete maintenance work. Examine adjacent work to determine what protective measures will be necessary. Make explorations, probes, and inquiries as necessary to determine condition of construction to be removed in the course of repair.
 - 1. Verify that affected utilities have been disconnected and capped.
 - 2. Inventory and record the condition of items to be removed for reinstallation or salvage.
- E. Reinforcing-Bar Preparation: Remove loose and flaking rust from exposed reinforcing bars by high-pressure water cleaning or wire brushing until only tightly adhered light rust remains.
 - 1. Where section loss of reinforcing bar is more than 25 percent, or 20 percent in two or more adjacent bars, cut bars and remove and replace as indicated on Drawings.
 - 2. Remove additional concrete as necessary to provide at least 3/4-inch (19-mm) clearance at existing and replacement bars.
 - 3. Splice replacement bars to existing bars according to ACI 318 (ACI 318M) by lapping, welding, or using mechanical couplings.

- F. Surface Preparation for Corrosion-Inhibiting Treatment: Clean concrete to remove dirt, oils, films, and other materials detrimental to treatment application.
 - 1. Use low-pressure water cleaning.
 - 2. Allow surface to dry before applying corrosion-inhibiting treatment.
- G. Surface Preparation for Cementitious Coating:
 - 1. Remove delaminated material and deteriorated concrete surface material.
 - 2. Roughen surface of concrete to produce a surface profile matching CSP 3 according to ICRI 310.2.
 - 3. Use sand blasting scarifying high-pressure water jetting or milling.
 - 4. Sweep and vacuum roughened surface to remove debris followed by low-pressure water cleaning.
- H. Nonacidic Surface Preparation for Sealers: Clean concrete to remove dirt, oils, films, and other materials detrimental to sealer application.
 - 1. Use low-pressure water cleaning or detergent scrubbing. See manufacturer's instructions for additional requirements.

3.5 REMOVAL OF CONCRETE

- A. Do not overload structural elements with debris.
- B. Saw-cut perimeter of areas indicated for removal to a depth of at least 1/2 inch (13 mm). Make cuts perpendicular to concrete surfaces and no deeper than cover on reinforcement.
- C. Remove deteriorated and delaminated concrete by breaking up and dislodging from reinforcement.
- D. Remove additional concrete if necessary to provide a depth of removal of at least 1/2 inch (13 mm) over entire removal area.
- E. Where half or more of the perimeter of reinforcing bar is exposed, bond between reinforcing bar and surrounding concrete is broken, or reinforcing bar is corroded, remove concrete from entire perimeter of bar and to provide at least 3/4-inch (19-mm) clearance around bar.
- F. Test areas where concrete has been removed by tapping with hammer, and remove additional concrete until unsound and disbonded concrete is completely removed.
- G. Provide surfaces with a fractured profile of at least 1/8 inch (3 mm) that are approximately perpendicular or parallel to original concrete surfaces. At columns and walls, make top and bottom surfaces level unless otherwise directed.
- H. Thoroughly clean removal areas of loose concrete, dust, and debris.

3.6 APPLICATION OF BONDING AGENT

A. Epoxy-Modified, Cementitious Bonding and Anticorrosion Agent: Apply to reinforcing bars and concrete by stiff brush or hopper spray according to manufacturer's written instructions. Apply to reinforcing bars in two coats, allowing first coat to dry two to three hours before applying second coat. Allow to dry before placing patching mortar or concrete.

3.7 INSTALLATION OF PATCHING MORTAR

- A. Place patching mortar as specified in this article unless otherwise recommended in writing by manufacturer.
 - 1. Provide forms where necessary to confine patch to required shape.
 - 2. Wet substrate and forms thoroughly and then remove standing water.
- B. Pretreatment: Apply specified bonding agent or mortar scrub coat as specified by the manufacturer.
- C. General Placement: Place patching mortar by troweling toward edges of patch to force intimate contact with edge surfaces. For large patches, fill edges first and then work toward center, always troweling toward edges of patch. At fully exposed reinforcing bars, force patching mortar to fill space behind bars by compacting with trowel from sides of bars.
- D. Vertical Patching: Place material in lifts of not more than 1 inch (25 mm) or less than 1/8 inch (3 mm). Do not feather edge.
- E. Consolidation: After each lift is placed, consolidate material and screed surface.
- F. Multiple Lifts: Where multiple lifts are used, score surface of lifts to provide a rough surface for placing subsequent lifts. Allow each lift to reach final set before placing subsequent lifts.
- G. Finishing: Allow surfaces of lifts that are to remain exposed to become firm and then finish to a surface matching adjacent concrete and meets the manufacturer's requirements for the coating.
- H. Curing: Wet-cure cementitious patching materials, including polymer-modified cementitious patching materials, for not less than seven days by water-fog spray or water-saturated absorptive cover.

3.8 CONCRETE PLACEMENT

- A. Place concrete according to Section 033000 "Cast-in-Place Concrete" and as specified in this article.
- B. Pretreatment: Apply epoxy-modified, cementitious bonding and anticorrosion agent to reinforcement and concrete substrate.
- C. Standard Placement: Place concrete by form-and-pump method unless otherwise indicated.

- 1. Use vibrators to consolidate concrete as it is placed.
- 2. At unformed surfaces, screed concrete to produce a surface that when finished with patching mortar will match required profile and surrounding concrete.
- D. Wet-cure concrete for not less than seven days by leaving forms in place or keeping surfaces continuously wet by water-fog spray or water-saturated absorptive cover.
- E. Fill placement cavities with dry-pack mortar and repair voids with patching mortar. Finish to match surrounding concrete.

3.9 EPOXY CRACK INJECTION

- A. Clean cracks with oil-free compressed air or low-pressure water to remove loose particles.
- B. Clean areas to receive capping adhesive of oil, dirt, and other substances that would interfere with bond.
- C. Place injection ports as recommended by epoxy manufacturer, spacing no farther apart than thickness of member being injected. Seal injection ports in place with capping adhesive.
- D. Seal cracks at exposed surfaces with a ribbon of capping adhesive at least 1/4 inch (6 mm) thick by 1 inch (25 mm) wider than crack.
- E. Inject cracks wider than 0.003 inch (0.075 mm) to a depth of 8 inches (200 mm).
- F. Inject epoxy adhesive, beginning at widest part of crack and working toward narrower parts. Inject adhesive into ports to refusal, capping adjacent ports when they extrude epoxy. Cap injected ports and inject through adjacent ports until crack is filled.
- G. After epoxy adhesive has set, remove injection ports and grind surfaces smooth.

3.10 APPLICATION OF COATINGS AND SEALERS

- A. Apply polymer sealer by brush, roller, or airless spray at manufacturer's recommended application rate.
- B. Apply to traffic-bearing surfaces, including stairs, landings and walls.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections:
 - 1. Packaged, Cementitious Patching Mortar: Twelve (two per stair) randomly selected sets of samples for each type of mortar required, tested according to ASTM C928/C928M.

- 2. Concrete: As specified in Section 033000 "Cast-in-Place Concrete."
- 3. Epoxy Crack Injection: Core-drilled samples to verify proper installation.
 - a. Testing Frequency: Three samples from mockup and one sample for each 100 feet (30 m) of crack injected.
 - b. Where samples are taken, refill holes with epoxy mortar.
- C. Product will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.
- E. Manufacturers Field Service: Engage manufacturers' factory-authorized service representatives for consultation and Project-site inspection and to provide on-site assistance when requested by Architect.
 - 1. Have manufacturers' factory-authorized service representatives perform the following number of Project-site inspections to observe progress and quality of the Work, distributed over the period of product installation, regardless of on-site assistance requested by Architect:
 - a. Bonding-Agent and Packaged Patching-Mortar Installation: Three inspections.
 - b. Crack-Injection-Adhesive Preparation and Installation: Three inspections.
 - c. Coatings and Sealers: Three inspections.
 - 2. At least one site visit by manufacturer's representative should occur during the initial product installation to observe surface preparation and first applications.

3.12 CONCRETE MAINTENANCE SCHEDULE

A. Schedule must be carefully coordinated with Owner. Unless otherwise directed by Owner, only one stair may be closed at a time.

SEND OF SECTION 030130

Bidder Questions & Responses

- 1. Bidder Question: Can bench mark quantities be provided for the following repairs:
 - a. Concrete Spall Repair
 - b. Rout and Sealing of Cracks
 - c. Handrail base pocket repairs
 - d. Precast Concrete Cap Stone
 - e. Cast in place step replacement
 - f. Sealant Replacement

Note: By providing bench mark quantities it gives all perspective bidders equal footing and provides an apple to apple comparison to compare bids.

Response: Please see forthcoming Addenda #1 for Allowance Specification, which includes base bid quantities for many of these items.

2. Bidder Question: Can the bid date be extended one week?

Response: The bid date has been extended to Wednesday, August 31, 2022 at 2:00 pm.

3. Bidder Question: Due to the location of the project and the potential that the work could be impacted by climatic weather conditions such as cold temperatures, snow and ice. Would it be prudent to start this project in early spring? It would also not interfere with the upcoming basketball season if the project started in early spring.

Response: It is the owner's intent to get this project started as soon as possible. If it cannot be completed before winter weather sets in, then the project will temporarily shut down as necessary and resume in the spring when weather conditions improve.

4. Bidder Question: If the a portion of the project must begin in the fall, it will require an additional mobilization in the spring to complete the project. Can a line item be included on the bid form for an additional mobilization?

Response: We are not going to add a line item in the bid form for mobilization. The bidders must determine the repair schedule and if a shut down during winter months is needed, include the re-mobilization in your bid.

5. Bidder Question: Based upon the site visit, it appears that all of the landings would require total removal of the existing topping. Is this the intent to totally remove the topping on the landings?

Response: Yes.

- 6. Bidder Question: The specifications for the new coating has two (2) manufacture's products but here are different types of materials.
 - a. MasterSeal 1500 is a polyurethane WTP, traffic bearing membrane
 - b. MasterSeal 658 is an acrylic slip resistant coating
 - c. Sikagard FlexCoat Cementitious Coating
 - d. Sikagard FlexCoat ATC is the acrylic top coat

APPALACHIAN STATE UNIVERSITY HOLMES CONVOCATION CENTER – STAIR REPAIR SCO ID NO. 22-24212-01A

i. Note: The aforementioned materials are totally different systems. The specification needs to be clarified as to what system is the best repair method for the stairs. Is it polyurethane coating or cementitious coating?

Response: The polyurethane coating has been removed from the Addenda#1 revision to the 030130 Maintenance of Cast-In-Place Concrete specification. Use the cementitious coating.

7. Bidder Question: Please provide a detail for the stair nosing?

Response: The stair will be formed concrete per Detail F on Sheet S-501 with a broom finish for slip resistance. An adhesive nonskid strip may be required if the broom finish does not provide the necessary slip resistance. Unit pricing on the nonskid strip have been identified in the specs.

8. Bidder Question: Could a list of minority contractors in the area be provided?

Response: We do not have a list of minority contractors to provide at this time. We suggest that you check the NC HUB website at https://ncadmin.nc.gov/businesses/historically-underutilized-businesses-hub.



LIST OF PRE-BID CONFERENCE ATTENDEES

Appalachian State University/ Holmes Convocation Center Stair Repairs: AUGUST 18, 2022 / 2:00PM

Company Name: Builds General Contractor
Address: 2059 Tyne castle Hwy Bainer Elk NC . Email: Tyonger a VPC Duilders. com Attendee Name: Trasis Younger Phone: 919-604-2332
Email: Tyonnor @ VPC Auildes. com
Attendee Name: 1233 Vonnger Phone: 919-604-2332
Company Name: Wilson General Contractor D Subcontractor D Supplier D
Address: 550 Centerview Suite 311 Raleigh NC 27606 Email: Showman @ wileywilson.com Attendee Name: Steve Bowman Phone: 919.746.8369
Email: Showman@ wileywilson.com
Attendee Name: Steve Boxm in Phone: 919,746.8369
Company Name: WATEN TIGM SymGeneral Contractor ☑ Subcontractor ☐ Supplier ☐
Address:
Email: (egg 1 0 VATERTISW-SYSTOMS, COM
Email: <u>(egg is O VATERTISH</u> STOMS, COM Attendee Name: <u>VEggie Victolas</u> Phone: <u>803-312-2303</u>
Company Name:General Contractor ☐ Subcontractor ☐ Supplier ☐
Address:
Email:
Attendee Name: Phone:



LIST OF PRE-BID CONFERENCE ATTENDEES

Appalachian State University/ Holmes Convocation Center Stair Repairs: AUGUST 18, 2022 / 2:00PM

Company Name: 当かいに W General Contractor Subcontractor □ Supplier □
Address: 119 Brooktom Rd Wash Salam No
Email: Julity phigh rock will, com
Attendee Name: Jeff welty Phone: 336.596 2110
Company Name: <u>Iq Contracting</u> , LLC General Contractor Subcontractor □ Supplier □
Address: 632 Pershing RD Roleigh, NC 27608
Email: Mmorse @ 19 contracting, net
Attendee Name: Mike Morse Phone: 919-793-5715
Company Name: SillA Corp General Contractor Subcontractor Supplier
Company Name: Silla Conf General Contractor Subcontractor Supplier Address: 6804 RUSMAN LANE
Company Name: SillA Corp General Contractor Subcontractor Supplier Address: 6804 RUSMAN LANE Email: 6000, Greg & US, SiKA. COM
Email: 6809 RIBMAN LANE Email: 6809 RIBMAN LANE EMAIL: 6809 RIBMAN LANE
Address: 6809 RIBMAN LANE
Address: 6809 RUSMAN LANE Email: 6809 RUSMAN LANE Email: 6809 RUSMAN LANE Attendee Name: 6809 RUMN Phone: 769-773-1937
Address: 6804 RUSMAN LANE Email: 6804 RUSMAN
Address: 6809 RUSMAN LANE Email: 6809 RUSMAN LANE Email: 6809 RUSMAN LANE Attendee Name: 6109 BNOW, D. Phone: 709-773-1937 Company Name: 5tone Restoration General Contractor & Subcontractor Supplier D. Address: 2601 Wilkinson Blud. Charlete, NC 28208
Address: 6804 RUSMAN LANE Email: 6804 RUSMAN