SECTION 00 02 00 - NOTICE TO BIDDERS

NOTICE TO BIDDERS

Notice is hereby given that sealed bids will be received:

By: Kalamazoo Public Schools

1220 Howard Street Kalamazoo, MI 49008

For: Kalamazoo Central High School HVAC Improvements

2432 North Drake Road Kalamazoo, MI 49006

At: Kalamazoo Facilities Management Office, 600 W. Vine Street, Kalamazoo, MI

49008

Until: 2:00 pm (local time), November 1, 2022

Bid Opening: Bids will be publicly opened and read aloud at 2:05 pm (local time), in

Room 130 of the Community Education Center, 600 W. Vine Street,

Kalamazoo, MI 49008.

All work for the complete construction of the Project will be under one or more prime contracts with the Owner based on bids received and on combinations awarded. The Construction Manager will manage the construction of the Project.

Construction shall be in full accordance with the Bidding Documents which are on file with the Owner and may be examined by prospective bidders at the following locations:

The Skillman Plan Room

www.skillmanplanroom.com

<u>Prime and Non-Prime Contract Bidders</u> must place an order on <u>www.skillmanplanroom.com</u> to be able to download documents electronically or request printed documents. There is no cost for downloading the bidding documents. Bidders desiring printed documents shall pay for the cost of printing, shipping and handling. Reprographic Services are provided by:

Kal-Blue, 914 East Vine Street, Kalamazoo, MI 49001 Phone 269-349-8681

A Pre-Bid Conference will be held on October 18, 2022, at 3:00 pm, local time, at Central High School Cafeteria, 2432 North Drake Road, Kalamazoo, MI 49006. Attendance by bidders is optional, but recommended, in order to clarify or answer questions concerning the Drawings and Project Manual for the Project.

Bid security in the amount of five percent (5%) of the Bid must accompany each Bid in accordance with the Instructions to Bidders.

All proposals shall be accompanied by a sworn and notarized statement disclosing any familial relationship (or lack of relationship) that exists between the owner or any employee of the bidder and any member of the Board of Education of the Kalamazoo Public Schools or the Superintendent of the School District. The District shall not accept a bid that does not include a sworn and notarized disclosure statement.

The successful Bidders will be required to furnish Performance and Payment Bonds for one hundred percent (100%) of their Contract amount prior to execution of Contracts.

Contractors submitting bids for the performance of any Work as specified in this building Project should make such Bids to Kalamazoo Public Schools. Contractors are advised that the Contract as finally entered into with any successful Bidder shall be entered into with the Kalamazoo Public School.

The Owner reserves the right to accept or reject any Bid (or combination of Bids) and to waive any irregularities in bidding. All Bids may be held for a period not to exceed **120** days before awarding contracts.

Kalamazoo Public Schools

END OF SECTION 00 02 00

SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions of the Prime Contract, including amended General Conditions and other Division 1 Specification Sections, apply to Work of this Section.

1.02 SUMMARY

- A. The intent of this Section is to indicate the Work required by the Contractors and to provide information regarding the duties, responsibilities, and cooperation required by the Contractors, with similar requirements for the subcontractors and suppliers.
- B. Owners right to maintain current operations
- C. Occupancy requirements
- D. Work by Owner
- E. Permits, fees, and notices
- F. Labor and materials
- G. Verifications of existing dimensions
- H. Project security
- I. Coordination of work
- J. Time of commencement and completion
- K. Schedule of contract responsibilities

1.03 WORK UNDER SEPARATE CONTRACTS

- A. Prime Contracts are defined to include the following contracts described in the Schedule of Contract Responsibilities included hereinafter; and each is recognized to be a major part of the project, with Work to be performed concurrently and in close coordination with Work of other Prime Contracts.
- B. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the

Work, Contractors shall be responsible for their Work as specified herein and as indicated on the Drawings. Although the majority of the Drawings are "to scale," Contractors are directed to use indicated dimensions for determining material quantities and for other reasons. No additional monies will be allowed due to Contractors using "scaling instruments" to determine material quantities or for other reasons.

- C. Separate prime contracts will be awarded as per the "Schedule of Contract Responsibilities" (see Part 3 Execution). Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.
- D. Work for the complete construction of the Project will be under multiple prime contracts with the Owner. The Construction Manager will manage the construction of the Project.
- E. Each Contractor shall be responsible for demolition and disposal of existing items relative to his Contract.

1.04 ADMINISTRATIVE RESPONSIBILITIES OF PRIME CONTRACTORS AND CM

- A. The Construction Manager shall be responsible for the maintenance of the Construction Schedule and management of every phase of the Work.
 - 1. Each Contractor shall read the Specifications and Drawings for other separate Contracts for fixed equipment and the like to be incorporated or attached or built in to the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
 - 2. Each Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
 - 3. Each Contractor shall cooperate with the Construction Manager in notifying him when the Work is at a stage to require the services of other Contractors and shall notify the Construction Manager in the event that such other Contractors do not carry out their responsibilities in connection with such notification.
- B. Contractors shall cooperate with and assist the Construction Manager in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. Other Contractors shall cooperate in getting their Work and the Work of their subcontractors completed according to the schedule as prepared and maintained by the Construction Manager. Each Contractor shall immediately notify the Construction Manager of a delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.

- C. The Owner will furnish the topographical survey, either as a part of these Drawings or separately, giving the general topographical lines existing at the site and the property lines.
- D. Contractors required to make connections to existing utilities, especially sewerage where gravity flow occurs, shall verify grades and locations at points of such connections and shall notify the Construction Manager of circumstances which would adversely affect the proper flow or connection to such facilities.

1.05 PRIME CONTRACTORS USE OF PREMISES

- A. General: During the construction period, the Prime Contractors jointly shall have full use of the premises for construction operations, including use of the site. Each Prime Contractor's use of the premises is limited only by the Owner's right to perform work or to retain other Contractors on portions of the Project.
- B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

1.06 OWNERS RIGHT TO MAINTAIN OPERATIONS

- A. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.
- B. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.
- C. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.
- D. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.
- E. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly

removed from the site. Smoking is not permitted on school property or within school buildings.

1.07 OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
 - 1. The Construction Manager will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
 - 2. Party which obtained general building permit shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
 - 3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
 - 4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.08 WORK BY OWNER

- A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. Contractors shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.
 - 1. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.
 - 2. Items which may be deleted from Contracts for Work as required by the Contract Documents.
 - 3. Existing school maintenance work.
 - 4. The purchase and supplying of certain materials as noted in the Project Manual.
 - 5. The Owner, under separate contract, shall provide removal of identified asbestos containing materials from the existing structure. The asbestos report is available through the Construction Manager upon request.

1.09 PERMITS, FEES, AND NOTICES

A. Construction Manager will secure the general building permit for the Owner. Each Contractor shall secure and pay for other permits, governmental fees, and licenses necessary for the proper execution and completion of the Contractors Work. Fees

to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.

- 1. The Owner shall pay for the cost of the Building Permit.
- 2. State filing fees for plan approval are the responsibility of the Owner and will be paid by the Owner.
- B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.
- C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Construction Manager and Owner.
- D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.
- E. Each Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authorities bearing on the performance of his Work. If a Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Construction Manager in writing, and necessary changes shall be adjusted by appropriate notification. If a Contractor performs Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Construction Manager, he shall assume full responsibility therefore and shall bear the costs attributable thereto.

1.10 LABOR AND MATERIALS

- A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- B. Each Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his Contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.
- C. Prime Contractors must furnish a letter to the Construction Manager, stating that Contractor shall not assign any of its employees, agents or other individuals to perform any services in the District's facilities or program sites if that individual:
 - 1. Is listed on the Michigan Sex Offender Registry, www.mipsor.state.mi.us.
 - 2. Is listed on the Federal Sex Offender Registry www.nsopw.gov.
 - 3. Has not passed a 5-50 drug screen, testing negative for the following drugs:
 - a. Amphetamines
 - b. Methamphetamines
 - c. Cocaine

- d. Codeine
- e. Methadone
- f. Morphine
- g. Phencyclidine (PCP)
- h. Marijuana
- D. ID Stickers will be issued by The Skillman Corporation upon receipt of verification from the Contractor that the employee/subcontractor employee or independent contractor has a satisfactory record to work on the Project. Stickers will be numbered and numbers assigned to each worker to be worn on their hardhat. It is the Contractor's responsibility to maintain a record of contractor's name assigned each number and provide to The Construction Manager upon request.
- E. Consistent with Michigan law, possession or consumption of drugs on school property will promptly be reported to the local police. Consumption of alcoholic beverages or tobacco or other noxious behavior on school owned property is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

1.11 CUTTING AND PATCHING

A. Refer to Section 01 73 10 – Cutting and Patching, for provisions on this subject.

1.12 VERIFICATIONS OF EXISTING DIMENSIONS

A. When verification of existing dimensions is required, the Contractor requiring said verification for the construction or fabrication of his material shall be the Contractor responsible for the procurement of the field information.

1.13 PROJECT SECURITY

- A. Each Prime Contractor shall take all reasonable precautions to prevent injury, damage or loss to people and property in, on and adjacent to the project. This shall include not only their own work or property but that of other contractors and the Owner.
- B. If deemed necessary by The Construction Manager a project wide security program may be developed for the purpose of preventing damage or loss at the project site or property adjacent thereto. Once accepted by the Owner, contractors shall comply.

1.14 SCHEDULE OF CONTRACT RESPONSIBILITIES - SCOPE

A. Contractors shall submit their proposals based on the work included under each contract area as listed herein. Include Work necessary for a complete project, as shown on the Drawings and called for in the Specifications.

- B. Questions concerning the phasing or "Schedule of Contract Responsibilities" should be directed to the Construction Manager, who will be the interpreter and be responsible for this Schedule of Contract Responsibilities and Contract Breakdown, prior to submitting proposals and during construction.
- C. The requirements of Division 1 are a part of the Work of each and every contract area. The Contractor for any one contract area shall be familiar with the Work and requirements of all other contract areas.
- D. Certain Specification Sections describe Work to be performed under several contract areas. (Example: 06 10 00 Rough Carpentry.) Provide Work of this nature as required for each contract area whether or not enumerated in the Schedule of Contract Responsibilities.
- E. The following contract areas are broken down by Specifications Section conforming basically to the CSI format.
- F. The Drawings and Specifications as furnished for each of the Contracts is for the convenience of the Contractor in preparing a proposal for this Project. However, each Contractor is responsible to review the complete set of Drawings and Specifications to assure that Work required to be installed to complete his phase of the Work is included in his proposal. This "Schedule of Contract Responsibilities" is a definition of the work as it is to be bid in separate contracts. Where a specific item of Work is not defined, but is normally inherent to a trade, or is included in the scope of the applicable technical revision, it will be the responsibility of that Contractor to include the Work in his proposal.
- G. This "Schedule of Contract Responsibilities" is to aid each Contractor in defining the Scope of Work to be included in his proposal. However, omissions from this "Schedule of Responsibilities" do not relieve the Contractor from including in his proposal that Work which will be required to complete his Contract. Each Contractor should read the "Schedule of Contract Responsibilities" completely to familiarize himself with the Work of other Contractors that may have Work in adjacent areas and to coordinate the interfacing problems that may occur as the work is assembled and constructed.
- H. Where specific Work is to be completed under a particular phase of the Project and the Work is wholly or partially completed by other trades because of the type of work involved or jurisdictional trade agreements, the Contractor will be responsible to subcontract the Work as necessary to complete the Work included in his Contract. No delay in the Work will be allowed due to the failure of the Contractor to subcontract related work required by jurisdictional trade agreements.

1.15 COORDINATION OF WORK

A. Each Contractor is responsible to coordinate his Work with the Work of other trades and other Contractors and requirements of the school system. The Contractor must make space allowances for Work of other Contractors, provide necessary openings where indicated or implied by the Drawings and Specifications. Each Contractor is responsible to protect his own Work.

1.16 TIME OF COMMENCEMENT AND COMPLETION

- A. The Contractor shall commence work within ten (10) days after being notified in writing to proceed and shall complete the Work within the time limitations established in the Form of Agreement.
 - A. It is anticipated that construction will start within 153 calendar days after receipt of bids.
 - A. Construction shall be complete within 623 consecutive calendar days, or earlier, after Notice to Proceed.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 SCHEDULE OF CONTRACT RESPONSIBILITIES

3.02 GENERAL REQUIREMENTS

A. PROVIDED BY OWNER THROUGH THE CONSTRUCTION MANAGER

Section	01 32 00	Schedules and Reports
Section	01 45 10	Testing Laboratory Services
Section	01 51 60	Temporary Sanitary Facilities
Section	01 53 10	Fences (Temporary Security)
Section	01 57 60	Project Signs
Section	01 59 10	Project Office
Section	01 71 50	Final Cleaning

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

Section	01 12 00	Multiple Contract Summary
Section	01 23 00	Alternates
Section	01 25 00	Contract Modification Procedures
Section	01 28 00	Schedule of Values
Section	01 29 00	Applications for Payment
Section	01 31 00	Project Meetings
Section	01 32 00	Schedules and Reports
Section	01 33 00	Submittal Procedures
Section	01 45 10	Testing Laboratory Services (Paragraph 1.05)

Section	01 50 50	Temporary Facilities and Controls
Section	01 54 60	Environment Protection
Section	01 54 80	Utility Protection
Section	01 56 30	Water Control
Section	01 56 90	Housekeeping & Safety
Section	01 59 20	Offices and Sheds
Section	01 60 00	Product Requirements
Section	01 72 50	Work Layout
Section	01 73 10	Cutting and Patching
Section	01 77 00	Contract Closeout

All Contractors shall provide their Superintendents with radios capable of handling multiple channels and compatible with radios used by the Construction Manager.

All contractors shall subscribe to PlanGrid for use on this project. Number of users is up to the contractor, however, at a minimum your site personnel will be required to use this product to facilitate communication. PlanGrid will be used for the current construction documentation to include, current set, addenda, ASI, As Built Conditions, QA/QC, and Punch List. Visit the www.PlanGrid.com to determine subscription pricing. It is recommended that you have an office administrator to assist your field personnel. PlanGrid is a tool for the construction phase and will not be used for bidding. Visit www.skillmanplanroom.com for bid documents

C. PROVIDED BY DESIGNATED CONTRACTORS

Section	01 21 00	Allowances
Section	01 51 10	Temporary Electricity, Lighting and Warning
		Systems
Section	01 51 30	Temporary Heating, Ventilation and Cooling
Section	01 51 50	Temporary Water
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	01 53 20	Tree and Plant Protection
Section	01 53 30	Barricades
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 72 00	Field Engineering

3.03 **BID CATEGORIES**

A. <u>BID CATEGORY NO. 1 – GENERAL TRADES</u>

General Requirements in Pa	aragraph 3.02.B above.
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Section	01 21 00	Allowances
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container

Section	01 51 80	Temporary Fire Protection
Section	01 53 20	Tree and Plant Protection
Section	01 53 30	Barricades
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 72 00	Field Engineering
Section	02 41 19	Selective Demolition
Section	03 30 00	Cast-In-Place Concrete
Section	04 20 00	Unit Masonry
Section	05 31 00	Steel Decking
Section	05 40 00	Cold-Formed Metal Framing
Section	05 50 00	Metal Fabrications
Section	06 10 00	Rough Carpentry
Section	06 16 00	Sheathing
Section	06 41 16	Plastic-Laminate-Faced Architectural Cabinets
Section	07 21 00	Thermal Insulation
Section	07 24 13	Polymer-Based Exterior Insulation and Finish
		System
Section	07 51 13	Built-Up Asphalt Roofing
Section	07 53 23	Ethylene-Propylene-Diene-Monomer Roofing
Section	07 62 00	Sheet Metal Flashing and Trim
Section	07 71 00	Roof Specialties
Section	07 72 00	Roof Accessories
Section	07 84 13	Penetration Firestopping
Section	07 92 00	Joint Sealants
Section	08 11 13	Hollow Metal Doors and Frames
Section	08 31 13	Access Doors and Frames
Section	09 65 00	Resilient Flooring
Section	09 91 13	Exterior Painting
Section	09 91 23	Interior Painting
Section	31 10 00	Site Clearing
Section	31 20 00	Earth Moving
Section	32 92 00	Turf and Grasses (Sf0)

Clarifications:

- 1. Provide Spray insulation and Masonry work associated with Brick Piers, reference detail 1 on A101C. Metal-studs framing and Dens Glass provided by Bid Category No. 2 Metal-Studs Drywall contractor.
- 2. Provide and maintain floor protection in all areas of construction.
- 3. Provide temporary enclosures at all exterior openings
- 4. Bid Category No. 2 METAL-STUDS, ACOUSTICAL CEILINGS AND DRYWALL will provide removal, storage, and reinstallation of existing ceiling system such as ceiling tiles and grid at all areas noted with Key Note #2 and Key Note #9 on Architectural demolition drawings AD102C, AD102D1, AD102D2, and AD102E.

- 5. Access panels shown on drawings will be provided by General Trades. Access Panels not shown on the drawings but required, must be provided by the contractor performing the work.
- 6. Provide all wood blocking, nailers, wood sheathing, plywood, etc. for roof assembly.
- 7. Salvage all exterior brick per demolition notes.
- 8. Provide patching of existing openings after Mechanical, electrical, and plumbing, Technology demolition.
- 9. Provide new openings and patching of roof to accommodate all mechanical, plumbing, electrical penetrations required for construction. Openings to be laid out by trade requiring the opening.

B. <u>BID CATEGORY NO. 2 – METAL-STUDS, ACOUSTICAL CEILINGS AND DRYWALL</u>

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	07 21 00	Thermal Insulation
Section	09 22 16	Non-Structural Metal Framing
Section	09 26 13	Gypsum Veneer Plastering
Section	09 29 00	Gypsum Board
Section	09 51 13	Acoustical Panel Ceilings

Clarifications:

- 1. Provide metal-studs framing and Dens Glass at Brick pier locations, reference detail 1 on A101C. Spray insulation and Masonry work by Bid Category No. 1 General Trades.
- 2. Provide removal, storage, and reinstallation of existing ceiling system such as ceiling tiles and grid at all areas noted with Keyed notes #2 and #9 on Architectural demolition drawings AD102C, AD102D1, AD102D2, and AD102E. Include storage costs required to salvage Ceiling tiles, and grid as part of base-bid.
- 3. Include a \$3,000 material allowance and 120 man-hours at the current rate (including all fringe benefits and payroll expenses) for replacement of stained or damaged ceiling tiles or other work to be performed at the direction of the Construction Manager. At the end of the project, the unused material allowance and man-hours will be converted into a dollar amount per Wage Scale (including fringe benefits) and returned to the Owner through a deduct Change Order.
- 4. Provide Noise Isolation Requirements, reference detail 4 on Sheet A104.

C. <u>BID CATEGORY NO. 3 – ALUMINUM WINDOWS, ENTRANCES AND STOREFRONTS</u>

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	07 92 00	Joint Sealants
Section	08 41 13	Aluminum-Framed Entrances and Storefronts
Section	08 71 00	Door Hardware
Section	08 80 00	Glazing

D. <u>BID CATEGORY NO. 4 – MECHANICAL</u>

General Requirements in Paragraph 3.02.B above.
Section 01 21 00 Allowances

Section	01 21 00	Allowances
Section	01 51 30	Temporary Heating, Ventilation and Cooling
Section	01 51 50	Temporary Water
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	08 91 19	Fixed Louvers
Section	22 05 00	Common Work Results for Plumbing
Section	22 05 23	General Duty Valves for Plumbing Piping (2&Less)
Section	22 05 29	Hangers and Supports for Plumbing Piping and
		Equipment
Section	22 05 53	Identification for Plumbing Piping and Equipment
Section	22 07 00	Plumbing Insulation
Section	22 11 16	Domestic Water Piping
Section	23 05 00	Common Work Results for HVAC
Section	23 05 13	Common Motor Requirements for HVAC
		Equipment
Section	23 05 16	Expansion Fittings and Loops for HVAC Piping
Section	23 05 19	Meters and Gages for HVAC Piping
Section	23 05 23	General Duty Valves for HVAC Piping
Section	23 05 29	Hangers and Supports for HVAC Piping and
		Equipment
Section	23 05 48	Vibration and Seismic Controls for HVAC Piping
		and Equipment
Section	23 05 53	Identification for HVAC Piping and Equipment
Section	23 05 93	Testing, Adjusting, And Balancing for HVAC
Section	23 07 00	HVAC Insulation
Section	23 08 00	Commissioning of HVAC
Section	23 21 13	Hydronic Piping
Section	23 21 23	Hydronic Pumps
Section	23 22 13	Steam and Condensate Heating Piping
Section	23 22 16	Steam and Condensate Piping Specialties
Section	23 22 23	Steam Condensate Pumps
Section	23 23 00	Refrigerant Piping
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23 25 00	HVAC Water Treatment
23 31 13	Metal Ducts
23 31 15	HVAC Air-Distribution System Cleaning
23 33 00	Air Duct Accessories
23 36 00	Air Terminal Units
23 37 13	Diffusers, Registers, And Grilles
23 37 23	HVAC Gravity Ventilators
23 40 00	Antimicrobial Systems For HVAC
23 57 00	Heat Exchangers For HVAC
23 62 00	Packaged Compressor and Condenser Units
23 73 13	Modular Indoor Central-Station Air-Handling Units
23 74 13	Packaged, Outdoor, Central-Station Air-Handling
	Units
23 81 26	Split System Air Conditioners
23 82 16	Air Coils
23 82 23	Unit Ventilators
23 82 25	Vertical Unit Ventilators (Both Split and Self
	Contained)
23 82 33	Convectors
23 82 39	Unit Heaters
	23 31 13 23 31 15 23 33 00 23 36 00 23 37 13 23 37 23 23 40 00 23 57 00 23 62 00 23 73 13 23 74 13 23 81 26 23 82 16 23 82 23 23 82 25 23 82 33

Clarifications:

- 1. Air Handling Units (AHU's) #18, #19, and #20, and HUV#400 through HUV#408 along with associated ACCU's, warranties and startup service will be provided by different vendor under separate contract. This equipment will be delivered to site. Bid Category No. 4 Mechanical contractor to provide all work associated with installation of this equipment including but not limited to unloading from delivery trucks, crane as required, placement in the building, etc.
- 2. All other equipment not mentioned in Mechanical Clarification No. 1 to be provided as part of base-bid.
- 3. Bid Category No. 1 General Trades will provide new openings and patching of roof to accommodate all mechanical, plumbing, electrical penetrations required for construction. Openings to be laid out by trade requiring the opening.
- 4. Access panels shown on drawings will be provided by General Trades. Access Panels not shown on the drawings but required, must be provided by the contractor performing the work.

E. <u>BID CATEGORY NO. 5 – ELECTRICAL</u>

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	01 51 10	Temporary Electricity, Lighting and Warning
		Systems
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	26 05 00	Common Work Results for Electrical

Section	26 05 19	Low-Voltage Electrical Power Conductors and Cables
Section	26 05 26	Grounding and Bonding for Electrical Systems
Section	26 05 29	Hangers and Supports for Electrical Systems
Section	26 05 33	Raceways and Boxes for Electrical Systems
Section	26 05 44	Sleeves and Sleeve Seals for Electrical Raceways
		and Cabling
Section	26 05 53	Identification for Electrical Systems
Section	26 22 00	Low Voltage Transformers
Section	26 24 16	Panelboards
Section	26 27 26	Wiring Devices
Section	26 28 13	Fuses
Section	26 28 16	Enclosed Switches and Circuit Breakers
Section	26 29 13	Enclosed Controllers
Section	26 29 23	Variable Frequency Motor Controllers (Gs)
Section	26 43 13	Surge Protection for Low-Voltage Electrical Power
		Circuits
Section	28 31 00	Fire Detection and Alarm

Clarifications:

- 1. Bid Category No. 1 General Trades will provide new openings and patching of roof to accommodate all mechanical, plumbing, electrical penetrations required for construction. Openings to be laid out by trade requiring the opening.
- 2. Access panels shown on drawings will be provided by General Trades. Access Panels not shown on the drawings but required, must be provided by the contractor performing the work.
- 3. Provide all electrical work required for equipment furnished by Bid Category No.6 Controls contractor, for example: VFD's Variable Frequency Drives.
- 4. Bid Category No. 7 Technology will provide removal and reinstallation of devices noted on Electrical Demolitions Drawings Keyed Notes #4, #5, #6, #7, and #8.
- 5. Bid Category No. 7 Technology will provide temporarily support of devices per Keyed Notes #2, #3, and #4, noted on Electrical Floor Plans Sheets E102C, E102D1, E102D2, E102E, and E104C.

F. BID CATEGORY NO. 6 – CONTROLS

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	07 92 00	Joint Sealants
Section	23 09 00	Instrumentation and Control for HVAC (Tridium
		N4)

G. <u>BID CATEGORY NO. 7 – TECHNOLOGY</u>

General Requirements in Paragraph 3.02.B above. Section 01 21 00 Allowances

Section	01 21 00	Allowances
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	27 05 00	Common Work Results for Communications
Section	27 05 28	Pathways for Communications Systems
Section	27 05 53	Identification for Communications Systems
Section	27 15 13	Communications Copper Horizontal Cabling
Section	27 17 00	Testing, Identification and Administration of
		Balanced Twisted Pair Infrastructure
Section	27 26 26	Ip Address Request Form
Section	27 41 16	Technology Equipment

Clarifications:

- 1. Provide removal and reinstallation of devices noted on Electrical Demolitions Drawings Keyed Notes #4, #5, #6, #7, and #8.
- 2. Provide temporarily support of devices per Keyed Notes #2, #3, and #4, noted on Electrical Floor Plans Sheets E102C, E102D1, E102D2, E102E, E104C Drawings.

END OF SECTION 01 12 00