CHAMPAIGN COMMUNITY UNIT SCHOOL DISTRICT NO. 4  
Champaign, Illinois

Franklin Middle School & Edison Middle School  
Bleacher Replacement Specification

1.1 WORK INCLUDED
   A. Demolish existing bleachers. Separate wood seats from frame and stack for Owner
      salvage. Dumpster to be provided by seating company.
   B. Manufacture, deliver and install a retractable seating systems in accordance with
      applicable codes, the following specifications, and approved drawings.

1.2 RELATED WORK BY OTHERS
   A. Adequate floor levelness and strength for operation of retractable seating.
   B. Adequate wall strength for attachment and operation of wall attached retractable seating.
   C. Electrical wiring within the building as required for power operated retractable seating.

1.3 SYSTEM DESCRIPTION
   A. Retractable seating system shall be multiple tiered seating rows comprised of seat and
      deck components, risers, and supportive understructure.
   B. Retractable seating shall be operable on the retractable principle, stacking vertically in
      minimum floor area when not in use.
   C. The first moving row, on manual sections, shall be secured with release lever. All other
      rows shall be mechanically locked, operable only upon unlocking and cycling of first
      row. Power sections shall be secured with mechanical locks as well as the power system,
      operable upon activating the pendant control.

1.4 QUALITY ASSURANCE
   A. DESIGN LOAD CRITERIA (STRUCTURAL):  
      International Building Code Standard: Comply with requirements of IBC / ICC 300,
      Chapter 4 "Standard for Bleachers, Folding and Retractable Seating and Grandstands
      Assembly Seating," except where other requirements are indicated by the
      architect/owner.
   B. Manufacturer: Company specializing in retractable seating with a minimum of 25 years
      experience in manufacturing retractable seating.
   C. Quality Standards: Manufacturer to be I.S.O. 9001:2008 certified.
   D. Engineer Qualifications: Manufacturer to employ a registered, licensed Professional
      Engineer to certify that the equipment to be supplied meets or exceeds the design criteria
      of this specification.
   E. Installation: Shall be handled directly by the manufacturer or by a factory certified
      installation subcontractor.
   F. Product Liability: Certification of insurance coverage of not less than $5,000,000.

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G. Welding Processes: To be performed by certified professional welding operators in accordance with American Welding Society – Certified Welding Fabricator, (AWS-CWF), D1.1 "Structural Welding Code-Steel."

H. Product Improvements: Equipment provided shall incorporate manufacturer's design improvements and materials current at time of shipment, provided that such improvements and materials are consistent with the intent of these specifications.

1.5 SUBMITTALS

A. BID SUBMITTALS
   1. Manufacturer's descriptive literature and specifications.
   2. List of deviations from these specifications, if any.
   3. Certification of Insurance.

B. JOB SUBMITTALS
   1. Shop Drawings showing all equipment to be furnished with details of accessories to be supplied including necessary electrical service to be provided by others. All electrical submittals must include U.L. listing number.
   2. Samples of material and color finish.
   3. Warranty, operation and maintenance instructions to the Owner upon completion.

1.6 DESIGN CRITERIA

A. Retractable seating shall be designed to support, in addition to its own weight, and the weight of added accessories, a uniformly distributed live load of not less than 100 lbs. per sq. ft. (4.8 kN per sq. m.) of gross horizontal projection. Seat boards and footrest shall be designed for a live load of not less than 120 lbs. per linear foot (1.751 kN per linear m).

B. Sway force applied to seats shall be 24 lbs. per linear ft. (350 N per linear m.) parallel to the seats and 10 lbs. per linear ft. (146 N per linear m.) perpendicular to the seats. Sway forces shall not be considered simultaneously applied.

C. Railings, posts and sockets designed to withstand the following forces applied separately.

D. Handrails shall be designed and constructed for:
   1. A concentrated load of 200 lbs. (890 N) applied at any point and in any direction.
   2. A uniform load of 50 lbs. per ft. (730 N/m) applied in any direction.

The concentrated and uniform loading conditions shall not be required to be applied simultaneously.

E. Guards shall be designed and constructed for:
   1. A concentrated load of 200 lbs. (890 N/m) applied at any point and in any direction along the top railing member and; a uniform load of 50 lbs. per ft. (730 N/m) applied horizontally at the required guardrail height and simultaneous uniform load of 100 lbs. per ft. (1460 N/m) applied vertically downward at the top of the guardrail. The concentrated and uniform loading conditions shall not be required to be applied simultaneously.

F. American Institute of Steel Construction (AISC), American Iron and Steel Institute (AISI) and Aluminum Association (AA) design criteria shall be the basis for calculation of member sizes and connections.

G. Wood members shall be designed in accordance with National Forest Products Association, (NFOPA), and National Design Specification for Wood Construction.

1.7 WARRANTY

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A. The manufacturer shall warrant all work performed under these specifications to be free of defects for a period of one year.
B. All understructure components shall be warranted for a period of ten years.
C. Any materials found to be defective within this period will be replaced at no cost to the owner. This warranty shall not include replacements required by Acts of God, war, vandalism, flood, fire, calamity or deliberate abuse or misuse of the equipment.

2.1 ACCEPTABLE MANUFACTURERS
A. Irwin Seating Company
B. Hussey Seating Company
C. Interkal

2.2 MATERIALS
A. Seating Area: Field Verify All Groups Feet Inches Long, Rows High Wall Attached and Electrically Operated.
B. Dimensions: Field Verify All
   1. Overall height: Feet Inches
   2. Open depth: Feet Inches
   3. Row Spacing: Inches
   4. Rise per row: Inches

2.3 FABRICATION
A. Understructure System:
   a. Steel supports and rolling frames shall be constructed from formed steel of the size and shape necessary to support the design loads. All support bracing shall begin at Row 2 and be of diagonal or "knee" type for rigidity. Diagonal bracing to be minimum 1 1/2" x 1 1/2" 14-gauge square tubing. Bracing fabricated from open-sided channel, angle iron or flat strap "X" type bracing is unacceptable.
   b. Wheels shall not be less than 5" diameter x 1 3/8" non-marring soft rubber face to protect wood or synthetic floor surfaces. Each operating row shall have a minimum of 6 wheels.
   c. Each fully skirted wheel channel shall be formed 12-gauge steel and continuously in contact with adjacent channels by means of an Integral Alignment System (IAS) and include nylon glides to eliminate any metal to metal contact. The IAS maintains proper alignment between adjacent wheel channels for smooth and consistent operation while eliminating the potential for accidental row separation. Wheel channel alignment systems with metal to metal contact requiring periodic lubrication or that utilizes a guide rod system that can be bent or damaged will not be acceptable.
   d. Each cantilever arm shall be triple-formed 10-gauge steel, securely welded to the post assembly and include a nylon cantilever pad to ensure smooth operation. The cantilever pad shall also provide a firm base when in the occupied position and provide a solid feel when walked on.
   e. Vertical columns shall be high tensile steel structural tube to meet design criteria. Minimum column size to be 2" x 3" 14-gauge structural tube, welded to a 2’ wide wheel channel using 360 degrees of weldment.
f. Deck support members shall be double formed 14-gauge steel and connect the front nosing and rear riser members. Each deck support shall include a unique dual-purpose roller that provides smooth support during operation. The deck support roller shall also include a 3/4” wide shoulder that’s encapsulated by the deck support on the row above in order to maintain proper upper alignment while delivering consistent, repeatable operation.

B. Seat Systems
a. Supply plastic modular 18” individual seats in 10” deep models. Seating to be scuff resistant injection molded high density polyethylene plastic.
   a. Seat modules supplied shall be of a high aesthetic design using multiple textures, style lines and a waterfall front. The rear of the seat shall be slightly curved to eliminate the straight line appearance and include a moderate seat contour and texture to enhance spectator comfort.
   b. Seating design shall be molded to achieve a finished end appearance without the use of end caps. The rear of the seat shall include a smooth wall allowing for the deck to be easily swept clean without obstruction.
   c. Seat heights shall be maintained at a minimum of 16 3/4”. Lower seat heights which detract from spectator comfort will not be accepted.
   d. Foot space shall be maximized for spectator comfort and provide a minimum of 22” when measured with a 10” module and 21” with a 12” module.
   e. Each seat to be designed with the capability of using seat numbers and row letters at the aisle locations. Seat numbers to be stylishly designed using a radius corner to enhance the aesthetic value of the seat. Seat numbers and row letters shall be recessed into the seat to protect against any vandalism.
   f. Seating color to be selected from standards options.
   g. Securely fasten each seat to the nose beam using a 10-gauge formed steel bracket and locking hardware. Adjacent seating shall be interlocked together along the full perimeter eliminating any fore or aft movement or the potential of any pinching hazard.
   h. Seat modules shall be designed to support a uniform load of 600 lbs per seat and a concentrated load of 150 lbs over 4 square inches.

C. Deck System: Clear Coat
1. Clear Coat decking shall be finished using a two-pass UV topcoat process for maximum appearance and durability. Each of the two finishing cycles shall consist of a pass through the clear polyurethane roller coating, followed by a UV activation process permanently setting the finish. Each plywood panel shall be constructed from AC grade 5-ply western fir plywood with a high quality Radiata Pine face ply in strict compliance with U.S. Product Standard PS 195. Finish thickness to be 5/8”. Plywood shall be supported along the front and back edge for maximum rigidity and designed in a manner that allows 3 plies to run front to back for increased deck strength. Each plywood panel shall be connected using a tongue and groove splice leaving the deck clean and free of any tripping or cleaning obstructions. Plywood using a single coat of finish or applied without
the UV setting process that will show wear faster is unacceptable. Decking shall be secured in place by the encapsulation of the rear riser and mechanical fasteners along the front edge.

D. Nosing:
   1. Nosing shall be one piece, formed, 14-gauge steel with a minimum G-60 pre-galvanized finish.

E. Rear Risers:
   1. Rear riser shall be one piece, formed, 14-gauge steel with a minimum G-60 pre-galvanized finish.

F. Finish: For rust resistance in standard conditions all painted surfaces shall be finished in textured Epoxy Powder Coated Semi-Gloss Black.

1.4 ACCESSORIES

A. Aisles width shall be code compliant. Aisles at the footrest level shall include non-slip treads on the top front edge.

B. Intermediate aisle steps shall be provided. Steps are permanently attached closed design. Steps shall be constructed from 14 ga. steel, finished in a Black powder coated epoxy, and designed to eliminate any possible toe catch between the top of the intermediate step and the bottom of the nose beam per ADA or other applicable codes. Front step shall be removable and interlock to the front row eliminating any possibility of accidental disengagement, and store on the front row when not in use.

C. Aisle handrails.
   1. Smart Rail aisle handrails shall be provided for 22” to 26” row spacing. Aisle railings shall quickly and easily rotate 90 degrees to the locked position and store parallel to the front of the aisle. Railings that require removal from the pocket or the use of tools for storage will not be acceptable. Aisle railings shall be an individual rail design, located on every other row starting at row two (2). Railing to be constructed of 1 1/2” 11 ga. round steel tubing, finished in a textured powder coated epoxy. For safety, railings designed without a full return of the handrail will not be acceptable.

D. Wheelchair Seating Areas.
   1. Recoverable wheelchair spaces shall be provided at the section joint location or section length as shown on plans. An integral support on row two shall be provided to eliminate structural damage to the understructure during the operation and use of the system. Recoverable seating areas do not require front railings for support.

E. End rails.
   1. End rails of the self-storing type, finished with textured epoxy powder-coated black enamel, shall be provided at the open ends of the group. End rails shall start at row three and meet all national building codes. Railings with flexible uprights that can be expanded beyond the 4” sphere are not acceptable.

F. End panels of plywood and supports shall be provided to enclose the open ends of the group in the closed position. End panels shall enclose the space between the wall and the back of the self-storing end rails. End panels to be constructed from Panelam or clear coat plywood.

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G. Supply custom seat end graphics of school logo or mascot at each aisle seat location. Each graphic shall include full digital printing using a 4 color process, and be sized to follow the entire seat profile. Print-ready artwork to be supplied by the architect/owner.

H. Seat level rear filler panels up to 21” deep used to close openings between top row seat and wall. Provide adequate support structure below the closure panel that will allow for spectators to safely stand in this area. Closure panel to match the deck surface.

1.5 PROPULSION SYSTEM

A. FRICTION POWER: Power system shall be furnished on each seating group to open and close the retractable units. Each individual section shall include 2 systems integrated into the first moving row of understructure to achieve smooth and efficient operation. Operation of the seating shall be accomplished with the use of a walk along pendant control.

1. Each power system shall include large 6 1/2" diameter friction rollers to develop tractive force adequate to open and close the system. Each roller to include non-marring 1/2" thick rubber covering.

2. Electrical motors for each section shall be heavy-duty and high efficiency gear reduction motors. The shaft diameter for the gear motor and rollers shall be a minimum of 1” and be connected by a 1” schedule 40 drive shaft.

3. All roller chain and sprockets used throughout the drive system shall be a minimum of #40 in size. Each drive unit shall be designed to include a safety shroud around the chain and sprocket for overall safety.

4. The power units shall develop tractive forces adequate to operate the seating units under normal conditions but inadequate to operate should significant obstacles be encountered.

B. Manufacturer shall provide all wiring from power source within bleacher seating including pendant control. Removable pendant control shall be handheld with forward and reverse button, plugging into a single receptacle. Electrical contractor shall provide a 60 HZ power source (as specified below) behind each group of seating. Amperage to be as specified by seating manufacturer depending on the number of power units required. For wall-attached installations, power source to terminate in a surface mounted junction box above floor. For reverse units, power source to terminate in a junction box, flush mounted under first seating row in center of group. Electrical contractor shall perform the connections to the seating equipment at the junction box. All electrical parts and wiring shall be installed in complete accord with the National Electric Code. U.L. Listing FHJU.E479554.

**Power source:** Supply power system compatible with 208/230V, 5 wire 3-phase system.

3.1 REVIEWS AND APPROVALS

A. Shop drawings shall be approved and job site field measurements taken prior to installation and retractable gym seating shall be installed in conformance therewith.

3.2 INSTALLATION

A. The installation of the retractable gym seating will be handled directly by the manufacturer or by a factory authorized installation subcontractor qualified to perform the installation function.

2020.02.13
**3.3 PROTECTION**

A. The manufacturer’s representative shall transmit instructions in both operation and maintenance to the owner.

B. Maintenance and operation of the retractable gym seating shall be the responsibility of the owner or his duly authorized representative, and shall include the following:
   1. During operation of the retractable gym seating, the opening and closing shall be supervised by responsible personnel who will assure that the operation is in accordance with the manufacturer's instructions.
   2. Only attachments specifically approved by the manufacturer for the specific installation shall be attached to the retractable gym seating.
   3. An annual inspection and required maintenance of all retractable gym seating shall be performed to assure safe conditions. At least bi-annually, the inspection shall be performed by a Professional Engineer or factory service personnel.
CHAMPAIGN COMMUNITY UNIT SCHOOL DISTRICT #4
Champaign, Illinois

BID FORM

1. DATE: ________________ (Bidder to enter date)

2. SUBMITTED BY: _______________________________ (Bidder to enter name and address)
   a. Bidder’s Full Name: _________________________________________________
   b. Address: __________________________________________________________
   c. City, State, Zip: ____________________________________________________
   d. Phone: __________________________________________________________________

3. OFFER:
   The undersigned hereby agrees to perform all Work as set forth in the bid specifications
   for Champaign Community Unit School District No. 4 for the following costs:

BID PACKAGE 1 - FRANKLIN MIDDLE SCHOOL ONLY:

$ ________________________________________________________________________

BID PACKAGE 2 - JEFFERSON MIDDLE SCHOOL ONLY:

$ ________________________________________________________________________

COMBINATION BID PACKAGE 3: FRANKLIN & JEFFERSON COMBINED:

$ ________________________________________________________________________

SIGNED this __________day of ______________________, 2020.

FIRM NAME: ___________________________________________________________________

BY: ________________________________________________________________________

TITLE: ______________________________________________________________________

2020.02.13
**RETURN WITH BID**

**MINORITY AND WOMEN BUSINESS (MBE/WBE) PARTICIPATION**

**GOALS:** The MBE/WBE target goal for this Asbestos Abatement Contract is (12% MBE, 8% WBE) of the **amount** of the contract awarded by the District. The contract award is defined as the Base Bid plus any or all alternates.

**INSTRUCTIONS:** The Bidder will include below the names of certified minority/women owned business enterprises (CMS Certified) and the proposed dollar value of subcontract. If the Bidder needs assistance in identifying subcontractors or suppliers, contact the school district **prior** to submitting the bid. **This sheet should be returned with the bid.**

**BIDDER’S MBE/WBE SUBCONTRACTOR/SUPPLIER FIRMS, INCLUDING ADDRESS AND TELEPHONE NUMBER, TO BE UTILIZED IN REGARD TO THIS CONTRACT (Include base bids below):** Note: A firm can only be designated as an MBE or WBE, but not both. Firms must be certified or registered with CMS as an MBE/WBE prior to bid opening.
(Attach additional sheets if necessary)

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Minority/Women Business Enterprise Program Requirements

A. It is the intent of Champaign Community School District Unit #4 to utilize Minority and Women Business Enterprises (MBE/WBE) in the construction of the school facilities in the District. In this regard, the District encourages minority and women participation as Prime Contractors, as well as for Prime Contractors to utilize available resources to identify such businesses, and recruit them to work as subcontractors and suppliers on the Project. Unit 4 is especially interested in qualified firms who can contribute to the diversity of the District. Unit 4 is committed to providing equal employment opportunities to all employees, candidates for employment, and contractors and will not discriminate against any employee, candidate for employment, or contractor on the basis of race, color, religion, sex, national origin, disability, or other class protected by law.

B. The District’s target goal is 12% MBE and 8% WBE participation for each bid package. The percent goal is reflective of current Capital Development Board participation goals for Champaign County at the date of the Invitation to Bid.

C. Eligible MBE/WBE firms must be certified through the Illinois Department of Central Management Services (CMS). A list of CMS BEP-certified firms can be found at the following link: https://cms.diversitycompliance.com/Default.asp?

D. In its bid, a bidding entity shall list the name and relevant contact information of any certified MBE/WBE firm with which the bidding entity plans to subcontract, the proposed dollar value of any subcontract(s) and shall include a copy of the MBE/WBE firm’s CMS Certificate or Recognition Certification Approval Letter. These items must be included with the bid.

E. The contractor shall provide documentation to comply with both MBE/WBE contract with the Construction Schedule of Values (CSV) and with the Final Application for Payment.

F. Champaign Community Unit School District #4 values the utilization of MBE/WBEs in its capital construction projects. All such enterprises must perform a commercially useful function. Enterprises which might be considered "pass-throughs" or "fronts" are not permitted.

G. Definitions

a. Commercially Useful Function: MBE/WBE vendors are responsible for the execution of a distinct element of the work of the contract which is carried out by actually performing, managing, and supervising the work involved, or fulfilling responsibilities as a joint venture. To perform a commercially useful function, the MBE/WBE must also be responsible, with respect to materials
(including equipment) and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material (including equipment), and installing (where applicable) and paying for the material (including equipment) itself. To determine whether a MBE/WBE is performing a commercially useful function, the District shall evaluate the amount of work the firm subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing.

b. **Non-Performance of a Commercially Useful Function**: A MBE/WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of MBE/WBE participation. In determining whether a MBE/WBE is such an extra participant, the District will examine similar transaction and standard industry practice, particularly those in which MBE/WBE do not participate.

c. **Extra Participant**: a person, entity, affiliate, corporation, or joint venture that participates in a transaction, contract or project through which funds are passed in order to obtain the appearance of MBE/WBE participation thereby purporting to perform a commercially useful function.

d. **Similar transaction**: The examination of the process and flow of funds in construction subcontracting or procurement of goods and services for materials, equipment or supplies within a market or industry where MBE/WBE are not participants to establish common industry practice involving responsibility, ownership, risk and control between parties involved in the transaction.

e. **Regular Dealer**: an IL CMS BEP certified MBE/WBE company that owns or maintains a store, warehouse or other physical establishment in which materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be considered a regular dealer, the company must engage in, as its principal business and in its own name, the purchase and sale of the products in question.

f. **Brokers, Packagers, Manufacturers Representatives and Others**: Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of the immediate preceding paragraph.

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g. **Counting Regular Dealer Participation:** If the materials or supplies are purchased from a MBE/WBE regular dealer, count **100 percent** of the cost of the materials, equipment or supplies toward MBE/WBE goals. This is also applicable to materials, equipment or supplies with joint checks.